



A quorum of the City Council intends to be physically present at the aforementioned location.

The City Council may discuss, consider, and take action on any item listed on this agenda.

OPENING ITEMS

1. Invocation – Pastor David Hall, Midland Bible Church
2. Pledge of Allegiance

PRESENTATIONS

3. Presentation of special events, organizations, individuals, or periods of time including, but not limited to:
 - 3a. Proclamation honoring “Municipal Clerks Week”
 - 3b. Presentation of Proclamation for “Midland Lions Club Day”
 - 3c. Presentation of Proclamation for “Tasha Sport Day”

CONSENT AGENDA

4. MOTION APPROVING THE FOLLOWING MINUTES:
 - 4a. BRIEFING SESSION OF APRIL 11, 2023
 - 4b. REGULAR SESSION OF APRIL 11, 2023
5. 2023-058 – RESOLUTION APPROVING THE PURCHASE OF TWO (2) 2-3 YARD DUMP BODIES WITH LIFT GATES FROM ROYAL TRUCK BODY OF DALLAS, TEXAS FOR A TOTAL COST OF \$54,647.08; AND APPROVING THE PURCHASE TWO (2) UTILITY BODIES AND TWO (2) UTILITY BODIES WITH LIFT GATES FROM RRPFG, LP D/B/A RANDALL REED’S PLANET FORD 635 OF GARLAND, TEXAS, FOR A TOTAL COST OF \$63,692.00 (DISTRICT: NONE) (GENERAL SERVICES)

6. 2023-059 – RESOLUTION AWARDING A CONTRACT IN THE AMOUNT OF \$247,304.51 FOR THE IMPLEMENTATION OF ELECTRONIC BIDDING SOFTWARE AND RELATED SERVICES TO GTY SOFTWARE INC., D/B/A BONFIRE INTERACTIVE LTD. (DISTRICT: NONE) (GENERAL SERVICES)
7. 2023-060 – RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$845,000.00 WITH JSA ARCHITECTS, INC., FOR ARCHITECTURAL, DESIGN, AND ENGINEERING SERVICES FOR THE NEW HEALTH SERVICES FACILITY DESIGN PROJECT; APPROVING \$84,500.00 FOR PROJECT RELATED EXPENSES; AND APPROPRIATING FUNDS FOR SAID AGREEMENT (DISTRICT: NONE) (GENERAL SERVICES)
8. 041-2023 – MOTION APPROVING PLANS AND SPECIFICATIONS FOR THE PAUL DAVIS WELLFIELD DEVELOPMENT PROJECT, SAID PLANS AND SPECIFICATIONS BEING ON FILE IN THE CITY SECRETARY’S OFFICE REFERENCED BY THE NUMBER AND DATE OF THIS MOTION, AND AUTHORIZING THE CITY MANAGER OR THE CITY MANAGER’S DESIGNEE TO ADVERTISE FOR COMPETITIVE BIDS FOR SAID PROJECT PURSUANT TO THE STATUTES OF THE STATE OF TEXAS FOR ACCOMPLISHING THE WORK SET FORTH IN SAID SPECIFICATIONS (DISTRICT: NONE) (GENERAL SERVICES)
9. 042-2023 – MOTION APPROVING A PROMOTIONAL AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND HISPANIC CULTURAL CENTER OF MIDLAND, INC., TO ADVERTISE AND PUBLICIZE THE CITY OF MIDLAND, TEXAS, FOR THE PURPOSE OF DEVELOPING NEW AND EXPANDED BUSINESS ENTERPRISES (DISTRICT 2) (CITY MANAGER)
10. 043-2023 – MOTION APPROVING A PROMOTIONAL AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND CITY OF MIDLAND AQUATICS, INC., TO ADVERTISE AND PUBLICIZE THE CITY OF MIDLAND, TEXAS, FOR THE PURPOSE OF DEVELOPING NEW AND EXPANDED BUSINESS ENTERPRISES (DISTRICT 3) (COMMUNITY SERVICES)
11. 044-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (22-329-019) BETWEEN THE CITY OF MIDLAND AND TARGA PIPELINE MID-CONTINENT WESTEX LLC REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 10, BLOCK 38, T-2-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)
12. 045-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (22-329-020) BETWEEN THE CITY OF MIDLAND AND TARGA PIPELINE MID-CONTINENT WESTEX LLC REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 44, BLOCK 38, T-1-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)

SECOND READINGS

13. 10395 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 1B, BLOCK 33, NORTHGATE ADDITION, SECTION 24, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF NORTH MIDLAND DRIVE AND BRIARWOOD AVENUE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 1) (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 11, 2023)
14. 10396 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 2, BLOCK 1, W. P. KNIGHT ADDITION, SECTION 2, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR AN OFFICE CENTER TO PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF SOUTH POWELL STREET AND WEST WALL STREET); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 11, 2023)
15. 10397 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITHOUT TERM FOR LOT 4, BLOCK 2, COUNTRY VILLA ESTATES, SECTION 7, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF WEST WALL STREET AND BRINSON LANE), WHICH IS PRESENTLY ZONED C, COMMERCIAL DISTRICT, IN PART, AND TP, TECHNOLOGY PARK DISTRICT, IN PART, ALLOWING SAID PROPERTY TO BE USED FOR AUTOMOBILE OR OTHER MOTORIZED VEHICLE SALES AND SERVICE; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 11, 2023)

PUBLIC HEARINGS

The City Council will hold public hearings on the following items:

16. 10398 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 4,126-SQUARE FOOT PORTION OF LOT 1A, BLOCK 11, KIMBER-LEA ADDITION, SECTION 11, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH MIDKIFF ROAD AND MAXWELL DRIVE), WHICH IS PRESENTLY ZONED RR, REGIONAL RETAIL DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID

DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)

17. 10399 – AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR THE WEST 32 FEET OF LOT 3 AND THE EAST 63 FEET OF LOT 4, BLOCK 6, IMPERIAL HEIGHTS ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE SOUTH SIDE OF CIMMARON AVENUE, APPROXIMATELY 230 FEET WEST OF WHITNEY DRIVE), BY PERMITTING A REDUCED MINIMUM SIDE YARD SETBACK ON THE WEST SIDE OF THE PROPERTY; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)

PUBLIC COMMENT

18. Receive public comments where individuals may address the City Council on City related issues and projects not on the present agenda. Any deliberation of or decision by the City Council regarding the item being discussed shall be limited to a motion to place the item on the agenda for a subsequent meeting. (Please limit comments to three minutes or less.)

EXECUTIVE SESSION

19. PURSUANT TO TEXAS GOVERNMENT CODE § 551.101, THE CITY COUNCIL WILL HOLD AN EXECUTIVE SESSION, WHICH IS CLOSED TO THE PUBLIC, TO DISCUSS THE FOLLOWING MATTERS AS PERMITTED UNDER THE FOLLOWING SECTIONS OF THE TEXAS GOVERNMENT CODE:
 - a. SECTION 551.072, DELIBERATION REGARDING REAL PROPERTY
 - a1. DISCUSS THE PURCHASE, EXCHANGE, LEASE, OR VALUE OF REAL PROPERTY.

Respectfully Submitted,

Robert Patrick
City Manager

MEETING ASSISTANCE INFORMATION: The Midland City Hall and Council Chamber are wheelchair accessible. If you need special assistance to participate in this meeting, please contact the City Secretary's Office at (432) 685-7430. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

**MIDLAND CITY COUNCIL
BRIEFING SESSION
MINUTES
April 11, 2023**



The City Council convened in briefing session in the Basement Conference Room, City Hall, Midland, Texas, at 9:00 AM, April 11, 2023.

Council Members present: Amy Stretcher Burkes, Dan Corrales, Robin Poole, Lori Blong, Scott Dufford, Jack Ladd, John Norman

Council Members absent: None

Staff members present: City Attorney John Ohnemiller, Deputy City Manager Morris Williams Jr, Assistant City Manager Tina Jauz

The meeting was called to order at 9:00 a.m.

The following matter(s), and any matter listed on the agenda for this meeting, may be discussed by the City Council:

1. Receive and discuss a presentation from Charles Harrington, Development Services Director, regarding a proposed Downtown Entertainment Overlay District and certain proposed amendments to the City's Zoning Ordinance.

Development Services Director Chuck Harrington gave a brief overview of the proposed Downtown Entertainment District. Mr. Harrington reviewed additional permitted uses, permitted land uses (brewery, micro without SUD) and prohibited land uses (laundry, commercial or self service). Mr. Harrington also reviewed key design elements (alley improvements, increased lighting, signage, inviting street furniture, landscaping bollards, metered parking), street redesign (curbless street, clearly striped pedestrian crosswalks, reduced speed limit, narrow lane width and wider sidewalks) and estimated expenses of \$1,158,000 (capital expenses, and operational expenses of \$458,977.00 – yearly).

In addition, Mr. Harrington reported on alcoholic beverage changes in the zoning ordinance. He also reported on front yard carports and front yard fences.

2. Receive and discuss a presentation from Christy Weakland, Finance Director, regarding the issuance of the final \$25 million of the authorized General Obligation bonds for streets and related utility improvements, as approved by voters November 7, 2017.

George Williford, Hilltop Securities, gave a brief overview of the issuance of the remaining general obligation street bond authorization. Mr. Williford reported that of the \$100 million

G.O. Street Bond Authorization, \$25 million remains for authorization. Mr. Williford further reported on the structure of the new issue, the general purpose debt service and reviewed the preliminary timetable of events.

3. Receive and discuss a presentation from Christy Weakland, Finance Director, regarding an update on the Water Billing System.

Finance Director Christy Weakland gave a brief overview of AMI Advanced Metering.

Ms. Weakland reported on infrastructure, data collectors across Midland and that the meter change-out program is complete.

With regard to systems, Ms. Weakland reported that the Northstar billing software went live March 30, 2020. The Neptune system provides meters and collectors and installation and support. The Smartworks system provides water data validation, reporting and analysis tools, and the Silverblaze system is the customer portal which is currently being implemented.

Ms. Weakland also reported on Water Accounts Receivable balance and other solutions in progress. It was stated that this is a national situation.

Reinstating the lien process that was placed on hold during COVID was briefly discussed.

Utilities Director Carl Craig reported that ARPA funds were given during COVID to offset some of the funding issues that would take place due to the pandemic.

All the business at hand having been completed, the meeting adjourned at 9:57 a.m.

PASSED AND APPROVED April 25, 2023.

Lori Blong, Mayor

ATTEST:

Marcia Bentley-German
City Governance Officer /City Secretary

**MIDLAND CITY COUNCIL
MINUTES
April 11, 2023**



The City Council convened in regular session in the Council Chamber, City Hall, Midland, Texas, at 10:00 a.m., April 11, 2023.

Council Members present: Amy Stretcher Burkes, Dan Corrales, Robin Poole, Lori Blong, Scott Dufford, Jack Ladd, John Norman

Council Members absent: None

Staff members present: City Attorney John Ohnemiller, Deputy City Manager Morris Williams Jr, Assistant City Manager Tina Jauz

The meeting was called to order at 10:00 a.m.

OPENING ITEMS

1. Invocation – Monsignor Larry Droll, St. Ann’s Catholic Church
2. Pledge of Allegiance

PRESENTATIONS

3. Presentation of special events, organizations, individuals, or periods of time including, but not limited to:
 - 3a. Presentation of Proclamation for “National Child Abuse Awareness Month” and “National Sexual Assault Awareness Month”

CONSENT AGENDA

4. MOTION APPROVING THE FOLLOWING MINUTES:
 - 4a. BRIEFING SESSION OF MARCH 28, 2023
 - 4b. REGULAR SESSION OF MARCH 28, 2023
6. 028-2023 – MOTION APPROVING SPECIFICATIONS FOR DRY CLEANING AND LAUNDRY SERVICES FOR VARIOUS CITY DEPARTMENTS, SAID SPECIFICATIONS PACKET
4b.1 April 25, 2023

BEING ON FILE IN THE CITY SECRETARY'S OFFICE REFERENCED BY THE NUMBER AND DATE OF THIS MOTION, AND AUTHORIZING THE CITY MANAGER OR THE CITY MANAGER'S DESIGNEE TO ADVERTISE FOR COMPETITIVE BIDS FOR SAID SERVICES PURSUANT TO THE STATUTES OF THE STATE OF TEXAS FOR ACCOMPLISHING THE WORK SET FORTH IN SAID SPECIFICATIONS (DISTRICT: ALL) (GENERAL SERVICES)

7. 2023-052 – RESOLUTION RATIFYING AND APPROVING THE PAYMENT FOR THE EMERGENCY SEWER MAIN MANHOLE REPAIRS ALONG THE MIDLAND DRAW BY RED DEER CONSTRUCTION, LLC, FOR A TOTAL COST OF \$128,851.10 (DISTRICT 2) (GENERAL SERVICES)
8. 2023-053 – RESOLUTION ADOPTING A NEW PURCHASING POLICY AND RESCINDING ALL PRIOR CONFLICTING RESOLUTIONS (DISTRICT: NONE) (GENERAL SERVICES)
9. 2023-054 – RESOLUTION APPROVING THE PURCHASE OF ONE (1) INTERNATIONAL HV607 4X2 CHASSIS WITH TEN-FOOT DUMP BED, ONE (1) INTERNATIONAL HV607 6X4 CHASSIS WITH FOURTEEN-FOOT DUMP BED, ONE (1) INTERNATIONAL HV607 6X4 CHASSIS WITH TWENTY-TON CRANE, ONE (1) INTERNATIONAL HV507 6X4 CHASSIS, AND THREE (3) INTERNATIONAL HV607 6X4 CHASSIS WITH ROLL-OFF BODIES FROM BDR PREFERRED HOLDING LLC DBA ROBERTS TRUCK CENTER THROUGH SOURCEWELL FOR A TOTAL COST OF \$1,231,546.84 (DISTRICT: NONE) (GENERAL SERVICES)
10. 2023-055 – RESOLUTION AWARDED A CONTRACT FOR THE ENVIRONMENTAL COMPLIANCE SAMPLING PROJECT IN THE AMOUNT OF \$83,354.00 TO TALON/LPE, LTD.; AND APPROVING \$20,838.50 FOR CONTINGENCIES (DISTRICT: NONE) (GENERAL SERVICES)
11. 029-2023 – MOTION AUTHORIZING THE EXECUTION OF A NON-FEDERAL REIMBURSABLE AGREEMENT BETWEEN THE CITY OF MIDLAND, TEXAS, AND THE DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION FOR CERTAIN SERVICES RELATED TO THE RECONSTRUCT RUNWAY 16R BLAST PAD, REMOVE RUNWAY 34L CONCRETE BLAST PAD, AND ADD ASPHALT SHOULDERS TO RUNWAY 10 BLAST PAD PROJECT (900413) AT MIDLAND INTERNATIONAL AIR & SPACE PORT; AND APPROPRIATING \$102,851.06 FOR SAID PROJECT (DISTRICT 4) (AIRPORTS)
12. 030-2023 – MOTION AUTHORIZING THE EXECUTION OF AMENDMENT NO. 6 TO THE PROFESSIONAL SERVICES AGREEMENT DATED MARCH 23, 2021, BETWEEN THE CITY OF MIDLAND, TEXAS, AND PARKHILL, SMITH & COOPER, INC., DBA PARKHILL; SAID AMENDMENT PROVIDING FOR CERTAIN SCOPE CHANGES TO THE RECONSTRUCT RUNWAY 16R BLAST PAD, REMOVE RUNWAY 34L CONCRETE BLAST PAD, AND ADD ASPHALT SHOULDERS TO RUNWAY 10 BLAST PAD PROJECT (900413) AT MIDLAND INTERNATIONAL AIR & SPACE PORT; AND APPROPRIATING \$25,000.00 FOR SAID PROJECT (DISTRICT 4) (AIRPORTS)

13. 031-2023 – MOTION AUTHORIZING THE ACCEPTANCE OF GRANT FUNDS IN THE AMOUNT OF \$455,206.00 FROM THE TEXAS DEPARTMENT OF STATE HEALTH SERVICES TO ASSIST THE CITY OF MIDLAND HEALTH SERVICES DIVISION WITH SUPPORT FOR PUBLIC HEALTH INFRASTRUCTURE AND WORKFORCE NECESSITIES; AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ALL NECESSARY ACCEPTANCE DOCUMENTS; AND AUTHORIZING AND DIRECTING THE CITY TREASURER TO DEPOSIT SAID GRANT FUNDS INTO THE GENERAL FUND (DISTRICT: ALL) (COMMUNITY SERVICES)
14. 032-2023 – MOTION AUTHORIZING THE ACCEPTANCE OF GRANT FUNDS IN THE AMOUNT OF \$114,222.32 FROM THE U.S. COMMITTEE FOR REFUGEES AND IMMIGRANTS TO ASSIST THE CITY OF MIDLAND HEALTH SERVICES DIVISION WITH THE FUNDING AND DELIVERY OF REFUGEE IMMUNIZATION SERVICES; AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ALL NECESSARY ACCEPTANCE DOCUMENTS; AND AUTHORIZING AND DIRECTING THE CITY TREASURER TO DEPOSIT SAID GRANT FUNDS INTO THE GENERAL FUND (DISTRICT: ALL) (COMMUNITY SERVICES)
15. 033-2023 – MOTION APPROVING WITH STAFF'S RECOMMENDED CONDITIONS A PROPOSED PRELIMINARY PLAT OF WESTRIDGE PARK ADDITION, SECTION 47, BEING A PLAT OF A 37.62-ACRE TRACT OF LAND OUT OF THE NORTHEAST QUARTER OF SECTION 48, BLOCK 40, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF LEISURE DRIVE AND SOUTH LOOP 250 WEST) (DISTRICT 4) (DEVELOPMENT SERVICES)
16. 034-2023 – MOTION AUTHORIZING THE EXECUTION OF AN INTERLOCAL AGREEMENT WITH MIDLAND COUNTY PROVIDING (1) THAT THE CITY OF MIDLAND SHALL ACQUIRE REAL PROPERTY INTERESTS NECESSARY TO EXTEND OCCIDENTAL PARKWAY TO ELKINS ROAD AND SHALL DESIGN SAID EXTENSION OF OCCIDENTAL PARKWAY, AND (2) THAT MIDLAND COUNTY SHALL CONSTRUCT SAID EXTENSION OF OCCIDENTAL PARKWAY (DISTRICT 1) (ENGINEERING SERVICES)
17. 035-2023 – MOTION AUTHORIZING THE EXECUTION OF AN INTERLOCAL AGREEMENT WITH MIDLAND COUNTY PROVIDING (1) THAT THE CITY OF MIDLAND SHALL CONSTRUCT HARRIS ROAD, FROM MIDKIFF ROAD TO GARFIELD STREET, AND (2) THAT MIDLAND COUNTY SHALL REIMBURSE THE CITY FOR THE COST OF THE CONSTRUCTION THAT OCCURS OUTSIDE OF THE BOUNDARIES OF THE CITY, WHICH IS ESTIMATED TO BE \$1,350,335.00 (DISTRICT 2) (ENGINEERING SERVICES)
18. 2023-056 – RESOLUTION AUTHORIZING THE CITY OF MIDLAND IN CONJUNCTION WITH MIDLAND COUNTY TO ACCEPT THE FISCAL YEAR 2022 JUSTICE ASSISTANCE GRANT FUNDS TOTALING \$30,063.00; THE CITY OF MIDLAND WILL RECEIVE \$18,037.00 (60%) AND MIDLAND COUNTY WILL RECEIVE \$12,026.00 (40%) OF THE GRANT FUNDS; AUTHORIZING THE EXECUTION OF ACCEPTANCE

DOCUMENTS; AND APPROPRIATING GRANT FUNDS (DISTRICT: NONE) (POLICE)

19. 036-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (23-329-015) BETWEEN THE CITY OF MIDLAND AND MATTERHORN EXPRESS PIPELINE, LLC, REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTIONS 4, 9, 16, AND 21, BLOCK 37, T-3-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)
20. 037-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (23-329-016) BETWEEN THE CITY OF MIDLAND AND MATTERHORN EXPRESS PIPELINE, LLC, REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 9, BLOCK 37, T-3-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)
21. 038-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (23-329-017) BETWEEN THE CITY OF MIDLAND AND MATTERHORN EXPRESS PIPELINE, LLC, REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 9, BLOCK 37, T-3-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)
22. 039-2023 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (23-329-018) BETWEEN THE CITY OF MIDLAND AND MATTERHORN EXPRESS PIPELINE, LLC, REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 4, BLOCK 37, T-3-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)

John Norman moved to approve consent agenda items 4-22, excluding item 5; seconded by Dan Corrales.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

The following item(s) were pulled from consent agenda and considered individually.

5. 2023-051 – RESOLUTION APPROVING THE PURCHASE OF FURNITURE AND ASSOCIATED EQUIPMENT FOR THE CITY OF MIDLAND UTILITIES SERVICE CENTER FROM SEWCO, INC., DBA OFFICEWISE FURNITURE AND EQUIPMENT THROUGH THE PURCHASING ASSOCIATION OF COOPERATIVE ENTITIES AND OMNIA PARTNERS FOR A TOTAL COST OF \$318,654.49 (DISTRICT: NONE) (GENERAL SERVICES)

General Services Director Regina Stephenson gave a brief overview of the Utilities Service Center noting the completion date is now October 2023. The furniture has been designed to fit the space.

Dan Corrales moved to approve Resolution No. 2023-051; seconded by Robin Poole.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

SECOND READINGS

23. 10386 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 10, BLOCK 29, GREENWOOD ADDITION, THIRD, FOURTH, AND FIFTH SECTIONS, CITY AND COUNTY OF MIDLAND, TEXAS, FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED ON THE EAST SIDE OF BENTON STREET, APPROXIMATELY 110 FEET SOUTH OF EAST NEW YORK AVENUE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD MARCH 28, 2023)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10386.

Jack Ladd moved to approve the second and final reading of Ordinance No. 10386; seconded by John Norman.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

24. 10390 – AN ORDINANCE VACATING AND ABANDONING A 1.584-ACRE PORTION OF CHAMPIONS DRIVE RIGHT-OF-WAY LOCATED ADJACENT TO LOT 4, BLOCK 5, WESTRIDGE PARK ADDITION, SECTION 6, AND LOTS 3A AND 3B, BLOCK 6, WESTRIDGE PARK ADDITION, SECTION 44, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE WEST SIDE OF THE INTERSECTION OF CHAMPIONS DRIVE AND LOOP 250); THE CITY OF MIDLAND BEING THE OWNER OF ALL ABUTTING PROPERTY; AND ORDERING RECORDATION BY THE CITY SECRETARY (DISTRICT 4) (DEVELOPMENT SERVICES) (FIRST READING HELD MARCH 28, 2023)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10390.

Robin Poole moved to approve the second and final reading of Ordinance No. 10390; seconded by Dan Corrales.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

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NAY: None
ABSTAIN: None
ABSENT: None

25. 10391 – AN ORDINANCE VACATING AND ABANDONING A 0.042-ACRE PORTION OF THE ALLEY RIGHT-OF-WAY LOCATED ADJACENT TO LOTS 1 THROUGH 3, BLOCK 11, ELMWOOD ADDITION, AND LOT 1, BLOCK 15, ELMWOOD ADDITION, SECTION 2, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE EAST SIDE OF NORTH MARIENFIELD STREET, APPROXIMATELY 250 FEET SOUTH OF WEST CUTHBERT AVENUE); ADOPTING THE APPRAISAL BY THE CITY MANAGER OF \$7,232.00; RETAINING A NONEXCLUSIVE UTILITY EASEMENT; AND ORDERING RECORDATION BY THE CITY SECRETARY (DISTRICT 3) (DEVELOPMENT SERVICES) (FIRST READING HELD MARCH 28, 2023)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10391.

Dan Corrales moved to approve the second and final reading of Ordinance No. 10391; seconded by Jack Ladd.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

George Thornley, 521 N. Texas, stated he is available to answer questions. There were no questions for Mr. Thornley.

26. 10392 – AN ORDINANCE VACATING AND ABANDONING A 2,080-SQUARE FOOT PORTION OF WEST INDUSTRIAL LOOP RIGHT-OF-WAY LOCATED ADJACENT TO LOT 1, BLOCK 3, MIDKIFF INDUSTRIAL CENTER, SECTION 2, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE WEST SIDE OF WEST INDUSTRIAL LOOP, APPROXIMATELY 250 FEET SOUTH OF COMMERCIAL DRIVE); ADOPTING THE APPRAISAL BY THE CITY MANAGER OF \$1,040.00; AND ORDERING RECORDATION BY THE CITY SECRETARY (DISTRICT 2) (DEVELOPMENT SERVICES) (FIRST READING HELD MARCH 28, 2023)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10392.

John Norman moved to approve the second and final reading of Ordinance No. 10392; seconded by Dan Corrales.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

27. 10393 – AN ORDINANCE VACATING AND ABANDONING A 1,200-SQUARE FOOT

SANITARY SEWER EASEMENT LOCATED ADJACENT TO LOTS 2 AND 3, BLOCK 6, WARWICK ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE EAST SIDE OF NORTH L STREET, APPROXIMATELY 185 FEET SOUTH OF WINFIELD ROAD); ADOPTING THE APPRAISAL BY THE CITY MANAGER OF \$5,400.00; AND ORDERING RECORDATION BY THE CITY SECRETARY (DISTRICT 3) (DEVELOPMENT SERVICES) (FIRST READING HELD MARCH 28, 2023)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10393.

Robin Poole moved to approve the second and final reading of Ordinance No. 10393; seconded by John Norman.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

28. 10394 – AN ORDINANCE AMENDING TITLE X, “TRAFFIC REGULATIONS”, CHAPTER FOUR, “TRAFFIC CONTROL DEVICES”, SECTION 11, “SCHOOL ZONES”, OF THE MIDLAND CITY CODE, SO AS TO DESIGNATE EACH SCHOOL ZONE WITHIN THE CITY AND REGULATE THE SPEED AND MOVEMENT OF TRAFFIC THEREIN; AUTHORIZING AND DIRECTING THE TRAFFIC ENGINEER TO INSTALL APPROPRIATE SIGNS AND MARKINGS; REPEALING ORDINANCE NO. 10345; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO HUNDRED DOLLARS (\$200.00); AND ORDERING PUBLICATION (DISTRICT 3) (ENGINEERING SERVICES) (FIRST READING HELD MARCH 28, 2023)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10394.

John Norman moved to approve the second and final reading of Ordinance No. 10394; seconded by Robin Poole.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

PUBLIC HEARINGS

The City Council will hold public hearings on the following items:

29. 10395 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 1B, BLOCK 33, NORTHGATE ADDITION, SECTION 24, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF NORTH MIDLAND DRIVE

AND BRIARWOOD AVENUE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 1) (DEVELOPMENT SERVICES)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10395.

Mayor Blong opened the public hearing at 10:18 a.m.

Chris Strickland, 1101 S. Central Expressway, was there to answer questions. There were no questions.

There being no one else wishing to speak, the public hearing was closed at 10:18 a.m.

Dan Corrales moved to approve the first of two readings of Ordinance No. 10395; seconded by Jack Ladd.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

30. 10396 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 2, BLOCK 1, W. P. KNIGHT ADDITION, SECTION 2, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR AN OFFICE CENTER TO PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF SOUTH POWELL STREET AND WEST WALL STREET); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10396.

Development Services Director Chuck Harrington gave a brief overview of the item noting the applicant would like to enlarge his restaurant bar. The current ordinance it is under needs to be revised since the ordinance is very old. Once revised changes may be made.

Mayor Blong opened the public hearing at 10:20 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Dan Corrales moved to approve the first of two readings of Ordinance No. 10396; seconded by John Norman.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None
ABSTAIN: None
ABSENT: None

31. 10397 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITHOUT TERM FOR LOT 4, BLOCK 2, COUNTRY VILLA ESTATES, SECTION 7, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF WEST WALL STREET AND BRINSON LANE), WHICH IS PRESENTLY ZONED C, COMMERCIAL DISTRICT, IN PART, AND TP, TECHNOLOGY PARK DISTRICT, IN PART, ALLOWING SAID PROPERTY TO BE USED FOR AUTOMOBILE OR OTHER MOTORIZED VEHICLE SALES AND SERVICE; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Deputy City Secretary Vanessa White read the caption of Ordinance No. 10397.

Mayor Blong opened the public hearing at 10:21 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

Dan Corrales moved to approve the first of two readings of Ordinance No. 10397; seconded by John Norman.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

MISCELLANEOUS

32. 2023-057 – RESOLUTION OF THE CITY OF MIDLAND, TEXAS, AUTHORIZING THE CREATION OF A SPACEPORT DEVELOPMENT CORPORATION IN CONJUNCTION WITH MIDLAND COUNTY, TEXAS, PURSUANT TO TEXAS LOCAL GOVERNMENT CODE, CHAPTER 507; AND SETTING FORTH OTHER MATTERS RELATED THERETO (DISTRICT: NONE) (CITY MANAGER)

Mayor Blong spoke about this item noting the City of Midland had this board in the past but it was dissolved because there was no longer a funding mechanism for it. The City was continuing to pay for the audit and incurring cost. Now there are opportunities for potential revenues and grants, which is why it's being discussed today.

Midland Development Corporation Director Sara Harris gave a brief overview of the item noting this is a mechanism to receive State funding for a SpacePort Infrastructure Project that Midland County approved in their agreement yesterday. This will be a partnership with

the City and County to form the board. There will be three board members appointed by the County Commissioners and four board members appointed by the City Council. This will allow the board to identify projects suitable for funding.

In 2019 the legislature chose not to fund the Texas SpacePort Trust Fund. During this legislative session, there is strong indication that funding may be available. Governor Abbott has designated \$350 million in his budget for commercial SpacePort infrastructure. Although the budget has not passed yet, the Governor has indicated that this is a high priority.

HB 3447 established a Texas Space Commission; the board would be responsible for distributing funds from the State and other grant sources. Even though the bill hasn't passed yet, re-establishing the Midland SpacePort Development Corporation board will put Midland in a better position overall.

Mayor Blong reported that due to the nature of timing, the board may be formed and members chosen today. However, when it is time to open up Boards and Commissions later in the year, citizens are welcome to apply.

John Norman moved to approve Resolution No. 2023-057; seconded by Dan Corrales.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

33. 040-2023 – MOTION APPOINTING INDIVIDUALS TO SERVE ON THE BOARD OF DIRECTORS OF THE MIDLAND SPACEPORT DEVELOPMENT CORPORATION (DISTRICT: NONE) (CITY MANAGER)

Dan Corrales moved to appoint Frank Kisner, Mayor Lori Blong, Council Member Robin Poole, and Council Member Amy Stretcher Burkes to serve on the Board of Directors of the Midland Spaceport Development Corporation; seconded by John Norman.

The motion passed by the following vote:

AYE: Stretcher Burkes, Corrales, Poole, Blong, Dufford, Ladd, Norman

NAY: None

ABSTAIN: None

ABSENT: None

PUBLIC COMMENT

34. Receive public comments where individuals may address the City Council on City related issues and projects not on the present agenda. Any deliberation of or decision by the City Council regarding the item being discussed shall be limited to a motion to place the item on the agenda for a subsequent meeting. (Please limit comments to three minutes or less.)

Jose Luis Chavez, 1307 Camp Street, reported that Midland should go back to a board of
PACKET 4b.10 April 25, 2023

adjustments so people can present their problems. He would like to know why his street has never been paved. Mr. Chavez reported he was told last year there were funds to pave his street and when it wasn't, he was then told the funds were transferred somewhere else. Mr. Chavez also reported his street is in bad condition and needs to be paved.

Mayor Blong notified the audience that we now have briefings prior to the Council meetings which are located in the Basement Conference Room. She encouraged all to attend.

EXECUTIVE SESSION

35. Pursuant to Texas Government Code § 551.101, the City Council will hold an Executive Session, which is closed to the public, to discuss the following matters as permitted under the following sections of the Texas Government Code:

Mayor Blong recessed the Council Meeting to go into Executive Session at 10:34 a.m.

- a. Section 551.071, Consultation with Attorney
 - a.1. Discuss pending or contemplated litigation.
 - a.2. Discuss a matter in which the duty of the attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with Chapter 551 of the Texas Government Code.
- b. Section 551.072, Deliberation Regarding Real Property
 - b.1. Discuss the purchase, exchange, lease, or value of real property.

All the business at hand having been completed, the meeting adjourned at 12:21 p.m.

PASSED AND APPROVED April 25, 2023.

Lori Blong, Mayor

ATTEST:

Marcia Bentley-German
City Governance Officer/City Secretary



City Council Meeting

Item Number: 5
Meeting Date: April 25, 2023
To: City Council / City Manager
From: Erika Martinez, Manager, Purchasing
Subject: RESOLUTION APPROVING THE PURCHASE OF TWO (2) 2-3 YARD DUMP BODIES WITH LIFT GATES FROM ROYAL TRUCK BODY OF DALLAS, TEXAS FOR A TOTAL COST OF \$54,647.08; AND APPROVING THE PURCHASE TWO (2) UTILITY BODIES AND TWO (2) UTILITY BODIES WITH LIFT GATES FROM RRPFG, LP D/B/A RANDALL REED'S PLANET FORD 635 OF GARLAND, TEXAS, FOR A TOTAL COST OF \$63,692.00 (DISTRICT: NONE) (GENERAL SERVICES)

Purpose:

Resolution approving the purchase two (2) 2–3-yard dump bodies with lift gates, two (2) utility bodies, and two (2) utility bodies with lift gates.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding is available in the FY2023 Garage Fund operating budget.

Discussion:

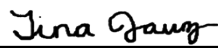
The City Manager approved specifications and authorized advertisement for bids for two (2) 2–3-yard dump bodies with lift gates, two (2) utility bodies, and two (2) utility bodies with lift gates. The bid request was sent to twenty-eight (28) companies. We received two (2) bids. Royal Truck Body was not able to meet specifications for the bodies that are being requested for item 2, therefore is nonresponsive for this item.

Staff recommends purchasing item 1 from the apparent low bidder Royal Truck Body and Items 2, and 3 from RRPFG, LP dba Randall Reed's Planet Ford 635. Please see the attached memo

from Manuel Salinas, Garage Superintendent for additional information.

Therefore, please consider a resolution approving the purchase of the truck bodies as shown below:

Item	Dealership	Total Cost
1	Royal Truck Body of Dallas, Texas	\$54,647.08
2	RRPFG, LP dba Randall Reeds Planet Ford 635 of Garland, Texas	\$27,932.00
3	RRPFG, LP dba Randall Reeds Planet Ford 635 of Garland, Texas	\$35,760.00
Total Cost for all vehicles		\$118,339.08



City Manager's Office



Fleet Services Division

INTEROFFICE MEMORANDUM

TO: Regina Stephenson

FROM: Eloy Salinas

SUBJECT: Bid # 23002351 for Utility bodies FY23

DATE: April 05, 2023

(Special note concerning the bid tabulation, Royal Truck Body was not able to meet specifications for the utility bodies under section 4.3 item 4.3.6 and section 4.4 item 4.4.6 that are being requested, therefore Royal Truck Body did not meet the requirements of the utility body bid requests.)

Fleet services is requesting (2) two 2–3-yard dump bodies with lift gates to be installed on two cab and chassis trucks, and (2) two utility bodies to be installed on two cab and chassis trucks. Fleet services is also requesting (2) two utility bodies with lift gates that will be installed on two cab and chassis trucks. These bodies along with the trucks will be replacements for units that have gone beyond their useful service life.

The budgeted amount for FY23 for (2) two 2–3-yard dump bodies with lift gates is \$83,750. The bid proposal in the amount of \$54,647.08 has been submitted by Royal Truck Body for the purchasing of (2) two 2–3-yard dump bodies with lift gates.

The budgeted amount for FY23 for (2) two utility bodies is \$55,000. The bid proposal in the amount of \$27,932 has been submitted by Randall Reeds Planet Ford for the purchasing of (2) two utility bodies.

The budgeted amount for FY23 for (2) two utility bodies with lift gates is \$63,750. The bid proposal in the amount of \$35,760 has been submitted by Randall Reeds Planet Ford for the purchasing of (2) two utility bodies with lift gates.

Fleet services accepts the bid proposals from Royal Truck Body for the purchasing of the 2–3-yard dump bodies which meets all the specifications.

Fleet services accepts the bid proposal from Randall Reed’s Planet Ford for the purchasing of the utility service bodies which meet all the specifications.

Sincerely,

Manuel Eloy Salinas

City of Midland Garage Superintendent

RESOLUTION NO. _____

RESOLUTION APPROVING THE PURCHASE OF TWO (2) 2-3 YARD DUMP BODIES WITH LIFT GATES FROM ROYAL TRUCK BODY OF DALLAS, TEXAS FOR A TOTAL COST OF \$54,647.08; AND APPROVING THE PURCHASE TWO (2) UTILITY BODIES AND TWO (2) UTILITY BODIES WITH LIFT GATES FROM RRPFG, LP D/B/A RANDALL REED'S PLANET FORD 635 OF GARLAND, TEXAS, FOR A TOTAL COST OF \$63,692.00

WHEREAS, the City Manager approved the specifications and authorized advertisement for bids for the purchase of two (2) 2-3 yard dump bodies with lift gates, two (2) utility bodies, and two (2) utility bodies with lift gates for the Garage Division; and

WHEREAS, Bid No. 23002351 was opened on February 22, 2023, with the lowest and most advantageous bid for the two (2) 2-3 yard dump bodies with lift gates being submitted by Royal Truck Body of Dallas, Texas, for a total cost of \$54,647.08; and the lowest and most advantageous bid for the two (2) utility bodies and two (2) utility bodies with lift gates being submitted by RRPFG, LP, d/b/a Randall Reed's Planet Ford 635 of Garland, Texas, for a total cost of \$63,692.00, as shown on the bid tabulation attached hereto as Exhibit A and incorporated herein for all purposes; and

WHEREAS, the City Council finds the prices proposed by Royal Truck Body and RRPFG, LP, d/b/a Randall Reed's Planet Ford 635 for the purchase of said vehicle bodies for the Garage Division to be fair and reasonable; and

WHEREAS, the City Council finds it to be in the public interest to purchase: (i) two (2) 2-3 yard dump bodies with lift gates from Royal Truck Body of Dallas, Texas, for a total cost of \$54,647.08; and (ii) two (2) utility bodies and two (2) utility bodies with lift gates from RRPFG, LP, d/b/a Randall Reed's Planet Ford 635 of Garland, Texas, for a total cost of \$63,692.00;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the City Manager is hereby authorized and directed to

purchase: (i) two (2) 2-3 yard dump bodies with lift gates from Royal Truck Body of Dallas, Texas, for a total cost of \$54,647.08; and (ii) two (2) utility bodies and two (2) utility bodies with lift gates from RRPFG, LP, d/b/a Randall Reed's Planet Ford 635 of Garland, Texas, for a total cost of \$63,692.00.

SECTION TWO. That the City Comptroller is hereby authorized and directed to pay Royal Truck Body of Dallas, Texas, and RRPFG, LP, d/b/a Randall Reed's Planet Ford 635 of Garland, Texas, from funds available in the FY2023 Garage Fund operating budget upon receipt of proper invoices or statements approved by the City Manager.

On motion of Council member _____, seconded by Council member _____, the above and foregoing resolution was adopted by the City Council of the City of Midland at a regular meeting on the _____ day of _____, A.D., 2023, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

Lori Merritt Blong, Mayor

ATTEST:

Marcia Bentley-German, City Secretary

RECOMMENDED AND APPROVED:

Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

Regina Stephenson, General Services Director

APPROVED AS TO FORM ONLY:

John Ohnemiller, City Attorney

City of Midland - Bid Tabulation

BID # 23002351 FY 2023 Utility Service Bodies OPENED February 22, 2023			RRPFG, LP dba Randall Reed's Planet Ford 635 3601 S Shiloh Road Garland, TX 75041 972-864-6815 asarac@planetford635.com		Royal Truck Body 3000 W Commerce St Ste 110 Dallas, TX 75212 469-480-7135 dori.page@royaltruckbody.com	
ITEM	QTY	DESCRIPTION	COST EA.	TOTAL	COST EA.	TOTAL
1	2	2-3 cubic yard dump body w/ tailgate lifts; Spec 4.2	\$31,360.00	\$62,720.00	\$27,323.54	\$54,647.08
		Mileage/Make:	NA	knapheide	NA	CM Truck
		Warranty/ Extended Warranty	12 Months	NA	2 Years	NA
		Delivery:	120-160 Days		8-10 Weeks	
2	2	Utility service body; Spec 4.3	\$13,966.00	\$27,932.00	\$13,896.00	\$27,792.00
		Mileage/Make:	NA	knapheide	NA	Royal 40-VO-98
		Warranty:	12 Months	NA	3 Years	NA
		Delivery:	90-160 Days		4-6 Weeks	
3	2	Utility service body w/ lift tailgate; Spec 4.4	\$17,880.00	\$35,760.00	\$19,078.63	\$38,157.26
		Mileage/Make:	NA	knapheide	NA	Royal 40-VO-98 Tommygate
		Warranty/ Extended Warranty	12 Months	NA	3 Years for Bed	NA
		Gate Warranty:			1 Year for Gate	
		Delivery:	90-160 Days		4-6 Weeks	
TOTAL				\$126,412.00		\$120,596.34

Bidding Summary:

28 Bid requests were issued.

2 Bids listed above

0 NO BIDS were received.

26 Bidders did not respond.



City Council Meeting

Item Number: 6
Meeting Date: April 25, 2023
To: City Council / City Manager
From: Erika Martinez, Manager, Purchasing
Subject: RESOLUTION AWARDING A CONTRACT IN THE AMOUNT OF \$247,304.51 FOR THE IMPLEMENTATION OF ELECTRONIC BIDDING SOFTWARE AND RELATED SERVICES TO GTY SOFTWARE INC., D/B/A BONFIRE INTERACTIVE LTD. (DISTRICT: NONE) (GENERAL SERVICES)

Purpose:

Resolution awarding a contract with GTY Software Inc., dba Bonfire Interactive Ltd. for Electronic Bidding (E-Bidding) Software and Implementation Services for a cost of \$247,304.51 for the Purchasing Division for ten (10) years.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding of \$26,000.00 for implementation is available in the FY2023 Technology Fund operating budget. \$221,304.51 will be available and paid from the Technology Fund operating budget as each yearly payment is due.

Discussion:

In December 2022, the General Services Department and Information Technology Services Department (ITSD) conducted an assessment of the existing bid management operations and technology at the City. As a result of the assessment, the General Services and ITSD project team identified several bid management challenges in the current technical and operational environment, including: (1) a reliance on manual, time-consuming processes, (2) heavy use of paper-based practices, (3) limited vendor management capabilities, (4) outdated communication channels with vendors, and (5) gaps in technology that support solicitation creation through

contract award.

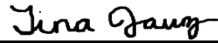
In order to overcome the existing challenges, the General Services and ITSD project team decided to identify a modern electronic bid management solution that will (1) streamline solicitation development activities, (2) increase vendor engagement, (3) enhance interdepartmental collaboration capabilities, (4) standardize opportunity creation and bid assessment, and (5) retire paper-based practices with electronic operations.

The City Manager approved specifications and authorized advertisement for bids for the Electronic Bidding (E-Bidding) Software and Implementation Services Project. The City issued bid requests to twenty-eight (28) vendors. In response to the RFP, the City received four (4) proposals for modern E-Bidding software.

General Services and ITSD formed an Evaluation Team that applied a formal, objective assessment methodology to analyze bid packages. The evaluation methodology involved three rounds of scoring based on written vendor proposals (Short-List Vendor Identification), software demonstrations (Finalist Vendor Identification), and vendor references checks (Preferred Vendor Identification). Bonfire Interactive Ltd. (Bonfire) advanced through all rounds of scoring and placed as the City's preferred software vendor based on the evaluation criteria, which included functional capabilities, technical architecture, experience, and cost.

As a result of the City's internal needs assessment and software evaluation activities, staff recommends awarding the opportunity to GTY Software Inc., dba Bonfire Interactive Ltd as the most capable vendor to help the City overcome existing operational and technical challenges through a modern E-Bidding solution.

Therefore, please consider a resolution awarding a contract with GTY Software Inc., dba Bonfire Interactive Ltd. of Ontario, Canada for Electronic Bidding (E-Bidding) Software and Implementation Services for a cost of \$247,304.51 for the Purchasing Division for ten (10) years.



City Manager's Office

RESOLUTION NO. _____

**RESOLUTION AWARDED A CONTRACT IN THE
AMOUNT OF \$247,304.51 FOR THE IMPLEMENTATION
OF ELECTRONIC BIDDING SOFTWARE AND
RELATED SERVICES TO GTY SOFTWARE INC., D/B/A
BONFIRE INTERACTIVE LTD.**

WHEREAS, the City Manager authorized the issuance of a request for proposals for the implementation of electronic bidding software and related services; and

WHEREAS, four (4) proposals were received by the City, with the most advantageous proposal being submitted by GTY Software Inc., d/b/a Bonfire Interactive Ltd., for a total amount of \$247,304.51; and

WHEREAS, the City Council finds the amount of \$247,304.51 proposed by GTY Software Inc., d/b/a Bonfire Interactive Ltd. for the implementation of electronic bidding software and related services to be fair and reasonable; and

WHEREAS, the City Council finds it to be in the public interest to award a contract to GTY Software Inc., d/b/a Bonfire Interactive Ltd. for the implementation of electronic bidding software and related services;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the City Manager and City Secretary are hereby authorized and directed to execute and attest, respectively, on behalf of the City of Midland, a contract in the amount of \$247,304.51 with GTY Software Inc., d/b/a Bonfire Interactive Ltd. for the implementation of electronic bidding software and related services. Said contract to be kept on file in the office of the City Secretary and referenced by the date and number of this Resolution.

SECTION TWO. That funding in the amount of \$22,500.00 for the implementation of the electronic bidding software is available in the FY2023 Technology Fund operating budget, and funding in the amount of \$224,804.51 is available in the Technology Fund operating budget.

SECTION THREE. That the City Comptroller is hereby authorized and directed to pay GTY Software Inc., d/b/a Bonfire Interactive Ltd., from the funds available in the budgets referenced in Section Two hereof, pursuant to the terms of said contract upon receipt of proper invoices or statements approved by the City Manager.

On motion of Council member _____, seconded by Council member _____, the above and foregoing resolution was adopted by the City Council of the City of Midland at a regular meeting on the _____ day of _____, A.D., 2023, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

Lori Merritt Blong, Mayor

ATTEST:

Marcia Bentley-German, City Secretary

RECOMMENDED AND APPROVED:

Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

Regina Stephenson, General Services Director

APPROVED AS TO FORM ONLY:

John Ohnemiller, City Attorney

City of Midland, Texas
E-Bidding Software RFP
 Vendor Scoring

City of Midland E-Bidding Software RFP - Short-List Scoring																				
Vendors																				
Evaluation Criteria	Bonfire					Cobblestone					Ion Wave					SAP				
	Functionality	Technical Capabilities	Approach	Vendor Experience	Proposed Staff Experience	Functionality	Technical Capabilities	Approach	Vendor Experience	Proposed Staff Experience	Functionality	Technical Capabilities	Approach	Vendor Experience	Proposed Staff Experience	Functionality	Technical Capabilities	Approach	Vendor Experience	Proposed Staff Experience
Points:	35	15	25	20	5	35	15	25	20	5	35	15	25	20	5	35	15	25	20	5
Evaluators	33	8.00	25.00	20.00	5	31	6.00	25.00	18.00	5	28	8.00	23.00	20.00	5	20	10.00	10.00	5.00	2
Average	33.00	8.00	25.00	20.00	5.00	31.00	6.00	25.00	18.00	5.00	28.00	8.00	23.00	20.00	5.00	20.00	10.00	10.00	5.00	2.00
Total	Bonfire 91.00					Cobblestone 85.00					Ion Wave 84.00					SAP 47.00				
	Total Possible Points 100					Total Possible Points 100					Total Possible Points 100					Total Possible Points 100				

Short-Listed Vendors	
Vendor	Demo Date
Bonfire	10-Feb
Cobblestone	8-Feb
Ionwave	6-Feb

Short-List Identification Criteria		
Criteria	Description	Points
Functionality	This criterion considers but is not limited to the following: - The vendor's written responses to the Functional and Technical Requirements for proposed functional areas and overall software solution. - The ability for the proposed software to integrate with the City systems environment.	35
	This criterion considers but is not limited to the following: - Alignment of the proposed software to the City's preferred technical specifications. - The level of integration among proposed functional areas.	15
Approach	This criterion considers but is not limited to the following: - The described approach to implement the system to achieve the City's goals and objectives. - The alignment of the proposed implementation timeline to the City's desired timeline. - The distribution of implementation tasks among City and vendor teams. - The proposed resources hours among City and vendor teams. - The vendor's approach to key implementation tasks including but not limited to testing and training. - The vendor's planned ongoing support and maintenance services.	25
Vendor Experience	This criterion considers but is not limited to the following: - The vendor's experience delivering the services requested in the RFP. - The vendor's experience with similar implementations for comparable organizations.	20
Proposed Staff Experience	This criterion considers but is not limited to the following: - The experience of named staff delivering services requested in the RFP. - The experience of named staff with similar implementations for comparable organizations. - The qualifications of named staff to deliver the services requested in the RFP with a focus on business process optimization.	5

PACKET

6.6

April 25, 2023

City of Midland, Texas
E-Bidding Software RFP

Vendor Scoring

City of Midland												
E-Bidding Software RFP - Finalist Scoring												
	Bonfire				Cobblestone				Ion Wave			
Evaluation Criteria	Functionality Demonstrated	Technical Capabilities	Approach Discussion	Experience Discussion	Functionality Demonstrated	Technical Capabilities	Approach Discussion	Experience Discussion	Functionality Demonstrated	Technical Capabilities	Approach Discussion	Experience Discussion
Points:	15	5	5	5	15	5	5	5	15	5	5	5
Evaluators	15.00	4.00	5.00	5.00	11.00	3.00	4.00	4.00	13.00	4.00	4.00	4.00
Average	15.00	4.00	5.00	5.00	11.00	3.00	4.00	4.00	13.00	4.00	4.00	4.00
Total	Bonfire			29.00	Cobblestone			22.00	Ion Wave			25.00
	Total Possible Finalist Points			30	Total Possible Finalist Points			30	Total Possible Finalist Points			30
	Short-List Score			91.00	Short-List Score			85.00	Short-List Score			84.00
	Cumulative Score			120.00	Cumulative Score			107.00	Cumulative Score			109.00

Finalist Vendors
Vendor
Bonfire
Ion Wave

Finalist Identification Criteria		
Criteria	Description	Points
Functionality Demonstrated	This criterion considers new information learned through vendor demonstrations including but not limited to the demonstrated user interface and the alignment of demonstrated functionality with preferred business processes.	15
Technical Capabilities	This criterion considers new information learned through the Technical Discussion as part of vendor demonstrations as well as other sessions.	5
Approach Discussion	This criterion considers new information learned through the Implementation Approach Discussion as part of vendor demonstrations as well as other sessions.	5
Experience Discussion	This criterion considers new information learned through the Company Overview Discussion as part of vendor demonstrations as well as other sessions.	5

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6.7

April 25, 2023

City of Midland, Texas
E-Bidding Software RFP
Vendor Scoring

City of Midland						
E-Bidding Software RFP - Preferred Vendor Scoring						
Evaluation Criteria	Bonfire			Ion Wave		
	Reference Feedback	Comparable References	Cost	Reference Feedback	Comparable References	Cost
Points:	20	10	40	20	10	40
Evaluators	20.00	10.00	40.00	20.00	10.00	34.21
Average	20.00	10.00	40.00	20.00	10.00	34.21
Total			70.00			64.21
	Total Possible Preferred Points		70	Total Possible Preferred Points		70
	Short-List Score		91.00	Short-List Score		84.00
	Finalist Score		29.00	Finalist Score		25.00
	Cumulative Score		190.00	Cumulative Score		173.21

Preferred Vendor
Vendor
Bonfire

Preferred Vendor Identification Criteria		
Criteria	Description	Points
Reference Feedback	This criterion considers the feedback received from references related to the vendor's performance in the implementation including: - Meeting project objectives and timelines - The knowledge, skills, and experience of implementation staff - Capabilities of the software - Ongoing vendor performance with support and maintenance.	20
Comparable References	This criterion considers the relevance of references related to: - Organization size and location - Structure of the organization - Entity type (e.g., City/town/village) - Comparable scope - Similar software version - Deployment model.	10
Cost Point Criteria		
Criteria	Description	Points
Cost	This criterion considers, as applicable, the price of the software licensing, services, and terms of any offered ongoing maintenance and support (including applicable service level agreements, disaster recovery, etc.) proposed in response to the information solicited by this RFP. Respondents will be evaluated on their pricing scheme, as well as on their price in comparison to the other proposers. In evaluating cost, the City may evaluate on a fully loaded ten-year cost of ownership. Fully loaded is defined to include (but is not limited to): software purchase and implementation costs; ongoing support and service costs; hardware costs; and associated hardware support costs. The City reserves the right to add their own estimates of the costs (including any anticipated savings) associated with the required level of internal staffing (business users and IT staff) for implementation and for ongoing support, hardware and overhead costs and savings, and may rely on the Respondent's resource estimates as a basis for their calculations.	40

PACKET

6.8

April 25, 2023

City of Midland, Texas
E-Bidding Software RFP
 Vendor Scoring

City of Midland E-Bidding Software Scoring Year 1 Costs (BAFO)		
Calculation of Points for Cost Component Total Possible Points: 40		
Bonfire	Name:	Bonfire
	Proposed Cost:	\$26,000.00
	Points Awarded:	40.00
Ion Wave Technologies	Name:	Ion Wave Technologies
	Proposed Cost:	\$26,000.00
	Points Awarded:	40.00
In this rating system, the items identified as the most important to the success of the project are given the most points. Cost is identified as a percentage of the total available points and cost proposals from all offerors are "normalized" meaning that the lowest cost offeror receives 100% of the points available and the other cost proposals receive a percentage of the available points based on their submitted cost.		

Vendor	Year 1 Costs (BAFO)
Bonfire	\$ 26,000.00
Ion Wave Technologies	\$ 26,000.00

City of Midland E-Bidding Software Scoring Years 1-10 Costs (BAFO)		
Calculation of Points for Cost Component Total Possible Points: 40		
Lowest Priced Bidder	Name:	Bonfire
	Proposed Cost:	\$247,304.52
	Points Awarded:	40.00
Next Highest Bidder	Name:	Ion Wave Technologies
	Proposed Cost:	\$289,190.00
	Points Awarded:	34.21
In this rating system, the items identified as the most important to the success of the project are given the most points. Cost is identified as a percentage of the total available points and cost proposals from all offerors are "normalized" meaning that the lowest cost offeror receives 100% of the points available and the other cost proposals receive a percentage of the available points based on their submitted cost.		

Vendor	Ten Year (BAFO)
Bonfire	\$ 247,304.52
Ion Wave Technologies	\$ 289,190.00

City of Midland, Texas
E-Bidding Software RFP
 Vendor Scoring

City of Midland E-Bidding Software Scoring Year 1 Costs		
Calculation of Points for Cost Component Total Possible Points: 40		
Lowest Priced Bidder	Name:	Ionwave
	Proposed Cost:	\$27,000.00
	Points Awarded:	40.00
Next Highest Bidder	Name:	Bonfire
	Proposed Cost:	\$27,500.00
	Points Awarded:	39.27
Next Highest Bidder	Name:	Cobblestone (SaaS)
	Proposed Cost:	\$36,110.00
	Points Awarded:	29.91
Next Highest Bidder	Name:	Cobblestone (On-Prem)
	Proposed Cost:	\$75,036.58
	Points Awarded:	14.39
Next Highest Bidder	Name:	SAP
	Proposed Cost:	\$210,196.00
	Points Awarded:	5.14
In this rating system, the items identified as the most important to the success of the project are given the most points. Cost is identified as a percentage of the total available points and cost proposals from all offerors are "normalized" meaning that the lowest cost offeror receives 100% of the points available and the other cost proposals receive a percentage of the available points based on their submitted cost.		

Vendor	Year 1 Costs
Bonfire	\$ 27,500.00
Cobblestone On-Prem	\$ 75,036.58
Cobblestone SaaS	\$ 36,110.00
Ionwave	\$ 27,000.00
SAP	\$ 210,196.00

City of Midland E-Bidding Software Scoring Years 1-10 Costs		
Calculation of Points for Cost Component Total Possible Points: 40		
Lowest Priced Bidder	Name:	Cobblestone (On-Prem)
	Proposed Cost:	\$178,901.74
	Points Awarded:	40.00
Next Highest Bidder	Name:	Bonfire
	Proposed Cost:	\$263,558.15
	Points Awarded:	27.15
Next Highest Bidder	Name:	Ionwave
	Proposed Cost:	\$299,090.00
	Points Awarded:	23.93
Next Highest Bidder	Name:	Cobblestone (SaaS)
	Proposed Cost:	\$495,092.02
	Points Awarded:	14.45
Next Highest Bidder	Name:	SAP
	Proposed Cost:	\$1,535,456.00
	Points Awarded:	4.66
In this rating system, the items identified as the most important to the success of the project are given the most points. Cost is identified as a percentage of the total available points and cost proposals from all offerors are "normalized" meaning that the lowest cost offeror receives 100% of the points available and the other cost proposals receive a percentage of the available points based on their submitted cost.		

Vendor	Ten Year Investment
Bonfire	\$ 263,558.15
Cobblestone On-Prem	\$ 178,901.74
Cobblestone SaaS	\$ 495,092.02
Ionwave	\$ 299,090.00
SAP	\$ 1,535,456.00



THE CITY OF MIDLAND CONTRACT

Contract No. 23001936

THIS CONTRACT, effective the 26th day of April 2023, by and between the City of Midland, hereinafter referred to as "CITY", and GTY Software Inc., dba Bonfire Interactive Ltd., hereinafter referred to as "COMPANY", is made for the following considerations:

1. **Cost:** Total Proposal: \$ 247,304.51 DOLLARS
2. **Scope of Work:** COMPANY shall perform all work described for the implementation of electronic bidding software and related services. Said work being more particularly described in the following documents, which are attached hereto and incorporated herein for all purposes.

EXHIBIT A..... Specifications, Proposal or Cost Summary

EXHIBIT B..... Intentionally Omitted

EXHIBIT C..... Intentionally Omitted

EXHIBIT D..... Wage Scale

3. **City:** The words "CITY's Representative" or "representative" shall mean Regina Stephenson or the designee under whose supervision these contract documents, including the plans and specifications, were prepared, or who may inspect work performed under this Contract; or such other representative, supervisor, or inspector as may be authorized by CITY to act in any particular capacity under this Contract.

4. **City's Representative:** CITY's Representative may make periodic visits to the site to observe the progress and quality of the executed work and to determine, in general, if the work is proceeding in accordance with the contract documents. CITY's representative will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work, nor will such representative be responsible for the construction means, methods, techniques, sequences or procedures, or the safety precautions incident thereto. CITY's representative will not be responsible for COMPANY's failure to perform the work in accordance with the contract.

5. **Company:** Unless otherwise stipulated, COMPANY shall provide and pay for all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and all water, light, power, fuel,

transportation and all other facilities necessary for the execution and completion of the work covered by the contract documents. Unless otherwise specified, all materials shall be new, and both workmanship and materials shall be of a good quality. COMPANY shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

5.1. COMPANY shall, at its expense, obtain all permits and licenses necessary for the performance of this contract and pay all fees and taxes required by law, and comply with all laws, ordinances, rules and regulations governing COMPANY's performance of the contract, including all environmental laws and regulations, whether state or federal.

5.2. All work shall be done and all materials furnished in strict conformity with the contract and specifications.

6. **Minor Work Not Mentioned:** All minor detail of the work not specifically mentioned in the Specifications but obviously necessary for the proper completion of the work, such as the proper connection of new work to old, shall be considered as incidental to and a part of the work for which the prices are named in the contract. COMPANY will not be entitled to any additional compensation therefor unless specifically stated otherwise. Otherwise the term "extra work" as used in this contract shall mean and include all work that may be required by CITY to be done by COMPANY to accomplish any alteration or addition to the work as shown on the Specifications.

6.1. COMPANY shall perform all extra work under the direction of CITY's Representative when presented with a written work order signed by CITY's Representative, subject, however, to the right of the COMPANY to require written confirmation of such extra work order by CITY. Payment for extra work shall be as agreed in the work order.

7. **Safety:** COMPANY shall at all times exercise reasonable precaution for the safety of employees and others on or near the work and shall comply with all applicable provisions of federal, state and municipal laws. All machinery and equipment and other physical hazards shall be guarded in accordance with federal, state or municipal laws or regulations.

8. **INDEMNITY: COMPANY SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND CITY AND ALL OF CITY'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, ACCIDENTAL DEATH, LOSSES, PROPERTY DAMAGE AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR**

PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF COMPANY, THEIR AGENTS OR EMPLOYEES, OR ANY SUBCONTRACTOR, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS CONTRACT, AND COMPANY WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST CITY OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES. THE OBLIGATIONS CONTAINED IN THIS SECTION 8 SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

8.1. COMPANY SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND CITY AND ALL OF CITY'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES, AND EXPENSES OF ANY CHARACTER WHATSOEVER INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF CITY, CITY'S OFFICERS, AGENTS AND EMPLOYEES, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH COMPANY OR COMPANY'S EMPLOYEES, AGENTS OR SUBCONTRACTORS NEGLIGENCE IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS CONTRACT, AND COMPANY WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST CITY OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES. THE OBLIGATIONS CONTAINED IN THIS SECTION 8.1 SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

8.2. COMPANY AGREES THAT IT WILL INDEMNIFY AND SAVE CITY HARMLESS FROM ALL CLAIMS GROWING OUT OF ANY DEMANDS OF SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, AND FURNISHERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS AND ALL SUPPLIES, INCURRED IN THE FURTHERANCE OF THE PERFORMANCE OF THIS CONTRACT. WHEN CITY SO DESIRES, COMPANY SHALL FURNISH SATISFACTORY EVIDENCE THAT ALL OBLIGATIONS OF THE NATURE HEREINABOVE DESIGNATED HAVE BEEN PAID, DISCHARGED OR WAIVED. COMPANY, ITS SURETIES AND INSURANCE CARRIERS SHALL DEFEND, INDEMNIFY AND SAVE HARMLESS CITY AND

ALL OF ITS OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, OR CLAIMS OF ANY CHARACTER WHATSOEVER, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ARISING FROM ANY ACT OF COMPANY OR ANY SUBCONTRACTOR, THEIR AGENTS OR EMPLOYEES, IN THE EXECUTION AND SUPERVISION OF THIS CONTRACT, AND WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST CITY OR ANY OF ITS OFFICERS, AGENTS, OR EMPLOYEES INCLUDING ATTORNEY'S FEES. THE OBLIGATIONS CONTAINED IN THIS SECTION 8.2 SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

9. **Start of Work:** COMPANY shall commence work no later than ten (10) days after receipt of the execution of this document or other written release to proceed and shall complete such work no later than 80 calendar days after release to proceed.

10. **Clean Up:** COMPANY shall promptly remove from CITY's premises all materials condemned by CITY's Representative on account of failure to conform to the contract, whether actually incorporated in the work or not, and COMPANY shall at its own expense promptly replace such condemned materials with other materials conforming to the requirements of the contract. COMPANY shall also bear the expense of restoring all work of other contractors damaged by any such removal or replacement. If COMPANY does not remove and replace any such condemned materials within a reasonable time after a written notice by CITY, CITY may remove and replace such at COMPANY's expense.

11. **Warranty:** Neither the final payment nor any provision in this contract shall relieve COMPANY of responsibility for faulty materials or workmanship, and he shall remedy any defects due thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one (1) year from the date of substantial completion. CITY shall give notice of observed defects with reasonable promptness.

12. **Remedy:** CITY may, on account of subsequently discovered evidence, withhold whole or part of any payment to such extent as may be necessary to protect itself from loss on account of:

12.1. Defective work not remedied; or

12.2. Claims filed or reasonable evidence indicating possible filing of claims; or

12.3. Failure of COMPANY to make payments promptly to subcontractors or for material or labor which CITY may pay as an agent for the COMPANY; or

12.4. Damages to another contractor or subcontractor.

When the above grounds to withhold payment are removed, or COMPANY provides a surety bond satisfactory to CITY, which will protect CITY in the amount withheld, payment may be released.

13. **Funding Out:** In the event no funds or insufficient funds are appropriated and budgeted or are otherwise unavailable in any fiscal period for contract payments due under the contract, then this contract shall terminate on the last day of the fiscal period for which full appropriations were made, without penalty or expense to CITY of any kind whatsoever.

14. **Wage Scale:** COMPANY agrees to pay all workmen in his employ no less than the generally prevailing wage rate for employees of similar category in the Permian Basin Area, as is depicted in the wage rate scale attached hereto as EXHIBIT D, and incorporated herein by reference for all legal purposes.

14.1. If applicable, the Davis-Bacon Act, 29 CFR 5.5, and any related acts or regulations are hereby incorporated by reference and made a part of this Contract, and all terms and requirements under said laws, by such incorporation, are made terms and requirements of this Contract, to which the parties to this Contract have agreed to be bound.

15. **Prompt Pay Act:** CITY and COMPANY agree that Texas Government Code, Chapter 2251, Payment for Goods and Services (the "Prompt Pay Act") does not waive governmental immunity.

16. **Payment:** After all work is completed by COMPANY, including all Change Orders altering the original scope and amount of said contract are completed, and CITY has inspected and approved that the work is completed and in compliance with the contract and all subsequent Change Orders, CITY shall thereafter issue payment to COMPANY in the amount of the contract and all Change Orders. CITY shall be the final judge of when the work is completed by COMPANY. CITY, in its sole discretion, shall determine if the work under the contract and under any Change Orders has been done to CITY's requirements. CITY may make periodic payments to COMPANY, however such periodic payments may only be made pursuant to this paragraph, and only after all work and all Change Orders are completed by COMPANY and approved by CITY. For contracts exceeding \$25,000 and construction time exceeds ninety days, requests for progress payments may be made to the extent of the materials and labor completed at the end of each month. Upon approval by the Owner's Representative the request and invoice shall be forwarded for payment less 5% retainage. The total of these payments shall not exceed 95% of the total contract amount.

17. **No Third-Party Beneficiary:** CITY's approval of this contract does not create a third-party beneficiary. There is no third-party beneficiary to this contract. No person or entity who is not a party to

this contract shall have any third-party beneficiary or other rights hereunder.

18. WAIVER OF ATTORNEY FEES: BY EXECUTING THIS CONTRACT, COMPANY AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST CITY REGARDING THE AWARD OR ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THIS CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THIS CONTRACT. COMPANY SPECIFICALLY AGREES THAT IF COMPANY BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING, BUT NOT LIMITED TO, ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, COMPANY AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH COMPANY MIGHT OTHERWISE BE ENTITLED.

COMPANY AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY-EXISTING KNOWN RIGHT. COMPANY ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS CONTRACT. COMPANY FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN CITY AND COMPANY. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OR GOVERNMENTAL IMMUNITY AND SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

COMPANY IS RELYING ON ITS OWN JUDGMENT. COMPANY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION. THE OBLIGATIONS CONTAINED IN THIS SECTION 18 SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

19. Governmental Immunity: By executing this contract CITY is not waiving its right of governmental immunity. CITY is retaining its immunity from suit. CITY is not granting consent to be sued by legislative resolution or action.

20. **Insurance:**

COMPANY shall at all times during the term of this Contract maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):

-Personal Injury:	\$1,000,000.00 per person \$1,000,000.00 per occurrence
-Property Damage:	\$500,000.00 per occurrence
<u>Business Automobile Liability:</u>	\$250,000.00 combined single limit - Personal Injury and Property Damage
<u>Workers' Compensation:</u>	Statutory limits
<u>Employers' Liability:</u>	\$500,000.00 per accident or occurrence

The Commercial General Liability shall be on a per project aggregate, including completed operations, and shall be on a claims-occurred basis. This insurance shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Business Automobile Liability insurance provided by COMPANY shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of \$250,000.00 covering any vehicle used for the execution of the work that is the subject of this Contract. This insurance shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Workers' Compensation coverage provided by COMPANY shall inure to the benefit of employees injured during the course and scope of their employment by COMPANY pursuant to this Contract. The Workers' Compensation shall waive all rights of subrogation in favor of CITY.

All insurance required pursuant to this Contract shall provide for a waiver of subrogation in favor of CITY. All insurance required pursuant to this Contract, except for Workers' Compensation Insurance, shall name CITY as an additional insured on a claims occurred basis. CITY shall be provided the notice by COMPANY's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage.

COMPANY shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this Contract to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and policies that name the City of Midland as an additional insured ~~PACKET~~ on a claims occurred basis (except workers' compensation).

April 25, 2023

The parties agree that, prior to the execution of the Contract, COMPANY shall provide one or more certificates of insurance specifically stating that these requirements have been met and subject to the approval of CITY. CITY shall not be required to provide any insurance whatsoever pursuant to this Contract.

COMPANY certifies that the certificate of insurance provided as required herein complies with the requirements of Chapter 1811 of the Texas Insurance Code. COMPANY shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of COMPANY.

21. **Assignment:** COMPANY shall not, either directly or indirectly, assign all or any part of this Contract or any interest, right or privilege herein, without the prior written consent of CITY. The issue on whether or not to grant consent to an assignment is in the sole discretion of CITY.

22. **RELEASE: NOTWITHSTANDING ANY OTHER PROVISION CONTAINED HEREIN, COMPANY HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES CITY AND CITY'S COUNCIL MEMBERS, EMPLOYEES, AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER THAT COMPANY HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING, BUT NOT LIMITED TO, BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR CITY'S NEGLIGENCE. THE OBLIGATIONS CONTAINED IN THIS SECTION SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.**

23. **Governing Law and Venue:** This contract shall be governed by the laws of the State of Texas. All performance and payment made pursuant to this contract shall be deemed to have occurred in Midland County, Texas. The obligations and undertakings of each of the parties to this Agreement shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this contract or the performance of this contract shall be in Midland County, Texas.

24. **Independent Contractor:** COMPANY shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant, or employee of CITY. COMPANY shall have exclusive control of, and the exclusive right to control the details of the services and work to be performed hereunder, and all persons performing the same. COMPANY shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors and the doctrine

of respondeat superior shall not apply as between CITY and COMPANY, its officers, agents, employees, contractors and subcontractors. Nothing in this Contract shall be construed as creating a partnership or joint enterprise between CITY and COMPANY. No person performing any of the work and services described hereunder by COMPANY shall be considered an officer, agent, servant or employee of CITY. Further, it is specifically understood and agreed that nothing in this contract is intended or construed as creating a "Community of Pecuniary Interest" or an "Equal Right of Control" which would give rise to vicarious liability.

COMPANY shall be an independent contractor under this Contract and shall assume all of the rights, obligations and liabilities, applicable to it as such independent contractor hereunder. CITY does not have the power to direct the order in which the work is done. CITY shall not have the right to control the means, methods or details of COMPANY's work. COMPANY shall assume exclusive responsibility for the work. COMPANY is entirely free to do the work in its own way.

25. Notice of Alleged Breach; Statutory Prerequisites: As a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this Contract, COMPANY or its legal representative, shall give the City Manager, or any other reasonable official of CITY, notice in writing (consisting of one (1) original and seven (7) copies of notice attached to a copy of this Contract) of such damages, duly verified, within one hundred twenty (120) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which COMPANY shall settle, the physical and mailing addresses of COMPANY at the time and date the claim was presented and the physical and mailing addresses of COMPANY for the six (6) months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom COMPANY relies to establish its claim; and a failure to provide such written notification within the time and manner provided herein shall exonerate, excuse and except CITY from any liability whatsoever. CITY is under no obligation to provide notice to COMPANY that COMPANY's notice is insufficient. CITY reserves the right to request additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision to the contrary, COMPANY's failure to comply with the requirements of this Section shall perpetually bar COMPANY's claim for damages under Chapter 271 of the Texas Government Code, and Section 311.034 of the Texas Government Code, unless if

CITY has actual or constructive notice or knowledge of said claim or alleged damages. COMPANY agrees that the requirements of this entire Contract are reasonable. The provisions and obligations of this Section shall survive the termination of this Contract.

26. **Consideration:** The terms of this Contract are supported by good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties named herein.

27. **Termination At Will:** CITY may terminate this Contract at will for no or any reason upon giving at least one hundred eighty (180) days written notice to COMPANY. The parties to this Contract understand and agree that it is in CITY's sole discretion to cancel the Contract during the term of the Contract without penalty to CITY. COMPANY has no expectation and has received no guarantees that this Contract will not be terminated before the end of the Contract term. The parties have bargained for the flexibility of terminating this Contract upon tender of the requisite notice at any time during the term of the Contract. All work and services under the Contract shall be suspended upon termination of the Contract becoming effective.

28. **Compliance:** COMPANY agrees that it shall comply with Texas Government Code Section 2252.908, *et seq.*, as amended. COMPANY agrees that it shall comply with Texas Local Government Code Section 176.006, *et seq.*, as amended.

29. To the extent that Sections 2271.002 and 2274.002 of the Texas Government Code (collectively, the "Anti-Boycott Statutes") apply to this Contract, Company hereby verifies:

- that Company does not boycott Israel and will not boycott Israel during the term of this Contract;
- that Company does not boycott energy companies and will not boycott energy companies during the term of this Contract; and
- that Company does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this Contract against a firearm entity or firearm trade association.

To the extent that the Anti-Boycott Statutes do not apply to this Contract, such verification is not required, and Company shall be deemed to have not made such verification.

30. **Records Retention and Production of Information.** To the extent that this Contract constitutes a contract described by Section 552.371 of the Texas Government Code, COMPANY shall: (i) preserve all contracting information related to this Contract as provided by the records retention requirements applicable to CITY for the duration of this Contract; (ii) promptly provide to CITY any contracting information related to the Contract that is in the custody or possession of COMPANY on request of CITY;

and (iii) on completion of the Contract, either: (a) provide at no cost to CITY all contracting information related to the Contract that is in the custody or possession of COMPANY; or (b) preserve the contracting information related to the Contract as provided by the records retention requirements applicable to CITY.

31. **Public Information.** To the extent that this Contract is a contract described by Section 552.371 of the Texas Government Code, COMPANY agrees as follows in accordance with Section 552.372(b) of the Texas Government Code: The requirements of Subchapter J, Chapter 552, Government Code, may apply to this Contract, and COMPANY agrees that the contract can be terminated if COMPANY knowingly or intentionally fails to comply with a requirement of that subchapter.

32. **Conflict of Terms.** If a conflict of terms or language exists between: (i) any of the provisions of this Contract and (ii) any of the provisions contained in any exhibit(s) attached to this Contract, precedence shall be given to the provisions of this Contract. For the avoidance of any doubt, the provisions contained in this Contract shall supersede any and all conflicting provisions contained in any exhibit(s) attached hereto. Furthermore, the parties acknowledge and agree that any provision contained in an exhibit(s) attached to this Contract that imposes an additional express or implied obligation on CITY is hereby made void and of no force or effect. CITY's sole and exclusive obligations under this Contract are contained in the provisions of this Contract that precede the signature page(s), which evidences the parties' execution.

33. Company agrees that all iron or steel products produced through a manufacturing process and used in the project that is the subject of this Contract shall be produced in the United States in accordance with Government Code § 2252.202, et seq., as amended.

EXECUTED IN DUPLICATE the day and year first above mentioned.

THE CITY OF MIDLAND, TEXAS

By: _____
Robert Patrick, City Manager

ATTEST

Marcia Bentley-German, City Governance Officer/City Secretary

APPROVED ONLY AS TO FORM

John Ohnemiller, City Attorney

COMPANY:

By: _____

Name: _____

Title: _____

STATE OF _____ §

§

COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this ____ day of _____, 2023 personally appeared, _____, an officer of GTY Software Inc., dba Bonfire Interactive Ltd., known to me to be the person and official whose name is subscribed to the forgoing instrument, and acknowledged to me that he executed the same as the act and deed of said corporation, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the ____ day of _____, 2023.

Statement of Work

Electronic Bidding Software and Implementation Services
RFP# 23001936

City of Midland, TX

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ORDER	DETAILS
Plan Type	Annual
Currency	USD
Term 1	Start Date: 01-Apr-23 End Date: 31-Mar-24
Term 2	Start Date: 01-Apr-24 End Date: 31-Mar-25
Term 3	Start Date: 01-Apr-25 End Date: 31-Mar-26
Term 4	Start Date: 01-Apr-26 End Date: 31-Mar-27
Term 5	Start Date: 01-Apr-27 End Date: 31-Mar-28
Term 6	Start Date: 01-Apr-28 End Date: 31-Mar-29
Term 7	Start Date: 01-Apr-29 End Date: 31-Mar-30
Term 8	Start Date: 01-Apr-30 End Date: 31-Mar-31
Term 9	Start Date: 01-Apr-31 End Date: 31-Mar-32
Term 10	Start Date: 01-Apr-32 End Date: 31-Mar-33
Billing Cycle	Annual
Data Location	USA

ORDER FORM

GTY Software Inc. DBA Bonfire Interactive Ltd.
121 Charles St. W. Suite C429, Kitchener, ON

CUSTOMER DETAILS / QUOTE TO
City of Midland 300 N. Lorraine Midland, TX 79702
Prepared on: March 1st, 2023 Prepared by: Willow Stuart

Contract Terms: April 1 2023 - March 31 2033

Quantity	Description	Rate	Amount
6 Licenses	Bonfire eSourcing		\$30,000.00
	Implementation, Configuration & Training (one time fee)		\$3,500.00
	Less: Provided BAFO Discount		-\$7,500.00
	Unlimited Departmental Collaborators/Draft Editors	Included	
	Unlimited Evaluators and Evaluations	Included	
	Unlimited Solicitations	Included	
	Bidtables	Included	
	Questionnaires	Included	
	Intake	Included	
	File Library	Included	
	Unlimited Vendors	Included	
	Single Sign On Support	Included	
	Community Projects & Templates	Included	
	Vendor Registration & Reporting	Included	
	Vendor Performance Management	Included	
	Insights (KPI Reporting)	Included	
	Maintenance/Hosting	Included	
	Associated Releases/Upgrades	Included	
	On-going Support	Included	
	Year 1 Cost		\$26,000.00
	Year 2 Cost		\$22,500.00
	Year 3 Cost		\$22,500.00
	Year 4 Cost (5% increase applied)		\$23,625.00
	Year 5 Cost		\$23,625.00
	Year 6 Cost (5% increase applied)		\$24,806.25
	Year 7 Cost		\$24,806.25
	Year 8 Cost (5% increase applied)		\$26,046.56
	Year 9 Cost		\$26,046.56
	Year 10 Cost (5% increase applied)		\$27,348.89

QUOTE COMMENTS:

- Includes all internal users including suppliers, data analysts, managers, administrators, evaluators & advisor/client roles for the organization
- Includes implementation, training, unlimited projects, support, submissions, and cloud storage
- Term 1 total to be invoiced April 1 2023. Term 2 total to be invoiced April 1 2024. Term 3 total to be invoiced April 1 2025. Term 4 total to be invoiced April 1 2026. Term 5 total to be invoiced April 1 2027. Term 6 total to be invoiced April 1 2028. Term 7 total to be invoiced April 1 2029. Term 8 total to be invoiced April 1 2030. Term 9 total to be invoiced April 1 2031. Term 10 total to be invoiced April 1 2032.

Exhibit B: Statement of Work

Contractor shall provide the following Services under this Agreement:

1. Project Request

The City is seeking Electronic Bidding (E-Bidding) software and professional services to implement the new system. The City is seeking to automate vendor registration, solicitation development and issuance, question and answer period, solicitation receipt, bid tabulation and evaluation, and other ancillary tasks related to bid management. The City intends to gain efficiency and transparency while maintaining the integrity of the City's bidding process.

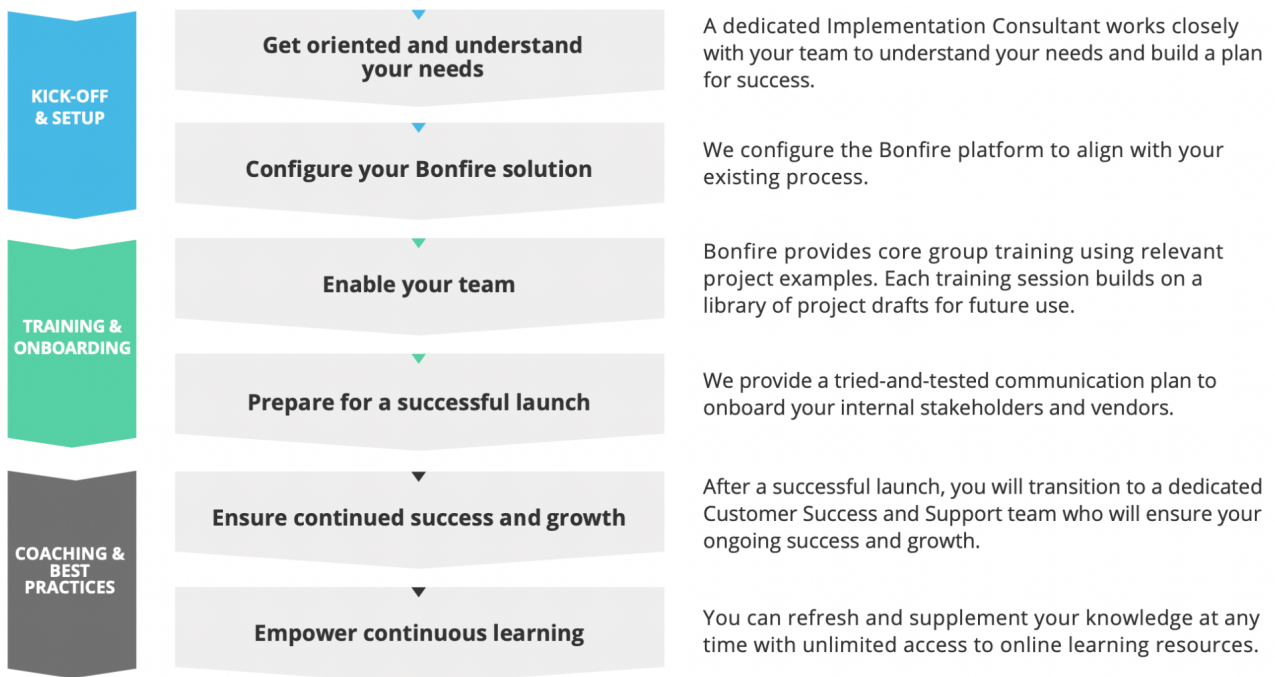
2. Services Description

Bonfire shall provide all necessary software, configurations, integrations and interfaces, implementation services, training, and support and maintenance services required to deliver a fully functional, Contractor-hosted electronic procurement and vendor management solution ("System") which demonstrates the functionality stated in this Statement of Work ("SOW").

Software Suite, Version & Module	Quantity & Type of License (e.g., Enterprise, User)	Purpose, Functionality & Expected Operation of Software
Bonfire Municipal Edition, Cloud-based Solution	· Software-as-a-Service	This solution provides the ability to build solicitations, perform intake and sourcing via advertising, receiving, evaluating, and awarding. Users will also be able to view insights and analytics, perform user management, and perform vendor management.

BONFIRE IMPLEMENTATION PLAN

Please see a graphical preview of the implementation schedule below, followed by a detailed explanation.



One of the core principles that Bonfire was designed around is simplicity and ease of use. As such, the Bonfire implementation process is focused on training the power users of the system, the buyers who will be managing procurement projects. Casual users such as evaluators are guided by Bonfire's user-centric design and require no formal training before accessing the procurement portal.

All Bonfire implementations are managed by an Implementation Lead who will guide the implementation project from inception to completion. The Implementation Lead acts as the main point of contact for all implementation activities and will personally be involved in every point of the implementation process.

The tasks involved in a Bonfire implementation typically fall into three main categories:

General Account Setup (approx. two weeks)

- Customization of Portal Feature Set
- Determining and Configuring the Departments on the Portal
- Determining and Assigning User Roles
- Customizing Vendor Registration Form
- Customizing Contract Management Attributes and Types

Training (approx. two weeks)

- General training session on the Listing / Evaluation platforms of Bonfire
- Specialized training on Bonfire's Advanced Evaluation Modules (Multi-Decision, Questionnaires, BidTables)
- Contract Management Training
- Vendor Management Training

Ramp-Up (approx. two weeks)

- Review of RFx templates and changes required
- Assistance with the creation of the first project at each Department
- Bulk import of all pre-existing contracts into the Contracts Management module
- Implementation Debrief to Management for each Department

1. General Account Setup

Every organization in Bonfire is set up with a site dedicated just for the organization along with a unique URL. From here, Departments are created on the site to separate each of the organization's groups into their own individual space. Bonfire is composed of multiple modules that cover Listing / Posting of procurement projects, Digital Submissions and Evaluation, and vendor management. The implementation of Bonfire depends on which modules the organization decides on implementing.

Completion of the General Account Setup tasks ensures that the setup of the organization's portal is as-intended before running procurement projects. However, if the organization's needs change at any point in the future these tasks can be revisited to further configure the setup of the portal.

1.1. Kick-Off Call

The implementation will typically begin with a kick-off call including all decision makers across the organization's different departments and an Implementation Lead assigned to the organization.

ACTION: Kickoff Call with Key Stakeholders - Estimated Time 1- 1.5 hours

The agenda for the Kick-Off Call is as follows:

- Introduction and explanation of Bonfire project team roles
- Identify a representative who will act as the main point of contact for the organization
- Clarify the organization's intentions and goals for their use of Bonfire
- Discuss the organization's timelines for the launch of the first projects in the system
- Identify the individuals who will be using Bonfire and discuss user permissions
- Identify department structure at the organization
- Review the functionalities of the Bonfire platform
- Overview of Bonfire Feature Options
- Discuss vendor facing setup

By the end of the meeting, the Implementation Lead will better understand the Organization's timelines and goals. Additionally, the Implementation Lead will have enough information to create a finalized implementation plan and provide it to the organization.

Bonfire Deliverables	Organization Deliverables
Final Implementation Plan: Including dates of implementation tasks and major milestones	Sign off on Final Implementation Plan

1.2. Finalize Feature Set, Custom Language, and Vendor Fields

The Implementation Lead will provide the attendees of the kick-off call with a document of all of the features available in Bonfire. Organization stakeholders will identify features that are applicable to their process and complete the form section of the document.

If applicable, the Implementation Lead will ask the Organization to provide Bonfire with any custom Conflict of Interest, Non-Disclosure Agreement, or Award Notice language that should be applied to the portal. Lastly, based on the intended vendor facing setup of the portal, the Implementation Lead will ask the Organization for a sample of the form typically collected from vendors during the registration process. This information will eventually be used to guide the Implementation Lead when the vendor facing registration fields are set up on the portal.

OPTIONAL ACTION: Meeting to clarify any questions about Bonfire features - Estimated Time 1 hour

Bonfire Deliverables	Organization Deliverables
Provide feature set document to implementation stakeholders	Review Bonfire features internally and complete feature set document to identify features to be implemented

-	Conflict of Interest, Non-Disclosure Agreement, and/or Award Notice language
-	Sample of vendor registration information and documents collected

1.3. Customize Vendor Registration Page

The Implementation Lead will review the Organization's vendor registration information and documents. Any opportunities to improve the registration process will be reviewed with the organization's stakeholders.

The desired features will be applied to the Organization's portal by the implementation. Following the completion of the setup, the Organization's stakeholders will test the vendor registration page to ensure that the setup is accurately capturing the required information.

ACTION: Implementation Lead applies custom vendor registration fields to the organization's portal – Estimated Time 2 hours

ACTION: Organization stakeholders test the vendor registration page, ensuring all required information is captured – Estimated Time 1 hour

1.4. Customize Account with Desired Feature Set and Custom Language

Based on the discussions so far and the completed feature preferences form, the Implementation lead will apply the desired feature set to the Organization's portal. Any custom Conflict of Interest, Non-Disclosure Agreement, or Award Notice language will also be applied to the portal.

ACTION: Implementation Lead Customizes Account Feature Set – Estimated Time 1 hour

1.5. User Invites and Setup

The Implementation Lead will create the appropriate Department structure on the portal and send out invites to buyers across the organization. For larger groups of buyers, it may be necessary to send the Implementation Lead a list of all buyers, as well as the desired user roles for each buyer.

ACTION: Implementation Lead Creates Department Structure, Invites Users – Estimated Time 1 hour

ACTION: Users Accept Bonfire Invitation and Create their Bonfire Account - Estimated Time 15 minutes

Bonfire Deliverables	Organization Deliverables
Provide the Organization's stakeholders with documentation describing the different user roles available in the system and their associated permissions	Compile a list of all buyers who will be using the system and the desired system permissions for each buyer

1.6. Pre-Training Call

Prior to kicking-off training for the team, the attendees of the Kick-off Call are invited to attend a call to review General Account Setup with the Implementation Lead. The Implementation Lead will provide an overview of all of the tasks completed during the General Account Setup phase. A General Account Setup summary document will be provided to the organization outlining the features setup on the portal, any custom Conflict of Interest, Non-Disclosure Agreement, or Award Notice language, custom Vendor Registration fields, and any custom contract fields or types. Bonfire asks that the Organization's stakeholders sign off on this document to confirm that the initial setup is as-intended.

If applicable, any outstanding tasks from the General Account Setup stage will be discussed during this call. Training can still proceed if there are outstanding tasks, but new completion dates for the outstanding items should be agreed upon before moving on.

ACTION: Pre-training call – Estimated Time 1 hour

Bonfire Deliverables	Organization Deliverables
General Account Setup summary document to be provided to the Organization's stakeholders	Signoff on General Account Setup summary document
Proposed completion dates for outstanding General Account Setup tasks	Verbal agreement of proposed completion dates for outstanding General Account Setup tasks

Training

Bonfire provides unlimited training to all Bonfire customers. However, through our experience with onboarding hundreds of organizations we found that following the training plan below will equip buyers with all the necessary information to start implementing the platform.

Since Bonfire is composed of several different modules, the training will be broken down to cover each module. The training is done on a sample set of projects that reflect actual procurement scenarios. The buyers at the organization are encouraged to provide the Implementation Lead with their own procurement projects. These projects can be used during training to help tailor the sessions to the organization's needs. During the training phase, the buyers at the organization will be able to start setting up draft procurement projects to get hands on experience in Bonfire.

If all participants agree, training sessions will be recorded, and the recording will be provided to the buyers at the organization.

1.7. General Training Session

The first training session will cover project (solicitation) creation, evaluation workflow, and project reporting. The trainer will also provide a thorough overview of project templates, project drafts, and common workflows such as issuing addenda and managing supplier Q&A. By the end of the training session, attendees will be able to create and manage a typical RFQ/RFP project and run a complete evaluation through to award.

ACTION: General Training Session – Estimated Time 1.5-2 hours

Bonfire Deliverables	Organization Deliverables
Recording of General Training Session	Documentation for a past or future RFP that can be used for training purposes

1.8. Advanced Module Training

The Advanced Module Training sessions build on the concepts covered during the first session, however the emphasis will be shifted to cover advanced evaluation modules such as BidTables, Questionnaires, and Multi-Category Projects. Due to the sophisticated functionality included in these modules, Advanced Module Training is usually broken into three separate training sessions.

1.8.1. BidTables Training Session

This session will cover the creation of BidTables, the vendor experience when responding to a BidTable, and the workflow used to evaluate pricing on a BidTable. By the end of this session, attendees will be able to set up projects that collect complex pricing information or multi-line item bids from vendors and easily compare all submitted prices using a structured process.

ACTION: BidTable Module Training Session – Estimated Time 1 hour

Bonfire Deliverable	Organization Deliverable
Recording of BidTables training session	Documentation for a project that involves a pricing sheet or multi-line item bids

1.8.2. Questionnaires Training Session

This session will cover the creation of Questionnaires, the vendor experience when responding to a Questionnaire, and the workflow used to evaluate the vendors' responses to the Questionnaire. By the end of this session, attendees will be able to set up complex solicitations that capture vendor responses to line by line requirements, such as responses to IT technical requirements.

ACTION: Questionnaire Module Training Session – Estimated Time 1 hour

Bonfire Deliverable	Organization Deliverable
Recording of Questionnaires training session	Documentation for an RFQ/RFP that requires vendors to respond to line by line requirements

2. Ramp-Up Phase

After the training is complete, we recommend that the management team at the organization select 1-3 projects to be run through Bonfire. Through our experience, we found that the projects would be led by 'Bonfire Champions' who will become Bonfire experts at their respective department(s).

2.1. Review RFx Templates

Prior to kicking off the first projects, the Implementation Lead will schedule a call with management to go over their current RFx templates and identify areas that need to be adjusted to accommodate the electronic listing and submission process.

ACTION: Review RFx Template Changes with Management – Estimated Time 1 hour

Bonfire Deliverables	Organization Deliverables
Provide sample submission instructions document to the Organization’s stakeholders	A typical RFx template used by the Organization

2.2. Review First Project Setup

Once the templates are reviewed and the first project is selected, the buyer responsible for managing the project will set up the project in Bonfire. After the project setup has been taken as far as possible by the buyer, the Implementation Lead will lead a training session with the buyer running the project (others may attend) aimed at reviewing the project setup to ensure it is set up correctly.

Note, if the organization has multiple departments, this process can be repeated across each department, should their process be slightly different.

After the first project has been launched, this process can continue to be repeated until the buyers at the organization are comfortable creating their own projects in Bonfire.

ACTION: Review First Project Setup – Estimated Time 1 hour

Bonfire Deliverable	Organization Deliverable
-	Set up first project(s) in Bonfire

2.3. Implementation Review

Depending on the wishes of the management at the organization, other buyers will be encouraged to continue placing projects into Bonfire. Once at least 2 projects have been fully completed, the Implementation Lead will set up a call to review implementation progress, and discuss any lessons learned prior to full ramp up.

ACTION: Review Implementation Progress – Estimated Time 1 hour

At this point, the Implementation Lead will pass on any recommendations to the organization based on the final assessment of the initial ramp up. An Implementation Summary Document will be provided to the Organization’s stakeholders to summarize project metrics, milestones reached, lessons learned, and vendor feedback from the Bonfire projects run so far.

The Implementation Lead will continue to monitor the account closely until all buyers have used Bonfire to run at least one project through the platform.

Bonfire Deliverables	Organization Deliverables
Provide Implementation Summary Document to organization stakeholders	-

2.4. Implementation Survey

Once all buyers have run a project in Bonfire and the organization is feeling comfortable using the tool, it is time to bring the implementation period to an end. The Implementation Lead will revisit the initial implementation goals with the organization's stakeholders and determine whether they have been met. If the organization's goals have been met, the organization will sign off on the completion of the implementation.

Bonfire will send a survey to the organization to collect qualitative and quantitative information about the implementation process in order to keep improving the implementation program.

Project Approach And Implementation Methodology

Status Reporting

Proposer to detail their approach to providing status reports throughout the course of the Project.

This section should include an example of the recurring status report and identify the expected delivery mechanism that will be used to provide the report to the City.

As Bonfire is a COTS solution, Configuration and Deployment requires very little time (< 1 week). The City's dedicated implementation manager will provide consistent updates to the project management team throughout the Portal Deployment, Configuration, and Training processes. Bonfire's implementation plan will provide the City with absolute knowledge of progress throughout each of these stages. These updates will typically include a live Zoom discussion along with written collateral when required.

Resource Hours

Proposer shall include the proposed resource levels for the City Implementation Project Team and their Project Teams by completing the table below.

Proposer shall include the proposed resource levels for the City Implementation Project Team and their Project Teams by completing the table below.

Project Team Resource Hours			
Instructions: The Proposer is asked to provide the number of resources that will be committed to the Project in terms of number of hours. These numbers should be based on the functionality the City requires, included in the detailed Functional and Technical Requirements (Attachment 2).			
Assumptions: Any assumptions related to the number of Project Team staff for the Proposer or City teams, roles of staff, and duration of involvement used in the development of the resource hour estimates should be included here:			
Project Team	City Team	Vendor Team	Total Hours
Requirements and Design	1-2 Hours	1-2 Hours	2-4 Hours
Configuration and Setup	1-2 Hours	1-2 Hours	2-4 Hours
Implementation/Project Management	0 Hours	1 Hour	1 Hour
Testing	1-2 Hours	1-2 Hours	2-4 Hours
Training	6-12 Hours	6-12 Hours	12-24 Hours
Total Hours	9-18 Hours	10-19 Hours	19-37 Hours

Proposer to provide a description of the proposed approach for providing the Scope described in the RFP, including a comprehensive description of the proposed implementation methodology for the Project. The description should include how the Proposer has developed this methodology to both incorporate lessons learned from experiences as well as to meet the needs described in the RFP.

i. Based on information provided in this RFP and experience in working with other localities, what is the Proposer's perspective on the most significant risks to this Project, and how do you plan to mitigate these risks?

Bonfire has successfully implemented over 650 organizations and government entities, and with this experience, Bonfire is able to anticipate and mitigate potential risks/challenges throughout the Implementation process. The following descriptions are of the main issues that can arise during implementation.

Different Learning Styles

Bonfire adapts its training plans to meet the needs of learners with different styles to ensure the material is delivered in a manner that sets each learner up for success. An example of this is a recent implementation with the County of Solano in California. For this implementation, the learners preferred a more hands on approach where each learner built out a project in real time while following along with the Implementation Specialist. This allowed each learner to walk away from the training already having completed a project set up in the system.

Scheduling Training

It can be difficult to find training times that match all learners' availability. Bonfire is able to help mitigate this risk by offering multiple training opportunities. A recent example of this was with the Insurance Corporation of BC where there were over 24 learners that required training. Because of conflicting schedules we offered three sets of training to ensure all learners had the opportunity to attend. On top of the formal training sessions, Bonfire is happy to book additional training by request and offers recordings of all training sessions to all learners.

Process Change & Vendor Support

With the introduction of a new procurement system, many of our clients share concerns regarding how their vendors will adapt to the change. This was specifically true for Ada County,

who brought up concerns regarding their vendors adopting the new e- submission process, and what happens if they have technical difficulties. Bonfire was able to mitigate this risk in a number of ways. We first provided sample RFX language that outlines how vendors access solicitations, download documents, ask questions and prepare submissions. We also helped in providing samples of vendor communications that can be used to proactively get vendors to register on their Bonfire portal prior to their first project being released. Finally, we ensured that in all the sample verbiage vendors were directed to Bonfire's support team should they have any technical difficulties using the portal or preparing/submitting their submissions.

ii. With what frequency will Proposer's Project Team staff be on-site at the City during implementation? Will staff be on-site for full or partial weeks? How has the proposed approach been modified for other implementations during the pandemic?

All implementation activities (e.g. Portal creation, configuration, etc.) take place remotely as Bonfire is a cloud-based, SaaS, and Bonfire has successfully implemented over 650 installations this way.

However, Bonfire does offer on-site training for an additional fee if the City desires. If the City desires to have on site training, Bonfire staff can be there for whatever time is desired by the City. However, clients who opt for in-person training will generally host Bonfire staff for 2-3 days and complete the rest of their training in a virtual manner.

iii. Describe in detail the approach to configuration and set-up activities. Will the Proposer team complete the majority of the configuration based upon information gathered from City subject matter experts, or will the City be expected to perform much of the configuration?

The General Account Setup, which lasts approximately two weeks, includes the following categories:

- Customization of portal feature set
- Determining and configuring the Departments on the portal
- Determining and assigning user roles
- Customizing vendor registration form

Please see Section 5.3.6. for a detailed approach to configuration and set-up activities.

Bonfire's implementation team will complete the majority of the configuration based upon information gathered from City subject matter experts; the City will not be expected to perform the configuration, although the two teams can work together when practical

iv. Describe in detail the approach to load existing vendor files into the system.

We can help the City transition your existing vendor pool into Bonfire. Bonfire will create a communication to your existing vendors, notifying them of the change and prompting them to register in Bonfire. This method of transition is conducted with most all our clients and achieves the results our clients are looking for. The process for vendors is simple, straightforward, and familiarizes them with Bonfire.

v. Describe any additional assumptions made in the Proposal, not already identified in detail. These should include any assumptions related to the current City technical environment, staffing, project management approach, and City resources available during implementation and support phases.

Bonfire is assuming that the City's project management team will be available to meet with a Bonfire implementation specialist for approximately 90 minutes per week for 1 month, and 60 minutes per week for a second month. We assume that end-users will be available for between 3 - 4 virtual, 60-minute, live training sessions, and will have access to internet enabled devices. Bonfire does not limit training to this alone, but we assume that teams are willing and able to put at least a baseline level of effort into learning the system and becoming familiar with Bonfire's modules.

Proposer to provide a detailed narrative description of how the implementation approach will vary between the deployment methods proposed (i.e., a traditional City-hosted model, a Proposer-hosted and/or a subscription-based solution, etc.)

Bonfire is a subscription-based SaaS software model, and as such, the implementation process is accomplished remotely. Bonfire has successfully implemented over 650 installations in this manner.

Ongoing Support

Proposer to describe what level of pre- and post-go-live support is available under the proposed fee structure. If varying levels of support are available, this section of the RFP response should clarify these potential support services and highlight the level of support that has been proposed. Proposer shall use Attachment 3 – Cost Worksheets, to clearly identify the varying fees based on the varying levels of support that are available.

i. What are the standard hours that support is offered, and through what means (telephone, web ticket submission, etc.)?

Technical support for anyone interacting with Bonfire (purchasers, evaluators, vendors, and more) and is available in a variety of methods. This includes telephone (toll-free), from Monday-Friday, from 7am-7pm CST, live chat, email, website articles, videos, and . Bonfire also offers unlimited ongoing training and support to all users.

ii. Are after hours and weekend support offered, and if so, is this part of the standard support offering or part of a different tier/offering?

No, Bonfire support is only offered from 7:00am to 7:00pm CT. Bonfire help resources such as the Bonfire Online Knowledge Base of 500+ resources, Bonfire Academy, and in-app guides are available 24/7.

iii. Describe the support that is offered to assist in potential situations where the City is unable to conduct certain mission-critical processes due to emergency situations.

Bonfire is committed to supporting our clients in the event of mission-critical processes and emergencies. In the event of an emergency, Bonfire is available to help support the City in any way we can to ensure mission-critical processes can be completed. For instance, in the event the City were to lose power due to a natural disaster. Bonfire can remotely support the City and help to complete any processes on the City's behalf.

iv. Is product support offered by Proposer, through the software developer/provider, or subcontracted?

All support is provided by Bonfire through in-house resources

v. Are there optional, "enhanced" support tiers or offerings above and beyond what has been proposed?

No, Bonfire does not offer various levels of support tiers. Bonfire provides best-in-class support to all clients and their vendors.

vi. How often are releases provided, how is advance notification provided to customers of upcoming releases, and what is the process to test each release?

Our software development life cycle includes: requirement gathering, design, development, code review, acceptance testing, regression testing, trial deployment in a segregated staging environment, live deployment, and maintenance. Dev/Test/Staging/Production environments are used to promote changes prior to release to clients.

Releases are generally every two weeks but can vary due to release size and complexity. Hot fixes and bug fixes may be applied as a hotfix when required. Clients are notified of changes in releases and your Bonfire Customer Success Manager will proactively reach out to provide additional support or training.

vii. Would the City be able to test releases in a test environment prior to pushing updates to a live environment?

Certain functionality is released as a Feature Flag in Bonfire and the City can test this new functionality in a test environment prior to enabling the functionality in the live environment. Minor changes that are not a unique feature flag do not apply.

viii. Does the system have the ability to roll back updates if the City encounters challenges or bugs?

All updates are vigorously tested prior to release. However, if bugs or challenges are found in an update, Bonfire can roll back updates. Please note, as a SaaS all rollbacks are system wide and not on a client by client basis.

ix. Describe how often major and minor software updates are provided, as well as the level of City resources required for a major update and the level of resources required for a minor update.

As a cloud solution, Bonfire will facilitate all system upgrades and no Midland support or installation is required. Bonfire rolls out all upgrades at 2:00 am CT on Saturday evenings to ensure no clients are affected. Bonfire will provide release notes and unlimited training (if required) following any system upgrades or releases.

Minor releases are generally every two weeks with major releases occurring monthly or quarterly, based on size and complexity of the major release. No City resources are required for any updates beyond attending training if applicable.

x. Please describe the major/minor upgrade process that is required if the solution requires a client-based installation.

The upgrade process will not require a client-based response. As mentioned earlier, Bonfire applies upgrades remotely.

xi. Are there future costs associated with upgrade processes? For example, costs associated with purchasing licensing for upgrades, professional services costs associated with implementing upgrades, etc.? Proposer to describe the frequency of upgrades and any price ranges for anticipated upgrades.

As a cloud solution, Bonfire will facilitate all system upgrades and no Midland support or installation is required. Bonfire rolls out all upgrades at 2:00 am CT on Saturday evenings to ensure no clients are affected. Bonfire will provide release notes and unlimited training (if required) following any system upgrades or releases.

Bonfire regularly releases updates that can include new features, improvements to current features, and system maintenance and upgrades. Midland will not not be required to provide anything to apply an upgrade, and there is no cost for these updates. Some updates will include

new functionality to already purchased modules, which involves no charge to the client. From time to time, Bonfire may release new, separate modules that would be available to the City for an additional fee (i.e. a separate module).

xii. What is the role of the City in providing ongoing support and maintenance of the system proposed? How many FTE are typically required to support the system on the client-side, and what tasks are entailed?

The City does not need to assume any role in the ongoing support and maintenance of Bonfire. Bonfire fully maintains all system development, support, and maintenance at no additional cost. No FTE is required to support the system on the client-side.

Additional Ongoing Support

Evaluator Training

Similar to the vendor's experience in Bonfire, the evaluator experience has been designed from the ground-up to be intuitive. Evaluators are greeted with a three-minute training video upon their first login into Bonfire, guiding them through its entire functionality. Typically, the training video is all that is required for an evaluator to use Bonfire. Bonfire is also willing to host multiple training sessions for evaluators as part of the change management program. Sessions can be recorded and stored internally for future access.

For Vendors

Historically, vendors have rarely needed to have specific training to use Bonfire as they typically spend an average of only eight minutes in Bonfire, including the time to register for an account and upload a submission. Bonfire has developed resources to help vendors get acquainted with Bonfire, such as short training videos and a list of FAQs accessible right from within the platform.

However, Bonfire is willing to offer multiple training sessions for vendors (especially if they're part of a Vendor of Record list) when necessary, as well as host periodic training webinars for newly registered vendors on a monthly basis.

Client Success and Support

Upon joining Bonfire, the City will also have access to a dedicated Customer Success Manager (CSM) who will act as an additional support pillar beyond Bonfire's customer support team. Your CSM will help facilitate training, offer best practices on new projects, provide continuous learning, and be available to help facilitate any technical support questions.

Technical support for anyone interacting with Bonfire (purchasers, evaluators, vendors, and more) is available in a variety of methods. This includes telephone (toll-free) and email from Monday-Friday from 7am-7pm CST, website articles, videos, and live chat. Bonfire also offers unlimited training and support via WebEx (included in cost) and on-site (at additional cost).

Self-Help Resources

Finally, in addition to the above-noted training, Bonfire will feature multiple self-help resources to support the City's success adopting and using Bonfire, including the following.

Bonfire Academy

Bonfire offers a course-based training platform for all users, called Bonfire Academy. Courses in the platform are interactive, and include videos, slideshows, annotated screenshots, and quizzes. Users are able to learn at their own pace or use the courses to refresh their memory after the official training program has ended. Conveniently, course progress is tracked, which lets the user jump in and out of courses based on their availability and learning needs.

The platform includes generic courses aimed at learning all aspects of the platform, as well as courses specific to an organization and its related processes. Depending on your subscription package and needs, Bonfire will work with you to build content that is specific to your organization's roll-out. These courses are designed to walk the user through the steps required in Bonfire to mimic the organization's business processes, policies, and procedures.

Knowledge Base

Bonfire's Support team also created an online Knowledge Base repository where, to date, more than 60% of customer requests have been addressed with self-help guidance. Users are empowered to find answers quickly, easily, and on their own time. In addition to the Knowledge Base, Bonfire offers online FAQs, chat support, phone and email coverage, and a unique webinar series. The webinars, introduced in 2018, highlight product features on new releases, offer drop-in training sessions, and best practice guides. Webinars target areas of the product and are based around customer requests.

System and Application Architecture

System and Application Architecture Questions	
What is the source language(s) of the product?	Bonfire uses a variety of source languages, for more details please see our Security Policy Bundle.
How many environments are available with your proposed solution at no additional cost (e.g., test, training, production)?	Bonfire can provide multiple environments to the City at no additional cost including test, training, and production. However, most agencies only require a test and production as all training activities can be completed within the production portal.
Describe how often major and minor software updates are provided, as well as the level of City resources required for a major update and the level of resources required for a minor update.	Minor updates are rolled out every two weeks, with bug fixes and hot fixes as needed. Major updates can vary based on multiple factors but will range from monthly to quarterly.
Please describe the major/minor upgrade process that is required if the solution requires a client-based installation.	N/A. Bonfire is a SaaS product with no client-based installation. No client processes are required upon upgrades.
List all browsers that are certified for use with the application and describe any required browser add-ons, function enablement, etc.	Bonfire supports Microsoft Edge, Google Chrome, Mozilla Firefox, and Safari. No browser add-ons or other functions are required.

The underlying architecture of the application design is important to the City. Please describe your system architecture model and explain the capabilities and features of this model that led to your use of it in developing this system.	While Bonfire does not disclose full details of its infrastructure and networks, Bonfire uses a load-balanced and fault-tolerant architecture. Bonfire uses industry best practices for network security, including separation of components (client, api, database) and a public/private network architecture with deny by default access. Servers and services are distributed across distinct geographical locations. We have provided a diagram outlining our architecture above. Bonfire has received a clean SOC2 Type II report to attest to the Bonfire architecture.
Please describe how data privacy and security compliance is supported within your proposed software solution.	Data is encrypted in transit and at rest. Data in the underlying storage for Bonfire's database and its automated backups are encrypted using the industry-standard AES-256 encryption algorithm. All communications between the customer and Bonfire portal and APIs are encrypted using industry-standard HTTPS (TLS 1.2 or higher), including well-known, industry-standard ciphers over public networks. All traffic between the customer and Bonfire is secure during transit. Bonfire servers are configured to switch any unencrypted requests over to an encrypted connection. All customer data stored within Bonfire is replicated and backed up on a regular basis. Documents are backed up instantly upon upload. We also test our backup and recovery processes to ensure that we can recover data in the event of a disaster. Bonfire has been SOC2 Type II certified since September 2021. We have successfully met or exceeded the requirements for Security, Availability and Confidentiality trust criteria for managing customer data established by The American Institute of CPAs (AICPA). Bonfire uses industry best practices for network security, including separation of components (client, API, database) and a

	public/private network architecture with deny by default access. Bonfire uses Amazon Web Services (AWS) data centres. All of the City's data and backups will be stored/hosted on servers located in the US. Backups are hosted in separate locations with multiple redundancies. The IT infrastructure that AWS provides is designed and managed in alignment with security best practices and a variety of IT security standards, including: • SOC 1/SSAE 16/ISAE 3402 (formerly SAS 70) • SOC2 • SOC3 • FISMA, DIACAP , and FedRAMP • DOD CSM Levels 1-5 • PCI DSS Level 1 • ISO 9001 / ISO 27001 • ITAR • FIPS 140-2 • MTCS Level 3 • 24/7 on-site physical security, fire prevention, and monitoring Bonfire has created a detailed Security Overview and Disaster Recovery Plan in our Security Bundle, which outlines our backup policies, security policies, and Disaster Recovery planning. We have attached this document for your review.
Describe your approach to ensure scalability of the product. This includes transaction growth, upgrades, and replacements of components of the architecture, technology, and application.	The platform is a SaaS solution, built on Amazon Web Services with auto-scaling and configuration as code. The system is actively monitored and designed to scale up and down to meet load requirements. The application is fully scalable and has multiple infrastructure redundancies at the system, network, storage and application layers. Backups are performed automatically. Bonfire takes full advantage of fail-over

	capabilities and procedures supplied by Amazon Web Services.
List all hardware/operating system/database platforms upon which the product is supported. Provide specifications in terms of processors, processor speed, memory requirements, and other sizing and capacity factors to assist the City in budgeting for and acquiring hardware. List which industry standard benchmarks or guidelines measures are used to establish this recommendation.	As a SaaS, the only requirements for accessing Bonfire are a web-browser such as Chrome, Firefox, Safari, or Edge and an internet connection. The City does not need to budget for or acquire any special hardware.

Security and Software Hosting

Proposer to provide a description of the proposed application security features/functionality as well as the underlying technology used to support hosting and access to the software by clients.

Data is encrypted in transit and at rest; data in the underlying storage for Bonfire's database and its automated backups are encrypted using the industry-standard AES-256 encryption algorithm. All communications between the customer and Bonfire portal and APIs are encrypted using industry-standard HTTPS (TLS 1.2 or higher), including well-known, industry-standard ciphers over public networks. All traffic between the customer and Bonfire is secure during transit. Bonfire servers are configured to switch any unencrypted requests over to an encrypted connection. All customer data stored within Bonfire is replicated and backed up on a regular basis. Documents are backed up instantly upon upload. We also test our backup and recovery processes to ensure that we can recover data in the event of a disaster. Bonfire follows industry best practices for application security. This includes, but is not limited to:

- In-transit and at-rest encryption
- User input validation
- Role based access control
- Least privilege access
- Annual third party penetration tests
- Weekly application vulnerability scans
- Comprehensive quality assurance and testing

Bonfire has been SOC2 Type II certified since September 2021. We have successfully met or exceeded the requirements for Security, Availability and Confidentiality trust criteria for managing customer data established by The American Institute of CPAs (AICPA). Bonfire uses industry best practices for network security, including separation of components (client, API, database) and a public/private network architecture with deny by default access.

Bonfire uses Amazon Web Services (AWS) data centres. All of the City's data and backups will be stored/hosted on servers located in the US. Backups are hosted in separate locations with multiple redundancies. The IT infrastructure that AWS provides is designed and managed in alignment with security best practices and a variety of IT security standards, including:

- SOC 1/SSAE 16/ISAE 3402 (formerly SAS 70)
- SOC2
- SOC3
- FISMA, DIACAP , and FedRAMP
- DOD CSM Levels 1-5
- PCI DSS Level 1
- ISO 9001 / ISO 27001
- ITAR
- FIPS 140-2
- MTCS Level 3
- 24/7 on-site physical security, fire prevention, and monitoring

System Documentation

Proposer to provide a detailed description of system documentation and resources that will be included as part of the implementation including, but not limited to, detailed system user manuals, "Quick Reference" guides, etc. as available. Proposer to itemize optional items on Attachment 3. Proposer to check off in the table below all that are available and included as part of the RFP response.

System Documentation		
Type of Documentation	Included in Scope of Proposal to the City?	Description/Explanation/Optional
Quick Reference Guides	Yes	Bonfire offers a full and constantly growing online knowledge base that is accessible 24/7/365. Bonfire's knowledge base includes everything from getting started guides to specific how-to articles and videos. Bonfire is constantly adding new material as well; whenever we receive a support request for something that is not currently in our knowledge base we will create a subsequent article/video pairing as soon as possible. Information is organized to be easily digestible and allows users to easily follow step-by-step instructions where

System Documentation		
Type of Documentation	Included in Scope of Proposal to the City?	Description/Explanation/Optional
		applicable.
Online Support	Yes	Bonfire offers online support by phone, email, ticketing system, and live chat.
Help Desk Support	Yes	Bonfire offers a full and constantly growing online knowledge base that is accessible 24/7/365. Bonfire's knowledge base includes everything from getting started guides to specific how-to articles and videos. Bonfire is constantly adding new material as well; whenever we receive a support request for something that is not currently in our knowledge base we will create a subsequent article/video pairing as soon as possible. Information is organized to be easily digestible and allows users to easily follow step-by-step instructions where applicable.
User Group Community Resources	Yes	Bonfire provides an embedded Bonfire Forum within our Client Hub. Enabling the City to connect with 650+ public procurement teams to share tips, ask questions, and share best practices.
Annual User Conferences	Yes	Bonfire hosts annual regional user meetups (including in Texas). Attendance is free for our clients and Bonfire will discuss Bonfire best practices, upcoming features, and other procurement hot topics.
Videos	Yes	Bonfire has both embedded and supported videos in our Knowledge Base.
Custom User Guides/Manuals	Yes	Bonfire has customized user guides and manuals in our Knowledge Base unique for all different user roles. Bonfire can provide additional custom user guides and manuals should our existing materials not meet the City's needs.
Other:	Yes	Bonfire also offers a course-based

System Documentation		
Type of Documentation	Included in Scope of Proposal to the City?	Description/Explanation/Optional
		training platform for all users, called Bonfire Academy. Courses in the platform are interactive and include videos, slideshows, annotated screenshots, and quizzes. Users are able to learn at their own pace or use the courses to refresh their memory after the official training program has ended. Course progress is tracked enabling the user to jump in and out of courses based on their availability and learning needs.

Bonfire Single Sign-On

Bonfire Single Sign-On (SSO) is based on the [SAML 2.0 protocol](#).

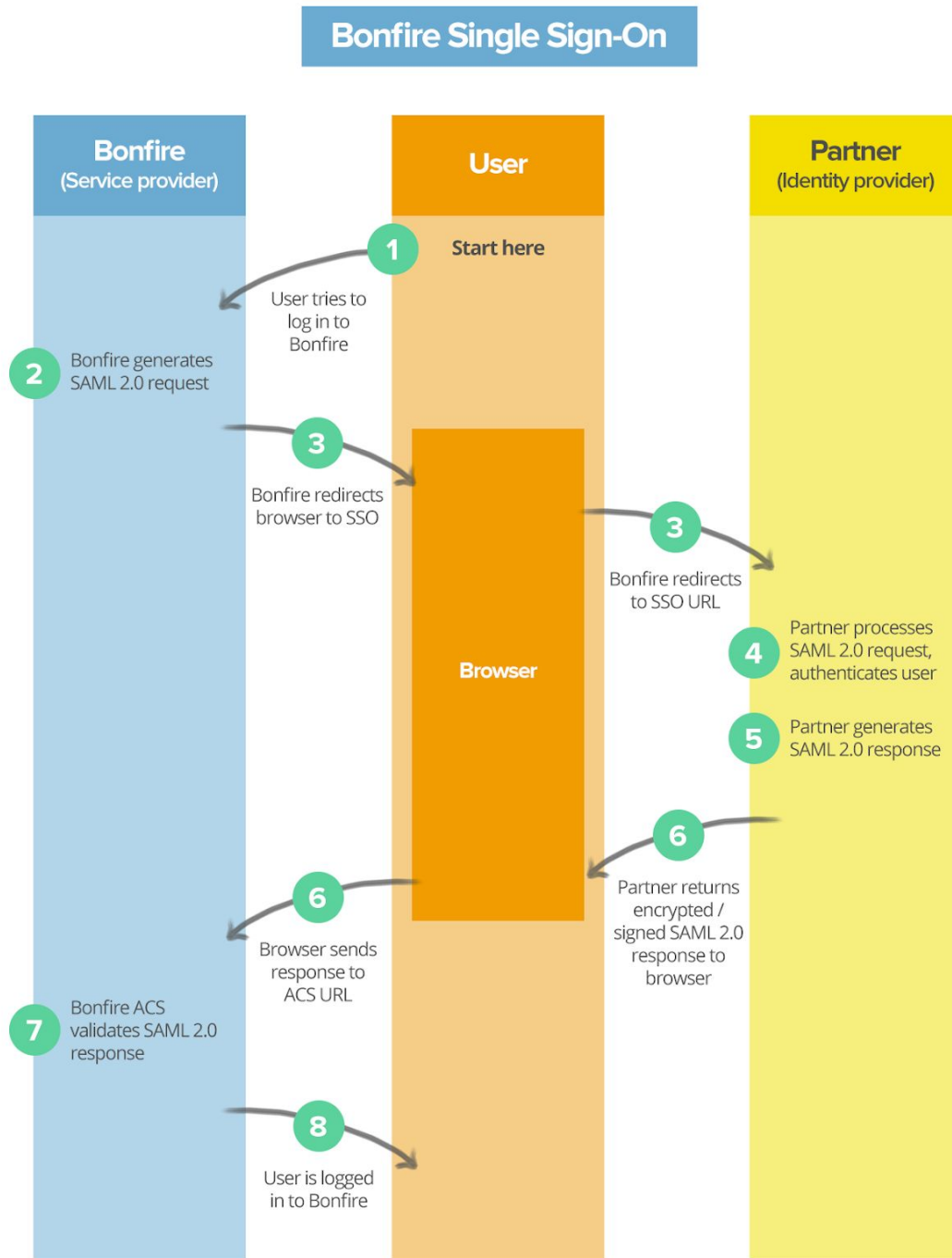


Figure 1: Logging in to Bonfire using Single Sign-On

In order to get set up with Bonfire SSO, your Identity Provider (IdP) will need to be configured with some information/data that we will be available here:

<https://example.bonfirehub.com/saml/metadata> (Note: this is a template document and this should be changed to the client portal name once configured)

You will also need to provide Bonfire with the URL to your IdP's metadata.

Bonfire SSO uses the following NameIDFormat:

```
<md:NameIDFormat>
  urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified
</md:NameIDFormat>
```

And requires the following attributes:

Friendly Name	Formal Name
mail	urn:oid:0.9.2342.19200300.100.1.3
givenName	urn:oid:2.5.4.42
sn	urn:oid:2.5.4.4

The Bonfire SSO Assertion Consumer Service (ACS) does not support friendly names at this time, so the formal names will need to be included in the SAML 2.0 response.

The ACS requires that the `<saml:Assertion>` elements received are both signed and encrypted. The metadata has a KeyDescriptor of type "encryption" with the public key to use for the encryption.

Once Bonfire SSO is set up, when a user tries to log in at `example.bonfirehub.com` with an email address that ends in one of the provided email domains (e.g. `@example.com`), the user will be redirected to your IdP for authentication. Any other users that do not have email addresses that end in one of the provided email domains (e.g. vendors) will be able to log in to Bonfire with their email/password as normal.

Testing

Before enabling Bonfire SSO in your production portal, it is strongly recommended to test the SSO integration in our sandbox environment first so any issues can be identified without risking disruption to your users. Bonfire's sandbox environment is set up almost identical to production except for the domain name and x509 cert will be slightly different.

The following steps will guide you through the process and expectations for testing your Bonfire SSO integration

1. Bonfire has provisioned a test portal for you to verify your SSO integration. Use the following test SAML metadata to set up a new Relying Party for testing Bonfire SSO <https://sso.bonfirehub.com/saml/metadata> (Note: this is a template document and this should be changed to the client portal name once configured)
2. Please provide Bonfire with an email address(es) to be invited to the test portal. An email invite will be sent which gives access to test the SSO login flow.
3. If you have any issues or experience errors during setup or testing, please reach out to sso.setup@gobonfire.com to contact a Bonfire Developer who will assist with your SSO integration. Expect a 1-2 day maximum response time from Bonfire Developers
4. Once the SSO integration is confirmed to work successfully in test, make sure your production SSO configuration mirrors your working configuration in test.
5. A Bonfire Developer will coordinate with you to determine a suitable go-live time to enable SSO in your production Bonfire portal. During go-live, the Developer will be available to troubleshoot if any issues arise.

Troubleshooting

Error: NameID not found in the assertion of the Response

If you are using ADFS as your IdP it is common to encounter the following error: "NameID not found in the assertion of the Response". The solution is to include the NameID in your claim rules. The screenshot below shows the typical ADFS claim rules that work with Bonfire SSO. You may also find this Microsoft support article helpful, <https://social.msdn.microsoft.com/Forums/vstudio/en-US/a3fa1761-8594-4511-bb45-45b5bc246579/adfs-30-relying-party-trust?forum=Geneva%E2%80%8B>.

Edit Rule - Bonfire Claim Rules

You can configure this rule to send the values of LDAP attributes as claims. Select an attribute store from which to extract LDAP attributes. Specify how the attributes will map to the outgoing claim types that will be issued from the rule.

Claim rule name:
Bonfire Claim Rules

Rule template: Send LDAP Attributes as Claims

Attribute store:
Active Directory

Mapping of LDAP attributes to outgoing claim types:

	LDAP Attribute (Select or type to add more)	Outgoing Claim Type (Select or type to add more)
▶	E-Mail-Addresses	urn:oid:0.9.2342.19200300.100.1.3
	Given-Name	urn:oid:2.5.4.42
	Surname	urn:oid:2.5.4.4
	SAM-Account-Name	Name ID
*		

Error: The assertion of the Response is not encrypted and the SP requires it

This error indicates that you are not encrypting the signed assertions in the SAML response. By default Bonfire expects the SAML assertions in the response to be signed with your organization's private key **and encrypted** with Bonfire's public key. Since it is optional to **encrypt** assertions, you may request Bonfire to disable this requirement for your organization.

1. Quality Management Approach

The purpose for managing quality is to validate that the project deliverables are completed with an acceptable level of quality. Quality management assures the quality of the project deliverables and the quality of the processes used to manage and create the deliverables.

The quality management plan identifies these key components:

Objects of quality review	Quality Measure	Quality Evaluation Methods
Project Deliverables	Deliverable Quality Standards Completeness and Correctness Criteria	Quality Control Activities
Project Processes	Process Quality Standards Stakeholder Expectations	Quality Assurance Activities

The following is a brief explanation of each of the components of the quality management plan.

Project Deliverables and Processes	The key project deliverables and processes subject to quality review.
Deliverable Quality Standards and Completeness and Correctness Criteria	The quality standards that are the “measures” used to determine a successful outcome for a deliverable. The completeness and correctness criteria describe when each deliverable is complete and correct as defined by the customer. Deliverables are evaluated against these criteria before they are formally approved.
Process Quality Standards and Stakeholder Expectations	The quality standards that are the “measures” used to determine if project work processes are being followed. Stakeholder expectations describe when a project process is effective as defined by the project stakeholders. An example is the expectation to be regularly informed monthly of project status.
Quality Control Activities	The quality control activities that monitor and verify that the project deliverables meet defined quality standards.
Quality Assurance Activities	The quality assurance activities that monitor and verify that the processes used to manage and create the deliverables are followed and are effective.

2. Quality Management Objectives

The following are the quality objectives of the project that reflect the overall intentions to be applied with regard to quality throughout the project.

- Deliverables align with industry best practices for E-Sourcing/Procurement
- Deliverables are usable

3. Project Quality Control

The focus of quality control is on the deliverables of the project. Quality control monitors project deliverables to verify that the deliverables are of acceptable quality and are complete and correct. Note: As Bonfire is an out-of-box SAAS Platform, this Project Quality Control addresses Training and Ramp-up with Bonfire and not Custom Development.

The following table identifies:

- The major deliverables of the project that will be tested for satisfactory quality level.
- The quality standards and the correctness and completeness criteria established for the project deliverable. Included are any organizational standards that need to be followed.
- The quality control activities that will be executed to monitor the quality of the deliverables.
- How often or when the quality control activity will be performed.

Project Deliverable	Deliverable Quality Standards/ Completeness and Correctness Criteria	Quality Control Activity	Frequency/Interval
Kick-Off	QC 1 Outline Implementation Plan and Training Plan	Core Team Review	Once prior to Implementation (If Departments are implemented independently, once per department)
Training	QC.2 Department has been trained on the Tool (75%)	Post-Training Bonfire Academy Courses with Qualitative Assessment (Test)	Per Training Session (Per Group/Sub-Group)
Ramp-Up	QC.3 Each Buyer runs first project (75%)	Establish Project Debrief with Buyer and Direct Manager/Supervisor.	Once per Project/Buyer

4. Project Quality Assurance

The focus of quality assurance is on the processes used in the project. Quality assurance ensures that project processes are used effectively to produce quality project deliverables.

The following table identifies:

- The project processes are subject to quality assurance.
- The quality standards and stakeholder expectations for that process.
- The quality assurance activity – such as a quality audit or reviews - that will be executed to monitor that project processes are properly followed.
- How often or when the quality assurance activity will be performed.

Project Process	Process Quality Standards/ Stakeholder Expectations	Quality Assurance Activity	Frequency/Interval
QA1. Develop/refine project charter	100% compliance with framework	Audit charter updates by phase	Once per project phase
QA2. Develop/refine Implementation/Training plan	100% compliance with framework	Audit plan content and updates, project priorities, and task estimation	Once per project phase
QA3. Execute and control project per project plan	75% compliance with framework	Audit the following project activities: ✓Quality ✓Communications ✓Project progress	Upon completion of each training session/Bonfire Academy Course Monthly Monthly
QA4. Close project with post project review	100% compliance with framework	Audit project reviews by phase	Once per project phase
QA 5 Client Success Manager Check-ins	100% compliance with framework	Quarterly Check-in with Client Success Manager to highlight adoption and new features	Quarterly

When addressing the specific elements of the project, there are background measures in place to ensure that the software that Bonfire deploys meets the highest standard of SaaS software. Bonfire will create a specific plan to capture and report on the needs of the City of Midland, but the following measures are in place for 100% of Bonfire deployments. These measures include:

- QA and Deployment
- Tools and workflow to capture customer feedback
- Feature development methodology

QA and Development

Bonfire does not always move the updates and bug fixes directly to the client sites. The code line is deployed to several environments (development, testing, staging, and production) prior to deployment to production. The code first reaches a test environment that is used by the developers during the sprint for QA and verification. It is then promoted to the staging environment for internal UAT by staff across the company in the Product, Sales, Support, Customer Success, and Implementation teams.

Each of the environments (development, testing, staging, and production) are instrumented with SLI/SLO/SLA telemetry and targets which monitor individual metrics for load/response time/reliability.

Monitoring and automated alerts of system and function performance against these metrics is done on a continuous basis during the Software Development Life Cycle. This enables developers to stress test and verify the potential performance issues early in the development process. It also enables discovery and remediation paths for issue that may arise in a different environment through measurement of deviation for performance metrics between environments

Upon completion of internal UAT, the code line is deployed to production so that we can make sure the quality is met and there are no additional costs for general updates

Tools and workflow to collect feedback

Bonfire uses Zendesk to gather and prioritize the tickets from the users, these tickets are properly prioritized and channeled to the right teams within the organization. Bonfire also uses Jira to track development work and bugs related to the Bonfire application. In Jira, we have defined workflows to manage bugs in the application so that they are properly prioritized and addressed. After planning the work items, we have mechanisms in place to plan release schedules. There are regular release milestones to ensure the timely completion of key projects.

Feature Development Methodology

The platform is delivered as a SaaS application, as such there is only a one-version of the system available which is deployed to the production environment every two-weeks.

To ensure the solution meets the business requirements and maintains backward compatibility all features are developed behind feature flags. This allows the code to be regularly updated, and features to be enabled individually for alpha and beta versions to clients in production. Once features have gone through alpha and beta versions they move to General Availability and are either mass enabled or remain behind a feature flag for optional use based on organizational preferences

5. Quality Team Roles & Responsibilities

The following identifies the quality-related responsibilities of the project team and lists specific quality responsibilities.

Project Team Role	Quality Control and Quality Assurance Responsibilities	Assigned Resource
Project Manager	QA1 – Ensure Project Charter is up-to-date QA2 – Ensure Implementation plan is reviewed and deliverables are being met. QA3 – Ensure practice of quality control measures and communications in project plan QA4 – Debrief team on project closeout.	Mitchell Shim
Account Executive	QA1 – Assist in development of Project Charter based on RFP.	Willow Stuart
Implementation Specialist/Trainer	QA2 – Conduct training and facilitate Ramp-up / debriefs with Buyers. QA4 – Participate in Debriefs	Mitchell Shim
Additional Implementation Specialist/Trainer	QA2 – Conduct training and facilitate Ramp-up / debriefs with Buyers.	TBD

	QA4 – Participate in Debriefs	
Core Team Members	QA1 – Ensure Project Charter is reflects actual needs of organization QA2 – approve implementation plan QA3 – Actively response to communications. QA4 – Participate in Debrief team on project closeout.	TBD per business units
Client Success Manager	QA5 – Conduct Account Reviews	Brandon Zanussi

6. Ensuring Project Completion and Remedying Issues

If the City of Midland were to have any issues with their training or implementation of Bonfire, Bonfire ensures that the City will have access to unlimited resources to remedy any issues. Bonfire provides unlimited training and support for all users, which means that the City is guaranteed to be given as much support needed to hit their milestones and configure Bonfire based on the City needs. Any specific workflow issues, or product development recommendations will be recorded by Bonfire staff, and processed through the channels to escalate issues as needed. Any pressing issues can be resolved with hotfixes, and any feature development requests will be taken into consideration to meet the needs of the City of Midland, and the rest of the Bonfire user base.

Bonfire is committed to ensuring that the training and implementation of Bonfire is completed based on the timeline desired by the City of Midland. Bonfire can increase the frequency of meetings to ensure that the necessary time is allocated to City staff to ensure they are completing on schedule.

The Bonfire cost proposal is a fixed and hard cap. Bonfire has never charged a customer more for a service, training or software than what is communicated as the price. That price includes unlimited training, support, configurations, and implementation resources needed to get the job done on-time, quickly, and in a way that completely reduces any risk of the cost for the City increasing.



TERMS AND CONDITIONS

1. **LICENSE**. Bonfire Interactive Ltd. ("**Bonfire**") hereby grants to Customer (identified on the Order Form), for internal use by Customer, its agents, contractors, employees and suppliers (collectively, the "**Users**") a non-transferable, non-exclusive, non-sub-licensable right and license (the "**License**") to access and use the services identified on Schedule A (collectively, the "**Platform Services**") during the Term (as outlined on the Order Form). The Platform Services shall be made available on-line at bonfirehub.com or bonfirehub.ca (or such other URL as Bonfire may designate from time to time) (the "**Site**") from a third party hosted facility, located in the country specified on the Order Form, and/or other systems used by Bonfire to host the Platform Services in the country specified on the Order Form (collectively, the "**Systems**"). Platform Services may be amended, enhanced or modified from time to time by Bonfire. Users shall access the Platform Services by means of a specific account (the "**Customer's Account**") using individual User login names and passwords ("**Passwords**") provided by Bonfire. Bonfire shall enable the Platform Services and provide the Passwords on the Plan Start Date (identified on the Order Form). The Customer is responsible for the confidentiality and use of its Passwords and Customer Account, and in no event shall Bonfire be liable for any loss of information of the Customer or other claims arising from unauthorized access to the Platform Services as a result of the failure by Customer to protect the confidentiality of its Passwords and Customer Account. Bonfire is also responsible for the confidentiality of the Passwords and Customer Account provided to Customer and shall in all events be liable and indemnify Customer for any breach of this provision.

2. **USE**. The License and Support (as defined in Section 3 below) is granted exclusively for Customer's internal use, and the Customer is solely and exclusively responsible:
 - a. For the collection, accuracy, currency, quality, legality, completeness and use of Customer Data (as defined in Section 7.2 below) that is stored on the Systems, disclosed to or used by Customer or Users in connection with the Platform Services;
 - b. For the content of all communications (including without limitation, any transfer of signs, signals, text, images, videos, sounds, data or intelligence of any nature transmitted in whole or in part electronically the "**Electronic Communications**") while using Customer's Account;
 - c. To ensure that it and the Users will not use the Platform Services to communicate, by way of Electronic Communication or otherwise, any message or material that (1) is libelous, harmful to minors, obscene or constitutes pornography; (2) infringes the copyrights, patents, trade secrets, trademarks, trade names or other proprietary rights of a third party or is otherwise unlawful; or (3) would otherwise give rise to any breach of confidentiality or privacy laws, or any civil liability, or that constitutes or encourages conduct that could constitute a criminal offence, under any applicable law or regulation;
 - d. To ensure that the use of the Platform Services by any User is limited to the rights outlined herein; and the Customer shall not permit Users, directly or indirectly, to do (and shall be responsible for any violation of) any of the following acts:
 - i. Reverse engineer, de-compile, disassemble or otherwise attempt to discover the source code or underlying ideas or algorithms of the Platform Services;
 - ii. Modify, translate, or create derivative works from the Platform Services;



Terms & Conditions

Bonfire Interactive Ltd.

- iii. Rent, lease, distribute, license, sublicense, sell, resell, assign, or otherwise commercially exploit the Platform Services;
- iv. Publish or disclose to third parties any evaluation of the Platform Services without Bonfire's prior written consent;
- v. Violate any local, state / provincial, federal or foreign law, treaty, regulation or convention applicable to the Customer in connection with Users' use of the Platform Services;
- vi. Access data or log into a server or account on the System that the Customer is not authorized to access, or access or tamper with other customer accounts of Bonfire;
- vii. Willfully tamper with the security of, or probe, scan or test the vulnerability of, any of the Systems, or render any part of the Systems unusable.
- viii. Sharing of Customer's Account with multiple individuals to circumvent license allocation as defined on the Order Form.

3. SUPPORT AND MAINTENANCE. Bonfire shall provide general maintenance services and technical support in respect of the Platform Services ("**Support**") throughout the Term, during Business Days (as defined in Schedule A). The Customer acknowledges that the Support will not be available during System maintenance periods for purposes of upgrades and maintenance to the Platform Services and/or System. Downtime for such System maintenance periods shall only occur between the hours of 11:00 pm and 6:00 am Eastern Standard Time ("**Downtime**") unless there is a defect that renders the Platform Services unavailable in which case Bonfire shall take steps to correct such deficiency immediately. Otherwise, Bonfire will make reasonable efforts to announce the scheduled Downtime via e-mail to the Customer's designated e-mail address. Support does not include services required as a result of (i) User misuse, improper use, alteration, or damage of the Platform Services; (ii) any problem caused by modifications in any version of the Platform Services not made or authorized by Bonfire; (iii) any problem resulting from the Customer combining or merging the Platform Services with any hardware or software not supplied by Bonfire, or not identified by Bonfire as compatible with the Platform Services and/or Systems, or (iv) any custom development services outlined on Schedule A hereto. Optional additional services which may be provided by Bonfire at the request of the Customer are as outlined on Schedule A hereto.

4. SERVICE LEVEL AGREEMENT. Bonfire shall provide the Platform Services at a service level described in the Service Level Agreement outlined on Schedule B hereto.

5. CUSTOM DEVELOPMENT. In the event the Customer wishes to have Bonfire provide additional custom development and/or services at any time during the Term, the parties will negotiate the terms and conditions of such additional services, and enter into a mutually agreeable contract which, among other things, will address which party will own any and all intellectual property developed as a result.

6. FEES, PAYMENT AND TAXES.



Terms & Conditions

Bonfire Interactive Ltd.

6.1 Fees. Fees for the License, Platform Services and Support (collectively the “**Fees**”) are based on (i) the Plan Type selected by the Customer, and/or (ii) the number of records (“**Records**”) that the Plan Type includes, each as defined on the Order Form.

6.2 Payment.

- a. **General.** All Fees are quoted in American currency unless otherwise stated on the Order Form; and are non-refundable except as may otherwise be provided in this Agreement.
- b. **Invoicing.** Fees will be invoiced in advance and will be due on such dates and for such amounts as indicated on the invoices provided by Bonfire to the Customer.
- c. **Expenses.** The Customer shall pay Bonfire for all pre-approved costs and expenses incurred by Bonfire in providing any Support to the Customer (in excess of that provided as outlined in the Support and Maintenance Section contained herein) within 45 days of receipt of invoice from Bonfire, unless otherwise specified. The Customer is responsible for all its internet connection charges related to the use of the Platform Services.
- d. **Suspension of Service.** If Fees on any Customer Account are not paid by the due date, in addition to any other rights and remedies Bonfire may have (including interest owing, and the termination rights set forth herein), Bonfire reserves the right to suspend the Customer Account without liability to Bonfire, until such account is paid in full. “**Suspended Account**” means that all attempts to create new projects in Bonfire will be blocked and all Support will cease until the Customer makes the full payment due and owing, including any interest and other charges accruing during the suspension period. A Suspended Account does not remove the Customer’s obligation to pay those amounts outstanding to the date of such suspension or thereafter for the remainder of the Term, as the case may be.

7. OWNERSHIP AND CONFIDENTIALITY.

7.1 Intellectual Property. The Customer acknowledges and agrees that the Platform Services, and all intellectual property rights therein (including without limitation, copyrights, patents, trade secrets, trademarks, moral rights and other intellectual property rights, in and to the Platform Services, and all modifications, changes, enhancements, or additions thereto (whether initiated by the Customer or otherwise), and all intellectual property rights relating to the provision of Support in respect of the Platform Services (collectively, “**Bonfire IP**”), are owned or licensed by Bonfire. Except for the License granted hereunder, nothing in this Agreement gives the Customer any right, title or interest in, to or under any of the Bonfire IP, and to the extent the Customer acquires rights in the Bonfire IP, Customer assigns such rights to Bonfire and waives any moral rights it may have in the Bonfire IP to and in favour of Bonfire. All Bonfire IP shall be deemed to be Confidential Information (as defined below), and the Customer shall be bound by all confidentiality provisions.

7.2 Customer Data. “**Customer Data**” means any data, information or other materials of any nature recorded in any form whatsoever, disclosed or provided to Bonfire by the Customer and by the Users in the course of using the Platform Services, including all information generated by the Users’ use of the Platform Services. The Customer retains all right, title and interest in and to all Customer Data. The Customer Data shall be deemed to be Confidential Information (as defined below) of the Customer, and Bonfire will restrict access to Customer’s



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Confidential Information to those Bonfire employees, consultants and/or subcontractors who have a need to access the Customer Data in order to provide the Platform Services and Support and have agreed to be bound by the confidentiality provisions outlined herein. The Customer agrees that it is solely and exclusively responsible for the collection, accuracy, currency, quality, legality, completeness and use of Customer Data that is stored on the System, disclosed to or used by Customer or Users in connection with the Platform Services, and for compliance with all applicable laws and regulations in the appropriate jurisdiction, including without limitation with respect to privacy, non-disclosure and confidentiality.

7.3 Bonfire Access and Use. Bonfire shall have the right, in its sole discretion, to access the Customer's Account from time to time, for purposes of Support, administration, anonymized data aggregation, invoicing and to inspect the Customer's utilization of the Platform Services so as to ensure Customer's compliance with the provisions of this Agreement.

7.4 Confidential Information. As used herein, "**Confidential Information**" means all confidential and proprietary information of a party that is disclosed to the other party pursuant to this Agreement, and includes without limitation all Passwords, Customer Account information, Customer Data, Bonfire IP, and the terms and conditions of this Agreement. Each party agrees to keep all Confidential Information disclosed to it by the other party strictly confidential, in the same manner as it protects the confidentiality of its own information and data (at all times exercising at least a reasonable degree of care in the protection of the Confidential Information). Confidential Information shall not include information which: (a) is known publicly; (b) is generally known in the industry before disclosure; (c) has become known publicly, without fault of a party, subsequent to disclosure by the other party; or (d) has been otherwise lawfully known or received by a party. This section will not be construed to prohibit the disclosure of Confidential Information if required by law or order of the court or other governmental authority, provided that a party shall give the other party prompt notice of such request, so that the other party has a reasonable time to attempt to limit or prevent such disclosure. Upon termination of this Agreement, all copies of all Confidential Information shall be either returned to the applicable party or destroyed, at the discretion and written direction of the other party.

8. PERSONAL INFORMATION.

8.1 Definition and Permitted Use.

- a. For this Agreement, "**Personal Information**" means any information that Bonfire collects, receives, or obtains, from or on behalf of Customer or any of its Authorized Users that identifies a specific individual or by or from which a specific individual may be identified, such as the individual's name, address, or social security number, and any other information relating to an identified or identifiable individual. Personal Information includes the information of or pertaining to Customer's personnel, directors, officers, agents, providers, contractors, investors, or customers.
- b. Bonfire shall not cause or permit any Personal Information to be processed in any manner or for any purpose other than the performance of the Services in compliance with the restrictions in this Agreement and all applicable Laws.



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8.2 Ownership and Treatment of Personal Information. As between Customer and Bonfire, Customer is and shall remain the sole and exclusive owner of all right, title, and interest in and to Personal Information. Bonfire shall:

- a. Process Personal Information for the sole purpose of performing the Services and in compliance with: (i) this Agreement or as Customer may expressly direct in advance in writing; and (ii) all applicable data protection laws; and
- b. Notify Customer in writing if Bonfire becomes aware of any unauthorized access, use or other unauthorized act respecting Personal Information.

9 TERM AND TERMINATION.

9.1 Term. The License and Support shall commence on the Plan Start Date (as outlined on the Order Form) and shall continue for the Term outlined on the Order Form (the “**Initial Term**”), unless earlier terminated in accordance with the provisions of this Agreement.

9.2 Suspension of Service. Bonfire may, at its sole option, and in addition to any other right herein, notify the Customer that it has a Suspended Account effective immediately in the event of any breach of payment of Fees as outlined in Section 6.2 above, or a breach of any provisions related to intellectual property or confidential information, or a breach of any provisions outlined in Section 2.d.

9.3 Termination. This Agreement may be terminated as follows upon the occurrence of any of the following events:

- a. Immediately by Bonfire, if the Customer fails to make payment of undisputed Fees within 45 days of receiving written notice from Bonfire;
- b. Immediately by either party, if the other party breaches any of the obligations or provisions of this Agreement and fails to remedy such breach within 30 days of written notice from the party of such default;
- c. Immediately on written notice by either party if the other party (A) ceases or threatens to cease to carry on its business, commits an act of bankruptcy, makes an assignment or bulk sale of its assets, or proposes a compromise or arrangement to its creditors, or (B) is subject to any proceeding that is taken to (i) compromise or make an arrangement with that party's creditors, (ii) obtain an order to assign that party into bankruptcy or winding-up that party, or (iii) obtain an order to appoint a receiver over any part of that party's assets, and in each case, such proceeding is not dismissed within 60 days of such proceeding being initiated; and
- d. Immediately on written notice by either party if the other party breaches or threatens to breach any provision of Section 7 of this Agreement.

9.4 Effect of Termination. Upon the effective date of termination, the License and all Support shall terminate and:

- a. Each of the parties shall deliver or destroy, at the direction of the other party, all Confidential Information of the other party which is in its possession, care or control, provided that the Bonfire, on request by Customer, shall be permitted 10 business days to provide Customer with a backup copy of all Customer Data located on the Platform



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Services. The backup copy of all Customer Data located on the platform services shall be provided to the customer in a format of the Customer's choosing, which may include a physical hard drive.

- b. Customer shall pay to Bonfire all undisputed Fees accrued and owing up to the effective date of termination or Bonfire shall reimburse to Customer all pre-paid Fees on a pro rata basis for that portion of the Term following the effective date of termination;
- c. The provisions dealing with intellectual property, confidential information, liability and indemnification of this Agreement shall continue in force following effective termination; and
- d. Each of the parties shall have all remedies which are available to it at law or in equity.

10 **INSURANCE.**

Bonfire shall, at its own cost and expense, procure and maintain in full force and effect during the Term, policies of insurance from licensed and reputable insurance carriers covering the operations of Bonfire and its potential liabilities pursuant to this Agreement.

11 **WARRANTIES AND DISCLAIMERS.**

11.1 Software Limited Warranty. Bonfire warrants that the Platform Services will operate in substantial conformity with the applicable written documentation provided by Bonfire. For any breach of this warranty, Customer's remedy shall be that Bonfire will, at its expense, correct any errors identified by Customer in the Platform Services, in addition to any other remedy that might be available to Customer for such breach by Bonfire. Bonfire also warrants that it will maintain the Platform Services at reputable third party Internet service providers and hosting facilities. Bonfire warrants that it has implemented commercially reasonable security measures, including without limitation, technical, physical and procedural controls to protect Customer Data against destruction, loss, alteration, unauthorized disclosure to third parties or unauthorized access by employees or contractors employed by Bonfire, whether by accident or otherwise. However, the Customer acknowledges and agrees that, notwithstanding such security measures, use of or connection to the Internet provides the opportunity for unauthorized third parties to circumvent such precautions and illegally gain access to the Platform Services and Customer Data. Accordingly, Bonfire cannot and does not guarantee the privacy, security or authenticity of any information so transmitted over or stored in any system connected to the Internet. For any breach of the foregoing warranties, Bonfire shall pay to Customer all damages the Customer suffers in connection with such breach, subject to the limitations set out in Section 11.3.

11.2 Exclusions. Except as expressly stated in this Section 11, there are no representations, warranties or conditions (whether implied or arising by statute or otherwise in law or from a course of dealing or usage of trade) for the Platform Services or Support, and BONFIRE DISCLAIMS ALL STATUTORY OR IMPLIED WARRANTIES AND CONDITIONS INCLUDING WITHOUT LIMITATION THE CONDITIONS AND/OR WARRANTIES OF MERCHANTABILITY, MERCHANTABLE QUALITY, FITNESS FOR ANY PURPOSE, PARTICULAR, SPECIFIC OR OTHERWISE, OR NON-INFRINGEMENT. Bonfire does not warrant that the functions contained in the Platform Services will meet the Customer's requirements or that the operation of the Platform Services will be uninterrupted or error-free.



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11.3 Limitations of Liability. UNLESS PROHIBITED BY APPLICABLE LAW, IN NO EVENT SHALL EITHER PARTY OR THEIR RESPECTIVE AGENTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OF ANY KIND, WHETHER OR NOT FORESEEABLE, INCLUDING WITHOUT LIMITATION, LOSS OF BUSINESS, LOST PROFITS OR REVENUE, OR FAILURE TO REALIZE EXPECTED SAVINGS, EVEN IF THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE TOTAL AGGREGATE LIABILITY OF BONFIRE FOR DIRECT DAMAGES UNDER THIS AGREEMENT SHALL BE LIMITED TO THE FEES PAID BY CUSTOMER IN THE TWELVE (12) MONTHS PRECEDING THE DATE ON WHICH THE CAUSE OF ACTION GIVING RISE TO THE LIABILITY AROSE.

12 INDEMNIFICATION.

12.1 Bonfire Indemnification. Bonfire shall, at its own expense, defend Customer in any action, suit or claim by a third party alleging that the Platform Services (when used as authorized under this Agreement) infringe any United States or Canadian patent, trademark, trade secret, copyright or any other proprietary right of such third party (an “IP Claim”) and shall pay settlement amounts agreed by Bonfire and/or any losses, damages, liabilities, expenses, or costs (including but not limited to reasonable attorneys' fees) awarded to such third party against Customer by a court of competent jurisdiction in such IP Claim. As conditions for such defense and satisfaction by Bonfire, (i) Customer shall notify Licensor promptly in writing upon becoming aware of all pending IP Claims; (ii) Customer shall give Licensor sole control of the defense and settlement of such IP Claims; (iii) Customer shall cooperate fully with Licensor in the defense and/or settlement of such IP Claims; and (iv) Customer shall not settle any IP Claims without Licensor's consent, or compromise the defense of any such IP Claims.

12.2 Mitigation. Notwithstanding the foregoing, if Bonfire reasonably believes that use of any portion of the Platform Services is likely to be enjoined by reason of an IP Claim then Bonfire may, at its sole option and expense: (i) procure for the Customer the right to continue using the Platform Services, as the case may be, or any portion thereof; (ii) replace the same with other software, services or other material of equivalent functions and efficiency that is not subject to an action described in this section; or (iii) modify the applicable software or other material so that there is no longer any infringement or breach, provided that such modification does not adversely affect the functional capabilities of the Platform Services as set out herein. If none of the foregoing options are commercially reasonable, Bonfire may terminate this Agreement or access to the allegedly infringing portion of the Platform Services [and refund customer any prepaid unearned fees for the Platform Services or such portion of the Platform Services.] Bonfire shall have no liability respecting any IP Claim to the extent such Claim is based upon the combination, operation or use of the Platform Services, Support with other equipment, software, apparatus, devices or things not identified by Bonfire as compatible with the Platform Services and/or Systems or in a manner inconsistent with Bonfire's specifications and instructions or this Agreement.

12.3 Procedure. Bonfire's defense and indemnity obligations in this Section 12 are subject to the following: (i) Customer promptly notifying Bonfire in writing of the Claim on becoming aware of any pending Claim; (ii) Bonfire having sole control of the defense and all related settlement negotiations with respect to the Claim, provided that no settlement shall be accepted without the prior written consent of the aggrieved party, such consent not to be



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unreasonably withheld, conditioned or delayed; and (iii) Customer shall cooperate fully to the extent necessary in the defense or settlement of such Claim, and execute all documents necessary for the defense of such Claim and (iv) Customer shall not settle any Claim without Bonfire's written consent, or compromise the defense of any such Claim.

This section states the entire liability of Bonfire for any type of infringement or breach whatsoever of intellectual property rights of third parties resulting from or relating to the provision by Bonfire of the Platform Services or Support.

13 GENERAL PROVISIONS.

13.1 Entire Agreement. This Agreement, and any amendments or additions thereto from time to time, constitute the entire agreement and set forth the entire understanding between the parties hereto with respect to the subject matter hereof and supersede all prior or other agreements, covenants, arrangements and discussions with respect thereto. In the event of an inconsistency between the terms and conditions of this Agreement and any other document or agreement between the parties with respect to the subject matter hereof, the terms and conditions of this Agreement shall prevail and govern to the extent necessary to remedy such inconsistency.

13.2 Relationship of Customer and Bonfire. Nothing contained in this Agreement shall be deemed or construed as creating a joint venture or partnership between the parties; no party is by virtue of this Agreement authorized as an agent, employee or agent representative of the other.

13.3 Export and control restrictions. The Customer acknowledges that this Agreement and the provision of all products hereunder shall be subject to the export control laws and regulations of Canada as are in force from time to time and the Customer shall comply with all such laws and regulations.

13.4 Non-Exclusivity. Nothing in this Agreement will be construed to prevent Bonfire from marketing, licensing, selling or otherwise providing the Platform Services, Support or Systems, or any aspects of Bonfire's technology or services to any third party. Nothing in this Agreement will be construed to prevent the Customer from obtaining services similar to the Platform Services from a third party.

13.5 Modifications and Waiver. No modification of, amendment or addition to this Agreement is valid or binding unless set forth in writing and fully executed by both parties hereto. Any waiver of any right or remedy under this Agreement must be in writing and signed by each party. No delay in exercising any right or remedy shall operate as a waiver of such right or remedy or any other right or remedy. The exercise or failure to exercise any remedy shall not preclude the exercise of that remedy at any time. The waiver of any breach hereof or default in any payment shall not be deemed to constitute a waiver of any succeeding breach or default.

13.6 No Assignment. This Agreement and any rights or obligations hereunder, shall not be assigned, sublicensed or otherwise transferred by the Customer by a change of control of the Customer or by operation of law. Bonfire may transfer or assign its rights and obligations hereunder without prior written approval of the Customer. This Agreement shall be binding upon and shall inure to the benefit of Bonfire and the Customer and each of their successors and permitted assigns.



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- 13.7 Notices.** Any notices, demands and other communications hereunder shall be in writing and shall be delivered, sent by electronic transmission, or by mail, registered or certified, return receipt requested, postage prepaid, and addressed to the parties as outlined on the Order Form. All notices shall be effective and deemed to be delivered (i) if mailed, on the fifth business day following such mailing, unless there is an interruption in the mail, in which case it shall be deemed to have been given when received; or (ii) if delivered or sent by facsimile, on the business day following the date of dispatch or the date of transmission, as the case may be. Either party may change the address for notice by giving written notice of such change to the other party in the manner provided in this Section.
- 13.8 Severability.** If any provision of this Agreement is held to be unenforceable or illegal by a court of competent jurisdiction, such provision shall be modified to the extent necessary to render it enforceable, or shall be severed from this Agreement, and all other provisions of this Agreement shall remain in full force and effect.
- 13.9 Force Majeure.** Neither party to this Agreement shall be liable to the other for any failure or delay in performance by circumstances beyond its control, including but not limited to, acts of God, fire, labour difficulties, governmental action or terrorism, provided that the party seeking to rely on such circumstances gives written notice of such circumstances to the other party hereto and uses reasonable efforts to overcome such circumstances.
- 13.10 Authorized Reseller Status; Option to Purchase Affiliate Products.** Bonfire is a subsidiary of GTY Technology Holdings Inc. ("GTY") and an authorized reseller of products and services produced and provided by other subsidiaries of GTY (such subsidiaries, "Bonfire Affiliates"). These products and services include software-as-a-service technology for the procurement and vendor supplier sourcing industry, digital services and payment technology through a software-as-a-service platform, software solutions for grants management and indirect cost reimbursement and related implementation and consulting services, software tools to streamline permitting and licensing services, and additional web-based budgeting preparation, performance, management and data visualization solutions ("Affiliate Products"). Bonfire Affiliates include Bonfire Interactive US Ltd., Sherpa Government Solutions LLC, eCivis Inc., CityBase, Inc., OpenCounter Enterprise Inc., Questica Ltd. and Questica Software Inc. In addition to the products and services that are the subject of this Agreement, Client has the option to purchase from either Bonfire, as an authorized reseller, or Bonfire Affiliates, Affiliate Products on terms and conditions, including pricing, to be agreed upon in writing by Client and Bonfire or Client and the applicable Bonfire Affiliate.



SCHEDULE A – SERVICE DESCRIPTIONS AND DEFINITIONS

All capitalized terms used in this Schedule shall have the meanings ascribed thereto in the Agreement. This Schedule may be amended from time to time in accordance with the terms of the Agreement, and is deemed incorporated into the Agreement, as amended.

1. PLATFORM SERVICES.

a. **Description of Platform Services.** Platform Services include the following functionality (based on the modules included on the customer order form):

- i. Public Opportunity Portal
- ii. Project Management and Evaluation
- iii. Contract Management
- iv. Vendor Record Management
- v. Vendor Performance Management
- vi. Insights and Analytics
- vii. User Management

2. **CUSTOM DEVELOPMENT AND SERVICES.** The following optional custom development services are available to the Customer, the terms of which shall be negotiated by the parties.

- a. **Data Migration Service:** Importing Customer's legacy data and files into Platform Services. Exporting Customer's historical data in a structured manner out of Platform Services.
- b. **Custom Development Service:** Includes any additional development that the Customer would like done for integrating custom data formats, the creation of custom report formats, and any other development required to fill Customer needs.

3. BUSINESS DAYS.

- a. Business Days are defined as Monday – Friday.
- b. Business Days do not include holidays, which include:
 - i. New Year's Day (January 1)
 - ii. President's Day / Family Day (Third Monday in February)
 - iii. Good Friday (Friday before Easter Sunday)
 - iv. Victoria Day (Monday before May 25)
 - v. Labor Day (First Monday in September)
 - vi. Columbus Day / Thanksgiving Day (Second Monday in October)
 - vii. Christmas Day (December 25)
 - viii. Boxing Day (December 26)



SCHEDULE B – SERVICE LEVEL AGREEMENT

Bonfire understands the importance and centrality the Platform Services plays in supporting an organization's business processes. We value and appreciate the trust that each customer places in us.

This Service Level Agreement ("SLA") is a policy governing the use of the Platform Services between Bonfire ("us" or "we") and users of Platform Services ("you"). This SLA applies separately to each Customer using the Platform Services. Any amendments or revisions to this SLA will be in writing and agreed to by both parties.

Bonfire is committed to providing reliable high-performance managed services to our customers. Our SLA has been designed to ensure the highest quality service and to provide compensation to the Customer in the event of failure to achieve the specified metrics herein.

1. SERVICE COMMITMENT.

- a. **Service Availability.** Bonfire will use commercially reasonable efforts to make the Platform Services available with a Monthly Uptime Percentage (defined below) of at least 99.5% during any monthly billing period. In the event Bonfire does not meet the Service Commitment, you will be eligible to receive a Service Credit as described below.
- b. **Data Redundancy.** Bonfire will use commercially reasonable efforts to provide at a minimum one (1) redundant data store for Customer Data, updated on a daily basis, during the period of the Term.
- c. **Data Storage Term.** While there exists an SLA in place between the Customer and Bonfire, Bonfire will use commercially reasonable efforts to store all Customer Data.
- d. **Data Exportation.** Bonfire will use commercially reasonable efforts to provide (i) the access or means for the Customer to export the Customer Data out of the Platform Services or (ii) a comprehensive export of all Customer Data in downloadable Excel and ZIP formats upon request.

2. SERVICE AVAILABILITY DEFINITIONS.

- a. **Server Outage.** A "Server Outage" is defined as an instance in which no traffic can pass in or out of the Bonfire managed server(s) for more than 15 consecutive minutes ("Service Unavailable"). We will calculate the Service Unavailable for each Customer as a percentage for each fifteen-minute period in the monthly billing cycle. The calculation of the number of Server Outages will not include outages that arise directly or indirectly as a result of any of the SLA Exclusions (as defined below).
- b. **Monthly Uptime Percentage.** The "Monthly Uptime Percentage" is calculated by subtracting from 100% the average of the Service Outage from each fifteen-minute in the monthly cycle.

3. **SERVICE CREDITS.** "Service Credits" are calculated as a percentage of the total charges paid by you to Bonfire for the billing cycle in which the error occurred in accordance with the schedule below.



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a. Service Credit Percentages:

- i. For Monthly Uptime Percentage equal to or greater than 99.0% but less than 99.5% - Service Credit of 1%
- ii. For Monthly Uptime Percentage less than 99% - Service Credit Percentage of 5%.

We will apply any Service Credits against future Bonfire payments otherwise due from you unless there are none, in which case Service Credits will be refunded. A Service Credit will be applicable and issued only if the credit amount for the applicable monthly billing cycle is greater than one dollar (\$1 Canadian Dollar). Service Credits may not be transferred or applied to any other Customer.

4. **SERVICE CREDIT PROCEDURE.** To receive a Service Credit, you must submit a request by sending an e-mail message to support@gobonfire.com. To be eligible, the credit request must (i) include your account URL in the subject of the e-mail message; (ii) include, in the body of the e-mail, the dates and times of each incident of each outage; and (iii) be received by us within ten (10) business days after the end of the billing cycle in which the errors occurred. If the Monthly Uptime Percentage applicable to the month of such request is confirmed by us, we will issue the Service Credit to you within one billing cycle following the month in which the error occurred. Your failure to provide the request and other information as required above will disqualify you from receiving a Service Credit.
5. **SERVICE COMMITMENT EXCLUSIONS.** The Service Commitment does not apply to any unavailability, suspension, termination of Platform Services, or any other Platform Services performance issues (i) that result from Downtime and Service Suspensions as defined below. **"Service Suspensions"** means, collectively, Bonfire's right to suspend access to any portion or all of the Platform Services at any time, on a Service-wide basis: (a) for scheduled Downtime to permit us to conduct maintenance or make modifications to any Platform Service; (b) in the event of a denial of service attack or other attack on the Platform Service or other event that we determine, in our sole discretion, may create a risk to the applicable Platform Service, to you or to any of our other customers if the Platform Service were not suspended; or (c) in the event that we determine that any Platform Service is prohibited by law or we otherwise determine that it is necessary or prudent to do so for legal or regulatory reasons To the extent we are able, we will endeavour to provide you email notice of any Service Suspension and email notice regarding resumption of Platform Services following any such suspension; (ii) caused by factors outside of our reasonable control, including any force majeure event or Internet access or related problems beyond the demarcation point of the Platform Services; (iii) that result from any actions or inactions of you or any third party; (iv) that result from your equipment, software or other technology and/or third party equipment, software or other technology (other than third party equipment within our direct control); or (v) arising from our suspension and termination of your right to use Platform Services in accordance with the terms of the Agreement. If availability is impacted by factors other than those used in our calculation of the Server Outage, we may issue a Service Credit considering such factors in our sole discretion.

