Effective March 16, 2020, Governor Greg Abbott authorized the temporary suspension of certain statutory provisions of the Texas Open Meetings Act. This meeting of the City Council of the City of Midland is being held pursuant to such authorization and will limit face-to-face interactions for the purpose of slowing the spread of the coronavirus (COVID-19).

CITY OF MIDLAND, TEXAS
AGENDA FOR CITY COUNCIL MEETING
May 25, 2021 - 10:00 AM
300 North Loraine
Midland, Texas
Council Chamber - City Hall

Videoconference Information

Please click this URL to join. https://zoom.us/j/95075959983?pwd=UkZ1Qjh4Yko2ZUFNanZoWEd3eEovQT09

Passcode: 110141

Or One tap mobile:

+13462487799,,95075959983# US (Houston)

+16699009128,,95075959983# US (San Jose)

Or join by phone:

Dial(for higher quality, dial a number based on your current location):

US: +1 346 248 7799 or +1 669 900 9128 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 646 558 8656

Webinar ID: 950 7595 9983

International numbers available: https://zoom.us/u/aetWM4aJeg

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

OPENING ITEMS

1. Invocation – Minister Russ Hale, Stonegate Fellowship

2. Pledge of Allegiance

CONSENT AGENDA

3. MOTION APPROVING THE FOLLOWING MINUTES:

4a. BRIEFING SESSION OF MAY 11, 2021

4b. REGULAR MEETING OF MAY 11, 2021

4. 2021-059 – RESOLUTION AUTHORIZING THE EXECUTION OF A SOLE-SOURCE CONTRACT WITH AZTECA SYSTEMS, LLC, FOR THE PURCHASE OF THREE (3) YEARS OF LICENSING AND SOFTWARE MAINTENANCE SUPPORT OF CITYWORKS SOFTWARE FOR THE COMMUNICATION AND INFORMATION SYSTEMS DEPARTMENT AT A TOTAL COST OF $229,033.00 (DISTRICT: ALL) (GENERAL SERVICES)

5. 2021-060 – RESOLUTION REJECTING ALL BIDS RECEIVED FOR THE MIDLAND DRAW WIDENING PROJECT (DISTRICT 2) (GENERAL SERVICES)

6. 2021-061 – RESOLUTION AWARDING A CONTRACT FOR THE PARK AVENUE HEIGHTS 2 UTILITY PROJECT TO TEC EXCAVATION, INC., FOR A TOTAL COST NOT TO EXCEED $1,164,771.00; APPROVING $50,000.00 FOR PROJECT RELATED COSTS; AND APPROPRIATING FUNDS (DISTRICT 2) (GENERAL SERVICES)

7. 053-2021 – MOTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN INTERLOCAL AGREEMENT WITH TML MULTISTATE INTERGOVERNMENTAL EMPLOYEE BENEFITS POOL, DOING BUSINESS AS TML HEALTH BENEFITS POOL, FOR THE PURPOSE OF OBTAINING SERVICES FOR THE ADMINISTRATION OF ONE OR MORE LIFE, SICK, ACCIDENT AND OTHER HEALTH BENEFITS; AND AUTHORIZING THE CITY MANAGER TO EXECUTE ANY DOCUMENTS NECESSARY OR APPROPRIATE TO EFFECTUATE SAID INTERLOCAL AGREEMENT (DISTRICT: NONE) (ADMINISTRATIVE SERVICES)

8. 054-2021 – MOTION AUTHORIZING THE CITY MANAGER OR THE CITY MANAGER'S DESIGNEE TO ADVERTISE A REQUEST FOR PROPOSALS FOR NON-EXCLUSIVE FIXED BASE OPERATOR SERVICES AT MIDLAND INTERNATIONAL AIR & SPACE PORT, AND TO NEGOTIATE A FIXED-BASE OPERATOR SERVICES AGREEMENT FOR SAID SERVICES; PROVIDED, HOWEVER, THAT SAID AGREEMENT SHALL NOT BECOME EFFECTIVE UNTIL APPROVED BY THE CITY COUNCIL (DISTRICT: FOUR) (AIRPORTS)

9. 2021-062 – RESOLUTION APPROVING AN AMENDMENT TO THAT CERTAIN ECONOMIC DEVELOPMENT AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND KEPLER AEROSPACE, LTD (DISTRICT: NONE) (CITY MANAGER)

10. 2021-063 – RESOLUTION AUTHORIZING THE MIDLAND CHAMBER OF COMMERCE TO HOLD THE ANNUAL STAR SPANGLED SALUTE AT CENTENNIAL PARK AND ON THE ADJACENT PUBLIC RIGHTS OF WAY ON JULY 3, 2021; AND AUTHORIZING THE SALE AND CONSUMPTION OF ALCOHOLIC BEVERAGES AT SAID EVENT (DISTRICT 2) (COMMUNITY SERVICES)

11. 055-2021 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE AMENDMENT BETWEEN THE CITY OF MIDLAND AND SCM WATER, LLC,

REGARDING CITY OWNED PROPERTY DESCRIBED AS SECTIONS 13, 17, 18,19 AND 21, BLOCK C-23, P.S.L. SURVEY, ABSTRACT NO. 1388, WINKLER COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)

12. 2021-064 – RESOLUTION AUTHORIZING THE ACCEPTANCE OF A 7.097-ACRE RIGHT-OF-WAY GRANT LOCATED IN SECTIONS 18 AND 19, BLOCK 38, T-1-S, T&P RR. CO SURVEY, MIDLAND, TEXAS FROM MORIAH LAND & CATTLE, LLC; ORDERING THE CITY SECRETARY TO RECORD SAID INSTRUMENT IN THE OFFICIAL REAL PROPERTY RECORDS OF MIDLAND COUNTY, TEXAS; AND APPROPRIATING FUNDS (DISTRICT: ALL) (UTILITIES)

13. 056-2021 – MOTION AUTHORIZING THE EXECUTION OF A RIGHT-OF-WAY LICENSE BETWEEN THE CITY OF MIDLAND AND NUSTAR PERMIAN TRANSPORTATION & STORAGE, LLC, REGARDING CITY-OWNED PROPERTY DESCRIBED AS SECTION 2, BLOCK 37, TOWNSHIP 3 SOUTH, T&P RR CO. SURVEY, MIDLAND COUNTY, TEXAS (DISTRICT: NONE) (UTILITIES)

14. 2021-065 – RESOLUTION AMENDING CHAPTER IV, “APPLICATIONS, APPLICANTS, AND CONDITIONS OF EMPLOYMENT,” SECTION 15, “CITY OF MIDLAND DRUG AND ALCOHOL TESTING POLICY,” SUBSECTION D, “REQUIRED TESTS,” PARAGRAPH 3, “REASONABLE SUSPICION TESTING,” CHAPTER VIII, “ADVERSE ACTION,” AND CHAPTER IX, “GRIEVANCE PROCEDURES,” OF THE CITY OF MIDLAND PERSONNEL POLICIES; AND ESTABLISHING AN EFFECTIVE DATE OF JUNE 1, 2021 (CITY ATTORNEY)

SECOND READINGS

15. 10185 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 9.92-ACRE TRACT OF LAND OUT OF SECTION 11, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM AE, AGRICULTURAL ESTATE DISTRICT TO PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF NORTH STATE HIGHWAY 349 AND TEJAS); 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 (DEVELOPMENT SERVICES) (FIRST READING HELD MAY 11, 2021)

16. 10186 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 10,250-SQUARE FOOT PORTION OF LOT 1, BLOCK 8, POLO PARK, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH GARFIELD STREET AND WEST LOOP 250 NORTH), WHICH IS PRESENTLY ZONED PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER, 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 (DEVELOPMENT SERVICES) (FIRST READING HELD MAY 11, 2021)

PUBLIC HEARINGS

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

17. 10187 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 27.05-ACRE TRACT OF LAND OUT OF SECTION 7, BLOCK 38, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM SF-3, SINGLE-FAMILY DWELLING DISTRICT TO PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT (GENERALLY LOCATED ON THE SOUTH SIDE OF OCCIDENTAL PARKWAY, APPROXIMATELY 1,335 FEET EAST OF CARRIAGE ROAD); 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)

18. 10188 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 141.53-ACRE TRACT OF LAND OUT OF SECTION 12, BLOCK 39, T-1-S, T&P RR CO. SURVEY, CITY OF MIDLAND, MIDLAND AND MARTIN COUNTIES, TEXAS, FROM AE, AGRICULTURAL ESTATE DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED AT THE NORTHEAST CORNER OF NORTH STATE HIGHWAY 349 AND OCCIDENTAL PARKWAY); 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)

19. 10189 – AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOTS 4, 5 AND 6, WEST WAY ADDITION, SECTION 4, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF WEST GOLF COURSE ROAD AND HUGHES STREET), BY PERMITTING A REDUCED MINIMUM FRONT YARD SETBACK; 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)

20. 057-2021 – HOLD A PUBLIC HEARING IN ORDER FOR THE CITY OF MIDLAND AND THE CDBG PRIORITIZATION COMMITTEE TO RECEIVE PUBLIC COMMENTS, GUIDANCE AND RECOMMENDATIONS REGARDING THE 2021-2022 CDBG GRANT APPLICATION SUBMISSIONS AND THE SECOND YEAR ACTION PLAN IN ACCORDANCE WITH THE FIVE YEAR CONSOLIDATED PLAN GOALS (DISTRICT:

NONE) (DEVELOPMENT SERVICES) (PUBLIC HEARING ONLY)

21. 2021-066 – RESOLUTION AUTHORIZING THE TEMPORARY USE OF LAND FOR A VENDOR MARKET AND CONCERT ON LOT 1A, BLOCK 54, ALL OF BLOCK 55, A 0.57-ACRE PORTION OF WEST WALL STREET RIGHT-OF-WAY, A 0.57-ACRE PORTION OF NORTH COLORADO STREET RIGHT-OF-WAY, AND A 0.57-ACRE PORTION OF THE WEST TEXAS AVENUE RIGHT-OF-WAY, ALL ADJACENT TO BLOCK 55, ALL OUT OF ORIGINAL TOWN ADDITION, SECTION 14, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF NORTH COLORADO STREET AND WEST TEXAS AVENUE) SUBJECT TO CERTAIN SPECIAL CONDITIONS AND RESTRICTIONS (DISTRICT 2) (DEVELOPMENT SERVICES)

MISCELLANEOUS

22. 10190 – AN ORDINANCE AMENDING TITLE III, “DEPARTMENTS”, CHAPTER 3, “HOTEL OCCUPANCY TAX”, SECTION 1, “DEFINITIONS”, OF THE CITY CODE OF MIDLAND, TEXAS, SO AS TO DEFINE “HOTEL” IN ACCORDANCE WITH STATE LAW; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF FIVE HUNDRED DOLLARS ($500.00); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; AND ORDERING PUBLICATION (CITY ATTORNEY)

23. 058-2021 – MOTION GRANTING CACTUS SIGN COMPANY'S APPEAL AND REVERSING THE BUILDING OFFICIAL'S DENIAL OF A SIGN PERMIT FOR THE SOUTH HALF OF LOTS 7 THROUGH 9 AND THE SOUTH 93.32 FEET OF LOTS 10 THROUGH 12, BLOCK 5, AND ALL OF BLOCKS 1, 2, 6 AND 7, ALL OUT OF HIGH SCHOOL ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF NORTH A STREET AND WEST ILLINOIS AVENUE) (DISTRICT 3) (DEVELOPMENT SERVICES)

24. 059-2021 – MOTION APPOINTING A MAYOR PRO TEMPORE (CITY MANAGER)

PUBLIC COMMENT

25. 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

26. 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

a.1. 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
May 11, 2021

The City Council convened in regular session in the Council Chamber, City Hall, Midland, Texas, at 9:30 AM, May 11, 2021.

Council Members present:	Patrick Payton, Spencer Robnett, Scott Dufford, John Norman, Lori Blong
Council Members absent:	Michael Trost, Jack Ladd
Staff members present:	City Manager Robert Patrick, City Attorney John Ohnemiller, Deputy City Manager Morris Williams, Assistant City Manager Tina Jauz

The meeting was called to order at 9:31 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 a presentation from Development Services regarding Cultural and Entertainment Districts

   Development Services Director Chuck Harrington provided a presentation and explained what are cultural and entertainment districts. He reviewed the different types of districts and which cities have the districts across Texas. He reviewed types held by other cities across Texas. The stakeholders of such districts can include arts organizations, artists, government agencies, hotels, universities, convention centers and visitor bureaus. To be successful you need buy-in from the community. The district needs to be actively engaged in their promotion. The process includes sending a letter of intent to the state by January 30th of each year and submitting the full application by June 15th.

   Entertainment Districts are an overlay district that allows for the development and promotion of a vibrant and active area in Midland that encourages economic development and can allow for latitude in certain zoning ordinances such as allowing persons to carry alcoholic beverages while walking in the district, allowing neon signs, etc. He discussed the possibility of setting up a public improvement district within the entertainment district and reviewed the benefits. He suggested doing something smaller than the DMMD district in an area focusing on 2-3 blocks and then the size could be increased later.

DRAFT

Mr Harrington asked if Council would like him to pursue these options and Council agreed. Council Member Robnett suggested he add some money in the budget to start funding. Council Member Blong asked for a one page report talking about the acronyms and potential funding components.

All the business at hand having been completed, the meeting adjourned at 10:00 a.m.

PASSED AND APPROVED May 25, 2021.

_____

Patrick Payton, Mayor

ATTEST:

_____

Amy M. Turner, City Secretary

DRAFT

MIDLAND CITY COUNCIL
MINUTES
May 11, 2021

The City Council convened in regular session in the Council Chamber, City Hall, Midland, Texas, at 10:00 a.m., May 11, 2021.

Council Members present:	Lori Blong, Michael Trost, Spencer Robnett, Patrick Payton, Scott Dufford, Jack Ladd, John Norman
Council Members absent:	None
Staff members present:	City Manager Robert Patrick, City Attorney John Ohnemiller, Deputy City Manager Morris Williams, Assistant City Manager Tina Jauz

The meeting was called to order at 10:01 a.m.

OPENING ITEMS

1. Invocation – Pastor Bob Pase, Grace Lutheran Church

2. Pledge of Allegiance

PRESENTATIONS

3. Presentation of special events, organizations, individuals, or periods of time including, but not limited to:

    a. Proclamation to Encompass Health Rehabilitation Hospital for National Nurses Week.

CONSENT AGENDA

Spencer Robnett moved to approve the Consent Agenda items 4-8; seconded by Lori Blong.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

DRAFT

4. MOTION APPROVING THE FOLLOWING MINUTES:

   a. BRIEFING SESSION MEETING OF APRIL 27, 2021

   b. REGULAR MEETING OF APRIL 27, 2021

   c. SPECIAL MEETING OF MAY 4, 2021

5. 051-2021 – MOTION AUTHORIZING AN INTERLOCAL AGREEMENT FOR COOPERATIVE PURCHASING SERVICES WITH THE REGION 8 EDUCATION SERVICE CENTER THROUGH A PROGRAM KNOWN AS THE INTERLOCAL PURCHASING SYSTEM (TIPS) PROGRAM (GENERAL SERVICES)

6. 2021-056 – RESOLUTION APPROVING A CONTRACT WITH PARAGON ROOFING, INC., THROUGH THE INTERLOCAL PURCHASING SYSTEM, FOR THE PURCHASE AND INSTALLATION OF STANDING SEAM METAL ROOFING AT FIRE STATION 10 FOR A TOTAL COST OF $164,953.25; AND APPROPRIATING FUNDS FOR SAID CONTRACT (GENERAL SERVICES)

7. 2021-057 – RESOLUTION APPROVING THE PURCHASE OF TWO (2) FORD F-150 4X4 CREW CAB TRUCKS AND ONE (1) FORD F-250 4X4 CREW CAB TRUCK FROM CHASTANG FORD THROUGH THE HOUSTON-GALVESTON AREA COUNCIL FOR A TOTAL COST OF $239,882.00 (GENERAL SERVICES)

8. 052-2021 – MOTION ACCEPTING FUNDS FROM THE 2021 TEXAS "J"- REGIONAL ADVISORY COUNCIL GRANT (DISTRICT: NONE) (FIRE)

SECOND READINGS

9. 10175 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 9.53-ACRE TRACT OF LAND OUT OF LOT 1, BLOCK 4, FREELAND ADDITION, SECTION 6, CITY AND COUNTY OF MIDLAND, TEXAS, FROM AE, AGRICULTURAL ESTATE DISTRICT TO CE, COUNTRY ESTATE DISTRICT (GENERALLY LOCATED AT THE SOUTHWEST CORNER OF THE INTERSECTION OF EAST GOLF COURSE ROAD AND ELKINS ROAD); 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

   Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10175.

   Spencer Robnett moved to approve the second and final reading of Ordinance No. 10175; seconded by Lori Blong.

   The motion passed by the following vote:
   AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong

DRAFT

NAY: None
ABSTAIN: None
ABSENT: Trost

10. 10176 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 1.494-ACRE TRACT OF LAND OUT OF THE WEST HALF OF TRACT 5, AND A 0.14-ACRE TRACT OF LAND OUT OF THE WEST HALF OF TRACT 6, LINDSAY ACRES ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM MH, MANUFACTURED HOUSING DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF MONTGOMERY AVENUE AND MORAN 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10176.

Spencer Robnett moved to approve the second and final reading of Ordinance No. 10176; seconded by Lori Blong.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

11. 10177 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 2, BLOCK 2, WALLACE HEIGHTS ADDITION, SECTION 9, CITY AND COUNTY OF MIDLAND, TEXAS, FROM PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT TO AN AMENDED PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT (GENERALLY LOCATED ON THE SOUTH SIDE OF SINCLAIR AVENUE, APPROXIMATELY 290 FEET EAST OF NORTH LOOP 250 WEST); 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10177.

John Norman moved to approve the second and final reading of Ordinance No. 10177; seconded by Lori Blong.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

DRAFT

12. 10178 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 7 AND 8, BLOCK 5, GREENWOOD ADDITION, FIRST SECTION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM MF-22, MULTIPLE-FAMILY DWELLING DISTRICT TO 2F, TWO-FAMILY DWELLING (DUPLEX) DISTRICT (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF SOUTH CALHOUN STREET AND EAST KENTUCKY 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10178.

Lori Blong moved to approve the second and final reading of Ordinance No. 10178; seconded by John Norman.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

13. 10179 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE THE SOUTH 50 FEET OF THE NORTHWEST QUARTER (ALSO KNOWN AS LOT 10), BLOCK 4, HOMESTEAD ADDITION, 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 NORTH TERRELL STREET, APPROXIMATELY 150 FEET NORTH OF EAST KANSAS 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10179.

Jack Ladd moved to approve the second and final reading of Ordinance No. 10179; seconded by John Norman.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

14. 10180 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE THE NORTH 50 FEET OF LOT 2, BLOCK 11, ORIGINAL TOWN ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM C, COMMERCIAL DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED ON THE WEST SIDE OF NORTH FORT WORTH STREET, APPROXIMATELY 100 FEET

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NORTH OF EAST OHIO 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10180.

John Norman moved to approve the second and final reading of Ordinance No. 10180; seconded by Lori Blong.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

15. 10181 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOTS 5 AND 6, BLOCK 118, SOUTHERN ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM LI, LIGHT INDUSTRIAL DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED ON THE WEST SIDE OF SOUTH WEATHERFORD STREET, APPROXIMATELY 122 FEET SOUTH OF EAST WASHINGTON 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10181.

John Norman moved to approve the second and final reading of Ordinance No. 10181; seconded by Jack Ladd.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

16. 10182 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 3, BLOCK 14, ORIGINAL TOWN ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM C, COMMERCIAL DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH TERRELL STREET AND EAST OHIO 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10182.

DRAFT

Lori Blong moved to approve the second and final reading of Ordinance No. 10182; seconded by Spencer Robnett.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

17. 10183 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE LOT 6, BLOCK 44, MOODY ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS, FROM RR, REGIONAL RETAIL DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF SOUTH LEE STREET AND EAST KENTUCKY 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 (DEVELOPMENT SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10183.

John Norman moved to approve the second and final reading of Ordinance No. 10183; seconded by Lori Blong.

The motion passed by the following vote:
AYE: Payton, Robnett, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: Trost

18. 10184 – AN ORDINANCE ADOPTING AN ACCESS MANAGEMENT POLICY AND AMENDING TITLE IX, “PUBLIC WAYS AND PROPERTY”, CHAPTER 4, “SIDEWALKS, DRIVEWAYS AND CURBING”, OF THE CITY CODE OF MIDLAND, TEXAS, SO AS TO REVISE THE SPECIFICATIONS CONTAINED THEREIN AND TO INCORPORATE THE ACCESS MANAGEMENT POLICY; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; ESTABLISHING AN EFFECTIVE DATE OF JUNE 1, 2021; AND ORDERING PUBLICATION (ENGINEERING SERVICES) (FIRST READING HELD APRIL 27, 2021)

Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10184.

Spencer Robnett moved to approve the second and final reading of Ordinance No. 10184; seconded by John Norman.

The motion passed by the following vote:
AYE: Robnett, Trost, Dufford, Norman
NAY: Payton, Ladd, Blong
ABSTAIN: None
ABSENT: None

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PUBLIC HEARINGS

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

19. 10185 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 9.92-ACRE TRACT OF LAND OUT OF SECTION 11, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM AE, AGRICULTURAL ESTATE DISTRICT TO PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF NORTH STATE HIGHWAY 349 AND TEJAS); 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 (DEVELOPMENT SERVICES)

    Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10185.

    Mayor Payton opened the public hearing at 10:12 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

    Jack Ladd moved to approve the first of two readings of Ordinance No.10185; seconded by Lori Blong.

    The motion passed by the following vote:
    AYE: Payton, Robnett, Trost, Dufford, Norman, Ladd, Blong
    NAY: None
    ABSTAIN: None
    ABSENT: None

20. 10186 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 10,250-SQUARE FOOT PORTION OF LOT 1, BLOCK 8, POLO PARK, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH GARFIELD STREET AND WEST LOOP 250 NORTH), WHICH IS PRESENTLY ZONED PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER, 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 (DEVELOPMENT SERVICES)

    Deputy City Secretary SueAnn Reyes read the caption of Ordinance No. 10186.

    Mayor Payton opened the public hearing at 10:14 a.m. There being no one present wishing to speak, the public hearing was immediately closed.

    Jack Ladd moved to approve the first of two readings of Ordinance No. 10186; seconded by Lori Blong.

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The motion passed by the following vote:
AYE: Payton, Robnett, Trost, Dufford, Norman, Ladd, Blong
NAY: None
ABSTAIN: None
ABSENT: None

21. 10187 – AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 27.05-ACRE TRACT OF LAND OUT OF SECTION 7, BLOCK 38, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM SF-3, SINGLE-FAMILY DWELLING DISTRICT TO PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT (GENERALLY LOCATED ON THE SOUTH SIDE OF OCCIDENTAL PARKWAY, APPROXIMATELY 1,335 FEET EAST OF CARRIAGE ROAD); 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 (DEVELOPMENT SERVICES)

Development Services Director Chuck Harrington reported the applicant asked to have this item withdrawn and it will be put on a future meeting once notice requirements have been met.

22. 2021-058 – RESOLUTION AUTHORIZING THE TEMPORARY USE OF LAND FOR A FESTIVAL, COOK-OFF AND CONCERT EVENT ON LOT 1A, BLOCK 54, LOT 1A, BLOCK 55, A 0.26-ACRE PORTION OF NORTH COLORADO STREET RIGHT-OF-WAY ADJACENT TO LOT 1A, BLOCK 55, AND A 0.54-ACRE PORTION OF WEST TEXAS AVENUE RIGHT-OF-WAY AND A 0.43-ACRE PORTION OF WEST WALL STREET RIGHT-OF-WAY, BOTH ADJACENT TO BLOCKS 54 AND 55, ALL OUT OF ORIGINAL TOWN ADDITION, SECTION 14, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF WEST TEXAS AVENUE AND NORTH COLORADO STREET) SUBJECT TO CERTAIN SPECIAL CONDITIONS AND RESTRICTIONS (DEVELOPMENT SERVICES)

Development Services Director Chuck Harrington gave a brief overview of the item noting it is for the Hispanic Chamber of Commerce for their Mex Tex Festival. This year it is moving back downtown to Centennial Park.

Mayor Payton opened the public hearing at 10:17 a.m.

Adrian Carrasco, 2009 Mosswood, gave a brief history of the event noting this will be the 33rd year. It will be held on June 12, 2021. They are happy to be moving back downtown. This cultural event brings together families and is their most important fundraiser of the year. They have been working with Centennial Park, Bush Convention Center and VisitMidland as well as many other local partners and companies to make this event happen. They will have the Midland Police Department providing event security and will be using janitorial services to keep the venue clean. He thanked Council for their support in bringing the event back downtown.

Steven Villela, 1208 South Loraine, reported this event started on the south side of Lamesa, was moved downtown, then out to the sports complex and now they are happy for

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it to move back downtown. This is a staple event in Midland and they are ensuring that measures have been taken for safety and need the road closure to host this cultural event.

Council Member Ladd reported he would be abstaining because he sits on the board of the Hispanic Chamber of Commerce.

There being no one else wishing to speak, the public hearing was closed at 10:20 a.m.

Lori Blong moved to approve Resolution No. 2021-058; seconded by John Norman.

The motion passed by the following vote:
AYE: Blong, Trost, Robnett, Payton, Dufford, Norman
NAY: None
ABSTAIN: Ladd
ABSENT: None

PUBLIC COMMENT

23. 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.)

Reagan Hignojos, 5108 Ric Drive, reported he attended an event a week ago and received a call that his son was having a meltdown at the mall. When he arrived his son appeared to be fine but as they were walking he went into a full blown meltdown. His son was diagnosed with autism when he was four years old. He is an accomplished horse rider, construction worker, and has climbed mountains. He has received therapy at MARC but is still a work in progress. As he was attempting to get his son home, someone, understandably, reported a kidnapping. Sergeant Ed Marker quickly assessed the situation and maintained a demeanor that kept the other officers calm all while his son told them that the police were stupid and used other expletives. Sergeant Marker's leadership influenced the other officers and he is grateful. His concern is that Sergeant Marker cannot be at all calls and wanted to ensure that officers are well trained to handle situations of people with learning disabilities and mental illness. In an era where the police are being criticized he wanted to recognize Sergeant Marker's actions and felt he should be commended.

Lauren Johnston, 3406 Sinclair Avenue, on behalf of the micro market requested a temporary road closure for the dates listed on the paper she distributed. She provided a map showing the area where the road would be closed. Their market has been held for almost a year in two different locations. They are growing and expanding and need more space which is why they are asking for the road closures. She clarified that they have over 100 vendors that have participated but they have space for 40 plus at each event not counting the permanent 11 small shops. Their events are held the first Saturday of every month from 10:00 a.m. to 6:00 p.m. Council Member Robnett noted that there is a formal application process that they need to go through and pointed her in the direction of Engineering Services Director Jose Ortiz to help her with the process.

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R.J. Daum, 800 Marienfeld, asked for a motion to be placed on another agenda for an exemption to a City ordinance about El Montecito Estates. This started in 2013 and they have hit a perfect storm. There are 17 square miles of drainage from TxDOT development from Todd Road to Elkins Road. The drainage affects the flood plain study for the county and incorporated areas. The TxDOT design cites future growth and the whole burden is coming on top of the current land owner. They are asking for an exemption for economic hardship.They are at an impasse with the County Commissioners and need some help. Mayor Payton reported staff would work with him to get this placed on a future agenda.

EXECUTIVE SESSION

Mayor Payton recessed the meeting to go to Executive Session at 10:36 a.m.

24. 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 551.071, Consultation with the City Attorney

    a.1. Discuss matters in which the duty of the attorney(s) 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

All the business at hand having been completed, the meeting adjourned at 11:30 a.m.

PASSED AND APPROVED May 25, 2021.

_____

Patrick Payton, Mayor

ATTEST:

_____

Amy M. Turner, City Secretary

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City Council Meeting

Item Number: 4

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Erika Martinez, Manager, Purchasing

Subject: **RESOLUTION AUTHORIZING THE EXECUTION OF A SOLE-SOURCE CONTRACT WITH AZTECA SYSTEMS, LLC, FOR THE PURCHASE OF THREE (3) YEARS OF LICENSING AND SOFTWARE MAINTENANCE SUPPORT OF CITYWORKS SOFTWARE FOR THE COMMUNICATION AND INFORMATION SYSTEMS DEPARTMENT AT A TOTAL COST OF $229,033.00 (DISTRICT: ALL) (GENERAL SERVICES)**

Purpose:

Approval of a resolution authorizing an agreement for the sole source purchase of licensing and software maintenance support for Cityworks software.

Recommended City Council Action:

Approve

Fiscal Impact:

Funds are available in the General Fund FY21 Operating Budget.

Discussion:

Resolution 2007-155 authorized the purchase of the Cityworks software for the Transportation Division and Utilities Department. The licensing and software maintenance support for the Cityworks software is only available through Azteca Systems, LLC. According to Texas Local Government Code 252.022 (a)(7)(A), competitive bidding requirements do not apply to items that are available from only one source because of patents, copyrights, secret processes, or natural monopolies. Staff recommends entering into the agreement and purchasing the licensing and software maintenance for Cityworks software from Azteca Systems, LLC. Please see the attached memo from Jennifer Frescaz, Chief Information Officer, for additional information.

Therefore, please consider a resolution authorizing an agreement for the sole source purchase of licensing and software maintenance support for Cityworks software to Azteca Systems, LLC of Sandy, Utah for a total cost of $229,033.00 for three (3) years.

Morris Williams Jr.

City Manager's Office

City Council Agenda

MEETING DATE: 05/12/2021

TO: Erika Martinez, Purchasing Manager

FROM: Jenifer Frescaz, Chief Information Officer

SUBJECT: Consider a resolution to approve a Cityworks software license and maintenance agreement

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Purpose:

Consider a resolution to approve a Cityworks Online Enterprise License Agreement for a three-year term.

Discussion:

The Engineering and Utilities departments began using Cityworks for asset and work order management more than ten years ago. In recent years, staff has made use additional Cityworks modules such as contract job management, analytics, and work order interfaces to other products. The number of users has also increased considerably. The user count will continue to increase as Cityworks will be the work order system for Customer Service's water meter repairs. The mobile capability allows staff to continue working in the field and at job sites rather than coming back to City offices for work order updates and assignments. This provides better efficiency and cost savings for fuel.

This renewal will provide Cityworks Cloud hosting, software updates, continued maintenance for customer support and mobile device access licenses.

The total cost of the agreement is $229,033 for 3 years and is budgeted in CISD Software Maintenance.

RESOLUTION NO. _____

RESOLUTION AUTHORIZING THE EXECUTION OF A SOLE-SOURCE CONTRACT WITH AZTECA SYSTEMS, LLC, FOR THE PURCHASE OF THREE (3) YEARS OF LICENSING AND SOFTWARE MAINTENANCE SUPPORT OF CITYWORKS SOFTWARE FOR THE COMMUNICATION AND INFORMATION SYSTEMS DEPARTMENT AT A TOTAL COST OF $229,033.00

WHEREAS, the City of Midland's Communication and Information Systems Department utilizes Cityworks software for asset and work order management; and

WHEREAS, Azteca Systems, LLC, is the sole authorized distributor for said Cityworks software in Texas; and

WHEREAS, Azteca Systems, LLC, has agreed to provide the City of Midland with three (3) years of licensing and software maintenance support of Cityworks software for a total cost of $229,033.00; and

WHEREAS, said Cityworks software is proprietary in nature and are available only through Azteca Systems, LLC; and

WHEREAS, the City Council finds the price proposed for three (3) years of licencing and software maintenance support of Cityworks software to be fair and reasonable; and

WHEREAS, the City Council finds it to be in the public interest to authorize the execution of a sole-source contract for the licensing and software maintenance support of said Cityworks software;

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

SECTION ONE. That the City Manager and the City Secretary are hereby authorized and directed to execute and attest, respectively, on behalf of the City of Midland, a sole-source contract with Azteca Systems, LLC, for three (3) years of licensing and software maintenance support of Cityworks software for the Communication and Information Systems Department at a total cost of $229,033.00. Said contract being attached hereto as Exhibit A and incorporated herein for all purposes.

SECTION TWO. That the City Comptroller is hereby authorized and directed to pay Azteca Systems, LLC, in accordance with the terms of the above-referenced contract, from funds available in the General Fund FY21 Operating Budget upon receipt of proper invoices or statements approved by the City Manager's Office.

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., 2021, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, 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

Azteca Systems, LLC, 11075 South State, Suite 24, Sandy, UT 84070
• TEL 801.523.2751 • FAX 801.523.3734 •
www.cityworks.com

CITYWORKS®
SOFTWARE LICENSE AND MAINTENANCE AGREEMENT

This Software License and Maintenance Agreement ("Agreement") is made by and between Azteca Systems, LLC ("Azteca Systems" or "Azteca") a Delaware limited liability company, with a place of business set forth on Addendum #1 below, and the **City of Midland, Texas**, (hereinafter referred to as "Licensee" or "Customer"), using certain of Azteca Systems Licensed Products. This Software License and Maintenance Agreement is effective upon the date of signature by Licensee below (the "Effective Date").

Azteca Systems Products are licensed under the terms and conditions of this Agreement. This Agreement, when executed by the Licensee and Azteca Systems, as licensor of the Software, or the Online Services, and Documentation licensed under this Agreement, will supersede any previous agreements.

This Agreement includes (i) this Software License and Maintenance Agreement, (ii) Addendum #1 – Product Licensing, (iii) Addendum #2 – Standard Maintenance and Support, and (iv) Addendum #3 – Third-Party Contractor Acknowledgment.

This Agreement may be executed in duplicate by the Parties. An executed Agreement, modification, amendment, or separate signature page shall constitute a duplicate if it is transmitted through electronic means, such as fax or email, and reflects the signing of the document by any Party. Duplicates are valid and binding even if an original paper document bearing each Party's original signature is not delivered.

ARTICLE 1—DEFINITIONS

1.1 **Definitions**. The terms used are defined as follows:

a. "Agreement" means this Software License and Maintenance Agreement between Azteca Systems and Licensee, inclusive of all schedules, exhibits, attachments, addenda, and other documents incorporated by reference.
b. "Authorization Code(s)" means any key, authorization number, enablement code, login credential, activation code, token, account username and password, or other mechanism required for use of a Product.
c. "Authorized User" or "User" shall mean: (i) a direct user of the Licensed Products, including but not limited to Licensee's employees; (ii) Licensee's consultants who have agreed to maintain the Licensed Property in confidence and use it only for the benefit of Licensee, or (iii) members of the public gaining access to, and only limited use of, the Licensed Products via the Software's public web portal (if applicable). Other than limited use of the Products through the software's web portal, the public is not considered an authorized user.
d. "Beta" means any alpha, beta, or other prerelease version of a Product.
e. "Client Data" means the data provided or inputted by or on behalf of Licensee, including personally identifiable information, for use with the Software.
f. "Cloud Services" means both Azteca Systems Managed Cloud Services and Online Services.
g. "Covered Software" shall mean the particular Cityworks Software, scripts, interfaces and custom code identified in Addendum #1.
h. "Concurrent Use License" means that Licensee may install and use the Software on computer(s) on a network, but the number of simultaneous users (logins) may not exceed the number of licenses required.
i. "Testing Server License" means a license that authorizes Licensee to install and use the Software on a server in Licensee's internal use to provide testing License rights prior to deployment.
j. "Documentation" means all user reference documentation that is supplied to the Licensee by Azteca Systems pursuant to this Agreement for aiding or enabling the use of the Software and is deemed to include any Azteca Systems-provided revisions thereof.
k. "Internal Use" means use of the Licensed Products by employees of Licensee in Licensee's internal operations but does not include access of the Licensed Products by or use of the Licensed Products in the provisions of services to Licensee's clients or customers. Internal Use also includes use of the Licensed Products by contractors of Licensee, including contractors providing outsourcing or hosting services, as long as Licensee assumes full responsibility for the compliance with this Agreement in such use. Use of the Licensed Products (or any part thereof) for the benefit of others, whether by means of a software as a

service offering, service bureau application, application service provider, outsourcing, or other means of providing service to any third party shall not be considered Internal Use.

l. “Licensed Products” or “Products” shall mean the portion of the Cityworks Software and the Documentation to which Licensee has purchased a License as identified in Addendum #1 attached hereto. Licensed Products shall include any updates or upgrades to the Licensed Products that Azteca Systems may at its discretion deliver to Licensee. Products includes but is not limited to Software and Documentation licensed under the terms of this Agreement.

m. "Login" means a license that allows Licensee to permit a single authorized named end user to use the Software, Data, and Documentation installed on a server and accessed from a computer device.

n. “Malicious Code” means software viruses; worm time bombs; Trojan horses; or any other computer code, files, denial of service, or programs designed to interrupt, destroy, or limit the functionality of any computer software, hardware, or telecommunications equipment.

o. “Named User(s) is Licensee’s employee, agent, consultant, or contractor to whom Licensee has assigned a unique, secure login credential (identity) enabling access to a Product that requires such identity in order to access identity-managed capabilities within a Product or subscription to Online Services for Licensee’s exclusive benefit.

p. "Online Services" means the commercially available, internet-based asset management system that Azteca Systems provides (commonly known as Cityworks Online), including applications and associated APIs, for storing, managing, publishing, and using maps, data, and other information. Online services exclude Data and Content.

q. “Online Services Subscription” means a limited-term subscription conveying the right for one or more named users to access and use Online Services.

r. "Ordering Document(s)" means a sales quotation, purchase order, or other document identifying the Products that Licensee orders.

s. "Preview" means any alpha, beta, or prerelease Product.

t. “Product(s)” means Software and Documentation licensed under the terms of this Agreement.

u. "Sample(s)" means sample code, sample applications, sample add-ons, or sample extensions of Products.

v. “Server” means each single instance of an operating system, whether physically installed on a computer or within a virtualized environment.

w. "Software" or “Cityworks Software” means all or any portion of Azteca Systems proprietary software technology, excluding data, accessed or downloaded from an Azteca Systems (Cityworks) authorized website or delivered on any media in any format including backups, documentation, updates, upgrades, and service packs. Without limitation, the Software is deemed to include any alpha, beta, prerelease or restricted version(s), or final commercial release(s), provided in source, object, or executable code format(s), inclusive of backups, updates, service packs, sample code, or merged copies permitted hereunder or subsequently supplied under this Agreement. Unless otherwise indicated by the context herein, the term Software is also deemed to include its associated Documentation.

x. “Standard Maintenance” or “Maintenance Addendum” shall mean the Standard Software Maintenance & Support Addendum #2.

y. "Term License" means a license or access provided for use of a Product for a limited time period ("Term") or on a subscription or maintenance basis as specified herein.

ARTICLE 2—INTELLECTUAL PROPERTY RIGHTS AND RESERVATION OF OWNERSHIP

All Azteca Systems Offerings are the copyrighted works of Azteca Systems. Azteca Systems or its licensors own the Products and all copies, which are protected by United States and applicable international laws, treaties, and conventions regarding intellectual property and proprietary rights, including trade secrets. This Agreement does not transfer ownership rights of any description in the software, materials, products, or services to Licensee or any third party. Licensee agrees to use reasonable means to protect Products from unauthorized use, reproduction, distribution, or publication. All rights not specifically granted in this Agreement are reserved to Azteca Systems and its licensor(s). Azteca Systems does not acquire any rights in Customer Content under this Agreement other than as needed to provide Azteca Offerings and Services to Customer.

ARTICLE 3—GRANT OF LICENSE

3.1 **Grant of License**. Subject to the terms of this Agreement, Azteca Systems grants to Licensee a personal, nonexclusive, nontransferable license solely to use the Products as set forth in Addendum #1 – Product Licensing (i)

for which the applicable license fees have been paid; (ii) for Licensee's own internal use; (iii) in accordance with this Agreement and the configuration ordered by Licensee or as authorized by Azteca Systems; and (iv) for the applicable Term or until terminated in accordance with Article 5. License types may include, but are not limited to Login, Workgroup, Departmental, ELA (Enterprise License) licenses. Licensee may allow Third-Party Contractors to access and use the licensed Software, provided Licensee and Third-Party Contractor agree to and are bound by the terms set forth in Addendum 3. In addition to the Scope of Use in Article 4, Addendum #1 – Product Licensing which applies to specific Products, Addendum #2 – Standard Maintenance and Support, and Addendum #3 – Third-Party Contractor Acknowledgment (if applicable) collectively, are incorporated by reference into this Agreement.

a. *Software.* Use and license for specific Software products are set forth in Addendum #1– Product Licensing, which is incorporated by reference.
b. *Maintenance.* Maintenance terms are set forth in Section 9.11 below and in Addendum #2 – Standard Maintenance and Support, which terms are incorporated by reference.
c. *Third Party Contractor.* Terms of use for Third-Party Contractor software usage (if applicable) are set forth in Addendum #3 – Third-Party Contractor Acknowledgment, which is incorporated by reference.

3.2 **Delivery**. Unless otherwise agreed, Azteca Systems shall provide an electronic link to make available to Licensee the Licensed Products by electronic download and a license key to activate the Licensed Products.

ARTICLE 4—SOFTWARE AND ONLINE SERVICES

4.1 Software Terms of Use

a. For Products delivered to Licensee, Licensee may:

1. Install, access, and store Products on electronic storage device(s);
2. Make archival copies and routine computer backups;
3. Install and use a newer version of Software concurrently with the version to be replaced during a reasonable transition period not to exceed 6 months, provided that the deployment of either version does not exceed the Licensee's licensed quantity; thereafter, Licensee shall not use more Software in the aggregate than Licensee's total licensed quantity; and
4. Move the Software in the licensed configuration to a replacement server.

b. Licensee may use, copy, or prepare derivative works of Documentation supplied in digital format and thereafter reproduce, display, and redistribute the customized documentation only for Licensee's own internal use. Portions of Documentation supplied in digital format merged with other software and printed or digital documentation are subject to this Agreement. Licensee shall include the following copyright attribution notice acknowledging the proprietary rights of Azteca Systems and its licensors: "Portions of this document include intellectual property of Azteca and its licensors and are used herein under license. Copyright © [*Licensee will insert the actual copyright date(s) from the source materials*] Azteca Systems, LLC. and its licensors. All rights reserved."

c. *Consultant or Contractor Access.* Subject to Section 3.1 and Addendum #3, Azteca Systems grants Licensee the right to permit Licensee's Third-Party Consultants or Contractors to use the Products exclusively and solely for Licensee's benefit. Licensee must comply with terms and provisions of Addendum #3 and provide a copy to Azteca Systems. Licensee shall be solely responsible for compliance by Third-Party Consultants and Contractors with this Agreement and shall ensure that the Third-Party Consultant or Contractor discontinues Product use upon completion of work for Licensee. Access to or use of Products by Third-Party Consultants or Contractors not exclusively for Licensee's benefit is prohibited.

4.2 Online Services Terms of Use

a. **Use of Online Services** is also subject to the Cloud Services Terms found in Addendum #2.
b. **Modification of Online Services**. Azteca Systems may change Online Services and associated APIs at any time, subject to 30 days' notice of material changes and 90 days' notice for deprecations. If any modification, discontinuation, or deprecation of Online Services causes a material, adverse impact to Customer's operations, Azteca Systems may, at its discretion, attempt to repair, correct, or provide a

workaround for Online Services. If a viable solution is not commercially reasonable, Customer may cancel its subscription to Online Services, and Azteca Systems will issue a prorated refund.

4.3 **Named User Licenses**. Except as expressly set forth in this Agreement, the following terms apply to Software and Online Services for which Customer acquires Named User Licenses.

a. **Named Users**.

1. Named User login credentials are for designated users only and may not be shared with other individuals.
2. Customer may reassign a Named User License to another user if the former user no longer requires access to the Software or Online Services.
3. Customer may not add third parties as Named Users, other than third parties included within the definition of Named Users.

4.4 **Limited-Use Programs**.

a. **Trial, Evaluation, and Beta Programs**. Products acquired under a trial, evaluation, or beta program are licensed for evaluation and testing purposes only and not for commercial use. Any such use is at Customer's own risk and the Products do not qualify for Maintenance. If Customer does not convert to a purchased license or subscription prior to the expiration of the trial, evaluation, or beta license, Customer may lose any Customer Content and customizations made during the license term. If Customer does not wish to purchase a license or subscription, Customer should export such Customer Content before the license expires.

b. **Educational Programs**. Licensee agrees to use Products provided under an educational program solely for educational purposes during the educational use Term. Licensee shall not use Products for any Administrative Use unless Customer has acquired an Administrative Use license. "Administrative Use" means administrative activities that are not directly related to instruction or education, such as asset mapping, facilities management, demographic analysis, routing, campus safety, and accessibility analysis. Customer shall not use Products for revenue-generating or for-profit purposes.

c. **Other Azteca Systems Emergency or Limited-Use Programs**. If Licensee acquires Products under any limited-use program not listed above, Licensee's use of the Products may be subject to the terms set forth in the applicable launching page, letter, or enrollment form or as described on Azteca's website in addition to the nonconflicting terms of this Agreement.

4.5 **Uses Not Permitted**. Except to the extent that applicable law prohibits or overrides these restrictions, or as provided herein, Licensee shall not:

a. Sell, rent, lease, sublicense, lend, assign, or time-share Licensed Software or Products;
b. Permit persons other than Authorized Users to access or use the Licensed Products (or any part thereof);
c. Act as a service bureau or Commercial ASP;
d. Use Software, Data, or Documentation for a site or service and operate the site or service for profit or generate revenue through direct or indirect methods (e.g., advertising or by charging for access to the site or service);
e. Redistribute Software, Data, or Online Services to third parties, in whole or in part, including, but not limited to, extensions, components, or APIs;
f. Distribute Authorization Codes to third parties;
g. Reverse engineer, decompile, or disassemble Products;
h. Make any attempt to circumvent the technological measure(s) that controls access to or use of Licensed Products;
i. Upload or transmit content or otherwise use Products in violation of third-party rights, including intellectual property rights, privacy rights, nondiscrimination laws, or any other applicable law or government regulation;
j. Remove or obscure any Azteca Systems (or its licensors') patent, copyright, trademark, proprietary rights notices, and/or legends contained in or affixed to any Product, Product output, metadata file, or online and/or hard-copy attribution page of any Data or Documentation delivered hereunder;
k. Unbundle or independently use the individual or component parts of Software or Online Services;
l. Incorporate any portion of the Software into a product or service that competes with the Software;

m. Publish the results of benchmark tests run on Software without the prior written permission of Azteca Systems; or
n. Use, incorporate, modify, distribute, provide access to, or combine any computer code provided with the Software in a manner that would subject such code or any part of the Software to open source license terms, which includes any license terms that require computer code to be (i) disclosed in source code form to third parties, (ii) licensed to third parties for the purpose of making derivative works, or (iii) redistributable to third parties at no charge.

ARTICLE 5—AZTECA SYSTEMS MANAGED CLOUD SERVICES

5.1 **Definitions**. The following are supplemental definitions provided in Article 1.

a. "Azteca Managed Cloud Services" means the hardware, Software, Data, network platform that Azteca Systems or its third-party supplier provides as part of Azteca Managed Cloud Services.
b. "Hosting" means the business of housing and making accessible Licensee Content via the internet.