Support and Incident Management Policy

Bonfire Interactive Ltd. | Confidential

Purpose of Document

This document details Bonfire's support and incident management policy and processes for dealing with customer support, privacy and security, maintenance, and disaster recovery. The document serves as (1) an internal guide for Bonfire staff in managing these activities, and (2) a clear and understandable service level commitment for customers.

Key Definitions

Downtime

Complete unavailability of web portal or API to the user as measured at the Bonfire platform's internet access point. Network unavailability from user to the web server is not included. Downtime may be planned (as in the case of maintenance) or unplanned (as in the case of disaster). An outage must persist for more than 15 minutes to be considered downtime.

Solution Maintenance

Includes major maintenance activities, improvements, and/or upgrades to core platform and/or features. May require downtime. May cause changes in how a customer operates business processes / workflows in Bonfire.

Solution Patches

Includes minor maintenance activities, improvements, and/or upgrades to core platform and/or features. Does not require downtime. Does not cause changes in how a customer operates business processes / workflows in Bonfire.

Communication Standards

This defines the communication standards which Bonfire will commit to.

Definitions

Core Business Hours

Core business hours are 8:00 a.m. to 8:00 p.m. EST/EDT (UTC-5, UTC-4 during daylight savings), Monday through Friday. All durations in this document are in business hours/days.

Holidays

Public holidays are not considered a part of core business hours. Such holidays are not included in any durations in this document.

Incident Response Standards

The following standards apply to the response to and handling of incidents impacting customers.

Level		Incident A	Incident B	Incident C
Response Within	Initial Response	1 hour	1 hour	1 hour
	Start Work	2 hours	4 hours	1 day
	Resolution	2 days	3 days	4 days
Compliance Target		100%	100%	100%
Communication Methods		Email to the primary contact notifying of the incident and process to resolve. Phone available for follow up communication.		
		Email and phone to primary contact for Organizations with opportunities closing within 3 days. Organizations will be contacted in order of project close date (most immediate close date first).		

Event Notification

The following standards apply to notification of events that have happened or will happen.

Level	Planned A	Planned B	Planned C	Unplanned A
Response	1 week prior	3 days prior	1 day prior	3 days after
Compliance Target	100%	100%	100%	100%
Communication Methods	Email to the primary contact notifying of the event. Phone available for follow up communication.			

Support Performance

Tier 1 Incidents

Tier 1 incidents have a major impact on customer ability to operate entire business processes. No work-around or manual process is available.

Communication Standard: Incident Response Level A

Tier 2 Incidents

Tier 2 incidents include minor system or component failure or malfunction causing impact on customer ability to operate significant business processes. No work-around or manual process is available.

Communication Standard: Incident Response Level B

Tier 3 Incidents

Tier 3 incidents include component failure or malfunction not causing impact on customer ability to operate significant business processes. Work-around or manual processes are available.

Communication Standard: Incident Response Level C

Support Requests

Customer support requests not relating to an incident will be responded to promptly. Start work and resolution times are dependent on the nature of the request.

Communication Standard: Incident Response Level C (for initial response only)

Carolina Jimenez

From: Willow Stuart <wstuart@gobonfire.com>
Sent: Wednesday, February 15, 2023 10:49 AM
To: Carolina Jimenez
Cc: Philip Huntley; Regina Stephenson; Erika Munoz; Matthew Calderon; Matthew Iglesias
Subject: Re: RFP # 23001936 E-Bidding - BAFO Worksheet
Attachments: City of Midland RFP 23001936 E-Bidding Software and Implementation Services - BAFO Worksheet.xlsx

Good morning Midland team!

We sincerely appreciate the time taken in reviewing Bonfire. We understand the impact that implementing a new procurement system will have on the Purchasing team, internal customers, and ultimately the citizens of Midland. We appreciate the importance of selecting the right system. Over the past 12 years, Bonfire has made it our mission to create effective, efficient workflows for school districts to handle the contracting process from start to finish, and we are thrilled at the opportunity to partner with the team in Midland. In order to show our enthusiasm, we have opted to increase our discount from \$6,000 to \$7,500 off of annual fees, which compounds to a \$20,000 savings over the 10 year agreement.

We look forward to hearing back!

On Mon, Feb 13, 2023 at 2:06 PM Carolina Jimenez <cjimenez@midlandtexas.gov> wrote:

Good afternoon,

The City requests that your company submit a Best-and-Final-Offer (BAFO) in relation to the RFP #23001936 for E-Bidding software and implementation services. The City has attached a BAFO form for your company to complete, which requests comparable information to the cost worksheets included in the RFP package.

The City requests a BAFO submission by **Tuesday, February 21, 2023, at 2:00 p.m. Central Time**. The City is available to address questions and clarification requests regarding the BAFO form and submission.

Thank you,

Carolina Jimenez

Buyer II | Purchasing Dept

O. 432-685-7418

F. 432-685-0523



300 N. Loraine | P.O. Box 1152 | Midland, TX 79702



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Willow Stuart

Account Executive (AE)

USA: +1(202) 968 3604 Canada: +1(519) 718 2187

Directly book a meeting with me [here](#)

GoBonfire.com

Watch a 90-second video to [learn more about Bonfire.](#)

CAUTION: This email originated from outside your organization — exercise caution when opening attachments or clicking links, especially from unknown senders.

BAFO Worksheet

BAFO Worksheet Instructions: Provide a cost response for each cost area, based upon system modules for a subscription-based application. The pricing should be based on the detailed functionality that the City requires for each functional area. All additional costs should be captured in the respective areas.

One-Time Costs Professional Services and Hardware Costs

	Costs	Vendor Notes (recommended)
Professional Service Costs	\$0.00	No integrations have been proposed
Project Management Costs	\$0.00	Project management is included at no cost
Training Costs	\$3,500.00	Unlimited training delivered in-house
Software Customization Costs (Detail to be contained in responses to applicable requirements in Attachment 2)	\$0.00	Bonfire is COTS, configuration is included at no cost
Third-Party Hardware Costs	\$0.00	
Third-Party Services Costs (including training, etc.)	\$0.00	
Expenses (miscellaneous)	\$0.00	
Other (Specify in Vendor Notes)	\$0.00	
Other (Specify in Vendor Notes)		
Other (Specify in Vendor Notes)		
Total One-Time Costs (Before Discounts)	\$3,500.00	
Amount Discounted (\$)		
Server and other Hardware Costs	\$0.00	
Server/database licenses (OS, SQL licensing, etc.)	\$0.00	
Additional Environments	\$0.00	
Additional Databases	\$0.00	
Total Discounted One-Time Costs	\$3,500.00	

	Costs	Vendor Notes (optional)
Estimated Travel Costs (not to exceed basis)	\$0.00	Training delivered remotely, in-person training available for additional cost but strictly not necessary

Recurring Hosting/Managed Services Costs

Vendor Comments on Hosting and Managed Services Costs

Year 1 Hosting Costs		
	Costs	Vendor Comments
Annual Hosting/Services	\$30,000.00	
Third-party Hosting Costs	\$0.00	
Other Annual Services/Hosting Costs (if applicable)	\$0.00	
Total Hosting Cost (annual)	\$30,000.00	
Amount Discounted (\$)	\$7,500.00	
Total Discounted Hosting Amount - Year 1 Hosting Fees	\$22,500.00	

Recurring Hosting Fees - Years 2 - 10				
	Rate of Increase over Prior Year (as a percentage)	Hosting Costs (as a dollar amount)	Third-Party Hosting Costs (as a dollar amount)	Vendor Comments
Year 2	0%	\$22,500.00	\$0.00	
Year 3	0%	\$22,500.00	\$0.00	
Year 4	5%	\$23,625.00	\$0.00	
Year 5	0%	\$23,625.00	\$0.00	
Year 6	5%	\$24,806.25	\$0.00	
Year 7	0%	\$24,806.25	\$0.00	
Year 8	5%	\$26,046.56	\$0.00	
Year 9	0%	\$26,046.56	\$0.00	
Year 10	5%	\$27,348.89	\$0.00	
Ten Year Hosting Cost		\$243,804.52		

Other In-Scope Costs		
	Cost	Notes
Anticipated Future Upgrade Costs and Frequency Over 10-year Horizon (Licensing)	\$0.00	
Anticipated Future Upgrade Costs and Frequency Over 10-year Horizon (Services)	\$0.00	
Anticipated Future Upgrade Costs and Frequency Over 10-year Horizon (Other)	\$0.00	
Other: (Please describe)		
Other: (Please describe)		
Other: (Please describe)		
Other: (Please describe)		
Other: (Please describe)		

TOTAL TEN YEAR INVESTMENT

Total Discounted One-Time Costs (Cell B23)	\$3,500.00
Total Estimated Travel Costs (Cell B24)	\$0.00
Other In-Scope Costs (Cells B53:B60)	\$0.00
Recurring Hosting Years 1-10 (Cell B49)	\$243,804.52
TOTAL TEN YEAR INVESTMENT	\$247,304.52

Hourly Rates for Professional Services	
Hourly Rate for Training Services	\$0.00
Hourly Rate for Project Management Services	\$0.00

PACKET

6.81

April 25, 2023

Hourly Rate for Custom Programming (Customizations, Integrations, etc.)	\$0.00		
Optional Costs (Not in scope)			
Optional/Complementary Services			
Description of Services		Costs	
Optional/Complementary Module Costs			
Module Name	Recurring Maintenance or Subscription Costs	Implementation Costs	Licensing Costs (if applicable)
Contract Management	\$9,950.00	\$2,500.00	



Request for Proposal

Electronic Bidding Software and Implementation Services
RFP# 23001936

City of Midland, TX

Due: January 19, 2023 2:00PM CT

ATTACHMENT 1 – EXECUTION OFFER

Date:

In compliance with this RFP, and subject to all the conditions herein, the undersigned offers and agrees to furnish any or all commodities or services at the prices quoted.

By executing this offer, Offeror affirms that he/she has not given, offered to give, nor intends to give at anytime hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted offer. Failure to sign the offer, or signing it with a false statement, shall void the submitted offer or any resulting contracts, and the Offeror shall be removed from all proposal lists.

By the signature hereon affixed, the Offeror hereby certifies that neither the Offeror or the firm, corporation, or institution represented by the Offeror or anyone acting for such firm, corporation, or institution has violate the antitrust laws of this State, codified in Section 15.01, et seq., Texas Business and Commerce Code, or the Federal antitrust laws, nor communicated directly or indirectly the offer being made to any competitor or any other person in such line of business. By signing this offer, Offeror certifies that if a Texas address is shown as the address of the Offeror, Offeror qualifies as a Texas Resident Offeror as defined in Rule 1 TAC 113.8.

This offer consists of pages number 1 through _____.

Offeror/ COMPANY: Bonfire Interactive Ltd.

SIGNATURE (INK): _____

NAME: (TYPED/PRINTED) Bill Brunson

TITLE: VP, Sales

STREET: 121 Charles St. W., Ste. C429

CITY/STATE/ZIP: Kitchener, Ontario N2G 1H6

TELEPHONE: 1-800-354-8010 FAX: _____

E-MAIL ADDRESS: hello@gobonfire.com

Federal Employer's Identification Number: 98-0562951

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Executive Summary

Procurement is a function of fair and transparent local government, and upholding the integrity of the City of Midland's (the City) process is mission critical. Bidding and Contracting touches internal stakeholders at the City office, and externally in the Midland community. Moving such a critical process requires several considerations: How will this impact vendor satisfaction and engagement?; How can we ensure compliance with our local and state statutes?; Can it capture the nuances of all of our Projects?; How secure is the platform?; and, most importantly, How easy is it to use? Bonfire operates with a great deal of attention paid to these considerations, and we're excited for this opportunity to show you why we think purchasing teams choose Bonfire.

Bonfire is the most utilized SaaS eProcurement System in Texas, covering all elements of Solicitation and Vendor Management, and contains modules that address all of the objectives listed in the Scope of Work (including vendor registration, solicitation development and issuance, communicating with vendors, receiving electronic bid and proposal submissions, bid tabulation, RFP evaluation, and robust reporting and auditing features). Over 100 agencies within the State of Texas and almost 700 agencies across North America utilize Bonfire. This proposal outlines the capabilities of the system, as well as our approach to supporting the more human elements of change management. Through our experience working with local government in Texas, we have developed a consistent and dependable process for implementing electronic procurement processes within the city. In addition to making good software, we invest significantly into resources to collect and share best practices within the public procurement community.

We are also thrilled to announce that Bonfire has purchased and acquired Ionwave Technologies, the second largest provider of eProcurement systems to local governments in Texas. With the acquisition of Ionwave, we look forward to expanding our network of client agencies, vendors, and community resources (such as cooperative contracts and solicitation templates) throughout 2023. We firmly believe that 2023 is a landmark year for eProcurement technology and Bonfire appreciates the time and effort taken by the city to choose the appropriate platform. Considering this, we want to outline what we think sets us apart from other providers in the space. While you evaluate so many processes, it is important to consider if:

- ***The solution truly supports the entire workflow online***

Bonfire centralizes and streamlines the entire procurement workflow in a single online place, eliminating the need to rely on a patchwork of tools and manual activities. All sourcing and vendor communication activities (Q&A, addenda, notifications, etc.) are conducted within Bonfire for all stakeholders, with no need to download, print, or otherwise work outside of the platform.

"Bonfire's easy-to-use tools and transparent, centralized solution ensures that my buyers, evaluators, and stakeholders work together seamlessly."

Boyd Donovan, Assistant Purchasing Agent
County of Ventura, CA



- ***The solution is easy to use, ensuring a high adoption rate (for Midland and its suppliers)***

Ease of use is a critical factor in getting the most out of your software. It should support stakeholders of all technical abilities, especially for organizations centralizing their entire procurement process for the first time. The same situation exists for suppliers. If the platform is too difficult to register, navigate, and use, Midland's solicitations will not be competitive. *Bonfire* is the only software for sourcing professionals and that prioritizes ease of use. It's easy to get started, find help, and run projects, while offering the power, scalability, and flexibility to handle the most complex RFPs and your growing number of tenders. Bonfire's supplier experience, through a highly visual interface, is second to none. The online submission process is easier because it is clear, more intuitive, and faster, including the project details, timelines, and the documents or data required as part of their proposal.



"Ultimately, we chose Bonfire because of its user-friendliness for our team and our vendors."

Julia Byrd, Administrative Manager, The California Mental Health Services Authority

Narrative

5.1. Company Introduction And Relevant Experience

5.1.1. Transmittal Certification and Primary Contact Information

Transmittal Certification and Primary Contact Information	
Field	Response
Name of the Respondent Representative	Willow Stuart
Title	Account Executive
Name of Company	Bonfire Interactive Ltd.
Address	121 Charles St. W., Ste. C429, Kitchener, Ontario Canada N2G 1H6
Telephone Number	+1 (519) 718-2187
Email Address	wstuart@gobonfire.com
Signature of Authorized Officer of the Firm	
A signature provides the City with the Respondent's acknowledgement and acceptance of the RFP terms, requirements, and conditions, and the execution of same during the discharge of any succeeding contract.	

5.1.2. Company Background and History

Company Background and History	
Metric	Response
Name of Proposer	Bonfire Interactive Ltd.
Name of Partner/Third-Party Firm (if applicable):	n/a
Total number of employees	185
Type and number of employees committed to the product and support being proposed	100% of Bonfire staff are committed to the Bonfire product.
Office locations (City and State)	- 121 Charles St. W #C429, Kitchener, Ontario, Canada - 2005 23rd Ave E, Seattle, WA - 3653 South Ave, Springfield, MO
Total number of active clients	Private: 14 Government: 672
Total number of active Private Sector	14

Company Background and History	
Metric	Response
<i>E-Bidding clients</i>	
<i>Total number of active Government Sector E-Bidding clients</i>	672
<i>Total years offering proposed software systems</i>	11 Years
<i>Total number of Texas Government clients with breakout by Municipality, County, Other</i>	Texas: 115 Municipality: 36 County: 15
<i>Total number of completed implementations of the proposed product and version</i>	672
<i>Total number of active government clients using the proposed product version</i>	672
<i>Largest active government installation, including population</i>	Bonfire's largest deployment by users is the Texas Department of Transportation serving the 30M residents of Texas. Bonfire's largest municipality by population is Cook County, Illinois Population: 5,172,000
<i>Smallest active government installation, including population</i>	Bristol Bay Borough, Alaska Population: 838
<i>Other products offered by the company</i>	N/A

i. Please describe your relevant experience working with Texas entities (Counties, Municipalities, etc.)

Bonfire has worked with local governments in Texas for over eight years, and has successfully implemented eProcurement and Contract Management systems with over 100 government agencies within the state. Over this time, we have worked collaboratively with our clients and partners in state to create and iterate on modules and workflows that capture the entirety of the solicitation and contracting process, with a high degree of attention paid to local purchasing regulations and Texas purchasing law.

Bonfire is a frequent participant in DIR conferences and local NIGP chapter events, and frequently hosts in-person round table events and virtual discussions to provide our clients with opportunities to share feedback with each other and discuss upcoming features and use cases for Bonfire's Procurement tools. Bonfire has worked with the Texas DIR to become TxRamp compliant, as we take the security and integrity of our clients' data with the utmost seriousness.

ii. Please describe any relevant experience working with similarly situated municipalities, including any unique factors that arise during the implementation process.

Bonfire has successfully implemented over 650 organizations and government entities, and with this experience, Bonfire is able to anticipate and mitigate potential risks/challenges throughout the Implementation process. The following descriptions are of the main issues that can arise during implementation.

Different Learning Styles

Bonfire adapts its training plans to meet the needs of learners with different styles to ensure the material is delivered in a manner that sets each learner up for success. An example of this is a recent implementation with the County of Solano in California. For this implementation, the learners preferred a more hands on approach where each learner built out a project in real time while following along with the Implementation Specialist. This allowed each learner to walk away from the training already having completed a project set up in the system.

Scheduling Training

It can be difficult to find training times that match all learners' availability. Bonfire is able to help mitigate this risk by offering multiple training opportunities. A recent example of this was with the Insurance Corporation of BC where there were over 24 learners that required training. Because of conflicting schedules we offered three sets of training to ensure all learners had the opportunity to attend. On top of the formal training sessions, Bonfire is happy to book additional training by request and offers recordings of all training sessions to all learners.

Process Change & Vendor Support

With the introduction of a new procurement system, many of our clients share concerns regarding how their vendors will adapt to the change. This was specifically true for Ada County, who brought up concerns regarding their vendors adopting the new e- submission process, and what happens if they have technical difficulties. Bonfire was able to mitigate this risk in a number of ways. We first provided sample RFX language that outlines how vendors access solicitations, download documents, ask questions and prepare submissions. We also helped in providing samples of vendor communications that can be used to proactively get vendors to register on their Bonfire portal prior to their first project being released. Finally, we ensured that in all the sample verbiage vendors were directed to Bonfire's support team should they have any technical difficulties using the portal or preparing/submitting their submissions.

iii. Identify two recent project implementations that are most comparable to the City's proposed implementation, and provide a project profile for each, including: scope of modules; project duration; any unique requirements or circumstances that were a part of, or came up during the project; the legacy system converted from; etc.

1. City of San Angelo, Texas

Client Since: August 26, 2020 - Current

Converted From: Manual Processes; Email, Paper, Excel

Unique Requirements: Capturing full solicitation lifecycle

Scope of Modules:

- Bonfire Intake
- Bonfire eSourcing - 3 Users (including BidTables, Approvals, and Questionnaires)
- Bonfire Contract Management

2. City of Round Rock, Texas

Client Since: July 6, 2022 - Current

Converted From: Manual Processes; Email, Paper, Excel

Unique Requirements: Better vendor engagement and management

Scope of Modules:

- Bonfire eSourcing - 4 Users (including BidTables, Approvals and Questionnaires)
- Bonfire Contract Management

iv. Please describe implementation barriers or challenges that have been experienced working within Texas on implementations. What proactive steps are planned in this proposed project to mitigate against similar challenges?

Bonfire's team of support and implementation specialists have worked with over 90 other municipalities within the state of Texas to stand up eProcurement and digital contract management processes. Over this time, we have adapted our approach to implementation in several ways to mitigate common challenges that occur when managing the change to a digital procurement environment. Two common challenges that we see when implementing our platform are Vendor Engagement and internal communications to city departments and stakeholders.

Vendor Engagement

For a digital eProcurement system to be successful, the City's vendor community needs to A) understand the changes that are taking place regarding doing business with the City and B) understand how to get registered and utilize the city's portal. To accomplish this, Bonfire provides several key areas of support for City vendors, including;

- In-house vendor support delivered by a team of highly trained support staff familiar with Texas Procurement regulations
- Simple and easy to understand user interfaces for vendors when registering, communicating with the city, and submitting bids and proposals
- An indepth user guide and embedded videos throughout the platform guiding vendors through the various components of the platform

- Drop in sessions for vendors to ask questions and receive walkthroughs from a live Bonfire support specialist
- A vendor onboarding campaign highlighting the benefits of Bonfire and the steps to get registered

Internal Communication

In addition to purchasing and contracting staff, many other stakeholders across the City's teams will have ancillary involvement in Bonfire. For staff members who may utilize Bonfire to submit requests for new contracts, collaborate on bid and scope of work documentation, or evaluate proposals as a part of a formal RFP; it is crucial that the new processes that are put in place are well communicated and understood by all city stakeholders. To ensure these changes are well communicated, Bonfire provides several key areas of support, including;

- A dedicated Training specialist to provide live training to groups of city stakeholders
- Unlimited support for all stakeholders (we do not offload supporting these staff to the Procurement team, and do not employ "train the trainer" style learning)
- An indepth user guide and embedded videos throughout the platform guiding vendors through the various components of the platform
- Drop in sessions for vendors to ask questions and receive walkthroughs from a live Bonfire support specialist

v. What sets the product(s) and services that your firm proposes apart from competitors' products and services? Why should the City select your firm to partner with?

1. Simple, efficient and visual user interface

Simply put, Bonfire is easier to use. It's more intuitive, and you'll need less training. Our customers (and their vendors) consistently tell us that nothing they've used before is as easy as Bonfire. The result is that our clients can process more solicitations, and when they do, there's more vendor competition for their business.

"Everything is in one place, it's accessible for everybody, and it's so easy to find what you're looking for"

Jacquelyn Tate, Purchasing Coordinator, Bergen County NJ



2. Customer Support

Bonfire provides full customer support and training to all procurement users, city staff, evaluators, **and vendors**. Our customer success team is committed to making sure you achieve your goals. You will not be on your own, even long after the implementation. A dedicated CX rep will meet with you as often as necessary to support your use of the software, to advise on public sector procurement best practices, and to work with you to find solutions to the challenges you face. It doesn't cost extra, and it's not just to get you going. It's part of our service because we're committed to your success.



"Bonfire has been tantamount in helping us in our outreach to our small business community" Sonya Collins, Procurement Director, Great Lakes Water Authority

"We're spending less time on tactical busywork, and more time on the thought process behind each project"

Lori Pruitt, Procurement Officer, Pinal County



3. **Texas User Community.** Over 90 governments and over 110,000 suppliers use Bonfire within the state of Texas. And with our recent acquisition of Ionwave Technologies, this number is soon to grow even larger! Joining Bonfire means gaining access to the contracts, suppliers, templates, and data from hundreds of other municipalities, including several of Texas' leading procurement organizations and many cities of a similar size to Midland. In addition, Bonfire frequently hosts in-person round table events and virtual discussions to provide our clients with opportunities to share feedback with each other and discuss upcoming features and use cases for Bonfire's Procurement tools.

5.1.3. Subcontractor Questions

Subcontractor Questions	
Question	Response
Does your firm complete the implementations of the product being proposed or is this effort outsourced?	Bonfire completes all implementations.
Will subcontractors or contract employees complete any portion of the proposed work?	No.
This below portion of the table is to be copied and filled out for each proposed subcontractor.	
Name of subcontractor and address	N/A
Summary of Service and estimated percentage of Work the subcontractor will be providing.	N/A
Reasons for subcontracting	N/A
Experience	N/A
Detailed subcontractor responsibilities	N/A
Previous history of projects using the named subcontractor	N/A
Any additional relevant information	N/A

5.2. Software Solution

5.2.1. Proposed Functional Areas/Modules

Proposed Software Information		
Product Component/Suite <i>(Name and Version of the Proposed Software Solution)</i>		Bonfire eSourcing
Time on Market		Release Date of Most Current Version
11 Years		January 18, 2023
Next Major Release Date		Next Minor Release Date
TBD		February 1, 2023
Licensing		
Describe how the software is licensed (e.g., named user, concurrent users, enterprise/site, power user) and the options available for licensing:	Bonfire employs an annual licensing model where cost is determined by the number of central procurement users who will be managing and publishing solicitations. Bonfire also provides unlimited and unpaid access to all ancillary City staff (such as editing solicitation documents, participating in evaluations or submitting requests)	
How many licenses have been proposed?	6 Licenses have been proposed	
Are the same licenses required for all users, or would some users (e.g., those only accessing employee self-service) have a different license type than other users?	Licenses are only required by staff members who will be managing and publishing solicitations. Ancillary City staff (such as editing solicitation documents, participating in evaluations or submitting requests) are unpaid and unlimited.	
How are new users added to the system? Are there incremental costs per user?	New procurement licenses may be obtained by contacting your Customer Success Specialist. Ancillary City staff (such as editing solicitation documents, participating in evaluations or submitting requests) are unpaid and unlimited, and may be added at any time by Procurement	
Deployment Model		
Deployment Models Proposed to the City	City-Hosted (Perpetual License)	Software-as-a-Service (Subscription)
<i>(Corresponding Attachment 3 Cost Worksheets shall be</i>	☐	☒

Proposed Software Information			
<i>completed for each separate deployment model proposed)</i>			
Summary of Modules Proposed			
No.	Functional Area	Name of Proposed System Module(s) to Address Requested Functional Area	Previous Third-Party Partnerships and/or Solutions Successfully Integrated* With
1	E-Bid Management	Bonfire eSourcing Bonfire Intake	Bonfire has integrated with several ERP systems and state purchasing portals. No integrations for this project have been proposed

5.2.2. Optional and Complementary Modules

Optional and Complementary Modules		
No.	Module Name	Narrative Description of Functionality Provided
1	Bonfire Contract Management	Bonfire's Contract Management is a lifecycle management solution, allowing the City to not only seamlessly create contracts from awarded bids and centralize the City's contract repository, but also proactively manage vendor performance throughout the life of the contract - and inform future RFx and bidding projects.
2		
3		

5.2.3. Partnerships and/or Third-Party Product Identification

- i. Proposer to fill out the below table for each of the Partnership/Third-Party software product proposed.

This is not applicable; there is no Partnership/Third-Party software proposed.

Partnership and/or Third-Party Product Identification			
Name of Partnership/ Third-Party Software Firm	Name of Software Product	Name of existing Clients using Proposer's system and the Partnership/Third-Party Software	Number of years Client has been using the two products together

- ii. For each product proposed as a Partnership/Third-Party product, detail the options available to the City as it relates to contracting relationship between the City and the Partnership/Third Party.

N/A.

- iii. Proposer to provide the approach and responsibilities for managing the implementation and acceptance testing for each of the proposed Partnership/Third-Party products.

N/A.

- iv. Proposer to provide the approach and responsibilities for the SLA/maintenance related to the Partner/Third-Party provider.

N/A.

- v. Proposer to submit references and qualification statements for each of the proposed Partners/Third-Party firms.

N/A.

- vi. Proposer shall indicate if the proposed approach utilizes a systems integrator or consulting firm as the third-party.

N/A.

5.2.4. General

i. Proposer shall clearly indicate the deployment model(s) proposed from among the two categories presented in a-b below. If more than one product is proposed, please clearly identify the deployment model for each product proposed:

a. On Premise (locally hosted at the City, perpetual licenses)

b. Software as a Service (SaaS or subscription-based models)

Bonfire is a Software as a Service (SaaS) subscription-based model.

ii. Proposer shall fully describe the integration/interface/data exchange capabilities of the proposed system, including available API's, middleware, web services, etc.

Bonfire has been built to support Custom Integrations with other IT systems, by using a modern and reliable approach that includes Event Webhooks and REST APIs. Further, Bonfire has a dedicated Professional Services team that will work with the City's IT team to properly integrate systems where required. Bonfire has an Open, RESTful API, and vast experience integrating with a wide variety of systems for many different functions. Bonfire is an ERP agnostic system and *has the most extensive experience* among eProcurement providers integrating with external systems. The Bonfire Professional Services team remains available to support and maintain any developed integrations.

iii. For available API's, does the proposed pricing include access to the entire API library? What functionality is exposed in the systems' APIs?

Bonfire has not provided pricing for API support as per the instructions of Addendum 3.

iv. Describe your proposed reporting features native to the system, and how City staff will be trained to develop and configure their own reports.

As the centralized hub for all sourcing activities, Bonfire will capture and record all of the activities conducted to provide the City with an air-tight audit trail. This is essential for having detailed records of past projects and providing information to vendors if deemed necessary (bid protest, vendor debrief, etc.). At every stage throughout the lifecycle of a solicitation in Bonfire, project owners can instantaneously download reports. The platform pulls all necessary information and organizes it into a clean Microsoft Word or Microsoft Excel file. From start to finish, project owners can track how the project was executed, who was involved, and why the decision was made.

All reports and project details (including submission data/documents) can be stored in Archived Projects in the City's portal for future access. Bonfire can store this information for as long as the City requires and it is unlimited in nature. Bonfire is committed to making our clients successful, and as such, our support team is available to dig deeper and provide custom and more robust audit reporting as warranted (ie: a disgruntled vendor with a bid protest, records request, etc). The following can be pulled as an Excel or Word format report from Bonfire:

- Project Details: Overview of the project dates, highest-ranking supplier, and NDA + COI forms
- Signature Block: Formatted page where you can have all of the participants sign the report
- Q + A and Discussions: Questions from vendors and corresponding responses and any internal or vendor discussions
- Submissions: List of the vendors (Email, Name, Confirmation Codes) that submitted for this project
- Criteria: List of the criteria (title, points, description) for a particular project
- Scoring Summary: Submissions, criteria scores, and evaluator comments
- Contracts Overview: List of all contracts, including their metadata (such as expiry date)
- Insights: see below for detail

Bonfire also provides a reporting tool, called 'Insights', that allows users to visualize, pivot, and filter all KPIs (including Spend Analytics). Users can segment data by user, department, and project type (RFP, RFI, ITB, etc.), and view information in a chart format, or extract the raw data for further offline analysis. Insights come in a wide array of reports, such as Average Time in each Project Stage (as seen below), Average Number of Users per Project, Average Project Configuration, Project Spend and Savings, and more.

Bonfire's Professional Services team is also capable of generating custom reports for the City in the event that Bonfire does not include the desired reporting out of the box. All Bonfire dashboards allow for configurable reporting where users can filter, sort, and report on any custom information.

v. What strategic decisions or direction is your firm taking or making related to the product being proposed today?

"Reinvent procurement to better our world." That's our vision at Bonfire.

Our vision is rooted in the belief that by fundamentally improving the way Buyers and Sellers connect (through the procurement process) we can directly improve the quality of life for our communities through providing the best value products and services to them. Our pursuit of this vision is endless: it started with the insight to digitize the procurement process with tools that people actually want to use. Since our inception in 2012, we have continued to build, develop, and refine our platform to continually meet the needs and future requirements of public procurement. We have accomplished this through continuous and regular updates to our platform.

We strongly believe that Procurement Teams are an integral part of the success of any organization, and we will always devote time and effort to understanding the market, listening to our clients, and evolving our product roadmap to meet our vision. We have designed our product roadmap and development strategy to allow Bonfire to remain nimble to market dynamics and customer needs, enabling our team to continually evolve our product future as we look forward. Bonfire follows a strictly agile product development process, this means we deliver continuous improvements to clients rather than holding back monolithic releases.

Our clients play an important role in our product roadmap: our client feedback and validation help to steer where our platform is headed and how we can continue to best equip procurement teams to succeed. This includes feedback we receive from clients through a number of key channels: through their Client Success Manager, during training sessions, at Client Meet-ups and events, through support agents, and many more. We take our client feedback seriously, ensuring the proper attention and consideration is given to all feedback (big or small).

Clients can also choose to participate in 'Beta' features or help to test new functionality, where their feedback will also directly help us to refine the Bonfire platform. With these clients, we explore new ideas and deeply engage with our customers to validate them. Together, these efforts represent a major new step towards our vision - *"Reinvent procurement to better our world"*.

We pride ourselves in our integrity when it comes to product commitments to customers. We're always happy to discuss specific concerns or questions people have and are more than willing to provide clarifying comments over email or phone.

Bonfire is committed to the advancement of procurement and in the past year has acquired two other leading eProcurement providers, Demandstar Corporation and Ion Wave Technologies, further demonstrating our commitment to provide easy to use, powerful solutions to the public sector while allowing our clients to access the largest database of vendors and public sector solicitations.

5.3. Project Approach And Implementation Methodology

5.3.1. Project Approach

Proposer to provide a description of the proposed approach for providing the Scope described in the RFP, including a comprehensive description of the proposed implementation methodology for the Project. The description should include how the Proposer has developed this methodology to both incorporate lessons learned from experiences as well as to meet the needs described in the RFP.

i. Based on information provided in this RFP and experience in working with other localities, what is the Proposer's perspective on the most significant risks to this Project, and how do you plan to mitigate these risks?

Bonfire has successfully implemented over 650 organizations and government entities, and with this experience, Bonfire is able to anticipate and mitigate potential risks/challenges throughout the Implementation process. The following descriptions are of the main issues that can arise during implementation.

Different Learning Styles

Bonfire adapts its training plans to meet the needs of learners with different styles to ensure the material is delivered in a manner that sets each learner up for success. An example of this is a recent implementation with the County of Solano in California. For this implementation, the learners preferred a more hands on approach where each learner built out a project in real time while following along with the Implementation Specialist. This allowed each learner to walk away from the training already having completed a project set up in the system.

Scheduling Training

It can be difficult to find training times that match all learners' availability. Bonfire is able to help mitigate this risk by offering multiple training opportunities. A recent example of this was with the Insurance Corporation of BC where there were over 24 learners that required training. Because of conflicting schedules we offered three sets of training to ensure all learners had the opportunity to attend. On top of the formal training sessions, Bonfire is happy to book additional training by request and offers recordings of all training sessions to all learners.

Process Change & Vendor Support

With the introduction of a new procurement system, many of our clients share concerns regarding how their vendors will adapt to the change. This was specifically true for Ada County, who brought up concerns regarding their vendors adopting the new e- submission process, and what happens if they have technical difficulties. Bonfire was able to mitigate this risk in a number of ways. We first provided sample RFx language that outlines how vendors access solicitations, download documents, ask questions and prepare submissions. We also helped in providing samples of vendor communications that can be used to proactively get vendors to register on their Bonfire portal prior to their first project being released. Finally, we ensured that in all the sample verbiage vendors were directed to Bonfire's support team should they have any technical difficulties using the portal or preparing/submitting their submissions.

ii. With what frequency will Proposer's Project Team staff be on-site at the City during implementation? Will staff be on-site for full or partial weeks? How has the proposed approach been modified for other implementations during the pandemic?

All implementation activities (e.g. Portal creation, configuration, etc.) take place remotely as Bonfire is a cloud-based, SaaS, and Bonfire has successfully implemented over 650 installations this way.

However, Bonfire does offer on-site training for an additional fee if the City desires. If the City desires to have on site training, Bonfire staff can be there for whatever time is desired by the City. However, clients who opt for in-person training will generally host Bonfire staff for 2-3 days and complete the rest of their training in a virtual manner.

iii. Describe in detail the approach to configuration and set-up activities. Will the Proposer team complete the majority of the configuration based upon information gathered from City subject matter experts, or will the City be expected to perform much of the configuration?

The General Account Setup, which lasts approximately two weeks, includes the following categories:

- Customization of portal feature set
- Determining and configuring the Departments on the portal
- Determining and assigning user roles
- Customizing vendor registration form

Please see Section 5.3.6. for a detailed approach to configuration and set-up activities.

Bonfire's implementation team will complete the majority of the configuration based upon information gathered from City subject matter experts; the City will not be expected to perform the configuration, although the two teams can work together when practical

iv. Describe in detail the approach to load existing vendor files into the system.

We can help the City transition your existing vendor pool into Bonfire. Bonfire will create a communication to your existing vendors, notifying them of the change and prompting them to register in Bonfire. This method of transition is conducted with most all our clients and achieves the results our clients are looking for. The process for vendors is simple, straightforward, and familiarizes them with Bonfire.

v. Describe any additional assumptions made in the Proposal, not already identified in detail. These should include any assumptions related to the current City technical environment, staffing, project management approach, and City resources available during implementation and support phases.

Bonfire is assuming that the City's project management team will be available to meet with a Bonfire implementation specialist for approximately 90 minutes per week for 1 month, and 60 minutes per week for a second month. We assume that end-users will be available for between 3 - 4 virtual, 60-minute, live training sessions, and will have access to internet enabled devices. Bonfire does not limit training to this alone, but we assume that teams are willing and able to put at least a baseline level of effort into learning the system and becoming familiar with Bonfire's modules.

5.3.2. Deployment

Proposer to provide a detailed narrative description of how the implementation approach will vary between the deployment methods proposed (i.e., a traditional City-hosted model, a Proposer-hosted and/or a subscription-based solution, etc.)

Bonfire is a subscription-based SaaS software model, and as such, the implementation process is accomplished remotely. Bonfire has successfully implemented over 650 installations in this manner.

5.3.3. Go-Live and Ongoing Support

Proposer to describe what level of pre- and post-go-live support is available under the proposed fee structure. If varying levels of support are available, this section of the RFP response should clarify these potential support services and highlight the level of support that has been proposed. Proposer shall use Attachment 3 – Cost Worksheets, to clearly identify the varying fees based on the varying levels of support that are available.

i. What are the standard hours that support is offered, and through what means (telephone, web ticket submission, etc.)?

Technical support for anyone interacting with Bonfire (purchasers, evaluators, vendors, and more) and is available in a variety of methods. This includes telephone (toll-free), from Monday-Friday, from 7am-7pm CST, live chat, email, website articles, videos, and . Bonfire also offers unlimited ongoing training and support to all users.

ii. Are after hours and weekend support offered, and if so, is this part of the standard support offering or part of a different tier/offering?

No, Bonfire support is only offered from 7:00am to 7:00pm CT. Bonfire help resources such as the Bonfire Online Knowledge Base of 500+ resources, Bonfire Academy, and in-app guides are available 24/7.

iii. Describe the support that is offered to assist in potential situations where the City is unable to conduct certain mission-critical processes due to emergency situations.

Bonfire is committed to supporting our clients in the event of mission-critical processes and emergencies. In the event of an emergency, Bonfire is available to help support the City in any way we can to ensure mission-critical processes can be completed. For instance, in the event the City were to lose power due to a natural disaster. Bonfire can remotely support the City and help to complete any processes on the City's behalf.

iv. Is product support offered by Proposer, through the software developer/provider, or subcontracted?

All support is provided by Bonfire through in-house resources

v. Are there optional, "enhanced" support tiers or offerings above and beyond what has been proposed?

No, Bonfire does not offer various levels of support tiers. Bonfire provides best-in-class support to all clients and their vendors.

vi. How often are releases provided, how is advance notification provided to customers of upcoming releases, and what is the process to test each release?

Our software development life cycle includes: requirement gathering, design, development, code review, acceptance testing, regression testing, trial deployment in a segregated staging environment, live deployment, and maintenance. Dev/Test/Staging/Production environments are used to promote changes prior to release to clients.

Releases are generally every two weeks but can vary due to release size and complexity. Hot fixes and bug fixes may be applied as a hotfix when required. Clients are notified of changes in releases and your Bonfire Customer Success Manager will proactively reach out to provide additional support or training.

vii. Would the City be able to test releases in a test environment prior to pushing updates to a live environment?

Certain functionality is released as a Feature Flag in Bonfire and the City can test this new functionality in a test environment prior to enabling the functionality in the live environment. Minor changes that are not a unique feature flag do not apply.

viii. Does the system have the ability to roll back updates if the City encounters challenges or bugs?

All updates are vigorously tested prior to release. However, if bugs or challenges are found in an update, Bonfire can roll back updates. Please note, as a SaaS all rollbacks are system wide and not on a client by client basis.

ix. Describe how often major and minor software updates are provided, as well as the level of City resources required for a major update and the level of resources required for a minor update.

As a cloud solution, Bonfire will facilitate all system upgrades and no Midland support or installation is required. Bonfire rolls out all upgrades at 2:00 am CT on Saturday evenings to ensure no clients are affected. Bonfire will provide release notes and unlimited training (if required) following any system upgrades or releases.

Minor releases are generally every two weeks with major releases occurring monthly or quarterly, based on size and complexity of the major release. No City resources are required for any updates beyond attending training if applicable.

x. Please describe the major/minor upgrade process that is required if the solution requires a client-based installation.

The upgrade process will not require a client-based response. As mentioned earlier, Bonfire applies upgrades remotely.

xi. Are there future costs associated with upgrade processes? For example, costs associated with purchasing licensing for upgrades, professional services costs associated with implementing upgrades, etc.? Proposer to describe the frequency of upgrades and any price ranges for anticipated upgrades.

As a cloud solution, Bonfire will facilitate all system upgrades and no Midland support or installation is required. Bonfire rolls out all upgrades at 2:00 am CT on Saturday evenings to ensure no clients are affected. Bonfire will provide release notes and unlimited training (if required) following any system upgrades or releases.

Bonfire regularly releases updates that can include new features, improvements to current features, and system maintenance and upgrades. Midland will not be required to provide anything to apply an upgrade, and there is no cost for these updates. Some updates will include new functionality to already purchased modules, which involves no charge to the client. From time to time, Bonfire may release new, separate modules that would be available to the City for an additional fee (i.e. a separate module).

xii. What is the role of the City in providing ongoing support and maintenance of the system proposed?
How many FTE are typically required to support the system on the client-side, and what tasks are entailed?

The City does not need to assume any role in the ongoing support and maintenance of Bonfire. Bonfire fully maintains all system development, support, and maintenance at no additional cost. No FTE is required to support the system on the client-side.

5.3.4. Status Reporting

Proposer to detail their approach to providing status reports throughout the course of the Project. This section should include an example of the recurring status report and identify the expected delivery mechanism that will be used to provide the report to the City.

As Bonfire is a COTS solution, Configuration and Deployment requires very little time (< 1 week). The City's dedicated implementation manager will provide consistent updates to the project management team throughout the Portal Deployment, Configuration, and Training processes. Bonfire's implementation plan will provide the City with absolute knowledge of progress throughout each of these stages. These updates will typically include a live Zoom discussion along with written collateral when required.

5.3.5. Resource Hours

Proposer shall include the proposed resource levels for the City Implementation Project Team and their Project Teams by completing the table below.

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Project Team Resource Hours
<i>Instructions: The Proposer is asked to provide the number of resources that will be committed to the Project in terms of number of hours. These numbers should be based on the functionality the City requires, included in the detailed Functional and Technical Requirements (Attachment 2).</i>

<i>Assumptions: Any assumptions related to the number of Project Team staff for the Proposer or City teams, roles of staff, and duration of involvement used in the development of the resource hour estimates should be included here:</i>			
<i>Project Team</i>	<i>City Team</i>	<i>Vendor Team</i>	<i>Total Hours</i>
<i>Requirements and Design</i>	<i>1-2 Hours</i>	<i>1-2 Hours</i>	<i>2-4 Hours</i>
<i>Configuration and Setup</i>	<i>1-2 Hours</i>	<i>1-2 Hours</i>	<i>2-4 Hours</i>
<i>Implementation/Project Management</i>	<i>0 Hours</i>	<i>1 Hour</i>	<i>1 Hour</i>
<i>Testing</i>	<i>1-2 Hours</i>	<i>1-2 Hours</i>	<i>2-4 Hours</i>
<i>Training</i>	<i>6-12 Hours</i>	<i>6-12 Hours</i>	<i>12-24 Hours</i>
<i>Total Hours</i>	<i>9-18 Hours</i>	<i>10-19 Hours</i>	<i>19-37 Hours</i>

5.3.6. Implementation Plan

Proposer to provide their overall objectives and approach to the City's implementation. Discuss timing as being chronological, in parallel, etc., for all of the modules proposed.

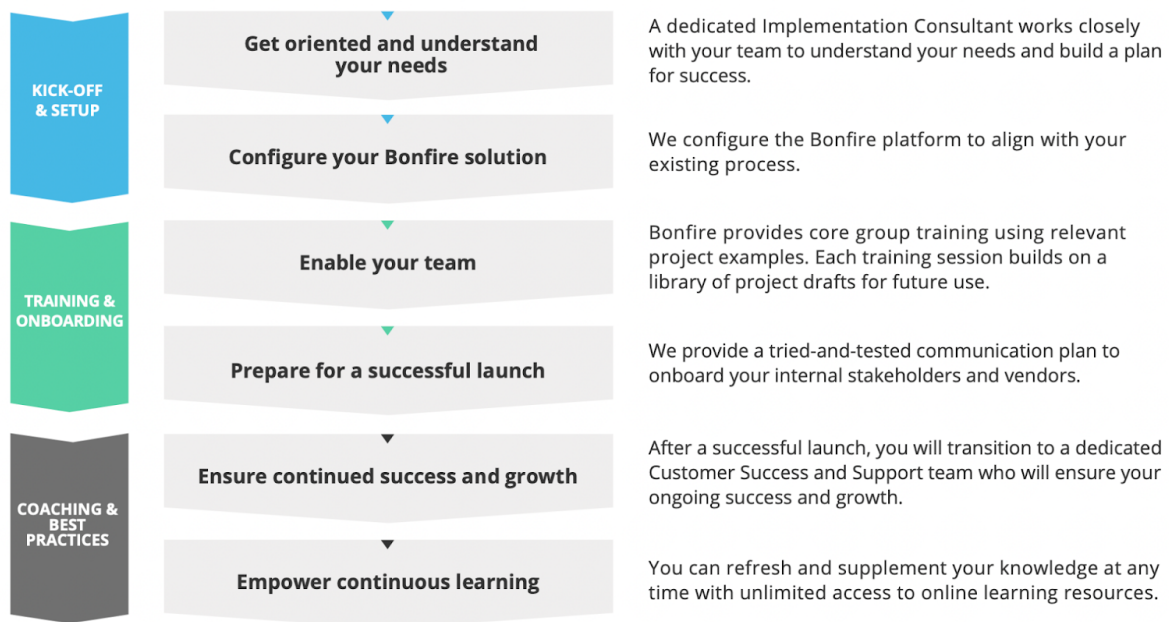
Proposer shall submit a Sample Implementation Plan.

Exhibit submitted Yes No

Below is a detailed Implementation Plan.

BONFIRE IMPLEMENTATION PLAN

Please see a graphical preview of the implementation schedule below, followed by a detailed explanation.



BONFIRE IMPLEMENTATION PLAN

One of the core principles that Bonfire was designed around is simplicity and ease of use. As such, the Bonfire implementation process is focused on training the power users of the system, the buyers who will be managing procurement projects. Casual users such as evaluators are guided by Bonfire's user-centric design and require no formal training before accessing the procurement portal.

All Bonfire implementations are managed by an Implementation Lead who will guide the implementation project from inception to completion. The Implementation Lead acts as the main point of contact for all implementation activities and will personally be involved in every point of the implementation process.

The tasks involved in a Bonfire implementation typically fall into three main categories:

General Account Setup (approx. two weeks)

- Customization of Portal Feature Set
- Determining and Configuring the Departments on the Portal
- Determining and Assigning User Roles
- Customizing Vendor Registration Form
- Customizing Contract Management Attributes and Types

Training (approx. two weeks)

- General training session on the Listing / Evaluation platforms of Bonfire
- Specialized training on Bonfire's Advanced Evaluation Modules (Multi-Decision, Questionnaires, BidTables)
- Contract Management Training
- Vendor Management Training

Ramp-Up (approx. two weeks)

- Review of RFx templates and changes required
- Assistance with the creation of the first project at each Department
- Bulk import of all pre-existing contracts into the Contracts Management module
- Implementation Debrief to Management for each Department

1. General Account Setup

Every organization in Bonfire is set up with a site dedicated just for the organization along with a unique URL. From here, Departments are created on the site to separate each of the organization's groups into their own individual space. Bonfire is composed of multiple modules that cover Listing / Posting of procurement projects, Digital Submissions and Evaluation, as well as Contract Management.

The implementation of Bonfire depends on which modules the organization decides on implementing.

Completion of the General Account Setup tasks ensures that the setup of the organization's portal is as-intended before running procurement projects. However, if the organization's needs change at any point in the future these tasks can be revisited to further configure the setup of the portal.

1.1. Kick-Off Call

The implementation will typically begin with a kick-off call including all decision makers across the organization's different departments and an Implementation Lead assigned to the organization.

ACTION: Kickoff Call with Key Stakeholders - Estimated Time 1- 1.5 hours

The agenda for the Kick-Off Call is as follows:

- Introduction and explanation of Bonfire project team roles
- Identify a representative who will act as the main point of contact for the organization
- Clarify the organization's intentions and goals for their use of Bonfire
- Discuss the organization's timelines for the launch of the first projects in the system
- Identify the individuals who will be using Bonfire and discuss user permissions
- Identify department structure at the organization
- Review the functionalities of the Bonfire platform
- Overview of Bonfire Feature Options

- Discuss vendor facing setup

By the end of the meeting, the Implementation Lead will better understand the Organization's timelines and goals. Additionally, the Implementation Lead will have enough information to create a finalized implementation plan and provide it to the organization.

Bonfire Deliverables	Organization Deliverables
Final Implementation Plan: Including dates of implementation tasks and major milestones	Sign off on Final Implementation Plan

1.2.Finalize Feature Set, Custom Language, and Vendor Fields

The Implementation Lead will provide the attendees of the kick-off call with a document of all of the features available in Bonfire. Organization stakeholders will identify features that are applicable to their process and complete the form section of the document.

If applicable, the Implementation Lead will ask the Organization to provide Bonfire with any custom Conflict of Interest, Non-Disclosure Agreement, or Award Notice language that should be applied to the portal.

Lastly, based on the intended vendor facing setup of the portal, the Implementation Lead will ask the Organization for a sample of the form typically collected from vendors during the registration process. This information will eventually be used to guide the Implementation Lead when the vendor facing registration fields are set up on the portal.

OPTIONAL ACTION: Meeting to clarify any questions about Bonfire features - Estimated Time 1 hour

Bonfire Deliverables	Organization Deliverables
Provide feature set document to implementation stakeholders	Review Bonfire features internally and complete feature set document to identify features to be implemented
-	Conflict of Interest, Non-Disclosure Agreement, and/or Award Notice language
-	Sample of vendor registration information and documents collected

1.3.Customize Vendor Registration Page

The Implementation Lead will review the Organization's vendor registration information and documents. Any opportunities to improve the registration process will be reviewed with the organization's stakeholders.

The desired features will be applied to the Organization's portal by the implementation. Following the completion of the setup, the Organization's stakeholders will test the vendor registration page to ensure that the setup is accurately capturing the required information.

ACTION: Implementation Lead applies custom vendor registration fields to the organization's portal
– Estimated Time 2 hours

ACTION: Organization stakeholders test the vendor registration page, ensuring all required information is captured – Estimated Time 1 hour

1.4. Customize Account with Desired Feature Set and Custom Language

Based on the discussions so far and the completed feature preferences form, the Implementation lead will apply the desired feature set to the Organization's portal. Any custom Conflict of Interest, Non-Disclosure Agreement, or Award Notice language will also be applied to the portal.

ACTION: Implementation Lead Customizes Account Feature Set – Estimated Time 1 hour

1.5. User Invites and Setup

The Implementation Lead will create the appropriate Department structure on the portal and send out invites to buyers across the organization. For larger groups of buyers, it may be necessary to send the Implementation Lead a list of all buyers, as well as the desired user roles for each buyer.

ACTION: Implementation Lead Creates Department Structure, Invites Users – Estimated Time 1 hour

ACTION: Users Accept Bonfire Invitation and Create their Bonfire Account - Estimated Time 15 minutes

Bonfire Deliverables	Organization Deliverables
Provide the Organization's stakeholders with documentation describing the different user roles available in the system and their associated permissions	Compile a list of all buyers who will be using the system and the desired system permissions for each buyer

1.6. Pre-Training Call

Prior to kicking-off training for the team, the attendees of the Kick-off Call are invited to attend a call to review General Account Setup with the Implementation Lead. The Implementation Lead will provide an overview of all of the tasks completed during the General Account Setup phase. A General Account Setup summary document will be provided to the organization outlining the features setup on the portal, any custom Conflict of Interest, Non-Disclosure Agreement, or Award Notice language, custom Vendor Registration fields, and any custom contract fields or types. Bonfire

asks that the Organization's stakeholders sign off on this document to confirm that the initial setup is as-intended.

If applicable, any outstanding tasks from the General Account Setup stage will be discussed during this call. Training can still proceed if there are outstanding tasks, but new completion dates for the outstanding items should be agreed upon before moving on.

ACTION: Pre-training call – Estimated Time 1 hour

Bonfire Deliverables	Organization Deliverables
General Account Setup summary document to be provided to the Organization's stakeholders	Signoff on General Account Setup summary document
Proposed completion dates for outstanding General Account Setup tasks	Verbal agreement of proposed completion dates for outstanding General Account Setup tasks

2. Training Plan

Bonfire provides unlimited training to all Bonfire customers. However, through our experience with onboarding hundreds of organizations we found that following the training plan below will equip buyers with all the necessary information to start implementing the platform.

Since Bonfire is composed of several different modules, the training will be broken down to cover each module. The training is done on a sample set of projects that reflect actual procurement scenarios. The buyers at the organization are encouraged to provide the Implementation Lead with their own procurement projects. These projects can be used during training to help tailor the sessions to the organization's needs. During the training phase, the buyers at the organization will be able to start setting up draft procurement projects to get hands on experience in Bonfire.

If all participants agree, training sessions will be recorded, and the recording will be provided to the buyers at the organization.

2.1. General Training Session

The first training session will cover project (solicitation) creation, evaluation workflow, and project reporting. The trainer will also provide a thorough overview of project templates, project drafts, and common workflows such as issuing addenda and managing supplier Q&A. By the end of the training session, attendees will be able to create and manage a typical RFQ/RFP project and run a complete evaluation through to award.

ACTION: General Training Session – Estimated Time 1.5-2 hours

Bonfire Deliverables	Organization Deliverables
Recording of General Training Session	Documentation for a past or future RFP that can be used for training purposes

2.2. Advanced Module Training

The Advanced Module Training sessions build on the concepts covered during the first session, however the emphasis will be shifted to cover advanced evaluation modules such as BidTables, Questionnaires, and Multi-Category Projects. Due to the sophisticated functionality included in these modules, Advanced Module Training is usually broken into three separate training sessions.

2.2.1. BidTables Training Session

This session will cover the creation of BidTables, the vendor experience when responding to a BidTable, and the workflow used to evaluate pricing on a BidTable. By the end of this session, attendees will be able to set up projects that collect complex pricing information or multi-line item bids from vendors and easily compare all submitted prices using a structured process.

ACTION: BidTable Module Training Session – Estimated Time 1 hour

Bonfire Deliverable	Organization Deliverable
Recording of BidTables training session	Documentation for a project that involves a pricing sheet or multi-line item bids

2.2.2. Questionnaires Training Session

This session will cover the creation of Questionnaires, the vendor experience when responding to a Questionnaire, and the workflow used to evaluate the vendors' responses to the Questionnaire. By the end of this session, attendees will be able to set up complex solicitations that capture vendor responses to line by line requirements, such as responses to IT technical requirements.

ACTION: Questionnaire Module Training Session – Estimated Time 1 hour

Bonfire Deliverable	Organization Deliverable
Recording of Questionnaires training session	Documentation for an RFQ/RFP that requires vendors to respond to line by line requirements

2.2.3. Multi-Category Projects Training Session

This training session will introduce attendees to the concept of Multi-Category, Multi-Award projects in Bonfire. The session will cover the definition of multiple categories, the setup of categories and category items, and strategies to manage the evaluation process on projects of this complexity. By the end of this session, attendees will be able to recognize when to use a multi-category project, set up the appropriate categories, and run a multi-category evaluation process.

ACTION: Multi-Category Module Training Session – Estimated Time 1 hour

Bonfire Deliverable	Organization Deliverable
Recording of Multi-Category Projects training session	Documentation for a project involving multiple categories or decisions

3. Ramp-Up Phase

After the training is complete, we recommend that the management team at the organization select 1-3 projects to be run through Bonfire. Through our experience, we found that the projects would be led by ‘Bonfire Champions’ who will become Bonfire experts at their respective department(s).

3.1. Review RFX Templates

Prior to kicking off the first projects, the Implementation Lead will schedule a call with management to go over their current RFX templates and identify areas that need to be adjusted to accommodate the electronic listing and submission process.

ACTION: Review RFX Template Changes with Management – Estimated Time 1 hour

Bonfire Deliverables	Organization Deliverables
Provide sample submission instructions document to the Organization’s stakeholders	A typical RFX template used by the Organization

3.2. Review First Project Setup

Once the templates are reviewed and the first project is selected, the buyer responsible for managing the project will set up the project in Bonfire. After the project setup has been taken as far as possible by the buyer, the Implementation Lead will lead a training session with the buyer running the project (others may attend) aimed at reviewing the project setup to ensure it is set up correctly.

Note, if the organization has multiple departments, this process can be repeated across each department, should their process be slightly different.

After the first project has been launched, this process can continue to be repeated until the buyers at the organization are comfortable creating their own projects in Bonfire.

ACTION: Review First Project Setup – Estimated Time 1 hour

Bonfire Deliverable	Organization Deliverable
-	Set up first project(s) in Bonfire

3.3.Implementation Review

Depending on the wishes of the management at the organization, other buyers will be encouraged to continue placing projects into Bonfire. Once at least 2 projects have been fully completed, the Implementation Lead will set up a call to review implementation progress, and discuss any lessons learned prior to full ramp up.

ACTION: Review Implementation Progress – Estimated Time 1 hour

At this point, the Implementation Lead will pass on any recommendations to the organization based on the final assessment of the initial ramp up. An Implementation Summary Document will be provided to the Organization's stakeholders to summarize project metrics, milestones reached, lessons learned, and vendor feedback from the Bonfire projects run so far.

The Implementation Lead will continue to monitor the account closely until all buyers have used Bonfire to run at least one project through the platform.

Bonfire Deliverables	Organization Deliverables
Provide Implementation Summary Document to organization stakeholders	-

3.4.Implementation Survey

Once all buyers have run a project in Bonfire and the organization is feeling comfortable using the tool, it is time to bring the implementation period to an end. The Implementation Lead will revisit the initial implementation goals with the organization's stakeholders and determine whether they have been met. If the organization's goals have been met, the organization will sign off on the completion of the implementation.

Bonfire will send a survey to the organization to collect qualitative and quantitative information about the implementation process in order to keep improving the implementation program.

5.3.7. Project Management Process

Proposer to provide their overall approach for managing the City's Project, including the following areas:

i. Scope Management: approach for managing the Project Scope and the process used to request changes to Project Scope. It is the City's desire to use the proposed software system "as is" and, as such, any changes (e.g. customizations or modifications to the software) must be reviewed and approved by the City's Implementation Project Team.

Our implementation approach follows the same path no matter the size of the organization. Our experience with organizations of similar size and complexity as the City will enable Bonfire to have the City's system fully implemented and running within three to six weeks.

Please note, Bonfire's implementation plans will be fully customized to the City's desired timeline. Some Bonfire clients have run their first project in their first week of Bonfire, whereas others prefer a longer implementation period. We focus on providing extensive training covering different aspects of the tool, down to one-on-one sessions with each buyer as they set up their first project in Bonfire.

The only resources required from the City are the City's procurement staff participating in the relevant training sessions. Typically, this represents three to six hours of time over the course of the entire implementation.

Following the ramp-up stage, the City will be ready to 'go live'. This final stage takes place once the portal has been created and users have been added. Please note that many implementation activities will be completed concurrently to minimize the time required to complete the onboarding. However, please also note that these timelines are dependent on the City's staff's availability for training and the speed with which the organization is comfortable.

ii. Schedule Management: approach for managing the City's Project Schedule and the process used to submit requested changes to the schedule.

Bonfire's implementation plans will be fully customized to the City's desired timeline, and these timelines are dependent on the City's staff's availability for training, the speed with which the

organization is comfortable, and the changes the City might want to make to the schedule. Bonfire will work with the City to keep the schedule up to date following any changes.

iii. Risk Management: their approach for documenting Project risks, providing recommendations for mitigating the risk, and how this will be communicated to the City's Implementation Project Team.

Bonfire has successfully implemented over 650 organizations and government entities and with this experience Bonfire is able to both anticipate and mitigate potential risks/challenges throughout the Implementation process.

Learning Styles

Bonfire is able to adapt its training plans to meet the needs of the learners and ensure the material is delivered in a manner that sets each learner up for success. An example of this is a recent implementation with the County of Solano in California. For this implementation the learners preferred a more hands on approach where each learner built out a project in real time while following along with the Implementation Specialist. This allowed each learner to walk away from the training already having completed a project set up in the system.

Scheduling Training

With larger organizations it can be difficult to find training times that match all learners' availability. Bonfire is able to help mitigate this risk by offering multiple training opportunities. A recent example of this was with the Insurance Corporation of BC where there were over 24 learners that required training. Because of conflicting schedules we offered three sets of training to ensure all learners had the opportunity to attend. On top of the formal training sessions Bonfire is happy to book additional training by request and offers recordings of all training sessions to all learners.

Process Change & Vendor Support

With the introduction of a new procurement system many of our clients share concerns regarding how their vendors will adapt to the change. This was specifically true for Ada County who brought up concerns regarding their vendors adopting the new e- submission process and what happens if they have technical difficulties. Bonfire was able to mitigate this risk in a number of ways. We first provided sample RFx language that outlines how vendors access

solicitations, download documents, ask questions and prepare submissions. We also helped in providing samples of vendor communications that can be used to proactively get vendors to register on their Bonfire portal prior to their first project being released. Finally, we ensured that in all the sample verbiage vendors were directed to Bonfire's support team should they have any technical difficulties using the portal or preparing/submitting their submissions.

iv. Quality Management: approach/policies to assure that all written deliverables have received appropriate reviews for quality before being submitted to the City.

Please see our Quality Management Approach document, included as a separate document.

v. Communication Management: approach that will be used to provide the City with a detailed communication plan.

Please see our Communication Management plan, included as a separate document.

vi. Organizational Change Management: process, tools, and techniques they will use to manage the people side of change.

Change Management

To best address change management, and to reduce the time to value, Bonfire recommends breaking out the implementation of the solution into four general segments.

Segment One: Bonfire Sourcing

The first two items that are addressed are Strategic Sourcing. Strategic Sourcing takes little upfront work to deploy, and is mostly dependent on the successful training of procurement staff, vendors, and evaluators. Procurement staff can continue to receive requests from internal customers the same way they do today, and can continue to create solicitation documents the same way they do today.

In the first segment, Bonfire starts work to post opportunities. The City will post their opportunities on Bonfire, receive electronic submissions from suppliers through Bonfire, the RFX evaluation tabulation/evaluation will occur in Bonfire, and the recommendation for award will be made and communication through Bonfire. Bonfire creates exports out of the system so the necessary data can be imported back into the ERP system to continue with the procurement transaction.

There have been instances of organizations who post live projects as quickly as a few weeks after finalizing their contract. The administrative lift to get to that point is relatively low, and the value of digitizing the sourcing workflow is high. This allows progress quickly for the procurement staff, and it allows other resources to invest time into other components of the software that require more administrative effort.

Segment Two: Bonfire Solicitation Builder

Once the team is comfortable using some of the core sourcing workflows, the City can use some of its existing resources to build Bonfire's File Library and Solicitation Builder abilities. There is some administrative work required here. Existing word/RFX templates need to be formatted and structured in Bonfire's File & Clause Library. Following the import of documentation, documentation pieces can be associated with project types. As an example, there might be a clause for a professional services RFP utilizing state or federal funds that will not be found on an informal quote template.

In addition to the documents, the City can also begin to template out project workflows in their Bonfire templates. Approval steps, evaluation groups, documents, criteria, people, and vendor invites can all be templated out to eliminate redundant steps when running new projects. This segment will only increase efficiency when it comes to using the sourcing process, but the configuration times and work required can add lead time to getting live events posted on the system. It's for this reason this is recommended as the second segment to approach.

Segment Three: Bonfire Intake

Bonfire Intake gives the City the ability to receive intake requests from their internal customers directly into Bonfire. It's from that point that the request can be categorized as a type of project, and the appropriate template can be used, based on the project type. While there isn't a large amount of effort needed to configure Bonfire Intake, we recommend it is handled later since the most value from Intake comes from having the other elements of the system set-up.

Bonfire's Intake system is designed to be a self-service environment for internal customers to submit requests, so there is training and enablement required to let internal customers know about the new process. This training has been most successful when the Procurement staff has a working knowledge of the system, and it's clear for the internal customers to see how their request moves through Bonfire up until award.

Segment Four: Integrations (if applicable)

Integration discussions can begin immediately, but it is not recommended to action the build of any integrations until the software and ideal connection points are understood by procurement and internal business analysts. The most common integration points are pushing requisition data from an ERP into Bonfire's Intake module to initiate a request, and pushing award data out of Bonfire into ERP to cut a purchase order. There might be other desired integration functionality from the City, which will all be discussed with Bonfire's professional service team.

The City, like every organization Bonfire works with, will have unique priorities, goals, and outcomes. The Bonfire implementation process can be completely customized to meet the City's needs. What is proposed above is a proven framework to ensure business continuity, while driving towards continuous improvement. Bonfire aims to approach every implementation with a custom and agile approach.

vii. Resource Management Plan: approach to resource management and managing resource allocation for the City and vendor teams.

Our implementation approach follows the same path no matter the size of the organization. Bonfire's implementation plans will be fully customized to the City's desired timeline. Some Bonfire clients have run their first project in their first week of Bonfire, whereas others prefer a longer implementation period. We focus on providing extensive training covering different aspects of the tool, down to one-on-one sessions with each buyer as they set up their first project in Bonfire.

The only resources required from the City are the City's procurement staff participating in the relevant training sessions. Typically, this represents three to six hours of time over the course of the entire implementation. Bonfire will work with the City to allocate resources to ensure that City procurement operations can continue and time can be applied to Bonfire learnings as well.

Many implementation activities will be completed concurrently to minimize the time required to complete the onboarding. However, please also note that these timelines are dependent on the City's staff's availability for training and the speed with which the organization is comfortable. Our experience with organizations of similar size and complexity as the City will enable Bonfire to have the City's system fully implemented and running within three to six weeks.

5.4. Key Proposed Personnel And Team Organization

5.1. KEY PROPOSED PERSONNEL AND TEAM ORGANIZATION

Proposer Project Team Members					
Name	Title	Role on Proposed Project Team (e.g., PM)	Years of Relevant Experience	Years with firm	Number of implementations completed within past five years
Willow Stuart	Account Executive	Account Executive	5	5	80
Rachel Friesen	Director of Customer Success	Responsible for ensuring user success	10	6	200
Brandon Zanussi	Client Success Manager	Provides on-boarding and ongoing training	7	5	100
Mitchell Shim	Implementation Manager	Project Management and team operations	6	5	70

5.5. Project Schedule

5.5.1. Project Schedule

Proposer shall submit a proposed Project Schedule with the major milestones, activities, and timing of deliverables for the Scope of Work described in the RFP. In addition, the response should reflect Project predecessors, successors, and dependencies.

- The City requests that the sample Project Schedule be in a Gantt chart format.
- Proposer to submit as an Exhibit, a sample Project Schedule.

Exhibit submitted Yes No

Please see enclosed Gantt Chart.

5.5.2. Project Deliverables, Milestones, and Payment Applications

Proposer to include a list of deliverables and milestones of the Project and should describe exactly how and what will be provided to meet the needs of the City.

Please see the detailed Implementation Plan in Section 5.3.6.

Proposer to submit their payment schedule, tied to the listed deliverables and milestones for review by the City, as an exhibit.

Exhibit submitted Yes No

Bonfire follows a typical SaaS based annual pricing model. Licensing is paid up front and renews on an annual basis.

5.5.3. Project Schedule Questions

Proposer to include a list of deliverables and milestones of the Project and should describe exactly how and what will be provided to meet the needs of the City. Proposer will submit the list of deliverables and milestones as an exhibit.

Please see the detailed Implementation Plan in Section 5.3.6.

Exhibit submitted Yes No

Project Schedule Questions	
Question	Response
Based on current obligations, what is the earliest you can begin implementation after contract signing?	Bonfire can begin implementation immediately after contract signing. Your Bonfire portal will be created within one week with training immediately following.
What activities would the Proposer expect to occur within the first 60 days of contract signing?	Within the first 60 days, Bonfire would create the City's Bonfire portal, configure all system settings, and have begun several weeks of training. Within the first 60 days, City staff would have a firm grasp of how to use the system and began releasing their first live solicitations in the system.
How long does the typical implementation of the product being proposed take for an organization of similar size to the City?	For organizations of similar size to the City, a typical implementation will take from 4-8 weeks based on the speed at which the organization is comfortable with training.
What special considerations are there related to the timing of go-live activities?	The only special considerations to go-live activities are coordinating applicable City procurement staff for training and kick-off.

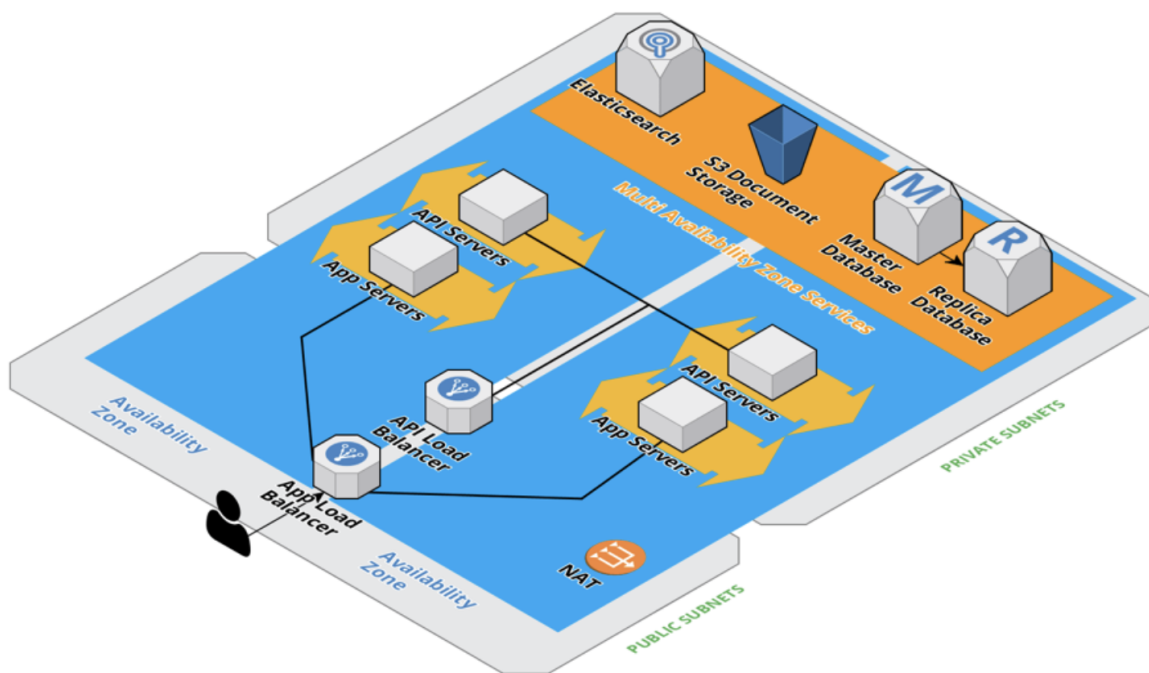
5.6 System and Application Architecture

5.6.1. General Overview

Proposer to provide a description of the proposed system and application architecture for the proposed application.

While Bonfire does not disclose full details of its infrastructure and networks, Bonfire uses a load-balanced and fault-tolerant architecture. Servers and services are distributed across distinct geographical locations.

Please see the provided architecture diagram.



5.6.2. System and Application Architecture Questions

System and Application Architecture Questions	
What is the source language(s) of the product?	Bonfire uses a variety of source languages, for more details please see our Security Policy Bundle.
How many environments are available with your proposed solution at no additional cost (e.g., test, training, production)?	Bonfire can provide multiple environments to the City at no additional cost including test, training, and production. However, most agencies only require a test and production as all training activities can be completed within the production portal.
Describe how often major and minor software updates are provided, as well as the level of City resources required for a major update and the level of resources required for a minor update.	Minor updates are rolled out every two weeks, with bug fixes and hot fixes as needed. Major updates can vary based on multiple factors but will range from monthly to quarterly.
Please describe the major/minor upgrade process that is required if the solution requires a client-based installation.	N/A. Bonfire is a SaaS product with no client-based installation. No client processes are required upon upgrades.
List all browsers that are certified for use with the application and describe any required browser add-ons, function enablement, etc.	Bonfire supports Microsoft Edge, Google Chrome, Mozilla Firefox, and Safari. No browser add-ons or other functions are required.
The underlying architecture of the application design is important to the City. Please describe your system architecture model and explain the capabilities and features of this model that led to your use of it in developing this system.	While Bonfire does not disclose full details of its infrastructure and networks, Bonfire uses a load-balanced and fault-tolerant architecture. Bonfire uses industry best practices for network security, including separation of components (client, api, database) and a public/private network architecture with deny by default access. Servers and services are distributed across distinct geographical locations. We have provided a diagram outlining our architecture above. Bonfire has

	received a clean SOC2 Type II report to attest to the Bonfire architecture.
Please describe how data privacy and security compliance is supported within your proposed software solution.	Data is encrypted in transit and at rest. Data in the underlying storage for Bonfire's database and its automated backups are encrypted using the industry-standard AES-256 encryption algorithm. All communications between the customer and Bonfire portal and APIs are encrypted using industry-standard HTTPS (TLS 1.2 or higher), including well-known, industry-standard ciphers over public networks. All traffic between the customer and Bonfire is secure during transit. Bonfire servers are configured to switch any unencrypted requests over to an encrypted connection. All customer data stored within Bonfire is replicated and backed up on a regular basis. Documents are backed up instantly upon upload. We also test our backup and recovery processes to ensure that we can recover data in the event of a disaster. Bonfire has been SOC2 Type II certified since September 2021. We have successfully met or exceeded the requirements for Security, Availability and Confidentiality trust criteria for managing customer data established by The American Institute of CPAs (AICPA). Bonfire uses industry best practices for network security, including separation of components (client, API, database) and a public/private network architecture with deny by default access.

	Bonfire uses Amazon Web Services (AWS) data centres. All of the City's data and backups will be stored/hosted on servers located in the US. Backups are hosted in separate locations with multiple redundancies. The IT infrastructure that AWS provides is designed and managed in alignment with security best practices and a variety of IT security standards, including: • SOC 1/SSAE 16/ISAE 3402 (formerly SAS 70) • SOC2 • SOC3 • FISMA, DIACAP , and FedRAMP • DOD CSM Levels 1-5 • PCI DSS Level 1 • ISO 9001 / ISO 27001 • ITAR • FIPS 140-2 • MTCS Level 3 • 24/7 on-site physical security, fire prevention, and monitoring Bonfire has created a detailed Security Overview and Disaster Recovery Plan in our Security Bundle, which outlines our backup policies, security policies, and Disaster Recovery planning. We have attached this document for your review.
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Describe your approach to ensure scalability of the product. This includes transaction growth, upgrades, and replacements of components of the architecture, technology, and application.	The platform is a SaaS solution, built on Amazon Web Services with auto-scaling and configuration as code. The system is actively monitored and designed to scale up and down to meet load requirements. The application is fully scalable and has multiple infrastructure redundancies at the system, network, storage and application layers. Backups are performed automatically. Bonfire takes full advantage of fail-over capabilities and procedures supplied by Amazon Web Services.
List all hardware/operating system/database platforms upon which the product is supported. Provide specifications in terms of processors, processor speed, memory requirements, and other sizing and capacity factors to assist the City in budgeting for and acquiring hardware. List which industry standard benchmarks or guidelines measures are used to establish this recommendation.	As a SaaS, the only requirements for accessing Bonfire are a web-browser such as Chrome, Firefox, Safari, or Edge and an internet connection. The City does not need to budget for or acquire any special hardware.

5.7. Security and Software Hosting

5.7.1. General Overview

Proposer to provide a description of the proposed application security features/functionality as well as the underlying technology used to support hosting and access to the software by clients.

Data is encrypted in transit and at rest; data in the underlying storage for Bonfire's database and its automated backups are encrypted using the industry-standard AES-256 encryption algorithm. All communications between the customer and Bonfire portal and APIs are encrypted using industry-standard HTTPS (TLS 1.2 or higher), including well-known, industry-standard ciphers over public networks. All traffic between the customer and Bonfire is secure during transit. Bonfire servers are configured to switch any unencrypted requests over to an encrypted connection. All customer data stored within Bonfire is replicated and backed up on a regular basis. Documents are backed up instantly upon upload. We also test our backup and recovery processes to ensure that we can recover data in the event of a disaster. Bonfire follows industry best practices for application security. This includes, but is not limited to:

- In-transit and at-rest encryption
- User input validation
- Role based access control
- Least privilege access
- Annual third party penetration tests
- Weekly application vulnerability scans
- Comprehensive quality assurance and testing

Bonfire has been SOC2 Type II certified since September 2021. We have successfully met or exceeded the requirements for Security, Availability and Confidentiality trust criteria for managing customer data established by The American Institute of CPAs (AICPA). Bonfire uses industry best practices for network security, including separation of components (client, API, database) and a public/private network architecture with deny by default access.

Bonfire uses Amazon Web Services (AWS) data centres. All of the City's data and backups will be stored/hosted on servers located in the US. Backups are hosted in separate locations with multiple redundancies. The IT infrastructure that AWS provides is designed and managed in alignment with security best practices and a variety of IT security standards, including:

- SOC 1/SSAE 16/ISAE 3402 (formerly SAS 70)
- SOC2
- SOC3
- FISMA, DIACAP , and FedRAMP
- DOD CSM Levels 1-5
- PCI DSS Level 1
- ISO 9001 / ISO 27001
- ITAR
- FIPS 140-2
- MTCS Level 3
- 24/7 on-site physical security, fire prevention, and monitoring

Bonfire has created a detailed Security Overview and Disaster Recovery Plan in our Security Bundle, which outlines our backup policies, security policies, and Disaster Recovery planning. We have attached this document for your review.

5.7.2. Security Questions

Proposer to respond to the following questions related to system security and access controls.

Security Questions	
Question	Response
Is Active Directory integration and/or single sign-on supported? Please provide applicable diagrams and/or details to substantiate the level of integration and compliance with published internet standards (i.e., LDAP and DNS).	Bonfire supports single sign-on through Workos.com. This service is compatible with any IdP and supports both the SAML and OIDC protocols. It's modeled to meet the OAuth 2.0 framework specification, abstracting away the underlying authentication handshakes between different IdPs. Please see attached "SSO Configuration".
Proposer shall detail the ability of the proposed system(s) to integrate with Active Directory Domain Services implemented in accordance with published internet standards such as	Workos is compatible with SAML 2.0. SAML 2.0 single sign-on (SSO) supports integration with Microsoft Active Directory Federation Services (ADFS) 3.0.

Security Questions	
Question	Response
Lightweight Directory Access Protocol (LDAP) and Domain Name System (DNS). If such integration is not offered, Proposer shall explain the identify management solution that is provided.	Bonfire can call on Active Directory as an IDP to verify Single Sign on and authenticate a user, however management of Bonfire users via Active Directory is currently not supported
Describe how the SaaS application/service provides two-way user and group synchronization with Active Directory (AD). (e.g., As users and groups are added to and removed from AD, these changes are reflected in the SaaS applications). Would the City AD be able to push, and the SaaS applications able to receive, user profiles and groups?	Bonfire can call on Microsoft Active Directory as an IDP to verify Single Sign on and authenticate a user, however management of Bonfire users via Active Directory is currently not supported.
When a user is added to AD, are the proposed solutions automatically provisioned and, conversely, when a user is removed from AD, access is automatically revoked?	Bonfire can call on Microsoft Active Directory as an IDP to verify Single Sign on and authenticate a user, however management of Bonfire users via Active Directory is currently not supported Bonfire through WorkOS.com will route authentication requests to Active Directory, if a user is removed from Active Directory the request will fail and access will not be granted.
Are users able to sign on to the Windows network once, and then easily gain access to the proposed applications without having to enter an additional set of credentials?	Once a user with Bonfire access rights signs onto the windows network, they will navigate to the Bonfire application via their internet browser. Enter their login username only (the same as their active directory user name). Bonfire through WorkOS.com will route this request to their underlying IDP to authenticate.

Security Questions	
Question	Response
Will Proposer require remote access to City systems/network to provide support/management of the solution either during implementation or post go-live? If yes, please describe in detail what type of access is required.	No. Bonfire will not require remote access to City systems or networks to provide support/management of Bonfire during implementation or post go-live.
If any access, remote or physical, is required for accessing City's systems/network, will Proposer agree to reviewing and having applicable staff consent to follow applicable City Security Policies?	Not applicable.
Will Proposer staff resources be accessing the City systems/network remotely from outside the United States? If yes, please describe in detail the reasoning and how security will be managed.	Not applicable.
Describe in detail the password requirements and account management standards for the system. - Can complex password requirements be enforced on the software along with aging requirements if SSO is not available? - Can accounts be locked out automatically after a City-defined number of failed login attempts? - Are session timeouts enforced in the system?	All password requirements can default to the City's IdP. If not using SSO, passwords must be a minimum of 10 characters. Session timeouts are enforced by Bonfire after 4 hours. Accounts are locked out after 50 failed attempts and this cannot be changed.

5.7.3. Software Hosting Questions

Proposer to respond to the following questions regarding their software hosting platform proposed for the City.

Software Hosting Questions	
Question	Response
Where are the data center and storage facilities?	Bonfire uses Amazon Web Services (AWS) data centers. All data and backed up remains in the continental United States with multiple geographies for redundancy purposes. AWS does not disclose the location of data centers for security purposes.
What is the total number of active clients currently served by hosted/SaaS solutions provided by your company?	672 public sector clients.
How many years has your company provided hosted/SaaS solutions?	Bonfire has only ever provided hosted/SaaS solutions in our 11 years of operations.
How are hosted/SaaS software applications deployed for use by numerous customers?	Bonfire is a multi-tenant SaaS application using logical segregation. The data access layer has strict organization boundaries with a default deny access-model.
What availability and response time do you guarantee?	Per our SLA, Bonfire uptime guarantee is 99.5%. Please note, Bonfire's uptime over the last 24 months is 99.99%. Response times cannot be guaranteed as this is dependent on the user's internet connection and speeds.
How many instances of unplanned outages have any of your customers experienced within the past five years? - Describe the nature of any such outages, including the mitigating steps that have been established to minimize repeat outages. - What has been the duration and scope of such unplanned outages?	Bonfire has experienced two brief outages in the past five years. On December 11th, 2021 at 10:38 pm ET there was an AWS incident which resulted in downtime of 56 minutes. On December 7th, 2020 at 5:35 am ET there was an AWS incident which resulted in a downtime of 6 hours. AWS has investigated and rectified the problems and assures customers that the

Software Hosting Questions	
Question	Response
	incidents will not occur.
What are the standard relief schedules for unplanned system downtime/outages? - In how many instances has your firm had to pay client relief for unplanned outages?	Please see our attached Security Policy bundle for detailed schedules in the event of an outage. Bonfire has not had to pay client relief for unplanned outages per our SLA terms.
What is your process for notification of standard maintenance and downtime?	Bonfire does not notify for maintenance as maintenance requires no downtime and is released outside of core business hours as a preventative measure.
What data security and system redundancy capabilities are available at Proposer's data center and storage facilities?	Bonfire uses Amazon Web Services (AWS) data centres. All of the City's data and backups will only be stored/hosted on servers located in the US. The IT infrastructure that AWS provides is designed and managed in alignment with security best practices and a variety of IT security standards, including: • SOC 1/SSAE 16/ISAE 3402 (formerly SAS 70) • SOC2 • SOC3 • FISMA, DIACAP , and FedRAMP • DOD CSM Levels 1-5 • PCI DSS Level 1 • ISO 9001 / ISO 27001 • ITAR • FIPS 140-2 • MTCS Level 3

Software Hosting Questions	
Question	Response
Will data be encrypted at rest, and in transit? Please explain any applicable protocols.	Data is encrypted in transit and at rest. Data in the underlying storage for Bonfire's database and its automated backups are encrypted using the industry-standard AES-256 encryption algorithm. All communications between the customer and Bonfire portal and APIs are encrypted using industry-standard HTTPS (TLS 1.2 or higher), including well-known, industry-standard ciphers over public networks. All traffic between the customer and Bonfire is secure during transit. Bonfire servers are configured to switch any unencrypted requests over to an encrypted connection. All customer data stored within Bonfire is replicated and backed up on a regular basis. Documents are backed up instantly upon upload. We also test our backup and recovery processes to ensure that we can recover data in the event of a disaster.
How many years has your company provided SaaS solutions?	Bonfire has provided SaaS solutions for 11 years and has only ever operated as a SaaS solution.
What is the total number of active clients currently utilizing the proposed software as a SaaS deployment provided by your company?	Bonfire has 672 public sector clients utilizing Bonfire as a SaaS deployment. Bonfire is only offered as a SaaS.
Provide relevant documentation related to any recent certifications pertaining to the Proposer's hosting technical and operation capabilities or that of their subcontracted provider for these services.	Bonfire achieved SOC2 Type II certification as of September 2021. Our SOC2 can be sent following completion of a mNDA. Bonfire has obtained TX-RAMP

Software Hosting Questions	
Question	Response
	Provisional Certification via Third-Party Audit/Attestation Review and is committed to working towards full certification. TX-RAMP is a state risk and authorization management program to provide a standardized approach for security assessment, authorization, and continuous monitoring of cloud computing services that process the data of a state agency. The Texas Department of Information Resources (DIR) developed the program in compliance with Senate Bill 475. TX991834.
Provide detailed information on the way(s) in which the City will access the software if deployed in a SaaS or hosted environment. Such information should include how the software is accessed when on or off the City network, as well as any additional hardware/software that may be required for accessing the software.	Bonfire is accessible through any web browser and from any network. No additional hardware or software is required to access Bonfire.
How is data stored? Would City data be physically or logically segmented from other client data?	Bonfire is a multi-tenant SaaS application using logical segregation. The data access layer has strict organization boundaries with a default deny access-model.
Please describe the database storage capacity of the proposed solution. - Are there limits on the amount of data that can be stored in the proposed solution? - If applicable, what tiers of storage are offered in the hosted/SaaS environment?	There are no limits to the amount of data that can be stored within Bonfire. Bonfire provides unlimited data storage as part of our standard contracts.

Software Hosting Questions	
Question	Response
What disaster recovery services are provided under your standard hosting agreement? If not standard, is there a separate agreement/cost associated with disaster recovery?	Bonfire maintains an internal continuity/disaster recovery plan. We have attached this document for your review. 1. Backup locations are dependent on backup types (the details of which are in our Backup Policy) but are stored within AWS with geographical redundancy. 2. RTO is 24 hours 3. RPO is 2 hours 4. System scales to ensure continued service regardless of traffic 5. System scans for ensuring content integrity and access
Please describe the anticipated cost savings or cost avoidance (e.g., reduced hardware needs, maintaining failover sites) that may be realized through selecting a SaaS deployment model. Specific figures from past projects that can be substantiated may be included.	There are many advantages to a SaaS deployment model including but not limited to: • Decreased hardware costs • Decreased storage costs • Increased security • Reduced maintenance and maintenance costs • Efficient implementation • Ongoing upgrades • And many more.

5.8. Testing & Quality Assurance Plan

5.8.1. Approach

Describe your standard approach to testing and quality assurance.

Please see the Quality Management Approach document included with the submission. Our software development life cycle includes: requirement gathering, design, development, code review,

acceptance testing, regression testing, trial deployment in a segregated staging environment, live deployment, and maintenance. Dev/Test/Staging/Production environments are used to promote changes prior to release to clients.

5.8.2. Sample Plan

Submit a Sample Testing and Quality Assurance Plan that would be very similar to the plan utilized for the City's Project. Proposer to submit as an Exhibit.

Please see the Quality Management Approach document included with the submission.

Exhibit submitted Yes No

5.8.3. Plan Details

Awarded Proposer will be responsible to provide a Testing and Quality Assurance Plan that describes all phases of testing that may be used: unit, system, integration, regression, and user acceptance testing (UAT). It is the City's expectation that the Testing and Quality Assurance Plan govern all phases of the Project and that the Proposer will also provide assistance during each testing phase involving City users. The Awarded Proposer will develop the initial UAT plan, provide templates and guidance for developing test scripts, and will provide support during UAT. The Awarded Proposer will also provide a plan for stress testing the system, which will occur during or after UAT. Proposer to confirm their proposal includes providing the services identified in this section and providing any additional services that are also provided as part of your Testing and Quality Assurance Plan not listed.

Bonfire attests that this proposal includes providing the services identified in this section and any additional services that are also provided as part of our Testing and Quality Assurance Plan not listed.

5.8.4. Levels of Support

What levels of support will be provided by the Proposer during the City testing phases (e.g., UAT)? Will Proposer resources be onsite during certain testing phases? Are varying service levels offered for testing support?

Bonfire will provide full support to the City during testing phases to ensure the Bonfire system and/or any integrations are configured to the City's needs. As a SaaS, all support during testing phases can be conducted in an entirely remote environment. Bonfire does not offer varying service

levels for testing support and provides the same world class support experience to all clients at no additional costs.

5.9. Training Plan

5.9.1. Proposed Training Approach and Strategy

Proposer to describe the proposed approach to training users of the system, including the frequency of training, timing in the overall sequence of the implementation, as well as training resources/materials that will be provided to trainees.

Bonfire provides unlimited training to all Bonfire customers, as well as self-help resources, which will assist Midland users, as well as vendors interacting with the Bonfire platform.

Since Bonfire is composed of several different modules, the training will be broken down to cover each module. The training is done on a sample set of projects that reflect actual procurement scenarios. The buyers at the City will be encouraged to provide the Implementation Lead with their own procurement projects. These projects can be used during training to help tailor the sessions to your needs. During the training phase, the buyers at the City will be able to start setting up draft procurement projects to get hands-on experience in Bonfire. If all participants agree, training sessions will be recorded, and the recording will be provided to the procurement team.

The training program for the City users will be broken out by stakeholder role and training objective, which is explained below.

General Training for Managers

Manager training focuses on high level aspects of Bonfire, such as user roles, Insights, and reporting. During this training session, the trainer will introduce key concepts in Bonfire to the managers while giving them exposure to their view and to what vendors and internal evaluators see when accessing Bonfire. This training focuses on KPIs tracked in Bonfire, as well as methods and ways managers can use Bonfire to optimize their process.

General Training for Buyers

The first training session will cover project (solicitation) creation, evaluation workflow, and project reporting. The trainer will also provide a thorough overview of project templates, project drafts, and common workflows, such as issuing addenda and managing supplier Q&A. By the end of the training session, attendees will be able to create and manage a typical RFQ/RFP project, and run a complete evaluation through to award.

Advanced Module Training

In this training session, emphasis will shift to cover some of Bonfire's advanced evaluation modules, such as BidTables. By the end of this session, attendees will be able to create complex solicitations in Bonfire, such as multi-line bid projects.

Vendor and Contract Management Training (as applicable to your configuration)

This training session is meant to expose attendees to the Vendor and Contract Management modules. The trainer will go over vendor lists, vendor management, contract creation, contract searching and filtering, vendor performance tracking, among other key actions and workflows.

Individual Training Sessions

During the ramp phase of the implementation, Bonfire will offer one-on-one training for any buyer placing their first sourcing project into Bonfire, ensuring that the project is set up correctly, and any project-specific questions have been answered before the project goes live.

Evaluator Training

Similar to the vendor's experience in Bonfire, the evaluator experience has been designed from the ground-up to be intuitive. Evaluators are greeted with a three-minute training video upon their first login into Bonfire, guiding them through its entire functionality. Typically, the training video is all that is required for an evaluator to use Bonfire. Bonfire is also willing to host multiple training sessions for evaluators as part of the change management program. Sessions can be recorded and stored internally for future access.

For Vendors

Historically, vendors have rarely needed to have specific training to use Bonfire as they typically spend an average of only eight minutes in Bonfire, including the time to register for an account and upload a submission. Bonfire has developed resources to help vendors get acquainted with Bonfire, such as short training videos and a list of FAQs accessible right from within the platform.

However, Bonfire is willing to offer multiple training sessions for vendors (especially if they're part of a Vendor of Record list) when necessary, as well as host periodic training webinars for newly registered vendors on a monthly basis.

Client Success and Support

Upon joining Bonfire, the City will also have access to a dedicated Customer Success Manager (CSM) who will act as an additional support pillar beyond Bonfire's customer support team. Your CSM will help facilitate training, offer best practices on new projects, provide continuous learning, and be available to help facilitate any technical support questions.

Technical support for anyone interacting with Bonfire (purchasers, evaluators, vendors, and more) is available in a variety of methods. This includes telephone (toll-free) and email from Monday-Friday from 7am-7pm CST, website articles, videos, and live chat. Bonfire also offers unlimited training and support via WebEx (included in cost) and on-site (at additional cost).

Self-Help Resources

Finally, in addition to the above-noted training, Bonfire will feature multiple self-help resources to support the City's success adopting and using Bonfire, including the following.

Bonfire Academy

Bonfire offers a course-based training platform for all users, called Bonfire Academy. Courses in the platform are interactive, and include videos, slideshows, annotated screenshots, and quizzes. Users are able to learn at their own pace or use the courses to refresh their memory after the official training program has ended. Conveniently, course progress is tracked, which lets the user jump in and out of courses based on their availability and learning needs.

The platform includes generic courses aimed at learning all aspects of the platform, as well as courses specific to an organization and its related processes. Depending on your subscription package and needs, Bonfire will work with you to build content that is specific to your organization's roll-out. These courses are designed to walk the user through the steps required in Bonfire to mimic the organization's business processes, policies, and procedures.

Knowledge Base

Bonfire's Support team also created an online Knowledge Base repository where, to date, more than 60% of customer requests have been addressed with self-help guidance. Users are empowered to find answers quickly, easily, and on their own time. In addition to the Knowledge Base, Bonfire offers online FAQs, chat support, phone and email coverage, and a unique webinar series. The webinars, introduced in 2018, highlight product features on new releases, offer drop-in training sessions, and best practice guides. Webinars target areas of the product and are based around customer requests.

Proposer to provide their approach to the training plan and what makes their training plan successful and effective for system implementations. Include your approach to when and why you choose to use on-site training versus a webinar or a train-the-trainer format.

Bonfire's training plan is successful for a number of reasons. One is that there is *unlimited ongoing online training* and support (through Zoom) and includes 1-on-1 sessions to ensure clients are fully comfortable.

Also, clients, as mentioned earlier, have a dedicated Implementation Manager and Customer Success Manager for training and ongoing learning, as well as full access to Bonfire's support team. Further, Bonfire will facilitate personalized remote training sessions to ensure all staff are comfortable working with the solution.

Proposer to detail the knowledge transfer strategy proposed to prepare the City staff to maintain the system after it is placed into production.

Essentially, the Bonfire solution will not have to be "maintained" by City staff. Any improvements, updates and upgrades will be done by Bonfire. As stated earlier, there is a plethora of training aids available for the City after implementation, and if further in-person assistance is needed, the City's CSM will be available to help staff work efficiently with the system.

"Our Implementation Specialist did an OUTSTANDING job training our team. She is very knowledgeable, patient and organized. Training was delivered at a comfortable pace to understand and implement. She always provided time for

*questions and sent additional training information/videos after each session.
Thanks to her, our transition was much faster than expected."*

Maricopa County Community Colleges District



Proposer to detail the approach to conducting training using webinar (e.g., GoToMeeting, Zoom, Teams, Skype), including how Proposer staff will monitor staff comprehension and, if applicable, aid trainees on navigation through the system.

Please see the first response in this section.

Proposer to identify the requested analysis/training room environment requirements and any other requirements related to the training facility/room/equipment. Requirements may include any presentation equipment, whiteboards, seating style, number of computers, printers, and other amenities needed to support on-site implementation activities.

Bonfire's training is delivered remotely. City staff will only require access to an internet-enabled device to participate in user training.

5.9.2. System Documentation

Proposer to provide a detailed description of system documentation and resources that will be included as part of the implementation including, but not limited to, detailed system user manuals, "Quick Reference" guides, etc. as available. Proposer to itemize optional items on Attachment 3. Proposer to check off in the table below all that are available and included as part of the RFP response.

System Documentation		
Type of Documentation	Included in Scope of Proposal to the City?	Description/Explanation/Optional
Quick Reference Guides	Yes	Bonfire offers a full and constantly growing online knowledge base that is accessible 24/7/365. Bonfire's knowledge base includes

System Documentation		
Type of Documentation	Included in Scope of Proposal to the City?	Description/Explanation/Optional
		everything from getting started guides to specific how-to articles and videos. Bonfire is constantly adding new material as well; whenever we receive a support request for something that is not currently in our knowledge base we will create a subsequent article/video pairing as soon as possible. Information is organized to be easily digestible and allows users to easily follow step-by-step instructions where applicable.
Online Support	Yes	Bonfire offers online support by phone, email, ticketing system, and live chat.
Help Desk Support	Yes	Bonfire offers a full and constantly growing online knowledge base that is accessible 24/7/365. Bonfire's knowledge base includes everything from getting started guides to specific how-to articles and videos. Bonfire is constantly adding new material as well; whenever we receive a support request for something that is not currently in our knowledge base we will create a subsequent article/video pairing as soon as possible. Information is organized to be easily digestible and allows users to easily follow step-by-step instructions where applicable.
User Group Community Resources	Yes	Bonfire provides an embedded Bonfire Forum within our Client Hub. Enabling the City to connect with 650+ public procurement

System Documentation		
Type of Documentation	Included in Scope of Proposal to the City?	Description/Explanation/Optional
		teams to share tips, ask questions, and share best practices.
Annual User Conferences	Yes	Bonfire hosts annual regional user meetups (including in Texas). Attendance is free for our clients and Bonfire will discuss Bonfire best practices, upcoming features, and other procurement hot topics.
Videos	Yes	Bonfire has both embedded and supported videos in our Knowledge Base.
Custom User Guides/Manuals	Yes	Bonfire has customized user guides and manuals in our Knowledge Base unique for all different user roles. Bonfire can provide additional custom user guides and manuals should our existing materials not meet the City's needs.
Other:	Yes	Bonfire also offers a course-based training platform for all users, called Bonfire Academy. Courses in the platform are interactive and include videos, slideshows, annotated screenshots, and quizzes. Users are able to learn at their own pace or use the courses to refresh their memory after the official training program has ended. Course progress is tracked enabling the user to jump in and out of courses based on their availability and learning needs.

5.10. References

5.10.1. Software and Professional Services References

Reference Table
Reference: <u>1</u>
(Governmental) Entity Name: <u>City of Brownsville, TX</u> What is the approximate staff count of the Entity? <u>3000</u>
What is the approximate population served by the Entity? <u>187,000</u>
Detailed narrative description of work completed for this reference (e.g. upgrade process, new implementation for a client transitioning from a different legacy system): <u>The City of Brownsville was using a legacy patchwork solution of tools. They were soliciting and running simple projects through Bidnet direct and running complex projects fully manually (paper, email, excel, etc). The City conducted extensive market analysis and felt that Bonfire was the only tool to fully support their needs.</u>
<u>Contact Information</u> Address: <u>1001 E Elizabeth St.</u> City, State, Zip: <u>Brownsville, TX 78521</u> Reference Contact Name: <u>Damian Espinoza</u> Title: <u>Senior Buyer</u> Phone No.: <u>956-538-3139</u> Email Address: <u>damien.espinoza@brownsvilletx.gov</u> Start Date of Project: <u>08/26/2021</u> Go-Live Date : <u>09/01/2021</u> <u>Project Information</u> Vendor Project Manager/Lead for this Client: <u>Miranda Brubacher</u> Name and Version of software system installed: <u>Bonfire eSourcing</u> Legacy software system replaced: <u>Bidnet Direct/Manual</u> Scope of Modules installed: <u>Bonfire Intake, Bonfire eSourcing, Bonfire Contract Management</u>

Reference Table
Model used (Hosted, On-Premise, SaaS, etc.): <u>SaaS</u>
Is this reference still using the software? Yes <u> X </u> No <u> </u>
<u>Total Project Cost: \$20,422/year</u>

Reference Table
Reference: <u>2</u>
(Governmental) Entity Name: <u>City of Southlake, TX</u> What is the approximate staff count of the Entity? <u>750</u>
What is the approximate population served by the Entity? <u>35,000</u>
Detailed narrative description of work completed for this reference (e.g. upgrade process, new implementation for a client transitioning from a different legacy system): <u>The City was soliciting manually through paper binders and excel spreadsheets and needed a better way to manage their growing workload. As a single buyer team, the Purchasing Manager was tasked with doing more with less to meet the growing needs of a growing population and after extensive market research brought on Bonfire to help manage the growing number of solicitations.</u>
<u>Contact Information</u> Address: <u>1400 Main Street Suite 420</u> City, State, Zip: <u>Southlake, TX 76092</u> Reference Contact Name: <u>Timothy Slifka</u> Title: <u>Purchasing Manager</u> Phone No.: <u>817-748-8312</u> Email Address: <u>tslifka@ci.southlake.tx.is</u> Start Date of Project: <u>09/06/2019</u> Go-Live Date : <u>10/01/2019</u> <u>Project Information</u> Vendor Project Manager/Lead for this Client: <u>Ryan Hamill</u> Name and Version of software system installed: <u>Bonfire eSourcing</u> Legacy software system replaced: <u>None</u> Scope of Modules installed: <u>Bonfire eSourcing</u> Model used (Hosted, On-Premise, SaaS, etc.): <u>SaaS</u> Is this reference still using the software? Yes <u>X</u> No <u> </u> Total Project Cost: <u>\$13,500</u>

Reference Table
Reference: <u>3</u>
(Governmental) Entity Name: <u>City of Burleson</u> What is the approximate staff count of the Entity? <u>800</u>
What is the approximate population served by the Entity? <u>55,000</u>
Detailed narrative description of work completed for this reference (e.g. upgrade process, new implementation for a client transitioning from a different legacy system): <u>Tasked with increasing the vendor participation rate and to keep up with a growing number of solicitations, the City brought on Bonfire to help move away from manual processes and better track all procurement events.</u>
<u>Contact Information</u> Address: <u>141 W Renfro Street</u> City, State, Zip: <u>Burleson, TX 76028-4296</u> Reference Contact Name: <u>Justin Scharnhorst</u> Title: <u>Assistant to City Manager</u> Phone No.: <u>817-426-9646</u> Email Address: <u>jscharnhorst@burlson.tx.com</u> Start Date of Project: <u>03/11/2020</u> Go-Live Date : <u>04/01/2020</u> <u>Project Information</u> Vendor Project Manager/Lead for this Client: <u>Kristy Matheson</u> Name and Version of software system installed: <u>Bonfire eSourcing</u> Legacy software system replaced: <u>None</u> Scope of Modules installed: <u>Bonfire eSourcing, Bonfire Contract Management</u> Model used (Hosted, On-Premise, SaaS, etc.): <u>SaaS</u> Is this reference still using the software? Yes <u>X</u> No <u> </u>

Reference Table
Total Project Cost: \$32,000

5.10.2. Contract Termination/Non-Renewal

Provide a summary of any contracts/license agreements/hosted subscriptions that the customer provided notice of cancellation to your firm, with or without cause, or elected to not renew in the past five years as it relates to the software solution proposed. The summary shall state the name of the customer, summary of the contract, term of the contract and reason for cancellation or non-renewal. If none, state as such.

Submitted as an Exhibit ☐ or Response provided as: Bonfire does not disclose this information.

5.10.3. Litigation

Provide a summary of any litigation filed against the Proposer or any subcontractors/partners in the past seven years, which is related to the services that Proposer provides in the regular course of business. The summary shall state the nature of the litigation, a brief description of the case, the outcome or projected outcome, and the monetary amount involved. If none, state as such.

Submitted as Attachment ☐ or Type/Provide Response here:

Bonfire has not had any litigation filed in the past seven years.

5.11. Exceptions To Project Scope And Contract Terms

The City reserves the right to disallow exceptions it finds are not in the best interests of the City. Any and all exceptions must be identified and fully explained in the submitted Proposal. It is the City's intention to be made aware of any exceptions to terms or conditions prior to contract negotiations.

5.11.1. Deviations to Scope of Work

The Proposer to identify and describe any exceptions/deviations to the Scope of Work and identify their impact to the City, including, but not limited to workarounds; reductions in performance; capacity; flexibility; accuracy; and ultimately, cost and value.

Proposer to identify the areas where they feel the requested service or product is not available, deviates from the specific requests, or is deemed an unwise or unwarranted approach.

Bonfire aligns very well with almost all of the areas of the Scope of Work. Two areas specifically are facilitated in different ways in Bonfire than proposed in the Scope of Work. These areas are the 'report builder' and some of the workflows. Report building is done through configurable dashboards in Bonfire and as a SaaS has some differences to on-premise report builders. Bonfire can also customize reports for the City. Workflows are configurable in Bonfire but are more built into certain components as opposed to a centralized workflow routing section within the system.

5.11.2. Deviations/Exceptions to RFP Terms and Conditions as Proposed by the City

Proposer will provide any deviations or exceptions to the language proposed by the City in the RFP. Each item to be listed along with the requested alternative language for review by the City.

If no deviations are taken, state as such. Substantive exceptions to the City's terms, submitted after the date and time established for the submittal of Proposals, will not be considered.

No deviations taken:

Appendix A - Bonfire Security Bundle

BONFIRE SECURITY OVERVIEW

Confidential | A Summary of Bonfire's Security & Stability Practices

Our Commitment

Bonfire has been trusted with \$10's of billions purchasing decisions to date by a range of public and private organizations in Canada, the USA, and internationally. Our top priority has been ensuring a safe, private, and performant cloud / SaaS product. This priority remains unchanged while we expand our client base and product functionality now and in the future.

We recognize the sensitive and mission-critical nature inherent in our clients' use of Bonfire, and have implemented specific policies and practices that govern our infrastructure and activities. A summary of our security and stability practices can be found in the section below.

Our Practices

The table below is a summarization of the major security and stability practices at Bonfire. Also refer to the attached Policies.

Commitment	Practices
We protect your data	<i>Encrypted data transmission and storage</i> Data transmission only occurs over 256-bit SSL encrypted connections; Bonfire servers are configured to switch any unencrypted requests over to an encrypted connection. The data is stored in an encrypted state upon arriving on the servers. <i>Multiple redundancies</i> All data entered into Bonfire is regularly backed-up to physically external backup systems with multiple redundancies. Documents are backed-up instantly upon upload; database data is backed-up hourly. <i>Robust session management</i> Bonfire manages user sessions and utilizes a role-based permission system to enforce security. <i>Network-based security and monitoring</i> Traffic to Bonfire's server first pass through a network security layer that inspects the traffic for common attacks, blocking suspected attackers and providing notifications to our technical team. <i>User permission checks</i>

	Each page view and action in Bonfire checks a user's permissions in order to make sure they are allowed to view / act in the manner attempted. <i>User passwords hashed</i> User passwords in Bonfire are hashed and stored using Bcrypt, an algorithm highly resistant to high-speed brute force attacks. At no time are any passwords stored in plain text in the application. <i>Physical security practices</i> Our datacenters are chosen to adhere to our requirements (see below). No servers are located in Bonfire offices. <i>Strict Network Security</i> Our production networks use security best practices including network isolation, private subnets and least privilege firewalls.
We regularly update our infrastructure	We regularly monitor our technology stack for issued patches/updates, and update our systems accordingly. Minor updates and security patches are applied automatically.
We have fail-over systems in place and tested	In the unlikely but possible event that our systems become unavailable users shown a page with instructions to contact Support by Email or Phone. Clients are contacted in accordance with our Support & Incident Management Policy.
We provide guaranteed exports of data	Bonfire does not own the data input into the tool; the organization remains full legal owner of the data, as stipulated in the Order Form Terms and Conditions. In that light, Bonfire provides numerous ways an organization can export their data including (1) mechanisms to download the supplier files, scoring summaries, and other project data at any time from within the tool, and (2) the guarantee that we will provide a mass data export (to DVD or hard drive) in the event that an organization ceases using Bonfire (upon request).
We continually monitor system for errors and performance	We continually monitor our application and infrastructure load and performance. In the event of an application error, our technical team is notified automatically (both for server-generated errors and client-generated errors [e.g. JavaScript errors]). Logs are processed using a centralized log management system.

Bonfire Security Policies

Bonfire has a number of security policies to provide additional details in specific areas. Please refer to the table below.

Policy	Version	Commitment
Backup	0.0.1	We commit to a robust set of back up practices.
Communication Standards	0.0.4	We adhere to strict standards on communication response times.
Data Centre Supplier Requirements	0.0.2	We only choose compliant datacenters. Note that the storage of your data occurs at a site appropriate to your location: Canadian organizations' data is stored in Canada, USA organizations' data stored in USA, European/Asian organizations' data stored in the EU. This is specified on your Order Form.
Data Destruction	0.0.6	We abide by a defined Data Destruction Policy.
Data Encryption	0.0.1	We Encrypt your data in transit and at rest.
Email	0.0.2	Our commitment to the security of your data extends to the use of email.
EU GDPR Policy	0.0.1	We comply with the European General Data Protection Regulation.
Internal Data Access	0.0.2	We enforce specific Internal Data Access Policies.
Physical Security	0.0.2	We treat physical security seriously and abide by a Physical Security Policy.
Redundancy and Fault Tolerance	0.0.1	We implement multiple strategies to ensure our services and your data is available.
Risk Management	0.0.1	We actively manage risk.
Security Overview	3.1.9	(This policy)
Support & Incident Management	0.0.4	We abide by a defined Support & Incident Policy.

If you'd like more detailed information about our security and stability practices, please either submit a Support Request from within Bonfire or contact us at Support@GoBonfire.com with your question or comment.



BONFIRE BACKUP POLICY

Confidential | A Summary of Bonfire's Data Backup Practices

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Introduction

This document provides an overview on Bonfire's policies and processes regarding the back up of data.

Data Types

Database

Databases are backed up via two mechanisms; the first is real time replication to a secondary database (under a master-slave configuration) in a geographically distinct location, the second is a periodic dump of the database.

Documents and Files

Upon upload, all documents and files are immediately placed in multiple redundancy storage.

Backup Frequency

The frequency of data backup depends on the data type.

Data Type	Frequency	Retention
Database – replication	Continuous	Permanent
Database – dump	Hourly, Daily, Weekly, Monthly	Rolling – keep last dump for each frequency
Documents and Files	Continuous	Permanent

Redundancy

All backup data is stored in a separate location from its source. Backup data is stored in a geographically redundant nature, meaning that multiple copies of the backup data are stored in distinct locations to safeguard against storage failure including facility wide failure.

Communication Standards Policy

Confidential | Standards for communication with customers

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Purpose of Document

The purpose of this document is to define communication standards which Bonfire will commit to. These standards are referred to in other policy documents, which describe which standards will be met under different scenarios.

Definitions

Core Business Hours

Core business hours are 8:00 a.m. to 8:00 p.m. EST/EDT (UTC-5, UTC-4 during daylight savings), Monday through Friday. All durations in this document are in business hours/days.

Holidays

Public holidays are not considered a part of core business hours. Such holidays are not included in any durations in this document.

Incident Response Standards

The following standards apply to the response to and handling of incidents impacting customers.

Level		Incident A	Incident B	Incident C
Response Within	Initial Response	1 hour	1 hour	1 hour
	Start Work	2 hours	4 hours	1 day
	Resolution	2 days	3 days	4 days
Compliance Target		100%	100%	100%
Communication Methods		Email to the primary contact notifying of the incident and process to resolve. Phone available for follow up communication.		
		Email and phone to primary contact for Organizations with opportunities closing within 3 days. Organizations will be contacted in order of project close date (most immediate close date first).		

Event Notification

The following standards apply to notification of events that have happened or will happen.

Level	Planned A	Planned B	Planned C	Unplanned A
Response	1 week prior	3 days prior	1 day prior	3 days after
Compliance Target	100%	100%	100%	100%

Communication Methods	Email to the primary contact notifying of the event. Phone available for follow up communication.
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Data Centre Supplier Requirements Policy

Confidential | Policy and Guidelines for Data Centers

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Introduction

This document details Bonfire's minimum requirements for use of third-party data centers in the delivery of its software and services. The document serves as (1) an internal guide for Bonfire staff in choosing appropriate data center suppliers, and (2) an assurance to Bonfire's customers and partners that appropriate data center suppliers are utilized in the delivery of its software.

Minimum Requirements

The following requirements are the Minimum Performance Levels (MPLs) acceptable for a data center to be approved for use in Bonfire's product delivery:

Connectivity Requirements	MPL
Connectivity – Bandwidth Provider	'Tier 1' bandwidth provider connection (also known as 'transit-free network' connection)
Connectivity – Server Incoming Bandwidth	100 Mbps incoming connection
Connectivity – Server Outgoing Bandwidth	100 Mbps outgoing connection
Connectivity – Availability	99.9% up-time guarantee
Connectivity – Scheduled Maintenance Notice	48 hours notice

Security & Data Integrity Requirements	MPL
Security – Security Monitor	Network-based, OS integrity checks, intrusion detection.
Security – Physical Access to Servers	Restricted to authorized personnel only. Physical security system in place to prevent unauthorized physical access.
Data Integrity – Access By Data Centre Staff	Prohibited except with explicit permission
Data Integrity – Data Access Logs	Log all data center staff access to server
Data Integrity – Information Sharing	Information sharing with third parties strictly prohibited.

Hardware Requirements	MPL
Hardware – Power Supply	2x redundant power supply to server. Backup power system capable of providing five (5) days uninterrupted power to server.
Hardware – Parts Replacement	Faulty or defective parts of server replaced within defined service windows or pre-emptively as part of scheduled maintenance.

Support Requirements	MPL
Support – Active Monitoring	24 / 7 monitoring by on-site technicians year- round
Support – Phone & Email Availability	24 / 7 phone support, year-round 24 / 7 email support, year-round
Support – Minimum Response Time (Level 1 Issue*)	1 hour or less
Support – Minimum Response Time (non-Level 1 Issue*)	12 hours or less

* Level 1 in this context refers to total server unavailability or faulty components.

Additional Requirements

In addition to the above, Bonfire's choice of data center suppliers may also be subject to the following conditions / restrictions:

Additional Requirements	MPL
Location of Data Centre	Data center must be located in specific country or region (e.g. Canada, USA, Europe, etc.). This requirement is specified on a Customer's Order Form.
Server Specifications	Data center must offer servers with suitable technical specifications for a particular deployment (e.g. RAM, CPU speed, etc.).

Data Destruction Policy

Confidential | Destruction of Client Data

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Introduction

This document details Bonfire's data destruction policy for securely permanently deleting / removing sensitive customer documents and data. This document serves as (1) an internal guide for Bonfire staff in managing these activities, and (2) a clear and understandable service level commitment for customers.

Types of Sensitive Data

Electronic Documents

Includes all client files uploaded into Bonfire, and their derivatives (e.g. our intermediate document format). Includes all exported reports and summary files that remain on Bonfire systems.

Physical Documents

Includes all physical artifacts [Electronic Documents](#) that Bonfire has exported to a physical medium (i.e. paper) for internal purposes.

Electronic Data

Includes all client data stored in Bonfire's database(s) for the customer.

Electronic Back-ups

Includes all back-ups of [Electronic Documents](#) and [Electronic Data](#). Bonfire preserves multiple physically disparate concurrent back-up systems.

Methods of Destruction

Electronic Destruction

All digital assets are securely destroyed with Unix **srm** utility with a minimum of 35 passes. This is consistent with DoD 5220.22-M clearing process. Note that due to the multi-tenant nature of the application, destruction of customer data does not imply clearing of the entire physical storage device.

Physical Destruction

All physical assets destroyed with cross-shredding and using a secure disposal service (NAID certified) for protected removal of the paper.

Authorized Destruction

Data will only be destroyed only in the following authorized cases. All data destruction activities are logged and audited by Bonfire.

Purging Local Systems

From time to time, sensitive customer data is mirrored onto local systems for troubleshooting or maintenance purposes. All sensitive data is destroyed locally immediately upon task completion.



Upon Customer Request

When explicitly requested by the customer's Primary Contact, in writing, Bonfire will destroy the specified data as requested.

After System Migration

If Bonfire is migrating the customer data to a new system / server, all the data on the old system / server are destroyed and the hard drives reformatted as defined by [Electronic Destruction](#).

Existence of Meta-Data

After deletion of customer data, meta-data relating to customer data may persist. Any such data is anonymized, aggregated and non-identifiable. Bonfire may use such information to improve performance of the application.

Under no circumstances will such meta-data include personally identifiable information, specific financial information or sensitive data.

Hardware Decommissioning

When production hardware containing customer data is decommissioned, data on the hardware is destroyed. This does not imply that all instances of such data is destroyed, only that the instances of data on the hardware is destroyed prior to its disposal.

Bonfire uses data centers that commit to best practices for data destruction in this scenario – following standards outlined in DoD 5220.22-M, NIST 800-88 or similar for sanitization of data.

Data Encryption Policy

Confidential | Data Encryption Policy

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1 Purpose of Document

This document provides an overview of Bonfire's commitments and procedures relating to the handling of application data at rest and in transit.

2 Data at Rest

2.1 Database

Data in the underlying storage for Bonfire's database and its automated backups are encrypted using industry standard AES-256 encryption algorithm.

2.2 Documents and Files

Documents and files stored by Bonfire are encrypted using industry standard AES-256 encryption algorithm.

3 Data in Transit

External data transmission only occurs over 256-bit SSL encrypted connections; Bonfire servers are configured to switch any unencrypted requests over to an encrypted connection.

Bonfire Email Policy

Confidential | Company Email Usage Policy and Guidelines

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Introduction

Email is a ubiquitous and valuable communication tool, but care must be taken to ensure that is used in an appropriate and secure manner. Bonfire strives to ensure that email is used in a way that protects client data.

Data Not Suitable for Email Communication

Not all data is suitable to be included in emails. Care must be taken to avoid sending any such data. Such data types are explained below, including circumstances under which they may or may not be included in email.

Authentication Data

Authentication data is not to be sent via email under any circumstances. Authentication data includes; passwords, ssh keys, api keys, security question responses or any other information that may be used to authenticate against internal or external systems.

Confidential Client Data

Confidential client data may not be included in email communication with third parties without the permission of the client. When communicating with employees of the client company, information may only be disclosed via email that the employee has access to via their bonfire credentials, or that is appropriate to their position, unless permission is granted by the client.

Email Access

Networks

Bonfire Employees shall take care when using email over untrusted networks (e.g. public Wi-Fi). Sensitive communication should be conducted over trusted networks only.

Web Based Email Clients

When accessing email over web based email clients, an ssl connection with a valid certificate must be used at all times.

Personal Email

Bonfire employees shall not use Bonfire email accounts to send or receive personal emails. Bonfire employees shall not use personal email accounts to send email on behalf of Bonfire or relating to Bonfire business.

Appropriate Use

Bonfire employees will only send emails relating to their role / function. Clients are not to be contacted via email unless appropriate to the employee's role.

Sharing/Forwarding Email

Care should be taken to share or forward emails only as necessary. The same rules that apply to sending email apply to forwarding with regard to client permission and appropriate use.



Phishing/Impersonation

Phishing is the attempt to obtain sensitive information by masquerading as a trustworthy entity via electronic communication. Bonfire employees will take care to avoid phishing attempts, in particular, email addresses in client communication will be verified against official records.

EU GDPR Policy

Confidential | EU General Data Privacy Regulation Policy

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1 Purpose of Document

The European Union General Data Privacy Regulation provides data protection and privacy for individuals in the European Union. Bonfire is committed to complying with the GDPR.

This document provides an overview of Bonfire's commitments and procedures relating to the GDPR. The complete details of Bonfire's handling of GDPR and privacy in general may be found in our Privacy Policy.

2 Collection of Personal Data

2.1 What We Collect

Bonfire collects a limited set of personal data, as necessary to carry out the application's functions. The personal data collected is minimal and is generally used for the purpose of identifying and/or communicating with users within our system. Personal data may include:

- Name
- Email address
- Phone number
- Profile picture (optional)

Additionally, information that may identify a person, such as IP addresses and user IDs, may be collected.

Our Privacy Policy gives additional details of the personal data we collect and how it may be processed.

2.2 Data Processor and Data Controller

Bonfire operates both as a data controller and a data processor. In the case where data is collected on behalf of a client organization, Bonfire assumes the role of data processor, and requests to exercise data rights should be directed to that organization.

3 Protection of Personal Data

Bonfire takes the security of all data, including personal data, very seriously. A number of approaches are taken to ensure data is appropriately protected.

3.1 Data Protection by Design

Protection of data is an important consideration and included in the design of all Bonfire systems. Data protection and security is an important part of the entire software development lifecycle.

3.2 Data Protection by Default

Bonfire treats data as private, and consequently implements the appropriate protections, by default. Data is made accessible only with careful consideration.

3.3 Testing of Data Protection

Bonfire regularly tests the integrity of data protection mechanisms, such testing includes code review, testing of new features and bug fixes, as well as general regression and integration testing.

Security policies, including those which may impact the protection of personal data, are reviewed on a regular basis.

4 Personal Data Management

The GDPR offers several rights to data subjects regarding their personal data. Bonfire will honor these rights.

The following sections provide detail on some of these rights and how they may be exercised.

4.1 Right of Data Access

Data subjects have the right to know if Bonfire processes any personal data concerning them, where it was collected from and for what purpose, and to whom it may have been disclosed. Upon request, Bonfire will disclose to a user this information.

Additionally, a data subject may request a copy of this data. Bonfire will provide this on request.

4.2 Right of Rectification

Data subjects have the right to the correction of inaccurate personal data concerning them. Bonfire will provide this rectification without undue delay upon request.

4.3 Right to be Forgotten

Data subjects have the right to have their personal data erased where there is no legal obligation for Bonfire to retain it. Bonfire will honor these requests.

4.4 Exercising Rights

Requests to exercise rights under the GDPR may be directed to support@gobonfire.com. Please note that Bonfire is required by the GDPR to gain proof of identity from the data subject before giving effect to these rights. Bonfire will comply with requests within 30 days.

5 Personal Data Breach Notification

In the event of a personal data breach, Bonfire will disclose details of the breach to those affected in a manner that is appropriate to the nature of the breach. Please refer to our Support and Incident Management Policy and Data Processing Agreement for details.

Internal Data Access Policy

Confidential | Policy and Guidelines for Internal/Employee Data Access

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Purpose of Document

This document details Bonfire's internal data access policy for managing employee access to confidential customer information. The document serves as an internal guide for Bonfire staff in managing access to sensitive customer data.

Governing Staff Access

The following items comprise the policies and processes that govern Bonfire employees' access to confidential customer data.

Employee Access Rules

Employees of Bonfire have specific user accounts for the production systems (i.e. databases and file systems on servers) that comprise the software service. These user accounts have associated permissions that govern the user's access to confidential customer data. Employees are prohibited from sharing account credentials with others.

By default, employees have no access to confidential data; only employees directly related to the activities detailed below ('Acceptable Access') are granted access rights. Such access is granted on a least privilege/need to know basis. In the event of an employee ceasing employment with Bonfire, his or her user accounts are immediately suspended.

Improper use of an employee user account is grounds for immediate termination of employment and may result in additional legal action (subject to the employment agreement and non-disclosure agreement).

Employee Access Logging

All employee access to confidential data is logged in the system being accessed. These logs are reviewed regularly.

Access Keys and Passwords

All access keys and passwords are securely stored in a password management system. Only senior technical staff possess 'root' access to production systems.

Acceptable Access of Customer Account / Data

All employee access to confidential data is limited to the following activities:

- Helping a customer resolve an issue (e.g. answering a support question, troubleshooting a potential bug, checking something by request, etc.);
- Updating a record at a customer's request (e.g. changing a user's email address for them, correcting an incorrectly inputted project parameter, etc.);
- Performing system maintenance (e.g. migrating the database to a new schema during a major update, regular data back-ups, etc.);
- Performing system monitoring and usage analysis (routine monitoring of key system components, monitoring of submission flow during a project close, analysis of usage patterns for possible feature improvements, etc.);

- Periodic data aggregation for reports (e.g. providing usage statistics and reports to customer);
- Anonymized usage information gathering for product development purposes (e.g. analyzing how users on aggregate use a particular feature);
- Other types of access when explicitly requested by customer.

Employees in roles that don't include the above activities do not have access to any systems containing confidential customer data.

Exportation of Data

Employees are restricted from exporting the data from the production systems or backup systems, except in the following cases:

- If a local copy of the customer's dataset is required for debugging purposes. This exportation must be approved by a senior technical executive in advance, and the local data securely deleted immediately upon task completion;
- Anonymized data to be used in testing and/or development. Prior to use, the data must be purged of all identifying information (user accounts, supplier names, documents, etc.) and is subject to prior review and approval by a senior technical executive.

During server migrations or system backups. The local data must be securely deleted immediately upon task completion.

Employee Non-Disclosure Agreement (NDA)

All Bonfire employees are bound by an NDA upon hire. Bonfire's NDA stipulates that customer data is confidential and to be treated with the same regard as Bonfire's own confidential data. No employee is authorized to access any of Bonfire's systems until (1) the NDA is signed and filed, and (2) after the employee's specified start date.

Deviations from this Policy

All deviations from these policies must be immediately reported (within 1 hour) to the affected customer upon discovery by Bonfire. Within 3 days, a complete report must be made to the customer containing (1) a detailed description of the deviation, (2) a comprehensive identification of the compromised data if any, and (3) corrective actions to be taken.

Governing Contractor Access

Any contractor or consultant employed by Bonfire is subject to the same policies and restrictions detailed for staff members.

Physical Security Policy

Confidential | Physical security of Bonfire office and assets

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Office Access

The Bonfire office is protected by security card access and offers no street level visibility into the office. Only approved visitors are granted access to the Bonfire office and are supervised at all times.

Server Access

All Bonfire servers are hosted in off-site data centers that meet strict security requirements (see the Data Centre Supplier Requirements Policy).

Physical Computer Security

While all servers are located off-site, the physical security of employee computers remains an important consideration.

Locking of Computers

Bonfire employees are not to leave computers unlocked for any length of time. Unless directly attended, computers must be locked requiring a password to unlock.

Visibility of Confidential Information

Bonfire employees will take care that computers are not used in a location that may allow viewing of confidential data by unauthorized parties.

Redundancy and Fault Tolerance Policy

Confidential | Redundancy and Fault Tolerance within the Bonfire Application

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6 Purpose of Document

The purpose of this document is to Bonfire's approach to ensuring the availability and integrity of its systems. This is achieved both through fault tolerance (the ability of the system to continue to operate in the presence of various issues) and redundancy (having duplication of critical components).

7 Load Balancing

Bonfire application servers run through a load balancer, this means that requests made to the application are sent to a service that distributes the requests between multiple redundant servers. The load balancing service continuously runs health checks against these servers and will stop directing requests to any server that is deemed unhealthy. In the event of server failure, requests are simply routed to the remaining health servers.

The load balancing service itself is robust, automatically scaling and highly fault tolerant.

8 Database Redundancy and Fault Tolerance

8.1 Database Fail-Over

Bonfire utilizes a relational database service that provides a seamless failover feature. The database exists in two geographically separate locations with one of these instances actively serving application data requests. If the active instance is in a failure state or is unavailable, the service will automatically fail-over to the second instance.

8.2 Database Replication

In addition to the fail-over capability, Bonfire maintains a separate read-replica of the database. If data should somehow be corrupted, or if both primary instances are unavailable, the read-replica is available for manual switch over to master status.

8.3 Database Backups

Please refer to the Backup Policy for details of how Bonfire ensures additional redundancy via database backups.

9 Document Storage

Bonfire uses a document storage service that is both redundant and fault tolerant, including geographically distinct storage. Data integrity is regularly checked and any corrupt data is repaired using redundant data.

Risk Management Policy

Confidential | Approach to Risk Management

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Overview

In an environment of significant change, it is essential that Bonfire recognizes importance of assuming a reasonable level of risk if it is to fulfill its vision, mission, and strategic priorities. In order to grow and continue to be a best-in-class product, Bonfire needs to push forward which often involves taking risks. Not all risk can be transferred to third parties through insurance policies, contracts or waivers, as such the management of residual risk at all levels of the organization is imperative.

Purpose

Bonfire is committed to building increased awareness and a shared responsibility for risk management at all levels of the organization. This policy is intended to assist in decision making processes support the acceptance of risk, improve the management of existing uncertainty and the approach to new opportunities.

Definition of Risk

Bonfire defines risk as the possibility that an uncertain event, action or set of circumstances which, if to occur, would have a material adverse effect.

Risk Appetite

Bonfire is entrusted with sensitive business information from our clients, as well to run and maintain an application for a time sensitive business process. As such, Bonfire has a low appetite for risk.

Our internal motto on this is; *“Never break anything and figure out how to move as fast as possible.”*

We recognize by taking a lower appetite for risk can sometimes be – and is seen as – a trade-off for the ability move quickly. Given the increase of high profile data breaches within the industry in recent years, now more than ever it is important to take a stance of having a low appetite for risk.

Responsibilities for Risk Management

Every staff member of the Bonfire is responsible for the effective management of risk including the identification of potential risks. Managers and Executives are responsible for the development of risk mitigation plans and the implementation of risk reduction strategies. Risk management processes should be integrated with planning processes and management activities.

Support and Incident Management Policy

Confidential | Support and Incident Management Process and Policy

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Purpose of Document

This document details Bonfire's support and incident management policy and processes for dealing with customer support, privacy and security, maintenance, and disaster recovery. The document serves as (1) an internal guide for Bonfire staff in managing these activities, and (2) a clear and understandable service level commitment for customers.

Key Definitions

Downtime

Complete unavailability of web channel to the user as measured at the Bonfire platform's internet access point. Network unavailability from user to the web server is not included. Downtime may be planned (as in the case of maintenance) or unplanned (as in the case of disaster). An outage must persist for more than 15 minutes to be considered downtime.

Solution Maintenance

Includes major maintenance activities, improvements, and/or upgrades to core platform and/or features. May require downtime. May cause changes in how customer operates business processes / workflows in Bonfire.

Solution Patches

Includes minor maintenance activities, improvements, and/or upgrades to core platform and/or features. Does not require downtime. Does not cause changes in how customer operates business processes / workflows in Bonfire.

Communication Standards

This document references communication standards which are defined in the Communication Standards Policy document.

Support Performance

Tier 1 Incidents

Tier 1 incidents have a major impact on customer ability to operate entire business processes. No work-around or manual process is available.

Communication Standard: Incident Response Level A

Tier 2 Incidents

Tier 2 incidents include minor system or component failure or malfunction causing impact on customer ability to operate significant business processes. No work-around or manual process is available.

Communication Standard: Incident Response Level B

Tier 3 Incidents

Tier 3 incidents include component failure or malfunction not causing impact on customer ability to operate significant business processes. Work-around or manual processes are available.

Communication Standard: Incident Response Level C

Support Requests

Customer support requests not relating to an incident will be responded to promptly. Start work and resolution times are dependent on the nature of the request.

Communication Standard: Incident Response Level C (for initial response only)

Maintenance Windows and Service Notifications

Bonfire will provide notification of planned maintenance and service depending on the impact to the customer and the duration of impact.

Maintenance Type	Communication Standard
Planned emergency outage.	Event Notification - Planned C
Planned emergency maintenance including but not limited to urgent patches.	Event Notification - Planned C
Regular maintenance (requiring downtime) including but not limited to defect fixes, software patches and hardware maintenance. Downtime of 4 hours or less.	Event Notification - Planned B
Regular maintenance (requiring downtime) including but not limited to defect fixes, software patches and hardware maintenance. Downtime of more than 4 hours.	Event Notification - Planned A

All solution maintenance shall be performed outside of core business hours and be no longer than 8 hours in duration.

All solution patches may be performed during core business hours, without advance notice to customer.

Unplanned Event Notification

Bonfire may need to communicate events to customers that were not planned. Such events may include, but are not limited to, the following:

- Emergency maintenance
- Internet/network outages beyond Bonfire's control affecting the Bonfire application
- Unplanned service degradation
- Natural Disasters affecting the Bonfire application

Communication Standard: Unplanned A

Security and Privacy Breach Notification

In the event of a security or privacy breach, Bonfire will notify the affected parties. In the case of a breach involving organizational data, organization contacts or affected organizations will be notified. In the case of a personal data breach, the affected individuals will be contacted.

Communication of any such event will describe the nature of the event, the information affected, likely consequences, measures that Bonfire will take, and any recommended actions the affected parties should take.

Communication Standard: Unplanned A (from time of detection)

Privacy and Security

Mitigation

In the event of a privacy or security breach Bonfire will ensure that any compromised user account(s) are disabled immediately after a breach is discovered.

Documentation

Bonfire will provide documentation explaining the breach, its' impact, and steps that were taken in response to the breach.

Disaster Recovery and System Recover

Disaster Recovery

Requirement	Expected Service Level Value
Bonfire will ensure the mean time to recovery from an unplanned outage will be within the following period:	Four (4) hours
Bonfire will ensure that the solutions recovery time objective (RTO) allowing the solution users return to operations will be as follows:	The recovery time objective will be 1 day. Critical business functions will be resumed within 24 hours of disaster. Necessary business functions will be resumed immediately following the resumption of critical functions but no longer than 7 elapsed days. Desirable functions shall be resumed immediately following the resumption of necessary function, but no longer than 30 elapsed days following a disaster.
Bonfire will ensure that the recovery point objective (RPO) will be as follows:	The recovery point objective will be two (2) hours. The recovery point is defined at the time between the disaster event and the historical point to which data will be restored.

Solution Recovery

Requirement	Expected Service Level Value
Bonfire will ensure that after any service disruption, security breach, or other event that may impact the integrity of customer data, the solution recovery period to restore/clean/restart compromised system and data to last point of integrity will be as follows:	8 hours for tier 3 incidents, 24 hours for tier 2 incidents and 48 hours for tier 1 incidents.

Appendix B - Bonfire Change Management

Change Management

To best address change management, and to reduce the time to value, Bonfire recommends breaking out the implementation of the solution into four general segments.

Segment One: Bonfire Sourcing and Contract Management

The first two items that are addressed are Strategic Sourcing and Contract Management. Strategic Sourcing takes little upfront work to deploy, and is mostly dependent on the successful training of procurement staff, vendors, and evaluators. Procurement staff can continue to receive requests from internal customers the same way they do today, and can continue to create solicitation documents the same way they do today.

In the first segment, Bonfire starts work to post opportunities. The city will post their opportunities on Bonfire, receive electronic submissions from suppliers through Bonfire, the RFx evaluation tabulation/evaluation will occur in Bonfire, and the recommendation for award will be made and communication through Bonfire. Bonfire creates exports out of the system so the necessary data can be imported back into the Peoplesoft system to continue with the procurement transaction.

There have been instances of organizations who post live projects as quickly as a few weeks after finalizing their contract. The administrative lift to get to that point is relatively low, and the value of digitizing the sourcing workflow is high. This allows progress quickly for the procurement staff, and it allows other resources to invest time into other components of the software that require more administrative effort.

Contract management can also begin to be addressed in phase one. It is a component that typically requires a high amount of planning, data cleanup and configuration. A gap analysis will be conducted with the City and Bonfire implementation to understand what work needs to be done on both sides to import the City existing data into Bonfire. The setup and data cleaning process typically takes longer than the setup of the sourcing component, but this setup will not block any other actions within the Bonfire platform. It can be started soon, and be continued to be worked on until the portal is configured correctly, and the data is ready for import.

Segment Two: Bonfire Solicitation Builder

Once the team is comfortable using some of the core sourcing workflows, the City can use some of its existing resources to build Bonfire's File Library and Solicitation Builder abilities. There is some administrative work required here. Existing word/RFX templates need to be formatted and structured in Bonfire's File & Clause Library. Following the import of documentation, documentation pieces can be associated with project types. As an example, there might be a clause for a professional services RFP utilizing federal funds that will not be found on an informal quote template.

In addition to the documents, the City can also begin to template out project workflows in their Bonfire templates. Approval steps, evaluation groups, documents, criteria, people, and vendor invites can all be templated out to eliminate redundant steps when running new projects. This segment will only increase efficiency when it comes to using the sourcing process, but the configuration times and work required can add lead time to getting live events posted on the system. It's for this reason this is recommended as the second segment to approach.

Segment Three: Bonfire Intake

Bonfire Intake gives the City the ability to receive intake requests from their internal customers directly into Bonfire. It's from that point that the request can be categorized as a type of project, and the appropriate template can be used, based on the project type. While there isn't a large amount of effort needed to configure Bonfire Intake, we recommend it is handled later since the most value from Intake comes from having the other elements of the system set-up.

Bonfire's Intake system is designed to be a self-service environment for internal customers to submit requests, so there is training and enablement required to let internal customers know about the new process. This training has been most successful when the Procurement staff has a working knowledge of the system, and it's clear for the internal customers to see how their request moves through Bonfire up until award.

Appendix C - Bonfire Communications Plan

BONFIRE IMPLEMENTATION

COMMUNICATIONS MANAGEMENT PLAN

Version **2.8**
01/12/2023

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1 INTRODUCTION

1.1 PURPOSE OF COMMUNICATIONS MANAGEMENT PLAN

The overall objective of a Communications Management Plan is to promote the success of a project by meeting the information needs of project stakeholders. The *Bonfire Implementation* Communications Management Plan (CMP) defines the project's structure and methods of information collection, screening, formatting, and distribution and outline understanding among project teams regarding the actions and processes necessary to facilitate the critical links among people, ideas, and information that are necessary for project success.

The intended audience of the *Bonfire Implementation* CMP is the project manager, project team, project sponsor and any senior leaders whose support is needed to carry out communication plans.

2 STAKEHOLDER IDENTIFICATION AND ANALYSIS

Name	Title	Contact	Communication	Vehicle	Comments
<i>Mitchell Shim</i>	<i>Manager, Implementation & Professional Services, Bonfire Interactive</i>	<i>800-354-8010 x5700 mshim@gobonfire.com</i>	<i>Status Reports, Scheduling Training, Internal Project Status Meeting</i>	<i>Email and Phone</i>	<i>N/A</i>
TBD	Implementation Specialist		Scheduling Training, Scheduling Ramp-up Sessions	Email and Phone	
TBD	Client Success Manager		Scheduling Quarterly Check-ins, Scheduling <i>Adhoc</i> Training Sessions	Email and Phone	

3 COMMUNICATIONS VEHICLES

3.1 COMMUNICATIONS MATRIX

Vehicle	Target	Description Purpose	Frequency	Owner	Distribution Vehicle	Internal/ External
<i>Status Report</i>	<i>All Stakeholders</i>	<i>One page communication of project progress and deliverable status</i>	<i>Weekly</i>	<i>Mitchell Shim (PM)</i>	<i>Email</i>	<i>External</i>
Resource Communication	End-Users	After each training session, IS will send a recording of each training session with additional Bonfire	Once per Training Session per Business Unit	Implementation Specialist	Email	External

Bonfire Implementation Communication Plan

		Academy Resources to be completed.				
Announcement	Vendors	Notify vendors that your process has changed and have vendors proactively register for your Portal	Once	Mitchell Shim (PM)	Email	External
Optional – Announcement	Internal Organization	Notify Internal Organization of process shift and use of Bonfire	Once	Client Implementation Champion	Email/Memo	External
Optional – Press Release	General Public	This media release can be used by your team to showcase your leadership with moving to a digital procurement process	Once	Client Implementation Champion	Media Release	External

3.1.1 Project Meetings

Meeting	Description Purpose	Frequency	Owner	Internal/ External	Comments/ Participants
<i>Kick-off</i>	<i>Implementation Kick-off</i>	<i>Once</i>	<i>Mitchell Shim (PM)</i>	<i>External</i>	<i>Implementation will begin, discuss key objectives, Training Plan and ramp-up schedule. Key Stakeholders per Business Unit must be involved.</i>
<i>Action Item Follow up and Planning</i>	<i>Implementation Adjustment Meeting</i>	<i>Once</i>	<i>Nathan Tarr</i>	<i>Internal</i>	<i>PM, IS</i>

Bonfire Implementation Communication Plan

Training	Solicitation Training	Once per Business Unit	TBD	External	IS, End-Users
Training	Vendor Communication and Evaluation Training	Once per Business Unit	TBD	External	IS, End-Users
Training	Questionnaire Training	Once per Business Unit	TBD	External	IS, End-Users
Training	BidTables Training	Once per Business Unit	TBD	External	IS, End-Users
Training	Vendor Management and Reporting	Once per Business Unit	TBD	External	IS, End-Users
Training	Contract Management Training	Once per Business Unit	TBD	External	IS, End-Users
Status Meeting	Communication of project progress and deliverable status	Weekly	Mitchell Shim(PM)	External	Key Stakeholders per Business Unit must be involved Meeting will occur Thursday before 12:00 pm CT
Action Item Follow up	Action Items that have been allocated will be discussed with Timelines.	Adhoc	Mitchell Shim (PM)	External	Action Item Holders and Key Stakeholders
Management Meeting	Communication of project progress and deliverable status	Monthly	Mitchell Shim(PM)	External	Key Stakeholders per Business Unit
Transition	Client Success Manager Transition Meeting	Once	Mitchell Shim(PM)	External	Client Success Manager, PM, Key Stakeholders
Check-In Meeting	Quarterly Check-in	Quarterly	TBD	External	Client Success Manager, Key Stakeholders

3.1.2 Project Reporting

Meeting	Description Purpose	Frequency	Owner	Internal/ External	Comments/ Distribution List
Status Report	Communication of project progress and deliverable status	Weekly	TBD(PM)	External	As follow up to Weekly meeting.
End of Project Report	Communication of outcomes of Implementation	Once	TBD (PM)	External	

3.1.3 360 Communication Plan

This plan can be utilized to assist with communicating with other stakeholders outside of the Bonfire Implementation.

3.1.3.1 Email Templates

PACKET

6 201

April 25, 2023

Please feel free to use the following email templates to communicate your teams' exciting move to Bonfire. These templates are designed to help stakeholders understand how your team is focused on achieving great results and placing an effort on improving collaboration within the organization.

3.1.3.2 Corporate Announcement

Hello All,

Our department has contracted an online procurement software, called Bonfire, to help us make substantive time and cost savings within our procurement process and create better collaboration for purchasing activities across the organization.

Bonfire will help us achieve the following:

- Provide faster service to internal departments on procurement requests
- Enable better collaboration from stakeholders through an easy-to-use tool
- Enable a positive user-experience for those who need to review projects
- Become more sustainable by using less paper
- Obtain better value goods and services for our <customers/students/community>
- Ensure compliant procurement activities for audit-tracking

Our department looks forward to partnering with you on future procurement requests.

Regards,

<Department Contact>

Internal Stakeholders Announcement

Hello All,

We're excited to announce that our department has contracted an online procurement software called Bonfire to help us make substantive time and cost savings within our procurement process and improve collaboration for purchasing activities across our organization.

What this means for you

You have previously participated in procurement activities, which means you will likely be provided with access to Bonfire in the future. But don't panic! The system is very easy to use. Through an online portal, you'll see information that is only relevant to you. Additionally, you can access the system anytime, from any location, which means supporting procurement activities will be fast and simple so you can return to your work quickly.

Training and support

Occasional users will gain access to projects when necessary and will not require training. Regular users will be contacted directly and provided with training. Additional support coverage is available through Bonfire for those who prefer it:

- Bonfire email support: support@gobonfire.com
- Bonfire online knowledge base for self-help support: <https://support.gobonfire.com/hc/en-us>
- Bonfire FAQ: <https://help.bonfire.com/>

We look forward to working with you soon!

<Department Contact>

3.1.3.3 Vendor Announcement

Hello All,

We're reaching out to inform you that <insert organization name> is now using Bonfire, an online procurement software, to help us keep track of your information and maintain better communication with you. Here's what this best-in-class sourcing platform help with:

- Save time and money with online RFx responses - paper printing and snail mail is no longer required!
- Communicate with our team during the bid and RFP process through Bonfire's message center for centralized conversations and simplified record keeping
- Update your details and documents like contact information, insurance forms, and NDAs on your own time in minutes

Ranked as one of the easiest sourcing tools to use in the market. Setup your account in minutes by visiting: www.organizationname.bonfirehub.com/login

Watch this [5 minute training video](#) to learn how to get started. For questions or support needed when using the platform, access the [online knowledge base](#), search the [FAQ](#), or can contact the Bonfire support team at support@gobonfire.com or by calling 1-800-354-8010.

We look forward to working with you,

<Department Contact>

3.1.3.4 Media Release Template

This media release template can be used by your team to showcase your leadership with moving to a digital procurement process. Please ensure all red fields are updated. Please feel welcome to edit any of the below template to better represent your organization. For a custom quote from a Bonfire executive, please email press@gobonfire.com.

For Immediate Release

Organization Name Moves to Digital Procurement Process with Bonfire Procurement Software

Digital transformation of procurement activities expects to yield better value for community/patients/students/etc, improved internal collaboration, and strengthen vendor relations

(CITY, STATE, Month dd, yyyy) - Today Organization Name has contracted Bonfire, an online procurement software, as their latest vendor to support organizational objectives of cost and time savings, improved collaboration across internal departments, and strengthened vendor relations.

PACKET

6-203

April 25, 2023

Organization Name is joining a digital transformation as they integrate this cloud-based platform into business processes and gain capability that wasn't previously possible. The results will lead to opportunities that directly relate to better outcomes internally and for the organizations' greater community.

"We're thrilled to partner with **Organization Name** and support the digital transformation of their procurement workflow," said, Omar Salaymeh, Executive Direct of Client Success. "Bonfire has had great success working with similar clients in the field and we look forward to bringing tangible results to the team at **Organization Name**."

Bonfire provides software that helps procurement teams find the right vendors to work with through the RFP and bid process to make best-value spending decisions. The platform offers an automated workflow, built-in compliance for purchasing processes, and simplifies RFP evaluations with easy-to-use tools.

About Bonfire Interactive Inc.

Bonfire Interactive Inc. ("Bonfire") is a subsidiary of GTY Technology Holdings Inc., and a leader in strategic sourcing and procurement software. Bonfire empowers organizations to make the right purchasing decisions. With tools to support the entire vendor lifecycle (sourcing, contract management, and vendor performance), Bonfire goes beyond traditional mechanics of standard procurement suites to make complex decision-making easy. The combination of flexible technology and world-class customer service makes Bonfire the solution of choice for both public and private sector organizations of all sizes around the globe. Bonfire was named a 2018 Gartner Cool Vendor and proudly reports a client retention rate greater than 96 percent. www.gobonfire.com.

3.1.3.5 Top 10 Benefits of Using Bonfire as a Supplier

1. TIME SAVINGS

The number one benefit of using Bonfire's electronic submission reported by vendors is time savings. Electronic submission eliminates the administrative workload of printing, copying, assembling, binding, and delivering/sending bids, giving vendors more time to devote to the content of each response.

2. FAIL-PROOF DELIVERY

Whether transporting submissions themselves or hiring a courier, the delivery of paper bids is a significant source of risk for vendors. Multiple unknowns could interfere with the successful delivery of bids including delays due to traffic or weather, parking issues, difficulty finding the right building, courier error, and misplaced or mishandled bids. Bonfire's electronic submission removes those risks, ensuring instantaneous delivery and confirmation of receipt, and in turn giving vendors greater confidence in the process.

3. EASE OF SUBMISSION

Bonfire's electronic submission often means an easier process for vendors. Not only can teams cut down on printing and copying tasks, the online portal provides a clear structure to ensure that vendors submit each piece of information that is required of them. There is no guesswork or room for misunderstanding of the required information.

4. ACCESSIBILITY

With electronic posting and submission, vendors can access and submit to open opportunities anytime, anywhere. Electronic posting also ensures that all related documents and communication are centralized in one place.

5. COST SAVINGS

Aside from time savings and peace of mind associated with Bonfire's electronic submissions, vendors experience hard dollar savings as a result of no longer investing in printing, binding, and courier/transportation costs.

6. ENVIRONMENTAL BENEFITS

Reduce paper and transportation emissions through Bonfire's electronic submission process. Though it may seem trivial, when you consider that the average RFP submission is 112 pages in length, the paper piles up quickly ([State of the RFP Study](#)). It's a win-win situation for vendors and procurement teams to reduce their paper use and [improve office sustainability](#) practices.

7. Exceptional Service and Support

Bonfire is humbled by its clients and those who use the tool, including stakeholders and vendors. The team understands the importance of exceptional customer service, and with a 98% retention rate, it seems the team is doing something right. To ensure this level of success, Bonfire provides live phone, email and chat support (with real people, not automated systems!) to vendors at no additional cost. They also an online resource center if vendors prefer to self-help themselves through the FAQ.

8. No Hidden Fees

The Bonfire business model is designed to encourage vendors to participate in bid submissions that relate to their goods or service offering. Therefore, it is free for vendors to set up a Bonfire account and submit responses through the portal.

9. Centralized communications

Submitting questions via email, phone or fax and managing multiple notifications and inquiries from prospective buyers can be a daunting task. Bonfire's sourcing platform allows all communications to be completed within the tool. Centralizing inquiries and allowing vendors to see all relevant information easily.

10. Supplier Information Management

Once the contract is awarded, buyers can create vendor documents within Bonfire and associate them with vendor types, which allows the vendors to easily upload relevant, up to date documents before they submit to bids, ensuring all information is current.

3.1.3.6 Top 5 Impacts on Citizens when Procurement Teams use Bonfire

1. Better Deals on Goods and Services

Bonfire is designed to encourage multiple vendors to submit responses to bids. More vendors submitting bids creates healthy competition, meaning the municipality has an opportunity for better deals, whether it comes down to cost alone or higher value service for a fair price.

34002688. Faster Procurement means Faster Results

A faster turnaround of procurement projects means faster results for the community. In fact, Bonfire has proven that most clients can run projects two times as fast.

34002432. Transparency

Plain and simple: Bonfire enables dashboards and reports so procurement teams can quickly and easily share information about how funds are being allocated, whether that means how taxpayer dollars or grants are being spent.

34002240. **Cost savings**

Clients using the Bonfire sourcing platform save an average of 12% on projects. Imagine what that means when your city is purchasing a new fire truck or completing sewage maintenance. It leaves the door open for cost savings to be reinvested into new areas in the community.

34002304. **100% Compliance**

This doesn't seem exciting at first, but it's important to note so that citizens can have peace of mind knowing that their government is completely in align with the law. Those using Bonfire are automatically spending money in a way that is 100% compliant because the platform has built-in tools that ensure it. Therefore, you won't have to read about your government being caught up in any spend scandals!

Appendix D - Bonfire Quality Management

1. Quality Management Approach

The purpose for managing quality is to validate that the project deliverables are completed with an acceptable level of quality. Quality management assures the quality of the project deliverables and the quality of the processes used to manage and create the deliverables.

The quality management plan identifies these key components:

Objects of quality review	Quality Measure	Quality Evaluation Methods
Project Deliverables	Deliverable Quality Standards Completeness and Correctness Criteria	Quality Control Activities
Project Processes	Process Quality Standards Stakeholder Expectations	Quality Assurance Activities

The following is a brief explanation of each of the components of the quality management plan.

Project Deliverables and Processes	The key project deliverables and processes subject to quality review.
Deliverable Quality Standards and Completeness and Correctness Criteria	The quality standards that are the “measures” used to determine a successful outcome for a deliverable. The completeness and correctness criteria describe when each deliverable is complete and correct as defined by the customer. Deliverables are evaluated against these criteria before they are formally approved.
Process Quality Standards and Stakeholder Expectations	The quality standards that are the “measures” used to determine if project work processes are being followed. Stakeholder expectations describe when a project process is effective as defined by the project stakeholders. An example is the expectation to be regularly informed monthly of project status.
Quality Control Activities	The quality control activities that monitor and verify that the project deliverables meet defined quality standards.
Quality Assurance Activities	The quality assurance activities that monitor and verify that the processes used to manage and create the deliverables are followed and are effective.

2. Quality Management Objectives

The following are the quality objectives of the project that reflect the overall intentions to be applied with regard to quality throughout the project.

- Deliverables align with industry best practices for E-Sourcing/Procurement
- Deliverables are usable

3. Project Quality Control

The focus of quality control is on the deliverables of the project. Quality control monitors project deliverables to verify that the deliverables are of acceptable quality and are complete and correct. Note: As Bonfire is an out-of-box SAAS Platform, this Project Quality Control addresses Training and Ramp-up with Bonfire and not Custom Development.

The following table identifies:

- The major deliverables of the project that will be tested for satisfactory quality level.
- The quality standards and the correctness and completeness criteria established for the project deliverable. Included are any organizational standards that need to be followed.
- The quality control activities that will be executed to monitor the quality of the deliverables.
- How often or when the quality control activity will be performed.

Project Deliverable	Deliverable Quality Standards/ Completeness and Correctness Criteria	Quality Control Activity	Frequency/Interval
Kick-Off	QC 1 Outline Implementation Plan and Training Plan	Core Team Review	Once prior to Implementation (If Departments are implemented independently, once per department)
Training	QC.2 Department has been trained on the Tool (75%)	Post-Training Bonfire Academy Courses with Qualitative Assessment (Test)	Per Training Session (Per Group/Sub-Group)
Ramp-Up	QC.3 Each Buyer runs first project (75%)	Establish Project Debrief with Buyer and Direct Manager/Supervisor.	Once per Project/Buyer

4. Project Quality Assurance

The focus of quality assurance is on the processes used in the project. Quality assurance ensures that project processes are used effectively to produce quality project deliverables.

The following table identifies:

- The project processes are subject to quality assurance.
- The quality standards and stakeholder expectations for that process.
- The quality assurance activity – such as a quality audit or reviews - that will be executed to monitor that project processes are properly followed.
- How often or when the quality assurance activity will be performed.

Project Process	Process Quality Standards/ Stakeholder Expectations	Quality Assurance Activity	Frequency/Interval
QA1. Develop/refine project charter	100% compliance with framework	Audit charter updates by phase	Once per project phase
QA2. Develop/refine Implementation/Training plan	100% compliance with framework	Audit plan content and updates, project priorities, and task estimation	Once per project phase
QA3. Execute and control project per project plan	75% compliance with framework	Audit the following project activities: ✓Quality ✓Communications ✓Project progress	Upon completion of each training session/Bonfire Academy Course Monthly Monthly
QA4. Close project with post project review	100% compliance with framework	Audit project reviews by phase	Once per project phase
QA 5 Client Success Manager Check-ins	100% compliance with framework	Quarterly Check-in with Client Success Manager to highlight adoption and new features	Quarterly

When addressing the specific elements of the project, there are background measures in place to ensure that the software that Bonfire deploys meets the highest standard of SaaS software. Bonfire will create a specific plan to capture and report on the needs of the City of Midland, but the following measures are in place for 100% of Bonfire deployments. These measures include:

- QA and Deployment
- Tools and workflow to capture customer feedback
- Feature development methodology

QA and Development

Bonfire does not always move the updates and bug fixes directly to the client sites. The code line is deployed to several environments (development, testing, staging, and production) prior to deployment to production. The code first reaches a test environment that is used by the developers during the sprint for QA and verification. It is then promoted to the staging environment for internal UAT by staff across the company in the Product, Sales, Support, Customer Success, and Implementation teams.

Each of the environments (development, testing, staging, and production) are instrumented with SLI/SLO/SLA telemetry and targets which monitor individual metrics for load/response time/reliability.

Monitoring and automated alerts of system and function performance against these metrics is done on a continuous basis during the Software Development Life Cycle. This enables developers to stress test and verify the potential performance issues early in the development process. It also enables discovery and remediation paths for issue that may arise in a different environment through measurement of deviation for performance metrics between environments

Upon completion of internal UAT, the code line is deployed to production so that we can make sure the quality is met and there are no additional costs for general updates

Tools and workflow to collect feedback

Bonfire uses Zendesk to gather and prioritize the tickets from the users, these tickets are properly prioritized and channeled to the right teams within the organization. Bonfire also uses Jira to track development work and bugs related to the Bonfire application. In Jira, we have defined workflows to manage bugs in the application so that they are properly prioritized and addressed. After planning the work items, we have mechanisms in place to plan release schedules. There are regular release milestones to ensure the timely completion of key projects.

Feature Development Methodology

The platform is delivered as a SaaS application, as such there is only a one-version of the system available which is deployed to the production environment every two-weeks.

To ensure the solution meets the business requirements and maintains backward compatibility all features are developed behind feature flags. This allows the code to be regularly updated, and features to be enabled individually for alpha and beta versions to clients in production. Once features have gone through alpha and beta versions they move to General Availability and are either mass enabled or remain behind a feature flag for optional use based on organizational preferences

5. Quality Team Roles & Responsibilities

The following identifies the quality-related responsibilities of the project team and lists specific quality responsibilities.

Project Team Role	Quality Control and Quality Assurance Responsibilities	Assigned Resource
Project Manager	QA1 – Ensure Project Charter is up-to-date QA2 – Ensure Implementation plan is reviewed and deliverables are being met. QA3 – Ensure practice of quality control measures and communications in project plan QA4 – Debrief team on project closeout.	Mitchell Shim
Account Executive	QA1 – Assist in development of Project Charter based on RFP.	Willow Stuart
Implementation Specialist/Trainer	QA2 – Conduct training and facilitate Ramp-up / debriefs with Buyers. QA4 – Participate in Debriefs	Mitchell Shim
Additional Implementation Specialist/Trainer	QA2 – Conduct training and facilitate Ramp-up / debriefs with Buyers.	TBD

	QA4 – Participate in Debriefs	
Core Team Members	QA1 – Ensure Project Charter is reflects actual needs of organization QA2 – approve implementation plan QA3 – Actively response to communications. QA4 – Participate in Debrief team on project closeout.	TBD per business units
Client Success Manager	QA5 – Conduct Account Reviews	Brandon Zanussi

6. Ensuring Project Completion and Remedying Issues

If the City of Midland were to have any issues with their training or implementation of Bonfire, Bonfire ensures that the City will have access to unlimited resources to remedy any issues. Bonfire provides unlimited training and support for all users, which means that the City is guaranteed to be given as much support needed to hit their milestones and configure Bonfire based on the City needs. Any specific workflow issues, or product development recommendations will be recorded by Bonfire staff, and processed through the channels to escalate issues as needed. Any pressing issues can be resolved with hotfixes, and any feature development requests will be taken into consideration to meet the needs of the City of Midland, and the rest of the Bonfire user base.

Bonfire is committed to ensuring that the training and implementation of Bonfire is completed based on the timeline desired by the City of Midland. Bonfire can increase the frequency of meetings to ensure that the necessary time is allocated to City staff to ensure they are completing on schedule.

The Bonfire cost proposal is a fixed and hard cap. Bonfire has never charged a customer more for a service, training or software than what is communicated as the price. That price includes unlimited training, support, configurations, and implementation resources needed to get the job done on-time, quickly, and in a way that completely reduces any risk of the cost for the City increasing.

Appendix E - Bonfire SSO Configuration

Bonfire Single Sign-On

Bonfire Single Sign-On (SSO) is based on the [SAML 2.0 protocol](#).

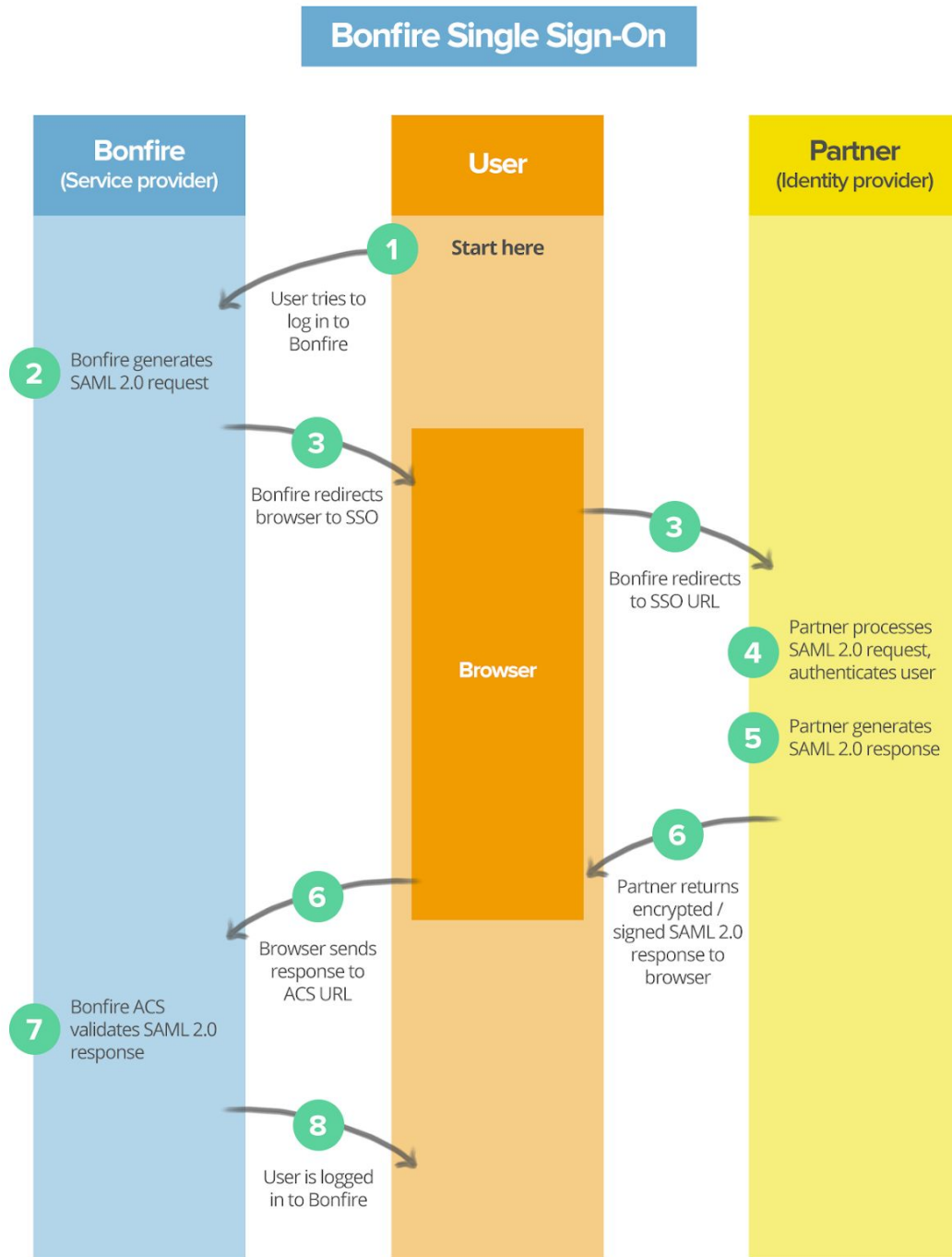


Figure 1: Logging in to Bonfire using Single Sign-On

In order to get set up with Bonfire SSO, your Identity Provider (IdP) will need to be configured with some information/data that we will be available here:

<https://example.bonfirehub.com/saml/metadata> (Note: this is a template document and this should be changed to the client portal name once configured)

You will also need to provide Bonfire with the URL to your IdP's metadata.