5.2 **Provision of Azteca Managed Cloud Services.**

a. **General Terms**. Use of Azteca Systems Managed Cloud Services is subject to the Cloud Services terms found in Addendum #2 of this Agreement.
b. **Requirements Planning**. It is Customer's responsibility to plan for and address with Azteca Systems changes to Customer's requirements, such as the need for additional capacity, the update of an application or dataset, or increased level of system availability.
c. **Compensation and Expenses**. Azteca Systems will invoice Customer annually for the Azteca Systems Managed Cloud Services to be provided the upcoming year. Customer will pay invoices within 30 days of receipt. Customer is responsible for any shipping or temporary storage costs incurred during the delivery of Customer Content to Azteca Systems or removal of Customer Content from the Azteca Systems Managed Cloud Services environment.
d. **Risk of Loss**. Risk of loss for all Customer Content shall at all times remain with Customer, and it is Customer's sole responsibility to maintain regular backups of Customer Content.
e. **Personally Identifiable Information**. Prior to providing any Customer Content under this Agreement, Customer shall notify Azteca Systems if Customer Content includes personally identifiable information.
f. **Public Software**. Customer may not use, and may not authorize its end users or contractors to combine or use any Azteca Systems Offerings with any software (including any underlying dependencies), documentation, or other material distributed under an open source or other similar licensing or distribution model that requires as a condition of such model that any component of the Azteca Systems Offering to be (i) disclosed or distributed in source code form, (ii) made available free of charge to third parties, or (iii) modifiable without restriction by third parties.
g. **Monitoring**. Licensee will provide information and other materials related to its Licensee Content as reasonably requested by Azteca Systems or its Hosting partner to verify Azteca's or Licensee's compliance with this Agreement. Azteca Systems or its Hosting partner, as applicable, may browse, index, or otherwise monitor the external interfaces of any Licensee Content solely for the purpose of verifying compliance with this Agreement.

ARTICLE 6—TERM AND TERMINATION

6.1. The initial term of this Agreement will begin on the Effective Date, or upon such latter dates set forth in Addendum #1, and in each case provided a valid purchase authorization is issued. This Agreement may then be renewed annually by payment of the then current maintenance fees for the next annual maintenance period as set forth in Addendum #1.

6.2. Either party may terminate this Agreement or any Product license for a material breach that is not cured within thirty (30) days of written notice to the breaching party, except that termination shall be deemed to have immediate effect for a material breach that is impossible to cure.

6.3. **Termination by Licensee**. In the event that either funding from Licensee or other sources is withdrawn, reduced, or limited, or the authority of Licensee to perform any of its duties is withdrawn, reduced, or limited in any way after the Effective Date of this Agreement, Licensee may terminate subsequent Term Maintenance Periods by

giving Azteca Systems thirty (30) days' written notice prior to the end of the current Term Maintenance Period. The effective date of such termination will be the start of the subsequent Term.

6.4. **Termination by Azteca Systems**. Azteca Systems may terminate this Software License and Maintenance Agreement and/or any license granted hereunder if:

a. Licensee violates its obligations under this Software License and Maintenance Agreement and fails to cure the breach within thirty (30) days after Azteca Systems' written notification, provided however, that no cure period prior to termination will be required as noted in section 6.2.
b. Licensee ceases to do business in the ordinary course, or becomes insolvent, enters bankruptcy, reorganization, composition or other similar proceedings under applicable laws, whether voluntary or involuntary, or admits in writing its inability to pay its debts, or makes or attempts to make an assignment for the benefit of creditors. Such termination shall be effective upon notice to such party or as soon thereafter as is permitted by applicable law.

6.5. Upon termination of the License and Maintenance Agreement, all Product licenses granted hereunder terminate as well. Upon termination of a License or the Software License and Maintenance Agreement, Licensee will (i) stop accessing and using affected Product(s); (ii) clear any client-side data cache derived from Online Services; and (iii) uninstall, remove, and destroy all copies of affected Product(s) in Licensee's possession or control, including any modified or merged portions thereof, in any form, and execute and deliver evidence of such actions to Azteca Systems.

6.6. If this Agreement is terminated per section 6.3, the Licensee is only liable for payment required by the terms of this Agreement for license, maintenance, and support services rendered or products and software received and accepted prior to the effective date of termination.

6.7. If this Agreement is terminated per section 6.3 or 6.4, Licensee shall then return to Azteca Systems all of the Software, related modules, related updates, and any whole or partial copies, codes, modifications, and merged portions in any form. Azteca will then, for no additional charge to Licensee and at Licensee's option, either grant a license to the Licensee for a period of one (1) year, which will allow Licensee to retain the ability to access records and data contained in the Software, or allow Licensee to create digital copies of all files needed by the Licensee for the same period. If Licensee needs to retain access to records or data for a period longer than one (1) year, in order to transfer data to another system, Azteca will consider reasonable requests to extend beyond one (1) year.

6.8. If Licensee has an Online Services Subscription, Managed Cloud Services, or Online Services Product, then upon termination per section 6.3 or 6.4, Azteca Systems will provide Licensee the ability for 30 days to download, backup, or otherwise archive all Licensee Data.

6.9. The parties hereby agree that all provisions which operate to protect the intellectual rights of Azteca Systems shall remain in force should breach or termination of any kind occur.

ARTICLE 7—LIMITED WARRANTIES AND DISCLAIMERS

7.1 **Limited Warranties**. Except as otherwise provided in this Article 7, Azteca Systems warrants for a period of ninety (90) days from the date Azteca Systems issues the Authorization Code enabling use of Software and that the unmodified Software will substantially conform to the published Documentation under normal use and service.

7.2 **Special Disclaimer**. **Third-Party Content; Data; Samples; hot fixes; patches; updates; Online Services provided at no charge; and trial, evaluation, and beta Products are delivered "as is" and without warranty of any kind.**

7.3 **Disclaimers**.

a. **Internet Disclaimer**. Neither party will be liable for damages under any theory of law related to the performance or discontinuance of operation of the internet or to regulation of the internet that might restrict or prohibit the operation of Cloud Services.

b. **Third-Party Websites; Third-Party Content**. Azteca Systems is not responsible for any third-party website or third-party content that appears in or is referenced by Azteca Systems Products or Azteca Systems websites, including www.cityworks.com and www.mycityworks.com. Providing links to third-party websites and resources does not imply an endorsement, affiliation, or sponsorship of any kind.

7.4 **General Disclaimer**. **Except for the express limited warranties set forth in this Agreement, Azteca Systems disclaims all other warranties or conditions of any kind, whether express or implied, including, but not limited to, warranties or conditions of merchantability, fitness for a particular purpose, or non-infringement of intellectual property rights. Azteca Systems is not responsible for any nonconformities with Specifications or loss, deletion, modification, or disclosure of Licensee Content caused by Licensee's modification of any Azteca Systems Product or Service other than as specified in the Documentation. Azteca Systems does not warrant that Products and Services hereunder or Licensee's operation of the same, will be uninterrupted, error free, fault-tolerant, or fail-safe or that all nonconformities can or will be corrected. Products are not designed, manufactured, or intended for use in environments or applications that may lead to death, personal injury, or physical property/environmental damage. Licensee should not follow any suggestions or instructions that appear to be hazardous, unsafe, or illegal. Any such use shall be at Licensee's own risk and cost.**

7.5 **Exclusive Remedy**. Licensee's exclusive remedy and Azteca Systems' entire liability for breach of the limited warranties set forth in this Section shall be limited to replace any defective media; (i) repair, correct, or provide a workaround for the applicable Products or Services and subject to the Azteca Systems Maintenance Services and Support Addendum; or (ii) at Azteca Systems election, terminate Licensee's right to use and refund the fees paid for Azteca Systems Products or Services that do not meet Azteca Systems limited warranties, provided that Licensee uninstalls, removes, and destroys all copies of Software or Documentation; ceases using the Software or Online Services; and executes and delivers evidence of such actions to Azteca Systems.

ARTICLE 8—LIMITATION OF LIABILITY

8.1 **Disclaimer of Liability. Neither Licensee, Azteca Systems, nor any Azteca Systems distributor or third party licensor will be liable for any indirect, special, incidental, or consequential damages; lost profits; lost sales; loss of goodwill; costs of procurement of substitute goods or services; or damages exceeding the applicable license fees paid for the current Term support period, or current Subscription fees, or Services fees actually paid to Azteca Systems for the Azteca Systems Products or Services giving rise to the cause of action**.

8.2 The limitations and exclusions of liability in the preceding paragraph do not apply to Licensee's infringement, misuse, or misappropriation of Azteca Systems or Azteca Systems licensors' intellectual property rights, either party's indemnification obligations, gross negligence, willful misconduct, or violations of the Export Compliance clause of this Agreement or any applicable law or regulation.

8.3 **Applicability of Disclaimers and Limitations**. Azteca Systems (or its authorized distributor if any) has set its fees and entered into this Agreement in reliance on the disclaimers and limitations in this Agreement; the fees reflect an allocation of risk that is an essential basis of the bargain between the parties. **These limitations will apply whether or not a party is aware of the possibility of any damage and notwithstanding any failure of essential purpose of any exclusive, limited remedy.**

8.4 The foregoing warranties, limitations, and exclusions may be invalid in some jurisdictions and apply only to the extent permitted by applicable law or regulation in Licensee's jurisdiction. Licensee may have additional rights under law that may not be waived or disclaimed. Azteca Systems does not seek to limit Licensee's warranty or remedies to any extent not permitted by law.

ARTICLE 9—INDEMNIFICATIONS

9.1 **Definitions**. The following definitions supplement the definitions provide in Article 1:
a. "Claim" means any claim, action, or demand by a third party.
b. "Indemnitees" means Customer and its directors, officers, and employees.

c. "Infringement Claim(s)" means any Claim alleging that Customer's use of or access to any Azteca Systems Products or Services infringes a patent, copyright, trademark, or trade secret.
d. "Loss(es)" means expenditure, damage award, settlement amount, cost, or expense, including awarded attorney's fees.

9.2 **Infringement Indemnity**.
a. Azteca Systems will defend, hold all indemnitees harmless from and against any Loss arising out of an Infringement Claim.
b. If Azteca Systems determines that an Infringement Claim is valid, Azteca Systems may, at its expense, either (i) obtain rights for Customer to continue using the Azteca Systems Products or Services or (ii) modify the Azteca Systems Products or Services while maintaining substantially similar functionality. If neither alternative is commercially reasonable, Azteca Systems may terminate Licensee's right to use the Azteca Systems Products or Services and will refund any unused portion of fees paid for Term Licenses, Subscriptions, and Maintenance.
c. Azteca Systems has no obligation to defend an Infringement Claim or to indemnify Customer to the extent the Infringement Claim arises out of (i) the combination or integration of Azteca Systems Products or Services with a product, process, or system or element not supplied by Azteca Systems or specified by Azteca Systems in its Documentation, (ii) alteration of Azteca Systems Products or Services by anyone other than Azteca Systems or its subcontractors, (iii) compliance with Licensee's specifications, or (iv) use of Products or Services after Azteca Systems either provides a modified version to avoid infringement or terminates Licensee's right to use the Products or Services.

9.3 **General Indemnity**. Azteca Systems will defend and hold all Indemnitees harmless from, and indemnify any Loss arising out of, any Claim for bodily injury, death, or tangible or real property damage brought against any of the Indemnitees to the extent arising from any negligent act or omission or willful misconduct by Azteca Systems or its directors, officers, employees, or agents performing Services while on Customer's site.

9.4 **Conditions for Indemnification**. As conditions for indemnification, Indemnitee will (i) promptly notify Azteca Systems in writing of the Claim, (ii) provide all available documents describing the Claim, (iii) give Azteca Systems sole control of the defense of any action and negotiation related to the defense or settlement of any Infringement Claim, and (iv) reasonably cooperate in the defense of the Infringement Claim at Azteca Systems request and expense.

9.5 **This section sets forth the entire obligation of Azteca Systems, its authorized distributor (if any), and its third-party licensors (if any) regarding any Claim for which Azteca Systems must indemnify Licensee**.

ARTICLE 10—GENERAL PROVISIONS

10.1 **Export Control Regulations**. Licensee expressly acknowledges and agrees that Licensee shall not export, re-export, import, transfer, or release Products, in whole or in part, to (i) any US embargoed country, (ii) any person on the US Treasury Department's list of Specially Designated Nationals, (iii) any person or entity on the US Commerce Department's Denied Persons List, Entity List, or Unverified List, or (iv) any person or entity or into any country where such export, re-export, or import violates any US, local, or other applicable import/export control laws or regulations including, but not limited to, the terms of any import/export license or license exemption and any amendments and supplemental additions to those import/export laws as they may occur from time to time.

10.2 **Taxes and Fees, Shipping Charges**. License and Subscription fees quoted to Licensee are exclusive of any and all taxes or fees, including, but not limited to, sales tax, use tax, value-added tax (VAT), customs, duties, or tariffs, and shipping and handling charges.

10.3 **No Implied Waivers**. The failure of either party to enforce any provision of this Agreement shall not be deemed a waiver of the provisions or of the right of such party thereafter to enforce that or any other provision.

10.4 **Severability**. The parties agree that if any provision of this Agreement is held to be unenforceable for any reason, such provision shall be reformed only to the extent necessary to make the intent of the language enforceable.

10.5 **Successor and Assigns**. Licensee shall not assign, sublicense, or transfer Licensee's rights or delegate Licensee's obligations under this Agreement without Azteca Systems' prior written consent, and any attempt to do so without consent shall be void. This Agreement shall be binding on the respective successors and assigns of the parties to this Agreement. Notwithstanding, a government contractor under contract to the government to deliver Products may assign this Agreement and Products acquired for delivery to its government customer upon written notice to Azteca Systems, provided the government customer assents to the terms of this Agreement.

10.6 **Survival of Terms**. The provisions of Articles 2, 6, 7, 8, 9 and 10 of this Agreement, and the provisions of section 4.1 of Addendum #2, shall survive the expiration or termination of this Software License and Maintenance Agreement.

10.7 **US Government Licensee**. The Products are commercial items, developed at private expense, provided to Licensee under this Agreement. If Licensee is a US government entity or US government contractor, Azteca Systems licenses Products to Licensee in accordance with this Agreement under FAR Subparts 12.211/12.212 or DFARS Subpart 227.7202. Azteca Systems Data and Online Services are licensed under the same subpart 227.7202 policy as commercial computer software for acquisitions made under DFARS. The commercial license rights in this Agreement strictly govern Licensee's use, reproduction, or disclosure of Products. Azteca Systems Software source code is unpublished, and all rights to Products are reserved by Azteca Systems and its licensors. Licensee may transfer Software to any licensed government procuring agency facility to which computer(s) on which Software is installed are transferred. If any court, arbitrator, or board holds that Licensee has greater rights to any portion of Products under applicable public procurement law, such rights shall extend only to the portions affected.

10.8 **Governing Law**. This Agreement is not subject to the United Nations Convention on Contracts for the International Sale of Goods.

- **Government Entities**. If Licensee is a government entity, the applicable laws of the Licensee's jurisdiction govern this Agreement.
- **Nongovernment Entities**. US federal law and the law of the State of Utah exclusively govern this Agreement, excluding their respective choice of law principles.

10.9 **Dispute Resolution**. The parties will use the following dispute resolution process:

- **Equitable Relief**. Either party will have the right to seek an injunction, specific performance, or other equitable relief in any court of competent jurisdiction without the requirement of posting a bond or proving injury as a condition for relief.
- **US Government Agencies**. This Agreement is subject to the Contract Disputes Act of 1978, as amended (41 USC 601-613).
- **Other Government Entities**. Azteca Systems will comply with mandatory dispute resolutions under applicable law.
- **Negotiation and Mediation**. The parties will attempt negotiation and consultation in good faith and a spirit of mutual cooperation. If not resolved through negotiation, the parties will next attempt mediation in Midland Texas, by a mutually acceptable mediator chosen by the parties, which cost is shared equally. If not resolve either through negotiation or mediation, then it shall be finally adjudicated by a court of competent jurisdiction in Midland, County Texas, or any Federal District court in the event of matters of intellectual property.

10.10 **Maintenance**. Maintenance for qualifying Software consists of updates (provided on a when-and-if available basis) and other benefits, such as access to technical support, which are provided during the Term. Maintenance is specified as set forth in Addendum #2.

10.11 **Audit**. Upon Azteca System's written request, Licensee shall certify in a signed writing that its use of the Licensed Product is in full compliance with the terms of this Agreement (including any restrictions herein). Azteca Systems, or its authorized representative, may, upon prior reasonable notice of at least ten (10) days, inspect and audit Licensee's records and use of the Licensed Products to confirm compliance with this Agreement. All such inspections and audits will be conducted during regular business hours and in a manner that does unreasonably interfere with ordinary business activities. Licensee shall be responsible for any audit costs only in the event that such audit reveals that Licensee's use is not in accordance with the permitted uses under this Agreement, and for

unpaid license fees.

10.12 **Feedback**. Azteca Systems may freely use any feedback, suggestions, or requests for Product improvements that Licensee provides to Azteca Systems. Regardless of the source of any feedback or suggestions, any improvements to Software or Products, and any related intellectual property, are owned by Azteca Systems.

10.13 **Patents**. Licensee may not seek, and may not permit any other user to seek, a patent or similar right worldwide that is based on or incorporates any Azteca Systems technology or services. This express prohibition on patenting shall not apply to Licensee's software and technology except to the extent that Azteca Systems technology or services, or any portion thereof, are a part of any claim or preferred embodiment in a patent application or a similar application.

10.14 **Force Majeure**. A party will not be liable for any failure of or delay in the performance of this Agreement for the period that such failure or delay is due to causes beyond the party's reasonable control. Such causes may include, but are not limited to, acts of God, war, strikes, labor disputes, cyber-attacks, laws, regulations, government orders, or any other force majeure event.

10.15 **Independent Contractor**. Azteca Systems is and at all times will be an independent contractor. Nothing in this Agreement creates an employer/employee, principal/agent, or joint venture relationship between Azteca Systems and the Licensee. No party has any authority to enter into contracts on behalf of another party or otherwise act on behalf of another party.

10.16 **Entire Agreement**. This Agreement, including its incorporated documents, addendums, and exhibits constitutes the sole and entire agreement of the parties as to the subject matter set forth herein and supersedes any previous license agreements, understandings, and arrangements between the parties relating to such subject matter. Additional or conflicting terms set forth in any purchase orders, invoices, or other standard form documents exchanged during the ordering process, other than product descriptions, quantities, pricing, and delivery instructions, are void and of no effect. Any modification(s) or amendment(s) to this Agreement must be in writing and signed by each party or as otherwise provided in Addendum #1.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and made effective by their respective authorized representatives.

AZTECA SYSTEMS, LLC	**CITY OF MIDLAND, TX** – (LICENSEE)
By: _____	By: _____
Name: Brian L. Haslam	Name: _____
Title: President - CEO	Title: _____
Date: _____/_____/_____	Date: _____/_____/_____

ADDENDUM #1

PRODUCT LICENSING

1. **Licensed Software:**

Server AMS Standard Cityworks Online Enterprise License Agreement (ELA), Includes Unlimited Quantities of the Identified Products:
Office
Respond
Mobile Native Apps (for iOS/Android)

--Includes the following Add-ons:
Storeroom
Equipment Checkout
Contracts
Cityworks for Excel
Cityworks Analytics for AMS
eURL (Enterprise URL)
Workload
Web Hooks
CCTV Interface for PACP
Pavement Management
Performance Budgeting
Service Request API
Work Order API - Basic
Data Storage Plus
Local Government Templates (LGT)
Use of Cityworks AMS Application Programming Interfaces (APIs) with commercially available Cityworks-centric applications that are licensed and maintained by authorized Cityworks partners

Additional Software Products & Licenses & Annual Renewals: Additional Software Products & Licenses may be added to this Agreement as well as annual renewals of this Agreement with either an acknowledgement of an official Cityworks quote signed by Licensee and additional fees, if necessary or applicable being paid, or receipt of Purchase Order from Licensee in response to an official Cityworks quote and additional fees, if applicable, being paid.

2. **Notices & Licensee Information: Until or unless otherwise modified, all notices relevant to this agreement shall be sent to the following address:**

Azteca Systems, LLC 11075 South State, Suite 24 Sandy, Utah 84070	**City of Midland** 1602 E Orchard Lane Building 5 Midland, TX 79701
	Attn: Gabe McClelland
	E-mail: gmcclelland@midlandtexas.gov
	Phone: 432.685.7299

3. **Effective Date of Software (Date Software made available)**

MM/DD/YYYY
06/01/2021

4. **Schedule of Payments and/or Fees under Agreement**

Annual Period	Date From/To (mm/dd/yyyy)	Amount
Period 1	**06/01/2021 – 08/05/2021**	**$ 27,033.00**
Period 2	**08/06/2021 – 08/05/2022**	**$101,000.00**
Period 3	**08/06/2022 – 08/05/2023**	**$101,000.00**

** Fee for Period 1 reflects the services ($23,700.00) for the licensing conversion change to Cityworks Online and the cost of additional products (3,333.00) pro-rated for the period of 6/1/2021 – 08/05/2021. Current Period 1 fee of $81,000.00 for the period of 08/06/2020 to 08/05/2021 was paid previously.*

5. **Additional Items (If Any):**

   a. Cityworks Online (CWOL) - is a Cityworks Online hosted services subscription for the right to access and use the Online Services for the products identified hereinabove. CWOL is a highly scalable hosted services product offering. It is hosted on Azteca Systems' servers and completely scaled, managed, updated, backed up, and maintained by Azteca Systems.

   b. Because Azteca Systems controls the update schedule, users are not responsible for upgrading, managing, or patching the systems themselves.

   c. Annual fee herein is based on 100,001 - 150,000 population range.

   d. ELA pricing herein for CWOL assumes no hosting logins are added over and above the current 100 Server AMS hosting Logins. Additional hosting logins can be added for an additional fee.

ADDENDUM #2

STANDARD MAINTENANCE AND SUPPORT

Standard Maintenance and Support Addendum provisions are between the Licensee and Azteca Systems, LLC ("Azteca Systems" or "Azteca"). Maintenance and support are provided subject to the terms and conditions of the signed Software License and Maintenance Agreement and which is incorporated by reference.

1. **MAINTENANCE & SUPPORT**: Azteca Systems will provide maintenance and support services to Licensee for qualifying Products during the applicable Term for such Products provided the applicable license and maintenance fees have been paid for the times and periods and amounts specified in Addendum #1. Maintenance and Support services consist of the following benefits: maintenance items (provided on a when-and-if available basis) which may include subsequent version releases of the licensed software, service packs, upgrades and updates, and technical support.

1.1. Azteca Systems will ensure upward compatibility for the licensed software applications within a reasonable timeframe for minor Esri® ArcGIS and Cityworks supported database revisions. Azteca Systems will not ensure upward compatibility for licensed software applications when there are major Esri ArcGIS revisions (for example, from rev 10.x to rev 11.x), however Azteca Systems will make all reasonable efforts to provide upward compatibility.

1.2. Azteca Systems shall, without additional charge (except as allowed for in paragraph 3.4), during the term of this Agreement provide the following:

a. **Software Updates**. Software Updates includes upgrades and service packs which are a collection of files that enhance or correct the licensed software, and which will be available for Licensee to download during the Maintenance Term/Period. Updates and upgrades may also include new versions;
b. Provide Telephone Support, Email Support, Web Support, during normal business hours, 8 AM to 5 PM Mountain Time, Monday through Friday (excepting Holidays) and after hour emergency support line, and other benefits deemed appropriate by Azteca Systems (as set forth in Section 2 below); and
c. Implement and maintain a means of secure, remote direct network access (VPN, Web-access, etc.) to the Licensee's systems in order to perform thorough remote diagnostics.

1.3 The following items, among others, however, are specifically excluded as support services under this Addendum:

a. Support for applying or installing upgrades and service packs;
b. Assistance with questions related to third-party software, computer hardware, networking, and other similar items that are not provided by Azteca;
c. Assistance with computer operating system questions not directly pertinent to the licensed software;
d. Licensee Data debugging and/or correcting;
e. Services necessitated as a result of any cause other than authorized ordinary and proper use by the Licensee of the licensed software, including but not limited to neglect, abuse, unauthorized modifications, and/or unauthorized updates;
f. Consulting regarding customizations created to function with the licensed software unless the customization is identified and listed as licensed software in Addendum #1;
g. Assistance with applications which are not part of a standard life cycle, such as preview, beta, or candidate releases; and
h. Questions such as configuration, implementation, and walk-throughs.

1.4 Support Periods are renewable unless terminated as provided in Section 3 below.

1.5. Technical support provided pursuant these maintenance provisions shall be performed in a professional and workmanlike manner. Azteca Systems will use commercially reasonable efforts to provide corrections to a technical issue or provide a workaround, but Azteca Systems cannot guarantee that all technical issues can be fixed or resolved.

1.6. **Authorized Callers**. Licensee may designate a limited number of authorized callers per software product listed in Addendum #1. Licensee may replace Authorized Callers at any time by notifying Azteca Systems Support services. Authorized callers may be designated in this Addendum #2 or by email. Azteca may limit the total number of authorized callers as may be reasonably necessary and may request an updated list of authorized callers.

1.7. **Cityworks Online Support and Customer Portal**. Azteca has created a self-help support website center for Authorized Callers to submit technical issues, chat with technical specialists, track technical support incidents through the 'MyCityworks' portal, and view technical articles, updated product documentation, blogs, links to forums, and technology announcements. The support and care website can be found at http://www.mycityworks.com.

1.8. **Additional Support Items**.

a. On a when-and-if available basis, updates to the licensed software (Addendum #1) means subsequent releases of the program which Azteca generally makes available to its customers who are under an active Software License and Maintenance Agreement for which fees have been paid for the relevant support period.
b. Occasionally, Azteca changes the name of its licensed software as part of its ongoing process to improve and increase the functionality of the software. In the event the software licensed or listed in Addendum #1 changes in name, and/or improvements are made, Azteca will provide software with functionality that is similar to or with substantially the same or greater functionality of the originally licensed software, provided all current license or maintenance fees have been paid.
c. Updates may not always include any release, option, or future program that Azteca licenses separately. Updates are provided on a when-and-if available basis as determined by Azteca Systems. Azteca Systems is under no obligation to develop any future programs or functionality. Any updates made available will made available to you for download. Customer is responsible for copying, downloading, and installing the updates.

2. PROCEDURES FOR ACCESSING SUPPORT

2.1. All problem categories from routine, non-critical and critical, that occur during normal business hours shall procedurally occur as follows: 1) Licensee's system administration staff as first line of support, and then 2) Azteca Systems staff as the second line of support. Azteca Systems will make all reasonable efforts to acknowledge all requests for support during normal business hours within four (4) hours.

2.2. Prior to calling Azteca Systems for support services, the Licensee will first attempt to isolate any problems that occur within the Licensee's System. The Licensee will try to reduce the problem down to a specific software or system component. If it is determined that the problem is the Cityworks Software component, Licensee will first try and resolve the problem without Azteca Systems' involvement. If Licensee cannot resolve the problem or isolate the problem, Licensee may contact Azteca Systems via telephone, chat, or self-service portal. In each case, Cityworks technical support will log the information and provide an answer to the question, a resolution to the problem, or submit a verified bug to the development group. Any support request that is not quickly resolved will be assigned to a technical support representative. Phone calls and chat requests are accepted during normal business hours as outlined on the Contact Support page of MyCityworks.com. Voicemails and requests submitted via the self-service portal outside of the posted business hours will be responded to on a first come, first served basis the next business day.

2.3. For critical problems that occur outside of Azteca Systems' normal business hours (8 AM to 5 PM, Mountain Time) and cannot be isolated and resolved by the Licensee, Azteca Systems will provide an after-hours phone number that will forward the call to the currently assigned Azteca Systems support representative. Azteca Systems will make all reasonable efforts to acknowledge and respond to the request for support for critical problems that occur outside of normal business hours within four (4) hours of receipt of the call from a designated and authorized Licensee representative. Critical problems are defined as problems that cause several users to be unable to perform their duties. For routine and non-critical problems, Licensee will submit support requests during normal business hours as outlined in 2.2 above.

2.4. After a Technical Support Incident is logged, Azteca Systems will use commercially reasonable efforts to provide corrections to a technical issue or provide a work around. While it is Azteca's goal to provide an acceptable solution to technical issues, Azteca cannot guarantee that all technical issues can be fixed or resolved.

2.5. Azteca will use all reasonable efforts to utilize remote support-type services. However, in the event Licensee and Azteca Systems agree it becomes necessary for Azteca Systems to be on-site to provide support for the covered Software, the parties by mutual negotiation, shall develop a separate agreement that will govern the terms and conditions for any on-site work or services.

3. CHARGES/FEES

3.1. License, Maintenance, and Support Services herein are included in the payment of annual fees as set forth in Addendum #1 and shall be paid by Licensee. The annual fee for each twelve (12) month period is set forth in Addendum #1 and shall be paid prior to the start for each License and Maintenance Period unless otherwise specified. The annual fee for successive Terms/Periods (twelve-month periods) commencing upon the anniversary of the first maintenance period, shall become due prior to the end of the preceding paid-up Maintenance Period.

3.2. Upon sixty (60) days written notice, the fee for the License and Maintenance Periods listed in Addendum #1 subsequent to year one (1) of the Maintenance Period, may be adjusted by Azteca Systems to reflect increases in costs of providing the services; provided, however, that the fee shall not increase by more than the CPI from the previous annual fee. "CPI" shall mean for all Urban Consumers, the U.S. City Average, for all items, 1982-84=100 (the "CPI-U"), as published by the Bureau of Labor Statistics, U.S. Department of Labor. Azteca Systems will notify Licensee of the new pricing no later than sixty (60) days prior to the annual renewal date of the year preceding the year for which such adjusted pricing applies.

3.3. **Maintenance Expiration**. Azteca Systems will send Licensee a notice of expiration approximately sixty (60) days before the Maintenance term expires. If Azteca Systems does not receive a purchase order prior to the expiration date, Azteca will send the notification to Licensee upon expiration of the Maintenance term. All other Maintenance benefits and Support services will end with the expiration of the Maintenance term.

3.4. **Reinstatement Fee for Lapsed Maintenance**. Azteca Systems will reinstate Maintenance if Licensee sends a purchase order or payment within thirty (30) days of the expiration date. If Licensee does not renew Maintenance within thirty (30) days of the expiration date but at a later date wants to reinstate Maintenance, Maintenance fees will include the Maintenance fees that Licensee would have paid since the expiration date.

4. MANAGED CLOUD AND ONLINE SERVICES

4.1. **Prohibited Uses**. Licensee shall not provide Customer Content or otherwise access or use Cloud Services in a manner that:

a. Creates or transmits spam, spoofings, phishing emails, or offensive or defamatory material; or stalks or makes threats of physical harm;

b. Stores or transmits any Malicious Code;

c. Violates any law or regulation;

d. Infringes or misappropriates the rights of any third party;

e. Probes, scans, or tests the vulnerability of Cloud Services or breaches any security or authentication measures used by Cloud Services without written approval from Azteca Systems product security officer; or

f. Benchmarks the availability, performance, or functionality of Cloud Services for competitive purposes.

4.2. **Service Interruption**. System failures or other events beyond Azteca's reasonable control may interrupt Customer's access to Cloud Services. Azteca Systems may not be able to provide advance notice of such interruptions.

4.3. **Licensee Content**.

a. Licensee grants Azteca Systems and its subcontractors a nonexclusive, nontransferable, worldwide right to host, run, modify, and reproduce Licensee Content as needed to provide Cloud Services to Licensee. Azteca Systems will not access, use, or disclose Customer Content without Customer's written permission except as reasonably necessary to support Customer's use of Cloud Services. Except for the limited rights granted to Azteca Systems under this Agreement, Customer retains all its rights, title, and interest in the Customer Content.

b. If Customer accesses Cloud Services with an application provided by a third party, Azteca Systems may disclose Customer Content to such third party as necessary to enable interoperation between the application, Cloud Services, and Customer Content.

c. Azteca Systems may disclose Customer Content if required to do so by law or regulation or by order of a court or other government body, in which case Azteca Systems will reasonably attempt to limit the scope of disclosure.

d. When Customer's use of Cloud Services ends, Azteca Systems will either:

   1. Make Customer Content available to Customer for download for a period of thirty (30) days unless Customer requests a shorter window of availability or Azteca Systems is legally prohibited from doing so; or

   2. Download all Customer Content in Azteca Systems' possession to a medium of Customer's choosing and deliver such Customer Content to Customer.

Azteca Systems will have no further obligations to store or return Customer Content at the conclusion of the Cloud Services.

4.4. **Removal of Customer Content**. Azteca Systems may remove or delete Customer Content if there is reason to believe that uploading Customer Content to or using it with Cloud Services materially violates this Agreement. If reasonable under these circumstances, Azteca Systems will notify Customer before removing Customer Content. Azteca Systems will respond to any Digital Millennium Copyright Act takedown notices in accordance with Azteca Systems copyright policy, available at www.cityworks.com/legal.

4.5. **Service Suspension**. Azteca Systems may suspend access to Cloud or Online Services (i) if Customer materially breaches this Agreement and fails to timely cure the breach, (ii) if Azteca Systems reasonably believes that Customer's use of Cloud Services will subject Azteca Systems to immediate liability or adversely affect the integrity, functionality, or usability of the Cloud Services, (iii) for scheduled maintenance, (iv) to enjoin a threat or attack on Cloud Services, or (v) if Cloud Services become prohibited by law or regulated to a degree that continuing to provide them would impose a commercial hardship. When feasible, Azteca Systems will notify Customer of any Cloud Services suspension beforehand and give Customer reasonable opportunity to take remedial action.

Azteca Systems is not responsible for any damages, liabilities, or losses that may result from any interruption or suspension of Cloud Services or removal of Customer's content as described above.

4.6. **Notice to Azteca Systems**. Licensee will promptly notify Azteca Systems if Customer becomes aware of any unauthorized use of Customer's subscription or any other breach of security regarding Cloud Services.

5. **MISCELLANEOUS**

5.1. **Data Confidentiality Statement**. Azteca Systems will take reasonable measures to ensure that any Licensee data and/or confidential information provided to Azteca Systems is not inappropriately accessed or distributed to any third-party. Data provided to Azteca Systems by the Licensee may be loaded onto Azteca Systems servers or employee computers for the purpose of testing the Cityworks Software, database structure, or database values, and related Esri® software to resolve database or software performance issues, software enhancements, and software defects. At no time will the data be distributed to individuals or organizations who are not Azteca Systems employees without first receiving written approval from Licensee. If requested by the Licensee, and once the testing has been completed, Azteca Systems will delete all data provided by the Licensee.

5.2. **No Implied Waivers**. No failure or delay by Azteca Systems or Licensee in enforcing any right or remedy under this Agreement shall be construed as a waiver of any future or other exercise of such right or remedy by Azteca Systems.

5.3. Azteca Systems will use commercially reasonable efforts to ensure that Azteca Systems Products and Offerings will not transmit any Malicious Code to Licensee. Azteca Systems is not responsible for Malicious Code that Licensee introduces to Azteca Systems Products or Offerings or that is introduced through Third-Party Content. Malicious Code means software viruses; worms, time bombs, Trojan horses; or any other computer code, files, denial of service, or programs designed to interrupt, destroy, or limit the functionality of any computer software, hardware, or telecommunications equipment.

ADDENDUM #3

THIRD-PARTY CONSULTANT/CONTRACTOR ACKNOWLEDGMENT

If Licensee engages any third party or contractor (Third Party) and desires to grant access to use the Licensed Software, the access may be granted subject to the following terms conditions and provisions:

1. Access and use of the Licensed Products by Third Party is solely for Licensee's benefit;

2. Third Party (or, if applicable, its employee) shall be considered the Authorized User for purposes of the applicable license type, and all use shall be in accordance with the terms and conditions of the Cityworks Software License and Maintenance Agreement with Licensee;

3. Before accessing the Licensed Products, Third Party agrees that (i) the software shall be used solely in accordance with the terms of this Agreement, and (ii) said contractor shall be liable to Azteca Systems for any breach by it of this Agreement;

4. Licensee hereby agrees and acknowledges that Licensee will be responsible for all use by Third Party with respect to the use of the Licensed Products;

5. Upon expiration or termination of this Agreement, the rights of usage of Third Party shall immediately terminated;

6. Use of the Products by Third Party will be governed by the terms of this Agreement, and will require that Licensee purchase the appropriate license for each user utilized by Third Party; and

7. Licensee will ensure that Third-Party Contractor agrees to comply with and does comply with the terms of this Agreement on the same basis as the terms apply to Licensee.

The rights granted under Third-Party Contractor Addendum, do not modify the license or increase the number of licenses granted under this Agreement. Third Party, by their signature below, acknowledges that it has a copy of the License Agreement and agrees to the terms herein. Licensee shall provide a signed copy of this Addendum to Azteca Systems at contracts@cityworks.com.

Third Party (Print):_____ **Licensee**: City of Midland, Texas

By: _____
Third Party/Contractor Authorized Signature

Title: _____

Date: _____

Third Party Information

Address City, State, Zip	
Contact Name	
Phone Number	
Email	

Azteca Systems, LLC, 11075 South State, Suite 24, Sandy, UT 84070
• TEL 801.523.2751 • FAX 801.523.3734 •
www.cityworks.com

CITYWORKS®
SOFTWARE LICENSE AND MAINTENANCE AGREEMENT

This Software License and Maintenance Agreement ("Agreement") is made by and between Azteca Systems, LLC ("Azteca Systems" or "Azteca") a Delaware limited liability company, with a place of business set forth on Addendum #1 below, and the **City of Midland, Texas**, (hereinafter referred to as "Licensee" or "Customer"), using certain of Azteca Systems Licensed Products. This Software License and Maintenance Agreement is effective upon the date of signature by Licensee below (the "Effective Date").

Azteca Systems Products are licensed under the terms and conditions of this Agreement. This Agreement, when executed by the Licensee and Azteca Systems, as licensor of the Software, or the Online Services, and Documentation licensed under this Agreement, will supersede any previous agreements.

This Agreement includes (i) this Software License and Maintenance Agreement, (ii) Addendum #1 – Product Licensing, (iii) Addendum #2 – Standard Maintenance and Support, and (iv) Addendum #3 – Third-Party Contractor Acknowledgment.

This Agreement may be executed in duplicate by the Parties. An executed Agreement, modification, amendment, or separate signature page shall constitute a duplicate if it is transmitted through electronic means, such as fax or email, and reflects the signing of the document by any Party. Duplicates are valid and binding even if an original paper document bearing each Party's original signature is not delivered.

ARTICLE 1—DEFINITIONS

1.1 **Definitions**. The terms used are defined as follows:

a. "Agreement" means this Software License and Maintenance Agreement between Azteca Systems and Licensee, inclusive of all schedules, exhibits, attachments, addenda, and other documents incorporated by reference.
b. "Authorization Code(s)" means any key, authorization number, enablement code, login credential, activation code, token, account username and password, or other mechanism required for use of a Product.
c. "Authorized User" or "User" shall mean: (i) a direct user of the Licensed Products, including but not limited to Licensee's employees; (ii) Licensee's consultants who have agreed to maintain the Licensed Property in confidence and use it only for the benefit of Licensee, or (iii) members of the public gaining access to, and only limited use of, the Licensed Products via the Software's public web portal (if applicable). Other than limited use of the Products through the software's web portal, the public is not considered an authorized user.
d. "Beta" means any alpha, beta, or other prerelease version of a Product.
e. "Client Data" means the data provided or inputted by or on behalf of Licensee, including personally identifiable information, for use with the Software.
f. "Cloud Services" means both Azteca Systems Managed Cloud Services and Online Services.
g. "Covered Software" shall mean the particular Cityworks Software, scripts, interfaces and custom code identified in Addendum #1.
h. "Concurrent Use License" means that Licensee may install and use the Software on computer(s) on a network, but the number of simultaneous users (logins) may not exceed the number of licenses required.
i. "Testing Server License" means a license that authorizes Licensee to install and use the Software on a server in Licensee's internal use to provide testing License rights prior to deployment.
j. "Documentation" means all user reference documentation that is supplied to the Licensee by Azteca Systems pursuant to this Agreement for aiding or enabling the use of the Software and is deemed to include any Azteca Systems-provided revisions thereof.
k. "Internal Use" means use of the Licensed Products by employees of Licensee in Licensee's internal operations but does not include access of the Licensed Products by or use of the Licensed Products in the provisions of services to Licensee's clients or customers. Internal Use also includes use of the Licensed Products by contractors of Licensee, including contractors providing outsourcing or hosting services, as long as Licensee assumes full responsibility for the compliance with this Agreement in such use. Use of the Licensed Products (or any part thereof) for the benefit of others, whether by means of a software as a

service offering, service bureau application, application service provider, outsourcing, or other means of providing service to any third party shall not be considered Internal Use.

l. “Licensed Products” or “Products” shall mean the portion of the Cityworks Software and the Documentation to which Licensee has purchased a License as identified in Addendum #1 attached hereto. Licensed Products shall include any updates or upgrades to the Licensed Products that Azteca Systems may at its discretion deliver to Licensee. Products includes but is not limited to Software and Documentation licensed under the terms of this Agreement.

m. "Login" means a license that allows Licensee to permit a single authorized named end user to use the Software, Data, and Documentation installed on a server and accessed from a computer device.

n. “Malicious Code” means software viruses; worm time bombs; Trojan horses; or any other computer code, files, denial of service, or programs designed to interrupt, destroy, or limit the functionality of any computer software, hardware, or telecommunications equipment.

o. “Named User(s) is Licensee’s employee, agent, consultant, or contractor to whom Licensee has assigned a unique, secure login credential (identity) enabling access to a Product that requires such identity in order to access identity-managed capabilities within a Product or subscription to Online Services for Licensee’s exclusive benefit.

p. "Online Services" means the commercially available, internet-based asset management system that Azteca Systems provides (commonly known as Cityworks Online), including applications and associated APIs, for storing, managing, publishing, and using maps, data, and other information. Online services exclude Data and Content.

q. “Online Services Subscription” means a limited-term subscription conveying the right for one or more named users to access and use Online Services.

r. "Ordering Document(s)" means a sales quotation, purchase order, or other document identifying the Products that Licensee orders.

s. "Preview" means any alpha, beta, or prerelease Product.

t. “Product(s)” means Software and Documentation licensed under the terms of this Agreement.

u. "Sample(s)" means sample code, sample applications, sample add-ons, or sample extensions of Products.

v. “Server” means each single instance of an operating system, whether physically installed on a computer or within a virtualized environment.

w. "Software" or “Cityworks Software” means all or any portion of Azteca Systems proprietary software technology, excluding data, accessed or downloaded from an Azteca Systems (Cityworks) authorized website or delivered on any media in any format including backups, documentation, updates, upgrades, and service packs. Without limitation, the Software is deemed to include any alpha, beta, prerelease or restricted version(s), or final commercial release(s), provided in source, object, or executable code format(s), inclusive of backups, updates, service packs, sample code, or merged copies permitted hereunder or subsequently supplied under this Agreement. Unless otherwise indicated by the context herein, the term Software is also deemed to include its associated Documentation.

x. “Standard Maintenance” or “Maintenance Addendum” shall mean the Standard Software Maintenance & Support Addendum #2.

y. "Term License" means a license or access provided for use of a Product for a limited time period ("Term") or on a subscription or maintenance basis as specified herein.

ARTICLE 2—INTELLECTUAL PROPERTY RIGHTS AND RESERVATION OF OWNERSHIP

All Azteca Systems Offerings are the copyrighted works of Azteca Systems. Azteca Systems or its licensors own the Products and all copies, which are protected by United States and applicable international laws, treaties, and conventions regarding intellectual property and proprietary rights, including trade secrets. This Agreement does not transfer ownership rights of any description in the software, materials, products, or services to Licensee or any third party. Licensee agrees to use reasonable means to protect Products from unauthorized use, reproduction, distribution, or publication. All rights not specifically granted in this Agreement are reserved to Azteca Systems and its licensor(s). Azteca Systems does not acquire any rights in Customer Content under this Agreement other than as needed to provide Azteca Offerings and Services to Customer.

ARTICLE 3—GRANT OF LICENSE

3.1 **Grant of License**. Subject to the terms of this Agreement, Azteca Systems grants to Licensee a personal, nonexclusive, nontransferable license solely to use the Products as set forth in Addendum #1 – Product Licensing (i)

for which the applicable license fees have been paid; (ii) for Licensee's own internal use; (iii) in accordance with this Agreement and the configuration ordered by Licensee or as authorized by Azteca Systems; and (iv) for the applicable Term or until terminated in accordance with Article 5. License types may include, but are not limited to Login, Workgroup, Departmental, ELA (Enterprise License) licenses. Licensee may allow Third-Party Contractors to access and use the licensed Software, provided Licensee and Third-Party Contractor agree to and are bound by the terms set forth in Addendum 3. In addition to the Scope of Use in Article 4, Addendum #1 – Product Licensing which applies to specific Products, Addendum #2 – Standard Maintenance and Support, and Addendum #3 – Third-Party Contractor Acknowledgment (if applicable) collectively, are incorporated by reference into this Agreement.

a. *Software.* Use and license for specific Software products are set forth in Addendum #1– Product Licensing, which is incorporated by reference.
b. *Maintenance.* Maintenance terms are set forth in Section 9.11 below and in Addendum #2 – Standard Maintenance and Support, which terms are incorporated by reference.
c. *Third Party Contractor.* Terms of use for Third-Party Contractor software usage (if applicable) are set forth in Addendum #3 – Third-Party Contractor Acknowledgment, which is incorporated by reference.

3.2 **Delivery**. Unless otherwise agreed, Azteca Systems shall provide an electronic link to make available to Licensee the Licensed Products by electronic download and a license key to activate the Licensed Products.

ARTICLE 4—SOFTWARE AND ONLINE SERVICES

4.1 Software Terms of Use

a. For Products delivered to Licensee, Licensee may:

1. Install, access, and store Products on electronic storage device(s);
2. Make archival copies and routine computer backups;
3. Install and use a newer version of Software concurrently with the version to be replaced during a reasonable transition period not to exceed 6 months, provided that the deployment of either version does not exceed the Licensee's licensed quantity; thereafter, Licensee shall not use more Software in the aggregate than Licensee's total licensed quantity; and
4. Move the Software in the licensed configuration to a replacement server.

b. Licensee may use, copy, or prepare derivative works of Documentation supplied in digital format and thereafter reproduce, display, and redistribute the customized documentation only for Licensee's own internal use. Portions of Documentation supplied in digital format merged with other software and printed or digital documentation are subject to this Agreement. Licensee shall include the following copyright attribution notice acknowledging the proprietary rights of Azteca Systems and its licensors: "Portions of this document include intellectual property of Azteca and its licensors and are used herein under license. Copyright © [*Licensee will insert the actual copyright date(s) from the source materials*] Azteca Systems, LLC. and its licensors. All rights reserved."

c. *Consultant or Contractor Access.* Subject to Section 3.1 and Addendum #3, Azteca Systems grants Licensee the right to permit Licensee's Third-Party Consultants or Contractors to use the Products exclusively and solely for Licensee's benefit. Licensee must comply with terms and provisions of Addendum #3 and provide a copy to Azteca Systems. Licensee shall be solely responsible for compliance by Third-Party Consultants and Contractors with this Agreement and shall ensure that the Third-Party Consultant or Contractor discontinues Product use upon completion of work for Licensee. Access to or use of Products by Third-Party Consultants or Contractors not exclusively for Licensee's benefit is prohibited.