Bonfire SSO uses the following NameIDFormat:

```
<md:NameIDFormat>  
  urn:oasis:names:tc:SAML:1.1:nameid-format:unspecified  
</md:NameIDFormat>
```

And requires the following attributes:

Friendly Name	Formal Name
mail	urn:oid:0.9.2342.19200300.100.1.3
givenName	urn:oid:2.5.4.42
sn	urn:oid:2.5.4.4

The Bonfire SSO Assertion Consumer Service (ACS) does not support friendly names at this time, so the formal names will need to be included in the SAML 2.0 response.

The ACS requires that the `<saml:Assertion>` elements received are both signed and encrypted. The metadata has a KeyDescriptor of type "encryption" with the public key to use for the encryption.

Once Bonfire SSO is set up, when a user tries to log in at `example.bonfirehub.com` with an email address that ends in one of the provided email domains (e.g. `@example.com`), the user will be redirected to your IdP for authentication. Any other users that do not have email addresses that end in one of the provided email domains (e.g. vendors) will be able to log in to Bonfire with their email/password as normal.

Testing

Before enabling Bonfire SSO in your production portal, it is strongly recommended to test the SSO integration in our sandbox environment first so any issues can be identified without risking disruption to your users. Bonfire's sandbox environment is set up almost identical to production except for the domain name and x509 cert will be slightly different.

The following steps will guide you through the process and expectations for testing your Bonfire SSO integration

1. Bonfire has provisioned a test portal for you to verify your SSO integration. Use the following test SAML metadata to set up a new Relying Party for testing Bonfire SSO <https://sso.bonfirehub.com/saml/metadata> (Note: this is a template document and this should be changed to the client portal name once configured)
2. Please provide Bonfire with an email address(es) to be invited to the test portal. An email invite will be sent which gives access to test the SSO login flow.
3. If you have any issues or experience errors during setup or testing, please reach out to sso.setup@gobonfire.com to contact a Bonfire Developer who will assist with your SSO integration. Expect a 1-2 day maximum response time from Bonfire Developers
4. Once the SSO integration is confirmed to work successfully in test, make sure your production SSO configuration mirrors your working configuration in test.
5. A Bonfire Developer will coordinate with you to determine a suitable go-live time to enable SSO in your production Bonfire portal. During go-live, the Developer will be available to troubleshoot if any issues arise.

Troubleshooting

Error: NameID not found in the assertion of the Response

If you are using ADFS as your IdP it is common to encounter the following error: "NameID not found in the assertion of the Response". The solution is to include the NameID in your claim rules. The screenshot below shows the typical ADFS claim rules that work with Bonfire SSO. You may also find this Microsoft support article helpful, <https://social.msdn.microsoft.com/Forums/vstudio/en-US/a3fa1761-8594-4511-bb45-45b5bc246579/adfs-30-relying-party-trust?forum=Geneva%E2%80%8B>.

Edit Rule - Bonfire Claim Rules

You can configure this rule to send the values of LDAP attributes as claims. Select an attribute store from which to extract LDAP attributes. Specify how the attributes will map to the outgoing claim types that will be issued from the rule.

Claim rule name:
Bonfire Claim Rules

Rule template: Send LDAP Attributes as Claims

Attribute store:
Active Directory

Mapping of LDAP attributes to outgoing claim types:

	LDAP Attribute (Select or type to add more)	Outgoing Claim Type (Select or type to add more)
▶	E-Mail-Addresses	um:oid:0.9.2342.19200300.100.1.3
	Given-Name	um:oid:2.5.4.42
	Surname	um:oid:2.5.4.4
	SAM-Account-Name	Name ID
*		

Error: The assertion of the Response is not encrypted and the SP requires it

This error indicates that you are not encrypting the signed assertions in the SAML response. By default Bonfire expects the SAML assertions in the response to be signed with your organization's private key **and encrypted** with Bonfire's public key. Since it is optional to **encrypt** assertions, you may request Bonfire to disable this requirement for your organization.

Unauthorized error despite entering valid credentials

Do you have multiple email addresses or aliases that belong to you at your organization?

- No. Contact a Bonfire developer at sso+setup@gobonfire.com.
- Yes. Bonfire may identify you by a different email alias than your internal authentication system which causes Bonfire SSO authentication to fail. Check which email address was used to invite you to Bonfire and confirm that it matches the Email claim in the SAML Response. Bonfire depends on the Email claim to identify the Bonfire user account.

Appendix F - Bonfire GANTT Chart

Included in excel format with digital submission

Appendix G - Addendum 1 - 4

CITY OF MIDLAND

ADDENDUM

BID # 23001936

TO ALL BIDDERS ON THE SUBJECT BID:

ADDENDUM # 1

DATE: January 5, 2023

The following question was raised by one or more of the proposers. The answer is provided as a matter of clarification for all proposers as follows:

Q1. Will the City be needing upstreaming and down streaming procurement, for example: requisitions, invoicing, accounts payable etc.?

A1. The City is only looking for an E-bidding procurement at this time.

Q2. Was Attachment 2 based on a specific system or created in-house by end-users?

A2. The Attachment 2 was developed in-house by end-users based on internal fact-finding and requirements planning sessions. The requirements workbook is vendor agnostic, identifying the critical and desired functionality of a new system without prescribing the way a system would address the requested features and functions.

Q3. Will the City provide pages 10 through 25 in a word version?

A3. The City included as part of this addendum a protected MS Word version of Section 5: Narrative ("City of Midland RFP 23001936 E-Bidding Software and Implementation Services - Section 5. Narrative (Protected)"). The protected MS Word version enables proposers to respond to the narrative questions and forms without altering the original RFP information.

Q4. Will the City extend the bid opening date?

A4. As of now, the City will not be extending the bid opening date.

Q5. Please clarify the RFP submittal.

A5. Please attached the original Response for Proposal.
Provide your company's Proposal form.
Attach all the Requested attachments provided, below is the list.
Attachment 1 – Signed Execution Offer
Attachment 2 – Functional and Technical Requirements (MS Excel)
Attachment 3 – Cost Worksheets (MS Excel)

Attachment 4 – Sample Contract

PLEASE RETURN THIS ADDENDUM WITH YOUR BID BY THE CLOSING DATE.

All other terms and conditions shall remain the same.

Bonfire Interactive Ltd.

Company Name

January 11, 2023

Bidder Authorized Signature

Date

Bill Brunson

416-276-2246

Please Print Above Name

Phone

CITY OF MIDLAND

ADDENDUM

RFP # 23001936

RFP Electronic Bidding (E-Bidding) Software and Implementation Services

TO ALL PROPOSERS ON THE SUBJECT RFP:

ADDENDUM # 2

DATE: January 11, 2023

The following questions were raised by one or more of the proposers. The answers are provided as a matter of clarification for all proposers as follows:

Q1: We would like to understand on how City of Midland is planning to send Invitation for Vendor Registration. Is it through the Website?

A1: The City envisions that the E-Bid Management system will provide functionality that allows vendors to self-register in order to receive electronic bid materials. When the City awards a contract to a vendor, an awarded vendor will register on the City's MUNIS system.

Q2: Is there any separate tool in existence to maintain the contracts once the supplier is onboarded? How are the contracts maintained currently?

A2: The City currently uses MUNIS by Tyler Technologies to maintain and manage contracts.

Q3: Page 3, section 1.15.1.1. There is a mention in the RFP about submission of 1 soft copy. Should we send the soft copy to the mail ID specified in the RFP?

A3: Yes

Q4: Page 14, section 5.2.4. ii. Kindly list down the current systems that are being utilized and the integration that is there with the ERP, if any.

A4: The City currently uses MUNIS for ERP-related functions. The City currently uses manual processes for bid management through disparate tools (e.g., MS Excel) without integrations into MUNIS.

Q5: Page 15, section 5.3.1. ii. Is City of Midland open to hybrid (Onsite/Offshore) resource deployment model? If yes, is there any criteria for the resources to be deployed?

A5: No

Q6: Attachment 3, Subscription Cost Worksheet, There is a section mentioned as "One Time Licensing Cost" which does not seem to align well with a usual subscription-based Licensing model SaaS (where the License price covers both the license utilization and the hardware subscription required to run the servers). In this case, is City of Midland fine with modifying/aligning the cost worksheet according to the proposer's model pertaining to that particular section of the sheet?

A6: Yes, please align the cost response as necessary to account for the Year 1 subscription costs. (Note: Year 1 commences at the date of contract signing). On the Subscription cost worksheet tab, when row 3 is expanded the section header reads "One-Time Cost: Professional Services and Hardware Costs." Please include the associated professional services and hardware costs (if applicable) in rows 5 – 24.

In relation to recurring maintenance costs (if applicable), Year 1 commences at the date of contract signing. The City requests that Year 1 maintenance fees be waived until go-live of the system. If Year 1 fees are waived, please include the actual costs in rows 80-85, and apply the discount at 100% in row 87

PLEASE RETURN THIS ADDENDUM WITH YOUR PROPOSAL BY THE CLOSING DATE.

All other terms and conditions shall remain the same.

Bonfire Interactive Ltd.	
_____ Company Name	
	January 11, 2023
_____ Authorized Signature	_____ Date
Bill Brunson	416-276-2246
_____ Please Print Above Name	_____ Phone

CITY OF MIDLAND

ADDENDUM

RFP # 23001936

RFP Electronic Bidding (E-Bidding) Software and Implementation Services

TO ALL PROPOSERS ON THE SUBJECT RFP:

ADDENDUM # 3

DATE: January 11, 2023

The following questions were raised by one or more of the proposers. The answers are provided as a matter of clarification for all proposers as follows:

Hosting Options

Q1: Would you be open to pricing for the E-Bidding Software to be hosted by vendor (SaaS/cloud) or deployed on your organization's server (on-premise)?

A1: The City is accepting proposals for SaaS and on-premise models.

User Licensing

Q2: How many total users?

A2: The City plans to have six (6) concurrent users on the system.

Q2a: How many internal users will require administrative level access?

A2a: Six (6)

Q2b: How many internal users will require the ability to add, edit and delete?

A2b: Six (6)

Q2c: How many internal users will require request only access?

A2c: The City will collaborate with the awarded vendor during discovery activities to confirm the number of users for request only access.

Q2d: How many internal users will require read-only access?

A2d: The City will collaborate with the awarded vendor during discovery activities to confirm the number of users for read-only access.

Q2e: How many internal users do you project will require access to the system at any given time?

A2e: Six (6)

Data Import

Q3: Does your organization require data import services? If so, please expand upon the data migration / importing requirements for the E-Bidding Software? (Such as record info, employee lists, vendor lists, etc.)

A3: The City will collaborate with the awarded vendor during discovery to confirm the importing requirements for the new software (e.g., vendor lists).

Q3a: How many total electronic files (PDF, MS Word, etc.) in current/legacy system into the E-Bidding Software?

A3a: The City does not have a current E-Bidding Software.

Q3b: How many total electronic files in current/legacy system? (rows in the exported spreadsheet)

A3b: The City does not have a current E-Bidding Software

Q3c: Where are the legacy (historic) electronic contract files currently stored? (shared folders, Sharepoint, document management system, paper, etc.)

A3c: The City stores the document in shared folder on a City drive.

Data Integration

Q4: Can you please expand upon your preferences to integrate with any third-party software solutions? Please provide system details (system name and version, database used, scope of use, home-grown or commercial) if applicable.

A4: The City has not identified any third-party interface requirements.

Q5: Are there any additional systems that may require a one-time data import such as a legacy E-Bidding Software?

A5: The City does not have a current E-Bidding software system.

Q5a: If so, please provide the system name, version, scope of use, the total number of contract records and files being imported into the system and SOAP/REST API, if available.

A5a: Not applicable.

Q6: What objects, fields, and tables will your organization be passing in the data integration between the E-Bidding Software and any third-party software solutions?

A6: Not applicable.

Q7: Are the other systems installed/deployed on your organization's server(s) or is the vendor hosting the software (cloud/SaaS)?

A7: Not applicable.

Q8: Do the third-party software solutions (if any) have one of the following available for integration and your organization has licensed access: SOAP API, REST API?

A8: Not applicable.

Q9: Can you please provide additional details about your organization's process flows or diagrams as it relates to the integration requirements?

A9: Not applicable.

Document Templates

Q10: What documents/contract types would you like to author within the system (number of templates)?

A10: The City will author documents to solicit proposals from vendors, contractors, consultants, etc. The City does not have a predetermined number of templates and is interested in receiving information about the pre-defined templates the vendor offers.

Q11: Do you require professional services to configure templates?

A11: Yes, the City is interested in reviewing professional service approaches and costs to configure templates.

Q11a: If so, how many would be required for the awarded vendor to configure?

A11a: The City will collaborate with the awarded vendor during discovery to confirm the number of templates. The City does not have a predetermined number of templates.

Workflow

Q12: Do you require professional services to configure workflow processes?

A12: Yes, the City is interested in reviewing professional service approaches and costs to configure workflow. The City is interested in receiving power-user/admin training for internal staff to maintain workflow processes in-house after go-live, and would also like to receive costs for ongoing workflow support (as needed).

Q12a: If so, how many would be required for the awarded vendor to configure?

A12a: The City will collaborate with the awarded vendor during discovery to confirm the number of workflows and intends to use the new software to streamline existing workflow.

Q13: Can you please provide additional details about your organization's workflow/approval processes?

A13: The City has a variety of workflow/approval processes based on the opportunity type.

Q13a: Can you please provide number of steps and examples?

A13a: The number of steps varies by opportunity, but requires input from leadership, technical resources, functional SMEs, and procurement officials.

Implementation

Q14: Do you have an established time frame for the implementation of the awarded solution?

A14: No. The City expects the vendor to recommend an implementation duration appropriate for the scope of the request and the vendor's experience with comparable agencies.

Q14a: If so, what are the anticipated kick-off and go-live dates?

A14a: Not applicable.

Q14b: If no specific dates have been established, how many weeks do you plan to dedicate to the implementation process?

A14b: The City expects the vendor to recommend an implementation duration appropriate for the scope of the request and the vendor's experience with comparable agencies.

Public Sector Bids

Q15: Is your organization eligible to purchase off the GSA Schedule 70?

A15: No

Q15a: If yes, would you like GSA pricing in the bid response or retail pricing?

A15a: Not Applicable

Q16: If in the event our response is subject to an Open Records Request, will we be notified and given the opportunity to provide a redacted response in accordance with applicable Freedom of Information laws?

A16: The City does not typically notify the vendor about an open records request.

Additional Questions

Q17: Does the awarded vendors staff have to be e-verified, run through OFAC sanction lists, and meet US working regulations?

A17: Yes

Q18: Does your organization require an electronic signature tool?

A18: No, the City does not require an electronic signature tool.

Q18a: If so, are you currently utilizing a specific product and which tool are you using?

A18a: Not applicable.

Q19: Do you require a testing/staging/DEV environment in addition to production?

A19: Yes, the City is interested in reviewing the environments (and associated costs) the vendor offers.

Q19a: If so, how many internal users would need access?

A19a: Six (6)

Q19b: Please specify the duration in which the testing/staging/DEV environment would need to run for (i.e., ongoing, Year 1 Only, etc.)

A19b: The City intends to conduct regression testing for the life of the product.

PLEASE RETURN THIS ADDENDUM WITH YOUR PROPOSAL BY THE CLOSING DATE.

All other terms and conditions shall remain the same.

Bonfire Interactive Ltd.

Company Name

January 11, 2023

Authorized Signature

Date

Bill Brunson

416-276-2246

Please Print Above Name

Phone

CITY OF MIDLAND

ADDENDUM

RFP # 23001936

RFP Electronic Bidding (E-Bidding) Software and Implementation Services

TO ALL PROPOSERS ON THE SUBJECT RFP:

ADDENDUM # 4

DATE: January 12, 2023

The following questions were raised by one or more of the proposers. The answers are provided as a matter of clarification for all proposers as follows:

Companies shall be able to accept the City's Terms and Conditions when registering on the e-bidding software database.

Q1: Would it be possible to receive a copy of Attachment 2 and Attachment 3 where the column width can be edited?

A1: Please see attached updated worksheets.

Q2: Will the City consider an extension of the timeline?

A2: The City will not be extending the bid opening date.

PLEASE RETURN THIS ADDENDUM WITH YOUR PROPOSAL BY THE CLOSING DATE.

All other terms and conditions shall remain the same.

Bonfire Interactive Ltd.

Company Name

January 13, 2023

Authorized Signature

Date

Bill Brunson

416-276-2246

Please Print Above Name

Phone

Appendix H - Original RFP

Request for Proposals

RFP 23001936

for

Electronic Bidding (E-Bidding) Software and Implementation Services

Proposals for this requirement will be accepted until 2:00 P.M. on Thursday, January 19, 2023

Proposals May be Mailed or Delivered to:

**City Secretary
City of Midland
Suite 330
P.O. BOX 1152
Midland, Texas 79702-1153
(300 N. Loraine, Suite 330 Midland, TX 79701)**

No Late Proposals Will Be Accepted

NOTICE TO PROPOSERS:

1. IF THE SELECTED PROPOSER/CONTRACTOR CANNOT MEET THE REQUIREMENTS OF PARAGRAPH 1, THEN THE CITY RESERVES THE RIGHT TO AWARD THIS PURCHASE TO ANOTHER PROPOSER.
2. **IMPORTANT NOTICE** – IF THE CONTRACT DOCUMENTS REQUIRE WORKER'S COMPENSATION INSURANCE, PROPOSER/CONTRACTOR MUST CARRY WORKER'S COMPENSATION INSURANCE TO BE ELIGIBLE FOR THIS CONTRACT. IF YOU CANNOT PROVIDE WORKER'S COMPENSATION INSURANCE AS REQUIRED BY STATE OF TEXAS STATUTE WE RESPECTFULLY REQUEST THAT YOU "NO BID" THIS WORK
3. **COMPLIANCE** – COMPANY AGREES THAT IT SHALL COMPLY WITH TEXAS GOVERNMENT CODE SECTION 2252.908, *ET SEQ.*, AS AMENDED. COMPANY AGREES THAT IT SHALL COMPLY WITH TEXAS LOCAL GOVERNMENT CODE SECTION 176.006, *ET SEQ.*, AS AMENDED.
4. **PUBLIC INFORMATION**. TO THE EXTENT THAT PROPOSER IS SUBMITTING A PROPOSAL FOR A CONTRACT DESCRIBED BY SECTION 552.371 OF THE TEXAS GOVERNMENT CODE, PROPOSER AGREES AS FOLLOWS IN ACCORDANCE WITH SECTION 552.372(B) OF THE TEXAS GOVERNMENT CODE: THE REQUIREMENTS OF SUBCHAPTER J, CHAPTER 552, GOVERNMENT CODE, MAY APPLY TO THIS PROPOSAL, AND THE CONTRACTOR OR VENDOR AGREES THAT THE CONTRACT CAN BE TERMINATED IF THE CONTRACTOR OR VENDOR KNOWINGLY OR INTENTIONALLY FAILS TO COMPLY WITH A REQUIREMENT OF THAT SUBCHAPTER.

See Section 1.9 for Pre-proposal Meeting Information

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SCHEDULE OF EVENTS

RFP 23001936
For
E-Bidding Software and Implementation Services

Event	Date*
RFP Released	Thursday, December 29, 2022
Cutoff Date for inquiries and clarification.....	Thursday, January 12, 2023, at 2:00 p.m. C.T.
Proposal Due Date	Thursday, January 19, 2023, at 2:00 p.m. C.T.
Notification of Vendor Interviews / Product Demonstrations	Friday, January 27, 2023
Intended Date for Contract Award.....	Friday, February 17, 2023

*These dates are our intended schedule; however, they may be changed as necessary without further notice.

NOTE:

From the issuance date of this RFP until a Contractor(s) is selected, all verbal communication is not binding. The City will only be bound by written comments submitted by the Purchasing Office.

SPECIAL TERMS AND CONDITIONS

Proposal Requirements /Terms

1. Unless otherwise called for, the number of copies specified in the RFP, shall be submitted typewritten or printed in ink. Many Requests for Proposals are in a word format that can be completed on your computer and will be noted on the cover page if available.
2. Each proposal should be placed in a separate envelope completely and properly identified with the RFP number, due time and date. Proposal must be time stamped at the appointed receipt location before the hour and date specified for the proposal receipt. Responsibility for having the proposal properly marked and to the opening location by the specified date and time is solely the offeror's. All copies of the proposal may be delivered in the same box/package.
3. Any Proposal may be withdrawn in writing prior to the date and time set for receipt of proposals. Any proposals not so withdrawn shall constitute an irrevocable offer, for a minimum period as stated in the RFP following the final acceptance date, to provide the commodity or service set forth in the attached specifications, or until a selection has been made by the City.
4. Late proposals will not be accepted under any circumstances.
5. Proposal should give full firm name and address of Offeror. Failure to manually sign the proposal will disqualify it. The person signing the proposal should show title or authority to bind his/her firm in contract. Insert your Federal Employer's Identification Number _____ or Sole owner should enter SSN _____-____-____.
6. Purchases made for City use are exempt from State Sales Tax and Federal Excise Tax. Do not include tax in your proposal. Tax exemption certificates will be furnished by the City upon request.
7. Telephone proposals are not acceptable when in response to an RFP.

Conditions

The City of Midland is requesting proposals with the intent of awarding a contract for the requirement contained in this RFP. However, the City is not obligated to award a contract on this solicitation and reserves the right to reject any and all proposals and award the proposal to best serve the interests of the City.

1. Offerors electing to respond to this RFP are responsible for all costs of proposal preparation. The City is not liable for any costs incurred by a offeror in response to this RFP.
2. No public disclosures or news releases pertaining to this RFP shall be made without prior written approval from purchasing.
3. In case of a tie between two or more offerors, the award will be made in accordance with preferences as outlined by statute.
4. The Offeror agrees to protect the City from claims involving infringement of patents or copyrights.
5. The Offeror hereby assigns to Purchaser, any and all claims for overcharges associated with any contract resulting from this RFP which arise under the antitrust laws of the United States 15 U.S.C.A. Section 1, et seq. 1973 and which arise under the antitrust laws of the State of Texas, Texas Business and Commercial Code Ann. Sec. 15.01, et seq. (1967).
6. No substitutions or cancellation permitted without the written approval of the City Purchasing Agent. Deliveries made pursuant to a resulting contract shall be made during normal working hours only, unless approval for late delivery has been obtained.
7. Contractor shall submit two copies of an itemized invoice to Accounts Payable, The City of Midland, Texas, P.O. Box 1152, Midland Texas 79702. Each copy of the invoice shall reference the P.O. and the RFP numbers.
8. In the event of a conflict between the standard proposal requirements and conditions and the attached detail specification, the detail specifications shall govern.
9. Governing Law & Venue: This agreement shall be governed by and construed in accordance with the laws of the State of Texas. Venue for any disputes or lawsuits arising from the performance of this contract shall be exclusively in Midland County, Texas. The parties agree that all performance under this contract shall take place in Midland, County, Texas. The Contractor and City agree that all payments made under this contract shall take place in Midland County, Texas.
10. This obligation and undertakings of each of the parties to this contract shall be deemed to have been performed in Midland County, Texas.

1. GENERAL INFORMATION

1.1. INTRODUCTION

The City of Midland (hereinafter referred to as "the City") is pleased to invite you to submit a proposal for E-Bidding Software and Implementation Services as specified herein. Proposals submitted in response to the specifications contained herein shall comply with the following instructions and procedures.

Request for Proposal Standard Information

This Request for Proposal (RFP) is issued in accordance with City of Midland Policy, the RFP Manual and the statutes of the State of Texas. The RFP process is a procurement option allowing the award to be evaluated based on stated criteria. The RFP states the relative importance of all criteria. No other criteria, other than as outlined in the Request for Proposal, will be used.

1.2. INITIAL EVALUATION

Upon receipt, the proposal information will be disclosed only to persons participating in the evaluation or contracting process until the proposal has been reviewed and all marked trade secrets have been removed (see "Trade Secrets and Other Withheld Information" statement below). After this review, all remaining proposal materials will be available under the open records act. The proposals will be initially evaluated by the committee as being "responsive" or "non-responsive".

1.3. DISCUSSION/NEGOTIATION

Although proposals may be accepted and a contract awarded without discussion, the City may initiate discussions should clarification or negotiation be necessary. Offerors should be prepared to send qualified personnel to Midland, Texas to discuss technical and contractual aspects of the proposal.

1.4. BEST AND FINAL OFFER

The "Best and Final Offer" is an option available to the City under the RFP process allowing one or more offerors to submit a best and final offer. Offerors may be contacted, asking that they submit their best and final offer, which must include the discussed and/or negotiated changes.

1.5. AWARD

1.5.1. If the Contract is awarded, it will be awarded to either the lowest responsible bidder, or to the bidder who provides goods or services at the best value for the City of Midland. In determining the best value for the City of Midland, the City of Midland may consider the criteria enumerated in Section 252.043 of the Texas Local Government Code.

1.6. TRADE SECRETS

1.6.1. All information received in response to this RFP will be available to the public except for:

- 1.6.1.1. trade secrets meeting the requirements of Texas Government Code Title 5, Chapter 552, Subchapter C, § 552.110; and
- 1.6.1.2. matters involving individual safety as determined by the department.

1.6.2. In order for an offeror to claim trade secret material, the following conditions must

be met. Information to be withheld must be clearly marked and separated from the rest of the proposal.

- 1.6.2.1. The proposal may not contain trade secret matter in the cost or price.
- 1.6.2.2. An affidavit from the offeror's legal counsel attesting to and explaining the validity of the trade secret claim must be attached to each proposal containing trade secrets. In addition, offerors submitting a proposal containing trade secrets must be prepared to pay all legal costs and fees associated with defending the claim for trade secret protection in the event of an open records request from another party.
- 1.6.3. Documents not meeting all of the requirements of (1) and (2) will be available for public inspection, including copyrighted materials.**

1.7. LATE PROPOSALS

Proposals received after the time specified for receipt of proposals will be destroyed or returned at the offeror's expense after consultation with the offeror. There are no exceptions to this deadline.

1.8. PREPARING A RESPONSE

This RFP contains the instructions governing the proposals to be submitted and a description of the mandatory requirements. To be eligible for consideration, an offeror must meet the intent of all mandatory requirements. Compliance with the intent of a mandatory requirement will be determined by the Purchasing Office. When imperative language (shall, will, must) appears in any section of the RFP, it is considered to be mandatory.

- 1.8.1. Offerors shall promptly notify the City of any ambiguity, inconsistency, or error, which they may discover upon examination of this RFP.**

1.9. PRE-PROPOSAL TELECONFERENCE:

A Pre-Proposal Conference will be conducted virtually on Thursday, January 5, 2023, at 10:00 a.m. C.T. Offerors may use this opportunity to notify the City of any ambiguity, inconsistency, or error, which they may discover upon examination of this RFP. All responses to questions at the Pre-Proposal Conference will be oral and in no way binding on the City. Offerors interested in attending the pre-proposal teleconference will use the following virtual Zoom bridge:

Join Zoom Meeting:

Bridge:

<https://us02web.zoom.us/j/87183018041?pwd=TFIDZEQ3S0poUFdTV2ZMOXZRdnIyUT09>

Meeting ID: 871 8301 8041

Passcode: 595131

(Optional) Dial by Phone:

Phone Number: (346) 248-7799

Meeting ID: 871 8301 8041

Passcode: 595131

1.10. CLARIFICATION/ INTERPRETATION

Offerors requiring clarification or interpretation of any section or sections contained in this RFP shall make a written request to the City Purchasing Agent by the deadline described in the Schedule of Events. All written correspondence must be addressed to:

The City Of Midland
Office of the Purchasing Agent OR
P.O. Box 1152

FAX: (432) 685-0523

e-mail: purchasing@midlandtexas.gov

Midland, TX 79702

1.11. FORMAT FOR INQUIRIES:

Each offeror submitting written questions must clearly address each question by reference to a specific section, page and item of this RFP. An official written answer will be provided to all questions received. Verbal responses shall not be considered binding.

1.12. INTERPRETATION:

Any interpretation, correction or change of this RFP will be made by written Addendum. Interpretations, corrections or changes of this RFP made in any other manner will not be binding and offerors shall not rely upon such interpretations, corrections or changes.

The City of Midland Purchasing Office will issue any necessary Addenda.

A point-by-point response to all numbered sections, subsections, paragraphs, subparagraphs and appendices must be submitted by each offeror in order to be considered for selection.

1.13. PROPOSAL ORGANIZATION AND SUBMISSION

Offerors must organize proposals into sections following the format of this RFP, with tabs separating each section. If no exception, explanation, or clarification is required in the offeror's response to a specific subsection, the offeror shall indicate so in the point-by-point response with the following:

“(Offeror’s Name)”, understands and will comply.

1.14. OFFER PRICING

Offerors must respond to this RFP by utilizing **Attachment 3 – Cost Worksheets**. The cost worksheets will be used as the primary representation of each offeror’s cost and will be used extensively during proposal evaluations. Additional information should be included as necessary to explain in detail the offeror’s cost.

Proposals should be complete to the degree that all of the information sought by this RFP is supplied in the order requested.

1.15. SUBMITTING A SEALED PROPOSAL

1.15.1. Number of copies and Location:

1.15.1.1. Offerors must submit one original, 4 hard copies and one (1) soft copy (PDF or Word) to the City Secretary. Sealed Proposals must be received by the date before the time stated on the face of the Request for Proposal Cover Page, local time. Sealed Proposals received after this time will not be accepted for consideration. Facsimile copies are not acceptable.

1.15.1.2. Please be sure to label the outermost package of the RFP whether it is an envelope, box or overnight package with the RFP number, RFP description and closing date so that it is visible when received by the City.

1.15.2. Each Offeror who submits a proposal represents that:

1.15.2.1. The proposal is based upon an understanding of the specifications and requirements described in this RFP.

- 1.15.2.2. Costs for developing and delivering responses to this RFP and any subsequent presentations of the proposal as requested by the City are entirely the responsibility of the offeror. The City is not liable for any expense incurred by the offerors in the preparation and presentation of their proposals.
- 1.15.2.3. All materials submitted in response to this RFP become the property of the City and are to be appended to any formal documentation, which would further define or expand any contractual relationship between the City and offeror resulting from this RFP process.
- 1.15.3. The proposals must be signed in ink by an individual authorized to legally bind the business submitting the proposal.**
- 1.15.4. A proposal may not be modified, withdrawn or canceled by the offeror for a 120-day period following the deadline for proposal submission,** or receipt of best and final offer, if required, as defined in the Schedule of Events, and offeror so agrees in submitting the proposal.

1.16. RIGHTS RESERVED

While the City has every intention to award a contract as a result of this RFP, issuance of the RFP in no way constitutes a commitment by the City of Midland to award a contract. Upon a determination, such actions would be in its best interests, the City in its sole discretion reserves the right to:

- A) waive any formality;
- b) cancel or terminate this RFP;
- c) reject any or all proposals received in response to this document;
- d) waive any undesirable, inconsequential, or inconsistent provisions of this document, which would not have significant impact on any proposal; not award, or if awarded, terminate any contract if the City determines adequate City funds are not available.

1.17. BONDING REQUIREMENTS

Intentionally omitted.

1.18. OFFEROR INTERVIEW / PRODUCT DEMONSTRATION

After receipt of all proposals and before the determination of the award, respondents may be required to make an oral presentation and product demonstration in Midland, Texas to clarify their response or to further define their offer. Oral presentations and product demonstrations, if requested, shall be at the offeror's expense.

1.19. SUBCONTRACTING

1.19.1. The successful offeror will be the Prime Contractor and shall be responsible, in total, for all work of subcontractors. All subcontractors must be listed in the proposal. The City reserves the right to approve all subcontractors.

1.19.2. The contractor shall be responsible to the City for the acts and omissions of all subcontractors or agents and of persons directly or indirectly employed by such subcontractors, and for the acts and omissions of persons employed directly by the contractor. Further, nothing contained within this document, or any contract documents created as a result of any contract awards derived from this RFP shall create any contractual relationships between any subcontractor and the City.

1.20. INSURANCE REQUIREMENTS

See Contract or Agreement

1.21. CONTRACTOR'S RESPONSIBILITIES

The successful offeror shall keep informed of, and shall comply with all applicable laws, ordinances, rules, regulations and orders of the City, County, State, Federal or public bodies

having jurisdiction affecting any work to be done to provide the services required. The offeror shall provide all necessary safeguards for safety and protection, as set forth by the United States Department of Labor, Occupational Safety and Health Administration.

1.22. OFFEROR COMPETITION

The City encourages free and open competition among offerors. Whenever possible, specifications, proposal requests and conditions are designed to accomplish this objective, consistent with the necessity to satisfy the City's need to procure technically sound, cost-effective services.

The offeror's signature on a proposal in response to this RFP guarantees that the prices quoted have been established without collusion of other eligible offerors and without effort to preclude the City of Midland from obtaining the best possible price.

1.23. CONTRACT PROVISIONS AND TERMS

1.23.1. Contract Execution

1.23.1.1. The City will execute a contract with the successful offeror(s). The City requires that the RFP and the terms and conditions attached to it, the offeror's response, the best and final offer (if required), and any formal addenda to the RFP be included as part of any contract documents.

1.23.2. Terms and Conditions

Contract that will be executed by the successful offeror and the City is found in Attachment 4 – Sample Contract.

1.23.3. Exceptions to Contract Terms & Conditions

Offerors should notify the City of any terms within the sample contract that either precludes them from responding to the RFP or add unnecessary cost.

1.23.4. The initial contract(s) term is for a period of (5) five years. Renewals of the contract will occur automatically at the discretion of the City and/or vendor.

1.23.5. Contract Extension

The offeror agrees that, through the term of the initial contract and any agreed-upon extension, the City will be entitled to any price reductions at least equal to any lower prices made available to any other customer of comparable volume.

1.23.6. Escalation

Annual pricing adjustments to contract extensions following the initial contract term, if applicable, shall not exceed seventy-five percent (75%) of the rate of increase in the cost of living as reflected in the Federal Bureau of Labor Statistics, Consumer Price Index (CPI) for all Urban Consumers (1982-84=100; through November 1991 = 137.8) or any other index which may be substituted in the future. The CPI for the latest twelve (12) month period of the contract will be the CPI base on which later adjustments are computed. Each time an adjustment is made, the earlier CPI base will be replaced by the adjusted CPI base. The percentage of adjustment to contract prices shall in no event exceed the percentage change in the index.

2. PROPOSAL WAIVERS:

2.1. WAIVER OF ATTORNEY FEES: BY SUBMITTING THIS PROPOSAL,

OFFEROR AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST CITY REGARDING THE AWARD OR ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THIS PROPOSAL, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THIS PROPOSAL. OFFEROR SPECIFICALLY AGREES THAT IF OFFEROR BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS PROPOSAL, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS PROPOSAL, INCLUDING, BUT NOT LIMITED TO, ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, OFFEROR AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH OFFEROR MIGHT OTHERWISE BE ENTITLED.

- 2.2. OFFEROR AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY-EXISTING KNOWN RIGHT. OFFEROR ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS PROPOSAL. OFFEROR FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN CITY AND OFFEROR. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OR GOVERNMENTAL IMMUNITY AND SHALL SURVIVE THE TERMINATION OF THE CONTRACT.
- 2.3. OFFEROR IS RELYING ON ITS OWN JUDGMENT. OFFEROR HAD THE OPPORTUNITY TO DISCUSS THESE PROPOSAL DOCUMENTS WITH COMPETENT LEGAL COUNSEL PRIOR TO SUBMISSION OF THE PROPOSAL OR EXECUTION OF THE CONTRACT.
- 2.4. WAIVER:
- 2.5. BY SUBMITTING A PROPOSAL, THE OFFEROR AGREES TO WAIVE AND DOES HEREBY VOLUNTARILY AND INTENTIONALLY WAIVE, ABANDON AND RELINQUISH ANY CLAIM THE OFFEROR HAS OR MAY HAVE IN THE FUTURE AGAINST THE CITY OF MIDLAND, TEXAS, AND THE CITY'S EMPLOYEES, AGENTS AND OFFICERS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE FOLLOWING:
- 2.5.1. THE ADMINISTRATION, EVALUATION OR RECOMMENDATION OF ANY PROPOSAL;
- 2.5.2. WAIVER OR DELETION OF ANY OF THE REQUIREMENTS UNDER THE PROPOSAL DOCUMENTS OR THE CONTRACT DOCUMENTS;
- 2.5.3. ACCEPTANCE OR REJECTION OF ANY PROPOSALS; OR
- 2.5.4. AWARD OF THE CONTRACT.
- 2.6. BY SUBMITTING A PROPOSAL, THE OFFEROR ACKNOWLEDGES THAT THE OFFEROR UNDERSTANDS ALL OF THE TERMS OF THE PROPOSAL DOCUMENTS AND CONSENTS TO THE PROPOSAL PROCESS AND THE POSSIBILITY OF A NEGATIVE ASSESSMENT. BY SUBMITTING A PROPOSAL, THE OFFEROR ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE OFFEROR AND THE CITY OF MIDLAND, TEXAS. THE OFFEROR AGREES THAT THIS IS THE INTENTIONAL RELINQUISHMENT OF A PRESENTLY EXISTING KNOWN RIGHT. BY SIGNING THE PROPOSAL AND/OR BELOW,

YOUR COMPANY AGREES TO THE ABOVE WAIVER(S).

- 2.7. BY SIGNING THE EXECUTION OF OFFER, YOUR COMPANY AGREES TO THE ABOVE WAIVER(S). IF THIS FORM IS NOT SIGNED AND INCLUDED WITH YOUR PROPOSAL DOCUMENTS YOUR PROPOSAL WILL BE CONSIDERED NON-RESPONSIVE AND WILL BE REJECTED.**

3. SCOPE OF PROJECT

The City is soliciting proposals from respondents capable of meeting the City's requirements for Electronic Bidding (E-Bidding) software and professional services to implement the new system. The City is seeking to automate vendor registration, solicitation development and issuance, question and answer period, solicitation receipt, bid tabulation and evaluation, and other ancillary tasks related to a bid management. The City intends to gain efficiency and transparency while maintaining the integrity of the City's bidding process.

The City intends to use the E-Bidding system to automate and manage the City's sourcing process. The following table identifies the associated functional area and business processes the new system will support:

Functional Areas		
No.	Functional Area	Functional Area Description
1	E-Bid Management	This function area support business processes involving solicitation creation, solicitation issuance and pre-bid management, vendor response management, bid tabulation, bid evaluation, reverse auction management, vendor self-registration, vendor management, and opportunity assignment.

The list of functional and technical requirements contained in **Attachment 2 – Functional and Technical Requirements** capture the detailed functionality the City requires in the future system environment in addition to general and technical system requirements.

The following table contains functional statistics of the City related to bid management. The statistics are estimates and are provided for planning purposes only.

Bid Management Statistics		
No.	Metric	Statistic
1	Number of planned concurrent users on the E-Bidding system.	6
2	Number of opportunities managed during the previous fiscal year.	50 (50 – 70 annual estimate)

The following information establishes the expectation of the minimum level of project management documentation respondent must provide as a part of, but not exclusively, the resulting implementation services offered. As part of the implementation scope, following signing of a contract, the selected respondent or respondents must develop and provide the City with the following items:

- Project Management Plan: a detailed Implementation Project Plan that, at a minimum, includes the following:

- Objectives
- Deliverables and Milestones
- Project Schedule
- Resource Management Processes
- Scope Management Processes
- Schedule Management Processes
- Risk Management Processes
- Quality Management Approach
- Communication Management Approach
- Organizational Change Management Approach
- Status Reporting
- Training Plan
- Testing and Quality Assurance Plan
- Pre- and Post-Implementation Support Plan
- System Documentation
- Risk Register

The City is open to considering various deployment models and has structured the RFP to allow for the evaluation of the deployment model as one factor in the overall procurement process. The City intends to evaluate the greatest range of marketplace offerings feasible through this process.

The City recognizes there are many factors contributing to a comparison of cost proposals for these various deployment methods including the required infrastructure and/or hardware costs, the potential for reduced hardware and support costs in hosted/SaaS models, a particular Proposer's approach to managing upgrades, and technical staffing needs. The City has a preference toward a Software as a Service (SaaS) deployment model. The City intends to evaluate the greatest range of available solutions in the market including those that may be locally hosted by the City. As such, the City is open to considering all deployment models in light of the breadth of functionality and available solutions in the marketplace to address those functional areas. The City will consider, in no particular order, the following deployment models:

- On Premise (locally hosted at the City, perpetual licenses)
- Software as a Service (SaaS or subscription-based models)

Note: The City has provided cost sheets for pricing each of the deployment models ("Attachment 3 – Cost Worksheets" MS Excel).

This solicitation is not a bid process and will not follow a lowest-priced responsive proposal review. Instead, the City will identify will the most advantageous proposal or proposals utilizing the Evaluation Criteria listed in the RFP, including the review of life cycle costs (i.e., recurring costs, hardware, third-party licenses, etc.).

In developing proposals, the proposer must clearly define the deployment model, including the licensing model as well as any perceived benefits of the proposed model. In the event two or more products are proposed under the same proposal (e.g., through a partnership or offered by the same company) the proposer must clearly indicate in both the technical proposal and cost proposal the deployment model for each proposed software product.

4. REQUIREMENTS

the date and time established for the submittal of Proposals, will not be considered.

No deviations taken: ☐

6. VENDOR QUALIFICATIONS

6.1. INFORMATION VERIFICATION

The City may make such investigations as deemed necessary to determine the ability of the offeror to supply the products and perform the services specified.

6.2. RIGHT TO REJECT

The City reserves the right to reject any proposal if the evidence submitted by, or investigation of, the offeror fails to satisfy the City that offeror is properly qualified to carry out the obligations of the contract.

6.3. VENDOR CAPABILITIES

In determining the capabilities of an offeror to perform the services specified herein, the following informational requirements must be met by the offeror and will be weighed by the City. (Note: Each item must be thoroughly addressed. Taking exception to any requirements listed in this Section may disqualify the proposal):

6.3.1. References

- 6.3.1.1. Offeror shall provide a minimum of (3) three references that are using services of the type proposed in this RFP. The references should fall within the categories identified below. At a minimum, the offeror shall provide the company name, the location where the services were provided, contact person(s), customer telephone number, a complete description of the service type, and dates the services were provided. The City reserves the right to use any information or additional references deemed necessary to establish the ability of the offerors to perform the conditions of the contract. Negative references may be grounds for proposal disqualification.
- 6.3.1.2. These references should include City government and universities where the offeror, preferably within the last (5) five years, has successfully provided software and implementation services for an E-Bidding system.
- 6.3.1.3. These references should include the information as defined by **Section 5.10 - References**

6.3.2. Vendor Stability

- 6.3.2.1. Provide financial statements, preferably audited, for the two consecutive years immediately preceding the issuance of this RFP.
- 6.3.2.2. Offerors shall specify how long the company submitting the proposal has been in business (doing similar projects) _____.

7. EVALUATION PROCESS

7.1. EVALUATION PROCESS

The following section outlines the City's proposal evaluation process. The City reserves the right to deviate from this process at its own discretion, to negotiate any and all elements of the RFP, to amend, modify, or withdraw the RFP, to revise any requirements under the RFP, to require supplemental statements of information from any Respondent, to extend the deadline for submission of Proposals, to cancel, in whole or part, this RFP if the City deems it is in its best

interest to do so, to request additional information or clarification of information provided in any Proposal without changing the terms of the RFP, to award this project in whole or in part to a vendor other than the highest scoring vendor based on the determination of the best overall value and/or fit for the City, and/or to waive any portion of the selection process in order to accelerate the selection and negotiation with the top-ranked respondent. The City may exercise the foregoing rights at any time without notice and without liability to any respondent, or any other party, for expenses incurred in the preparation of responses hereto or otherwise.

- **Vendor Shortlist:** The City Evaluation Committee will initially review and evaluate each Proposal received to determine the proposer's ability to meet the requirements of the City. The evaluation criteria described in this RFP will be the basis for evaluation. The Evaluation Committee will determine the respondents best suited to meet the needs of the City based on the scoring of the evaluation criteria. These vendors will form the vendor shortlist.
- **Vendor Demonstrations:** The City, at its sole discretion, reserves the right to have system demonstrations with those respondents on the vendor shortlist, or any other respondent. Demonstrations may be conducted at City offices. Demonstrations will involve a scripted demonstration. The schedule, scripts, and demonstration requirements will be provided with the invitation to participate in demonstrations. A pre-demonstration vendor teleconference will take place for those vendors that have been shortlisted, and respondents will have an opportunity to review the format of the demonstrations and ask questions related to procedure and specific demonstration scenarios. Vendors that are invited to participate in demonstrations are advised that the provided scripts must be strictly adhered to while presenting. Optional modules or functionality shall not be presented if the modules fall outside the scope of requested functionality or that functionality which has been proposed by the respondents. The proposed version of the software must be shown and must not include any software that is under development or in beta testing. Evaluation Committee members will view the demonstrations, and additional City staff may also be in attendance to observe and provide informal feedback.
- **Reference Checks:** The City may employ a process of contacting references provided through respondents' proposals. This process may include teleconference meetings, web conferences, and in-person meetings with references. The City reserves the right to conduct reference checks at any point in the evaluation process, and to contact other known users of the proposed system(s) beyond just those references provided.
- **Best and Final Offer and Request for Clarification:** A Best-and-Final-Offer process may be initiated if it is determined to be in the best interest of the City. Such process may be initiated following the identification of the vendor shortlist or at any other evaluation process step. Additional processes of scope and cost clarification may be employed as part of the evaluation process if it is deemed to be in the City's best interest.

7.2. CLARIFICATION AND DISCUSSION OF PROPOSALS

The City may request clarifications and conduct discussions with any Respondent that submits a Proposal, including requesting additional information. The City reserves the right to select the Proposal or Proposals that it believes is the most responsive as determined by the City Evaluation Committee, which will best serve the City business and operational requirements, considering the evaluation criteria set forth below. Respondents shall be available for a system demonstration to City staff on dates specified in schedule or events or as otherwise requested by the City if selected for system demonstrations. Failure of a respondent to respond to such a request for additional information, clarification, or system demonstrations may result in rejection of the proposal. The initial evaluation may be adjusted because of a clarification under this section. The City reserves the right to waive irregularities in the Proposal content or to request supplemental information from respondents.

7.3. EVALUATION CRITERIA

The City intends to follow a cumulative approach to scoring based on key evaluation activities (i.e., scoring that is conducted in a progressive manner, following various steps in the process). The City hereby reserves the right to evaluate, at its sole discretion, the extent to which each proposal received compares to the stated criteria. Vendor proposals shall be evaluated in accordance with the following criteria, subject to variation at the sole discretion of the City.

7.3.1. Short-List Vendor Identification

The City intends to utilize the following criteria during the evaluation of proposals:

Short-List Identification Criteria		
Criteria	Description	Points
Functionality	This criterion considers but is not limited to the following: • The vendor's written responses to the Functional and Technical Requirements for proposed functional areas and overall software solution. • The ability for the proposed software to integrate with the City systems environment.	35
Technical Capabilities	This criterion considers but is not limited to the following: • Alignment of the proposed software to the City's preferred technical specifications. • The level of integration among proposed functional areas.	15
Approach	This criterion considers but is not limited to the following: • The described approach to implement the system to achieve the City's goals and objectives. • The alignment of the proposed implementation timeline to the City's desired timeline. • The distribution of implementation tasks among City and vendor teams. • The proposed resources hours among City and vendor teams. • The vendor's approach to key implementation tasks including but not limited to testing and training. • The vendor's planned ongoing support and maintenance services.	25
Vendor Experience	This criterion considers but is not limited to the following: • The vendor's experience delivering the services requested in the RFP. • The vendor's experience with similar implementations for comparable organizations.	20
Proposed Staff Experience	This criterion considers but is not limited to the following: • The experience of named staff delivering services	5

Short-List Identification Criteria		
Criteria	Description	Points
	requested in the RFP. • The experience of named staff with similar implementations for comparable organizations. • The qualifications of named staff to deliver the services requested in the RFP with a focus on business process optimization.	

7.3.2. Finalist Vendor Identification

The City intends to utilize the following criteria after demonstrations by short-list vendors.

Finalist Identification Criteria		
Criteria	Description	Points
Functionality Demonstrated	This criterion considers new information learned through vendor demonstrations including but not limited to the demonstrated user interface and the alignment of demonstrated functionality with preferred business processes.	15
Technical Capabilities	This criterion considers new information learned through the Technical Discussion as part of vendor demonstrations as well as other sessions.	5
Approach Discussion	This criterion considers new information learned through the Implementation Approach Discussion as part of vendor demonstrations as well as other sessions.	5
Experience Discussion	This criterion considers new information learned through the Company Overview Discussion as part of vendor demonstrations as well as other sessions.	5

7.3.3. Preferred Vendor Identification

The City intends to utilize the following criteria after completing reference checks.

Preferred Vendor Identification Criteria		
Criteria	Description	Points
Reference Feedback	This criterion considers the feedback received from references related to the vendor's performance in the implementation including: • Meeting project objectives and timelines • The knowledge, skills, and experience of implementation staff • Capabilities of the software • Ongoing vendor performance with support and maintenance.	20
Comparable References	This criterion considers the relevance of references related to: • Organization size and location • Structure of the organization • Entity type (e.g., City/town/village) • Comparable scope	10

Preferred Vendor Identification Criteria		
Criteria	Description	Points
	• Similar software version • Deployment model.	

7.4. COST POINT ALLOCATION

The City will evaluate cost proposals based upon the following criteria. The City will apply Cost points at the timing in the evaluation process determined by the Evaluation Team. The City reserves the right to review cost proposals at any stage in the process to ensure pricing is within internal budget planning ranges. Cost points may be refined or replaced in the event of a subsequent Request for Clarification or Request for Best and Final Offer (BAFO).

7.4.1. Preferred Vendor Identification

The City intends to utilize the following criteria after completing reference checks and site visits.

Cost Point Criteria		
Criteria	Description	Points
Cost	This criterion considers, as applicable, the price of the software licensing, services, and terms of any offered ongoing maintenance and support (including applicable service level agreements, disaster recovery, etc.) proposed in response to the information solicited by this RFP. Respondents will be evaluated on their pricing scheme, as well as on their price in comparison to the other proposers. In evaluating cost, the City may evaluate on a fully loaded ten-year cost of ownership. Fully loaded is defined to include (but is not limited to): software purchase and implementation costs; ongoing support and service costs; hardware costs; and associated hardware support costs. The City reserves the right to add their own estimates of the costs (including any anticipated savings) associated with the required level of internal staffing (business users and IT staff) for implementation and for ongoing support, hardware and overhead costs and savings, and may rely on the Respondent's resource estimates as a basis for their calculations.	40

7.5. NO OBLIGATION, RIGHT OF REJECTION, AND MULTIPLE AWARDS

The inquiry made through this RFP implies no obligation on the part of the City. This RFP does not constitute an offer or a contract with any Respondent or other party. The City reserves the right to reject any or all Proposals, in whole or in part, and to waive any informality in proposals received, deemed to be in the best interest of the City or to accept or reject all or any part of any Proposal.

Proposals deemed to be received from debarred or suspended Vendors will be rejected. The City may reject any Proposal that is not responsive to all of the material and substantial terms, conditions, and performance requirements of this RFP. The City further reserves the right to award all, part, or none of the components/functional areas included in this RFP. In addition, the City reserves the right to make one or more awards to competing Respondents for subsets of functionality as a result of this RFP. The City also reserves the right to refrain from making an

award if it determines it to be in its best interest. The City reserves the right to abandon the Project and/or to re-advertise and solicit other Proposals. The City reserves the right to create a Project of lesser or greater expense than described in this RFP or the respondent's reply, based on the component prices or scope submitted. The City reserves the right to cancel this solicitation or to change its scope if it is considered to be in the best interest of the City.

7.6. CONTRACT NEGOTIATION

After final evaluation, the City may negotiate with the Respondent(s) of the highest-ranked Proposal. If any Respondent fails to negotiate in good faith, the City may terminate negotiations and negotiate with the Respondent of the next highest-ranked Proposal or terminate negotiations with any or all Respondents. If contract negotiations are commenced, they may be held at City office locations or via teleconference. If contract negotiations are held, the Respondent will be responsible for all of Respondent's costs including, without limitation, its travel and per diem expenses and its legal fees and costs.

7.7. FAILURE TO NEGOTIATE

If the selected Respondent:

1. Fails to provide the information required to begin negotiations in a timely manner
2. Fails to negotiate in good faith
3. Indicates it cannot perform the contract within the designated timeframes or within budgeted funds available for the Project
4. If the Respondent and the City, after a good-faith effort, cannot come to terms

The City may terminate negotiations with the Respondent initially selected and commence negotiations with the next highest-ranked Respondent. At any point in the negotiation process, the City may, at its sole discretion, terminate negotiations with any or all Respondents.

8. PROPOSAL CONTENTS

The following items constitute the RFP submittal in response to the request herein:

8.1. THE RFP

8.2. PROPOSAL FORM

8.3. REQUESTED ATTACHMENTS

8.3.1. Attachment 1 – Signed Execution Offer

8.3.2. Attachment 2 – Functional and Technical Requirements (MS Excel)

8.3.3. Attachment 3 – Cost Worksheets (MS Excel)

8.3.4. Attachment 4 – Sample Contract

9. TEXAS PUBLIC INFORMATION ACT

Notwithstanding any other provisions, this request for proposals, along with any associated contract, is subject to the Texas Public Information Act.

TERMS AND CONDITIONS

1. **LICENSE**. Bonfire Interactive Ltd. (“**Bonfire**”) hereby grants to Customer (identified on the Order Form), for internal use by Customer, its agents, contractors, employees and suppliers (collectively, the “**Users**”) a non-transferable, non-exclusive, non-sub-licensable right and license (the “**License**”) to access and use the services identified on Schedule A (collectively, the “**Platform Services**”) during the Term (as outlined on the Order Form). The Platform Services shall be made available on-line at bonfirehub.com or bonfirehub.ca (or such other URL as Bonfire may designate from time to time) (the “**Site**”) from a third party hosted facility, located in the country specified on the Order Form, and/or other systems used by Bonfire to host the Platform Services in the country specified on the Order Form (collectively, the “**Systems**”). Platform Services may be amended, enhanced or modified from time to time by Bonfire. Users shall access the Platform Services by means of a specific account (the “**Customer’s Account**”) using individual User login names and passwords (“**Passwords**”) provided by Bonfire. Bonfire shall enable the Platform Services and provide the Passwords on the Plan Start Date (identified on the Order Form). The Customer is responsible for the confidentiality and use of its Passwords and Customer Account, and in no event shall Bonfire be liable for any loss of information of the Customer or other claims arising from unauthorized access to the Platform Services as a result of the failure by Customer to protect the confidentiality of its Passwords and Customer Account. Bonfire is also responsible for the confidentiality of the Passwords and Customer Account provided to Customer and shall in all events be liable and indemnify Customer for any breach of this provision.
2. **USE**. The License and Support (as defined in Section 3 below) is granted exclusively for Customer’s internal use, and the Customer is solely and exclusively responsible:
 - a. For the collection, accuracy, currency, quality, legality, completeness and use of Customer Data (as defined in Section 7.2 below) that is stored on the Systems, disclosed to or used by Customer or Users in connection with the Platform Services;
 - b. For the content of all communications (including without limitation, any transfer of signs, signals, text, images, videos, sounds, data or intelligence of any nature transmitted in whole or in part electronically the “**Electronic Communications**”) while using Customer’s Account;
 - c. To ensure that it and the Users will not use the Platform Services to communicate, by way of Electronic Communication or otherwise, any message or material that (1) is libelous, harmful to minors, obscene or constitutes pornography; (2) infringes the copyrights, patents, trade secrets, trademarks, trade names or other proprietary rights of a third party or is otherwise unlawful; or (3) would otherwise give rise to any breach of confidentiality or privacy laws, or any civil liability, or that constitutes or encourages conduct that could constitute a criminal offence, under any applicable law or regulation;
 - d. To ensure that the use of the Platform Services by any User is limited to the rights outlined herein; and the Customer shall not permit Users, directly or indirectly, to do (and shall be responsible for any violation of) any of the following acts:
 - i. Reverse engineer, de-compile, disassemble or otherwise attempt to discover the source code or underlying ideas or algorithms of the Platform Services;
 - ii. Modify, translate, or create derivative works from the Platform Services;

- iii. Rent, lease, distribute, license, sublicense, sell, resell, assign, or otherwise commercially exploit the Platform Services;
- iv. Publish or disclose to third parties any evaluation of the Platform Services without Bonfire's prior written consent;
- v. Violate any local, state / provincial, federal or foreign law, treaty, regulation or convention applicable to the Customer in connection with Users' use of the Platform Services;
- vi. Access data or log into a server or account on the System that the Customer is not authorized to access, or access or tamper with other customer accounts of Bonfire;
- vii. Willfully tamper with the security of, or probe, scan or test the vulnerability of, any of the Systems, or render any part of the Systems unusable.
- viii. Sharing of Customer's Account with multiple individuals to circumvent license allocation as defined on the Order Form.

3. **SUPPORT AND MAINTENANCE**. Bonfire shall provide general maintenance services and technical support in respect of the Platform Services ("**Support**") throughout the Term, during Business Days (as defined in Schedule A). The Customer acknowledges that the Support will not be available during System maintenance periods for purposes of upgrades and maintenance to the Platform Services and/or System. Downtime for such System maintenance periods shall only occur between the hours of 11:00 pm and 6:00 am Eastern Standard Time ("**Downtime**") unless there is a defect that renders the Platform Services unavailable in which case Bonfire shall take steps to correct such deficiency immediately. Otherwise, Bonfire will make reasonable efforts to announce the scheduled Downtime via e-mail to the Customer's designated e-mail address. Support does not include services required as a result of (i) User misuse, improper use, alteration, or damage of the Platform Services; (ii) any problem caused by modifications in any version of the Platform Services not made or authorized by Bonfire; (iii) any problem resulting from the Customer combining or merging the Platform Services with any hardware or software not supplied by Bonfire, or not identified by Bonfire as compatible with the Platform Services and/or Systems, or (iv) any custom development services outlined on Schedule A hereto. Optional additional services which may be provided by Bonfire at the request of the Customer are as outlined on Schedule A hereto.

4. **SERVICE LEVEL AGREEMENT**. Bonfire shall provide the Platform Services at a service level described in the Service Level Agreement outlined on Schedule B hereto.

5. **CUSTOM DEVELOPMENT**. In the event the Customer wishes to have Bonfire provide additional custom development and/or services at any time during the Term, the parties will negotiate the terms and conditions of such additional services, and enter into a mutually agreeable contract which, among other things, will address which party will own any and all intellectual property developed as a result.

6. **FEES, PAYMENT AND TAXES**.

6.1 Fees. Fees for the License, Platform Services and Support (collectively the “**Fees**”) are based on (i) the Plan Type selected by the Customer, and/or (ii) the number of records (“**Records**”) that the Plan Type includes, each as defined on the Order Form.

6.2 Payment.

- a. **General.** All Fees are quoted in American currency unless otherwise stated on the Order Form; and are non-refundable except as may otherwise be provided in this Agreement. The Fees in an Order Form apply for the Initial Term and any Renewal subject always to Bonfire’s right to increase the Fees by up to 5% above the previous applicable Fees at any time. Such revised Fees will apply only to a Renewal.
- b. **Invoicing.** Fees will be invoiced in advance and will be due on such dates and for such amounts as indicated on the invoices provided by Bonfire to the Customer.
- c. **Expenses.** The Customer shall pay Bonfire for all pre-approved costs and expenses incurred by Bonfire in providing any Support to the Customer (in excess of that provided as outlined in the Support and Maintenance Section contained herein) within 45 days of receipt of invoice from Bonfire, unless otherwise specified. The Customer is responsible for all its internet connection charges related to the use of the Platform Services.
- d. **Suspension of Service.** If Fees on any Customer Account are not paid by the due date, in addition to any other rights and remedies Bonfire may have (including interest owing, and the termination rights set forth herein), Bonfire reserves the right to suspend the Customer Account without liability to Bonfire, until such account is paid in full. “**Suspended Account**” means that all attempts to create new projects in Bonfire will be blocked and all Support will cease until the Customer makes the full payment due and owing, including any interest and other charges accruing during the suspension period. A Suspended Account does not remove the Customer’s obligation to pay those amounts outstanding to the date of such suspension or thereafter for the remainder of the Term, as the case may be.

7. OWNERSHIP AND CONFIDENTIALITY.

7.1 Intellectual Property. The Customer acknowledges and agrees that the Platform Services, and all intellectual property rights therein (including without limitation, copyrights, patents, trade secrets, trademarks, moral rights and other intellectual property rights, in and to the Platform Services, and all modifications, changes, enhancements, or additions thereto (whether initiated by the Customer or otherwise), and all intellectual property rights relating to the provision of Support in respect of the Platform Services (collectively, “**Bonfire IP**”), are owned or licensed by Bonfire. Except for the License granted hereunder, nothing in this Agreement gives the Customer any right, title or interest in, to or under any of the Bonfire IP, and to the extent the Customer acquires rights in the Bonfire IP, Customer assigns such rights to Bonfire and waives any moral rights it may have in the Bonfire IP to and in favour of Bonfire. All Bonfire IP shall be deemed to be Confidential Information (as defined below), and the Customer shall be bound by all confidentiality provisions.

7.2 Customer Data. “**Customer Data**” means any data, information or other materials of any nature recorded in any form whatsoever, disclosed or provided to Bonfire by the Customer and by the Users in the course of using the Platform Services, including all information generated by the Users’ use of the Platform Services. The Customer retains all right, title and

interest in and to all Customer Data. The Customer Data shall be deemed to be Confidential Information (as defined below) of the Customer, and Bonfire will restrict access to Customer's Confidential Information to those Bonfire employees, consultants and/or subcontractors who have a need to access the Customer Data in order to provide the Platform Services and Support and have agreed to be bound by the confidentiality provisions outlined herein. The Customer agrees that it is solely and exclusively responsible for the collection, accuracy, currency, quality, legality, completeness and use of Customer Data that is stored on the System, disclosed to or used by Customer or Users in connection with the Platform Services, and for compliance with all applicable laws and regulations in the appropriate jurisdiction, including without limitation with respect to privacy, non-disclosure and confidentiality.

7.3 Bonfire Access and Use. Bonfire shall have the right, in its sole discretion, to access the Customer's Account from time to time, for purposes of Support, administration, anonymized data aggregation, invoicing and to inspect the Customer's utilization of the Platform Services so as to ensure Customer's compliance with the provisions of this Agreement.

7.4 Bonfire Press Release. Customer agrees that Bonfire may issue a press release identifying Customer as a Bonfire customer and describing Customer's utilization and the benefits that Customer receives from use of Bonfire's services, subject to the Customer's prior review and approval of same.

7.5 Confidential Information. As used herein, "**Confidential Information**" means all confidential and proprietary information of a party that is disclosed to the other party pursuant to this Agreement, and includes without limitation all Passwords, Customer Account information, Customer Data, Bonfire IP, and the terms and conditions of this Agreement. Each party agrees to keep all Confidential Information disclosed to it by the other party strictly confidential, in the same manner as it protects the confidentiality of its own information and data (at all times exercising at least a reasonable degree of care in the protection of the Confidential Information). Confidential Information shall not include information which: (a) is known publicly; (b) is generally known in the industry before disclosure; (c) has become known publicly, without fault of a party, subsequent to disclosure by the other party; or (d) has been otherwise lawfully known or received by a party. This section will not be construed to prohibit the disclosure of Confidential Information if required by law or order of the court or other governmental authority, provided that a party shall give the other party prompt notice of such request, so that the other party has a reasonable time to attempt to limit or prevent such disclosure. Upon termination of this Agreement, all copies of all Confidential Information shall be either returned to the applicable party or destroyed, at the discretion and written direction of the other party.

8. PERSONAL INFORMATION.

8.1 Definition and Permitted Use.

- a. For this Agreement, "**Personal Information**" means any information that Bonfire collects, receives, or obtains, from or on behalf of Customer or any of its Authorized Users that identifies a specific individual or by or from which a specific individual may be identified, such as the individual's name, address, or social security number, and any other information relating to an identified or identifiable individual. Personal Information includes

the information of or pertaining to Customer's personnel, directors, officers, agents, providers, contractors, investors, or customers.

- b. Bonfire shall not cause or permit any Personal Information to be processed in any manner or for any purpose other than the performance of the Services in compliance with the restrictions in this Agreement and all applicable Laws.

8.2 Ownership and Treatment of Personal Information. As between Customer and Bonfire, Customer is and shall remain the sole and exclusive owner of all right, title, and interest in and to Personal Information. Bonfire shall:

- a. Process Personal Information for the sole purpose of performing the Services and in compliance with: (i) this Agreement or as Customer may expressly direct in advance in writing; and (ii) all applicable data protection laws; and
- b. Notify Customer in writing if Bonfire becomes aware of any unauthorized access, use or other unauthorized act respecting Personal Information.

8.3 Customer as Controller. Customer agrees that if Customer, or any data submitted by Customer to the Platform Services, is subject to the General Data Protection Regulation ("GDPR"), or related laws including related laws of European Union member states: (i) Customer is the data controller of such data and Bonfire is a data processor of such data; and (ii) Customer further represents that Customer has undertaken all requirements to comply with all privacy and data protection laws including but not limited to GDPR. Such requirements may include but are not limited to maintaining adequate records and registration requirements with supervising or other regulatory authorities.

8.4 Legitimate purpose/consent. Customer agrees and represents to Bonfire that all personal information Customer collects, provides, or otherwise uses in any way in relation to the Bonfire Service is necessary for Customer's legitimate interest and is not overridden by fundamental rights of the subject individual, and otherwise that Customer has all rights and obtained all necessary consents to collect, provide, manage, all personal information Customer provides to Bonfire for any purpose. Customer further represents and warrants that Customer will not collect, provide or otherwise use in any way in relation to the Bonfire Service any special category of personal data as described in GDPR.

9 TERM AND TERMINATION.

9.1 Term. The License and Support shall commence on the Plan Start Date (as outlined on the Order Form) and shall continue for the Term outlined on the Order Form (the "**Initial Term**"), unless earlier terminated in accordance with the provisions of this Agreement. At the end of the Initial Term this Agreement will auto-renew for further terms of 12 months (each a "**Renewal**") unless either party gives written notice of intention to terminate at least ninety (90) days prior to the end of the then current term (together the Initial Term and any Renewals constitute the "**Term**").

9.2 Suspension of Service. Bonfire may, at its sole option, and in addition to any other right herein, notify the Customer that it has a Suspended Account effective immediately in the event of any breach of payment of Fees as outlined in Section 6.2 above, or a breach of any

provisions related to intellectual property or confidential information, or a breach of any provisions outlined in Section 2.d.

9.3 Termination. This Agreement may be terminated as follows upon the occurrence of any of the following events:

- a. Immediately by Bonfire, if the Customer fails to make payment of undisputed Fees within 45 days of receiving written notice from Bonfire;
- b. Immediately by either party, if the other party breaches any of the obligations or provisions of this Agreement and fails to remedy such breach within 30 days of written notice from the party of such default;
- c. Immediately on written notice by either party if the other party (A) ceases or threatens to cease to carry on its business, commits an act of bankruptcy, makes an assignment or bulk sale of its assets, or proposes a compromise or arrangement to its creditors, or (B) is subject to any proceeding that is taken to (i) compromise or make an arrangement with that party's creditors, (ii) obtain an order to assign that party into bankruptcy or winding-up that party, or (iii) obtain an order to appoint a receiver over any part of that party's assets, and in each case, such proceeding is not dismissed within 60 days of such proceeding being initiated; and
- d. Immediately on written notice by either party if the other party breaches or threatens to breach any provision of Section 7 of this Agreement.

9.4 Effect of Termination. Upon the effective date of termination, the License and all Support shall terminate and:

- a. Each of the parties shall deliver or destroy, at the direction of the other party, all Confidential Information of the other party which is in its possession, care or control, provided that the Bonfire, on request by Customer, shall be permitted 10 business days to provide Customer with a backup copy of all Customer Data located on the Platform Services ;
- b. Customer shall pay to Bonfire all undisputed Fees accrued and owing up to the effective date of termination or Bonfire shall reimburse to Customer all pre-paid Fees on a pro rata basis for that portion of the Term following the effective date of termination;
- c. The provisions dealing with intellectual property, confidential information, liability and indemnification of this Agreement shall continue in force following effective termination; and
- d. Each of the parties shall have all remedies which are available to it at law or in equity.

10 INSURANCE.

Bonfire shall, at its own cost and expense, procure and maintain in full force and effect during the Term, policies of insurance from licensed and reputable insurance carriers covering the operations of Bonfire and its potential liabilities pursuant to this Agreement.

11 WARRANTIES AND DISCLAIMERS.

11.1 Software Limited Warranty. Bonfire warrants that the Platform Services will operate in substantial conformity with the applicable written documentation provided by Bonfire. For

any breach of this warranty, Customer's remedy shall be that Bonfire will, at its expense, correct any errors identified by Customer in the Platform Services, in addition to any other remedy that might be available to Customer for such breach by Bonfire. Bonfire also warrants that it will maintain the Platform Services at reputable third party Internet service providers and hosting facilities. Bonfire warrants that it has implemented commercially reasonable security measures, including without limitation, technical, physical and procedural controls to protect Customer Data against destruction, loss, alteration, unauthorized disclosure to third parties or unauthorized access by employees or contractors employed by Bonfire, whether by accident or otherwise. However, the Customer acknowledges and agrees that, notwithstanding such security measures, use of or connection to the Internet provides the opportunity for unauthorized third parties to circumvent such precautions and illegally gain access to the Platform Services and Customer Data. Accordingly, Bonfire cannot and does not guarantee the privacy, security or authenticity of any information so transmitted over or stored in any system connected to the Internet. For any breach of the foregoing warranties, Bonfire shall pay to Customer all damages the Customer suffers in connection with such breach, subject to the limitations set out in Section 11.3.

11.2 Exclusions. Except as expressly stated in this Section 11, there are no representations, warranties or conditions (whether implied or arising by statute or otherwise in law or from a course of dealing or usage of trade) for the Platform Services or Support, and BONFIRE DISCLAIMS ALL STATUTORY OR IMPLIED WARRANTIES AND CONDITIONS INCLUDING WITHOUT LIMITATION THE CONDITIONS AND/OR WARRANTIES OF MERCHANTABILITY, MERCHANTABLE QUALITY, FITNESS FOR ANY PURPOSE, PARTICULAR, SPECIFIC OR OTHERWISE, OR NON-INFRINGEMENT. Bonfire does not warrant that the functions contained in the Platform Services will meet the Customer's requirements or that the operation of the Platform Services will be uninterrupted or error-free.

11.3 Limitations of Liability. UNLESS PROHIBITED BY APPLICABLE LAW, IN NO EVENT SHALL EITHER PARTY OR THEIR RESPECTIVE AGENTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OF ANY KIND, WHETHER OR NOT FORESEEABLE, INCLUDING WITHOUT LIMITATION, LOSS OF BUSINESS, LOST PROFITS OR REVENUE, OR FAILURE TO REALIZE EXPECTED SAVINGS, EVEN IF THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE TOTAL AGGREGATE LIABILITY OF BONFIRE FOR DIRECT DAMAGES UNDER THIS AGREEMENT SHALL BE LIMITED TO THE FEES PAID BY CUSTOMER IN THE TWELVE (12) MONTHS PRECEDING THE DATE ON WHICH THE CAUSE OF ACTION GIVING RISE TO THE LIABILITY AROSE.

12 INDEMNIFICATION.

12.1 Bonfire Indemnification. Bonfire shall, at its own expense, defend Customer in any action, suit or claim by a third party alleging that the Platform Services (when used as authorized under this Agreement) infringe any United States or Canadian patent, trademark, trade secret, copyright or any other proprietary right of such third party (an "**IP Claim**") and shall pay settlement amounts agreed by Bonfire and/or any losses, damages, liabilities, expenses, or costs (including but not limited to reasonable attorneys' fees) awarded to such third party against Customer by a court of competent jurisdiction in such IP Claim. As conditions for such defense and satisfaction by Bonfire, (i) Customer shall notify Licensor promptly in writing upon becoming aware of all pending IP Claims; (ii) Customer shall give

Licensors sole control of the defense and settlement of such IP Claims; (iii) Customer shall cooperate fully with Licensor in the defense and/or settlement of such IP Claims; and (iv) Customer shall not settle any IP Claims without Licensor's consent, or compromise the defense of any such IP Claims.

12.2 Mitigation. Notwithstanding the foregoing, if Bonfire reasonably believes that use of any portion of the Platform Services is likely to be enjoined by reason of an IP Claim then Bonfire may, at its sole option and expense: (i) procure for the Customer the right to continue using the Platform Services, as the case may be, or any portion thereof; (ii) replace the same with other software, services or other material of equivalent functions and efficiency that is not subject to an action described in this section; or (iii) modify the applicable software or other material so that there is no longer any infringement or breach, provided that such modification does not adversely affect the functional capabilities of the Platform Services as set out herein. If none of the foregoing options are commercially reasonable, Bonfire may terminate this Agreement or access to the allegedly infringing portion of the Platform Services [and refund customer any prepaid unearned fees for the Platform Services or such portion of the Platform Services.] Bonfire shall have no liability respecting any IP Claim to the extent such Claim is based upon the combination, operation or use of the Platform Services, Support with other equipment, software, apparatus, devices or things not identified by Bonfire as compatible with the Platform Services and/or Systems or in a manner inconsistent with Bonfire's specifications and instructions or this Agreement.

12.3 Procedure. Bonfire's defense and indemnity obligations in this Section 12 are subject to the following: (i) Customer promptly notifying Bonfire in writing of the Claim on becoming aware of any pending Claim; (ii) Bonfire having sole control of the defense and all related settlement negotiations with respect to the Claim, provided that no settlement shall be accepted without the prior written consent of the aggrieved party, such consent not to be unreasonably withheld, conditioned or delayed; and (iii) Customer shall cooperate fully to the extent necessary in the defense or settlement of such Claim, and execute all documents necessary for the defense of such Claim and (iv) Customer shall not settle any Claim without Bonfire's written consent, or compromise the defense of any such Claim.

This section states the entire liability of Bonfire for any type of infringement or breach whatsoever of intellectual property rights of third parties resulting from or relating to the provision by Bonfire of the Platform Services or Support.

13 GENERAL PROVISIONS.

13.1 Entire Agreement. This Agreement, and any amendments or additions thereto from time to time, constitute the entire agreement and set forth the entire understanding between the parties hereto with respect to the subject matter hereof and supersede all prior or other agreements, covenants, arrangements and discussions with respect thereto. In the event of an inconsistency between the terms and conditions of this Agreement and any other document or agreement between the parties with respect to the subject matter hereof, the terms and conditions of this Agreement shall prevail and govern to the extent necessary to remedy such inconsistency.

13.2 Relationship of Customer and Bonfire. Nothing contained in this Agreement shall be deemed or construed as creating a joint venture or partnership between the parties; no party is by virtue of this Agreement authorized as an agent, employee or agent representative of the other.

- 13.3 Export and control restrictions.** The Customer acknowledges that this Agreement and the provision of all products hereunder shall be subject to the export control laws and regulations of Canada as are in force from time to time and the Customer shall comply with all such laws and regulations.
- 13.4 Non-Exclusivity.** Nothing in this Agreement will be construed to prevent Bonfire from marketing, licensing, selling or otherwise providing the Platform Services, Support or Systems, or any aspects of Bonfire's technology or services to any third party. Nothing in this Agreement will be construed to prevent the Customer from obtaining services similar to the Platform Services from a third party.
- 13.5 Modifications and Waiver.** No modification of, amendment or addition to this Agreement is valid or binding unless set forth in writing and fully executed by both parties hereto. Any waiver of any right or remedy under this Agreement must be in writing and signed by each party. No delay in exercising any right or remedy shall operate as a waiver of such right or remedy or any other right or remedy. The exercise or failure to exercise any remedy shall not preclude the exercise of that remedy at any time. The waiver of any breach hereof or default in any payment shall not be deemed to constitute a waiver of any succeeding breach or default.
- 13.6 No Assignment.** This Agreement and any rights or obligations hereunder, shall not be assigned, sublicensed or otherwise transferred by the Customer by a change of control of the Customer or by operation of law. Bonfire may transfer or assign its rights and obligations hereunder without prior written approval of the Customer. This Agreement shall be binding upon and shall inure to the benefit of Bonfire and the Customer and each of their successors and permitted assigns.
- 13.7 Governing Law.** The rights and obligations of the parties and all interpretations and performance of this Agreement shall be governed by and construed in accordance with the laws of the State of Texas, without regard to conflicts of laws principles. The parties agree that the provisions of the United Nations Convention on Contracts for the International Sale of Goods do not apply to this Agreement. The parties irrevocably and unconditionally attorn to the exclusive jurisdiction of the courts of the State of Texas, and all courts competent to hear appeals therefrom.
- 13.8 Notices.** Any notices, demands and other communications hereunder shall be in writing and shall be delivered, sent by electronic transmission, or by mail, registered or certified, return receipt requested, postage prepaid, and addressed to the parties as outlined on the Order Form. All notices shall be effective and deemed to be delivered (i) if mailed, on the fifth business day following such mailing, unless there is an interruption in the mail, in which case it shall be deemed to have been given when received; or (ii) if delivered or sent by facsimile, on the business day following the date of dispatch or the date of transmission, as the case may be. Either party may change the address for notice by giving written notice of such change to the other party in the manner provided in this Section.
- 13.9 Severability.** If any provision of this Agreement is held to be unenforceable or illegal by a court of competent jurisdiction, such provision shall be modified to the extent necessary to render it enforceable, or shall be severed from this Agreement, and all other provisions of this Agreement shall remain in full force and effect.
- 13.10 Force Majeure.** Neither party to this Agreement shall be liable to the other for any failure or delay in performance by circumstances beyond its control, including but not limited to,

acts of God, fire, labour difficulties, governmental action or terrorism, provided that the party seeking to rely on such circumstances gives written notice of such circumstances to the other party hereto and uses reasonable efforts to overcome such circumstances.

13.11 Authorized Reseller Status; Option to Purchase Affiliate Products. Bonfire is a subsidiary of GTY Technology Holdings Inc. ("GTY") and an authorized reseller of products and services produced and provided by other subsidiaries of GTY (such subsidiaries, "Bonfire Affiliates"). These products and services include software-as-a-service technology for the procurement and vendor supplier sourcing industry, digital services and payment technology through a software-as-a-service platform, software solutions for grants management and indirect cost reimbursement and related implementation and consulting services, software tools to streamline permitting and licensing services, and additional web-based budgeting preparation, performance, management and data visualization solutions ("Affiliate Products"). Bonfire Affiliates include Bonfire Interactive US Ltd., Sherpa Government Solutions LLC, eCivis Inc., CityBase, Inc., OpenCounter Enterprise Inc., Questica Ltd. and Questica Software Inc. In addition to the products and services that are the subject of this Agreement, Client has the option to purchase from either Bonfire, as an authorized reseller, or Bonfire Affiliates, Affiliate Products on terms and conditions, including pricing, to be agreed upon in writing by Client and Bonfire or Client and the applicable Bonfire Affiliate.

SCHEDULE A – SERVICE DESCRIPTIONS AND DEFINITIONS

All capitalized terms used in this Schedule shall have the meanings ascribed thereto in the Agreement. This Schedule may be amended from time to time in accordance with the terms of the Agreement, and is deemed incorporated into the Agreement, as amended.

1. PLATFORM SERVICES.

a. **Description of Platform Services.** Platform Services include the following functionality (based on the modules included on the customer order form):

- i. Public Opportunity Portal
- ii. Project Management and Evaluation
- iii. Contract Management
- iv. Vendor Record Management
- v. Vendor Performance Management
- vi. Insights and Analytics
- vii. User Management

2. **CUSTOM DEVELOPMENT AND SERVICES.** The following optional custom development services are available to the Customer, the terms of which shall be negotiated by the parties.

- a. **Data Migration Service:** Importing Customer's legacy data and files into Platform Services. Exporting Customer's historical data in a structured manner out of Platform Services.
- b. **Custom Development Service:** Includes any additional development that the Customer would like done for integrating custom data formats, the creation of custom report formats, and any other development required to fill Customer needs.

3. BUSINESS DAYS.

- a. Business Days are defined as Monday – Friday.
- b. Business Days do not include holidays, which include:
 - i. New Year's Day (January 1)
 - ii. President's Day / Family Day (Third Monday in February)
 - iii. Good Friday (Friday before Easter Sunday)
 - iv. Victoria Day (Monday before May 25)
 - v. Labor Day (First Monday in September)
 - vi. Columbus Day / Thanksgiving Day (Second Monday in October)
 - vii. Christmas Day (December 25)
 - viii. Boxing Day (December 26)

SCHEDULE B – SERVICE LEVEL AGREEMENT

Bonfire understands the importance and centrality the Platform Services plays in supporting an organization's business processes. We value and appreciate the trust that each customer places in us.

This Service Level Agreement ("SLA") is a policy governing the use of the Platform Services between Bonfire ("us" or "we") and users of Platform Services ("you"). This SLA applies separately to each Customer using the Platform Services. Any amendments or revisions to this SLA will be in writing and agreed to by both parties.

Bonfire is committed to providing reliable high-performance managed services to our customers. Our SLA has been designed to ensure the highest quality service and to provide compensation to the Customer in the event of failure to achieve the specified metrics herein.

1. SERVICE COMMITMENT.

- a. **Service Availability.** Bonfire will use commercially reasonable efforts to make the Platform Services available with a Monthly Uptime Percentage (defined below) of at least 99.5% during any monthly billing period. In the event Bonfire does not meet the Service Commitment, you will be eligible to receive a Service Credit as described below.
- b. **Data Redundancy.** Bonfire will use commercially reasonable efforts to provide at a minimum one (1) redundant data store for Customer Data, updated on a daily basis, during the period of the Term.
- c. **Data Storage Term.** While there exists an SLA in place between the Customer and Bonfire, Bonfire will use commercially reasonable efforts to store all Customer Data.
- d. **Data Exportation.** Bonfire will use commercially reasonable efforts to provide (i) the access or means for the Customer to export the Customer Data out of the Platform Services or (ii) a comprehensive export of all Customer Data in downloadable Excel and ZIP formats upon request.

2. SERVICE AVAILABILITY DEFINITIONS.

- a. **Server Outage.** A "Server Outage" is defined as an instance in which no traffic can pass in or out of the Bonfire managed server(s) for more than 15 consecutive minutes ("Service Unavailable"). We will calculate the Service Unavailable for each Customer as a percentage for each fifteen-minute period in the monthly billing cycle. The calculation of the number of Server Outages will not include outages that arise directly or indirectly as a result of any of the SLA Exclusions (as defined below).
- b. **Monthly Uptime Percentage.** The "Monthly Uptime Percentage" is calculated by subtracting from 100% the average of the Service Outage from each fifteen-minute in the monthly cycle.

3. **SERVICE CREDITS.** "Service Credits" are calculated as a percentage of the total charges paid by you to Bonfire for the billing cycle in which the error occurred in accordance with the schedule below.

a. Service Credit Percentages:

- i. For Monthly Uptime Percentage equal to or greater than 99.0% but less than 99.5% - Service Credit of 1%
- ii. For Monthly Uptime Percentage less than 99% - Service Credit Percentage of 5%.

We will apply any Service Credits against future Bonfire payments otherwise due from you unless there are none, in which case Service Credits will be refunded. A Service Credit will be applicable and issued only if the credit amount for the applicable monthly billing cycle is greater than one dollar (\$1 Canadian Dollar). Service Credits may not be transferred or applied to any other Customer.

4. **SERVICE CREDIT PROCEDURE.** To receive a Service Credit, you must submit a request by sending an e-mail message to support@gobonfire.com. To be eligible, the credit request must (i) include your account URL in the subject of the e-mail message; (ii) include, in the body of the e-mail, the dates and times of each incident of each outage; and (iii) be received by us within ten (10) business days after the end of the billing cycle in which the errors occurred. If the Monthly Uptime Percentage applicable to the month of such request is confirmed by us, we will issue the Service Credit to you within one billing cycle following the month in which the error occurred. Your failure to provide the request and other information as required above will disqualify you from receiving a Service Credit.
5. **SERVICE COMMITMENT EXCLUSIONS.** The Service Commitment does not apply to any unavailability, suspension, termination of Platform Services, or any other Platform Services performance issues (i) that result from Downtime and Service Suspensions as defined below. **"Service Suspensions"** means, collectively, Bonfire's right to suspend access to any portion or all of the Platform Services at any time, on a Service-wide basis: (a) for scheduled Downtime to permit us to conduct maintenance or make modifications to any Platform Service; (b) in the event of a denial of service attack or other attack on the Platform Service or other event that we determine, in our sole discretion, may create a risk to the applicable Platform Service, to you or to any of our other customers if the Platform Service were not suspended; or (c) in the event that we determine that any Platform Service is prohibited by law or we otherwise determine that it is necessary or prudent to do so for legal or regulatory reasons To the extent we are able, we will endeavour to provide you email notice of any Service Suspension and email notice regarding resumption of Platform Services following any such suspension; (ii) caused by factors outside of our reasonable control, including any force majeure event or Internet access or related problems beyond the demarcation point of the Platform Services; (iii) that result from any actions or inactions of you or any third party; (iv) that result from your equipment, software or other technology and/or third party equipment, software or other technology (other than third party equipment within our direct control); or (v) arising from our suspension and termination of your right to use Platform Services in accordance with the terms of the Agreement. If availability is impacted by factors other than those used in our calculation of the Server Outage, we may issue a Service Credit considering such factors in our sole discretion.

"General Decision Number: TX20220261 08/05/2022

Superseded General Decision Number: TX20210261

State: Texas

Construction Type: Building

County: Midland County in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2022.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Modification Number
0
1

Publication Date
01/07/2022
02/25/2022

6.265

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2

08/05/2022

BOIL0074-003 01/01/2021

	Rates	Fringes
BOILERMAKER.....	\$ 29.47	24.10

ENGI0178-005 06/01/2020

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
(1) Tower Crane.....	\$ 32.85	13.10
(2) Cranes with Pile Driving or Caisson Attachment and Hydraulic Crane 60 tons and above.....	\$ 28.75	10.60
(3) Hydraulic cranes 59 Tons and under.....	\$ 32.35	13.10

* IRON0084-011 06/01/2022

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 26.76	7.88

PLUM0404-001 09/01/2020

	Rates	Fringes
PLUMBER.....	\$ 26.05	8.81

* SUTX2014-037 07/21/2014

	Rates	Fringes
BRICKLAYER.....	\$ 20.00	0.00
CARPENTER.....	\$ 13.82 **	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 13.76 **	0.00
ELECTRICIAN.....	\$ 23.18	6.31
INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation).....	\$ 19.77	7.13
IRONWORKER, REINFORCING.....	\$ 12.27 **	0.00
IRONWORKER, STRUCTURAL.....	\$ 22.16	5.26
LABORER: Common or General.....	\$ 11.80 **	0.00
LABORER: Mason Tender - Brick...	\$ 11.38 **	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 10.58 **	0.00
LABORER: Pipelayer.....	\$ 12.49 **	2.13
LABORER: Roof Tearoff.....	\$ 11.28 **	0.00
OPERATOR:		

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Backhoe/Excavator/Trackhoe.....\$ 14.25 **	0.00
OPERATOR: Bobcat/Skid	
Steer/Skid Loader.....\$ 13.93 **	0.00
OPERATOR: Bulldozer.....\$ 18.29	1.31
OPERATOR: Drill.....\$ 16.22	0.34
OPERATOR: Forklift.....\$ 14.83 **	0.00
OPERATOR: Grader/Blade.....\$ 13.37 **	0.00
OPERATOR: Loader.....\$ 13.55 **	0.94
OPERATOR: Mechanic.....\$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....\$ 16.03	0.00
OPERATOR: Roller.....\$ 12.70 **	0.00
PAINTER (Brush, Roller, and Spray).....\$ 15.00	0.73
PIPEFITTER.....\$ 25.80	8.55
ROOFER.....\$ 14.75 **	0.00
SHEET METAL WORKER (HVAC Duct Installation Only).....\$ 22.73	7.52
SHEET METAL WORKER, Excludes HVAC Duct Installation.....\$ 19.50	0.00
TILE FINISHER.....\$ 11.22 **	0.00
TILE SETTER.....\$ 14.74 **	0.00
TRUCK DRIVER: Dump Truck.....\$ 12.39 **	1.18
TRUCK DRIVER: Flatbed Truck.....\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer Truck.....\$ 12.50 **	0.00
TRUCK DRIVER: Water Truck.....\$ 12.00 **	4.11

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is **PACKET** by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours

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they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the

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wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

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The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"



City Council Meeting

Item Number: 7
Meeting Date: April 25, 2023
To: City Council / City Manager
From: Erika Martinez, Manager, Purchasing
Subject: RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$845,000.00 WITH JSA ARCHITECTS, INC., FOR ARCHITECTURAL, DESIGN, AND ENGINEERING SERVICES FOR THE NEW HEALTH SERVICES FACILITY DESIGN PROJECT; APPROVING \$84,500.00 FOR PROJECT RELATED EXPENSES; AND APPROPRIATING FUNDS FOR SAID AGREEMENT (DISTRICT: NONE) (GENERAL SERVICES)

Purpose:

Resolution awarding a professional services agreement with JSA Architects, Inc. for architectural, design, and engineering services for the new Health Services Facility Design Project for the Community Services Department for a cost of \$845,000.00; approving \$84,500.00 for contingencies; for a total cost of \$929,500.00; and appropriating funds therefore.

Recommended City Council Action:

Approve

Fiscal Impact:

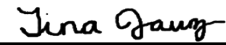
Funding is available in the FY2023 General Operating Fund budget and will be transferred and appropriated to a project for the said purposes.

Discussion:

Motion 133-2022 authorized the issuance of a request for qualifications for new Health Services Facility Design Project for the Community Services Department. One hundred eighty-eight requests were issued. We received six (6) proposals. Staff recommends awarding a professional services agreement for architectural, design, and engineering services for the new Health Services Facility Design Project to JSA Architects, Inc of Midland, Texas. Please see the

attached memo from Cristina Burns, Community Services Director, for additional information.

Therefore, please consider a resolution awarding a professional services agreement for architectural, design, and engineering services for the new Health Services Facility Design Project to JSA Architects, Inc of Midland, Texas for a cost of \$845,000.00; approving \$84,500.00 for contingencies; for a total cost of \$929,500.00; and appropriating funds therefore.



City Manager's Office

CITY OF MIDLAND
Community Services Department
Health Services Division
Interoffice Memorandum

Date: April 6, 2023
To: Erika Martinez, Purchasing Manager
From: Cristina O. Burns, Director of Community Services
Subject: Professional Services Agreement – Design of a new Health Services facility

The City of Midland closed a Request for Qualifications for Professional Design Services for the design, plans, specifications, and architectural services for the construction of a new Health Services facility on February 1, 2023. The City received six proposals, and JSA Architects, Inc. of Odessa, Texas, was selected as the best qualified consultant to provide professional design services for the project.

JSA Architects, Inc. has submitted an exhibit of their services fees for the development of the plans, specifications, estimates, and construction oversight of a new Health Services facility which would include the following work:

Basic Service Fees	\$740,000
(includes Design and Development of Construction Documents, Bidding, and Construction Administration)	
Additional Service Fees	
Site Feasibility Study and Programming	\$10,000
Civil Engineering	\$70,000
Landscape Design	\$25,000
Total Basic and Additional Services Fees	\$845,000

With 38 years of municipal experience and work on similar health facility design projects, JSA Architects, Inc. has proven experience, including designing and building three medical primary care clinics for Medical Center Health System (MCHS), the expansion of the MCHS Woman and Infants Center, the Vascular Center of the Permian Basin, The Odessa College Health Sciences Building Simulation Hospital, The Texas Tech Health Science Center-Odessa Simulation Hospital, and The Life Center of Odessa.

For the purpose of providing a general baseline, JSA Architects, Inc. is assuming building costs of \$9 million and approximately 9.22 acres of site work at 4500 N. Lamesa Road.

The Professional Services Contract with JSA Architects, Inc. shall not exceed \$845,000. A 10% contingency (\$84,500) is requested to cover any unexpected project-related expenses. \$929,500 shall be appropriated from the General Fund (001) unappropriated fund balance to a Project.

RESOLUTION NO. _____

RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT IN THE AMOUNT OF \$845,000.00 WITH JSA ARCHITECTS, INC., FOR ARCHITECTURAL, DESIGN, AND ENGINEERING SERVICES FOR THE NEW HEALTH SERVICES FACILITY DESIGN PROJECT; APPROVING \$84,500.00 FOR PROJECT RELATED EXPENSES; AND APPROPRIATING FUNDS FOR SAID AGREEMENT

WHEREAS, Motion 133-2022 authorized the issuance of a request for qualifications for architectural, design, and engineering services for the New Health Services Facility Design Project; and

WHEREAS, six (6) statements of qualifications were received, with the most qualified submittal belonging to JSA Architects, Inc., for a total cost of \$845,000.00; and

WHEREAS, the City Council finds that JSA Architects, Inc., is qualified to perform said professional services; and

WHEREAS, the City Council finds that the professional fees proposed by JSA Architects, Inc. are consistent with and not higher than the recommended practices and fees published by the applicable professional associations and do not exceed any maximum provided by law; and

WHEREAS, the City Council finds that JSA Architects, Inc., provides professional services for a fair and reasonable price; and

WHEREAS, the City Council finds it to be in the public interest to execute a professional services agreement with JSA Architects, Inc., as the most highly qualified provider of said professional services based on demonstrated competence, knowledge, and qualifications and on the reasonableness of the proposed fees for the services; and

WHEREAS, the City Council finds it to be in the public interest to approve \$84,500.00 for project related expenses;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the City Manager and City Secretary are hereby authorized
PACKET 7.4 April 25, 2023

and directed to execute and attest, respectively, on behalf of the City of Midland, a professional services agreement with JSA Architects, Inc., for said professional services. A copy of said agreement is attached hereto as Exhibit A and incorporated herein for all purposes.

SECTION TWO. That the sum of \$84,500.00 for project related expenses is hereby approved.

SECTION THREE. That the sum of \$929,500.00 is available in the FY2023 General Operating Fund budget and will be transferred and appropriated to a project established by the City of Midland Finance Department.

SECTION THREE. That the City Comptroller is hereby authorized and directed to pay JSA Architects, Inc., from funds available in the project established by the City of Midland Finance Department upon receipt of proper invoices or statements approved by the City Manager.

On motion of Council member _____, seconded by Council member _____, the above and foregoing resolution was adopted by the City Council of the City of Midland at a regular meeting on the _____ day of _____, A.D., 2023, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

Lori Merritt Blong, Mayor

ATTEST:

Marcia Bentley-German, City Secretary

RECOMMENDED AND APPROVED:

Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

Regina Stephenson, General Services Director

APPROVED AS TO FORM ONLY:

John Ohnemiller, City Attorney

PROFESSIONAL SERVICES AGREEMENT
23001568

THIS AGREEMENT is made and effective the 26th day of April 2023, by and between the CITY OF MIDLAND, TEXAS (“*CITY*”), a home-rule municipal corporation, and JSA Architects, Inc. (“*COMPANY*”). CITY and COMPANY are at times individually referred to as a “*Party*” and collectively referred to as the “*Parties*.”

ARTICLE I. PURPOSE

The purpose of this Agreement is to state the terms and conditions under which COMPANY shall perform design, plans, specifications, and architectural services for a new Health Services Facility services (the “*Services*”) for CITY. The Services are more specifically set forth in Exhibit A, which is attached hereto and incorporated herein for all purposes.

ARTICLE II. SERVICES TO BE PERFORMED

COMPANY shall provide the Services in a manner consistent with the same level of skill and care as other professionals that perform similar services for similar projects in approximately the same region and at approximately the same point in time. COMPANY represents that any employee who performs the Services shall be fully qualified and competent to perform the Services.

ARTICLE III. FINANCIAL CONSIDERATIONS

CITY agrees to pay COMPANY an amount not to exceed \$ 845,000.00 for the performance of the Services. CITY agrees to pay COMPANY according to the schedule set forth in Exhibit A upon presentation of a monthly invoice. The monthly invoice shall set forth all service fees for the month and those expenses described in Exhibit A that COMPANY incurs during the previous month for which COMPANY receives advanced written approval from the City Manager. All additional and/or reimbursable expenses must be approved by the City Manager prior to incurring such expenses.

Within thirty (30) days of the date COMPANY’s invoice is received by CITY, CITY shall pay the full amount of such invoice; provided, however, that if CITY objects to any portion of an invoice, CITY shall notify COMPANY of CITY’s objection and the grounds therefor within fifteen (15) days of the date of receipt of the invoice, and the Parties shall immediately make every

effort to settle the disputed portion of the invoice. Notwithstanding the foregoing, CITY shall pay every portion of the invoice that is not in dispute within the 30-day period for payment.

ARTICLE IV. TERM

The term of this Agreement shall be from April 26, 2023, until the project is completed sooner, or the Agreement is terminated as provided below.

ARTICLE V. TERMINATION AT WILL

CITY may terminate this Agreement at will, for any or no reason, upon giving COMPANY at least one hundred eighty (180) days' written notice. The Parties understand and agree that it is in CITY'S sole and absolute discretion to cancel this Agreement during the term set forth in Article IV without penalty to CITY. COMPANY has no expectation and has received no guarantees that this Agreement will not be terminated during the Agreement's term. The Parties have bargained for the flexibility of terminating this Agreement upon tender of the requisite notice at any time during this Agreement's term. All work and services under the Agreement shall be suspended upon termination of the Agreement becoming effective.

ARTICLE VI. ASSIGNMENT

COMPANY shall not, either directly or indirectly, assign all or any part of this Agreement, or any interest, right or privilege herein, without obtaining CITY's prior written consent. The issue of whether to grant such consent shall be in the sole and absolute discretion of CITY.

ARTICLE VII. OWNERSHIP AND CONFIDENTIALITY OF DOCUMENTS AND OTHER WORK PRODUCT

All reports, information and other data ("*Instruments of Service*") given to, prepared or assembled by COMPANY under this Agreement, and any other related document or item shall become the sole and exclusive property of CITY. The Instruments of Service shall be promptly delivered, without restriction, to CITY and such other persons or entities as CITY may designate; provided, however, that COMPANY may make copies of the Instruments of Service for its files.

ARTICLE VIII. INDEPENDENT CONTRACTOR

COMPANY shall perform the Services as an independent contractor and not as an officer, agent, servant or employee of CITY. COMPANY shall have exclusive control of and the exclusive

right to control the details of the Services and all persons performing the same. COMPANY shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors and subcontractors. The Parties acknowledge and agree that the doctrine of *respondeat superior* shall not apply as between CITY and COMPANY, its officers, agents, employees, contractors and subcontractors. Nothing in this Agreement shall be construed as creating a partnership or joint enterprise between CITY and COMPANY. No person performing the Services shall be considered an officer, agent, servant or employee of CITY. Further, it is specifically understood and agreed that nothing in this Agreement is intended nor shall be construed as creating a “Community of Pecuniary Interest” or “An Equal Right of Control” that would give rise to vicarious liability. COMPANY is an independent contractor under this Agreement and shall assume all rights, obligations, and liabilities applicable to it as an independent contractor. CITY does not have the power to direct the order in which the services are performed. CITY shall not have the right to control the means, methods or details of COMPANY’S work. COMPANY shall assume exclusive responsibility for performing the Services, and is entirely free to perform the Services in its own way.

ARTICLE IX. INSURANCE

During the term of this Agreement, COMPANY shall maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):

-Personal Injury: \$1,000,000.00 per person
 \$1,000,000.00 per occurrence

-Property Damage: \$500,000.00 per occurrence

Business Automobile Liability: \$250,000.00 combined single limit -
 Personal Injury and Property Damage

Workers’ Compensation: Statutory limits

Employers’ Liability: \$500,000.00 per accident or occurrence

The Commercial General Liability policy shall be on a per project aggregate, including completed operations, and shall be on a claims-occurred basis. This policy shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Business Automobile Liability policy shall cover any vehicle for bodily injury and

property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of \$250,000.00 covering any vehicle used for the execution of the Services. This policy shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Workers' Compensation policy shall inure to the benefit of employees injured during the course and scope of their employment by COMPANY pursuant to this Agreement. The Workers' Compensation policy shall waive all rights of subrogation in favor of CITY.

All insurance policies required by this Agreement shall (i) provide for a waiver of subrogation in favor of CITY, and (ii) name CITY as an additional insured on a claims-occurred basis (except for the Workers' Compensation policy). Prior to any reduction or termination of the insurance policies referenced herein, COMPANY shall ensure that its insurance provider submits written notice to CITY no later than thirty (30) days prior to the reduction or termination of such coverage.

COMPANY shall contractually require all contractors, subcontractors, and sub-subcontractors that perform the Services to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and that name the City of Midland as an additional insured on a claims-occurred basis (except Workers' Compensation).

Prior to the execution of the Agreement, COMPANY shall provide one or more certificates of insurance specifically stating that requirements of this Article have been met, which shall be subject to the approval of CITY. CITY shall not be required to provide any insurance pursuant to this Agreement.

By executing this Agreement, COMPANY certifies that the certificate of insurance provided pursuant to this Article complies with the requirements of Chapter 1811 of the Texas Insurance Code. COMPANY shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law and this Agreement is the sole and exclusive responsibility of COMPANY.

Notwithstanding any contrary provision contained herein, the City Manager, in his/her sole and absolute discretion, modify the insurance requirements contained in this Article.

ARTICLE X. ATTORNEY FEES

BY EXECUTING THIS AGREEMENT, COMPANY AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST CITY, REGARDING THE AWARD OF ATTORNEY FEES, WHICH ARE IN ANY WAY RELATED TO THIS AGREEMENT OR THE CONSTRUCTION, INTERPRETATION, OR BREACH OF THIS AGREEMENT. COMPANY SPECIFICALLY AGREES THAT IF COMPANY BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS AGREEMENT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS AGREEMENT (INCLUDING, BUT NOT LIMITED TO, ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED) OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE), COMPANY AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY FEES TO WHICH COMPANY MIGHT OTHERWISE BE ENTITLED.

COMPANY AGREES THAT THIS IS A VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY-EXISTING KNOWN RIGHT. COMPANY ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS AGREEMENT. COMPANY FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN CITY AND COMPANY. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF GOVERNMENTAL IMMUNITY.

COMPANY IS RELYING ON ITS OWN JUDGMENT AND HAD THE OPPORTUNITY TO DISCUSS THIS AGREEMENT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION. THE PROVISIONS OF THIS ARTICLE SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

ARTICLE XI. GOVERNMENTAL IMMUNITY

By executing this Agreement, CITY is not waiving its right of governmental immunity. CITY is retaining its immunity from suit. CITY is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

ARTICLE XII. NO THIRD-PARTY BENEFICIARY

CITY's approval of this Agreement does not create a third-party beneficiary. There is no third-party beneficiary to this Agreement. No person or entity who is not a party to this Agreement shall have any third-party beneficiary or other rights hereunder.

ARTICLE XIII. RELEASE

NOTWITHSTANDING ANY CONTRARY PROVISION CONTAINED HEREIN, COMPANY HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES CITY AND ITS AGENTS, COUNCIL MEMBERS, EMPLOYEES, AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH COMPANY HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF AGREEMENT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR CITY'S NEGLIGENCE. THE PROVISIONS OF THIS ARTICLE SHALL SURVIVE THE TERMINATION OF THIS AGREEMENT.

ARTICLE XIV. GENERAL PROVISIONS

A. Waiver. No waiver by CITY of a breach of any covenant, condition, or restriction of this Agreement shall be construed or held to be a waiver of any succeeding or preceding breach of the same or any other covenant, condition, or restriction contained in this Agreement.

B. Governing Law and Venue. The laws of the State of Texas shall govern, construe and enforce all rights and duties of the Parties, including, but not limited to, tort claims and any contractual claims or disputes arising from or relating in any way to the subject matter of this Agreement, without regard to conflict of laws and rules that would direct application of the laws of another jurisdiction. All performance and payment made pursuant to this Agreement shall be deemed to have occurred in Midland County, Texas. The obligations and undertakings of the

Parties shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claim, suit, or other action arising from or connected in any way to this Agreement shall be in Midland County, Texas.

C. Notice. Any notice or demand made regarding this Agreement shall be made in writing and delivered, either in person or by certified or registered mail, at the addresses provided below. Notice by mail shall be complete upon deposit of the paper, postage prepaid, in a post office or official depository under the care and custody of the United States Postal Service.

If to CITY: City Manager's Office
 P.O. Box 1152
 Midland, Texas 79702

If to COMPANY: JSA Architects, Inc.
 415 N. Jackson Ave.
 Odessa, Texas 79761

The parties hereto may change the above-designated addresses by giving notice pursuant to the terms of this Section.

D. Severability. If one or more of the provisions contained in this Agreement are held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and this Agreement shall be construed as if the invalid, illegal, or unenforceable provision were never contained herein.

E. Use of Language. Words in the singular shall be held to include the plural, unless the context otherwise requires.

F. Amendments, Modifications, Alterations. No amendment, modification, or alteration of this Agreement shall be binding unless such is evidenced in writing, dated subsequent to the date of this Agreement, and duly executed by the Parties.

G. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed as original, and all of which shall constitute one and the same instrument.

H. Federal Wage Requirements. If applicable, the Davis-Bacon Act, 29 CFR 5.5, and any related acts or regulations are hereby incorporated by reference and made a part of this Agreement, and all terms and requirements under said statutes and regulations are made terms and conditions of this Agreement, to which the Parties have agreed to be bound.

I. Notice of Alleged Breach; Statutory Prerequisites. As a condition precedent to filing suit

for alleged damages incurred by an alleged breach of an express or implied provision of this Agreement, COMPANY or its legal representative shall give the City Manager, or any other reasonable official of CITY, written notice (consisting of one (1) original and seven (7) copies of such notice attached to a copy of this Agreement) of such duly-verified damages within one hundred fifty (150) days after the same has been sustained. The discovery rule does not apply to the giving of such notice. The notice shall include when, where, and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which COMPANY will settle, the physical and mailing addresses of COMPANY at the time and date the claim was presented, the physical and mailing addresses of COMPANY for the six (6) months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom COMPANY relies to establish its claim. COMPANY's failure to so notify the City Manager within the time and manner provided herein shall exonerate, excuse and except CITY from any liability whatsoever. CITY is under no obligation to provide notice to COMPANY that COMPANY'S notice is insufficient. CITY reserves the right to request additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after COMPANY's receipt of such notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any contrary provision contained herein, COMPANY's failure to comply with the requirements herein shall perpetually bar COMPANY's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless of whether CITY has actual or constructive notice or knowledge of said claim or alleged damages. COMPANY agrees that the requirements of this entire Agreement are reasonable.

J. Prompt Pay Act. The Parties agree that Texas Government Code, Chapter 2251, Payment for Goods and Services does not waive the CITY's governmental immunity.

K. Compliance. COMPANY shall comply with Texas Government Code § 2252.908, *et seq.*, as amended, and Texas Local Government Code § 176.006, *et seq.*, as amended.

L. Anti-Boycott Statutes. To the extent that Tex. Gov't Code §§ 2271.002 and 2274.002 apply to this Agreement, COMPANY hereby verifies that:

- COMPANY does not boycott Israel and will not boycott Israel during the term of

this Agreement;

- COMPANY does not boycott energy companies and will not boycott energy companies during the term of this Agreement; and
- COMPANY does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this Agreement against any firearm entity or firearm trade association.

If Tex. Gov't Code § 2270.002 does not apply to this Agreement, such verification is not required, and COMPANY shall be deemed to have not made such verification.

M. Records Retention and Production of Information. To the extent that this Agreement is a contract described by Tex. Gov't Code § 552.371, COMPANY shall: (i) preserve all contracting information related to the Agreement as provided by the records retention requirements applicable to CITY for the duration of the contract; (ii) promptly provide to CITY any contracting information related to the Agreement that is in the custody or possession of COMPANY on request of CITY; and (iii) on completion of the Agreement, either (a) provide at no cost to CITY all contracting information related to the Agreement that is in the custody or possession of COMPANY, or (b) preserve the contracting information related to the Agreement as provided by the records retention requirements applicable to CITY.

N. Public Information. To the extent that this Agreement is a contract described by Tex. Gov't Code § 552.371, COMPANY agrees as follows in accordance with Tex. Gov't Code § 552.372(b): The requirements of Subchapter J, Chapter 552, Government Code, may apply to this contract, and the contractor or vendor agrees that the contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

O. Conflict of Terms. If a conflict of terms or language exists between: (i) any of the provisions of this Agreement; and (ii) any of the provisions contained in any exhibit(s) attached to this Agreement, precedence shall be given to the provisions of this Agreement. For the avoidance of any doubt, the provisions contained in this Agreement shall supersede any and all conflicting provisions contained in any exhibit(s) attached hereto. Furthermore, the Parties acknowledge and agree that any provision contained in an exhibit(s) attached to this Agreement that imposes an additional express or implied obligation on CITY is hereby made void and of no force or effect. CITY's sole and exclusive obligations under this Agreement are contained in the provisions of this

Agreement that precede the signature page(s), which evidences the Parties' execution and acceptance hereof.

P. Iron or Steel Products Statute. Company agrees that all iron or steel products produced through a manufacturing process and used in the project that is the subject of this Agreement shall be produced in the United States in accordance with Government Code § 2252.202, *et seq.*, as amended.

Q. Interpretation. By executing this Agreement, the Parties acknowledge and agree that this Agreement shall not be interpreted or construed against any Party solely because such Party or its legal counsel drafted this Agreement. The Parties have read, understood, and approve of the language and terms set forth herein.

[Signature Page(s) Follows]

EXECUTED IN DUPLICATE the day and year first above mentioned.

THE CITY OF MIDLAND, TEXAS

Robert Patrick, City Manager

ATTEST:

Marcia Bentley-German, City Governance Officer/City Secretary

APPROVED AS TO FORM ONLY:

John Ohnemiller, City Attorney

COMPANY:

By: _____

Name: _____

Title: _____

STATE OF _____ §

§

COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this ____ day of _____, 20____ personally appeared, _____, an officer of JSA Architects, Inc., known to me to be the person and official whose name is subscribed to the forgoing instrument, and acknowledged to me that he executed the same as the act and deed of said corporation, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the __ day of _____, 20____.

Notary Public, State of Texas

Exhibit A

City of Midland

New Health Services Facility

Architect's Basic Services:

- A. The Architect's Basic Services consist of those described below and include usual and customary structural, mechanical, and electrical engineering services. Services not set forth below are Additional Services.
- B. The Architect shall manage the Architect's services, research applicable design criteria, attend Project meetings, communicate with members of the Project team, and report progress to the City.
- C. The Architect shall coordinate its services with those services provided by the City and the City's consultants. The Architect shall be entitled to rely on, and shall not be responsible for, the accuracy, completeness, and timeliness of, services and information furnished by the City and the City's consultants. The Architect shall provide prompt written notice to the City if the Architect becomes aware of any error, omission, or inconsistency in such services or information.
- D. As soon as practicable after the date of the Agreement, the Architect shall submit for the City's approval a schedule for the performance of the Architect's services. The schedule initially shall include anticipated dates for the commencement of construction and for Substantial Completion. The schedule shall include allowances for periods of time required for the City's review, for the performance of the City's consultants, and for approval of submissions by authorities having jurisdiction over the Project. Once approved by the City, time limits established by the schedule shall not, except for reasonable cause, be exceeded by the Architect or the City. With the City's approval, the Architect shall adjust the schedule, if necessary, as the Project proceeds until the commencement of construction.
- E. The Architect shall not be responsible for the City's directive or substitution, or for the City's acceptance of non-conforming work, made or given without the Architect's written approval.
- F. The Architect shall contact governmental authorities required to approve the Construction Documents and entities providing utility services to the Project. The Architect shall respond to applicable design requirements imposed by those authorities and entities.
- G. The Architect shall assist the City in connection with the City's responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the Project.
- H. Schematic Design Phase Services:
 - 1. The Architect shall review the program and other information furnished by the City, and shall review laws, codes, and regulations applicable to the Architect's services.
 - 2. The Architect shall prepare a preliminary evaluation of the City's program, schedule, budget for the Cost of the work, Project site, the proposed procurement and delivery method, and other Initial Information, each in terms of the other, to ascertain the requirements of the Project. The Architect shall notify the City of (1) any inconsistencies discovered in the information, and (2) other

information or consulting services that may be reasonably needed for the Project.

3. The Architect shall present its preliminary evaluation to the City and shall discuss with the City alternative approaches to design and construction of the Project. The Architect shall reach an understanding with the City regarding the requirements of the Project. The Architect will attend meetings or workshops as required.
4. Based on the Project requirements agreed upon with the City, the Architect shall prepare and present, for the City's approval, a preliminary design illustrating the scale and relationship of the Project components.
5. Based on the City's approval of the preliminary design, the Architect shall prepare Schematic Design Documents for the City's approval. The Schematic Design Documents shall consist of drawings and other documents including a site plan, if appropriate, and preliminary building plans, sections and elevations; and may include some combination of study models, perspective sketches, or digital representations. Preliminary selections of major building systems and construction materials shall be noted on the drawings or described in writing.
6. The Architect shall consider the value of alternative materials, building systems and equipment, together with other considerations based on program and aesthetics, in developing a design for the Project that is consistent with the City's program, schedule, and budget for the Cost of the work.
7. The Architect shall submit the Schematic Design Documents to the City, and request the City's approval.

I. Design Development Phase Services:

1. Based on the City's approval of the Schematic Design Documents, and on the City's authorization of any adjustments in the Project requirements and the budget for the Cost of the work, the Architect shall prepare Design Development Documents for the City's approval. The Design Development Documents shall illustrate and describe the development of the approved Schematic Design Documents and shall consist of drawings and other documents including plans, sections, elevations, typical construction details, and diagrammatic layouts of building systems to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, and other appropriate elements. The Design Development Documents shall also include outline specifications that identify major materials and systems and establish, in general, their quality levels.
2. The Architect shall submit the Design Development Documents to the City, and request the City's approval.

J. Construction Documents Phase Services:

1. Based on the City's approval of the Design Development Documents, and on the City's authorization of any adjustments in the Project requirements and the budget for the Cost of the work, the Architect shall prepare Construction Documents for the City's approval. The Construction Documents shall illustrate and describe the further development of the approved Design Development Documents and shall consist of Drawings and Specifications setting forth in detail the quality levels and performance criteria of materials and systems and other requirements for the construction of the work. The City and Architect acknowledge that, in order to perform the work, the Contractor will provide additional information, including Shop Drawings, Product Data, Samples and other similar submittals, which the Architect shall review.
2. The Architect shall incorporate the design requirements of governmental authorities having

jurisdiction over the Project into the Construction Documents.

3. During the development of the Construction Documents, the Architect shall assist the City in the development and preparation of (1) procurement information that describes the time, place, and conditions of bidding, including bidding or proposal forms; and (2) the Conditions of the Contract for Construction (General, Supplementary and other Conditions). The Architect shall also compile a project manual that includes the Conditions of the Contract for Construction and Specifications, and may include bidding requirements and sample forms.
4. The Architect shall submit the Construction Documents to the City and request the City's approval.

K. Procurement Phase Services:

1. Following the City's approval of the Construction Documents, the Architect shall assist the City in (1) obtaining either competitive bids or competitive sealed proposals; (2) confirming responsiveness of bids or proposals; (3) determining the successful bid or proposal, if any.
2. Competitive Bidding or Competitive Sealed Proposals:
 - a. Bidding Documents shall consist of bidding requirements and proposed Contract Documents.
 - b. The Architect shall assist the City in bidding the Project by (1) organizing and conducting a pre-bid conference for prospective; and (2) preparing responses to questions from prospective bidders and providing clarifications and interpretations of the Bidding Documents to the prospective bidders in the form of addenda.
 - c. In the case of competitive sealed proposals, the Architect shall assist the City in evaluating the proposers to determine the best value for the City.
 - d. Other procurement methods: should the City select another procurement method, the Architect will assist the City similarly to that outlined above for bidding or competitive sealed proposals. The Architect's assistance in preparing request for proposals or request for qualifications documents will be additional services.

L. Construction Phase Services

1. The Architect shall advise and consult with the City during the Construction Phase Services. The Architect shall not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work, nor shall the Architect be responsible for the Contractor's failure to perform the work in accordance with the requirements of the Contract Documents. The Architect shall be responsible for the Architect's negligent acts or omissions, but shall not have control over or charge of, and shall not be responsible for, acts or omissions of the Contractor or of any other persons or entities performing portions of the work.
2. The Architect's responsibility to provide Construction Phase Services commences with the award of the Contract for Construction and terminates on the date the Architect issues the final Certificate for Payment.
3. Evaluations of the work:
 - a. The Architect shall visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the portion of the work completed, and to determine, in general, if the work observed is being performed in a manner indicating that the work, when fully completed, will be in accordance with the Contract Documents. However, the Architect shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work. On the basis of

the site visits, the Architect shall keep the City reasonably informed about the progress and quality of the portion of the work completed, and promptly report to the City (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the work.

- b. The Architect has the authority to reject work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable, the Architect shall have the authority to require inspection or testing of the work in accordance with the provisions of the Contract Documents, whether or not the work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the work.
 - c. The Architect shall interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the City or Contractor. The Architect's response to such requests shall be made in writing within any time limits agreed upon or otherwise with reasonable promptness.
4. Interpretations and decisions of the Architect shall be consistent with the intent of, and reasonably inferable from, the Contract Documents and shall be in writing or in the form of drawings. When making such interpretations and decisions, the Architect shall endeavor to secure faithful performance by both City and Contractor, shall not show partiality to either, and shall not be liable for results of interpretations or decisions rendered in good faith.
5. Certificates for Payment to Contractor
- a. The Architect shall review and certify the amounts due the Contractor and shall issue certificates in such amounts. The Architect's certification for payment shall constitute a representation to the City, based on the Architect's evaluation of the work and on the data comprising the Contractor's Application for Payment, that, to the best of the Architect's knowledge, information and belief, the work has progressed to the point indicated, the quality of the work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to (1) an evaluation of the work for conformance with the Contract Documents upon Substantial Completion, (2) results of subsequent tests and inspections, (3) correction of minor deviations from the Contract Documents prior to completion, and (4) specific qualifications expressed by the Architect.
 - b. The issuance of a Certificate for Payment shall not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the City to substantiate the Contractor's right to payment, or (4) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.
 - c. The Architect shall maintain a record of the Applications and Certificates for Payment.
6. Submittals
- a. The Architect shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval of the schedule. The Architect's action in reviewing submittals

shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time, in the Architect's professional judgment, to permit adequate review.

- b. The Architect shall review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- c. If the Contract Documents specifically require the Contractor to provide professional design services or certifications by a design professional related to systems, materials, or equipment, the Architect shall specify the appropriate performance and design criteria that such services must satisfy. The Architect shall review and take appropriate action on Shop Drawings and other submittals related to the work designed or certified by the Contractor's design professional, provided the submittals bear such professional's seal and signature when submitted to the Architect. The Architect's review shall be for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect shall be entitled to rely upon, and shall not be responsible for, the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals.
- d. The Architect shall review and respond to requests for information about the Contract Documents. The Architect shall set forth, in the Contract Documents, the requirements for requests for information. Requests for information shall include, at a minimum, a detailed written statement that indicates the specific Drawings or Specifications in need of clarification and the nature of the clarification requested. The Architect's response to such requests shall be made in writing within any time limits agreed upon, or otherwise with reasonable promptness. If appropriate, the Architect shall prepare and issue supplemental Drawings and Specifications in response to the requests for information.
- e. The Architect shall maintain a record of submittals and copies of submittals supplied by the Contractor in accordance with the requirements of the Contract Documents.

7. Changes in the work

- a. The Architect may order minor changes in the work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. Subject to Section 4.2, the Architect shall prepare Change Orders and Construction Change Directives for the City's approval and execution in accordance with the Contract Documents.
- b. The Architect shall maintain records relative to changes in the work.

8. Project completion:

- a. At project completion, the Architect shall (1) conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; (2) issue Certificates of Substantial Completion; (3) forward to the City, for the City's review and records, written

warranties and related documents required by the Contract Documents and received from the Contractor; and (4) issue a final Certificate for Payment based upon a final inspection indicating that, to the best of the Architect's knowledge, information, and belief, the work complies with the requirements of the Contract Documents.

- b. The Architect's inspections shall be conducted with the City to check conformance of the work with the requirements of the Contract Documents and to verify the accuracy and completeness of the list submitted by the Contractor of work to be completed or corrected.
- c. When Substantial Completion has been achieved, the Architect shall inform the City about the balance of the Contract Sum remaining to be paid the Contractor, including the amount to be retained from the Contract Sum, if any, for final completion or correction of the work.
- d. The Architect shall forward to the City the following information received from the Contractor: (1) consent of surety or sureties, if any, to reduction in or partial release of retainage or the making of final payment; (2) affidavits, receipts, releases and waivers of liens, or bonds indemnifying the City against liens; and (3) any other documentation required of the Contractor under the Contract Documents.
- e. Upon request of the City, and prior to the expiration of one year from the date of Substantial Completion, the Architect shall, without additional compensation, conduct a meeting with the City to review the facility operations and performance.
- f. Notwithstanding anything in the foregoing seemingly to the contrary, Substantial Completion of the Project will not occur prior to the date on which there has been delivered to City a certificate of occupancy and all such other permits and approvals from governmental authorities having jurisdiction over the Project, so that City can safely and legally occupy the Site for its intended purpose.

Additional Services:

- A. The services listed below are not included in Basic Services, but will be provided by the Architect. Owner shall compensate the Architect for additional services as indicated under the Fees section of this Exhibit.
 - 1. Site Feasibility Study: The Architect will assist the City in evaluating up to 3 sites for the Project. Each site will be evaluated for size, access, availability of services and general acceptability for the purposes of the project.
 - 2. Programming: The Architect will assist the City in developing a Program for the project. The program will establish required spaces, sizes, adjacencies and any other requirements. The program will establish the requirements for the project for the schematic design phase.
 - 3. Civil Engineering Services: The Architect will engage a civil engineering firm to prepare title and topographical surveys, site plans, grading and drainage plans, drainage reports, SWPPP plans, and utility plans.
 - 4. Landscaping Design: The Architect will engage a Landscape Architect to prepare landscaping and irrigation plans.

Services Not Included:

- A. The services listed below are not included in Basic Services, but can be provided by the Architect if requested. Services not specifically listed under Basic Services or Additional Services are not included in the Architect's services.
 - 1. Re-platting multiple properties into a single property.
 - 2. Detailed cost estimating.
 - 3. As-constructed record drawings.
 - 4. Design of low voltage systems, including data systems, nurse call systems, security systems or telecommunication systems.
 - 5. Furniture, furnishings and equipment design.
 - 6. Additional design fees as may be required for significant changes in scope or budget after completion and acceptance of Programming, Schematic Design, Design Development or Construction Documents phases.

Owner Responsibilities:

- A. The Owner shall establish the Owner's budget for the Project, including (1) the budget for the cost of the work; (2) the Owner's other costs; and, (3) reasonable contingencies related to all of these costs. The Owner shall update the Owner's budget for the Project as necessary throughout the duration of the Project until final completion. If the Owner significantly increases or decreases the Owner's budget for the Cost of the Work, the Owner shall notify the Architect. The Owner and the Architect shall thereafter agree to a corresponding change in the Project's scope and quality.
- B. The Owner shall identify a representative authorized to act on the Owner's behalf with respect to the Project. The Owner shall render decisions and approve the Architect's submittals in a timely manner in order to avoid unreasonable delay in the orderly and sequential progress of the Architect's services.
- C. The Owner shall furnish services of geotechnical engineers, which may include test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations.
- D. The Owner shall coordinate the services of its own consultants with those services provided by the Architect. The Owner shall furnish the services of consultants other than those designated as the responsibility of the Architect in this Exhibit, or authorize the Architect to furnish them as an Additional Service, when the Architect requests such services and demonstrates that they are reasonably required by the scope of the Project. The Owner shall require that its consultants and contractors maintain insurance, including professional liability insurance, as appropriate to the services or work provided.
- E. The Owner shall furnish tests, inspections and reports required by law or the Contract Documents, such as structural, mechanical, and chemical tests, tests for air and water pollution, and tests for hazardous materials.
- F. The Owner shall furnish all legal, insurance and accounting services, including auditing services, that may be reasonably necessary at any time for the Project to meet the Owner's needs and interests.
- G. The Owner shall provide prompt written notice to the Architect if the Owner becomes aware of any

fault or defect in the Project, including errors, omissions or inconsistencies in the Architect's Instruments of Service.

- H. The Owner shall include the Architect in all communications with the Contractor that relate to or affect the Architect's services or professional responsibilities. The Owner shall promptly notify the Architect of the substance of any direct communications between the Owner and the Contractor otherwise relating to the Project. Communications by and with the Architect's consultants shall be through the Architect.
- I. The Owner shall provide the Architect access to the Project site prior to commencement of the Work and shall obligate the Contractor to provide the Architect access to the Work wherever it is in preparation or progress.

Compensation:

- A. Basic Services Fees: \$740,000.
 - 1. Fees are based on an assumed building cost of \$9,000,000.
 - 2. Proportion compensation for each phase:
 - a. Schematic Design Phase: 15%
 - b. Design Development Phase: 30%
 - c. Construction Documents Phase: 30%
 - d. Procurement Phase: 5%
 - e. Construction Phase: 20%
- B. Additional Services Fees:
 - 1. Site Feasibility Study \$5,000
 - 2. Programming: \$5,000
 - 3. Civil Engineering: \$70,000
 - 4. Landscape Design \$25,000
- C. **Total Basic and Additional Services Fees: \$845,000**



City Council Meeting

Item Number: 8
Meeting Date: April 25, 2023
To: City Council / City Manager
From: Erika Martinez, Manager, Purchasing
Subject: MOTION APPROVING PLANS AND SPECIFICATIONS FOR THE PAUL DAVIS WELLFIELD DEVELOPMENT PROJECT, SAID PLANS AND SPECIFICATIONS BEING ON FILE IN THE CITY SECRETARY'S OFFICE REFERENCED BY THE NUMBER AND DATE OF THIS MOTION, AND AUTHORIZING THE CITY MANAGER OR THE CITY MANAGER'S DESIGNEE TO ADVERTISE FOR COMPETITIVE BIDS FOR SAID PROJECT PURSUANT TO THE STATUTES OF THE STATE OF TEXAS FOR ACCOMPLISHING THE WORK SET FORTH IN SAID SPECIFICATIONS (DISTRICT: NONE) (GENERAL SERVICES)

Purpose:

Motion approving specifications for the Paul Davis Wellfield Development Project, said specifications being on file in the City Secretary's Office referenced by the number and date of this motion, and authorizing the City Manager or the City Manager's Designee to advertise for competitive bids for said project pursuant to the statutes of the State of Texas for accomplishing the work set forth in said specifications.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding is not required at this time.

Discussion:

Please consider approving a motion authorizing the City Manager or the City Manager's designee to advertise a request for bids for the Paul Davis Wellfield Development Project including but not limited to the construction of five public water system wells in the Paul Davis

wellfield. Please see the attached memo from Carl Craig, Utilities Director, for more information.

Jina Gang

City Manager's Office



INTEROFFICE MEMORANDUM

TO: Erika Martinez, Purchasing Manager

FROM: Carl Craig, P.E., Utilities Director

SUBJECT: Consider a Resolution Approving the Request for Bids, Authorizing Advertisement for Bids for the construction of five public water system wells in the Paul Davis well field.

DATE: April 25, 2023

Paul Davis well field is approximately 32 miles North of the City of Midland on HWY 349. This well field was developed in the 60s and was the City's main groundwater source at the time. Utilities has maintained the wells (43 of them when built) in the area to a point where the wells are now past their life cycle. Paul Davis is the City's emergency water source (as a backup to T-bar) but are unable to deliver more than 4 million gallons a day with the current working wells. This project is to bid out the construction of 5 new water wells as phase one to start the redevelopment of the well field. Utilities had the wells designed by Parkhill through the Utilities' on-call engineer program.

Utilities requests to go out for bid and advertise for the construction of five public water system water wells.

PROJECT MANUAL

CITY OF MIDLAND

PAUL DAVIS WELLFIELD DEVELOPMENT



April | 2023

Parkhill Project # 01616722

City of Midland Project #22002648
PACKET

8.4

April 25, 2023

Parkhill.com

PROJECT MANUAL

CITY OF MIDLAND

PAUL DAVIS WELLFIELD DEVELOPMENT



04/06/2023

April | 2023

Parkhill Project # 01616722

City of Midland Project # 22002648

PAKET

8.5

April 25, 2023

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DESIGN PROFESSIONAL RESPONSIBILITY

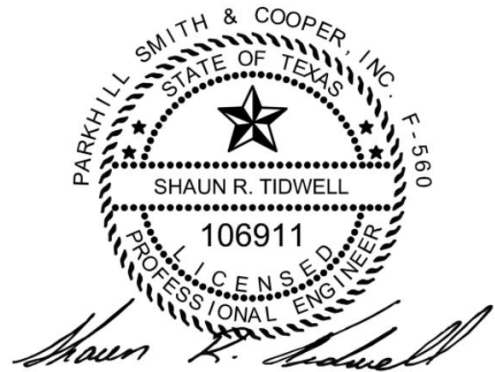
The Specification Sections authenticated by my seal and signature are limited to the following:

DIVISION 22 - PLUMBING

22 05 33 Heat Tracing for Plumbing Piping

DIVISION 26 – ELECTRICAL

26 05 00 Basic Electrical Methods
26 05 19 Low-Voltage Electrical Power Conductors and Cables
26 05 26 Grounding and Bonding for Electrical Systems
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26 24 16 Panelboards
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26 28 13 Fuses
26 28 16.16 Enclosed Switches
26 29 13.06 Soft-Start Motor Controllers
26 43 00 Surge Protective Devices



04/06/2023

DESIGN PROFESSIONAL RESPONSIBILITY

The Specification Sections authenticated by my seal and signature are limited to the following:

DIVISION 40 - PROCESS INTEGRATION

40 61 10	Process Control Forms
40 61 20	Process Control Cabinets and Enclosures
40 61 32	SCADA Equipment
40 70 00	Instrumentation for Process Systems
40 73 29	Differential Pressure Transmitters



04/06/2023

ADVERTISEMENT

CITY OF MIDLAND PAUL DAVIS WELLFIELD DEVELOPMENT BID PACKAGE REQUEST FOR BIDS

The City of Midland (Owner) has issued a Request for Bids (RFB) in order to evaluate pricing and qualifications of a contractor to construct the following Project:

City of Midland, Texas Paul Davis Wellfield Development Bid Package

Bidders shall deliver sealed Bids to the Owner at the following address:

City of Midland Office of the City Secretary 300 N. Loraine, 3rd Floor Midland, Texas 79701

Bids must be received at the designated location no later than 2:00 PM, May 31, 2023, at which time Bids will be opened and read. Project consists of construction of five new municipal public water supply replacement wells, new electrical and instrumentation control equipment, and associated piping appurtenances within the City's Paul Davis Wellfield which is located about 24 miles north of Midland. Existing wells will be plugged.

Bid Documents may be obtained from Engineer by emailing bids@parkhill.com, or from Civcast at www.civcastusa.com. Bidders may examine the Bid Documents at the Engineer's Office, Parkhill, 1700 W. Wall Street, Suite 100, Midland, Texas, Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including addenda, if any, obtained from sources other than the Issuing Office. It is the Bidder's sole responsibility to ensure all Addenda have been received prior to submitting a Bid.

A pre-bid conference for the Project will be held on May 17, 2023, at 3:00 PM at the Paul Davis Booster Pump Station located about 4.5 miles northeast of intersection SH 176 and 349 (32.376993, -102.139560). Attendance at the pre-bid conference is encouraged but not required. NOTE: Internet service is NOT available at the meeting site. There will be no virtual option for attendance.

For all further requirements regarding submittal, qualifications, procedures, and contract award, refer to the RFB.

The City of Midland reserves the right to reject any or all Bids or to waive any informalities in the Bids.

Date Issued: April 6, 2023
By: Carl Craigo, PE
Title: Director of Utilities

NOTICE TO BIDDERS

IF THIS PURCHASE REQUIRES A CONTRACT, THE ATTACHED **CONTRACT AND INSURANCE REQUIREMENTS ARE NON-NEGOTIABLE**. MODIFICATIONS BY BIDDER/COMPANY OF ANY MATERIAL TERM(S) TO THE CONTRACT DOCUMENTS WILL BE DEEMED A NON-RESPONSIVE BID. NON-RESPONSIVE BIDS WILL BE REJECTED. BIDDER/COMPANY MUST BE WILLING TO SIGN THE CONTRACT AS IS AND WITHOUT MODIFICATIONS, PROVIDE PROPERLY EXECUTED BONDS (IF APPLICABLE) AND PROVIDE INSURANCE SPECIFICALLY AS REQUIRED WITHIN THE CONTRACT DOCUMENTS **WITHIN 21 DAYS** OF THE DATE OF THE TRANSMITTAL LETTER.

IF THE SELECTED BIDDER/COMPANY CANNOT MEET THE ABOVE REQUIREMENTS, THEN **THE CITY RESERVES THE RIGHT TO AWARD THIS PURCHASE TO ANOTHER BIDDER**.

IMPORTANT NOTICE – IF THE CONTRACT DOCUMENTS REQUIRE WORKER’S COMPENSATION INSURANCE, BIDDER/COMPANY MUST CARRY WORKER’S COMPENSATION INSURANCE TO BE ELIGIBLE FOR THIS CONTRACT. IF YOU CANNOT PROVIDE WORKER’S COMPENSATION INSURANCE AS REQUIRED BY STATE OF TEXAS STATUTE, WE RESPECTFULLY REQUEST THAT YOU “NO BID” THIS WORK.

COMPLIANCE: Company agrees that it shall comply with Texas Government Code Section 2252.908, et seq., as amended. Company agrees that it shall comply with Texas Local Government Code Section 176.006, et seq., as amended. For further instructions on how to comply with Texas Government Code Section 2252.908 and Texas Local Government Code Section 176.006,

please go to https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm
and https://www.ethics.state.tx.us/filinginfo/conflict_forms.htm.

ANY VENDOR WHO FAILS TO COMPLY WITH THE TERMS OF THE
AWARD **MAY BE DECLARED AN IRRESPONSIBLE VENDOR**. BIDS
SUBMITTED BY SAID VENDOR SHALL NOT BE CONSIDERED AGAIN FOR
A MINIMUM PERIOD OF SIX MONTHS AS DETERMINED BY THE CITY
MANAGER.

**IMPORTANT: READ CAREFULLY BEFORE MAKING BID
GENERAL CONDITIONS OF BIDDING**

1. All Bids are to be submitted as specified in the procurement document(s).
2. Each Bidder is requested to provide: Descriptive literature clearly marked to show each item on this Bid. Any catalog or manufacturer's reference in this Bid is descriptive, but not restrictive, and is used only to indicate type and quality. If, however, the Bidder proposes similar but not identical terms, he must furnish all particulars. If no mention is made of any exceptions, it is assumed that he is bidding on the article specified and not on an approved equal and he will be required to deliver exact article specified.
3. Prices should be itemized. (Indicate unit price and extend to show total price.) In case of discrepancy between the unit price and the extension, the unit price shall govern.
4. Unit price for each item offered shall include all discounts, e.g., trade, seasonal, etc. with net 30 days payment terms. Discounts shall not be shown as such but shall be incorporated in the base Bid price. Any Bid showing discounts will be considered an alternate Bid. The City of Midland will not be responsible for any goods delivered without a purchase order number.
5. If the Contract is awarded, it will be awarded to either the lowest responsible Bidder, or to the Bidder who provides goods or services at the best value for the City of Midland. In determining the best value for the City of Midland, the City of Midland may consider the criteria enumerated in Section 252.043 of the Texas Local Government Code. The City of Midland reserves the right to award by item or by total Bid, or to reject any or all Bids or parts of Bids. Further, the City of Midland reserves all rights granted by Section 271.027 of the Texas Local Government Code. The City of Midland reserves the right to award the Bid to the lowest responsible Bidder.
6. Time of proposed delivery shall be stated in number of calendar days.
7. NOTE: The City of Midland, Texas is exempt from all Federal, State, and City tax. Please do not include these taxes in your bid price or invoice. Taxable items must be so designated, and the City will supply vendor with a Tax Exemption Certificate, properly executed.
8. All items are to be delivered F.O.B. to the City of Midland, Texas with freight prepaid and included in the Bid.
9. Detailed specifications rule over General specifications (headings, etc.)
10. No officer or employee of the City shall have a financial interest, direct or indirect, in any contract with the City, or be financially interested, directly or indirectly, in the sale to the City of any lands, materials, supplies or services except as allowed under chapter 176 of the Local Government Code. Form CIQ shall be submitted and placed on file with the City of Midland.
11. The City shall determine the most advantageous Bid for the City and accept the Bid of the responsible party submitting the lowest and/or most advantageous Bid or reject any and all Bids.
12. The City of Midland, Texas may consider as informal any Bid not prepared and submitted in accordance with the provisions hereof, and may waive, in its sole discretion, any informalities.

QUALIFICATIONS STATEMENT

ARTICLE 1—GENERAL INFORMATION

12.01 Provide contact information for the Business:

Legal Name of Business:			
Corporate Office			
Name:		Phone number:	
Title:		Email address:	
Business address of corporate office:			
Local Office			
Name:		Phone number:	
Title:		Email address:	
Business address of local office:			

12.02 Provide information on the Business's organizational structure:

Form of Business:	☐ Sole Proprietorship ☐ Partnership ☐ Corporation		
☐ Limited Liability Company ☐ Joint Venture comprised of the following companies:			
1.			
2.			
3.			
Provide a separate Qualification Statement for each Joint Venturer.			
Date Business was formed:		State in which Business was formed:	
Is this Business authorized to operate in the Project location?		☐ Yes ☐ No ☐ Pending	

12.03 Identify all businesses that own Business in whole or in part (25% or greater), or that are wholly or partly (25% or greater) owned by Business:

Name of business:		Affiliation:	
Address:			
Name of business:		Affiliation:	
Address:			
Name of business:		Affiliation:	
Address:			

12.04 Provide information regarding the Business's officers, partners, and limits of authority.

Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	\$
Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	\$
Name:		Title:	
Authorized to sign contracts: ☐ Yes ☐ No		Limit of Authority:	\$
Name:		Title:	

ARTICLE 2—LICENSING

2.01 Provide information regarding licensure for Business:

Name of License:			
Licensing Agency:			
License No:		Expiration Date:	
Name of License:			
Licensing Agency:			
License No:		Expiration Date:	

ARTICLE 3—DIVERSE BUSINESS CERTIFICATIONS

3.01 Provide information regarding Business's Diverse Business Certification, if any. Provide evidence of current certification.

Certification	Certifying Agency	Certification Date
☐ Disadvantaged Business Enterprise		
☐ Minority Business Enterprise		
☐ Woman-Owned Business Enterprise		
☐ Small Business Enterprise		
☐ Disabled Business Enterprise		
☐ Veteran-Owned Business Enterprise		
☐ Service-Disabled Veteran-Owned Business		
☐ HUBZone Business (Historically Underutilized) Business		
☐ Other		
☐ None		

ARTICLE 4—SAFETY

- 4.01 Provide information regarding Business's safety organization and safety performance.

Name of Business's Safety Officer:		
Safety Certifications		
Certification Name	Issuing Agency	Expiration

- 4.02 Provide Worker's Compensation Insurance Experience Modification Rate (EMR), Total Recordable Frequency Rate (TRFR) for incidents, and Total Number of Recorded Manhours (MH) for the last 3 years and the EMR, TRFR, and MH history for the last 3 years of any proposed Subcontractor(s) that will provide Work valued at 10% or more of the Contract Price. Provide documentation of the EMR history for Business and Subcontractor(s).

Year									
Company	EMR	TRFR	MH	EMR	TRFR	MH	EMR	TRFR	MH

ARTICLE 5—FINANCIAL

- 5.01 Provide information regarding the Business's financial stability. Provide the most recent audited financial statement, and if such audited financial statement is not current, also provide the most current financial statement.

Financial Institution:		
Business address:		
Date of Business's most recent financial statement:		☐ Attached
Date of Business's most recent audited financial statement:		☐ Attached
Financial indicators from the most recent financial statement		
Contractor's Current Ratio (Current Assets ÷ Current Liabilities)		
Contractor's Quick Ratio ((Cash and Cash Equivalents + Accounts Receivable + Short Term Investments) ÷ Current Liabilities)		

ARTICLE 6—SURETY INFORMATION

- 6.01 Provide information regarding the surety company that will issue required bonds on behalf of the Business, including but not limited to performance and payment bonds.

Surety Name:			
Surety is a corporation organized and existing under the laws of the state of:			
Is surety authorized to provide surety bonds in the Project location?	☐ Yes ☐ No		
Is surety listed in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" published in Department Circular 570 (as amended) by the Bureau of the Fiscal Service, U.S. Department of the Treasury? ☐ Yes ☐ No			
Mailing Address (principal place of business):			
Physical Address (principal place of business):			
Phone (main):		Phone (claims):	

ARTICLE 7—INSURANCE

- 7.01 Provide information regarding Business's insurance company(s), including but not limited to its Commercial General Liability carrier. Provide information for each provider.

Name of insurance provider, and type of policy (CLE, auto, etc.):			
Insurance Provider		Type of Policy (Coverage Provided)	
Are providers licensed or authorized to issue policies in the Project location?		☐ Yes ☐ No	
Does provider have an A.M. Best Rating of A-VII or better?		☐ Yes ☐ No	
Mailing Address (principal place of business):			
Physical Address (principal place of business):			
Phone (main):		Phone (claims):	

ARTICLE 8—CONSTRUCTION EXPERIENCE

- 8.01 Provide information that will identify the overall size and capacity of the Business.

Average number of current full-time employees:	
Estimate of revenue for the current year:	
Estimate of revenue for the previous year:	

8.02 Provide information regarding the Business's previous contracting experience.

Years of experience with projects like the proposed project:		
As a general contractor:		As a joint venturer:
Has Business, or a predecessor in interest, or an affiliate identified in Paragraph 1.03:		
Been disqualified as a Bidder by any local, state, or federal agency within the last 5 years? ☐ Yes ☐ No		
Been barred from contracting by any local, state, or federal agency within the last 5 years? ☐ Yes ☐ No		
Been released from a Bid in the past 5 years? ☐ Yes ☐ No		
Defaulted on a project or failed to complete any contract awarded to it? ☐ Yes ☐ No		
Refused to construct or refused to provide materials defined in the contract documents or in a change order? ☐ Yes ☐ No		
Been a party to any currently pending litigation or arbitration? ☐ Yes ☐ No		
Provide full details in a separate attachment if the response to any of these questions is Yes.		

8.03 List all projects currently under contract in Schedule A and provide indicated information.

8.04 List a minimum of three and a maximum of six projects completed in the last 5 years in Schedule B and provide indicated information to demonstrate the Business's experience with projects similar in type and cost of construction.

8.05 In Schedule C, provide information on key individuals whom Business intends to assign to the Project. Provide resumes for those individuals included in Schedule C. Key individuals include the Project Manager, Project Superintendent, Quality Manager, and Safety Manager. Resumes may be provided for Business's key leaders as well.

ARTICLE 9—REQUIRED ATTACHMENTS

9.01 Provide the following information with the Statement of Qualifications:

- A. If Business is a Joint Venture, separate Qualifications Statements for each Joint Venturer, as required in Paragraph 1.02.
- B. Diverse Business Certifications if required by Paragraph 3.01.
- C. Certification of Business's safety performance if required by Paragraph 4.02.
- D. Financial statements as required by Paragraph 5.01.
- E. Attachments providing additional information as required by Paragraph 8.02.
- F. Schedule A (Current Projects) as required by Paragraph 8.03.
- G. Schedule B (Previous Experience with Similar Projects) as required by Paragraph 8.04.
- H. Schedule C (Key Individuals) and resumes for the key individuals listed, as required by Paragraph 8.05.
- I. Additional items as pertinent.

This Statement of Qualifications is offered by:

Business:

(typed or printed name of organization)

By:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Date:

(date signed)

(If Business is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

(individual's signature)

Name:

(typed or printed)

Title:

(typed or printed)

Address for giving notices:

Designated Representative:

Name:

(typed or printed)

Title:

(typed or printed)

Address:

Phone:

Email:

Schedule A—Current Projects

Name of Organization					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Schedule B—Previous Experience with Similar Projects

Name of Organization					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Schedule B—Previous Experience with Similar Projects

Name of Organization					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					
Project Owner			Project Name		
General Description of Project					
Project Cost			Date Project		
Key Project Personnel	Project Manager	Project Superintendent	Safety Manager	Quality Control Manager	
Name					
Reference Contact Information (listing names indicates approval to contacting the names individuals as a reference)					
	Name	Title/Position	Organization	Telephone	Email
Owner					
Designer					
Construction Manager					

Schedule C—Key Individuals

Project Manager			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	
Project Superintendent			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

Safety Manager			
Name of individual			
Years of experience as project manager			
Years of experience with this organization			
Number of similar projects as project manager			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	
Quality Control Manager			
Name of individual			
Years of experience as project superintendent			
Years of experience with this organization			
Number of similar projects as project superintendent			
Number of similar projects in other positions			
Current Project Assignments			
Name of assignment		Percent of time used for this project	Estimated project completion date
Reference Contact Information (listing names indicates approval to contact named individuals as a reference)			
Name		Name	
Title/Position		Title/Position	
Organization		Organization	
Telephone		Telephone	
Email		Email	
Project		Project	
Candidate's role on project		Candidate's role on project	

REQUEST FOR BIDS (RFB)

CITY OF MIDLAND PAUL DAVIS WELLFIELD DEVELOPMENT BID PACKAGE

The City of Midland (Owner) is now accepting Bids in order to evaluate pricing and qualifications of a contractor to construct the work identified as Paul Davis Wellfield Development Bid Package Project. Sealed Bids will be received until 2:00 PM, May 31, 2023, Bidders shall deliver sealed Bids to Owner at the following address:

**City of Midland
Office of the City Secretary
300 N. Loraine, 3rd Floor
Midland, Texas 79701**

Bid Documents may be obtained from Engineer by emailing bids@parkhill.com, or from Civcast at www.civcastusa.com. Bidders may examine the Bid Documents at the Engineer's Office, Parkhill, 1700 W. Wall Street, Suite 100, Midland, Texas, 432.697.1447, Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including addenda, if any, obtained from sources other than the Issuing Office.

GENERAL INFORMATION AND OVERVIEW

The purpose of this RFB is to contract with a firm to construct the Paul Davis Wellfield Development, Parkhill Project #01616722. The General Scope of Work to be performed includes but is not limited to:

- Construction of five new municipal public water supply replacement wells per TCEQ Rules; TCEQ quality testing; new electrical and instrumentation controls; new above ground piping; and plug existing wells. Work is located in the City's Paul Davis Wellfield approximately 24 miles north of Midland.

The City of Midland reserves the right to reject any or all Bids or to waive any informalities in the Bids.

BID PROCESS:

1. Requests for Information/Clarification (RFI/C's) shall be submitted to Engineer, in writing and as indicated, no later than 72 hours prior to the RFB submittal deadline. Specific information regarding this RFB must be requested in writing to:

Kevin W. Krueger, PE
Parkhill
1700 West Wall Street, Suite 100
Midland, Texas 79701
Phone: 432.697.1447
Email: kekruieger@parkhill.com

2. Written responses to RFI/C's will be made available to all Respondents no later than 24 hours prior to the RFB Submittal Deadline.
3. Bid packages must be hand delivered, mailed, or shipped by means of a delivery tracking system to confirm delivery time, date, and person signing for delivery.
4. Bids will be opened at time and place indicated in the Advertisement, and unless obviously non-responsive, read aloud publicly. An abstract of amounts of Base Bids and major Alternates, if any, will be made available to Bidders after Bid opening.
5. Owner shall exercise sole discretion as to the schedule and process of evaluating Bids according to the requirements contained herein.

Owner reserves right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject Bid of any Bidder Owner finds, after reasonable inquiry and evaluation, not responsible. If Bidder purports to add terms or conditions to Bid, takes exception to any provision of Bidding Documents, or attempts to alter contents of Contract Documents for purposes of Bid, Owner will reject Bid as nonresponsive; provided Owner also reserves right to waive all minor informalities not involving price, time, or changes in Work.

If Owner awards Contract for Work, award shall be to responsible Bidder submitting lowest, responsive Bid.

EVALUATION OF BIDS

1. In evaluating Bids, Owner will consider if Bids comply with prescribed requirements, and such Alternates, unit prices, and other data, as requested in Bid Form or prior to Notice of Award.
2. For determination of apparent low Bidder(s), when Base Bid with Alternates are submitted, award may be made to Successful Bidder on Base Bid and any combination of additive Alternate Bids for which Owner determines funds will be available at time of award.
3. In evaluating if Bidder is responsible, Owner will consider Bidder qualifications and may consider qualifications and experience of subcontractors and Suppliers proposed for portions of Work. Identity of subcontractors and Suppliers must be submitted as provided in Bidding Documents.
4. Owner may conduct investigations as Owner deems necessary to establish responsibility, qualifications, and financial ability of Bidder and any proposed subcontractor or Supplier.

BID FORMAT & REQUIREMENTS:

1. The RFB shall be the basis for each Bid.
2. Bids shall be addressed to Owner, as indicated, in a sealed package that shall be independent of the mailing/shipping packages. The Bid package shall be clearly marked as "City of Midland, Paul Davis Wellfield Development, Bid Package" on the package label. The package label shall include the name and address of the Respondent's company.
3. Bids shall be submitted in bound documents.
4. Bids sent by facsimile (fax) machine or by email shall be rejected as being non-responsive to the RFB.
5. Bid pricing shall be for the entirety of the Work shown or specified and shall be listed on the Price Bid Sheet of this RFB.
6. All exclusions shall be listed in specific terms, quantities, and values.
7. No Respondent may withdraw its Bid within 60 days after the actual date of the opening thereof.
8. A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time of the RFB submittal deadline. Upon receipt of such notice, the unopened Bid will be returned to the Respondent.
 - a. If a Respondent wishes to modify its Bid prior to the RFB submittal deadline, Respondent must withdraw its initial Bid in the manner specified and submit a new Bid prior to the date and time of the RFB submittal deadline.
 - b. If within 24 hours after Bids are opened any Respondent files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Respondent may withdraw its Bid, and the Bid Security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.
9. Respondents shall satisfy themselves of the accuracy of the requirements in the RFB by examination of the sites in addition to the review of the Specifications and Addenda, if any. After Bids have been submitted, the Respondent shall not assert that there was a misunderstanding concerning the quantities of work or the nature of the work to be done. The RFB contains the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of Owner or any other person shall not affect the risks or obligations assumed by the Respondent or relieve them from fulfilling any of the conditions of the Contract.
10. A certificate of insurance for general and automotive liability, and workers compensation in the amounts of at least \$1,000,000, \$250,000, and Statutory Limits respectively, naming Owner and Engineer as co-insured, shall be provided with the Bid. Bidder shall provide an insurance policy as an installation floater in an amount of no less than the value of the equipment and materials stored or pending start-up. Respondent's insurance company shall be required to give a minimum of 30 days prior notice of policy or coverage cancellation.

11. A PERFORMANCE and PAYMENT BOND, each in the amount of 100 percent of the Contract Price, issued by a corporate surety authorized to conduct business in the State of Texas under Article 7.19-1, Texas Insurance Code, will be required for the faithful performance of the Contract. Attorneys-in-fact who sign PAYMENT BONDS and PERFORMANCE BONDS must file with each bond a certified and effective dated copy of the power of attorney. The party to whom the Contract is awarded will be required to execute the Agreement and obtain the PERFORMANCE AND PAYMENT BONDS within 10 calendar days from the date when the NOTICE OF AWARD is delivered to the Bidder. The NOTICE OF AWARD shall be accompanied by the necessary Agreement, Bond Forms, and Certificate of Insurance. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period.
12. Bids shall include, at a minimum, the following Sections and documentation in response to the RFB:
 - a. Request for Bid Document – A complete copy of the RFB, including Addenda, if any, shall be submitted as a Bid Section, in its entirety, to include the Price Bid Sheet to be completed by the Respondent.
 - b. Pricing, as follows:
 - i. Pricing shall be submitted by item on the attached Price Bid Sheet. Failure to price all listed sites and items shall be considered non-responsive to the RFB.
 - ii. Pricing shall include all Bid development costs, mobilization, labor, material, transportation, equipment, incidentals, appurtenances, demolition, removal, demobilization, overhead, and profit to cover the finished Work specified in this RFB document, achieving a fully functional system.
 - iii. Pricing shall reflect Owner's sales tax exempt status.
 - iv. Pricing shall include all freight and handling costs, F.O.B., Owner's destination.
 - v. Pricing shall include insurance and bonding costs.
 - c. Statement of Qualifications Section shall include the following minimum information:
 - i. Company Profile with listing of principals by percent ownership and their role in the company.
 - ii. Type of Company – corporation, sole proprietorship, etc.
 - iii. Primary field of business interest (water/wastewater, industry, oil & gas, etc.), listed by percent of revenue.
 - iv. Date of incorporation and/or start-up.
 - v. Number of years under the current ownership structure and business name.
 - vi. Number and location of offices and technical support centers.
 - vii. Percentage of this Project, based on cost, that shall be:
 - Self-performed – completed by company personnel = what percent.
 - Sub-contracted – completed by personnel of other companies = what percent.
 - viii. Listing of all sub-contractors proposed to be used, including a complete Statement of Qualifications as required under this Section to be completed by the sub-contractor.
 - ix. Number of employees (not subcontractor employees) dedicated to construction, integration, and technical support.

- x. Brief resume of each person to be assigned to this Project, to include:
 - The individual's technical background as it relates to this Project and related field of interest.
 - The individual's duration with the Bidder's company.
 - The individual's proximity to Owner's facilities as a reasonable response expectation for technical and service support.
 - The individual's company of employment if different from the Respondent.
- xi. Areas of specialization including required licenses and certifications. Include copy of current TCEQ water and wastewater license(s) and Water Well Driller's license(s).
- xii. Area of geographical coverage of related Project and service activities.
- d. Reference Section shall include:
 - i. A listing of previous project references and experience shall be provided by the Bidder, information to include:
 - Name of entity.
 - Project name.
 - Contact person.
 - Phone number.
 - City of office.
 - Year work completed.
 - ii. A list of a minimum of three similar projects that include the complexity and magnitude of Work to be completed in this Project, and that have been completed by the Bidder. The list must include contact names, titles, addresses, email addresses, and telephone numbers for references.
- e. Project Schedule:
 - i. Include with your Bid a detailed Project schedule from the Notice to Proceed for the timetable for completing the construction of the Work.
- f. Bid Bond with required Bid Security.

TERMS AND CONDITIONS:

- 1. Owner hereby notifies all Respondents that:
 - a. The purchase contemplated by this RFB shall be procured in strict compliance with the local, state, and federal laws.
 - b. There is no pre-disposition of award to any particular company at the time of advertisement of this RFB.
 - c. An invitation to any Respondent, verbal or otherwise, does not waive any requirement set forth in this RFB.

- d. In regard to any agreement entered into pursuant to this document, minority business enterprises will be afforded equal opportunities to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, age, religion, or national origin in consideration for an award.
2. Owner reserves the right to reject any and/or all Bids, to waive any and all technicalities and to accept any Bid, or part thereof, which in the opinion of Owner, is most advantageous to Owner. In case of ambiguity or lack of clarity in stating the prices in the Bid, Owner reserves the right to consider the most advantageous Bid thereof or to reject the Bid.
3. Respondents may modify their Bid by written addendum at any time prior to the scheduled receipt of Bids, provided such communication is received by Owner prior to the closing hour of the Bid due date. The addendum should not reveal the Bid pricing but should provide the addition or subtraction or other modification so that Owner will not know the final pricing or terms until the sealed Bid, and its addendum, are opened.
4. Owner will not provide interpretation of the meaning of Plans, Specifications, or other pre-bid documents to any Bidder orally. Such communication must be in writing in the form of an RFI/C and directed to Engineer as stated herein. Where this RFB is ambiguous or in conflict with on-site conditions, the Respondent shall bring forth questions for clarification, and shall assume all responsibility for a fully functional system prior to submitting Bid. Owner and Engineer shall determine the meaning and requirements of any questionable items.
5. Requests for Information/Clarification (RFI/C's) shall be submitted to Engineer, as previously indicated.
6. Respondents shall assume all responsibility for verifying Engineer's receipt of Requests for Information/Clarification (RFI/C). Where applicable, an addendum or written clarification shall be provided to all Respondents to clarify the meaning of questionable items.
7. Evaluation of Bids will be based on the criteria stated herein. The best Bid submitted by a responsible, responsive, qualified Respondent will be negotiated with Owner. If Bid amounts exceed the available funds to finance the Contract, Owner may reject all Bids or may award the contract on a negotiated Bid with deductible amounts applied as prioritized by Owner to produce a net amount which is within available funds. Owner reserves the right to waive any informalities or technical errors that in its judgment will best serve its interests.
8. At the time of the opening of Bids, each Respondent will be presumed to be thoroughly familiar with the technical requirements, including any addenda, as set forth herein. The failure or omission of any Respondent to examine any site condition, form, instrument, or document shall in no way relieve any Respondent from any obligation with respect to the Bid. It is the Bidder's responsibility to make inquiry as to any addenda issued. All such addenda shall become part of the contract documents and all Bidders shall be bound by such addenda, whether or not received by the Bidders.
9. Owner may make such investigations as deemed necessary to determine the ability of the Respondent to perform the Work, and the Respondent shall furnish to Owner all such information and data for this purpose as Owner may request. Owner reserves the right to reject any Bid if the evidence submitted by, or the investigation of, such Respondent fails to satisfy Owner that such Respondent is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein. Conditional Bids will not be accepted.

10. Respondents must inform themselves fully of the conditions relating to the construction of the Project and the employment of labor therein. Failure to do so will not relieve a successful Respondent of his obligation to furnish all labor and material necessary to carry out the provisions of the Contract. The conduct of required work shall not cause any interruptions of, or interfere with, the work of any other Contractors.
11. The Respondent's attention is directed to the fact that all applicable state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contract throughout, and they will be deemed to be included in the Contract as though therein written out in full.
12. The Respondent is specifically advised that any person, firm, or other party to whom it is proposed to award a subcontract under this contract must be identified and shall be acceptable to Owner.
13. With respect to all work performed under this Contract, the Respondent shall meet the following requirements, where Scope of Work is applicable:
 - a. Comply with the safety standards and provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, and the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596).
 - b. Exercise every precaution at all times for the prevention of accidents and the protection of persons, including employees, and property. Bidder shall conduct weekly safety meetings to insure a safe working environment. Owner shall reserve the right to request documentation of such meetings and safety training practices.
14. **Provision of Texas Ethics Commission Form 1295 ("TEC Form 1295") by Bidders: Effective January 1, 2016, pursuant to Texas Government Code § 2252.908 (the "Interested Party Disclosure Act" or the "Act"), Owner may not award the contract to a Bidder unless the Bidder has provided to Owner a completed, signed, and notarized TEC Form 1295 which has been assigned a certificate number by the Texas Ethics Commission (the "TEC"). Pursuant to the rules prescribed by the TEC, the TEC Form 1295 must be completed online through the TEC's website, assigned a certificate number, printed, signed, and notarized, and provided to Owner. The TEC Form 1295 may accompany the Bid or may be submitted separately but must be provided to Owner prior to the award of the contract. For purposes of completing the TEC Form 1295, the entity's name is City of Midland; the contract ID number is TBD; and the description of goods and services is Paul Davis Wellfield Development. Neither Owner nor its consultants have the ability to verify the information included in a TEC Form 1295, and neither have an obligation nor undertake responsibility for advising any Bidder with respect to the proper completion of the TEC Form 1295.**

SELECTION OF BIDDER:

Following the review and evaluation of the RFBs, Owner will notify the most qualified Bidder in writing. Contracts for the Project will be issued for execution by all parties. Neither the State of Texas nor any of its departments, agencies, or employees are or will be a party to this Request for Bids or any resulting contract.

A "Notice of Award" will be issued upon approval of the Bidder's Bid by contract. A "Notice-to- Proceed" may be issued by Owner to initiate each Work element of the Project. The selected Bidder shall be prepared to arrive on Site to initiate construction of the proposed improvements upon immediate readiness demanded by the proposed completion date. The selected Bidder shall coordinate its proposed construction schedule with Owner and Engineer prior to mobilization.

PAYMENT:

Upon notice to proceed, the selected Bidder shall submit a schedule of values to Owner for approval as a basis of partial payment requests throughout the Project. The selected Bidder may submit monthly invoices for Work completed and materials purchased during the previous 30-day period based on the schedule of values. Piping material not eligible for materials-on-hand. All invoices shall reflect a five percent retention from the amount of the draw request.

Owner shall remit the net amount of the invoice within 30 days of receipt of the invoice. All retained amounts shall be remitted upon final completion of the project as approved by Owner and release of a Certificate of Completion.

CONDITIONS OF AWARD:

The Bids will be considered and evaluated for award based upon the criteria set forth in this RFB.

The Price Bid Sheet shall be completed with pricing of all items as required under the Scope of Work and Specifications of the RFB and meet the terms thereof. All blank spaces for Bid items must be filled in, in ink or typewritten, and the pricing form must be fully completed and executed when submitted. Owner may waive any informalities, minor defects, or reject any or all Bids. Owner reserves the right to reject any and all Bids, in whole or in part; to waive any informality in any Bid, and to accept the Bid which, in its discretion, is in the best interest of Owner. In case of ambiguity or lack of completeness in stating the prices in any Bid, Owner reserves the right to consider the most advantageous thereof.