4.2 Online Services Terms of Use

a. **Use of Online Services** is also subject to the Cloud Services Terms found in Addendum #2.
b. **Modification of Online Services**. Azteca Systems may change Online Services and associated APIs at any time, subject to 30 days' notice of material changes and 90 days' notice for deprecations. If any modification, discontinuation, or deprecation of Online Services causes a material, adverse impact to Customer's operations, Azteca Systems may, at its discretion, attempt to repair, correct, or provide a

workaround for Online Services. If a viable solution is not commercially reasonable, Customer may cancel its subscription to Online Services, and Azteca Systems will issue a prorated refund.

4.3 **Named User Licenses**. Except as expressly set forth in this Agreement, the following terms apply to Software and Online Services for which Customer acquires Named User Licenses.

a. **Named Users**.

1. Named User login credentials are for designated users only and may not be shared with other individuals.
2. Customer may reassign a Named User License to another user if the former user no longer requires access to the Software or Online Services.
3. Customer may not add third parties as Named Users, other than third parties included within the definition of Named Users.

4.4 **Limited-Use Programs**.

a. **Trial, Evaluation, and Beta Programs**. Products acquired under a trial, evaluation, or beta program are licensed for evaluation and testing purposes only and not for commercial use. Any such use is at Customer's own risk and the Products do not qualify for Maintenance. If Customer does not convert to a purchased license or subscription prior to the expiration of the trial, evaluation, or beta license, Customer may lose any Customer Content and customizations made during the license term. If Customer does not wish to purchase a license or subscription, Customer should export such Customer Content before the license expires.
b. **Educational Programs**. Licensee agrees to use Products provided under an educational program solely for educational purposes during the educational use Term. Licensee shall not use Products for any Administrative Use unless Customer has acquired an Administrative Use license. "Administrative Use" means administrative activities that are not directly related to instruction or education, such as asset mapping, facilities management, demographic analysis, routing, campus safety, and accessibility analysis. Customer shall not use Products for revenue-generating or for-profit purposes.
c. **Other Azteca Systems Emergency or Limited-Use Programs**. If Licensee acquires Products under any limited-use program not listed above, Licensee's use of the Products may be subject to the terms set forth in the applicable launching page, letter, or enrollment form or as described on Azteca's website in addition to the nonconflicting terms of this Agreement.

4.5 **Uses Not Permitted**. Except to the extent that applicable law prohibits or overrides these restrictions, or as provided herein, Licensee shall not:

a. Sell, rent, lease, sublicense, lend, assign, or time-share Licensed Software or Products;
b. Permit persons other than Authorized Users to access or use the Licensed Products (or any part thereof);
c. Act as a service bureau or Commercial ASP;
d. Use Software, Data, or Documentation for a site or service and operate the site or service for profit or generate revenue through direct or indirect methods (e.g., advertising or by charging for access to the site or service);
e. Redistribute Software, Data, or Online Services to third parties, in whole or in part, including, but not limited to, extensions, components, or APIs;
f. Distribute Authorization Codes to third parties;
g. Reverse engineer, decompile, or disassemble Products;
h. Make any attempt to circumvent the technological measure(s) that controls access to or use of Licensed Products;
i. Upload or transmit content or otherwise use Products in violation of third-party rights, including intellectual property rights, privacy rights, nondiscrimination laws, or any other applicable law or government regulation;
j. Remove or obscure any Azteca Systems (or its licensors') patent, copyright, trademark, proprietary rights notices, and/or legends contained in or affixed to any Product, Product output, metadata file, or online and/or hard-copy attribution page of any Data or Documentation delivered hereunder;
k. Unbundle or independently use the individual or component parts of Software or Online Services;
l. Incorporate any portion of the Software into a product or service that competes with the Software;

m. Publish the results of benchmark tests run on Software without the prior written permission of Azteca Systems; or
n. Use, incorporate, modify, distribute, provide access to, or combine any computer code provided with the Software in a manner that would subject such code or any part of the Software to open source license terms, which includes any license terms that require computer code to be (i) disclosed in source code form to third parties, (ii) licensed to third parties for the purpose of making derivative works, or (iii) redistributable to third parties at no charge.

ARTICLE 5—AZTECA SYSTEMS MANAGED CLOUD SERVICES

5.1 **Definitions**. The following are supplemental definitions provided in Article 1.

a. "Azteca Managed Cloud Services" means the hardware, Software, Data, network platform that Azteca Systems or its third-party supplier provides as part of Azteca Managed Cloud Services.
b. "Hosting" means the business of housing and making accessible Licensee Content via the internet.

5.2 **Provision of Azteca Managed Cloud Services.**

a. **General Terms**. Use of Azteca Systems Managed Cloud Services is subject to the Cloud Services terms found in Addendum #2 of this Agreement.
b. **Requirements Planning**. It is Customer's responsibility to plan for and address with Azteca Systems changes to Customer's requirements, such as the need for additional capacity, the update of an application or dataset, or increased level of system availability.
c. **Compensation and Expenses**. Azteca Systems will invoice Customer annually for the Azteca Systems Managed Cloud Services to be provided the upcoming year. Customer will pay invoices within 30 days of receipt. Customer is responsible for any shipping or temporary storage costs incurred during the delivery of Customer Content to Azteca Systems or removal of Customer Content from the Azteca Systems Managed Cloud Services environment.
d. **Risk of Loss**. Risk of loss for all Customer Content shall at all times remain with Customer, and it is Customer's sole responsibility to maintain regular backups of Customer Content.
e. **Personally Identifiable Information**. Prior to providing any Customer Content under this Agreement, Customer shall notify Azteca Systems if Customer Content includes personally identifiable information.
f. **Public Software**. Customer may not use, and may not authorize its end users or contractors to combine or use any Azteca Systems Offerings with any software (including any underlying dependencies), documentation, or other material distributed under an open source or other similar licensing or distribution model that requires as a condition of such model that any component of the Azteca Systems Offering to be (i) disclosed or distributed in source code form, (ii) made available free of charge to third parties, or (iii) modifiable without restriction by third parties.
g. **Monitoring**. Licensee will provide information and other materials related to its Licensee Content as reasonably requested by Azteca Systems or its Hosting partner to verify Azteca's or Licensee's compliance with this Agreement. Azteca Systems or its Hosting partner, as applicable, may browse, index, or otherwise monitor the external interfaces of any Licensee Content solely for the purpose of verifying compliance with this Agreement.

ARTICLE 6—TERM AND TERMINATION

6.1. The initial term of this Agreement will begin on the Effective Date, or upon such latter dates set forth in Addendum #1, and in each case provided a valid purchase authorization is issued. This Agreement may then be renewed annually by payment of the then current maintenance fees for the next annual maintenance period as set forth in Addendum #1.

6.2. Either party may terminate this Agreement or any Product license for a material breach that is not cured within thirty (30) days of written notice to the breaching party, except that termination shall be deemed to have immediate effect for a material breach that is impossible to cure.

6.3. **Termination by Licensee**. In the event that either funding from Licensee or other sources is withdrawn, reduced, or limited, or the authority of Licensee to perform any of its duties is withdrawn, reduced, or limited in any way after the Effective Date of this Agreement, Licensee may terminate subsequent Term Maintenance Periods by

giving Azteca Systems thirty (30) days' written notice prior to the end of the current Term Maintenance Period. The effective date of such termination will be the start of the subsequent Term.

6.4. **Termination by Azteca Systems**. Azteca Systems may terminate this Software License and Maintenance Agreement and/or any license granted hereunder if:

a. Licensee violates its obligations under this Software License and Maintenance Agreement and fails to cure the breach within thirty (30) days after Azteca Systems' written notification, provided however, that no cure period prior to termination will be required as noted in section 6.2.
b. Licensee ceases to do business in the ordinary course, or becomes insolvent, enters bankruptcy, reorganization, composition or other similar proceedings under applicable laws, whether voluntary or involuntary, or admits in writing its inability to pay its debts, or makes or attempts to make an assignment for the benefit of creditors. Such termination shall be effective upon notice to such party or as soon thereafter as is permitted by applicable law.

6.5. Upon termination of the License and Maintenance Agreement, all Product licenses granted hereunder terminate as well. Upon termination of a License or the Software License and Maintenance Agreement, Licensee will (i) stop accessing and using affected Product(s); (ii) clear any client-side data cache derived from Online Services; and (iii) uninstall, remove, and destroy all copies of affected Product(s) in Licensee's possession or control, including any modified or merged portions thereof, in any form, and execute and deliver evidence of such actions to Azteca Systems.

6.6. If this Agreement is terminated per section 6.3, the Licensee is only liable for payment required by the terms of this Agreement for license, maintenance, and support services rendered or products and software received and accepted prior to the effective date of termination.

6.7. If this Agreement is terminated per section 6.3 or 6.4, Licensee shall then return to Azteca Systems all of the Software, related modules, related updates, and any whole or partial copies, codes, modifications, and merged portions in any form. Azteca will then, for no additional charge to Licensee and at Licensee's option, either grant a license to the Licensee for a period of one (1) year, which will allow Licensee to retain the ability to access records and data contained in the Software, or allow Licensee to create digital copies of all files needed by the Licensee for the same period. If Licensee needs to retain access to records or data for a period longer than one (1) year, in order to transfer data to another system, Azteca will consider reasonable requests to extend beyond one (1) year.

6.8. If Licensee has an Online Services Subscription, Managed Cloud Services, or Online Services Product, then upon termination per section 6.3 or 6.4, Azteca Systems will provide Licensee the ability for 30 days to download, backup, or otherwise archive all Licensee Data.

6.9. The parties hereby agree that all provisions which operate to protect the intellectual rights of Azteca Systems shall remain in force should breach or termination of any kind occur.

ARTICLE 7—LIMITED WARRANTIES AND DISCLAIMERS

7.1 **Limited Warranties**. Except as otherwise provided in this Article 7, Azteca Systems warrants for a period of ninety (90) days from the date Azteca Systems issues the Authorization Code enabling use of Software and that the unmodified Software will substantially conform to the published Documentation under normal use and service.

7.2 **Special Disclaimer**. **Third-Party Content; Data; Samples; hot fixes; patches; updates; Online Services provided at no charge; and trial, evaluation, and beta Products are delivered "as is" and without warranty of any kind.**

7.3 **Disclaimers**.

a. **Internet Disclaimer**. Neither party will be liable for damages under any theory of law related to the performance or discontinuance of operation of the internet or to regulation of the internet that might restrict or prohibit the operation of Cloud Services.

b. **Third-Party Websites; Third-Party Content**. Azteca Systems is not responsible for any third-party website or third-party content that appears in or is referenced by Azteca Systems Products or Azteca Systems websites, including www.cityworks.com and www.mycityworks.com. Providing links to third-party websites and resources does not imply an endorsement, affiliation, or sponsorship of any kind.

7.4 **General Disclaimer**. **Except for the express limited warranties set forth in this Agreement, Azteca Systems disclaims all other warranties or conditions of any kind, whether express or implied, including, but not limited to, warranties or conditions of merchantability, fitness for a particular purpose, or non-infringement of intellectual property rights. Azteca Systems is not responsible for any nonconformities with Specifications or loss, deletion, modification, or disclosure of Licensee Content caused by Licensee's modification of any Azteca Systems Product or Service other than as specified in the Documentation. Azteca Systems does not warrant that Products and Services hereunder or Licensee's operation of the same, will be uninterrupted, error free, fault-tolerant, or fail-safe or that all nonconformities can or will be corrected. Products are not designed, manufactured, or intended for use in environments or applications that may lead to death, personal injury, or physical property/environmental damage. Licensee should not follow any suggestions or instructions that appear to be hazardous, unsafe, or illegal. Any such use shall be at Licensee's own risk and cost.**

7.5 **Exclusive Remedy**. Licensee's exclusive remedy and Azteca Systems' entire liability for breach of the limited warranties set forth in this Section shall be limited to replace any defective media; (i) repair, correct, or provide a workaround for the applicable Products or Services and subject to the Azteca Systems Maintenance Services and Support Addendum; or (ii) at Azteca Systems election, terminate Licensee's right to use and refund the fees paid for Azteca Systems Products or Services that do not meet Azteca Systems limited warranties, provided that Licensee uninstalls, removes, and destroys all copies of Software or Documentation; ceases using the Software or Online Services; and executes and delivers evidence of such actions to Azteca Systems.

ARTICLE 8—LIMITATION OF LIABILITY

8.1 **Disclaimer of Liability. Neither Licensee, Azteca Systems, nor any Azteca Systems distributor or third party licensor will be liable for any indirect, special, incidental, or consequential damages; lost profits; lost sales; loss of goodwill; costs of procurement of substitute goods or services; or damages exceeding the applicable license fees paid for the current Term support period, or current Subscription fees, or Services fees actually paid to Azteca Systems for the Azteca Systems Products or Services giving rise to the cause of action**.

8.2 The limitations and exclusions of liability in the preceding paragraph do not apply to Licensee's infringement, misuse, or misappropriation of Azteca Systems or Azteca Systems licensors' intellectual property rights, either party's indemnification obligations, gross negligence, willful misconduct, or violations of the Export Compliance clause of this Agreement or any applicable law or regulation.

8.3 **Applicability of Disclaimers and Limitations**. Azteca Systems (or its authorized distributor if any) has set its fees and entered into this Agreement in reliance on the disclaimers and limitations in this Agreement; the fees reflect an allocation of risk that is an essential basis of the bargain between the parties. **These limitations will apply whether or not a party is aware of the possibility of any damage and notwithstanding any failure of essential purpose of any exclusive, limited remedy.**

8.4 The foregoing warranties, limitations, and exclusions may be invalid in some jurisdictions and apply only to the extent permitted by applicable law or regulation in Licensee's jurisdiction. Licensee may have additional rights under law that may not be waived or disclaimed. Azteca Systems does not seek to limit Licensee's warranty or remedies to any extent not permitted by law.

ARTICLE 9—INDEMNIFICATIONS

9.1 **Definitions**. The following definitions supplement the definitions provide in Article 1:

a. "Claim" means any claim, action, or demand by a third party.
b. "Indemnitees" means Customer and its directors, officers, and employees.

c. "Infringement Claim(s)" means any Claim alleging that Customer's use of or access to any Azteca Systems Products or Services infringes a patent, copyright, trademark, or trade secret.
d. "Loss(es)" means expenditure, damage award, settlement amount, cost, or expense, including awarded attorney's fees.

9.2 **Infringement Indemnity**.
a. Azteca Systems will defend, hold all indemnitees harmless from and against any Loss arising out of an Infringement Claim.
b. If Azteca Systems determines that an Infringement Claim is valid, Azteca Systems may, at its expense, either (i) obtain rights for Customer to continue using the Azteca Systems Products or Services or (ii) modify the Azteca Systems Products or Services while maintaining substantially similar functionality. If neither alternative is commercially reasonable, Azteca Systems may terminate Licensee's right to use the Azteca Systems Products or Services and will refund any unused portion of fees paid for Term Licenses, Subscriptions, and Maintenance.
c. Azteca Systems has no obligation to defend an Infringement Claim or to indemnify Customer to the extent the Infringement Claim arises out of (i) the combination or integration of Azteca Systems Products or Services with a product, process, or system or element not supplied by Azteca Systems or specified by Azteca Systems in its Documentation, (ii) alteration of Azteca Systems Products or Services by anyone other than Azteca Systems or its subcontractors, (iii) compliance with Licensee's specifications, or (iv) use of Products or Services after Azteca Systems either provides a modified version to avoid infringement or terminates Licensee's right to use the Products or Services.

9.3 **General Indemnity**. Azteca Systems will defend and hold all Indemnitees harmless from, and indemnify any Loss arising out of, any Claim for bodily injury, death, or tangible or real property damage brought against any of the Indemnitees to the extent arising from any negligent act or omission or willful misconduct by Azteca Systems or its directors, officers, employees, or agents performing Services while on Customer's site.

9.4 **Conditions for Indemnification**. As conditions for indemnification, Indemnitee will (i) promptly notify Azteca Systems in writing of the Claim, (ii) provide all available documents describing the Claim, (iii) give Azteca Systems sole control of the defense of any action and negotiation related to the defense or settlement of any Infringement Claim, and (iv) reasonably cooperate in the defense of the Infringement Claim at Azteca Systems request and expense.

9.5 **This section sets forth the entire obligation of Azteca Systems, its authorized distributor (if any), and its third-party licensors (if any) regarding any Claim for which Azteca Systems must indemnify Licensee**.

ARTICLE 10—GENERAL PROVISIONS

10.1 **Export Control Regulations**. Licensee expressly acknowledges and agrees that Licensee shall not export, re-export, import, transfer, or release Products, in whole or in part, to (i) any US embargoed country, (ii) any person on the US Treasury Department's list of Specially Designated Nationals, (iii) any person or entity on the US Commerce Department's Denied Persons List, Entity List, or Unverified List, or (iv) any person or entity or into any country where such export, re-export, or import violates any US, local, or other applicable import/export control laws or regulations including, but not limited to, the terms of any import/export license or license exemption and any amendments and supplemental additions to those import/export laws as they may occur from time to time.

10.2 **Taxes and Fees, Shipping Charges**. License and Subscription fees quoted to Licensee are exclusive of any and all taxes or fees, including, but not limited to, sales tax, use tax, value-added tax (VAT), customs, duties, or tariffs, and shipping and handling charges.

10.3 **No Implied Waivers**. The failure of either party to enforce any provision of this Agreement shall not be deemed a waiver of the provisions or of the right of such party thereafter to enforce that or any other provision.

10.4 **Severability**. The parties agree that if any provision of this Agreement is held to be unenforceable for any reason, such provision shall be reformed only to the extent necessary to make the intent of the language enforceable.

10.5 **Successor and Assigns**. Licensee shall not assign, sublicense, or transfer Licensee's rights or delegate Licensee's obligations under this Agreement without Azteca Systems' prior written consent, and any attempt to do so without consent shall be void. This Agreement shall be binding on the respective successors and assigns of the parties to this Agreement. Notwithstanding, a government contractor under contract to the government to deliver Products may assign this Agreement and Products acquired for delivery to its government customer upon written notice to Azteca Systems, provided the government customer assents to the terms of this Agreement.

10.6 **Survival of Terms**. The provisions of Articles 2, 6, 7, 8, 9 and 10 of this Agreement, and the provisions of section 4.1 of Addendum #2, shall survive the expiration or termination of this Software License and Maintenance Agreement.

10.7 **US Government Licensee**. The Products are commercial items, developed at private expense, provided to Licensee under this Agreement. If Licensee is a US government entity or US government contractor, Azteca Systems licenses Products to Licensee in accordance with this Agreement under FAR Subparts 12.211/12.212 or DFARS Subpart 227.7202. Azteca Systems Data and Online Services are licensed under the same subpart 227.7202 policy as commercial computer software for acquisitions made under DFARS. The commercial license rights in this Agreement strictly govern Licensee's use, reproduction, or disclosure of Products. Azteca Systems Software source code is unpublished, and all rights to Products are reserved by Azteca Systems and its licensors. Licensee may transfer Software to any licensed government procuring agency facility to which computer(s) on which Software is installed are transferred. If any court, arbitrator, or board holds that Licensee has greater rights to any portion of Products under applicable public procurement law, such rights shall extend only to the portions affected.

10.8 **Governing Law**. This Agreement is not subject to the United Nations Convention on Contracts for the International Sale of Goods.

- **Government Entities**. If Licensee is a government entity, the applicable laws of the Licensee's jurisdiction govern this Agreement.
- **Nongovernment Entities**. US federal law and the law of the State of Utah exclusively govern this Agreement, excluding their respective choice of law principles.

10.9 **Dispute Resolution**. The parties will use the following dispute resolution process:

- **Equitable Relief**. Either party will have the right to seek an injunction, specific performance, or other equitable relief in any court of competent jurisdiction without the requirement of posting a bond or proving injury as a condition for relief.
- **US Government Agencies**. This Agreement is subject to the Contract Disputes Act of 1978, as amended (41 USC 601-613).
- **Other Government Entities**. Azteca Systems will comply with mandatory dispute resolutions under applicable law.
- **Negotiation and Mediation**. The parties will attempt negotiation and consultation in good faith and a spirit of mutual cooperation. If not resolved through negotiation, the parties will next attempt mediation in Midland Texas, by a mutually acceptable mediator chosen by the parties, which cost is shared equally. If not resolve either through negotiation or mediation, then it shall be finally adjudicated by a court of competent jurisdiction in Midland, County Texas, or any Federal District court in the event of matters of intellectual property.

10.10 **Maintenance**. Maintenance for qualifying Software consists of updates (provided on a when-and-if available basis) and other benefits, such as access to technical support, which are provided during the Term. Maintenance is specified as set forth in Addendum #2.

10.11 **Audit**. Upon Azteca System's written request, Licensee shall certify in a signed writing that its use of the Licensed Product is in full compliance with the terms of this Agreement (including any restrictions herein). Azteca Systems, or its authorized representative, may, upon prior reasonable notice of at least ten (10) days, inspect and audit Licensee's records and use of the Licensed Products to confirm compliance with this Agreement. All such inspections and audits will be conducted during regular business hours and in a manner that does unreasonably interfere with ordinary business activities. Licensee shall be responsible for any audit costs only in the event that such audit reveals that Licensee's use is not in accordance with the permitted uses under this Agreement, and for

unpaid license fees.

10.12 **Feedback**. Azteca Systems may freely use any feedback, suggestions, or requests for Product improvements that Licensee provides to Azteca Systems. Regardless of the source of any feedback or suggestions, any improvements to Software or Products, and any related intellectual property, are owned by Azteca Systems.

10.13 **Patents**. Licensee may not seek, and may not permit any other user to seek, a patent or similar right worldwide that is based on or incorporates any Azteca Systems technology or services. This express prohibition on patenting shall not apply to Licensee's software and technology except to the extent that Azteca Systems technology or services, or any portion thereof, are a part of any claim or preferred embodiment in a patent application or a similar application.

10.14 **Force Majeure**. A party will not be liable for any failure of or delay in the performance of this Agreement for the period that such failure or delay is due to causes beyond the party's reasonable control. Such causes may include, but are not limited to, acts of God, war, strikes, labor disputes, cyber-attacks, laws, regulations, government orders, or any other force majeure event.

10.15 **Independent Contractor**. Azteca Systems is and at all times will be an independent contractor. Nothing in this Agreement creates an employer/employee, principal/agent, or joint venture relationship between Azteca Systems and the Licensee. No party has any authority to enter into contracts on behalf of another party or otherwise act on behalf of another party.

10.16 **Entire Agreement**. This Agreement, including its incorporated documents, addendums, and exhibits constitutes the sole and entire agreement of the parties as to the subject matter set forth herein and supersedes any previous license agreements, understandings, and arrangements between the parties relating to such subject matter. Additional or conflicting terms set forth in any purchase orders, invoices, or other standard form documents exchanged during the ordering process, other than product descriptions, quantities, pricing, and delivery instructions, are void and of no effect. Any modification(s) or amendment(s) to this Agreement must be in writing and signed by each party or as otherwise provided in Addendum #1.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and made effective by their respective authorized representatives.

AZTECA SYSTEMS, LLC	**CITY OF MIDLAND, TX** – (LICENSEE)
By: _____	By: _____
Name: Brian L. Haslam	Name: _____
Title: President - CEO	Title: _____
Date: _____/_____/_____	Date: _____/_____/_____

ADDENDUM #1

PRODUCT LICENSING

1. **Licensed Software:**

Server AMS Standard Cityworks Online Enterprise License Agreement (ELA), Includes Unlimited Quantities of the Identified Products: Office Respond Mobile Native Apps (for iOS/Android) --Includes the following Add-ons: Storeroom Equipment Checkout Contracts Cityworks for Excel Cityworks Analytics for AMS eURL (Enterprise URL) Workload Web Hooks CCTV Interface for PACP Pavement Management Performance Budgeting Service Request API Work Order API - Basic Data Storage Plus Local Government Templates (LGT) Use of Cityworks AMS Application Programming Interfaces (APIs) with commercially available Cityworks-centric applications that are licensed and maintained by authorized Cityworks partners

Additional Software Products & Licenses & Annual Renewals: Additional Software Products & Licenses may be added to this Agreement as well as annual renewals of this Agreement with either an acknowledgement of an official Cityworks quote signed by Licensee and additional fees, if necessary or applicable being paid, or receipt of Purchase Order from Licensee in response to an official Cityworks quote and additional fees, if applicable, being paid.

2. **Notices & Licensee Information: Until or unless otherwise modified, all notices relevant to this agreement shall be sent to the following address:**

Azteca Systems, LLC 11075 South State, Suite 24 Sandy, Utah 84070	**City of Midland** 1602 E Orchard Lane Building 5 Midland, TX 79701
	Attn: Gabe McClelland
	E-mail: gmcclelland@midlandtexas.gov
	Phone: 432.685.7299

3. **Effective Date of Software (Date Software made available)**

MM/DD/YYYY
06/01/2021

4. **Schedule of Payments and/or Fees under Agreement**

Annual Period	Date From/To (mm/dd/yyyy)	Amount
Period 1	**06/01/2021 – 08/05/2021**	**$ 27,033.00**
Period 2	**08/06/2021 – 08/05/2022**	**$101,000.00**
Period 3	**08/06/2022 – 08/05/2023**	**$101,000.00**

** Fee for Period 1 reflects the services ($23,700.00) for the licensing conversion change to Cityworks Online and the cost of additional products (3,333.00) pro-rated for the period of 6/1/2021 – 08/05/2021. Current Period 1 fee of $81,000.00 for the period of 08/06/2020 to 08/05/2021 was paid previously.*

5. **Additional Items (If Any):**

   a. Cityworks Online (CWOL) - is a Cityworks Online hosted services subscription for the right to access and use the Online Services for the products identified hereinabove. CWOL is a highly scalable hosted services product offering. It is hosted on Azteca Systems' servers and completely scaled, managed, updated, backed up, and maintained by Azteca Systems.

   b. Because Azteca Systems controls the update schedule, users are not responsible for upgrading, managing, or patching the systems themselves.

   c. Annual fee herein is based on 100,001 - 150,000 population range.

   d. ELA pricing herein for CWOL assumes no hosting logins are added over and above the current 100 Server AMS hosting Logins. Additional hosting logins can be added for an additional fee.

ADDENDUM #2
STANDARD MAINTENANCE AND SUPPORT

Standard Maintenance and Support Addendum provisions are between the Licensee and Azteca Systems, LLC ("Azteca Systems" or "Azteca"). Maintenance and support are provided subject to the terms and conditions of the signed Software License and Maintenance Agreement and which is incorporated by reference.

1. **MAINTENANCE & SUPPORT**: Azteca Systems will provide maintenance and support services to Licensee for qualifying Products during the applicable Term for such Products provided the applicable license and maintenance fees have been paid for the times and periods and amounts specified in Addendum #1. Maintenance and Support services consist of the following benefits: maintenance items (provided on a when-and-if available basis) which may include subsequent version releases of the licensed software, service packs, upgrades and updates, and technical support.

1.1. Azteca Systems will ensure upward compatibility for the licensed software applications within a reasonable timeframe for minor Esri® ArcGIS and Cityworks supported database revisions. Azteca Systems will not ensure upward compatibility for licensed software applications when there are major Esri ArcGIS revisions (for example, from rev 10.x to rev 11.x), however Azteca Systems will make all reasonable efforts to provide upward compatibility.

1.2. Azteca Systems shall, without additional charge (except as allowed for in paragraph 3.4), during the term of this Agreement provide the following:

a. **Software Updates**. Software Updates includes upgrades and service packs which are a collection of files that enhance or correct the licensed software, and which will be available for Licensee to download during the Maintenance Term/Period. Updates and upgrades may also include new versions;
b. Provide Telephone Support, Email Support, Web Support, during normal business hours, 8 AM to 5 PM Mountain Time, Monday through Friday (excepting Holidays) and after hour emergency support line, and other benefits deemed appropriate by Azteca Systems (as set forth in Section 2 below); and
c. Implement and maintain a means of secure, remote direct network access (VPN, Web-access, etc.) to the Licensee's systems in order to perform thorough remote diagnostics.

1.3 The following items, among others, however, are specifically excluded as support services under this Addendum:

a. Support for applying or installing upgrades and service packs;
b. Assistance with questions related to third-party software, computer hardware, networking, and other similar items that are not provided by Azteca;
c. Assistance with computer operating system questions not directly pertinent to the licensed software;
d. Licensee Data debugging and/or correcting;
e. Services necessitated as a result of any cause other than authorized ordinary and proper use by the Licensee of the licensed software, including but not limited to neglect, abuse, unauthorized modifications, and/or unauthorized updates;
f. Consulting regarding customizations created to function with the licensed software unless the customization is identified and listed as licensed software in Addendum #1;
g. Assistance with applications which are not part of a standard life cycle, such as preview, beta, or candidate releases; and
h. Questions such as configuration, implementation, and walk-throughs.

1.4 Support Periods are renewable unless terminated as provided in Section 3 below.

1.5. Technical support provided pursuant these maintenance provisions shall be performed in a professional and workmanlike manner. Azteca Systems will use commercially reasonable efforts to provide corrections to a technical issue or provide a workaround, but Azteca Systems cannot guarantee that all technical issues can be fixed or resolved.

1.6. **Authorized Callers**. Licensee may designate a limited number of authorized callers per software product listed in Addendum #1. Licensee may replace Authorized Callers at any time by notifying Azteca Systems Support services. Authorized callers may be designated in this Addendum #2 or by email. Azteca may limit the total number of authorized callers as may be reasonably necessary and may request an updated list of authorized callers.

1.7. **Cityworks Online Support and Customer Portal**. Azteca has created a self-help support website center for Authorized Callers to submit technical issues, chat with technical specialists, track technical support incidents through the 'MyCityworks' portal, and view technical articles, updated product documentation, blogs, links to forums, and technology announcements. The support and care website can be found at http://www.mycityworks.com.

1.8. **Additional Support Items**.

a. On a when-and-if available basis, updates to the licensed software (Addendum #1) means subsequent releases of the program which Azteca generally makes available to its customers who are under an active Software License and Maintenance Agreement for which fees have been paid for the relevant support period.
b. Occasionally, Azteca changes the name of its licensed software as part of its ongoing process to improve and increase the functionality of the software. In the event the software licensed or listed in Addendum #1 changes in name, and/or improvements are made, Azteca will provide software with functionality that is similar to or with substantially the same or greater functionality of the originally licensed software, provided all current license or maintenance fees have been paid.
c. Updates may not always include any release, option, or future program that Azteca licenses separately. Updates are provided on a when-and-if available basis as determined by Azteca Systems. Azteca Systems is under no obligation to develop any future programs or functionality. Any updates made available will made available to you for download. Customer is responsible for copying, downloading, and installing the updates.

2. PROCEDURES FOR ACCESSING SUPPORT

2.1. All problem categories from routine, non-critical and critical, that occur during normal business hours shall procedurally occur as follows: 1) Licensee's system administration staff as first line of support, and then 2) Azteca Systems staff as the second line of support. Azteca Systems will make all reasonable efforts to acknowledge all requests for support during normal business hours within four (4) hours.

2.2. Prior to calling Azteca Systems for support services, the Licensee will first attempt to isolate any problems that occur within the Licensee's System. The Licensee will try to reduce the problem down to a specific software or system component. If it is determined that the problem is the Cityworks Software component, Licensee will first try and resolve the problem without Azteca Systems' involvement. If Licensee cannot resolve the problem or isolate the problem, Licensee may contact Azteca Systems via telephone, chat, or self-service portal. In each case, Cityworks technical support will log the information and provide an answer to the question, a resolution to the problem, or submit a verified bug to the development group. Any support request that is not quickly resolved will be assigned to a technical support representative. Phone calls and chat requests are accepted during normal business hours as outlined on the Contact Support page of MyCityworks.com. Voicemails and requests submitted via the self-service portal outside of the posted business hours will be responded to on a first come, first served basis the next business day.

2.3. For critical problems that occur outside of Azteca Systems' normal business hours (8 AM to 5 PM, Mountain Time) and cannot be isolated and resolved by the Licensee, Azteca Systems will provide an after-hours phone number that will forward the call to the currently assigned Azteca Systems support representative. Azteca Systems will make all reasonable efforts to acknowledge and respond to the request for support for critical problems that occur outside of normal business hours within four (4) hours of receipt of the call from a designated and authorized Licensee representative. Critical problems are defined as problems that cause several users to be unable to perform their duties. For routine and non-critical problems, Licensee will submit support requests during normal business hours as outlined in 2.2 above.

2.4. After a Technical Support Incident is logged, Azteca Systems will use commercially reasonable efforts to provide corrections to a technical issue or provide a work around. While it is Azteca's goal to provide an acceptable solution to technical issues, Azteca cannot guarantee that all technical issues can be fixed or resolved.

2.5. Azteca will use all reasonable efforts to utilize remote support-type services. However, in the event Licensee and Azteca Systems agree it becomes necessary for Azteca Systems to be on-site to provide support for the covered Software, the parties by mutual negotiation, shall develop a separate agreement that will govern the terms and conditions for any on-site work or services.

3. CHARGES/FEES

3.1. License, Maintenance, and Support Services herein are included in the payment of annual fees as set forth in Addendum #1 and shall be paid by Licensee. The annual fee for each twelve (12) month period is set forth in Addendum #1 and shall be paid prior to the start for each License and Maintenance Period unless otherwise specified. The annual fee for successive Terms/Periods (twelve-month periods) commencing upon the anniversary of the first maintenance period, shall become due prior to the end of the preceding paid-up Maintenance Period.

3.2. Upon sixty (60) days written notice, the fee for the License and Maintenance Periods listed in Addendum #1 subsequent to year one (1) of the Maintenance Period, may be adjusted by Azteca Systems to reflect increases in costs of providing the services; provided, however, that the fee shall not increase by more than the CPI from the previous annual fee. "CPI" shall mean for all Urban Consumers, the U.S. City Average, for all items, 1982-84=100 (the "CPI-U"), as published by the Bureau of Labor Statistics, U.S. Department of Labor. Azteca Systems will notify Licensee of the new pricing no later than sixty (60) days prior to the annual renewal date of the year preceding the year for which such adjusted pricing applies.

3.3. **Maintenance Expiration**. Azteca Systems will send Licensee a notice of expiration approximately sixty (60) days before the Maintenance term expires. If Azteca Systems does not receive a purchase order prior to the expiration date, Azteca will send the notification to Licensee upon expiration of the Maintenance term. All other Maintenance benefits and Support services will end with the expiration of the Maintenance term.

3.4. **Reinstatement Fee for Lapsed Maintenance**. Azteca Systems will reinstate Maintenance if Licensee sends a purchase order or payment within thirty (30) days of the expiration date. If Licensee does not renew Maintenance within thirty (30) days of the expiration date but at a later date wants to reinstate Maintenance, Maintenance fees will include the Maintenance fees that Licensee would have paid since the expiration date.

4. MANAGED CLOUD AND ONLINE SERVICES

4.1. **Prohibited Uses**. Licensee shall not provide Customer Content or otherwise access or use Cloud Services in a manner that:

a. Creates or transmits spam, spoofings, phishing emails, or offensive or defamatory material; or stalks or makes threats of physical harm;

b. Stores or transmits any Malicious Code;

c. Violates any law or regulation;

d. Infringes or misappropriates the rights of any third party;

e. Probes, scans, or tests the vulnerability of Cloud Services or breaches any security or authentication measures used by Cloud Services without written approval from Azteca Systems product security officer; or

f. Benchmarks the availability, performance, or functionality of Cloud Services for competitive purposes.

4.2. **Service Interruption**. System failures or other events beyond Azteca's reasonable control may interrupt Customer's access to Cloud Services. Azteca Systems may not be able to provide advance notice of such interruptions.

4.3. **Licensee Content**.

a. Licensee grants Azteca Systems and its subcontractors a nonexclusive, nontransferable, worldwide right to host, run, modify, and reproduce Licensee Content as needed to provide Cloud Services to Licensee. Azteca Systems will not access, use, or disclose Customer Content without Customer's written permission except as reasonably necessary to support Customer's use of Cloud Services. Except for the limited rights granted to Azteca Systems under this Agreement, Customer retains all its rights, title, and interest in the Customer Content.

b. If Customer accesses Cloud Services with an application provided by a third party, Azteca Systems may disclose Customer Content to such third party as necessary to enable interoperation between the application, Cloud Services, and Customer Content.

c. Azteca Systems may disclose Customer Content if required to do so by law or regulation or by order of a court or other government body, in which case Azteca Systems will reasonably attempt to limit the scope of disclosure.

d. When Customer's use of Cloud Services ends, Azteca Systems will either:

   1. Make Customer Content available to Customer for download for a period of thirty (30) days unless Customer requests a shorter window of availability or Azteca Systems is legally prohibited from doing so; or

   2. Download all Customer Content in Azteca Systems' possession to a medium of Customer's choosing and deliver such Customer Content to Customer.

Azteca Systems will have no further obligations to store or return Customer Content at the conclusion of the Cloud Services.

4.4. **Removal of Customer Content**. Azteca Systems may remove or delete Customer Content if there is reason to believe that uploading Customer Content to or using it with Cloud Services materially violates this Agreement. If reasonable under these circumstances, Azteca Systems will notify Customer before removing Customer Content. Azteca Systems will respond to any Digital Millennium Copyright Act takedown notices in accordance with Azteca Systems copyright policy, available at www.cityworks.com/legal.

4.5. **Service Suspension**. Azteca Systems may suspend access to Cloud or Online Services (i) if Customer materially breaches this Agreement and fails to timely cure the breach, (ii) if Azteca Systems reasonably believes that Customer's use of Cloud Services will subject Azteca Systems to immediate liability or adversely affect the integrity, functionality, or usability of the Cloud Services, (iii) for scheduled maintenance, (iv) to enjoin a threat or attack on Cloud Services, or (v) if Cloud Services become prohibited by law or regulated to a degree that continuing to provide them would impose a commercial hardship. When feasible, Azteca Systems will notify Customer of any Cloud Services suspension beforehand and give Customer reasonable opportunity to take remedial action.

Azteca Systems is not responsible for any damages, liabilities, or losses that may result from any interruption or suspension of Cloud Services or removal of Customer's content as described above.

4.6. **Notice to Azteca Systems**. Licensee will promptly notify Azteca Systems if Customer becomes aware of any unauthorized use of Customer's subscription or any other breach of security regarding Cloud Services.

5. **MISCELLANEOUS**

5.1. **Data Confidentiality Statement**. Azteca Systems will take reasonable measures to ensure that any Licensee data and/or confidential information provided to Azteca Systems is not inappropriately accessed or distributed to any third-party. Data provided to Azteca Systems by the Licensee may be loaded onto Azteca Systems servers or employee computers for the purpose of testing the Cityworks Software, database structure, or database values, and related Esri® software to resolve database or software performance issues, software enhancements, and software defects. At no time will the data be distributed to individuals or organizations who are not Azteca Systems employees without first receiving written approval from Licensee. If requested by the Licensee, and once the testing has been completed, Azteca Systems will delete all data provided by the Licensee.

5.2. **No Implied Waivers**. No failure or delay by Azteca Systems or Licensee in enforcing any right or remedy under this Agreement shall be construed as a waiver of any future or other exercise of such right or remedy by Azteca Systems.

5.3. Azteca Systems will use commercially reasonable efforts to ensure that Azteca Systems Products and Offerings will not transmit any Malicious Code to Licensee. Azteca Systems is not responsible for Malicious Code that Licensee introduces to Azteca Systems Products or Offerings or that is introduced through Third-Party Content. Malicious Code means software viruses; worms, time bombs, Trojan horses; or any other computer code, files, denial of service, or programs designed to interrupt, destroy, or limit the functionality of any computer software, hardware, or telecommunications equipment.

ADDENDUM #3

THIRD-PARTY CONSULTANT/CONTRACTOR ACKNOWLEDGMENT

If Licensee engages any third party or contractor (Third Party) and desires to grant access to use the Licensed Software, the access may be granted subject to the following terms conditions and provisions:

1. Access and use of the Licensed Products by Third Party is solely for Licensee's benefit;

2. Third Party (or, if applicable, its employee) shall be considered the Authorized User for purposes of the applicable license type, and all use shall be in accordance with the terms and conditions of the Cityworks Software License and Maintenance Agreement with Licensee;

3. Before accessing the Licensed Products, Third Party agrees that (i) the software shall be used solely in accordance with the terms of this Agreement, and (ii) said contractor shall be liable to Azteca Systems for any breach by it of this Agreement;

4. Licensee hereby agrees and acknowledges that Licensee will be responsible for all use by Third Party with respect to the use of the Licensed Products;

5. Upon expiration or termination of this Agreement, the rights of usage of Third Party shall immediately terminated;

6. Use of the Products by Third Party will be governed by the terms of this Agreement, and will require that Licensee purchase the appropriate license for each user utilized by Third Party; and

7. Licensee will ensure that Third-Party Contractor agrees to comply with and does comply with the terms of this Agreement on the same basis as the terms apply to Licensee.

The rights granted under Third-Party Contractor Addendum, do not modify the license or increase the number of licenses granted under this Agreement. Third Party, by their signature below, acknowledges that it has a copy of the License Agreement and agrees to the terms herein. Licensee shall provide a signed copy of this Addendum to Azteca Systems at contracts@cityworks.com.

Third Party (Print):_____ **Licensee**: City of Midland, Texas

By: _____
Third Party/Contractor Authorized Signature

Title: _____

Date: _____

Third Party Information

Address City, State, Zip	
Contact Name	
Phone Number	
Email	

May 14, 2021

City of Midland
Attn: Hugo Rodriguez
601 N. Loraine
PO Box 1152
Midland, TX 79701
Via email: hrodriguez@midlandtexas.gov

Re: *Cityworks Sole Source Letter – City of Midland, Texas*

To Whom it may concern:

This letter is to confirm that the Cityworks® Software is a sole source product, designed, created, and owned exclusively by Azteca Systems, LLC. Azteca Systems is the sole creator and owner of the Cityworks software including the Copyrights and Trademarks for Cityworks® and Empowering GIS® in the United States and elsewhere. Within the United States of America, Azteca Systems, LLC is the sole source provider of the Cityworks license and maintenance services. The product may be purchased only directly from Azteca Systems or through authorized parties.

Should you have any further questions please contact me at (801) 523-2751 or if you prefer e-mail at bhaslam@cityworks.com.

Sincerely,

Brian L. Haslam
President - CEO, Azteca Systems, LLC

City Council Meeting

Item Number: 5

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Erika Martinez, Manager, Purchasing

Subject: RESOLUTION REJECTING ALL BIDS RECEIVED FOR THE MIDLAND DRAW WIDENING PROJECT (GENERAL SERVICES)

Purpose:

Approval of a resolution rejecting all bids for the Midland Draw Widening Project from Front Street to Golf Course Road.

Recommended City Council Action:

Approve

Fiscal Impact:

No funding at this time.

Discussion:

The City Manager approved plans and specifications and authorized advertisement for bids for the Midland Draw Widening Project from Front Street to Golf Course Road. Bid requests were issued to sixty-nine (69) contractors. We received four (4) bids. Two (2) bids were deemed non-responsive. Due to the type of work that was combined for this bid packet there was some confusion concerning the scope of the work. Staff will make the appropriate revisions to the plans and specifications and send out two (2) different bid requests. Please see the attached memo from Matt Carr, City Engineer, for more information.

Therefore, please consider a resolution rejecting all bids received for the Midland Draw Widening Project from Front Street to Golf Course Road.

Morris Williams Jr.

City Manager's Office

INTEROFFICE MEMORANDUM

TO: Erika Martinez; Purchasing Manager

FROM: Matt Carr, City Engineer

SUBJECT: Support Memo – Midland Draw Widening Project ♦ Eng. Project No. D20-01

COUNCIL MEETING DATE: May 25, 2021

Engineer staff has reviewed the bid proposals and bid tabulations for the Midland Draw Widening project. It was clear that the bid process had some confusion because of the types of work that was combined for this bid package. Please **reject** all bids for this project.

Staff will make appropriate revisions to the construction plans to separate out the scope of the project into two projects: (1) **Midland Draw Drainage project**, and (2) **Midland Draw Utility project**. This separation should clear up any future confusion about the work scope and bid process.

cc: Jose Ortiz
Regina Stephenson

RESOLUTION NO. _____

RESOLUTION REJECTING ALL BIDS RECEIVED FOR THE MIDLAND DRAW WIDENING PROJECT

WHEREAS, the City Manager advertised for competitive bids for the Midland Draw Widening Project (the "Project"); and

WHEREAS, the City Council finds it to be in the public interest to reject all bids received for the Project, which were opened on April 28, 2021;

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

SECTION ONE. That the recitals stated above are hereby adopted.

SECTION TWO. That all bids received for the Project are hereby rejected.