**CITY OF MIDLAND
PAUL DAVIS WELLFIELD DEVELOPMENT
BID PACKAGE
PRICE BID SHEET**

Item No.	Description	Unit	Estimated Quantity	Bid Unit Price	Total Bid Price
General/Site Work					
1.	Mobilization/Demobilization (Max. 5 percent of total Base Bid)	LS	1	\$	\$
2.	Demo Existing Well Equipment, Piping, and Fences	EA	5	\$	\$
3.	8-Foot Chain Link Security Fence and Two 10-Foot Gates	EA	4	\$	\$
4.	Barb Wire Fencing and Renovate and Relocate Existing Gates	EA	4	\$	\$
5.	10-Foot Gate (Barb Wire Cattle Fencing)	EA	1	\$	\$
6.	Well Pads and Roads	SY	5,700	\$	\$
7.	Soil Preparation/Re-seeding	LS	1	\$	\$
8.	Trench Safety (Including Plan)	LF	75	\$	\$
9.	Stormwater Pollution Prevention Plan and Erosion Control	LS	1	\$	\$
Public Water Supply Wells					
10.	Drill Equipment Set Up and Slush Pit	EA	5	\$	\$
11.	Drill and Install 24-Inch Conductor Casing	LF	75	\$	\$
12.	Drill 20-Inch Diameter Well	VF	1,045	\$	\$
13.	Well Casing, 12-3/4-Inch Low Carbon Steel	LF	655	\$	\$
14.	Well Screen, 12-3/4-Inch Stainless Steel	LF	400	\$	\$
15.	Dielectric Couplings	EA	5	\$	\$
16.	Draw Down Tube	LF	970	\$	\$
17.	Gravel Feed Tube	LF	550	\$	\$
18.	Gravel Pack	VF	485	\$	\$
19.	Cementing/Grouting	VF	535	\$	\$
20.	Well Disinfection	EA	5	\$	\$
21.	Well Head Improvements	EA	5	\$	\$
22.	Well Development - Bailing/Pumping	HR	150	\$	\$
23.	36-Hour Pump Test	HR	180	\$	\$
24.	Well Quality Sampling and Testing	EA	5	\$	\$
25.	Well Pump (250 GPM, 250 Feet), Column Piping, Wire, and Discharge Head	EA	1	\$	\$
26.	Well Pump (350 GPM, 265 Feet), Column Piping, Wire, and Discharge Head	EA	1	\$	\$
27.	Well Pump (500 GPM, 260 Feet), Column Piping, Wire, and Discharge Head	EA	1	\$	\$
28.	Well Pump (500 GPM, 280 Feet), Column Piping, Wire, and Discharge Head	EA	1	\$	\$
29.	Well Pump (500 GPM, 290 Feet), Column Piping, Wire, and Discharge Head	EA	1	\$	\$
30.	4-Inch Above-Ground Well Piping and Tie-In	EA	1	\$	\$
30.	6-Inch Above-Ground Well Piping and Tie-In	EA	5	\$	\$
31.	Plug Existing Wells	EA	5	\$	\$

Electrical/SCADA					
32.	Electrical and Instrumentation, Including Lighting 60Amp, 3-Phase, 277/480VAC Protection, Electrical Service for 25HP motors	EA	5	\$	\$
TOTAL BASE BID:					
ADDITIVE ALTERNATE ITEMS					
A-1	Additive Alternate #1 - Electrical Service Upgrade Adder for 30HP and 40HP Motors: 100Amp, 3-Phase, 277/480VAC	EA	1	\$	\$
A-2	Additive Alternate #2 - Electrical Service Upgrade Adder for 50HP and 60HP Motors: 200Amp, 3-Phase, 277/480VAC	EA	2	\$	\$
A-3	Additive Alternate #3 - Electrical Service Upgrade Adder for 75HP and 100HP Motors: 200Amp, 3-Phase, 277/480VAC	EA	1	\$	\$
TOTAL ADDITIVE ALTERNATE ITEMS:					\$
TOTAL BASE BID + TOTAL ADDITIVE ALTERNATE ITEMS:					\$
Note: Items 11, 13, 14, 15, 16, 17, and 30 are eligible for payment of materials (see Special Provision Water Utilities).					

TIME OF THE ESSENCE

All time limits for Milestones, if any, Substantial Completion, completion, and readiness for final payment, as stated in Contract Documents, are of the essence of Contract.

CONTRACT TIMES: DAYS

Work substantially completed within **240** days after Contract Times commence to run as provided in General Conditions, completed and ready for final payment per General Conditions, within **60** days after Contract Times commence to run.

LIQUIDATED DAMAGES

Contractor and Owner recognize time is of the essence as stated in Article 4.01 and Owner will suffer financial and other losses if Work not completed and Milestones not achieved within times specified in Article 4.02, plus any extensions thereof allowed per Contract. Parties also recognize delays, expense, and difficulties involved in proving in a legal or arbitration proceeding, actual loss suffered by Owner if Work not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree as liquidated damages for delay (but not as a penalty):

Substantial Completion: Contractor pays Owner \$500 for each day that expires after time (as duly adjusted pursuant to Contract) specified in Article 4.02.A for Substantial Completion until Work is substantially complete.

Completion of Remaining Work: After Substantial Completion, if Contractor neglects, refuses, or fails to complete remaining Work within Contract Time (as duly adjusted pursuant to Contract) for completion and readiness for final payment, Contractor pays Owner \$250 for each day that expires until Work completed and ready for final payment.

Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and not imposed concurrently.

Bidder agrees that the Work will be Substantially Complete, as provided in the General Conditions, within the lesser of the number of calendar days specified above and completed and ready for final payment in accordance with the General Conditions within 60 calendar days after the date that Substantial Completion is reached.

Respectfully Submitted (Bidder): _____

SUBMITTED on _____, 2023.

State Contractor License No. _____. (If applicable)

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the RFB to perform and furnish all Work as specified or indicated in the RFB for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the RFB.
2. Bidder accepts all of the terms and conditions of the RFB, including without limitation those dealing with the disposition of Bid Security. The Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
3. In submitting this Bid, Bidder represents, as set forth in the Agreement, that:
 - A. Bidder has examined and carefully studied the Bid Documents, the other related data identified in the Bid Documents, and the following Addenda, receipt of all which is hereby acknowledged.

Addendum No.

Addendum Date

- B. Bidder is qualified to do business in the state where the Project is located as required by laws, rules, and regulations or, if allowed by statute, covenants to obtain such qualification prior to contract award.
- C. The Bidder shall provide values for specific performance parameters for the equipment being proposed. The Bidder understands and agrees that the values stated in this Section for the associated performance parameters will be compared to the performance standards required in the equipment specifications. Bidders understand and agree to guarantee the performance values stated herein for the equipment proposed in accordance with the guidelines specified herein.
- D. Bidder understands and agrees that this Bid shall form the basis for an agreement with Owner. Therefore, the undersigned agrees to enter into an agreement to perform and furnish all Work as specified or indicated in these Specifications for the amount indicated in this Bid and in accordance with the other terms and conditions of these Contract Documents.
- E. Bidder accepts all of the terms and conditions of these Contract Documents including, without limitation, those dealing with the disposition of Bid Security, required bonds, and the liquidated damages that may be imposed. This Bid shall remain subject to acceptance for a period of 60 days after the day of Bid opening. The Bidder shall sign and submit the Agreement with the bonds and other required documents within 10 days after the receipt of Notice of Award from Owner.
- F. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bid Documents, and the written resolution thereof by Engineer is acceptable to Bidder.

PACKET

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April 25, 2023

- G. The Bid Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

4. Bidder further represents that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from proposing; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.
5. Bidder will complete the Work in accordance with the Contract Documents for the prices proposed in the Price Bid Sheet.
6. Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the Contract Times specified.
7. The following documents are attached to and made a condition of this Bid:
 - A. Non-Collusion Affidavit of Prime Bidder.
 - B. Debarment / Suspension Certification.
8. The Bidder is required to include in this Bid their proposed construction schedule.

STANDARD PURCHASE TERMS AND CONDITIONS
PURCHASING DIVISION, CITY OF MIDLAND, TEXAS

"Seller," as used herein, has the same meaning as "Company." "Buyer," as used herein, has the same meaning as "City."

Seller and Buyer agree as follows:

1. **SELLER TO PACKAGE GOODS** - Seller will package goods in accordance with good commercial practice. Each shipping container shall be clearly and permanently marked as follows; (a) Seller's name and address, (b) Consignee's name, and address, and purchase order number, (c) Container number and total number of containers, e.g., box 1 of 4 boxes, and (d) the number of the container bearing the packing slip. Seller shall bear cost of packaging unless otherwise provided. Goods shall be suitably packed to secure lowest transportation costs and to conform with requirements of common carriers and any applicable specifications. Buyer's count or weight shall be final and conclusive on shipments not accompanied by packing lists.

2. **SHIPMENT UNDER RESERVATION PROHIBITED** - Seller is not authorized to ship the goods under reservation and no tender of a bill of lading will serve as a tender of goods.

3. **TITLE & RISK OF LOSS** - The title and risk of loss of the goods shall not pass to Buyer until Buyer actually receives and takes possession of the goods at the point or points of delivery in Midland, Texas.

4. **NO REPLACEMENT OF DEFECTIVE TENDER** - Every tender or delivery of goods must fully comply with all provisions of this contract as to time of delivery, quality, and the like. If a tender is made which does not fully conform, this shall constitute a breach and Seller shall not have the right to substitute a conforming tender, provided, where the time for performance has yet expired, the Seller may reasonably notify Buyer of his intention to cure and may then make a conforming tender within the contract time but not afterward.

5. **PLACE OF DELIVERY** - The place of delivery shall be that set forth in the block of the purchase order entitled "deliver to."

6. **INVOICES** - Seller shall submit separate ORIGINAL invoices, on each purchase order. Invoices shall indicate the purchase order number. All invoices must be mailed to City of Midland, Accounts Payable, P.O. Box 1152, Midland, TX 79702-1152. Payment will be made within 30 days from the date the invoice and properly executed receiving documents are received by City of Midland, Accounts Payable at the above address. Invoices sent to any other address will delay payment.

7. **GRATUITIES** - The buyer may, by written notice to the seller, cancel this contract without liability to Seller, if it is determined by Buyer that gratuities, in the form of entertainment, gifts, or otherwise, were offered or given by the seller, or any agent or representative of the Seller, to any officer or employee of the City of Midland with a view toward securing a contract or securing favorable treatment with respect to performing of such a contract. In the event this contract is cancelled by Buyer pursuant to this provision, Buyer shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Seller in providing such gratuities.

8. **WARRANTY - PRICE -**

a. The price to be paid by the Buyer shall be that contained in Seller's Bid which Seller warrants to be no higher than Seller's current prices on order by others for products of the kind and specifications covered by this agreement for similar quantities under similar or like conditions and methods of purchase. In the event Seller breaches this warranty, the prices of the items shall be reduced to the Seller's current prices on order by others, or in the alternative, Buyer may cancel this contract without liability to Seller for breach or Seller's actual expense.

b. The Seller warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for commission, percentage, brokerage, or contingent fee excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Seller for the purpose of securing business. For breach or violation of this warranty the Buyer shall have the right or rights to cancel this contract without liability and to deduct from the contract price, or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

9. **WARRANTY - PRODUCT** - Seller shall not limit or exclude any implied warranties and any attempt to do so shall render this contract voidable at the option of the Buyer. Seller warrants that the goods furnished will conform to the specification, drawings, and description listed in the Bid invitation, and to the sample(s) furnished by Seller, if any. In the event of a conflict between the specifications, drawings and descriptions, the specifications shall govern.

10. **SAFETY WARRANTY** - Seller warrants that the product sold to Buyer shall conform to the standards promulgated by the U.S. Department of Labor under the Occupational Safety and Health Act of 1970. In the event the product does not conform to OSHA standards, Buyer may return the product for correction or replacement at the Seller's expense. In the event Seller fails to make the appropriate correction within a reasonable time, correction made by buyer will be at Seller's expense.

11. **RIGHT OF INSPECTION** - Buyer shall have the right to inspect the goods at delivery before accepting them.

12. **CANCELLATION** - Buyer shall have the right to cancel for default all or any part of the undelivered portion of this order if Seller breached any of the terms hereof including warranties of Seller if the Seller becomes insolvent or commits acts of bankruptcy. Such right of cancellation is in addition to and not in lieu of any other remedies which Buyer may have in law or equity.

13. **TERMINATION** - The performance of work under this order may be terminated in whole, or in part by the Buyer in accordance with this provision. Termination of work hereunder shall be effected by the delivery to Seller of a "Notice of Termination" specifying the extent to which performance of work under the order is terminated and the date upon which such termination becomes effective. Such right of termination is in addition to and not in lieu of the rights of Buyer set forth in Clause 13, herein.

14. **FORCE MAJEURE** - Neither party shall be held responsible for losses, resulting if the fulfillment of any terms or provisions of this contract is delayed or prevented by any cause not within the control of the party whose performance is interfered with, and which by the exercise of reasonable diligence said party is unable to prevent.

15. **ASSIGNMENT - DELEGATION** - No right or interest in this contract shall be assigned or delegation of any obligation made by Seller without the written permission of the Buyer. Any attempted assignment or delegation by the Seller shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.

16. **MODIFICATIONS** - This contract can be modified or rescinded only by a writing signed by both of the parties or their duly authorized agents.

17. **INTERPRETATION - PAROL EVIDENCE** - This writing, plus any Specifications for Bids and performance provided by Buyer in its advertisement for Bids, is intended by the parties as a final expression of this agreement. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any term used in this agreement. Acceptance or acquiescence in a course of performance rendered under this agreement shall not be relevant to determine the meaning of this agreement even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in this Agreement, the definition contained in the Code is to control.

18. **ADVERTISING** - Seller shall not advertise or publish without Buyer's prior consent the fact that Buyer has entered into the contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state, or local government.

19. **RIGHT TO ASSURANCE** - Whenever one party to the contract in good faith has reason to question the other party's intent to perform, he may demand that the other party give written assurance of this intent to perform. In the event that a demand is made and no assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation of the contract.

20. **PROTECTION AGAINST ROYALTIES OR PATENT INFRINGEMENT** - The Seller shall pay all royalties and license fees, and shall provide for the use of any design, device, material, or process covered by letters patent or copyright by suitable legal agreement with Patentee or Owner thereof. The Seller shall defend all suits or claims for infringement of any patent or copyrights and shall indemnify and save the Buyer harmless from any loss on account thereof, except that Buyer shall defend all such suits and claims and shall be responsible for all such loss when a particular design, device, material, or process is allowed to the Seller, the Seller shall indemnify and save Buyer harmless from any loss on account thereof. If the material or process specified or required by Buyer is an infringement, the Seller shall be responsible for such loss unless he promptly gives written notice to the Buyer of such infringement.

21. TIME - It is hereby expressly agreed and understood that time is of the essence for the performance of this Contract, and any failure by Contractor to meet the time Specifications of this Agreement will cause Seller to be in default of this agreement.

22. TAX - The City of Midland is exempt from all Federal, State and City tax. Please do not include these taxes in your Bid price or invoice. Taxable items must be so designated, and the City will supply vendor with a Tax Exemption Certificate, properly executed.

23. INSURANCE –

The following provisions apply unless the agreement is for the supply of goods only:

Seller shall at all times during the term of this agreement maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):

-Personal Injury:	\$1,000,000.00 per person \$1,000,000.00 per occurrence
-Property Damage:	\$500,000.00 per occurrence
<u>Business Automobile Liability:</u>	\$250,000.00 combined single limit- Personal Injury and Property Damage
<u>Worker's Compensation:</u>	Statutory limits
<u>Employers' Liability:</u>	\$500,000.00 per accident or occurrence

The Commercial General Liability shall be on a per project aggregate, including completed operations, and shall be on a claims-occurred basis. This insurance shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Business Automobile Liability insurance provided by COMPANY shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of \$250,000.00 covering any vehicle used for the execution of the work that is the subject of this Contract. This insurance shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Workers' Compensation coverage provided by COMPANY shall inure to the benefit of employees injured during the course and scope of their employment by COMPANY pursuant to this Contract. The Workers' Compensation shall waive all rights of subrogation in favor of CITY.

All insurance required pursuant to this Contract shall provide for a waiver of subrogation in favor of CITY. All insurance required pursuant to this Contract, except for Workers' Compensation Insurance, shall name CITY as an additional insured on a claims occurred basis. CITY shall be provided the notice by COMPANY's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage.

COMPANY shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this Contract to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and policies that name the City of Midland as an additional insured on a claims occurred basis (except workers' compensation).

The parties agree that, prior to the execution of the Contract, COMPANY shall provide one or more certificates of insurance specifically stating that these requirements have been met and subject to the approval of CITY. CITY shall not be required to provide any insurance whatsoever pursuant to this Contract.

COMPANY certifies that the certificate of insurance provided as required herein complies with the requirements of Chapter 1811 of the Texas Insurance Code. COMPANY shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of COMPANY.

24. **ASSIGNMENT** - Seller shall not, either directly or indirectly, assign all or any part of this agreement or any interest, right or privilege herein, without the prior written consent of the Buyer. The issue on whether or not to grant consent to an assignment is in the sole discretion of the Buyer.

25. **RELEASE - NOTWITHSTANDING ANY OTHER PROVISIONS, SELLER HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES BUYER, BUYER'S EMPLOYEES AND OFFICERS, FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH SELLER HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR BUYER'S NEGLIGENCE.**

26. **GOVERNING LAW AND VENUE** - This Agreement shall be governed by the laws of the State of Texas. All performance and payment made pursuant to this Agreement shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits, or any other action arising from or connected in any way to this Agreement, or the performance of this Agreement shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this Agreement shall be deemed to have occurred in Midland County, Texas.

27. **INDEPENDENT CONTRACTOR** - It is expressly understood and agreed that Seller shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of the Buyer; that Seller shall have exclusive control of and the exclusive right to control the details of the services and work performed hereunder, and all persons performing the same; and shall be solely responsible for the acts and omissions of its officers, agents, employees, Contractors and subcontractors; that the doctrine of respondeat superior shall not apply as between Buyer and Seller, its officers, agents, employees, contractors and subcontractors; and that nothing herein shall be construed as creating a partnership or joint enterprise between Buyer and Seller. No person performing any of the work and services described hereunder by Seller shall be considered an officer, agent, servant, or employee of the Buyer. Further, it is specifically understood and agreed that nothing in this Agreement is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" which would give rise to vicarious liability. Seller shall be an independent contractor under this Agreement and shall assume all of the rights, obligations, and liabilities, applicable to it as such independent contractor hereunder. The Buyer does not have the power to direct the order in which the work is done. The Buyer shall not have the right to control the means, methods, or details of the Seller's work. Seller shall assume exclusive responsibility for the work. Seller is entirely free to do the work in its ownway.

28. **NOTICE OF ALLEGED BREACH; STATUTORY PREREQUISITES** - As a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this Agreement, Seller or his legal representative, shall give the City Manager, or any other reasonable official of the Buyer, notice in writing (consisting of one original and seven copies of notice attached to a copy of this agreement) of such damages, duly verified, within one-hundred-twenty (120) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which the Seller will settle, the physical and mailing addresses of Seller at the time and date the claim was presented and the physical and mailing addresses of Seller for the six months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom the Seller relies to establish its claim; and a failure to so notify the City Manager within the time and manner provided herein shall exonerate, excuse and except the Buyer from any liability whatsoever. The Buyer is under no obligation to provide notice to Seller that Seller's notice is insufficient. Buyer reserves the right to request reasonable additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision, Seller's failure to comply with the requirements herein shall perpetually bar Seller's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if Buyer has actual or constructive notice or knowledge of said claim or alleged damages. Seller agrees that the requirements of this entire Agreement are reasonable.

29. **INDEMNITY (NOT APPLICABLE TO PURCHASE AGREEMENTS) - SELLER WILL INDEMNIFY AND HOLD HARMLESS AND DEFEND BUYER AND ALL OF BUYER'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, LOSSES, PROPERTY DAMAGE AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING REASONABLE ATTORNEY'S FEES,**

BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF SELLER, its agents or employees, or any subcontractor, arising out of, or resulting from, Seller's use of, or activities on, the agreement premises, and Seller will be required to pay any judgment with costs which may be obtained against Buyer or any of its officers, agents, or employees, including reasonable attorney's fees.

SELLER SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND BUYER AND ALL OF BUYER'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, ACCIDENTAL DEATH, PERSONAL INJURIES, PROPERTY DAMAGE, LOSSES, AND EXPENSE OF ANY CHARACTER WHATSOEVER INCLUDING REASONABLE ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF BUYER, BUYER'S OFFICERS, AGENTS AND EMPLOYEES, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH SELLER OR SELLER'S EMPLOYEES, AGENTS OR SUBCONTRACTORS NEGLIGENCE, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS AGREEMENT AND SELLER WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST BUYER OR ANY OF BUYER'S OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

30. **SOVEREIGN IMMUNITY** - By executing this Agreement the Buyer is not waiving its right of sovereign immunity. The Buyer is retaining its immunity from suit. The Buyer is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF SOVEREIGN IMMUNITY.**

31. **THIRD PARTY BENEFICIARY** - The Buyer's approval of this Agreement does not create a third party beneficiary. There is no third party beneficiary to this Agreement. No person or entity who is not a party to this Agreement shall have any third party beneficiary or other rights hereunder.

32. **ATTORNEY FEES - BY EXECUTING THIS AGREEMENT, SELLER AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY, AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE BUYER, REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THE AGREEMENT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE AGREEMENT. THE SELLER SPECIFICALLY AGREES THAT IF THE SELLER BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS AGREEMENT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET. SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE SELLER AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH SELLER MIGHT OTHERWISE BE ENTITLED.**

SELLER AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. SELLER ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE AGREEMENT. THE SELLER FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE BUYER AND THE SELLER. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE SELLER AND BUYER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS AGREEMENT WITH LEGAL COUNSEL PRIOR TO ITS EXECUTION.

33. **CONSIDERATION** - The terms of this Agreement are supported by good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties named herein.

34. **CERTIFICATION** - In accordance with the Texas Local Government Code, the City of Midland Department of Facilities and Fleet Management does hereby certify that the City of Midland is in compliance with Sections 252, 271 and all applicable sections of the Texas Local Government Code and other state law as it applies to procurement and contracting issues.

35. **FEDERAL WAGE REQUIREMENTS** - If applicable, the Davis-Bacon Act, 29 CFR 5.5, and any related acts or regulations are hereby incorporated by reference and made a part of this Agreement, and all terms and requirements under said laws, by such incorporation, are made terms and requirements of this agreement, to which the parties to this agreement have agreed to be bound.

36. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS - Seller shall at all times during the term of this Agreement comply with applicable federal, state, and local laws regarding Seller's activities pursuant to this Agreement, including but not limited to all applicable sections of the Municipal Code of Midland, Texas, as may be amended, said sections being hereby incorporated by reference and made a part of this Agreement for all legal purposes. Failure to abide by any such law mentioned herein constitutes grounds for the immediate termination of this Agreement.

SPECIAL PROVISIONS

(WATER UTILITIES)

ATTENTION: All Bidders are directed to pay special attention to the NOTICE TO BIDDERS section of the bid packet. Bidders have sole responsibility for complying with the current Bid process requirements. Bidders also have sole responsibility for verifying that any Bid submitted is completed correctly and includes all of the required documentation, including Addendums.

1. SCOPE OF WORK:

Included in this Project will be the construction of new TCEQ approved municipal public water supply wells and integration of these wells into the existing Paul Davis Wellfield to be performed as outlined in the Plans and Specifications, which are necessary to satisfactorily complete the Work.

The Project will include construction of five new municipal public water supply wells, new electrical controls, new control instrumentation and integration into City's SCADA system, new above-ground piping and plugging of five existing public water supply wells.

Owner reserves the right to abandon, without obligation to Contractor, any part of the Project, or the entire Project, at any time before Contractor begins any construction work authorized by Owner.

Standard Specifications for Construction of the City of Midland will govern all construction, except as modified by these Special Provisions.

2. ORDER OF PRECEDENCE:

The Special Provisions take precedence over the General Conditions in this Bid packet anywhere these two Sections are not in agreement.

The Special Provisions take precedence over the City of Midland Specifications in this Bid packet anywhere these two Sections are not in agreement.

Contractor is to Bid the quantities in the Proposal Section of the Bid packet even if there is a discrepancy between the Proposal quantities and those noted or measured in the Construction Drawing set.

In the Proposal the long-hand dollar amount written in the Description column for each Bid item will take precedence over the numerical dollar amount listed in the Unit Price column if there is a discrepancy between the two.

In the Construction Drawing set any written or noted dimension takes precedence over dimensions measured based on the Drawing scale unless otherwise directed by Engineer.

Any changes or revisions made as part of an Addendum for this Project take precedence over the original Bid packet and Construction Drawing set where the documents are in conflict.

3. EXAMINATION OF SITE:

Prospective Bidders are to make a careful examination of the entire site of the Project and are to make such explorations as may be necessary to determine the subsoil and/or water conditions to be encountered; improvements and obstructions which may be encountered; methods of providing ingress-egress to private as well as public property; methods of handling traffic during construction and maintenance of the entire Project as well as any section thereof, protection of all existing structures both above and below ground; and how the plans fit the proposed Project and especially if any discrepancies exist.

4. PAYMENT:

Payment and retainage (5 percent) shall be per the General Conditions.

Payment will be made for material installed, not for material delivery, for all Proposal Bid Items except those specifically listed below, which will be the only Proposal Bid Items to be paid upon material delivery for this Project:

- Miscellaneous (General) Bid Items: none
- Public Water Supply Wells Items: 11, 13, 14, 15, 16, 17, and 30

Retainage will apply the same to all Bid items and invoices regardless of whether an invoice is for bid items paid upon material delivery or not.

Any and all payments for Bid items that are paid upon material delivery are paid with the expectation that the material will be installed per the Construction Drawings and Specifications, and that the material delivered will be protected and kept in good condition by Contractor until it is installed. Material that is not properly stored or protected and becomes weathered or damaged before installation must be replaced with new material meeting the standards and requirements of the Construction Drawings and Specifications before it can be installed, and this will be done by Contractor at no additional cost to the City of Midland.

5. SAFETY REQUIREMENTS:

It is the responsibility of Contractor to follow and comply at all times with Occupational Safety and Health Administration (OSHA) and all other applicable safety regulations and requirements throughout the course of the Project's work. The City of Midland reserves the right to require additional safety measures on the Project site if they are needed in the opinion of the Engineer for the safety of the work crews or public.

OSHA approved trench protective systems (i.e., safety measures) are required for any and all trench sections on City of Midland projects that exceed a depth of five feet (5.0') regardless of the soil condition or classification at the location of the trench section in question.

6. SAFETY RESTRICTIONS – WORK NEAR HIGH VOLTAGE LINES:

The following procedure will be followed regarding the subject item on this Contract:

1. A warning sign painted yellow with black letters that are legible at 12 feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment, or similar apparatus. The warning sign shall read as follows:

“WARNING – UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES”

2. Equipment that may be operated within 10 feet of high voltage lines shall have an insulation cage-type of guard about the boom or arm, except back hoes or dippers, and insulator links on the lift hook connections.
3. When necessary to work within 6 feet of high voltage electric lines, notification shall be given to the power company of who will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. The notifying department shall maintain an accurate log of all such calls to the Power Company and shall record action taken in each case.
4. Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at Contractor's sole cost and expense.

5. No person shall work within 6 feet of a high voltage line without protection having been taken as outlined in Paragraph (3).

7. TRAFFIC CONTROL:

All proposed traffic control shall be approved by the City where applicable. All traffic control plans must be submitted to and approved by the Construction Manager no less than two business days prior to starting the construction work. Traffic control for each phase of work must be approved prior to starting that work.

Generic traffic control plans or typical details may be submitted for shoulder work on any class of roadway, or for work on local or collector streets that does not require the closure of any travel lanes (i.e., all lanes are open to traffic on striped roadways, or adequate width remains available for two-way traffic on unstriped roadways). Once a generic traffic control plan or typical detail for a certain type of setup has been approved one time, Contractor shall only be responsible for notifying the Construction Manager of the location, type of setup, and dates on which they intend to utilize the pre-approved traffic control for the duration of the Contract. No additional plan submittals will be required in these cases, except that the City reserves the right to suspend this exception at its discretion. For any work not fitting the above exception, or in the event that the exception is suspended by the City, a site-specific traffic control plan will be required for each work location and time period.

1. All temporary traffic control shall be in general conformance with the *Texas Manual on Uniform Traffic Control Devices* (TMUTCD) (latest edition as adopted by the Texas Department of Transportation), except as specifically directed by the City Engineer or City Traffic Engineer.
 2. All temporary traffic control shall be designed, installed, and maintained by competent and qualified personnel with adequate experience in traffic control.
 3. All temporary traffic control involving multiple lane closures or traffic shifts, full closures of collector or arterial streets, traffic control extending through a railroad crossing, or any setup reasonably determined by the City to be "complex", shall be implemented only by a contractor with specific experience and expertise in the field of traffic control (i.e., a qualified "barricade company").
 4. A Traffic Control Plan (TCP) shall be submitted to the Engineering Services Department, Construction Manager, in advance of any work in the right-of-way that impacts traffic. No work shall occur until an approved TCP has been returned to the Contractor.
 5. A copy of the approved TCP shall be kept in the possession of the person responsible for supervising the traffic control at all times while working in the right-of-way. The approved TCP shall be presented to City staff or law enforcement upon demand at any time.
 6. Depending on site conditions and the nature of the work, temporary traffic control may be approved by the City for either of the following:
 - a. All Times – All traffic control, including closures, may remain in place 24 hours per day until expiration of the approved TCP.
 - b. Off-Peak Only – Lane or road closures are NOT permitted from 6:00-9:00 AM and 4:00-7:00 PM on weekdays (Monday through Friday). Other traffic control not related to lane or road closures may remain in place 24 hours per day until expiration of the approved TCP.
 7. Contractor setting the temporary traffic control shall be responsible for the maintenance and upkeep of all signs, barricades, and other devices, at all times.
 - a. All temporary traffic control setups shall be maintained at least one time per day, including weekends and holidays.
 - b. More frequent maintenance shall be performed as needed, with particular emphasis to following up after severe weather events or during times of high winds.
 - c. Maintenance shall include:
 - i. Verifying and correcting the location and orientation of all signs, barricades, and other devices;
 - ii. Keeping signs and reflective areas of barricades and other devices clean and free of dirt buildup so as to maintain appropriate visibility and legibility; and
- PACKET 8-46 Ensuring the proper location, orientation, and operation of arrow boards and changeable message boards, if present.

8. Arrow boards shall be required for lane closures under the following conditions:

- a. On roadways with a posted speed limit of 55 MPH or greater, for closures lasting more than one hour;
- b. On roadways with a posted speed limit of 45 MPH or greater, for closures lasting more than four hours;
- c. On any roadway if lanes will remain open to traffic travelling in the same direction on both sides of a closed lane during any overnight hours (from 7:00 PM to 6:00 AM); and

At other times as shown on the approved TCP, or as otherwise directed by the City.

8. DETOURS:

Contractor is to prosecute his work in such a manner as to create a minimum of interruption to traffic and pedestrian facilities and to the flow of vehicular and pedestrian traffic within the Project area.

9. PROPERTY AND RIGHT-OF-WAY ACCESS:

Access to adjacent properties must be maintained at all times unless otherwise directed by Engineer. If Contractor will not be working in an area for a period of one week or more, special care is to be taken to address any unsafe conditions such as excavated areas or obstructions outside the worked area that could be tripping hazards, etc.

10. PROPERTY AND RIGHT-OF-WAY SERVICE:

Service to adjacent properties must be maintained at all times unless otherwise directed by Engineer. Such services include water, wastewater, fiber, cable, electric, and gas. Contractor must notify affected properties no less than two business days prior to any planned service interruption.

Contractor must coordinate with the City of Midland regarding any planned service interruptions for public water or wastewater, or to restore any public infrastructure damaged during construction activities.

Contractor must coordinate with private service providers for any necessary service interruptions to their infrastructure or to restore service to their infrastructure in the event that a private service is disrupted, damaged, etc. during construction.

11. CONSTRUCTION SCHEDULE:

It is the responsibility of Contractor to furnish the Construction Engineer, prior to construction, with a schedule outlining the anticipated time each phase of construction will begin and be completed, including sufficient time being allowed for clean-up.

12. CONSTRUCTION STAKING:

It is the responsibility of Contractor to provide the Project construction staking at 50 foot intervals along the entire length of the Project as well as at such control points as Contractor deems necessary for proper execution of the Work. Construction staking is to include grading and cuts as well as horizontal alignments and construction control points. Cut sheets are to be provided to Engineer by Contractor for review and approval.

13. SURVEY:

Contractor is to provide GPS survey shots for all meters replaced to the City of Midland with each completed work order submittal. Survey data is to be shot in Texas Central Zone with 1983 NAD at 1 foot accuracy or better. Survey data is to be provided in Excel csv. file format with all rounding functions turned off.

14. CONSTRUCTION MATERIALS:

Contractor is to only provide new materials for permanent installation in any and all parts of this Project, and all such materials must comply with the General Conditions, the Bid Packet Specifications, and all applicable City of Midland Standards and Specifications.

For this Project, the Standard Specification is hereby amended to read:

Qualifications of Material Sources – Contractor is only to use pavement mixtures that have a proven record of acceptance by the City of Midland, or another Texas municipality, or have a proven record of meeting similar standards for state highway projects.

Concrete is only to be placed when the ambient temperature is between 40 degrees and 95 degrees F and the ambient temperature in the shade is higher than 40 degrees F or is 40 degrees F and rising.

All concrete pavement joints are to be sealed with Texas Department of Transportation (TxDOT) DMS-6310 SL-2 sealant, an American Society for Testing and Materials (ASTM) D 1190 Hot-Applied Single Component Joint Sealant, or a City of Midland approved equal. This will not apply to curb or sidewalk joints.

No construction materials are to be placed or installed during rain events unless they are necessary to resolve an emergency situation or to facilitate the project site erosion control measures.

15. EROSION CONTROL:

Erosion control is the responsibility of Contractor and erosion control measures are to be implemented so as to prevent sediment erosion from wind, rain, and other elements from the Project site. Should Owner feel that supplementary erosion control measures are required in addition to those implemented by Contractor then Contractor will include additional erosion control measures within reason to Owner's satisfaction and/or TCEQ requirements.

Reasonable erosion control measures include but are not limited to construction entrance(s), concrete washout(s), perimeter silt fence or fiber wattle, rock rip-rap dams for concentrated runoff control, gutter and inlet protection measures such as sand bags, and stabilization of the construction area surfaces when construction work is not actively occurring by means of vegetative cover or seeded erosion control blankets.

Supplemental erosion control measures are ancillary to the Project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes.

Site cleanup work is to be done for this Project as soon as possible as per the General Conditions and will be ancillary to the Project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes. Site cleanup is to take place throughout the Project's construction as needed to maintain a clean and professional looking work area. No more than three calendar days are to elapse after completion of construction before the final roadway and right-of-way cleanup has been completed to the satisfaction of Engineer.

16. WASTE MATERIAL:

Excess material from excavation and other construction or demolition activity will become the property of Contractor. Excess excavation will be disposed of at locations secured by Contractor and if necessary, approved by Engineer. No material is to be placed on private property or City property without the approval of Engineer and property owner. Removal of excess material, excavation, and waste material are ancillary to the Project and not paid as a separate item, unless otherwise noted in the Proposal or Pay Notes.

Excess concrete material must be washed out in a concrete washout within the Project's job site area, or else any and all other concrete material washout must occur away from the job site area in Contractor's or concrete Supplier's own operation yards or properties. Under no circumstances are concrete trucks allowed to washout in any job site excavations, channels, public right-of-way, or on private property.

Existing fire hydrants and existing water meters indicated for removal as part of the Project are to be returned to the City of Midland by the Contractor and remain City property. These are ancillary to the Project and will not be paid as separate items.

17. TESTING:

It is Contractor's responsibility to perform all required testing for any and all materials and workmanship performed or installed as part of the Project's Work. The cost of all such testing is to be borne solely by Contractor unless required by Engineer for work or materials that had previously been tested and approved and had not experienced any change in condition since that time as a result of Contractor's work or actions; or unless additional testing outside of the Project Scope is performed at the request of Engineer.

Required testing includes:

Concrete Pavement – A Slump Test is required for every cylinder set (three test cylinders) taken, and no less than one cylinder set per day is to be taken for testing when concrete is placed. Test results are to be given to the engineer upon completion of each test, with one cylinder set taken for:

- A. Every 50 cubic yards of concrete placed for concrete pavement between street intersections.
- B. Every 50 cubic yards of concrete placed for concrete pavement at a street intersection.
- C. Every 2 sets of fillets and valley gutters at street approaches. (1 set = 2 fillets and 1 valley gutter)
- D. Every 4 alley approaches or driveway approaches.
- E. There will be no testing for curb, ramps, and sidewalks.

Concrete Pavement for Trench Repair – A Slump Test is required only if directed by Engineer for pavement patches that are equal to or greater than 50 cubic yards (roughly equal to an 8-foot-wide by 340-foot-long by 6-inch-thick pavement section). The slump test is to be performed once for every cylinder set (three cylinders) taken, and no less than one cylinder set per day is to be taken for testing when concrete is placed. Test results are to be given to Engineer upon completion of each test. There will be no testing for curb, ramps, and sidewalks.

Asphalt Hot-Mix Pavement – A Nuclear Gauge Density Test is required for either each day that asphalt hot-mix is placed or for every 250 linear feet of asphalt hot-mix pass, whichever results in more frequent testing. The laboratory density limits will be a minimum limit of 96 percent, a maximum limit of 98 percent, and an optimum limit of 97 percent. The acceptable field density range for construction of this Project is 93 percent - 98 percent with a target density of 95 percent. Test results are to be given to Engineer upon completion of each test.

Asphalt Hot-Mix Pavement for Trench Repair – A Nuclear Gauge Density Test is required only if directed by Engineer for pavement patches that are equal to or greater than 620 square yards (roughly equal to an 8-foot-wide by 700-foot-long pavement section). The laboratory density limits will be a minimum limit of 96 percent, a maximum limit of 98 percent, and an optimum limit of 97 percent. The acceptable field density limit will be a minimum limit of 93 percent, a maximum limit of 98 percent, and an optimum limit of 95 percent. Test results are to be given to Engineer upon completion of each test.

Public Water Supply Wells – Pump tests and water quality testing as directed by Technical Specifications.

Water Pipes & Fittings – Perform Pressure Testing and Bacterial Testing (Bac T)/Chlorination testing for all water mains and fire hydrants.

- Pressure Test – Perform test as described in the City of Midland Water Line Specifications, PART 10, Hydrostatic Tests, with the sole difference being that a continuous pressure of 180 pounds per square inch (psi) must be maintained over a continuous period of not less than four hours rather than eight hours. The acceptable field pressure limit will be a minimum 180 psi and a maximum 185 psi. A 2 to 3 psi drop in the measured pipe pressure during the first two hour period will be acceptable to account for the compression of air within the pipe so long as the minimum and maximum allowed field pressure limits are not exceeded. There can be no variation in the measured pipe pressure during the last two hours of the pressure test.

- Bac T/Chlorination Testing – Perform disinfection and test as described in the City of Midland Water Line Specifications, Part 9, Disinfection Of Pipe Lines.

Wastewater Gravity Pipes/Manholes – Perform air testing, mandrel testing, hydrostatic testing, and closed circuit televising (CCTV) for all wastewater mains and manholes.

- Air Test – Perform test as described in the City of Midland Gravity Flow Pipe Sewers and Fittings for Wastewater and Storm Water, Part 3.14, Testing Gravity Mains and Manholes.
- Mandrel Test – A successful mandrel pull is required for all wastewater pipes installed.
- Hydrostatic Testing – Perform test as described in the City of Midland Gravity Flow Pipe Sewers and Fittings for Wastewater and Stormwater Specifications, Part 3.14, Hydrostatic Testing.
- Closed Circuit Televising (CCTV) – Provide CCTV video of the wastewater mains for the full length of the wastewater system installed, including through all wastewater structures. CCTV video is not required for wastewater laterals unless directed by the Engineer.

Force Mains & Fittings (Wastewater & Storm Drain) – Perform pressure testing for all wastewater and storm drain force mains.

- Pressure Test – Perform test as described in the City of Midland Water Line Specifications, PART 10, Hydrostatic Tests, with the sole difference being that a continuous pressure of 180 pounds per square inch (psi) must be maintained over a continuous period of not less than four hours rather than eight hours. The acceptable field pressure limit will be a minimum 180 psi and a maximum 185 psi. A 2 to 3 psi drop in the measured pipe pressure during the first two hour period will be acceptable to account for the compression of air within the pipe so long as the minimum and maximum allowed field pressure limits are not exceeded. There can be no variation in the measured pipe pressure during the last two hours of the pressure test.

Storm Drain Pipes & Structures – Perform as-built survey and closed circuit televising (CCTV) for all storm drain pipes and structures.

- As-Built Survey of Storm Drain Pipes & Culverts – Provide as-built survey shots at 50 foot intervals along the storm drain pipe or culvert at the top of the pipe or culvert installed.
- As-Built Survey of Storm Drain Structures – Provide as-built survey shots at the inverts of all storm drain structures that are installed to verify the storm drain grades, including all manholes, junction boxes, and inlets.
- Closed Circuit Televising (CCTV) – Provide CCTV video of the storm drain for the full length of the storm drain system installed, including through all storm drain structures. CCTV video is not required for storm drain laterals unless directed by Engineer.

18. COMPLIANCE:

The said Contractor further agrees to comply with all applicable provisions of the laws and building and construction codes of the City of Midland and the State of Texas, and with any regulations for the protection of workers which may be promulgated by the Government, and will protect such work with all necessary lights, barriers, safeguards, and warnings as provided for in said Specifications and the Ordinance regulations.

19. PERSONNEL:

It is Contractor's responsibility to have a supervising representative of Contractor on the construction site any time that construction work is taking place. Contractor's representative must be on Contractor's direct payroll. Sub-contractors or paid consultants will not satisfy this requirement.

It is also Contractor's responsibility to provide the City with a reliable contact for issue escalation coordination. Such contacts would include Contractor's site foreman, Contractor's construction Project Manager, etc.

20. INTENT OF THE PROPOSAL:

The intent of the proposal is to determine the lowest responsible bidder based on the total of the quantities and unit prices. Once the lowest responsible bidder is selected, the Project will be awarded based on the terms and requirements of the Contract outlined in the Bid packet and Construction Drawings.

21. CONTRACT DEADLINE:

The deadline for Substantial Completion of this Project is 240 calendar days total starting from the Notice to Proceed date.

Extensions of the Project deadline may be requested by Contractor for documented excepting conditions such as weather days, delays due to conflicts with existing franchise lines, etc. which are reasonably beyond the Contractor's control. Any and all deadline extensions must be submitted by Contractor in writing to Engineer for review, and the approval or denial of the request rests solely with Engineer.

Unless specifically granted in writing by Engineer, there will be no suspension of Project time between phases of construction.

22. WARRANTY PERIOD:

There is a one year calendar warranty period on this Project for all Work performed or materials installed effective immediately upon acceptance of the improvements by Owner. The warranty period will be based on the acceptance date of the Project as a whole, and not any individual phases of the Project.

23. BID PACKET COMPLETION ITEMS OF NOTE:

Bidders must be willing to sign the Contract as is if a Bid is submitted. Revisions, alterations, deletions, additions, or any other changes of any kind by the Bidder to the Bid packet or other Bid documents (such as the Construction Drawing set, Addendums, etc.) will result in the Bid submittal being deemed 'Non-Responsive' and the Bid will not be accepted.

Bidders are reminded to make sure that the Conflict of Interest forms are completed if applicable before submitting a Bid.

All Bid items in the Proposal section must be completed for a Bid submittal to be considered complete. Any Bid item left blank, only partially completed, or that the Bidder indicates they chose to not provide a Bid for will be considered incomplete, and the entire Bid submittal will also be deemed incomplete, the Bid submittal will be deemed 'Non-Responsive', and the Bid will not be accepted. Bidders bear sole responsibility for making sure that the Proposal is complete and in accordance with the instructions provided to Bidders in the Bid packet.

All acknowledgement forms for all Addendums that are issued during the Bid process for this Project must be filled out and be included with any Bid submittal for that Bid submittal to be considered complete. Any Bid submittal lacking these completed Addendum acknowledgement forms will be deemed 'Non-Responsive' and the Bid will not be accepted. Bidders bear sole responsibility for making sure that they have obtained all addendums issued prior to submitting their Bid.

Bidders must provide documentation as part of the Bid packet submittal proving that they possess active licenses that are equivalent to or a higher class than a Water Operator D license and also equivalent to or a higher class than either a Wastewater D license or a Class 1 Collections license, and Contractor must maintain both of these active licenses for the entirety of the Project. Any Bid submittal that does not include this required documentation for both licenses will be rejected as a non-responsive Bid. If a Contractor allows either or both of the required licenses to lapse at any time during the course of the Project, then all Work under this Project will be halted and the City of Midland will have sole discretion to either allow Contractor to renew both of their active licenses before resuming Work or to end the Project immediately.

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER

State of _____ §

County of _____ §

_____, being first duly sworn, deposes and says that:

- (1) He is _____ of _____ the Bidder that has submitted the attached Bid;
- (2) He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
- (3) Such Bid is genuine and is not a collusive or sham Bid;
- (4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix an overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any advantage against the _____ (Local Public Agency) or any person interested in the proposed contract; and
- (5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(signed) _____

Title

Subscribed and sworn to before me

this _____ day of _____, 20____.

My commission expires _____, 20____.

Debarment / Suspension Certification

I, _____, hereby certify that I have checked on the federal
(Authorized Representative of Recipient)

System for Award Management (www.sam.gov) website and determined that

_____ is not shown as an “excluded party” that is debarred,
(Name of Entity)

suspended or otherwise excluded from or ineligible for participation in federal assistance programs under Executive Order 12549. (See 2 CFR Part 180 and 2 CFR Part 1532 for additional information on the federal governmentwide debarment and suspension system for nonprocurement programs and activities.)

I understand that a false statement herein may subject me to penalties under federal and state laws relating to filing false statements and other relevant statutes.

Signature

Date

Title

Name of Recipient

Verifying prime contractors and subcontractors for construction, equipment, supplies and services: Using the www.sam.gov website, the recipient must verify prior to awarding the contract that the prime contractor is not listed as an “excluded party” that is debarred, suspended or otherwise excluded from or ineligible. Once any subcontractors are known, they also must be verified as not listed as an “excluded party” prior to award of a subcontract. The recipient must print a dated record of the verification from the www.sam.gov website and retain a copy that is available for review by TWDB. The prime contractors and subcontractors must be verified prior to the contract award or the costs may be disallowed.

BID BOND

THE STATE OF TEXAS §
COUNTY OF MIDLAND §

SURETY NO. _____

KNOW ALL MEN BY THESE PRESENTS, THAT _____

(hereinafter called the Principal), as Principal, and _____

(hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Midland, Texas a home rule municipal corporation of Midland County, Texas, (hereinafter called the Obligee), in the amount of _____ DOLLARS

(\$ _____), for the payment whereof the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a Bid or Bid to enter into a certain written Contract with the obligee to _____.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully enter into such written Contract, then this obligation shall be void; otherwise to remain in full force and effect.

IT IS EXPRESSLY UNDERSTOOD AND AGREED that if said Principal should withdraw its Bid any time after such Bid is opened and before official rejection to such Bid or, if successful in securing the award thereof, said Principal should fail to enter into the Contract and furnish satisfactory Performance Bond and Payment Bond, the Obligee, in either such events, shall be entitled and is hereby given the right to collect the full amount of this Bid Bond as liquidated damages.

PROVIDED, further that if any legal action be filed upon this Bond venue shall lie in Midland County, Texas

IN WITNESS THEREOF, THE SAID PRINCIPAL AND SURETY do sign and seal this instrument, this

_____ day of _____, 20____.

Principal

Surety

By _____

By _____

Address _____

Address _____

APPROVED AS TO FORM:

City Attorney

NOTE: ATTACH POWER OF ATTORNEY

CONTRACT DOCUMENTS



THE CITY OF MIDLAND CONTRACT

Contract No. 23003518

THIS CONTRACT, effective the ____ day of _____, 20__, by and between the City of Midland, hereinafter referred to as "CITY", and _____, hereinafter referred to as "COMPANY", is made for the following considerations:

1. **Cost:** Total Proposal: \$ _____ DOLLARS
2. **Scope of Work:** COMPANY shall perform all work described for the Paul Davis Wellfield Development Project. Said work being more particularly described in the following documents, which are attached hereto and incorporated herein for all purposes.

EXHIBIT A..... Specifications, Proposal or Cost Summary

EXHIBIT BIntentionally Omitted

EXHIBIT C Bonding instructions for Public Works Contract of \$50,000 and more

EXHIBIT D..... Wage Scale

3. **City:** The words "CITY's Representative" or "representative" shall mean Carl Craig or the designee under whose supervision these Contract Documents, including the Plans and Specifications, were prepared, or who may inspect work performed under this Contract; or such other representative, supervisor, or inspector as may be authorized by CITY to act in any particular capacity under this Contract.

4. **City's Representative:** CITY's Representative may make periodic visits to the site to observe the progress and quality of the executed work and to determine, in general, if the work is proceeding in accordance with the contract documents. CITY's representative will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work, nor will such representative be responsible for the construction means, methods, techniques, sequences or procedures, or the safety precautions incident thereto. CITY's representative will not be responsible for COMPANY's failure to perform the work in accordance with the contract.

5. **Company:** Unless otherwise stipulated, COMPANY shall provide and pay for all materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and all water, light, power, fuel, transportation and all other facilities necessary for the execution and completion of the work covered by the contract documents. Unless otherwise specified, all materials shall be new, and both workmanship and materials shall be of good quality. COMPANY shall, if required, furnish satisfactory evidence as to the kind and quality of materials.

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April 25, 2023

5.1. COMPANY shall, at its expense, obtain all permits and licenses necessary for the performance of this contract and pay all fees and taxes required by law, and comply with all laws, ordinances, rules, and regulations governing COMPANY's performance of the Contract, including all environmental laws and regulations, whether state or federal.

5.2. All work shall be done, and all materials furnished in strict conformity with the Contract and Specifications.

6. **Minor Work Not Mentioned:** All minor detail of the work not specifically mentioned in the Specifications but obviously necessary for the proper completion of the work, such as the proper connection of new work to old, shall be considered as incidental to and a part of the work for which the prices are named in the contract. COMPANY will not be entitled to any additional compensation therefor unless specifically stated otherwise. Otherwise the term "extra work" as used in this contract shall mean and include all work that may be required by CITY to be done by COMPANY to accomplish any alteration or addition to the work as shown on the Specifications.

6.1. COMPANY shall perform all extra work under the direction of CITY's Representative when presented with a written work order signed by CITY's Representative, subject, however, to the right of the COMPANY to require written confirmation of such extra work order by CITY. Payment for extra work shall be as agreed in the work order.

7. **Safety:** COMPANY shall at all times exercise reasonable precaution for the safety of employees and others on or near the work and shall comply with all applicable provisions of federal, state and municipal laws. All machinery and equipment and other physical hazards shall be guarded in accordance with federal, state or municipal laws or regulations.

8. **INDEMNITY: COMPANY SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND CITY AND ALL OF CITY'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, ACCIDENTAL DEATH, LOSSES, PROPERTY DAMAGE AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF COMPANY, THEIR AGENTS OR EMPLOYEES, OR ANY SUBCONTRACTOR, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS CONTRACT, AND COMPANY WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST CITY OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES. THE OBLIGATIONS CONTAINED IN THIS SECTION 8 SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.**

8.1. COMPANY SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND CITY AND ALL OF CITY'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES, AND EXPENSES OF ANY CHARACTER WHATSOEVER INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ON ACCOUNT OF ANY NEGLIGENT ACT OF CITY, CITY'S OFFICERS, AGENTS AND EMPLOYEES, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH COMPANY OR COMPANY'S EMPLOYEES, AGENTS OR SUBCONTRACTORS NEGLIGENCE IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS CONTRACT, AND COMPANY WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST CITY OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES. THE OBLIGATIONS CONTAINED IN THIS SECTION 8.1 SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

8.2. COMPANY AGREES THAT IT WILL INDEMNIFY AND SAVE CITY HARMLESS FROM ALL CLAIMS GROWING OUT OF ANY DEMANDS OF SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, AND FURNISHERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS AND ALL SUPPLIES, INCURRED IN THE FURTHERANCE OF THE PERFORMANCE OF THIS CONTRACT. WHEN CITY SO DESIRES, COMPANY SHALL FURNISH SATISFACTORY EVIDENCE THAT ALL OBLIGATIONS OF THE NATURE HEREINABOVE DESIGNATED HAVE BEEN PAID, DISCHARGED OR WAIVED. COMPANY, ITS SURETIES AND INSURANCE CARRIERS SHALL DEFEND, INDEMNIFY AND SAVE HARMLESS CITY AND ALL OF ITS OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, OR CLAIMS OF ANY CHARACTER WHATSOEVER, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY, ARISING FROM ANY ACT OF COMPANY OR ANY SUBCONTRACTOR, THEIR AGENTS OR EMPLOYEES, IN THE EXECUTION AND SUPERVISION OF THIS CONTRACT, AND WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST CITY OR ANY OF ITS OFFICERS, AGENTS, OR EMPLOYEES INCLUDING ATTORNEY'S FEES. THE OBLIGATIONS CONTAINED IN THIS SECTION 8.2 SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

9. **Start of Work:** COMPANY shall commence work no later than ten (10) days after receipt of the execution of this document or other written release to proceed and shall complete such work no later than _____ calendar days after release to proceed.

PACKET

10. **Clean Up:** COMPANY shall promptly remove from CITY's premises all materials condemned by CITY's Representative on account of failure to conform to the contract, whether actually incorporated in the work or not, and COMPANY shall at its own expense promptly replace such condemned materials with other materials conforming to the requirements of the contract. COMPANY shall also bear the expense of restoring all work of other contractors damaged by any such removal or replacement. If COMPANY does not remove and replace any such condemned materials within a reasonable time after a written notice by CITY, CITY may remove and replace such at COMPANY's expense.

11. **Warranty:** Neither the final payment nor any provision in this contract shall relieve COMPANY of responsibility for faulty materials or workmanship, and he shall remedy any defects due thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one (1) year from the date of substantial completion. CITY shall give notice of observed defects with reasonable promptness.

12. **Remedy:** CITY may, on account of subsequently discovered evidence, withhold whole or part of any payment to such extent as may be necessary to protect itself from loss on account of:

12.1. Defective work not remedied; or

12.2. Claims filed or reasonable evidence indicating possible filing of claims; or

12.3. Failure of COMPANY to make payments promptly to subcontractors or for material or labor which CITY may pay as an agent for the COMPANY; or

12.4. Damages to another contractor or subcontractor.

When the above grounds to withhold payment are removed, or COMPANY provides a surety bond satisfactory to CITY, which will protect CITY in the amount withheld, payment may be released.

13. **Funding Out:** In the event no funds or insufficient funds are appropriated and budgeted or are otherwise unavailable in any fiscal period for contract payments due under the contract, then this contract shall terminate on the last day of the fiscal period for which full appropriations were made, without penalty or expense to CITY of any kind whatsoever.

14. **Wage Scale:** COMPANY agrees to pay all workmen in his employ no less than the generally prevailing wage rate for employees of similar category in the Permian Basin Area, as is depicted in the wage rate scale attached hereto as EXHIBIT D and incorporated herein by reference for all legal purposes.

14.1. If applicable, the Davis-Bacon Act, 29 CFR 5.5, and any related acts or regulations are hereby incorporated by reference and made a part of this Contract, and all terms and requirements under said laws, by such incorporation are made terms and requirements of this Contract, to which the parties to this Contract have agreed to be bound.

15. **Prompt Pay Act:** CITY and COMPANY agree that Texas Government Code, Chapter 2251, Payment for Goods and Services (the “Prompt Pay Act”) does not waive governmental immunity.

16. **Payment; Retainage:** After all work is completed by COMPANY, including all Change Orders altering the original scope and amount of the contract are completed, and the CITY has inspected and approved that the work is completed and in compliance with the Contract and all subsequent Change Orders, the CITY may thereafter issue payment to COMPANY in the amount of the contract and all Change Orders. The CITY shall be the final judge of when the work is completed by COMPANY. The CITY, in its sole discretion, shall determine if the work under the Contract and under any Change Orders has been done to the CITY’s requirements.

16.1. The CITY may make periodic payments to COMPANY; provided, however, such periodic payments may only be made pursuant to this Section, and only after all Work and all Change Orders are completed by COMPANY and approved by the CITY. The approval shall be in the CITY’s sole discretion. Requests for progress payments may be made to the extent of the materials and labor completed at the end of each month. Upon approval by the CITY or the CITY’s representative, the request and invoice shall be forwarded for payment less 5 percent retainage. The total of these payments shall not exceed 95 percent of the total Contract amount.

17. **Late Completion; Liquidated Damages:** It is hereby understood and mutually agreed, by and between COMPANY and the CITY, that the date of beginning and the time for completion as specified in the Contract of the Work to be done hereunder are ESSENTIAL CONDITIONS of this Contract; and it is further mutually understood and agreed that the Work embraced in this Contract shall be commenced on a date to be specified in the “Notice to Proceed.” COMPANY agrees that said Work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will ensure full completion thereof within the time specified. It is expressly understood and agreed, by and between COMPANY and the CITY, that the time for the completion of the work described herein is a reasonable time for the completion of the same, taking into consideration the average climatic range and usual industrial conditions prevailing in this locality.

17.1. In the event COMPANY shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the CITY, then COMPANY and COMPANY’s surety, if any, shall be liable for and does hereby agree, as a part consideration for the awarding of this Contract, to pay to the CITY \$500.00, not as a penalty but as liquidated damages for such breach of contract as hereinafter set forth, for each and every day that COMPANY shall be in default after the time stipulated in the Contract for completing the Work. Further, the CITY shall have the right to cancel this Contract for such delay. In the event the CITY cancels this Contract pursuant to the terms of this Section, the CITY shall pay to COMPANY only those monies deemed appropriate by the CITY, in its sole discretion, to compensate COMPANY for any Work actually performed, less any liquidated damages COMPANY owes the CITY.

17.2. The said amount is fixed and agreed upon by and between COMPANY and the CITY because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the CITY would in such event sustain, and said amount is agreed to be the amount of damages which the CITY would sustain and said amount shall be retained from time to time by the CITY from current periodical estimates.

17.3. It is further agreed that time is of the essence of each and every portion of this Contract and of the Specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever; and where under the Contract an additional time is allowed for the completion of any Work, the new time limit fixed by such extension shall be of the essence of this Contract. Provided, that COMPANY shall not be charged with liquidated damages or any excess cost when the CITY determines, in its sole discretion, that COMPANY is without fault and COMPANY's reasons for the time extension are acceptable to the CITY. Provided, further, that COMPANY shall not be charged with liquidated damages of any excess cost when the delay in completion of the Work is due:

- a. To any preference, priority or allocation order duly issued by the Government;
- b. To unforeseeable cause beyond the control and without the fault or negligence of COMPANY, including, but not restricted to, acts of God, or of the public enemy, acts of the CITY, acts of another contractor in the performance of a contract with the CITY, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather; and
- c. To any delays of subcontractors or suppliers occasioned by any of the causes specified in subsections (a) and (b) of this article.

17.4. Provided, further, that COMPANY shall, within 10 days from the beginning of such delay, unless the CITY shall, in its sole discretion grant a further period of time prior to the date of final settlement of the Contract, notify the CITY, in writing, of the causes of the delay, who shall ascertain the facts and extent of the delay and notify COMPANY within a reasonable time of its decision in the matter.

17.5. COMPANY AGREES THAT THE PAYMENT OF SUCH LIQUIDATED DAMAGES MAY BE RECOVERED BY THE CITY FROM RETAINAGE HELD BY THE CITY. NOTWITHSTANDING ANY OTHER PROVISION HEREOF, COMPANY HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES CITY, CITY'S EMPLOYEES AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER ARISING FROM THE CITY WITHHOLDING PAYMENT FROM COMPANY AS LIQUIDATED DAMAGES FOR COMPANY'S FAILURE TO COMPLETE THE WORK WITHIN THE TIME SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR CITY'S NEGLIGENCE.

17.6. COMPANY SHALL RECEIVE NO FINANCIAL COMPENSATION FOR DELAY OR HINDRANCE TO THE WORK. IN NO EVENT SHALL THE CITY BE LIABLE TO COMPANY OR ANY SUBCONTRACTOR OR SUPPLIER, ANY OTHER PERSON OR ANY SURETY FOR OR ANY EMPLOYEE OR AGENT OF ANY OF THEM, FOR ANY DAMAGES ARISING OUT OF OR ASSOCIATED WITH ANY DELAY OR HINDRANCE TO THE WORK, REGARDLESS OF THE SOURCE OF THE DELAY OR HINDRANCE, INCLUDING EVENTS OF FORCE MAJEURE, AND EVEN IF SUCH DELAY OR HINDRANCE RESULTS FROM, ARISES OUT OF OR IS DUE, IN WHOLE OR IN PART, TO THE NEGLIGENCE OF THE CITY. COMPANY'S SOLE REMEDY IN ANY SUCH CASE SHALL BE AN EXTENSION OF TIME.

18. No Third-Party Beneficiary: CITY's approval of this Contract does not create a third-party beneficiary. There is no third-party beneficiary to this Contract. No person or entity who is not a party to this Contract shall have any third-party beneficiary or other rights hereunder.

19. WAIVER OF ATTORNEY FEES: BY EXECUTING THIS CONTRACT, COMPANY AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST CITY REGARDING THE AWARD OR ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THIS CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THIS CONTRACT. COMPANY SPECIFICALLY AGREES THAT IF COMPANY BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS CONTRACT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS CONTRACT, INCLUDING, BUT NOT LIMITED TO, ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, COMPANY AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH COMPANY MIGHT OTHERWISE BE ENTITLED.

COMPANY AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY-EXISTING KNOWN RIGHT. COMPANY ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS CONTRACT. COMPANY FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN CITY AND COMPANY. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OR GOVERNMENTAL IMMUNITY AND SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

COMPANY IS RELYING ON ITS OWN JUDGMENT. COMPANY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION. THE OBLIGATIONS CONTAINED IN THIS SECTION 18 SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.

20. **Governmental Immunity:** By executing this contract CITY is not waiving its right of governmental immunity. CITY is retaining its immunity from suit. CITY is not granting consent to be sued by legislative resolution or action.

THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.

21. **Insurance:**

COMPANY shall at all times during the term of this Contract maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):

-Personal Injury:	\$1,000,000.00 per person \$1,000,000.00 per occurrence
-Property Damage:	\$500,000.00 per occurrence
<u>Business Automobile Liability:</u>	\$250,000.00 combined single limit - Personal Injury and Property Damage
<u>Workers' Compensation:</u>	Statutory limits
<u>Employers' Liability:</u>	\$500,000.00 per accident or occurrence

The Commercial General Liability shall be on a per project aggregate, including completed operations, and shall be on a claims-occurred basis. This insurance shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Business Automobile Liability insurance provided by COMPANY shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-city vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of \$250,000.00 covering any vehicle used for the execution of the Work that is the subject of this Contract. This insurance shall name CITY as an additional insured and waive subrogation in favor of CITY.

The Workers' Compensation coverage provided by COMPANY shall inure to the benefit of employees injured during the course and scope of their employment by COMPANY pursuant to this Contract. The Workers' Compensation shall waive all rights of subrogation in favor of CITY.

All insurance required pursuant to this Contract shall provide for a waiver of subrogation in favor of CITY. All insurance required pursuant to this Contract, except for Workers' Compensation Insurance, shall name CITY as an additional insured on a claims occurred basis. CITY shall be provided the notice by COMPANY's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage.

COMPANY shall contractually require all Contractors, subcontractors, and sub-subcontractors that work on any portion of the Work that is the subject of this Contract to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts specified herein. All Contractors, subcontractors, and sub-subcontractors shall obtain insurance policies that provide blanket waivers of subrogation in favor of the City of Midland and policies that name the City of Midland as an additional insured on a claims occurred basis (except workers' compensation).

The parties agree that, prior to the execution of the Contract, COMPANY shall provide one or more certificates of insurance specifically stating that these requirements have been met and subject to the approval of CITY. CITY shall not be required to provide any insurance whatsoever pursuant to this Contract.

COMPANY certifies that the certificate of insurance provided as required herein complies with the requirements of Chapter 1811 of the Texas Insurance Code. COMPANY shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of COMPANY.

22. **Assignment:** COMPANY shall not, either directly or indirectly, assign all or any part of this Contract or any interest, right or privilege herein, without the prior written consent of CITY. The issue on whether or not to grant consent to an assignment is in the sole discretion of CITY.

23. **RELEASE: NOTWITHSTANDING ANY OTHER PROVISION CONTAINED HEREIN, COMPANY HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES CITY AND CITY'S COUNCIL MEMBERS, EMPLOYEES, AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER THAT COMPANY HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING, BUT NOT LIMITED TO, BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR CITY'S NEGLIGENCE. THE OBLIGATIONS CONTAINED IN THIS SECTION SHALL SURVIVE THE TERMINATION OF THIS CONTRACT.**

24. **Governing Law and Venue:** This Contract shall be governed by the laws of the State of Texas. All performance and payment made pursuant to this contract shall be deemed to have occurred in Midland County, Texas. The obligations and undertakings of each of the parties to this Agreement shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this Contract, or the performance of this Contract shall be in Midland County, Texas.

25. **Independent Contractor:** COMPANY shall perform all Work and services described herein as an independent Contractor and not as an officer, agent, servant, or employee of CITY. COMPANY shall have exclusive control of, and the exclusive right to control the details of the services and Work to be performed hereunder, and all persons performing the same. COMPANY shall be solely responsible for the acts and omissions of its officers, agents, employees, Contractors and subcontractors and the doctrine of respondent superior shall not apply as between CITY

and COMPANY, its officers, agents, employees, contractors and subcontractors. Nothing in this Contract shall be construed as creating a partnership or joint enterprise between CITY and COMPANY. No person performing any of the Work and services described hereunder by COMPANY shall be considered an officer, agent, servant, or employee of CITY. Further, it is specifically understood and agreed that nothing in this Contract is intended or construed as creating a "Community of Pecuniary Interest" or an "Equal Right of Control" which would give rise to vicarious liability.

COMPANY shall be an independent Contractor under this Contract and shall assume all of the rights, obligations and liabilities, applicable to it as such independent Contractor hereunder. CITY does not have the power to direct the order in which the Work is done. CITY shall not have the right to control the means, methods, or details of COMPANY's work. COMPANY shall assume exclusive responsibility for the work. COMPANY is entirely free to do the work in its own way.

26. **Notice of Alleged Breach; Statutory Prerequisites:** As a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this Contract, COMPANY or its legal representative, shall give the City Manager, or any other reasonable official of CITY, notice in writing (consisting of one original and seven copies of notice attached to a copy of this Contract) of such damages, duly verified, within 120 days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which COMPANY shall settle, the physical and mailing addresses of COMPANY at the time and date the claim was presented and the physical and mailing addresses of COMPANY for the six months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom COMPANY relies to establish its claim; and a failure to provide such written notification within the time and manner provided herein shall exonerate, excuse and except CITY from any liability whatsoever. CITY is under no obligation to provide notice to COMPANY that COMPANY's notice is insufficient. CITY reserves the right to request additional information regarding the claim. Said additional information shall be supplied within 30 days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision to the contrary, COMPANY's failure to comply with the requirements of this Section shall perpetually bar COMPANY's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if CITY has actual or constructive notice or knowledge of said claim or alleged damages. COMPANY agrees that the requirements of this entire Contract are reasonable. The provisions and obligations of this Section shall survive the termination of this Contract.

27. **Consideration:** The terms of this Contract are supported by good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties named herein.

PACKET

8.65

April 25, 2023

28. **Termination At Will:** CITY may terminate this Contract at will for no or any reason upon giving at least 180 days written notice to COMPANY. The parties to this Contract understand and agree that it is in CITY's sole discretion to cancel the Contract during the term of the Contract without penalty to CITY. COMPANY has no expectation and has received no guarantees that this Contract will not be terminated before the end of the Contract term. The parties have bargained for the flexibility of terminating this Contract upon tender of the requisite notice at any time during the term of the Contract. All Work and services under the Contract shall be suspended upon termination of the Contract becoming effective.

29. **Compliance:** COMPANY agrees that it shall comply with Texas Government Code Section 2252.908, *et seq.*, as amended. COMPANY agrees that it shall comply with Texas Local Government Code Section 176.006, *et seq.*, as amended.

30. To the extent that Sections 2271.002 and 2274.002 of the Texas Government Code (collectively, the "Anti-Boycott Statutes") apply to this Contract, Company hereby verifies:

- that Company does not boycott Israel and will not boycott Israel during the term of this Contract;
- that Company does not boycott energy companies and will not boycott energy companies during the term of this Contract; and
- that Company does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of this Contract against a firearm entity or firearm trade association.

To the extent that the Anti-Boycott Statutes do not apply to this Contract, such verification is not required, and Company shall be deemed to have not made such verification.

31. **Records Retention and Production of Information.** To the extent that this Contract constitutes a contract described by Section 552.371 of the Texas Government Code, COMPANY shall: (i) preserve all contracting information related to this Contract as provided by the records retention requirements applicable to CITY for the duration of this Contract; (ii) promptly provide to CITY any contracting information related to the Contract that is in the custody or possession of COMPANY on request of CITY; and (iii) on completion of the Contract, either: (a) provide at no cost to CITY all contracting information related to the Contract that is in the custody or possession of COMPANY; or (b) preserve the contracting information related to the Contract as provided by the records retention requirements applicable to CITY.

32. **Public Information.** To the extent that this Contract is a contract described by Section 552.371 of the Texas Government Code, COMPANY agrees as follows in accordance with Section 552.372(b) of the Texas Government Code: The requirements of Subchapter J, Chapter 552, Government Code, may apply to this Contract, and COMPANY agrees that the contract can be terminated if COMPANY knowingly or intentionally fails to comply with a requirement of that subchapter.

33. **Conflict of Terms.** If a conflict of terms or language exists between: (i) any of the provisions of this Contract and (ii) any of the provisions contained in any exhibit(s) attached to this Contract, precedence shall be given to the provisions of this Contract. For the avoidance of any doubt, the provisions contained in this Contract shall supersede any and all conflicting provisions contained in any exhibit(s) attached hereto. Furthermore, the parties acknowledge and agree that any provision contained in an exhibit(s) attached to this Contract that imposes an additional express or implied obligation on CITY is hereby made void and of no force or effect. CITY's sole and exclusive obligations under this Contract are contained in the provisions of this Contract that precede the signature page(s), which evidences the parties' execution.

34. Company agrees that all iron or steel products produced through a manufacturing process and used in the project that is the subject of this Contract shall be produced in the United States in accordance with Government Code § 2252.202, et seq., as amended.

EXECUTED IN DUPLICATE the day and year first above mentioned.

THE CITY OF MIDLAND, TEXAS

By: _____
Robert Patrick, City Manager

ATTEST

Marcia Bentley-German, City Governance Officer/Chief Deputy City Secretary

APPROVED ONLY AS TO FORM

John Ohnemiller, City Attorney

COMPANY:

By: _____

Name: _____

Title: _____

STATE OF _____ §

§

COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this ____ day of _____, 20____ personally appeared, _____, an officer of _____, known to me to be the person and official whose name is subscribed to the forgoing instrument, and acknowledged to me that he executed the same as the act and deed of said corporation, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the ____ day of _____, 20____.

Notary Public, State of _____

EXHIBIT C

Bonding Requirements

The successful Bidder shall be required to furnish a Performance and Payment Bond* for Bids in excess of \$50,000.00, in an amount equal to 100 percent of the total Contract price, such bond to be executed in five original counterparts by a Corporate Surety authorized to do business in the State of Texas and acceptable to the City of Midland. All bonds must be executed on forms contained in these Contract Documents. The form of Agreement which the successful Bidder, as Contractor, will be required to execute is also included herewith. The form of Agreement and the form of the bonds should be carefully examined by the Bidder.

A certified check, cashier's check, bank money order, or irrevocable letter of credit issued by a bank satisfactory to the City, or a Bidder's bond on the form provided, in the amount of 5 percent of the largest possible lump sum Bid submitted, payable without recourse to the City, must accompany the Bidder's Bid, as a guaranty that the Bidder will enter a contract and execute the required payment bond and guaranty in the forms provided within fifteen (15) days after notice of award of contract to him. Bids or Bids without the required Bid guaranty will not be considered. All Bid sureties and payment bonds shall name the City of Midland as Obligee.

*A cash security such as a cashier's check or irrevocable letter of credit issued by a bank satisfactory to the City for 100 percent of the Contract amount may be supplied in lieu of the Performance and Payment Bonds. The check will be returned un-cashed upon satisfactory completion of the work and evidence of payment of all obligations due for the Contract.

"General Decision Number: TX20230002 01/06/2023

Superseded General Decision Number: TX20220002

State: Texas

Construction Types: Heavy and Highway

Counties: Armstrong, Carson, Crosby, Ector, Irion, Lubbock, Midland, Potter, Randall, Taylor and Tom Green Counties in Texas.

HEAVY & HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/06/2023

SUTX2011-002 08/02/2011

	Rates	Fringes
CEMENT MASON/CONCRETE		
FINISHER (Paving & Structures)...	\$ 13.55	**
ELECTRICIAN.....	\$ 20.96	
FORM BUILDER/FORM SETTER		
Paving & Curb.....	\$ 12.36	**
Structures.....	\$ 13.52	**
LABORER		
Asphalt Raker.....	\$ 12.28	**
Flagger.....	\$ 9.30	**
Laborer, Common.....	\$ 10.30	**
Laborer, Utility.....	\$ 11.80	**
Work Zone Barricade		
Servicer.....	\$ 10.30	**
POWER EQUIPMENT OPERATOR:		
Asphalt Distributer.....	\$ 14.87	**
Asphalt Paving Machine.....	\$ 13.40	**
Broom and Sweeper.....	\$ 11.21	**
Crane, Lattice Boom 80		
Tons or Less.....	\$ 16.82	
Crawler Tractor Operator....	\$ 13.96	**
Excavator, 50,000 lbs or		
less.....	\$ 13.46	**
Front End Loader Operator,		
Over 3 CY.....	\$ 12.77	**
Front End Loader, 3CY or		
less.....	\$ 12.28	**
Loader/Backhoe.....	\$ 14.18	**

Mechanic.....	\$ 20.14	
Milling Machine.....	\$ 15.54	**
Motor Grader, Rough.....	\$ 16.15	**
Motor Grader, Fine.....	\$ 17.49	
Pavement Marking Machine....	\$ 16.42	
Reclaimer/Pulverizer.....	\$ 12.85	**
Roller, Asphalt.....	\$ 10.95	**
Roller, Other.....	\$ 10.36	**
Scraper.....	\$ 10.61	**
Spreader Box.....	\$ 12.60	**

Servicer.....\$ 13.98 **

Steel Worker (Reinforcing).....\$ 13.50 **

TRUCK DRIVER

Lowboy-Float.....	\$ 14.46	**
Single Axle.....	\$ 12.74	**
Single or Tandem Axle Dump..	\$ 11.33	**
Tandem Axle Tractor with Semi.....	\$ 12.49	**

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

<https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average

calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal

process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISIO"

PERFORMANCE BOND

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

SURETY NO _____

KNOW ALL MEN BY THESE PRESENTS, THAT _____ (Hereinafter called the Principal[s]), as Principal(s), and _____ (Hereinafter called the Surety), as Surety, are held and firmly bound unto the City of Midland, Texas a home rule municipal corporation of Midland County, Texas, (hereinafter called the Obligee), in the amount of _____ DOLLARS (\$ _____) for the payment whereof the said Principal and surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 20____, for the furnishing of materials and equipment to perform all labor and work necessary for the construction of _____, specifically including in the scope of this work and bond, the additional maintenance guaranty provisions set forth in the contract conditions, which contract is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein, as well as the Principal's primary obligation to perform according to plans and specifications.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform the work in accordance with the plans, specifications, instructions to bidder, general and special conditions and other contract documents, including any addendum thereto, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED further that if any legal action be filed upon this Bond venue shall lie in Midland County, State of Texas.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications or drawings accompanying the same, or any assignment of the contract as may be provided for in the instructions to bidders, shall in anywise affect its obligation on this Bond, and it does waive notice of any such change, extension of time, alteration or addition to the terms of the contract, assignment thereof, or the work to be performed thereunder.

IN WITNESS WHEREOF, the said Principal and surety do sign and seal this instrument, this _____ day of _____, 20__.

Principal

Surety

By _____

By _____

Address _____

Address _____

APPROVED AS TO FORM:

City Attorney

NOTE: Attach Power of Attorney

PAYMENT BOND

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

SURETY NO _____

KNOW ALL MEN BY THESE PRESENTS, THAT

_____ of the City of

_____ of the County of _____ and State of Texas

as Principal, and _____, as Surety, are held and

firmly bound unto the City of Midland, Texas, as Oblige, in the amount of

_____ DOLLARS

(\$ _____) for the payment whereof the said Principal and Surety bind themselves, their heirs,

administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Oblige, dated the _____

day of _____, 20____, for the furnishing of materials, equipment to perform all labor and work

necessary for _____, hereof as fully and to the

same extent as if copied at length herein.

NOW, THEREFORE, the condition of the obligation is that if the said Principal shall pay all claimants

supplying labor and material to him or a subcontractor in the prosecution of the work provided for in said

contract, then this obligation shall be null and void; otherwise, it is to remain in full force and effect.

Surety, for value received, stipulates and agrees that no change, extension of time alteration or addition

to the terms of the contract, or to the work performed there under, or the plans, specifications of drawings

accompanying the same, or any assignment of the contract as may be provided for in the instructions to bidders,

shall in anywise affect its obligation on this Bond, and it does waive notice of any such change, extension of

time, alteration or addition to the terms of the contract, assignment thereof, or to the work to be performed there under.

IN WITNESS WHEREOF the said Principal and Surety have signed and sealed this instrument, this _____ day of _____, 20__.

Principal

Surety

By _____

By _____

Address _____

Address _____

APPROVED AS TO FORM:

City Attorney

NOTE: Attach Power of Attorney

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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PACKET

April 25, 2023

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Exhibit A – Foreseeable Bad Weather Days

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to Bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Bid*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

- requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Bid; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Bid, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
- 11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
 - 12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
 - 13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
 - 14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
 - 15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
 - 16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
 - 17. *Cost of the Work*—See Paragraph 13.01 for definition.
 - 18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
 - 19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
 - 20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital format.
 - 21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions, including sending and receipt; (c) printing of the transmitted Electronic Document by the

recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
- a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.
32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work, and used as the basis for reviewing Contractor’s Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers’ instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Bids, Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.
42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.

43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions. **Supplementary Conditions are established by redline edits to these Standard General Conditions of the Construction Contract and by Section 00 73 14 "Supplementary Conditions."**
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
 - c. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data, and instead Underground Facilities are shown or indicated on the Drawings.
47. *Underground Facilities*—All active or not-in-service underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives:* The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day:* The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective:* The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
1. does not conform to the Contract Documents;
 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words “furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully signed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.
- B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work

into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

- A. *Standards Specifications, Codes, Laws and Regulations*
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
 - 2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility

inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs) or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.

- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Bid, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the 30th day after the Effective Date of the Contract or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Contract. In no event will the Contract Times commence to run later than the 60th day after the day of Bid opening or the 30th day after the Effective Date of the Contract, whichever date is earlier.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the

established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:
 - 1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 - 2. Abnormal weather conditions;
 - 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 - 4. Acts of war or terrorism.

5. Weather-Related Delays

- a. If “abnormal weather conditions” as set forth in Paragraph 4.05.C.2 of the General Conditions are the basis for a request for an equitable adjustment in the Contract Times, such request must be documented by data substantiating each of the following: 1) that weather conditions were abnormal for the period of time in which the delay occurred, 2) that such weather conditions could not have been reasonably anticipated, and 3) that such weather conditions had an adverse effect on the Work as scheduled.
 - b. The existence of abnormal weather conditions will be determined on a month-by-month basis in accordance with the following:
 - 1) Every workday on which one or more of the following conditions exist will be considered a “bad weather day”:
 - i) Total precipitation (as rain equivalent) occurring between 7:00 p.m. on the preceding day (regardless of whether such preceding day is a workday) through 7:00 p.m. on the workday in question equals or exceeds 2 inches of precipitation (as rain equivalent, based on the snow/rain conversion indicated in the table entitled Foreseeable Bad Weather Days; such table is hereby incorporated in this SC-4.05.C by reference.
 - ii) Ambient outdoor air temperature at 11:00 a.m. is equal to or less than the following low temperature threshold: 20 degrees Fahrenheit; or, at 3:00 p.m. the ambient outdoor temperature is equal to or greater than the following high temperature threshold: 110 degrees Fahrenheit.
 - 2) Determination of actual bad weather days during performance of the Work will be based on the weather records measured and recorded by National Weather Service weather monitoring station at Midland International Air and SpacePort.
 - 3) Contractor shall anticipate the number of foreseeable bad weather days per month indicated in the table in Exhibit A—Foreseeable Bad Weather Days.
 - 4) In each month, every bad weather day exceeding the number of foreseeable bad weather days established in the table in Exhibit A—Foreseeable Bad Weather Days will be considered as “abnormal weather conditions.” The existence of abnormal weather conditions will not relieve Contractor of the obligation to demonstrate and document that delays caused by abnormal weather are specific to the planned work activities or that such activities thus delayed were on Contractor’s then-current Progress Schedule’s critical path for the Project.
- D. Contractor’s entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor’s entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by

Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.

3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Bid seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
 1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.

Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.
- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 Availability of Lands

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 Use of Site and Other Areas

- A. *Limitation on Use of Site and Other Areas*

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.
- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:

1. Those reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
 2. Those drawings of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
 3. Technical Data contained in such reports and drawings.
- B. *Underground Facilities*: Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
- C. *Reliance by Contractor on Technical Data*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.
- D. *Limitations of Other Data and Documents*: Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
 3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
 4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

- A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:
1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
 2. is of such a nature as to require a change in the Drawings or Specifications;
 3. differs materially from that shown or indicated in the Contract Documents; or
 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

- then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.
- B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.
- D. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- E. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;

- b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
- 3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
- 4. Contractor may submit a Change Bid regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.
- F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities*: Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
 - 1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 - 2. complying with applicable state and local utility damage prevention Laws and Regulations;
 - 3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 - 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 - 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor*: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review*: Engineer will:
 - 1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with

reasonable accuracy;

2. identify and communicate with the owner of the Underground Facility; prepare recommendations to Owner (and if necessary, issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.

During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.

E. *Early Resumption of Work:* If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

F. *Possible Price and Times Adjustments*

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E; and
 - c. Contractor gave the notice required in Paragraph 5.05.B.
2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
3. Contractor may submit a Change Bid regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and
3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose

- removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.
- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Bid, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold

harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of Contractor's obligations under the Contract. These bonds must remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the terms of a prescribed bond form, the Supplementary Conditions, or other provisions of the Contract.
- B. Contractor shall also furnish such other bonds (if any) as are required by the Supplementary Conditions or other provisions of the Contract.
- C. All bonds must be in the form included in the Bidding Documents or otherwise specified by Owner prior to execution of the Contract, except as provided otherwise by Laws or Regulations, and must be issued and signed by a surety named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Department Circular 570 (as amended and supplemented) by the Bureau of the Fiscal Service, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority must show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- D. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue bonds in the required amounts.
- E. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer in writing and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which must comply with the bond and surety requirements above.
- F. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.

- G. Upon request to Owner from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Owner shall provide a copy of the payment bond to such person or entity.
- H. Upon request to Contractor from any Subcontractor, Supplier, or other person or entity claiming to have furnished labor, services, materials, or equipment used in the performance of the Work, Contractor shall provide a copy of the payment bond to such person or entity.

6.02 Insurance—General Provisions

- A. Owner and Contractor shall obtain and maintain insurance as required in this article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized in the state or jurisdiction in which the Project is located to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.
- C. Alternative forms of insurance coverage, including but not limited to self-insurance and “Occupational Accident and Excess Employer’s Indemnity Policies,” are not sufficient to meet the insurance requirements of this Contract, unless expressly allowed in the Supplementary Conditions.
- D. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Contractor has obtained and is maintaining the policies and coverages required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, full disclosure of all relevant exclusions, and evidence of insurance required to be purchased and maintained by Subcontractors or Suppliers. In any documentation furnished under this provision, Contractor, Subcontractors, and Suppliers may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those applicable to this Contract.
- E. Owner shall deliver to Contractor, with copies to each additional insured identified in the Contract, certificates of insurance and endorsements establishing that Owner has obtained and is maintaining the policies and coverages required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies, documentation of applicable self-insured retentions (if allowed) and deductibles, and full disclosure of all relevant exclusions. In any documentation furnished under this provision, Owner may block out (redact) (1) any confidential premium or pricing information and (2) any wording specific to a project or jurisdiction other than those relevant to this Contract.
- F. Failure of Owner or Contractor to demand such certificates or other evidence of the other party’s full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, will not be construed as a waiver of the other party’s obligation to obtain and maintain such insurance.
- G. In addition to the liability insurance required to be provided by Contractor, the Owner, at Owner’s option, may purchase and maintain Owner’s own liability insurance. Owner’s liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner’s liability policies for any of Contractor’s obligations to the

Owner, Engineer, or third parties.

H. Contractor shall require:

1. Subcontractors to purchase and maintain worker's compensation, commercial general liability, and other insurance that is appropriate for their participation in the Project, and to name as additional insureds Owner and Engineer (and any other individuals or entities identified in the Supplementary Conditions as additional insureds on Contractor's liability policies) on each Subcontractor's commercial general liability insurance policy; and
 2. Suppliers to purchase and maintain insurance that is appropriate for their participation in the Project.
- I. If either party does not purchase or maintain the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- J. If Contractor has failed to obtain and maintain required insurance, Contractor's entitlement to enter or remain at the Site will end immediately, and Owner may impose an appropriate set-off against payment for any associated costs (including but not limited to the cost of purchasing necessary insurance coverage), and exercise Owner's termination rights under Article 16.
- K. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect (but is in no way obligated) to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price will be adjusted accordingly.
- L. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests. Contractor is responsible for determining whether such coverage and limits are adequate to protect its interests, and for obtaining and maintaining any additional insurance that Contractor deems necessary.
- M. The insurance and insurance limits required herein will not be deemed as a limitation on Contractor's liability, or that of its Subcontractors or Suppliers, under the indemnities granted to Owner and other individuals and entities in the Contract or otherwise.
- N. All the policies of insurance required to be purchased and maintained under this Contract will contain a provision or endorsement that the coverage afforded will not be canceled, or renewal refused, until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured and Engineer.

6.03 *Contractor's Insurance*

- A. *Required Insurance:* Contractor shall purchase and maintain Worker's Compensation, Commercial General Liability, and other insurance pursuant to the specific requirements of the Supplementary Conditions.
- B. *General Provisions:* The policies of insurance required by this Paragraph 6.03 as supplemented must:
1. include at least the specific coverages required;
 2. be written for not less than the limits provided, or those required by Laws or Regulations, whichever is greater;

3. remain in effect at least until the Work is complete (as set forth in Paragraph 15.06.D), and longer if expressly required elsewhere in this Contract, and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract;
 4. apply with respect to the performance of the Work, whether such performance is by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable; and
 5. include all necessary endorsements to support the stated requirements.
- C. *Additional Insureds*: The Contractor's commercial general liability, automobile liability, employer's liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies, if required by this Contract, must:
1. include and list as additional insureds Owner and Engineer, and any individuals or entities identified as additional insureds in the Supplementary Conditions;
 2. include coverage for the respective officers, directors, members, partners, employees, and consultants of all such additional insureds;
 3. afford primary coverage to these additional insureds for all claims covered thereby (including as applicable those arising from both ongoing and completed operations);
 4. not seek contribution from insurance maintained by the additional insured; and
 5. as to commercial general liability insurance, apply to additional insureds with respect to liability caused in whole or in part by Contractor's acts or omissions, or the acts and omissions of those working on Contractor's behalf, in the performance of Contractor's operations.

6.04 *Builder's Risk and Other Property Insurance*

- A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance are set forth in the Supplementary Conditions.
- B. *Property Insurance for Facilities of Owner Where Work Will Occur*: Owner is responsible for obtaining and maintaining property insurance covering each existing structure, building, or facility in which any part of the Work will occur, or to which any part of the Work will attach or be adjoined. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, providing coverage consistent with that required for the builder's risk insurance, and will be maintained until the Work is complete, as set forth in Paragraph 15.06.D.
- C. *Property Insurance for Substantially Complete Facilities*: Promptly after Substantial Completion, and before actual occupancy or use of the substantially completed Work, Owner will obtain property insurance for such substantially completed Work, and maintain such

property insurance at least until the Work is complete, as set forth in Paragraph 15.06.D. Such property insurance will be written on a special perils (all-risk) form, on a replacement cost basis, and provide coverage consistent with that required for the builder's risk insurance. The builder's risk insurance may terminate upon written confirmation of Owner's procurement of such property insurance.

- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide advance notice of such occupancy or use to the builder's risk insurer, and obtain an endorsement consenting to the continuation of coverage prior to commencing such partial occupancy or use.
- E. *Insurance of Other Property; Additional Insurance:* If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, then the entity or individual owning such property item will be responsible for insuring it. If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.04, it may do so at Contractor's expense.

6.05 *Property Losses; Subrogation*

- A. The builder's risk insurance policy purchased and maintained in accordance with Paragraph 6.04 (or an installation floater policy if authorized by the Supplementary Conditions), will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors.
 - 1. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils, risks, or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all individuals or entities identified in the Supplementary Conditions as builder's risk or installation floater insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused.
 - 2. None of the above waivers extends to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Any property insurance policy maintained by Owner covering any loss, damage, or consequential loss to Owner's existing structures, buildings, or facilities in which any part of the Work will occur, or to which any part of the Work will attach or adjoin; to adjacent structures, buildings, or facilities of Owner; or to part or all of the completed or substantially completed Work, during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06, will contain provisions to the effect that in the event of payment of any loss or damage the insurer will have no rights of recovery against any insureds thereunder, or against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners,

employees, agents, consultants, or subcontractors of each and any of them, and that the insured is allowed to waive the insurer's rights of subrogation in a written contract executed prior to the loss, damage, or consequential loss.

1. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from fire or any of the perils, risks, or causes of loss covered by such policies.
- C. The waivers in this Paragraph 6.05 include the waiver of rights due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other insured peril, risk, or cause of loss.
- D. Contractor shall be responsible for assuring that each Subcontract contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from fire or other peril, risk, or cause of loss covered by builder's risk insurance, installation floater, and any other property insurance applicable to the Work.

6.06 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of property insurance required by Paragraph 6.04 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.04 shall maintain such proceeds in a segregated account and distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, Contractor shall repair or replace the damaged Work, using allocated insurance proceeds.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction

means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.
- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 "Or Equals"

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
 - b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding and may not be reversed through an appeal under any provision of the Contract.

- E. *Treatment as a Substitution Request:* If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an “or-equal” item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. *Contractor’s Request; Governing Criteria:* Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of equipment or material from anyone other than Contractor.
 2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
 3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in

Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Bid.

7.07 Concerning Subcontractors and Suppliers

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or

otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 5 days.

- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall initiate a Change Bid for such adjustment within 30 days of Owner's requirement of replacement.
- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.

7.08 Patent Fees and Royalties

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its

use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.

- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.
- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 Permits

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 Taxes

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.
- B. Owner is exempt from payment of sales and compensating use taxes of the State of Texas and of cities and counties thereof on all materials to be incorporated into the Work.
 - 1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the Work.
 - 2. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Bid, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.
- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 Hazard Communication Programs

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;
 - 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
 - c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.
3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.

- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.

1. *Shop Drawings*

- a. Contractor shall submit the number of copies required in the Specifications.

- b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.

2. *Samples*

- a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Engineer's Review of Shop Drawings and Samples*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.

8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 - d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance and resubmit an acceptable document.
 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.

- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 - 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 - 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:
 - 1. Observations by Engineer;
 - 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. Use or occupancy of the Work or any part thereof by Owner;
 - 5. Any review and approval of a Shop Drawing or Sample submittal;
 - 6. The issuance of a notice of acceptability by Engineer;
 - 7. The end of the correction period established in Paragraph 15.08;
 - 8. Any inspection, test, or approval by others; or
 - 9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers,

architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 Delegation of Professional Design Services

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.
- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and

- 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 Other Work

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.
- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 Coordination

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 Legal Relationships

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Bid seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's

other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.

- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 Change Orders

- A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

9.08 Inspections, Tests, and Approvals

- A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 Limitations on Owner's Responsibilities

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

9.10 Undisclosed Hazardous Environmental Condition

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 Evidence of Financial Arrangements

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 Safety Programs

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 Owner's Representative

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 Visits to Site

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On

the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 Resident Project Representative

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.
- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.
- C. The Resident Project Representative (RPR) will be Engineer's representative at the Site. RPR's dealings in matters pertaining to the Work in general will be with Engineer and Contractor. RPR's dealings with Subcontractors will only be through or with the full knowledge or approval of Contractor. The RPR will:
 - 1. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.
 - 2. *Safety Compliance:* Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.
 - 3. *Liaison*
 - a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.
 - b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for Contractor's proper execution of the Work.
 - 4. *Review of Work; Defective Work*
 - a. Conduct on-Site observations of the Work to assist Engineer in determining, to the extent set forth in Paragraph 10.02, if the Work is in general proceeding in accordance with the Contract Documents.

- b. Observe whether any Work in place appears to be defective.
- c. Observe whether any Work in place should be uncovered for observation, or requires special testing, inspection, or approval.

5. *Inspections and Tests*

- a. Observe Contractor-arranged inspections required by Laws and Regulations, including but not limited to those performed by public or other agencies having jurisdiction over the Work.
- b. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work.

6. *Payment Requests: Review Applications for Payment with Contractor.*

7. *Completion*

- a. Participate in Engineer's visits regarding Substantial Completion.
- b. Assist in the preparation of a punch list of items to be completed or corrected.
- c. Participate in Engineer's visit to the Site in the company of Owner and Contractor regarding completion of the Work and prepare a final punch list of items to be completed or corrected by Contractor.
- d. Observe whether items on the final punch list have been completed or corrected.

D. The RPR will not:

- 1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
- 2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
- 3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.
- 4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences, or procedures of construction.
- 5 Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
- 6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
- 7. Authorize Owner to occupy the Project in whole or in part.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications, and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.

E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 Determinations for Unit Price Work

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 Decisions on Requirements of Contract Documents and Acceptability of Work

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Bids, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 Limitations on Engineer's Authority and Responsibilities

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 Compliance with Safety Program

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (1) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Bids; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.
- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.

- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Bid seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 Field Orders

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Bid as provided herein.

11.05 Owner-Authorized Changes in the Work

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 Unauthorized Changes in the Work

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Change Bid for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.

- B. An adjustment in the Contract Price will be determined as follows:
1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee*: When applicable, the Contractor's fee for overhead and profit will be determined as follows:
1. A mutually acceptable fixed fee; or
 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;
 - d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
 - e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
 - f. When both additions and credits are involved in any one change or Change Bid, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to

each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 Change of Contract Times

- A. The Contract Times may only be changed by a Change Order. Any Change Bid for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 Change Bids

- A. *Purpose and Content:* Contractor shall submit a Change Bid to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Bid will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Bid will address only one issue, or a set of closely related issues.

B. Change Bid Procedures

- 1. *Submittal:* Contractor shall submit each Change Bid to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
- 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Bid.
 - a. Change Bids based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change Bids related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

- 3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Bid and consider any comments or response from Owner regarding the Change Bid. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Bid, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Bid.
- 4. *Engineer's Full Review and Action on the Change Bid:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Bid and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Bid in whole, deny it in

whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Bid within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Bid is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

5. *Binding Decision*: Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Bids*: If the Change Bid does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Bid. For purposes of further resolution of such a Change Bid, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion*: Contractor shall not submit any Change Bids after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 Notification to Surety

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 Claims

- A. *Claims Process*: The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
 1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Bids;
 2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Bids within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the

supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

- C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.

D. *Mediation*

1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.

- E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.

- F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 Cost of the Work

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:

1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. When needed to determine the value of a Change Order, Change Bid, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included:* Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive Bids from subcontractors acceptable to Owner and Contractor and shall deliver such Bids to Owner, which will then determine, with the advice of Engineer, which Bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.
 4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
 5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

- b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
- c. *Construction Equipment Rental*
 - 1) Rentals of all construction equipment and machinery, and the parts thereof, in accordance with rental agreements approved by Owner as to price (including any surcharge or special rates applicable to overtime use of the construction equipment or machinery), and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs will be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts must cease when the use thereof is no longer necessary for the Work.
 - 2) The equipment rental rate book that governs the included costs for the rental of machinery and equipment owned by Contractor (or a related entity) under the Cost of the Work provisions of this Contract is the most current edition of the Rental Rate Blue Book for Construction Equipment.
 - 3) With respect to Work that is the result of a Change Order, Change Bid, Claim, set-off, or other adjustment in Contract Price ("changed Work"), included costs will be based on the time the equipment or machinery is in use on the changed Work and the costs of transportation, loading, unloading, assembly, dismantling, and removal when directly attributable to the changed Work. The cost of any such equipment or machinery, or parts thereof, must cease to accrue when the use thereof is no longer necessary for the changed Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with

Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded:* The term Cost of the Work does not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
- 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 6. Expenses incurred in preparing and advancing Claims.
- 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.

- b. for any Work covered by a Change Order, Change Bid, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.
 - 2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Bid, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.
- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors will establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
 - 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. Adjustments in Unit Price

- 1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:
 - a. the extended price of a particular item of Unit Price Work amounts to 5 percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than 25 percent from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
- 2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
- 3. Adjusted unit prices will apply to all units of that item.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 Access to Work

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 Tests, Inspections, and Approvals

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work will be governed by the provisions of Paragraph 14.05.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;
 - 2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
 - 3. by manufacturers of equipment furnished under the Contract Documents;
 - 4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
 - 5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by

Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Bid within 30 days of the determination that the Work is not defective.

14.06 Owner May Stop the Work

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses, and damages will include

but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. *Applications for Payments*

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information, and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;

- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
- d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
- e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. Payment Becomes Due

- 1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. Reductions in Payment by Owner

- 1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;
 - c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or

- I. Other items entitle Owner to a set-off against the amount recommended.
 2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Bid contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.
- F. For contracts in which the Contract Price is based on the Cost of Work, if Owner determines that progress payments made to date substantially exceed the actual progress of the Work (as measured by reference to the Schedule of Values), or present a potential conflict with the Guaranteed Maximum Price, then Owner may require that Contractor prepare and submit a plan for the remaining anticipated Applications for Payment that will bring payments and progress into closer alignment and take into account the Guaranteed Maximum Price (if any), through reductions in billings, increases in retainage, or other equitable measures. Owner will review the plan, discuss any necessary modifications, and implement the plan as modified for all remaining Applications for Payment.

15.02 Contractor's Warranty of Title

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a preliminary certificate of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify

Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

- D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion, the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 Partial Use or Occupancy

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
 - 1. At any time, Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through 15.03.E for that part of the Work.
 - 2. At any time, Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
 - 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 15.03 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 6.04 regarding builder's risk or other property insurance.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.
 - d. a list of all duly pending Change Bids and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

- B. *Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10

days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Notice of Acceptability:* In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work:* The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment and issuance of notice of the acceptability of the Work.
- E. *Final Payment Becomes Due:* Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within 30 days of Owner's receipt of the final Application for Payment from Engineer.

15.07 *Waiver of Claims*

- A. By making final payment, Owner waives its claim or right to liquidated damages or other damages for late completion by Contractor, except as set forth in an outstanding Claim, appeal under the provisions of Article 17, set-off, or express reservation of rights by Owner. Owner reserves all other claims or rights after final payment.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim, or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. correct the defective repairs to the Site or such adjacent areas;
 - 2. correct such defective Work;
 - 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and

4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give any such notice of defect within 60 days of the discovery that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Bid seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 4. Contractor's repeated disregard of the authority of Owner or Engineer.
- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
 - 3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost Bid.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Bid for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
 - 1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 - 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.

- B. *Final Resolution of Disputes*: For any dispute subject to resolution under this article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 Giving Notice

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 3. by e-mail to the recipient, with the words "Formal Notice" or similar in the e-mail's subject line.

18.02 Computation of Times

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 Cumulative Remedies

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 Limitation of Damages

- A. With respect to any and all Change Bids, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 No Waiver

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 Survival of Obligations

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 Controlling Law

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 Successors and Assigns

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 Headings

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

EXHIBIT A— FORESEEABLE BAD WEATHER DAYS

Month	Number of Foreseeable Bad Weather Days in Month Based on Precipitation as Rain Equivalent (inches) (1)	Ambient Outdoor Air Temperature (degrees F)	
		Number of Foreseeable Bad Weather Days in Month Based on Low Temperature (at 11:00 a.m.)	Number of Foreseeable Bad Weather Days in Month Based on High Temperature (at 3:00 p.m.)
January	0	4	0
February	0	2	0
March	1	1	0
April	1	0	0
May	1	0	0
June	1	0	0
July	0	0	0
August	0	0	0
September	1	0	0
October	1	0	0
November	0	1	0
December	0	3	0
Notes:			
1. Two inches of sleet equal one inch of rain. Five inches of wet, heavy snow equal one inch of rain. Fifteen inches of “dry” powder snow equals one inch of rain.			

IMPORTANT NOTICE

Conflict Of Interest Reporting Requirements

Compliance with LOCAL GOVERNMENT CODE TITLE 5. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES SUBTITLE C. MATTERS AFFECTING PUBLIC OFFICERS AND EMPLOYEES OF MORE THAN ONE TYPE OF LOCAL GOVERNMENT CHAPTER 176. DISCLOSURE OF CERTAIN RELATIONSHIPS WITH LOCAL GOVERNMENT OFFICERS; PROVIDING PUBLIC ACCESS TO CERTAIN INFORMATION.

Form CIQ: This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session. This questionnaire shall be filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a). By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code. A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

Bidders are responsible for filing Conflict of Interest form "CIQ" in accordance with the above referenced statute. Failure to do so is a class C Misdemeanor. Contracts or Purchase Orders awarded to a vendor that has violated this law is subject to termination at such time that the violation is discovered with no recourse to the City of Midland. The Bidder will be subsequently removed from the Bidders list for a minimum of one year.

When there is no known conflict of interest as defined by the statute, it is not necessary to file/submit the Form CIQ. The form must be submitted if a conflict is subsequently discovered.

By submitting a response to this request, vendor represents that it complies with the requirements of Chapter 176 of the Texas Local Government Code.

For a current list of the local government officers go to: <http://www.midlandtexas.gov/>

Upon completion of the form, sign and submit with Bid or mail to:

City of Midland
Attn: City Secretary
PO Box 1152
Midland, Texas 79702

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

2 ☐ Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director or holds an ownership interest of one percent or more.

6 Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

☐

7

PACKET Vendor doing business with the government 8-100

Date April 25, 2023

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

(2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed;
or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

(1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for Bids or Bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

(2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

CITY OF MIDLAND

**Consideration of Location of Bidder's Principal Place of Business
For Bids of \$50,000 up to \$100,000 for Services and \$500,000 for Commodities**

Affidavit of Eligibility

Pursuant to Texas Local Government Code 271.9051, in purchasing real property, personal property that is not affixed to real property, or services, if the City receives one or more Bids from a Bidder whose principal place of business is in the City of Midland and whose Bid is within five percent (5%) of the lowest Bid price received by the City from a Bidder who is not a resident of the City of Midland, the City may enter into a contract with:

- (1) the lowest Bidder; or
- (2) the Bidder whose principal place of business is in the City of Midland if the City Council determines, in writing, that the local Bidder offers the City the best combination of contract price and additional economic development opportunities for the City of Midland created by the contract award, including the employment of residents of the City of Midland and increased tax revenues to the City of Midland.

In order to receive consideration, Bidders must submit this affidavit to:

Regina Stephenson
Purchasing Manager
City of Midland
300 N. Loraine St.,
PO BOX 1152
Midland, TX 79702-1152

Complete all areas below. Incomplete affidavits may be rejected.

Local Business Name: _____

Local Address (must be within the City limits): _____

1. Is the above address the principal place of business for the business named above? ☐ Yes ☐ No
2. How many residents of the City of Midland are employed at the above business location? _____
3. Year your business was established in the City of Midland: _____
4. If you collect sales tax for ANY class of customer, provide the following Reseller information:

Reseller Permit Number: _____

Company Name and Address (as it appears on permit):

5. Does your business have more than one office in the State of Texas? ☐ Yes ☐ No
If Yes, identify the office location considered as the point-of sale for the purpose of sales tax calculation:

6. Was the local business required to pay business and/or real property tax for the most recent tax year?

☐ Yes ☐ No

If Yes, did the local business pay any of this tax to the City of Midland? ☐ Yes ☐ No

Under penalty of perjury, the undersigned states that the foregoing statements are true and correct. It is further acknowledged that any person, firm, corporation or entity intentionally submitting false information to the City in an attempt to qualify for eligibility shall be prohibited from Bidding on City of Midland products and services for a period of one (1) year.

Authorized Signature: _____ Date: _____

Printed Name and Title: _____

PACKET

8.162

April 25, 2023

**SECTION 00 73 14 - SUPPLEMENTARY CONDITIONS OF
THE CONSTRUCTION CONTRACT**

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SECTION 00 73 14 - SUPPLEMENTARY CONDITIONS OF THE CONSTRUCTION CONTRACT

These Supplementary Conditions amend or supplement Section 00 72 00 “Standard General Conditions of the Construction Contract (EJCDC® C-700)(2018).” The General Conditions remain in full force and effect except as amended.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix “SC” added—for example, “Paragraph SC-4.05.”

ARTICLE 1—DEFINITIONS AND TERMINOLOGY

No suggested Supplementary Conditions in this Article.

ARTICLE 5—SITE, SUBSURFACE AND PHYSICAL CONDITIONS, HAZARDOUS ENVIRONMENTAL CONDITIONS

5.03 *Subsurface and Physical Conditions*

SC-5.03 Add the following new paragraphs immediately after Paragraph 5.03.D:

- E. The following table lists the reports of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data, and specifically identifies the Technical Data in the report upon which Contractor may rely:

Report Title	Date of Report	Technical Data
Borehole near W-12	June 7, 2022	Drill Log and Sieve Analysis

- F. The following table lists the Drawings of existing physical conditions at or adjacent to the Site, including those Drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data, and specifically identifies the Technical Data upon which Contractor may rely:

Drawings Title	Date of Drawings	Technical Data
None		

- G. Contractor may examine copies of Reports and Drawings identified in SC-5.03.E and SC-5.03.F that were not included with the Bidding Documents. Coordinate with Owner to examine documents, or request copies from Engineer.

5.06 *Hazardous Environmental Conditions*

SC-5.06 Add the following new paragraphs immediately after Paragraph 5.06.A.3:

4. The following table lists the reports known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and the Technical Data (if any) upon which Contractor may rely:

Report Title	Date of Report	Technical Data
None		

5. The following table lists the Drawings known to Owner relating to Hazardous Environmental Conditions at or adjacent to the Site, and Technical Data (if any) contained in such Drawings upon which Contractor may rely:

Drawings Title	Date of Drawings	Technical Data
None		

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

SC-6.01 Add the following paragraphs immediately after Paragraph 6.01.A:

1. *Required Performance Bond Form:* The Performance Bond that Contractor furnishes will be in the form of the provided “Performance Bond” found on page 73 of this manual.
2. *Required Payment Bond Form:* The Payment Bond that Contractor furnishes will be in the form of the provided “Payment Bond” found on page 75 of this manual.

6.03 *Contractor’s Insurance*

SC-6.03 Supplement Paragraph 6.03 with the following provisions after Paragraph 6.03.C:

- D. *Other Additional Insureds:* As a supplement to the provisions of Paragraph 6.03.C of the General Conditions, the commercial general liability, automobile liability, umbrella or excess, pollution liability, and unmanned aerial vehicle liability policies must include as additional insureds (in addition to Owner and Engineer) the following: City of Midland and Parkhill.
- E. *Workers’ Compensation and Employer’s Liability:* Contractor shall purchase and maintain workers’ compensation and employer’s liability insurance.

Workers’ Compensation Insurance Coverage

A. Definitions:

1. Certificate of Coverage (“certificate”) - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the division, or a coverage agreement (For work in Texas DWC Form-81, DWC Form-82, DWC Form-83, or DWC Form - 84), showing statutory workers’

compensation insurance coverage for the person's or entity's employees providing services on a Project, for the duration of the Project.

2. Duration of Project - includes the time from the beginning of the Work on the Project until Contractor's/person's work on the Project has been completed and accepted by the governmental entity.
 3. Persons Providing Services on Project ("subcontractor" in §406.096) - includes all persons or entities performing all or part of the services Contractor has undertaken to perform on the Project, regardless of whether that person contracted directly with Contractor and regardless of whether that person has employees. This includes, without limitation, independent Contractors, subcontractors, leasing companies, motor carriers, Owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the Project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the Project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.
- B. Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, meeting statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of Contractor providing services on project, for duration of Project.
- C. Contractor must provide a certificate of coverage to governmental entity before Awarded Contract.
- D. If coverage period shown on Contractor's current certificate of coverage ends during duration of Project, Contractor must, prior to end of coverage period, file a new certificate of coverage with governmental entity showing coverage is extended.
- E. Contractor shall obtain from each person providing services on Project and provide to governmental entity.
- (1) a certificate of coverage, prior to persons beginning Work on Project, so governmental entity will have certificates of coverage covering all persons providing services on Project; and
- (2) no later than 7 days after receipt by Contractor, new certificate of coverage showing extension of coverage, if coverage period shown on current certificate of coverage ends during duration of Project.
- F. Contractor retains all required certificates of coverage for duration of Project and for one year thereafter.

- G. Contractor shall notify governmental entity in writing, by certified mail or personal delivery, within 10 days after Contractor knew or should have known, of any change that materially affects provision of coverage of any person providing services on Project.
- H. Contractor shall post on each project site a notice, in the text, form and manner prescribed by Texas Department of Insurance, Division of Workers' Compensation, informing all persons providing services on Project they are required to be covered and stating how persons may verify coverage and report lack of coverage.
- I. Contractor shall contractually require each person with whom it contracts to provide services on Project, to:
- (1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, meeting statutory requirements of Texas Labor Code, Section 401.011(44) for all of its employees' providing services on Project, for duration of Project;
 - (2) provide Contractor, prior to persons beginning Work on Project, a certificate of coverage showing coverage provided for all employees of persons providing services on Project, for duration of Project;
 - (3) provide Contractor, prior to end of coverage period, a new certificate of coverage showing extension of coverage, if coverage period shown on current certificate of coverage ends during duration of Project;
 - (4) obtain from each person with whom contracted, and provide to Contractor:
 - (a) a certificate of coverage, prior to persons beginning Work on Project; and
 - (b) a new certificate of coverage showing extension of coverage, prior to end of coverage period, if coverage period shown on current certificate of coverage ends during duration of Project;
 - (5) retain all required certificates of coverage for duration of Project and for one year thereafter;
 - (6) notify governmental entity in writing, by certified mail or personal delivery, within 10 days after person knew or should have known, of any change that materially affects provision of coverage of any person providing services on Project; and
 - (7) contractually require each person contracted, to perform as required by paragraphs (1) - (7), with certificates of coverage to be provided to person for whom they are providing services.

- J. By signing this Contract or providing or causing to be provided a certificate of coverage, Contractor is representing to governmental entity all employees of Contractor who will provide services on Project will be covered by workers' compensation coverage for duration of Project, that coverage will be based on proper reporting of classification codes and payroll amounts, and all coverage agreements will be filed with appropriate insurance carrier or, in the case of a self-insured, with the division. Providing false or misleading information may subject Contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.
- K. Contractor's failure to comply with any of these provisions is a breach of Contract by Contractor which entitles governmental entity to declare contract void if Contractor does not remedy breach within 10 days after receipt of notice of breach from governmental entity.

Workers' Compensation and Employer's Liability	Policy limits of not less than:
Workers' Compensation	
Texas	Statutory
Employer's Liability	
Each accident	\$ 500,000
Each employee	\$
Policy limit	\$

- F. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against claims for:
1. damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees,
 2. damages insured by reasonably available personal injury liability coverage, and
 3. damages because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- G. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy must be written on a 1996 (or later) Insurance Services Organization, Inc. (ISO) commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage.
 - a. Such insurance must be maintained for 3 years after Final Payment.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and 3 years thereafter.
 2. Blanket contractual liability coverage, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Severability of interests and no insured-versus-insured or cross-liability exclusions.
 4. Underground, explosion, and collapse coverage.
 5. Personal injury coverage.

6. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
 7. For design professional additional insureds, ISO Endorsement CG 20 32 07 04 “Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured” or its equivalent.
- H. *Commercial General Liability—Excluded Content:* The commercial general liability insurance policy, including its coverages, endorsements, and incorporated provisions, must not include any of the following:
1. Any modification of the standard definition of “insured contract” (except to delete the railroad protective liability exclusion if Contractor is required to indemnify a railroad or others with respect to Work within 50 feet of railroad property).
 2. Any exclusion for water intrusion or water damage.
 3. Any provisions resulting in the erosion of insurance limits by defense costs other than those already incorporated in ISO form CG 00 01.
 4. Any exclusion of coverage relating to earth subsidence or movement.
 5. Any exclusion for the insured’s vicarious liability, strict liability, or statutory liability (other than worker’s compensation).
 6. Any limitation or exclusion based on the nature of Contractor’s work.
 7. Any professional liability exclusion broader in effect than the most recent edition of ISO form CG 22 79.
- I. *Commercial General Liability—Minimum Policy Limits*

Commercial General Liability	Policy limits of not less than:
Each Occurrence (bodily injury and property damage)	\$1,000,000
Personal and Advertising Injury	\$
General Aggregate	\$
Products—Completed Operations Aggregate	\$

- J. *Automobile Liability*: Contractor shall purchase and maintain automobile liability insurance for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy must be written on an occurrence basis.

Automobile Liability	Policy limits of not less than:
Bodily Injury	
Each Person	\$ 250,000
Each Accident	\$
Property Damage	
Each Accident	\$
or	
Combined Single Limit	\$ 250,000

- K. *Umbrella or Excess Liability*: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the Paragraphs above. The coverage afforded must be at least as broad as that of each and every one of the underlying policies.

Excess or Umbrella Liability	Policy limits of not less than:
Each Occurrence	\$
General Aggregate	\$

6.04 *Builder's Risk and Other Property Insurance*

SC-6.04 Delete Paragraph 6.04.A and insert the following in its place:

- A. Owner shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the Work's full insurable replacement cost (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). The specific requirements applicable to the builder's risk insurance is set forth in the Supplementary Conditions.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.03 *Labor; Working Hours*

SC-7.03 Amend the first and second sentences of Paragraph 7.03.C to state "...all Work at the Site must be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday or any legal holiday."

SC-7.03 Add the following new paragraph immediately after Paragraph 7.03.C:

- D. Contractor shall be responsible for the cost of any overtime pay or other expense incurred by Owner for Engineer's services (including those of the Resident Project Representative, if any), Owner's representative, and construction observation services, occasioned by the performance of Work on Saturday, Sunday, any legal holiday, or as overtime on any regular work day. If Contractor is responsible but does not pay, or if the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under Article 15.

SC-7.03 Add the following new subparagraph immediately after Paragraph SC-7.03.D:

1. For purposes of administering the foregoing requirement, additional overtime costs are defined as any hours worked outside of Monday through Friday, 8:00 a.m. through 5:00 p.m. each day, requiring inspection services. Construction activities requiring inspection services shall be at the sole discretion of Owner.

7.10 *Taxes*

SC-7.10 Add a new paragraph immediately after Paragraph 7.10.A:

- B. Owner is exempt from payment of sales and compensating use taxes of the State of Texas and of cities and counties thereof on all materials to be incorporated into the Work.
 1. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the Work.
 2. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the Work.

ARTICLE 9—OWNER'S RESPONSIBILITIES

9.13 *Owner's Site Representative*

SC-9.13 Add the following new paragraph immediately after Paragraph 9.12 of the General Conditions:

9.13 *Owner's Site Representative*

- A. Owner will furnish an "Owner's Site Representative" to represent Owner at the Site and assist Owner in observing the progress and quality of the Work. Owner's Site Representative is not Engineer's consultant, agent, or employee. Owner's Site Representative will be determined and named by Owner. Responsibilities of Owner's Site Representative are provided in Specifications.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.03 *Resident Project Representative*

SC-10.03 Delete Paragraph 10.03.A in its entirety, and insert the following:

1. On this Project, by agreement with Owner, Engineer will not furnish a Resident Project Representative to represent Engineer at the Site or assist Engineer in observing the progress and quality of the Work.

ARTICLE 13—COST OF WORK; ALLOWANCES, UNIT PRICE WORK

13.03 *Unit Price Work*

SC-13.03 Delete Paragraph 13.03.E in its entirety and insert the following in its place:

- E. *Adjustments in Unit Price*
 1. Contractor or Owner shall be entitled to an adjustment in the unit price with respect to an item of Unit Price Work if:

- a. the extended price of a particular item of Unit Price Work amounts to **5** percent or more of the Contract Price (based on estimated quantities at the time of Contract formation) and the variation in the quantity of that particular item of Unit Price Work actually furnished or performed by Contractor differs by more than **25** percent from the estimated quantity of such item indicated in the Agreement; and
 - b. Contractor's unit costs to perform the item of Unit Price Work have changed materially and significantly as a result of the quantity change.
2. The adjustment in unit price will account for and be coordinated with any related changes in quantities of other items of Work, and in Contractor's costs to perform such other Work, such that the resulting overall change in Contract Price is equitable to Owner and Contractor.
 3. Adjusted unit prices will apply to all units of that item.

ARTICLE 15—PAYMENTS TO CONTRACTOR, SET OFFS; COMPLETIONS; CORRECTION PERIOD

15.01 Progress Payments

SC-15.01.D Delete Paragraph 15.01.D.1 in its entirety and insert the following in its place:

1. **Thirty** days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

15.03 Substantial Completion

SC-15.03 Add the following new subparagraph to Paragraph 15.03.B:

1. If some or all of the Work has been determined not to be at a point of Substantial Completion and will require re-inspection or re-testing by Engineer, the cost of such re-inspection or re-testing, including the cost of time, travel and living expenses, will be paid by Contractor to Owner. If Contractor does not pay, or the parties are unable to agree as to the amount owed, then Owner may impose a reasonable set-off against payments due under this Article 15.

SC 15.06.E Delete Paragraph 15.06.E in its entirety and insert the following in its place:

- E. Final Payment Becomes Due: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor within **30** days of Owner's receipt of the final Application for Payment from Engineer.

DIVISION 01
GENERAL REQUIREMENTS

SECTION 01 10 00 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Contract description.
 - 3. Work by Owner or others.
 - 4. Owner-furnished products.
 - 5. Contractor's use of Site and premises.
 - 6. Future work.
 - 7. Work sequence.
 - 8. Owner's product purchase contracts.
 - 9. Work restrictions.
 - 10. Owner occupancy.
 - 11. Permits.
 - 12. Specification conventions.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 01 20 00 "Price and Payment Procedures."
 - 3. Section 01 32 16 "Construction Progress Schedule" for digital Project management procedures and web-based Project management software package.
 - 4. Section 01 50 00 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
 - 5. Section 01 70 00 "Execution and Closeout Requirements" for coordination of Owner-installed products.

1.2 PROJECT INFORMATION

- A. Name: Paul Davis Wellfield Development - Replacement PWS Wells 7, 8, 12, 15, and 16.
 - 1. Project Location: Midland, Texas.
- B. Owner: City of Midland.
 - 1. Owner's Representative: Carl Craigo, PE.
- C. Project Engineer: Parkhill.
 - 1. Engineer's Representative: Kevin W. Krueger, PE.
- D. Construction Manager: City of Midland.
 - 1. Construction Manager Representative: TBD.
 - 2. Construction Manager as advisor (CMa): Construction Manager has been engaged for this Project to serve as an advisor to Owner and to provide assistance in administering the Contract for construction between Owner and Contractor, according to a separate contract between Owner and Construction Manager.
- E. Project Mechanical/Electrical Coordinator for Multiple Contracts:
 - 1. Parkhill has been engaged by Owner to serve as Project coordinator.
- F. Web-Based Project Software: Project software will be used for purposes of managing communication and documents during the construction stage.
 - 1. See Section 01 32 16 "Construction Progress Schedule" for requirements for using web-based Project software.

1.3 CONTRACT DESCRIPTION

- A. Work of the Project includes construction of five new municipal water supply wells and associated appurtenances within the City of Midland's Paul Davis Wellfield. New wells will replace existing wells: PD-7, PD-8, PD-12, PD-15, and PD-16. Existing wells will be plugged in accordance with TDLR and local requirements.
- B. Perform Work of Contract under separate Contract with Owner according to Conditions of Contract.

1.4 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limits on Use of Site: Limit use of Project Site to areas within the Contract limits indicated. Do not disturb portions of Project Site beyond areas in which the Work is indicated.
- B. Limits on Use of Site: Confine construction operations to areas designated in Drawings.
 - 1. Limit use of Site and premises to allow:
 - a. Work by Owner.
 - b. Work by Others.
 - 2. Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or for storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on Site.
- C. Construction Operations: Limited to areas indicated on Drawings.

1.5 WORK SEQUENCE

- A. Construct Work in phases during construction period. Coordinate construction schedule and operations with Engineer:
 - 1. Phase 1: Demolition of Existing Equipment and Existing Well Plugging.
 - 2. Phase 2: Construct New Wells.
- B. Sequencing of Construction Plan: Before start of construction, submit electronic copies of construction plan schedule regarding phasing of demolition, and new Work for acceptance by Owner. After acceptance of plan, comply with accepted plan when coordinating construction sequencing unless deviations are accepted by Owner in writing.

1.6 WORK RESTRICTIONS

- A. Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets, work on public streets, rights of way, and other requirements of authorities having jurisdiction (AHJ). Wells 7, 8, 12, and 16 will be drilled on private property. Well 15 will be drilled on University of Texas Lands. Contractor shall follow each landowner's requirements.
- B. On-Site Work Hours: Limit Work to between 6:00 a.m. to 8:00 p.m., Monday through Friday, unless otherwise indicated. Work hours may be modified to meet Project requirements if approved by Owner and AHJ.

- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions, and only after arranging for temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than 14 days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Smoking and Controlled Substance Restrictions: Use of tobacco products, alcoholic beverages, marijuana, and other controlled substances on Project Site is not permitted.

1.7 OWNER OCCUPANCY

- A. Owner will occupy Site during entire period of construction.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.

1.8 PERMITS

- A. Furnish all necessary permits for construction of Work, including the following:
 - 1. Stormwater permit.
 - 2. Owner will obtain well permits from the Permian Basin Underground Water Control District and from University Lands.

1.9 SPECIFICATION CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Text Color: Text used in the Specifications, including units of measure, manufacturer and product names, and other text may appear in multiple colors or underlined as part of a hyperlink; no emphasis is implied by text with these characteristics.
 - 3. Hypertext: Text used in the Specifications may contain hyperlinks. Hyperlinks may allow for access to linked information that is not residing in the Specifications. Unless otherwise indicated, linked information is not part of the Contract Documents.
- B. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations scheduled on Drawings.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 20 00 - PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Cash allowances.
 - 2. Contingency allowances.
 - 3. Testing and inspection allowances.
 - 4. Schedule of Values.
 - 5. Application for Payment.
 - 6. Change procedures.
 - 7. Defect assessment.
 - 8. Unit prices.
 - 9. Alternates.
- B. Related Requirements:
 - 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 CASH ALLOWANCES

- A. Costs Included in Cash Allowances: Cost of product to Contractor or Subcontractor, less applicable trade discounts; delivery to Site and applicable taxes unless stated otherwise in Allowance Schedule.
- B. Costs Not Included in Cash Allowances but Included in Contract Sum/Price: Product handling at Site including unloading, uncrating, and storage; protection of products from elements and from damage; and labor for installation and finishing unless stated otherwise in Allowance Schedule.
- C. Engineer Responsibilities:
 - 1. Consult with Contractor for consideration and selection of products suppliers.
 - 2. Select products in consultation with Owner and transmit decision to Contractor.
 - 3. Prepare Change Order.
- D. Contractor Responsibilities:
 - 1. Assist Engineer in selection of products, suppliers.
 - 2. Obtain proposals from suppliers and offer recommendations.
 - 3. Upon notification of selection by Engineer, execute purchase agreement with designated supplier.
 - 4. Arrange for and process Shop Drawings, Product Data, and Samples. Arrange for delivery.
 - 5. Promptly inspect products upon delivery for completeness, damage, and defects. Submit claims for transportation damage.
- E. Differences in costs will be adjusted by Change Order.

1.3 SCHEDULE OF VALUES

- A. Submit electronic file to Project website of schedule on Progress Estimate schedule on EJCDC C-620.
- B. Submit Schedule of Values as electronic file to Project website within 15 days after date of Owner-Contractor Agreement.

- C. Format: Use Table of Contents of this Project Manual. Identify each line item with number and title of major Specification Section. Also identify Site mobilization.
- D. Include in each line item amount of allowances as specified in this Section. For unit cost allowances, identify quantities taken from Contract Documents multiplied by unit cost to achieve total for each item.
- E. Include within each line item, direct proportional amount of Contractor's overhead and profit.
- F. Revise Schedule to list approved Change Orders with each Application for Payment.

1.4 APPLICATION FOR PAYMENT

- A. Submit electronic file to Project website of each Application for Payment on EJCDC C-620 - Contractor's Application for Payment.
- B. Content and Format: Use Schedule of Values for listing items in Application for Payment.
- C. Submit updated Construction Schedule with each Application for Payment.
- D. Payment Period: Submit at intervals stipulated in the Agreement.
- E. Submit submittals with transmittal letter as specified in Section 01 33 00 "Submittal Procedures."
- F. Substantiating Data: When Engineer requires substantiating information, submit data justifying dollar amounts in question. Include the following with Application for Payment:
 - 1. Current construction photographs specified in Section 01 33 00 "Submittal Procedures."
 - 2. Affidavits attesting to off-Site stored products.
 - 3. Construction Progress Schedule, revised and current as specified in Section 01 33 00 "Submittal Procedures."

1.5 CHANGE PROCEDURES

- A. Submittals: Submit name of individual who is authorized to receive change documents and is responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.
- B. Carefully study and compare Contract Documents before proceeding with fabrication and installation of Work. Promptly advise Engineer of any error, inconsistency, omission, or apparent discrepancy.
- C. Requests for Interpretation (RFI) and Clarifications: Allot time in construction scheduling for liaison with Engineer; establish procedures for handling queries and clarifications.
 - 1. Use CSI Form 13.2A - Request for Interpretation for requesting interpretations.
 - 2. Engineer may respond with a direct answer on the Request for Interpretation form, Clarification Notice, CSI Form 13.3A Clarification Notice, Proposal Request, or CSI Form 13/6A - Change Order Request (Proposal).
- D. Engineer will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions on EJCDC C-942.
- E. Engineer may issue CSI Form 13/6A including a detailed description of proposed change with supplementary or revised Drawings and Specifications, a change in Contract Time for executing the change. Contractor will prepare and submit estimate within 14 days.
- F. Contractor may propose changes by submitting a request for change to Engineer, describing proposed change and its full effect on the Work. Include a statement describing reason for the change and the effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on the Work by separate or other Contractors.
- G. Document requested substitutions according to Section 01 25 00 "Substitution Procedures."

- H. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for Change Order as approved by Engineer.
- I. Unit Price Change Order: For Contract unit prices and quantities, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of that which are not predetermined, execute Work under Construction Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Force Account Change Order.
- J. Construction Change Directive: Architect/Engineer may issue directive, on EJCDC C-940 - Work Change Directive signed by Owner, instructing Contractor to proceed with change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change.
- K. Force Account Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in Conditions of the Contract. Engineer will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.
- L. Maintain detailed records of Work done on force account basis. Provide full information required for evaluation of proposed changes and to substantiate costs for changes in the Work.
- M. Document each quotation for change in Project Cost or Time with sufficient data to allow evaluation of quotation.
- N. Change Order Forms: EJCDC C-941 - Change Order.
- O. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in Conditions of the Contract.
- P. Correlation of Contractor Submittals:
 - 1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
 - 2. Promptly revise Progress Schedules to reflect change in Contract Time, revise subschedules to adjust times for other items of Work affected by the change, and resubmit.
 - 3. Promptly enter changes in Record Documents.

1.6 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of Engineer, it is not practical to remove and replace the Work, Engineer will direct appropriate remedy or adjust payment.
- C. Individual Specification Sections may modify these options or may identify specific formula or percentage sum/price reduction.
- D. Authority of Engineer to assess defects and identify payment adjustments is final.
- E. Nonpayment for Rejected Products: Payment will not be made for rejected products for any of the following reasons:
 - 1. Products wasted or disposed of in a manner that is not acceptable.
 - 2. Products determined as unacceptable before or after placement.
 - 3. Products not completely unloaded from transporting vehicle.
 - 4. Products placed beyond lines and levels of the required Work.
 - 5. Products remaining on hand after completion of the Work.
 - 6. Loading, hauling, and disposing of rejected products.

1.7 UNIT PRICES

- A. Authority: Measurement methods are delineated in individual Specification Sections.
- B. Measurement methods delineated in individual Specification Sections complement criteria of this Section. In event of conflict, requirements of individual Specification Section govern.
- C. Take measurements and compute quantities. Engineer will verify measurements and quantities.
- D. Unit Quantities: Quantities and measurements indicated on Bid Form are for Contract purposes only. Quantities and measurements supplied or placed in the Work shall determine payment.
 - 1. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at contracted unit sum/prices.
 - 2. When actual Work requires 25 percent or greater change in quantity than those quantities indicated, Owner or Contractor may claim a Contract Price adjustment.
- E. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals, erection, application, or installation of item of the Work; overhead and profit.
- F. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.
- G. Measurement of Quantities:
 - 1. Weigh Scales: Inspected, tested, and certified by applicable State of Texas weights and measures department within past year.
 - 2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
 - 3. Metering Devices: Inspected, tested, and certified by applicable State of Texas department within past year.
 - 4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel, or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
 - 5. Measurement by Volume: Measured by cubic dimension using mean length, width, and height, or thickness.
 - 6. Measurement by Area: Measured by square dimension using mean length and width, or radius.
 - 7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
 - 8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

1.8 ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in Owner-Contractor Agreement. The Owner-Contractor Agreement may identify certain Alternates to remain an Owner option for a stipulated period of time.

- B. Coordinate related Work and modify surrounding Work. Description for each Alternate is recognized to be abbreviated but requires that each change shall be complete for Scope of Work affected.
 - 1. Coordinate related requirements among Specification Sections as required.
 - 2. Include as part of each Alternate: Miscellaneous devices, appurtenances, and similar items incidental to or necessary for complete installation.
 - 3. Coordinate Alternate with adjacent Work and modify or adjust as necessary to ensure integration.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 22 00 - MEASUREMENT AND PAYMENT

1.1 SUMMARY

- A. Section Includes:
 - 1. Procedures for measurement and payment.
 - 2. Mobilization demobilization.
 - 3. Unit price items.
 - 4. Lump sum items.
 - 5. Bid Form-specific payment items.
- B. Related Requirements:
 - 1. City of Midland Request for Bids (RFB).
 - 2. Other Division 01 Specification Sections apply to Work of the Section.

1.2 PROCEDURES FOR MEASUREMENT AND PAYMENT

- A. Unit price bid on each item as stated in City of Midland Request for Bids (RFB) includes furnishing all labor, superintendence, machinery, equipment, and materials, except as otherwise specified, necessary, or incidental to complete various item of Work per Drawings and Specifications.
- B. Cost of Work or materials shown on Drawings or called for in Specifications and on which no separate payment is made, included in bid prices on various pay items.
- C. Payment not made for any items not complete, including all associated incidental Work.

1.3 MOBILIZATION/DEMobilIZATION

- A. Payment made for mobilization and demobilization on lump sum basis.
- B. Bid amount for mobilization and demobilization shall not exceed 5 percent of total Bid Price.
- C. Work under this item consists of preparatory work and operations, including but not limited to those necessary for movement of personnel, equipment, supplies, and incidentals to Work; establish all offices, buildings, and other facilities necessary for Work; and all other work and operations performed or costs incurred prior to beginning work on various items of Work.
- D. Payment for mobilization and demobilization will be on a lump sum basis with partial payments as noted. The adjusted Contract Amount as used herein is defined as the total Contract amount less lump sum for mobilization and demobilization.
 - 1. First Application for Payment: 50 percent of lump sum.
 - 2. Second Application for Payment: 75 percent of the lump sum.
 - 3. When 10 percent of adjusted Contract amount is earned, 90 percent of mobilization and demobilization lump sum.
 - 4. Final Application for Payment: 100 percent of mobilization and demobilization lump sum.

1.4 UNIT PRICE ITEMS

- A. Unit price items, not otherwise included herein, paid at a unit price per unit.
- B. Payment will include all work and material for installing unit price item as specified.
- C. Measurement made in units shown on City of Midland Request for Bids (RFB).

1.5 LUMP SUM ITEMS

- A. Lump sum items include all work and materials for installing lump sum item as specified.
- B. Payment based on percentage complete basis as agreed by Engineer and Contractor.
- C. Payment includes all work and material for installing lump sum Bid item as specified.

1.6 BID FORM-SPECIFIC PAYMENT ITEMS

- A. Bid Item 1: Mobilization/Demobilization (Max. 5 percent of total Base Bid):
 - 1. Measurement: None.
 - 2. Payment: Lump sum basis for bonds, insurance, mobilizing, and demobilizing. Mobilization will be limited to 3 percent of total Base Bid. Demobilization will be limited to 2 percent of total Base Bid. Owner shall be solely responsible to determine timing for demobilization payment.
- B. Bid Item 2: Demo Existing Well Equipment, Piping, and Fences:
 - 1. Measurement: Per each well site location.
 - 2. Payment: For each type and size as specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment for removing and disposing of existing fences or fence sections and designated equipment including well pumps and piping, and electrical for each well site.
- C. Bid Item 3: 8-Foot Chain Link Security Fence and Two 10-Foot Gates:
 - 1. Measurement: Per each well site location.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment for providing and installing fence type, new 10-foot gates, including appurtenances for each well site excluding Well 7.
- D. Bid Item 4: Barb Wire Fencing and Renovate and Relocate Existing Gates:
 - 1. Measurement: Per each well site location.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment for providing and installing fence type, including removing, blasting, and painting existing gates appurtenances for each well site.
- E. Bid Item 5: 10-Foot Gate (Barb Wire Cattle Fencing):
 - 1. Measurement: Per each.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment for providing 10-foot gate to match existing gate on barb wire cattle fencing at Well 12.
- F. Bid Item 6: Well Pads and Roads:
 - 1. Measurement: Per square yard.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment for providing and installing well pads and roads including clearing, grubbing, and sub-grade preparation for each well site.
- G. Bid Item 7: Soil Preparation/Re-seeding:
 - 1. Measurement: None.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment on lump sum basis for preparing topsoil, providing, and placing seed mixture in all areas disturbed by construction activities.
- H. Bid Item 8: Trench Safety (Including Plan):
 - 1. Measurement: Linear foot basis as measured along excavation center line for all trenches requiring trench safety.
 - 2. Payment: For each type and size as specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per linear foot.

- I. Bid Item 9: Stormwater Pollution Prevention Plan and Erosion Control:
 - 1. Measurement: None.
 - 2. Payment: Lump sum basis for preparing SWPPP, filing Notice(s) of Intent (NOI), installing, and maintaining erosion control measures, preparing reports, and filing a Notice of Termination (NOT) as specified.
- J. Bid Item 10: Drill Equipment Set Up & Slush Pit:
 - 1. Measurement: Per each well site location.
 - 2. Payment: For moving and setting up drilling equipment at each well site including constructing, cleaning up, and filling in of slush settling re-circulation pit.
- K. Bid Item 11: Drill and Install 24-Inch Conductor Casing:
 - 1. Measurement: Vertical foot basis measured from ground surface to bottom of hole limited to depth authorized by Engineer in Contract Documents.
 - 2. Payment: For diameter specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per vertical foot despite method used.
- L. Bid Item 12: Drill 20-Inch Diameter Well:
 - 1. Measurement: Vertical foot basis measured from ground surface to bottom of hole limited to depth authorized by Engineer in Contract Documents.
 - 2. Payment: For diameter specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per vertical foot despite method used.
- M. Bid Item 13: Well Casing, 12-3/4-Inch Low Carbon Steel:
 - 1. Measurement: Per linear foot basis measured along casing centerline, end-to-end with no deductions for end fittings.
 - 2. Payment: For each type and size specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per linear foot.
- N. Bid Item 14: Well Screen, 12-3/4-Inch Stainless Steel:
 - 1. Measurement: Per linear foot basis measured along casing centerline, end-to-end with no deductions for end fittings.
 - 2. Payment: For each type and size specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per linear foot.
- O. Bid Item 15: Dielectric Couplings:
 - 1. Measurement: Per each basis.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per each.
- P. Bid Item 16: Draw Down Tube:
 - 1. Measurement: Per linear foot.
 - 2. Payment: For each type and size specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per linear foot.
- Q. Bid Item 17: Gravel Feed Tube:
 - 1. Measurement: Linear foot basis as measured along centerline end-to-end with no deductions for fittings.
 - 2. Payment: For each type and size specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per linear foot.
- R. Bid Item 18: Gravel Pack:
 - 1. Measurement: Vertical foot basis as calculated from bottom of bore hole to top of gravel pack as shown on Drawings or directed by Engineer.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per vertical foot.

- S. Bid Item 19: Cementing/Grouting:
 - 1. Measurement: Per vertical foot basis as measured from ground surface to top of gravel pack with no deductions for seals.
 - 2. Payment: As included in City of Midland Request for Bids (RFB), payment per vertical foot.
- T. Bid Item 20: Well Disinfection:
 - 1. Measurement: Per each well. Disinfection is limited to one per well.
 - 2. Payment: As specified and included in City of Midland Request for Bids (RFB), payment per each well.
- U. Bid Item 21: Well Head Improvements:
 - 1. Measurement: Per each basis.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per each.
- V. Bid Item 22: Well Development - Bailing/Pumping:
 - 1. Measurement: Per hourly basis of active well development.
 - 2. Payment: As shown on City of Midland Request for Bids (RFB), payment per hour.
- W. Bid Item 23: 36-Hour Pump Test:
 - 1. Measurement: Per hourly basis of active well pumping. Include cost of providing, setting, removing temporary pump, piping, conductors, and electricity.
 - 2. Payment: As shown on City of Midland Request for Bids (RFB), payment per hour not to exceed 36 hours for each well.
- X. Bid Item 24: Well Quality Sampling and Testing:
 - 1. Measurement: Per each basis limited to one per well. No additional payment for failed bacteriological testing.
 - 2. Payment: As specified and included in City of Midland Request for Bids (RFB), payment per each well for sampling and laboratory analyses following 36-hour pump test.
- Y. Bid Items 25 to 29: Well Pump, Column Piping, Wire, and Discharge Heads:
 - 1. Measurement: Per each well basis.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per each.
- Z. Bid Item 30: 6-Inch Above-Ground Well Piping and Tie-In:
 - 1. Measurement: Per each well basis. Includes all piping, supports, fittings, meters, valves, and appurtenances shown on Drawings and required to connect from well discharge head to existing underground well field piping.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per each.
- AA. Bid Item 31: 4-Inch Above-Ground Well Piping and Tie-In:
 - 1. Measurement: Per each well basis. Includes all piping, supports, fittings, meters, valves, and appurtenances shown on Drawings and required to connect from well discharge head to existing underground well field piping.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per each.
- BB. Bid Item 32: Plug Existing Wells:
 - 1. Measurement: Per each well basis. Provide signed plugging certification/report per 16 TAC, Part 4, Rule 76.104 and per PBUWCD rules.
 - 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFB), payment per each.

- CC. Bid Item 33: Electrical and Instrumentation, Including Lighting Protection, Electrical Service for 25HP motors: 60Amp, 3-phase, 277/480VAC:
1. Measurement: Per each.
 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFQ), payment per each. Includes electrical service, conduit, conductors, labor, and miscellaneous appurtenances required for 25HP motors: 60 Amp, 3-phase 277/480VAC.
- DD. Additive Alternate A-1 - Electrical Service Upgrade Adder for 30HP and 40HP Motors: 100Amp, 3-phase, 277/480VAC:
1. Measurement: Per each.
 2. Payment: As specified, shown in Drawings, and included in City of Midland Request for Bids (RFQ), payment per each. Includes additive cost to provide electrical service, conduit, conductors, labor, and miscellaneous appurtenances required for 30HP and 40HP motors: 100 Amp, 3-phase, 277/480VAC.
- EE. Additive Alternate A-2 - Electrical Service Upgrade Adder for 50HP and 60HP Motors: 200Amp, 3-phase, 277/480VAC:
1. Measurement: Per each.
 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFQ), payment per each. Includes additive cost to provide electrical service, conduit, conductors, labor, and miscellaneous appurtenances required for 50HP and 60HP motors: 200Amp, 3-phase, 277/480VAC.
- FF. Additive Alternate A-3 - Electrical Service Upgrade Adder for 75HP and 100HP Motors: 200Amp, 3-phase, 277/480VAC:
1. Measurement: Per each.
 2. Payment: As specified, shown on Drawings, and included in City of Midland Request for Bids (RFQ), payment per each. Includes additive cost to provide electrical service, conduit, conductors, labor, and miscellaneous appurtenances required for 75HP and 100HP motors: 200Amp, 3-phase, 277/480VAC.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 25 00 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Quality assurance.
 - 2. Product options.
 - 3. Product substitution procedures.
- B. Related Requirements:
 - 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 QUALITY ASSURANCE

- A. Contract is based on products and standards established in Contract Documents without consideration of proposed substitutions.
- B. Products specified define standard of quality, type, function, dimension, appearance, and performance required.
- C. Substitution Proposals: Permitted for specified products except where specified otherwise. Do not substitute products unless substitution has been accepted and approved in writing by Owner.

1.3 PRODUCT OPTIONS

- A. See Section 01 60 00 "Product Requirements."

1.4 PRODUCT SUBSTITUTION PROCEDURES

- A. Document General Conditions of Bidding specifies time restrictions for submitting requests for substitutions during Bidding period.
- B. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.
- C. Document each request with complete data, substantiating compliance of proposed substitution with Contract Documents, including:
 - 1. Manufacturer's name and address, product, trade name, model, or catalog number, performance and test data, and reference standards.
 - 2. Itemized point-by-point comparison of proposed substitution with specified product, listing variations in quality, performance, and other pertinent characteristics.
 - 3. Reference to Article and Paragraph numbers in Specification Section.
 - 4. Cost data comparing proposed substitution with specified product and amount of net change to Contract Sum.
 - 5. Changes required in other Work.
 - 6. Availability of maintenance service and source of replacement parts as applicable.
 - 7. Certified test data to show compliance with performance characteristics specified.
 - 8. Samples when applicable or requested.
 - 9. Other information as necessary to assist Engineer's evaluation.
- D. A request constitutes a representation that Bidder:
 - 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.

2. Will provide same warranty for substitution as for specified product.
 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 4. Waives claims for additional costs or time extension that may subsequently become apparent.
 5. Will coordinate installation of the accepted substitute, making such changes as may be required for the Work to be complete in all respects.
 6. Will reimburse Owner and Engineer for review or redesign services associated with reapproval by authorities having jurisdiction.
- E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals without separate written request or when acceptance will require revision to Contract Documents.

1.5 INSTALLER SUBSTITUTION PROCEDURES

- A. Document General Conditions of Bidding specifies time restrictions for submitting requests for substitutions during Bidding period.
- B. Document each request with:
 1. Installer's qualifications.
 2. Installer's experience in work similar to that specified.
 3. Other information as necessary to assist Engineer's evaluation.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Coordination and Project conditions.
 - 2. Preconstruction meeting.
 - 3. Site mobilization meeting.
 - 4. Progress meetings.
 - 5. Preinstallation meetings.
 - 6. Closeout meeting.
 - 7. Alteration procedures.
- B. Related Requirements:
 - 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 COORDINATION AND PROJECT CONDITIONS

- A. Coordinate scheduling, submittals, and Work of various Sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B. Verify that utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate Work of various Sections having interdependent responsibilities for installing, connecting to, and placing operating equipment in service.
- C. Coordinate space requirements, supports, and installation of mechanical and electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit as closely as practical; place runs parallel with lines of building. Use spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
 - 1. Coordination Drawings: Prepare as required to coordinate all portions of Work. Show relationship and integration of different construction elements that require coordination during fabrication or installation to fit in space provided or to function as intended. Indicate locations where space is limited for installation and access and where sequencing and coordination of installations are important.
- D. Coordination Meetings: In addition to other meetings specified in this Section, hold coordination meetings with personnel and Subcontractors to ensure coordination of Work.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of Work of separate Sections in preparation for Substantial Completion.
- G. After Owner's occupancy of premises, coordinate access to Site for correction of defective Work and Work not complying with Contract Documents, to minimize disruption of Owner's activities.

1.3 PRECONSTRUCTION MEETING

- A. Engineer will schedule and preside over meeting after Notice of Award.
- B. Attendance Required: Engineer, Owner, Resident Project Representative, Construction Manager, major Subcontractors, and Contractor.
- C. Minimum Agenda:
 - 1. Distribution of Contract Documents.
 - 2. Submission of list of Subcontractors, list of products, schedule of values, Submittal Schedule, and Progress Schedule.
 - 3. Designation of personnel representing parties in Contract, onstruction Manager and Engineer.
 - 4. Communication procedures.
 - 5. Procedures and processing of requests for interpretations, field decisions, field orders, submittals, substitutions, Applications for Payments, proposal request, Change Orders, and Contract closeout procedures.
 - 6. Scheduling.
 - 7. Critical Work sequencing.
- D. Construction Manager: Record minutes and distribute copies to participants within 7 days after meeting, with electronic copies each to Engineer, Owner, and those affected by decisions made.

1.4 SITE MOBILIZATION MEETING

- A. Engineer will schedule meeting at Project Site prior to Contractor occupancy. Construction Manager presides over meeting.
- B. Attendance Required: Engineer, Owner, Contractor, Contractor's superintendent, Construction Manager, and major Subcontractors.
- C. Minimum Agenda:
 - 1. Use of premises by Owner and Contractor.
 - 2. Owner's requirements.
 - 3. Construction facilities and controls provided by Owner.
 - 4. Temporary utilities provided by Contractor.
 - 5. Survey well site layout.
 - 6. Security and housekeeping procedures.
 - 7. Schedules.
 - 8. Procedures for testing.
 - 9. Procedures for maintaining Record Documents.
 - 10. Requirements for startup of equipment.
 - 11. Inspection and acceptance of equipment put into service during construction period.
- D. Construction Manager: Record minutes and distribute copies to participants within 7 days after meeting, with electronic copies each to Engineer, Owner, and those affected by decisions made.

1.5 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum monthly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, and preside over meetings.
- C. Attendance Required: Job superintendent, major Subcontractors and suppliers, Engineer, and Owner, as appropriate to agenda topics for each meeting.

- D. Minimum Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems impeding planned progress.
 - 5. Review of submittal schedule and status of submittals.
 - 6. Review of off-Site fabrication and delivery schedules.
 - 7. Maintenance of Progress Schedule.
 - 8. Corrective measures to regain projected schedules.
 - 9. Planned progress during succeeding work period.
 - 10. Coordination of projected progress.
 - 11. Maintenance of quality and work standards.
 - 12. Effect of proposed changes on Progress Schedule and coordination.
 - 13. Other business relating to Work.
- E. Construction Manager: Record minutes and distribute copies to participants within 7 days after meeting, with electronic copies each to Engineer, Owner, and those affected by decisions made.

1.6 PREINSTALLATION MEETINGS

- A. When required in individual Specification Sections, convene preinstallation meetings at Project Site before starting Work of specific Section.
- B. Require attendance of parties directly affecting, or affected by, Work of specific Section.
- C. Notify Engineer 7 days in advance of meeting date.
- D. Prepare agenda and preside over meeting:
 - 1. Review conditions of installation, preparation, and installation procedures.
 - 2. Review coordination with related Work.
- E. Record minutes and distribute copies to participants within 7 days after meeting, with electronic copies each to Engineer, Owner, and those affected by decisions made.

1.7 CLOSEOUT MEETING

- A. Schedule Project closeout meeting with sufficient time to prepare for requesting Substantial Completion. Preside over meeting and be responsible for minutes.
- B. Attendance Required: Contractor, Construction Manager, major Subcontractors, Engineer, Owner, and others appropriate to agenda.
- C. Notify Engineer 7 days in advance of meeting date.
- D. Minimum Agenda:
 - 1. Start-up of facilities and systems.
 - 2. Operations and maintenance manuals.
 - 3. Testing, adjusting, and balancing.
 - 4. System demonstration and observation.
 - 5. Operation and maintenance instructions for Owner's personnel.
 - 6. Contractor's inspection of Work.
 - 7. Contractor's preparation of an initial "punch list."
 - 8. Procedure to request Engineer inspection to determine date of Substantial Completion.
 - 9. Completion time for correcting deficiencies.
 - 10. Inspections by authorities having jurisdiction.
 - 11. Certificate of Occupancy and transfer of insurance responsibilities.
 - 12. Partial release of retainage.
 - 13. Final cleaning.

14. Preparation for final inspection.
 15. Closeout Submittals:
 - a. Project record documents.
 - b. Operating and maintenance documents.
 - c. Operating and maintenance materials.
 - d. Affidavits.
 16. Final Application for Payment.
 17. Contractor's demobilization of Site.
 18. Maintenance.
- E. Record minutes and distribute copies to participants within 7 days after meeting, with electronic copies each to Engineer, Owner, and those affected by decisions made.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 32 16 - CONSTRUCTION PROGRESS SCHEDULE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Web-based project management software package.
 - 2. Digital Project data licensing.
 - 3. Submittals.
 - 4. Quality assurance.
 - 5. Format for network analysis schedules.
 - 6. Network analysis schedules.
 - 7. Bar chart schedules.
 - 8. Review and evaluation.
 - 9. Updating schedules.
 - 10. Distribution.
- B. Related Requirements:
 - 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 WEB-BASED PROJECT MANAGEMENT SOFTWARE PACKAGE

- A. Web-Based Project Management Software Package: Use Engineer's web-based Project management software package for purposes of hosting and managing Project communication and documentation until final completion.
 - 1. Web-based Project management software includes, at a minimum, the following features:
 - a. Compilation of Project data, including Contractor, Subcontractors, Engineer, Engineer's consultants, Owner, and other entities involved in Project. Include names of individuals and contact information.
 - b. Access control for each entity for each workflow process, to determine entity's digital rights to create, modify, view, and print documents.
 - c. Document workflow planning, allowing customization of workflow among Project entities.
 - d. Create, log, track, and notify Project members of Project communications required in other Specification Sections, including, but not limited to, RFIs, submittals, minor changes in the Work, Construction Change Directives, and Change Orders.
 - e. Track status of each Project communication in real time, and log time and date when responses are provided.
 - f. Procedures for handling PDFs or similar file formats, allowing markups by each entity. Provide security features to lock markups against changes once submitted.
 - g. Process and track payment applications.
 - h. Process and track contract modifications.
 - i. Create and distribute meeting minutes.
 - j. Document management for Drawings, Specifications, and Coordination Drawings, including revision control.
 - k. Management of construction progress photographs.
 - l. Mobile device compatibility, including smartphones and tablets.

- B. Provide up to 7 Project management software user licenses for use by Owner, Construction Manager, Engineer, and Engineer's consultants. Provide 8 hours of software training at Engineer's office for web-based Project software users.
 - 1. At completion of Project, provide digital archive in format that is readable by common desktop software applications and acceptable to Engineer. Provide data in locked format to prevent further changes.
 - 2. Manufacturers:
 - a. Newforma, Inc.
 - 3. Products: Provide one of the above Project management software packages under the current published licensing agreements.

1.3 DIGITAL PROJECT DATA LICENSING

- A. Use of Engineer's Digital Data Files: Digital data files of Engineer's CAD Drawings will be provided by Engineer for Contractor's use during construction.
- B. Conditions for Use:
 - 1. Digital data files may be used by Contractor in preparing Coordination Drawings, Shop Drawings, and Project Record Drawings.
 - 2. Engineer makes no representations as to the accuracy or completeness of digital data files as they relate to Contract Drawings.
 - 3. Conditions listed in Section 01 33 00 "Submittal Procedures" Article 1.7.
 - 4. Digital Drawing Software Program: Contract Drawings are available in Autodesk Civil 3D format.
 - 5. Contractor shall execute a data licensing agreement in the form of Agreement form acceptable to Owner and Engineer.
 - a. Subcontractors and other parties granted access by Contractor to Engineer's digital data files shall execute a data licensing agreement in the form of Agreement acceptable to Owner and Engineer.
 - 6. The following digital data files will be furnished for each appropriate discipline:
 - a. Wellfield site layout.

1.4 SUBMITTALS

- A. Within 10 days after date established in Notice to Proceed, submit proposed preliminary network diagram defining planned operations for first 60 days of Work, with general outline for remainder of Work.
- B. Participate in review of preliminary and complete network diagrams jointly with Engineer.
- C. Within 20 days after joint review of proposed preliminary network diagram, submit draft of proposed complete network diagram for review. Include written certification that major Subcontractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete network analysis consisting of network diagrams and mathematical analyses.
- E. Submit updated network schedules with each Application for Payment and at least every 30 days.
- F. Post as electronic file to Project website.
- G. Submit network schedules under transmittal letter form specified in Section 01 33 00 "ubmittal Procedures."

- H. Schedule Updates:
 - 1. Overall percent complete, projected and actual.
 - 2. Completion progress by listed activity and sub-activity, to within 5 working days prior to submittal.
 - 3. Changes in Work scope and activities modified since submittal.
 - 4. Delays in submittals or resubmittals, deliveries, or Work.
 - 5. Adjusted or modified sequences of Work.
 - 6. Other identifiable changes.
 - 7. Revised projections of progress and completion.
- I. Narrative Progress Report:
 - 1. Submit with each monthly submission of Progress Schedule.
 - 2. Summary of Work completed during the past period between reports.
 - 3. Work planned during the next period.
 - 4. Explanation of differences between summary of Work completed and Work planned in previously submitted report.
 - 5. Current and anticipated delaying factors and estimated impact on other activities and completion milestones.
 - 6. Corrective action taken or proposed.

1.5 QUALITY ASSURANCE

- A. Scheduler: Contractor's personnel specializing in scheduling with 2 years' minimum experience in scheduling construction work of complexity comparable to the Project, and having use of computer facilities capable of delivering detailed graphic printout within 48 hours of request.
- B. Contractor's Administrative Personnel: Two years' minimum experience in using and monitoring schedules on comparable Projects.

1.6 NETWORK ANALYSIS SCHEDULES

- A. Bar Chart Schedules:
 - 1. Format: Bar Chart Schedule, to include at least:
 - a. Identification and listing in chronological order of those activities reasonably required to complete the Work, including:
 - 1) Subcontract Work.
 - 2) Major equipment design, fabrication, factory testing, and delivery dates including required lead times.
 - 3) Move-in and other preliminary activities.
 - 4) Equipment and equipment system test and startup activities.
 - 5) Project closeout and cleanup.
 - 6) Work sequences, constraints, and milestones.
 - b. Listings identified by Specification Section number.
 - c. Identification of the following:
 - 1) Horizontal time frame by year, month, and week.
 - 2) Duration, early start, and completion for each activity and subactivity.
 - 3) Critical activities and Project float.
 - 4) Subschedules to further define critical portions of Work.

1.7 REVIEW AND EVALUATION

- A. Participate in joint review and evaluation of schedules with Engineer at each submittal.
- B. Evaluate Project status to determine Work behind schedule and Work ahead of schedule.
- C. After review, revise schedules incorporating results of review, and resubmit within 10 days.

1.8 UPDATING SCHEDULES

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity. Update schedules to depict current status of Work.
- C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- D. Upon approval of a Change Order, include the change in the next schedule submittal.
- E. Indicate changes required to maintain Date of Substantial Completion.
- F. Submit sorts as required to support recommended changes.
- G. Prepare narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken or proposed and its effect.

1.9 DISTRIBUTION

- A. Following joint review, distribute copies of updated schedules to Contractor's Project site file, subcontractors, suppliers, Engineer, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 33 00 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Definitions.
 - 2. Submittal procedures.
 - 3. Construction progress schedules.
 - 4. Proposed product list.
 - 5. Product data.
 - 6. Use of electronic CAD files of Project Drawings.
 - 7. Shop Drawings.
 - 8. Samples.
 - 9. Other submittals.
 - 10. Design data.
 - 11. Test reports.
 - 12. Certificates.
 - 13. Manufacturer's instructions.
 - 14. Manufacturer's field reports.
 - 15. Erection Drawings.
 - 16. Construction photographs.
 - 17. Contractor review.
 - 18. Engineer review.
- B. Related Requirements:
 - 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Engineer's and Construction Manager's responsive action.
- B. Informational Submittals: Written and graphic information and physical Samples that do not require Engineer's and Construction Manager's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

- A. Transmit each submittal with CSI Form 12.1A - Submittal Transmittal or Engineer-accepted form.
- B. Mark revised submittals with original number and sequential alphabetic suffix.
- C. Identify: Project, Contractor, subcontractor and supplier, pertinent Drawing and detail number, and Specification Section number appropriate to submittal.
- D. Apply Contractor's stamp, signed or initialed, certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is according to requirements of the Work and Contract Documents.
- E. Schedule submittals to expedite Project, and post electronic submittals as PDF electronic files to Project website. Coordinate submission of related items.
- F. For each submittal for review, allow 15 days excluding delivery time to and from Contractor.

- G. Identify variations in Contract Documents and product or system limitations that may be detrimental to successful performance of completed Work.
- H. Allow space on submittals for Contractor and Engineer review stamps.
- I. When revised for resubmission, identify changes made since previous submission.
- J. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- K. Submittals not requested will not be recognized nor processed.
- L. Incomplete Submittals: Engineer will not review. Complete submittals for each item are required. Delays resulting from incomplete submittals are not the responsibility of Engineer.

1.4 CONSTRUCTION PROGRESS SCHEDULES

- A. Comply with Section 01 32 16 "Construction Progress Schedule."

1.5 PROPOSED PRODUCT LIST

- A. Within 15 days after date of Notice to Proceed, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, indicate manufacturer, trade name, model or catalog designation, and reference standards.

1.6 PRODUCT DATA

- A. Product Data: Action Submittal: Submit to Engineer for review for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Post electronic submittals as PDF electronic files to Project website.
- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 "Execution and Closeout Requirements."

1.7 ELECTRONIC CAD FILES OF PROJECT DRAWINGS

- A. Electronic CAD Files of Project Drawings: May only be used to expedite production of Shop Drawings for the Project. Use for other Projects or purposes is not allowed.
- B. Electronic CAD Files of Project Drawings: Distributed only under the following conditions:
 - 1. Use of files is solely at receiver's risk. Engineer does not warrant accuracy of files. Receiving files in electronic form does not relieve receiver of responsibilities for measurements, dimensions, and quantities set forth in Contract Documents. In the event of ambiguity, discrepancy, or conflict between information on electronic media and that in Contract Documents, notify Engineer of discrepancy and use information in hard-copy Drawings and Specifications.
 - 2. CAD files do not necessarily represent the latest Contract Documents, existing conditions, and as-built conditions. Receiver is responsible for determining and complying with these conditions and for incorporating addenda and modifications.

3. User is responsible for removing information not normally provided on Shop Drawings and removing references to Contract Documents. Shop Drawings submitted with information associated with other trades or with references to Contract Documents will not be reviewed and will be immediately returned.
 4. Receiver shall not hold Engineer responsible for data or file clean-up required to make files usable, nor for error or malfunction in translation, interpretation, or use of this electronic information.
 5. Receiver shall understand that even though Engineer has computer virus scanning software to detect presence of computer viruses, there is no guarantee that computer viruses are not present in files or in electronic media.
 6. Receiver shall not hold Engineer responsible for such viruses or their consequences, and shall hold Engineer harmless against costs, losses, or damage caused by presence of computer virus in files or media.
 7. Conditions listed in Section 01 32 16 "Submittal Procedures" Article 1.3.
- C. Costs: \$100 per file, plus \$0.825 sales tax per request paid in advance by certified check or money order payable to Engineer.

1.8 SHOP DRAWINGS

- A. Shop Drawings: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. When required by individual Specification Sections, provide Shop Drawings signed and sealed by a Professional Engineer responsible for designing components shown on Shop Drawings.
 1. Include signed and sealed calculations to support design.
 2. Submit Shop Drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- D. Post electronic submittals as PDF electronic files to Project website.
- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for Record Documents described in Section 01 70 00 "Execution and Closeout Requirements."

1.9 SAMPLES

- A. Samples: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Samples for Selection as Specified in Product Sections:
 1. Submit to Engineer for aesthetic, color, and finish selection.
 2. Submit Samples of finishes, textures, and patterns for Engineer selection.
- C. Submit Samples to illustrate functional and aesthetic characteristics of products, with integral parts and attachment devices. Coordinate Sample submittals for interfacing work.
- D. Include identification on each Sample, with full Project information.
- E. Submit number of Samples specified in individual Specification Sections; Engineer will retain one Sample.
- F. Reviewed Samples that may be used in the Work are indicated in individual Specification Sections.

- G. Samples will not be used for testing purposes unless specifically stated in Specification Section.
- H. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 "Execution and Closeout Requirements."

1.10 OTHER SUBMITTALS

- A. Closeout Submittals: Comply with Section 01 70 00 "Execution and Closeout Requirements."
- B. Informational Submittal: Submit data for Engineer's knowledge as Contract Administrator or for Owner.
- C. Submit information for assessing conformance with information given and design concept expressed in Contract Documents.

1.11 TEST REPORTS

- A. Informational Submittal: Submit reports for Engineer's knowledge as Contract Administrator or for Owner.
- B. Submit test reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

1.12 CERTIFICATES

- A. Informational Submittal: Submit certification by manufacturer, installation/application Subcontractor, or Contractor to Engineer, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product but must be acceptable to Engineer.

1.13 MANUFACTURER'S INSTRUCTIONS

- A. Informational Submittal: Submit manufacturer's installation instructions for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, to Engineer in quantities specified for Product Data.
- C. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.14 MANUFACTURER'S FIELD REPORTS

- A. Informational Submittal: Submit reports for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit report within 5 days of observation to Engineer for information.
- C. Submit reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

1.15 ERECTION DRAWINGS

- A. Informational Submittal: Submit Drawings for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit Drawings for information assessing conformance with information given and design concept expressed in Contract Documents.
- C. Data indicating inappropriate or unacceptable Work may be subject to action by Engineer or Owner.

1.16 CONSTRUCTION PHOTOGRAPHS

- A. Provide photographs of Site and construction throughout progress of Work produced by an experienced photographer acceptable to Engineer.
- B. Submit photographs showing pre-construction conditions with first Application for Payment. Payment application will not be considered complete without pre-construction photos.
- C. Digital Images: Deliver complete set of digital image electronic files on CD-ROM to Owner with Project Record Documents or post to Project website. Identify electronic media with date photographs were taken. Submit images that have same aspect ratio as sensor, uncropped.
 - 1. Digital Images: Uncompressed TIFF format, produced by digital camera with minimum sensor size of 4.0 megapixels, and image resolution of not less than pixels.
 - 2. Date and Time: Include date and time in filename for each image.

1.17 CONTRACTOR REVIEW

- A. Review for compliance with Contract Documents and approve submittals before transmitting to Engineer and Construction Manager.
- B. Contractor: Responsible for:
 - 1. Determination and verification of materials including manufacturer's catalog numbers.
 - 2. Determination and verification of field measurements and field construction criteria.
 - 3. Checking and coordinating information in submittal with requirements of Work and of Contract Documents.
 - 4. Determination of accuracy and completeness of dimensions and quantities.
 - 5. Confirmation and coordination of dimensions and field conditions at Site.
 - 6. Construction means, techniques, sequences, and procedures.
 - 7. Safety precautions.
 - 8. Coordination and performance of Work of all trades.
- C. Stamp, sign or initial, and date each submittal to certify compliance with requirements of Contract Documents.
- D. Do not fabricate products or begin Work for which submittals are required until approved submittals have been received from Engineer.