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., 2021, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Regina Stephenson, General Services Director

_____
Jose Ortiz, Director of Engineering Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

D20-01 Midland Draw Widening Project - Front Street to Golf Course Road

City of Midland - Engineering Services; May 05, 2021

BID TAB					Jones Bros. Dirt & Paving Contractors			Salinas Construction		
Bid Item	Pay Note	Description	Quantity	Units	Bid # Unit Price	Bid Total	Actual Bid Total	Bid # Unit Price	Bid Total	Actual Bid Total
Miscellaneous Items										
1	M1	Mobilization	4	MO	$ 16,000.00	$ 64,000.00	$ 64,000.00	$ 77,669.11	$ 310,676.44	$ 310,676.44
2	M2	Temporary Erosion/Sediment Control	4	MO	$ 12,930.00	$ 51,720.00	$ 51,720.00	$ 12,026.00	$ 48,104.00	$ 48,104.00
3	M3	Traffic Control	4	MO	$ 1,500.00	$ 6,000.00	$ 6,000.00	$ 16,484.40	$ 65,937.60	$ 65,937.60
4	M4	Job Site Safety	4	MO	$ 8,195.00	$ 32,780.00	$ 32,780.00	$ 1,442.99	$ 5,771.96	$ 5,771.96
5	M5	Seeded Erosion Control Mats	30,710	SY	$ 1.85	$ 56,813.50	$ 56,813.50	$ 1.45	$ 44,529.50	$ 44,529.50
6	M6	Soil Preparation, Seeding, Fertlizing & Stabilization	31.5	AC	$ 997.50	$ 31,421.25	$ 31,421.25	$ 1,202.07	$ 37,865.21	$ 37,865.21
7	M7	Vegetative Watering	12	WK	$ 6,000.00	$ 72,000.00	$ 72,000.00	$ 6,859.86	$ 82,318.32	$ 82,318.32
8	M8	Outfall Protection Gabion Wall	1	EA	$ 6,950.00	$ 6,950.00	$ 6,950.00	$ 23,797.44	$ 23,797.44	$ 23,797.44
9	M9	Material Mark-up	Percentage	%	50.00%	50.00%	50.00%	30.00%	30.00%	30.00%
10	M10	Labor Mark-up	Percentage	%	30.00%	30.00%	30.00%	30.00%	30.00%	30.00%
11	M11	Equipment Rental Mark-up	Percentage	%	25.00%	25.00%	25.00%	30.00%	30.00%	30.00%
Demolition Items										
1	D1	Clearing, Grubbing and Tree Removal	1	EA	$ 29,800.00	$ 29,800.00	$ 29,800.00	$ 44,956.48	$ 44,956.48	$ 44,956.48
2	D2	Removal & Disposal of Existing Miscellaneous Concrete Pavement	351	SY	$ 4.25	$ 1,491.75	$ 1,491.75	$ 39.04	$ 13,703.04	$ 13,703.04
3	D3	Removal & Disposal of Existing Fences	2,120	LF	$ 3.00	$ 6,360.00	$ 6,360.00	$ 5.87	$ 12,444.40	$ 12,444.40
4	D4	Removal & Disposal of Existing 30" HDPE Storm Drain	21	LF	$ 157.50	$ 3,307.50	$ 3,307.50	$ 47.59	$ 999.39	$ 999.39
5	D5	Strip and Stockpile 6" of Topsoil	25,260	CY	$ 3.95	$ 99,777.00	$ 99,777.00	$ 8.84	$ 223,298.40	$ 223,298.40
6	D6	Uncalssified Channel Excavation	114,090	CY	$ 5.32	$ 606,958.80	$ 606,958.80	$ 8.55	$ 975,469.50	$ 975,469.50
Wastewater Items										
1	WW1	6" SDR 26 ASTM D2241, PVC Wastewater Main	116	LF	$ 131.25	$ 15,225.00	$ 15,225.00	$ 263.99	$ 30,622.84	$ 30,622.84
2	WW2	8" SDR 26 ASTM D2241, PVC Wastewater Main	83	LF	$ 131.25	$ 10,893.75	$ 10,893.75	$ 374.61	$ 31,092.63	$ 31,092.63
3	WW3	Manhole Ring & Cover Adjustment	14	EA	$ 1,575.00	$ 22,050.00	$ 22,050.00	$ 3,491.10	$ 48,875.40	$ 48,875.40
4	WW4	Water Valve Box Ring & Cover Adjustment	2	EA	$ 997.50	$ 1,995.00	$ 1,995.00	$ 2,168.02	$ 4,336.04	$ 4,336.04
5	WW5	60" Fiberglass Manhole & Cover, (0' - 15')	2	EA	$ 8,846.25	$ 17,692.50	$ 17,692.50	$ 12,586.53	$ 25,173.06	$ 25,173.06
6	WW6	Structural Lining Rehabiliation, Brick Manholes	9	EA	$ 12,757.50	$ 114,817.50	$ 114,817.50	$ 6,711.39	$ 60,402.51	$ 60,402.51
7	WW7	Structural Lining Rehabiliation, Concrete Manholes	12	EA	$ 12,048.75	$ 144,585.00	$ 144,585.00	$ 5,487.61	$ 65,851.32	$ 65,851.32
8	WW8	Sawcut Fibeerglass Barrel and Lower Manhole	1	EA	$ 4,856.25	$ 4,856.25	$ 4,856.25	$ 3,909.74	$ 3,909.74	$ 3,909.74
Structural Items										
1	S1	6" Concrete Cap for 27" Sewer	42	CY	$ 750.75	$ 31,531.50	$ 31,531.50	$ 867.55	$ 36,437.10	$ 36,437.10
2	S2	6" Concrete Flume	783	SY	$ 161.70	$ 126,611.10	$ 126,611.10	$ 131.24	$ 102,760.92	$ 102,760.92
3	S3	Post & Gable Fence	1160	LF	$ 54.60	$ 63,336.00	$ 63,336.00	$ 31.53	$ 36,574.80	$ 36,574.80
4	S4	20 - Foot Security Swing Gate	5	EA	$ 5,617.50	$ 28,087.50	$ 28,087.50	$ 4,996.89	$ 24,984.45	$ 24,984.45
Paving Items										
1	P1	Installation of Fill using Excavated Material	6,100	CY	$ 8.95	$ 54,595.00	$ 54,595.00	$ 4.92	$ 30,012.00	$ 30,012.00
2	P2	Replace 6" of Topsoil	25,390	CY	$ 5.90	$ 149,801.00	$ 149,801.00	$ 10.76	$ 273,196.40	$ 273,196.40
		Base Bid Total				**$ 1,855,456.90**	**$ 1,855,456.90**		**$ 2,664,100.89**	**$ 2,664,100.89**
Add Alternate No. 1: Flexible Caliche Base										
1	T1	6" Flexible Caliche Base	19,280	SY	$ 6.00	$ 115,680.00	$ 115,680.00	$ 9.17	$ 176,797.60	$ 176,797.60
		Base Bid Total + Add Alt No. 1				**$ 1,971,136.90**	**$ 1,971,136.90**		**$ 2,840,898.49**	**$ 2,840,898.49**
Add Alternate No. 2: Flume Extensions & Center Valley Channels										
1	T1	6" Concrete Flume Extensions and Center Valley	5,526	SY	$ 64.05	$ 353,940.30	$ 353,940.30	$ 110.06	$ 608,191.56	$ 608,191.56
		Base Bid Total + Add Alt No. 1 + Add Alt No. 2				**$ 2,325,077.20**	**$ 2,325,077.20**		**$ 3,449,090.05**	**$ 3,449,090.05**
						$ 2,325,077.20	$ 2,325,077.20		$ 3,449,090.05	$ 3,449,090.05
							$0.00			$0.00

City Council Meeting

Item Number: 6

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Erika Martinez, Manager, Purchasing

Subject: RESOLUTION AWARDING A CONTRACT FOR THE PARK AVENUE HEIGHTS 2 UTILITY PROJECT TO TEC EXCAVATION, INC., FOR A TOTAL COST NOT TO EXCEED $1,164,771.00; APPROVING $50,000.00 FOR PROJECT RELATED COSTS; AND APPROPRIATING FUNDS (DISTRICT 2) (GENERAL SERVICES)

Purpose:

Approval of a resolution authorizing the execution of a contract for the Park Avenue Heights 2 Utility Project.

Recommended City Council Action:

Approve

Fiscal Impact:

Funding will be appropriated from the American Rescue Plan Act funds and transferred into a project fund for said purpose.

Discussion:

The City Manager approved plans and specifications and authorized advertisement for bids for the Park Avenue Heights 2 Utility Project. Bid requests were issued to sixty-nine (69) contractors. We received five (5) bids. Two (2) bids were deemed non-responsive. Staff recommends awarding the contract to TEC Excavation, Inc. Please see the attached memo from Carl Craigo, Utilities Director, for more information.

Therefore, please consider a resolution awarding a contract to TEC Excavation, Inc. of Midland, Texas for the Park Avenue Heights 2 Utility Project for the Engineering Services Department in the base bid amount of $1,164,771.00 plus $291,192.75 in contingences and $50,000.00 for

project related costs for a project total of $1,505,963.75.

Morris Williams Jr.

City Manager's Office

TO: Erika Martinez; City of Midland, Purchasing Manager

FROM: Carl Craigo, P.E.; City of Midland, Director of Utilities

SUBJECT: Park Avenue Heights 2 Utility Project ♦ Engr. Project No. PU19-01 ♦ Bid Tabulation ♦

DATE: May 25, 2021

Erika,

Utility staff has reviewed the bid tabulation for the Park Avenue Heights 2 Utility Project. TEC Excavation, Inc. of Midland, Texas, is the apparent successful low bidder. Staff recommends awarding the Park Avenue Heights 2 Utility Project to TEC Excavation, Inc.

TEC Excavation, Inc. has an established history with the City of Midland of performing work of similar scale and scope to the Park Avenue Heights 2 Utility Project. Furthermore, the unit prices appear to be in line with current pricing trends.

The apparent successful bidder was selected based on the base bid amount of **$1,164,771.00** as outlined in the bidding documents. In addition, we would like to request that a 25% contingency in the amount of **$291,192.75** be allowed for value added changes to the project during construction and **$50,000.00** for project related costs incurred by the City to facilitate the contract (i.e. TDLR inspections, material testing services, etc.). The total amount made available for the project would be **$1,505,963.75**. Funds for the project will be allocated out of the Utilities unallocated funds or if the American Rescue Plan Act funds are available the project will be funded through those allocations.

The agreement specifies a construction period beginning within 15 calendar days of a written notice to proceed for construction.

Carl Craigo, P.E.
Director of Utilities

Cc: Cory Moose
Jose Ortiz
Regina Stephenson

RESOLUTION NO. _____

RESOLUTION AWARDING A CONTRACT FOR THE PARK AVENUE HEIGHTS 2 UTILITY PROJECT TO TEC EXCAVATION, INC., FOR A TOTAL COST NOT TO EXCEED $1,164,771.00; APPROVING $50,000.00 FOR PROJECT RELATED COSTS; AND APPROPRIATING FUNDS

WHEREAS, the City Manager approved specifications and authorized the advertisement for bids for the Park Avenue Heights 2 Utility Project; and

WHEREAS, Bid No. PU19-01 was opened on May 12, 2021, with the most advantageous bid being submitted by TEC Excavation, Inc., as shown on the bid tabulation attached hereto as Exhibit "A" and incorporated herein for all purposes; and

WHEREAS, the City Council finds the amount proposed by TEC Excavation, Inc., to be fair and reasonable; and

WHEREAS, the City Council finds it to be in the public interest to award a contract to TEC Excavation, Inc., for the Park Avenue Heights 2 Utility Project; and

WHEREAS, the City Council finds it to be in the public interest to approve $50,000.00 for project related costs incurred by the City to facilitate the contract;

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 with TEC Excavation, Inc., for the Park Avenue Heights 2 Utility Project for a total cost not exceed $1,164,771.00. Said contract to be kept on file in the office of the City Secretary, referenced by the date and number of this Resolution.

SECTION TWO. That the City Manager is hereby authorized and directed to execute, on behalf of the City of Midland, change orders to said contract if (1) each change order involves a decrease or increase of $50,000.00 or less and (2) the change orders, in total, do not increase the original contract price by more than twenty-five percent ($291,192.75).

SECTION THREE. That the sum of $50,000.00 for project costs incurred by the City to facilitate the contract is hereby approved for said agreement.

SECTION FOUR. That funding is hereby appropriated from the American Rescue Plan Act funds and transferred into a project fund for said purpose.

SECTION FIVE. That the City Comptroller is hereby authorized and directed to pay TEC Excavation, Inc., pursuant to the terms of said contract from funds available in the project fund for said purpose 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., 2021, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Regina Stephenson, General Services Director

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

PU19-01 - City of Midland: Park Avenue Heights 2

City of Midland - Engineering Services; May 12, 2021

BID TAB					Boler Equipment Service, Inc.			J&H Services			TEC Excavation, Inc.		
Bid Item	Pay Note	Description	Quantity	Units	Unit Price	Bid Total	Actual Bid Total	Unit Price	Bid Total	Actual Bid Total	Unit Price	Bid Total	Actual Bid Total
1	M1	Mobilization	8	MO	$ 9,600.00	$ 76,800.00	$ 76,800.00	$ 5,000.00	$ 40,000.00	$ 40,000.00	$ 5,500.00	$ 44,000.00	$ 44,000.00
2	M2	36" Steel Pipe Casing (1/4" Wall Thickness)	200	LF	$ 235.00	$ 47,000.00	$ 47,000.00	$ 255.00	$ 51,000.00	$ 51,000.00	$ 240.00	$ 48,000.00	$ 48,000.00
3	M2	20" Steel Pipe Casing (1/4" Wall Thickness)	100	LF	$ 151.00	$ 15,100.00	$ 15,100.00	$ 140.00	$ 14,000.00	$ 14,000.00	$ 140.00	$ 14,000.00	$ 14,000.00
4	M3	Erosion/Sediment Control	8	MO	$ 475.00	$ 3,800.00	$ 3,800.00	$ 1,150.00	$ 9,200.00	$ 9,200.00	$ 800.00	$ 6,400.00	$ 6,400.00
5	M4	Traffic Control	8	MO	$ 5,750.00	$ 46,000.00	$ 46,000.00	$ 3,780.00	$ 30,240.00	$ 30,240.00	$ 2,500.00	$ 20,000.00	$ 20,000.00
6	M5	Job Site Safety	8	MO	$ 675.00	$ 5,400.00	$ 5,400.00	$ 2,800.00	$ 22,400.00	$ 22,400.00	$ 500.00	$ 4,000.00	$ 4,000.00
7	M6	Material Mark-up	N/A	%	20%	N/A	N/A	20%	N/A	N/A	15%	N/A	N/A
8	M7	Labor Mark-up (Regular Work Hours)	N/A	%	20%	N/A	N/A	20%	N/A	N/A	15%	N/A	N/A
9	M8	Equipment Rental Mark-up (Non-Standard Equipment Only)	N/A	%	20%	N/A	N/A	20%	N/A	N/A	15%	N/A	N/A
1	D1	Removal & Disposal of Existing Water Main	1600	LF	$ 15.00	$ 24,000.00	$ 24,000.00	$ 7.75	$ 12,400.00	$ 12,400.00	$ 8.00	$ 12,800.00	$ 12,800.00
2	D1	Removal & Disposal of Existing Wastewater Main	60	LF	$ 20.00	$ 1,200.00	$ 1,200.00	$ 14.00	$ 840.00	$ 840.00	$ 15.00	$ 900.00	$ 900.00
3	D2	Flowable Fill for Existing Pipes Abandoned In Place	3	CY	$ 250.00	$ 750.00	$ 750.00	$ 350.00	$ 1,050.00	$ 1,050.00	$ 135.00	$ 405.00	$ 405.00
4	D3	Removal & Disposal of Existing Fire Hydrant Assembly	2	EA	$ 850.00	$ 1,700.00	$ 1,700.00	$ 1,100.00	$ 2,200.00	$ 2,200.00	$ 1,000.00	$ 2,000.00	$ 2,000.00
5	D4	Removal & Disposal of Existing Unclassified Pavement	1300	SY	$ 20.00	$ 26,000.00	$ 26,000.00	$ 10.00	$ 13,000.00	$ 13,000.00	$ 10.00	$ 13,000.00	$ 13,000.00
6	D5	Removal & Disposal of Existing Concrete Curb & Gutter	50	LF	$ 15.00	$ 750.00	$ 750.00	$ 17.00	$ 850.00	$ 850.00	$ 10.00	$ 500.00	$ 500.00
7	D6	Removal & Disposal of Existing Concrete Sidewalk & Ramps	10	SY	$ 15.00	$ 150.00	$ 150.00	$ 45.00	$ 450.00	$ 450.00	$ 20.00	$ 200.00	$ 200.00
1	W1	12" AWWA C-900 DR18, PVC, Water Main	100	LF	$ 66.00	$ 6,600.00	$ 6,600.00	$ 58.00	$ 5,800.00	$ 5,800.00	$ 83.00	$ 8,300.00	$ 8,300.00
2	W1	8" AWWA C-900 DR18, PVC, Water Main	2800	LF	$ 55.00	$ 154,000.00	$ 154,000.00	$ 35.00	$ 98,000.00	$ 98,000.00	$ 63.00	$ 176,400.00	$ 176,400.00
3	W1	6" AWWA C-900 DR18, PVC, Water Main	160	LF	$ 52.00	$ 8,320.00	$ 8,320.00	$ 27.50	$ 4,400.00	$ 4,400.00	$ 60.00	$ 9,600.00	$ 9,600.00
4	W2	12" Gate Valve & Box (MJxMJ/FL)	5	EA	$ 3,625.00	$ 18,125.00	$ 18,125.00	$ 4,000.00	$ 20,000.00	$ 20,000.00	$ 3,400.00	$ 17,000.00	$ 17,000.00
5	W2	8" Gate Valve & Box (MJxMJ/FL)	11	EA	$ 2,495.00	$ 27,445.00	$ 27,445.00	$ 2,400.00	$ 26,400.00	$ 26,400.00	$ 1,800.00	$ 19,800.00	$ 19,800.00
6	W2	6" Gate Valve & Box (MJxMJ/FL)	8	EA	$ 1,995.00	$ 15,960.00	$ 15,960.00	$ 1,700.00	$ 13,600.00	$ 13,600.00	$ 1,200.00	$ 9,600.00	$ 9,600.00
7	W3	Fire Hydrant Assembly	8	EA	$ 4,150.00	$ 33,200.00	$ 33,200.00	$ 4,775.00	$ 38,200.00	$ 38,200.00	$ 4,500.00	$ 36,000.00	$ 36,000.00
8	W4	Ductile Iron Fittings	1.1	TON	$ 16,500.00	$ 18,150.00	$ 18,150.00	$ 17,625.00	$ 19,387.50	$ 19,387.50	$ 27,400.00	$ 30,140.00	$ 30,140.00
9	W5	8" Dresser Coupling	1	EA	$ 650.00	$ 650.00	$ 650.00	$ 1,550.00	$ 1,550.00	$ 1,550.00	$ 2,000.00	$ 2,000.00	$ 2,000.00
10	W6	Connect to Existing Water Main	1	EA	$ 1,500.00	$ 1,500.00	$ 1,500.00	$ 1,800.00	$ 1,800.00	$ 1,800.00	$ 3,900.00	$ 3,900.00	$ 3,900.00
11	W7	12"x1" Tapping Saddle	20	EA	$ 350.00	$ 7,000.00	$ 7,000.00	$ 460.00	$ 9,200.00	$ 9,200.00	$ 490.00	$ 9,800.00	$ 9,800.00
12	W7	8"x1" Tapping Saddle	39	EA	$ 315.00	$ 12,285.00	$ 12,285.00	$ 405.00	$ 15,795.00	$ 15,795.00	$ 270.00	$ 15,930.00	$ 10,530.00
13	W8	1" Water Service Connection	59	EA	$ 2,025.00	$ 119,475.00	$ 119,475.00	$ 405.00	$ 23,895.00	$ 23,895.00	$ 1,000.00	$ 59,000.00	$ 59,000.00
14	W9	1" Water Service Lateral	2200	LF	$ 35.00	$ 77,000.00	$ 77,000.00	$ 13.00	$ 28,600.00	$ 28,600.00	$ 10.00	$ 22,000.00	$ 22,000.00
15	W10	Water Meter Installation (New Service Lateral)	59	EA	$ 325.00	$ 19,175.00	$ 19,175.00	$ 690.00	$ 40,710.00	$ 40,710.00	$ 420.00	$ 24,780.00	$ 24,780.00
16	W11	Open Trenching of Water Main	3060	LF	$ 30.00	$ 91,800.00	$ 91,800.00	$ 12.70	$ 38,862.00	$ 38,862.00	$ 7.00	$ 21,420.00	$ 21,420.00
1	WW1	6" SDR 26 ASTM D2241, PVC, Wastewater Main	1600	LF	$ 52.00	$ 83,200.00	$ 83,200.00	$ 35.00	$ 56,000.00	$ 56,000.00	$ 58.00	$ 92,800.00	$ 92,800.00
2	WW2	48" Fiberglass Manhole & Cover (0'-5' Deep)	7	EA	$ 4,350.00	$ 30,450.00	$ 30,450.00	$ 6,800.00	$ 47,600.00	$ 47,600.00	$ 4,300.00	$ 30,100.00	$ 30,100.00
3	WW3	48" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	15	VF	$ 301.00	$ 4,515.00	$ 4,515.00	$ 550.00	$ 8,250.00	$ 8,250.00	$ 470.00	$ 7,050.00	$ 7,050.00
4	WW4	Connect To Existing Manhole	1	EA	$ 1,850.00	$ 1,850.00	$ 1,850.00	$ 2,150.00	$ 2,150.00	$ 2,150.00	$ 1,700.00	$ 1,700.00	$ 1,700.00
5	WW5	6" Manhole Drop Structure (External)	1	EA	$ 2,050.00	$ 2,050.00	$ 2,050.00	$ 3,065.00	$ 3,065.00	$ 3,065.00	$ 3,100.00	$ 3,100.00	$ 3,100.00
6	WW6	6" Wastewater Service Connection	7	EA	$ 1,925.00	$ 13,475.00	$ 13,475.00	$ 1,130.00	$ 7,910.00	$ 7,910.00	$ 880.00	$ 6,160.00	$ 6,160.00
7	WW6	4" Wastewater Service Connection	43	EA	$ 1,925.00	$ 82,775.00	$ 82,775.00	$ 1,100.00	$ 47,300.00	$ 47,300.00	$ 700.00	$ 30,100.00	$ 30,100.00
8	WW7	6" Wastewater Service Lateral	100	LF	$ 50.00	$ 5,000.00	$ 5,000.00	$ 49.00	$ 4,900.00	$ 4,900.00	$ 28.00	$ 2,800.00	$ 2,800.00
9	WW7	4" Wastewater Service Lateral	600	LF	$ 50.00	$ 30,000.00	$ 30,000.00	$ 49.00	$ 29,400.00	$ 29,400.00	$ 25.00	$ 15,000.00	$ 15,000.00
10	WW8	Open Trenching of Wastewater Main	1600	LF	$ 50.00	$ 80,000.00	$ 80,000.00	$ 35.00	$ 56,000.00	$ 56,000.00	$ 9.00	$ 14,400.00	$ 14,400.00
1	SD1	24" ASTM F2619, HDPE, Storm Drain	960	LF	$ 89.00	$ 85,440.00	$ 85,440.00	$ 84.00	$ 80,640.00	$ 80,640.00	$ 95.00	$ 91,200.00	$ 91,200.00
2	SD1	18" ASTM F2619, HDPE, Storm Drain	140	LF	$ 80.00	$ 11,200.00	$ 11,200.00	$ 59.00	$ 8,260.00	$ 8,260.00	$ 75.00	$ 10,500.00	$ 10,500.00
2	SD2	60" Fiberglass Manhole & Cover (0'-5' Deep)	4	EA	$ 5,400.00	$ 21,600.00	$ 21,600.00	$ 7,600.00	$ 30,400.00	$ 30,400.00	$ 5,800.00	$ 23,200.00	$ 23,200.00
3	SD2	48" Fiberglass Manhole & Cover (0'-5' Deep)	4	EA	$ 4,350.00	$ 17,400.00	$ 17,400.00	$ 5,600.00	$ 22,400.00	$ 22,400.00	$ 3,700.00	$ 14,800.00	$ 14,800.00
3	SD3	60" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	13	VF	$ 450.00	$ 5,850.00	$ 5,850.00	$ 1,200.00	$ 15,600.00	$ 15,600.00	$ 920.00	$ 11,960.00	$ 11,960.00
4	SD3	48" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	15	VF	$ 300.00	$ 4,500.00	$ 4,500.00	$ 690.00	$ 10,350.00	$ 10,350.00	$ 470.00	$ 7,050.00	$ 7,050.00
4	SD4	24" Plug	2	EA	$ 1,975.00	$ 3,950.00	$ 3,950.00	$ 1,450.00	$ 2,900.00	$ 2,900.00	$ 500.00	$ 1,000.00	$ 1,000.00
5	SD4	18" Plug	6	EA	$ 1,795.00	$ 10,770.00	$ 10,770.00	$ 1,300.00	$ 7,800.00	$ 7,800.00	$ 400.00	$ 2,400.00	$ 2,400.00
5	SD5	Open Trenching of Storm Drain	1100	LF	$ 60.00	$ 66,000.00	$ 66,000.00	$ 49.00	$ 53,900.00	$ 53,900.00	$ 10.00	$ 11,000.00	$ 11,000.00
1	P1	Concrete Curb & Gutter Repair	50	LF	$ 45.00	$ 2,250.00	$ 2,250.00	$ 47.00	$ 2,350.00	$ 2,350.00	$ 42.00	$ 2,100.00	$ 2,100.00
2	P2	2" Type D HMAC Asphalt Pavement Repair (PG70-22)	1300	SY	$ 52.00	$ 67,600.00	$ 67,600.00	$ 19.00	$ 24,700.00	$ 24,700.00	$ 58.00	$ 75,400.00	$ 75,400.00
3	P3	Bituminous Prime Coat (MC-30 or AEP, 0.20 Gal / SY)	260	GAL	$ 10.00	$ 2,600.00	$ 2,600.00	$ 6.00	$ 1,560.00	$ 1,560.00	$ 7.00	$ 1,820.00	$ 1,820.00
4	P4	Flowable Fill / 2-Sack Backfill	1312	SY	$ 92.00	$ 120,704.00	$ 120,704.00	$ 94.00	$ 123,328.00	$ 123,328.00	$ 63.00	$ 82,656.00	$ 82,656.00
					Base Bid Total =	$ 1,612,514.00	**$ 1,612,514.00**	Base Bid Total =	$ 1,230,592.50	**$ 1,230,592.50**	Base Bid Total =	$ 1,170,171.00	**$ 1,164,771.00**
							$0.00			$0.00			($5,400.00)

MIDLAND
Engineering Services

SPECIFICATIONS

Project Name: Park Avenue Heights 2 Utility Project
Project Number: PU19-01

MAYOR
Patrick Payton

COUNCIL MEMBERS

District 1	Scott Dufford	District 3	Jack Ladd
District 2	John Norman	District 4	Lori Blong
At-Large	Spencer Robnett	At Large	Michael Trost

CITY ENGINEER
Matt C. Carr, P.E.