1.18 ARCHITECT/ENGINEER REVIEW

- A. Do not make "mass submittals" to Engineer. "Mass submittals" are defined as six or more submittals or items in one day or 15 or more submittals or items in one week. If "mass submittals" are received, Engineer's review time stated above will be extended as necessary to perform proper review. Engineer will review "mass submittals" based on priority determined by Engineer after consultation with Owner and Construction Manager.

- B. Informational submittals and other similar data are for Engineer's information, do not require Engineer's responsive action, and will not be reviewed or returned with comment.
- C. Submittals made by Contractor that are not required by Contract Documents may be returned without action.
- D. Submittal approval does not authorize changes to Contract requirements unless accompanied by Change Order or Field Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 40 00 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Quality control.
 - 2. Tolerances.
 - 3. References.
 - 4. Labeling.
 - 5. Mockup requirements.
 - 6. Testing and inspection services.
 - 7. Manufacturers' field services.
- B. Related Requirements:
 - 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 QUALITY CONTROL

- A. Monitor quality control over suppliers, manufacturers, products, services, Site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with specified standards as the minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- C. Perform Work using persons qualified to produce required and specified quality.
- D. Products, materials, and equipment may be subject to inspection by Engineer and Owner at place of manufacture or fabrication. Such inspections shall not relieve Contractor of complying with requirements of Contract Documents.
- E. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.

1.3 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' recommended tolerances and tolerance requirements in reference standards. When such tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

1.4 REFERENCES

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current as of date for receiving Bids except where specific date is established by code.
- C. Obtain copies of standards and maintain on Site when required by product Specification Sections.

- D. When requirements of indicated reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference in reference documents.

1.5 LABELING

- A. Attach label from agency approved by authorities having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label:
 - 1. Model number.
 - 2. Serial number.
 - 3. Performance characteristics.
- C. Manufacturer's Nameplates, Trademarks, Logos, and Other Identifying Marks on Products: Not allowed on surfaces exposed to view in public areas, interior or exterior.

1.6 MOCK-UP REQUIREMENTS

- A. Tests will be performed under provisions identified in this Section and identified in individual product Specification Sections.
- B. Assemble and erect specified or indicated items with specified or indicated attachment and anchorage devices, flashings, seals, and finishes.
- C. Accepted mockups shall be comparison standard for remaining Work.
- D. Where mockup has been accepted by Engineer and is specified in product Specification Sections to be removed, remove mockup and clear area when directed to do so by Engineer.

1.7 TESTING AND INSPECTION SERVICES

- A. Employ and pay for services of an independent testing agency or laboratory acceptable to Owner to perform specified testing.
 - 1. Before starting Work, submit testing laboratory name, address, and telephone number, and names of full-time specialist and responsible officer.
 - 2. Submit copy of report of laboratory certificate of compliance with Texas Commission on Environmental Quality's requirements.
- B. Testing, inspections, and source quality control may occur on or off Project Site. Perform off-Site testing as required by Engineer or Owner.
- C. Reports shall be submitted by independent firm to Engineer, Contractor, and authorities having jurisdiction, in duplicate, indicating observations and results of tests and compliance or noncompliance with Contract Documents.
 - 1. Submit final report indicating correction of Work previously reported as noncompliant.
- D. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
 - 1. Notify Engineer and independent firm 24 hours before expected time for operations requiring services.
 - 2. Make arrangements with independent firm and pay for additional Samples and tests required for Contractor's use.
- E. Employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work according to requirements of Contract Documents.

- F. Retesting or re-inspection required because of nonconformance with specified or indicated requirements shall be performed by same independent firm on instructions from Engineer. Payment for retesting or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.
- G. Agency Responsibilities:
 - 1. Test Samples of mixes submitted by Contractor.
 - 2. Provide qualified personnel at Site. Cooperate with Engineer and Contractor in performance of services.
 - 3. Perform indicated sampling and testing of products according to specified standards.
 - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 5. Promptly notify Engineer and Contractor of observed irregularities or nonconformance of Work or products.
 - 6. Perform additional tests required by Engineer.
 - 7. Attend preconstruction meetings and progress meetings.
- H. Agency Reports: After each test, promptly submit two copies of report to Engineer, Contractor, and authorities having jurisdiction. When requested by Engineer, provide interpretation of test results. Include the following:
 - 1. Date issued.
 - 2. Project title and number.
 - 3. Name of inspector.
 - 4. Date and time of sampling or inspection.
 - 5. Identification of product and Specification Section.
 - 6. Location in Project.
 - 7. Type of inspection or test.
 - 8. Date of test.
 - 9. Results of tests.
 - 10. Conformance with Contract Documents.
- I. Limits on Testing Authority:
 - 1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency or laboratory may not approve or accept any portion of the Work.
 - 3. Agency or laboratory may not assume duties of Contractor.
 - 4. Agency or laboratory has no authority to stop the Work.

1.8 MANUFACTURER'S FIELD SERVICES

- A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe Site conditions, conditions of surfaces and installation, quality of workmanship, startup of equipment, testing, adjusting, and balancing of equipment, and commissioning as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Engineer 30 days in advance of required observations. Observer is subject to approval of Owner.
- C. Report observations and Site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.
- D. Refer to Section 01 33 00 "Submittal Procedures," "Manufacturer's Field Reports" Article.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 50 00 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Temporary facilities under Construction Management Agreement.
 - 2. Temporary Utilities:
 - a. Temporary electricity.
 - b. Temporary lighting for construction purposes.
 - c. Temporary water service.
 - d. Temporary sanitary facilities.
 - 3. Construction Facilities:
 - a. Field offices and sheds.
 - b. Vehicular access.
 - c. Parking.
 - d. Progress cleaning and waste removal.
 - e. Project identification.
 - f. Traffic regulation.
 - g. Fire-prevention facilities.
 - 4. Temporary Controls:
 - a. Barriers.
 - b. Enclosures and fencing.
 - c. Security.
 - d. Water control.
 - e. Dust control.
 - f. Erosion and sediment control.
 - g. Noise control.
 - h. Pest and rodent control.
 - i. Pollution control.
 - 5. Removal of utilities, facilities, and controls.
- B. Related Requirements:
 - 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 TEMPORARY ELECTRICITY

- A. Provide and pay for power service required from utility or other sources as needed for construction operation.

1.3 TEMPORARY WATER SERVICE

- A. Provide and pay for suitable quality water service as needed to maintain specified conditions for construction operations.

1.4 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Existing facility use is not permitted. Provide facilities at time of Project mobilization.

1.5 FIELD OFFICES AND SHEDS

- A. Designated existing spaces may be used for field offices and for storage:
 - 1. Areas approved by Owner.
- B. Storage Areas and Sheds: Size to storage requirements for products of individual Sections, allowing for access and orderly provision for maintenance and inspection of products to suit requirements in Section 01 60 00 "Product Requirements."
- C. Preparation: Fill and grade Sites for temporary structures sloped for drainage away from buildings.

1.6 VEHICULAR ACCESS

- A. Construct temporary access roads from public thoroughfares to serve construction area, of width and load-bearing capacity to accommodate unimpeded traffic for construction purposes.
- B. Construct temporary bridges and culverts to span low areas and allow unimpeded drainage.
- C. Extend and relocate vehicular access as Work progress requires and provide detours as necessary for unimpeded traffic flow.
- D. Locate as approved by Owner.
- E. Provide unimpeded access for emergency vehicles. Maintain 20-foot-wide driveways with turning space between and around combustible materials.
- F. Provide and maintain access to fire hydrants and control valves free of obstructions.
- G. Provide means of removing mud from vehicle wheels before entering streets.
- H. Use designated existing on-Site roads for construction traffic.

1.7 PARKING

- A. Provide temporary gravel surface parking areas to accommodate construction personnel.
- B. Locate as approved by Owner.
- C. If Site space is not adequate, provide additional off-Site parking.
- D. Use of existing on-Site streets and driveways used for construction traffic is permitted. Tracked vehicles are not allowed on paved areas.
- E. Use of existing parking facilities used by construction personnel is permitted.
- F. Do not allow heavy vehicles or construction equipment in parking areas.
- G. Do not allow vehicle parking on existing pavement.
- H. Maintenance:
 - 1. Maintain traffic and parking areas in sound condition free of excavated material, construction equipment, products, mud, snow, ice, and the like.
 - 2. Maintain existing paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original condition.
- I. Removal, Repair:
 - 1. Remove temporary materials and construction at Substantial Completion.
 - 2. Remove underground Work and compacted materials to depth of 2 eet; fill and grade Site as indicated.
 - 3. Repair existing facilities damaged by use, to original condition.
- J. Mud from Site vehicles: Provide means of removing mud from vehicle wheels before entering streets.

1.8 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain Site in clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, before enclosing spaces.
- C. Broom and vacuum clean interior areas before starting surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and rubbish from Site as needed and dispose of off-Site.
- E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.9 TRAFFIC REGULATION

- A. Signs, Signals, and Devices:
 - 1. Post-Mounted and Wall-Mounted Traffic Control and Informational Signs: As approved by authorities having jurisdiction.
 - 2. Automatic Traffic Control Signals: As approved by local jurisdictions.
 - 3. Traffic Cones, Drums, Flares, and Lights: As approved by authorities having jurisdiction.
 - 4. Flag Person Equipment: As required by authorities having jurisdiction.
- B. Flag Persons: Provide trained and equipped flag persons to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- C. Flares and Lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.
- D. Haul Routes:
 - 1. Consult with authorities having jurisdiction and establish public thoroughfares to be used for haul routes and Site access.

1.10 FIRE-PREVENTION FACILITIES

- A. Establish fire watch for cutting, welding, and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.

1.11 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, while also allowing for Owner's use of Site, and to protect existing facilities and adjacent properties from damage from construction operations.

1.12 SECURITY

- A. Security Program:
 - 1. Protect Work on existing premises from theft, vandalism, and unauthorized entry.
 - 2. Initiate program at Project mobilization.
 - 3. Maintain program throughout construction period until Final Completion.

- B. Entry Control:
 - 1. Restrict entrance of persons and vehicles to Project Site and existing facilities.
 - 2. Allow entrance only to authorized persons with proper identification.
 - 3. Owner will control entrance of persons and vehicles related to Owner's operations.

1.13 WATER CONTROL

- A. Grade Site to drain. Maintain excavations free of water. Provide, operate, and maintain necessary pumping equipment.
- B. Protect Site from puddles or running water. Provide water barriers as required to protect Site from soil erosion.

1.14 DUST CONTROL

- A. Execute Work by methods that minimize raising dust from construction operations.
- B. Provide positive means to prevent airborne dust from dispersing into atmosphere.

1.15 EROSION AND SEDIMENT CONTROL

- A. Follow requirements of Section 01 57 23 "Temporary Stormwater Pollution Control."
- B. Plan and execute construction by methods to control surface drainage from cuts and fills from borrow and waste disposal areas. Prevent erosion and sedimentation.
- C. Minimize surface area of bare soil exposed at one time.
- D. Provide temporary measures including berms, dikes, drains, and other devices to prevent water flow.
- E. Construct fill and waste areas by selective placement to avoid erosive surface silts and clays.
- F. Periodically inspect earthwork to detect evidence of erosion and sedimentation. Promptly apply corrective measures.

1.16 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances and pollutants produced by construction operations.
- B. Comply with pollution and environmental control requirements of authorities having jurisdiction.

1.17 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials before Substantial Completion inspection.
- B. Remove underground installations to minimum depth of 2 feet, unless otherwise indicated on Drawings.
- C. Clean and repair damage caused by installation or use of temporary Work.
- D. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 57 23 - TEMPORARY STORMWATER POLLUTION CONTROL

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Contractor responsibilities.
 - 2. Submittals.
 - 3. Erosion and sediment controls.
- B. Related Requirements:
 - 1. Local jurisdiction requirements.
 - 2. Division 01 Specification Sections apply to Work of this Section.

1.2 CONTRACTOR RESPONSIBILITIES

- A. Contractor is solely responsible for meeting all TCEQ and EPA requirements for stormwater pollution prevention:
 - 1. Develop a Stormwater Pollution Prevention Plan (SWPPP);
 - 2. File Notice of Intent (NOI) and include Owner as an "Operator;"
 - 3. Install and maintain all erosion control measures and best management practices (BMPs);
 - 4. Perform inspections and prepare reports; and
 - 5. File Notice of Termination (NOT).

1.3 SUBMITTALS

- A. Submit to Engineer, SWPPP, Submittal Procedures, and all other related documentation conforming to Section 01 33 00 "Submittal Procedures."

1.4 EROSION AND SEDIMENT CONTROLS

- A. Implement structural measures to divert flows from exposed soils, temporarily store flows, or otherwise limit run-off and discharge of pollutants from exposed areas of site. Timely implement structural practices as specified in SWPPP during construction to minimize erosion and sediment run-off.
- B. Stabilized Ingress/Egress:
 - 1. Provide stabilized access to/from construction site as soon as practical per SWPPP.
 - 2. Ensure any soil tracked off-site is cleaned from existing roads, alleys, and any adjacent properties as soon as possible. Check for any pollutants (mud, silt, sand, cement, construction materials, etc.) tracked or washed off-site and perform necessary clean-up measures at the end of each workday.
- C. Silt Fences/Diversion Berms: Provide as a temporary structural practice to minimize erosion and sediment runoff, as necessary. Properly install silt fences and/or diversion berms to effectively retain sediment immediately after completing each phase of Work where erosion would occur as sheet and rill erosion (clearing and grubbing, excavation, embankment, grading, etc.).

- D. Sand/Gravel Bags: Provide as a temporary structural practice to minimize erosion and sediment runoff. Properly place bags to effectively retain sediment immediately after completing each phase of Work (clearing and grubbing, excavation, embankment, grading, etc.) in each independent runoff area (after clearing and grubbing between ridge and drain, place bags as Work progresses, remove/replace/relocate bags as needed for Work to progress in drainage area). Replace sand/gravel bags no longer in good condition, as needed.
- E. Site Stabilization:
 - 1. Minimize surface area of base soil material at one time.
 - 2. Implement necessary stabilization measures including:
 - a. Temporary/permanent seeding/sodding.
 - b. Mulching.
 - c. Geotextiles.
 - d. Vegetative buffer strips.
 - e. Paving.
 - f. Rock riprap.
 - g. Rock-filled gabions.
 - h. Inlet protection.
 - 3. Implement stabilization measures per SWPPP.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 60 00 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Products.
 - 2. Product delivery requirements.
 - 3. Product storage and handling requirements.
 - 4. Product options.
 - 5. Equipment electrical characteristics and components.
- B. Related Requirements:
 - 1. Other Division 01 Specification Sections apply to Work of this Section.

1.2 PRODUCTS

- A. At minimum, comply with specified requirements and reference standards.
- B. Specified products define standard of quality, type, function, dimension, appearance, and performance required.
- C. Furnish products of qualified manufacturers that are suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise. Confirm that manufacturer's production capacity can provide sufficient product, on time, to meet Project requirements.
- D. Domestic Products: All iron and steel products produced through a manufacturing process and used in the Project shall be produced in the United States in accordance with Government Code Section 2252.202, et seq., as amended.
- E. Do not use materials and equipment removed from existing premises except as specifically permitted by Contract Documents.
- F. Furnish interchangeable components from same manufacturer for components being replaced.

1.3 PRODUCT DELIVERY REQUIREMENTS

- A. Transport and handle products according to manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products; use methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products according to manufacturer's instructions.
- B. Store products with seals and labels intact and legible.
- C. Store sensitive products in weathertight, climate-controlled enclosures in an environment suitable to product.
- D. For exterior storage of fabricated products, place products on sloped supports aboveground.
- E. Provide bonded off-Site storage and protection when Site does not permit on-Site storage or protection.

- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products; use methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Products complying with specified reference standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of one of manufacturers named and complying with Specifications; no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit Request for Substitution for any manufacturer not named, according to Section 01 25 00 "Substitution Procedures."

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Examination.
 - 2. Preparation.
 - 3. Coordination of Owner's portion of the Work.
 - 4. Field engineering.
 - 5. Execution.
 - 6. Cutting and patching.
 - 7. Protecting installed construction.
 - 8. Starting of systems.
 - 9. Demonstration and instruction.
 - 10. Testing, adjusting, and balancing.
 - 11. Closeout procedures.
 - 12. Project record documents.
 - 13. Operation and maintenance data.
 - 14. Manual for materials and finishes.
 - 15. Manual for equipment and systems.
 - 16. Spare parts and maintenance products.
 - 17. Product warranties and product bonds.
 - 18. Maintenance service.
 - 19. Final cleaning.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 EXAMINATION

- A. Verify that existing Site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual Specification Sections.
- D. Verify that utility services are available with correct characteristics and in correct locations.

1.3 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance according to manufacturer's instructions.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer-required or -recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

1.4 FIELD ENGINEERING

- A. Employ land surveyor registered in State of Texas and acceptable to Owner.
- B. Locate and protect survey controls and reference points. Promptly notify Engineer of discrepancies discovered.
- C. Control datum for survey is established by Owner-provided survey and indicated on Drawings.
- D. Verify setbacks and easements; confirm Drawing dimensions and elevations.
- E. Provide field engineering services. Establish elevations, lines, and levels using recognized engineering survey practices.
- F. Submit copy of certificate signed by land surveyor certifying elevations and locations of the Work are in conformance with Contract Documents.
- G. Maintain complete and accurate log of control and survey Work as Work progresses.
- H. Protect survey control points prior to starting Site Work; preserve permanent reference points during construction.
- I. Promptly report to Engineer loss or destruction of reference point or relocation required because of changes in grades or other reasons.
- J. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Engineer.

1.5 EXECUTION

- A. Comply with manufacturer's installation instructions, performing each step in sequence. Maintain one set of manufacturer's installation instructions at Project Site during installation and until completion of construction.
- B. When manufacturer's installation instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Verify that field measurements are as indicated on approved Shop Drawings or as instructed by manufacturer.
- D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
 - 1. Secure Work true to line and level and within specified tolerances, or if not specified, industry-recognized tolerances.
 - 2. Physically separate products in place and provide electrical insulation or protective coatings to prevent galvanic action or corrosion between dissimilar metals.
 - 3. Exposed Joints: Provide uniform joint width and arrange to obtain best visual effect. Refer questionable visual effect choices to Engineer for final decision.
- E. Allow for expansion of materials and building movement.
- F. Climatic Conditions and Project Status: Install each unit of Work under conditions to ensure best possible results in coordination with entire Project.
 - 1. Isolate each unit of Work from incompatible Work as necessary to prevent deterioration.
 - 2. Coordinate enclosure of Work with required inspections and tests to minimize necessity of uncovering Work for those purposes.
- G. Mounting Heights: Where not indicated, mount individual units of Work at industry-recognized standard mounting heights for particular application indicated.
 - 1. Refer questionable mounting height choices to Engineer for final decision.
 - 2. Elements Identified as Handicap Accessible: Comply with applicable codes and regulations.

- H. Adjust operating products and equipment to ensure smooth and unhindered operation.
- I. Clean and perform maintenance on installed Work as frequently as necessary through remainder of construction period. Lubricate operable components as recommended by manufacturer.

1.6 CUTTING AND PATCHING

- A. Employ skilled and experienced Installers to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements affecting the following:
 - 1. Structural integrity of element.
 - 2. Integrity of weather-exposed or moisture-resistant elements.
 - 3. Efficiency, maintenance, or safety of element.
 - 4. Visual qualities of sight-exposed elements.
 - 5. Work of Owner or separate Contractor.
- C. Execute cutting, fitting, and patching, including excavation and fill. to complete Work and to accomplish the following:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install or correct ill-timed Work.
 - 3. Remove and replace defective and nonconforming Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Execute Work by methods to avoid damage to other Work and to provide proper surfaces to receive patching and finishing.
- E. Cut masonry and concrete materials using masonry saw or core drill.
- F. Restore Work with new products according to requirements of Contract Documents.
- G. Fit Work tight to pipes, sleeves, ducts, conduits, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- I. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.
- J. Identify the hazardous substances or conditions exposed during the Work to Engineer for decision or remedy.

1.7 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual Specification Sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate Work area to prevent damage.
- C. Prohibit traffic from landscaped areas.

1.8 STARTING OF SYSTEMS

- A. Coordinate schedule for startup of various equipment and systems.
- B. Notify Engineer 14 days prior to startup of each item. Start up date shall not be scheduled until proposed date has been accepted by Owner and Engineer.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- D. Verify that tests, meter readings, and electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.

- F. Execute startup under supervision of manufacturer's representative or Contractors' personnel according to manufacturer's instructions.
- G. When specified in individual Specification Sections, require manufacturer to provide authorized representative who will be present at Site to inspect, check, and approve equipment or system installation prior to startup and will supervise placing equipment or system in operation.
- H. Submit a written report in accordance with Section 01 33 00 "Submittal Procedures" stating that equipment or system has been properly installed and is functioning correctly.

1.9 CLOSEOUT PROCEDURES

- A. Prerequisites to Substantial Completion: Complete following items before requesting Certification of Substantial Completion, either for entire Work or for portions of Work:
 - 1. Submit maintenance manuals, Project record documents, digital images of construction photographs, and other similar final record data in compliance with this Section.
 - 2. Complete facility startup, testing, adjusting, balancing of systems and equipment, demonstrations, and instructions to Owner's operating and maintenance personnel as specified in compliance with this Section.
 - 3. Conduct inspection to establish basis for request that Work is substantially complete. Create comprehensive list (initial punch list) indicating items to be completed or corrected, value of incomplete or nonconforming Work, reason for being incomplete, and date of anticipated completion for each item. Include copy of list with request for Certificate of Substantial Completion.
 - 4. Obtain and submit releases enabling Owner's full, unrestricted use of Project and access to services and utilities. Include certificate of occupancy, operating certificates, and similar releases from authorities having jurisdiction and utility companies.
 - 5. Deliver tools, spare parts, extra stocks of material, and similar physical items to Owner.
 - 6. Make final change-over of locks and transmit keys directly to Owner. Advise Owner's personnel of change-over in security provisions.
 - 7. Discontinue or change over and remove temporary facilities and services from Project Site, along with construction tools, mockups, and similar elements.
 - 8. Perform final cleaning according to this Section.
- B. Substantial Completion Inspection:
 - 1. When Contractor considers Work to be substantially complete, submit to Engineer:
 - a. Written certificate that Work, or designated portion, is substantially complete.
 - b. List of items to be completed or corrected (initial punch list).
 - 2. Within 7 days after receipt of request for Substantial Completion, Engineer will make inspection to determine whether Work or designated portion is substantially complete.
 - 3. Should Engineer determine that Work is not substantially complete:
 - a. Engineer will promptly notify Contractor in writing, stating reasons for its opinion.
 - b. Contractor shall remedy deficiencies in Work and send second written request for Substantial Completion to Engineer.
 - c. Engineer will reinspect Work.
 - d. Redo and Inspection of Deficient Work: Repeated until Work passes Engineer's inspection.

4. When Engineer finds that Work is substantially complete, Engineer will:
 - a. Prepare Certificate of Substantial Completion on EJCDC C-625 - Certificate of Substantial Completion , accompanied by Contractor's list of items to be completed or corrected as verified and amended by Engineer and Owner (final punch list).
 - b. Submit Certificate to Owner and Contractor for their written acceptance of responsibilities assigned to them in Certificate.
5. After Work is substantially complete, Contractor shall:
 - a. Allow Owner occupancy of Project under provisions stated in Certificate of Substantial Completion.
 - b. Complete Work listed for completion or correction within time period stipulated.
- C. Prerequisites for Final Completion: Complete following items before requesting final acceptance and final payment.
 1. When Contractor considers Work to be complete, submit written certification that:
 - a. Contract Documents have been reviewed.
 - b. Work has been examined for compliance with Contract Documents.
 - c. Work has been completed according to Contract Documents.
 - d. Work is completed and ready for final inspection.
 2. Submittals: Submit following:
 - a. Final punch list indicating all items have been completed or corrected.
 - b. Final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 - c. Specified warranties, workmanship/maintenance bonds, maintenance agreements, and other similar documents.
 - d. Accounting statement for final changes to Contract Sum.
 - e. Contractor's affidavit of payment of debts and claims on AIA G706 - Contractor's Affidavit of Payment of Debts and Claims.
 - f. Contractor affidavit of release of liens on AIA G706A - Contractor's Affidavit of Release of Liens.
 - g. Consent of surety to final payment on AIA G707 - Consent of Surety to Final Payment Form.
 3. Perform final cleaning for Contractor-soiled areas according to this Section.
- D. Final Completion Inspection:
 1. Within 7 days after receipt of request for final inspection, Engineer will make inspection to determine whether Work or designated portion is complete.
 2. Should Engineer consider Work to be incomplete or defective:
 - a. Engineer will promptly notify Contractor in writing, listing incomplete or defective Work.
 - b. Contractor shall remedy stated deficiencies and send second written request to Engineer that Work is complete.
 - c. Engineer will reinspect Work.
 - d. Redo and Inspection of Deficient Work: Repeated until Work passes Engineer's inspection.

1.10 PROJECT RECORD DOCUMENTS

- A. Maintain on Site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed Shop Drawings, product data, and Samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store Record Documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record, at each product Section, description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates used.
 - 3. Changes made by Addenda, bulletin, Change Order, and modifications.
- F. Record Drawings: Legibly mark each item to record actual construction as follows:
 - 1. Include Contract modifications such as Addenda, supplementary instructions, change directives, field orders, minor changes in the Work, and change orders.
 - 2. Include locations of concealed elements of the Work.
 - 3. Identify depth of buried utility lines and provide dimensions showing distances from permanent facility components that are parallel to utilities.
 - 4. Dimension ends, corners, and junctions of buried utilities to permanent facility components using triangulation.
 - 5. Identify and locate existing buried or concealed items encountered during Project.
 - 6. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 7. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
 - 8. Field changes of dimension and detail.
 - 9. Details not on original Drawings.
- G. Submit marked-up paper copy documents to Engineer with claim for final Application for Payment.
- H. Submit PDF electronic files of marked-up documents to Engineer with claim for final Application for Payment.

1.11 OPERATION AND MAINTENANCE DATA

- A. Submit in PDF composite electronic indexed file.
- B. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

- C. Contents: Prepare table of contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by process flow and subdivided by Specification Section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Include the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - g. Safety precautions to be taken when operating and maintaining or working near equipment.
 - 3. Part 3: Project documents and certificates, including the following:
 - a. Shop Drawings and product data.
 - b. Air and water balance reports.
 - c. Certificates.
 - d. Originals of warranties and bonds.

1.12 MANUAL FOR MATERIALS AND FINISHES

- A. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Engineer will review draft and return one copy with comments.
- B. For equipment or component parts of equipment put into service during construction and operated by Owner, submit documents within ten days after acceptance.
- C. Submit one copy of completed volumes 15 days prior to Final Inspection.

1.13 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Furnish spare parts, maintenance, and extra products in quantities specified in individual Specification Sections.
- B. Deliver to place in location as directed by Owner; obtain receipt prior to final payment.

1.14 FINAL CLEANING

- A. Execute final cleaning prior to final walk through inspection.
- B. Return Site to original or better condition.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

DIVISION 03
CONCRETE

SECTION 03 10 00 - CONCRETE FORMING AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Formwork for cast-in-place concrete.
 - 2. Shoring, bracing, and anchorage.
 - 3. Architectural form liners.
 - 4. Form accessories.
 - 5. Form stripping.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 03 20 00 "Concrete Reinforcing" for reinforcing steel and required supports for cast-in-place concrete.

1.2 REFERENCE STANDARDS

- A. American Concrete Institute:
 - 1. ACI 117 - Specification for Tolerances for Concrete Construction and Materials.
 - 2. ACI 301 - Specifications for Structural Concrete.
 - 3. ACI 318 - Building Code Requirements for Structural Concrete.
 - 4. ACI 347 - Guide to Formwork for Concrete.
- B. American Forest & Paper Association:
 - 1. AF&PA - National Design Specification (NDS) for Wood Construction.
- C. APA - The Engineered Wood Association:
 - 1. APA/EWA PS 1 - Voluntary Product Standard - Structural Plywood.
- D. ASTM International:
 - 1. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
 - 2. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
- E. West Coast Lumber Inspection Bureau:
 - 1. WCLIB - Standard No. 17 Grading Rules for West Coast Lumber.

1.3 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Coordinate Work of this Section with other Sections of Work in forming and placing openings, slots, reglets, recesses, sleeves, bolts, anchors, other inserts, and components of other Work.

1.4 QUALITY ASSURANCE

- A. Perform Work according to ACI 347, 301, and 318.
- B. For wood products furnished for Work of this Section, comply with AF&PA.
- C. Perform Work according to City of Midland standards.

PART 2 - PRODUCTS

2.1 PERFORMANCE AND DESIGN CRITERIA

- A. Design, engineer, and construct formwork, shoring, and bracing according to ACI 318 to conform to design and applicable code requirements to achieve concrete shape, line, and dimension as indicated on Drawings.

2.2 WOOD FORM MATERIALS

- A. Form Materials: At discretion of Contractor.

2.3 PREFABRICATED FORMS

- A. Manufacturers:
 - 1. EFCO - Economy Forms Corp.
 - 2. Molded Fiber Glass Construction Products.
 - 3. Sonoco Products Co.
 - 4. Symons by Dayton Superior.
 - 5. Wall-Ties & Forms, Inc.
 - 6. Western Forms.
 - 7. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- B. Preformed Steel Forms:
 - 1. Description: Matched, tightly fitted, and stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished surfaces.
 - 2. Minimum Thickness: 16 gage.
- C. FRP Forms: Matched, tightly fitted, and stiffened to support weight of concrete without deflection detrimental to tolerances and appearance of finished concrete surfaces.
- D. Pan:
 - 1. Material: Steel.
 - 2. Configuration: Size and profile as required.
- E. Steel Forms:
 - 1. Description: Sheet steel, suitably reinforced.
 - 2. Design: For particular use as indicated on Drawings.
- F. Form Liners: Smooth, durable, grainless, and non-staining hardboard unless otherwise indicated on Drawings.
- G. Framing, Studding, and Bracing: Stud.

2.4 FORMWORK ACCESSORIES

- A. Form Ties:
 - 1. Type: Removable, snap off, or cone.
 - 2. Material: Galvanized.
 - 3. Length: Adjustable.
 - 4. Furnish waterproofing washer.
 - 5. Free of defects capable of leaving holes larger than 1-inch in concrete surface.

- 6. Manufacturers:
 - a. Heckmann Building Products, Inc.
 - b. Symons by Dayton Superior.
 - c. Wall-Ties & Forms, Inc.
 - d. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- B. Spreaders:
 - 1. Description: Standard, non-corrosive metal-form clamp assembly, of type acting as spreaders and leaving no metal within 1-inch of concrete face.
 - 2. Wire ties, wood spreaders, or through bolts are not permitted.
- C. Form Release Agent:
 - 1. Description: Colorless mineral oil that will not stain concrete or absorb moisture or impair natural bonding or color characteristics of coating intended for use on concrete.
 - 2. Manufacturers:
 - a. Architectural Concrete Chemicals, LLC.
 - b. Nox-Crete Products Group.
 - c. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- D. Vapor Retarder:
 - 1. Description: Polyethylene sheet.
 - 2. Thickness: 8 mils.
- E. Bituminous Joint Filler: Comply with ASTM D1751.
- F. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Size, strength, and character to maintain formwork in place while placing concrete.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify lines, levels, and centers before proceeding with formwork.
- C. Verify that dimensions agree with Shop Drawings.
- D. If formwork is placed after reinforcement resulting in insufficient concrete cover over reinforcement, request instructions from Engineer before proceeding.

3.2 INSTALLATION

- A. Earth Forms:
 - 1. Trench earth forms neatly, accurately, and at least 2 inches wider than footing widths indicated on Drawings.
 - 2. Trim sides and bottom of earth forms.
 - 3. Construct wood edge strips at top of each side of trench to secure reinforcing and to prevent trench from sloughing.
 - 4. Form sides of footings where earth sloughs.
 - 5. Tamp earth forms firm and clear them of debris and loose material before depositing concrete.

- B. Formwork:
1. Provide top form for sloped surfaces steeper than 1.5 horizontal to 1 vertical to hold shape of concrete during placement, unless it can be demonstrated that top forms can be omitted.
 2. Construct forms to correct shape and dimensions, mortar-tight, braced, and of sufficient strength to maintain shape and position under imposed loads from construction operations.
 3. Camber forms where necessary to produce level finished soffits unless indicated otherwise on Drawings.
 4. Positioning:
 - a. Carefully verify horizontal and vertical positions of forms.
 - b. Correct misaligned or misplaced forms before placing concrete.
 5. Complete wedging and bracing before placing concrete.
 6. Erect formwork, shoring, and bracing to achieve design requirements according to ACI 301.
 7. Stripping:
 - a. Arrange and assemble formwork to permit dismantling and stripping.
 - b. Do not damage concrete during stripping.
 - c. Permit removal of remaining principal shores.
 8. Obtain approval of Engineer before framing openings in structural members not indicated on Drawings.
 9. Install fillet and chamfer strips on external corners of beams, joists, and columns.
 10. Install void forms according to manufacturer instructions.
 11. Do not reuse wood formwork more than 3 times for concrete surfaces to be exposed to view.
 12. Do not patch formwork.
 13. Leave forms in place for minimum number of days according to ACI 347.
- C. Form Removal:
1. Do not remove forms or bracing until concrete has gained sufficient strength to carry its own weight and imposed loads, and removal has been approved by Engineer.
 2. Loosen forms carefully; do not wedge pry bars, hammers, or tools against finish concrete surfaces scheduled for exposure to view.
 3. Store removed forms in manner that surfaces to be in contact with fresh concrete will not be damaged.
 4. Discard damaged forms.
 5. Form Release Agent:
 - a. Apply according to manufacturer instructions.
 - b. Apply prior to placement of reinforcing steel, anchoring devices, and embedded items.
 - c. Do not apply form release agent if concrete surfaces are indicated to receive special finishes or applied coverings that may be affected by agent.
 - d. Soak inside surfaces of untreated forms with clean water, and keep surfaces coated prior to placement of concrete.
 6. Form Cleaning:
 - a. Clean forms as erection proceeds to remove foreign matter within forms.
 - b. Clean formed cavities of debris prior to placing concrete.
 - c. Flush with water or use compressed air to remove remaining foreign matter.
 - d. Ensure that water and debris drain to exterior through cleanout ports.
 - e. Cold Weather:
 - 1) During cold weather, remove ice and snow from within forms.
 - 2) Do not use de-icing salts.

- 3) Do not use water to clean out forms, unless formwork and concrete construction proceed within heated enclosure; use compressed air or other dry method to remove foreign matter.
7. Reuse and Coating of Forms:
 - a. Thoroughly clean forms and reapply form coating before each reuse.
 - b. For exposed Work, do not reuse forms with damaged faces or edges.
 - c. Apply form coating to forms according to manufacturer instructions.
 - d. Do not coat forms for concrete indicated to receive "scored finish."
 - e. Apply form coatings before placing reinforcing steel.
- D. Forms for Smooth Finish Concrete:
 1. Use steel, plywood, or lined-board forms.
 2. Use clean and smooth plywood and form liners, uniform in size, and free from surface and edge damage capable of affecting resulting concrete finish.
 3. Install form lining with close-fitting square joints between separate sheets without springing into place.
 4. Use full-sized sheets of form liners and plywood wherever possible.
 5. Tape joints to prevent protrusions in concrete.
 6. Apply forming and strip wood forms in a manner to protect corners and edges.
 7. Level and continue horizontal joints.
 8. Keep wood forms wet until stripped.
- E. Architectural Form Liners:
 1. Erect architectural side of formwork first.
 2. Attach form liner to forms before installing form ties.
 3. Install form liners square, with joints and pattern aligned.
 4. Seal form liner joints to prevent grout leaks.
 5. Dress joints and edges to match form liner pattern and texture.
- F. Forms for Surfaces to Receive Membrane Waterproofing:
 1. Use plywood or steel forms.
 2. After erection of forms, tape form joints to prevent protrusions in concrete.
- G. Framing, Studding, and Bracing:
 1. Maximum Spacing of Studs:
 - a. Boards: Maximum 16 inches o.c.
 - b. Plywood: 12 inches o.c.
 2. Size framing, bracing, centering, and supporting members for sufficient strength to maintain shape and position under imposed loads from construction operations.
 3. Construct beam soffits of material minimum 2 inches thick.
 4. Distribute bracing loads over base area on which bracing is erected.
 5. When placed on ground, protect against undermining, settlement, and accidental impact.
- H. Form Anchors and Hangers:
 1. Do not use anchors and hangers leaving exposed metal at concrete surface.
 2. Symmetrically arrange hangers supporting forms from structural-steel members to minimize twisting or rotation of member.
 3. Penetration of structural-steel members is not permitted.

- I. Inserts, Embedded Parts, and Openings:
 - 1. Install formed openings for items to be embedded in or passing through concrete Work.
 - 2. Locate and set in place items required to be cast directly into concrete.
 - 3. Install accessories straight, level, and plumb, and ensure that items are not disturbed during concrete placement.
 - 4. Joints:
 - a. Install waterstops continuous without displacing reinforcement.
 - 5. Openings:
 - a. Provide temporary ports or openings in formwork as required to facilitate cleaning and inspection.
 - b. Locate openings at bottom of forms to allow flushing water to drain.
 - 6. Close temporary openings with tight-fitting panels, flush with inside face of forms, and neatly fitted such that joints will not be apparent in exposed concrete surfaces.
- J. Form Ties:
 - 1. Provide sufficient strength and quantity to prevent spreading of forms.
 - 2. Place ties at least 1-inch away from finished surface of concrete.
 - 3. Leave inner rods in concrete when forms are stripped.
 - 4. Space form ties equidistant, symmetrical, and aligned vertically and horizontally unless indicated otherwise on Drawings.
- K. Arrange formwork to allow proper erection sequence and to permit form removal without damage to concrete.
- L. Construction Joints:
 - 1. Install surfaced pouring strip where construction joints intersect on exposed surfaces to provide straight line at joints.
 - 2. Just prior to subsequent concrete placement, remove strip and tighten forms to conceal shrinkage.
 - 3. Appearance:
 - a. Show no overlapping of construction joints.
 - b. Construct joints to present same appearance as butted plywood joints.
 - 4. Arrange joints in continuous line straight, true, and sharp.
- M. Embedded Items:
 - 1. Make provisions for pipes, sleeves, anchors, inserts, reglets, anchor slots, nailers, waterstops, and other features.
 - 2. Do not embed wood or uncoated aluminum in concrete.
 - 3. Obtain installation and setting information for embedded items furnished under other Sections.
 - 4. Securely anchor embedded items in correct location and alignment prior to placing concrete.
 - 5. Ensure that conduits and pipes, including those made of coated aluminum, meet requirements of ACI 318 regarding size and location limitations.
- N. Openings for Items Passing through Concrete:
 - 1. Frame openings in concrete where indicated on Drawings.
 - 2. Establish exact locations, sizes, and other conditions required for openings and attachment of Work specified under other Sections.
 - 3. Coordinate Work to avoid cutting and patching of concrete after placement.
 - 4. Perform cutting and repairing of concrete required as result of failure to provide required openings.
- O. Screeds:
 - 1. Set screeds and establish levels for tops of and finish on concrete slabs.
 - 2. Slope slabs to drain where required or as indicated on Drawings.

3. Before depositing concrete, remove debris from space to be occupied by concrete and thoroughly wet forms; remove freestanding water.
- P. Screed Supports:
 1. For concrete over waterproof membranes and vapor retarder membranes, use cradle pad, or base-type screed supports that will not puncture membrane.
 2. Staking through membrane is not permitted.
- Q. Cleanouts and Access Panels:
 1. Provide removable cleanout sections or access panels at bottoms of forms to permit inspection and effective cleaning of loose dirt, debris, and waste material.
 2. Clean forms and surfaces against which concrete is to be placed.
 3. Remove chips, sawdust, and other debris.
 4. Thoroughly blow out forms with compressed air just before concrete is placed.

3.3 TOLERANCES

- A. Construct formwork to maintain tolerances according to ACI 301 and 318.

3.4 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Inspection:
 1. Inspect erected formwork, shoring, and bracing to ensure that Work complies with formwork design and that supports, fastenings, wedges, ties, and items are secure.
 2. Notify Engineer after placement of reinforcing steel in forms but prior to placing concrete.
 3. Schedule concrete placement to permit formwork inspection before placing concrete.

END OF SECTION

SECTION 03 20 00 - CONCRETE REINFORCING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Reinforcing bars.
 - 2. Welded wire fabric.
 - 3. Reinforcement accessories.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 03 10 00 "Concrete Forming and Accessories" for form materials, waterstops, and accessories required to form cast-in-place concrete.
 - 3. Section 03 30 00 "Cast-in-Place Concrete" for cast-in-place or in-situ concrete for structural building frame, slabs on grade, and other concrete components associated with building.

1.2 REFERENCE STANDARDS

- A. American Concrete Institute:
 - 1. ACI 301 - Specifications for Structural Concrete.
 - 2. ACI 318 - Building Code Requirements for Structural Concrete.
- B. American Welding Society:
 - 1. AWS D1.4 - Structural Welding Code - Reinforcing Steel.
 - 2. AWS D1.4M - Structural Welding Code - Reinforcing Steel.
- C. ASTM International:
 - 1. ASTM A184 - Standard Specification for Welded Deformed Steel Bar Mats for Concrete Reinforcement.
 - 2. ASTM A615 - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
 - 3. ASTM A704 - Standard Specification for Welded Steel Plain Bar or Rod Mats for Concrete Reinforcement.
 - 4. ASTM A706 - Standard Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement.
 - 5. ASTM A767 - Standard Specification for Zinc-Coated (Galvanized) Steel Bars for Concrete Reinforcement.
 - 6. ASTM A775 - Standard Specification for Epoxy-Coated Steel Reinforcing Bars.
 - 7. ASTM A884 - Standard Specification for Epoxy-Coated Steel Wire and Welded Wire Reinforcement.
 - 8. ASTM A934 - Standard Specification for Epoxy-Coated Prefabricated Steel Reinforcing Bars.
 - 9. ASTM A996 - Standard Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement.
 - 10. ASTM A1064 - Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete.
- D. Concrete Reinforcing Steel Institute:
 - 1. CRSI 10-MSP - Manual of Standard Practice.
 - 2. CRSI 10PLACE - Placing Reinforcing Bars.

1.3 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Coordinate Work of this Section with placement of formwork, formed openings, and other Work.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Shop Drawings:
 - 1. Indicate bar sizes, spacings, locations, splice locations, and quantities of reinforcing steel.
 - 2. Indicate bending and cutting schedules.
 - 3. Indicate supporting and spacing devices.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Submit certified copies of mill test report of reinforcement materials analysis.
- E. Welder Certificates: Certify welders and welding procedures employed on Work, verifying AWS qualification within previous 12 months.
- F. Source Quality-Control Submittals: Indicate results of factory tests and inspections.
- G. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- H. Qualifications Statement:
 - 1. Welders: Qualify procedures and personnel according to AWS D1.1.

1.5 QUALITY ASSURANCE

- A. Perform Work according to ACI 301 and ACI 318.
- B. Prepare Shop Drawings according to ACI SP-66.
- C. Perform Work according to City of Midland standards.

1.6 QUALIFICATIONS

- A. Welders: AWS qualified within previous 12 months for employed weld types.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture by storing in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.

1.8 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

PART 2 - PRODUCTS

2.1 REINFORCEMENT

- A. Reinforcing Steel:
 - 1. Comply with ASTM A615.
 - 2. Yield Strength: 60 ksi.
 - 3. Billet Bars: Deformed.
 - 4. Finish: Uncoated.

2.2 FABRICATION

- A. Fabricate concrete reinforcement according to ACI 318.
- B. Form standard hooks for 90-degree bends, stirrups and tie hooks as indicated on Drawings.
- C. Form reinforcement bends with minimum diameters according to ACI 318.
- D. Fabricate column reinforcement with offset bends at reinforcement splices.
- E. Form spiral column reinforcement from minimum 3/8-inch-diameter continuous plain bar or wire.
- F. Form ties and stirrups from following:
 - 1. Bars No. 10 and Smaller: No. 3 deformed bars.
 - 2. Bars No. 11 and Larger: No. 4 deformed bars.
- G. Weld reinforcement according to AWS D1.4.
- H. Splicing:
 - 1. If not indicated on Drawings, locate reinforcement splices at point of minimum stress.

2.3 ACCESSORY MATERIALS

- A. Tie Wire:
 - 1. Minimum 16 gage, annealed type.
- B. Chairs, Bolsters, Bar Supports, and Spacers:
 - 1. Size and Shape: To strengthen and support reinforcement during concrete placement conditions.
- C. Special Chairs, Bolsters, Bar Supports, and Spacers Adjacent to Weather-Exposed Concrete Surfaces:
 - 1. Material: Plastic-coated steel.
 - 2. Size and Shape: To meet Project conditions.
- D. Reinforcing Splicing Devices:
 - 1. Type: Exothermic welding type; full tension and compression.
- E. Epoxy Coating Patching Material: Type as recommended by coating manufacturer.

2.4 SOURCE QUALITY CONTROL

- A. Provide shop inspection and testing of completed assembly.
- B. Refer to Section 01 40 00 "Quality Requirements" for requirements for testing, inspection, and analysis.
- C. Certificate of Compliance:
 - 1. If fabricator is approved by authorities having jurisdiction, submit certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.
 - 2. Specified shop tests are not required for Work performed by approved fabricator.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Place, support, and secure reinforcement against displacement.
- B. Do not deviate from required position beyond specified tolerance.
- C. Do not weld crossing reinforcement bars for assembly.
- D. Do not displace or damage vapor retarder.
- E. Accommodate placement of formed openings.
- F. Spacing:
 - 1. Space reinforcement bars with minimum clear spacing according to ACI 318.
 - 2. If bars are indicated in multiple layers, place upper bars directly above lower bars.
- G. Maintain minimum concrete cover around reinforcement according to ACI 318 as follows:
 - 1. Footings and Concrete Formed Against Earth: 3 inches.
 - 2. Concrete Exposed to Earth or Weather:
 - a. No. 6 Bars and Larger: 2 inches.
 - b. No. 5 Bars and Smaller: 1-1/2 inches.
 - 3. Supported Slabs, Walls, and Joists:
 - a. No. 14 Bars and Larger: 1-1/2 inches.
 - b. No. 11 Bars and Smaller: 3/4-inch.
 - 4. Beams and Columns: 1-1/2 inches.
 - 5. Shell and Folded Plate Members:
 - a. No. 6 Bars and Larger: 3/4-inch.
 - b. No. 5 Bars and Smaller: 1/2-inch.

3.2 TOLERANCES

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for tolerances.
- B. Install reinforcement within following tolerances for flexural members, walls, and compression members:
 - 1. Reinforcement Depth Greater Than 8 Inches:
 - a. Depth Tolerance: Plus or Minus 3/8-inch.
 - b. Concrete Cover Tolerance: Minus 3/8-inch.
 - 2. Reinforcement Depth Less Than or Equal to 8 Inches:
 - a. Depth Tolerance: Plus or Minus 1/2-inch.
 - b. Concrete Cover Tolerance: Minus 1/2-inch.
- C. Foundation Walls: Install reinforcement within tolerances according to ACI 530.

3.3 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Field inspection and testing will be performed by Owner's testing laboratory according to ACI 318.

END OF SECTION

SECTION 03 30 00 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide all materials and labor necessary to complete all concrete, plain and reinforced, as indicated on Drawings or as specified in these Specifications and as required to complete the Project. Work, without limiting the generality thereof, includes:
 - 1. Installation of concrete to provide pile caps, transfer beams, grade beams, footings, foundations, suspended slabs, building walls, elevator shaft walls, retaining walls, slabs on grade, electrical ductbanks, and other incidental concrete Work.
 - 2. Setting of utility structures to grade, setting of granite curb, setting of precast concrete curb, grouting around pipe at manholes, manhole bases, and general repairs caused by utility Work.
 - 3. Installation of concrete to provide bridge abutments, water retention vaults, sewage vaults, sewage clarifiers, and tunnel structures.
 - 4. Concrete slurry wall construction.
 - 5. Mass concrete foundations and related structures.
 - 6. Lightweight concrete at new composite slab locations.
 - 7. Concrete pads for mechanical equipment.
 - 8. Concrete fill in steel stairs.
 - 9. Furnishing and installation of admixtures.
 - 10. Work of other trades required to be built into concrete, such as inserts for connections to steel members, waterstops, flashing reglets, anchors, embedded plates, and reinforcing dowels.
 - 11. Providing vapor retarder or waterproofing membrane below slabs on grade.
 - 12. Finishing of concrete as specified herein or as indicated on Drawings.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 03 10 00 "Concrete Forming and Accessories" for formwork and accessories.
 - 3. Section 03 20 00 "Concrete Reinforcing" for requirements for reinforcing steel and supports.
 - 4. Section 31 23 16 "Excavation."
 - 5. Section 31 23 16.13 "Trenching."

1.2 DEFINITIONS

- A. Cementitious Materials: The materials that are subject to compliance with requirements, such as Portland cement alone or in combination with one or more of the following: Blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume.
- B. Conventional Concrete: A type of concrete that has a specified compressive strength of less than 8,000 psi.
- C. High-Strength Concrete (HSC): A type of concrete that has a specified compressive strength of 8,000 psi or greater.
- D. Self-Consolidating Concrete (SCC): A type of highly flowable, nonsegregating concrete that can spread into place, fill formwork, and encapsulate reinforcement without any mechanical consolidation.

- E. Strain Hardening: The ability to carry increasing tensile load beyond the point of first crack.
- F. Strain Softening: The ability to carry a reduced (but nonzero) tensile load beyond the point of first crack.
- G. Ultra-High-Performance Concrete: A type of concrete that has a minimum specified compressive strength of 22,000 psi with specified durability, tensile ductility, and toughness requirements; fibers are generally included to achieve specified requirements.
- H. Water-Cementitious Materials Ratio (w/cm): The ratio by weight of water to cementitious materials.

1.3 REFERENCE STANDARDS

- A. American Association of State Highway and Transportation Officials (AASHTO):
 - 1. AASHTO M182 - Standard Specification for Burlap Cloth Made from Jute or Kenaf and Cotton Mats.
- B. American Concrete Institute:
 - 1. ACI 117 - Specification for Tolerances for Concrete Construction and Materials.
 - 2. ACI 232.3R - Report on High-Volume Fly Ash Concrete for Structural Applications.
 - 3. ACI 228.1R - Report on Methods for Estimating In-Place Concrete Strength.
 - 4. ACI 239R - Ultra-High-Performance Concrete: An Emerging Technology Report.
 - 5. ACI 301 - Specifications for Structural Concrete.
 - 6. ACI 302.1R - Guide for Concrete Floor and Slab Construction.
 - 7. ACI 305R - Guide to Hot Weather Concreting.
 - 8. ACI 305.1 - Specification for Hot Weather Concreting.
 - 9. ACI 306.1 - Standard Specification for Cold Weather Concreting.
 - 10. ACI 306R - Guide to Cold Weather Concreting.
 - 11. ACI 308.1 - Specification for Curing Concrete.
 - 12. ACI 318 - Building Code Requirements for Structural Concrete.
 - 13. ACI 350.5 - Specifications for Environmental Concrete Structures.
 - 14. ACI 357.3R - Guide for Design and Construction of Waterfront and Coastal Concrete Marine Structures.
 - 15. ACI 362.1R - Guide for the Design and Construction of Durable Concrete Parking Structures.
 - 16. ACI 363.2R - Guide to Quality Control and Assurance of High-Strength Concrete.
 - 17. ACI 440R - Report on Fiber-Reinforced Polymer (FRP) Reinforcement for Concrete Structures.
- C. ASTM International:
 - 1. ASTM A820 - Standard Specification for Steel Fibers for Fiber-Reinforced Concrete
 - 2. ASTM C 31 - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
 - 3. ASTM C 33 - Standard Specification for Concrete Aggregates.
 - 4. ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 - 5. ASTM C 42 - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
 - 6. ASTM C 94 - Standard Specification for Ready-Mixed Concrete.
 - 7. ASTM C 143 - Standard Test Method for Slump of Hydraulic-Cement Concrete.
 - 8. ASTM C 150 - Standard Specification for Portland Cement.
 - 9. ASTM C 171 - Standard Specification for Sheet Materials for Curing Concrete.
 - 10. ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete.
 - 11. ASTM C 173 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.

12. ASTM C 231 - Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
13. ASTM C 260 - Standard Specification for Air-Entraining Admixtures for Concrete.
14. ASTM C 309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
15. ASTM C 330 - Standard Specification for Lightweight Aggregates for Structural Concrete.
16. ASTM C 494 - Standard Specification for Chemical Admixtures for Concrete.
17. ASTM C 567 - Standard Test Method for Determining Density of Structural Lightweight Concrete.
18. ASTM C 595 - Standard Specification for Blended Hydraulic Cements.
19. ASTM C 618 - Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
20. ASTM C 685 - Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing.
21. ASTM C 845 - Standard Specification for Expansive Hydraulic Cement.
22. ASTM C 881 - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete.
23. ASTM C 979 - Standard Specification for Pigments for Integrally Colored Concrete.
24. ASTM C 989 - Standard Specification for Slag Cement for Use in Concrete and Mortars.
25. ASTM C 1017 - Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete.
26. ASTM C 1059 - Standard Specification for Latex Agents for Bonding Fresh to Hardened Concrete.
27. ASTM C 1064 - Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete.
28. ASTM C 1074 - Standard Practice for Estimating Concrete Strength by the Maturity Method.
29. ASTM C 1077 - Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation.
30. ASTM C 1107 - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
31. ASTM C 1116 - Standard Specification for Fiber-Reinforced Concrete.
32. ASTM C 1157 - Standard Performance Specification for Hydraulic Cement.
33. ASTM C 1218 - Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.
34. ASTM C 1240 - Standard Specification for Silica Fume Used in Cementitious Mixtures.
35. ASTM C 1260 - Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method).
36. ASTM C 1293 - Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction.
37. ASTM C 1315 - Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.
38. ASTM C 1567 - Standard Test Method for Determining the Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method).
39. ASTM C 1602 - Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete.

40. ASTM C 1611 - Standard Test Method for Slump Flow of Self-Consolidating Concrete.
41. ASTM C 1778 - Standard Guide for Reducing the Risk of Deleterious Alkali-Aggregate Reaction in Concrete.
42. ASTM D994 - Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).
43. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
44. ASTM D1752 - Standard Specification for Preformed Sponge Rubber, Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction.
45. ASTM D6690 - Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
46. ASTM E154 - Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover.
47. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection.
48. ASTM E1155 - Standard Test Method for Determining FF Floor Flatness and FL Floor Levelness Numbers.
49. ASTM E1643 - Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs.
50. ASTM E1745 - Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
51. ASTM E1993 - Standard Specification for Bituminous Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs.
- D. Canadian Standards Association (CSA):
 1. CSA A23.1/A23.2 - Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete.
- E. National Ready Mixed Concrete Association (NRMCA):
 1. NRMCA - Certification of Ready Mixed Concrete Production Facilities.
- F. National Sanitation Foundation (NSF):
 1. NSF/ANSI Standard 61 - Drinking Water System Components - Health Effects.
- G. South Coast Air Quality Management District:
 1. SCAQMD Rule 1168 - Adhesive and Sealant Applications.
- H. U.S. Army Corps of Engineers:
 1. CRD-C 48 - Standard Test Method for Water Permeability of Concrete.

1.4 COORDINATION

- A. Coordinate placement of control and expansion joint devices with erection of concrete formwork and placement of form accessories.

1.5 SUBMITTALS

- A. Product Data: Submit data on the following:
 1. Portland cement.
 2. Fly ash.
 3. Slag cement.
 4. Blended hydraulic cement.
 5. Silica fume.

6. Performance-based hydraulic cement.
7. Aggregates.
8. Admixtures:
 - a. Include limitations of use, such as restrictions on cementitious materials, supplementary cementitious materials, air entrainment, aggregates, temperature at time of concrete placement, relative humidity at time of concrete placement, curing conditions, and use of other admixtures.
9. Color pigments.
10. Vapor retarders or waterproof membranes.
11. Curing materials:
12. Joint fillers.
13. Repair materials.
- B. Design Mixtures: For each concrete mixture, include the following:
 1. Mixture identification.
 2. Minimum 28-day compressive strength.
 3. Durability exposure class.
 4. Maximum water-cementitious materials ratio.
 5. Calculated equilibrium unit weight for lightweight concrete.
 6. Slump limit.
 7. Air content.
 8. Nominal maximum aggregate size.
 9. Steel-fiber reinforcement content.
 10. Synthetic micro-fiber content.
 11. Indicate amounts of mixing water to be withheld for later addition at Project Site, if permitted.
 12. Submit intended placement method.
 13. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
 14. Submit separate mix designs if admixtures are required for the following:
 - a. Hot and cold weather concrete Work.
 - b. Air-entrained concrete Work.
- C. Qualification Data: Submit data for the following:
 1. Installer: Include copies of applicable ACI certificates.
 2. Ready-mixed concrete manufacturer.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer Instructions: Submit installation procedures and interfacing required for adjacent Work.
- F. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.

1.6 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of embedded utilities and components concealed from view in finished construction.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified Installer employing Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor certified as ACI Flatwork Concrete Finisher/Technician, or an ACI Concrete Flatwork Technician with experience installing and finishing concrete.
- B. Ready-Mixed Concrete Manufacturer Qualifications: A firm experienced manufacturing ready-mixed concrete products that complies with ASTM C 94 requirements for production facilities and equipment.
 - 1. Manufacturer certified in accordance with NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- C. Concrete Testing Service: Employ and pay an independent testing laboratory, acceptable to Owner and Engineer, to perform material evaluation tests and to review concrete mix designs proposed by Contractor to conform to this Specification.
- D. Laboratory Testing Agency Qualifications: A testing agency qualified in accordance with ASTM C 1077 and ASTM E329 for testing indicated and employing an ACI-certified Concrete Quality Control Technical Manager.
 - 1. Personnel performing laboratory tests are required to be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician, Grade I. Testing agency laboratory supervisors are required to be ACI-certified Concrete Laboratory Testing Technician, Grade II.
- E. Alkali-Silica Reactivity Testing: Aggregates used in the concrete shall be tested by an independent testing agency for alkali-silica reactivity in accordance with ASTM C 1260. Agencies approved for this testing are as follows:
 - 1. American Engineering Testing, Inc., 350 Cleveland Avenue N, Saint Paul, MN 55224-1804.
 - 2. ATC Associates, Inc., 40 Strafello Drive, Avon, MA 02322-1169.
 - 3. CTL Group, 5400 Old Orchard Road, Skokie, IL 60077-1030.
 - 4. Simpson Gumpertz & Heger, 42 Seyon Street, Building 1, Suite 500, Waltham, MA 02453-8355.
- F. Additional Testing and Inspection Services:
 - 1. If required, Owner's testing agency will perform additional testing and inspection services to verify conformance to Contract Documents as listed below:
 - a. Inspect concrete batching, mixing, and delivery operations.
 - b. Inspect forms, foundation preparation, reinforcement, embedded items, reinforcement placement, and concrete placing, finishing, and curing operations.
 - c. Sample concrete at point of placement and other locations as directed by Engineer and perform required tests.
 - d. Review manufacturer's report for shipment of cement, reinforcement, and prestressing tendons, and conduct laboratory tests or spot checks of materials received for compliance with specifications.
 - e. Other testing or inspection services as required by Engineer.
 - 2. Provide Owner's testing agency with requested documentation and access to perform testing and inspection activities.

1.8 AMBIENT CONDITIONS

- A. Refer to Section 01 50 00 "Temporary Facilities and Controls" for requirements for ambient condition control facilities for product storage and installation.
- B. Cold-Weather Placement: Comply with ACI 301, ACI 306.1, and as follows:
 - 1. Protect concrete Work from physical damage or reduced strength caused by frost, freezing actions, or low temperatures.
 - 2. When average high and low temperature is expected to fall below 40 degrees F for 3 successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
 - 3. Do not use frozen materials or materials containing ice or snow.
 - 4. Do not place concrete in contact with surfaces less than 35 degrees F, other than reinforcing steel.
 - 5. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- C. Hot-Weather Placement: Comply with ACI 301 and ACI 305.1, and as follows:
 - 1. Maintain concrete temperature at time of discharge not to exceed 95 degrees F.
 - 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless modified by requirements in the Contract Documents.

2.2 CONCRETE MATERIALS

- A. Concrete Source Limitations:
 - 1. Obtain all concrete mixtures from a single ready-mixed concrete manufacturer for entire Project.
 - 2. Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant.
 - 3. Obtain aggregate from single source.
 - 4. Obtain each type of admixture from single source from single manufacturer.
- B. Concrete Components:
 - 1. Cement:
 - a. Comply with ASTM C 150, Type I - Normal and Type IA - Air Entraining.
 - b. Type: Portland.
 - 2. Normal Weight Aggregates:
 - a. Comply with ASTM C 33 uniform coarse aggregate or better, graded. Provide aggregates from a single source.
 - b. Coarse Aggregate Maximum Size: 1-1/2 inches nominal.
 - 3. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride in steel-reinforced concrete.
 - a. Air-Entraining Admixture: ASTM C 260.
 - b. Water-Reducing Admixture: ASTM C 494, Type A.

- c. Retarding Admixture: ASTM C 494, Type B.
- d. Water-Reducing and -Retarding Admixture: ASTM C 494, Type D.
- e. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
- f. High-Range, Water-Reducing and -Retarding Admixture: ASTM C 494, Type G.
- g. Plasticizing and Retarding Admixture:
 - 1) Comply with ASTM C 1017.
 - 2) Type I, plasticizing.
- h. Color Pigment: ASTM C 979, synthetic mineral-oxide pigments, color stable, nonfading, and resistant to lime and other alkalis.
 - 1) Manufacturers:
 - a) Alabama Pigments Company, LLC.
 - b) BASF Corporation.
 - c) Brickform; a division of Solomon Colors.
 - d) Butterfield Color, Inc.
 - e) Dynamic Color Solutions, Inc.
 - f) Euclid Chemical Company (The); an RPM company.
 - g) Hoover Color Corporation.
 - h) NewLook International, Inc.
 - i) Scofield, a Business Unit of Sika Corporation.
 - j) Solomon Colors, Inc.
 - 2) Substitutions: As specified in Section 01 60 00 "Product Requirements."
 - 3) Furnish materials according to National Electric Code standards.
- 4. Water and Water Used to Make Ice: ASTM C 94, potable or complying with ASTM C 1602, including all limits listed in Table 2 and the requirements of Paragraph 5.4.

2.3 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
 - 1. Manufacturers:
 - a. BASF Corporation.
 - b. Bon Tool Co.
 - c. Brickform; a division of Solomon Colors.
 - d. Dayton Superior.
 - e. Euclid Chemical Company (The); an RPM company.
 - f. Kaufman Products, Inc.
 - g. Lambert Corporation.
 - h. Laticrete International, Inc.
 - i. Nox Crete products group.
 - j. Sika Corporation.
 - k. SpecChem, LLC.
 - l. TK Products.
 - m. Vexcon Chemicals Inc.
 - n. W.R. Meadows, Inc.
 - 2. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- B. Concrete Curing Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.

- C. Concrete Curing Reusable Moisture-Retaining Covers, ASTM C 171:
 - 1. Burlap-polyethylene sheet.
 - a. Ten oz. burlap laminated onto 5 mil white coated polyethylene.
 - b. Reusable, natural burlap provides moisture absorption.
 - c. Coated white poly reflects sunlight and intense heat rays.
 - d. Quality lamination between the two fabrics.
 - e. Size: 10- by 100-foot roll.
 - 2. Provide wet cure blankets comprised of a non-woven polypropylene fabric coated with a white-pigmented polyethylene, complying with ASTM C 171; total thickness varies per manufacturer. Acceptable products are as follows
 - a. HydraCure reusable, reflective wet cure blankets as manufactured by PNA Construction Technologies, thickness 40 mils.
 - b. Transguard 4,000 as manufactured by Reef Industries, Inc., thickness 42 mils.
 - c. Konkure 80 as manufactured by Raven Industries, thickness 17 mils.

2.4 RELATED MATERIALS

- A. Nonshrink Grout:
 - 1. Manufacturers:
 - a. CGM, Incorporated.
 - b. Euclid Chemical Company (The); an RPM company.
 - c. Laticrete International, Inc.
 - d. QUIKRETE.
 - e. Sika Corporation.
 - 2. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 - 3. Description: Premixed compound consisting of non-metallic aggregate, cement, and water-reducing and plasticizing agents.
 - 4. Comply with ASTM C 1107.
 - 5. Minimum Compressive Strength: 2,400 psi in 48 hours and 7,000 psi in 28 days.
- B. Bonding Agent:
 - 1. Manufacturers:
 - a. Euclid Chemical Company (The); an RPM company.
 - b. Metacrete Industries.
 - c. QUIKRETE.
 - d. Sika Corporation.
 - e. W.R. Meadows, Inc.
 - 2. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 - 3. Description: rovide epoxy resin base bonding systems complying with ASTM C 881.

2.5 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, in accordance with ACI 301.
 - 1. Use a qualified testing agency for preparing and reporting proposed mixture designs, based on laboratory trial mixtures.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than Portland cement in concrete as follows:
 - 1. Fly Ash or Other Pozzolans: 25 percent by mass.
 - 2. Slag Cement: 50 percent by mass.
 - 3. Silica Fume: 10 percent by mass.

4. Total of Fly Ash or Other Pozzolans, Slag Cement, and Silica Fume: 50 percent by mass, with fly ash or pozzolans not exceeding 25 percent by mass, and silica fume not exceeding 10 percent by mass.
 5. Total of Fly Ash or Other Pozzolans and Silica Fume: 35 percent by mass, with fly ash or pozzolans not exceeding 25 percent by mass, and silica fume not exceeding 10 percent by mass.
- C. Admixtures: Use in accordance with manufacturer's written instructions.
1. Use water-reducing, high-range water-reducing, or plasticizing admixture in concrete, as required, for placement and workability.
 2. Use water-reducing and -retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs, concrete for parking structure slabs, and concrete with a w/cm below 0.50.
 4. Use corrosion-inhibiting admixture in concrete mixtures where indicated.
 5. Use permeability-reducing admixture in concrete mixtures where indicated.
- D. Color Pigment: Add color pigment to concrete mixture in accordance with manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

2.6 CONCRETE MIXTURES

- A. Select proportions for normal weight concrete according to ACI 301, Method 1.
- B. Select proportions for concrete ACI 318 trial mixtures, field test data, or both.
- C. Performance and Design Criteria:
1. Compressive Strength: 3,000 psi at 28 days.
 2. Cement Type: ASTM C 150.
 3. Minimum Cement Content: 470 lb./cu. yd.
 4. Aggregate Type: Normal weight.
 5. Coarse Aggregate: 25 to 30 percent by volume.
 6. Fine Aggregate: 35 to 45 percent by volume.
 7. Maximum Water-Cementitious Materials Ratio: 0.45:1 by weight.
 8. Aggregate Size:
 - a. Maximum: 1-1/2-inch.
 - b. Minimum: 3/8-inch.
 9. Air Content: 3 to 7 percent, plus or minus 1.5 percent.
 10. Admixture Type(s): As required based on environmental conditions at time of placement.
 11. Maximum Fly Ash or Pozzolan Content: 25 percent of cementitious materials by weight.
 12. Maximum Silica Fume Content: 10 percent of cementitious materials by weight.
 13. Maximum Slag Content: 50 percent of cementitious materials by weight.
 14. Slump: 3 to 5 inches, plus or minus 1-inch.
- D. Average Compressive Strength Reduction: Permitted according to ACI 318.
- E. Ready-Mixed Concrete: Mix and deliver concrete according to ASTM C 94.
- F. Site-Mixed Concrete: Mix concrete according to ACI 318.
- G. Mass Concrete: Comply with requirements of ACI 301 Section 8 - Mass Concrete.
- H. High Early Concrete Mix Proportions: Provide high early concrete as a preblended, prepackaged material requiring only the addition of water and stone aggregate.

2.7 CONCRETE MIXING

- A. Ready-Mix Concrete: Comply with requirements of ASTM C 94, and as herein specified. Delete references for allowing additional water to be added to batch for material with insufficient slump. Addition of water to the batch will not be permitted.
 - 1. During hot weather, or under conditions contributing to rapid setting of concrete, a shorter mixing time than specified in ASTM C 94 may be required. When air temperature is between 85 degrees F and 90 degrees F, reduce mixing and delivery time from 90 minutes to 75 minutes, and when air temperature is above 90 degrees F, reduce mixing and delivery time to 60 minutes.
 - 2. During cold weather, concrete shall not be mixed while the temperature is below 40 degrees F without the permission of the Construction Manager. If permission is granted for mixing under such conditions, aggregates or water, or both, shall be heated and the concrete shall be placed at a temperature between 50 degrees F and 80 degrees F.
 - 3. Retempering of concrete by adding water or any other material is not permitted.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions:
 - 1. Before placing concrete, verify that installation of concrete forms, accessories, and reinforcement, and embedded items is complete and that required inspections have been performed.
 - 2. Do not proceed until unsatisfactory conditions have been corrected.
- B. Verify requirements for concrete cover over reinforcement.
- C. Verify that anchors, seats, plates, reinforcement, and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with placing concrete.

3.2 PREPARATION

- A. Previously Placed Concrete:
 - 1. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent.
 - 2. Remove laitance, coatings, and unsound materials.
- B. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels, and pack solid with nonshrink grout.
- C. Remove debris and ice from formwork, reinforcement, and concrete substrates.
- D. Remove water from areas receiving concrete before concrete is placed.
- E. Provide reasonable auxiliary services to accommodate field testing and inspections, acceptable to testing agency, including the following:
 - 1. Daily access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Secure space for storage, initial curing, and field curing of test samples, including source of water and continuous electrical power at Project Site during Site curing period for test samples.
 - 4. Security and protection for test samples and for testing and inspection equipment at Project Site.

3.3 INSTALLATION OF VAPOR RETARDER

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder in accordance with ASTM E1643 and manufacturer's written instructions.
 - 1. Install vapor retarder with longest dimension parallel with direction of concrete pour.
 - 2. Face laps away from exposed direction of concrete pour.
 - 3. Lap vapor retarder over footings and grade beams not less than 6 inches, sealing vapor retarder to concrete.
 - 4. Lap joints 6 inches and seal with manufacturer's recommended tape.
 - 5. Terminate vapor retarder at the top of floor slabs, grade beams, and pile caps, sealing entire perimeter to floor slabs, grade beams, foundation walls, or pile caps.
 - 6. Seal penetrations in accordance with vapor retarder manufacturer's instructions.
 - 7. Protect vapor retarder during placement of reinforcement and concrete.
 - a. Repair damaged areas by patching with vapor retarder material, overlapping damages area by 6 inches on all sides, and sealing to vapor retarder.
- B. Bituminous Vapor Retarders: Place, protect, and repair bituminous vapor retarder in accordance with manufacturer's written instructions.

3.4 INSTALLATION

- A. Placing Concrete:
 - 1. Place concrete according to ACI 301 and 318.
 - 2. Notify testing laboratory, Engineer, and Construction Manager, minimum 24 hours prior to commencement of operations.
 - 3. Ensure that reinforcement, inserts, embedded parts, formed expansion and contraction joints, and forms are not disturbed during concrete placement.
 - 4. Deposit concrete at final position, preventing segregation of mix.
 - 5. Place concrete in continuous operation for each panel or section as determined by predetermined joints.
 - 6. Consolidate concrete.
 - 7. Maintain records of concrete placement, including date, location, quantity, air temperature, and test samples taken.
 - 8. Place concrete continuously between predetermined expansion, control, and construction joints.
 - 9. Do not interrupt successive placement and do not permit cold joints to occur.
 - 10. Place floor slabs in indicated saw-cut pattern.
 - 11. Saw-Cut Joints:
 - a. Saw-cut joints within 12 hours after placing.
 - b. Use 3/16-inch thick blade.
 - c. Cut into 1/4 depth of slab thickness.
 - 12. Screeding:
 - a. Screed slabs on grade level.
 - b. Surface Flatness:
 - 1) Maximum 1/4-inch in 10 feet.

- B. Concrete Finishing:
 - 1. Provide formed concrete surfaces to be left exposed with smooth-rubbed finish.
 - 2. Steel trowel surfaces indicated to be exposed.
 - 3. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, ramps, and locations indicated on Drawings.
 - a. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route.
 - b. Coordinate required final finish with Engineer before application.
- C. Curing and Protection:
 - 1. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
 - 2. Protect concrete footings from freezing for minimum of 5 days.
 - 3. Maintain concrete with minimal moisture loss at relatively constant temperature for period as necessary for hydration of cement and hardening of concrete.
 - 4. Cure concrete according to ACI 308.1 using adsorptive mat method.

3.5 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Inspection and Testing: Performed by Owner's testing laboratory according to ACI 318.
- C. Provide unrestricted access to Work and cooperate with appointed testing and inspection firm.
- D. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of Work.
- E. Concrete Inspections:
 - 1. Continuous Placement Inspection: Inspect for proper installation procedures.
 - 2. Periodic Curing Inspection: Inspect for specified curing temperature and procedures.
- F. Strength Test Samples:
 - 1. Sampling Procedures: Comply with ASTM C 172.
 - 2. Cylinder Molding and Curing Procedures:
 - a. Comply with ASTM C 31.
 - b. Cylinder Specimens: Standard cured.
 - 3. Sample concrete and make one set of 3 cylinders for every 75 cu. yd. or less of each class of concrete placed each day, and for every 5,000 sq. ft. of surface area for slabs and walls.
 - 4. If volume of concrete for a class of concrete would provide less than 5 sets of cylinders, take samples from five randomly selected batches, or from every batch if less than 5 batches are used.
 - 5. Make one additional cylinder during cold weather concreting and field cure.
- G. Concrete Maturity Testing Using Sensors:
 - 1. Non-destructive Test: Gather information from wireless embedded sensors recording temperature and strength.
 - 2. Data is logged and/or retrieved by external device in real-time.
 - 3. Comply with sensor manufacturer's written instructions and ASTM C 1074, CSA A23.1/A23.2, ACI 318, ACI 228.1R, and ACI 306R.

- H. Field Testing:
 - 1. Slump Test Method: Comply with ASTM C 143.
 - 2. Air Content Test Method: Comply with ASTM C 231.
 - 3. Temperature Test Method: Comply with ASTM C 1064.
 - 4. Compressive Strength Concrete:
 - a. Measure slump and temperature for each sample.
 - b. Measure air content in air-entrained concrete for each sample.
- I. Cylinder Compressive Strength Testing:
 - 1. Test Method: Comply with ASTM C 39.
 - 2. Test Acceptance: According to ACI 318.
 - 3. Test one cylinder at 7 days.
 - 4. Test one cylinder at 28 days.
 - 5. Retain one cylinder for testing when requested by Engineer.
 - 6. Dispose of remaining cylinders if testing is not required.
- J. Core Compressive Strength Testing:
 - 1. Sampling and Testing Procedures: Comply with ASTM C 42.
 - 2. Test Acceptance: According to ACI 318.
- K. Patching:
 - 1. Allow Engineer to inspect concrete surfaces immediately upon removal of forms.
 - 2. Honeycombing or Embedded Debris in Concrete:
 - a. Not acceptable.
 - b. Notify Engineer upon discovery.
 - 3. Patch imperfections as directed by Engineer according to ACI 301.
- L. Defective Concrete:
 - 1. Description: Concrete not conforming to required lines, details, dimensions, tolerances, or specified requirements.
 - 2. Repair or replacement of defective concrete will be determined by Engineer.
 - 3. Do not patch, fill, touch up, repair, or replace exposed concrete except upon express direction of Engineer for each individual area.

END OF SECTION

DIVISION 22
PLUMBING

SECTION 22 05 13 - COMMON MOTOR REQUIREMENTS FOR PLUMBING EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes three-phase motors for application on equipment provided under other Sections.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 05 26 "Grounding and Bonding for Electrical Systems."
 - 3. Section 26 05 53 "Identification for Electrical Systems."

1.2 REFERENCES

- A. American Bearing Manufacturers Association:
 - 1. ABMA 9 - Load Ratings and Fatigue Life for Ball Bearings.
- B. National Electrical Manufacturers Association:
 - 1. NEMA MG 1 - Motors and Generators.
- C. International Electrical Testing Association:
 - 1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.

1.3 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for submittal procedures.
- B. Product Data: Submit catalog data for each motor furnished loose. Indicate nameplate data, standard compliance, electrical ratings and characteristics, and physical dimensions, weights, mechanical performance data, and support points.
- C. Test Reports: Indicate procedures and results for specified factory and field testing and inspection.

1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years experience.
- B. Testing Agency: Company member of International Electrical Testing Association and specializing in testing products specified in this Section with minimum three years experience.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for product storage and handling requirements.
- B. Lift only with lugs provided. Handle carefully to avoid damage to components, enclosure, and finish.
- C. Protect products from weather and moisture by covering with plastic or canvas and by maintaining heating within enclosure.
- D. For extended outdoor storage, remove motors from equipment and store separately.

PART 2 - PRODUCTS

2.1 PRODUCT REQUIREMENTS FOR MOTORS FURNISHED WITH EQUIPMENT

- A. Motors 3/4 hp and Larger: Three-phase motor as specified below.
- B. Motors Smaller Than 3/4 hp: Single-phase motor as specified below, except motors less than 250 watts or 1/4 hp may be equipment manufacturer's standard.
- C. Three-Phase Motors: NEMA MG 1, Design B, energy-efficient squirrel-cage induction motor, with windings to accomplish starting methods and number of speeds as specified in Section 33 11 13 "Potable Water Supply Wells."
 - 1. Voltage: As specified in Section 33 11 13 "Potable Water Supply Wells."
 - 2. Service Factor: 1.15.
 - 3. Enclosure: Meet conditions of installation unless specific enclosure is indicated on Drawings.
 - 4. Design for continuous operation in 30 degrees C environment, with temperature rise in accordance with NEMA MG 1 limits for insulation class, service factor, and motor enclosure type.
 - 5. Insulation System: NEMA Class F.
 - 6. Bearings: Grease lubricated anti-friction ball bearings with housings equipped with plugged provision for relubrication, rated for minimum ABMA 9, L-10 life of 200,000 hours. Calculate bearing load with NEMA minimum V-belt pulley with belt center line at end of NEMA standard shaft extension. Stamp bearing sizes on nameplate.
- D. Wiring Terminations: Furnish terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated.

2.2 SOURCE QUALITY CONTROL

- A. Test motors in accordance with NEMA MG 1, including winding resistance, no-load speed and current, locked rotor current, insulation high-potential test, and mechanical alignment tests.

PART 3 - EXECUTION

3.1 EXISTING WORK

- A. Disconnect and remove abandoned motors
- B. Maintain access to existing motors and other installations remaining active and requiring access. Modify installation or provide access panel.
- C. Clean and repair existing motors to remain or are to be reinstalled.

3.2 INSTALLATION

- A. Install securely on firm foundation. Mount ball bearing motors with shaft in any position.
- B. Install engraved plastic nameplates in accordance with Section 26 05 53 "Identification for Electrical Systems."
- C. Ground and bond motors in accordance with Section 26 05 26 "Grounding and Bonding for Electrical Systems."

3.3 FIELD QUALITY CONTROL

- A. Refer to Sections 01 40 00 "Quality Requirements" and 01 70 00 "Execution and Closeout Requirements" for field inspecting, testing, adjusting, and balancing.
- B. Inspect and test in accordance with NETA ATS, except Section 4.
- C. Perform inspections and tests listed in NETA ATS, Section 7.15.

END OF SECTION

SECTION 22 05 33 - HEAT TRACING FOR PLUMBING PIPING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes and describes the requirements for designing, supplying, installing, and testing of an industrial electric heat tracing system for above grade station piping, eyewash station, and for domestic water piping in areas subject to freezing temperatures.
- B. Contractor shall provide the services of heat trace and pipe insulation system designers to implement requirements of this Section. Designers shall be authorized supplier and manufacturer's representative for the heat trace products installed. Acceptable heat tracing systems are:
 - 1. Thermon.
 - 2. Chromalox.
 - 3. Raychem.
 - 4. Or approved equal.
- C. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 40 42 13 "Process Piping Insulation."

1.2 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Specification to the extent referenced. The publications are referenced in the text by the basic designation only. Where conflicts occur on these Specifications, the NEC will govern.
- B. The Institute of Electrical and Electronic Engineers (IEEE): 515.1-2012 Testing, Design, Installation, and Maintenance of Electrical Resistance Trace Heating for Commercial Applications.
- C. International Code Council, (ICC): IPC-2018 International Plumbing Code.
- D. National Fire Protection Association (NFPA): 70-2020 National Electrical Code (NEC).
- E. Underwriters' Laboratories, Inc. (UL): 508-2018 Industrial Control Equipment.

1.3 SUBMITTALS

- A. Submittals, including number of required copies, shall be submitted in accordance with Section 01 33 00 "Submittal Procedures."
- B. Information and material submitted under this Section shall be marked "Submitted" under Section 22 05 33 "Heat Tracing for Plumbing Piping," with applicable paragraph identification.
- C. Manufacturer's Literature and Data including Full item description and optional features and accessories. Include dimensions, weights, materials, applications, standard compliance, model numbers, size, and capacity.
 - 1. Rated capacity.
 - 2. Length of cable.
 - 3. Cable spacing.
 - 4. Electrical power requirements.
 - 5. Controls.
 - 6. Enclosures.
 - 7. Accessories.

- D. Shop Drawings shall include Plans, Sections, details, wiring diagrams, and attachments to other work. The wiring diagrams shall include power, signal, and control wiring.
- E. Field quality control test reports shall be submitted.
- F. Complete operating and maintenance manuals including wiring diagram, technical data sheets, information for ordering replaceable parts, and troubleshoot guide:
 - 1. Include complete list indicating all components of the systems.
 - 2. Include complete diagrams of the internal wiring for each item of equipment.
 - 3. Diagrams shall have their terminals identified to facilitate installation, operation, and maintenance.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Ten years' experience in design, engineering, manufacture and support of specified system and components.
 - 1. Factory Mutual approved heating cable that has the same wattage per lineal foot (power output), throughout its entire length.
 - 2. UL Listed, thermostat and contactor panel.
 - 3. UL Listed Control/Monitor Panel.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency.

PART 2 - PRODUCTS

2.1 SELF-REGULATING PARALLEL RESISTANCE HEATING CABLES

- A. Self-regulating parallel resistance heating cables shall comply with IEEE 515.1.
- B. The heating element shall be a pair of parallel No. 16 AWG tinned stranded copper bus wires embedded in cross linked conductive polymer core, which varies heat output in response to temperature along its length. Cables shall be terminated with waterproof, factory assembled non heating leads with connects at one end and seal the opposite end watertight. The cable shall be capable of crossing over itself without overheating.
- C. The electrical insulating jacket shall be flame-retardant polyolefin.
- D. The cable cover shall be tinned copper and polyolefin outer jacket with UV inhibitor.
- E. The maximum power on operating temperature shall be 65 degrees C (150 degrees F).
- F. The maximum power off exposure temperature shall be 85 degrees C (185 degrees F).
- G. The capacities and characteristics shall be:
 - 1. Maximum heat output (12.0 W/foot).
 - 2. Pipe Diameter: 24-inch max.
 - 3. Number of parallel cables: 3 max.
 - 4. See Electrical Drawings for electrical supply circuits.
- H. Pipe mounting thermostats for Freeze protection shall have a remote bulb unit with adjustable temperature range from minus 1 to 10 degrees C (34 to 50 degrees F). The thermostat shall be snap action, open-on-rise, single pole switch with minimum current rating adequate for the connected cable. The thermostat shall be remote bulb on capillary, resistance temperature device, or thermistor for direct sensing of pipe wall temperature.

2.2 ACCESSORIES

- A. Cable Installation Accessories: Fiberglass tape, heat-conductive putty, cable ties, silicone end seals and splice kits, and installation clips all furnished by manufacturer, or as recommended in writing by manufacturer.
- B. Warning Labels: Shall comply with NFPA 70.
- C. Warning Tape: Continuously printed "Electrical Tracing"; vinyl, at least 3 mils thick, and with pressure-sensitive, permanent, waterproof, self-adhesive back.
 - 1. Width for Warning Tape on Pipes with Outside Dimension, Including Insulation, Less Than 6 Inches: 3/4-inch minimum.
 - 2. Width for Warning Tape on Pipes with Outside Dimension, Including Insulation, 6 Inches or Greater: 1-1/2 inches minimum.

PART 3 - EXECUTION

3.1 GENERAL

- A. Inspect surfaces and substrates of electric heating cables for compliance with requirements of this specification. Ensure surfaces and pipes in contact with electric heating cables are free of burrs and sharp protrusions.
- B. Notify COR if the existing substrate conditions are unsuitable for application of heating cables in accordance with manufacturer's recommendations.
- C. If the installation of the heat tracing is unsatisfactory, then the Contractor shall correct the installation at no additional cost or time to the Government.

3.2 INSTALLATION

- A. Electric heating cable shall be installed for the following applications:
 - 1. Freeze protection of water piping: Self-regulating parallel-resistance heating cable.
- B. Electric heating cable for pipe freeze protection shall be installed according to the following:
 - 1. Electric heating cables shall be installed after piping has been tested and before insulation is installed.
 - 2. Electric heat cables shall be installed according to IEEE 515.1
 - 3. Insulation shall be installed or applied over piping with electric cables. Refer to Section 40 42 13 Process Piping Insulation."
 - 4. "WARNING" tape shall be installed on pipe insulation where piping is equipped with electric heating cables.
- C. Field adjustable switches and circuit breaker trip ranges shall be set.
- D. Heating cables including leads shall be protected from damage.
- E. Equipment shall be grounded according to Section 26 05 26 "Grounding and Bonding for Electrical Systems."
- F. Wiring shall be connected according to Section 26 05 19 "Low Voltage Electrical Power Conductors and Cables."

3.3 TESTS

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 - 1. Perform tests after cable installation but before application of coverings such as insulation, wall or ceiling construction, or concrete.
 - 2. Test cables for electrical continuity and insulation integrity before energizing.
 - 3. Test cables to verify rating and power input. Energize and measure voltage and current simultaneously.
- C. Repeat tests for continuity, insulation resistance, and input power after applying thermal insulation on pipe-mounted cables.
- D. If deficiency is found, Contractor shall correct all deficiencies at no additional cost or time to Owner.
- E. Prepare test and inspection reports.

3.4 DEMONSTRATION AND TRAINING

- A. Provide services of manufacturer's technical representative for 4 hours to instruct personnel responsible in operation and maintenance of the system.

END OF SECTION

**DIVISION 26
ELECTRICAL**

SECTION 26 05 00 - BASIC ELECTRICAL METHODS

PART 1 - GENERAL

1.1 SUMMARY

- A. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Requirements of General Conditions, Special Conditions, and these Specifications are applicable and part of every Section in Division 26 "Electrical." Contractor shall furnish all labor, material, service, equipment, appliances, and perform all operations in connection with installation and testing of Electrical Work per Contract Drawings and Specifications. Engineer will reject any material found defective and Contractor shall remove defective material from Work site.
 - 3. Contractor is responsible for all material he furnishes and shall replace, at his own expense, all materials found defective in manufacture or damaged after delivery.
 - 4. Interconnections between various items of electrical equipment and control system will likely require coordination and in some cases, interface devices such as but not limited to couplings, flanges, reducers, converters, conduit, relays, terminal blocks, contacts, wiring etc., will be required whether or not these items are shown on Drawings. It is the General Contractor's responsibility to provide necessary coordination and interface devices at no additional cost to Owner.

1.2 REQUIREMENTS OF REGULATORY AGENCIES AND STANDARDS

- A. Regulatory Agencies: Installation, materials, equipment, and workmanship shall conform to the applicable provisions of:
 - 1. National Electrical Code (NEC).
 - 2. National Electrical Safety Code (NESC).
 - 3. Terms and conditions of electrical utility and other authorities having lawful jurisdiction pertaining to Work required.
- B. Underwriters Laboratories, Inc. (UL): All materials, appliances, equipment, or devices shall conform to applicable standards of UL. Label of, or listing by, UL is required.
- C. Standards: Where referenced in these Specifications or Drawings, publications and standards of the following organizations apply:
 - 1. ASTM, International.
 - 2. Institute of Electrical and Electronic Engineers (IEEE).
 - 3. Insulated Power Cable Engineers Association (IPCEA).
 - 4. National Electrical Manufacturers Association (NEMA).
 - 5. National Fire Protection Association (NFPA).
 - 6. American National Standards Institute (ANSI).
 - 7. Illuminating Engineering Society of North America (IESNA).
- D. Should Contractor observe any conflict or variation in Plans and Specifications, notify Engineer in writing no later than 10 days before date of Bid opening. Failure to clarify such variations will result in Electrical Contractor bearing all costs arising from Electrical Work done contrary to Specifications or Drawings.
- E. Electrical Contractor shall coordinate all conduit runs, control wiring, and electrical connections to equipment items furnished by Mechanical Contractor, General Contractor, Instrumentation Contractor, Owner, and other contractors under other Specification Sections.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01 33 00 "Submittal Procedures."
- B. Shop Drawings: Submit Shop Drawings for approval. Show complete outlines, dimensions, control diagrams, electrical characteristics of a special nature or critical to installation and pertinent data required for installation. All descriptive and technical data and Shop Drawings shall bear signed certification that they were carefully examined and found correct with respect to dimension, space available, non-interference with other trades and that equipment complies with all Specification requirements. Where catalog data submitted, clearly "flag" or otherwise identify proposed items so no confusion exists.
- C. Substitutions: Submit proposed substitutions of electrical equipment, control devices, and other equipment with other submittal data. Accompany this request by complete descriptions of substitutes offered, including catalog cuts. Entire burden of proof of equality is placed on Contractor and Engineer decision is final.
- D. Test Data: Provide one copy of all data obtained during tests required in Specifications. Organize data in an orderly fashion, type, and indicate each test result. Submit for Engineer review within 3 days of performing required tests.

PART 2 - PRODUCTS

2.1 REQUIREMENTS

- A. Electrical requirements for equipment specified or indicated on Drawings are based on information available at time of design. If equipment furnished for installation has electrical requirements other than indicated on Electrical Drawings, Contractor shall make any required changes to wire and conduit size, controls, overcurrent protection, and installation as required to accommodate equipment supplied, without additional charge to Owner. Complete responsibility and costs for such adjustments shall be assigned to respective Specification Section where equipment is furnished.

2.2 MATERIALS

- A. All similar materials and equipment shall be the product of the same manufacturer unless specified otherwise. Where no specific material, apparatus, or appliance is mentioned, a accepted industry standard product, with Engineer approval, may be used. Materials and equipment shall be standard products of manufacturers regularly engaged in production of such material and manufacturer's current and standard design. Equipment affected by altitude shall perform satisfactorily for function intended at altitude of Project site. Site elevation can be found on drainage plan of Civil Drawing sheets.

PART 3 - EXECUTION

3.1 FABRICATION, ERECTION, AND INSTALLATION

- A. Fabrication, erection, and installation of complete electrical system shall be per best practice by qualified personnel experienced in such Work and proceed in an orderly manner, not impeding Project progress. Electrical Contractor shall check all areas and surfaces where electrical equipment material is installed, removed, or relocated then report any unsatisfactory conditions before starting Work. Commencing Work signifies Contractor acceptance of existing conditions. In acceptance or rejection of finished installation, no allowance made for lack of skill on the part of workmen.

3.2 TEMPORARY POWER AND LIGHTING

- A. Furnish and install temporary electrical facilities, if required, for construction and safety operations. No part of permanent electrical systems or existing electrical system may be used for temporary service unless approved by Engineer. Provide separate electrical service metering for temporary power.

3.3 PERFORMANCE TESTS

- A. Thoroughly test all control circuits, fixtures, services and all circuits for proper operating condition and freedom from grounds and short circuits before requesting acceptance. Operate all equipment, appliances, and devices under load conditions. After interior wiring system installation is complete and when Engineer directs, conduct operating tests for approval. When requested, test all wire, cable, devices, and equipment after installation to assure all material possesses all original characteristics required by governing codes and standards listed herein.
- B. Perform such tests as required by other Specifications Sections or requested to prove acceptability. Furnish all instruments and labor for testing.

3.4 RECORD DRAWINGS

- A. During Work progress, maintain a clean, full set of Project Plans to record accurate red-lined changes to system installation. Upon installation completion, submit full set of red-lined Drawings with all record data to Engineer.

3.5 OPERATING INSTRUCTIONS AND MANUALS

- A. Without additional charge to Owner, furnish complete instruction to Owner in care, adjustment, and operation of all electrical equipment and system parts. Upon Work completion, prepare and deliver to Owner two sets of complete operating and maintenance manuals for systems and major equipment installed. Include catalog data, Shop Drawings, wiring diagrams, performance curves and rating data, spare parts lists, and manufacturer operating maintenance data. Include a copy of test data collected during field tests in manuals.
- B. Requirements are in addition to specific instructions and manuals specified for individual systems or equipment.

3.6 DRAWINGS

- A. Electrical Drawings show general arrangement of all conduit, equipment, etc. and shall be followed as closely as actual building construction and Work of other trades will permit. Structural Drawings shall be considered as a part of Work insofar as these Drawings furnish Contractor with information relating to design and construction of building. Because of the small scale of Electrical Drawings, it is impossible to indicate all offsets, fittings, and accessories required. Contractor shall investigate structural and finish conditions affecting Work and arrange Work accordingly, providing such fittings, elbows, pull boxes, and accessories be required to meet such conditions.
- B. Field Measurements: Contractor shall verify dimensions governing Electrical Work at facility. No extra compensation claimed or allowed on account of differences between actual dimensions and those indicated on Drawings.

3.7 LOCATION OF EQUIPMENT AND OUTLETS

- A. Approximate locations of cabinets, conduits, controllers, power outlets, etc., are indicated on Drawings; however, not intended to give complete and detailed information. Determine exact location after thoroughly examining general building plans and actual measurements during construction, subject to the approval of Engineer.

3.8 EXISTING ELECTRICAL

- A. Existing Electrical system information has been obtained from most up-to-date source and documents, but accuracy is not guaranteed. Contractor shall familiarize himself with existing conditions before preparing Bid.
- B. Only existing electrical affected by this Contract is shown on Drawings. Existing electrical not shown in Drawings is to remain in place and in operation. Repair or replace all existing electrical damaged during construction.
- C. Contractor responsible for damage due to electrical construction. Repairing damage shall be by proper trades involved.

3.9 ELECTRIC UTILITY SERVICE

- A. Oncor Electric is the local electric utility company providing service to this facility. Design and installation of Oncor Electric overhead and underground facilities will be done by Oncor Electric.
- B. Contractor shall be familiar with and comply with requirements of latest version of Oncor Electric. Contractor provides and installs any equipment in Electric Service Requirements stated to be provided or installed by Customer.
- C. Contractor shall coordinate with Oncor Electric exact location and spacing requirements of service transformer and pullboxes.

3.10 PAYMENT

- A. Payment made for all Work covered herein at Contract unit price per unit or included in lump sum price per job for items, as shown on proposal. Either such payment shall be complete compensation for complete performance of Work per Drawings and Specification provisions.

END OF SECTION

**SECTION 26 05 19 - LOW-VOLTAGE ELECTRICAL POWER
CONDUCTORS AND CABLES**

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes power wire and cable, service entrance cable, control cable, and wiring connectors and connections.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 05 33 "Raceway and Boxes for Electrical Systems."
 - 3. Section 26 05 53 "Identification for Electrical Systems" for product requirements for wire identification.

1.2 REFERENCES

- A. International Electrical Testing Association:
 - 1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- B. National Fire Protection Association:
 - 1. NFPA 70 - National Electrical Code.
- C. Underwriters Laboratories, Inc.:
 - 1. UL 1277 - Standard for Safety for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members.

1.3 SYSTEM DESCRIPTION

- A. Product Requirements: Provide products as follows:
 - 1. Solid conductor for feeders and branch circuits 10 AWG and smaller.
 - 2. Stranded conductors for control circuits.
 - 3. Conductor not smaller than 12 AWG for power and lighting circuits.
 - 4. Conductor not smaller than 16 AWG for control circuits.
- B. Wiring Methods: Provide the following wiring methods:
 - 1. Concealed Dry Interior Locations: Use only building wire, Type THHN/THWN insulation, in raceway.
 - 2. Exposed Dry Interior Locations: Use only building wire, Type THHN/THWN insulation, in raceway.
 - 3. Wet or Damp Interior Locations: Use only building wire, Type THHN/THWN insulation.
 - 4. Exterior Locations: Use only building wire, Type THHN/THWN insulation, in raceway, service-entrance cable.
 - 5. Underground Locations: Use only building wire, Type THHN/THWN XHHW insulation, in raceway, direct burial cable service-entrance cable.

1.4 DESIGN REQUIREMENTS

- A. Conductor sizes are based on copper.

1.5 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit for building wire and each cable assembly type.

1.6 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of components and circuits.

1.7 QUALITY ASSURANCE

- A. Provide wiring materials located in plenums with peak optical density not greater than 0.5, average optical density not greater than 0.15, and flame spread not greater than 5 feet when tested in accordance with NFPA 262.
- B. Perform Work in accordance with NEC Standards.

1.8 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' documented experience.

1.9 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on Drawings.

1.10 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Where wire and cable destinations are indicated and routing is not shown, determine routing and lengths required.
- C. Wire and cable routing indicated is approximate unless dimensioned.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Power Wire and Cable: Cable to be manufactured by:
 - 1. Southwire.
 - 2. Okonite.
 - 3. PWC, Inc.
 - 4. Capital Wire & Cable Corp.
 - 5. Or approved equal.
- B. Cable shall meet or exceed the applicable ICEA test requirements for the type of insulation used and the application.

2.2 POWER WIRE AND CABLE

- A. 600V and Below:
 - 1. Description: Dry and Wet Locations, multi-conductor, insulated wire.
 - 2. Conductor: Copper.
 - 3. Insulation Voltage Rating: 600 volts.
 - 4. Insulation: ANSI/NFPA 70; Type THHN/THWN-2, 90 degrees C insulation for service entrance, feeders, and branch circuits.
 - 5. For conductor sizes 250 KCM and larger, Type RHH/RHW with XLPE insulation.

2.3 CONTROL CABLE

- A. Analog I/O wiring shall be 16AWG twisted pair shielded, Belden 8719 or equal.
- B. Discrete I/O wiring shall be 16AWG, 600V, stranded copper, THWN. Use multi-conductor cable when possible.

2.4 WIRING CONNECTORS

- A. Split Bolt Connectors:
 - 1. Manufacturers:
 - a. IlSCO.
 - b. Buchanan.
 - c. Burndy.
 - d. Or approved equal.
 - 2. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Solderless Pressure Connectors:
 - 1. Manufacturers:
 - a. IlSCO.
 - b. Buchanan.
 - c. Burndy.
 - d. Or approved equal.
 - 2. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- C. Spring Wire Connectors:
 - 1. Manufacturers:
 - a. IlSCO.
 - b. Buchanan.
 - c. Burndy.
 - d. Or approved equal.
 - 2. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- D. Compression Connectors:
 - 1. Manufacturers:
 - a. IlSCO.
 - b. Buchanan.
 - c. Burndy.
 - d. Or approved equal.
 - 2. Substitutions: Refer to Section 01 60 00 "Product Requirements."

2.5 TERMINATIONS

- A. Terminal Lugs for Wires 6AWG and Smaller: Solderless, compression type copper.
- B. Lugs for Wires 4AWG and Larger: Color keyed, compression type copper, with insulating sealing collars.
- C. Use anti-seize compound when bolts and screws are used for threaded connections.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for coordination and Project conditions.
- B. Verify interior of building has been protected from weather.
- C. Verify Mechanical Work likely to damage wire and cable has been completed.
- D. Verify raceway installation is complete and supported.

3.2 PREPARATION

- A. Completely and thoroughly swab raceway before installing wire.

3.3 EXISTING WORK

- A. Remove abandoned wire and cable.
- B. Extend existing circuits using materials and methods compatible with existing electrical installations, or as specified.
- C. Clean and repair existing wire and cable remaining or wire and cable to be reinstalled.

3.4 INSTALLATION

- A. Route wire and cable to meet Project conditions.
- B. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- C. Identify and color code wire and cable under provisions of Section 26 05 53 "Identification for Electrical Systems." Identify each conductor with its circuit number or other designation indicated.
- D. Wire in Raceway:
 - 1. Pull conductors into raceway at same time.
 - 2. Install building wire 4AWG and larger with pulling equipment.
- E. Special Techniques - Cable:
 - 1. Protect exposed cable from damage.
 - 2. Use suitable cable fittings and connectors.
- F. Wiring Connections:
 - 1. Clean conductor surfaces before installing lugs and connectors.
 - 2. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.
 - 3. Tape uninsulated conductors and connectors with electrical tape to 150 percent of insulation rating of conductor.
 - 4. Install split bolt connectors for copper conductor splices and taps, 6AWG and larger.

5. Install solderless pressure connectors with insulating covers for copper conductor splices and taps, 8AWG and smaller.
6. Install insulated spring wire connectors with plastic caps for copper conductor splices and taps, 10AWG and smaller.
- G. Install stranded conductors for branch circuits 10AWG and smaller. Install crimp on fork terminals for device terminations. Do not place bare stranded conductors directly under screws.
- H. Install terminal lugs on ends of 600V wires unless lugs are furnished on connected device, such as circuit breakers.
- I. Size lugs in accordance with manufacturer's recommendations terminating wire sizes. Install 2-hole type lugs to connect wires 4AWG and larger to copper bus bars.
- J. For terminal lugs fastened together such as on motors, transformers, and other apparatus, or when space between studs is small enough that lugs can turn and touch each other, insulate for dielectric strength of 2-1/2 times normal potential of circuit.

3.5 WIRE COLOR

- A. General:
 1. For wire sizes 10AWG and smaller. Install wire colors in accordance with the following:
 - a. Black and red for single phase circuits at 120/240V.
 - b. Black, red, and blue for circuits at 120/208V single or 3-phase.
 - c. Brown, Orange, and yellow for circuits at 277/480V single or 3-phase.
 2. For wire sizes 8AWG and larger, identify wire with colored tape continuously applied for a minimum of 4 inches at terminals, splices, and boxes. Colors are as follows:
 - a. Black and red for single phase circuits at 120/240V.
 - b. Black, red, and blue for circuits at 120/208V single or 3-phase.
 - c. Brown, orange, and yellow for circuits at 277/480V single or 3-phase.
- B. Neutral Conductors: White. When two or more neutrals are located in one conduit, individually identify each with proper circuit number.
- C. Branch Circuit Conductors: Install 3 or 4 wire home runs with each phase uniquely color coded.
- D. Feeder Circuit Conductors: Uniquely color code each phase.
- E. Ground Conductors:
 1. For 6AWG and smaller: Green.
 2. For 4AWG and larger: Identify with green tape at both ends and visible points including junction boxes.

3.6 FIELD QUALITY CONTROL AND TESTING

- A. Refer to Section 01 40 00 "Quality Requirements" for field inspecting, testing, adjusting, and balancing.
- B. Inspect and test in accordance with NETA ATS, except Section 4.
- C. Perform inspections and tests listed in NETA ATS, Section 7.3.2., cables, low voltage, 600V maximum.
- D. Verify uniform resistance of parallel conductors.

END OF SECTION

SECTION 26 05 26 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Rod electrodes.
 - 2. Wire.
 - 3. Mechanical connectors.
 - 4. Exothermic connections.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 REFERENCES

- A. Institute of Electrical and Electronics Engineers:
 - 1. IEEE 80 - Guide for safety in AC Substation grounding.
 - 2. IEEE 1100 - Recommended Practice for Powering and Grounding Electronic Equipment.
- B. International Electrical Testing Association:
 - 1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- C. National Fire Protection Association:
 - 1. NFPA 70 - National Electrical Code.

1.3 SYSTEM DESCRIPTION

- A. Grounding systems use the following elements as grounding electrodes:
 - 1. Metal underground water pipe.
 - 2. Metal building frame.
 - 3. Concrete-encased electrode.
 - 4. Rod electrode.

1.4 PERFORMANCE REQUIREMENTS

- A. Grounding System Resistance: 5-ohms maximum.

1.5 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for Submittals.
- B. Product Data: Submit data on grounding electrodes and connections.
- C. Test Reports: Indicate overall resistance to ground and resistance of each electrode.

1.6 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for Submittals.
- B. Project Record Documents: Record actual locations of components and grounding electrodes.

1.7 QUALITY ASSURANCE

- A. Provide grounding materials conforming to requirements of NEC, IEEE 80, and UL labeled.
- B. Perform Work in accordance with NEC standards.
- C. Maintain one copy each document on site.

1.8 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' documented experience.
- B. Installer: Company specializing in performing Work of this Section with minimum 3 years' documented experience.

1.9 PRE-INSTALLATION MEETINGS

- A. Refer to Section 01 30 00 "Administrative Requirements" for pre-installation meeting.
- B. Convene minimum one week prior to commencing Work of this Section.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Accept materials on site in original factory packaging, labeled with manufacturer's identification.
- C. Protect from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original packaging.
- D. Do not deliver items to Project before time of installation. Limit shipment of bulk and multiple-use materials to quantities needed for immediate installation.

1.11 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Complete grounding and bonding of building reinforcing steel prior to concrete placement.

PART 2 - PRODUCTS

2.1 ROD ELECTRODES

- A. Manufacturers:
 - 1. Burndy.
 - 2. nVent (Erico).
 - 3. Harger Lighting & Grounding.
 - 4. Or approved equal.
 - 5. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description:
 - 1. Material: Copper Clad.
 - 2. Diameter: 3/4-inch.
 - 3. Length: 10 feet.

- C. Connector: Connector for exothermic welded connection, or non-reversable Type, Burndy Hy Ground Products listed for the application.

2.2 WIRE

- A. Material: Stranded copper.
- B. Foundation Electrodes: Bare copper conductor.
- C. Grounding Electrode Conductor: Copper conductor insulated.
- D. Bonding Conductor: Copper conductor insulated.
- E. Ground ring: Bare copper conductor.

2.3 EXOTHERMIC CONNECTIONS

- A. Manufacturers:
 - 1. Burndy.
 - 2. nVent (Erico).
 - 3. Harger Lighting & Grounding.
 - 4. Or approved equal.
 - 5. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description: Exothermic materials, accessories, and tools for preparing and making permanent field connections between grounding system components.
- C. Exothermic connectors, rod electrodes, and other grounding related equipment shall be supplied by a manufacturer with 10 years' experience in manufacturing.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for verification of existing conditions before starting Work.
- B. Verify final backfill and compaction has been completed before driving rod electrodes.

3.2 PREPARATION

- A. Remove paint, rust, mill oils, surface contaminants at connection points.

3.3 INSTALLATION

- A. Install products in accordance with manufacturer's instructions. Exothermically weld all connections.
- B. Install rod electrodes at locations as indicated on Drawings.
- C. Install grounding and bonding conductors concealed from view.
- D. Install grounding electrode conductor and connect to reinforcing steel in foundation footing as indicated on Drawings.
- E. Bond together metal siding not attached to grounded structure, bond to ground.
- F. Equipment Grounding Conductor: Install separate, insulated conductor within each feeder and branch circuit raceway. Terminate each end on suitable lug, bus, or bushing.
- G. Permanently attach equipment and grounding conductors prior to energizing equipment.

3.4 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for field inspecting, testing, adjusting, and balancing.
- B. Inspect and test in accordance with NETA ATS, except Section 4.
- C. Grounding and Bonding: Perform inspections and tests listed in NETA ATS, Section 7.13., Grounding Systems.

END OF SECTION

SECTION 26 05 29 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Conduit and equipment supports.
 - 2. Anchors and fasteners.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 REFERENCES

- A. NECA - National Electrical Contractors Association.
- B. ANSI/NFPA 70 - National Electrical Code.
- C. NFPA 70 - National Electrical Code.

1.3 REGULATORY REQUIREMENTS

- A. Conform to requirements of ANSI/NFPA 70.
- B. Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purpose specified and shown.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data:
 - 1. Hangers and Supports: Submit manufacturers catalog data including load capacity.
 - 2. Firestopping: Submit data on product characteristics, performance, and limitation criteria.
- C. Design Data: Indicate load carrying capacity of hangers and supports.
- D. Manufacturer's Installation Instructions:
 - 1. Hangers and Supports: Submit special procedures and assembly of components.
- E. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

PART 2 - PRODUCTS

2.1 CONDUIT SUPPORTS

- A. Manufacturers:
 - 1. Carlon; a brand of Thomas & Betts Corporation.
 - 2. nVent (CADDY).
 - 3. Or approved equal.
 - 4. Substitutions: Refer to Section 01 60 00 "Product Requirements."

2.2 FORMED STEEL CHANNEL

- A. Furnish materials in accordance with industry accepted standards.
- B. Product Description: Galvanized 12-gauge thick steel. With holes 1-1/2 inches on center.

2.3 SPRING STEEL CLIPS

- A. Furnish materials in accordance with industry accepted standards.
- B. Product Description: Mounting hole and screw closure.

2.4 SLEEVES

- A. Sleeves Through Non-Fire Rated Beams, Walls, Footings, and Potentially Wet Floors: Steel pipe or 18-gauge thick galvanized steel.
- B. Stuffing Insulation: Glass fiber type, non-combustible.

2.5 MECHANICAL SLEEVE SEALS

- A. Product Description: Modular mechanical type, consisting of interlocking synthetic rubber links shaped to continuously fill annual space between object and sleeve, connected with bolts and pressure plates causing rubber sealing elements to expand when tightened, providing watertight seal and electrical insulation

2.6 ANTI-SEIZE COMPOUND

- A. Use anti-seize compound when using bolts and screws to install pre-manufactured equipment.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for verification of existing conditions before starting Work.
- B. Verify openings are ready to receive sleeves.

3.2 INSTALLATION - HANGERS AND SUPPORTS

- A. Anchors and Fasteners:
 - 1. Concrete Structural Elements: Provide expansion anchors, powder actuated anchors and preset inserts.
 - 2. Steel Structural Elements: Provide beam clamps, spring steel clips, and steel ramset fasteners.
 - 3. Concrete Surfaces: Provide self-drilling anchors and expansion anchors.
 - 4. Sheet Metal: Provide sheet metal screws.
 - 5. Wood Elements: Provide wood screws.
- B. Install conduit and raceway support and spacing in accordance with NEC.
- C. Do not fasten supports to pipes, ducts, mechanical equipment, or conduit.
- D. Install multiple conduit runs on common hangers.

E. Supports:

1. Fabricate supports from structural steel. Rigidly well members or install hexagon head bolts to present neat appearance with adequate strength and rigidity. Install spring lock washers under nuts.
2. Install surface mounted cabinets and panelboards with minimum of 4 anchors.
3. In wet and damp locations install steel channel supports to stand cabinets and panelboards 1-inch off wall.

3.3 INSTALLATION - EQUIPMENT BASES AND SUPPORTS

- A. Provide housekeeping pads of concrete, minimum 4 inches thick and extending 6 inches beyond supported equipment.
- B. Using templates furnished with equipment, install anchor bolts, and accessories for mounting and anchoring equipment.
- C. Construct supports of formed steel channel. Brace and fasten with flanges bolted to structure.

3.4 INSTALLATION - SLEEVES

- A. Exterior watertight entries: Seal with adjustable interlocking rubber links.
- B. Conduit penetrations not required to be watertight: Sleeve and fill with silicon foam.
- C. Set sleeves in position in forms. Provide reinforcing around sleeves.
- D. Size sleeves large enough to allow for movement due to expansion and contraction. Provide for continuous insulation wrapping.
- E. Extend sleeves through floors 1-inch above finished floor level. Caulk sleeves.
- F. Where conduit or raceway penetrates floor, ceiling, or wall, close off space between conduit or raceway and adjacent work with fire stopping insulation and caulk airtight. Provide close fitting metal collar or escutcheon covers at both sides of penetration.
- G. Install stainless steel escutcheons at finished surfaces.

3.5 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for field inspecting, testing, adjusting, and balancing.

3.6 CLEANING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for cleaning.

3.7 PROTECTION OF FINISHED WORK

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for protecting finished Work.
- B. Protect adjacent surfaces from damage by material installation.

END OF SECTION

SECTION 26 05 33 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes conduit and tubing, surface raceways, wireways, outlet boxes, pull and junction boxes, and handholes.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 05 26 "Grounding and Bonding for Electrical Systems."
 - 3. Section 26 05 29 "Hangers and Supports for Electrical Systems."
 - 4. Section 26 05 53 "Identification for Electrical Systems."

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated.
- B. National Electrical Manufacturers Association:
 - 1. NEMA 250 - Enclosures for Electrical Equipment (1,000 Volts Maximum).
 - 2. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies.
 - 3. NEMA OS 1 - Sheet Steel Outlet Boxes, Device Boxes, Covers, and Box Supports.
 - 4. NEMA OS 2 - Nonmetallic Outlet Boxes, Device Boxes, Covers, and Box Supports.
 - 5. NEMA RN 1 - Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit.
 - 6. NEMA TC 2 - Electrical Polyvinyl Chloride (PVC) Tubing and Conduit.
 - 7. NEMA TC 3 - PVC Fittings for Use with Rigid PVC Conduit and Tubing.
- C. National Fire Protection Association:
 - 1. NFPA 70 - National Electrical Code.

1.3 SYSTEM DESCRIPTION

- A. Raceway and boxes located as indicated on Drawings, and at other locations required for splices, taps, wire pulling, equipment connections, and compliance with regulatory requirements. Raceway and boxes are shown in approximate locations unless dimensioned. Provide raceway to complete wiring system.
- B. Underground: Schedule 40 PVC conduit. Provide cast metal boxes or nonmetallic handhole.
- C. When transitioning from below grade to above grade, provide PVC coated rigid steel conduit elbows.
- D. Outdoor Locations, Above Grade: Provide rigid steel conduit. Provide cast metal outlet, pull, and junction boxes.
- E. In Slab Above Grade: Provide thick wall nonmetallic conduit. Provide sheet metal boxes.
- F. Wet and Damp Locations: Provide rigid steel conduit. Provide cast metal or nonmetallic outlet, junction, and pull boxes. Provide flush mounting outlet box in finished areas.
- G. Concealed Dry Locations: Provide rigid steel conduit. Provide sheet-metal boxes. Provide flush mounting outlet box in finished areas. Provide hinged enclosure for large pull boxes.
- H. Exposed Dry Locations: Provide rigid steel conduit. Provide sheet-metal boxes. Provide flush mounting outlet box in finished areas. Provide hinged enclosure for large pull boxes.

1.4 DESIGN REQUIREMENTS

- A. Minimum Raceway Size: 3/4-inch unless otherwise specified.

1.5 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for submittal procedures.
- B. Product Data: Submit for the following:
 - 1. Rigid metallic conduit.
 - 2. Liquidtight flexible metal conduit.
 - 3. Nonmetallic conduit.
 - 4. Raceway fittings.
 - 5. Conduit bodies.
 - 6. Pull and junction boxes.
- C. Manufacturer's Installation Instructions: Submit application conditions and limitations of use stipulated by product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.6 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for closeout procedures.
- B. Project Record Documents:
 - 1. Record actual routing of conduits larger than 2-inch.
 - 2. Record actual locations of outlet, pull, and junction boxes.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for product storage and handling requirements.
- B. Protect conduit from corrosion and entrance of debris by storing above grade. Provide appropriate covering.
- C. Protect PVC conduit from sunlight.

1.8 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for coordination and Project conditions.

PART 2 - PRODUCTS

2.1 METAL CONDUIT

- A. Manufacturers:
 - 1. Allied.
 - 2. Wheatland.
 - 3. Or approved equal.
 - 4. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Rigid Steel Conduit: ANSI C80.1.
- C. Rigid Aluminium Conduit: ANSI C80.5.

- D. Intermediate Metal Conduit (IMC): Rigid steel.
- E. Fittings and Conduit Bodies: NEMA FB 1; all steel fittings.

2.2 PVC COATED METAL CONDUIT

- A. Manufacturers:
 - 1. Levy.
 - 2. Robroy Industries.
 - 3. Or approved equal.
 - 4. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description: NEMA RN 1; rigid steel conduit with external PVC coating, 20 thick.
- C. Fittings and Conduit Bodies: NEMA FB 1; steel fittings with external PVC coating to match conduit.

2.3 LIQUIDTIGHT FLEXIBLE METAL CONDUIT

- A. Manufacturers:
 - 1. Ultatite.
 - 2. Electri-flex.
 - 3. Or approved equal.
 - 4. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description: Interlocked steel construction with PVC jacket.
- C. Fittings: NEMA FB 1.

2.4 NONMETALLIC CONDUIT

- A. Manufacturers:
 - 1. Carlon.
 - 2. Or approved equal.
 - 3. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description: NEMA TC 2; Schedule 40 PVC.
- C. Fittings and Conduit Bodies: NEMA TC 3.

2.5 WIREWAY

- A. Manufacturers:
 - 1. Allied Moulded Products, Inc.
 - 2. Carlon.
 - 3. Or approved equal.
 - 4. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description: Oiltight and dust-tight type wireway.
- C. Knockouts: Bottom only.
- D. Size: As indicated on Drawings.
- E. Cover: Hinged cover with full gaskets.
- F. Connector: Slip-on.
- G. Fittings: Lay-in type with drip shield.
- H. Finish: Rust inhibiting primer coating with gray enamel finish.

2.6 OUTLET BOXES

- A. Manufacturers:
 - 1. Allied Moulded Products, Inc.
 - 2. Carlon; a brand of Thomas & Betts Corporation.
 - 3. Or approved equal.
 - 4. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Sheet Metal Outlet Boxes: NEMA OS 1, galvanized steel.
 - 1. Luminaire and Equipment Supporting Boxes: Rated for weight of equipment supported; furnish 1/2-inch male fixture studs where required.
 - 2. Concrete Ceiling Boxes: Concrete type.
- C. Nonmetallic Outlet Boxes: NEMA OS 2.
- D. Cast Boxes: NEMA FB 1, Type FD, cast fer alloy. Furnish gasketed cover by box manufacturer.
- E. Wall Plates for Finished Areas: As specified in Section 26 27 26 "Wiring Devices."
- F. Wall Plates for Unfinished Areas: Furnish gasketed cover.

2.7 PULL AND JUNCTION BOXES

- A. Manufacturers:
 - 1. nVent (Hoffman).
 - 2. Raco Taymac Bell; Hubbell Incorporated, Commercial, and Industrial.
 - 3. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Sheet Metal Boxes: NEMA OS 1, galvanized steel.
- C. Surface Mounted Cast Metal Box: NEMA 250, Type 4; flat-flanged, surface mounted junction box:
 - 1. Material: Galvanized cast iron.
 - 2. Cover: Furnish with ground flange, neoprene gasket, and stainless-steel cover screws.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for coordination and Project conditions.
- B. Verify outlet locations and routing and termination locations of raceway prior to rough-in.

3.2 INSTALLATION

- A. Ground and bond raceway and boxes in accordance with Section 26 05 26 "Grounding and Bonding for Electrical Systems."
- B. Fasten raceway and box supports to structure and finished in accordance with Section 26 05 29 "Hangers and Supports for Electrical Systems."
- C. Identify raceway and boxes in accordance with Section 26 05 53 "Identification for Electrical Systems."
- D. Arrange raceway and boxes to maintain headroom and present neat appearance.
- E. Use anti-seize compound when using bolts and screws to install pre-manufactured equipment.

3.3 INSTALLATION - RACEWAY

- A. Raceway routing is shown in approximate locations unless dimensioned. Route to complete wiring system.
- B. Arrange raceway supports to prevent misalignment during wiring installation.
- C. Support raceway using coating steel or malleable iron straps, lay-in adjustable hangers, clevis hangers, and split hangers.
- D. Group related raceway; support using conduit rack. Construct rack using steel channel specified in Section 26 05 29 "Hangers and Supports for Electrical Systems" to provide space on each for 25 percent additional raceways.
- E. Do not support raceway with wire or perforated pipe straps. Remove wire used for temporary supports.
- F. Do not attach raceway to ceiling support wires or other piping systems.
- G. Construct wireway supports from steel channel specified in Section 26 05 29 "Hangers and Supports for Electrical Systems."
- H. Route exposed raceway parallel and perpendicular to walls.
- I. Maximum Size Conduit in Slab Above Grade: 3/4-inch. Do not cross conduits in slab.
- J. Maintain clearance between raceway and piping for maintenance purposes.
- K. Maintain 12-inch clearance between raceway and surfaces with temperatures exceeding 104 degrees F.
- L. Cut conduit square using saw or pipe cutter; de-burr cut ends.
- M. Bring conduit to shoulder of fittings; fasten securely.
- N. Join nonmetallic conduit using cement as recommended by manufacturer. Wipe nonmetallic conduit dry and clean before joining. Apply full even coat of cement to entire area inserted in fitting. Allow joint to cure for minimum 20 minutes.
- O. Install conduit hubs or sealing locknuts to fasten conduit to sheet metal boxes in damp and wet locations and to cast boxes.
- P. Install no more than equivalent of three 90-degree bends between boxes. Install conduit bodies to make sharp changes in direction, as around beams. Install hydraulic on-shot bender to fabricate factory elbows for bends in metal conduit larger than 2-inch size.
- Q. Avoid moisture traps; install junction box with drain fitting at low points in conduit system.
- R. Install fittings to accommodate expansion and deflection where raceway crosses seismic, control and expansion joints.
- S. Install suitable pull string or cord in each empty raceway except sleeves and nipples.
- T. Install suitable caps to protect installed conduit against entrance of dirt and moisture.
- U. Surface Raceway: Install flat-head screws, clips, and straps to fasten raceway channel to surfaces; mount plumb and level. Install insulating bushings and inserts at connections to outlets and corner fittings.
- V. Close ends and unused openings in wireway.

3.4 INSTALLATION - BOXES

- A. Install wall mounted boxes at elevations to accommodate mounting heights as indicated on Drawings.
- B. Adjust box location up to 10 feet prior to rough-in to accommodate intended purpose.
- C. Orient boxes to accommodate wiring devices orientated as specified in Section 26 27 26 "Wiring Devices."
- D. Install pull boxes and junction boxes above accessible ceilings and in unfinished areas only.

- E. In Accessible Ceiling Areas: Install outlet and junction boxes no more than 6 inches from ceiling access panel or from removable recessed luminaire.
- F. Locate flush mounting box in masonry wall to require cutting of masonry unit corner only. Coordinate masonry cutting to achieve neat opening.
- G. Do not install flush mounting box back-to-back in walls; install with minimum 6 inches separation. Install with minimum 24 inches separation in acoustic rated walls.
- H. Secure flush mounting box to interior wall and partition studs. Accurately position to allow for surface finish thickness.
- I. Install stamped steel bridges to fasten flush mounting outlet box between studs.
- J. Install flush mounting box without damaging wall insulation or reducing its effectiveness.
- K. Install adjustable steel channel fasteners for hung ceiling outlet box.
- L. Do not fasten boxes to ceiling support wires or other piping systems.
- M. Support boxes independently of conduit.
- N. Install gang box where more than one device is mounted together. Do not use sectional box.
- O. Install gang box with plaster ring for single device outlets.

3.5 INTERFACE WITH OTHER PRODUCTS

- A. Locate outlet boxes to allow luminaires positioned as indicated on Drawings.
- B. Align adjacent wall mounted outlet boxes for switches, thermostats, and similar devices.

3.6 ADJUSTING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for testing, adjusting, and balancing.
- B. Adjust flush-mounting outlets to make front flush with finished wall material.
- C. Install knockout closures in unused openings in boxes.

3.7 CLEANING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for final cleaning.
- B. Clean interior of boxes to remove dust, debris, and other material.
- C. Clean exposed surfaces and restore finish.

END OF SECTION

SECTION 26 05 53 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Nameplates.
 - 2. Labels.
 - 3. Wire markers.
 - 4. Conduit markers.
 - 5. Stencils.
 - 6. Underground Warning Tape.
 - 7. Lockout Devices.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section

1.2 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures."
- B. Product Data:
 - 1. Submit manufacturer's catalog literature for each product required.
 - 2. Submit electrical identification schedule including list of wording, symbols, letter size, color coding, tag number, location, and function.
- C. Manufacturer's Installation Instructions: Indicate installation instructions, special procedures, and installation.

1.3 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of tagged devices; include tag numbers.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with NEC standards and other Sections of the Specifications.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' documented experience.
- B. Installer: Company specializing in performing Work of this Section with minimum 3 years' documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Accept identification products on site in original containers. Inspect for damage.
- C. Accept materials on site in original factory packaging, labeled with manufacturer's identification, including product density and thickness.
- D. Protect insulation from weather and construction traffic, dirt, water, chemical, and mechanical damage, by storing in original wrapping.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Refer to Section 01 60 00 "Product Requirements" for environmental conditions affecting products on site.
- B. Install labels and nameplates only when ambient temperature and humidity conditions for adhesive are within range recommended by manufacturer.

PART 2 - PRODUCTS

2.1 NAMEPLATES

- A. Manufacturers:
 - 1. Brady ID.
 - 2. Or approved equal.
 - 3. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description: Laminated 3-layer plastic with engraved white letters on black contrasting background color.
- C. Letter Size:
 - 1. 1/4-inch-high letters for identifying individual equipment and loads.
 - 2. 1/4-inch-high letters for identifying grouped equipment and loads.
 - 3. 3/8-inch-high letters for identifying main disconnect equipment.
- D. Minimum nameplate thickness: 1/8-inch.

2.2 LABELS

- A. Manufacturers:
 - 1. Brady ID.
 - 2. Or approved equal.
 - 3. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Labels: Embossed adhesive tape, with 3/16-inch white letters on black background.

2.3 WIRE MARKERS

- A. Manufacturers:
 - 1. Brady ID.
 - 2. Or approved equal.
 - 3. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Description: Cloth tape, split sleeve, or tubing type wire markers.

- C. Legend:
 - 1. Power and Lighting Circuits: Branch circuit or feeder number as indicated on Drawings.
 - 2. Control Circuits: Control wire number as indicated on Drawings.

2.4 CONDUIT AND RACEWAY MARKERS

- A. Manufacturers:
 - 1. Brady ID.
 - 2. Or approved equal.
 - 3. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Description: Nameplate and labels fastened with adhesive.

2.5 UNDERGROUND WARNING TAPE

- A. Manufacturers:
 - 1. Brady ID.
 - 2. Or approved equal.
 - 3. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Description: 4-inch-wide plastic tape, detectable type, colored red with suitable warning legend describing buried electrical lines.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Degrease and clean surfaces to receive adhesive for identification materials.

3.2 INSTALLATION

- A. Install identifying devices after completion of painting.
- B. Nameplate Installation:
 - 1. Install nameplate parallel to equipment lines.
 - 2. Install nameplate for each electrical distribution and control equipment enclosure with corrosive-resistant mechanical fasteners, or adhesive.
 - 3. Install nameplates for each control panel and major control components located outside panel with corrosive-resistant mechanical fasteners, or adhesive.
 - 4. Secure nameplate to equipment front using screws or rivets.
 - 5. Secure nameplate to inside surface of door on recessed panelboard in finished locations.
 - 6. Install nameplates for the following:
 - a. Switchboards.
 - b. Panelboards.
 - c. Transformers.
 - d. Service Disconnects.
- C. Label Installation:
 - 1. Install label parallel to equipment lines.
 - 2. Install label for identification of individual control device stations.
 - 3. Install labels for permanent adhesion and seal with clear lacquer.

D. Wire Marker Installation:

1. Install wire marker for each conductor at panelboard gutters, pull boxes, outlet and junction boxes, and each load connection.
2. Mark data cabling at each end. Install additional marking at accessible locations along the cable run.
3. Install labels at data outlets identifying patch panel and port designation as indicated on Drawings.

E. Underground Warning Tape Installation:

1. Install underground warning tape along length of each underground conduit, raceway, or cable 6 to 8 inches below finished grade.

END OF SECTION

SECTION 26 24 16 - PANELBOARDS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Distribution and branch circuit panelboards.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 05 29 "Hangers and Supports for Electrical Systems."
 - 3. Section 26 05 53 "Identification for Electrical Systems."

1.2 REFERENCE STANDARDS

- A. Institute of Electrical and Electronics Engineers:
 - 1. IEEE C62.41 - Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.
- B. National Electrical Manufacturers Association:
 - 1. NEMA ICS 2 - Industrial Control and Systems: Controllers, Contactors, and Overload Relays, Rated Not More Than 2,000 Volts AC or 750 Volts DC.
 - 2. NEMA ICS 5 - Industrial Control and Systems: Control Circuit and Pilot Devices.
 - 3. NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
 - 4. NEMA PB 1 - Panelboards.
 - 5. NEMA PB 1.1 - General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less.
- C. International Electrical Testing Association:
 - 1. NETA ATS - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- D. National Fire Protection Association:
 - 1. NFPA 70 - National Electrical Code.
- E. Underwriters Laboratories, Inc. (UL):
 - 1. UL 50 - Cabinets and Boxes
 - 2. UL 67 - Safety for Panelboards.
 - 3. UL 489 - Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures.
 - 4. UL 1283 - Electromagnetic Interference Filters.
 - 5. UL 1449 - Transient Voltage Surge Suppressors.
 - 6. UL 1699 - Arc-Fault Circuit Interrupters.

1.3 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit catalog data showing specified features of standard products.
- C. Shop Drawings: Indicate outline and support point dimensions, voltage, main bus ampacity, integrated short circuit ampere rating, circuit breaker, and fusible switch arrangement and sizes.

- D. Source Quality control submittals: Indicate results of shop and factory tests and inspections.
- E. Field Quality Control Submittals: Indicate results of Contractor furnished tests and inspections.

1.4 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of panelboards and record actual circuiting arrangements.
- C. Operation and Maintenance Data: Submit spare parts listing, source and current prices of replacement parts and supplies, and recommended maintenance procedures and intervals.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for maintenance products.

1.6 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Independently mounted panelboards shall be manufactured by:
 - 1. Square-D;
 - 2. Cutler Hammer; or
 - 3. Equivalent.

2.2 120/240 VAC DISTRIBUTION PANELBOARDS

- A. Panelboards:
 - 1. 240/120 VAC.
 - 2. 1-phase.
 - 3. 4-wire, 60 Hertz.
- B. Service Conditions:
 - 1. Temperature: 105 degrees F.
 - 2. Altitude: 3,107 feet.
 - 3. Bus: Copper.
- C. Provide copper ground bus in each panelboard.
 - 1. Minimum integrated short-circuit rating: 18k amperes RMS symmetrical at 240 VAC.
 - 2. Molded-Case Circuit Breakers: NEMA AB trip in each pole.
 - 3. Provide circuit breaker accessory trip units and auxiliary switches as indicated.
 - 4. Doors: Secured with vault-type latch with tumbler lock; keyed alike. For doors over 36 inches provide two latches; keyed alike.

2.3 120/240 PANELBOARD WITH TRANSFORMER

- A. Mini Power Zone: Square D Mini Power Zone Dry-Type Package Power Supply or approved equal. Minimum integrated short circuit rating of 18,000 amperes RMS symmetrical at 240 VAC. Transformer shall be rated as indicated on Drawings with 480 volt primary and 240/120 volt secondary. Transformers are to be encapsulated to provide protection against moisture, dust, and corrosive environments. Panelboard shall be supplied with bolt-on-type breakers.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install panelboards according to NEMA PB 1.1.
- B. Install panelboards plumb.
- C. Install recessed panelboards flush with wall finishes.
- D. Height: 6 feet to top of panelboard; install panelboards taller than 6 feet with bottom no more than 4 inches above floor.
- E. Install filler plates for unused spaces in panelboards.
- F. Provide typed circuit directory for each branch circuit panelboard. Revise directory to reflect circuiting changes to balance phase loads. Identify each circuit as to its clear, evident and specific purpose of use.
- G. Install engraved plastic nameplates according to Section 26 05 53 "Identification for Electrical Systems."
- H. Ground and bond panelboard enclosure according to Section 26 05 26 "Grounding and Bonding for Electrical Systems." Connect equipment ground bars of panels according to NFPA 70.
- I. Use anti-sieze compound on bolts and screws to install equipment.

3.2 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Inspect and test according to NETA ATS, except Section 4.
- C. Perform circuit breaker inspections and tests listed in NETA ATS, Section 7.6.

3.3 ADJUSTING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for starting and adjusting.
- B. Measure steady state load currents at each panelboard feeder; rearrange circuits in panelboard to balance phase loads to within 20 percent of each other. Maintain proper phasing for multi-wire branch circuits.

3.4 CLEANING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for cleaning.
- B. Clean existing panelboards to remain or to be reinstalled.

END OF SECTION

SECTION 26 27 26 - WIRING DEVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes wall switches; wall dimmers; receptacles; multioutlet assembly; and device plates and decorative box covers.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 05 33 "Raceway and Boxes for Electrical Systems" for outlet boxes for wiring devices.

1.2 REFERENCES

- A. National Electrical Manufacturers Association:
 - 1. NEMA WD 1 - General Requirements for Wiring Devices.
 - 2. NEMA WD 6 - Wiring Devices-Dimensional Requirements.
- B. National Fire Protection Association:
 - 1. NFPA 70 - National Electrical Code.

1.3 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for submittal procedures.
- B. Product Data: Submit manufacturer's catalog information showing dimensions, colors, and configurations.

1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' documented experience.

PART 2 - PRODUCTS

2.1 WALL SWITCHES

- A. Manufacturers; Wall Switch:
 - 1. General Electric Model 5951-2G.
 - 2. Hubbell Model 1221-1.
 - 3. P&S Model 20-AC-1-1.
 - 4. Or approved equal.
 - 5. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description: NEMA WD 1, Specification grade, AC only general-use snap switch.
- C. Body and Handle: Ivory plastic with toggle handle.
- D. Ratings:
 - 1. Voltage: 120-277 volts, AC.
 - 2. Current: 20 amperes.

2.2 RECEPTACLES

- A. Manufacturers:
 - 1. General Electric Model 5362.2.
 - 2. Hubbell Model 5362.1.
 - 3. P&S Model 5362.1.
 - 4. Or approved equal.
 - 5. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Product Description: NEMA WD 1, Specification grade general use receptacle.
- C. Device Body: Ivory plastic.
- D. Configuration: NEMA WD 6, type as indicated on Drawings.
- E. Convenience Receptacle: Type 5-20.
- F. GFCI Receptacle, 20 amp rated: Convenience receptacle with integral ground fault circuit interrupter to meet regulatory requirements.
- G. Outdoor receptacles shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted.

2.3 WALL PLATES

- A. Manufacturers:
 - 1. General Electric.
 - 2. Hubbell.
 - 3. P&S.
 - 4. Or approved equal.
 - 5. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. General: Provide plates for each switch and receptacle device. Provide plates to match material of box to which it is attached.
- C. Exposed: Plates for exposed screw jointed fittings shall match the fittings with edges of plates flush with edges of fittings. Plates for cast type boxes shall be of the cast, vapor type.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for coordination and Project conditions.
- B. Verify outlet boxes are installed at proper height.
- C. Verify wall openings are neatly cut and completely covered by wall plates.
- D. Verify branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.

3.2 PREPARATION

- A. Clean debris from outlet boxes.

3.3 INSTALLATION

- A. Use anti-seize compound when using bolts and screws to install equipment.
- B. Install devices plumb and level.
- C. Install switches with OFF position down.
- D. Install wall dimmers to achieve full rating specified and indicated after derating for ganging as instructed by manufacturer.
- E. Do not share neutral conductor on load side of dimmers.
- F. Install receptacles with grounding pole on bottom.
- G. Connect wiring device grounding terminal to branch circuit equipment grounding conductor.
- H. Install wall plates on flush mounted switches, receptacles, and blank outlets.
- I. Install decorative plates on switch, receptacle, and blank outlets in finished areas.
- J. Connect wiring devices by wrapping solid conductor around screw terminal. Install stranded conductor for branch circuits 10AWG and smaller. When stranded conductors are used in lieu of solid, use crimp on fork terminals for device terminations. Do not place bare stranded conductors directly under device screws.
- K. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted outlets.

3.4 INTERFACE WITH OTHER PRODUCTS

- A. Coordinate locations of outlet boxes provided under Section 26 05 33 "Raceway and Boxes for Electrical Systems" to obtain mounting heights as specified and as indicated on Drawings.
- B. Install wall switch 48 inches above finished floor.
- C. Install convenience receptacle 18 inches above finished floor.

3.5 FIELD QUALITY CONTROL

- A. Inspect each wiring device for defects.
- B. Operate each wall switch with circuit energized and verify proper operation.
- C. Verify each receptacle device is energized.
- D. Test each receptacle device for proper polarity.
- E. Test each GFCI receptacle device for proper operation.

3.6 ADJUSTING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for testing, adjusting, and balancing.
- B. Adjust devices and wall plates to be flush and level.

3.7 CLEANING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for final cleaning.
- B. Clean exposed surfaces to remove splatters and restore finish.

END OF SECTION

SECTION 26 28 13 - FUSES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Cartridge fuses rated 600 VAC and less for use in the following:
 - a. Control circuits.
 - b. Enclosed controllers.
 - c. Enclosed switches.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for spare-fuse cabinets. Include the following for each fuse type indicated:
 - 1. Ambient Temperature Adjustment Information: If ratings of fuses have been adjusted to accommodate ambient temperatures, provide list of fuses with adjusted ratings.
 - a. For each fuse having adjusted ratings, include location of fuse, original fuse rating, local ambient temperature, and adjusted fuse rating.
 - b. Provide manufacturer's technical data on which ambient temperature adjustment calculations are based.
 - 2. Dimensions and manufacturer's technical data on features, performance, electrical characteristics, and ratings.
 - 3. Current-limitation curves for fuses with current-limiting characteristics.
 - 4. Time-current coordination curves (average melt) and current-limitation curves (instantaneous peak let-through current) for each type and rating of fuse. Submit in PDF format.
 - 5. Coordination charts and tables and related data.

1.3 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For fuses to include in emergency, operation, and maintenance manuals. In addition to items specified in Section 01 70 00 "Execution and Closeout Requirements," include the following:
 - 1. Ambient temperature adjustment information.
 - 2. Current-limitation curves for fuses with current-limiting characteristics.
 - 3. Time-current coordination curves (average melt) and current-limitation curves (instantaneous peak let-through current) for each type and rating of fuse used on the Project. Submit in PDF format.
 - 4. Coordination charts and tables and related data.

1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Fuses: Equal to one of each size and type.

1.5 FIELD CONDITIONS

- A. Where ambient temperature to which fuses are directly exposed is less than 40 degrees F or more than 100 degrees F, apply manufacturer's ambient temperature adjustment factors to fuse ratings.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Bussmann, an Eaton business.
 - 2. Edison; a brand of Bussmann by Eaton.
 - 3. Littelfuse, Inc.
 - 4. Mersen USA.
 - 5. Or approved equal.
- B. Source Limitations: Obtain fuses, for use within a specific product or circuit, from single source from single manufacturer.

2.2 CARTRIDGE FUSES

- A. Characteristics: NEMA FU 1, current-limiting, nonrenewable cartridge fuses with voltage ratings consistent with circuit voltages.
 - 1. Type RK-1: 600V, zero- to 600-A rating, 200 kAIC, time delay.
 - 2. Type RK-5: 600V, zero- to 600-A rating, 200 kAIC, time delay.
 - 3. Type CC: 600V, zero- to 30-A rating, 200 kAIC, fast acting , time delay.
 - 4. Type CD: 600V, 31- to 60-A rating, 200 kAIC, fast acting , time delay.
 - 5. Type J: 600V, zero- to 600-A rating, 200 kAIC, time delay.
 - 6. Type L: 600V, 601- to 6000-A rating, 200 kAIC, time delay.
 - 7. Type T: 600V, zero- to 800-A rating, 200 kAIC, very fast acting , time delay.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Comply with NEMA FU 1 for cartridge fuses.
- D. Comply with NFPA 70.
- E. Coordinate fuse ratings with utilization equipment nameplate limitations of maximum fuse size and with system short-circuit current levels.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine fuses before installation. Reject fuses that are moisture damaged or physically damaged.
- B. Examine holders to receive fuses for compliance with installation tolerances and other conditions affecting performance, such as rejection features.
- C. Examine utilization equipment nameplates and installation instructions. Install fuses of sizes and with characteristics appropriate for each piece of equipment.
- D. Evaluate ambient temperatures to determine if fuse rating adjustment factors must be applied to fuse ratings.
- E. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 FUSE APPLICATIONS

- A. Cartridge Fuses:
 - 1. Service Entrance: Class L, fast acting; Class L, time delay; Class RK1, fast acting; Class RK1, time delay; Class J, fast acting; Class J, time delay; Class T, fast acting; or as indicated on Drawings.
 - 2. Other Branch Circuits: Class RK1, time delay; Class RK5, time delay; Class J, fast acting; Class J, time delay; Class CC, fast acting; or as indicated on Drawings.
 - 3. Control Transformer Circuits: Class CC, time delay, control transformer duty.
 - 4. Provide open-fuse indicator fuses or fuse covers with open fuse indication.

3.3 INSTALLATION

- A. Install fuses in fusible devices. Arrange fuses so rating information is readable without removing fuse.

3.4 IDENTIFICATION

- A. Install labels complying with requirements for identification specified in Section 26 05 53 "Identification for Electrical Systems" and indicating fuse replacement information inside of door of each fused switch and adjacent to each fuse block, socket, and holder.

END OF SECTION

SECTION 26 28 16.16 - ENCLOSED SWITCHES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Fusible.
 - 2. Non-fusible switches.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 05 29 "Hangers and Supports for Electrical Systems."
 - 3. Section 26 05 53 "Identification for Electrical Systems."

1.2 REFERENCE STANDARDS

- A. National Electrical Manufacturers Association:
 - 1. NEMA KS 1 - Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
- B. National Fire Protection Association:
 - 1. NFPA 70 - National Electrical Code.

1.3 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for submittal procedures.
- B. Product Data: Submit switch ratings and enclosure dimensions.

1.4 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for closeout procedures.
- B. Project Record Documents: Record actual locations of enclosed switches and ratings of installed fuses.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' documented experience.

PART 2 - PRODUCTS

2.1 FUSIBLE SWITCH ASSEMBLIES

- A. Manufacturers:
 - 1. Schneider Electric USA (Square D).
 - 2. Eaton.
 - 3. Or approved equal.
 - 4. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- B. Description: NEMA KS 1, Type HD, enclosed load interrupter knife switch. Handle lockable in OFF position.

- C. Operation:
 - 1. Switch Ratings:
 - a. Switch Rating: Horsepower rated for AC or DC as indicated on Drawings.
 - b. Short Circuit Current Rating: UL listed for 200,000 rms symmetrical amperes when used with or protected by Class R or Class J fuses (30 to 600 ampere switches employing appropriate fuse rejection schemes).
- D. Materials:
 - 1. Coordinate selection in the following paragraph with fuses specified for application in enclosed switches.
 - 2. Fuse clips: Designed to accommodate NEMA FU 1, Class R fuses.
 - 3. Enclosure: NEMA KS 1, to meet conditions.
 - a. Interior Dry Locations: Type 1.
 - b. Exterior Locations: Type 3R or 4.
 - 4. Service Entrance: Switches identified for use as service equipment are to be labeled for this application. Furnish solid neutral assembly and equipment ground bar.
 - 5. Furnish switches with entirely copper current carrying parts.

2.2 HEAVY-DUTY DOUBLE THROW GENERATOR QUICK CONNECT SAFETY SWITCHES

- A. Provide switches as shown on Drawings, with the following ratings:
 - 1. Ampere Rating: As indicated on Drawings. 600 volts ac.
 - 2. Three poles with solid neutral.
 - 3. Upper utility switch shall be fusible.
 - 4. Mechanical lugs suitable for aluminum or copper conductors.
- B. Construction:
 - 1. Switch blades, jaws, and bus bars shall be visible and plated copper.
 - 2. Switches shall have a red handle that is easily pad-lockable with three 3/8-inch shank locks in the OFF position.
 - 3. Switches shall be of double throw design such that both switches may not be closed simultaneously. Handle operation shall have an "off" position between the two on positions.
 - 4. Switch shall be equipped with a separate interlocked receptacle compartment containing receptacles for quick-connection and disconnection of portable cord-connected equipment.
 - a. Interlock shall prevent the lower generator switch from being closed while cable compartment door is open and shall prevent the door from being opened while the switch is closed.
 - b. Compartment shall be equipped with a spring-assisted door to allow portable cords to exit the compartment while in use but shall close when not in use to effectively seal the compartment to prevent insects and small animals from entry.
 - c. Compartment shall be equipped with receptacles for sufficient cable connection for the ampacity of the switch.
 - d. Receptacles for switches 200 amps and greater shall be of the single cable per phase design - utilizing quarter turn cam type connections.
 - e. Receptacles shall be Cam-Lok type. 600 amp and 800 amp switches shall employ parallel receptacles.
 - 5. Switches shall have deionizing arc chutes.
 - 6. Switches shall have factory-installed ground lug kit.
 - 7. Switch assembly and operating handle shall be an integral part of the enclosure base.
 - 8. Switch blades shall be readily visible in the "ON" and "OFF" position.

9. Switch operating mechanism shall be non-teasable, positive quick-make/quick-break type. Bail type mechanisms are not acceptable.
 10. Fusible switches shall be suitable for service entrance equipment.
 11. Switches shall have a solid or switched neutral as shown on the Drawings.
 12. Switches shall have line terminal shields (except for non-fusible double throw switches).
 13. Switches shall be suitable for systems cable of 100 kA at 600 V with embossed or engraved ON-OFF indication shall be provided.
 14. Double-make, double-break switch blade feature shall be provided.
 15. Renewal parts data shall be shown on the inside of the door.
- C. Enclosures:
1. All enclosures shall be NEMA 3R rainproof.
 2. Paint color shall be ANSI 61 gray.
 3. 600 and 800 amp enclosures shall include a "Z" mounting channel on the back for assistance in mounting.
 4. 600 and 800 amp switches shall be equipped with lifting eyes.
- D. The following factory modifications are to be included:
1. Phenolic.
 2. Lock ON provision.
 3. Lock OFF provision.
 4. Factory installed auxiliary contact.
 5. Factory installed UL listed switching neutral bonding kit.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install enclosed switches where indicated.
- B. Install enclosed switches plumb. Provide supports in accordance with Section 26 05 29 "Hangers and Supports for Electrical Systems."
- C. Height: 5 feet to operating handle.
- D. Install fuses for fusible disconnect switches. Refer to Section 26 28 13 "Fuses" for product requirements.
- E. Install engraved plastic nameplates in accordance with Section 26 05 53 "Identification for Electrical Systems." Engrave nameplates with the equipment served and the panel and circuit number supplying the switch.
- F. Apply adhesive tag on inside door of each fused switch indicating NEMA fuse class and size installed.

3.2 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting, testing, adjusting, and balancing.
- B. Inspect and test in accordance with NETA ATS, except Section 4.
- C. Perform inspections and tests listed in NETA ATS, Section 7.5.

3.3 CLEANING

- A. Refer to Section 01 70 00 Execution and Closeout Requirements” for requirements for cleaning.
- B. Clean existing enclosed switches to remain or to be reinstalled.

END OF SECTION

SECTION 26 29 13.06 - SOFT-START MOTOR CONTROLLERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes soft-start motor controllers that are designed for reduced-voltage start and full-voltage run duty.
 - 1. Enclosed soft-start controllers.
 - 2. Combination soft-start controllers.
 - 3. Enclosures.
 - 4. Accessories.
 - 5. Identification.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 DEFINITIONS

- A. CPT: Control power transformer.
- B. FLA: Full-load current.
- C. MCCB: Molded-case circuit breaker.
- D. MCP: Motor circuit protector.
- E. NC: Normally closed.
- F. NO: Normally open.
- G. OCPD: Overcurrent protective device.
- H. SCCR: Short-circuit current rating.
- I. SCPD: Short-circuit protective device.
- J. SCR: Silicon-controlled rectifier.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
- B. Shop Drawings: For each type of controller.
 - 1. Include Plans, elevations, Sections, and mounting details.
 - 2. Indicate dimensions, weights, required clearances, and location and size of each field connection.
 - 3. Wire Termination Diagrams and Schedules: Include diagrams for signal and control wiring. Identify terminals and wiring designations and color-codes to facilitate installation, operation, and maintenance. Indicate recommended types, wire sizes, and circuiting arrangements for field-installed wiring, and show circuit protection features. Differentiate between manufacturer-installed and field-installed wiring.
 - 4. Include features, characteristics, ratings, and factory settings of individual OCPD and auxiliary components.
- C. Product Schedule: For each enclosed controller.
 - 1. Each installed soft-start controller type.
 - 2. NRTL listing.
 - 3. Factory-installed accessories.
 - 4. Nameplate legends.

5. SCCR of integrated unit.
 - a. For each combination soft-start controller, include features, characteristics, ratings, and factory setting of the SCPD and OCPD.
 - b. For each series-rated combination, state the listed integrated SCCR (withstand) of SCPDs and OCPDs by an NRTL acceptable to authorities having jurisdiction.

1.4 INFORMATIONAL SUBMITTALS

- A. Seismic Qualification Data: Certificates, for soft-start controllers, from manufacturer.
 1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
 2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
 3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.
- B. Source quality-control reports.
- C. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For soft-start controllers to include in operation and maintenance manuals.
 1. Include the following:
 - a. Routine maintenance requirements for soft-start controllers and installed components.
 - b. Manufacturer's written instructions for testing and adjusting circuit-breaker and MCP trip settings.
 - c. Manufacturer's written instructions for testing, adjusting, and reprogramming reduced-voltage soft-start controllers.
 - d. Load-Current and Overload-Relay Heater List: Compile after motors have been installed, and arrange to demonstrate that selection of heaters suits actual motor nameplate FLAs.
 - e. Load-Current and List of Settings of Adjustable Overload Relays: Compile after motors have been installed, and arrange to demonstrate that switch settings for motor running overload protection suit actual motors to be protected.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Fuses for Fused Switches: Equal to one set of each size and type.
 2. Control Power Fuses: Equal to one set of each size and type.
 3. Indicating Lights: One set of each type and color installed.
 4. Auxiliary Contacts: Furnish one set spare(s) for each size and type of magnetic controller installed.
 5. Power Contacts: Furnish one set spares for each size and type of magnetic contactor installed.

1.7 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Accredited by NETA.
 - 1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store soft-start controllers indoors in clean, dry space with uniform temperature to prevent condensation. Protect soft-start controllers from exposure to dirt, fumes, water, corrosive substances, and physical damage.
- B. If stored in areas subject to weather, cover soft-start controllers to protect them from weather, dirt, dust, corrosive substances, and physical damage. Remove loose packing and flammable materials from inside controllers; connect factory-installed space heaters to temporary electrical service.
- C. Handle per manufacturer-written instructions. Lift only with lugs provided. Handle carefully to avoid damage to components, enclosure, and finish.

1.9 FIELD CONDITIONS

- A. Environmental Limitations: Rate equipment for continuous operation under the following conditions unless otherwise indicated:
 - 1. Ambient Temperature: Not less than 32 degrees F and not exceeding 104 degrees F, humidity noncondensing.
 - 2. Altitude: Not exceeding 3,300 feet.
 - 3. The effect of solar radiation is insignificant.

PART 2 - PRODUCTS

2.1 MOTOR CONTROLLER PERFORMANCE REQUIREMENTS

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.
- B. UL Compliance: Fabricate and label enclosed controllers to comply with UL 508.
- C. NEMA Compliance: Fabricate motor controllers to comply with NEMA ICS 2.

2.2 COMBINATION SOFT-START MOTOR CONTROLLERS

- A. Description: Factory-assembled, combination, reduced-voltage soft-start controller with a disconnecting means, SCPD and OCPD, in a single enclosure. The reduced-voltage soft-start controller shall consist of an integrated unit with power SCRs, heat sink, microprocessor logic board, door-mounted digital display and user interface module, run-bypass contactor, and overload relay(s); suitable for use with NEMA MG 1, Design B, polyphase, medium induction motors.
 - 1. Run-Bypass Contactor: Magnetic contactor in parallel with the SCR of the soft-start controller, bypassing the SCR when full voltage is achieved.

- B. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Eaton.
 - 2. Allen Bradley - SMC Flex.
 - 3. Square D; by Schneider Electric.
 - 4. ABB.
 - 5. Or approved equal.
- C. Standard: Comply with NEMA ICS 2, general purpose, Class A.
- D. Configuration: Heavy duty.
 - 1. At least two SCRs per phase to control the starting and stopping of the motor.
 - 2. Microprocessor control shall continuously monitor current and proper operation of the SCRs.
 - 3. Bypass Contactor: Operates automatically when full voltage is applied to motor, and bypasses the SCRs. Soft-start controller protective features and deceleration controls shall remain active when this contactor is in the bypass mode.
 - 4. Power Electronics Disconnect Contactor. Where indicated, installed ahead of the power electronics equipment, and shall open automatically when the motor is stopped, or a controller fault is detected, or when an SCR shorts.
 - 5. Logic Board: Identical for all ampere ratings and voltage classes, with environmental protective coating.
 - 6. Surge Protection: Comply with NEMA ICS 2 requirements for surge suppression.
- E. Control Power:
 - 1. For on-board control power, obtain from line circuit or from integral CPT. The CPT shall have capacity to operate integral devices and remotely located pilot, indicating, and control devices.
 - 2. Spare CPT Capacity: As indicated on Drawings, available in increments of 100 VA, from 100 to 500 VA.
- F. Controller Diagnostics and Protection:
 - 1. Microprocessor-based thermal-protection system for monitoring SCR and motor thermal characteristics, and providing controller overtemperature and motor-overload alarm and trip; settings selectable via the keypad.
 - 2. Protection from line-side reverse phasing; line-side and motor-side phase loss; motor jam, stall, and under-load conditions; and line frequency over or under normal.
 - 3. Input isolation contactor that opens when the controller diagnostics detect a faulted soft-start component or when the motor is stopped.
- G. Cover mounted-controller status panel with LED lights or alphanumeric display to show the following:
 - 1. Starter Status: "Ready," "starting," "stopping," or "run."
 - 2. Motor current in amperes.
 - 3. Faults:
 - a. Motor overcurrent trip.
 - b. Motor thermal overload.
 - c. Starter thermal fault.
 - d. Low line voltage.
 - e. Loss of a phase.
 - f. Phases reversed.
 - g. Maximum starting time exceeded.
 - h. Serial communications error.

- H. Interface Panel: Mounted on controller door.
 - 1. Guarded adjustable set points, not readily accessible.
 - a. Motor FLA, adjustable from 40 to 110 percent of the controller's rating.
 - b. Current limitation on starting, adjustable from 200 to 500 percent of FLA, typically set at 300 percent.
 - c. NEMA ICS 2 overload class. Selections shall include the following tripping classes: Class 5, Class 10, Class 20, and Class 30.
 - 2. Adjustable set points, readily accessible, password protected.
 - a. Linear acceleration, adjustable from 1 to 60 s.
 - b. Maximum start time, adjustable from 1 to 250 s.
 - c. Selector switch; select coast to stop or soft stop.
 - d. Linear deceleration, adjustable from 1 to 60 s.
- I. Remote Output Features: All outputs shall be prewired to terminal blocks.
 - 1. Analog output for field-selectable assignment of motor operating characteristics; 4- to 20-mA dc.
 - 2. Form C status contacts that change state when controller is running.
 - 3. Form C alarm contacts that change state when a fault condition occurs.
- J. Fusible Disconnecting Means:
 - 1. NEMA KS 1, heavy-duty, horsepower-rated, fusible switch with clips or bolt pads to accommodate indicated fuses.
 - 2. Lockable Handle: Accepts three padlocks and interlocks with cover in closed position.
 - 3. Auxiliary Contacts: NO or NC, arranged to activate before switch blades open.
- K. MCP Disconnecting Means:
 - 1. UL 489 and NEMA AB 3 (with interrupting capacity to comply with available fault currents) instantaneous-only circuit breaker with front-mounted, field-adjustable, short-circuit trip coordinated with motor locked-rotor amperes.
 - 2. Lockable Handle: Accepts three padlocks and interlocks with cover in closed position.
 - 3. Auxiliary contacts "a" and "b" arranged to activate with MCP handle.
 - 4. NC/NO alarm contact that operates only when MCP has tripped.
 - a. Current-limiting module to increase controller SCCR (withstand) to 100 kA.

2.3 ENCLOSURES

- A. Comply with NEMA 250, Type designations as indicated on Drawings, to comply with environmental conditions at installed location.
- B. Construction of the enclosures shall comply with NEMA ICS 6.
- C. Controllers in hazardous (classified) locations shall comply with UL 1203.

2.4 ACCESSORIES

- A. General Requirements for Control Circuit and Pilot Devices: NEMA ICS 5; factory installed in controller enclosure cover unless otherwise indicated.
 - 1. Push Buttons, Pilot Lights, and Selector Switches: Heavy duty, except as needed to match enclosure type. Heavy-duty or oiltight where indicated on Drawings.
 - a. Push Buttons: As indicated on Drawings.
 - b. Pilot Lights: As indicated Drawings.
 - 2. Elapsed Time Meters: Heavy duty with digital readout in hours; resettable.
 - 3. Meters: Panel type, 2-1/2-inch minimum size with 90- or 120-degree scale and plus or minus 2 percent accuracy. Where indicated, provide selector switches with Hand - Off Auto positions.

2.5 IDENTIFICATION

- A. Controller Nameplates: As described in Section 26 05 53 "Identification for Electrical Systems," for each compartment, mounted with corrosion-resistant screws.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and space conditions for compliance with requirements for motor controllers, their relationship with the motors, and other conditions affecting performance of the Work.

3.2 INSTALLATION

- A. Comply with NECA 1.
- B. Wall-Mounted Controllers: Install controllers on walls with tops at uniform height indicated, and by bolting units to wall or mounting on slotted support systems complying with Section 26 05 29 "Hangers and Supports for Electrical Systems," and bolted to wall.
- C. Install per NEMA ICS 3.1.
- D. Tighten accessible connections and mechanical fasteners after placing controller.
- E. Select and install overload heater elements in motor controllers to match installed motor characteristics.
- F. Maintain minimum clearances and workspace at equipment according to manufacturer's written instructions and NFPA 70.
- G. Control Wiring: Separate control wiring from power wiring. Where unavoidable, use twisted pair cabling or shielded cables for control wiring.
- H. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii. Install lacing bars and distribution spools.
- I. Setting of Overload Relays: Select and set overloads on the basis of FLA rating as shown on motor nameplate. Adjust setting value for special motors as required by NFPA 70 for high-torque, high-efficiency, and so on motors.
- J. Ground and bond controller per Section 26 05 26 "Grounding and Bonding for Electrical Systems."
- K. Install plumb. Provide supports per Section 26 05 29 "Hangers and Supports for Electrical Systems."
- L. Height: 5 feet, 6 inches maximum to all operating or monitoring devices.

3.3 IDENTIFICATION

- A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Section 26 05 53 "Identification for Electrical Systems."

3.4 FIELD QUALITY CONTROL

- A. Inspect and test per other Specifications and NETA ATS, except Section 4.
- B. Perform inspections and tests listed in NETA ATS, Section 7.16 and NEMA ICS 3.1
- C. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- D. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
- E. Perform tests and inspections with the assistance of a factory-authorized service representative.
- F. Tests and Inspections:
 - 1. Comply with provisions of NFPA 70B, Chapter "Testing and Test Methods."
 - 2. Visual and Mechanical Inspection:
 - a. Compare equipment nameplate data with Drawings and the Specifications.
 - b. Inspect physical and mechanical condition.
 - c. Inspect anchorage, alignment, and grounding.
 - d. Verify that the unit is clean.
 - e. Ensure that vent path openings are free from debris and that heat-transfer surfaces are clean.
 - f. Verify correct connections of circuit boards, wiring, disconnects, and ribbon cables.
 - g. Inspect Contactors:
 - 1) Verify mechanical operation.
 - 2) Verify that contact gap, wipe, alignment, and pressure are according to manufacturer's published data.
 - h. Motor-Running Protection:
 - 1) Verify that motor FLA is at, or under, the controller current rating.
 - 2) Verify that overload element setting is correct for its application.
 - 3) Apply minimum- and maximum-speed set points. Verify that set points are within limitations of the load coupled to the motor.
 - 4) If motor-running protection is provided by fuses, verify correct fuse rating.
 - i. Inspect bolted electrical connections for high resistance using one of the following two methods:
 - 1) Use a low-resistance ohmmeter. Compare bolted-connection-resistance values to values of similar connections. Investigate values that deviate from those of similar bolted connections by more than 50 percent of the lowest value.
 - 2) Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method according to manufacturer's published data or NETA ATS, Table 100.12. Bolt-torque levels shall be according to manufacturer's published data. In the absence of manufacturer's published data, use NETA ATS, Table 100.12.
 - j. Verify appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.

3. Electrical Tests:
 - a. For the contactor and circuit breaker, perform insulation-resistance tests for one minute on each pole, phase-to-phase and phase-to-ground with switch closed, and across each open pole. Insulation-resistance values shall be according to manufacturer's published data or NETA ATS, Table 100.1. In the absence of manufacturer's published data, use Table 100.5. Values of insulation resistance less than this table or manufacturer's written instructions shall be investigated and corrected.
 - b. Measure fuse resistance. Investigate fuse-resistance values that deviate from each other by more than 15 percent.
 - c. Test motor protection devices according to manufacturer's published data.
 - d. Test circuit breakers as follows:
 - 1) Operate the circuit breaker to ensure smooth operation.
 - 2) For adjustable circuit breakers, adjust protective device settings according to the coordination study. Comply with coordination study recommendations.
 - e. Test the electronic motor overload relay elements by injecting primary current through the overload circuit and monitoring trip time of the overload element.
 - f. Test the following parameters according to NETA relay calibration procedures, or as recommended by manufacturer:
 - 1) ANSI No. 49R, Overtemperature Protection:
 - a) Determine time delay at 300 percent of setting.
 - b) Determine a second point on the operating curve.
 - c) Determine pickup.
 - 2) ANSI No. 47, Input Phase Loss and Reversed Phases Protection:
 - a) Determine positive sequence voltage to close the NO contact.
 - b) Determine positive sequence voltage to open the NC contact (undervoltage trip).
 - c) Verify negative sequence trip.
 - d) Determine time delay to close the NO contact with sudden application of 120 percent of pickup.
 - e) Determine time delay to close the NC contact on removal of voltage when previously set to rated system voltage.
 - 3) ANSI No. 81, Overfrequency Protection:
 - a) Verify frequency set points.
 - b) Determine time delay.
 - c) Determine undervoltage cutoff.
 - 4) Fault Alarm Outputs: Verify that each relay contact performs its intended function in the control scheme including breaker trip tests, close inhibit tests, lockout tests, and alarm functions.
 - g. Perform operational tests by initiating control devices.
4. Infrared Inspection: Perform the survey during periods of maximum possible loading. Remove all necessary covers prior to the inspection.
 - a. Comply with recommendations of NFPA 70B, Chapter "Testing and Test Methods," Article "Infrared Inspection."
 - b. After Substantial Completion, but not more than 60 days after Final Acceptance, perform infrared inspection of the electrical power connections of each motor controller.
 - c. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each motor controller 11 months after date of Substantial Completion.

- d. Report of Infrared Inspection: Prepare a certified report that identifies the testing technician and equipment used, and lists the following results:
 - 1) Description of equipment to be tested.
 - 2) Discrepancies.
 - 3) Temperature difference between the area of concern and the reference area.
 - 4) Probable cause of temperature difference.
 - 5) Areas inspected. Identify inaccessible and unobservable areas and equipment.
 - 6) Identify load conditions at time of inspection.
 - 7) Provide photographs and thermograms of the deficient area.
 - 8) Recommended action.
- e. Equipment: Inspect distribution systems with imaging equipment capable of detecting a minimum temperature difference of 1 degree C at 30 degrees C. The equipment shall detect emitted radiation and convert detected radiation to a visual signal.
- f. Act on inspection results, recommended action, and considering recommendations of NETA ATS, Table 100.18. Correct possible and probable deficiencies as soon as Owner's operations permit. Retest until deficiencies are corrected.
- G. Motor controllers will be considered defective if they do not pass tests and inspections.
- H. Prepare test and inspection reports.

3.5 SYSTEM FUNCTION TESTS

- A. System function tests shall prove the correct interaction of sensing, processing, and action devices. Perform system function tests after field quality-control tests have been completed and all components have passed specified tests.
 - 1. Develop test parameters and perform tests for the purpose of evaluating performance of integral components and their functioning as a complete unit within design requirements and manufacturer's published data.
 - 2. Verify the correct operation of interlock safety devices for fail-safe functions in addition to design function.
 - 3. Verify the correct operation of sensing devices, alarms, and indicating devices.
- B. Motor controllers will be considered defective if they do not pass the system function tests and inspections.
- C. Prepare test and inspection reports.

3.6 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain motor controllers.

END OF SECTION

SECTION 26 43 00 - SURGE PROTECTIVE DEVICES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes Surge Protective Device (SPD), (former Transient Voltage Surge Suppression devices, TVSS). SPD used herein and all Drawings.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 05 26 "Grounding and Bonding."
 - 3. Section 26 27 26 "Wiring Devices."

1.2 REFERENCES

- A. Specified system shall be designed, manufactured, tested, and installed in compliance with:
 - 1. Canadian Standards Association (CSA).
 - 2. American National Standards Institute.
 - 3. National Electrical Manufacturer Association (NEMA).
- B. Institute of Electrical and Electronic Engineers:
 - 1. ANSI/IEEE C62.11.
 - 2. C62.41.
 - 3. C62.45.
- C. Federal Information Processing Standards Publication 94 FIP PUB 94.
- D. National Fire Protection Association:
 - 1. NFPA 20.
 - 2. NFPA 70.
 - 3. NFPA 75.
 - 4. NFPA 780.
- E. Underwriters Laboratories, Inc. 1449 3rd Ed., UL 1283: MIL-STD-220A.

1.3 SYSTEM DESCRIPTION

- A. Includes electrical and mechanical requirements for a high-energy transient voltage surge suppression system. Specified system shall provide effective high energy surge current diversion, sine wave tracking for electrical line noise filtering and be suitable for application in ANSI/IEEE C62.41 Category A, B, and C environments, as tested by ANSI/IEEE C62.11, C62.45 and MIL-STD-220A.
- B. Connect system in parallel with protected system; no series connected elements used which limit load current or kVA capability.

1.4 SUBMITTALS FOR REVIEW

- A. Submit under provisions of Section 01 33 00 "Submittal Procedures."
- B. Provide dimensions and materials of each component. Include isolation switch data.
- C. Documentation of specified system's UL 1449 Listing and clamping voltage ratings of all protection modes shall be included as required product data submittal information.
- D. Include documentation of specified system's UL 1283 Complimentary Listing as required product data submittal information.
- E. Independent fuse coordination tests from a nationally recognized independent testing laboratory.

1.5 PROJECT CLOSEOUT SUBMITTALS

- A. Manufacturer shall furnish an installation manual with installation, start up, trouble-shooting guide and operating instructions for the specified system.
- B. Electrical and Mechanical Drawings provided by manufacturer showing unit dimensions, weights, component, and connection locations, mounting provisions, connection details, and wiring diagram.
- C. Record actual location of SPD.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacture of SPD equipment with minimum 5 years' experience.

1.7 REGULATORY REQUIREMENTS

- A. Product Listing: UL listed under UL 1449 (Rev 09/2009) Standard for SPD and surge ratings permanently affixed to SPD.
- B. Complimentary listed to UL 1283 Standard for EMI/RFI Facility Filters.

1.8 FIELD QUALITY CONTROL

- A. Inspect each wiring device for defects.
- B. Verify all connections are properly bonded.

1.9 WARRANTY

- A. Manufacturer shall provide a full 5-year warranty from date of shipment against any failure when installed in compliance with manufacturer-written instructions, UL listing requirements, and any applicable national or local electrical codes.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Eaton;
- B. Erico Critec;
- C. MVC;
- D. Square D; or
- E. Approved equal.

- F. All manufacturers shall submit independent test data from a nationally recognized testing laboratory for over current protection, protection modes, and compliance with UL 1449 ratings.
- G. SPD to be mounted integral to motor control center.

2.2 ENVIRONMENTAL REQUIREMENTS

- A. Storage temperature range shall be -67 to +187 degrees F.
- B. Operating temperature range shall be -40 to +122 degrees F.
- C. Operation shall be reliable in an environment with 0- to 95-percent non-condensing relative humidity.
- D. SPD shall not generate any appreciable audible noise.
- E. Unit shall not generate any appreciable magnetic fields and shall be suitable for use directly inside computer rooms.

2.3 ELECTRICAL REQUIREMENTS

- A. Nominal system operating voltage shall be 277/480, 3-phase WYE, 4-wire plus ground.
- B. Maximum Continuous Operating Voltage (MCOV) shall be greater than 115 percent nominal system operating voltage to ensure ability of system to withstand temporary RMS overvoltage (swell) conditions.
- C. Operating frequency range of the system shall be at least 47 to 63 Hertz.
- D. All protection modes (including Neutral to Ground) of SPD shall be internally fused at component level with fuses IxIXT capability to allow suppressor's maximum rated transient current to pass through suppressor without fuse operation. If rated IxIXT characteristic of fusing is exceeded, fusing is capable of opening in less than 1 millisecond and clear both high and low impedance fault conditions. Fusing shall be able to interrupt up to 100 kA symmetrical fault current with 600 VAC applied. This overcurrent protection circuit shall be monitored and provide indication of suppression failure/operability. Conductor level fuses or circuit breakers internal or external to SPD not acceptable. Contractor to furnish submittal documentation of proper fuse coordination of actual fault tests from a nationally recognized testing laboratory for product approval.
- E. SPD unit shall be supplied with factory-installed disconnect and overcurrent protection device that eliminates requirement for external fusing.

2.4 PROTECTION MODES

- A. Protection Modes:
 - 1. Line-to-Neutral Protection.
 - 2. Neutral-to-Ground Protection.
 - 3. Line-to-Ground Protection.
 - 4. Line-to-Line Protection.
- B. SPD surge current capacity shall be 200 kA per phase max at service equipment, 120 kA max per phase at required distribution of branch panels.
- C. SPD system shall provide a joule rating that meets or exceeds requirements of ANSI/IEEE C62.41 Category C delivery capability.
- D. Typical response time of all suppression components shall be less than 1 nanosecond.

2.5 SURGE SUPPRESSION COMPONENTS

- A. SPD unit shall display combined total number of transient voltage surges detected from L-N, L-G, N-G, and L-L since counter was last reset.
- B. Provide dry contacts to monitor ON/OFF and alarm status.
- C. Alarm silence, reset, and test functions.
- D. Indication of full or partial loss of protection.
- E. Individually fused suppression modules.
- F. AC Tracking Filter: EMI/RFI filtering up to -50dB from 100 kHz to 100 MHz.
- G. Unit to include isolation switch, module status indicator lights, form C summary alarm contact.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. SPD shall be installed as a Type 2 device.
- B. Contractor shall follow SPD manufacturer-recommended installation practices and comply with all applicable codes.
- C. Manufacturer shall furnish an installation manual with installation, start up, trouble-shooting guide and operating instructions for the specified system.
- D. Electrical and Mechanical Drawings shall be provided by the manufacturer, which show unit dimensions, weights, component, and connection locations, mounting provisions, connection details and wiring diagram.
- E. No sharp bend allowed in wiring from SPD unit to ground.
- F. Install SPD so wiring between SPD and Point of Connection is minimal.

END OF SECTION

**DIVISION 31
EARTHWORK**

SECTION 31 10 00 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Removing surface debris.
 - 2. Removing designated paving, and curbs.
 - 3. Removing designated trees, shrubs, and other plant life.
 - 4. Excavating topsoil.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 33 11 13 "Potable Water Supply Wells."

1.2 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.

1.3 QUALITY ASSURANCE

- A. Conform to Federal, State, and Local codes for disposal of debris.
- B. Perform Work in accordance with City of Midland's standard.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for verification of existing conditions before starting work.
- B. Verify existing plant life designated to remain is tagged or identified.
- C. Identify waste area for placing removed materials.

3.2 PREPARATION

- A. Call Local Utility Line Information service as provided in Construction Plans not less than 3 working days before performing Work.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.

3.3 PROTECTION

- A. Locate, identify, and protect from damage utilities indicated to remain.
- B. Protect trees, plant growth, and features designated to remain.
- C. Protect bench marks, survey control points, and existing structures from damage or displacement.

3.4 CLEARING

- A. Clear areas required for access to site and execution of Work to minimum depth of 18 inches.
- B. Remove trees and shrubs as indicated in Drawings. Remove stumps and root system to dept of 18 inches.

3.5 REMOVAL

- A. Remove debris, rock, and extracted plant life from site.
- B. Partially remove paving, curbs, and, other improvements as indicated on Drawings. Neatly saw cut edges at right angle to surface.
- C. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.
- D. Do not burn or bury materials on site. Leave site in clean condition.

3.6 TOPSOIL EXCAVATION

- A. Do not remove topsoil from site.

END OF SECTION

SECTION 31 23 16 - EXCAVATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Soil densification.
 - 2. Excavating for building foundations.
 - 3. Excavating for paving, roads, and parking areas.
 - 4. Excavating for slabs on grade.
 - 5. Excavating for Site structures.
 - 6. Excavating for landscaping.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 31 23 16.13 "Trenching" for excavating as required for building foundations and utilities within building perimeter.

1.2 REFERENCE STANDARDS

- A. Local utility standards when working within 24 inches of utility lines.

1.3 QUALITY ASSURANCE

- A. Perform Work according to City of Midland standards.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 PREPARATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation preparation.
- B. Utility Service Locator:
 - 1. Call local utility service-line information as listed on Drawings, not less than 3 working days before performing Work.
 - 2. Request that underground utilities be located and marked within and immediately surrounding construction areas.
 - 3. Identify required lines, levels, contours, and data.
- C. Existing Utilities:
 - 1. Notify utility company of any new utility crossings required.
 - 2. Protect from damage utilities indicated to remain.
- D. Protect benchmarks, survey control points, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

- E. Do not close or obstruct roadways, sidewalks, or hydrants without permits.
- F. Erect and maintain temporary barriers and security devices at indicated locations, including warning signs, warning lights, and similar measures, for protection of public, Owner, livestock, and existing improvements indicated to remain.

3.2 EXCAVATION

- A. Underpin adjacent structures which may be damaged by excavation Work.
- B. Excavate subsoil to accommodate building foundations, slabs on grade, and construction operations.
- C. Excavate to working elevation for piling Work.
- D. Slope banks with machine to angle of repose or less until shored.
- E. Do not interfere with 45 degree bearing splay of foundations.
- F. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- G. Trim excavation and remove loose matter.
- H. Removal of Deleterious Materials:
 - 1. Remove lumped subsoil, boulders, and rock up to 3 inches in diameter.
 - 2. Remove larger material.
 - 3. Remove excess and unsuitable material from Site.
- I. Notify Engineer of unexpected subsurface conditions.
- J. Correct over-excavated areas with concrete.
- K. Remove excavated material from Site.
- L. Repair or replace items indicated to remain that have been damaged by excavation.

3.3 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Inspecting: Request visual inspection of bearing surfaces by Construction Manager before installing subsequent Work.

3.4 PROTECTION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for protecting finished Work.
- B. Prevent displacement or loose soil from falling into excavation, and maintain soil stability.
- C. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- D. Protect structures, utilities, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that may be created by earth operations.

END OF SECTION

SECTION 31 23 16.13 - TRENCHING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Excavating trenches for utilities.
 - 2. Compacted fill from top of utility bedding match finished grade elevations as shown on Plans.
 - 3. Backfilling and compaction.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 03 30 00 "Cast-In-Place Concrete" for concrete materials.

1.2 REFERENCES

- A. American Association of State Highway and Transportation Officials:
 - 1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg Rammer and a 457 mm Drop.
- B. ASTM International:
 - 1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort 12,400 ft-lbf/ft³.
 - 2. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
 - 3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort 56,000 ft-lbf/ft³.
 - 4. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
 - 5. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
 - 6. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.3 DEFINITIONS

- A. Utility: Any buried pipe, duct, conduit, or cable.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Excavation Protection Plan: Describe sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property; include structural calculations to support plan.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with the Texas Commission on Environmental Quality and City of Midland Standards and Specifications.

1.6 FIELD MEASUREMENTS

- A. Verify field measurements prior to fabrication.

1.7 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for coordination and Project Conditions.
- B. Verify Work associated with lower elevation utilities is complete before placing higher elevation utilities.
- C. Coordinate existing utility crossings with utility Owners. Ensure crossings meet Owner's crossing requirements.

PART 2 - PRODUCTS

2.1 FILL MATERIALS

- A. Fill materials shall meet requirements as indicated on Drawings.

PART 3 - EXECUTION

3.1 LINES AND GRADES

- A. Lay pipes to lines and grades indicated on Drawings.
 - 1. Engineer reserves right to make changes in lines, grades, and depths of utilities when changes are required for Project conditions.
- B. Use laser-beam instrument with qualified operator to establish lines and grades.

3.2 PREPARATION

- A. Call Local Utility Line Information service at numbers provided on Drawings, not less than minimum notification days required by law.
 - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Identify required lines, levels, contours, and datum locations.
- C. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- D. Maintain and protect above and below grade utilities indicated to remain.
- E. Establish temporary traffic control and detours when trenching is performed in public right-of-way. Relocate controls and reroute traffic as required during progress of Work.

3.3 TRENCHING

- A. Top soil shall be removed prior to trenching activities. Top soil shall be kept separate from subsoil for replacement during backfilling operations.
- B. Excavate subsoil required for utilities to grades provided in Construction Plans.
- C. Remove lumped subsoil, boulders, and rock up.
- D. Perform excavation within 36 inches of existing utility lines in accordance with utility company's crossing requirements.

- E. Do not advance open trench ahead of installed pipe by more than can be backfilled at the end of each day.
- F. Cut trenches to width indicated on Drawings. Remove water or materials that interfere with Work.
- G. Excavate bottom of trenches 6 inches deeper than outside of pipe.
- H. Excavate trenches to depth indicated on Drawings. Provide uniform and continuous bearing and support for bedding material and pipe.
- I. Provide trench protection in accordance with Section 31 41 10 "Trench Safety Systems."
- J. When subsurface materials at bottom of trench are loose or soft, excavate to greater depth as directed by Engineer until suitable material is encountered.
- K. Cut out soft areas of subgrade not capable of compaction in place. Backfill with crushed stone and compact to density equal to or greater than requirements for subsequent backfill material.
- L. Trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.
- M. Correct areas over excavated areas with compacted backfill as specified for authorized excavation or replace with fill concrete as directed by Engineer.
- N. Remove excess subsoil not intended for reuse, from site.

3.4 SHEETING AND SHORING

- A. Provide sheeting and shoring as directed in the trench protection plan. See Section 31 41 10 "Trench Safety Systems."
- B. Sheet, shore, and brace excavations to prevent danger to persons, structures and adjacent properties and to prevent caving, erosion, and loss of surrounding subsoil.
- C. Support trenches excavated through unstable, loose, or soft material. Provide sheeting, shoring, bracing, or other protection to maintain stability of excavation.
- D. Repair damage caused by failure of the sheeting, shoring, or bracing and for settlement of filled excavations or adjacent soil.
- E. Repair damage to new and existing Work from settlement, water or earth pressure or other causes resulting from inadequate sheeting, shoring, or bracing.

3.5 BACKFILLING

- A. Backfill trenches to contours and elevations with unfrozen fill materials.
- B. Place material in continuous layers per the requirements indicated in Drawings.
- C. Employ placement method that does not disturb or damage existing utilities in trench and surrounding improvements.
- D. Maintain optimum moisture content of fill materials to attain required compaction density.
- E. Do not leave more than 25 feet of trench open at end of working day.
- F. Protect open trench to prevent danger to Owner, the public, and livestock.

3.6 TOLERANCES

- A. Refer to Section 01 40 00 "Quality Requirements" for tolerances.
- B. Top Surface of General Backfilling: Plus or minus 1-inch from required elevations.
- C. Shape backfill to prevent ponding of water.

3.7 FIELD QUALITY CONTROL

- A. Refer to Sections 01 40 00 "Quality Requirements" and 01 70 00 "Execution and Closeout Requirements" for field inspecting, testing, adjusting, and balancing.
- B. Perform laboratory material tests in accordance with ASTM D1557 and ASTM D698, based on specified compaction method.
- C. Perform in place compaction tests in accordance with the following:
 - 1. Density Tests: ASTM D1556, ASTM D2167, or ASTM D2922.
 - 2. Moisture Tests: ASTM D3017.
- D. When tests indicate Work does not meet specified requirements, remove Work, replace, compact, and retest.
- E. Frequency of Tests: One test for every lift every 300 linear feet of fill, or as specified by Engineer.

3.8 PROTECTION OF FINISHED WORK

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for protecting finished work.
- B. Reshape and re-compact fills subjected to vehicular traffic during construction.

3.9 SCHEDULE

- A. Pressure and Gravity Piping:
 - 1. Bedding: As indicated in Drawings.
 - 2. Trench Backfill: As indicated in Drawings. Uniformly compact all areas under pavement or within City of Midland ROW to minimum 95 percent Modified Density per ASTM D11557. Uniformly compact all other areas to minimum 95 percent Standard Density per ASTM D698.

END OF SECTION

SECTION 31 41 10 - TRENCH SAFETY SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Trench safety systems for trench excavations greater than five feet deep. All Work performed under this Section shall also comply with OSHA Part 1926, Subpart P, and all state and local codes.
 - 2. Contractor shall be responsible for complying with requirements of Specifications, Drawings, and all applicable codes. Contractor shall immediately notify Engineer of any unforeseen field conditions which might affect integrity of trench safety system.
 - 3. Alternative methods of trench safety may be submitted for Engineer approval; however, alternative methods will not be reviewed or approved prior to Bid opening.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 SUBMITTALS

- A. Provide trench safety plan signed and sealed by an Engineer licensed in the State of Texas.
- B. Provide detailed Drawings for proposed trench safety systems. Clearly identify where each system is proposed for use and type of system to be used.
- C. Trench Boxes: Submit manufacturer standard data sheet and Certificate of Compliance signed by a registered Engineer stating maximum allowable depth for given design pressure for each type of trench box proposed for use.
- D. Alternative Systems: If alternative systems composed of steel, aluminum, wood, or combination of materials are proposed, submit design calculations signed by registered engineer showing all member properties, design strengths, and any stress increases used with justification for use.
- E. Trench excavations cannot be started until trench safety systems have been submitted and approved by Engineer as specified.

1.3 QUALITY ASSURANCE

- A. Trench safety systems shall be designed based on actual field conditions. Contractor shall review and determine field conditions for Project.
- B. Work shall be performed by forces having at least 2 years' experience with similar types of trench safety systems. All prefabricated items used in trench safety systems shall be manufactured by a company with at least 2 years' experience in fabricating items.
- C. Contractor shall be responsible for complying with all trench safety requirements and for safety of trenches and excavations.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Provide suitable materials capable of withstanding imposed loads without excessive deflections. Materials shall be clean, free of rust, holes, knots, and other defects.
- B. Steel shall be of type and thickness as required by design and with minimum yield stress of $F_y = 36,000$ psi.
- C. Aluminum Type 6061-T6, thickness as required by design.
- D. Wood in contact with earth to be pressure-treated soft woods or untreated hardwoods.
- E. Wood not in contact with earth to be soft or hardwood as required by design.

PART 3 - EXECUTION

3.1 JOB CONDITIONS

- A. Prior to starting trench excavations, Contractor shall examine all site conditions and note any conditions in existing pavements, structures, and other items which may be adversely affected by trenching operations. Prepare a written list of all such conditions and submit list to Engineer. During trenching operations, note any changes which occur to existing pavements or structures and submit written report to Engineer of all such changes.

3.2 EXISTING UTILITIES

- A. Prior to starting trench excavations, chart and field locate all existing utilities. Notify Owners of all utilities of Work to be performed. Protect all existing utilities from damage. Provide additional support for utility lines which cannot span trench width. Do not interrupt existing services without written approval by Engineer and utility Owner.

3.3 TRENCHING PROCEDURES

- A. Provide shoring systems in accordance with the submitted design to adequately resist earth pressures indicated on the Drawings.
- B. Proceed with Work in an orderly fashion. Install trench bracing systems as soon as possible after opening trenches. Do not allow workers in trench prior to installing trench bracing systems.
- C. Backfill trenches as soon as possible after completion of Work.
- D. Stockpile excavated materials at three feet away from edge of trench.
- E. Maintain barricades and signage as required by state and local codes to protect open excavations.
- F. Do not allow surface water to enter excavations. Properly grade areas adjacent to trench excavations to control surface drainage away from excavations. Excavations which must remain open during periods of rainfall shall be covered with suitable material to prevent accumulations of water in excavation.
- G. If cut back method is employed, maintain a clear distance of three feet from edge of cut to avoid allowing loose material to enter trench.
- H. Do not operate heavy equipment except for trench digging equipment within 20 feet of edge of excavation.

END OF SECTION

DIVISION 32
EXTERIOR IMPROVEMENTS

SECTION 32 31 13 - CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Chain-link fences.
 - 2. Swing gates.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 03 30 00 "Cast-in-Place Concrete" for cast-in-place concrete post footings.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for the following:
 - a. Fence and gate posts, rails, and fittings.
 - b. Chain-link fabric, reinforcements, and attachments.
 - c. Accessories: Barbed wire.
 - d. Gates and hardware.
- B. Shop Drawings: For each type of fence and gate assembly.
 - 1. Include plans, elevations, sections, details, and attachments to other work.
 - 2. Include accessories, hardware, gate operation, and operational clearances.

1.3 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of chain-link fence and gate.
- B. Field quality-control reports.

1.4 FIELD CONDITIONS

- A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

PART 2 - PRODUCTS

2.1 CHAIN-LINK FENCE FABRIC

- A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist according to "CLFMI Product Manual" and requirements indicated below:
 - 1. Fabric Height: As indicated on Drawings.
 - 2. Steel Wire for Fabric: Wire diameter of 0.148-inch.
 - a. Mesh Size: 2 inches.
 - b. Zinc-Coated Fabric: ASTM A392, Type II, Class 1, 1.2 oz./sq. ft. with zinc coating applied after weaving.
 - c. Coat selvage ends of metallic-coated fabric before the weaving process with manufacturer's standard clear protective coating.

2.2 FENCE FRAMEWORK

- A. Posts and Rails: ASTM F1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F1043 based on the following:
 - 1. Fence Height: 72 inches.
 - 2. Heavy-Industrial-Strength Material: Group IA, round steel pipe, Schedule 40.
 - a. Line Post: 2.375 inches in diameter.
 - b. End, Corner, and Pull Posts: 2.875 inches in diameter.
 - 3. Brace Rails: ASTM F1043.
 - 4. Metallic Coating for Steel Framework:
 - a. Type A: Not less than minimum 2.0-oz./sq. ft. average zinc coating according to ASTM A123 or 4.0-oz./sq. ft. zinc coating according to ASTM A653.

2.3 TENSION WIRE

- A. Metallic-Coated Steel Wire: 0.177-inch diameter, marcelled tension wire according to ASTM A817 or ASTM A824, with the following metallic coating:
 - 1. Type II: Zinc coated (galvanized) by hot-dip process, with the following minimum coating weight:
 - a. Class 4: Not less than 1.2 oz./sq. ft. of uncoated wire surface.

2.4 SWING GATES

- A. General: ASTM F900 for gate posts and double swing gate types.
 - 1. Gate Leaf Width: As indicated.
 - 2. Framework Member Sizes and Strength: Based on gate fabric height of 72 inches or less as indicated.
- B. Pipe and Tubing:
 - 1. Zinc-Coated Steel: ASTM F1043 and ASTM F1083; manufacturer's standard protective coating and finish.
 - 2. Gate Posts: Round tubular steel.
 - 3. Gate Frames and Bracing: Rectangular tubular steel.
- C. Frame Corner Construction: Assembled with corner fittings.

- D. Extended Gate Posts and Frame Members: Fabricate gate posts and frame end members to extend 12 inches above top of chain-link fabric at both ends of gate frame to attach barbed wire assemblies.
- E. Hardware:
 - 1. Hinges: 180-degree outward swing.
 - 2. Latch: Permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.

2.5 FITTINGS

- A. Provide fittings according to ASTM F626.
- B. Post Caps: Provide for each post.
 - 1. Provide line post caps with loop to receive tension wire or top rail.
- C. Rail and Brace Ends: For each gate, corner, pull, and end post.
- D. Rail Fittings: Provide the following:
 - 1. Top Rail Sleeves: Pressed-steel not less than 6 inches long.
 - 2. Rail Clamps: Line and corner boulevard clamps for connecting intermediate rails to posts.
- E. Tension and Brace Bands: Pressed steel.
- F. Tension Bars: Steel, length not less than 2 inches shorter than full height of chain-link fabric. Provide one bar for each gate and end post, and two for each corner and pull post, unless fabric is integrally woven into post.
- G. Truss Rod Assemblies: Steel, hot-dip galvanized after threading rod and turnbuckle or other means of adjustment.
- H. Barbed Wire Arms: Pressed steel or cast iron, with clips, slots, or other means for attaching strands of barbed wire, and means for attaching to posts, for each post unless otherwise indicated, and as follows:
 - 1. Provide line posts with arms that accommodate top rail or tension wire.
 - 2. Provide corner arms at fence corner posts unless extended posts are indicated.
 - 3. Single-Arm Type: Type II, vertical arm.
- I. Tie Wires, Clips, and Fasteners: According to ASTM F626.
 - 1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, according to the following:
 - a. Hot-Dip Galvanized Steel: 0.148-inch diameter wire; galvanized coating thickness matching coating thickness of chain-link fence fabric.
- J. Finish:
 - 1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz./sq. ft. of zinc.

2.6 BARBED WIRE

- A. Steel Barbed Wire: ASTM A121, two-strand barbed wire, 0.099-inch diameter line wire with 0.080-inch diameter, four-point round barbs spaced not more than 5 inches o.c.
 - 1. Zinc Coating: Type Z, Class 3.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.
 - 1. Do not begin installation before final grading is completed unless otherwise permitted by Architect.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 CHAIN-LINK FENCE INSTALLATION

- A. Install chain-link fencing according to ASTM F567 and more stringent requirements specified.
 - 1. Install fencing on established boundary lines inside property line.
- B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- C. Post Setting: Set posts with mechanical anchors by mechanically driving into soil at indicated spacing into firm, undisturbed soil.
 - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - 2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
 - a. Exposed Concrete: Extend 2 inches above grade; shape and smooth to shed water.
- D. Terminal Posts: Install terminal end, corner, and gate posts according to ASTM F567 and terminal pull posts at changes in horizontal or vertical alignment of as indicated on Drawings. For runs exceeding 500 feet, space pull posts an equal distance between corner or end posts.
- E. Line Posts: Space line posts uniformly at 10 feet o.c.
- F. Post Bracing and Intermediate Rails: Install according to ASTM F567, maintaining plumb position and alignment of fence posts. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.
 - 1. Locate horizontal braces at midheight of fabric 72 inches or higher, on fences with top rail, and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.

- G. Tension Wire: Install according to ASTM F567, maintaining plumb position and alignment of fence posts. Pull wire taut, without sags. Fasten fabric to tension wire with 0.120-inch diameter hog rings of same material and finish as fabric wire, spaced a maximum of 24 inches o.c. Install tension wire in locations indicated before stretching fabric. Provide horizontal tension wire at the following locations:
 - 1. Extended along bottom of fence fabric. Install top tension wire through post cap loops. Install bottom tension wire within 6 inches of bottom of fabric and tie to each post with not less than same diameter and type of wire.
- H. Top Rail: Install according to ASTM F567, maintaining plumb position and alignment of fence posts. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.
- I. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 2-inch maximum bottom clearance between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.
- J. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts, with tension bands spaced not more than 15 inches o.c.
- K. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric according to ASTM F626. Bend ends of wire to minimize hazard to individuals and clothing.
 - 1. Maximum Spacing: Tie fabric to line posts at 12 inches o.c. and to braces at 24 inches o.c.
- L. Fasteners: Install nuts for tension bands and carriage bolts on the side of fence opposite the fabric side.
- M. Retain "Privacy Slats" Paragraph below if applicable.
- N. Barbed Wire: Install barbed wire uniformly spaced as indicated on Drawings. Pull wire taut, install securely to extension arms, and secure to end post or terminal arms.

3.4 GATE INSTALLATION

- A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation.

3.5 ADJUSTING

- A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

END OF SECTION

SECTION 32 91 13 - SOIL PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Preparation of subsoil.
 - 2. Placing topsoil.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 32 92 19 "Seeding."

1.2 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with Midland County Soil and Water Conservation District standards.

1.4 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. Topsoil: Excavated from site. Keep separate from subsoil, debris, and refuse.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for verification of existing conditions before starting work.
- B. Verify prepared soil base is ready to receive the Work of this Section.

3.2 PREPARATION OF SUBSOIL

- A. Prepare sub-soil to eliminate uneven areas and low spots. Maintain lines, levels, profiles and contours. Make changes in grade gradual. Blend slopes into level areas.
- B. Remove foreign materials, weeds and undesirable plants and their roots. Remove contaminated sub-soil.
- C. Scarify subsoil to depth of 3 inches where topsoil is to be placed. Repeat cultivation in areas where equipment, used for hauling and spreading topsoil, has compacted sub-soil.

3.3 PLACING TOPSOIL

- A. Spread topsoil to original depth over area to be seeded. Rake until smooth.
- B. Place topsoil during dry weather and on dry unfrozen subgrade.
- C. Remove vegetable matter and foreign non-organic material from topsoil while spreading.
- D. Grade topsoil to eliminate rough, low or soft areas, and to ensure positive drainage.
- E. Install edging at periphery of seeded areas in straight lines to consistent depth.

END OF SECTION

SECTION 32 92 19 - SEEDING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes seeding.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 32 91 13 "Soil Preparation."

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM C 602 - Standard Specification for Agricultural Liming Materials.
- B. University of Texas Lands Rangeland Seed Mixtures by County.

1.3 DEFINITIONS

- A. Weeds: Vegetative species other than specified species to be established in given area.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit data for seed mix accessories.

1.5 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.

1.6 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.

1.7 QUALIFICATIONS

- A. Seed Supplier: Company specializing in manufacturing Products specified in this Section.
- B. Installer: Company specializing in performing Work of this Section.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for product storage and handling requirements.
- B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.

PART 2 - PRODUCTS

2.1 SEED MIXTURE

- A. Suppliers:
 - 1. Midland, Martin, or Andrews County Soil and Water Conservation Districts.
- B. Substitutions: Section 01 60 00 "Product Requirements."
- C. Description: (Pounds Pure Live Seed/Acre (PLS)).
 - 1. Sideoats Grama: 1.1 PLS.
 - 2. Blue Grama: 0.4 PLS.
 - 3. Plains Bristlegrass: 0.8 PLS.
 - 4. Sand Dropseed: 0.3 PLS.
 - 5. Green Sprangletop: 1.7 PLS.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for verification of existing conditions before starting work.
- B. Verify prepared soil base is ready to receive the Work of this Section.

3.2 SEEDING

- A. Apply seed at rates listed under Part 2 - Products.
- B. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph.
- C. Roll seeded area with roller not exceeding 112 lbs/linear foot.
- D. Apply water with fine spray immediately after each area has been planted. Saturate to 4 inches of soil. Provide minimum of 3 waterings, each separated by one week.
- E. Watering method shall not damage plants or displace soil.

END OF SECTION

DIVISION 33
UTILITIES

SECTION 33 01 10.58 - DISINFECTION OF WATER UTILITY PIPING SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Disinfection of potable water distribution and transmission system.
 - 2. Testing and reporting of results.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 33 14 13 "Public Water Utility Distribution Piping."

1.2 REFERENCE STANDARDS

- A. American Water Works Association:
 - 1. AWWA B300 - Hypochlorites.
 - 2. AWWA B302 - Ammonium Sulfate.
 - 3. AWWA B303 - Sodium Chlorite.
 - 4. AWWA C651 - Disinfecting Water Mains.

1.3 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Disinfection Procedure:
 - 1. Submit description of procedure, including type of disinfectant and calculations indicating quantities of disinfectants required to produce specified chlorine concentration.
- C. Product Data: Submit manufacturer information for proposed chemicals and treatment doses.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Certify that final water complies with disinfectant quality standards of Texas Commission on Environmental Quality and the City of Midland.
- F. Test and Evaluation Reports: Indicate testing results comparative to specified requirements.
- G. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- H. Qualifications Statements:
 - 1. Submit qualifications for manufacturer and applicator.

1.4 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Disinfection Report:
 - 1. Type and form of disinfectant used.
 - 2. Date and time of disinfectant injection start and completion.
 - 3. Test locations.
 - 4. Name of person collecting samples.
 - 5. Initial and 24-hour disinfectant residuals in treated water in ppm for each outlet tested.
 - 6. Date and time of flushing start and completion.
 - 7. Disinfectant residual after flushing in ppm for each outlet tested.

1.5 QUALITY ASSURANCE

- A. Perform Work according to AWWA C651.
- B. Perform Work according to Texas Commission on Environmental Quality and the City of Midland.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.
- B. Applicator: Company specializing in performing Work of this Section with minimum 3 years' experience.
- C. Applicator: Person holding Water Operators License issued by Texas Commission on Environmental Quality shall perform or supervise Work. Provide copy of valid license.

PART 2 - PRODUCTS

2.1 DISINFECTION CHEMICALS

- A. Chemicals:
 - 1. Hypochlorite: Comply with AWWA B300.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that piping system has been cleaned, inspected, and pressure tested.
- C. Verify that access fittings have been installed under Section 33 14 13 "Public Water Utility Distribution Piping."
- D. Perform scheduling and disinfecting activity with startup, water pressure testing, adjusting and balancing, and demonstration procedures, including coordination with related systems.

3.2 INSTALLATION

- A. Provide required equipment to perform Work of this Section.
- B. Introduce treatment into piping system.
- C. Maintain disinfectant in system for 24 hours.
- D. Flush, circulate, and clean until required disinfectant quality standard has been achieved using produced well.
- E. Replace permanent system devices that were removed for disinfection.

3.3 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Disinfection, Flushing, and Sampling:
 - 1. Disinfect pipeline installation according to AWWA C651.
 - 2. Use of liquid chlorine is not permitted.
 - 3. Upon completion of retention period required for disinfection, flush pipeline until chlorine concentration in water leaving pipeline is no higher than that generally prevailing in existing system or is acceptable for domestic use.
 - 4. Disposal:
 - a. Legally dispose of chlorinated water.
 - b. If chlorinated discharge may cause damage to environment, apply neutralizing chemical to chlorinated water to neutralize chlorine residual remaining in water.
 - 5. After final flushing and before pipeline is connected to existing system or placed in service, certify that disinfectant level meets quality standards of Texas Commission on Environmental Quality and the City of Midland.

END OF SECTION

SECTION 33 05 00 - COMMON WORK RESULTS FOR UTILITIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Pipin materials.
 - 2. Transition fittings.
 - 3. Identification devices.
 - 4. Grout.
 - 5. Flowable fill.
 - 6. Piped utility demolition.
 - 7. Piping system common requirements.
 - 8. Equipment installation common requirements.
 - 9. Painting.
 - 10. Concrete bases.
 - 11. Metal supports and anchorages.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 DEFINITIONS

- A. Exposed Installations: Exposed to view outdoors or subject to outdoor ambient temperatures and weather conditions.
- B. Concealed Installations: Concealed from view and protected from weather conditions and physical contact by building occupants but subject to outdoor ambient temperatures. Examples include installations within unheated shelters.
- C. ABS: Acrylonitrile-butadiene-styrene plastic.
- D. CPVC: Chlorinated polyvinyl chloride plastic.
- E. PE: Polyethylene plastic.
- F. PVC: Polyvinyl chloride plastic.

1.3 ACTION SUBMITTALS

- A. Product Data: For the following:
 - 1. Dielectric fittings.
 - 2. Identification devices.

1.4 INFORMATIONAL SUBMITTALS

- A. Welding certificates.

1.5 QUALITY ASSURANCE

- A. Steel Support Welding: Qualify procedures and personnel according to AWS D1.1, "Structural Welding Code - Steel."
- B. Steel Piping Welding: Qualify processes and operators according to ASME Boiler and Pressure Vessel Code: Section IX, "Welding and Brazing Qualifications."
 - 1. Comply with provisions in ASME B31 Series, "Code for Pressure Piping."
 - 2. Certify that each welder has passed AWS qualification tests for welding processes involved and that certification is current.
- C. Comply with ASME A13.1 for lettering size, length of color field, colors, and viewing angles of identification devices.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver pipes and tubes with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent pipe end damage and to prevent entrance of dirt, debris, and moisture.
- B. Store plastic pipes protected from direct sunlight. Support to prevent sagging and bending.

1.7 COORDINATION

- A. Coordinate installation of required supporting devices and set sleeves in poured-in-place concrete and other structural components as they are constructed.
- B. Coordinate installation of identifying devices after completing covering and painting if devices are applied to surfaces.
- C. Coordinate size and location of concrete bases. Formwork, reinforcement, and concrete requirements are specified in Section 03 30 00 "Cast-in-Place Concrete."

PART 2 - PRODUCTS

2.1 PIPING JOINING MATERIALS

- A. Pipe-Flange Gasket Materials: Suitable for chemical and thermal conditions of piping system contents.
 - 1. ASME B16.21, nonmetallic, flat, asbestos free, 1/8-inch maximum thickness, unless otherwise indicated.
 - a. Full-Face Type: For flat-face, Class 125, cast-iron and cast-bronze flanges.
 - b. Narrow-Face Type: For raised-face, Class 250, cast-iron and steel flanges.
 - 2. AWWA C110, rubber, flat face, 1/8-inch thick, unless otherwise indicated; and full-face or ring type, unless otherwise indicated.
- B. Flange Bolts and Nuts: ASME B18.2.1, 304 Stainless Steel, unless otherwise indicated.
- C. Welding Filler Metals: Comply with AWS D10.12 for welding materials appropriate for wall thickness and chemical analysis of steel pipe being welded.

2.2 TRANSITION FITTINGS

- A. Transition Fittings, General: Same size as, and with pressure rating at least equal to and with ends compatible with, piping to be joined.
- B. AWWA Transition Couplings NPS 2 and Larger:
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cascade Waterworks Mfg. Co.
 - b. Ford Meter Box Company, Inc. (The).
 - c. JCM Industries, Inc.
 - d. Smith-Blair, Inc.
 - e. Viking Johnson.
 - 2. Description: AWWA C219, metal sleeve-type coupling for underground pressure piping.

2.3 IDENTIFICATION DEVICES

- A. General: Products specified are for applications referenced in other utilities Sections. If more than single type is specified for listed applications, selection is Installer's option.
- B. Equipment Nameplates: Metal permanently fastened to equipment with data engraved or stamped.
 - 1. Data: Manufacturer, product name, model number, serial number, capacity, operating and power characteristics, labels of tested compliances, and essential data.
 - 2. Location: Accessible and visible.
- C. Stencils: Standard stencils prepared with letter sizes complying with recommendations in ASME A13.1. Minimum letter height is 1-1/4 inches for ducts, and 3/4-inch for access door signs and similar operational instructions.
 - 1. Material: Fiberboard.
 - 2. Stencil Paint: Exterior, oil-based, alkyd-gloss black enamel, unless otherwise indicated. Paint may be in pressurized spray-can form.
 - 3. Identification Paint: Exterior, oil-based, alkyd enamel in colors according to ASME A13.1, unless otherwise indicated.
- D. Snap-on Plastic Pipe Markers: Manufacturer's standard preprinted, semirigid, snap-on type. Include color-coding according to ASME A13.1, unless otherwise indicated.
- E. Pressure-Sensitive Pipe Markers: Manufacturer's standard preprinted, color-coded, pressure-sensitive-vinyl type with permanent adhesive.
- F. Pipes with OD, Including Insulation, Less Than 6 Inches: Full-band pipe markers, extending 360 degrees around pipe at each location.
- G. Pipes with OD, Including Insulation, 6 Inches and Larger: Either full-band or strip-type pipe markers, at least three times letter height and of length required for label.
- H. Lettering: Manufacturer's standard preprinted captions as selected by Engineer.
- I. Lettering: Use piping system terms indicated and abbreviate only as necessary for each application length.
 - 1. Arrows: Either integrally with piping system service lettering to accommodate both directions of flow, or as separate unit on each pipe marker to indicate direction of flow.

- J. Plastic Tape: Manufacturer's standard color-coded, pressure-sensitive, self-adhesive vinyl tape, at least 3 mils thick.
 - 1. Width: 1-1/2 inches on pipes with OD, including insulation, less than 6 inches; 2-1/2 inches for larger pipes.
 - 2. Color: Comply with ASME A13.1, unless otherwise indicated.
- K. Valve Tags: Stamped or engraved with 1/4-inch letters for piping system abbreviation and 1/2-inch sequenced numbers. Include 5/32-inch hole for fastener.
 - 1. Material: 0.032-inch thick, aluminum.
 - 2. Material: 0.0375-inch thick stainless steel.
 - 3. Material: 3/32-inch thick plastic laminate with two black surfaces and a white inner layer.
 - 4. Material: Valve manufacturer's standard solid plastic.
 - 5. Size: 1-1/2 inches in diameter, unless otherwise indicated.
 - 6. Shape: As indicated for each piping system.
- L. Valve Tag Fasteners: Brass, wire-link or beaded chain; or brass S-hooks.
- M. Engraved Plastic-Laminate Signs: ASTM D709, Type I, cellulose, paper-base, phenolic-resin-laminate engraving stock; Grade ES-2, black surface, black phenolic core, with white melamine subcore, unless otherwise indicated. Fabricate in sizes required for message. Provide holes for mechanical fastening.
 - 1. Engraving: Engraver's standard letter style, of sizes and with terms to match equipment identification.
 - 2. Thickness: 1/16-inch, for units up to 20 sq. in. or 8 inches in length, and 1/8-inch for larger units.
 - 3. Fasteners: Self-tapping, stainless-steel screws or contact-type permanent adhesive.
- N. Plastic Equipment Markers: Manufacturer's standard laminated plastic, in the following color codes:
 - 1. Green: Cooling equipment and components.
 - 2. Yellow: Heating equipment and components.
 - 3. Brown: Energy reclamation equipment and components.
 - 4. Blue: Equipment and components that do not meet criteria above.
 - 5. Hazardous Equipment: Use colors and designs recommended by ASME A13.1.
 - 6. Terminology: Match schedules as closely as possible. Include the following:
 - a. Name and plan number.
 - b. Equipment service.
 - c. Design capacity.
 - d. Other design parameters such as pressure drop, entering and leaving conditions, and speed.
 - 7. Size: 2-1/2 by 4 inches for control devices, dampers, and valves; 4-1/2 by 6 inches for equipment.
- O. Plasticized Tags: Preprinted or partially preprinted, accident-prevention tags, of plasticized card stock with mat finish suitable for writing.
 - 1. Size: 3-1/4 by 5-5/8 inches.
 - 2. Fasteners: Brass grommets and wire.
 - 3. Nomenclature: Large-size primary caption such as DANGER, CAUTION, or DO NOT OPERATE.
- P. Lettering and Graphics: Coordinate names, abbreviations, and other designations used in piped utility identification with corresponding designations indicated. Use numbers, letters, and terms indicated for proper identification, operation, and maintenance of piped utility systems and equipment.
 - 1. Multiple Systems: Identify individual system number and service if multiple systems of same name are indicated.

2.4 GROUT

- A. Description: ASTM C 1107, Grade B, nonshrink and nonmetallic, dry hydraulic-cement grout.
 - 1. Characteristics: Post hardening, volume adjusting, nonstaining, noncorrosive, nongaseous, and recommended for interior and exterior applications.
 - 2. Design Mix: 5,000 psi, 28-day compressive strength.
 - 3. Packaging: Premixed and factory packaged.

2.5 FLOWABLE FILL

- A. Description: Low-strength-concrete, flowable-slurry mix.
 - 1. Cement: ASTM C 150, Type I, portland.
 - 2. Density: 130-lb/cu. ft.
 - 3. Aggregates: ASTM C 33, natural sand, fine
 - 4. Admixture: ASTM C 618, fly-ash mineral.
 - 5. Water: Comply with ASTM C 94.
 - 6. Strength: 1,000 psi at 28 days.

PART 3 - EXECUTION

3.1 PIPED UTILITY DEMOLITION

- A. Disconnect, demolish, and remove piped utility systems, equipment, and components indicated to be removed.
 - 1. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
 - 2. Piping to Be Abandoned in Place: Drain piping. Fill abandoned piping with flowable fill, and cap or plug piping with same or compatible piping material.
 - 3. Equipment to Be Removed: Disconnect and cap services and remove equipment.
 - 4. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make operational.
 - 5. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
- B. If pipe, insulation, or equipment to remain is damaged in appearance or is unserviceable, remove damaged or unserviceable portions and replace with new products of equal capacity and quality.

3.2 PIPING INSTALLATION

- A. Install piping according to the following requirements and utilities Sections specifying piping systems.
- B. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on the Coordination Drawings.
- C. Install piping indicated to be exposed and piping in equipment rooms and service areas at right angles or parallel to building walls. Diagonal runs are prohibited unless specifically indicated otherwise.

- D. Install piping to permit valve servicing.
- E. Install piping at indicated slopes.
- F. Install piping free of sags and bends.
- G. Install fittings for changes in direction and branch connections.
- H. Select system components with pressure rating equal to or greater than system operating pressure.
- I. Permanent sleeves are not required for holes formed by removable PE sleeves.
- J. Install sleeves for pipes passing through concrete and masonry walls and concrete floor and roof slabs.
 - 1. Cut sleeves to length for mounting flush with both surfaces.
 - a. Exception: Extend sleeves installed in floors of equipment areas or other wet areas 2 inches above finished floor level.
 - 2. Install sleeves in new walls and slabs as new walls and slabs are constructed.
 - a. PVC Pipe Sleeves: For pipes smaller than NPS 6.
 - b. Steel Sheet Sleeves: For pipes NPS 6 and larger.
- K. Verify final equipment locations for roughing-in.
- L. Refer to equipment specifications in other Sections for roughing-in requirements.

3.3 PIPING JOINT CONSTRUCTION

- A. Join pipe and fittings according to the following requirements and utilities Sections specifying piping systems.
- B. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.
- C. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- D. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:
 - 1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
 - 2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.
- E. Welded Joints: Construct joints according to AWS D10.12, using qualified processes and welding operators according to Part 1 "Quality Assurance" Article.
- F. Flanged Joints: Select appropriate gasket material, size, type, and thickness for service application. Install gasket concentrically positioned. Use suitable lubricants on bolt threads.
- G. Grooved Joints: Assemble joints with grooved-end pipe coupling with coupling housing, gasket, lubricant, and bolts according to coupling and fitting manufacturer's written instructions.
- H. Pressure-Sealed Joints: Assemble joints for plain-end copper tube and mechanical pressure seal fitting with proprietary crimping tool to according to fitting manufacturer's written instructions.
- I. Plastic Pressure Piping Gasketed Joints: Join according to ASTM D3139.
- J. Plastic Nonpressure Piping Gasketed Joints: Join according to ASTM D3212.
- K. Plastic Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D2657.
 - 1. Plain-End PE Pipe and Fittings: Use butt fusion.
 - 2. Plain-End PE Pipe and Socket Fittings: Use socket fusion.

3.4 EQUIPMENT INSTALLATION

- A. Install equipment level and plumb, unless otherwise indicated.
- B. Install equipment to facilitate service, maintenance, and repair or replacement of components. Connect equipment for ease of disconnecting, with minimum interference with other installations. Extend grease fittings to an accessible location.
- C. Install equipment to allow right of way to piping systems installed at required slope.

3.5 PAINTING

- A. Painting of piped utility systems, equipment, and components is specified in Section 09 96 00 "High-Performance Coatings."
- B. Damage and Touchup: Repair marred and damaged factory-painted finishes with materials and procedures to match original factory finish.

3.6 IDENTIFICATION

- A. Piping Systems: Install pipe markers on each system. Include arrows showing normal direction of flow.
 - 1. Stenciled Markers: According to ASME A13.1.
 - 2. Plastic markers, with application systems. Install on insulation segment if required for hot noninsulated piping.
 - 3. Locate pipe markers on exposed piping according to the following:
 - a. Near each valve and control device.
 - b. Near each branch, excluding short takeoffs for equipment and terminal units. Mark each pipe at branch if flow pattern is not obvious.
 - c. Near locations where pipes pass through walls or floors or enter inaccessible enclosures.
 - d. At manholes and similar access points that permit view of concealed piping.
 - e. Near major equipment items and other points of origination and termination.
- B. Equipment: Install engraved plastic-laminate sign or equipment marker on or near each major item of equipment.
 - 1. Lettering Size: Minimum 1/4-inch high for name of unit if viewing distance is less than 24 inches, 1/2-inch high for distances up to 72 inches, and proportionately larger lettering for greater distances. Provide secondary lettering 2/3 to 3/4 of size of principal lettering.
 - 2. Text of Signs: Provide name of identified unit. Include text to distinguish among multiple units, inform user of operational requirements, indicate safety and emergency precautions, and warn of hazards and improper operations.
- C. Adjusting: Relocate identifying devices that become visually blocked by work of this or other Divisions.

3.7 CONCRETE BASES

- A. Concrete Bases: Anchor equipment to concrete base according to equipment manufacturer's written instructions and according to seismic codes at Project.
 - 1. Construct concrete bases of dimensions indicated, but not less than 4 inches larger in both directions than supported unit.
 - 2. Install dowel rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on 18-inch centers around the full perimeter of base.

3. Install epoxy-coated anchor bolts for supported equipment that extend through concrete base, and anchor into structural concrete floor.
4. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
5. Install anchor bolts to elevations required for proper attachment to supported equipment.
6. Install anchor bolts according to anchor-bolt manufacturer's written instructions.
7. Use 3,000 psi, 28-day compressive-strength concrete and reinforcement as specified in Section 03 30 00 "Cast-in-Place Concrete."

3.8 GROUTING

- A. Mix and install grout for equipment base bearing surfaces, pump and other equipment base plates, and anchors.
- B. Clean surfaces that will come into contact with grout.
- C. Provide forms as required for placement of grout.
- D. Avoid air entrapment during placement of grout.
- E. Place grout, completely filling equipment bases.
- F. Place grout on concrete bases and provide smooth bearing surface for equipment.
- G. Place grout around anchors.
- H. Cure placed grout.

END OF SECTION

SECTION 33 05 05.31 - HYDROSTATIC TESTING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes hydrostatic testing of pressure piping.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 33 14 13 "Public Water Utility Distribution Piping" for pipe materials and accessories normally encountered with pressurized water distribution systems.

1.2 REFERENCE STANDARDS

- A. American Water Works Association:
 - 1. AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.

1.3 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Submit following items prior to start of testing:
 - 1. Testing procedures.
 - 2. List of test equipment.
 - 3. Testing sequence schedule.
 - 4. Provisions for disposal of flushing and test water.
 - 5. Certification of test gage calibration.
- C. Test and Evaluation Reports: Indicate results of piping tests.
- D. Qualifications Statement:
 - 1. Submit qualifications for applicator.

1.4 QUALITY ASSURANCE

- A. Perform Work according to Texas Commission on Environmental Quality and City of Midland.

1.5 QUALIFICATIONS

- A. Applicator: Company specializing in performing Work of this Section with minimum 3 years' [documented] experience.
- B. Applicator: Person holding Water Operators License issued by Texas Commission on Environmental Quality shall perform or supervise Work. Provide copy of valid license.

PART 2 - PRODUCTS

2.1 HYDROSTATIC TESTING

- A. Equipment:
 - 1. Pressure pump.
 - 2. Pressure hose.
 - 3. Water meter.
 - 4. Test connections.
 - 5. Pressure relief valve.
 - 6. Pressure Gage: Calibrated to 0.1 psi.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that piping is ready for testing.
- C. Verify that trenches are backfilled.
- D. Verify that pressure piping thrust restraints have been installed.

3.2 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Testing of Pressure Piping:
 - 1. Test system according to AWWA C600 or C605 and following:
 - a. Hydrostatically test each portion of pressure piping, including valved section, at 1-1/2 times working pressure of piping, based on elevation of lowest point in piping corrected to elevation of test gage.
 - b. Conduct hydrostatic testing for at least two hours.
 - c. Slowly fill with water portion of piping to be tested, expelling air from piping at high points.
 - d. Install corporation cocks at high points.
 - e. Close air vents and corporation cocks after air is expelled.
 - f. Raise pressure to specified test pressure.
 - g. Observe joints, fittings, and valves undergoing testing.
 - h. Remove and renew cracked pipes, joints, fittings, and valves that show visible leakage.
 - i. Retest.
 - j. Correct visible deficiencies and continue testing at same test pressure for additional two hours to determine leakage rate.
 - k. Maintain pressure within plus or minus 5.0 psi of test pressure.
 - l. Leakage is defined as quantity of water supplied to piping necessary to maintain test pressure during period of testing.

- m. Compute maximum allowable leakage for Ductile Iron pipe using the following formula (AWWA C600):
 - 1) $L = SD * \sqrt{P}/C$.
 - 2) L = testing allowance, gph.
 - 3) S = length of pipe tested, feet.
 - 4) D = nominal diameter of pipe, inches.
 - 5) P = average test pressure during hydrostatic testing, psig.
 - 6) C = 148,000.
 - 7) If pipe undergoing testing contains sections of various diameters, calculate allowable leakage from sum of computed leakage for each pipe size.
- n. Compute maximum allowable leakage for PVC pipe using the following formula (AWWA C605):
 - 1) $Q = (L * D * \sqrt{P})/C$.
 - 2) Q = the quantity of makeup water in gallons per hour.
 - 3) L = the length of the pipe section being tested, in feet.
 - 4) D = the nominal diameter of the pipe in inches.
 - 5) P = the average test pressure during the hydrostatic test in pounds per square inch (psi).
 - 6) C = 148,000.
 - 7) If pipe undergoing testing contains sections of various diameters, calculate allowable leakage from the sum of computed leakage for each pipe size.
- 2. If testing of piping indicates leakage greater than that allowed, locate source of leakage, make corrections, and retest until leakage is within acceptable limits.
- 3. Correct visible leaks regardless of quantity of leakage.

END OF SECTION

SECTION 33 05 09.33 - THRUST RESTRAINT FOR UTILITY PIPING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes tied joint restraint system.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 31 23 16.13 "Trenching" for trenching and backfilling requirements for Site utilities.
 - 3. Section 33 14 13 "Public Water Utility Distribution Piping" for requirements for piping Work as required by this Section.

1.2 REFERENCE STANDARDS

- A. American Water Works Association:
 - 1. AWWA C600 - Installation of Ductile-Iron Water Mains and Their Appurtenances.
- B. ASME International:
 - 1. ASME B1.1 - Unified Inch Screw Threads, UN and UNR Thread Form.
- C. ASTM International:
 - 1. ASTM A36 - Standard Specification for Carbon Structural Steel.
 - 2. ASTM A123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - 3. ASTM A153 - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 - 4. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 ksi Tensile Strength.
 - 5. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength.
 - 6. ASTM A563 - Standard Specification for Carbon and Alloy Steel Nuts.
 - 7. ASTM A588 - Standard Specification for High-Strength Low-Alloy Structural Steel, up to 50 ksi Minimum Yield Point, with Atmospheric Corrosion Resistance.
 - 8. ASTM B633 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel.
 - 9. ASTM F436 - Standard Specification for Hardened Steel Washers.

1.3 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Coordinate Work of this Section with installation of fittings and joints that require restraint.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit manufacturer catalog information for restrained joint details and installation instructions.
- C. Shop Drawings:
 - 1. Indicate restrained joint details and materials being used.
 - 2. Submit Layout Drawings showing piece numbers and locations.
 - 3. Indicate restrained joint locations.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Delegated Design Submittals:
 - 1. Submit signed and sealed Shop Drawings with design calculations and assumptions for restrained lengths.
 - 2. Submit joint restraint details.
 - 3. Use joint restraint devices specifically designed for applications described in manufacturer information.
- F. Manufacturer Instructions: Submit detailed instructions on installation requirements, including storage and handling procedures.
- G. Qualifications Statement:
 - 1. Submit qualifications for manufacturer, fabricator, and licensed professional.

1.5 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of joint restraints.

1.6 QUALITY ASSURANCE

- A. Perform Work according to City of Midland standards.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.
- B. Fabricator: Company specializing in fabricating products specified in this Section with minimum 3 years' experience.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.

1.9 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

PART 2 - PRODUCTS

2.1 PERFORMANCE AND DESIGN CRITERIA

- A. Provide pressure pipeline with restrained joints at each bend, tee, and change in direction.

2.2 TIED JOINT RESTRAINT SYSTEMS

- A. Manufacturers:
 - 1. Bulldog Restraint System; S&B Technical Products.
 - 2. GE Oil & Gas.
 - 3. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 - 4. Furnish materials according to City of Midland standards.
- B. Tie Bolts:
 - 1. Mechanical and Flanged Joints on 4- to 12-Inch Pipe:
 - a. Size: 3/4-inch.
 - b. Comply with ASTM A588, Grade B.
 - c. Comply with ASTM A325, Type 3, except increase tensile strength of full-body threaded section to 60,000 lb. minimum for 3/4-inch by heat-treating (quenching and tempering) to manufacturer's reheat and hardness specifications.
- C. Tie Nut:
 - 1. Description: Hex nut for each tie bolt and tie rods.
 - 2. Comply with ASTM A563, Grade C3.
 - 3. Finish: Zinc plated.
- D. Tiepin:
 - 1. Bends and Hydrants: 3/4-inch round bar stock.
 - 2. Size and Shape: 6-inch hairpin.
 - 3. Comply with ASME B1.1 and ASTM A588.
 - 4. Finish: Zinc plated.
- E. Tie Coupling:
 - 1. Description: Extension of continuous-threaded rods.
 - 2. Provide with center stop to aid installation.
 - 3. Comply with ASTM A588.
 - 4. Finish: Zinc plated.
- F. Tie Clamp:
 - 1. Description: Retainer clamp for ductile iron, asbestos-cement, and PVC push-on pipe.
 - 2. Location: In front of bell.
 - 3. Comply with ASTM A36, ASTM A307, Grade A, and ASTM A563, Grade A.
 - 4. Finish: Zinc plated.

- G. Tie Rod:
 - 1. Description: Continuous-threaded rod for cutting to desired lengths.
 - 2. Comply with ASTM A588, Grade B, ASTM A325, Type 3, and ASME B1.1.
 - 3. Finish: Zinc plated.
- H. Tie Bar:
 - 1. Description: Steel bar used to restrain push-in plugs.
 - 2. Comply with ASTM A36.
 - 3. Finish: Zinc plated.
- I. Tie Washer:
 - 1. Description: Round flat washers.
 - 2. ASTM A588, ASTM F436, Type 1.
 - 3. Finish: Zinc plated.

2.3 MATERIALS

- A. Steel:
 - 1. High-Strength Low-Alloy Steel: Comply with ASTM A588, heat treated.
 - 2. High-Strength Low-Alloy Steel: Comply with ASTM A588.
 - 3. Carbon Steel: Comply with ASTM A36.

2.4 FINISHES

- A. Zinc Plating:
 - 1. Factory applied.
 - 2. Comply with ASTM B633.
- B. Galvanizing:
 - 1. Factory applied.
 - 2. Comply with ASTM A153.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that pipe and fittings are ready to receive Work.
- C. Field measure and verify conditions for installation of Work.

3.2 PREPARATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation preparation.
- B. Clean surfaces of pipe and fittings that are to receive tied joint restraint systems.

3.3 INSTALLATION

- A. According to AWWA C600.
- B. Install joint restraint system such that joints are mechanically locked together to prevent joint separation.
- C. Installation Standards: Install Work according to City of Midland standards.

3.4 TOLERANCES

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for tolerances.
- B. Torque 5/8-inch nuts on mating threaded fasteners from 45 to 60 ft.-lbf.
- C. Torque 3/4-inch nuts on mating threaded fasteners from 75 to 90 ft.-lbf.
- D. Torque 1-inch nuts from 100 to 120 ft.-lbf.

END OF SECTION

SECTION 33 05 53 - IDENTIFICATION FOR UTILITIES PIPING AND EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Nameplates.
 - 2. Tags.
 - 3. Stencils.
 - 4. Pipe markers.
 - 5. Labels.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 33 14 13 "Public Water Utility Distribution Piping" for materials and methods for piping, valves, and appurtenances.

1.2 REFERENCE STANDARDS

- A. Texas Commission on Environmental Quality:
 - 1. Comply with 30 TAC 290.42(d)(13)(A).

1.3 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit manufacturer's catalog literature for each product required.
- C. Shop Drawings: Submit list of wording, symbols, letter size, and color-coding for mechanical identification and valve chart and schedule, including valve tag number, location, function, and valve manufacturer's name and model number.
- D. Manufacturer's Installation Instructions: Indicate installation instructions, special procedures, and installation.
- E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.4 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for closeout procedures.
- B. Project Record Documents: Record actual locations of tagged valves; include valve tag numbers.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for maintenance materials.

1.6 QUALITY ASSURANCE

- A. Comply with 30 TAC 290.42(d)(13)(A) for color scheme for identification of piping systems and accessories.
- B. Perform Work according to City of Midland standards.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.

PART 2 - PRODUCTS

2.1 NAMEPLATES

- A. Manufacturer:
 - 1. Craftmark Pipe Markers.
 - 2. Kolbi Pipe Marker Co.
 - 3. Pipemarket.com; Brimar Industries, Inc.
 - 4. Seton Identification Products; a Brady Corporation company.
- B. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- C. Furnish materials according to City of Midland standards.
- D. Description: Laminated 3-layer plastic with engraved black letters on light, contrasting background color.

2.2 TAGS

- A. Plastic Tags:
 - 1. Manufacturers:
 - a. Brady ID.
 - b. Craftmark Pipe Markers.
 - c. Kolbi Pipe Marker Co.
 - d. Marking Services, Inc.
 - e. R & R Identification Co.
 - f. Seton Identification Products, a Brady Corporation company.
 - 2. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 - 3. Description:
 - a. Laminated 3-layer plastic with engraved black letters on light, contrasting background color.
 - b. Minimum Tag Size and Configuration: 1-1/2-inch; square.
- B. Metal Tags:
 - 1. Manufacturers:
 - a. Brady ID.
 - b. Craftmark Pipe Markers.
 - c. Kolbi Pipe Marker Co.
 - d. Marking Services, Inc.
 - e. Pipemarket.com; Brimar Industries, Inc.
 - f. R & R Identification Co.
 - g. Seton Identification Products, a Brady Corporation company.
 - 2. Substitutions: As specified in Section 01 60 00 "Product Requirements."

3. Description:
 - a. Aluminum construction; stamped letters.
 - b. Minimum Tag Size and Configuration: 1-1/2-inch; square with finished edges.
- C. Information Tags:
 1. Manufacturers:
 - a. Brady ID.
 - b. Seton Identification Products, a Brady Corporation company.
 2. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 3. Description:
 - a. Clear plastic with printed DANGER, CAUTION, WARNING, and message as appropriate and indicated in individual product Specifications.
 - b. Minimum Tag Size: 3-1/4- by 5-5/8-inch.
 - c. Furnish grommet and self-locking nylon ties.
 4. Tag Chart: Typewritten, letter-size list of applied tags and location, plastic laminated.

2.3 STENCILS

- A. Manufacturers:
 1. Kolbi Pipe Marker Co.
 2. Marking Services, Inc.
 3. Pipemarket.com; Brimar Industries, Inc.
 4. R & R Identification Co.
 5. Seton Identification Products, a Brady Corporation company.
- B. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- C. Furnish materials according to City of Midland standards.
- D. Description:
 1. Clean-cut symbols.
 2. Letters:
 - a. Up to 2-inch Outside Diameter of Insulation or Pipe: 1/2-inch high letters.
 - b. 2-1/2- to 6-Inch Outside Diameter of Insulation or Pipe: 1-inch high letters.
 - c. Over 6-Inch Outside Diameter of Insulation or Pipe: 1-3/4-inch high letters.
- E. Stencil Paint: As indicated on Drawings.
- F. Color-Coding: Comply with 30 TAC 290.42(d)(13)(A).
- G. Lettering Size: Conform to ASME A13.1.

2.4 PIPE MARKERS

- A. Color-Coding: Comply with 30 TAC 290.42(d)(13)(A).
- B. Lettering Size: Conform to ASME A13.1.
- C. Plastic Tape Pipe Markers:
 1. Manufacturers:
 - a. Brady ID.
 - b. Craftmark Pipe Markers.
 - c. Kolbi Pipe Marker Co.
 - d. Marking Services, Inc.
 - e. Pipemarket.com; Brimar Industries, Inc.
 - f. Seton Identification Products, a Brady Corporation company.
 2. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 3. Description: Flexible, vinyl film tape with pressure-sensitive adhesive backing and printed markings.

- D. Plastic, Underground Pipe Markers:
 - 1. Manufacturers:
 - a. Kolbi Pipe Marker Co.
 - b. Marking Services, Inc.
 - c. Pipemarket.com; Brimar Industries, Inc.
 - d. Rhino Marking and Protection Systems.
 - e. Seton Identification Products, a Brady Corporation.
 - 2. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 - 3. Description:
 - a. Brightly colored, continuously printed, plastic ribbon tape.
 - b. Minimum 6 inches wide by 4 mils thick.
 - c. Manufactured for direct burial service.

2.5 LABELS

- A. Manufacturers:
 - 1. Brady ID.
 - 2. Seton Identification Products, a Brady Corporation company.
- B. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- C. Furnish materials according to City of Midland standards.
- D. Description:
 - 1. Aluminum construction.
 - 2. Minimum Size: 1.9- by 0.75-inch.
 - 3. Adhesive backed, with printed identification.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation preparation.
- B. Degrease and clean surfaces to receive adhesive for identification materials.
- C. Prepare surfaces as indicated on Drawings.

3.2 INSTALLATION

- A. Apply stencil painting as indicated on Drawings.
- B. Install identifying devices after completion of coverings and painting.
- C. Install plastic nameplates with corrosion-resistant mechanical fasteners or adhesive.
- D. Labels:
 - 1. Install labels with sufficient adhesive for permanent adhesion and seal with clear lacquer.
 - 2. For unfinished covering, apply paint primer before applying labels.
- E. Tags:
 - 1. Install tags using corrosion-resistant chain.
 - 2. Number tags as indicated in tag schedule.
- F. Install underground plastic pipe markers 6 to 8 inches below finished grade, directly above buried pipe.
- G. Identify valves in main and branch piping with tags.

- H. Piping:
1. Identify piping, concealed or exposed, with plastic tape pipe markers.
 2. Identify service, flow direction, and pressure.
 3. Install in clear view and align with axis of piping.
 4. Locate identification not to exceed 20 feet on straight runs, including risers and drops, adjacent to each valve and tee, at each side of penetration of structure or enclosure, and at each obstruction.

END OF SECTION

SECTION 33 11 13 - POTABLE WATER SUPPLY WELLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Drilling and casing of water well.
 - 2. Pump.
 - 3. Water and system testing and certification.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 05 33 "Raceway and Boxes for Electrical Systems."
 - 3. Section 26 29 13.06 "Soft-Start Motor Controllers."
 - 4. Section 31 23 16 "Excavation" for excavating for conduit and pipe from well head to building.
 - 5. Section 31 23 16.13 "Trenching."
 - 6. Section 33 01 10.58 "Disinfection of Water Utility Piping Systems" for flushing and disinfecting of well piping.
 - 7. Section 33 14 13 "Public Water Utility Distribution Piping" for wellpiping.
 - 8. Appendix A: Boring log and test hole data.
 - 9. Appendix B: TCEQ Forms.

1.2 DEFINITIONS

- A. Suspended Solids: Small solid particles that do not dissolve in water.
- B. TCEQ: Texas Commission on Environmental Quality.
- C. TDLR: Texas Department of Licensing and Regulation.
- D. PBUWCD: Permian Basin Underground Water Conservation District.

1.3 UNIT PRICE - MEASUREMENT AND PAYMENT

- A. Refer to Section 01 20 00 "Price and Payment Procedures" for Contract Sum/Price modification procedures.
- B. Water Well:
 - 1. Basis of Measurement: By vertical foot of well depth.
 - a. Basis of Payment: Includes drilling, casing, backfilling, pump test, and water quantity tests.
 - 2. Grouting:
 - a. Basis of Measurement: By cubic foot.
 - b. Basis of Payment: Includes materials and placement of grout.
 - 3. Pump:
 - a. Basis of Measurement: By each.
 - b. Basis of Payment: Includes motor drive, fittings, sensor, and accessories; conduit, wire, pipe, and pipe fittings from; and pump to wellhead.

1.4 REFERENCE STANDARDS

- A. ASTM International:
 - 1. ASTM A53 - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless).
 - 2. ASTM C 150 - Standard Specification for Portland Cement.
 - 3. ASTM D2241 - Standard Specification for Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series).
- B. American Water Works Association:
 - 1. AWWA A100 - Water Wells.
 - 2. AWWA C900 - Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4-inch through 12-inch, for Water Transmission and Distribution.
- C. National Electrical Manufacturers Association:
 - 1. NEMA MG 1 - Motors and Generators.
 - 2. NEMA 250 - Enclosures for Electrical Equipment (1,000 Volts Maximum).

1.5 PREINSTALLATION MEETINGS

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for preinstallation meeting.
- B. Convene minimum one week prior to commencing Work of this Section.

1.6 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for Submittals.
- B. Product Data:
 - 1. Submit manufacturer information regarding well pump, including rated capacities, weights, accessories, electrical nameplate data, and wiring diagrams.
 - 2. Submit manufacturer information regarding well casing.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Manufacturer Instructions:
 - 1. Submit detailed instructions on installation requirements, including storage and handling procedures.
 - 2. Indicate rigging and assembly.
- E. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- F. Qualifications Statements:
 - 1. Submit qualifications for manufacturer, drilling, and pump installing firm.
 - 2. Submit current TDLR drillers and pump installer certifications.
 - 3. Submit proof of registration with PBUWCD.

1.7 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of well, depth, subsoil strata, and drilling difficulties encountered.
- C. Submit signed copy of driller's logbook statements.
- D. Submit executed certification of well pump after performance testing.
- E. Submit documents required by TCEQ.

- F. Provide certificate of compliance from testing lab, indicating TCEQ required certifications are current.
- G. Boring Log: Include depths and descriptions of all formations, soil sample locations and number and depth where groundwater is encountered.
- H. Cementing Certificate: TCEQ Form 20842.
- I. Disinfection Certificate: TCEQ Form 10525.
- J. Results of microbiological and chemical analysis.
- K. Results of 36-hour pump test.

1.8 QUALITY ASSURANCE

- A. Perform Work according to AWWA A100 and D654.
- B. Perform Work according to TCEQ, TDLR, PBUWCD, University Lands, and City of Midland standards.

1.9 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.
- B. Drilling Firm: Company specializing in performing Work of this Section with 5 years' experience and licensed in State of Texas.
- C. Welders: AWS certification within previous 12 months for employed weld types.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. All materials and products shall not contain more than 0.25 percent lead.
- B. Water well characteristics as indicated on Drawings.

Well Number	Design Flow (GPM)	Design Head (Feet)	Total Well Depth
7	250	250	220
8	350	265	220
12	500	260	205
15	500	280	200
16	500	290	200
Notes: 1. Minimum Efficiency at Design Flow Rate is 75 percent. 2. Final Pump Sizing to be determined following results of well test pumping. 3. Pump bottom shall be set 10 feet from the bottom of the well.			

2.2 WELL PUMPS

- A. Manufacturers:
 - 1. Goulds Water Technology; a Xylem brand.
 - 2. Grundfos Pumps Corporation U.S.A.
 - 3. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- B. Description:
 - 1. Type: Close-coupled, multi-stage submersible.
 - 2. Lubrication: Water lubricated.
 - 3. Shaft: Vertical.
 - 4. Suitable for insertion in 12-inch diameter pipe.
- C. Casing:
 - 1. Casting: Cast iron.
 - 2. Housing and Intake Screen: Stainless steel.
 - 3. Check Valve: Stainless-steel stem and valve seat with rubber seal built into discharge casting.
- D. Impellers and Diffusers: 316 stainless steel.
- E. Shaft and Sleeve: 316 stainless steel.
- F. Operation:
 - 1. Electrical Characteristics:
 - a. As specified in Section 26 27 26 "Wiring Devices."
 - b. HP: As determined by pump requirements.
 - c. Voltage: 480 V phase, 60 Hz.
 - 2. Motors:
 - a. As specified in Section 22 05 13 "Common Motor Requirements for Plumbing Equipment."
 - b. NEMA MG 1 submersible type.
 - 3. Pump Controller:
 - a. NEMA 250 Type 3R enclosure with main disconnect interlocked with door.
 - b. Single-point power connection and grounding lug.
 - c. Soft start electric motor starter with starting relay and ambient compensate quick trip overloads in each phase with manual trip button and reset button

- d. Circuit breaker.
- e. Control transformer.
- f. HAND-OFF-AUTO selector switches.
- g. Pilot lights.
- G. Screen Material: Stainless steel.

2.3 WELL CASINGS

- A. Description:
 - 1. Material:
 - a. Schedule 80 steel pipe.
 - b. Comply with ASTM A53, Grade B, and AWA standards.
 - 2. Nominal Outside Diameter: 12-3/4-inch.
 - 3. Accessories: Dielectric couplers.

2.4 WELL SCREENS

- A. Description:
 - 1. Configuration: Continuous slot; wire wound.
 - 2. Circumferentially wrap triangularly shaped wire around circular array of rods.
 - 3. Wire configuration to produce inlet slots with sharp outer edges, widening inwardly to minimize clogging.
 - 4. Material: Screen shall be sized to be able to pass not less than the continuous yield of well at an entrance velocity not exceeding 0.1 fps. Type 316 stainless steel.
- B. Acceptable Manufacturers:
 - 1. Johnson Screens.
 - 2. Roscoe Moss Company.
 - 3. Alloy Screen Works.
 - 4. Substitutions: As specified in Section 01 60 00 "Product Requirements."

2.5 MATERIALS

- A. Filter Packs:
 - 1. Description: Clean, well rounded, smooth, and uniform; mostly grains.
 - 2. Material:
 - a. Siliceous.
 - b. Calcareous Material: Not more than 5 percent by weight.
 - c. Minimum Specific Gravity: 2.5.
 - d. Disinfect with a 50 mg/L chlorine solution as it is added to well cavity.
 - 3. Grading:
 - a. Determination: From sieve analyses of aquifer materials.
 - b. Passing Size: Four to six times 30 percent passing size of aquifer sample having finest grain-size distribution.
 - 4. Minimum Uniformity Coefficient: 2.5.
 - 5. Acceptable Sources:
 - a. Hickory (Brady) Sands.
 - b. Substitutions: As specified in Section 01 60 00 "Product Requirements."

2.6 MIXES

- A. Grout:
 - 1. Type:
 - a. Portland cement.
 - b. Comply with ASTM C 150, Type 1.
 - 2. Mixture: Not more than 5 gallons of water per 94-lb bag of cement.
 - 3. Obtain approval of Engineer to use bentonite or other additives, up to 6 percent by weight of cement, to reduce shrinkage permeability, increase fluidity, or control setting time.
 - 4. Pressure cementing method shall conform to one of the methods described in the latest revision of AWWA Standard A100-20, Appendix C, Section C.2 (Positive Displacement-Exterior Method); Section C.3 (Interior Method-Without Plug); Section C.4 (Positive Placement, Interior Method-Drillable Plug); and Section C.5 (Placement Through Float Shoe Attached to Bottom of Casing). Contractor shall complete TCEQ Form 20842 Cementing Certificate.

2.7 ACCESSORIES

- A. Conductor Casing:
 - 1. ASTM A53 Grade B or A-139 Grade B pipe.
 - 2. Nominal Diameter: 24 inches.
 - 3. Thickness: 3/8-inch (minimum).
 - 4. Length: As specified on Drawings or Bid Form.
- B. Well Seals:
 - 1. Manufacturers:
 - a. Campbell Manufacturing, Inc.
 - b. Merrill Manufacturing.
 - c. Simmons Manufacturing Co.
 - d. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 - 2. Materials:
 - a. Plate: Painted cast iron.
 - b. Seal: Molded rubber.
 - c. Bolts and Nuts: Zinc-plated steel.
- C. Well Caps:
 - 1. Manufacturers:
 - a. Campbell Manufacturing, Inc.
 - b. Merrill Manufacturing.
 - c. Simmons Manufacturing Co.
 - d. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- D. Riser Pipes:
 - 1. C900RJ, DR14 PVC pipe.
 - 2. Nominal Diameter: As indicated on Drawings.
- E. Dielectric Coupling:
 - 1. Location: Between low carbon steel blank casing and stainless steel screen.
 - 2. Nominal Diameter: As shown on Drawings.
 - 3. Manufacturers:
 - a. Alloy Screen Works.
 - b. Roscoe Moss Company.
 - 4. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- F. Cable Ties: Threaded plastic strap.

- G. Torque Arrestors:
 - 1. Location: Top, middle, and bottom of column pipe.
 - 2. Nominal Diameter: Sized for casing shown on Drawings.
 - 3. Manufacturers:
 - a. Boshart.
 - 4. Substitutions: As specified in Section 01 60 00 "Product Requirements."

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that Site conditions are capable of supporting equipment for performing drilling operations.

3.2 PREPARATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation preparation.
- B. Protect structures near well from damage.

3.3 INSTALLATION

- A. Drilling:
 - 1. Drilling Equipment: Mud rotary.
 - 2. Drill concentric well shaft to diameters and depths as indicated on Drawings.
 - 3. Water used in drilling shall be of safe sanitary condition. Water used in mixing of drilling fluids or mud shall contain a chlorine residual of at least 0.5 mg/L. Maximum allowable total dissolved solids concentration of water used for any part of the drilling operation is 3,000 mg/L.
 - 4. Slush pit shall be constructed and maintained so as to minimize contamination of drilling mud.
 - 5. No temporary toilet facilities shall be placed within 150 feet of the well unless they are of sealed, leakproof type.
 - 6. Premises, materials, tools, and drilling equipment shall be maintained to comply with Safe Drinking Water Act per AWWA Section 4.3.
 - 7. Remove loose material from shaft bottom.
 - 8. Allow inspection of casing prior to placement of grout.
 - 9. Place grout tight to surrounding Work according to regulatory requirements.
 - 10. Shaft Top:
 - a. Cut off shaft top 24 inches above finished grade.
 - b. Prevent metal cuttings from entering casing.
 - 11. Record accurate log of materials penetrated to determine depths and thicknesses of underlying formations.
 - 12. Prepare electric log recording resistivity, spontaneous potential, and gamma for total depth of borehole.

13. Casing and Screen:
 - a. Place well casing and screen assembly immediately after drilling.
 - b. Keep casing and screen under tension during filter packing.
14. Install filter packing.
15. Test borehole for plumbness according to AWWA A100.
16. Remove loose material from shaft bottom.
17. Maintain well opening and casing free of contaminating materials.
18. Well opening shall be locked, or temporary cap welded in place following completion and testing and prior to installation of permanent pumping equipment.
- B. Disinfection: Disinfect well according to C654 - Disinfection of Wells; except that the disinfectant shall remain in the well for at least six hours.
- C. Installation Standards: Install Work according to City of Midland, AWWA, and TCEQ standards.
- D. Well Pumps:
 1. Electrical Connections: As specified in Section 26 27 26 "Wiring Devices."
 2. Install pump onto riser pipe.
 3. Set pump intake, 10 feet above the bottom elevation of well.
 4. Secure wiring harness to pump column at ten-foot intervals.
 5. Install pump column 2-1/2 feet above finished grade with well seal between pump column and well casing.

3.4 WELL PLUGGING

- A. Existing water supply wells indicated on Drawings to be abandoned, shall be plugged per 16 TAC, Part 4, Rule 76.104 and per PBUWCD rules.
- B. Submit signed certification describing procedures used to plug wells to Owner and as required by all regulatory agencies. TDLR Form WWD004N shall be completed and returned to TDLR with one copy provided to Owner and one copy to Engineer. See Appendix for copy of form.

3.5 TOLERANCES

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for tolerances.
- B. Maximum Variation from Plumb: Comply with AWWA A100.
- C. Maximum Offset from Indicated Alignment: 1 degree.

3.6 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Performance Testing:
 1. Notify Engineer at least 3 days prior to flow-rate testing.
 2. Test flow rate and certify.
 3. Well Development Testing. Provide temporary test pump system including flow meter and equipment to measure water level. Perform 36-hour pump test.

4. Water Quality: Following completion of Well Development, collect water samples for bacterial, physical, and chemical analyses to be performed by TCEQ approved testing laboratory. Analyses shall be performed in accordance with TCEQ/AWWA approved methods, procedures and holding times. Test for constituents listed in Appendix B TCEQ Public Well Completion Data Checklist for Approval to Use (Step 2). **Radionuclides listed in Table 4 shall be analyzed. Test for UCMR 5 constituents listed in Appendix D using EPA/TCEQ approved methods, collection, preservation, procedures, and holding times.** Analyses shall only be performed by EPA/TCEQ approved laboratories.
 5. Sand Content: Maximum sand content shall be accordance with AWWA A100.
- C. Acceptance: Adjust, repair, modify, or replace components failing to perform as specified and rerun tests.

END OF SECTION

SECTION 33 14 13 - PUBLIC WATER UTILITY DISTRIBUTION PIPING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Pipe and fittings for public line, including potable water line.
 - 2. Tapping sleeves and valves.
 - 3. Positive-displacement meters.
 - 4. Pipe support systems.
 - 5. Bedding and cover materials.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 03 20 00 "Concrete Reinforcing" for reinforcing steel and required supports for cradles and encasements.
 - 3. Section 03 30 00 "Cast-in-Place Concrete" for concrete for cradles and encasements.
 - 4. Section 31 23 16.13 "Trenching" for excavation and backfill as required by this Section.
 - 5. Section 33 05 05.31 "Hydrostatic Testing" for pressure testing required by this Section.
 - 6. Section 33 05 09.33 "Thrust Restraint for Utility Piping" for tied joint restraint system to anchor and resist forces developed in underground closed pipeline systems.
 - 7. Section 40 05 61 "Gate Valves."

1.2 REFERENCE STANDARDS

- A. American Association of State Highway and Transportation Officials:
 - 1. AASHTO T 180 - Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.
- B. American Society of Mechanical Engineers:
 - 1. ASME B16.1 - Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.
- C. ASTM International:
 - 1. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 ksi Tensile Strength.
 - 2. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12 400 ft-lbf/ft³).
 - 3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³).
 - 4. ASTM D1785 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.
 - 5. ASTM D2241 - Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series).
 - 6. ASTM D3035 - Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter.
 - 7. ASTM D3139 - Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.

8. ASTM D6938 - Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
9. ASTM F477 - Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
- D. American Water Works Association:
 1. AWWA C104 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings.
 2. AWWA C105 - Polyethylene Encasement for Ductile-Iron Pipe Systems.
 3. AWWA C110 - Ductile-Iron and Gray-Iron Fittings.
 4. AWWA C111 - Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
 5. AWWA C115 - Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
 6. AWWA C151 - Ductile-Iron Pipe, Centrifugally Cast.
 7. AWWA C153 - Ductile-Iron Compact Fittings.
 8. AWWA C200 - Steel Water Pipe, 6 Inches and Larger.
 9. AWWA C203 - Coal-Tar Protective Coatings and Linings for Steel Water Pipe.
 10. AWWA C205 - Cement-Mortar Protective Lining and Coating for Steel Water Pipe - 4 Inches and Larger - Shop Applied.
 11. AWWA C206 - Field Welding of Steel Water Pipe.
 12. AWWA C207 - Steel Pipe Flanges for Waterworks Service, Sizes 4 Inches Through 144 Inches.
 13. AWWA C208 - Dimensions for Fabricated Steel Water Pipe Fittings.
 14. AWWA C213 - Fusion-Bonded Epoxy Coatings and Linings for Steel Water Pipe and Fittings.
 15. AWWA C300 - Reinforced Concrete Pressure Pipe, Steel-Cylinder Type.
 16. AWWA C301 - Prestressed Concrete Pressure Pipe, Steel-Cylinder Type.
 17. AWWA C500 - Metal-Seated Gate Valves for Water Supply Service.
 18. AWWA C600 - Installation of Ductile-Iron Mains and Their Appurtenances.
 19. AWWA C605 - Underground Installation of Polyvinyl Chloride (PVC) and Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe and Fittings.
 20. AWWA C606 - Grooved and Shouldered Joints.
 21. AWWA C700 - Cold-Water Meters - Displacement Type, Metal Alloy Main Case.
 22. AWWA C701 - Cold-Water Meters - Turbine Type, for Customer Service.
 23. AWWA C702 - Cold-Water Meters - Compound Type.
 24. AWWA C707 - Encoder-Type Remote-Registration Systems for Cold-Water Meters.
 25. AWWA C900 - Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 Inches Through 12 Inches, for Water Transmission and Distribution.
 26. AWWA C901 - Polyethylene (PE) Pressure Pipe and Tubing, 1/2-Inch Through 3 Inches, for Water Service.
 27. AWWA C905 - Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14 Inches Through 48 Inches, for Water Transmission and Distribution.
 28. AWWA M6 - Water Meters - Selection, Installation, Testing, and Maintenance.
- E. Manufacturers Standardization Society of the Valve and Fittings Industry:
 1. MSS SP-60 - Connecting Flange Joints between Tapping Sleeves and Tapping Valves.
- F. National Fire Protection Association:
 1. NFPA 24 - Standard for the Installation of Private Fire Service Mains and Their Appurtenances.
- G. NSF International:
 1. NSF 61 - Drinking Water System Components - Health Effects.
 2. NSF 372 - Drinking Water System Components - Lead Content.

1.3 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Coordinate Work of this Section with water main connection to existing municipal wellfield piping, and trenching.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit manufacturer information regarding pipe materials, pipe fittings, valves, hydrants , and all appurtenances.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- E. Preconstruction Photographs: Submit digital files of color photographs of Work areas and material storage areas, as specified in Section 01 70 00 "Execution and Closeout Requirements."
- F. Qualifications Statements:
 - 1. Submit qualifications for manufacturer and installer.

1.5 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of piping mains, valves, connections, thrust restraints, and centerline elevations.
- C. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

1.6 QUALITY ASSURANCE

- A. Valves: Mark valve body with manufacturer's name and pressure rating.
- B. Materials in Contact with Potable Water: Certified according to NSF 61 and NSF 372.
- C. Perform Work according to City of Midland standards.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.
- B. Installer: Company specializing in performing Work of this Section with minimum 3 years' experience in installation of liner materials.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.

- C. Storage:
 - 1. Store materials according to manufacturer instructions.
 - 2. Block individual and stockpiled pipe lengths to prevent moving.
 - 3. Do not place pipe or pipe materials on private property or in areas obstructing pedestrian or vehicle traffic.
 - 4. Store PE and PVC materials out of sunlight.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.

1.9 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

1.10 WARRANTY

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for warranties.

PART 2 - PRODUCTS

2.1 WATER PIPING

- A. Ductile-Iron Pipe:
 - 1. Comply with AWWA C151.
 - 2. Bituminous Outside Coating: Comply with AWWA C151.
 - 3. Pipe Mortar Lining:
 - a. Comply with AWWA C104.
 - b. Thickness: Double.
 - 4. PE Encasement: Comply with AWWA C105.
 - 5. Pipe Class:
 - a. Comply with AWWA C151.
 - b. Class 54.
 - 6. Fittings:
 - a. Material: Ductile iron; comply with AWWA C110.
 - b. Compact Fittings: Comply with AWWA C153.
 - c. Coating and Lining:
 - 1) Bituminous Coating: Comply with AWWA C110.
 - 2) Cement-Mortar Lining: Comply with AWWA C104; double thickness.
 - 7. Joints:
 - a. Mechanical and Push-on Joints: Comply with AWWA C111.
 - b. Flanged Joints: Comply with AWWA C115.
 - c. Restrained Joints: Boltless, push-on type, joint restraint independent of joint seal.
 - 8. Jackets: PE; comply with AWWA C105.

- B. PVC with Internal Restrained Joints (Well Column Pipe):
 - 1. Comply with AWWA C900/RJ.
 - 2. Cast Iron Outside Diameter.
 - 3. Pipe Color: Blue.
 - 4. Fittings: Comply with AWWA C900/RJ.
 - 5. Joints:
 - a. Comply with ASTM D3139.
 - b. Seals: PVC flexible elastomeric.
 - c. Solvent-cement couplings are not permitted.

2.2 VALVES

- A. As specified in Sections 40 05 61 "Gate Valves" and 40 05 65.23 "Swing Check Valves."

2.3 PIPE SUPPORTS AND ANCHORING

- A. Metal for Pipe Support Brackets:
 - 1. Material: Structural steel.
 - 2. Finish: Galvanized.
 - 3. Coating: Bituminous paint.
- B. Metal Tie Rods and Clamps or Lugs:
 - 1. Material: Galvanized steel.
 - 2. Size: Comply with NFPA 24.
 - 3. Coating: Bituminous paint.

2.4 CONCRETE ENCASEMENT AND CRADLES

- A. Concrete:
 - 1. As specified in Section 03 30 00 "Cast-in-Place Concrete."
 - 2. Type: Reinforced, air entrained.
 - 3. Compressive Strength: 3,000 psi at 28 days.
 - 4. Finish: Rough troweled.
- B. Concrete Reinforcement: As specified in Section 03 20 00 "Concrete Reinforcing."

2.5 MATERIALS

- A. Bedding and Cover:
 - 1. Bedding: Fill Type as indicated on Drawings.
 - 2. Cover: Fill Type as indicated on Drawings.
 - 3. Soil Backfill from above Pipe to Finish Grade:
 - a. Soil Type as indicated on Drawings.
 - b. Subsoil with no rocks greater than 2 inches in diameter, frozen earth, or foreign matter.

2.6 FINISHES

- A. Steel: Hot-dip galvanized after fabrication, according to ASTM A123.
- B. Protective Coating: Coal-tar epoxy.

2.7 ACCESSORIES

- A. Thrust Restraints: As specified in Section 33 05 09.33 "Thrust Restraint for Utility Piping."
- B. Air-Release Valves:
 - 1. As located on Drawings.
 - 2. As specified on Drawings.
- C. Steel Rods, Bolt, Lugs, and Brackets:
 - 1. Comply with ASTM A36.
 - 2. Grade A carbon steel.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that existing utility water main size, location, and invert are as indicated on Drawings.

3.2 PREPARATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation preparation.
- B. Preconstruction Site Photos:
 - 1. As specified in Section 01 70 00 "Execution and Closeout Requirements."
 - 2. Take photographs along centerline of proposed pipe trench; minimum one photograph for each 50 feet of pipe trench.
 - 3. Show mailboxes, curbing, lawns, driveways, signs, culverts, and other existing Site features.
 - 4. Include Project description, date taken, and sequential number on back of each photograph.
- C. Pipe Cutting:
 - 1. Cut pipe ends square, ream pipe and tube ends to full pipe diameter, and remove burrs.
 - 2. Use only equipment specifically designed for pipe cutting; use of chisels or hand saws is not permitted.
 - 3. Grind edges smooth with beveled end for push-on connections.
- D. Remove scale and dirt on inside and outside before assembly.
- E. Prepare pipe connections to equipment with flanges or unions.

3.3 INSTALLATION

- A. Bedding:
 - 1. Excavation:
 - a. As specified in Section 31 23 16.13 "Trenching."
 - b. Hand trim for accurate placement of pipe to elevations as indicated on Drawings.
 - 2. Dewater excavations to maintain dry conditions and to preserve final grades at bottom of excavation.

3. Place bedding material at trench bottom, level fill materials in one continuous layer not exceeding 8 inches of compacted depth, and compact to 95 percent of maximum density.
- B. Piping:
 1. Comply with AWWA C600.
 2. Handle and assemble pipe according to manufacturer instructions and as indicated on Drawings.
 3. Maintain 10 feet of horizontal separation between water main and sewer piping according to Texas Commission on Environmental Quality and City of Midland requirements.
 4. Ductile-Iron Piping and Fittings: Comply with AWWA C600.
 5. Grooved and Shouldered Pipe Joints: Comply with AWWA C606.
 6. Flanged Joints: Do not use in underground installations except within structures.
 7. Route pipe in straight line, and re-lay pipe that is out of alignment or grade.
 8. High Points:
 - a. Install pipe with no high points.
 - b. If unforeseen field conditions arise that necessitate high points, install air-release valves as indicated on Drawings, as directed by Engineer.
 9. Bearing:
 - a. Maintain bearing along entire length buried of pipe.
 - b. Excavate bell holes to permit proper joint installation.
 - c. Do not lay pipe in wet or frozen trench.
 10. Prevent foreign material from entering pipe during placement.
 11. Allow for expansion and contraction without stressing pipe or joints.
 12. Close pipe openings with watertight plugs during Work stoppages.
 13. Install access fittings to permit disinfection of water system performed under Section 33 01 10.58 "Disinfection of Water Utility Piping Systems."
 14. Cover:
 - a. Establish elevations of buried piping with not less than 5 feet of cover.
 - b. Measure depth of cover from final surface grade to top of pipe barrel.
- C. Valves: As specified in Section 33 14 19 "Valves for Water Utility Service.
- D. PE Encasement:
 1. Encase piping in PE as indicated on Drawings to prevent contact with surrounding backfill material.
 2. Comply with AWWA C105.
 3. Terminate encasement 3 to 6 inches above ground where pipe is exposed.
- E. Thrust Restraints: As specified in Section 33 05 09.33 "Thrust Restraint for Utility Piping."
- F. Backfilling:
 1. Backfilling: Backfill around sides and to top of pipe as specified in Section 31 23 16.13 "Trenching."
- G. Disinfection of Potable Water Piping Systems: As specified in Section 33 01 10.58 "Disinfection of Water Utility Piping Systems."
- H. Installation Standards: Install Work according to City of Midland standards.

3.4 TOLERANCES

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for tolerances.
- B. Install pipe to match installed well piping match installed well piping.

3.5 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Testing:
 - 1. Pressure test piping system according to AWWA C600 or C605 and following:
 - a. Test Pressure: Not less than 200 psig or 50 psi in excess of maximum static pressure, whichever is greater.
 - b. Conduct hydrostatic test for a minimum of 2 hours.
 - c. Slowly fill section to be tested with water; expel air from piping at high points.
 - d. Install corporation cocks at high points.
 - e. Close air vents and corporation cocks after air is expelled.
 - f. Raise pressure to specified test pressure.
 - g. Observe joints, fittings, and valves under test.
 - h. Remove and renew cracked pipes, joints, fittings, and valves showing visible leakage, and retest.
 - i. Correct visible deficiencies and continue testing at same test pressure for additional 2 hours to determine leakage rate.
 - j. Maintain pressure within plus or minus 5 psi of test pressure.
 - k. Leakage is defined as quantity of water supplied to piping necessary to maintain test pressure during period of test.
 - l. Compute maximum allowable leakage using formula provided in Section 33 05 05.31 "Hydrostatic Testing."
 - m. If pipe under test contains sections of various diameters, calculate allowable leakage from sum of computed leakage for each size.
 - n. Leakage:
 - 1) If test of pipe indicates leakage greater than allowed, locate source of leakage, make corrections, and retest until leakage is within allowable limits.
 - 2) Correct visible leaks regardless of quantity of leakage.
 - 2. Perform pressure test on piping according to City of Midland standards.
 - 3. Compaction Testing:
 - a. Comply with ASTM D1557 and ASTM D698.
 - b. Frequency of Compaction Tests: One test for every lift every 300 linear feet of fill, or as specified by Engineer.
 - c. If tests indicate Work does not meet specified requirements, remove Work, replace, and retest.

END OF SECTION

DIVISION 40
PROCESS INTEGRATION

SECTION 40 05 61 - GATE VALVES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Resilient-seated gate valves.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 33 14 13 "Public Water Utility Distribution Piping."

1.2 DEFINITIONS

- A. OUTSIDE SCREW AND YOKE (OS&Y) VALVE: A valve in which the operating screw is driven by a threaded nut that is built into the handle.

1.3 REFERENCE STANDARDS

- A. American Water Works Association:
 - 1. AWWA C500 - Metal-Seated Gate Valves for Water Supply Service.
 - 2. AWWA C509 - Resilient-Seated Gate Valves for Water Supply Service.
- B. ASME International:
 - 1. ASME B16.1 - Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.
 - 2. ASME B16.5 - Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch Standard.
 - 3. ASME B16.42 - Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300.
 - 4. ASME B1.20.1 - Pipe Threads, General Purpose, Inch.
 - 5. ASME B1.20.2 - Pipe Threads, 60 deg. General Purpose (Metric).
- C. ASTM International:
 - 1. ASTM A126 - Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
 - 2. ASTM B62 - Standard Specification for Composition Bronze or Ounce Metal Castings.
 - 3. ASTM B584 - Standard Specification for Copper Alloy Sand Castings for General Applications.
 - 4. ASTM D1784 - Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds.
- D. Manufacturers Standardization Society of the Valve and Fittings Industry:
 - 1. MSS SP-70 - Gray Iron Gate Valves, Flanged and Threaded Ends.
 - 2. MSS SP-80 - Bronze Gate, Globe, Angle and Check Valves.

PART 2 - PRODUCTS

2.1 RESILIENT-SEATED GATE VALVES

- A. Manufacturers:

1. Clow Valve Company; a subsidiary of McWane, Inc. Model: 2838.
 2. Dresser - M & H Valve Company; a division of McWane, Inc. Model: 4067.
 3. Mueller Co. Model: A-2360.
 4. Substitutions: Any alternate (approved equal) shall have completely interchangeable parts with either of the specified valves.
 5. Furnish materials according to City of Midland standards.
- B. Description:
1. Comply with AWWA C509.
 2. Working Pressure: 200 psig at 180 degrees F.
 3. Maximum Process Fluid Temperature: 180 degrees F.
 4. End Connections: As indicated on Drawings.
 5. Gear Actuators for Manual Valves: Comply with AWWA C509.
- C. Operation:
1. Stem: Nonrising.
 2. Handwheel.
 3. Furnish gear operators for valves 16 inches and larger, and chainwheel operators for valves mounted over 8 feet above operating floor.
- D. Materials:
1. Wedge: Resilient ASTM A126, cast iron, fully encapsulated with molded rubber.
 2. Body and Disc: ASTM A536, ductile iron, rubber coated.
 3. Stem, Stem Nuts, Glands, and Bushings: ASTM B584, bronze.
 4. Connecting Hardware: Type 316 stainless steel.

2.2 SOURCE QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for testing, inspection, and analysis.
- B. Testing: Test gate valves according to AWWA C509.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. According to AWWA C509.

END OF SECTION

SECTION 40 05 65.23 - SWING CHECK VALVES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes swing check valves 3 inches and larger.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 33 14 13 "Public Water Utility Distribution Piping."

1.2 REFERENCE STANDARDS

- A. American Water Works Association:
 - 1. AWWA C508 - Swing-Check Valves for Waterworks Service, 2 Inches Through 24 Inches NPS.
- B. ASME International:
 - 1. ASME B16.1 - Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.
 - 2. ASME B16.11 - Forged Fittings, Socket-Welding and Threaded.
 - 3. ASME B16.42 - Ductile Iron Pipe Flanges and Flanged Fittings: Classes 150 and 300.
- C. ASTM International:
 - 1. ASTM A126 - Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
 - 2. ASTM A536 - Standard Specification for Ductile Iron Castings.
 - 3. ASTM B62 - Standard Specification for Composition Bronze or Ounce Metal Castings.
 - 4. ASTM B148 - Standard Specification for Aluminum-Bronze Sand Castings.
- D. NSF International:
 - 1. NSF 61 - Drinking Water System Components - Health Effects.
 - 2. NSF 372 - Drinking Water System Components - Lead Content.
- E. SSPC - The Society for Protective Coatings:
 - 1. SSPC SP 6 - Commercial Blast Cleaning.

1.3 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Coordinate Work of this Section with piping and equipment connections as specified in other Sections and as indicated on Drawings.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit manufacturer's catalog information, indicating materials of construction and compliance with indicated standards.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Source Quality-Control Submittals: Indicate results of factory tests and inspections.

- E. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- F. Qualifications Statement:
 - 1. Submit qualifications for manufacturer.

1.5 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of piping, valves and other appurtenances, connections, and centerline elevations.

1.6 QUALITY ASSURANCE

- A. Materials in Contact with Potable Water: Certified according to NSF 61 and NSF 372.
- B. Perform Work according to City of Midland standards.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Protect valves and appurtenances by storing off ground.
 - 3. Provide additional protection according to manufacturer instructions.

1.9 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

1.10 WARRANTY

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for warranties.

PART 2 - PRODUCTS

2.1 SWING CHECK VALVES

- A. Manufacturers:
 - 1. DeZURIK.
 - 2. GA Industries, Inc.
 - 3. Henry Pratt Company.
 - 4. Kennedy Valve Company; a division of McWane, Inc.
 - 5. Mueller Co.
 - 6. Val-Matic Valve & Manufacturing Corp.
 - 7. Substitutions: As specified in Section 01 60 00 "Product Requirements."
 - 8. Furnish materials according to City of Midland standards.
- B. Description:
 - 1. Type: Swing, resilient seated, with outside lever and adjustable weight.
 - 2. Size: 3 inches and larger.
 - 3. Comply with AWWA C508.
 - 4. Working Pressure: 175 psig at 180 degrees F.
 - 5. Maximum Fluid Temperature: 180 degrees F.
 - 6. Flow Area: Full open, equal to connecting nominal pipe diameter.
 - 7. Mounting: Horizontal or vertical.
 - 8. End Connections: Flanged, ASME B16.1 or Flanged, ASME B16.42.
- C. Materials:
 - 1. Body and Cover: Cast iron, ASTM A126.
 - 2. Disc: Bronze, ASTM B62.
 - 3. Seat: Field replaceable, bronze, ASTM B62.
 - 4. Chamber and Plunger: Bronze, ASTM B62.
 - 5. Hinge Pin and Key: Stainless steel.
 - 6. Packing and O-Ring: Buna-N.
 - 7. Rubber Components: Buna-N.
 - 8. Connecting Hardware: Type 304 stainless steel.

2.2 SOURCE QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for testing, inspection, and analysis.
- B. Testing:
 - 1. Hydrostatically test check valves at twice rated pressure according to AWWA C508.
 - 2. Permitted Leakage at Indicated Working Pressure: None.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that field dimensions are as indicated on Shop Drawings.
- C. Inspect existing flanges for nonstandard bolt-hole configurations or design, and verify that new valve and flange mate properly.

3.2 PREPARATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation preparation.
- B. Thoroughly clean valves before installation.

3.3 INSTALLATION

- A. According to AWWA C508 and manufacturer instructions.
- B. Installation Standards: Install Work according to City of Midland standards.

3.4 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Inspection:
 - 1. Inspect for damage to valve lining or coating and for other defects that may be detrimental as determined by Architect/Engineer.
 - 2. Repair damaged valve or provide new, undamaged valve.
 - 3. After installation, inspect for proper supports and interferences.
- C. Pressure Testing: As indicated in piping schedule.
- D. Pressure test valves with piping.

3.5 CLEANING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for cleaning.
- B. Keep valve interior clean as installation progresses.
- C. After installation, clean valve interior of soil, grit, loose mortar, and other debris.

END OF SECTION

SECTION 40 05 78.13 - AIR/VACUUM VALVES FOR WATER SERVICE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes air release/vacuum breaker valves for water treatment facilities.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 33 14 13 "Public Water Utility Distribution Piping."
 - 3. Section 40 42 13 "Process Piping Insulation" for insulation applied to process piping systems.

1.2 REFERENCE STANDARDS

- A. American Water Works Association:
 - 1. AWWA C512 - Air Release, Air/Vacuum, and Combination Air Valves for Waterworks Service.
- B. ASME International:
 - 1. ASME B16.1 - Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.
 - 2. ASME B16.5 - Pipe Flanges and Flanged Fittings: NPS 1/2 through NPS 24 Metric/Inch Standard.
- C. ASTM International:
 - 1. ASTM A126 - Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
 - 2. ASTM A216 - Standard Specification for Steel Castings, Carbon, Suitable for Fusion Welding, for High-Temperature Service.
 - 3. ASTM A536 - Standard Specification for Ductile Iron Castings.
 - 4. ASTM B148 - Standard Specification for Aluminum-Bronze Sand Castings.
- D. International Organization for Standardization:
 - 1. ISO 9001 - Quality Management Systems.
- E. NSF International:
 - 1. NSF 61 - Drinking Water System Components - Health Effects.
 - 2. NSF 372 - Drinking Water System Components - Lead Content.

1.3 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Coordinate Work of this Section with installation of process piping.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit manufacturer catalog information.
- C. Shop Drawings: Indicate materials, dimensions, weights, and end connections on assembly drawings.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Manufacturer Instructions: Submit special procedures and setting dimensions.

- F. Source Quality-Control Submittals: Indicate results of factory tests and inspections.
- G. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- H. Manufacturer Reports: Certify that equipment has been installed according to manufacturer instructions.
- I. Qualifications Statements:
 - 1. Submit qualifications for manufacturer and installer.
 - 2. Submit manufacturer's approval of installer.

1.5 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations of air release/vacuum breaker valves.

1.6 QUALITY ASSURANCE

- A. Materials in Contact with Potable Water: Certified to NSF 61 and NSF 372.
- B. Manufacturer Quality Management System: Certified to ISO 9001.
- C. Perform Work according to City of Midland standards.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.
- B. Installer: Company specializing in performing Work of this Section with minimum 3 years' experience.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store materials according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Furnish temporary end caps and closures on piping and fittings and maintain in place until installation.
 - 3. Provide additional protection according to manufacturer instructions.

1.9 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

1.10 WARRANTY

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for warranties.

PART 2 - PRODUCTS

2.1 AIR/VACUUM VALVES FOR WATER SERVICE

- A. Manufacturers:
 - 1. A.R.I. Flow Control Accessories, Ltd.
- B. Substitutions: As specified in Section 01 60 00 "Product Requirements" and as approved by the City of Midland.
- C. Furnish materials according to City of Midland standards.
- D. Description:
 - 1. Type: Fully automatic, float operated.
 - 2. Comply with AWWA C512.
 - 3. Size: As indicated on Drawings.
 - 4. Suitable for potable or raw water service.
 - 5. Pressure Rating: 200 psig.
 - 6. Maximum Operating Temperature: Water to 140 degrees F.
- E. Materials:
 - 1. Body and Cover: Reinforced Nylon/Type 316 Stainless Steel.
 - 2. Float: Foamed Polypropylene.
 - 3. Seat, and Trim: Type 316 stainless steel.
 - 4. Seats: Buna-N.
 - 5. Seals: Buna-N.
- F. End Connections:
 - 1. Size 3 Inches: Threaded, NPT.
 - 2. Size 4 Inches and Larger: Flanged, ASME B16.1.
- G. Accessories:
 - 1. Backwash accessories, including inlet shutoff valve, blowoff valve, rubber supply hose, and quick-disconnect couplings.

2.2 SOURCE QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for testing, inspection, and analysis.
- B. Provide shop inspection and testing of completed assembly.
- C. Certificate of Compliance:
 - 1. If fabricator is approved by authorities having jurisdiction, submit certificate of compliance indicating Work performed at fabricator's facility conforms to Contract Documents.
 - 2. Specified shop tests are not required for Work performed by approved fabricator.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that field dimensions are as indicated on Drawings.
- C. Inspect existing flanges for nonstandard bolt hole configurations or design and verify that new pipe and flanges mate properly.

3.2 PREPARATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation preparation.
- B. Thoroughly clean end connections before installation.
- C. Close pipe and equipment openings with caps or plugs during installation.
- D. Surface Preparation: Clean surfaces to remove foreign substances.

3.3 INSTALLATION

- A. According to manufacturer instructions.
- B. Provide access for operation, removal, and maintenance, and to avoid discharge to occupied areas or other equipment.
- C. Installation Standards: Install Work according to City of Midland standards.

3.4 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Inspect for interferences and proper supports.
- C. Equipment Acceptance:
 - 1. Adjust, repair, modify, or replace components failing to perform as specified and rerun tests.
 - 2. Make final adjustments to equipment under direction of manufacturer's representative.
 - 3. Repair damaged coatings with material equal to original coating.
 - 4. Furnish installation certificate from equipment manufacturer's representative attesting that equipment has been properly installed and is ready for startup and testing.

3.5 CLEANING

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for cleaning.
- B. Keep interior of air release valves clean as installation progresses.

3.6 DEMONSTRATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for demonstration and training.
- B. Demonstrate equipment startup, shutdown, routine maintenance, and emergency repair procedures to Owner's personnel.

END OF SECTION

SECTION 40 42 13 - PROCESS PIPING INSULATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Process piping insulation.
 - 2. Jacketing.
 - 3. Accessories.
- B. Related Requirements:
 - 1. Divisio 01 Specification Sections apply to Work of this Section.
 - 2. Section 33 05 00 "Common Work Results for Utilities."

1.2 REFERENCE STANDARDS

- A. ASTM International:
 - 1. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - 2. ASTM C 195 - Standard Specification for Mineral Fiber Thermal Insulating Cement.
 - 3. ASTM C 449 - Standard Specification for Mineral Fiber Hydraulic-Setting Thermal Insulating and Finishing Cement.
 - 4. ASTM C 450 - Standard Practice for Fabrication of Thermal Insulating Fitting Covers for NPS Piping, and Vessel Lagging.
 - 5. ASTM C 533 - Standard Specification for Calcium Silicate Block and Pipe Thermal Insulation.
 - 6. ASTM C 534 - Standard Specification for Preformed Flexible Elastomeric Cellular Thermal Insulation in Sheet and Tubular Form.
 - 7. ASTM C 547 - Standard Specification for Mineral Fiber Pipe Insulation.
 - 8. ASTM C 553 - Standard Specification for Mineral Fiber Blanket Thermal Insulation for Commercial and Industrial Applications.
 - 9. ASTM C 578 - Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
 - 10. ASTM C 585 - Standard Practice for Inner and Outer Diameters of Thermal Insulation for Nominal Sizes of Pipe and Tubing.
 - 11. ASTM C 591 - Standard Specification for Unfaced Preformed Rigid Cellular Polyisocyanurate Thermal Insulation.
 - 12. ASTM C 612 - Standard Specification for Mineral Fiber Block and Board Thermal Insulation.
 - 13. ASTM C 795 - Standard Specification for Thermal Insulation for Use in Contact with Austenitic Stainless Steel.
 - 14. ASTM C 921 - Standard Practice for Determining the Properties of Jacketing Materials for Thermal Insulation.
 - 15. ASTM C 1136 - Standard Specification for Flexible, Low Permeance Vapor Retarders for Thermal Insulation.

16. ASTM D1785 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedule 40, 80, and 120.
 17. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 18. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
- B. Manufacturers Standardization Society of the Valve and Fittings Industry:
1. MSS SP-69 - Pipe Hangers and Supports - Selection and Application.

1.3 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit product description, thermal characteristics, list of materials, and thickness for each service and location.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- D. Manufacturer's Instructions: Submit manufacturer's published literature indicating recommended installation procedures.
- E. Qualifications Statements:
 1. Submit qualifications for manufacturer and applicator.
 2. Submit manufacturer's approval of applicator.

1.4 QUALITY ASSURANCE

- A. Test pipe insulation for maximum flame-spread index of 25 and maximum smoke-developed index not exceeding 450, according to ASTM E84.
- B. Comply with ASTM C 585 for inner and outer diameters of pipe insulation.
- C. Factory-fabricated fitting covers according to ASTM C 450.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.
- B. Applicator: Company specializing in performing Work of this Section with minimum 3 years' experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Accept materials on-Site in original factory packaging, labeled with manufacturer's identification, including product density and thickness.
- C. Inspection: Accept insulation on-Site in manufacturer's packaging. Inspect for damage.
- D. Store insulation according to manufacturer's instructions.
- E. Protect insulation from weather and construction traffic, dirt, water, chemicals, and damage by storing in original wrapping.

1.7 AMBIENT CONDITIONS

- A. Refer to Section 01 50 00 "Temporary Facilities and Controls" for requirements for ambient condition control facilities for product storage and installation.
- B. Install insulation only when ambient temperature and humidity conditions are within ranges as recommended by manufacturer.

1.8 EXISTING CONDITIONS

- A. Field Measurements:
 - 1. Verify field measurements prior to fabrication.
 - 2. Indicate field measurements on Shop Drawings.

1.9 WARRANTY

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for warranties.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Glass Fiber and Mineral Fiber Insulation:
 - 1. Manufacturers:
 - a. CertainTeed Corporation.
 - b. Johns Manville; a Berkshire Hathaway company.
 - c. Knauf Insulation.
- B. Closed-Cell Elastomeric Insulation:
 - 1. Manufacturers:
 - a. Aeroflex USA, Inc.
 - b. Armacell LLC.
 - c. K-Flex USA.
 - 2. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- C. Polyisocyanurate Foam Insulation:
 - 1. Manufacturers:
 - a. Duna USA Inc.
 - b. Dyplast Products.
 - c. Elliott Company of Indianapolis.
 - d. ITW Insulation Systems; Illinois Tool Works, Inc.
 - 2. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- D. Extruded Polystyrene Insulation:
 - 1. Substitutions: Refer to Section 01 60 00 "Product Requirements."
- E. Valve and Fitting Insulation Blankets:
 - 1. Manufacturers:
 - a. Unitherm.
 - b. Thermaxx.
 - c. Firwin.
 - 2. Substitutions: Refer to Section 01 60 00 "Product Requirements."

2.2 PIPE INSULATION

- A. Type P-2:
 - 1. Description: Molded glass fiber.
 - 2. Comply with ASTM C 547.
 - 3. Thermal Conductivity: 0.23 Btu-in./h-ft.-deg. F at 75 degrees F.
 - 4. Operating Temperature Range: Zero to 850 degrees F.

2.3 PIPE INSULATION JACKETS

- A. Aluminum Pipe Jacket:
 - 1. Comply with ASTM B209.
 - 2. Sheet Thickness: 0.016-inch.
 - 3. Finish: Embossed.
 - 4. Joining: Longitudinal slip joints with 2-inch laps.
 - 5. Fitting Covers:
 - a. Description: Die-shaped, with factory-attached protective liner.
 - b. Thickness: 0.016-inch.
 - 6. Metal Jacket Bands:
 - a. Width: 3/8-inch.
 - b. Thickness and Material: 0.010-inch, stainless steel.
 - 7. Lining: 3 mil thick polyfilm.
- B. Valve and Fitting Insulation Blankets:
 - 1. Description:
 - a. One-piece, flexible fitted covers, fasteners, and insulation for freeze protection of valves and fittings.
 - b. Color: Off-white, gray, or silver.
 - 2. Insulation Material: Non-asbestos and hydrophobic.
 - 3. Jacket Material: Silicone Fiberglass Composite, 17 oz./sq./yd. minimum.
 - 4. Thread Material: Rated to withstand pipe skin temperatures without degradation.
 - 5. Applications: To cover above ground, exposed gate, and check valves.
 - 6. UV Protection: Outer layer shall be rated for outside use and shall be UV protected.
 - 7. Water Vapor Barrier: Integral vapor barrier.
 - 8. Connections: Straps shall be made from the same material as outer layer, fastened with double-D rings.
 - 9. Temperature Range: -10 degrees F to 150 degrees F.
 - 10. Thickness: As required for anti-freeze protection of heat traced water to 0 degrees F.
 - 11. Installation: Jackets shall be fitted for valve types and sizes shown on the Plans. Jacket material shall not require on-site cutting or modification prior to installation.

2.4 PIPE INSULATION ACCESSORIES

- A. Vapor-Retarder Lap Adhesive: Compatible with insulation.
- B. Mineral Fiber Hydraulic-Setting Thermal Insulating and Finishing Cement: Comply with ASTM C 449.
- C. Adhesives: Compatible with insulation.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that piping and equipment has been tested before applying insulation materials.
- C. Verify that surfaces are clean and dry, with foreign material removed.

3.2 INSTALLATION - PIPING SYSTEMS

- A. Piping Exposed to View in Finished Spaces: Locate insulation and cover seams in least visible locations.
- B. Fire-Rated Penetrations:
 - 1. Continue insulation through penetrations of building assemblies or portions of assemblies having fire-resistance rating of one hour or less.
 - 2. Provide intumescent firestopping when continuing insulation through assembly.
 - 3. Finish at supports, protrusions, and interruptions.
- C. Piping Systems Conveying Fluids below Ambient Temperature:
 - 1. Insulate entire system, including fittings, valves, unions, flanges, strainers, flexible connections, pump bodies, and expansion joints.
 - 2. Jacketing:
 - a. Furnish factory-applied or field-applied vapor-retarder jackets.
 - b. Secure factory-applied jackets with pressure-sensitive adhesive with self-sealing longitudinal laps and butt strips.
 - c. Secure field-applied jackets with outward-clinch expanding staples, and seal stapled penetrations with vapor-retarder mastic.
 - 3. Fittings, Joints, and Valves:
 - a. Insulate with molded insulation of like material and thickness as adjacent pipe.
- D. Glass-Fiber Board Insulation:
 - 1. Apply insulation close to equipment by grooving, scoring, and beveling insulation.
 - 2. Fasten insulation to equipment with studs, pins, clips, adhesive, wires, or bands.
 - 3. Fill joints, cracks, seams, and depressions with bedding compound to form smooth surface; on cold equipment, use vapor-retarder cement.
 - 4. Cover wire mesh or bands with cement to a thickness to remove surface irregularities.
- E. Closed-Cell Elastomeric Insulation:
 - 1. Push insulation onto piping.
 - 2. Miter joints at elbows.
 - 3. Seal seams and butt joints with manufacturer's recommended adhesive.
 - 4. If application requires multiple layers, apply with staggered joints.
 - 5. Insulate fittings and valves with insulation of like material and thickness as adjacent pipe.
- F. Heat-Traced Piping:
 - 1. Insulate fittings, joints, and valves with insulation of like material, thickness, and finish as adjoining pipe.
 - 2. Size large enough to enclose pipe and heat tracing.
- G. Heat-Traced Exterior Piping:
 - 1. Insulate fittings, joints, and valves with insulation of like material, thickness, and finish as specified.
 - 2. Size insulation large enough to enclose pipe and heat tracing.
 - 3. Cover with aluminum jacket with seams located at 3- or 9-o'clock position on side of horizontal piping, with overlap facing down to shed water.

END OF SECTION

SECTION 40 61 10 - PROCESS CONTROL FORMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. The forms listed below and following this Section are referenced from other Sections of the Project Manual:
 - a. 17000A-4: Loop wiring and insulation resistance test data form; 4-wire.
 - b. 17000B-1: Field, Transmitter, Miscellaneous switch/instrument calibration test and Loop commissioning test data form.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

PART 2 - PRODUCT (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

Reference Sheet 17000A-4										
IDENTIFICATION		LOCATION			CONTINUITY RESISTANCE *A		INSULATION RESISTANCE *B		COMMENTS	CMPLT DATE
TAG#	DESCRIPTION	WIRE TAG	COLOR	FIELD TB LOCATION	COND/ COND	COND/ SHLD.	COND/ GND.	SHLD/ GND.		

OWNERS' REP

[illegible]

ENGINEERS' REP.
DATE: 8.394

OWNERS' REP
DATE: April 25, 2023

SECTION 40 61 20 - PROCESS CONTROL CABINETS AND ENCLOSURES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Control Panel(s)/RTU(s).
 - 2. Miscellaneous Cabinets.
 - 3. Accessories.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 REFERENCES

- A. NECA Standard of Installation (National Electrical Contractors Association).
- B. NEMA 250 - Enclosures for Electrical Equipment (1,000 Volts Maximum).
- C. NEMA ICS 4 - Terminal Blocks for Industrial Control Equipment and Systems.
- D. NFPA 70 - National Electrical Code.

1.3 SUBMITTALS

- A. Submit under provisions of General Conditions.
- B. Provide manufacturer's standard data for enclosures and cabinets

1.4 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Materials and products to be listed and classified by Underwriters Laboratories, Inc. as suitable for the purpose specified and indicated

PART 2 - PRODUCTS

Equipment model numbers for major equipment and accessories are detailed in these Specifications and in the Drawings. Any changes from manufacturers and model numbers listed must have prior approval from Engineer.

The panel manufacturer shall provide all equipment and materials necessary to construct the panels, whether or not such items are listed in the Drawings.

2.1 CONTROL PANELS

- A. Enclosure:
 - 1. Panel enclosure shall be a NEMA Type 4/12 (as indicated on Project Drawings). Enclosure with backpan mounting surface or approved equal.
 - 2. Enclosure body shall be constructed of 12-gauge steel; all welded construction and seams shall be continuously welded.
 - 3. All welds and seams shall be ground smooth.
 - 4. Door Handles shall be flush type.
 - 5. All panel enclosures shall be equipped with a drawing pocket, 11-1/2-inch wide by 15-inch high by 3/4-inch deep, mounted on the door or side panel.

6. Control Panel/RTV(s) Enclosure shall have a fold down shelf mounted on the inside of the door at a height no more than 40 inches above finished floor. Refer to Project Drawings for shelf placement and/or omission.
 7. Panels shall have no screws or bolts protruding to the outside of the cabinet.
- B. Wiring:
1. Discrete I/O wiring from swing arm to terminal strip shall be 18 AWG, UL1007 rated, Belden #9918 or equal.
 2. Analog I/O wiring from swing arm to terminal strip shall be 18 AWG, twisted pair shielded, Belen #8762 or equal.
 3. Analog wiring shall be shielded with the shield extended up to the point of termination exposing just enough cable to adequately terminate the conductors. Heat shrink shall be used where the wire exits the cable jacket.
 4. Power distribution wiring shall be 16 AWG unless noted otherwise on the Drawings.
 5. AC power wiring to devices inside panel shall be twisted pair shielded #16 AWG, unless noted otherwise on the Drawings.
 6. Wiring from the PLC I/O Card Swing Arms to the panduit shall be enclosed in a braided expandable wire sleeving, Thomas & Betts #S750PC-0.
 7. Discrete I/O wiring from PLC swingarm to terminal strips shall be Slate Grey in color. All the panel wiring shall adhere to the following color code:
 - a. 12VDC and 24VDC Slate Grey.
 - b. 120VAC Black.
 - c. 120VAC Neut. White.
 - d. Analog I/O (+) Black.
 - e. Analog I/O (-) White or Clear.
- C. Wire Markers:
1. Wire markers shall be seamless type Heat Shrink wire markers, Raychem Part No. RPS-1K-18-12/2.0-9.
 2. Wire markers shall be legible and properly aligned after heat shrinking.
 3. Finished markings shall be aligned and positioned so that they can be easily read without manipulation of the wire.
 4. Wire markers shall designate the termination point of the opposite end of the wire.
- D. Grounding:
1. Two ground busses shall be provided in the enclosure, one for isolated grounds and one for equipment grounds.
 2. The isolated ground bus shall be isolated from the backpan and enclosure.
 3. Shield wires shall be jumpered together on their respective terminal strips and routed to the isolated ground bus.
 4. Equipment such as power supplies, PLCs, and enclosures shall be grounded to the equipment ground bus.
- E. Terminal Blocks:
1. In order to provide easier access to terminations, all terminal blocks shall be mounted on elevated DIN type mounting rails, DIN rail elevators shall be electrically isolated from back pan mounting surface. Refer to Project Drawings.
 2. Signal and Control Terminals: Modular construction type, suitable for channel mounting, with tubular pressure screw connectors, rated 300 Volts.
 3. Provide isolated ground bus terminal blocks for shield wires.
 4. Feed thru terminal blocks shall be Phoenix Contact UT4-MTD or equal.
 5. 24VDC fusible terminal blocks shall be Phoenix Contact UT4-PE/HESILED 24 or equal.

- 6. 120VAC fusible terminal blocks shall be Phoenix Contact UT4-PE/HESILA 250 or equal.
- 7. Grounding terminal blocks shall be Phoenix Contact UT4-MTD-PE/S or approved equal.
- F. All devices and terminal strips shall be labeled with white on black engraved name plates.
- G. Wireways shall be made of a flame retardant, non-metallic material, which is gray in color. The wireway covers shall be single complete lengths between intersections.
- H. Heat shrink shall be placed on all exposed shielding wires to protect from accidental shorting.

2.2 MISCELLANEOUS CABINETS

- A. Boxes shall be NEMA 250, Type 4 steel enclosure.
- B. Backpanel: Provide steel backpanel. Paint matte white.
- C. Fronts: Steel, door with concealed hinge, and flush lock keyed to match branch circuit panel board. Finish with gray baked enamel.
- D. Knockouts: Provide as necessary. Provide barriers to form separate compartments wiring of different systems and voltages. Provide accessory feet for free-standing equipment.

2.3 TESTING

- A. Owner and Engineer shall perform an acceptance test of the Control Pane(s)/RTU(s) at the panel shop prior to shipment. This test shall consist of a visual inspection for conformance with the Drawings and these Specifications, powering up the panel, loading a test program into the PLC and testing all wiring and devices installed in the panel. Any corrections necessary for a fully functional Control Pane(s)/RTU(s) as detailed in the Drawings and these Specifications shall be made at the panel shop prior to shipment. Travel and expenses for one Owner's representative and one Engineer's representative to conduct the acceptance test shall be provided by Contractor at no additional cost to Owner.
- B. Contractor shall notify Engineer 2 weeks prior to completion of the panel in order to schedule a date for the acceptance test.
- C. Control Pane(s)/RTU(s) shipped to the site without having an acceptance test shall be rejected.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in accordance with NECA "Standard of Installation." Install enclosures and boxes plumb. Anchor securely to wall and structural supports at each corner. Install cabinet fronts plumb.

3.2 CLEANING: GENERAL CONDITIONS - CONTRACT CLOSEOUT

- A. Cleaning installed Work. Clean electrical parts to remove conductive and harmful materials. Remove dirt and debris from enclosure. Clean finishes and touch up damage.

END OF SECTION

SECTION 40 61 32 - SCADA EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. This Section specifies requirements for Supervisory Control and Data Acquisition (SCADA) equipment which consists of the PLC, HMI / computer hardware, radios, radio antennas, power supplies, uninterruptible power supplies, networking equipment, and process software.

PART 2 - PLC SPECIFICATION SHEETS

2.1 PLC CONTROLLER

- A. Product Requirements:
 - 1. The PLC controller shall be Schneider Electric/Modicon M340BMXP342020.
 - 2. The PLC controller shall have the ability to have its firmware updated with new releases of compatible firmware from the manufacturer.
 - 3. The memory possessed by the PLC controller, with the exception of memory set aside for by the manufacturer for internal controller use, shall be user configurable in like file types, with no exception as to what the undefined memory shall become.
 - 4. The PLC controller shall be able to perform complex math calculations without the need of changing stored information from type to type, i.e., integer values shall be able to be used in math calculations involving floating point values without the need of changing either the floating point to integer or integer to floating point and so forth.
- B. Installation:
 - 1. Install in accordance with manufacturer's instructions and recommendations to the specified requirements.
 - 2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

2.2 ETHERNET COMMUNICATIONS MODULE

- A. Product Requirements:
 - 1. The PLC Ethernet communication module shall be Schneider Electric/Modicon BMXNOE0100.
 - 2. The Ethernet communication module shall be capable of servicing transmissions rates of up to 100 Mbps.
 - 3. The Ethernet communication module shall allow programming and data exchange connections via TCP/IP.
- B. Installation:
 - 1. Install in accordance with manufacturer's instructions and recommendations to the specified requirements.

2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

2.3 8 CHANNEL ANALOG INPUT MODULE

- A. Product Requirements:
 1. The 8 channel analog input module shall be Schneider Electric/Modicon BMXAMIO8100.
 2. The analog input module shall be a high resolution, isolated 8 channel analog input module capable of being placed within a modular chassis and communicate with the PLC controller via a backplane located in the chassis.
 3. The analog input module shall possess the ability of being placed anywhere within the modular chassis, with the exception of the space occupied by the PLC controller, and function as intended by the manufacturer.
 4. The analog input module shall have terminals located on its swing arm used to land field wiring.
 5. The analog input module shall be capable of receiving 4 to 20mA input signals from process devices and converting them for use by the PLC controller.
 6. The analog input module shall possess the capability of supplying power to 2-wire field devices via either its backplane power source or from an independent power source.
- B. Installation:
 1. Install in accordance with manufacturer's instructions and recommendations to the specified requirements.
 2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

2.4 4 CHANNEL ANALOG OUTPUT MODULE

- A. Product Requirements:
 1. The 4-Channel analog output module shall be Schneider Electric/Modicon BMXAO0410.
 2. The analog output module shall be 4 channel analog output module capable of being placed within a modular chassis and communicate with the PLC controller via a backplane located in the chassis.
 3. The analog output module shall possess the ability of being placed anywhere within the modular chassis, with the exception of the space occupied by the PLC controller, and function as intended by the manufacturer.
 4. The analog output module shall have terminals located on its swing arm used to land field wiring.
 5. The analog output module shall be capable of sending 4 to 20mA output signals to process device.
 6. The analog input module shall possess the capability of supplying power to 2-wire field devices via either its backplane power source or from an independent power source.
- B. Installation:
 1. Install in accordance with manufacturer's instructions and recommendations to the specified requirements.

2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

2.5 16 CHANNEL DISCRETE INPUT MODULE (24VDC)

- A. Product Requirements:
 1. The 16 channel 24VDC input module shall be Schneider Electric/Modicon BMXDDI1602.
 2. The input module shall possess the ability of being placed anywhere within the modular chassis, with the exception of the space occupied by the PLC controller, and function as intended by the manufacturer.
 3. The input module shall have terminals located on its swing arm used to land field wiring.
 4. The input module shall be capable of receiving discrete input signals from process devices and converting them for use by the PLC controller.
- B. Installation:
 1. Install in accordance with manufacturer's instructions and recommendations to the specified requirements.
 2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

2.6 16 CHANNEL OUTPUT MODULE

- A. Product Requirements:
 1. The 16-Channel output module shall be Schneider Electric/Modicon BMXDRA1605.
 2. The output module shall possess the ability of being placed anywhere within the modular chassis, with the exception of the space occupied by the PLC controller, and function as intended by the manufacturer.
 3. The output module shall have terminals located on its swing arm used to land field wiring.
- B. Installation:
 1. Install in accordance with manufacturer's instructions and recommendations to the specified requirements.
 2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

2.7 PLC CARD RACK

- A. Product requirements:
 1. The PLC card rack shall be Schneider Electric/Modicon BMXXBP1200.
 2. All input, output, communication, and controller modules shall properly fit inside the PLC chassis as recommended by the manufacturer.
 3. The card rack shall have the capability of being expanded by use of a remote I/O communication card.
 4. The card rack shall have the option of placing differing power supplies on the power supply connection located on the chassis.

- B. Installation:
 - 1. Install in accordance with manufacturer's instructions and recommendations to the specified requirements.
 - 2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

2.8 PLC CHASSIS POWER SUPPLY

- A. Product Requirements:
 - 1. The PLC chassis power supply shall be Schneider Electric/Modicon BMXCPS3020.
 - 2. The power supply shall be capable of being placed on the chassis as per manufacturer installation instruction.
 - 3. The PLC chassis power supply shall not be separate from the chassis.
- B. Installation:
 - 1. Install in accordance with manufacturer's instructions and recommendations to the specified requirements.
 - 2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

PART 3 - NETWORKING HARDWARE

3.1 NETWORK SWITCH

Total Ports:	10 VDC
RJ45 Ports:	8 Gigabit Ethernet
SFP Ports:	2 Gigabit Ethernet Slots
Inrush Current, Max:	0.55A
Power Input:	24 VDC
Power Consumption:	10W
Current, no:	DC 550mA
Current, max:	DC 1100mA
Wire size, gnd con.:	14AWG stranded
Wire size, DC power:	12 to 24 AWG stranded
Enclosure Type Rating:	None (open-style)
North American temp code:	T4
MAC addresses, max sup.:	8K
SFP modules:	Ordered separately, contractor to field verify, utilize SFP module matching that of existing fiber optic type utilized.
Temp, operating:	-4 degrees°C < Ta < + 75 degrees C (-40 degrees F < Ta < + 167 degrees F)
Temp, ambient, max:	75 degrees C (167 degrees F)
Temp, surrounding air, max:	75 degrees C (167 degrees F)
Temp, nonoperating:	-40 degrees C to +85 degrees C (-40 to +185 degrees F)
Relative humidity:	5 to 95 percent noncondensing
Mounting:	DIN rail

- A. Product Requirements:
 - 1. The network switch shall be a Modicon Model number MCSESM103F2CU0 or approved equal.
 - 2. The network switch shall be lean manageable.
 - 3. The network switch shall automatically detect the data transmission speed of up to 1,000.
 - 4. The network switch shall auto negotiate each port to establish a half or full duplex connection with 10 or 100 Mbps.
 - 5. The network switch shall be auto crossing to allow either 1:1 or crossover Ethernet copper cables.
- B. Installation:
 - 1. Install in accordance with manufacturer's instructions and the recommendations of API RP550 to the specified requirements.
 - 2. Miscellaneous installation hardware shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

PART 4 - POWER SUPPLIES/UPS/BATTERY

4.1 24 VDC POWER SUPPLY

- A. The 24 VDC Power Supply shall be a PULS Dimension series model number CP10.241 or approved equal.
- B. Minimum requirements of the power supplies are as follows:
 - 1. Nominal Input Voltage: 120VAC.
 - 2. Nominal Output Voltage: 24VDC.
 - 3. Nominal Output Current: 10A.
 - 4. AC Frequency Range: 45Hz to 65 Hz.
 - 5. Screw type connections.
 - 6. Input fusing.
 - 7. Parallel connection capability.
 - 8. Ambient Operating Temperature: -25 degrees C to 70 degrees C.
 - 9. Humidity: 95 percent (at 25 degrees C no condensation).

4.2 24 VDC UNINTERRUPTIBLE POWER SUPPLY

- A. The 24 VDC Uninterruptible Power Supply shall be a PULS Dimension series model number UBC10.241 or approved qual.
- B. Minimum requirements of the power supplies are as follows:
 - 1. Nominal Input Voltage: 24VDC.
 - 2. Nominal Output Voltage: 24VDC and 12VDC.
 - 3. Nominal Output Current: 10A.
 - 4. Screw type connections.
 - 5. Input fusing.
 - 6. Parallel connection capability.
 - 7. Ambient Operating Temperature: -25 degrees C to 70 degrees C.
 - 8. Humidity: 95 percent (at 25 degrees C no condensation).

4.3 REDUNDANCY MODULE

- A. The redundancy module shall be a PULS Diode redundancy module model number YRM2.DIODE or approved equal.
- B. Minimum requirements of the redundancy module is as follows:
 - 1. Input Current: 2x10A.
 - 2. Nominal Current per Input: 10A.
 - 3. DC Input Voltage: DC 24V to 48V.
 - 4. Voltage Drop: 800mV.
 - 5. Output Current Range: 20A.
 - 6. Output Current: 20A.
 - 7. Output Current Short Circuit Max: 25A.
 - 8. Derating: 0.5W/degree C for >+60 degrees C.
 - 9. Mounting: DIN rail.
 - 10. Operating Temp. Range: -40 degrees C to 70 degrees C.
 - 11. Connection Method: Screw terminals.
 - 12. Power Losses, Typical: 9.0W.
 - 13. No-Load Losses, Typical: 1W.

PART 5 - WIRELESS COMMUNICATION

5.1 ETHERNET RADIO ACCESS POINT

Radio Cambium:	PMP 450i Fixed Wireless Access Point Product, 5 GHz Model Number Integrated 90 degree sector C050045A006C	
Spectrum:	Channel Spacing Configurable on 2.5 MHz increments Frequency Range 5 GHz 4,900 to 5,925 MHz Channel Width 5 MHz, 15 MHz, 20 MHz, 30 MHz, or 40 MHz	
Interface:	MAC (Media Access Control) Layer Cambium Networks proprietary Physical Layer 2 by 2 MIMO OFDM Ethernet Interface 100/1,000 BaseT, full duplex, rate auto negotiated (802.3 compliant) Protocols Used IPv6, UDP, TCP/IP, ICMP, Telnet, SNMP, HTTP, FTP Network Management IPv4/IPv6 (dual stack), HTTP, HTTPS, Telnet, FTP, SNMPv2c, and v3, Cambium Networks cnMaestro™ MTU 1,700 bytes VLAN 802.1ad (DVLAN Q-in Q), 802.1Q with 802.1p priority dynamic port VID	
Performance:	Subscriber Per Sector Up to 238 ARQ Yes	
	Modulation Levels (Adaptive)	Signal to Noise Required (SNR, in dB)
	2x	QPSK 10
	4x	16QAM 17
	6x	64QAM 24
	8x	256QAM 32
	Maximum Deployment Range Up to 40 miles (64 km)	
	Latency 3 to 5 ms, typical	
	GPS Synchronization Yes, via Autosync (CMM5 or UGPS)	

Link Budget:	Quality of Service Diffserve QoS Integrated Sector Antenna 90 degrees Azimuth (3dB rolloff) Antenna Gain 17 dBi $\pm$ 1dBi integrated 90/120 degree sector Maximum Transmit Power +28 dBm (MIMO, Combined H+V) (may be limited by regulations) Maximum EIRP +43 dBm combined output (may be limited by regulations) VSWR 1.5, Reflection Coefficient 0.2, Reflected Power 4 percent, Return Loss 14 dB Power Control ATPC (Automatic Transmit Power Control) at system level, all Subscribers implement ATPC
Physical:	Surge Suppression (LPU fitted) EN61000-4-5:1.2us/50/us, 500V voltage waveform. Recommended Surge Suppressor: Cambium Networks Model # C000000L033A Mean Time Between Failure >40 Years Dust and Water Ingress Protection Rating IP67, IP66 Temperature/Humidity -40 degrees C to +75 degrees C (-40 degrees F to +167 degrees F), 0 to 100 percent condensing Weight Integrated Approx. 6.3 kg (14 lbs) Wind Survival 322 km/h (200 mi/h) Vibration NEMA TS2 Section 2.1.9 and Section 2.2.3 Shock NEMA TS2 Section 2.1.10 and Section 2.2.4 External Icing NEMA 250 to 2003 Section 5.6 Dimensions (H by W by D) 90 degree Integrated 59.1 by 23.3 by 15.8 cm (23.3 by 6.2 by 5.8 inches) Power Consumption 15W typical, 18W max, Using Aux port PoE for another device will increase power draw Input Voltage 48 to 59V DC, 802.3 at compatible
Security:	Encryption FIPS-197 128-bit AES, 256-bit AES (Requires Optional License)
Certifications 5 GHz:	FCC ID QWP-50450I CE EN 301 893 v2.1.1 EN 302 502 v2.1.1

5.2 ETHERNET RADIO CLIENT/END-POINT

Model	LBE-5AC-LR
Dimensions	512.5 by 385.75 by 258.3 mm (20.18 by 15.19 by 10.17 inches)
Weight Without Mount	1.360 kg (2.998 lb)
Weight With Mount	1.735 kg (3.825 lb)
Power Supply	24V, 0.3A Gigabit PoE Adapter (Included)
Max. Power Consumption	7W
Power Method	Passive PoE (Pairs 4, 5+; 7, 8 Return)
Supported Voltage Range	24V $\pm$ 10 percent
Gain	26 dBi
Networking Interface	(1) 10/100/1,000 Ethernet Port
Processor Specs	MIPS 74Kc Memory 64 MB DDR2
LEDs	Power, Ethernet
Channel Sizes	PtP Mode PtMP Mode 10/20/30/40/50/60/80 MHz 10/20/30/40 MHz Enclosure

Characteristics	Reflector (Aluminum) / Plastic: PC
Mounting	Pole-Mounting Kit (Included)
Wind Loading	550 N @ 200 km/h (123.6 lbf @ 125 mph)
Wind Survivability	200 km/h (125 mph)
ESD/EMP Protection	± 24 kV Contact / Air
Operating Temperature	-40 to 70 degrees C (-40 to 158 degrees F)
Operating Humidity	5 to 95 percent Noncondensing
Certifications	CE, FCC, IC Operating
Frequency (MHz)	US/CA U-NII-1: 5,150 - 5,250 U-NII-2A: 5,250 - 5,350 MHz U-NII-2C: 5,470 - 5,725 MHz U-NII-3: 5,725 - 5,850
Management Radio (MHz)	US/CA 2,412 - 2,462
System Documentation	1 - Electronic System Documentation and Open Manage DVD Kit, Powerededge T440 631-ABLM/5106454
Enabled Virtualization	Hyper-V role enabled with pre-installed STD or DC Ed OS on incl Virtual HDD 618-BBEC / HPRVHDD
Microsoft SQL Server	1 - Microsoft SQL Server 2019 Standard,OEM, Includes 5 Device CALs, NFI, ENGLISH 634-BUWS/G7LSC35
OCONUS	None
SERVICES & SUPPORT	
Warranty	Basic Next Business Day 12 Months, 12 Month(s) 709-BBFC/GCMBF1I
Extended Services	Basic Next Business Day, 36 Month(s) 865-BBLH/G0SA8U7

PART 6 - PROCESS SOFTWARE

6.1 PLC CONTROLLER PROGRAMMING AND HMI SOFTWARE

A. Product Requirements

1. The PLC controller programming software shall be EcoStruxure Control Expert large single user. Model #CEXSPUCZLSPMZZ or approved equal.

END OF SECTION

SECTION 40 70 00 - INSTRUMENTATION FOR PROCESS SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. It is anticipated that the interconnections between the various items of electrical and mechanical equipment and the control system will require coordination and in some cases interface devices such as, but not limited to, couplings, flanges, reducers, converters, conduit, relays, contacts, wiring, etc., will be required whether or not these items are shown on the Drawings. It is General Contractor's responsibility to provide the necessary coordination and interface devices at no additional cost to Owner.

1.2 REQUIREMENTS OF REGULATORY AGENCIES AND STANDARDS

- A. Regulatory Agencies: Installation, materials, equipment, and workmanship shall conform to the applicable provisions of the following:
 - 1. National Fluid Power Association (NFPA).
 - 2. National Electrical Code (NEC).
 - 3. National Electrical Safety Code (NESC).
- B. Reference Title:
 - 1. API RP550-86 - Manual of Installation of Refinery Instruments and Control Systems, Part I - Process Instrumentation and Control Sections 1 Through 13.
 - 2. ISA S51.1-79 - Process Instrumentation Terminology.
 - 3. NEMA 250-85(1988) - Enclosures for Industrial Controls.
 - 4. NFPA 70 - National Electric Code (NEC).
 - 5. ANSI T2.24.1 - Hydraulic Fluid Power - Systems standard for stationary industrial machinery.
 - 6. NFPA T3.5.49 - Recommended Practice - Hydraulic Fluid Power - Application guidelines for hydraulic valves.
- C. Should Contractor observe any conflict or variation in the Plans and Specifications, he shall notify Engineer in writing not later than 10 days prior to date of bid opening. Failure to clarify such variations will result in Contractor bearing all costs arising from electrical work done contrary to either the Specifications or Drawings.
- D. Electrical Contractor shall coordinate all conduit runs, control wiring and electrical connections to equipment items furnished by Mechanical Contractor, General Contractor, Instrumentation Contractor, Owner, and other Contractors under other Sections of these Specifications.

1.3 RECORD DRAWINGS

- A. During progress of the Work, maintain a clean full set of Project Plans to be used to record accurate re-lined changes to the installation of the system. Upon completion of the installation, submit the full set of re-lined Drawings with all record data to Engineer.

1.4 SUBMITTALS

- A. Materials List: Within 15 days after Award of Contract, Contractor shall submit to Engineer, electronically a list of all equipment to be furnished. Where substitutions are proposed, complete data must be furnished showing performance, quality, and dimensions. Written approval of Engineer must be obtained before purchasing any substitute equipment.
- B. Submit under provisions of Section 01 33 00 "Submittal Procedures."
- C. Shop Drawings: Submit for approval electronic copies of all Shop Drawings after the material list has been approved and prior to ordering. Show complete outlines, dimensions, electrical services, control diagrams, electrical characteristics of a special nature or critical to the installation and pertinent data required for installation. All descriptive and technical data and Shop Drawings shall bear signed certification to the effect that they have been carefully examined and found to be correct with respect to dimension, space available, non-interference with other trades and that the equipment complies with all the requirements of these Specifications. Where catalog data are submitted, the proposed items shall be clearly "flagged" or otherwise identified, so that no confusion exists. In addition to specific references or requests, submit Shop Drawings for the following applicable items: motor starters, switches, control devices, control systems, and sensing equipment.
- D. Substitutions: Proposed substitutions of electrical equipment, control devices, and other equipment shall be submitted with other submittal data. This request shall be accompanied by complete descriptions of the substitutes offered, including catalog cuts. The entire burden of proof of equality shall be placed on Contractor and the decision of Engineer shall be final.
- E. Submit under provisions of Section 01 60 00 "Product Requirements."
- F. Test Data: Provide electronic copies of all data obtained during tests required in Specifications. Data shall be organized in an orderly fashion, typed and indicate the result of each test.

1.5 OPERATING INSTRUCTIONS AND MANUALS

- A. Without additional charge to Owner, furnish complete instruction to Owner in the care, adjustment, and operation of all parts of the electrical equipment and systems. Upon completion of the Work, prepare and deliver to Owner 4 sets of complete operating and maintenance manuals for the systems and major equipment installed. Include catalog data, Shop Drawings, wiring diagrams, performance curves, rating data, spare parts lists, and manufacturer's operating maintenance data.
- B. The above requirements are in addition to specific instructions and manuals specified for individual systems or equipment.

1.6 SCOPE

- A. This Section specifies general requirements, which are applicable to all process control and instrumentation. The process instrumentation system consists of process sensors, monitoring, actuators, and accessories required to provide a complete and functional monitoring and control system.
- B. Contractor shall provide the services of instrument technicians to implement the requirements of this Section. Instrument technicians shall have a minimum of 5 years' experience in controls, automation, and/or system integration.
- C. Contractor shall examine the Site, Drawings, and Specifications to determine actual locations, sizes, materials, and ratings of process connections. Process taps shall be indicated on piping Shop Drawings as specified.

- D. Contractor shall furnish and install a control panel/RTU(s) as part of this Project. These panels shall be custom built as per the Drawings in a panel shop that has a minimum of 10 years' experience in the manufacturing of similar control panel/RTU(s).
- E. Owner and Engineer shall perform an acceptance test of each control panel/RTU(s) at the panel shop prior to shipment. This test shall consist of a visual inspection for conformance with these Specifications, powering up the panel, loading a test program into the PLC, and testing all wiring and devices installed in the panel. Any corrections necessary for a fully functional control panel/RTU per process area as detailed in the Drawings and these Specifications shall be made at the panel shop prior to shipment. Travel and expenses for one Owner's representative and one Engineer's representative to conduct the acceptance test shall be provided by Contractor at no additional cost to Owner.

PART 2 - PRODUCT

2.1 MATERIALS AND QUALITY

- A. Material shall be new, free from defects, and of the quality specified. Each type of instrument, instrument accessory, and device shall be by the same manufacturer throughout the Work.
- B. Electronic equipment shall be of solid state construction unless otherwise specified. Components of standard electronic assemblies shall not be replaced with components of different characteristics in order to meet the performance requirements of this Specification. Parts shall be as shown in the instruction manuals and shall be replaceable with standard commercial components of the same description without degrading the performance of the completed assembly.

2.2 CATALOG CUTS

- A. Contractor shall provide catalog cuts for equipment to be provided. Catalog information shall include Technical Specifications and application information for each piece of equipment. Catalog cuts shall be edited to indicate only those items, model or series of equipment which are being provided. All extraneous materials shall be crossed out or otherwise obliterated.

2.3 INSTALLATION

- A. Installation and testing procedures shall be as specified in this and subsequent Sections of this Division. Equipment shall be located so that it is readily accessible for operation and maintenance.
- B. Where instrumentation installation procedures are not specified herein, API RP550 shall be used as a guide. Final connections between rigid raceway systems and instruments shall be made with liquidtight flexible metal conduit with a maximum length of 2 feet.
- C. Where stainless steel tubing installation procedures are not specified herein, Swagelok Tube Fitter's Manual shall be used as a guide.

2.4 FIELD EQUIPMENT

- A. Equipment shall be provided as specified on the Drawings such that ports and adjustments are accessible for in-place testing and calibration. Where possible, equipment shall be located between 48 inches and 60 inches above the floor or a permanent work platform. Instrumentation equipment shall be mounted for unobstructed access, but mounting shall not obstruct walkways.
- B. Equipment shall not be mounted where shock or vibration will impair its operation. Support systems shall not be attached to handrails, process piping or mechanical equipment except for measuring elements and valve positioners. Instruments and cabinets supported directly by concrete or concrete block walls shall be spaced out not less than 5/8-inch by framing channel between instrument and wall.
- C. Steel used for support of equipment shall be hot-dip galvanized after fabrication. Support systems including panels shall be designed in accordance with SBC for seismic zone 1 and to prevent deformation greater than 1/8-inch under the attached equipment load and an external load 200 pounds in any direction.

2.5 ELECTRICAL POWER CONNECTIONS

- A. Electric power wiring and equipment shall comply with Division 26.

2.6 SIGNAL CONNECTIONS

- A. Electric signal connections to equipment shall be made on terminal blocks or by locking plug and receptacle assemblies.
- B. Liquidtight flexible metal conduit shall be used between equipment and rigid raceway systems except that flexible cable assemblies may be used where plug and receptacle assemblies are provided and the installation is not subject to mechanical damage in normal use.
- C. The length of flexible conduit or cord assemblies shall not exceed 2 feet. Flexible cable, receptacle and plug assemblies shall be used only where specified. Wire splicing shall not be accepted.
- D. All wires shall be labeled.
 - 1. Wire markers shall be Raychem Part No. RPS-1K-18-12/2.0-9 Heat Shrink wire markers.
 - 2. Wire markers shall be legible and properly aligned after heat shrinking.
 - 3. Finished markings shall be aligned and positioned so that they can be easily read without manipulation of the wire.
 - 4. Wire markers shall designate the termination point of the opposite end of the wire (i.e. "destination type wire tagging").

2.7 STAINLESS STEEL TUBING

- A. Tubing shall be Stainless Steel, high quality, fully annealed, seamless Type 316 austenitic stainless steel hydraulic tubing ASTM A213, A269, A632 or equivalent. Hardness Rb80 or less.
- B. Installed tubing is to be free of scratches, wrinkles, flattened bends, kinked bends, or defects.
- C. Tubing shall run clear of bolts and equipment that must have access for maintenance.
- D. Tubing shall remain clear of controls and not prohibit the operator's access to controls.
- E. Long runs of tubing shall be supported to prevent sagging.
- F. All fittings and valves shall be Swagelok Stainless Steel Tube Fittings.

PART 3 - EXECUTION

3.1 OWNER'S RESPONSIBILITY

- A. Contractor shall utilize the control narrative/strategy as developed by Engineer for proper coding and integration of new automated control devices and instruments under this Project.
- B. Owner shall conduct loop commissioning through the PLC after Contractor has completed responsibilities in 3.2 below.

3.2 CONTRACTOR'S RESPONSIBILITY

- A. Contractor shall be responsible for writing and implementing the station control program and Human Machine Interface (HMI) within the treatment plant's current control and HMI systems respectively.
- B. Contractor shall be responsible for coordinating with Owner and Engineer for testing of the control panel/RTU(s) ability to properly convey control and monitoring of connected equipment as well as the proper function of the control panel/RTU(s) internally mounted equipment.
- C. Contractor shall allot at least 2 weeks to Owner for testing of the written control sequences and HMI screen modification (s). Contractor shall be available during this time to address any items that may arise during the testing of the written control sequences and HMI screen modification(s).
- D. Contractor shall be responsible for furnishing and installing the control panel(s)/RTU(s) as shown on the Drawings.
- E. Contractor shall be responsible for furnishing and installing all instrument devices as shown on the Drawings and conduits and cabling to each instrument.
- F. All field terminations shall be done on the left side of control panel(s)/RTU(s) terminal blocks and fuses.
- G. Contractor shall be responsible for calibrating all field devices, performing individual loop tests and setting ranges, or other parameters, required for field devices. All calibration, loop tuning, and other data sheets required in these Specifications shall be the responsibility of Contractor. Contractor shall conduct loop checks, calibration and tuning of devices from the field side of the control panel(s)/RTU(s) terminal blocks.
- H. Contractor shall provide the assistance of an Instrument Technician during loop commissioning and system start-up.

3.3 TESTS AND INSPECTIONS

- A. Materials, equipment, and construction included under this Specification shall be inspected in accordance with this Project Manual. Testing shall be performed by Contractor in accordance with this and subsequent sections or, if applicable, witnessing the test.
- B. Contractor shall notify Engineer upon arrival of any material or equipment to be incorporated into the Work and shall remove protective covers or otherwise provide access in order that Construction Manager may inspect such items.
- C. Stainless steel tubing and piping systems shall be tested for leaks.

3.4 TEST REPORTS

- A. Test reports shall be provided by Contractor for all field devices connected to the automation controller. Test reports shall include but are not limited to self-excited/passive instrument type, field termination location, automation controller enclosure terminal location, gauge and type of conductor(s), tag information of device, wire identification/tag/marker as indicated on Project Drawings, color of connected conductor, range of analog signal both electrically and process specific, comments related to installation and testing of device, functional description of device, etc.
- B. The forms as indicated in Section 40 61 10 "Process Control Forms" are examples of test/field reports. Contractor can utilize the forms as included or provide others as long as the information included follows that of this Section.

3.5 INDIVIDUAL COMPONENT CALIBRATION AND TEST

- A. Each instrument and final element shall be field calibrated in accordance with the manufacturer's recommended procedure. Instruments shall then be tested in compliance with ISA S51.1 and the data entered on the applicable test form.
- B. Any component, which fails to meet the required tolerances, shall be repaired by the manufacturer or replaced, and the above tests repeated until the component is within tolerance.

3.6 LOOP TEST

- A. Each instrument loop shall be tested as an integrated system starting at the primary measuring element and ending at the PLC panel terminal blocks. Contractor shall provide power supplies, meters, signal generators, and any other equipment necessary to accomplish loop tests.
- B. If any output device fails to indicate properly, corrections to the loop circuitry shall be made as necessary and the test repeated until all instruments operate properly.

END OF SECTION

SECTION 40 71 13 - MAGNETIC FLOW METERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Magnetic flow meters.
 - 2. Transmitters.
 - 3. Indicators.
 - 4. Recorders.
 - 5. Integrators.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.
 - 2. Section 26 27 26 "Wiring Devices" for control power wiring requirements.

1.2 REFERENCE STANDARDS

- A. American Water Works Association:
 - 1. AWWA M6 - Water Meters - Selection, Installation, Testing, and Maintenance.
 - 2. AWWA M33 - Flowmeters in Water Supply.
- B. ASME International:
 - 1. ASME B16.1 - Gray Iron Pipe Flanges and Flanged Fittings: Classes 25, 125, and 250.
- C. NSF International:
 - 1. NSF 61 - Drinking Water System Components - Health Effects.
 - 2. NSF 372 - Drinking Water System Components - Lead Content.

1.3 COORDINATION

- A. Refer to Section 01 30 00 "Administrative Requirements" for requirements for coordination.
- B. Coordinate Work of this Section with piping Work.

1.4 SUBMITTALS

- A. Refer to Section 01 33 00 "Submittal Procedures" for requirements for submittals.
- B. Product Data: Submit manufacturer information for system materials and component equipment, including connection requirements.
- C. Shop Drawings:
 - 1. Indicate system materials and component equipment.
 - 2. Submit installation requirements and other details.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Source Quality-Control Submittals: Indicate results of factory tests and inspections.
- F. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.
- G. Manufacturer Reports: Certify that equipment has been installed according to manufacturer instructions.
- H. Qualifications Statement:
 - 1. Submit qualifications for manufacturer.

1.5 CLOSEOUT SUBMITTALS

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for submittals.
- B. Project Record Documents: Record actual locations and final orientation of equipment and accessories.

1.6 QUALITY ASSURANCE

- A. Ensure that materials of construction of wetted parts are compatible with process liquid.
- B. Materials in Contact with Potable Water: Certified to NSF 61 and NSF 372.
- C. Perform Work according to manufacturer's standards.

1.7 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum 3 years' experience.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Refer to Section 01 60 00 "Product Requirements" for requirements for transporting, handling, storing, and protecting products.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Store equipment according to manufacturer instructions.
- D. Protection:
 - 1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
 - 2. Provide additional protection according to manufacturer instructions.

1.9 WARRANTY

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for warranties.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

- A. Furnish sensors, field preamplifiers, signal conditioners, offset and span adjustments, amplifiers, transducers, transmitters, control devices, interconnecting cables, and unit conversions and algorithms as required for application.

2.2 MAGNETIC FLOW METERS

- A. Manufacturers:
 - 1. Endress-Hauser.
 - 2. Krohne.
 - 3. Rosemount; Emerson Electric Co., Automation Solutions.
- B. Substitutions: As specified in Section 01 60 00 "Product Requirements."

- C. Description: Low-frequency, electromagnetic induction-type flow meter, producing a linear signal directly proportional to flow rate, consisting of flow tube, signal cable, and transmitter.
- D. Performance and Design Criteria:
 - 1. Design: According to AWWA M33.
- E. Flow Rate Range: 100 to 800 gpm.
- F. Size: As indicated on Drawings.
- G. Flow Tubes:
 - 1. Material: Type 304 stainless steel with polyurethane liner.
 - 2. Length: As indicated on Drawings.
 - 3. End Connections: Flanged, ASME B16.1, carbon steel.
- H. Electrodes:
 - 1. Type 316L stainless steel.
 - 2. Self-cleaning.
- I. Accuracy: Plus or minus 1 percent of actual flow rate over a 10:1 range.
- J. Provide adjustment for zero and span.
- K. Accessories:
 - 1. Furnish cable between transmitter and receiver.

2.3 TRANSMITTERS

- A. Transmitter Output:
 - 1. 4- to 20-mA dc analog signal.
 - 2. Accuracy: Plus or minus 0.1 percent of full scale.
- B. Housing Material: Cast aluminum.
- C. HMI:
 - 1. Touch-screen programming, functioning through enclosure window without opening enclosure.
 - 2. Display:
 - a. Size: Four lines by 16 characters.
 - b. Type: Backlit digital display.
 - c. User-selectable engineering units.
 - d. Readout of diagnostic error messages.
- D. Mounting:
 - 1. Integral or remote mounting up to 100 feet from flow meter.
 - 2. Mounting Locations Less Than 4 Feet above Grade: Provide stainless-steel mounting posts.
- E. Transmitter Communication Interface: Ethernet.
- F. Accessories:
 - 1. Current signal output simulation.
 - 2. Empty pipe detection.
 - 3. Self-diagnostics.
 - 4. Automatic zero adjustment.
 - 5. Stainless-steel sunshield.
 - 6. Signal Cable: Provided by flow meter manufacturer.

2.4 INDICATORS

- A. Manufacturers:
 - 1. Precision Digital Corporation.
 - 2. SeaMetrics, Inc.
- B. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- C. Description:
 - 1. Integrally mounted in transmitter housing.
 - 2. Scale: Graduated.
 - 3. Length: To be field verified.
 - 4. Units: Totalizer mgd.
 - 5. Mounting: Remote wall mount.

2.5 RECORDERS

- A. Manufacturers:
 - 1. Foxboro; an Invensys Inc. brand.
 - 2. Honeywell International Inc.
- B. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- C. Description:
 - 1. Minimum Diameter: 10 inches.
 - 2. Drive Mechanism:
 - a. Synchronous motor.
 - b. 120-V ac, 60 Hz.

2.6 INTEGRATORS

- A. Manufacturers:
 - 1. Precision Digital Corporation.
 - 2. SeaMetrics, Inc.
- B. Substitutions: As specified in Section 01 60 00 "Product Requirements."
- C. Description:
 - 1. Totalize flow in specified units.
 - 2. Interface with specified flow meter assembly.
 - 3. Accuracy: Plus or minus 0.25 percent of full scale.

2.7 OPERATION

- A. Control Power:
 - 1. Wiring: As specified in Section 26 27 26 "Wiring Devices."
 - 2. 120-V ac, single phase, 60 Hz.
 - 3. Furnish local transformers as required.
- B. Enclosures: NEMA IP68 outdoor rated enclosure.

2.8 SOURCE QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for testing, inspection, and analysis.
- B. Provide shop inspection and testing of meters according to AWWA M6.
- C. Certificate of Compliance:

1. If manufacturer is approved by authorities having jurisdiction, submit certificate of compliance indicating Work performed at manufacturer's facility conforms to Contract Documents.
2. Specified shop tests are not required for Work performed by approved manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for installation examination.
- B. Verify that items provided by other Sections of Work are ready to receive Work of this Section.

3.2 INSTALLATION

- A. Coordinate location and orientation of flow meter with final equipment installations.
- B. Ensure that instruments are located to be easily accessible for maintenance.

3.3 FIELD QUALITY CONTROL

- A. Refer to Section 01 40 00 "Quality Requirements" for requirements for inspecting and testing.
- B. Testing:
 1. Test and calibrate flow meter to demonstrate that it meets specified accuracy requirements.
 2. Comply with AWWA M6.
- C. Equipment Acceptance:
 1. Adjust, repair, modify, or replace components failing to perform as specified and rerun tests.
 2. Make final adjustments to equipment under direction of manufacturer's representative.
- D. Furnish installation certificate from equipment manufacturer's representative attesting that equipment has been properly installed and is ready for startup and testing.

3.4 DEMONSTRATION

- A. Refer to Section 01 70 00 "Execution and Closeout Requirements" for requirements for demonstration and training.
- B. Demonstrate equipment startup, shutdown, routine maintenance, and emergency repair procedures to Owner's personnel.

END OF SECTION

SECTION 40 73 29 - TRANSMITTERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes specific requirements for transmitters, event switches, etc.
- B. Related Requirements:
 - 1. Division 01 Specification Sections apply to Work of this Section.

1.2 REFERENCES

- A. This Section contains a reference to the document listed. Additional references are listed in Section 40 70 00 "Instrumentation for Process Systems." They are a part of this Section as specified and modified. In case of conflict between the requirements of this Section and those of the listed document, the requirements of this Section shall prevail.
 - 1. NEMA 250-85 - Enclosures for Electrical Equipment.

1.3 GENERAL REQUIREMENTS

- A. Unless otherwise specified, measuring elements, transmitters, and process switches shall comply with the following requirements.
 - 1. Transmitters shall be two-wire type with operating power derived from the signal transmission circuit, unless otherwise specified.
 - 2. Transmitter output shall be 4 to 20 milliamperes, current regulated and shall drive any load between 0 and 550 ohms with the power supply at 23 volts DC.
 - 3. Transmitters shall meet specified performance requirements with load variations within the range of 0 to 600 ohms with the power supply at 24 volts DC.
 - 4. Transmitter output shall be galvanically isolated.
 - 5. Transmitters output shall increase with increasing measurement.
 - 6. Transmitters enclosures shall be rated NEMA 250, Type 4, unless otherwise specified
 - 7. Transmitters located outdoors shall be provided with surge protectors: MTL Inc. SD series with replaceable fuse and disconnect features, or equal.
 - 8. Where two-wire transmitter is located in an area classified as hazardous, it shall be made safe by means of an intrinsic safety barrier.
 - 9. Where four-wire transmitters are permitted, they shall be provided with a loop powered signal current isolator connected in the output signal circuit.

PART 2 - PRODUCT

- 2.1 The following instrument specification sheets are included in this Section:

INSTRUMENT SYMBOL	INSTRUMENT DESCRIPTION	INSTRUMENT FUNCTION
PIT/PE	Pressure Indicating Transmitter	Gauge Pressure
FIT/FE	Flow Indicating Transmitter	Magnetic Flow Measurement

2.2 PRESSURE INDICATING TRANSMITTER (PIT)

IDENTIFICATION:	PIT
Function:	Pressure Indicating Transmitter
Description:	Gauge Pressure Measurement
Power Supply:	24VDC
	10.5 to 55 VDC, with no load
Signal Input:	Process
Pressure Range:	0 to 300 PSIG
Reference Accuracy:	±0.065 percent of span
Long Term Stability:	±0.125 percent of URL for 5 years
Signal Output:	4 to 20mA
Dynamic Performance:	Response time – 100ms for 4-20mA
	Dead time – 45ms (nominal)
	Update Rate – 22 times per second
Vibration Effect:	@ resonant frequency < ±0.1 percent of URL per g between 15 and 2,000 Hz in any axis relative to pipe-mounted process conditions
Power Effect:	< ±0.005 percent of span per volt
RFI Effect:	±0.1 percent of span from 20 to 1,000 MHz and field strength ≤ 30 V/m
Process Connection:	1/2-inch NPT Female
Isolating Diaphragm:	316L SST
Process Wetted Parts:	316L SST
Wetted O-Rings:	Glass-filled PTFE
Fill Fluid:	Silicone
Housing Material:	Polyurethane-covered Aluminum
Conduit Entry Size:	1/2-Inch – 14 NPT
Indication:	5-digit LCD display
IDENTIFICATION:	PIT
Overpressure Limit:	1,500 PSI
Burst Pressure:	11,000 PSI
Temperature Limit:	Process – -40 to +250 degrees F

A. Product Requirements:

1. The transmitter shall be a Rosemount 3051TG series pressure transmitter or approved equal.
2. The transmitter shall be a two-wire, capacitance high-performance gage pressure transmitter.
3. The transmitter shall be configured assembled to an integral manifold of the same manufacturer. The manifold shall be made of 316L stainless steel and provide a 1/2-inch NPT male process connection and the proper manufacturer instrument connection. The manifold shall possess two valves; one for isolation of the transmitting instrument and one to allow for process isolation from the transmitter for calibration purposes.
4. The transmitter data shall be stored in nonvolatile EEPROM memory.

5. The transmitter's outputs shall be a 4 to 20mA analog signal, user-selectable linear or square root, with a superimposed digital signal. Analog output shall be adjustable remotely with a field communicator or control system. Zero and span adjustments shall also be available on the transmitter.
 6. The transmitter shall be provided with mounting optional manufacturer mounting hardware.
- B. Installation:
1. Install in accordance with manufacturer's instructions and the recommendations of API RP550 to the specified requirements.
 2. Root valves shall be provided at all process pressure taps. Gage valves shall be provided at the instrument where the instrument is not within sight of the root valve or where two or more instruments are connected to a single tap. Safety instruments shall not be connected to the same process tap as instruments used for control, indication, or recording. Unless otherwise specified, pressure instruments shall be located as close as practical to the process tap but shall be positioned to permit observation and maintenance.
 3. Pressure instruments shall not be supported from process piping.
 4. Miscellaneous installation hardware such as isolation valves and mounting brackets shall be furnished and installed by Contractor as indicated on Drawings and as recommended by the manufacturer's installation instructions.

2.3 FLOW INDICATING TRANSMITTER (FIT)

IDENTIFICATION:	FIT
Max. Measurement Error:	
Volume Flow (standard):	± 0.5 percent or ± 1 mm/s (0.04 in/s), Flat Spec
Measuring Range:	2.5 gal/min to 100,000 gal/min
Medium Temperature Range:	Liner material hard rubber: 0 to ± 80 degrees C (±32 to ±176 degrees F)
Max. Process Pressure:	PM 40, Class 300, 20K
Wetted Materials:	Liner material hard rubber: 0 to ± 80 degrees C (±32 to ±176 degrees F)
Electrodes:	316L
Measuring Principle:	Electromagnetic
Nominal Diameter Range:	DN 25 to 2,400 (1 to 90 inches): See Project Drawings for diameter requirements.
Ambient Temperature Range:	Liner material hard rubber: 0 to ± 80 degrees C (±32 to ±176 degrees F)
Sensor Housing Material:	
DN 25 to 300 (1 to 12 inches):	AlSi10Mg, coated
DN 25 to 2,000 (1 to 78 inches):	Carbon steel with protective varnish.
Sensor Connection Housing (standard):	AlSi10Mg, coated
Transmitter Housing Material:	Polycarbonate; AlSi10Mg, coated
Degree of Protection:	
Compact Version:	IP66/67, type 4X enclosure
Sensor Remote Version (standard):	IP66/67, type 4X enclosure

Sensor Remote Version (option):	IP68, type 6P enclosure, with protective varnish according to EN ISO 12944 C5-M/lm1/lm2/lm3
Transmitter Remote Version:	IP66/67, Type 4X enclosure
Display/Operation:	4-line backlit display with touch control (operation from outside) Configuration via local display, web browser and operating tools.
Outputs:	
3 Outputs:	0 to 20 mA/4 to 20mA HART (active) Pulse/frequency/switch output (passive) Pulse/frequency output (passive) Switch output (passive)
IDENTIFICATION:	FIT
Inputs:	Status input
Digital Communication:	HART, PROFUBUS DP, EtherNet/IP, Modbus RS485
Power Supply:	AC 100 240 V/ AC/DC 24 V
Hazardous Area Approvals:	cCSAus
Metrological Appr. and Cert.:	Calibration performed on accredited calibration facilities (acc. to ISO/IEC 17025), NAMUR
Custody transfer according to MI-001 or OIML R49 (optional Class I in combination with 0DN inlet run)	
Pressure Appr. and Cert.:	CRN
Material Certificates:	3.1 material
Hygienic Appr. and Cert.:	Drinking water approval: ACS, KTW/W270, NSF 61, WRAS BS 6920

- A. Product Requirements
 - 1. The flow indicating transmitter (FIT) shall be an Endress-Huaser Electromagnetic Flowmeter Proline Promag 400 series or approved equal.
 - 2. The transmitter shall be connected to an external converter to be remotely mounted.
 - 3. Contractor shall supply a test simulator in order to calibrate and test the transmitter and converter without the convenience of process.
- B. Installation:
 - 1. Install in accordance with manufacturer's instructions and the recommendations of API RP550 to the specified requirements.
 - 2. Contractor shall provide all necessary hardware for proper installation of the FIT.

PART 3 - EXECUTION (Not Used)

END OF SECTION

APPENDIX A
BORING LOG AND TEST HOLE DATA

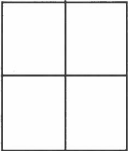
Sec. _____ Blk _____
Survey _____ Co. Martin
N. 32.39300° W. 102.14978°



No. 29652

P.O. Box 784
Sunray, Texas 79086
(806) 948-4421

Paul Davis Well Field



Test ☒ Waterwell ☐

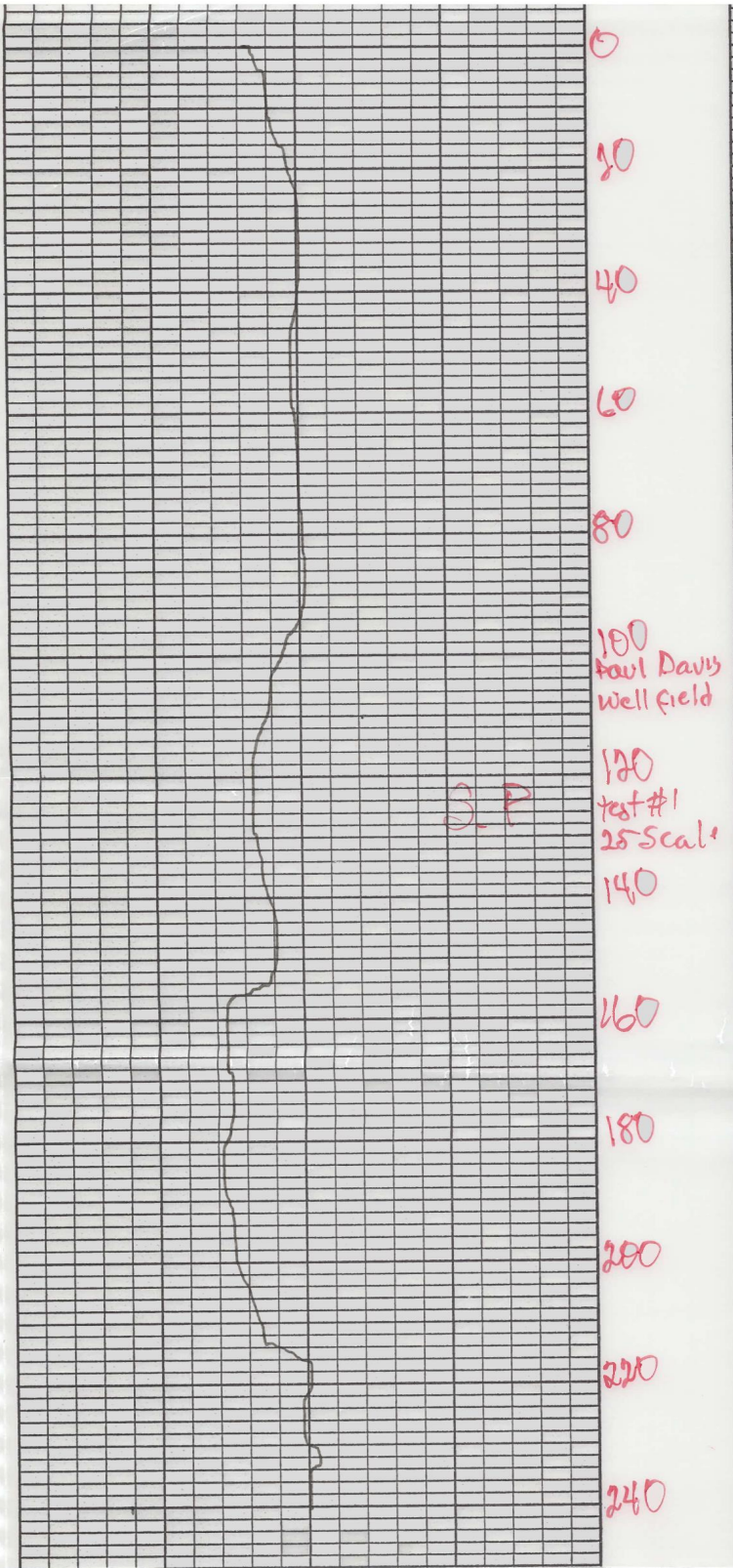
DATE 6-7-22

NO. 1-22

FROM	TO	DESCRIPTION	SAND
0	20	Surface fine sand to brown sandy clay	
20	40	Brown sandy clay w/ white clay strips	
40	60	Brown sandy clay to tight caliche	
60	80	Hard caliche rock w/ brown sandy clay + gravel strips	
80	100	Coarse sand w/ gravel w/ brown clay strips	14
100	120	Fine fairly loose sand w/ brown clay + coarse sand strips	16
120	140	Fine fairly loose sand w/ brown clay + gravel strips	15
140	160	Fine fairly loose sand w/ brown clay strip to big gravel	17
160	180	Big gravel	20
180	200	Big gravel to tight coarse sand w/ gravel	20
200	220	Coarse tight sand w/ gravel to red clay	13
220	240	Red clay	0
		1 Drag bit.	
		1/2 SK 66-HV 1/2 BKT Hydro pac reg	
		Pressure plugged from 240' to 20' w/ 8 sks of Retro granular gravel	
		Plugged from 20' to 5' w/ 2 sks of QUIK RETE.	
		PACKET	

8.422

April 25, 2023



100
Paul Davis
Well field

120
test #1
25 Scale

140

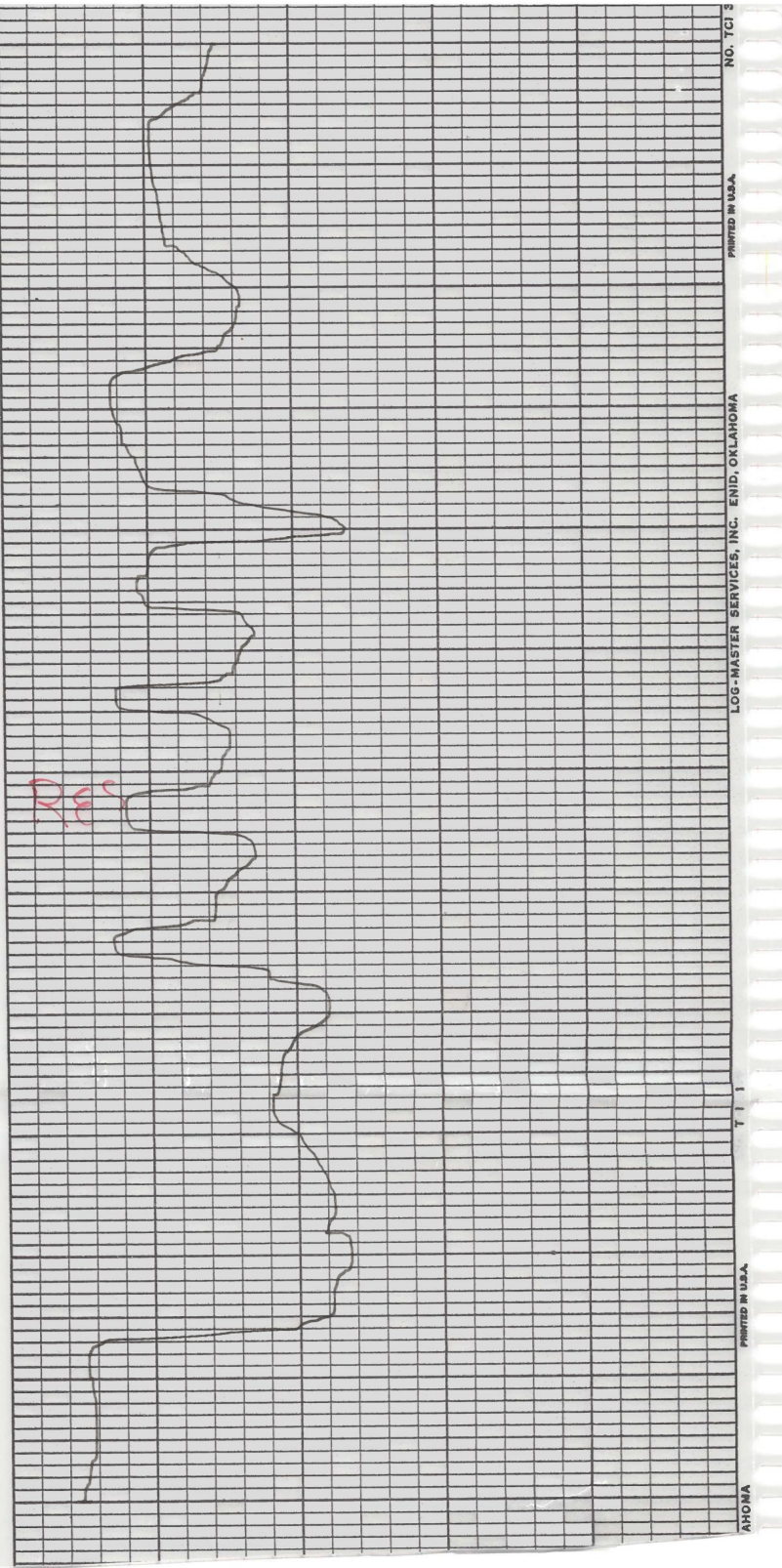
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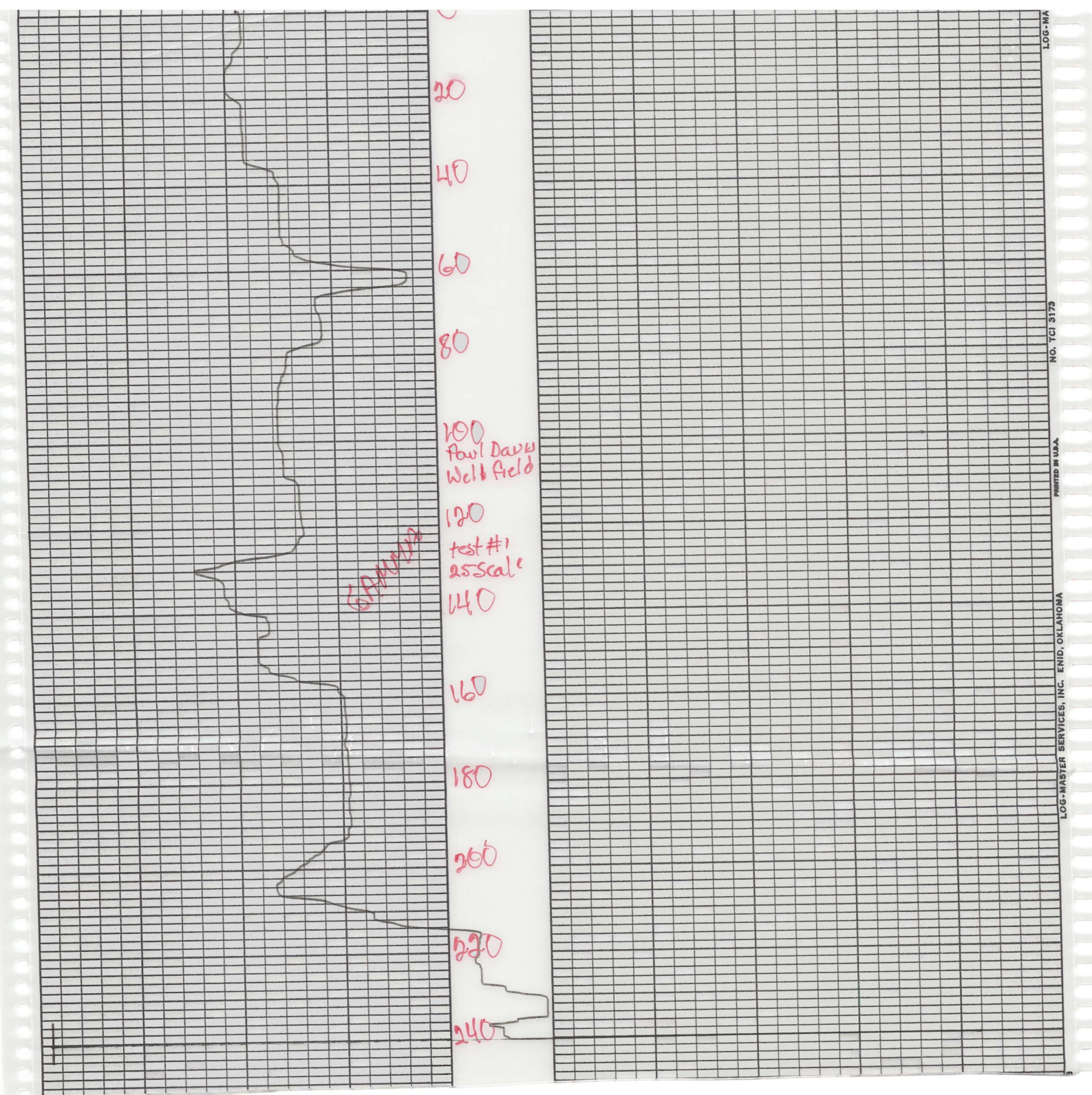
180

200

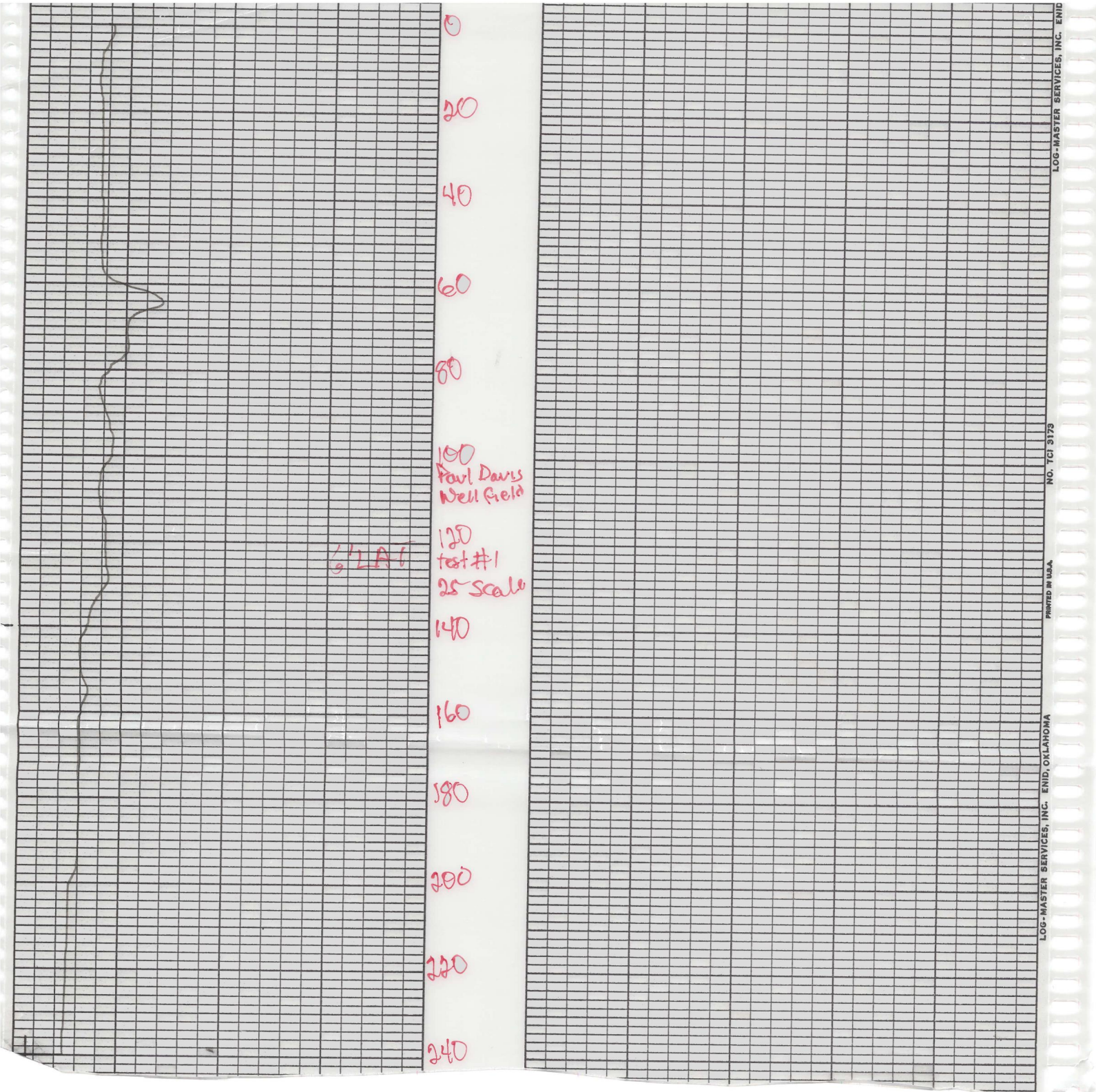
220

240





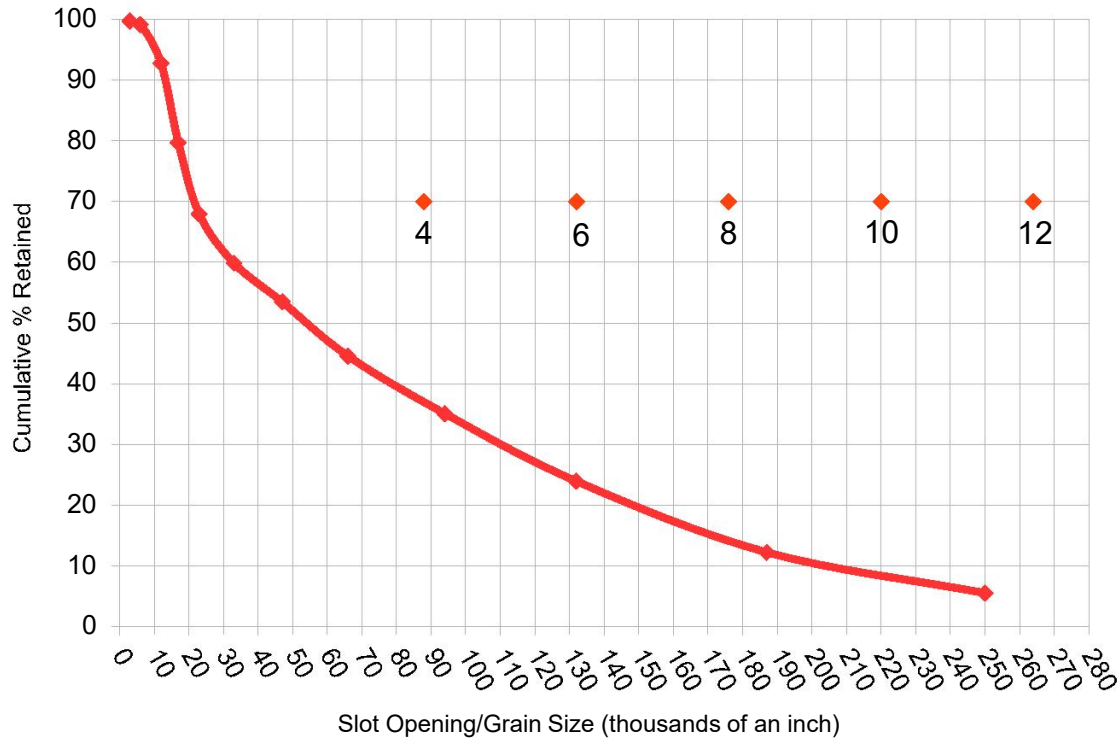
LOG-MA
NO. TCI 9179
PRINTED IN U.S.A.
LOG-MASTER SERVICES, INC. ENID, OKLAHOMA





SIEVE ANALYSIS

Customer: Paul Davis Well Field **Sample #** 1 of 3
Work Order: _____ **Date:** 11/4/22
Legal: 32.39300, -102.14978 **TH #:** 1-22
Depth Range: 80-100*, 200-220



Sieve No	Sieve Opening		Cumulative % Retained		Distribution@	70
	in	mm	Weight	%	4	88
1/4	.250	6.350	10	6	6	132
4	.187	4.760	22	12	8	176
6	.132	3.360	43	24	10	220
8	.094	2.380	63	35	12	264
12	.066	1.680	80	45		
16	.047	1.190	96	53		
20	.033	.840	107.5	60		
30	.023	.600	122	68		
40	.017	.420	143	80		
50	.012	.300	166.5	93		
100	.006	.149	178	99		
200	.003	.074	179	100		

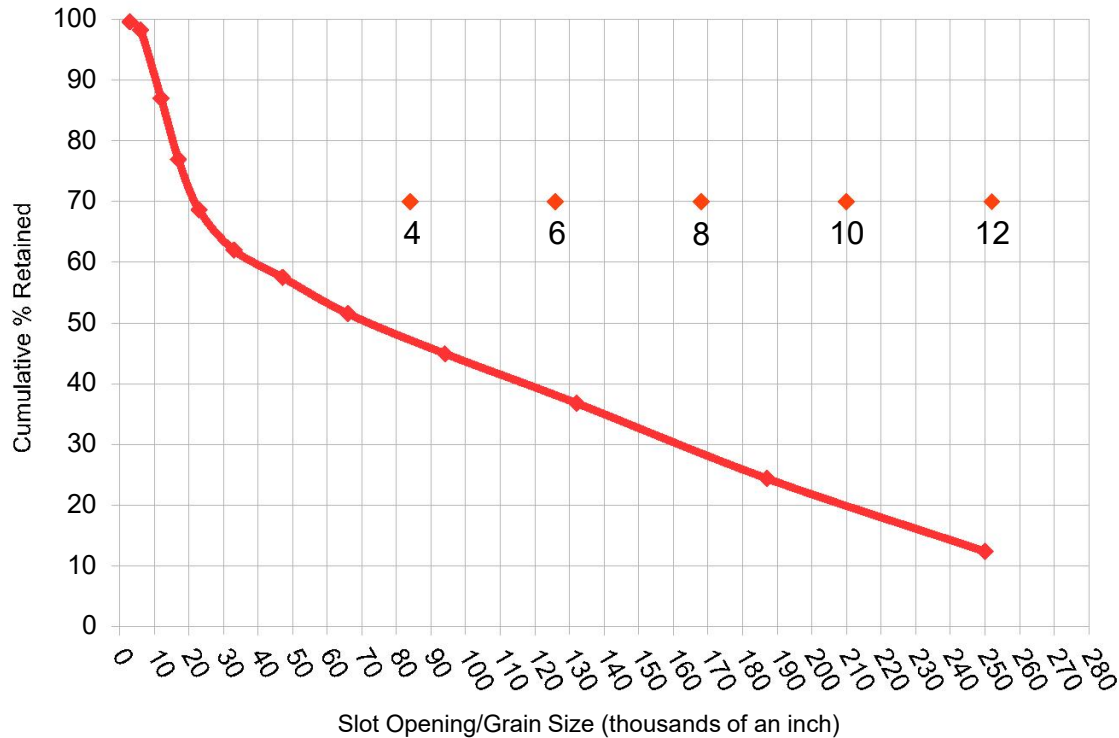
TOTAL= 179.5

Effective Size (Grain Size Passing 90%) = 0.013
 Grain Size Passing 40% = 0.080
 Uniformity Coefficient = 6.15
 Grain Size Passing 70% = 0.022



SIEVE ANALYSIS

Customer: Paul Davis Well Field **Sample #** 2 of 3
Work Order: _____ **Date:** 11/4/22
Legal: 32.39300, -102.14978 **TH #:** 1-22
Depth Range: 100-160



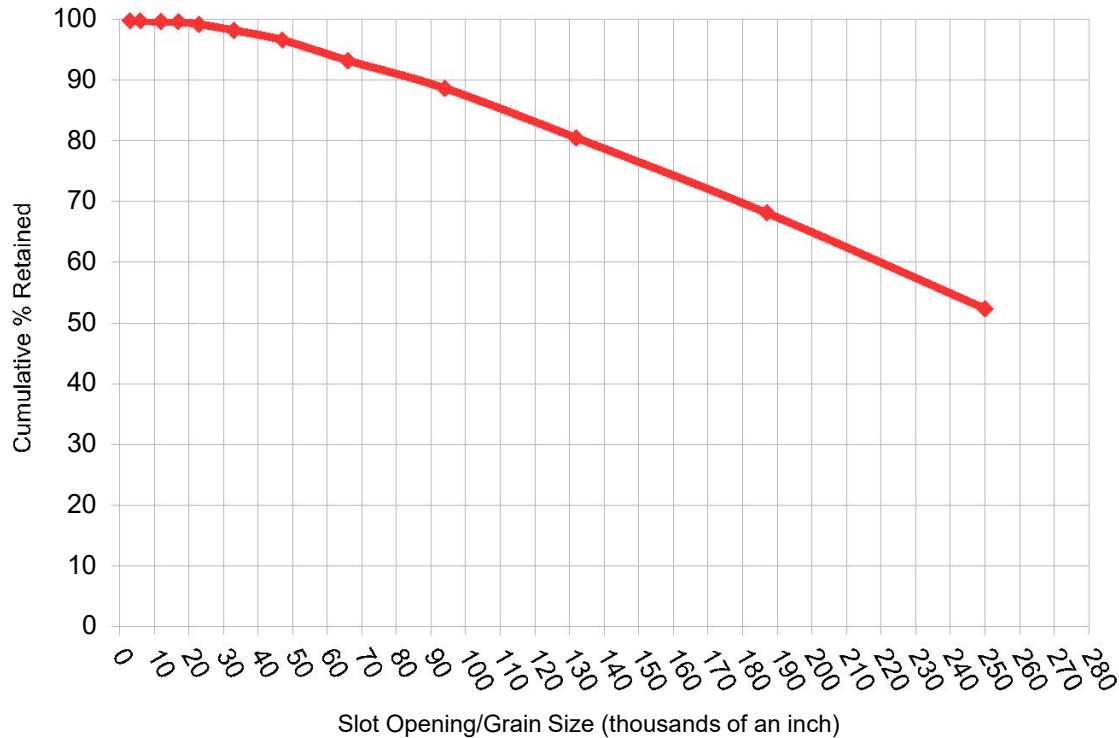
Sieve No	Sieve Opening		Cumulative % Retained		Distribution@	70
	in	mm	Weight	%	4	84
1/4	.250	6.350	32	12	6	126
4	.187	4.760	63	24	8	168
6	.132	3.360	95	37	10	210
8	.094	2.380	116	45	12	252
12	.066	1.680	133	52		
16	.047	1.190	148.5	58		
20	.033	.840	160	62		
30	.023	.600	177	69		
40	.017	.420	198.5	77		
50	.012	.300	224.5	87		
100	.006	.149	253.5	98		
200	.003	.074	257	100		
TOTAL=			258			

Effective Size (Grain Size Passing 90%) = 0.010
 Grain Size Passing 40% = 0.120
 Uniformity Coefficient = 12.00
 Grain Size Passing 70% = 0.021

SIEVE ANALYSIS



Customer: Paul Davis Well Field **Sample #** 3 of 3
Work Order: _____ **Date:** 11/4/22
Legal: 32.39300, -102.14978 **TH #:** 1-22
Depth Range: 160-200



Sieve No	Sieve Opening		Cumulative % Retained		Distribution@	70
	in	mm	Weight	%	4	720
1/4	.250	6.350	131.5	52	6	1080
4	.187	4.760	171	68	8	1440
6	.132	3.360	202	80	10	1800
8	.094	2.380	222.5	89	12	2160
12	.066	1.680	234	93		
16	.047	1.190	242.5	97		
20	.033	.840	246.5	98		
30	.023	.600	249	99		
40	.017	.420	250	100		
50	.012	.300	250	100		
100	.006	.149	250.5	100		
200	.003	.074	250.5	100		
TOTAL=			251			

Effective Size (Grain Size Passing 90%) = 0.090
 Grain Size Passing 40% = 0.300
 Uniformity Coefficient = 3.33
 Grain Size Passing 70% = 0.180

**APPENDIX B
TCEQ FORMS**

TCEQ Cementing Certificate for PWS Groundwater Well Construction

PWS No.: _____	TCEQ Approval Letter Log No.: P-_____
----------------	---------------------------------------

Cementing Company Name

--

Name and Title of Company Representative

Telephone Number

--	--

Company Address

--

Cementing Information

AWWA A100-15 Appendix C Method Used for Cementing Well ¹ (circle method used)	C2 C3 C4 C5
Casing Material and Specification (AWWA A100-15 Table 2 "Water well casing materials")	Check the appropriate pipe on following sheet

Note: Please use columns 2-3 only if increasing or decreasing borehole and/or casing sizes are utilized

Information	Size 1	Size 2	Size 3
Borehole size (inch)			
Actual Casing size (inch of outside diameter)			
Ground Surface Elevation (GSE) as (msl or 0)			
Top of casing elevation (msl or +GSE)			
Bottom of casing elevation (msl or -GSE)			
Number of centralizers used			
Vol. - sacks of cement (with water & additives)			
Vol. of hole (annular space) to be cemented ²			
Number of sacks calculated to fill annular space			
Number of sacks of 94 lb. cement used			
Volume balance between sacks used & required			
Gallons of water used per 94 lb. sack of cement and additives			
Depth of pressure cementing			
Date of pressure cementing			
API Class of cement used			
Additives used (bentonite, calcium chloride, etc)			
% of additive added to cement -			
% of additive added to cement -			
% of additive added to cement -			

Signature of Representative

Date

--	--

¹ Please note that AWWA A100-15 Method C1 is not allowed to be used, see 30 TAC §290.41(c)(3)(C).

²Borehole minus outside diameter of casing pipe.

**American Water Works Association Standard
A100-15 Water Wells**

APPENDIX C

Grouting and Sealing—Methods of Placement

SECTION C.2: Positive Displacement – Exterior Method

SECTION C.3: Interior Method – Without Plug

SECTION C.4: Positive Placement, Interior Method – Drillable Plug

SECTION C.5: Placement through Float Shoe Attached to Bottom of Casing

** For details of these approved methods refer to AWWA A100-15 Appendix C for details.*

Water-well Casing Materials Table 2 from AWWA A100-15

A. Manufacturing standards for single-ply carbon-steel well casing:

- ☐ ANSI/AWWA C200
- ☐ API Spec. 5L
- ☐ ASTM A53 Grade B
- ☐ ASTM A139 Grade B

B. Manufacturing standards for alternative-ply well-casing materials:

- | | |
|--|--|
| ☐ Casing Material | Manufacturing Standard |
| ☐ Carbon Steel | ASTM A139 Grade B |
| ☐ Copper-Bearing Steel | ASTM A139 Grade B with additional requirement that the steel contain a minimum of 0.20% copper |
| ☐ High-Strength Low-Alloy Steel | ASTM A606 Type 4 |
| ☐ Stainless Steel | ASTM A778 |
| ☐ Plastic | ASTM F480 |

Public Well Completion Data Checklist for Approval to Use (Step 2)

Texas Commission on Environmental Quality
Water Supply Division
Plan Review Team MC-159
P.O. Box 13087, Austin, Texas 78711-3087

Public Water System I.D. No. _____
TCEQ Log No. P- _____

The following list is a brief outline of the "Rules for Public Water Systems", 30 TAC Chapter 290 regarding proposed Water Supply Well Completion. Failure to submit the following items may delay project approval. Copies of the rules may be obtained from Texas Register, 1019 Brazos St, Austin, TX, 78701-2413, Phone: (512) 463-5561 or downloaded from the website: <http://www.tceq.texas.gov/rules/indxpdx.html>

Any well proposed as a source of water for a public water supply must have plans approved for construction by TCEQ. Please include the well construction approval letter with your submittal of well completion data listed below for TCEQ evaluation. Based on review of this submitted data, approval may be given for use of the well.

1. ☐ Site map(s) at appropriate scales showing the following: [§290.41(c)(3)(A)]
 - ☐ (i) Final location of the well with coordinates;
 - ☐ (ii) Named roadways;
 - ☐ (iii) All property boundaries within 150 feet of the final well location and the property owners' names;
 - ☐ (iv) Concentric circles with the final well location as the center point with radii of 10 feet, 50 feet, 150 feet, and ¼ mile;
 - ☐ (v) Any site improvements and existing buildings;
 - ☐ (vi) Any existing or potential pollution hazards; and
 - ☐ (vii) Map must be scalable with a north arrow.
2. ☐ A copy of the recorded deed of the property on which the well is located showing the Public Water System (PWS) as the landowner, and/or any of the following:
[§290.41(c)(1)(F)(iv)]
 - ☐ (i) Sanitary control easements (filed at the county courthouse and bearing the county clerk's stamp) covering all land within 150 feet of the well not owned by the PWS (for a sample easement see TCEQ Form 20698);
 - ☐ (ii) For a political subdivision, a copy of an ordinance or land use restriction adopted and enforced by the political subdivision which provides an equivalent or higher level of sanitary protection to the well as a sanitary control easement; and/or
 - ☐ (iii) A copy of a letter granting an exception to the sanitary control easement rule issued by TCEQ's Technical Review and Oversight Team.
3. ☐ Construction data on the completed well: [§290.41(c)(3)(A)]
 - ☐ (i) Final installed pump data including capacity in gallons per minute (gpm), total dynamic head (tdh) in feet, motor horsepower, and setting depth;
 - ☐ (ii) Bore hole diameter(s) (must be 3" larger than casing OD) and total well depth;
 - ☐ (iii) Casing size, length, and material (e.g. 200 lf of 12" PVC ASTM F480 SDR-17);
 - ☐ (iv) Length and material of any screens, blanks, and/or gravel packs utilized;
 - ☐ (v) Cementing depth and pressure method (one of the methods in latest revision of AWWA Standard A-100, Appendix C, excluding the dump bailer and tremie methods);
 - ☐ (vi) Driller's geologic log of strata penetrated during the drilling of the well;
 - ☐ (vii) Cementing certificate; and

Public Well Completion Data Checklist for Approval to Use (Step 2)

- ☐ (viii) Copy of the official State of Texas Well Report (some of the preceding data is included on the Well Report).
4. ☐ A U.S. Geological Survey 7.5-minute topographic quadrangle map (include quadrangle name and number) or a legible copy showing the location of the completed well; [§290.41(c)(3)(A)]
5. ☐ Record of a 36-hour continuous pump test on the well showing stable production at the well's rated capacity. Include the following: [§290.41(c)(3)(G)]
- ☐ (i) Test pump capacity in gpm, tdh in feet, and horsepower of the pump motor;
 - ☐ (ii) Test pump setting depth;
 - ☐ (iii) Static water level (in feet); and
 - ☐ (iv) Draw down (in feet).
6. ☐ Three bacteriological analysis reports for samples collected on three successive days showing raw well water to be free of coliform organisms. Reports must be for samples of raw (untreated) water from the disinfected well and submitted to a laboratory accredited by TCEQ, accredited to perform these test; and [§290.41(c)(3)(F)(i)]
7. ☐ Chemical analysis reports for well water samples showing the water to be of acceptable quality for the most problematic contaminants listed below. Reports must come from a laboratory accredited by TCEQ; accredited to perform these tests. Maximum contaminant level (MCL) and secondary constituent level (SCL) units are in milligrams per liter (except arsenic which is in micrograms per liter). [§290.41(c)(3)(G) and §290.104 and §290.105]

Table 1: Primary Constituents with Maximum Contaminant Level (MCL)

PRIMARY	MCL
Nitrate	10 (as N)
Nitrite	1 (as N)
Arsenic	10
Fluoride	4.0

Table 2: Secondary Constituents with Secondary Contaminant Level (SCL)

SECONDARY	SCL
Aluminum	0.2
Copper	1.0
Iron	0.3
Manganese	0.05
Zinc	5.0
Total Dissolved Solids	1,000
Fluoride	2.0
Sulfate	300
Chloride	300
pH	> 7.0

Public Well Completion Data Checklist for Approval to Use (Step 2)

Table 3: Water Quality Parameters

PARAMETER	UNITS
Alkalinity as CaCO ₃	mg/L
Calcium as CaCO ₃	mg/L
Sodium	mg/L
Lead*	mg/L

Lead is regulated by the lead and copper rule. This analyte is to document the amount of lead in the source water. The level shall be less than 0.010 mg/L for approval to use.

All systems located in a high-risk county (see page 3) shall submit radiological analysis reports for water samples showing the water to be of acceptable quality for the contaminants listed below. Reports must come from a TCEQ accredited laboratory for approval to use of the well.

Table 4: Radionuclides with Maximum Contaminant Level (MCL)

CONTAMINANT	MCL
Gross alpha	15 pCi/L
Radium-226/228	5 pCi/L
Beta particle	50 pCi/L
Uranium	30 µg/L

WHERE: pCi/L = pico curies per liter, µg/L = micrograms per liter

Please be aware when you review your radiological data that if the report has gross alpha over 15 pCi/L and individual uranium isotopes are not reported, you will have to resample or reanalyze and resubmit radionuclide results. If you see gross alpha plus radium-228 over 5 pCi/L, and don't have radium-226, you will have to resample or reanalyze and resubmit complete results.

List of Counties Where Radionuclide Testing Is required

Please be aware that we have added the requirement for analysis for radionuclides for high risk counties. For elevated levels of any contaminants found in a test well, treatment or blending may be required.

Table 5: List of Counties where Radionuclide Testing is required

COUNTY				
Atascosa	Bandera	Bexar	Bosque	Brazoria
Brewster	Burnet	Concho	Culberson	Dallam
Dawson	Erath	Fort Bend	Frio	Garza
Gillespie	Gray	Grayson	Harris	Hudspeth
Irion	Jeff Davis	Jim Wells	Kendall	Kent
Kerr	Kleberg	Liberty	Llano	Lubbock
McCulloch	Mason	Matagorda	Medina	Midland
Montgomery	Moore	Parker	Pecos	Polk
Presidio	Refugio	San Jacinto	San Saba	Tarrant
Travis	Tyler	Upton	Val Verde	Victoria
Walker	Washington	Wichita	Williamson	Zavala

APPENDIX C
TDLR FORM



TEXAS DEPARTMENT OF LICENSING & REGULATION

P.O. Box 12157 • Austin, Texas 78711 • (512) 334-5540

water.well@tdlr.texas.gov • www.tdlr.texas.gov

PLUGGING REPORT

A. WELL IDENTIFICATION AND LOCATION DATA

1. *Owner Name:

Mailing Address:

2. *Well Location:

County:	Physical Address:	City:	State:	Zip Code:
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3. Owner Well #:	4. *Lat:	5. Long:	Tracking #:
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6. *Type of Well: ☐ Water ☐ Monitor ☐ Injection ☐ De-watering ☐ Other:

Driller, Pump Installer, or Landowner performing the plugging operations must locate and identify the location of the well using a Global Positioning System (GPS) or Internet Mapping Website and provide the accurate Latitude and Longitude Coordinates in sections 4 and 5 above.

B. HISTORICAL DATA ON WELL TO BE PLUGGED (if available)

7. Driller:	License No.:
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8. Date Drilled:	9. Diameter of Hole:	10. Total depth of well: _____ ft.
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C. CURRENT PLUGGING DATA

11. *Date well plugged:	12. *REMOVE ALL REMOVABLE CASING Please click a button beside the method of plugging used.
-------------------------	---

13. *Name of Licensee or Well Owner performing the plugging:	☐ Tremie pipe cement from bottom to top.
--	---

License No.:	Variance No.:	☐ Tremie pipe bentonite from bottom to 2 feet from surface, cement top 2 feet.
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14. *CASING AND CEMENTING DATA RELATIVE TO THE PLUGGING OPERATIONS. CASING LEFT IN WELL	☐ Pour in 3/8 bentonite chips when standing water in well is less than 100 feet depth, cement top 2 feet.
--	--

DIAMETER (inches)	*FROM: (feet)	*TO: (feet)	☐ Large diameter (36 inches or greater) well filled with clay material from top to bottom.
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			☐ Other: Describe in comments.
--	--	--	---

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CEMENT/BENTONITE PLUG(S) PLACED IN WELL

COMMENTS:

*FROM: (feet)	*TO: (feet)	*SACKS	
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D. VALIDATION INFORMATION INCLUDED IN FORM

I certify that I plugged this well (or the well was plugged under my supervision) and that all of the statements herein are true and correct. I understand that failure to complete items 1 through 14 will result in the report(s) being returned for completion and resubmitted.

*Company or Individual's Name (type or print):

*Street Address, City, State, Zip Code:

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Licensee or Landowner

Date

Apprentice or Unlicensed Assistant

Date

Original to TDLR
PACKET

Copy to Landowner and Driller
8.436

April 25, 2023
*Required

APPENDIX D
UCMR 5 TEST LIST

Fifth Unregulated Contaminant Monitoring Rule Constituents (UCMR 5)

Twenty-nine Per- and Polyfluoroalkyl Substances

Contaminant	Chemical Abstract Service Registry Number (CASRN)	Minimum Reporting Level	Sample Point Location ¹	Analytical Methods
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	763051-92-9	0.005 µg/L	EPTDS	EPA Method 533
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	756426-58-1	0.002 µg/L	EPTDS	EPA Method 533
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	0.003 µg/L	EPTDS	EPA Method 533
hexafluoropropylene oxide dimer acid (HFPO DA)	13252-13-6	0.005 µg/L	EPTDS	EPA Method 533
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	0.02 µg/L	EPTDS	EPA Method 533
perfluorobutanoic acid (PFBA)	375-22-4	0.005 µg/L	EPTDS	EPA Method 533
perfluorobutanesulfonic acid (PFBS)	375-73-5	0.003 µg/L	EPTDS	EPA Method 533
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	39108-34-4	0.005 µg/L	EPTDS	EPA Method 533
perfluorodecanoic acid (PFDA)	335-76-2	0.003 µg/L	EPTDS	EPA Method 533
perfluorododecanoic acid (PFDoA)	307-55-1	0.003 µg/L	EPTDS	EPA Method 533

Contaminant	Chemical Abstract Service Registry Number (CASRN)	Minimum Reporting Level	Sample Point Location ¹	Analytical Methods
perfluoro(2-ethoxyethane)sulfonic acid (PFEEESA)	113507-82-7	0.003 µg/L	EPTDS	EPA Method 533
perfluoroheptanesulfonic acid (PFHpS)	375-92-8	0.003 µg/L	EPTDS	EPA Method 533
perfluoroheptanoic acid (PFHpA)	375-85-9	0.003 µg/L	EPTDS	EPA Method 533
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	757124-72-4	0.003 µg/L	EPTDS	EPA Method 533
perfluorohexanesulfonic acid (PFHxS)	355-46-4	0.003 µg/L	EPTDS	EPA Method 533
perfluorohexanoic acid (PFHxA)	307-24-4	0.003 µg/L	EPTDS	EPA Method 533
perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	0.004 µg/L	EPTDS	EPA Method 533
perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	0.003 µg/L	EPTDS	EPA Method 533
perfluorononanoic acid (PFNA)	375-95-1	0.004 µg/L	EPTDS	EPA Method 533
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	27619-97-2	0.005 µg/L	EPTDS	EPA Method 533
perfluorooctanesulfonic acid (PFOS)	1763-23-1	0.004 µg/L	EPTDS	EPA Method 533
perfluorooctanoic acid (PFOA)	335-67-1	0.004 µg/L	EPTDS	EPA Method 533

Contaminant	Chemical Abstract Service Registry Number (CASRN)	Minimum Reporting Level	Sample Point Location ¹	Analytical Methods
perfluoropentanoic acid (PFPeA)	2706-90-3	0.003 µg/L	EPTDS	EPA Method 533
perfluoropentanesulfonic acid (PFPeS)	2706-91-4	0.004 µg/L	EPTDS	EPA Method 533
perfluoroundecanoic acid (PFUnA)	2058-94-8	0.002 µg/L	EPTDS	EPA Method 533
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	0.005 µg/L	EPTDS	EPA Method 537.1
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	0.006 µg/L	EPTDS	EPA Method 537.1
perfluorotetradecanoic acid (PFTA)	376-06-7	0.008 µg/L	EPTDS	EPA Method 537.1
perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.007 µg/L	EPTDS	EPA Method 537.1

One Metal

Contaminant	Chemical Abstract Service Registry Number (CASRN)	Minimum Reporting Level	Sample Point Location ¹	Analytical Methods
lithium	7439-93-2	9 µg/L	EPTDS	EPA Method 200.7; SM 3120 B (2017); SM 3120 B-99 (1999); ASTM D1976-20



City Council Meeting

Item Number: 9
Meeting Date: April 25, 2023
To: City Council / City Manager
From: Tina Jauz, Assistant City Manager
Subject: MOTION APPROVING A PROMOTIONAL AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND HISPANIC CULTURAL CENTER OF MIDLAND, INC., TO ADVERTISE AND PUBLICIZE THE CITY OF MIDLAND, TEXAS, FOR THE PURPOSE OF DEVELOPING NEW AND EXPANDED BUSINESS ENTERPRISES (DISTRICT 2) (CITY MANAGER)

Purpose:

The Board of Directors of the Midland Development Corporation approved at a regular meeting on April 3, 2023 a promotional agreement with Hispanic Cultural Center of Midland, Inc., to advertise and publicize the City of Midland for the purpose of developing new and expanded business enterprises.

Recommended City Council Action:

Approve

Fiscal Impact:

\$30,000.00

Discussion:

This promotional agreement provides \$15,000 a year for two years to the Hispanic Cultural Center for operations and programming. The first disbursement will be made on or before January 31, 2024 and the second disbursement will be made on or before January 31, 2025.

Morris Williams Jr.

City Manager's Office

PROMOTIONAL AGREEMENT

THIS PROMOTIONAL AGREEMENT (“**Agreement**”) is made and effective the 25th day of April, 2023, by and between THE MIDLAND DEVELOPMENT CORPORATION (“**MDC**”), an economic development corporation existing under the authority of Chapter of 504 of the Texas Local Government Code, and HISPANIC CULTURAL CENTER OF MIDLAND, INC. (“**Hispanic Cultural Center**”), a Texas nonprofit corporation. In this Agreement, MDC and Hispanic Cultural Center are sometimes individually referred to as a “**Party**” and collectively referred to as the “**Parties**.”

WITNESSETH:

WHEREAS, MDC is authorized to expend promotional funds in order to advertise or publicize the City of Midland for the purpose of developing new and expanded business enterprises pursuant to Section 504.105 of the Texas Local Government Code; and

WHEREAS, MDC’s expenditure of promotional funds for the advertising and promotional services described herein will advertise and publicize the City of Midland for the purpose of developing new and expanded business enterprises, and will thereby enhance and promote economic development within the City of Midland; and

WHEREAS, it is the desire of the Parties to combine their efforts for the purpose of promoting the City of Midland and the Hispanic Cultural Center;

NOW, THEREFORE, in consideration of the covenants and conditions stated herein, and in consideration of the mutual benefits which will accrue to the Parties, as well as the general citizenry of the City of Midland, the Parties have agreed and do hereby agree as follows:

I. PURPOSE

The purpose of this Agreement is to state the terms and conditions under which Hispanic Cultural Center shall perform advertising and promotional services for MDC for the purpose of developing new and expanded business enterprises in the City of Midland and thereby enhance and promote economic development within the City of Midland.

II. OBLIGATIONS OF THE PARTIES

A. MDC Payment. MDC agrees to make two (2) payments to Hispanic Cultural Center in accordance with the following schedule:

1. \$15,000.00 on or before January 31, 2024.
2. \$15,000.00 on or before January 31, 2025.

The total funds provided by MDC under this Agreement shall not exceed \$30,000.00. The Parties covenant and agree that all funds provided by MDC under this Agreement are in exchange for Hispanic Cultural Center's advertising and promotional services as set forth herein.

B. Hispanic Cultural Center Services. Hispanic Cultural Center shall use commercially reasonable efforts to provide those services described in Exhibit A, which is attached hereto and incorporated herein for all purposes. Hispanic Cultural Center shall perform all services in a workmanlike manner. Hispanic Cultural Center shall coordinate with MDC's Chairman, or his designee, regarding the design, nature, content, and implementation of the services to enable the advertising and promotional activities performed hereunder to be effective and efficient in achieving the purpose of this Agreement.

C. Hispanic Cultural Center Report. During the term of this Agreement, at a time and place mutually agreed to by the Parties, Hispanic Cultural Center shall provide MDC with a report or presentation (the "**Report**") containing a detailed summary of Hispanic Cultural Center's efforts to promote new and expanded business enterprises within the City of Midland.

III. INDEPENDENT CONTRACTOR

Hispanic Cultural Center shall operate hereunder as an independent contractor and not as an officer, agent, servant, or employee of MDC. Hispanic Cultural Center shall have exclusive control of, and the exclusive right to control, the details of the work to be performed hereunder and all personnel performing the same, and shall be solely responsible for the acts and omissions of its officers, members, agents, employees or contractors. In no event shall any person participating in or performing any of Hispanic Cultural Center's duties or responsibilities hereunder be considered an officer, agent, or employee of MDC. Further, it is specifically understood and agreed that nothing in this Agreement is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control," which would give rise to vicarious liability. Hispanic Cultural Center shall be an independent contractor under this Agreement and shall assume all of the rights, obligations and liabilities, applicable to it as such independent contractor hereunder. MDC does not have the power to direct the order in which the work is done. MDC shall not have the right to control the means, methods or details of Hispanic Cultural Center's work. Hispanic Cultural Center shall assume exclusive responsibility for its work.

IV. TERM OF AGREEMENT

Upon execution by the Parties, this Agreement becomes effective April 25, 2023, and shall terminate on December 31, 2025, or when terminated by mutual agreement of the Parties, or when terminated as hereinafter provided.

V. GENERAL TERMS

A. Entire Agreement. This Agreement embodies the complete agreement of the Parties, superseding all oral or written, previous and contemporary agreements between the Parties

relating to matters in this Agreement; and except as otherwise provided herein, this Agreement cannot be modified or amended without a written agreement of the Parties.

B. Termination. MDC may terminate this Agreement at will for any or no reason upon giving at least ninety (90) days' written notice to Hispanic Cultural Center. The parties to this Agreement understand and agree that it is in MDC's sole and absolute discretion to cancel the Agreement during the term of the Agreement without penalty to MDC. Hispanic Cultural Center has no expectation and has received no guarantees that this Agreement will not be terminated before the end of the Agreement term. The Parties have bargained for the flexibility of terminating this Agreement upon tender of the requisite notice at any time during the term of the Agreement. All work and services under the Agreement shall be suspended upon termination of the Agreement becoming effective.

C. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and constitute one and the same instrument.

D. Legal Construction. In case one or more of the provisions contained in this Agreement shall for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions hereof and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

E. Notices. All notices to either Party required under this Agreement shall be sent by certified U.S. mail, postage prepaid, addressed to such Party at its respective address shown below. All notices shall be deemed given on the date so deposited in the mail, unless otherwise provided herein. Either Party hereto may change the address below by sending written notice of such change to the other Party.

If to MDC:

Executive Director
Midland Development Corp.
200 N. Loraine St., Suite 610
Midland, Texas 79701

If to Hispanic Cultural Center:

Hispanic Cultural Center of Midland, Inc.
P.O. Box 51404
Midland, Texas 79710

F. Assignment. This Agreement shall be binding upon the Parties and their successors and assigns. This Agreement may not be assigned by Hispanic Cultural Center without the prior written consent of MDC.

G. Release. NOTWITHSTANDING ANY OTHER PROVISION CONTAINED HEREIN, HISPANIC CULTURAL CENTER HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES MDC, MDC'S EMPLOYEES AND OFFICERS, FROM ANY AND ALL DEMANDS CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH HISPANIC CULTURAL CENTER HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE

PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR MDC’S NEGLIGENCE.

H. Amendments. This Agreement may be amended by written instrument executed by both Parties expressly stating the intention to amend this Agreement.

I. Governmental Immunity. By executing this agreement, MDC is not waiving its right of governmental immunity. MDC is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

J. Waiver of Attorney Fees. By executing this Agreement, **THE PARTIES AGREE TO WAIVE AND DO HEREBY WAIVE ANY CLAIM THEY HAVE OR MAY HAVE AGAINST THE OTHER PARTY REGARDING THE AWARD OF ATTORNEY FEES, WHICH ARE IN ANY WAY RELATED TO THIS AGREEMENT, OR THE CONSTRUCTION, INTERPRETATION, OR BREACH OF THIS AGREEMENT. THE PARTIES SPECIFICALLY AGREE THAT IF EITHER PARTY BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS AGREEMENT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), THAT PARTY AGREES TO WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY FEES TO WHICH IT MIGHT OTHERWISE BE ENTITLED.**

K. Governing Law and Venue. This Agreement shall be governed by the laws of the State of Texas. All performance and payment made pursuant to this Agreement shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this Agreement or the performance of this Agreement shall be in Midland County, Texas. The obligations and undertakings of each of the Parties shall be deemed to have occurred in Midland County, Texas.

L. Third-Party Beneficiary. MDC’s approval of this Agreement does not create a third-party beneficiary. There is no third-party beneficiary to this Agreement. No person or entity who is not a Party to this Agreement shall have any third-party beneficiary or other rights hereunder.

M. Governmental Function. MDC and Hispanic Cultural Center hereby acknowledge and agree that the entirety of MDC’s performance and obligations under this Agreement are governmental functions. By entering into this Agreement, Hispanic Cultural Center releases MDC from any present or future claims asserting that MDC’s performance or obligations under this Agreement are not governmental functions.

[Signature Page Follows]

EXECUTED by the duly authorized officials of the Parties as of the day and year first above written.

**MIDLAND DEVELOPMENT
CORPORATION**

Chase Gardaphe, Chairman

ATTEST:

Jill Pennington, Secretary

[Signature Page Follows]

**HISPANIC CULTURAL CENTER
OF MIDLAND, INC.**

By _____

Name _____

Title _____

THE STATE OF TEXAS §
 §
COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he/she executed and delivered the foregoing instrument for the purposes and consideration therein expressed on behalf of HISPANIC CULTURAL CENTER OF MIDLAND, INC.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2023.

Notary Public, State of Texas

Promotional Services to be Provided by Hispanic Cultural Center

1. Branding the City of Midland for the purpose of developing new and expanded business enterprises on website, brochure and media materials, when feasible.
2. Promoting the Hispanic Cultural Center.
3. Including references to the Midland Development Corporation's support for Hispanic Cultural Center in a press release.
4. Including a description and logo for the Midland Development Corporation in Hispanic Cultural Center promotional materials, when feasible.



City Council Meeting

Item Number: 10
Meeting Date: April 25, 2023
To: City Council / City Manager
From: Tina Jauz, Assistant City Manager
Subject: MOTION APPROVING A PROMOTIONAL AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND CITY OF MIDLAND AQUATICS, INC., TO ADVERTISE AND PUBLICIZE THE CITY OF MIDLAND, TEXAS, FOR THE PURPOSE OF DEVELOPING NEW AND EXPANDED BUSINESS ENTERPRISES (DISTRICT 3) (COMMUNITY SERVICES)

Purpose:

The Board of Directors of the Midland Development Corporation approved at a regular meeting on April 3, 2023 a promotional agreement with City of Midland Aquatics, Inc., to advertise and publicize the City of Midland for the purpose of developing new and expanded business enterprises.

Recommended City Council Action:

Approve

Fiscal Impact:

\$700,000.00

Discussion:

This agreement provides funding intended to re-line COM's competition pool.

Morris Williams Jr.

City Manager's Office

PROMOTIONAL AGREEMENT

THIS PROMOTIONAL AGREEMENT (“**Agreement**”) is made and effective the 25th day of April, 2023, by and between THE MIDLAND DEVELOPMENT CORPORATION (“**MDC**”), an economic development corporation existing under the authority of Chapter of 504 of the Texas Local Government Code, and CITY OF MIDLAND AQUATICS, INC. (“**COM Aquatics**”), a Texas nonprofit corporation. In this Agreement, MDC and COM Aquatics are sometimes individually referred to as a “**Party**” and collectively referred to as the “**Parties**.”

WITNESSETH:

WHEREAS, MDC is authorized to expend promotional funds in order to advertise or publicize the City of Midland for the purpose of developing new and expanded business enterprises pursuant to Section 504.105 of the Texas Local Government Code; and

WHEREAS, MDC’s expenditure of promotional funds for the advertising and promotional services described herein will advertise and publicize the City of Midland for the purpose of developing new and expanded business enterprises, and will thereby enhance and promote economic development within the City of Midland; and

WHEREAS, it is the desire of the Parties to combine their efforts for the purpose of promoting economic development within the City of Midland;

NOW, THEREFORE, in consideration of the covenants and conditions stated herein, and in consideration of the mutual benefits which will accrue to the Parties, as well as the general citizenry of the City of Midland, the Parties have agreed and do hereby agree as follows:

I. PURPOSE

The purpose of this Agreement is to state the terms and conditions under which COM Aquatics shall perform advertising and promotional services for MDC for the purpose of developing new and expanded business enterprises in the City of Midland and thereby enhance and promote economic development within the City of Midland.

II. OBLIGATIONS OF THE PARTIES

A. MDC Payment. As a condition precedent to MDC’s obligations under this Agreement, COM Aquatics shall enter a contract to provide for the relining of its fifty (50) meter competition pool (the “**Relining Contract**”) on or before October 1, 2023. Upon COM Aquatic’s execution of the Relining Contract, COM Aquatics shall provide MDC with a copy of the executed Relining Contract. Within seven (7) business days following MDC’s receipt of a copy of the executed Relining Contract, MDC shall make one (1) lump sum payment in the amount of Seven Hundred Thousand and No/100 Dollars (\$700,000.00). The total funds provided by the MDC under this Agreement shall not exceed \$700,000.00. The Parties covenant and agree that all funds provided by the MDC under this Agreement are in exchange for COM Aquatics’ advertising and promotional services as set forth herein.

B. COM Aquatics Services. COM Aquatics shall use commercially reasonable efforts to provide those services described in **Exhibit A**, which is attached hereto and incorporated herein

for all purposes. COM Aquatics shall perform all services in a workmanlike manner. COM Aquatics shall coordinate with MDC's Chairman, or his designee, regarding the design, nature, content, and implementation of the services to enable the advertising and promotional activities performed hereunder to be effective and efficient in achieving the purpose of this Agreement.

C. COM Aquatics Report. During the term of this Agreement, at a time and place mutually agreed to by the Parties, COM Aquatics shall provide MDC with a report or presentation containing a detailed summary of COM Aquatics' efforts to promote new and expanded business enterprises within the City of Midland.

III. INDEPENDENT CONTRACTOR

COM Aquatics shall operate hereunder as an independent contractor and not as an officer, agent, servant, or employee of MDC. COM Aquatics shall have exclusive control of, and the exclusive right to control, the details of the work to be performed hereunder and all personnel performing the same, and shall be solely responsible for the acts and omissions of its officers, members, agents, employees or contractors. In no event shall any person participating in or performing any of COM Aquatics' duties or responsibilities hereunder be considered an officer, agent, or employee of MDC. Further, it is specifically understood and agreed that nothing in this Agreement is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control," which would give rise to vicarious liability. COM Aquatics shall be an independent contractor under this Agreement and shall assume all of the rights, obligations and liabilities, applicable to it as such independent contractor hereunder. MDC does not have the power to direct the order in which the work is done. MDC shall not have the right to control the means, methods or details of COM Aquatics' work. COM Aquatics shall assume exclusive responsibility for its work.

IV. TERM OF AGREEMENT

Upon execution by the Parties, this Agreement becomes effective April 25, 2023, and shall terminate on September 30, 2024, or when terminated by mutual agreement of the Parties, or when terminated as hereinafter provided.

V. GENERAL TERMS

A. Entire Agreement. This Agreement embodies the complete agreement of the Parties, superseding all oral or written, previous and contemporary agreements between the Parties relating to matters in this Agreement; and except as otherwise provided herein, this Agreement cannot be modified or amended without a written agreement of the Parties.

B. Termination. MDC may terminate this Agreement at will for any or no reason upon giving at least ninety (90) days' written notice to COM Aquatics. The parties to this Agreement understand and agree that it is in MDC's sole and absolute discretion to cancel the Agreement during the term of the Agreement without penalty to MDC. COM Aquatics has no expectation and has received no guarantees that this Agreement will not be terminated before the end of the Agreement term. The Parties have bargained for the flexibility of terminating this Agreement upon tender of the requisite notice at any time during the term of the Agreement. All work and services under the Agreement shall be suspended upon termination of the Agreement becoming effective.

C. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and constitute one and the same instrument.

D. Legal Construction. In case one or more of the provisions contained in this Agreement shall for any reason be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions hereof and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

E. Notices. All notices to either Party required under this Agreement shall be sent by certified U.S. mail, postage prepaid, addressed to such Party at its respective address shown below. All notices shall be deemed given on the date so deposited in the mail, unless otherwise provided herein. Either Party hereto may change the address below by sending written notice of such change to the other Party.

If to MDC:

Executive Director
Midland Development Corp.
200 N. Loraine St., Suite 610
Midland, Texas 79701

If to COM Aquatics:

Brad Swendig, Executive Director
City of Midland Aquatics, Inc.
3003 North A Street
Midland, Texas 79705

F. Assignment. This Agreement shall be binding upon the Parties and their successors and assigns. This Agreement may not be assigned by COM Aquatics without the prior written consent of MDC.

G. Release. NOTWITHSTANDING ANY OTHER PROVISION CONTAINED HEREIN, COM AQUATICS HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES MDC, MDC'S EMPLOYEES AND OFFICERS, FROM ANY AND ALL DEMANDS CLAIMS, DAMAGES, OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH COM AQUATICS HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR MDC'S NEGLIGENCE.

H. Amendments. This Agreement may be amended by written instrument executed by both Parties expressly stating the intention to amend this Agreement.

I. Governmental Immunity. By executing this agreement, MDC is not waiving its right of governmental immunity. MDC is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

J. Waiver of Attorney Fees. By executing this Agreement, **THE PARTIES AGREE TO WAIVE AND DO HEREBY WAIVE ANY CLAIM THEY HAVE OR MAY HAVE AGAINST THE OTHER PARTY REGARDING THE AWARD OF ATTORNEY FEES, WHICH ARE IN ANY WAY RELATED TO THIS AGREEMENT, OR THE CONSTRUCTION, INTERPRETATION, OR BREACH OF THIS AGREEMENT. THE**

PARTIES SPECIFICALLY AGREE THAT IF EITHER PARTY BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS AGREEMENT, THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS AGREEMENT, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), THAT PARTY AGREES TO WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY FEES TO WHICH IT MIGHT OTHERWISE BE ENTITLED.

K. Governing Law and Venue. This Agreement shall be governed by and construed in accordance with the laws and court decisions of the State of Texas. All performance and payment made pursuant to this Agreement shall be deemed to have occurred in Midland County, Texas. The sole, exclusive, and mandatory venue for any claims, suits, disputes or any other action arising from, relating to or concerning in any way this Agreement or the performance of this Agreement shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this Agreement shall be deemed to have occurred in Midland County, Texas. This Agreement shall be governed by, interpreted, enforced and construed under the laws of the State of Texas. The laws of the State of Texas shall govern, construe and enforce all the rights and duties of the parties, including but not limited to tort claims and any and all contractual claims or disputes, arising from or relating in any way to the subject matter of this Agreement, without regard to conflict of laws and rules that would direct application of the laws of another jurisdiction. All payments under this Agreement are deemed to have taken place in Midland County, Texas.

L. Third-Party Beneficiary. MDC's approval of this Agreement does not create a third-party beneficiary. There is no third-party beneficiary to this Agreement. No person or entity who is not a Party to this Agreement shall have any third-party beneficiary or other rights hereunder.

M. Governmental Function. MDC and COM Aquatics hereby acknowledge and agree that the entirety of MDC's performance and obligations under this Agreement are governmental functions. By entering into this Agreement, COM Aquatics releases MDC from any present or future claims asserting that MDC's performance or obligations under this Agreement are not governmental functions.

[Signature Pages Follow]

EXECUTED by the duly authorized officials of the Parties as of the day and year first above written.

**MIDLAND DEVELOPMENT
CORPORATION**

Chase Gardaphe, Chairman

ATTEST:

Jill Pennington, Secretary

[Signature Page Follows]

CITY OF MIDLAND AQUATICS, INC.

By _____

Name _____

Title _____

THE STATE OF TEXAS §

§

COUNTY OF MIDLAND §

BEFORE ME, the undersigned authority, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged that he/she executed and delivered the foregoing instrument for the purposes and consideration therein expressed on behalf of CITY OF MIDLAND AQUATICS, INC.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this _____ day of _____, 2023.

Notary Public, State of Texas

Promotional Services to be Provided by COM Aquatics

1. Branding the City of Midland for the purpose of developing new and expanded business enterprises on website, brochure and media materials, when feasible.
2. Promoting COM Aquatics.
3. Including references to the Midland Development Corporation's support for COM Aquatics in a press release.
4. Including a description and logo for the Midland Development Corporation in COM Aquatics promotional materials, when feasible.



City Council Meeting

Item Number: 11
Meeting Date: April 25, 2023
To: City Council / City Manager
From: John Simmons, Manager, Right-of-Way
Subject: MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (22-329-019) BETWEEN THE CITY OF MIDLAND AND TARGA PIPELINE MID-CONTINENT WESTEX LLC REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 10, BLOCK 38, T-2-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)

Purpose:

This ROW License will replace License # 2013-184 effective June 26, 2013, which granted a 30' wide right of way to Atlas Pipeline Mid-Continent Westex L.L.C now known as Targa Pipeline Mid-Continent Westex LLC. This Right of Way License updates and replaces the previously granted license and terms for the continued operation of said 6" natural gas pipeline.

This Right-of-Way License is for a single ten (10) year period. Terms are consistent with the City's standard license for pipeline facilities of this nature.

Recommended City Council Action:

Approve

Fiscal Impact:

The following fees will be collected:

Application fee (one time): \$1,000

Full ten-year term paid in advance (\$170 per rod x 58.4 rods) \$9,928.00

Surface Damages: existing pipeline, no new surface damage

Total Collected: \$10,928.00

Discussion:

This is the third renewal for this private-use, steel-construction natural gas pipeline which is six inches (6) in diameter and buried thirty-six inches (36) deep and does not interfere with the City Plant Farm operations in this area. Attached plats are the "As Built" survey of the existing pipeline. Annual fees are up to date.

Certificates of Insurance (COI) with the City of Midland named as additional insured and a waiver of subrogation in favor of the City of Midland has been collected and are on file.

City Secretary to record completed License Agreement



City Manager's Office

TARGA RESOURCES, LLC811 LOUISIANA STREET, SUITE 2100
HOUSTON, TX 77002JPMorgan Chase Bank, N.A.
CHICAGO, IL

2-1/710

0030006

DATE: March 28, 2023

AMOUNT: \$9,928.00

PAY Nine Thousand Nine Hundred Twenty-Eight Dollars & 00/100*****

DOLLARS

TO THE ORDER OF City of Midland
P.O. Box 1152
Midland, TX 79702

SIGNATURE

JUSTIN WENGER

PRINTED NAME



⑈0030006⑈ ⑆071000013⑆

632558805⑈

0030006

TAXPAYER ID/SSN NO. _____

IN FULL FOR Consideration for the renewal of a pipeline easement and all damages associated with said easement
located in Section 10, Block 38, T-2-S, T&P RR Co. Survey, Midland County, Texas.

Total Rods 58.14

Total Payment = \$9,928.00

COM License 2013-184 / 23-329-019 renewal

Targa
Resources, LLC

DEPT APPROVAL _____ DATE: _____

TARGA RESOURCES, LLC.

GL COMPANY 35041 GL ACCOUNT 552004 RC 535502 LOC 20001

PROJECT NO _____ TASK 1004 - Land-ROW/Easement

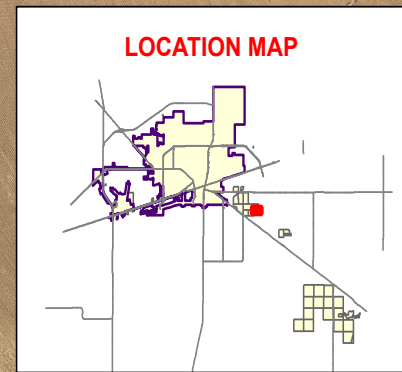
PROJECT NAME COM renewal 2013-184/ 23-329-019

PACKET 11.3

April 25, 2023

March 28, 2023

ENTERED THE ONE NET _____ DATE _____



Existing Pipeline ROW
58.14 Rods (930.3 Feet)

BLK 38-2-S
SEC 9

BLK 38-2-S
SEC 10

SCR 1140

SCR 1136

SCR 1135

Date: 3/15/2023

- As-Built Pipeline ROW
- Street
- Survey Section

PACKET

Targa As¹Built ROW Sec10 Blk38, T-2-S

April 25, 2023



0 150 300 Feet

©THE CITY OF MIDLAND - 2023

THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY PRODUCT NOR IS IT DESIGNED TO BE USED AS A PRIMARY TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.

THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

Block 38, T-2-S, T. & P. RR. Co. Survey
Midland County, Texas

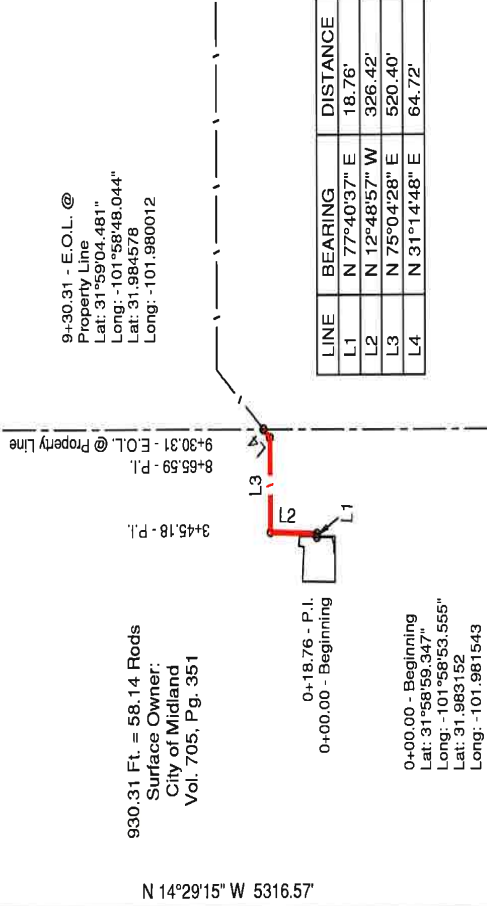
PACKET

2 (58926)
11 (S-20011)

N 75°38'49" E 5314.19'

3 (S-20007)

RR. Spike C/L
Co. Rd. 110
East & 1140 N/S



(S-20010) 9 (68121)
10 (26330)

S 75°52'33\"/>

S 75°52'32\"/>

W 2664.85'

H.M. Horton G.A. Torbett

CENTERLINE DESCRIPTION
Of An Existing Pipeline Right-of-Way
In and Through
Section 10, Block 38, T-2-S
T. & P. RR. Co. Survey
Midland County, Texas

M.E. Morrow

11.5

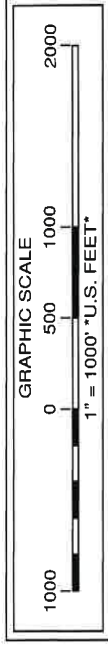
Beginning at pipeline station 0+00.00 for the beginning of this existing pipeline right-of-way from which a railroad spike C/L of CR 110 East & CR 1140 N/S for the Northeast corner of Section 9, Block 38 bears N 48°18'54\"/>

Thence N 77°40'37\"/>

Thence N 12°48'57\"/>

Thence N 75°04'28\"/>

Thence N 31°14'48\"/>



Note: Survey Reconstruction filed in the Office of Pennell & Marlowe Land Surveyors, Inc.

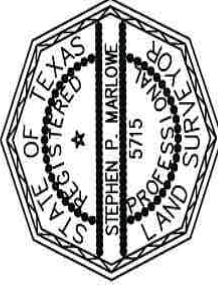
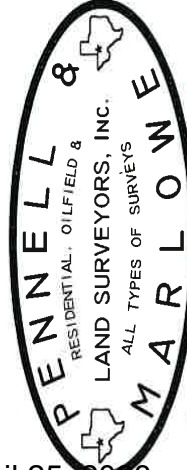
Note: Latitudes and Longitudes shown are on NAD'83 Datum.

Note: Bearings and distances are based on The Texas Coordinate System of 1927, Central Zone.

Note: A combined grid factor of 0.9999012 must be divided into all distances to obtain surface distances.

Note: Example: (S-99999) indicates General Land Office file number.

Note: Surface ownership provided by Targa Pipeline Mid-Continent Westtex LLC.



March 6, 2023
230306JR-BCL

REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5715

P.O. Box 51887, Midland, Texas 79710 (432) 262-0901 Fax (432) 262-0679 Firm #100201-00

USGS Quadrangle Sheet: Stephenson Lake, Tex.
Existing Pipeline Survey Plat

TARGA PIPELINE
MID-CONTINENT WESTTEX LLC
2013-184 City of Midland Renewal
P.O.- TAR183729
Existing Pipeline Survey
In and Through
Section 10, Block 38, T-2-S
T. & P. RR. Co. Survey
Midland County, Texas
Scale: 1" = 1000'

RIGHT OF WAY LICENSE

THE STATE OF TEXAS §
 § **KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF MIDLAND §

Date: April 26, 2023

Licensor: CITY OF MIDLAND, TEXAS, a home-rule municipal corporation

Licensor's Representative: Robert Patrick, City Manager

Licensor's Mailing Address: P.O. Box 1152
Midland, Texas 79702

Licensee: Targa Pipeline Mid-Continent WestTex LLC

Licensee's Representative: Norman L. Winter

Licensee's Mailing Address: 811 Louisiana St., Suite 2100
Houston, Texas 77002

Property: As described in Article III below

License Number: 23-329-019

Licensee desires use of certain Property (as defined below) owned by Licensor in Winkler County, Texas, for purposes set forth below. Licensee acknowledges and agrees that it must obtain a license (the "License") in order to use the public lands of Licensor.

W I T N E S S E T H:

For and in consideration of the execution of this license (this "License") and the mutual promises and covenants of the parties hereto, it is mutually promised, understood and agreed as follows:

I. Term

A. Term. This License shall be for a term of ten (10) years commencing on the date of this License (the "Commencement Date") unless terminated earlier as provided hereafter.

B. Termination. Licensor may terminate this License if Licensee fails to pay, when due, any amount owing under this License and that failure continues for sixty (60) days or, if Licensee commits any material breach or material default in performance of any obligation, prohibition, restriction, provision or covenant contained in this License, and the breach or default continues for a period of thirty (30) days after Licensor delivers notice to Licensee reasonably detailing the breach or default.

Additionally, Licensor may terminate this License at will for any or no reason upon giving at least three hundred sixty-five (365) days' written notice to Licensee. The parties to this License understand and agree that it is in Licensor's sole discretion to terminate this License during the term of this License without penalty to Licensor. Licensee has no expectation and has received no guarantees that this License will not be terminated before the end of the License term. The parties have bargained for the flexibility of terminating this License upon tender of the requisite notice at any time during the term of this License. All work and services under this License shall be suspended upon termination of this License.

Upon expiration or termination of this License, Licensee shall remove all equipment and structures associated with the undertakings contemplated by this License. After removal of all equipment and structures associated with the undertakings contemplated by this License, the surface of the Property shall be restored at the expense of Licensee to its original condition, as close thereto as may be practical, subject to the approval of Licensor upon inspection by Licensor's Representative, which approval shall not be unreasonably withheld. All of said work shall be completed within one hundred eighty (180) days after the expiration or termination of this License. All of the terms, provisions and requirements of this paragraph shall survive the expiration or termination of this License.

II. Financial Consideration

A. License Fee. A license fee in the amount of NINE THOUSAND NINE HUNDRED TWENTY-EIGHT and No/100 Dollars (\$9,928.00) ("License Fee") shall be due and payable on or prior to the Commencement Date.

In the event Licensor terminates this License pursuant to the provisions of Section I.B., Licensor agrees to refund to Licensee a pro rata share of the License Fee actually paid by Licensee to Licensor for that portion of the remaining term that is being terminated. For the avoidance of doubt, the amount of any refund payable to Licensee pursuant to this paragraph shall be determined net of any costs or expenses incurred by Licensor in connection with Licensee's unfulfilled obligations under this License (if any).

B. Application Fee. On or prior to the Commencement Date of this License, Licensee shall pay a non-refundable one-time fee of One Thousand and No/100 Dollars (\$1,000.00) to Licensor's Representative. Said fee shall revert to Licensor and Licensee shall have no claim to said fee. The fee shall be used to process the application for this License.

C. Delivery of Payment. Payment of the above fees shall be made to Licensor at the office of Licensor's Representative, Attn: Right of Way Manager, P.O. Box 1152, Midland, Texas, 79702. Payment of the above fees shall be exclusive of and in addition to all general municipal taxes of whatever nature, including but not limited to ad valorem taxes and special taxes and assessments for public improvements.

D. Late Payment. Licensee's failure to make payment of any of the above fees within thirty (30) days after such fee is due shall constitute a late payment and Licensee shall pay Licensor a late charge of five percent (5%) of such fee.

III. Use

A. Permitted Use. Licensor does hereby grant unto Licensee, the right to enter upon the Property, being thirty (30) feet in width of the pipeline location as shown on Exhibit A attached hereto and incorporated herein for the purpose of operating, repairing, maintaining, replacing and removing, thereon, along the herein described pipeline locations, a steel construction pipeline, not to exceed six (6) inches in diameter, for the transportation of natural gas and to have the right of ingress and egress at convenient points for such purpose. **Licensee shall provide Licensor with a complete as-built survey within sixty (60) days of completion of the pipeline(s) and facilities described herein. The parties agree Licensee's failure to provide Licensor with a complete as-built survey within sixty (60) days of completion of the pipeline(s) and facilities described herein may result in the termination of this License. The decision to accept a complete as-built survey after the sixty-day deadline prescribed herein, or, conversely, to terminate this License shall be in the sole and absolute discretion of Licensor.**

B. Road Repair. Licensee covenants and agrees that it will repair, at its own expense, any of Licensor's roads that Licensee, its employees, contractors, representatives, agents or assigns damage on Licensor's property, so that such roads will comply with Licensor's standard specifications.

C. Utility Repair. Licensee covenants and agrees that Licensee shall, at its own expense, repair all water lines, sewer lines, service lines, water meters and other utility lines owned by Licensor that Licensee, its employees, contractors, representatives, agents or assigns, damage so that such water lines, sewer lines, water meters and other utility lines shall comply with Licensor's standard specifications.

D. Pipeline Depth. Licensee covenants and agrees that it will bury the pipeline to be constructed hereunder no less than thirty-six (36) inches in depth. All backfill used in burying such pipeline shall be compacted to a density of ninety percent (90%), except where such pipeline crosses under a paved or traveled portion of any City of Midland right of way where such backfill shall be compacted to a density of ninety-five percent (95%). Licensor shall be afforded the opportunity to test the density on all backfill. Notwithstanding any provision to the contrary contained herein, Licensee covenants and agrees that, at any point that Licensee's pipeline intersects with a City of Midland utility line location, the pipeline shall be bored at a depth of at least (i) nine (9) feet under all City of Midland water utility lines and (ii) two (2) feet under all City of Midland sewer utility lines. Licensee agrees that it shall comply with 30 Tex. Admin. Code § 290.44(e), as amended, to the extent applicable to this License.

E. Approval of Bids. Before Licensee seeks bids on any phase of the repair of public streets, alleys, water lines, sewer lines or any other public utilities, Licensee shall first obtain written approval of the specifications therefor from Licensor's Representative, which approval shall be at Licensor's Representative's sole discretion.

F. Reservation of Rights. Licensor expressly reserves the right to install, repair, or reconstruct streets or roads and all ancillary public uses usual and customary in connection with streets and roads, expressly including but not limited to drainage facilities and related structures in the rights of way used and occupied by Licensee.

Licensors reserves the right to lay and permit to be laid, sewer, gas, water, and other pipelines or cables and conduits, and to do and permit to be done, any underground or overhead installation or improvement that may be deemed necessary or proper by the governing body of Licensors, in, on, across, along, over, under, and through any property occupied by Licensee. In permitting such work to be done, Licensors shall not be liable to Licensee for any damage so caused to Licensee's system or property, **NOR SHALL LICENSOR BE LIABLE TO LICENSEE FOR ANY DAMAGES TO LICENSEE'S PIPELINE ARISING OUT OF THE NEGLIGENCE BY LICENSOR, ITS EMPLOYEES, OFFICERS OR AGENTS, OR LICENSOR'S CONTRACTORS OR SUBCONTRACTORS.** If Licensors requires Licensee to remove, alter, change, adapt, or conform Licensee's facilities because of changes in the grade or construction of a street or in the location or manner of constructing a water pipe, sewer pipe, or other surface, underground or aboveground structure owned by Licensors, Licensee shall make the alterations or changes as soon as practicable, and in no event longer than one hundred eighty (180) days, when ordered in writing by Licensors, without claim for reimbursement for the cost of the relocation or for damages against Licensors. If these requirements impose a financial hardship upon Licensee, Licensee shall have the right to present alternative proposals for Licensors's consideration.

G. Non-exclusive. Licensors expressly reserves the full right to grant other easements or rights of way crossing or running parallel with the rights of way used by Licensee.

H. Abandonment. It is especially provided, however, that as an express condition of this License, and not as a mere covenant, in the event Licensee abandons any equipment or appurtenances associated with the undertakings contemplated by this License, or the Property ceases to be used for the purposes enumerated herein for any period of twelve (12) consecutive months, or longer, other than the time elapsing between the date hereof and construction, and upon giving Licensee one hundred and twenty (120) days' written notice, then and in that event, this License shall automatically terminate and revert to Licensors, its successors or assigns, free and clear of any right, title, or interest of Licensee.

I. Approval of Specifications. In the event Licensee desires to reconstruct, repair, alter, replace or remove any pipeline built hereunder, Licensee shall submit the plans and specifications that pertain to the rebuilding or repairs of Licensors's streets and roads and the rebuilding or repairs of any of Licensors's public utilities to Licensors's Representative for his or her prior written approval, which approval shall be at Licensors's Representative's sole discretion. In the event of emergency repairs necessary to restore service, Licensee shall notify Licensors's Representative before making any repairs if during a Licensors workday. If not on a workday, Licensee shall notify Licensors's Representative on the first workday after repairs have begun.

J. Gates and Fences. Without altering or expanding the limitations on ingress, egress and access to the Property set forth in Paragraph A. of Article III above, Licensee agrees to use existing gates and roadways where available, to enter, leave and cross the Property; provided that Licensee shall not use any road marked "Closed". Licensee and all persons entering or leaving the Property in connection with Licensee's operations hereunder shall keep all outside and interior gates securely closed except during operations related to this License. Licensee shall keep all outside gates, and all other gates designated by Licensors, securely locked except during operations related to this License. At any gate that is to be locked, Licensors may install its own lock in addition to Licensee's lock.

Licensee agrees that Licensee shall not cut or go over any fence at any time or in connection with any operations on the Property without first obtaining Licensor's express prior consent thereto in writing. All gates or openings in fences shall be at mutually agreeable location(s) between Licensee and Licensor and shall be constructed as reasonably required by Licensor. Upon the termination of this License, at Licensor's election, gates in fences shall be left in place and shall thereafter be owned by Licensor or Licensee shall remove such gates and restore the fence to its original condition as nearly as reasonably practicable. The terms, provisions and requirements of this provision shall survive the termination or expiration of this License.

K. Trash. Licensee shall keep the Property free of trash and debris at all times. Under no circumstances, will Licensee be allowed to bury any trash, debris or foreign material of any kind on or under the Property. Licensor shall have the right to expel and permanently ban from the Property any person observed disposing of trash on the Property. Upon the completion of any operations, all ribbons, flags, stakes and similar items shall be promptly removed from the Property.

L. Hunting, Fishing and Alcohol Prohibited. No agent, employee, representative, contractor or subcontractor of Licensee or any other person allowed to enter the Property by Licensee shall be permitted to hunt, fish, trap, camp, picnic, ride motorcycles or four-wheelers or otherwise conduct any social gathering on the Property, nor shall any such persons be permitted to bring firearms, archery equipment, dogs, alcoholic beverages or illegal drugs on the Property at any time. Violations of this provision shall cause the violator to be regarded as a trespasser and subject to prosecution under trespass laws of the State of Texas. Licensor shall have the right to expel and permanently ban from the Property any person observed on the Property in violation of this provision.

M. Storage of Machinery and Equipment. Licensee shall use no part of the Property to store machinery, equipment, or other property of Licensee while it is not being used.

N. Additional Reservations. Licensor reserves the right to use the surface, subsurface or airspace on, below or above the land covered by this License for any purpose allowed by law and deemed necessary or proper by Licensor and to do and permit to be done, any work in connection therewith which may be deemed necessary or proper by Licensor in, on, across, along, over, under, and through any portion of the Property. In the event of such work in connection with said purposes it shall be deemed necessary or proper by Licensor, at Licensor's sole discretion, to alter, change, or relocate any pipeline, property, or casing of Licensee, such alteration or change or relocation shall be commenced and completed by Licensee within one hundred eighty (180) days after being ordered in writing by Licensor pursuant to directions from Licensor without any claim for reimbursement for the cost of the alteration, change or relocation or damages against Licensor. The relocation, change, or alteration shall be at the sole cost of Licensee. Provided, however, that Licensee shall at all times be entitled to receive from appropriate governmental bodies, excluding Licensor, payment for alteration, change or relocation of its system to which it may be lawfully entitled to under applicable federal or state laws with respect to relocation payments. Without limiting the foregoing, Licensor expressly reserves the full right to grant other licenses, easements and/or rights-of-way in, on, across, along, over, under or through all or any portion of the Property. Licensor expressly reserves the right to use and grant to third parties the right to use all or any portion of the Property and the surface, subsurface or airspace on, below or above the Property for any purpose.

IV. Standard General Conditions

A. Insurance. Licensee shall at all times during the term of this License maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):

- Personal Injury: \$1,000,000.00 per person
\$1,000,000.00 per occurrence
- Property Damage: \$100,000.00 per occurrence

Business Automobile Liability: \$1,000,000.00 combined single limit--
Personal Injury and Property Damage

Workers' Compensation: Statutory limits

Employers' Liability: \$1,000,000.00 per accident or occurrence

Umbrella Liability: \$10,000,000.00 each occurrence
\$10,000,000.00 aggregate

The Commercial General Liability shall be on an occurrence basis. This insurance shall name Licensor as an additional insured and all insurance shall waive subrogation in favor of Licensor.

The Workers' Compensation coverage provided by Licensee shall inure to the benefit of employees injured during the course and scope of their employment by Licensee pursuant to this License. The Workers' Compensation insurance shall waive all rights of subrogation against Licensor.

The Business Automobile Liability insurance provided by Licensee shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-owner vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of \$1,000,000.00 covering any vehicle used for the execution of the work that is the subject of this License. This insurance shall name Licensor as an additional insured and all insurance shall waive subrogation in favor of Licensor.

All insurance required pursuant to this License, except for Worker's Compensation Insurance, shall name Licensor as an additional insured. All insurance required pursuant to this License, including Worker's Compensation Insurance, shall provide for a waiver of subrogation as to Licensor. The parties agree that, prior to the execution of this License, Licensee shall provide one or more certificates of insurance showing that the requirements of this article have been met. Licensor shall determine, in its sole discretion, whether such requirements have been satisfied.

Licensor shall be provided written notice by Licensee's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage. Licensor shall not be required to provide any insurance whatsoever pursuant to this License.

Licensee shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this License to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts as required herein and name the City of Midland as an additional insured (except as to Worker's Compensation Insurance). Licensee certifies that the one or more certificates of insurance provided as required herein complies with the requirements of Chapter 1811 of the Texas Insurance Code. Licensee shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of Licensee.

B. Indemnity. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, LICENSEE, ITS SUCCESSORS AND ASSIGNS, AGREE TO INDEMNIFY, PROTECT, DEFEND AND HOLD HARMLESS LICENSOR AND LICENSOR'S REPRESENTATIVES, AGENTS, ATTORNEYS, EMPLOYEES, SUCCESSORS AND ASSIGNS (COLLECTIVELY, "INDEMNITEES") FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, PERSONAL INJURIES, PROPERTY DAMAGE, AND ALL COSTS AND EXPENSES INCURRED IN CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND EXPENSES, INCLUDING, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY, DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) THIS LICENSE, LICENSEE'S USE OF OR ACTIVITIES ON THE PROPERTY OR ANY OTHER PROPERTY OWNED BY LICENSOR, OR ANY ACT OR OMISSION OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER (COLLECTIVELY, "LIABILITIES"), EVEN IF SUCH LIABILITIES ARISE FROM OR ARE ATTRIBUTED, IN WHOLE OR IN PART, TO THE NEGLIGENCE OF ANY INDEMNITEE. LICENSEE SHALL PROMPTLY ADVISE LICENSOR OF ANY ACTION, ADMINISTRATIVE OR LEGAL PROCEEDING OR INVESTIGATION TO WHICH THIS INDEMNIFICATION MAY APPLY, AND OF WHICH LICENSEE HAS RECEIVED NOTICE, AND LICENSEE, AT LICENSEE'S EXPENSE, SHALL ASSUME ON BEHALF OF LICENSOR (AND THE OTHER INDEMNITEES) AND CONDUCT WITH DUE DILIGENCE AND IN GOOD FAITH THE DEFENSE THEREOF WITH COUNSEL REASONABLY SATISFACTORY TO LICENSOR; PROVIDED, HOWEVER, THAT ANY INDEMNITEE SHALL HAVE THE RIGHT, AT ITS OPTION, TO BE REPRESENTED THEREIN BY COUNSEL OF ITS OWN SELECTION AND AT ITS OWN EXPENSE. IN THE EVENT OF FAILURE BY LICENSEE TO ASSUME THE DEFENSE OF LICENSOR IN ACCORDANCE WITH THIS INDEMNIFICATION, LICENSOR, AT ITS OPTION, AND WITHOUT RELIEVING LICENSEE OF ITS OBLIGATION HEREUNDER, MAY ASSUME SUCH DEFENSE, AFTER WRITTEN NOTICE THEREOF TO LICENSEE AND LICENSEE'S FAILURE TO RESPOND THERETO WITHIN TEN (10) BUSINESS DAYS AFTER RECEIPT OF SUCH NOTICE (SAID TEN (10) DAY PERIOD SHALL NOT APPLY IN ANY CASE WHERE IMMEDIATE ANSWERS, RESPONSES, OR OTHER AFFIRMATIVE ACTION IS REQUIRED TO PRESERVE THE RIGHTS OF LICENSOR)

BUT ALL REASONABLE COSTS AND EXPENSES SO INCURRED BY LICENSOR IN THAT EVENT SHALL BE REIMBURSED BY LICENSEE TO LICENSOR, TOGETHER WITH INTEREST ON THE SAME FROM THE DATE ANY SUCH EXPENSE WAS PAID BY LICENSOR UNTIL REIMBURSED BY LICENSEE, AT THE RATE OF INTEREST PROVIDED TO BE PAID ON JUDGMENTS, BY THE LAWS OF THE STATE OF TEXAS.

WITHOUT LIMITING THE FOREGOING, LICENSEE AGREES THAT LICENSEE SHALL INDEMNIFY, PROTECT, DEFEND AND SAVE LICENSOR HARMLESS FROM ANY AND ALL CLAIMS, LIENS, JUDGMENTS, SUITS, CAUSES OF ACTION, AND DEMANDS OF ANY SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, OR FURNISHERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS, OR SUPPLIES, IN CONNECTION WITH THE CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF THE PIPELINE OR OTHER PERMITTED FACILITIES DESCRIBED HEREIN.

WITHOUT LIMITING ANY OF THE FOREGOING, LICENSEE SHALL INDEMNIFY, PROTECT AND HOLD HARMLESS AND DEFEND EACH INDEMNITEE FROM ALL LIABILITIES, SUITS, ACTIONS, CLAIMS, DAMAGES, CAUSES OF ACTION, CHARGES, JUDGMENTS, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY ON ACCOUNT OF ANY NEGLIGENT ACT OF ANY INDEMNITEE, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH LICENSEE OR LICENSEE'S EMPLOYEES', REPRESENTATIVES', AGENTS', CONTRACTORS' OR SUBCONTRACTORS' NEGLIGENCE, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS LICENSE, INCLUDING, WITHOUT LIMITATION, SUCH NEGLIGENT ACTS ARISING FROM OR IN ANY WAY CONNECTED WITH THE PLACEMENT, CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF ANY PART OF LICENSEE'S PIPELINE OR PERMITTED FACILITIES ON LICENSOR'S PROPERTY. LICENSEE WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST LICENSOR OR ANY INDEMNITEE, INCLUDING RELATED ATTORNEY'S FEES.

WITHOUT LIMITING ANY OF THE FOREGOING, LICENSEE, ITS SUCCESSORS AND ASSIGNS, SHALL INDEMNIFY, PROTECT, DEFEND AND HOLD INDEMNITEES HARMLESS FROM AND AGAINST ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, PERSONAL INJURIES, PROPERTY DAMAGE, AND ALL COSTS AND EXPENSES INCURRED IN CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS'

FEES AND EXPENSES, INCLUDING, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY, DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) (i) FAILURE OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER (COLLECTIVELY, THE "INDEMNIFYING PARTIES"), TO COMPLY WITH ALL APPLICABLE LOCAL, FEDERAL AND/OR STATE ENVIRONMENTAL LAWS, INCLUDING BUT NOT LIMITED TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) AND THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) (AS THEY MAY BE REAUTHORIZED AND/OR AMENDED) AND ALL OTHER LOCAL, FEDERAL AND STATE LAWS, IN CONNECTION WITH OR RELATED TO ANY INDEMNIFYING PARTY'S OPERATIONS OR ACTIVITIES ON THE PROPERTY, OR (ii) ANY INDEMNIFYING PARTY'S HANDLING, STORING, RELEASING OR TRANSPORTING OR DISPOSING OF ALL SUBSTANCES, INCLUDING BUT NOT LIMITED TO HAZARDOUS SUBSTANCES AND HAZARDOUS WASTES, ON OR FROM THE PROPERTY OR ANY OTHER LANDS OF LICENSOR.

IT IS THE INTENTION OF THE PARTIES HERETO THAT THE PROVISIONS OF THIS INDEMNIFICATION SHALL APPLY TO AND PROTECT EACH INDEMNITEE FROM THE CONSEQUENCES OF STRICT LIABILITY IMPOSED OR THREATENED TO BE IMPOSED ON SUCH INDEMNITEE, AS WELL AS FROM THE CONSEQUENCES OF THE NEGLIGENCE OF ANY INDEMNITEE, WHETHER OR NOT THAT NEGLIGENCE IS A CONTRIBUTING OR CONCURRING CAUSE OF ANY LIABILITY INDEMNIFIED AGAINST IN THIS ARTICLE IV.B.

THE TERMS, PROVISIONS, REQUIREMENTS AND OBLIGATIONS OF THIS ARTICLE IV.B. SHALL SURVIVE TERMINATION OR EXPIRATION OF THIS LICENSE, AND SHALL NOT BE LIMITED BY OR TO DAMAGES, COMPENSATION OR BENEFITS PAYABLE UNDER INSURANCE POLICIES, WORKER'S COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEES' BENEFIT ACTS.

C. Assignment. The provisions of this License shall inure to the benefit of and be binding upon Licensor and Licensee and their respective successors and permitted assigns. The rights and privileges granted by Licensor under this License inure to the benefit of Licensee. No rights, privileges or obligations hereunder shall be assignable by Licensee without the express prior written consent of Licensor. Any required consent is to be evidenced by a letter written by Licensor's City Manager that fully recites the terms and conditions, if any, upon which consent is given. The granting of consent is in the sole discretion of Licensor's City Manager

D. Independent Contractor. It is expressly understood and agreed that Licensee shall perform all work described herein as an independent contractor and not as an officer, agent, servant or employee of Licensor; that Licensee shall have exclusive control of and the exclusive right to control the details of the work performed hereunder, and all persons performing the same; and shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors

and subcontractors; that the doctrine of respondeat superior shall not apply as between Licensor and Licensee, its officers, agents, employees, contractors and subcontractors; and that nothing herein shall be construed as creating a partnership or joint enterprise between Licensor and Licensee. No person performing any of the work described hereunder shall be considered an officer, agent, servant or employee of Licensor. Further, it is specifically understood and agreed that nothing in this License is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" which would give rise to vicarious liability. Licensee shall be an independent contractor under this License and shall assume all of the rights, obligations and liabilities applicable to it as such independent contractor hereunder. Licensor does not have the power to direct the order in which the work is done. Licensor shall not have the right to control the means, methods or details of Licensee's work. Licensee shall assume exclusive responsibility for the work. Licensee is entirely free to do the work in its own way. The provisions of this subparagraph (D.) shall not be deemed or construed as contradicting, limiting or conflicting with the provisions of subparagraph (M.) below.

E. Attorney Fees. SHOULD LICENSOR BE REQUIRED TO RESORT TO EMPLOYMENT OF ATTORNEYS TO ENFORCE THIS LICENSE, OR ANY OF ITS RIGHTS UNDER THIS LICENSE, LICENSOR SHALL BE ENTITLED TO REIMBURSEMENT FROM LICENSEE FOR LICENSOR'S ATTORNEYS' FEES. LICENSEE SHALL REIMBURSE LICENSOR FOR LICENSOR'S ATTORNEYS' FEES INCURRED IN CONNECTION WITH THE PREPARATION AND NEGOTIATION OF THIS LICENSE. BY EXECUTING THIS LICENSE, LICENSEE AGREES TO WAIVE, AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE, ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST LICENSOR REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THIS LICENSE, OR THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LICENSE. WITHOUT LIMITING THE FOREGOING, LICENSEE SPECIFICALLY AGREES THAT IF LICENSEE BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS LICENSE, OR TO THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LICENSE, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, LICENSEE AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH LICENSEE MIGHT OTHERWISE BE ENTITLED.

LICENSEE AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING, KNOWN RIGHT. LICENSEE ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS LICENSE. LICENSEE FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN LICENSOR AND LICENSEE. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF GOVERNMENTAL IMMUNITY.

LICENSEE AND LICENSOR ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS LICENSE WITH LEGAL

COUNSEL PRIOR TO ITS EXECUTION.

F. Governing Law & Venue. All performance and payments made pursuant to this License shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this License, or the performance of this License shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this License shall be deemed to have been performed in Midland County, Texas. This License shall be construed, interpreted and enforced under the laws of the State of Texas. The laws of the State of Texas shall govern, construe and enforce all the rights and duties of the parties, including but not limited to tort claims and any and all other claims or disputes, arising from or relating in any way to the subject matter of this License, without regard to conflict of laws and rules that would direct application of the laws of another jurisdiction.

G. Release. NOTWITHSTANDING ANY OTHER PROVISIONS OF THIS LICENSE, LICENSEE HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES LICENSOR, AND LICENSOR'S EMPLOYEES AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH LICENSEE HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR LICENSOR'S NEGLIGENCE.

H. Governmental Immunity. By executing this License, Licensor is not waiving its right of governmental immunity. Licensor is retaining its immunity from suit. Licensor is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

I. Third Party Beneficiary. Except as provided in Article IV.B. above with respect to Indemnities, (i) Licensor's granting of this License does not create any third-party beneficiary, (ii) there is no third-party beneficiary to this License, and (iii) no person or entity who is not a party to this License shall have any third party beneficiary or other rights hereunder.

J. Notices. Any notice or communication required in the administration of this License shall be sent by certified mail, return receipt requested, to the parties' respective mailing addresses as set forth hereinabove.

K. Notice of Alleged Breach; Statutory Prerequisite. Without limiting the provisions of Article IV.G. above, as a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this License, Licensee or its legal representative, shall give the City Manager, or any other reasonable official of Licensor, notice in writing (consisting of one (1) original and seven (7) copies of notice attached to a copy of this License) of such damages, duly verified, within one hundred eighty (180) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which Licensee will settle, the physical and mailing addresses of Licensee at the time and date the claim was presented and the physical and mailing addresses of Licensee for the six (6) months immediately preceding the occurrence of such damages, and the names and addresses

of the witnesses upon whom Licensee relies to establish its claim; and a failure to so notify the City Manager or other such official of Licensor within the time and manner provided herein shall exonerate, excuse and except Licensor from any liability whatsoever. Licensor is under no obligation to provide notice to Licensee that Licensee's notice is insufficient. Licensor reserves the right to request reasonable additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision, Licensee's failure to comply with the requirements herein shall perpetually bar Licensee's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if Licensor has actual or constructive notice or knowledge of said claim or alleged damages. Licensee agrees that the requirements of this entire License are reasonable.

L. Consideration. The terms of this License are supported by good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties named herein.

M. Waiver of Governmental Immunity; Chapter 271, TEX. LOC. GOV'T CODE. The parties hereto agree that this License does not constitute a "Contract" for providing goods and/or services to Licensor as discussed in Subchapter I of Chapter 271 of the Texas Local Government Code, and Licensor does not waive, to the maximum extent allowed by law, any constitutional, statutory or common law right to sovereign immunity or governmental immunity from liability or suit. Licensor expressly does not consent to be sued or be liable. To the maximum extent allowed by law, nothing in this License constitutes a waiver of Licensor's governmental immunity and the parties hereto expressly agree that this License shall not constitute, nor be interpreted as a waiver of Licensor's governmental immunity under Subchapter I of Chapter 271 of the Texas Local Government Code, nor shall it constitute nor be interpreted as a waiver of Licensor's governmental immunity for the benefit of any third-party lacking privity to this License.

This License does not obligate Licensee to use the Property to construct, repair, operate, replace, or maintain Licensor's facilities or structures described herein, rather, it merely prohibits Licensee from using the Property for any other purpose. This License restricts the use of the Property to a specific purpose but does not require the use of the Property for a specific purpose. Licensee is not providing a service to Licensor. Licensee is paying Licensor for temporary rights in real property, not for a service. Any such provision shall be deemed to be a covenant against noncomplying use, not a covenant to use. Licensee's use of the Property in compliance with a restriction shall not constitute a service, and such complying use shall not operate to waive Licensor's governmental immunity.

N. Compliance. Licensee agrees that it shall comply with Texas Government Code Section 2252.908, as amended, to the extent that this statute applies to this License. Licensee agrees that it shall comply with Texas Local Government Code Section 176.006, as amended, to the extent that this statute applies to this License.

O. Texas Historical Commission Survey. Licensee agrees that it shall comply with Chapter 191 of the Texas Natural Resources Code. By executing this License, Licensee represents that it has contacted the Texas Historical Commission (the "Commission") for the purpose of determining

whether the Commission will request that an archaeological survey be completed before Licensee commences operations on the Property, as contemplated herein. Licensee agrees that it shall complete or cause to be completed an archaeological survey before commencing any operations on the Property if the Commission so requests and deliver the same to Licensors. Notwithstanding any provision contained herein, in the event that any site, object, artifact, or other feature of archaeological, scientific, educational, cultural, or historical interest is encountered during the operations authorized by this License, Licensee will immediately notify Licensors and the Commission so that adequate measures may be undertaken to protect or recover such discoveries or findings, as deemed appropriate by Licensors or the Commission.

P. Waiver. No waiver of any of the provisions of this License shall be deemed or constitute a waiver of any other provisions of this License, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided. Likewise, the failure of Licensors to enforce any provision of this License shall not be deemed nor shall constitute a waiver of the right of Licensors to enforce such provision.

Q. Counterpart Execution. This License may be executed in several counterparts, and any such agreement shall be deemed an original for all intents and purposes.

R. No Release of Liability. Notwithstanding anything to the contrary contained in this License, the termination or expiration of this License shall not relieve Licensee of any liability, duty or obligation under this License, nor shall it preclude Licensors from asserting any right to specific performance, damages or any other rights or remedies to which Licensors may be entitled. Upon termination or expiration of this License for any reason, Licensee shall execute and deliver a recordable release of this License to Licensors in form and substance satisfactory to Licensors.

S. Entire Agreement. This License constitutes the entire agreement between Licensors and Licensee concerning the subject matter hereof, superseding all negotiations, prior discussions, prior licenses and prior agreements and understandings related to the subject matter hereof. This License may only be amended by written instrument executed by Licensors and Licensee.

[Signature Pages Follow]

**LICENSOR:
CITY OF MIDLAND, TEXAS**

By: _____
Robert Patrick, City Manager

ATTEST:

Marcia Bentley-German, City Secretary

APPROVED AS TO CONTENT AND
COMPLETENESS:

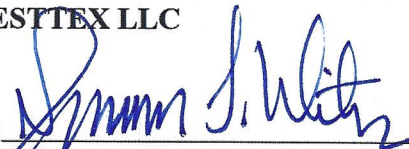
Carl Craig, Director of Utilities

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

LICENSEE:

**TARGA PIPELINE MID-CONTINENT
WESTTEX LLC**

By: 

Printed Name: Norman L. Winter

Title: Vice President of Land and ROW

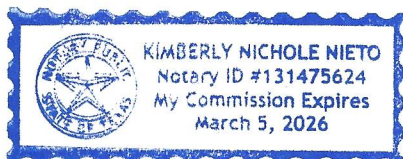
THE STATE OF Texas

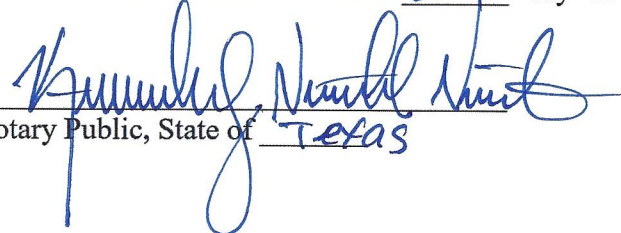
COUNTY OF Harris

§
§
§

BEFORE ME, the undersigned authority, on this 22nd day of March, 2023 personally appeared Norman L. Winter an officer of Targa Pipeline Mid-Continent WestTex LLC known to me to be the person and official whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed of said entity, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 22nd day of March, 2023.




Notary Public, State of Texas



City Council Meeting

Item Number: 12
Meeting Date: April 25, 2023
To: City Council / City Manager
From: John Simmons, Manager, Right-of-Way
Subject: MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE (22-329-020) BETWEEN THE CITY OF MIDLAND AND TARGA PIPELINE MID-CONTINENT WESTEX LLC REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 44, BLOCK 38, T-1-S, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)

Purpose:

This ROW License will replace License # 2013-187 effective June 26, 2013, which granted a 30' wide right of way to Atlas Pipeline Mid-Continent Westex L.L.C now known as Targa Pipeline Mid-Continent Westex LLC. This Right of Way License updates and replaces the previously granted license and terms for the continued operation of said 8" natural gas pipeline.

This Right-of-Way License is for a single ten (10) year period. Terms are consistent with the City's standard license for pipeline facilities of this nature.

Recommended City Council Action:

Approve

Fiscal Impact:

The following fees will be collected:

Application fee (one time): \$1,000

Full ten-year term paid in advance (\$170 per rod x 147.31 rods) \$25,042.70

Surface Damages: existing pipeline, no new surface damage

Total Collected: \$26,042.70

Discussion:

This is the third renewal for this private-use, steel-construction natural gas pipeline which is eight inches (8) in diameter and buried thirty-six inches (36) deep and does not interfere with the City Plant Farm operations in this area. Attached plats are the "As Built" survey of the existing pipeline. Annual fees are up to date.

Certificates of Insurance (COI) with the City of Midland named as additional insured and a waiver of subrogation in favor of the City of Midland has been collected and are on file.

City Secretary to record completed License Agreement



City Manager's Office

TARGA RESOURCES, LLC

811 LOUISIANA STREET, SUITE 2100
HOUSTON, TX 77002JPMorgan Chase Bank, N.A.
CHICAGO, IL

2-1/710

0030007

DATE: March 28, 2023

AMOUNT: \$25,042.70

PAY Twenty-Five Thousand Forty-Two Dollars & 70/100*****

DOLLARS

TO THE
ORDER
OFCity of Midland
P.O. Box 1152
Midland, TX 79702
SIGNATURESecurity Features Included.
Details On Back

JUSTIN WENGER

PRINTED NAME

⑈0030007⑈ ⑆071000013⑆

632558805⑈

0030007

TAXPAYER ID/SSN NO. _____

IN FULL FOR _____

Consideration for the renewal of a pipeline easement and all damages associated with said easement
located in Section 44, Block 38, T-1-S, T&P RR Co. Survey, Midland County, Texas.

Total Rods 147.31

Total Payment = \$25,042.70

COM License 2013-187 / 23-329-020 renewal

 Targa
Resources, LLC

DEPT APPROVAL _____

DATE: _____

TARGA RESOURCES, LLC.

GL COMPANY 35041

GL ACCOUNT 552004

RC 535502

LOC 20001

PROJECT NO _____

TASK _____

1004 - Land-ROW/Easement

PROJECT NAME COM renewal 2013-187/ 23-329-020

PACKET

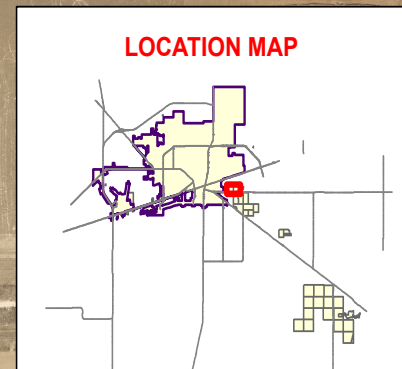
12.3

April 25, 2023

March 28, 2023

ENTERED THE ONE NET _____

DATE _____



BLK 38-1-S
SEC 43

BLK 38-1-S
SEC 44

Existing Pipeline ROW
147.31 Rods (2,430.65 Feet)

FM 307

BLK 38-2-S
SEC 6

BLK 38-2-S
SEC 5

EV20

Date: 3/15/2023

As-Built Pipeline ROW

Street

Survey Section

Targa As-Built ROW Sec44 Blk38, T-1-S

April 25, 2023



0 250 500 Feet

©THE CITY OF MIDLAND - 2023
THIS DATA IS NOT A SUBSTITUTION FOR A
SURVEY PRODUCT, NOR IS IT DESIGNED TO
BE USED AS A PRIMARY TOOL IN PERMITTING
OR OTHER DECISIONS BASED SOLELY ON THE
INFORMATION CONTAINED HEREIN.
THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR
ANY DECISIONS BASED UPON THE USE OF THIS DATA.

Block 38, T-1-S, T. & P. RR. CO. Survey
Midland County, Texas

(15565)
(89278) 42

(S-20002) 41

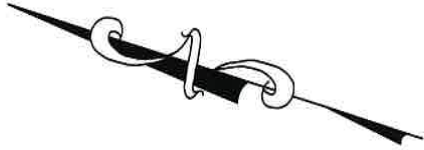
(93524)
40 (62288)

PACKET

N 75°36'40" E 5363.20'

N 14°31'24" W 5268.64'

24+30.63 - E.O.L. @ Occupied
Property Line
Lat: 32°00'14.285"
Long: -102°01'50.925"
Lat: 32.003968
Long: -102.030812



LINE	BEARING	DISTANCE
L1	N 15°45'23" W	19.58'
L2	N 12°08'22" W	144.16'
L3	N 14°09'54" W	97.81'
L4	N 14°24'27" W	202.29'
L5	N 14°30'30" W	398.23'
L6	N 14°27'30" W	578.90'
L7	N 14°54'05" W	282.22'
L8	N 14°32'39" W	245.53'
L9	N 14°52'51" W	314.59'
L10	N 14°52'45" W	147.34'

S 14°31'24" E 5273.85'

24+30.63 - E.O.L. @ Occupied Property Line

22+83.29 - P.I.
19+68.70 - P.I.
17+23.17 - P.I.
14+40.96 - P.I.

2,430.63 Ft. = 147.31 Rods
Surface Owner:
City of Midland
Vol. 67 Pg. 50

4+63.83 - P.I.
2+61.54 - P.I.
1+63.74 - P.I.
0+00.00 - Beginning

0+00.00 - Beginning
Lat: 31°59'51.091"
Long: -102°01'43.459"
Lat: 31.997525
Long: -102.028739

End. 1/2" I.R. in South R.O.W.
fence of Hwy 307 at fence
corner S-W & in line with
fence North

12.5

(57275) 6

CENTERLINE DESCRIPTION
Of An Existing Pipeline Right-of-Way
In and Through
Section 44, Block 38, T-1-S
T. & P. RR. Co. Survey
Midland County, Texas

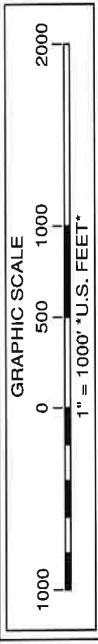
(54160)
(102892) 44

(S-20008) 5

45 (S-20004)

Beginning at pipeline station 0+00.00 for the beginning of this existing pipeline right-of-way from which found 1/2" iron rod in South right-of-way fence of HWY 307 at fence corner S-W & in line with fence North for the Southwest corner of Section 44, Block 38, T-1-S bears S 02°12'15" E, 247.49 feet;

Thence N 15°45'23"W, a distance of 19.58 feet to pipeline station P.I. 0+19.58;
Thence N 12°08'22"W, a distance of 144.16 feet to pipeline station P.I. 1+63.74;
Thence N 14°09'54"W, a distance of 97.81 feet to pipeline station P.I. 2+61.54;
Thence N 14°24'27"W, a distance of 202.29 feet to pipeline station P.I. 4+63.83;
Thence N 14°30'30"W, a distance of 398.23 feet to pipeline station P.I. 8+62.06;
Thence N 14°27'30"W, a distance of 578.90 feet to pipeline station P.I. 14+40.96;
Thence N 14°54'05"W, a distance of 282.22 feet to pipeline station P.I. 17+23.17;
Thence N 14°32'39"W, a distance of 245.53 feet to pipeline station P.I. 19+68.70;
Thence N 14°52'51"W, a distance of 314.59 feet to pipeline station P.I. 22+83.29;
Thence N 14°52'45"W, a distance of 147.34 feet to pipeline station 24+30.63 being the E.O.L. (End of Line) of this existing pipeline right-of-way from which found 1/2" iron rod in South right-of-way fence of HWY 307 at fence corner S-W & in line with fence North for the Southwest corner of Section 44, Block 38, T-1-S bears S 13°20'14" E, 2672.85 feet;



Note: Survey Reconstruction filed in the Office of Pennell & Marlowe Land Surveyors, Inc.

Note: Latitudes and Longitudes shown are on NAD83 Datum.

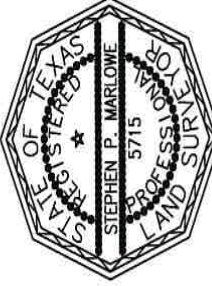
Note: Bearings and Longitudes are based on The Texas Coordinate System of 1927, Central Zone.

Note: A combined grid factor of 0.9998552 must be divided into all distances to obtain surface distances.

Note: Example: (S-99999) indicates General Land Office file number.

Note: Surface ownership provided by Targa Pipeline Mid-Continent Westtex LLC.

USGS Quadrangle Sheet: Southeast Midland, Tex.
USGS Quadrangle Sheet: Northeast Midland, Tex.
Existing Pipeline Survey Plat



TARGA PIPELINE
MID-CONTINENT WESTTEX LLC
2013-187 City of Midland Renewal
P.O. - TAR183729
Existing Pipeline Survey
In and Through
Section 44, Block 38, T-1-S
T. & P. RR. Co. Survey
Midland County, Texas
Scale: 1" = 1000'

March 5, 2023
230305JR-BCL

REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5715

P.O. Box 51887, Midland, Texas 79710 (432) 262-0901 Fax (432) 262-0679 Firm #100201-001

April 25, 2023

Block 38, T-2-S, T. & P. RR. Co. Survey Midland County, Texas

PACKET

(60936) 4
RR. Spike C/L
Co. Rd. 110
East & 1140 N/S

3 (S-20007)

N 75°38'49" E 5314.19'

2 (58926)

11 (S-20011)



930.31 Ft. = 58.14 Rods
Surface Owner:
City of Midland
Vol. 705, Pg. 351

3+45.18 - P.I.

8+65.59 - P.I.

9+30.31 - E.O.L. @ Property Line

9+30.31 - E.O.L. @
Property Line
Lat: 31°59'04.481"
Long: -101°58'48.044"
Lat: 31.984578
Long: -101.980012

N 14°29'15" W 5316.57'

S 14°19'31" E 5337.57'

0+00.00 - Beginning
Lat: 31°58'58.347"
Long: -101°58'53.555"
Lat: 31.983152
Long: -101.981543

LINE	BEARING	DISTANCE
L1	N 77°40'37" E	18.76'
L2	N 12°48'57" W	326.42'
L3	N 75°04'28" E	520.40'
L4	N 31°14'48" E	64.72'

(S-20010) 9 (68121)
10 (26330)

S 75°52'33" W 2605.64'

S 75°52'32" W 2664.85'

12.6

H.M. Horton

(S.F. 4666)

G.A. Torbett

CENTERLINE DESCRIPTION
Of An Existing Pipeline Right-of-Way
In and Through

Section 10, Block 38, T-2-S
T. & P. RR. Co. Survey
Midland County, Texas

M.E. Morrow

(P-1282)

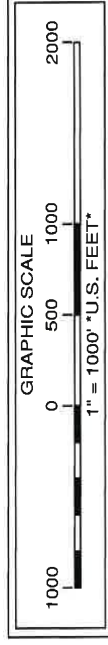
Beginning at pipeline station 0+00.00 for the beginning of this existing pipeline right-of-way from which a railroad spike C/L of CR 110 East & CR 11140 N/S for the Northeast corner of Section 9, Block 38 bears N 46°18'54" W, 3902.28 feet.

Thence N 77°40'37" E, a distance of 18.76 feet to pipeline station P.I. 0+18.76;

Thence N 12°48'57" W, a distance of 326.42 feet to pipeline station P.I. 3+26.42;

Thence N 75°04'28" E, a distance of 520.40 feet to pipeline station P.I. 8+46.82;

Thence N 31°14'48" E, a distance of 64.72 feet to pipeline station 9+30.31 being the E.O.L. (End of Line) of this existing pipeline right-of-way from which a railroad spike C/L of CR 110 East & CR 11140 N/S for the Northeast corner of Section 9, Block 38 bears N 56°32'29" W, 3960.60 feet.



Note: Survey Reconstruction filed in the Office of Pennell & Marlowe Land Surveyors, Inc.

Note: Latitudes and Longitudes shown are on NAD'83 Datum.

Note: Bearings and distances are based on The Texas Coordinate System of 1927, Central Zone.

Note: A combined grid factor of 0.9999012 must be divided into all distances to obtain surface distances.

Note: Example: (S-99999) indicates General Land Office file number.

Note: Surface ownership provided by Targa Pipeline Mid-Continent Westtex LLC.



Stephen P. Marlowe
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5715
P.O. Box 51887, Midland, Texas 79710 (432) 262-0901 Fax (432) 262-0679 Firm #100201-00

March 6, 2023
230306JR-BCL

USGS Quadrangle Sheet: Stephenson Lake, Tex.
Existing Pipeline Survey Plat

TARGA PIPELINE
MID-CONTINENT WESTTEX LLC
2013-184 City of Midland Renewal
P.O.- TAR183729
Existing Pipeline Survey
In and Through
Section 10, Block 38, T-2-S
T. & P. RR. Co. Survey
Midland County, Texas
Scale: 1" = 1000'

April 25, 2023

RIGHT OF WAY LICENSE

THE STATE OF TEXAS §
 § KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF MIDLAND §

Date: April 26, 2023

Licensor: CITY OF MIDLAND, TEXAS, a home-rule municipal corporation

Licensor's Representative: Robert Patrick, City Manager

Licensor's Mailing Address: P.O. Box 1152
Midland, Texas 79702

Licensee: Targa Pipeline Mid-Continent WestTex LLC

Licensee's Representative: Norman L. Winter

Licensee's Mailing Address: 811 Louisiana St., Suite 2100
Houston, Texas 77002

Property: As described in Article III below

License Number: 23-329-020

Licensee desires use of certain Property (as defined below) owned by Licensor in Winkler County, Texas, for purposes set forth below. Licensee acknowledges and agrees that it must obtain a license (the "License") in order to use the public lands of Licensor.

W I T N E S S E T H:

For and in consideration of the execution of this license (this "License") and the mutual promises and covenants of the parties hereto, it is mutually promised, understood and agreed as follows:

I. Term

A. Term. This License shall be for a term of ten (10) years commencing on the date of this License (the "Commencement Date") unless terminated earlier as provided hereafter.

B. Termination. Licensor may terminate this License if Licensee fails to pay, when due, any amount owing under this License and that failure continues for sixty (60) days or, if Licensee commits any material breach or material default in performance of any obligation, prohibition, restriction, provision or covenant contained in this License, and the breach or default continues for a period of thirty (30) days after Licensor delivers notice to Licensee reasonably detailing the breach or default.

Additionally, Licensor may terminate this License at will for any or no reason upon giving at least three hundred sixty-five (365) days' written notice to Licensee. The parties to this License understand and agree that it is in Licensor's sole discretion to terminate this License during the term of this License without penalty to Licensor. Licensee has no expectation and has received no guarantees that this License will not be terminated before the end of the License term. The parties have bargained for the flexibility of terminating this License upon tender of the requisite notice at any time during the term of this License. All work and services under this License shall be suspended upon termination of this License.

Upon expiration or termination of this License, Licensee shall remove all equipment and structures associated with the undertakings contemplated by this License. After removal of all equipment and structures associated with the undertakings contemplated by this License, the surface of the Property shall be restored at the expense of Licensee to its original condition, as close thereto as may be practical, subject to the approval of Licensor upon inspection by Licensor's Representative, which approval shall not be unreasonably withheld. All of said work shall be completed within one hundred eighty (180) days after the expiration or termination of this License. All of the terms, provisions and requirements of this paragraph shall survive the expiration or termination of this License.

II. Financial Consideration

A. License Fee. A license fee in the amount of TWENTY-FIVE THOUSAND FORTY-TWO and 70/100 Dollars (\$25,042.70) ("License Fee") shall be due and payable on or prior to the Commencement Date.

In the event Licensor terminates this License pursuant to the provisions of Section I.B., Licensor agrees to refund to Licensee a pro rata share of the License Fee actually paid by Licensee to Licensor for that portion of the remaining term that is being terminated. For the avoidance of doubt, the amount of any refund payable to Licensee pursuant to this paragraph shall be determined net of any costs or expenses incurred by Licensor in connection with Licensee's unfulfilled obligations under this License (if any).

B. Application Fee. On or prior to the Commencement Date of this License, Licensee shall pay a non-refundable one-time fee of One Thousand and No/100 Dollars (\$1,000.00) to Licensor's Representative. Said fee shall revert to Licensor and Licensee shall have no claim to said fee. The fee shall be used to process the application for this License.

C. Delivery of Payment. Payment of the above fees shall be made to Licensor at the office of Licensor's Representative, Attn: Right of Way Manager, P.O. Box 1152, Midland, Texas, 79702. Payment of the above fees shall be exclusive of and in addition to all general municipal taxes of whatever nature, including but not limited to ad valorem taxes and special taxes and assessments for public improvements.

D. Late Payment. Licensee's failure to make payment of any of the above fees within thirty (30) days after such fee is due shall constitute a late payment and Licensee shall pay Licensor a late charge of five percent (5%) of such fee.

III. Use

A. Permitted Use. Licensor does hereby grant unto Licensee, the right to enter upon the Property, being thirty (30) feet in width of the pipeline location as shown on Exhibit A attached hereto and incorporated herein for the purpose of operating, repairing, maintaining, replacing and removing, thereon, along the herein described pipeline locations, a steel construction pipeline, not to exceed eight (8) inches in diameter, for the transportation of natural gas and to have the right of ingress and egress at convenient points for such purpose. **Licensee shall provide Licensor with a complete as-built survey within sixty (60) days of completion of the pipeline(s) and facilities described herein. The parties agree Licensee's failure to provide Licensor with a complete as-built survey within sixty (60) days of completion of the pipeline(s) and facilities described herein may result in the termination of this License. The decision to accept a complete as-built survey after the sixty-day deadline prescribed herein, or, conversely, to terminate this License shall be in the sole and absolute discretion of Licensor.**

B. Road Repair. Licensee covenants and agrees that it will repair, at its own expense, any of Licensor's roads that Licensee, its employees, contractors, representatives, agents or assigns damage on Licensor's property, so that such roads will comply with Licensor's standard specifications.

C. Utility Repair. Licensee covenants and agrees that Licensee shall, at its own expense, repair all water lines, sewer lines, service lines, water meters and other utility lines owned by Licensor that Licensee, its employees, contractors, representatives, agents or assigns, damage so that such water lines, sewer lines, water meters and other utility lines shall comply with Licensor's standard specifications.

D. Pipeline Depth. Licensee covenants and agrees that it will bury the pipeline to be constructed hereunder no less than thirty-six (36) inches in depth. All backfill used in burying such pipeline shall be compacted to a density of ninety percent (90%), except where such pipeline crosses under a paved or traveled portion of any City of Midland right of way where such backfill shall be compacted to a density of ninety-five percent (95%). Licensor shall be afforded the opportunity to test the density on all backfill. Notwithstanding any provision to the contrary contained herein, Licensee covenants and agrees that, at any point that Licensee's pipeline intersects with a City of Midland utility line location, the pipeline shall be bored at a depth of at least (i) nine (9) feet under all City of Midland water utility lines and (ii) two (2) feet under all City of Midland sewer utility lines. Licensee agrees that it shall comply with 30 Tex. Admin. Code § 290.44(e), as amended, to the extent applicable to this License.

E. Approval of Bids. Before Licensee seeks bids on any phase of the repair of public streets, alleys, water lines, sewer lines or any other public utilities, Licensee shall first obtain written approval of the specifications therefor from Licensor's Representative, which approval shall be at Licensor's Representative's sole discretion.

F. Reservation of Rights. Licensor expressly reserves the right to install, repair, or reconstruct streets or roads and all ancillary public uses usual and customary in connection with streets and roads, expressly including but not limited to drainage facilities and related structures in the rights of way used and occupied by Licensee.

Licensors reserves the right to lay and permit to be laid, sewer, gas, water, and other pipelines or cables and conduits, and to do and permit to be done, any underground or overhead installation or improvement that may be deemed necessary or proper by the governing body of Licensors, in, on, across, along, over, under, and through any property occupied by Licensee. In permitting such work to be done, Licensors shall not be liable to Licensee for any damage so caused to Licensee's system or property, **NOR SHALL LICENSOR BE LIABLE TO LICENSEE FOR ANY DAMAGES TO LICENSEE'S PIPELINE ARISING OUT OF THE NEGLIGENCE BY LICENSOR, ITS EMPLOYEES, OFFICERS OR AGENTS, OR LICENSOR'S CONTRACTORS OR SUBCONTRACTORS.** If Licensors requires Licensee to remove, alter, change, adapt, or conform Licensee's facilities because of changes in the grade or construction of a street or in the location or manner of constructing a water pipe, sewer pipe, or other surface, underground or aboveground structure owned by Licensors, Licensee shall make the alterations or changes as soon as practicable, and in no event longer than one hundred eighty (180) days, when ordered in writing by Licensors, without claim for reimbursement for the cost of the relocation or for damages against Licensors. If these requirements impose a financial hardship upon Licensee, Licensee shall have the right to present alternative proposals for Licensors's consideration.

G. Non-exclusive. Licensors expressly reserves the full right to grant other easements or rights of way crossing or running parallel with the rights of way used by Licensee.

H. Abandonment. It is especially provided, however, that as an express condition of this License, and not as a mere covenant, in the event Licensee abandons any equipment or appurtenances associated with the undertakings contemplated by this License, or the Property ceases to be used for the purposes enumerated herein for any period of twelve (12) consecutive months, or longer, other than the time elapsing between the date hereof and construction, and upon giving Licensee one hundred and twenty (120) days' written notice, then and in that event, this License shall automatically terminate and revert to Licensors, its successors or assigns, free and clear of any right, title, or interest of Licensee.

I. Approval of Specifications. In the event Licensee desires to reconstruct, repair, alter, replace or remove any pipeline built hereunder, Licensee shall submit the plans and specifications that pertain to the rebuilding or repairs of Licensors's streets and roads and the rebuilding or repairs of any of Licensors's public utilities to Licensors's Representative for his or her prior written approval, which approval shall be at Licensors's Representative's sole discretion. In the event of emergency repairs necessary to restore service, Licensee shall notify Licensors's Representative before making any repairs if during a Licensors workday. If not on a workday, Licensee shall notify Licensors's Representative on the first workday after repairs have begun.

J. Gates and Fences. Without altering or expanding the limitations on ingress, egress and access to the Property set forth in Paragraph A. of Article III above, Licensee agrees to use existing gates and roadways where available, to enter, leave and cross the Property; provided that Licensee shall not use any road marked "Closed". Licensee and all persons entering or leaving the Property in connection with Licensee's operations hereunder shall keep all outside and interior gates securely closed except during operations related to this License. Licensee shall keep all outside gates, and all other gates designated by Licensors, securely locked except during operations related to this License. At any gate that is to be locked, Licensors may install its own lock in addition to Licensee's lock.

Licensee agrees that Licensee shall not cut or go over any fence at any time or in connection with any operations on the Property without first obtaining Licensor's express prior consent thereto in writing. All gates or openings in fences shall be at mutually agreeable location(s) between Licensee and Licensor and shall be constructed as reasonably required by Licensor. Upon the termination of this License, at Licensor's election, gates in fences shall be left in place and shall thereafter be owned by Licensor or Licensee shall remove such gates and restore the fence to its original condition as nearly as reasonably practicable. The terms, provisions and requirements of this provision shall survive the termination or expiration of this License.

K. Trash. Licensee shall keep the Property free of trash and debris at all times. Under no circumstances, will Licensee be allowed to bury any trash, debris or foreign material of any kind on or under the Property. Licensor shall have the right to expel and permanently ban from the Property any person observed disposing of trash on the Property. Upon the completion of any operations, all ribbons, flags, stakes and similar items shall be promptly removed from the Property.

L. Hunting, Fishing and Alcohol Prohibited. No agent, employee, representative, contractor or subcontractor of Licensee or any other person allowed to enter the Property by Licensee shall be permitted to hunt, fish, trap, camp, picnic, ride motorcycles or four-wheelers or otherwise conduct any social gathering on the Property, nor shall any such persons be permitted to bring firearms, archery equipment, dogs, alcoholic beverages or illegal drugs on the Property at any time. Violations of this provision shall cause the violator to be regarded as a trespasser and subject to prosecution under trespass laws of the State of Texas. Licensor shall have the right to expel and permanently ban from the Property any person observed on the Property in violation of this provision.

M. Storage of Machinery and Equipment. Licensee shall use no part of the Property to store machinery, equipment, or other property of Licensee while it is not being used.

N. Additional Reservations. Licensor reserves the right to use the surface, subsurface or airspace on, below or above the land covered by this License for any purpose allowed by law and deemed necessary or proper by Licensor and to do and permit to be done, any work in connection therewith which may be deemed necessary or proper by Licensor in, on, across, along, over, under, and through any portion of the Property. In the event of such work in connection with said purposes it shall be deemed necessary or proper by Licensor, at Licensor's sole discretion, to alter, change, or relocate any pipeline, property, or casing of Licensee, such alteration or change or relocation shall be commenced and completed by Licensee within one hundred eighty (180) days after being ordered in writing by Licensor pursuant to directions from Licensor without any claim for reimbursement for the cost of the alteration, change or relocation or damages against Licensor. The relocation, change, or alteration shall be at the sole cost of Licensee. Provided, however, that Licensee shall at all times be entitled to receive from appropriate governmental bodies, excluding Licensor, payment for alteration, change or relocation of its system to which it may be lawfully entitled to under applicable federal or state laws with respect to relocation payments. Without limiting the foregoing, Licensor expressly reserves the full right to grant other licenses, easements and/or rights-of-way in, on, across, along, over, under or through all or any portion of the Property. Licensor expressly reserves the right to use and grant to third parties the right to use all or any portion of the Property and the surface, subsurface or airspace on, below or above the Property for any purpose.

IV. Standard General Conditions

A. Insurance. Licensee shall at all times during the term of this License maintain and keep in full force and effect insurance in the following types and minimum amounts with companies authorized to do business in the State of Texas:

Commercial General Liability (including Contractual liability):

- Personal Injury: \$1,000,000.00 per person
\$1,000,000.00 per occurrence
- Property Damage: \$100,000.00 per occurrence

Business Automobile Liability: \$1,000,000.00 combined single limit--
Personal Injury and Property Damage

Workers' Compensation: Statutory limits

Employers' Liability: \$1,000,000.00 per accident or occurrence

Umbrella Liability: \$10,000,000.00 each occurrence
\$10,000,000.00 aggregate

The Commercial General Liability shall be on an occurrence basis. This insurance shall name Licensors as an additional insured and all insurance shall waive subrogation in favor of Licensors.

The Workers' Compensation coverage provided by Licensee shall inure to the benefit of employees injured during the course and scope of their employment by Licensee pursuant to this License. The Workers' Compensation insurance shall waive all rights of subrogation against Licensors.

The Business Automobile Liability insurance provided by Licensee shall cover any auto for bodily injury and property damage, including owned vehicles, hired and non-owner vehicles, and employee non-ownership, and the amount of such policy shall be a minimum of \$1,000,000.00 covering any vehicle used for the execution of the work that is the subject of this License. This insurance shall name Licensors as an additional insured and all insurance shall waive subrogation in favor of Licensors.

All insurance required pursuant to this License, except for Worker's Compensation Insurance, shall name Licensors as an additional insured. All insurance required pursuant to this License, including Worker's Compensation Insurance, shall provide for a waiver of subrogation as to Licensors. The parties agree that, prior to the execution of this License, Licensee shall provide one or more certificates of insurance showing that the requirements of this article have been met. Licensors shall determine, in its sole discretion, whether such requirements have been satisfied.

Licensors shall be provided written notice by Licensee's insurance provider not later than thirty (30) days prior to any reduction or termination of such coverage. Licensors shall not be required to provide any insurance whatsoever pursuant to this License.

Licensee shall contractually require all contractors, subcontractors, and sub-subcontractors that work on any portion of the work that is the subject of this License to obtain insurance coverage that meets or exceeds the policy requirements and minimum amounts as required herein and name the City of Midland as an additional insured (except as to Worker's Compensation Insurance). Licensee certifies that the one or more certificates of insurance provided as required herein complies with the requirements of Chapter 1811 of the Texas Insurance Code. Licensee shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of Licensee.

B. Indemnity. TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, LICENSEE, ITS SUCCESSORS AND ASSIGNS, AGREE TO INDEMNIFY, PROTECT, DEFEND AND HOLD HARMLESS LICENSOR AND LICENSOR'S REPRESENTATIVES, AGENTS, ATTORNEYS, EMPLOYEES, SUCCESSORS AND ASSIGNS (COLLECTIVELY, "INDEMNITEES") FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, PERSONAL INJURIES, PROPERTY DAMAGE, AND ALL COSTS AND EXPENSES INCURRED IN CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS' FEES AND EXPENSES, INCLUDING, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY, DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) THIS LICENSE, LICENSEE'S USE OF OR ACTIVITIES ON THE PROPERTY OR ANY OTHER PROPERTY OWNED BY LICENSOR, OR ANY ACT OR OMISSION OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER (COLLECTIVELY, "LIABILITIES"), EVEN IF SUCH LIABILITIES ARISE FROM OR ARE ATTRIBUTED, IN WHOLE OR IN PART, TO THE NEGLIGENCE OF ANY INDEMNITEE. LICENSEE SHALL PROMPTLY ADVISE LICENSOR OF ANY ACTION, ADMINISTRATIVE OR LEGAL PROCEEDING OR INVESTIGATION TO WHICH THIS INDEMNIFICATION MAY APPLY, AND OF WHICH LICENSEE HAS RECEIVED NOTICE, AND LICENSEE, AT LICENSEE'S EXPENSE, SHALL ASSUME ON BEHALF OF LICENSOR (AND THE OTHER INDEMNITEES) AND CONDUCT WITH DUE DILIGENCE AND IN GOOD FAITH THE DEFENSE THEREOF WITH COUNSEL REASONABLY SATISFACTORY TO LICENSOR; PROVIDED, HOWEVER, THAT ANY INDEMNITEE SHALL HAVE THE RIGHT, AT ITS OPTION, TO BE REPRESENTED THEREIN BY COUNSEL OF ITS OWN SELECTION AND AT ITS OWN EXPENSE. IN THE EVENT OF FAILURE BY LICENSEE TO ASSUME THE DEFENSE OF LICENSOR IN ACCORDANCE WITH THIS INDEMNIFICATION, LICENSOR, AT ITS OPTION, AND WITHOUT RELIEVING LICENSEE OF ITS OBLIGATION HEREUNDER, MAY ASSUME SUCH DEFENSE, AFTER WRITTEN NOTICE THEREOF TO LICENSEE AND LICENSEE'S FAILURE TO RESPOND THERETO WITHIN TEN (10) BUSINESS DAYS AFTER RECEIPT OF SUCH NOTICE (SAID TEN (10) DAY PERIOD SHALL NOT APPLY IN ANY CASE WHERE IMMEDIATE ANSWERS, RESPONSES, OR OTHER AFFIRMATIVE ACTION IS REQUIRED TO PRESERVE THE RIGHTS OF LICENSOR)

BUT ALL REASONABLE COSTS AND EXPENSES SO INCURRED BY LICENSOR IN THAT EVENT SHALL BE REIMBURSED BY LICENSEE TO LICENSOR, TOGETHER WITH INTEREST ON THE SAME FROM THE DATE ANY SUCH EXPENSE WAS PAID BY LICENSOR UNTIL REIMBURSED BY LICENSEE, AT THE RATE OF INTEREST PROVIDED TO BE PAID ON JUDGMENTS, BY THE LAWS OF THE STATE OF TEXAS.

WITHOUT LIMITING THE FOREGOING, LICENSEE AGREES THAT LICENSEE SHALL INDEMNIFY, PROTECT, DEFEND AND SAVE LICENSOR HARMLESS FROM ANY AND ALL CLAIMS, LIENS, JUDGMENTS, SUITS, CAUSES OF ACTION, AND DEMANDS OF ANY SUBCONTRACTORS, LABORERS, WORKMEN, MECHANICS, MATERIALMEN, OR FURNISHERS OF MACHINERY AND PARTS THEREOF, EQUIPMENT, POWER TOOLS, OR SUPPLIES, IN CONNECTION WITH THE CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF THE PIPELINE OR OTHER PERMITTED FACILITIES DESCRIBED HEREIN.

WITHOUT LIMITING ANY OF THE FOREGOING, LICENSEE SHALL INDEMNIFY, PROTECT AND HOLD HARMLESS AND DEFEND EACH INDEMNITEE FROM ALL LIABILITIES, SUITS, ACTIONS, CLAIMS, DAMAGES, CAUSES OF ACTION, CHARGES, JUDGMENTS, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF ANY INJURIES OR DAMAGES RECEIVED OR SUSTAINED BY ANY PERSON OR PERSONS OR PROPERTY ON ACCOUNT OF ANY NEGLIGENT ACT OF ANY INDEMNITEE, WHETHER SUCH NEGLIGENT ACT WAS THE SOLE PROXIMATE CAUSE OF THE INJURY OR DAMAGE OR A PROXIMATE CAUSE JOINTLY AND CONCURRENTLY WITH LICENSEE OR LICENSEE'S EMPLOYEES', REPRESENTATIVES', AGENTS', CONTRACTORS' OR SUBCONTRACTORS' NEGLIGENCE, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS LICENSE, INCLUDING, WITHOUT LIMITATION, SUCH NEGLIGENT ACTS ARISING FROM OR IN ANY WAY CONNECTED WITH THE PLACEMENT, CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF ANY PART OF LICENSEE'S PIPELINE OR PERMITTED FACILITIES ON LICENSOR'S PROPERTY. LICENSEE WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST LICENSOR OR ANY INDEMNITEE, INCLUDING RELATED ATTORNEY'S FEES.

WITHOUT LIMITING ANY OF THE FOREGOING, LICENSEE, ITS SUCCESSORS AND ASSIGNS, SHALL INDEMNIFY, PROTECT, DEFEND AND HOLD INDEMNITEES HARMLESS FROM AND AGAINST ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, PERSONAL INJURIES, PROPERTY DAMAGE, AND ALL COSTS AND EXPENSES INCURRED IN CONNECTION THEREWITH (INCLUDING, BUT NOT LIMITED TO, ATTORNEYS'

FEES AND EXPENSES, INCLUDING, WITHOUT LIMITATION, ALL ATTORNEYS' FEES AND EXPENSES INCURRED IN ENFORCING THIS INDEMNITY) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY, DIRECTLY OR INDIRECTLY ARISING OUT OF, CAUSED BY OR RESULTING FROM (IN WHOLE OR IN PART) (i) FAILURE OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER (COLLECTIVELY, THE "INDEMNIFYING PARTIES"), TO COMPLY WITH ALL APPLICABLE LOCAL, FEDERAL AND/OR STATE ENVIRONMENTAL LAWS, INCLUDING BUT NOT LIMITED TO THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) AND THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA) (AS THEY MAY BE REAUTHORIZED AND/OR AMENDED) AND ALL OTHER LOCAL, FEDERAL AND STATE LAWS, IN CONNECTION WITH OR RELATED TO ANY INDEMNIFYING PARTY'S OPERATIONS OR ACTIVITIES ON THE PROPERTY, OR (ii) ANY INDEMNIFYING PARTY'S HANDLING, STORING, RELEASING OR TRANSPORTING OR DISPOSING OF ALL SUBSTANCES, INCLUDING BUT NOT LIMITED TO HAZARDOUS SUBSTANCES AND HAZARDOUS WASTES, ON OR FROM THE PROPERTY OR ANY OTHER LANDS OF LICENSOR.

IT IS THE INTENTION OF THE PARTIES HERETO THAT THE PROVISIONS OF THIS INDEMNIFICATION SHALL APPLY TO AND PROTECT EACH INDEMNITEE FROM THE CONSEQUENCES OF STRICT LIABILITY IMPOSED OR THREATENED TO BE IMPOSED ON SUCH INDEMNITEE, AS WELL AS FROM THE CONSEQUENCES OF THE NEGLIGENCE OF ANY INDEMNITEE, WHETHER OR NOT THAT NEGLIGENCE IS A CONTRIBUTING OR CONCURRING CAUSE OF ANY LIABILITY INDEMNIFIED AGAINST IN THIS ARTICLE IV.B.

THE TERMS, PROVISIONS, REQUIREMENTS AND OBLIGATIONS OF THIS ARTICLE IV.B. SHALL SURVIVE TERMINATION OR EXPIRATION OF THIS LICENSE, AND SHALL NOT BE LIMITED BY OR TO DAMAGES, COMPENSATION OR BENEFITS PAYABLE UNDER INSURANCE POLICIES, WORKER'S COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEES' BENEFIT ACTS.

C. Assignment. The provisions of this License shall inure to the benefit of and be binding upon Licensor and Licensee and their respective successors and permitted assigns. The rights and privileges granted by Licensor under this License inure to the benefit of Licensee. No rights, privileges or obligations hereunder shall be assignable by Licensee without the express prior written consent of Licensor. Any required consent is to be evidenced by a letter written by Licensor's City Manager that fully recites the terms and conditions, if any, upon which consent is given. The granting of consent is in the sole discretion of Licensor's City Manager

D. Independent Contractor. It is expressly understood and agreed that Licensee shall perform all work described herein as an independent contractor and not as an officer, agent, servant or employee of Licensor; that Licensee shall have exclusive control of and the exclusive right to control the details of the work performed hereunder, and all persons performing the same; and shall be solely responsible for the acts and omissions of its officers, agents, employees, contractors

and subcontractors; that the doctrine of respondeat superior shall not apply as between Licensor and Licensee, its officers, agents, employees, contractors and subcontractors; and that nothing herein shall be construed as creating a partnership or joint enterprise between Licensor and Licensee. No person performing any of the work described hereunder shall be considered an officer, agent, servant or employee of Licensor. Further, it is specifically understood and agreed that nothing in this License is intended or shall be construed as creating a "Community of Pecuniary Interest" or "An Equal Right of Control" which would give rise to vicarious liability. Licensee shall be an independent contractor under this License and shall assume all of the rights, obligations and liabilities applicable to it as such independent contractor hereunder. Licensor does not have the power to direct the order in which the work is done. Licensor shall not have the right to control the means, methods or details of Licensee's work. Licensee shall assume exclusive responsibility for the work. Licensee is entirely free to do the work in its own way. The provisions of this subparagraph (D.) shall not be deemed or construed as contradicting, limiting or conflicting with the provisions of subparagraph (M.) below.

E. Attorney Fees. SHOULD LICENSOR BE REQUIRED TO RESORT TO EMPLOYMENT OF ATTORNEYS TO ENFORCE THIS LICENSE, OR ANY OF ITS RIGHTS UNDER THIS LICENSE, LICENSOR SHALL BE ENTITLED TO REIMBURSEMENT FROM LICENSEE FOR LICENSOR'S ATTORNEYS' FEES. LICENSEE SHALL REIMBURSE LICENSOR FOR LICENSOR'S ATTORNEYS' FEES INCURRED IN CONNECTION WITH THE PREPARATION AND NEGOTIATION OF THIS LICENSE. BY EXECUTING THIS LICENSE, LICENSEE AGREES TO WAIVE, AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE, ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST LICENSOR REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THIS LICENSE, OR THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LICENSE. WITHOUT LIMITING THE FOREGOING, LICENSEE SPECIFICALLY AGREES THAT IF LICENSEE BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS LICENSE, OR TO THE CONSTRUCTION, INTERPRETATION, VALIDITY OR BREACH OF THIS LICENSE, INCLUDING BUT NOT LIMITED TO ANY ACTION PURSUANT TO THE PROVISIONS OF THE TEXAS UNIFORM DECLARATORY JUDGMENTS ACT (TEXAS CIVIL PRACTICE AND REMEDIES CODE SECTION 37.001, ET SEQ., AS AMENDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, LICENSEE AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH LICENSEE MIGHT OTHERWISE BE ENTITLED.

LICENSEE AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING, KNOWN RIGHT. LICENSEE ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THIS LICENSE. LICENSEE FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN LICENSOR AND LICENSEE. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF GOVERNMENTAL IMMUNITY.

LICENSEE AND LICENSOR ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS LICENSE WITH LEGAL

COUNSEL PRIOR TO ITS EXECUTION.

F. Governing Law & Venue. All performance and payments made pursuant to this License shall be deemed to have occurred in Midland County, Texas. Exclusive venue for any claims, suits or any other action arising from or connected in any way to this License, or the performance of this License shall be in Midland County, Texas. The obligations and undertakings of each of the parties to this License shall be deemed to have been performed in Midland County, Texas. This License shall be construed, interpreted and enforced under the laws of the State of Texas. The laws of the State of Texas shall govern, construe and enforce all the rights and duties of the parties, including but not limited to tort claims and any and all other claims or disputes, arising from or relating in any way to the subject matter of this License, without regard to conflict of laws and rules that would direct application of the laws of another jurisdiction.

G. Release. NOTWITHSTANDING ANY OTHER PROVISIONS OF THIS LICENSE, LICENSEE HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES LICENSOR, AND LICENSOR'S EMPLOYEES AND OFFICERS FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH LICENSEE HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKINGS CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS, OR LICENSOR'S NEGLIGENCE.

H. Governmental Immunity. By executing this License, Licensor is not waiving its right of governmental immunity. Licensor is retaining its immunity from suit. Licensor is not granting consent to be sued by legislative resolution or action. **THERE IS NO WAIVER OF GOVERNMENTAL IMMUNITY.**

I. Third Party Beneficiary. Except as provided in Article IV.B. above with respect to Indemnitees, (i) Licensor's granting of this License does not create any third-party beneficiary, (ii) there is no third-party beneficiary to this License, and (iii) no person or entity who is not a party to this License shall have any third party beneficiary or other rights hereunder.

J. Notices. Any notice or communication required in the administration of this License shall be sent by certified mail, return receipt requested, to the parties' respective mailing addresses as set forth hereinabove.

K. Notice of Alleged Breach; Statutory Prerequisite. Without limiting the provisions of Article IV.G. above, as a condition precedent to filing suit for alleged damages incurred by an alleged breach of an express or implied provision of this License, Licensee or its legal representative, shall give the City Manager, or any other reasonable official of Licensor, notice in writing (consisting of one (1) original and seven (7) copies of notice attached to a copy of this License) of such damages, duly verified, within one hundred eighty (180) days after the same has been sustained. The discovery rule does not apply to the giving of this notice. The notice shall include when, where and how the damages occurred, the apparent extent thereof, the amount of damages sustained, the amount for which Licensee will settle, the physical and mailing addresses of Licensee at the time and date the claim was presented and the physical and mailing addresses of Licensee for the six (6) months immediately preceding the occurrence of such damages, and the names and addresses

of the witnesses upon whom Licensee relies to establish its claim; and a failure to so notify the City Manager or other such official of Licensor within the time and manner provided herein shall exonerate, excuse and except Licensor from any liability whatsoever. Licensor is under no obligation to provide notice to Licensee that Licensee's notice is insufficient. Licensor reserves the right to request reasonable additional information regarding the claim. Said additional information shall be supplied within thirty (30) days after receipt of notice.

The statutory prerequisites outlined herein constitute jurisdictional requirements pursuant to Section 271.154 of the Texas Local Government Code and Section 311.034 of the Texas Government Code. Notwithstanding any other provision, Licensee's failure to comply with the requirements herein shall perpetually bar Licensee's claim for damages under Chapter 271 of the Texas Local Government Code, and Section 311.034 of the Texas Government Code, regardless if Licensor has actual or constructive notice or knowledge of said claim or alleged damages. Licensee agrees that the requirements of this entire License are reasonable.

L. Consideration. The terms of this License are supported by good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties named herein.

M. Waiver of Governmental Immunity; Chapter 271, TEX. LOC. GOV'T CODE. The parties hereto agree that this License does not constitute a "Contract" for providing goods and/or services to Licensor as discussed in Subchapter I of Chapter 271 of the Texas Local Government Code, and Licensor does not waive, to the maximum extent allowed by law, any constitutional, statutory or common law right to sovereign immunity or governmental immunity from liability or suit. Licensor expressly does not consent to be sued or be liable. To the maximum extent allowed by law, nothing in this License constitutes a waiver of Licensor's governmental immunity and the parties hereto expressly agree that this License shall not constitute, nor be interpreted as a waiver of Licensor's governmental immunity under Subchapter I of Chapter 271 of the Texas Local Government Code, nor shall it constitute nor be interpreted as a waiver of Licensor's governmental immunity for the benefit of any third-party lacking privity to this License.

This License does not obligate Licensee to use the Property to construct, repair, operate, replace, or maintain Licensor's facilities or structures described herein, rather, it merely prohibits Licensee from using the Property for any other purpose. This License restricts the use of the Property to a specific purpose but does not require the use of the Property for a specific purpose. Licensee is not providing a service to Licensor. Licensee is paying Licensor for temporary rights in real property, not for a service. Any such provision shall be deemed to be a covenant against noncomplying use, not a covenant to use. Licensee's use of the Property in compliance with a restriction shall not constitute a service, and such complying use shall not operate to waive Licensor's governmental immunity.

N. Compliance. Licensee agrees that it shall comply with Texas Government Code Section 2252.908, as amended, to the extent that this statute applies to this License. Licensee agrees that it shall comply with Texas Local Government Code Section 176.006, as amended, to the extent that this statute applies to this License.

O. Texas Historical Commission Survey. Licensee agrees that it shall comply with Chapter 191 of the Texas Natural Resources Code. By executing this License, Licensee represents that it has contacted the Texas Historical Commission (the "Commission") for the purpose of determining

whether the Commission will request that an archaeological survey be completed before Licensee commences operations on the Property, as contemplated herein. Licensee agrees that it shall complete or cause to be completed an archaeological survey before commencing any operations on the Property if the Commission so requests and deliver the same to Licensors. Notwithstanding any provision contained herein, in the event that any site, object, artifact, or other feature of archaeological, scientific, educational, cultural, or historical interest is encountered during the operations authorized by this License, Licensee will immediately notify Licensors and the Commission so that adequate measures may be undertaken to protect or recover such discoveries or findings, as deemed appropriate by Licensors or the Commission.

P. Waiver. No waiver of any of the provisions of this License shall be deemed or constitute a waiver of any other provisions of this License, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided. Likewise, the failure of Licensors to enforce any provision of this License shall not be deemed nor shall constitute a waiver of the right of Licensors to enforce such provision.

Q. Counterpart Execution. This License may be executed in several counterparts, and any such agreement shall be deemed an original for all intents and purposes.

R. No Release of Liability. Notwithstanding anything to the contrary contained in this License, the termination or expiration of this License shall not relieve Licensee of any liability, duty or obligation under this License, nor shall it preclude Licensors from asserting any right to specific performance, damages or any other rights or remedies to which Licensors may be entitled. Upon termination or expiration of this License for any reason, Licensee shall execute and deliver a recordable release of this License to Licensors in form and substance satisfactory to Licensors.

S. Entire Agreement. This License constitutes the entire agreement between Licensors and Licensee concerning the subject matter hereof, superseding all negotiations, prior discussions, prior licenses and prior agreements and understandings related to the subject matter hereof. This License may only be amended by written instrument executed by Licensors and Licensee.

[Signature Pages Follow]

**LICENSOR:
CITY OF MIDLAND, TEXAS**

By: _____
Robert Patrick, City Manager

ATTEST:

Marcia Bentley-German, City Secretary

APPROVED AS TO CONTENT AND
COMPLETENESS:

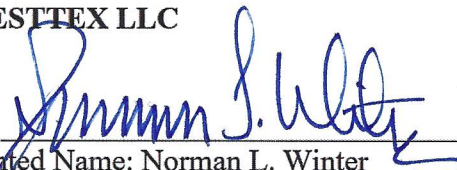
Carl Craig, Director of Utilities

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

LICENSEE:

**TARGA PIPELINE MID-CONTINENT
WESTTEX LLC**

By: 

Printed Name: Norman L. Winter

Title: Vice President of Land and ROW

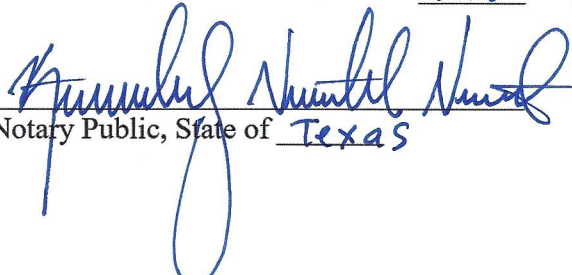
THE STATE OF Texas

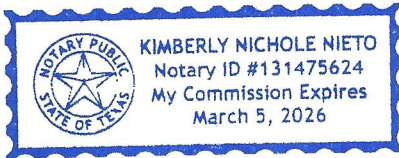
COUNTY OF Harris

§
§
§

BEFORE ME, the undersigned authority, on this 22nd day of March, 2023 personally appeared Norman L. Winter an officer of Targa Pipeline Mid-Continent WestTex LLC known to me to be the person and official whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed of said entity, for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 22nd day of March, 2023.


Notary Public, State of Texas





City Council Meeting

Item Number: 13
Meeting Date: April 11, 2023
To: City Council / City Manager
From: Jeffrey Fisher, Senior Planner
Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 1B, BLOCK 33, NORTHGATE ADDITION, SECTION 24, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF NORTH MIDLAND DRIVE AND BRIARWOOD AVENUE); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 1) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Allen Perez, is requesting a zone change from PD, Planned Development for a Shopping Center to PD, Planned Development for a Shopping Center to amend the adopted site plan for a gasoline service station.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the City.

Current Zoning:

PD, Planned Development District for a Shopping Center (Ordinance 7270).

Surrounding Zoning and Land Use:

The property to the north is zoned PD, Planned District for a Shopping Center, and is the location of retail stores and a gasoline service station. The property to the east is zoned PD, Planned District for a Housing Project, and the location of single-family residences. The property to the south and west is zoned PD, Planned District for a Shopping Center, and the location of a Walmart store.

Discussion:

The applicant, Allen Perez, is requesting to amend PD, Planned Development for a Shopping Center to update the site plan to reflect the improvements to the site not shown on the current exhibit. The amended elevations and site plan details the construction of a 1,400± square foot retail service store, replacing the original 122 ± square foot store; the construction of a new 7,450± square foot fuel pump canopy, replacing the original 2,688± square foot canopy; and the addition of four fuel pump islands bringing the total to eight.

This proposed zone change has been circulated to the respective City departments for internal review and their comments, conditions, and requirements are as follows:

Fire: (Approved)

No objection.

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Engineering: (Approved)

No objection to zone change. [For the Applicant's information only.] Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.]

Code: (Approved)

No Oil and Gas Issues. Informational: No Oil or Gas wells identified within 500 ft. permitted well radius or in the 135 ft. non-permitted well radius of location on plat. Please note if oil & gas wells are not identified or left off plat, this could prevent receiving city permits for structures. Any plugged and abandoned (P&A) well would need to be identified. No construction is

allowed on top of P&A wells.

Transportation: (Approved)

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.] No objection to zone change. [For the Applicant's information only.]

Planning:

The request complies with the Tall City Tomorrow Comprehensive Plan, Chapter 3-Land Use Vision. The land use map indicates that this area shall be used for CC, Community Commercial developments. These areas are designed to be utilized by major community and regional commercial developments that are both large in scale and have high traffic impact.

This request was recommended for approval at the March 20, 2023, Planning and Zoning Commission meeting.

Staff recommends approval of this request subject to conditions A through C.

Conditions:

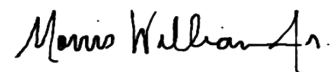
- A. That the Property shall significantly conform to the site plan and elevation drawings which are attached hereto, respectively, as Exhibits "A" and "B" and incorporated herein for all purposes; provided, however, that the signage shown in Exhibit "B" is illustrative only, and all signage shall conform to the regulations set forth in Title XI, Chapter 7a of the City Code.**
- B. That to the extent that Exhibit "A" requires six parking spaces to be located on Lot 1A, Block 33, Northgate Addition, Section 24, City and County of Midland, Texas (the "Adjacent Lot"), the owner of the Property shall ensure that such parking spaces are provided on said Adjacent Lot.**
- C. That all outdoor light fixtures shall be designed to avoid direct light from shining beyond the boundaries of the Property.**

Letters of Objection:

As of March 29, 2023, Staff has received no letters of objection to the request.

Attachments:

Application
Site Plan (Exhibit A)
Building Elevations (Exhibit B)
Maps
Ordinance 7270
Ordinance 7844



City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT
MAP OF THE CITY OF MIDLAND TO REZONE LOT
1B, BLOCK 33, NORTHGATE ADDITION, SECTION 24,
CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD,
PLANNED DEVELOPMENT DISTRICT FOR A
SHOPPING CENTER TO AN AMENDED PD, PLANNED
DEVELOPMENT DISTRICT FOR A SHOPPING

WHEREAS, the City Planning and Zoning Commission and the Governing Body
of

SOUTHWEST CORNER OF THE INTERSECTION OF

the City of Midland, in compliance with the City Charter, the City Code, and State law,
have

AVENUE); CONTAINING A CUMULATIVE CLAUSE;

given the request and by a unanimous vote and, subdivision and otherwise; and after
a full

CLAUSE; PROVIDING FOR A MAXIMUM PENALTY

and fair hearing to all of the property owners generally and particularly to those
interested

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is
AND ORDERING PUBLICATION

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE
persons situated in the affected area and in the vicinity thereof of the Governing Body
CITY OF MIDLAND, TEXAS:
finds

that the public health, safety and general welfare will be best served by rezoning
Center.

Block 33, Northgate Addition, Section 24, City and County of Midland, Texas
(the development

"Property") to an amended PD, Planned Development District for a Shopping
SECTION THREE. That a site plan, which is attached hereto as Exhibit "A" and
General
PACKET 13.5 April 25, 2023

and, upon a site plan therefor, as set out hereinafter;

incorporated herein for all purposes, is hereby adopted, and the use and development of the Property shall be subject to the following conditions and

restrictions:

A. That the Property shall significantly conform to the site plan and elevation

drawings which are attached hereto, respectively, as Exhibits "A" and "B" and

B. That to the extent that Exhibit "A" requires six parking spaces to be located on the Property, the same shall be incorporated herein for all purposes; provided, however, that the signage

C. That all outdoor light fixtures shall be designed to avoid direct light shown in Exhibit "B" is illustrative only, and all signage shall conform to the

Midland, Texas (the "Adjacent Lot"); the owner of the Property shall not allow any light to shine beyond the boundaries of the Property. If any section, subsection, sentence, clause, or phrase is declared unconstitutional, the remainder of this ordinance shall remain in full force and effect.

that such parking spaces are provided on said Adjacent Lot.

the City Code for the City of Midland, Texas, shall be applicable to all such ordinances as shall be adopted by the City Council of Midland, Texas.

SECTION FIVE. The provisions of this ordinance are to be cumulative of all other

ordinances or parts of ordinances governing or regulating the same subject matter as that

Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more

sections, subsections, sentences, clauses, or phrases be declared unconstitutional or expressly repealed to the extent of any such inconsistency or conflict.

SECTION SEVEN. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code

(\$2,000.00).

SECTION EIGHT. The City Secretary is hereby authorized and directed to the descriptive caption of this ordinance in the manner and for the length of time ^{publish} prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on

first reading, the _____ day of _____, A.D., 2023; and passed to second reading

Council members voting "AYE":
on motion of Council member _____, seconded by Council member

Council members voting "NAY":

_____, by the following vote:
The above and foregoing ordinance was read in full and finally adopted by the

following vote upon motion of Council member _____, seconded by Council

Council members voting "AYE":
member _____, on the _____ day of _____, A.D., 2023, at a regular

Council members voting "NAY":
meeting of the City Council:

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

Lori Merritt Blong, Mayor

ATTEST:

Marcia Bentley-German, City Secretary

PACKET

APPROVED AS TO CONTENT

AND COMPLETENESS:

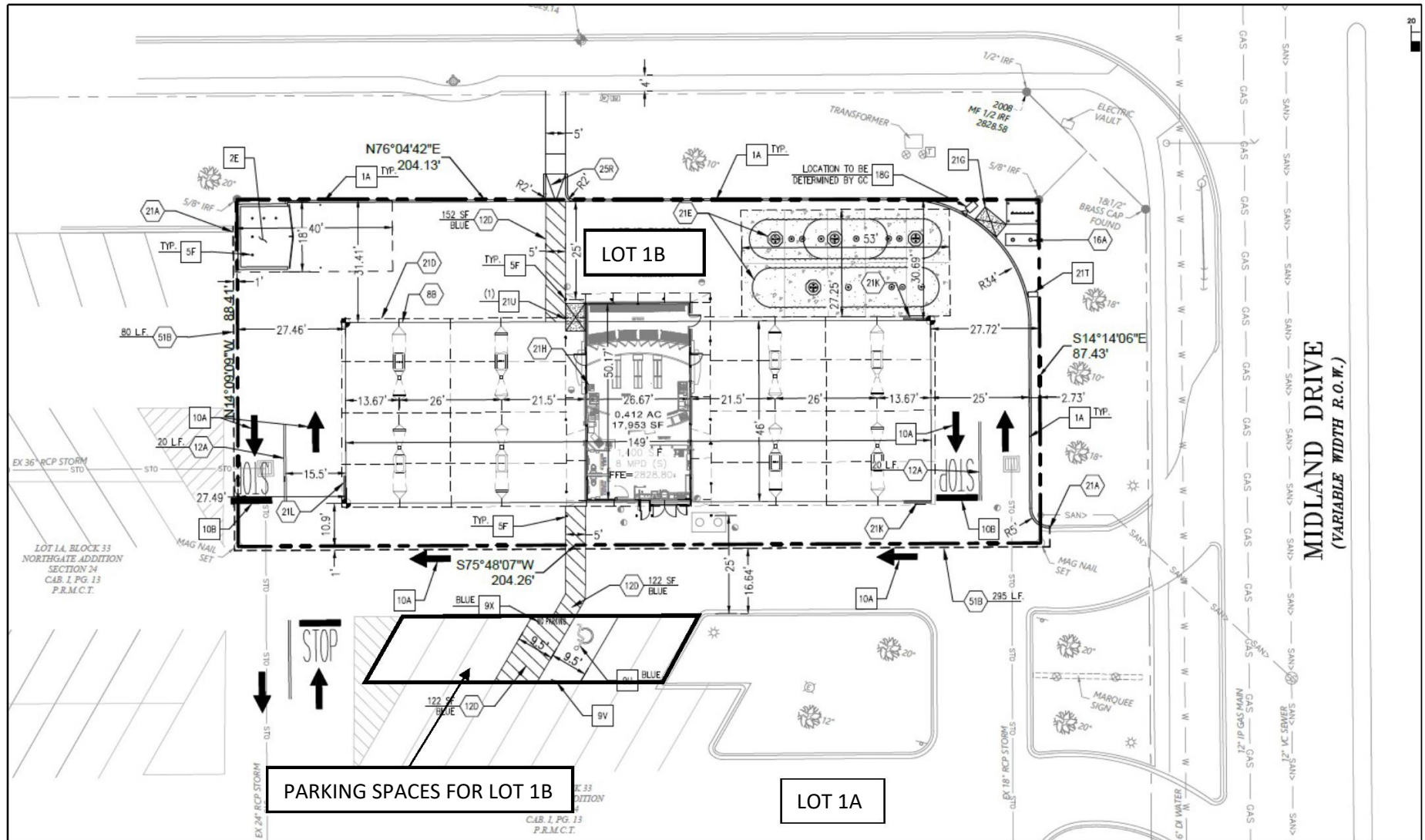
Charles Harrington, Director of Development
Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

Exhibit "A"

Site Plan



ACM CANOPY
DASCHENUS 2862
PULP WHITE SW #7005
FASCIA
18'-9"
BAND ACCENT
15'-0"
BAND ACCENT
14'-6"
BUILDING
13'-10"
MELODY RIM DORMER
ACQUINCE P/SHUSHED
ALUMINUM P/SHUSHED
BELL SCALLOP
VELOUR 35 LITE-8 LIGHT SANDSTONE
CANOPY COLUMNS - PAINTED DORMER
DORMER SHUTTER - PAINTED DORMER
VELOUR 35 LITE-8 LIGHT SANDSTONE
VELOUR 35 LITE-8 LIGHT SANDSTONE
ELEVATION
0'-0"

2 ELEVATION - RIGHT
(FACING WEST)

AC CANOPY FASCIA BRUSHED
ALUMINUM BY ARCONIC
FASCIA
18" 0"
BAND ACCENT
25" 0"
BAND ACCENT
44" 0"
BUILDING
13' 10"
HORIZONTAL METAL ACCENT BAND-
PURE WHITE SW #7005
METAL TRIM DOORS & BROWN SW
#2500A
BROWN
BE BROWN DOORS LIGHT SANDSTONE
VELOUR BY ENDICOTT
CANOPY SYSTEMS PAINTED DORMER
VELOUR BY ENDICOTT LIGHT SANDSTONE
VELOUR BY ENDICOTT CERAMICS
ELEVATION
0" 0"
METAL DOORS AND FRAMES TO BE
BROWN SW #7521

4 ELEVATION - LEFT
(FACING EAST)

8'-0" HIGH
ENCLOSURE - CMU
BLOCK, PAINTED
DORMER
BROWN SW #7521
FURNISHED
AND INSTALLED BY
DORMER
BROWN SW #7521
(FURNISHED
AND INSTALLED BY
GC)

11'-9"

T.O.
PYLON
30'-0"

6 PYLON
SIGN

BUILDING	QTY	HEIGHT	WIDT	AREA	TOTAL
SIGNAGE CANOPY	2			67.7	59.5
GRAPHIC					
SIGN SIGN PRICE	1	24.13	14.00	7.5	17.5
SIGN TUMK)					
BUILDING & TOTAL SIGNAGE:					87.06 S.F.
PYLON					
SIGN LED	1	105.0	141.0	102.8	102.8
DIESEL					
FUEL	1	43.13	85.00	25.4	25.4
AVAILABLE					
28 Pylon Signs Signage:					144.80
SIGNAGE:	3				51.86 S.F.
TOTAL SIGN					

13.10

APR 25 2023
MIDLAND, TX (4517-B
MIDLAND DRIVE)
NOV 11 2022
08, 2022 #608



**Zone Change/Planned District
Amendment/Site Plan Approval**

Project Number: 2-23-0322
Case Number: _____

Applicant (if acting as Agent, see affidavit on page 2)

Printed Name: Allen Perez

Phone (214) 705 3175

Email
aperez@jmcivileng.com

Address

1101 Central Expressway S #215

City

Allen

State

TX

Zip

75013

Property Owner

Printed Name: Terry Rigdon - Murphy Oil USA

Phone (214) 705 3175

Email
214 705 3175

Address

200 E Peach St

City

El Dorado

State

AR

Zip

71730

Representative (if different from Applicant or Property Owner)

Firm: _____

Printed Name: Allen Perez

Phone (214) 705 3175

Email
aperez@jmcivileng.com

Address

1101 Central Expressway S #215

City

Allen

State

TX

Zip

75013

Street Address: 4517-B Midland Dr. Midland, TX 79707

Legal Description

Lot: 1B Block: 33 Subdivision: NORTHGATE ADDITION

Current Zoning:

PD-7844 & PD-7270 / Underlying Zoning RR – Regional Retail

Proposed Zone: no change

(List by tracts if more than one district is requested)

Reason for Zone Change Request: Per city staff - PD Amendment required to rebuild on lot

Present Use of Property: Murphy USA fueling station

Proposed Use of Property: Murphy USA fueling station

How would this zone change affect the public health, safety and welfare? N/A

Describe how conditions affecting the property have changed since present zoning designation: N/A

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Site Plan
- Digital Copies of Site Plan (PDF/JPEG)

Signature (by property owner only – authorized agent must sign affidavit below)	
Applicant (signature): <u>Allen Perez</u>	Date: 02/07/2023
Applicant (printed): Allen Perez	
Property Owner (signature): <u>Terry W. Rigdon</u>	Date: 02/07/2023
Property Owner (printed): Terry W Rigdon	
The Zone Change/Planned District Amendment/Site Plan Approval shall be considered officially received in the Planning office <u>only</u> when it has been submitted in <u>full compliance</u> with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received. All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.	

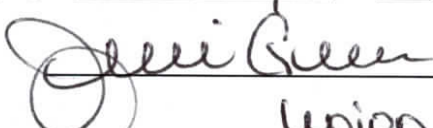
STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appear Terry Rigdon who, being by me duly sworn, upon oath says: That (s)he is the owner of _____ or authorized by Murphy O. Lusk the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.


 Authorized Agent (signature)

Subscribed and sworn to before me, this 7th day of February, 2023, to certify which witness my hand and seal of office.

JERRI GREER
UNION COUNTY
NOTARY PUBLIC - ARKANSAS
My Commission Expires August 22, 2026
Commission No. 12698642


Union AR
 NOTARY PUBLIC, ~~MIDLAND~~ COUNTY, TEXAS

FOR OFFICE USE ONLY	
☒ Property Owner Authorization	☒ Dimensioned Site Plan
☒ Application Fee	☒ Plans in Digital Format (PDF/JPEG)
Check # <u>2282</u>	
Received By: <u>KN</u>	Date: _____

RECEIVED
 FEB 15 2023
 BY:



JM Civil Engineering
101 Central Expressway South, Suite 220
Allen, TX 75013

Date 02/14/23

To: Midland Development Services 300 N Loraine Midland, TX 79701 eshaughnessy@midlandtexas.gov (432) 685-7902	From:	Allen Perez
	RE:	Murphy USA PD Submittal
	Project Number:	

Sent Via:

☐ Fax ☐ US Mail ☐ For Your Use ☐ For Comment
☐ Overnight ☐ As Requested ☐ For Revision
☐ Electronic ☒ For Approval ☒ High Priority

Quantity	Description
1	Completed Application
1	Check for \$550.00
1	Full Sized Dimensioned Site plan
1	PDF on disc

Comments

To City of Midland Development Team,

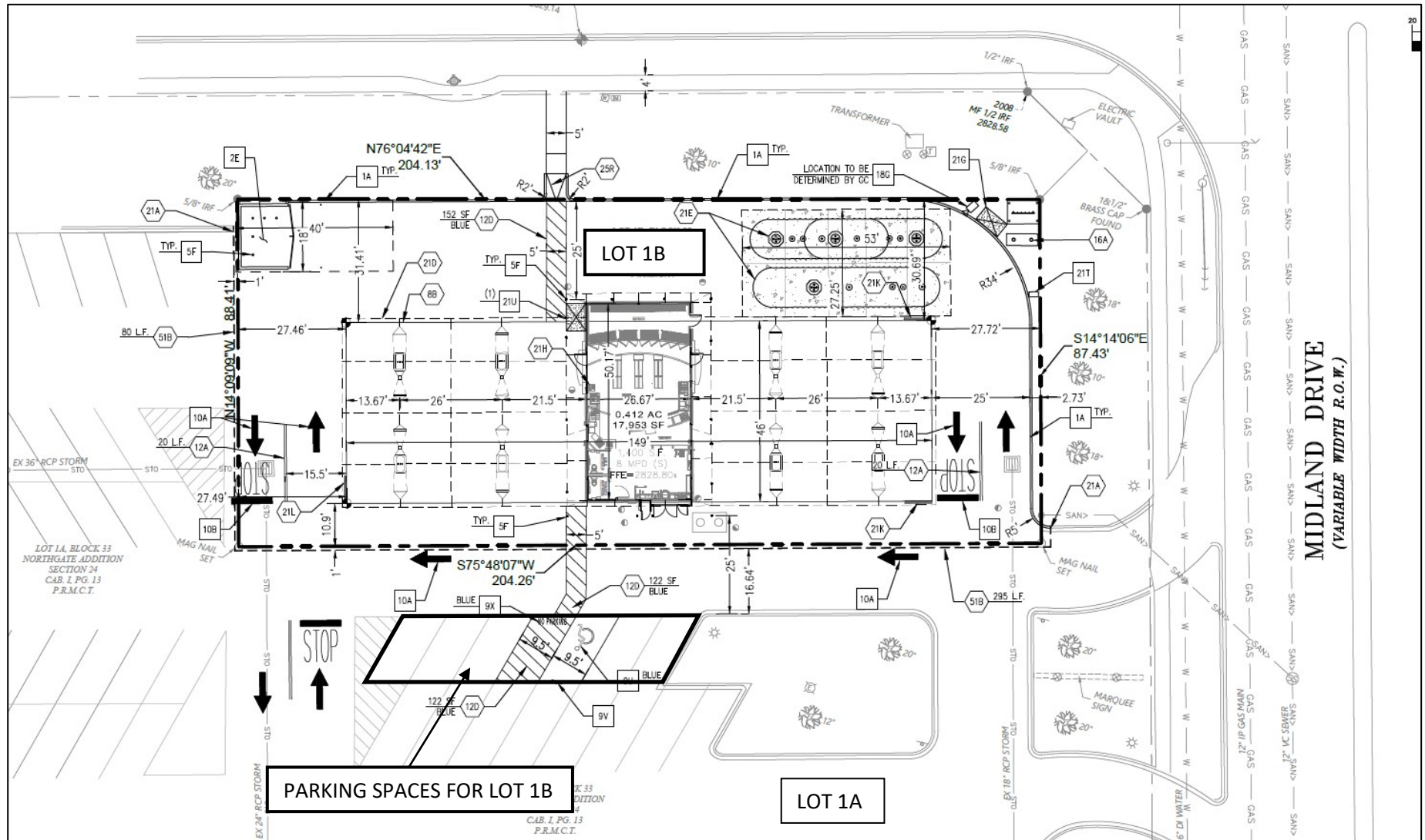
Enclosed is the PD submittal for the Murphy USA fueling station raze and rebuild. During the PreApplication meeting with staff it was indicated a PD Amendment would be required to build/rebuild on this lot.

Sincerely,

Allen Perez
Director of Development Services
JM Civil Engineering
1101 Central Expressway South, Suite 215
Allen, TX 75013
P: 214-705-3175 C: 504-908-7217 aperez@jmcivileng.com

Exhibit "A"

Site Plan



**1 ELEVATION - FRONT
(FACING NORTH)**

2 ELEVATION - RIGHT
(FACING WEST)

3 ELEVATION - REAR (FACING SOUTH)

4 ELEVATION - LEFT (FACING EAST)

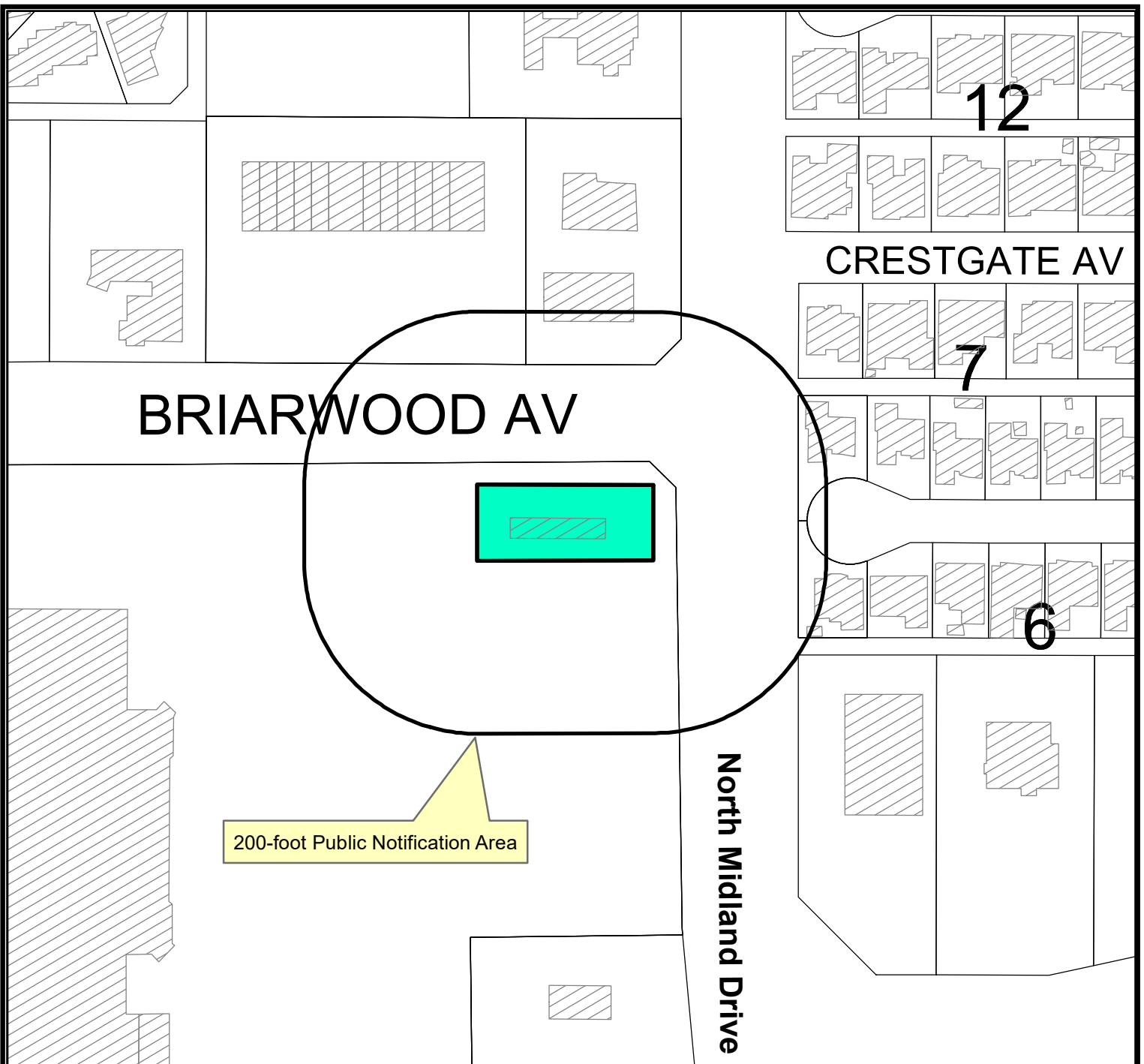
5 TRASH
ENCLOSURE

6 PYLON SIGN

PACKET

13.15

April 25, 2023
MIDLAND, TX (451)-B
MIDLAND DRIVE
NOVEMBER
08, 2022 #608



LOCATION MAP

Z-23-0322

Scale: 1" = 2,235'

Consider a request by Allen Perez for a zone change from PD, Planned Development District for a Shopping Center to an Amended PD, Planned Development District for a Shopping Center, on Lot 1B, Block 33, Northgate Addition, Section 24, City and County of Midland, Texas.

Generally located approximately 20-feet from the southwest corner of the intersection of Briarwood Avenue and North Midland Drive. (Council District 1)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS

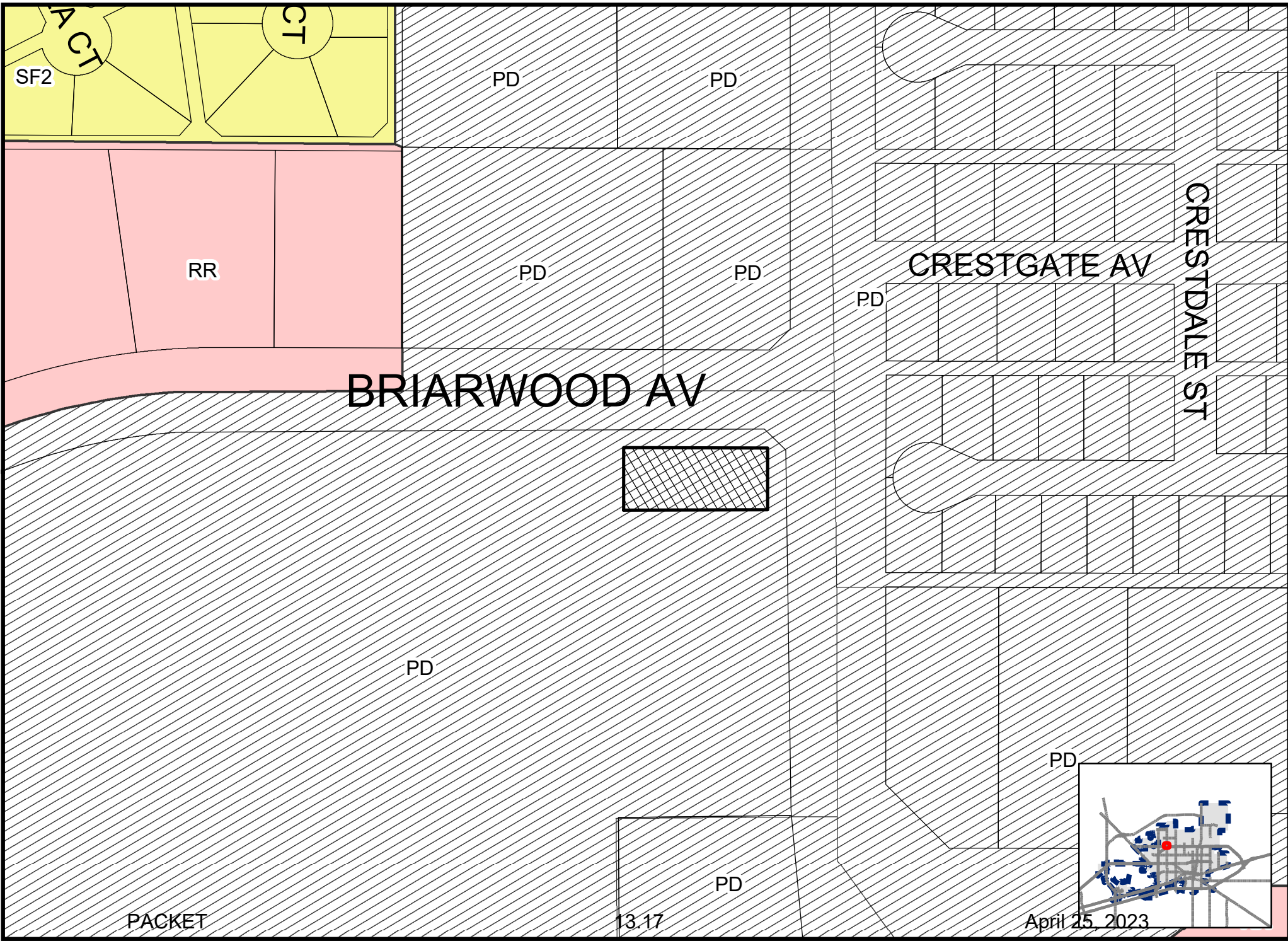


©THE CITY OF MIDLAND - 2021

April 25, 2023

THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY OR ENGINEERING TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.

THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.



ORDINANCE NO. 7270

AN ORDINANCE AMENDING CHAPTER ONE, TITLE XI, OF THE CITY CODE OF MIDLAND, TEXAS, BY PERMITTING THE PROPERTY DESCRIBED IN SECTION ONE HEREOF, WHICH IS PRESENTLY ZONED "LR-1" AND "LR-2", LOCAL RETAIL DISTRICTS, AND "PLANNED DISTRICT" FOR A SHOPPING CENTER, TO BE USED AS A "PLANNED DISTRICT" FOR A SHOPPING CENTER; PROVIDING FOR SUCH USE TO BE SUBJECT TO CERTAIN SPECIAL CONDITIONS AND RESTRICTIONS AS SET OUT HEREIN; PROVIDING THAT THE PROPERTY SHALL BE IMPROVED ACCORDING TO THE ORDINANCES, SITE PLAN AND OTHER SPECIFICATIONS SET OUT AND REFERRED TO HEREIN; CONTAINING A CUMULATIVE CLAUSE AND EXPRESSLY REPEALING ORDINANCE NO. 6417; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter and the State law with reference to the creation of "Planned Districts" under the zoning ordinance regulations and zoning map, have given the requisite notices by United States mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body finds that the public health, safety and general welfare will be best served by the creation of the "Planned District" set out hereinafter and subject to the conditions and restrictions set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That Chapter 1, Title XI, of the City Code of Midland, Texas, and the official zoning map of the City of Midland, Texas, are hereby amended insofar as the hereinafter described property is concerned, which is presently zoned "LR-1" and "LR-2", Local Retail Districts, and "Planned District" for a Shopping Center, and it shall be used as a "Planned District" for a Shopping Center, subject to the special conditions and restrictions hereinafter set out:

Said property is described as follows:

A 28.654 acre tract of land in the southeast part of Section 6, Block 39, H. P. Hilliard Survey, and the northeast part of Section 18, Block 39, T-1-S, T&P Ry. Co. Survey, Midland County, Texas, and being more fully described by metes and bounds as follows:

Beginning at a 1/2" iron rod found at a cutback corner in the west boundary line of Midland Drive in the southeast part of said Section 6, for the most easterly NE corner of Lot 1, Block 1, Briarwood Addition, Section 1, an addition to the City of Midland, Texas, plat of which is recorded in Cabinet D, Page 299, Midland County Plat Records for the most easterly NE corner of this tract, from which point the SE corner of said Section 6 bears N. 74° 55' 47" E., 62.35 feet and S. 15° 04' 13" E., 605 feet;

Thence S. 15° 17' 34" E., along the west boundary line of Midland Drive and east boundary line of Lot 1, 510 feet to a 1/2" iron rod found for a cutback corner for the most easterly SE corner of said Lot 1 and an interior corner of this tract;

Thence S. 19° 50' 05" E., at 95.33 feet pass the south boundary line of Section 6 and north boundary line of Section 18, continuing 205.72 feet in all to a 20d nail and tin tag found for an exterior easterly corner of Lot 6, Block 33, Northgate Addition, Section 10, an addition to the City of Midland, Texas, plat of which is recorded in Cabinet F, Page 4, Midland County Plat Records, for an exterior corner of this tract;

Thence S. 15° 13' 13" E., along the east boundary line of said Lot 6, 33.23 feet to a Texas Highway Department monument found in the north boundary line of State Loop Highway 250 for an exterior corner of said Lot 6 and this tract;

Thence S. 08° 56' E., along the east boundary of Lot 6 and north boundary line of State Loop Highway 250, 79.9 feet to a Texas Highway Department monument found for the SE corner of Lot 6 and this tract;

Thence N. 89° 31' 31" W., along the south boundary line of Lot 6, 276.65 feet to a point for the SW corner of Lot 6, NW corner of Lot 5, and an interior corner of this tract;

Thence S. 15° 12' 27" E., along the west boundary line of Lot 5, 107.09 feet to a 1/2" iron rod found for the SW corner of Lot 5 and an interior corner of this tract;

Thence S. 60° 08' 32" E., along the south boundary line of Lot 5, 127.72 feet to a 1/2" iron rod found in the north boundary line of State Loop Highway 250 for the SE corner of Lot 5 and an exterior corner of this tract;

Thence S. 39° 55' 33" W., along the north boundary line of State Loop Highway 250, at 227.56 feet pass the SW corner of Northgate Addition, Section 10, said point being the south boundary line of Lot 2, Block 33, Northgate Addition, Section 5, an addition to the City of Midland, Texas, plat of which is recorded in Cabinet C, Page 54, Midland County Plat Records, at 364.31 feet pass the SW corner of said Lot 2, continuing 628.61 feet in all to a point in the east boundary line of Northcrest Drive for the most southerly corner of Lot 1, Block 33, Northgate Addition, Section 5, and this tract;

Thence N. 50° 04' 27" W., along the east boundary line of Northcrest Drive and a south boundary line of said Lot 1, 97.11 feet to a point of curvature for a southerly corner of Lot 1 and this tract;

Thence northwesterly with a curve to the left, along the easterly boundary line of Northcrest Drive, Delta Angle = 54° 59' 46", Radius = 130 feet, Chord Bearing = N. 77° 34' 20" W., Chord Distance = 120.05, a distance on curve of 124.78 feet to a point of tangency in the southerly boundary line of Lot 1, for a southerly corner of this tract;

Thence S. 74° 55' 47" W., along the north boundary line of Northcrest Drive and south boundary line of Lot 1, 190 feet to a point of curvature for the most southerly SW corner of Lot 1 and this tract;

Thence northwesterly with a curve to the right along the north boundary line of Northcrest Drive, Delta Angle = 90°, Radius = 70 feet, Chord Bearing = N. 60° 04' 13" W., Chord Distance = 98.99 feet, a distance on curve of 109.96 feet to a point of tangency for the most westerly SW corner of lot 1 and this tract;

Thence N. 15° 04' 13" W., along the east boundary line of Northcrest Drive, at 435 feet pass the NW corner of Lot 1 in the south boundary line of Northgate Avenue, at 530 feet pass a 1/2" iron rod found in the north boundary line of Northgate Avenue for the SW corner of said Lot 1, Block 1, Briarwood Addition, Section 1, continuing in all 974.23 feet to a point of curvature for a westerly corner of said Lot 1 and this tract;

Thence northwesterly with a curve to the left along the east boundary line of Northcrest Drive and west boundary line of Lot 1, Delta Angle = 11° 08' 02", Radius = 465.06 feet, Chord Bearing = N. 20° 38' 14" W., Chord Distance = 90.23 feet, a distance on curve of 90.37 feet to a 1/1" iron rod found in the curved south boundary line of Briarwood Avenue for the NW corner of Lot 1 and this tract;

Thence northeasterly with a curve to the right along the south boundary line of Briarwood Avenue and north boundary line of Lot 1, Delta Angle = 22° 57' 58", Radius = 832.17 feet, Chord Bearing = N. 63° 26' 48" E., Chord Distance = 331.33 feet, a distance on curve of 333.56 feet to a point of tangency for a north corner of Lot 1 and this tract;

Thence N. 74° 55' 47" E., along the south boundary line of Briarwood Avenue and north boundary line of Lot 1, 780.23 feet to a 1/2" iron rod found at a cutback corner for the most northerly NE corner of Lot 1 and this tract;

Thence S. 60° 10' 53" E., along said cutback, 42.51 feet to the place of beginning and containing 1,248,177.78 square feet of land (28.654 acres).

SECTION TWO. That the property described in Section One hereof shall be subject to the following special conditions and restrictions:

1. That the use and development of this property including the proposed Garden Center as indicated on the site plan, attached hereto as Exhibit "A" and made a part hereof for all legal purposes, shall conform to the regulations of the "LR-2", Local Retail District, as they may be amended from time to time, except as stated otherwise below.

2. That, if Lot 1 as indicated on Exhibit "A" is developed for retail use, development shall conform to Exhibit "A" in all respects, except for the following conditions:

- a. All driveway locations except for the indicated TRUCK ACCESS ONLY driveway, located near the northwest corner of this site, shall be considered only as illustrative relative to location, directions of movements, and number.

- b. The indicated parking plan is for illustrative purposes only. The actual design and number of spaces shall

comply with the parking regulations of the Zoning Code.

3. That the Building Limits Line on Exhibit "A", Lot 1, depicts the maximum area within which buildings may be located on Lot 1.

4. That a portion of the facility may be used for a tire, battery and accessory facility in accordance with Midland City Code § 11-1-10-(a)(34), provided; however, that such facility be located at the southwest portion of the main retail building as shown on Exhibit "A" as "T.B.O.".

5. That the location of the Garden Center and Truck Area shall be at the southeast and west sides, respectively, of the main retail building within the general locations shown on Exhibit "A".

6. That the indicated screening walls along the west side of this tract shall be constructed to conform to Exhibit "A". The fence shall be a minimum of 6 feet in height, and shall be constructed of "Brickcrete" manufactured by American Technocrete Corporation, or equivalent, a modular concrete brick structure having the general appearance of a clay fired brick. Concrete masonry units (cinder block) shall not be used;

7. That landscaping shall be installed to conform to Exhibit "A". A tree shall be planted at each location depicted thereon and each shall have a minimum caliper of three inches at the time of planting. The maximum spacing measured from tree trunk to tree trunk between those trees located within 10 feet of Northcrest Drive shall be 40 feet. All areas not occupied by paving or buildings shall be planted in turf grass. An automatic sprinkler system shall be installed in all landscaped areas. Said landscaping shall be maintained in a healthy growing condition. The indicated dimensions between trees and tree groups shall be treated as maximum dimensions.

8. The outdoor lighting of this tract shall conform in all respects to the photometric plan attached hereto as Exhibit "B" and made a part hereof for all legal purposes. Any light fixtures installed on building walls within the Truck Area shall be designed and/or shielded so as to prevent light emanating directly from the light source of the fixtures from being visible anywhere beyond the west right of way of Northcrest Drive.

9. No development shall occur and no building permit shall be issued on Lot 2 shown on Exhibit "A" until a site plan has been reviewed and approved in the same manner as required for a zone change.

10. No development shall occur until the proposed lots shown on the site plan have been replatted according to the Midland Subdivision Code, to conform to the site plan;

11. That the west wall of the main building on Lot 1 shall be a minimum of 150 feet from the east line of Northcrest Drive.

12. That no advertising or business signs shall be located on the west wall of the main building as shown on Exhibit "A". Additionally, no advertising or business sign may be located on Lot 1 within 150 feet of the east line of Northcrest Drive.

SECTION THREE. That the definitions given in the zoning regulations contained in the City Code of the City of Midland, Texas, shall be applicable to such of those terms as are used

herein.

SECTION FOUR. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict, and Ordinance No. 6417 is expressly repealed.

SECTION FIVE. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION SIX. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars (\$2,000.00).

SECTION SEVEN. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the 24th day of August, A.D., 1993; and passed to second reading on motion of Council member Schneider, seconded by Council member Sipes, by the following vote:

Council members voting "AYE":	Schneider, Sipes, Faircloth, Egan and Brooks
Council members "ABSTAINING":	Morrow
Council members voting "NAY":	None

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member Cuevas, seconded by Council member Sipes, on the 14th day of September, A.D., 1993, at a regular meeting of the City Council:

Council members voting "AYE":	Cuevas, Sipes, Schneider, Faircloth, Egan and Brooks
Council members "ABSTAINING":	Morrow
Council members voting "NAY":	None

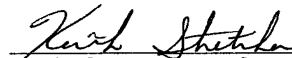
PASSED AND APPROVED THIS 14th day of September, A.D., 1993.


J. D. Faircloth, Mayor

ATTEST:


B. C. Clanton, City Secretary

APPROVED AS TO FORM:


Keith Stretcher, City Attorney

ORD\DunawayAssoc.PD

ORDINANCE NO. 7844

AN ORDINANCE ADOPTING AN AMENDED SITE PLAN
SUBJECT TO THE FOLLOWING CONDITIONS;
CONTAINING A CUMULATIVE CLAUSE; CONTAINING
A SAVINGS AND SEVERABILITY CLAUSE;
PROVIDING FOR A MAXIMUM PENALTY OR FINE OF
TWO THOUSAND DOLLARS (\$2,000.00); AND
ORDERING PUBLICATION

WHEREAS, by Ordinance No. 7270, adopted September 14,
1993, the City Council granted a "Planned District" for a
Shopping Center and adopted a site plan; and

WHEREAS, after a full and fair public hearing at which
all parties in interest were offered an opportunity to be
heard, all pursuant to law, the Council finds it to be in the
public interest to adopt an amended site plan pursuant to
Ordinance No. 7270 subject to special conditions;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE
CITY OF MIDLAND, TEXAS:

SECTION ONE. That the amended site plan attached hereto
as Exhibit "A" and "B" are hereby adopted as required by
Ordinance No. 7270, which created a "Planned District" for a
Shopping Center and is made a part hereof for all legal
purposes and subject to the following special conditions:

- A. That development of this property shall conform to the
conditions shown on Exhibits "A" and "B" in all respects,
except as otherwise stated below.
- B. That all outdoor light fixtures shall be designed so as
to avoid direct light from shining beyond the boundaries
of this lot.
- C. That all business signs shall conform to the regulations
set forth in Section 11-7 of the City Code.
- D. That a minimum of seven additional live oak trees shall
be planted along the north property line, adjacent to

Briarwood Avenue, with a minimum caliper of two inches at the time of planting. The minimum spacing between trees shall be 30 feet. Said landscaping shall be irrigated with an automatic sprinkler system, and shall be maintained in a healthy, growing condition.

SECTION TWO. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict including any inconsistency or conflict contained in Ordinance No. 7270.

SECTION THREE. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FOUR. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars (\$2,000.00).

SECTION FIVE. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the 27th day of April, A.D., 1999; and passed to second reading on motion of Council member Brooks, seconded by Council member Cuevas, by the following vote:

Council members voting "AYE": Brooks, Cuevas, Wood,
Brown, Burns and
Simpson

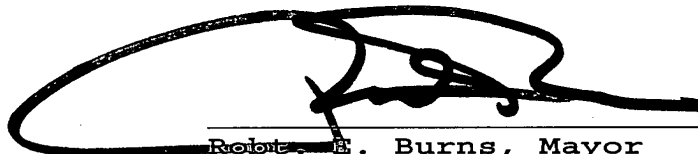
Council members voting "NAY": None

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member Cuevas, seconded by Council member Brooks, on the 11th day of May, A.D., 1999, at a regular meeting of the City Council:

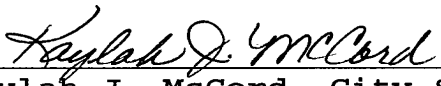
Council members voting "AYE": Cuevas, Brooks, Wood,
Brown, Burns and
Simpson

Council members voting "NAY": Washburn

PASSED AND APPROVED THIS 11th day of May,
A.D., 1999.


Robert E. Burns, Mayor

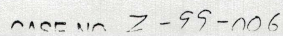
ATTEST:

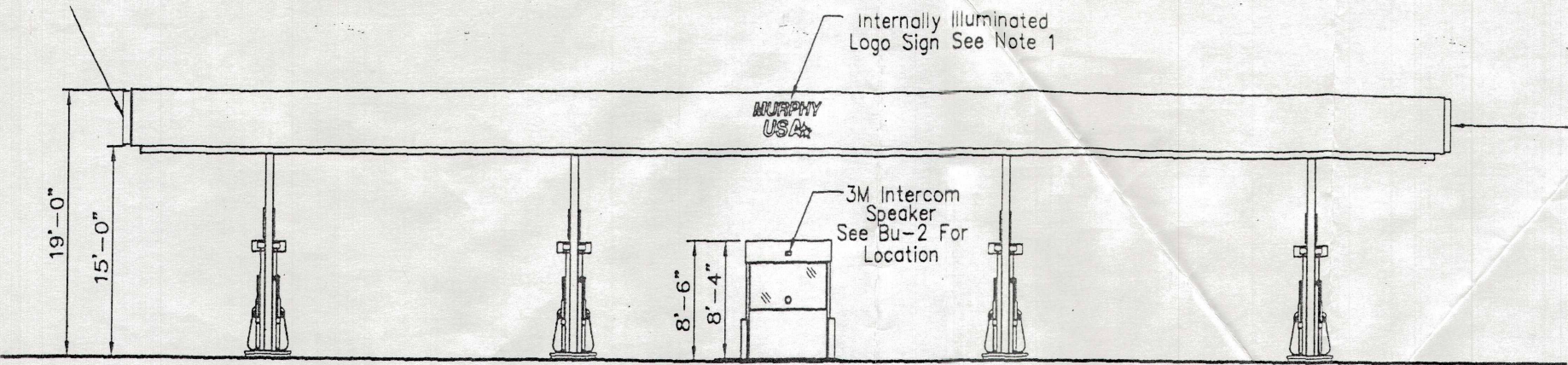

Kaylah J. McCord, City Secretary

APPROVED AS TO FORM:


Keith Stretcher, City Attorney

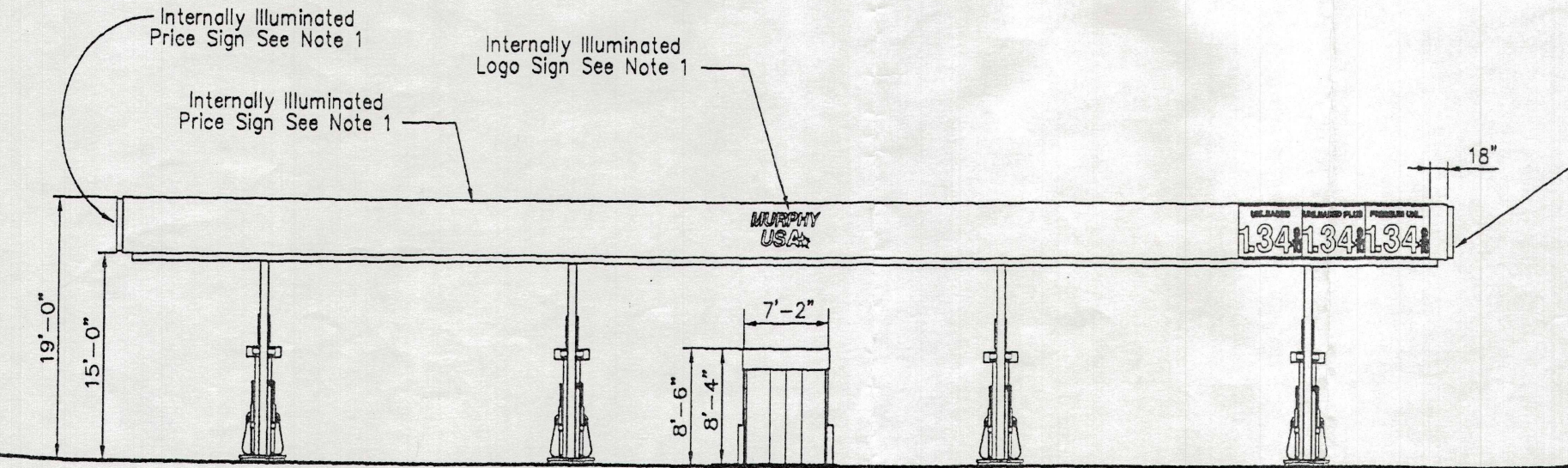
ord\planning\plndist\2-99-006





SITE CANOPY FRONT ELEVATION

SCALE: 1/8" = 1'-0"



RECEIVED

MAR 15 1999

PLANNING & DEVELOPMENT
CITY OF MIDLAND

SITE PLAN

PACKET

13.30

SITE CANOPY REAR ELEVATION

SCALE: 1/8" = 1'-0"

April 2000 **EXHIBIT B**

CASE NO. Z-99-006



PACKET

13.31

April 25, 2023









PACKET

13.35

April 25, 2023





City Council Meeting

Item Number: 14
Meeting Date: April 11, 2023
To: City Council / City Manager
From: Jeffrey Fisher, Senior Planner
Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 2, BLOCK 1, W. P. KNIGHT ADDITION, SECTION 2, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR AN OFFICE CENTER TO PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF SOUTH POWELL STREET AND WEST WALL STREET); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Alejandro Dominguez, is requesting a zone change from PD, Planned Development for an Office Center to PD, Planned Development for a Shopping Center to allow for hotel and restaurant use.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the City.

Current Zoning:

PD, Planned Development District for an Office Center (Ordinance No. 6231)

Surrounding Zoning and Land Use:

The property to the north is zoned MF-16, Multiple-Family District, and the location of single-family homes. The property to the east is zoned RR, Regional Retail District, and the location of a vehicle repair shop. The property to the south is zoned C, Commercial, and the location of a landscape and stone business. The property to the west is zoned RR, Regional Retail District, and the location of a car dealership.

Discussion:

The applicant, Alejandro Dominguez, is requesting to amend the PD to allow an expanded Restaurant within an existing Hotel. The current ordinance does not permit the use of a hotel however, it does permit a Lounge/Restaurant with a total square footage of 2,751± square feet. The applicant is seeking to increase the restaurant floor area to 5,200± square feet.

The proposed request has been circulated to the respective City departments for internal review and their comments, conditions, and requirements are as follows:

Fire: (Approved)

No objection to zone change. All future development shall meet the requirements of IFC 2015 ed. and local ordinances. Including the addition or modification of fire protection systems.

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2020 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary. Code versions are subject to change depending on time of new code edition adoption in the City of Midland and date of permit application.

Engineering: (Approved)

No objections to zoning/zone change. [For Applicant's Information Only.] Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For Applicant's Information Only.]

Code: (Approved)

No Oil and Gas Issues.

Transportation: (Approved)

No objections. [For the Applicant's information only.]

Planning:

The request is in compliance with the Tall City Tomorrow Comprehensive Plan, Chapter 3-Land Use Vision. The future land use map illustrates this area is designated as a Special Study Area. Staff believes that a hotel and restaurant are suitable at this location based on access and visibility of being located on a commercial corridor such as West Wall Street.

This request was recommended for approval at the March 20, 2023, Planning and Zoning Commission meeting.

Staff recommends approval of this request subject to conditions A and B.

Conditions:

- A. That the development of the Property shall conform to the site plan attached hereto as Exhibit "A".**
- B. That the barriers located around the perimeter of the Property as of the date of this ordinance shall be maintained or replaced as necessary to prevent encroachment of vehicles into adjacent public rights-of-way or adjacent property. Such barriers may include wheel stops, bollards, landscape islands, or other suitable barrier.**

Letters of Objection:

As of March 29, 2023, staff has received no letters of objection for this request.

Attachments:

Application
Site Plan (Exhibit A)
Maps
Ordinance 6231
Ordinance 6925
Parking Authorization Letter
Parking Sufficiency Letter



City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 2, BLOCK 1, W. P. KNIGHT ADDITION, SECTION 2, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR AN OFFICE CENTER TO PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF SOUTH POWELL STREET AND WEST WALL STREET) ; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body finds that the public health, safety and general welfare will be best served by rezoning Lot 2, Block 1, W. P. Knight Addition, Section 2, City and County of Midland, Texas (the "Property"), to PD, Planned Development District for a Shopping Center and adopting a site plan therefor, as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to rezone the Property from PD, Planned Development District for an Office Center to PD, Planned Development District for a Shopping Center.

SECTION TWO. That the base zoning district to which the use and development of the Property shall conform, except as modified by Section Three of this ordinance, is the RR, Regional Retail District.

SECTION THREE. That a site plan, which is attached hereto as Exhibit "A" and

incorporated herein for all purposes, is hereby adopted, and the use and development of the Property shall be subject to the following conditions and restrictions:

- A. That the development of the Property shall conform to the site plan attached hereto as Exhibit "A".
- B. That the barriers located around the perimeter of the Property as of the date of this ordinance shall be maintained or replaced as necessary to prevent encroachment of vehicles into adjacent public rights-of-way or adjacent property. Such barriers may include wheel stops, bollards, landscape islands, or other suitable barriers.

SECTION FOUR. That the definitions given in the zoning regulations contained in the City Code of the City of Midland, Texas, shall be applicable to such of those terms as are used herein.

SECTION FIVE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION SIX. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION SEVEN. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars (\$2,000.00).

SECTION EIGHT. The City Secretary is hereby authorized and directed to publish

the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

Lori Merritt Blong, Mayor

ATTEST:

Marcia Bentley-German, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

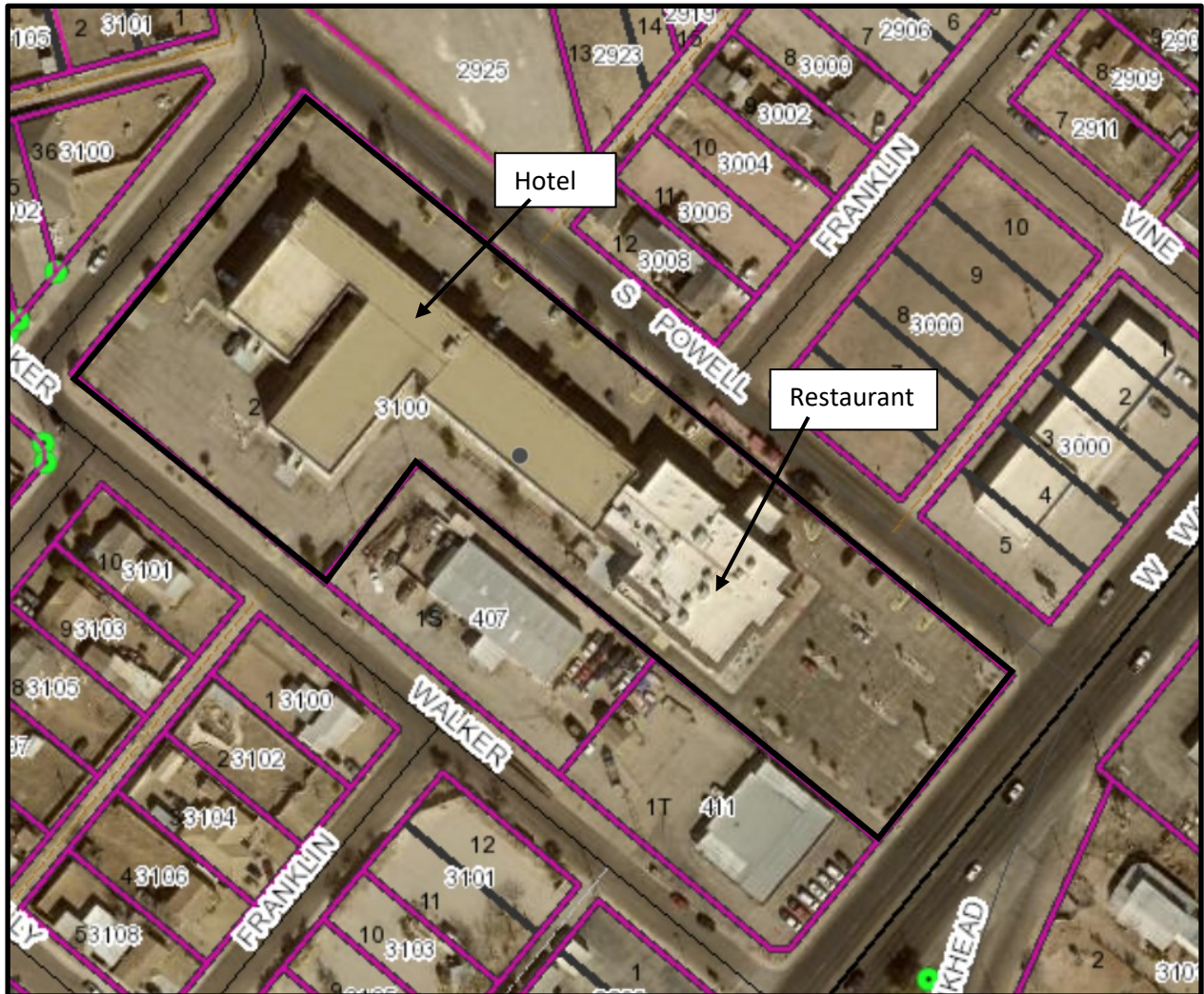
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

Exhibit “A”

Site Plan





Zone Change/Planned District
Amendment/Site Plan Approval

Project Number: Z-23-0323
Case Number: _____

Applicant (if acting as Agent, see affidavit on page 2) Printed Name: <u>Alejandro Dominguez</u>		Phone (432) <u>741 0121</u> Email: <u>Ocho8otexas@gmail.com</u>	
Address: <u>3601 Andrews Hwy</u>	City: _____	State: <u>TX</u>	Zip: <u>79703</u>

Property Owner Printed Name: <u>Nazim Enterprises, Inc. Nazim Butt</u>		Phone (432) <u>699 9149</u> Email: <u>Nazimb1@gmail.com</u>	
Address: <u>3100 W Wall St</u>	City: <u>Midland</u>	State: <u>TX</u>	Zip: <u>79701</u>

Representative (if different from Applicant or Property Owner) Firm: _____ Printed Name: _____		Phone () _____ Email: _____	
Address: _____	City: _____	State: _____	Zip: _____

Street Address: <u>3100 W Wall St Midland TX 79701</u>			
Legal Description Lot: <u>20</u> Block: <u>1</u> Subdivision: <u>W P KNIGHT SEC 2</u>			

Current Zoning: <u>PD 692S as amended</u>	Proposed Zone: <u>PD (see below)</u> (List by tracts if more than one district is requested)
--	--

Reason for Zone Change Request: <u>expansion of lounge, restaurant with bar.</u>

Present Use of Property: <u>lounge/restaurant/bar</u>
--

Proposed Use of Property: <u>same.</u>

How would this zone change affect the public health, safety and welfare? <u>N/A</u>
--

Describe how conditions affecting the property have changed since present zoning designation: <u>① expanded floor area 2,751 to 5,200 sq. ft.</u> <u>② expanded hours - Sunday open earlier at 11:00am</u>
--

Submittal and Fees Items to be submitted with this application form: • Application Fee - Payable to the 'City of Midland' • Dimensioned Site Plan • Digital Copies of Site Plan (PDF/JPEG)

Signature (by property owner only - authorized agent must sign affidavit below)

Applicant (signature): [Signature] Date: 2/27/28

Applicant (printed): Alejandro Dominguez

Property Owner (signature): Nazim Butt Date: 2/27/28

Property Owner (printed): Nazim Butt

The Zone Change/Planned District Amendment/Site Plan Approval shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

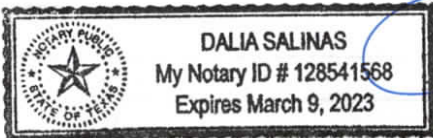
All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appear Alejandro Dominguez who, being by me duly sworn, upon oath says: That (s)he is the owner of 3100 W Wail St or authorized by NAZIM BUTT, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

[Signature]
Authorized Agent (signature)

Subscribed and sworn to before me, this 27th day of February, 2023, to certify which witness my hand and seal of office.

 [Signature]
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY

☒ Property Owner Authorization ☐ Dimensioned Site Plan (see original pp)

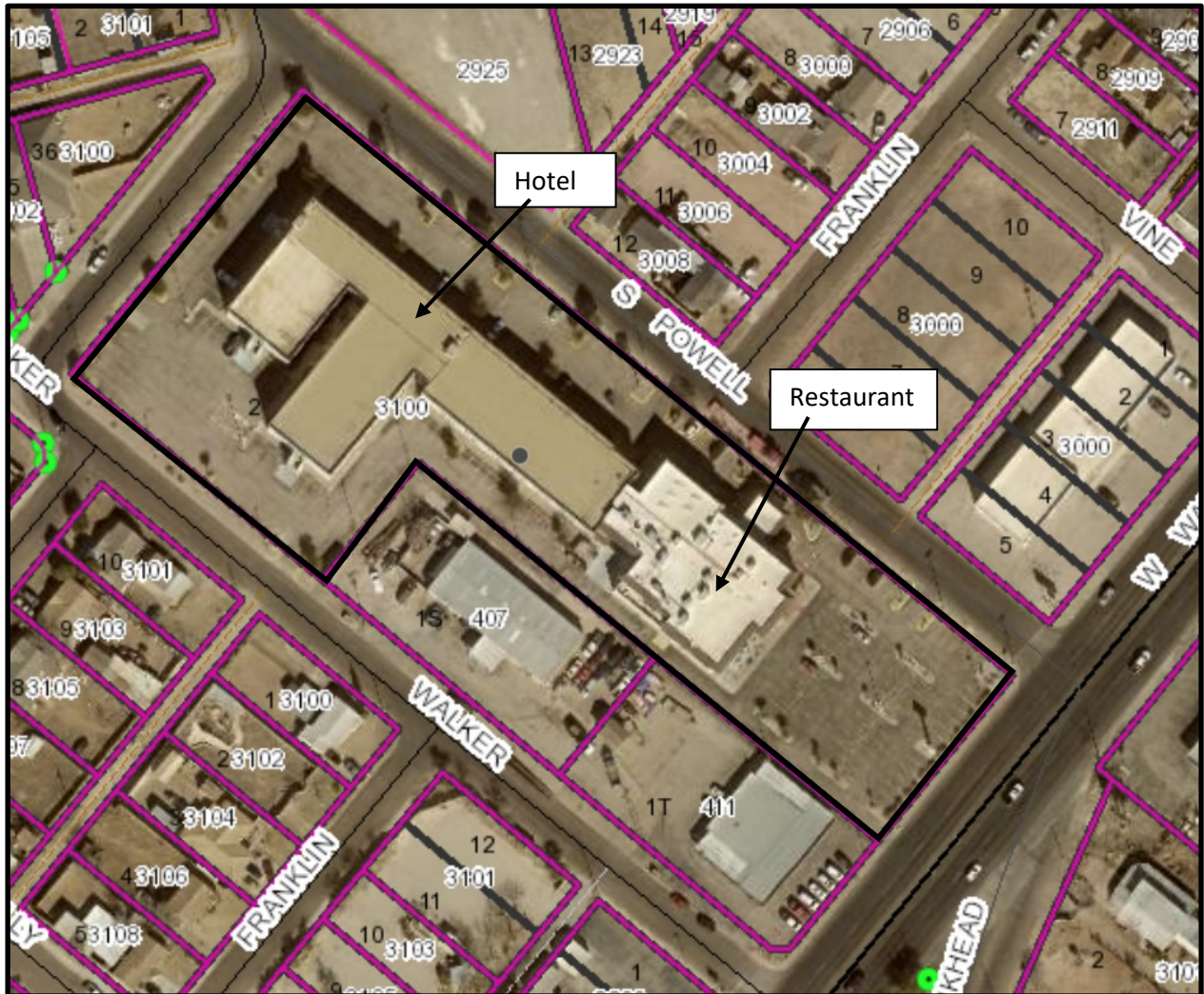
☒ Application Fee ☐ Plans in Digital Format (PDF/JPEG)

Check # 1146

Received By: Jeff Fisher Date: 2/27/23

Exhibit “A”

Site Plan



ORDINANCE NO. 6231

AN ORDINANCE AMENDING CHAPTER ONE, TITLE XI, OF THE CITY CODE OF MIDLAND, TEXAS, BY PERMITTING THE PROPERTY DESCRIBED IN SECTION ONE HEREOF, WHICH IS PRESENTLY ZONED "LR-3", LOCAL RETAIL DISTRICT, TO BE USED AS A "PLANNED DISTRICT" FOR AN OFFICE CENTER; PROVIDING FOR SUCH USE TO BE SUBJECT TO CERTAIN SPECIAL CONDITIONS AND RESTRICTIONS AS SET OUT HEREIN; PROVIDING THAT THE PROPERTY SHALL BE IMPROVED ACCORDING TO THE SITE PLAN, ORDINANCES AND OTHER SPECIFICATIONS SET OUT AND REFERRED TO HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO HUNDRED DOLLARS (\$200.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter and the State law with reference to the creation of "Planned Districts" under the zoning ordinance regulations and zoning map, have given the requisite notices by United States mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body finds that the public health, safety and general welfare will be best served by the creation of the "Planned District" set out hereinafter and subject to the conditions and restrictions set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That Chapter 1, Title XI, of the City Code of Midland, Texas, and the official zoning map of the City of Midland, Texas, are hereby amended insofar as the hereinafter described property is concerned, which is presently zoned "LR-3", Local Retail district, and it shall be used as a "Planned District" for an Office Center, subject to the special conditions and restrictions hereinafter set out.

Said property is described as follows:

Lot 2, Block 1, W. P. Knight Addition, Section 2, an addition to the City of Midland, Midland County, Texas.

SECTION TWO. That the property described in Section One hereof shall be subject to the following special conditions and restrictions:

1. That the use and development of the property shall conform to all regulations applicable to an "O-2", Office District, and in addition the maximum height shall be 36 feet or four stories, whichever is less.
2. That a lounge shall be permitted within the portion of the building with a total floor area not exceeding 2,751 square feet and located as shown by a double cross-hatching on the attached site plan and described as proposed restaurant/lounge.
3. That development of the property shall conform to said attached site plan in all respects.
4. That the proposed building shall be located within the area shown by cross-hatching on said site plan. The minimum set backs from all property lines shall be as dimensioned on said site plan.
5. That barriers shall be located around the perimeter of the tract to prevent encroachment of vehicles into adjacent public street rights of way or into adjacent property.
6. That the hours of operation of the lounge shall be limited to 11:00 a.m. of each day to 1:00 a.m. of the next succeeding day, Monday through Saturday, and from 12:00 noon of each day to 1:00 a.m. of the next succeeding day on Sunday, on each day that such sales are otherwise permitted by law.

SECTION THREE. That definitions given in the zoning regulations contained in the City Code of the City of Midland, Texas, shall be applicable to such of those terms as are used herein.

SECTION FOUR. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FIVE. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed

PACKET

April 25, 2023

this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION SIX. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two hundred dollars (\$200.00).

SECTION SEVEN. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the 14th day of June, A.D., 1983; and passed to second reading on motion of Councilman Sloan, seconded by Councilman Davidson, by the following vote:

Councilmen voting "AYE": Sloan, Davidson, Marcum,
and Godfrey

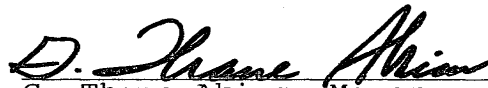
Councilmen voting "NAY": Hatfield and Akins

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Councilman Godfrey, seconded by Councilman Davidson, on the 28th day of June, A.D., 1983, at a regular meeting of the City Council:

Councilmen voting "AYE": Davidson, Godfrey, Marcum,
Hatfield and Sloan

Councilmen voting "NAY": Akins

PASSED AND APPROVED THIS 28th day of June, A.D., 1983.


G. Thane Akins, Mayor

ATTEST:


J. W. McCullough, City Secretary

APPROVED AS TO FORM:


J. M. Nuessle, City Attorney

ORDINANCE NO. 6925

AN ORDINANCE AMENDING PARAGRAPH ONE OF SECTION TWO OF ORDINANCE NO. 6231, WHICH CREATED A "PLANNED DISTRICT" FOR AN OFFICE CENTER, SO AS TO ALLOW FOR SIGN REGULATIONS ON THE SOUTH 150 FEET OF THIS PROPERTY; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, in compliance with the City Charter and the State law with reference to the creation of "Planned Districts" under the zoning ordinance regulations and zoning map, have given the requisite notices by United States Mail, publication and otherwise; and after a full and fair hearing to all of the property owners generally and particularly to those interested persons situated in the affected area and in the vicinity thereof; the Governing Body finds that the public health, safety and general welfare will be best served by amending Ordinance No. 6231, which created a "Planned District" for an Office Center as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

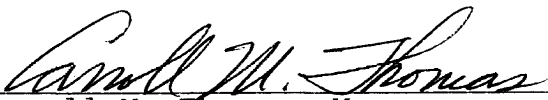
SECTION ONE. That Paragraph 1 of Section Two of Ordinance No. 6231 is hereby amended so as to hereafter read as follows:

1. That the use and development of the property shall conform to all regulations applicable to an "O-2", Office District, and in addition the maximum height shall be 36 feet or four stories, whichever is less, except that the sign regulations of the "LR-3", Local Retail District, shall apply to the southernmost 150 feet of this property.

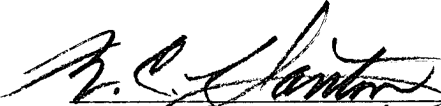
SECTION TWO. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION THREE. If any section, subsection, sentence, clause

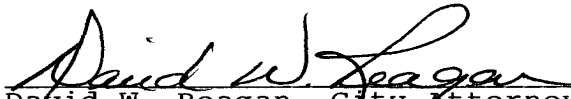
1989.

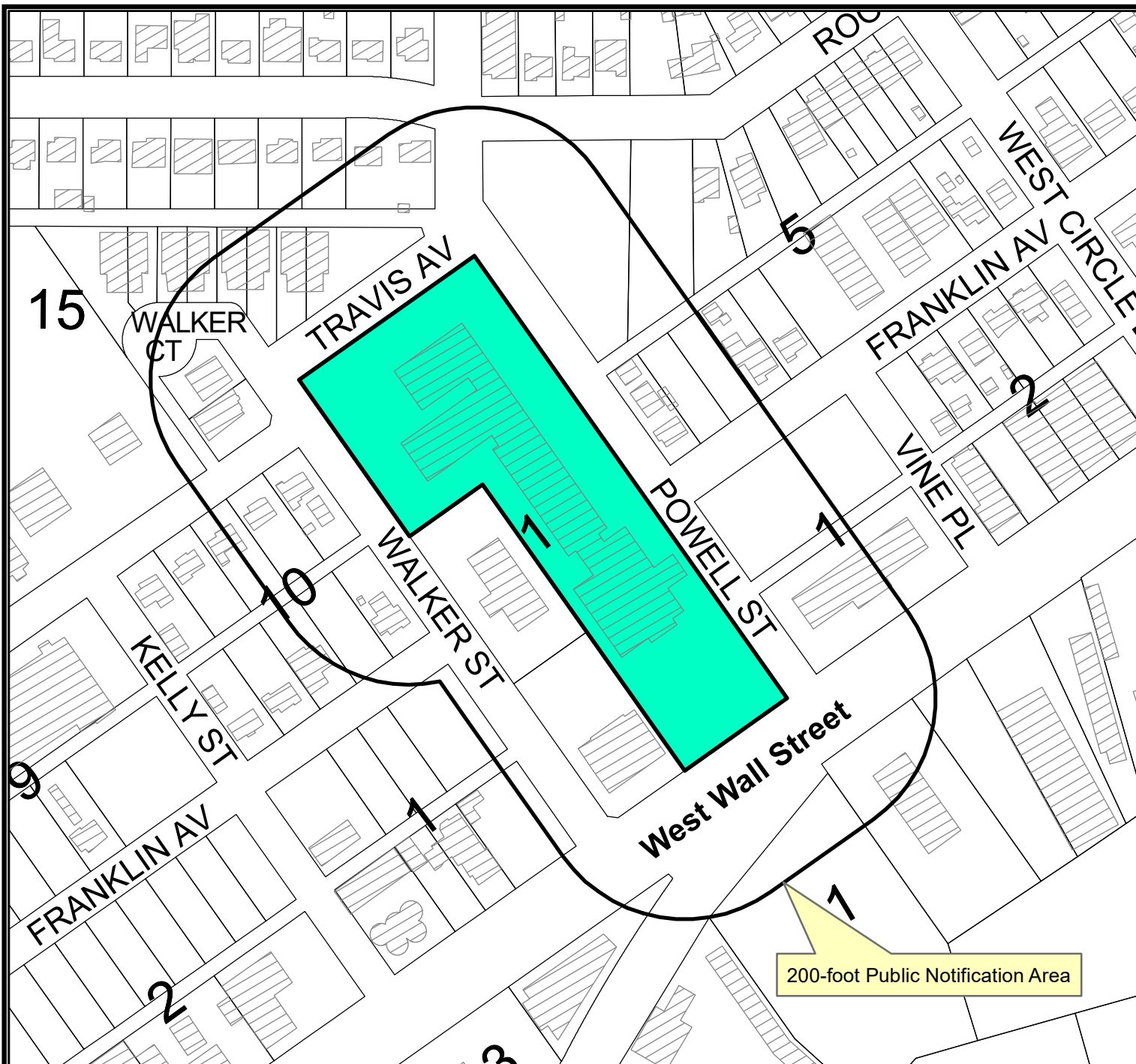

Carroll M. Thomas, Mayor

ATTEST:


B. C. Clanton, City Secretary

APPROVED AS TO FORM:


David W. Reagan, City Attorney



LOCATION MAP

Z-23-0323

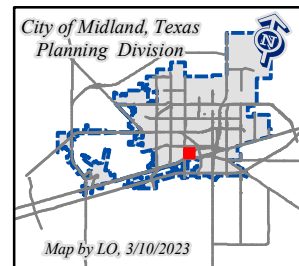
Scale: 1" = 2,328'

Consider a request by Alejandro Dominguez for a zone change from PD, Planned Development District for an Office Center to a PD, Planned Development District for a hotel with a restaurant, on Lot 2, Block 1, W. P. Knight, Section 2, City and County of Midland, Texas.

Generally located on the northwest corner of the intersection of West Wall Street and South Powell Street. (Council District 2)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS

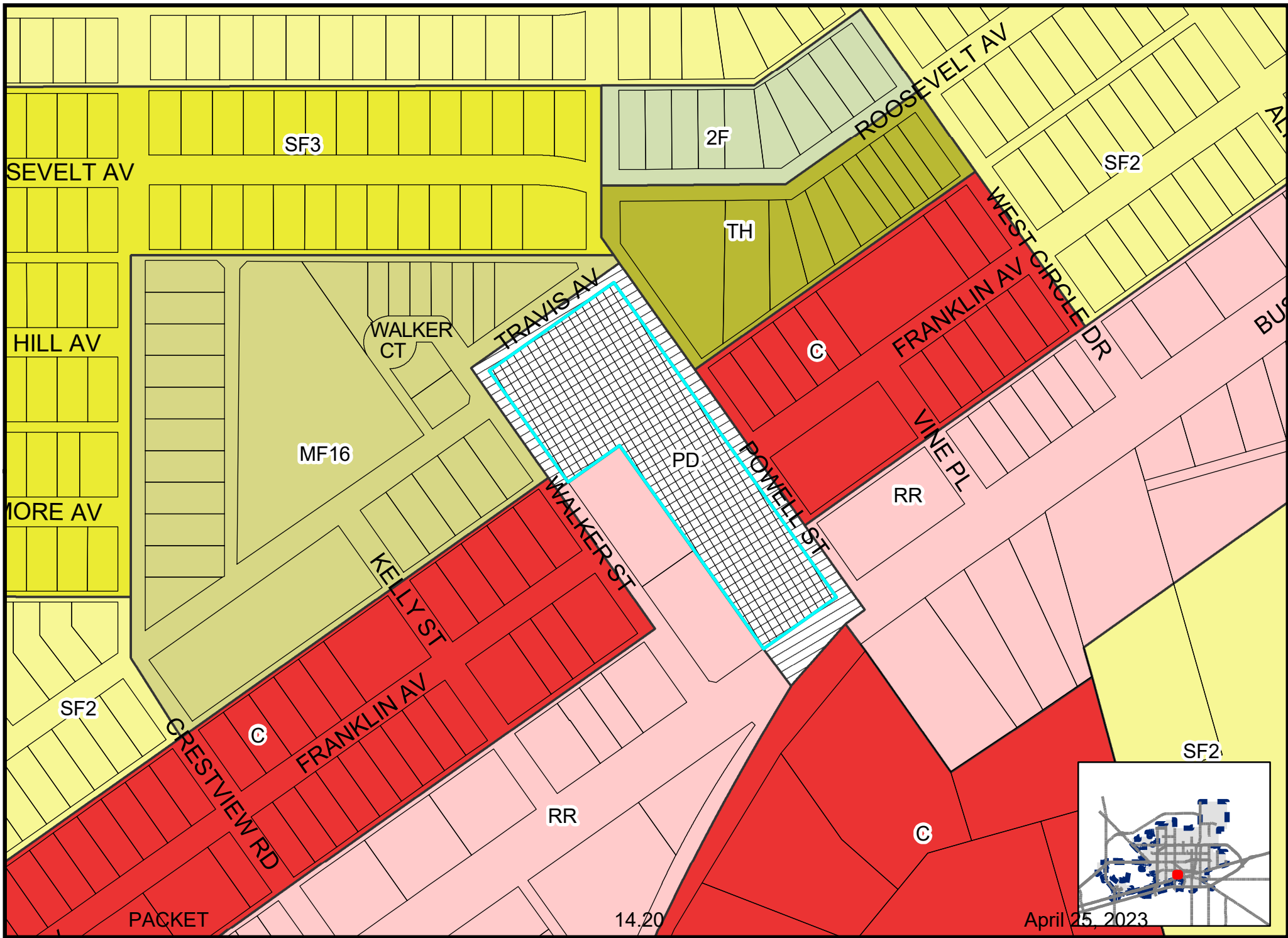


©THE CITY OF MIDLAND - 2021

April 25, 2023

THIS DATA IS NOT A SUBSTITUTION FOR A SURVEY OR ENGINEERING DRAWING. IT IS DESIGNED TO BE USED AS A GUIDANCE TOOL IN PERMITTING OR OTHER DECISIONS BASED SOLELY ON THE INFORMATION CONTAINED HEREIN.

THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.



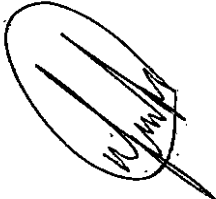
02/10/2023

To whom it may concern:

By means of this letter I certify and authorize that the attached parking lot with dimensions (Area: 23,782 Ft² / perimeter 677 ft) may be used for the establishment of the Bar OCHO 80 Restaurant Bar.



Nazim Enterprises, Inc (Landlord)

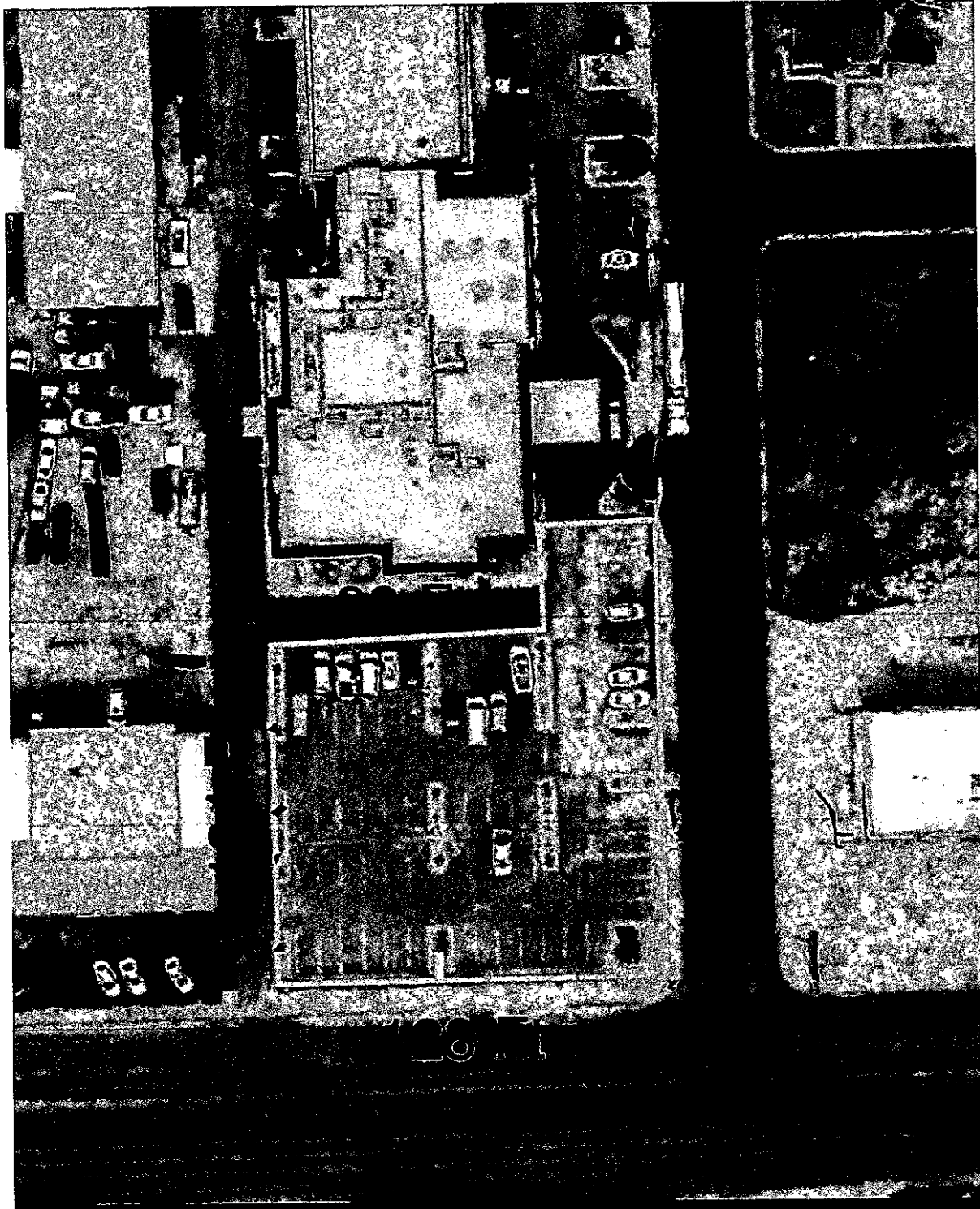


OCHO 80 LLC (Tenant)



Alejandro Dominguez (Guarantor/Surety)





Perímetro ②

677 ft ▼



Área

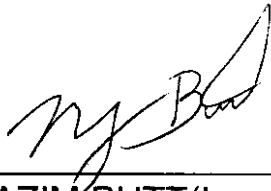
23,782 ft² ▼



14/03/2023

To whom it may concern:

Through this letter, I notify that the Wyndham Garden hotel with address 3100 W WALL ST Midland Tx 79701, and its conference room do not exceed 259 parking spaces, but it is sufficient for all use for both the HOTEL and the RESTAURANT OCHO 80.

A handwritten signature in black ink, appearing to read 'Nazim Butt', written over a horizontal line.

NAZIM BUTT(Landlord)











City Council Meeting

Item Number: 15
Meeting Date: April 11, 2023
To: City Council / City Manager
From: Jeffrey Fisher, Senior Planner
Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITHOUT TERM FOR LOT 4, BLOCK 2, COUNTRY VILLA ESTATES, SECTION 7, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF WEST WALL STREET AND BRINSON LANE), WHICH IS PRESENTLY ZONED C, COMMERCIAL DISTRICT, IN PART, AND TP, TECHNOLOGY PARK DISTRICT, IN PART, ALLOWING SAID PROPERTY TO BE USED FOR AUTOMOBILE OR OTHER MOTORIZED VEHICLE SALES AND SERVICE; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 2) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Roger Wells is requesting a Specific Use Designation (SUDwo) without Term for Automobile or Other Motorized Vehicle Sales and Service.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the City.

Current Zoning:

C, Commercial District, and TP, Technology Park District

Surrounding Zoning and Land Use:

The properties to the north are zoned SF-2, Single-Family Dwelling District, and the location of single-family homes. The properties to the east are zoned C, Commercial District, and the location of an auto dealership and hotel. The property to the south across West Wall Street is outside city limits and the location of equipment storage. The property to the west is zoned C, Commercial District, and the location of a hotel.

Discussion:

The current zoning of C, Commercial, and TP, Technology Park permits Automobile or Other Motorized Vehicle Sales and Service use with the approval of an SUDwo.

The site plan (Exhibit A) provided shows the property and associated existing buildings.

The property will be required to comply with the standards as listed in Section 4.04.A.6 of the Zoning Ordinance for Automobile or Other Motorized Vehicle Sales and Services use.

6. Automobile or Other Motorized Vehicle Sales and Service Standards

- a. Allowed by Specific Use Designation, according to the permitted Use Chart.
- b. All exterior light sources shall be of a down-light type, indirect, diffused, or shielded type luminaries and so installed as to reduce glare effect and consequent interference with use of adjacent properties and boundary streets.
- c. No intermittent or flashing lights shall be permitted.
- d. Luminaries shall be mounted at a height not to exceed 30 feet as measured vertically from the horizontal surface of the nearest parking pavement.
- e. All building façades shall be constructed with the same masonry materials that meet the masonry regulations for the zoning district in which the property is located.
- f. No exterior auditory devices shall be permitted.

This project has been circulated to all City departments for review. Below are the department comments:

Engineering: (Approved)

No objections. [For the Applicant's information only.]

Transportation: (Approved)

No objections. [For the Applicant's information only.]

Building Code: (Approved)

No objections.

Fire: (Approved)

No objections.

Planning: (Approved)

The Future Land Use Map in the Tall City Tomorrow Comprehensive Plan calls for community commercial uses in this area, visitor services, and higher density residential uses which is part of a Gateway Corridor Area. Staff believes that Automobile or other Motorized Vehicle Sales and Services is suitable at this location based on access and visibility of being located on a commercial corridor such as West Wall Street.

This request was recommended for approval at the March 20, 2023, Planning and Zoning Commission meeting.

Staff recommends approval of the request of the Specific Use Designation without Term for Automobile or other Motorized Vehicle Sales and Services, subject to Conditions A and B.

Conditions:

- A. That the use and development of the Property for the Specific Use shall significantly conform to the site plan, which is attached hereto as Exhibit "A" and incorporated herein for all purposes.**
- B. That the use and development of the Property for the Specific Use shall conform to standards set forth in Section 11-1-4.04.A.6 of the City Code.**

Letters of Objection:

As of March 15, 2023, staff has received no letters of objection for this request.

Application
Site Plan (Exhibit A)
Maps



City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITHOUT TERM FOR LOT 4, BLOCK 2, COUNTRY VILLA ESTATES, SECTION 7, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF WEST WALL STREET AND BRINSON LANE), WHICH IS PRESENTLY ZONED C, COMMERCIAL DISTRICT, IN PART, AND TP, TECHNOLOGY PARK DISTRICT, IN PART, ALLOWING SAID PROPERTY TO BE USED FOR AUTOMOBILE OR OTHER MOTORIZED VEHICLE SALES AND SERVICE; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, Texas, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after holding due hearings affording a full and fair hearing to all of the property owners generally, and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body of the City of Midland finds that the public convenience will be best served by granting a Specific Use Designation Without Term for Lot 4, Block 2, Country Villa Estates, Section 7, City and County of Midland, Texas (the “Property”), as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to grant the Property a Specific Use Designation Without Term for automobile or other motorized vehicle sales and service (the “Specific Use”), together with the uses permitted in the present C, Commercial District and the present TP, Technology Park District.

SECTION TWO. That the Property shall be subject to the following conditions and restrictions:

- A. That the use and development of the Property for the Specific Use shall significantly conform to the site plan, which is attached hereto as Exhibit “A” and incorporated herein for all purposes.
- B. That the use and development of the Property for the Specific Use shall conform to standards set forth in Section 11-1-4.04.A.6 of the City Code.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances, inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars (\$2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____.

_____, by the following vote:

Council members voting “AYE”:

Council members voting “NAY”:

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting “AYE”:

Council members voting “NAY”:

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

Lori Merritt Blong, Mayor

ATTEST:

Marcia Bentley-German, City Secretary

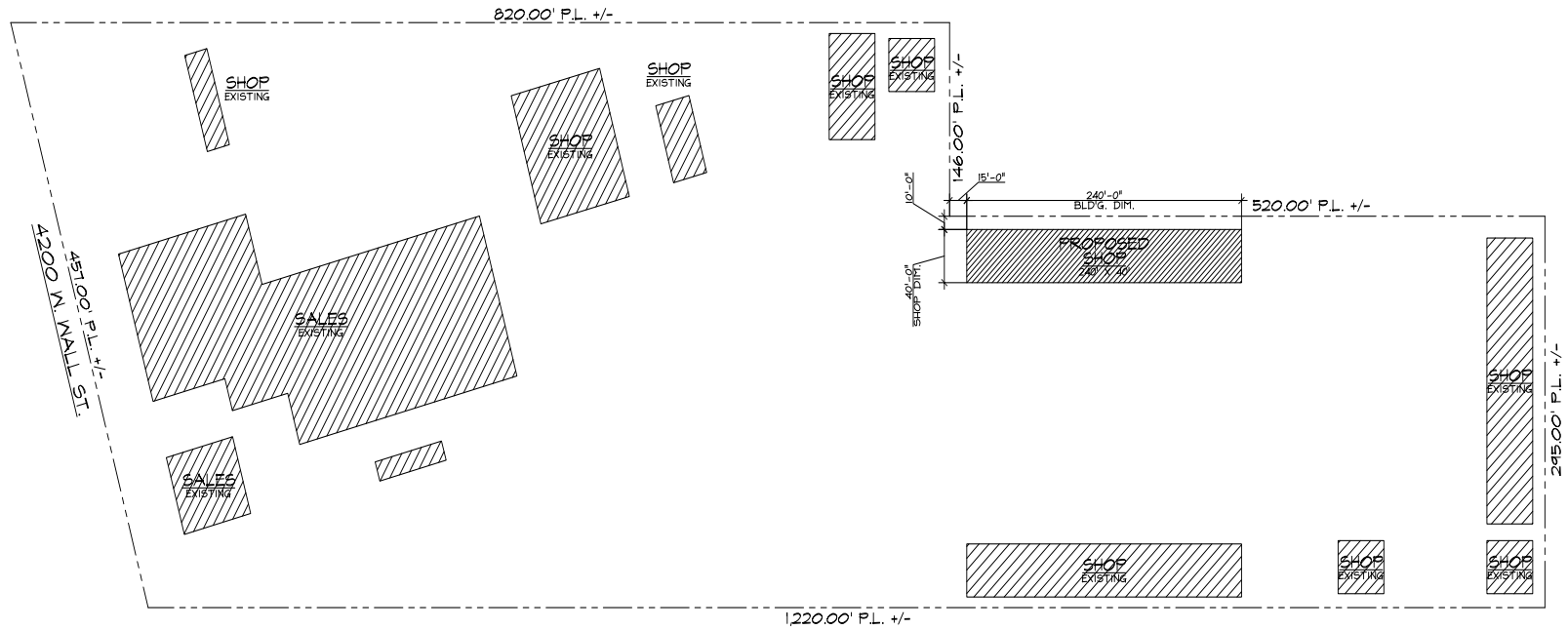
APPROVED AS TO CONTENT
AND COMPLETENESS:

Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

EXHIBIT "A"



A SITE PLAN
 NOTE 1" = 50'-0"

PACKET

15.8

April 25, 2023

THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER AND/OR ALL SUBCONTRACTORS OR THEIR REPRESENTATIVES WORKING FROM THESE PLANS AND SPECIFICATIONS SHALL NOT SCALE INFORMATION FROM SAID PLANS. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER AND/OR ALL SUBCONTRACTORS OR THEIR REPRESENTATIVES SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER AND/OR ALL SUBCONTRACTORS OR THEIR REPRESENTATIVES SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER AND/OR ALL SUBCONTRACTORS OR THEIR REPRESENTATIVES SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

BY: M DRAFTING & DESIGN
 P.O. BOX 4091 MIDLAND, TX. 79704
 E-MAIL: JAY@MIDLANDDRAFTING.COM

ROGERS FORD
 12200 N. HALL ST.
 MIDLAND, TEXAS

DATE ISSUED: DEC. 01, 2022
 REVISED:
 DRAWN BY: JAY



Specific Use Designation
Application (Non-Alcohol)

Case Number: SUD-23-0034
Ord. Number: _____

Applicant (if acting as Agent, see affidavit on page 2) Printed Name: _____		Phone () _____ Email _____	
Address <u>4200 W WALL</u>	City <u>Mid</u>	State <u>TX</u>	Zip <u>79703</u>

Property Owner Printed Name: <u>DTS</u>		Phone (432) <u>694-8801</u> Email _____	
Address <u>Box 4577</u>	City <u>Midland</u>	State <u>TX</u>	Zip <u>79704</u>

Representative (if different from Applicant or Property Owner) Firm: <u>B & B METAL BUILDINGS</u> Printed Name: <u>Roger Wells</u>		Phone (432) <u>620-0003</u> Email <u>PRODRUNNER3@GMAIL.COM</u>	
Address <u>Box 1006</u>	City <u>Mid</u>	State <u>TX</u>	Zip <u>02</u>

Type of Permit: _____	For Office Use Only
	☐ with Term ☒ without Term
Is there any Code Enforcement action pending on property? ☐ Yes ☐ No	

Street Address: <u>4200 W WALL</u>		
Legal Description Lot: _____ Block: _____ Subdivision: _____		

Current Zoning: _____	
Maximum Floor Area: <u>9600</u>	Maximum Occupancy: _____
Proposed hours and days of use or operation: <u>WAREHOUSE JAN/6 PM</u> <u>MON-FRI</u>	
Reason for request: <u>SVA IS USED FOR STORAGE BLDG</u>	
Applicant's opinion as to why the request will not adversely affect the public safety, health, morals, general welfare, and convenience: _____ _____	

Submittal and Fees Items to be submitted with this application form: • Application Fee – Payable to the 'City of Midland' • Dimensioned Site Plan showing • Parking (if applicable) • Building Footprint • Digital Copies of Site Plan (PDF/JPEG)

Signatures

Applicant (signature): <u>R. Wells</u>	Date: <u>FINAL 23</u>
Applicant (printed): <u>Roger Wells</u>	
Property Owner (signature): <u>Doss Rogers</u>	Date: <u>3-8-2023</u>
Property Owner (printed): <u>Doss Rogers</u>	

The Specific Use Designation shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

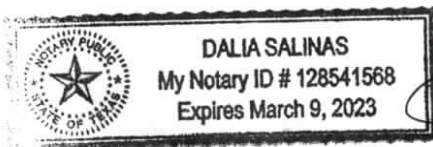
If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared Roger Wells who, being by me duly sworn, upon oath says: That (s)he is authorized by Doss Rogers, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

R. Wells
Authorized Agent (signature)

Subscribed and sworn to before me, this 9th day of March, 2023, to certify which witness my hand and seal of office.



Dalia Salinas
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY

☒ Property Owner Authorization

☒ Dimensioned Site Plan

☒ Application Fee

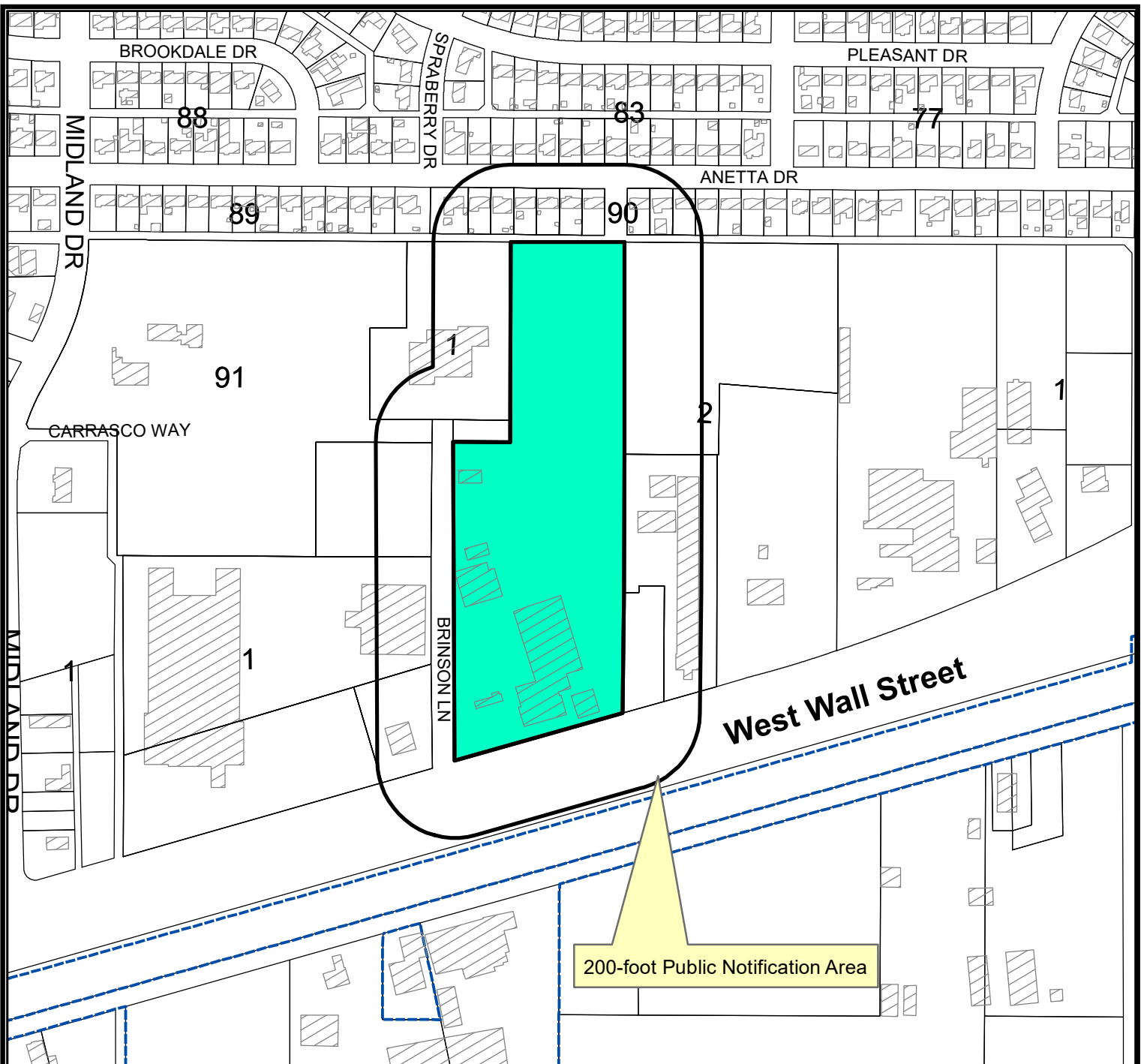
☐ Site Plan in Digital Format (PDF/JPEG)

Check # 5680

Received By: London White

Date:

RECEIVED
MAR 09 2023



LOCATION MAP

SUDwo-23-0034

Scale: 1" = 4,470'

Consider a request by Roger Wells for a Specific Use Designation without term, for an Automobile or Other Motorized Vehicle Sales and Service on Lot 4, Block 2, Country Villa Estates, Section 7, City and County of Midland, Texas.

Generally located on the northeast corner of the intersection of West Wall Street and Brinson Lane.

(Council District)

15.12

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS

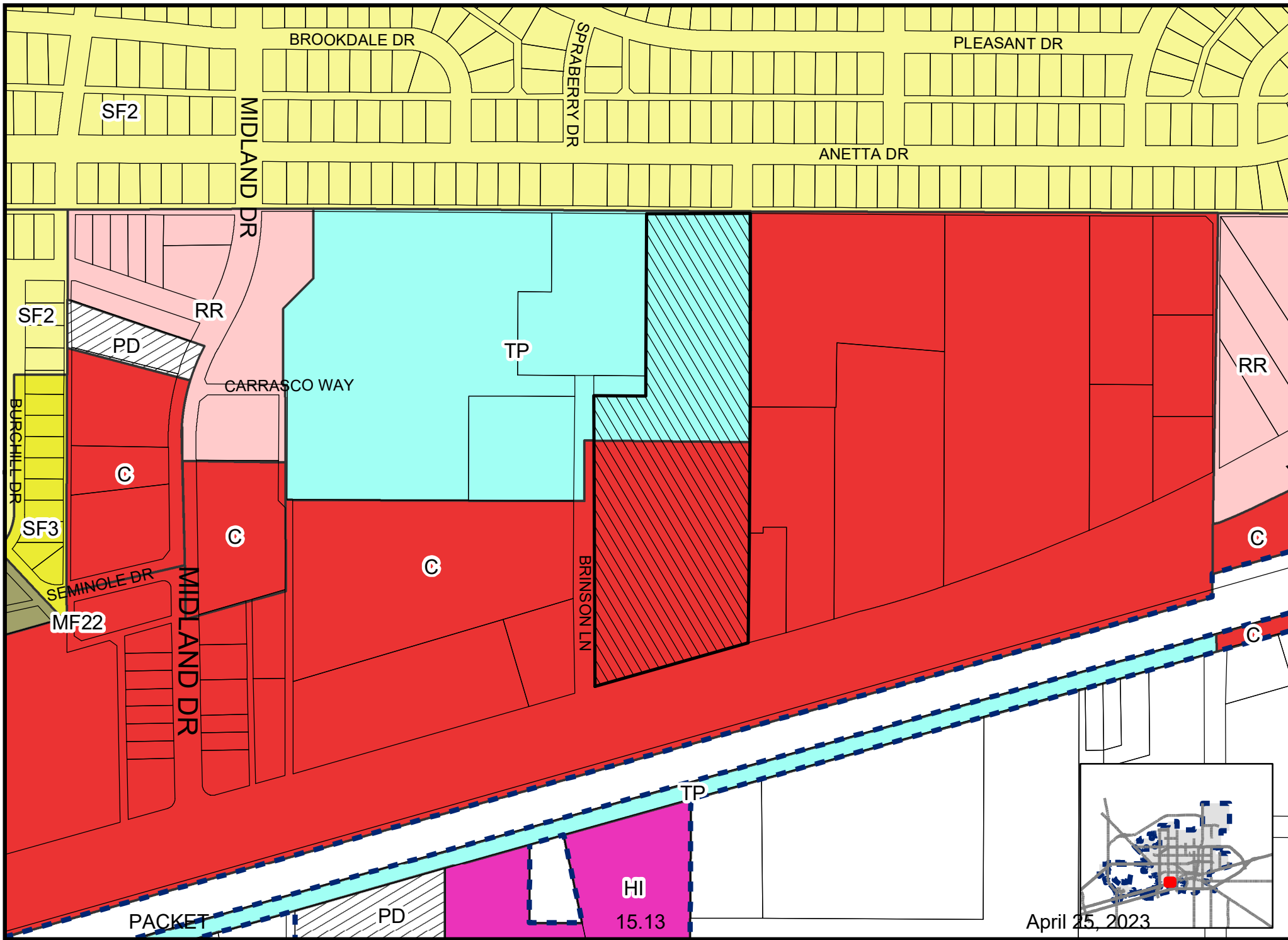


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THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

April 25, 2023



April 25, 2023















City Council Meeting

Item Number: 16
Meeting Date: April 25, 2023
To: City Council / City Manager
From: James Reber, Planner
Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 4,126-SQUARE FOOT PORTION OF LOT 1A, BLOCK 11, KIMBERLEA ADDITION, SECTION 11, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH MIDKIFF ROAD AND MAXWELL DRIVE), WHICH IS PRESENTLY ZONED RR, REGIONAL RETAIL DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Miguel Hernandez, d/b/a Casa Real, LLC, is requesting a Specific Use Designation with term for the sale of all alcoholic beverages for on-premises consumption in a restaurant located at 3408 North Midkiff Road, Suite 104.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the City.

Current Zoning:

RR, Regional Retail District

Surrounding Zoning and Land Use:

The properties to the north are zoned PD, Planned Development District for an Office Center (Ordinance 8,281). Properties to the east, south, and west are zoned SF-2, Single-Family Dwelling District.

Discussion:

The property is located at 3408 North Midkiff Road, Suite 104, and is currently zoned RR, Regional Retail District, which permits the sale of all alcoholic beverages for on-premises consumption in a restaurant, with the approval of a Specific Use Designation with Term.

The restaurant is currently not in operation. The site plan attached hereto as "Exhibit A" illustrates the location of the restaurant on the property, and the floor plan attached hereto as "Exhibit B" illustrates that the restaurant will have a total square footage of 4,126, of which 2,379 square feet will be dedicated to the alcohol serviceable area.

The proposed site plan provides adequate parking, access, and internal circulation. A total of 203 shared parking spaces for all proposed buildings, of which 8 will be accessible spaces.

The proposed days and hours of operation are:

**Sunday through Thursday from 11:00 a.m. to 11:00 p.m.
Friday and Saturday from 11:00 a.m. to 12:00 a.m.**

The applicant is requesting the following alcohol serviceable hours.

**Sunday through Thursday from 11:00 a.m. to 11:00 p.m.
Friday and Saturday from 11:00 a.m. to 12:00 a.m.**

Per Midland City Code, Section 5-4-4, Prohibited Places of Business:

The sale of any alcoholic beverage is hereby prohibited by any person, where the place of business of any such dealer is within 300 feet of any church, public-school, public-school ground, athletic stadium used by any public school or public hospital, the measurements to be along the property lines of the street fronts and from front door to front door and in a direct line across intersections where they occur.

There are no schools or churches within 300-feet of the property using the front door to door distance measurement.

This request has been circulated to and reviewed by respective City departments for internal review and their comments, conditions, and requirements are as follows:

Fire: (Approved)

No objections.

Engineering: (Approved)

No objection. [For Applicant's Information Only.]

Transportation: (Approved)

No objections. [For the Applicant's information only.]

Building Code: (Approved)

The SUD for Casa Real is acceptable. The property must adhere to the maximum occupant load of 158 for the alcohol serviceable area. Occupancy loads must be posted in accordance with section 1004.3 of the 2015 International Fire Code.

Code Compliance: (Approved)

No Oil and Gas issues.

Planning:

The request is in compliance with the *Tall City Tomorrow Comprehensive Plan, Chapter 6-Character Plan Goal 4, which is to* "Encourage the development of places where Midland residents can gather and socialize to build connections." (Tall City Tomorrow page 137) Casa Real is an establishment that will provide Midland residents with a unique social gathering experience.

This request was recommended for approval at the April 3, 2023, Planning and Zoning Commission meeting.

Staff recommends approval of this Specific Use Designation with Term for the sale of all alcoholic beverages, for on-premises consumption, For the sale of all alcoholic beverages for on premises consumption in a restaurant, subject to conditions A through G.

Conditions:

- A. That the alcohol serviceable area shall be limited to approximately 2,379 square feet as shown in Exhibit "A", which is attached hereto and incorporated herein for all purposes.**

B. That the days and hours of alcoholic beverages sales and consumption shall be limited to:

**Sunday through Thursday from 11:00 a.m. to 11:00 p.m.
Friday and Saturday from 11:00 a.m. to 12:00 a.m.**

C. That the occupancy of the establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.

D. That the establishment shall meet all requirements of the Fire Department and Code Administration.

E. That the sale and on-premises consumption of alcoholic beverages shall conform to applicable state and local laws.

F. That the applicant shall obtain a Certificate of Occupancy prior to the commencement of the sale of alcoholic beverages for on premises consumption to ensure that the conditions of this permit are satisfied.

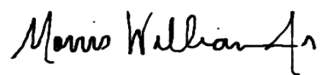
G. That in accordance with Section 9.07.E.3 of the Zoning Ordinance, the establishment shall be in operation within 120 days from the final adoption date of this ordinance.

Letters of Objection:

As of April 20, 2023, staff have not received any letters of objections.

Attachments:

Application
Floor Plan (Exhibit A)
Site Plan (Exhibit B)
Maps



City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 4,126-SQUARE FOOT PORTION OF LOT 1A, BLOCK 11, KIMBER-LEA ADDITION, SECTION 11, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH MIDKIFF ROAD AND MAXWELL DRIVE), WHICH IS PRESENTLY ZONED RR, REGIONAL RETAIL DISTRICT, ALLOWING SAID PROPERTY TO BE USED FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID DESIGNATION SUBJECT TO CERTAIN CONDITIONS AND RESTRICTIONS CONTAINED HEREIN; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); AND ORDERING PUBLICATION

WHEREAS, the City Planning and Zoning Commission and the Governing Body of the City of Midland, Texas, in compliance with the City Charter, the City Code, and State law, have given the requisite notices by United States mail, publication and otherwise; and after holding due hearings affording a full and fair hearing to all of the property owners generally, and particularly to those interested persons situated in the affected area and in the vicinity thereof, the Governing Body of the City of Midland finds that the public convenience will be best served by granting a Specific Use Designation With Term for a 4,126-square foot portion of Lot 1A, Block 11, Kimber-Lea Addition, Section 11, City and County of Midland, Texas (the "Property"), as set out hereinafter;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MIDLAND, TEXAS:

SECTION ONE. That the Zoning District Map of the City of Midland, Texas, is hereby amended to grant the Property a Specific Use Designation With Term for the sale of all alcoholic beverages in a restaurant (the "Establishment") for on-premises consumption, together with the uses permitted in the present RR, Regional Retail District.

SECTION TWO. That the Property shall be subject to the following conditions and

restrictions:

- A. That the serviceable area of the Establishment shall be limited to approximately 2,379 square feet as shown in Exhibit "A", which is attached hereto and incorporated herein for all purposes.
- B. That the sale and on-premises consumption of alcoholic beverages shall conform to all applicable state and local laws.
- C. That the days and hours of alcoholic beverage sales and consumption shall be limited to the following:

Sunday through Thursday from 11:00 a.m. to 11:00 p.m.; and
Friday and Saturday from 11:00 a.m. to 12:00 a.m. (midnight).
- D. That the occupancy of the Establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.
- E. That the Establishment shall meet the requirements of the Fire Department and the Code Administration Division.
- F. That the operator of the Establishment shall obtain a Certificate of Occupancy prior to the commencement of the sale of alcoholic beverages for on-premises consumption to ensure that the conditions of this Specific Use Designation With Term are satisfied.
- G. That in accordance with Section 11-1-9.07.E.3 of the City Code, the Establishment shall be in operation within 120 days from the final adoption date of this ordinance.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances, inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars (\$2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

Lori Merritt Blong, Mayor

ATTEST:

Marcia Bentley-German, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

TABLE COUNT

6 TOP TABLE 2
4 TOP TABLE 13
4 TOP BOOTH 8
6 TOP BOOTH 3
10 BAR SEATS

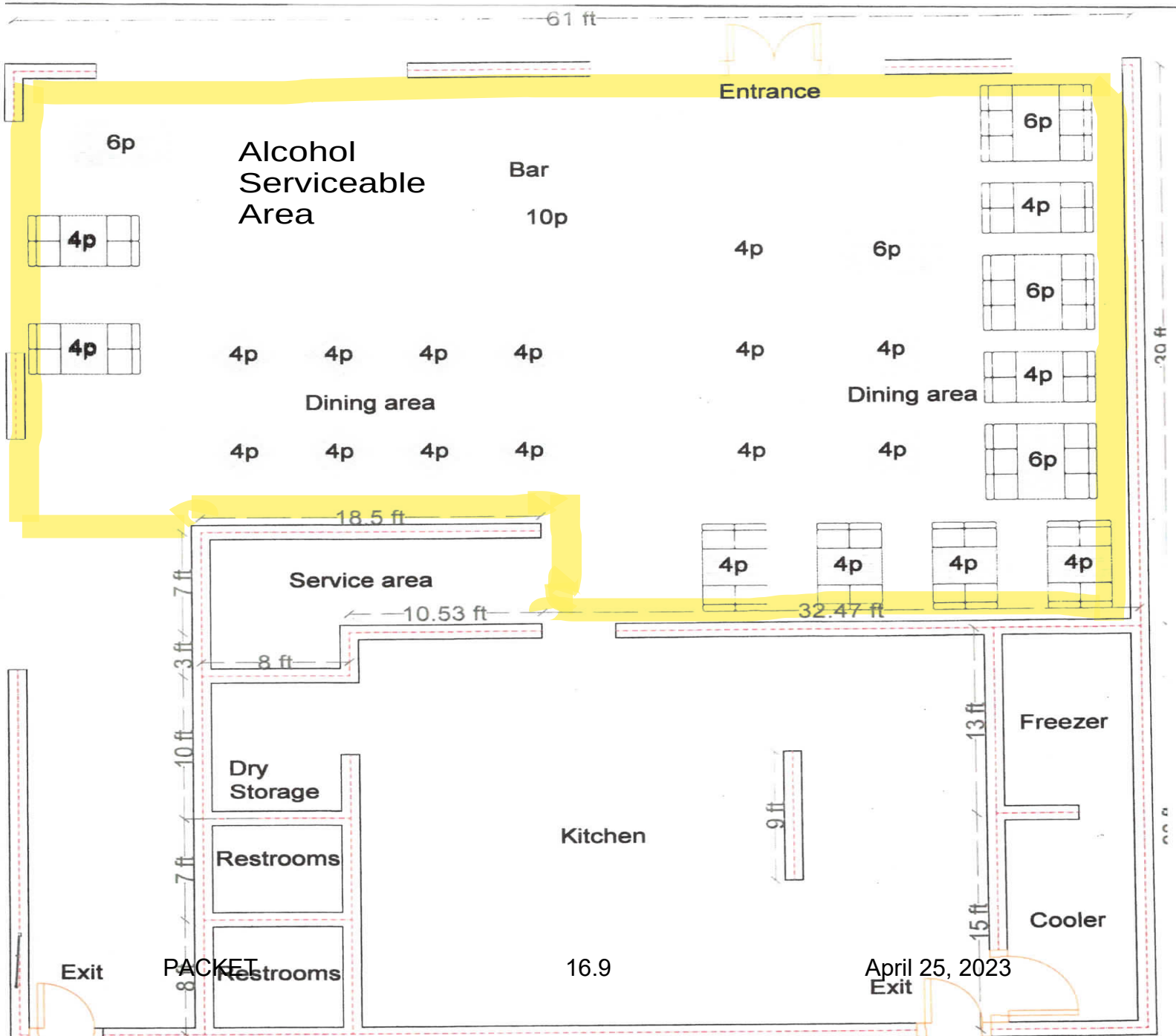
TOTAL TABLES 26

SEATS 124
EXITS 3
RESTR 2

KITCHEN 27.68 X 51
SERVICE 39 X 61
TOTAL SQUARE 66.68 X 61

EXHIBIT "A"

Total Sq. ft.
4126
serviceable
Area:
2379



April 25, 2023



**Specific Use Permit with Term for
the Sale of Alcoholic Beverages for
On-Premises Consumption**

Project Number: SUP-23-0153
Case Number: _____

Applicant (if acting as Agent, see affidavit on page 2) Printed Name: <u>Miguel Angel Hernandez</u>		Phone (806) 773-1098 Email: <u>METZKER@LIVE.COM</u>	
Address: <u>4003 106th</u>	City: <u>Lubbock</u>	State: <u>TX</u>	Zip: <u>79423</u>

Property Owner Printed Name: <u>3408 Midkiff, LLC</u>		Phone (806) 584-0800 Email: <u>kcollins@doubleeagledevelopment.com</u>	
Address: <u>5600 S Bell St Ste 105, Space 284</u>	City: <u>Amarillo</u>	State: <u>TX</u>	Zip: <u>79109</u>

Representative (if different from Applicant or Property Owner) Firm: <u>ALFREDO REYNA (CONTACT)</u> Printed Name: <u>ALFREDO REYNA</u>		Phone (806) 549-7320 Email: <u>AREYNA1108@GMAIL.COM</u>	
Address: <u>2810 Emily St</u>	City: <u>Lubbock</u>	State: <u>TX</u>	Zip: <u>79415</u>

Street Address: <u>3408 N Midkiff, Suite 104, Midland, TX 79705</u>	
Business Name: <u>Casa Real, LLC</u>	
Legal Description Lot: <u>1</u> Block: <u>11</u> Subdivision: <u>Kimber Lea Sec 11</u>	
Current Zoning: <u>RR-Regional Retail District</u>	
Reason for Request: <u>Open a restaurant that serves alcohol while dining</u>	

Type of Business (restaurant, bar, lounge, nightclub, etc.): <u>Restaurant</u>			
Proposed/Current Days and Hours of Operation: <u>Sunday - Thurs 11AM - 11PM</u> <u>Friday 11AM - 12AM Saturday 11AM - 12AM</u>			
Proposed Days and Hours of Alcohol Service: <u>Same Hours As operating</u> <u>Hours</u>			
Total Square Footage of Business: <u>4126 SF</u>			
Square Footage of Alcohol Serviceable Area: <u>2379</u>			
Restroom Fixtures:	<u>Men</u>	Toilets/Urinals: <u>1/1</u>	Bathroom Sinks: <u>1</u>
	<u>Women</u>	Toilets: <u>2</u>	Bathroom Sinks: <u>1</u>

RECEIVED
MAR 02 2023

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Dimensioned Floor Plan showing:
 - Seating
 - Exits
 - Restrooms
 - Kitchen
 - Total Square Footage
 - Serviceable Square Footage
- Dimensioned Site Plan showing:
 - Parking
 - Business Footprint
- Digital Copies of Floor Plan & Site Plan (PDF/JPEG)

Signatures

Applicant (signature): Miguel Hernandez Date: 03/01/23
Applicant (printed): Miguel Angel Hernandez
Property Owner (signature): [Signature] Date: 2-23-2023
Property Owner (printed): 3408 Midkiff, LLC Blake Carpenter, Manager

The Specific Use Permit with Term for the sale of all alcoholic beverages shall be considered officially received in the Planning office only when it has been submitted in full compliance with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.

All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.

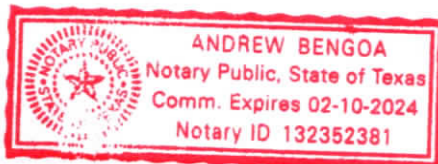
If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

STATE OF TEXAS
COUNTY OF MIDLAND

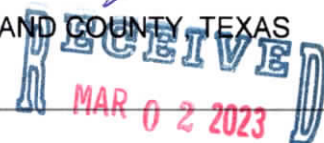
Before me, the undersigned authority, on this day personally appeared Miguel Angel Hernandez who, being by me duly sworn, upon oath says: That (s)he is authorized by _____, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Miguel Hernandez
Authorized Agent (signature)

Subscribed and sworn to before me, this 1st day of MARCH, 20 23, to certify which witness my hand and seal of office.



Andrew Bengoa
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS



BY:

****Application will not be considered for scheduling until reviewed by a planner.****

PACKET

16.11

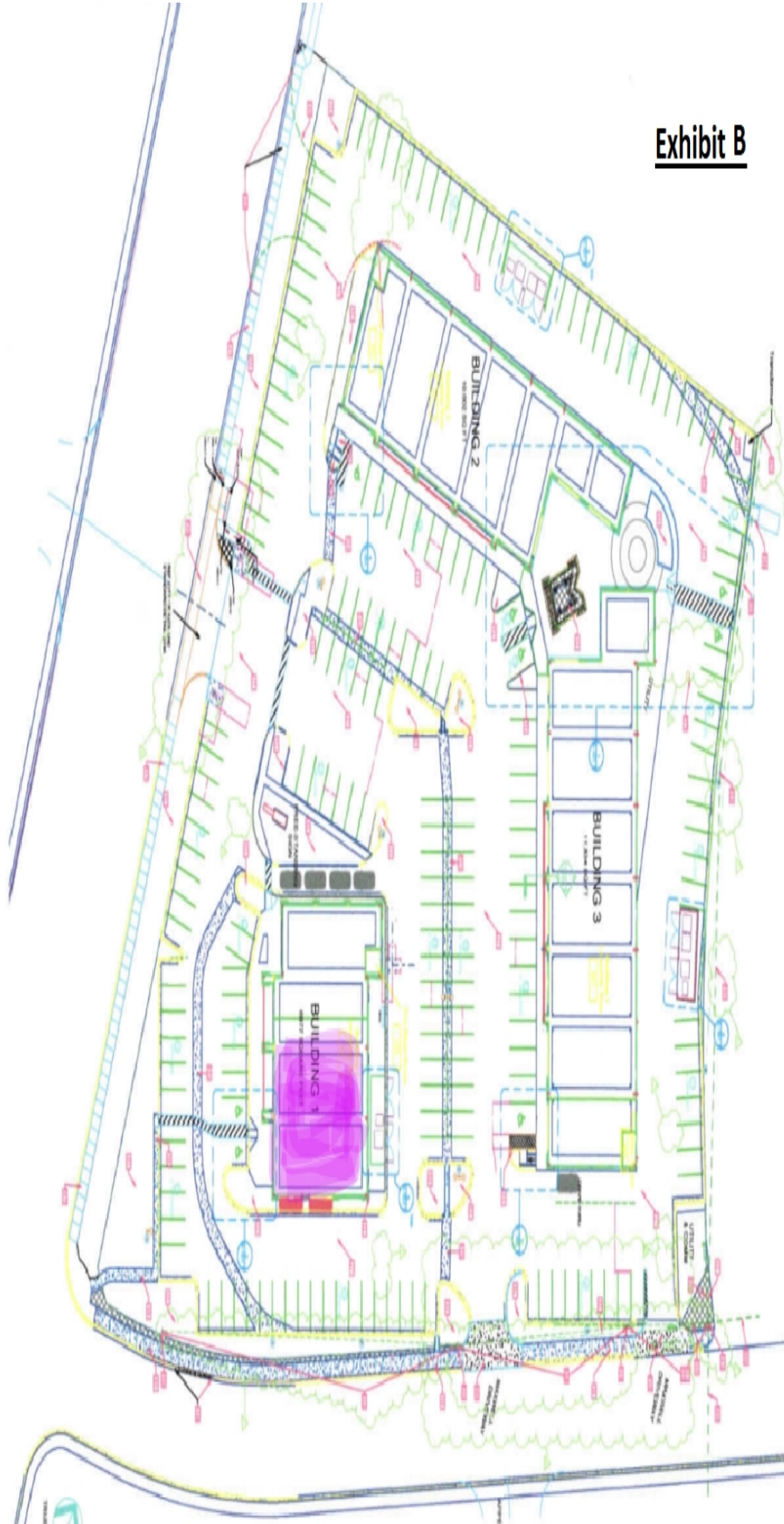
April 25, 2023

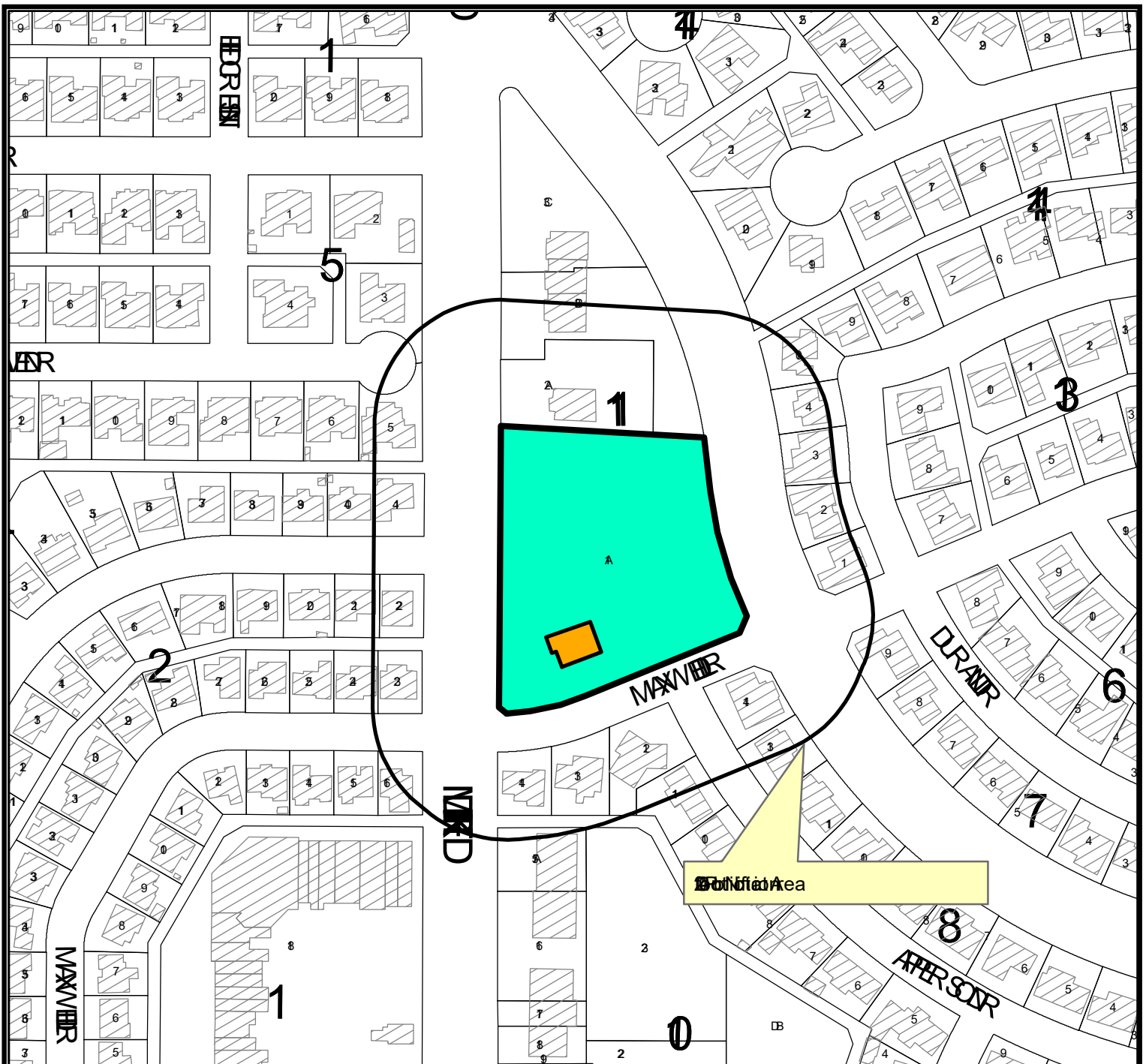
FOR OFFICE USE ONLY	
☒ Property Owner Authorization	☒ Dimensioned Floor Plan
☒ Application Fee	☒ Site Plan
Check # <u>1207</u>	☒ Plans in Digital Format (PDF/JPEG)
Received By: <u>DH</u>	Date: <u>MAR 02 2023</u>

RECEIVED
MAR 02 2023

BY:

Exhibit B





LOCATION MAP

SUD-23-0153

Scale: 1" = 200'

Consider a request by Miguel Hernandez, d/b/a Casa Real, LLC., for a Specific Use Designation with Term for the sale of all alcoholic beverages, for on-premises consumption in a restaurant on a 2,379-square foot portion of Lot 1A, Block 11, Kimber-Addition, Section 11, City and County of Midland, Texas. (Generally located on the northeast corner of the intersection of North Midkiff Road and Maxwell Drive. - Council District 3)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



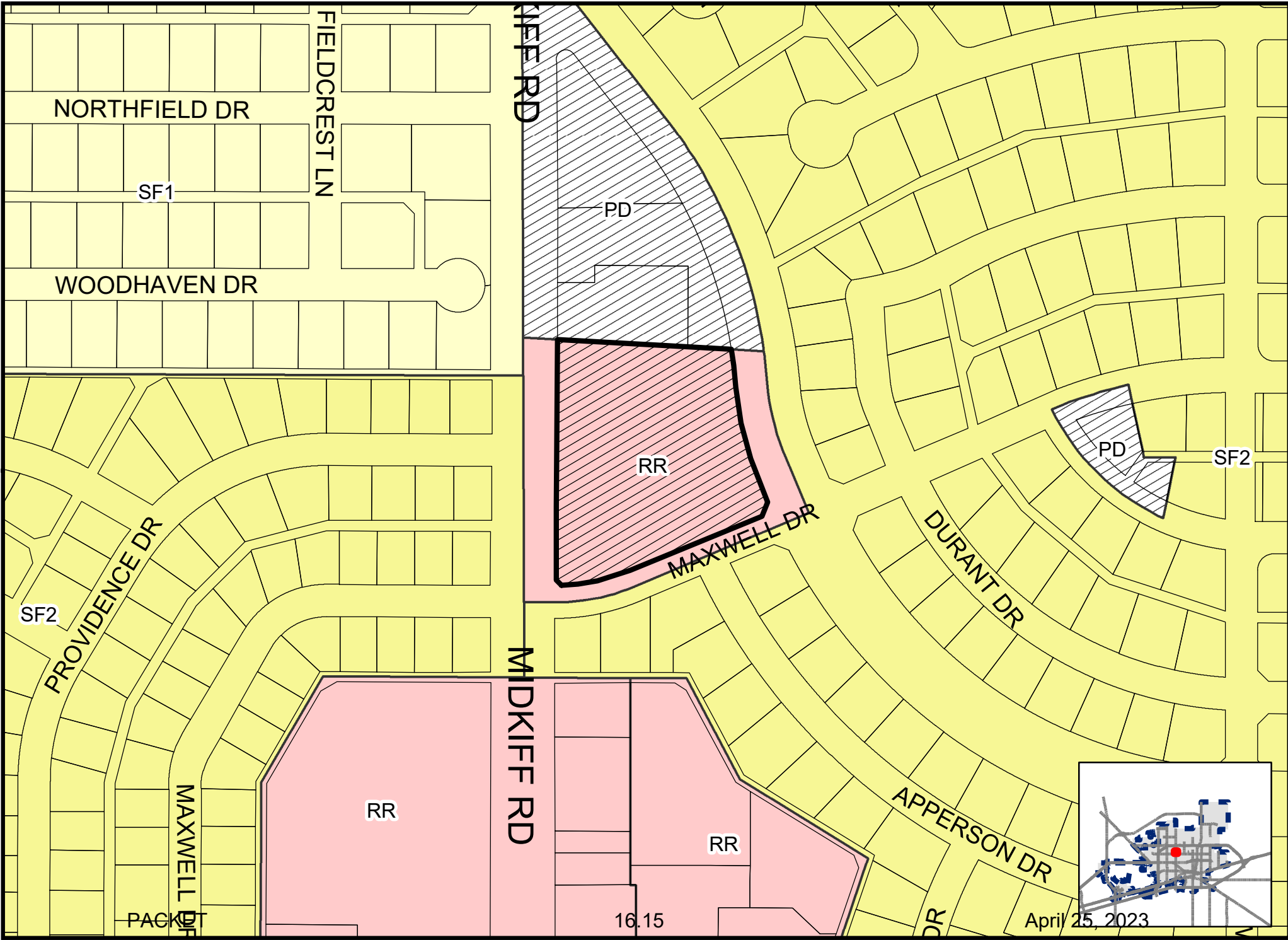
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THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR ANY DECISIONS BASED UPON THE USE OF THIS DATA.

April 25, 2023

16.14













City Council Meeting

Item Number: 17
Meeting Date: April 25, 2023
To: City Council / City Manager
From: Landon Ochoa, Planner
Subject: AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR THE WEST 32 FEET OF LOT 3 AND THE EAST 63 FEET OF LOT 4, BLOCK 6, IMPERIAL HEIGHTS ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE SOUTH SIDE OF CIMMARON AVENUE, APPROXIMATELY 230 FEET WEST OF WHITNEY DRIVE), BY PERMITTING A REDUCED MINIMUM SIDE YARD SETBACK ON THE WEST SIDE OF THE PROPERTY; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION (DISTRICT 3) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Roy Bermea, is requesting a Special Exception from the City of Midland Zoning Ordinance, *Section 5.04 – Residential Zoning District Dimensional Regulations Chart*, concerning the side yard setbacks to build an accessory structure three feet from the property line.

Recommended City Council Action:

Deny

Fiscal Impact:

No City funds are required to process this request.

Discussion:

The property is located at 3205 Cimmaron and is the location of a house. The applicant is requesting a special exception to the west side yard setback requirement for the property's current zoning of SF-2, Single-Family Dwelling District for the purpose of building an accessory structure three feet from the property line instead of the required five feet.

Per our City of Midland Zoning Ordinance, *Section 5.04 – Residential Zoning District Dimensional Regulations Chart*, concerning the side yard setback for a corner lot in SF-2:

SF-2, Single-Family Dwelling District
Yard Setback Dimensions
Minimum Side Yard Setback
Interior Lot: 5 feet

This request has been circulated to all pertinent City departments for review. Below are the departments' comments.

Fire: (Approved)

No objections

Building: (Approved with Conditions)

Building must also be 10 feet from the covered porch or any other portion of the home. This will be verified by the Residential Plans Examiner and on site building inspectors.

Engineering: (Approved)

No objections. [For the Applicant's information only.]

Code: (Approved)

No Oil and Gas issues.

Transportation: (Approved)

Site drainage, utilities, driveway access, and traffic circulation may be adjusted during construction drawing review as necessary to receive building permit approval from Engineering and Traffic Operations. [For the Applicant's information only.] No objection to zone change. [For the Applicant's information only.]

Planning (Denial):

This request represents a deviation from the Current Zoning Code. *Section 5.04 Residential Zoning District Dimensional Regulations Chart* shows that the west side yard setback is five feet. There is an existing '20 x 20' concrete foundation on the property that is three feet away

from the west property line. The property owner is wanting to use the foundation to build a storage building to store tools and equipment. It is possible that the property owner could remove two feet from the west side of the foundation and add two feet to the east side of the foundation. This would keep the dimensions of the foundation the same while meeting the side yard setback requirement. This solution was proposed to the applicant but the applicant is trying to reduce the cost of the project by applying for a special exception instead. The property would also need to be re-platted as the west and east lot lines are currently on structures.

Although this request deviates from the code, this request is in compliance with the Tall City Tomorrow Comprehensive Plan, Chapter 3 An Integrated Land Use Vision, "Future Land Use Map" as it designates this area for Urban Low, a classification which calls for "A mix of complementary uses including mostly single-family, with some attached, townhome and small multi-family projects, schools, small parks and churches, and neighborhood retail or mixed use." The use of an accessory structure for storage for a residence would not deviate from this designation.

Due to these factors, staff is recommending denial of this request. However, if it is approved, staff recommends that it be subject to conditions A through D.

Conditions:

- A. That said special exception shall not become effective until the Property is replatted into a single lot.**
- B. That the minimum side yard setback on the west side of the Property shall be three feet; provided, however, that said reduced minimum side yard setback shall apply only to the 20' x 20' accessory building shown in Exhibit "A", which is attached hereto and incorporated herein. Said accessory building is not drawn to scale in Exhibit "A".**
- C. That the accessory building described in Subsection B above shall be (1) located at least 10 feet from any portion of the building identified in Exhibit "A" as "RESIDENCE", (2) located at least 10 feet from any portion of the structure identified in Exhibit "A" as "COVERED PATIO", and (3) located at least five feet from the alley on the south side of the Property.**

Letters of Objection:

Staff has not received any letters of objection as of April 24, 2023.

Attachments:

Application
Site plan (Exhibit A)
Maps

ORDINANCE NO. _____

AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR THE WEST 32 FEET OF LOT 3 AND THE EAST 63 FEET OF LOT 4, BLOCK 6, IMPERIAL HEIGHTS ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED ON THE SOUTH SIDE OF CIMMARON AVENUE, APPROXIMATELY 230 FEET WEST OF WHITNEY DRIVE), BY PERMITTING A REDUCED MINIMUM SIDE YARD SETBACK ON THE WEST SIDE OF THE PROPERTY; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF TWO THOUSAND DOLLARS (\$2,000.00); ORDERING RECORDATION BY THE CITY SECRETARY IN THE DEED RECORDS OF MIDLAND COUNTY, TEXAS; AND ORDERING PUBLICATION

WHEREAS, the City Council modified the authority of the Board of Adjustment in Title XI, Chapter 1, Section 7 (“Section 11-1-7”) of the Midland City Code; and

WHEREAS, Section 11-1-7 provides for the consideration of requests for special exceptions to the Midland Zoning Ordinance; and

WHEREAS, the Council finds that satisfactory evidence has been presented that the use to be authorized by the granting of the special exception will not be detrimental to the health, safety, comfort and welfare of the occupants of the land area near the tract on which the use to be allowed by special exception will be located; and

WHEREAS, the Council finds that it is clearly and specifically authorized by the terms of Section 11-1-7 to grant such a special exception, and said exception will be in harmony with the general purposes and intent of the zoning provisions of the Midland City Code; and

WHEREAS, after a full and fair public hearing at which all parties in interest were offered an opportunity to be heard, all pursuant to law, the Council finds it to be in the public interest to grant a special exception to the Zoning Ordinance, pursuant to Section 11-1-7, for the purposes herein stated, subject to special conditions;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE

CITY OF MIDLAND, TEXAS:

SECTION ONE. That a special exception is hereby granted for the property described as the west 32 feet of Lot 3 and the east 63 feet of Lot 4, Block 6, Imperial Heights Addition, City and County of Midland, Texas (the “Property”). Said special exception shall allow a reduced minimum side yard setback on the west side of the Property.

SECTION TWO. Said special exception is subject to the following special conditions:

- A. That said special exception shall not become effective until the Property is replatted into a single lot.
- B. That the minimum side yard setback on the west side of the Property shall be three feet; provided, however, that said reduced minimum side yard setback shall apply only to the 20' x 20' accessory building shown in Exhibit “A”, which is attached hereto and incorporated herein. Said accessory building is not drawn to scale in Exhibit “A”.
- C. That the accessory building described in Subsection B above shall be (1) located at least 10 feet from any portion of the building identified in Exhibit “A” as “RESIDENCE”, (2) located at least 10 feet from any portion of the structure identified in Exhibit “A” as “COVERED PATIO”, and (3) located at least five feet from the alley on the south side of the Property.

SECTION THREE. The provisions of this ordinance are to be cumulative of all other ordinances or parts of ordinances governing or regulating the same subject matter as that covered herein; provided, however, that all prior ordinances or parts of ordinances inconsistent with or in conflict with any of the provisions of this ordinance are hereby expressly repealed to the extent of any such inconsistency or conflict.

SECTION FOUR. If any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this ordinance. The Council of the City of Midland hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional or invalid.

SECTION FIVE. The penalty for violation of this ordinance shall be in accordance

with the general penalty provisions contained in Section 1-3-1 of the City Code of Midland, Texas, which provides for a fine not exceeding two thousand dollars (\$2,000.00).

SECTION SIX. The City Secretary is hereby authorized and directed to file this ordinance with the Office of the County Clerk for purposes of recordation.

SECTION SEVEN. The City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance in the manner and for the length of time prescribed by the law as an alternative method of publication.

The above and foregoing ordinance was duly proposed, read in full and adopted on first reading, the _____ day of _____, A.D., 2023; and passed to second reading on motion of Council member _____, seconded by Council member _____, by the following vote:

Council members voting “AYE”:

Council members voting “NAY”:

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Council member _____, seconded by Council member _____, on the _____ day of _____, A.D., 2023, at a regular meeting of the City Council:

Council members voting “AYE”:

Council members voting “NAY”:

PASSED AND APPROVED THIS _____ day of _____, A.D., 2023.

Lori Merritt Blong, Mayor

ATTEST:

Marcia Bentley-German, City Secretary

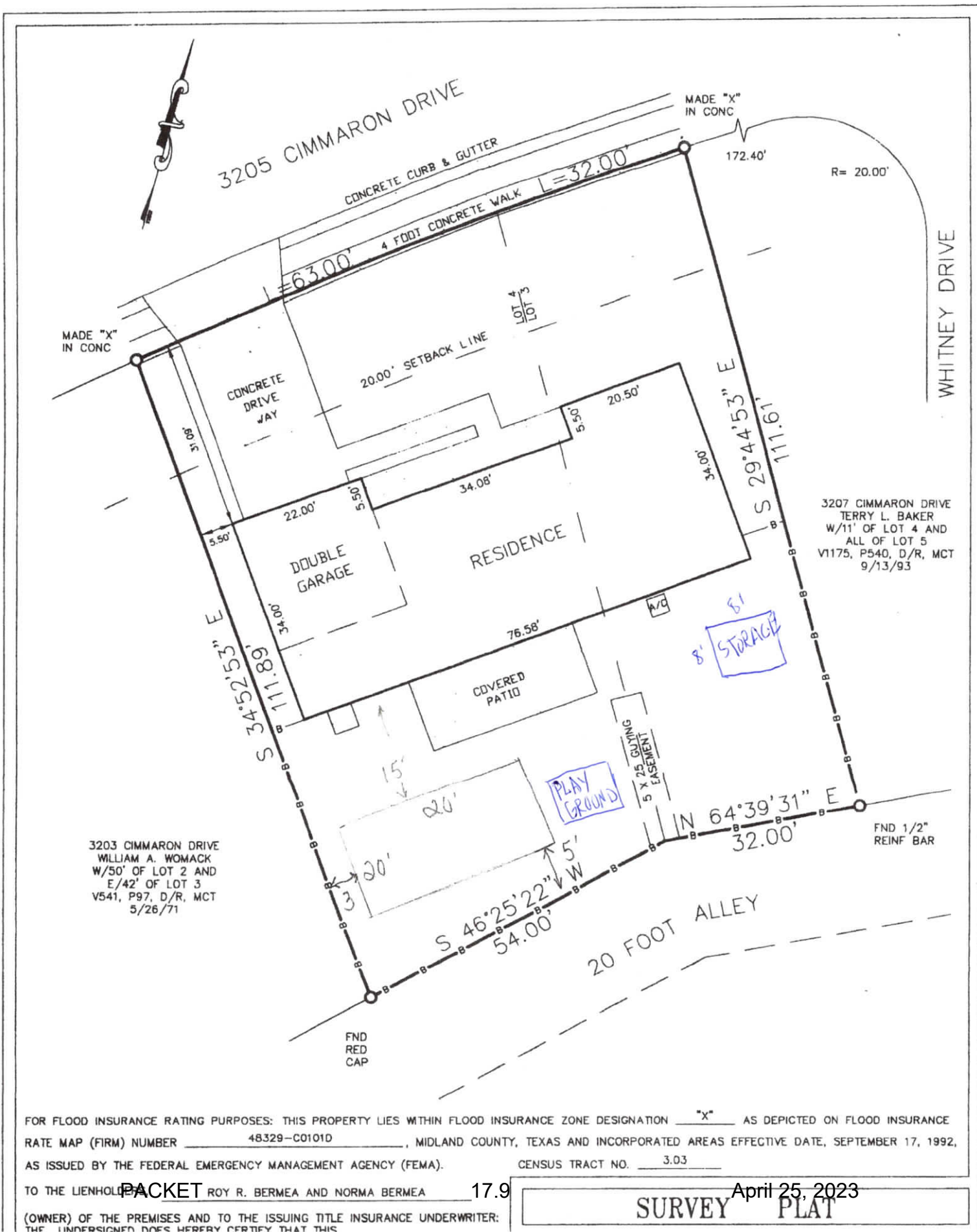
APPROVED AS TO CONTENT
AND COMPLETENESS:

Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

EXHIBIT "A"





Special Exception Application

Project Number: E-23-0096
Case Number: _____

Applicant (if acting as Agent, see affidavit on page 2) Printed Name: <u>ROY BERMEA</u>		Phone (432) <u>638-7339</u> Email <u>Rbermea52@gmail.com</u>	
Address <u>3205 CIMMARON</u>	City <u>MIDLAND</u>	State <u>TX</u>	Zip <u>79705</u>

Property Owner Printed Name: <u>ROY BERMEA</u>		Phone (432) <u>638-7339</u> Email <u>Rbermea52@gmail.com</u>	
Address <u>3205 CIMMARON</u>	City <u>MIDLAND</u>	State <u>TX</u>	Zip <u>79705</u>

Representative (if different from Applicant or Property Owner) Firm: _____ Printed Name: _____		Phone () _____ Email _____	
Address _____	City _____	State _____	Zip _____

Street Address: <u>3205 CIMMARON</u>		
Legal Description Lot: _____ Block: _____ Subdivision: _____		

Current Zoning:
This property qualifies as an exception to the City Code because: ☐ It is an expansion of a nonconforming use. ☐ There are existing nonconforming structures in the area. ☐ The addition of architectural or other projections of a minor extent.
Reason for Request: <u>Existing foundation 20'x20' is 5' from alley, but only 3ft from property line. I'm told it's changed from 3' to 5' between property lines. I want to put a pre-fab metal bld on that foundation, so I'm asking for an exception to the city code. Thank you!</u>

Submittal and Fees Items to be submitted with this application form: • Application Fee – Payable to the 'City of Midland' • Dimensioned Site Plan showing: • Parking • Building Footprint • Digital Copies of Site Plan (PDF/JPEG)
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Signatures	
Applicant (signature): <u>Roy Bermea</u>	Date:
Applicant (printed): <u>ROY BERMEA</u>	
Property Owner (signature): <u>Roy Bermea</u>	Date:
Property Owner (printed): <u>ROY BERMEA</u>	
<i>The Special Exception shall be considered officially received in the Planning office <u>only</u> when it has been submitted in <u>full compliance</u> with the provisions of Section 212 of the Texas Local Government Code and the Zoning Code of Ordinances of the City of Midland and when such required items for the application are also received.</i> <i>All materials, including exhibits, submitted in support of an application, or displayed during a public hearing, shall remain the property of the City of Midland.</i>	

If an agent is authorized by the property owner to file and execute the application on behalf of the property owner, the agent must complete the affidavit below.

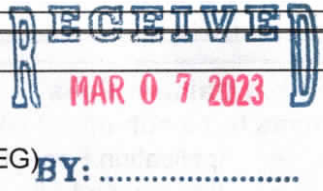
STATE OF TEXAS
COUNTY OF MIDLAND

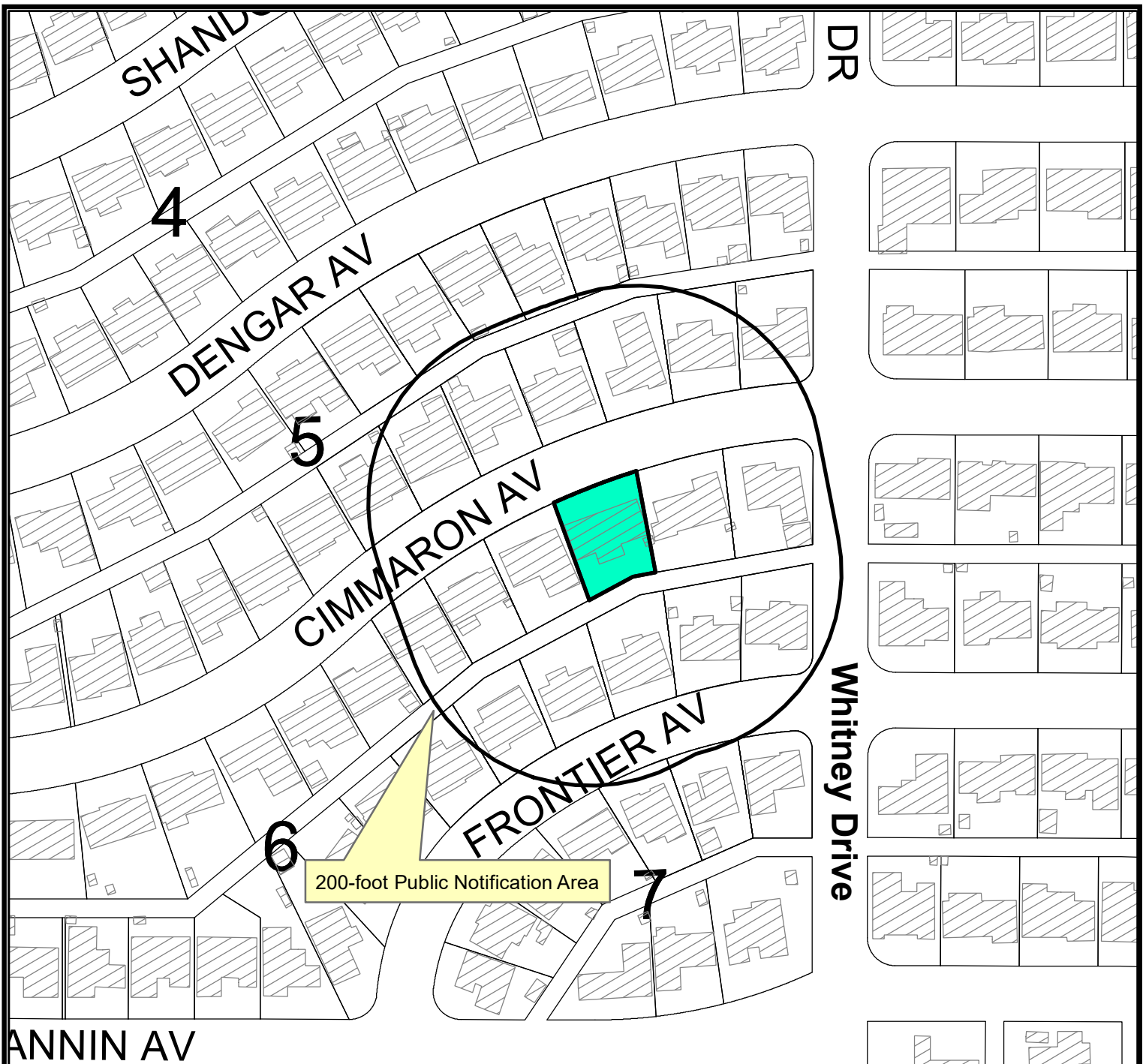
Before me, the undersigned authority, on this day personally appeared _____ who, being by me duly sworn, upon oath says: That (s)he is authorized by _____, the owner of the above described property, to fully represent him/her in this application and that (s)he had the legal right, power and authority to sign said owner's name hereto as his/her attorney in fact.

Authorized Agent (signature)

Subscribed and sworn to before me, this _____ day of _____, 20 ____, to certify which witness my hand and seal of office.

NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY		
☐ Property Owner Authorization ☐ Application Fee Check # _____	☐ Dimensioned Site Plan ☐ Plans in Digital Format (PDF/JPEG) BY: _____	
Received By: <u>James Riber</u>	Date: <u>3/7/23</u>	



LOCATION MAP

E-23-0096

Scale: 1" = 1,862'

Consider a request by Roy Bermea for a Special Exception from the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart, for a reduced minimum side yard setback on the west 32 feet of Lot 3 and the east 63 feet of Lot 4, Block 6, Imperial Heights Addition, City and County of Midland, Texas.

Generally located south of Cimmaron Avenue
Approximately 17.12 feet west of Whitney Drive.
(Council District 3)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



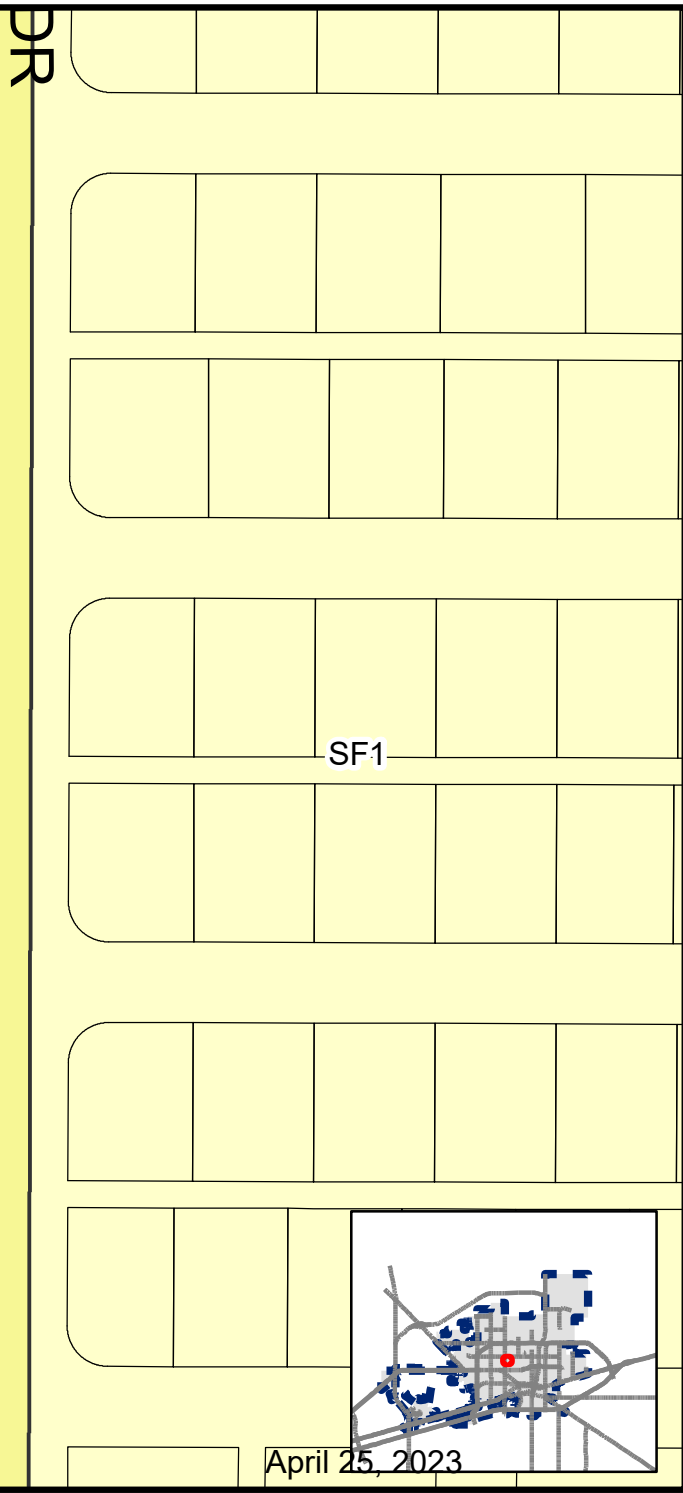
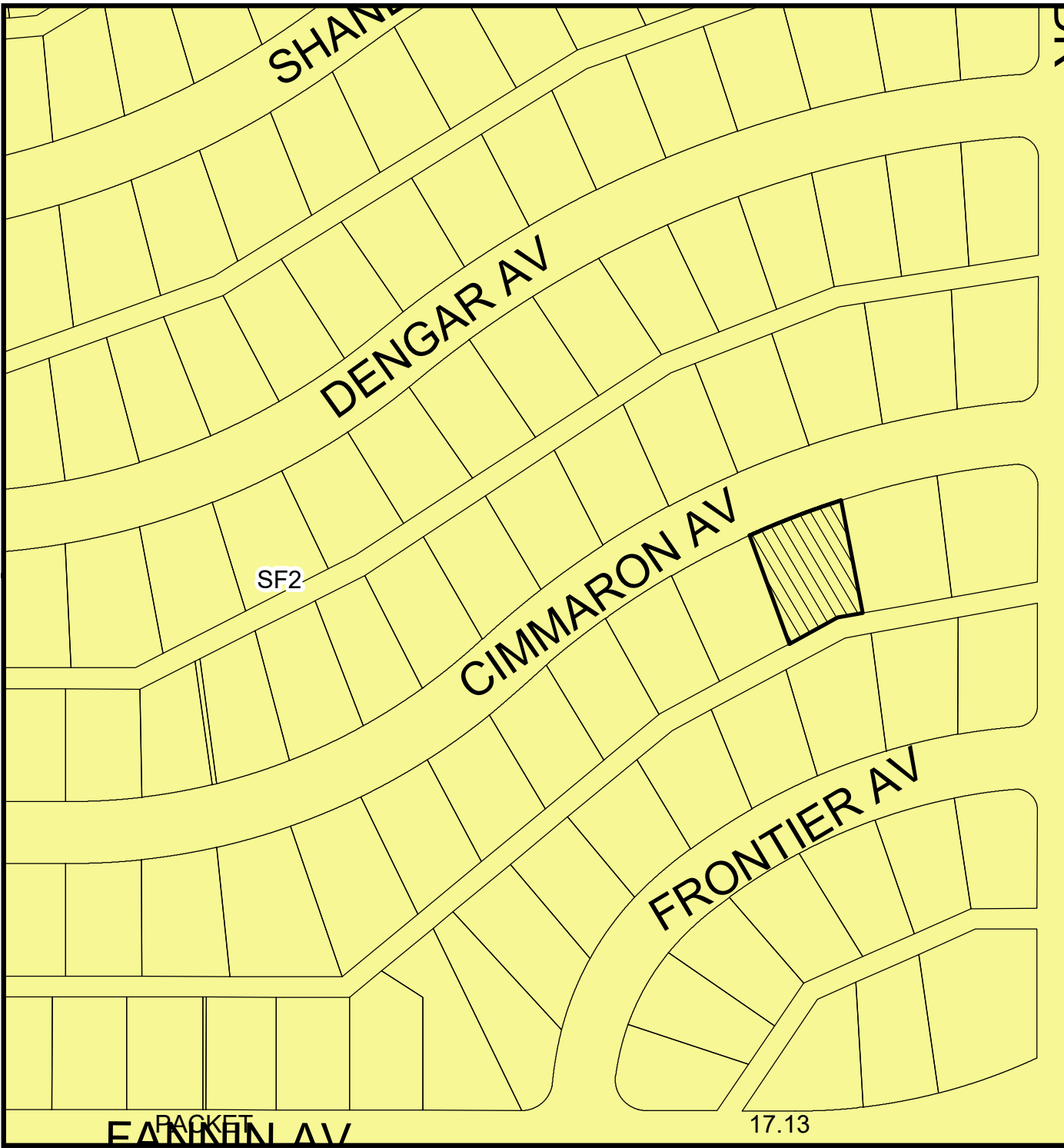
©THE CITY OF MIDLAND - 2021

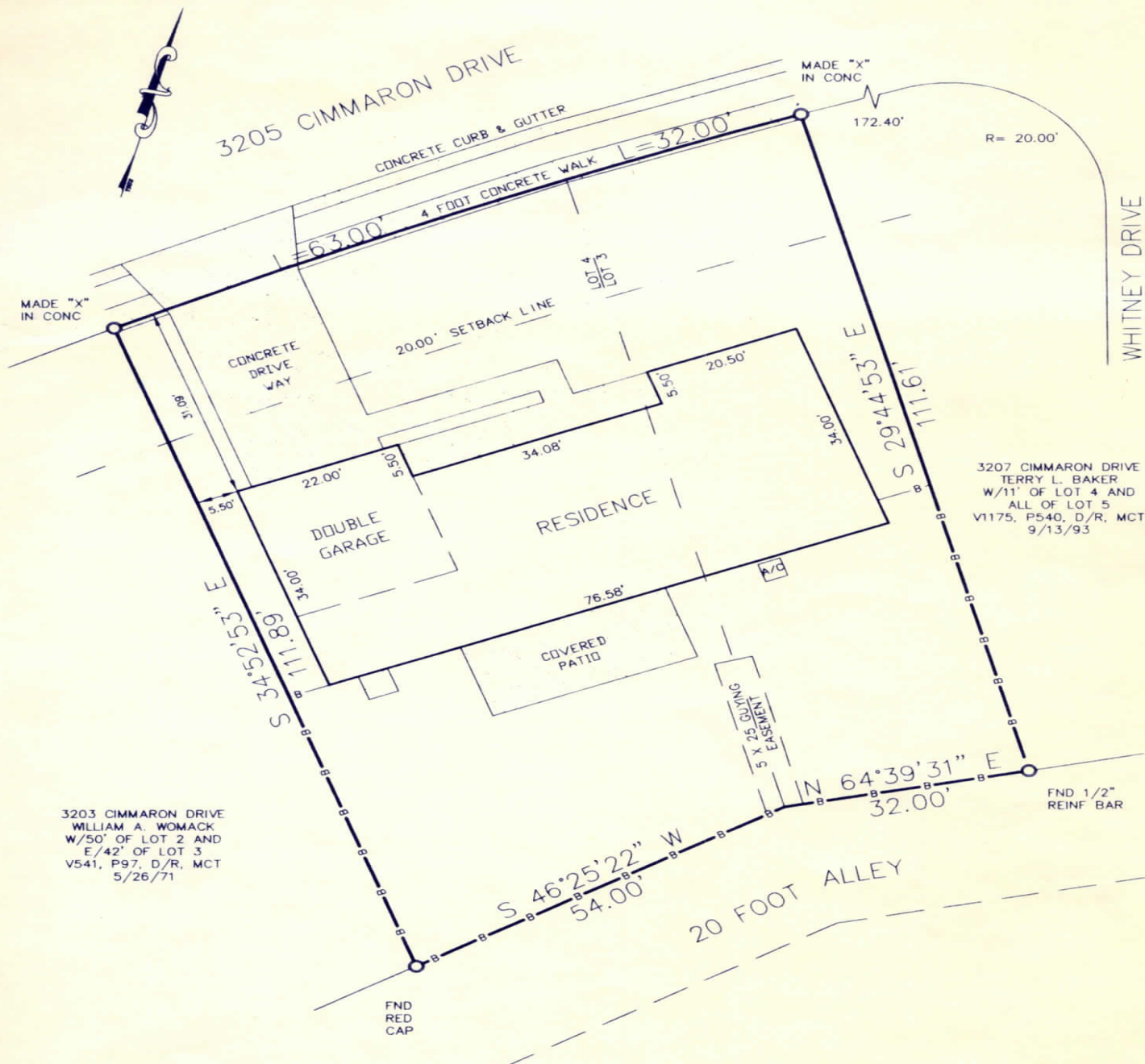
THIS DATA IS NOT A SUBSTITUTION FOR A
SURVEY OR FOR IT IS DESIGNED TO
BE USED AS A TOOL IN PERMITTING
OR OTHER DECISIONS BASED SOLELY ON THE
INFORMATION CONTAINED HEREIN.

THE CITY OF MIDLAND SHALL NOT BE RESPONSIBLE FOR
ANY DECISIONS BASED UPON THE USE OF THIS DATA.

April 25, 2023

17.12





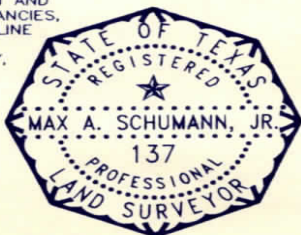
FOR FLOOD INSURANCE RATING PURPOSES: THIS PROPERTY LIES WITHIN FLOOD INSURANCE ZONE DESIGNATION "X" AS DEPICTED ON FLOOD INSURANCE RATE MAP (FIRM) NUMBER 48329-C0101D, MIDLAND COUNTY, TEXAS AND INCORPORATED AREAS EFFECTIVE DATE, SEPTEMBER 17, 1992, AS ISSUED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).

TO THE LIENHOLDERS, ROY R. BERMEA AND NORMA BERMEA

(OWNER) OF THE PREMISES AND TO THE ISSUING TITLE INSURANCE UNDERWRITER: THE UNDERSIGNED DOES HEREBY CERTIFY THAT THIS SURVEY WAS THIS DAY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON AND IS CORRECT AND THAT THERE ARE NO DISCREPANCIES, CONFLICTS, SHORTAGES IN AREA, BOUNDARY LINE CONFLICTS, ENCROACHMENTS, OVERLAPPING OF IMPROVEMENTS, EASEMENTS OR RIGHTS-OF-WAY, EXCEPT AS SHOWN HEREON AND THAT SAID PROPERTY HAS ACCESS TO AND FROM A DEDICATED ROADWAY.

DATED THIS 28TH DAY OF JULY, 1997

Max A. Schumann, Jr.
MAX A. SCHUMANN, JR.
RPLS 137



SCHUMANN ENGINEERING CO., INC.

REGISTERED PROFESSIONAL LAND SURVEYORS
LICENSED STATE LAND SURVEYORS

REGISTERED PROFESSIONAL CIVIL ENGINEERS
TEXAS AND NEW MEXICO

Civil Engineering ~ Land Surveying

408 N. PECOS STREET - P. O. BOX 504
MIDLAND, TEXAS 79702-0504

Office (915) 684-5548
Fax (915) 684-6973

SURVEY PLAT

THE WEST 32 FEET OF LOT 3 AND
LOT 4 EXCEPT THE WEST 11 FEET

BLOCK 6

IMPERIAL HEIGHTS ADDITION

AN ADDITION TO THE CITY OF MIDLAND,
AS PER PLAT OF RECORD IN
CABINET "A", PAGE 42, PLAT RECORDS,
MIDLAND COUNTY, TEXAS

April 25, 2023

SCALE: 1"= 20'

PROJECT: 63070LSA
JOB NO.: 63,070







PACKET

17.18

April 25, 2023