Prepared by City of Midland, Texas
Engineering Services Division

April 2021

PACKET
6.9
May 25, 2021

NOTICE TO BIDDERS

ATTENTION: Due to the Coronavirus (COVID-19) pandemic, all bidders are encouraged to mail bid packets to one of the addresses below rather than delivering them in person in the interests of maintaining social distancing:

USPS Mailing Address:		***Physical Address for mail carriers other than USPS:***
City of Midland, Texas		**City of Midland, Texas**
Attn: City Secretary's Office	**OR**	**Attn: City Secretary's Office**
P O Box 1152		**300 North Loraine St, Suite 330**
Midland, TX 79702		**Midland, TX 79701**

If bid packets are delivered in person then bidders must drop the bid packets off at the first-floor front desk of City Hall before the bid opening deadline, and social distancing measures will be maintained for the health of all parties involved.

Sealed proposals, addressed to the Mayor and City Council of the City of Midland, Texas, for the furnishing of materials and labor together with other miscellaneous and appurtenant work will be received at the office of the City Secretary, City Hall, Midland, Texas, until 2:00 p.m. on the 12th day of May, 2021, and publicly opened and read aloud at that time.

ATTENTION: The public bid opening will be in the City Council Meeting Chambers in order to enable social distancing by the attendees due to COVID-19. Attendees must wear masks while they are inside City Hall.

The Proposed Work provides for the furnishing of materials and labor for Park Avenue Heights 2 Utility Project together with other miscellaneous and appurtenant work.

ATTENTION: A NON-MANDATORY PRE-BID MEETING TELECONFERENCE will be held at 3:00 p.m. on Wednesday, May 5th, 2021. There will be no in-person pre-bid meeting due to COVID-19.

TELECONFERENCE CALL IN NUMBER: (866) 528-2256
ACCESS CODE: 4450719

ATTENTION: All questions submitted before or after the Non-Mandatory Pre-Bid Meeting Teleconference must be submitted via email to the following email address:

jferguson@midlandtexas.gov

The deadline for submitting additional questions after the Non-Mandatory Pre-Bid Meeting Teleconference is Noon on Friday, May 7, 2021. Questions submitted before the Noon deadline will be included in the Addendum that will go out that same day along with all discussion items, questions, answers, and any new information resulting from the Non-Mandatory Pre-Bid Meeting Teleconference. Questions submitted after the Noon deadline will not receive any additional information and will instead only be directed to the information already provided.

Bids will be received on a unit price basis.

No Bid may be withdrawn within a period of 60 days after the date fixed for opening Bids.

“FAX” or telephone bids or modifications will not be accepted.

Bid Envelopes shall be plainly marked "Proposal for City of Midland”.

ATTENTION: Information for bidders, proposal forms, specifications, and plans may be obtained by emailing purchasing@midlandtexas.gov.

A bid bond or proposal guaranty is to accompany the bid, thereby guaranteeing the good faith of the bidder and that the bidder will enter into the written contract. The guaranty is to amount to five percent (5%) of the total bid and must be in the form of cash or certified check, issued by a bank satisfactory to the City of Midland, or bid bond. If in the form of cash or certified check, it is expressly understood and agreed that the City of Midland is given the right to retain such as liquidated damages if such bidder withdraws its bid anytime after such bid is opened and before official rejection of such bid, or if successful in securing the awarded thereof, such bidder fails to enter into the contract and furnish satisfactory performance and payment bonds. If a bid bond is submitted, it shall be executed on forms contained in these contract documents by a corporate surety authorized to do business in the State of Texas and acceptable to the City of Midland.

WAIVER OF ATTORNEY FEES

BY SUBMITTING A BID, BIDDER AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY’S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE BIDDER SPECIFICALLY AGREES THAT IF THE BIDDER 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, THE BIDDER AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY’S FEES TO WHICH BIDDER MIGHT OTHERWISE BE ENTITLED.

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

THE BIDDER AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

WAIVER

BIDDER’S WAIVER:

BY SUBMITTING A BID, THE BIDDER AGREES TO WAIVE AND DOES HEREBY VOLUNTARILY AND INTENTIONALLY WAIVE, ABANDON AND RELINQUISH ANY CLAIM THE BIDDER 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:

1. **THE ADMINISTRATION, EVALUATION OR RECOMMENDATION OF ANY BID;**

2. **WAIVER OR DELETION OF ANY OF THE REQUIREMENTS UNDER THE BID DOCUMENTS OR THE CONTRACT DOCUMENTS;**

3. **ACCEPTANCE OR REJECTION OF ANY BIDS; OR**

4. **AWARD OF THE CONTRACT**

BY SUBMITTING A BID, THE BIDDER ACKNOWLEDGES THAT THE BIDDER UNDERSTANDS ALL OF THE TERMS OF THE BIDDING DOCUMENTS AND CONSENTS TO THE BIDDING PROCESS AND THE POSSIBILITY OF A NEGATIVE ASSESSMENT. BY SUBMITTING A BID, THE BIDDER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN THE BIDDER AND THE CITY OF MIDLAND, TEXAS. THE BIDDER AGREES THAT THIS IS THE INTENTIONAL RELINQUISHMENT OF A PRESENTLY EXISTING KNOWN RIGHT. BY SIGNING THE REQUEST FOR BID AND/OR BELOW, YOUR COMPANY AGREES TO THE ABOVE WAIVER(S).

City of Midland

Amy Turner
City Secretary

Form Revised April 2021

INSTRUCTION AND INFORMATION FOR BIDDERS

1. LOCATION AND EXTENT OF WORK

The work and construction contemplated to be accomplished under this Contract is located in the City of Midland, Texas, and consists of municipal public works projects as set forth in the proposal.

The location and details for the construction and related work are shown upon a set of drawings dated April 16, 2021 and numbered from C100 (1) through C401 (27) inclusive. These drawings and plans, together with the specifications, form a part of the Contract. Where figures are shown on the drawings, they shall take precedence over scaled distances and dimensions.

2. TIME AND PLACE OF RECEIVING BIDS

All bids shall be sealed, addressed to the Mayor and City Council of the City of Midland, Texas, and will be received by the City Secretary in her office at City Hall, 300 N. Loraine Street, Midland, Texas, mailing address is P.O. Box 1152, Midland, Texas 79702, until time stated on the Advertisement for Bids.

3. PREPARATION OF BID FORM

Bids shall be submitted only on the forms provided therefore in the Contract Documents, and must not be submitted in letter form or in any other form. They shall be filled out in ink in both script and figures. The Proposal form provided in the Contract Documents sets forth in detail the various items and approximate quantities thereof contained in the Project. Bids submitted in any other form will be considered irregular and will be returned to the Bidder without receiving consideration by the Owner.

All bids must be submitted in sealed envelopes bearing on the outside the name of the Bidder, his address, and the name of the Project for which the bid is submitted. It is the sole responsibility of the Bidder to see that his bid is received in proper time. Any bid received after the scheduled closing time for receipt of bids will be returned to the Bidder unopened.

The bid must be signed in the name of the Bidder and must bear the signature in longhand of the persons duly authorized to sign the bid.

Changes in or additions to the bid form, recapitulations of the work bid upon, alternative proposals, or any other modification of the bid form which is not specifically called for in the Contract Documents may result in the Owner's rejection of the bid as not being responsive to the invitation. No oral or telephonic modification of any bid submitted will be considered and a telegraphic modification may be considered only if the postmark evidences that a confirmation of the telegram duly signed by the Bidder was placed in the mail prior to the opening of bids.

The bid submitted must not contain any erasures, interlineations or other corrections unless each such correction is suitably authenticated by affixing in the margin immediately opposite the correction the surnames of the person or persons signing the bid.

4. EXAMINATION OF SITE, DRAWINGS, ETC

Each Bidder is requested to visit the site of the proposed work and fully acquaint himself with the conditions relating to the construction and labor so that he may fully understand the facilities, difficulties and restrictions attending the execution of the work under the Contract. Bidders shall thoroughly examine and be familiar with the Plans and the Specifications. The failure or omission of any Bidder to receive or examine any form, instrument, addendum or other document or to visit the site and acquaint himself with conditions there existing shall in no way relieve any Bidder from obligations with respect to his bid or to the Contract. The submission of a bid shall be taken as prima-facie evidence of compliance with this section.

5. WITHDRAWAL OF BIDS

Any Bidder may withdraw his bid, either personally, by written request, or by telegraphic request confirmed in the manner specified above, at any time prior to the scheduled closing time for receipt of bids.

6. AGREEMENT AND BONDS

The successful Bidder will be required to furnish a Performance Bond, and a Payment Bond, in an amount equal to one hundred percent (100%) of the total Contract price, such bond to be executed in five (5) 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, and 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.

7. INTERPRETATION OF PLANS AND DOCUMENTS

If any person contemplating submitting a bid for the proposed Contract is in doubt as to the true meaning of any part of the Plans, Specifications, or other Contract Documents or finds discrepancies in, or omissions from the Plans or Specifications, he may submit to the Owner written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation or correction of the Contract Documents will be made only by Addendum duly issued and a copy of such addendum will be mailed or delivered to each person receiving a set of such Contract Documents. The Owner will not be responsible for any other explanations or interpretations of the Contract Documents. No oral interpretations of any provision in the Contract Documents will be made to any Bidder.

8. BIDDERS INTERESTED IN MORE THAN ONE BID

No person, firm or corporation shall be allowed to make, or file more than one bid for the same work unless alternate bids are specifically called for. A person, firm or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices of materials to a Bidder is not thereby disqualified from submitting a sub-proposal or quoting prices to other Bidders or making a prime proposal.

9. AWARD OF CONTRACT

The Owner reserves the right to reject any or all bids submitted and not make an award. The Owner also reserves the privilege of accepting any item as a separate contract or the combination of items of a contract. The Owner and Bidder agree that, if the Contract is awarded, that it will be awarded to either the lowest responsible bidder/proposer, or to the bidder/proposer 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. Further, the Owner reserves all rights granted by Section 271.027 of the Texas Local Government Code. The Owner reserves the right to award the bid to the lowest responsible bidder.

10. OPENING OF BIDS

Bidders are invited to be present at the opening of the Proposals. All Proposals shall be made and received with the understanding that the Bidder accepts the terms and conditions contained in the Contract Documents.

11. COMPARISON OF BIDS

All bids will be compared on the basis of the Proposal.

12. BID GUARANTY

A Certified Check, Bank Money Order, issued by a bank satisfactory to the Owner, or a Bidder's Bond on the form provided and approved by the City Attorney, in the amount of five percent (5%) of the largest possible lump sum bid submitted, payable without recourse to the Owner, must accompany the Bidder's Proposal, as a guaranty that the Bidder will enter into a Contract and execute the required Performance Bond and Guaranty in the forms provided within fifteen (15) days after notice of award of Contract to him. Bids or Proposals without the required Bid Guaranty will not be considered. All Proposals shall remain in effect for a period of thirty (30) days after date of bid opening.

13. CONTRACT DOCUMENTS

The complete Contract Documents may include the following: (1) Notice to Bidders, (2) Instructions and Information for Bidders, (3) Proposal, (4) Experience Record, (5) Bid Bond, (6) Contract Agreement, (7) Performance Bond, (8) Payment Bond, (9) Insurance Certificate, (10) General Conditions, (11) Special Conditions, (12) Detailed Specifications all of which are bound together, and/or (13) Certificate of Payment. The Contract Documents shall also include Drawings or Detailed Plans for the proposed work. A complete set of the Contract Documents and the detailed plans are on file in the Office of the City Secretary.

14. TIME ELEMENT

The work to be done under this Contract shall be commenced within fifteen (15) days from the date of the notice from the City to the Contractor to commence work. The Contractor shall commence performance of the Contract on the date stated in the City's notice to the Contractor to proceed and shall complete the performance of the Contract without delay.

15. PAYMENTS

Payments to the Contractor will be based upon the prices stated in the proposal and upon basis of the work performed as determined by the Engineer. The Engineer's determination shall be considered as final unless changes are authorized by the City in writing which shall affect the work. Upon issuance of the Certificate of Completion, the Engineer shall proceed to take final measurements and prepare a final statement of the value of all work performed and materials furnished under the terms of the agreement and shall certify same to the Owner who shall pay to the Contractor on or after the 30th day, and before the 35th day, after the date of the

Certificate of Completion, the balance due the Contractor under the terms of this agreement, provided he has fully performed his contractual obligations under the terms of this Contract, and said payment shall become due in any event upon said performance by the Contractor. Notwithstanding any provision of these Contract documents to the contrary, it is expressly understood and agreed by the parties hereto that neither the Certificate of Acceptance, nor the final or any other payment hereunder, nor any partial or total occupancy or possession of the project by the Owner, shall relieve the Contractor of his responsibility for completion of the entire project in a good workmanlike manner and in full compliance with the plans and specifications and the fulfillment of any warranties which may be required in the Contract documents.

Revised April 2021

NOTICE TO BIDDERS

IF THIS PURCHASE REQUIRES A CONTRACT, THE ATTACHED **CONTRACT AND INSURANCE REQUIREMENTS ARE NON-NEGOTIABLE**. MODIFICATIONS BY BIDDER/CONTRACTOR OF ANY MATERIAL TERM(S) TO THE CONTRACT DOCUMENTS WILL BE DEEMED A NON-RESPONSIVE BID. NON-RESPONSIVE BIDS WILL BE REJECTED. BIDDER/CONTRACTOR 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/CONTRACTOR 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/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.

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 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.**

N/A

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.**

N/A

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.**

N/A

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.**

NO conflict of interest

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 Angela Clutter TEC Excavation 5.12.21

Signature of vendor doing business with the governmental entity Date

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 proposals 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:

Erika Martinez
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: TEC EXCAVATION, INC.

Local Address (must be within the City limits): 1538 COTTON FLAT ROAD MIDLAND, TX 79706

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? 35
3. Year your business was established in the City of Midland: 2001
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: Trula Clutter Date: 5·12·21

Printed Name and Title: Trula Clutter

TECHNICAL SPECIFICATIONS

FOR: Park Avenue Heights 2 Utility Project

All construction for this project must conform to the City of Midland "STANDARD SPECIFICATIONS" issued by the Engineering Services Department which are herein made a part of these specifications by reference.

The bidder/contractor is to pay particular attention to the following items in the "STANDARD SPECIFICATIONS" for this project.

1) Preparation of Right of Way
2) Excavation, Embankment and Preparation of Subgrade
3) Concrete Curb and Gutter, Sidewalks, Driveways, Valley Gutters, Center Drains and Rip Rap
4) Concrete Structures
5) Flexible Base, Caliche
6) Bituminous Prime
7) Bituminous Tack
8) Hot Mix Asphaltic Concrete
9) Double Course Asphalt Surface Treatment
10) Preparation of Asphaltic Concrete Surface for Overlay or Seal Coat
11) Seal Coat
12) Asphalt –Rubber Seal Coat
13) Polymer Modified Slurry
14) PVC Pipe Casings
15) Water Line Specifications
16) Gravity Flow Sewers for Waste Water and Storm Water

The "STANDARD SPECIFICATIONS" are available from the Department of Engineering Services, City Hall, 300 North Loraine Street, Suite 510, Midland, Texas.

GENERAL CONDITIONS AND PROVISIONS

1. DEFINITIONS

The following terms as used in this contract shall be defined and interpreted as follows:

(a) "Contract" or "This Contract" or "Agreement": The particular Contract executed by the Contractor and the Owner of which these general conditions are integral parts.

(b) "Contractor": The person, firm or corporation to whom this Contract is awarded by the Owner and who is a party thereto.

(c) "Owner", "City", or pronouns instead: The entity that is a party to this Contract, contracting under the official name of the City of Midland, Texas or the City Council of the City of Midland.

(d) The words "as directed", "as required", "as permitted", "acceptable to", "satisfactory", and the words of like import, shall mean that the direction, requirement or permission of the Engineer is intended.

(e) "Engineer": The word "Engineer" used in these specifications or in this Contract means the duly authorized representative or agent of the Owner supervising the performance of the Contract and representing the Owner in his Contractual relations and negotiations with the Contractor during the period of construction. The Engineer will be represented by assistants and inspectors authorized to act for him. On all questions concerning the acceptability of material or equipment, the classifications of material, the execution of the work, conflicting interest of Contractors performing related work and the determination of costs, the decision of the Engineer shall be final, but shall not relieve the Contractor of his responsibility for completion of the entire work in a good and workmanlike manner and in full compliance with the plans and specifications.

Inspectors are required to see that all the provisions of the Contract specifications are faithfully adhered to. Any inspector may, if authorized by the Engineer, stop the work entirely if there is not sufficient quantity of suitable and approved material on the ground to carry it on properly, or for any other good and sufficient cause. Any work done in the absence of an inspector may be ordered opened up for thorough examination, and must be rebuilt or replaced at the Contractors sole expense if found to be deficient or not in accordance with the plans and specifications. But no approval by an inspector shall be construed as an acceptance of defective or improper work or material, which must be rebuilt or properly replaced whenever discovered. Inspectors have not the power to give orders or directions under any possible circumstances, except as herein defined and provided, and on authority of the Engineer

(f) "Subcontractor": Any person, firm or corporation other than an employee of the contractor, supplying, for and under agreement either with the Contractor or any subcontractor of the Contractor, labor or material, or both, at the site of the project in connection with this Contract.

(g) "Project": The structure or improvement to be constructed in whole or in part through the performance of this Contract.

(h) "Work on the Project": Such work as is performed or ordinarily would be performed at the site of the project.

(i) "Surety": Any firm or corporation executing a Surety Bond or Bonds payable to the Owner securing the performance of the Contract either in whole or in part.

(j) Whenever certain articles are specifically mentioned, by brand name or name of the manufacturer, such materials shall be taken as standard and guide for quality, operation, capacity, etc. The term "or equal" shall mean that articles of equal characteristics as required, but of different brand or manufacturer, may be substituted and accepted, subject in all instances to the approval of the Engineer.

(k) "Special Provisions", "Special Conditions", "Project Specific Specification" or "Job Specific Specifications" are included as amendment of and/or additions to the General Conditions and/or Standard Specifications for the particular project in which they are included and will take precedence over the General Conditions and Standard Specifications only in so far as the amendments and/or additions. All other provisions in the General Conditions and/or Standard Specifications will not be affected.

(l) "Drawings" "Contract Drawings", "Plans" "Detail Drawings" "Detail Sheets" or "Plans and Details" refers to the set of drawings which show the details for the construction and related work anticipated on this project and upon which bids are being solicited.

2. CONFLICT OF PROVISIONS

Unless it is specifically provided otherwise, any provision in any other part of this Contract which may be in conflict or inconsistent with any provision in the General Conditions and Provisions shall be void to the extent only of such conflict or inconsistency.

3. DUTIES AND RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall have charge of and shall be responsible for the entire work under this Contract until its completion and acceptance by the city. A competent superintendent, foreman or other representative, invested with sufficient authority to conduct the work properly, shall be maintained on the work at all times.

It is expressly agreed and understood that no decision of the Engineer or any certificate issued nor payment made to the Contractor nor partial or entire use or occupancy of the work by the Owner, shall be an acceptance of any work or materials not in accordance with this Contract, nor constitute a waiver of the Contractor's responsibility to perform the entire work in a good and workmanlike manner and in accordance with the plans and specifications.

4. TIME ELEMENT

The work shall be commenced and finished within the time set out in the Form of Contract.

The time of completion of this Contract is an essential element and consideration. Since, therefore, time is of the essence thereof, and in the event of delay in the completion of the entire work required hereunder beyond the period prescribed, or beyond the period for which time may be extended by authority of the Owner for good cause shown, the Owner shall be paid damages for such delay. Inasmuch as the amount of such damages is difficult to ascertain, it is hereby stipulated and agreed that such damages shall be liquidated and the Owner shall be paid damages at the rate as set forth in the Special Provisions, said damages to be paid to the Owner for each and every day that the Contractor be in default in completing the entire work required under this Contract. The Owner shall have the right to deduct such amounts from any monies due, or which may become due, under

this Contract. In the event that no amount for such damages is shown in the Special Provisions of these specifications, it is agreed that the amount of damages shall be Five Hundred dollars ($500.00) per day.

If during the progress of the work weather conditions, or other circumstances beyond the control of the Contractor should prevail to the extent that the work cannot be prosecuted and completed within the time specified in the Contract, the Contractor shall file with the Engineer within one week of the occurrence of such delay a request for a credit on the time of completion. Unless the Contractor files such request, the liquidated damages specified above will be enforced.

5. PAYMENT TO CONTRACTOR

ESTIMATED QUANTITIES:

This Contract, including the specifications, plans and estimate, is intended to show clearly all work to be done and material to be furnished hereunder. Where the estimated quantities are shown for the various classes of work to be done and material to be furnished under this Contract, they are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this Contract may differ somewhat from these estimates, and that where the basis for payment under this Contract is the unit price method, payment shall be for the actual amount of such work done and the material furnished.

Where payment is based on the unit price method, the Contractor agrees that he will make no claim for damages, anticipated profits or otherwise on account of any differences which may be found between the quantities of work actually done, the material actually furnished under this Contract and the estimated quantities contemplated and contained in the proposal provided, however, that in case the actual quantity of any major item should become as much as twenty percent (20%) more than, or twenty percent (20%) less than the estimated or contemplated quantity for such items, then either party of this agreement, upon demand, shall be entitled to a revised consideration upon the portion of the work above or below twenty percent (20%) of the estimated quantity.

A "Major Item" shall be construed to be any individual item incurred in the proposal that has a total cost equal to or greater than five percent (5%) of the total Contract cost, computed on the basis of the proposal quantities and the Contract unit price.

Any revised consideration is to be determined by agreement between the parties, otherwise by the terms of this Contract, as provided under "Extra Work".

PAYMENT; RETAINAGE:

On or before the 1st day of each month the Contractor shall prepare an itemized statement showing the total value of the work completed by the Contractor up to and including the 25th day of the preceding month; said statement shall also include the value of all sound materials delivered on the site of the work that are to be fabricated into the work. NO ESTIMATE WILL BE MADE ON UNCOMPLETED PORTIONS OF THE WORK.

After all work is completed by Contractor, 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 Contractor in the amount of the contract and all Change Orders. The City shall be the final judge of when the

work is completed by Contractor. 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.

The City may make periodic payments to Contractor; 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 Contractor 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% retainage. The total of these payments shall not exceed 95% of the total contract amount.

FINAL COMPLETION AND ACCEPTANCE:

Within ten (10) days after the Contractor has given the Engineer written notice that the work has been completed, or substantially completed, the Engineer and the Owner shall inspect the work and within said time, if the work be found to be completed or substantially completed in accordance with the Contract documents, the Engineer shall issue to the Owner and the Contractor his Certificate of Completion.

FINAL PAYMENT:

Upon the issuance of the Certificate of Completion, the Engineer shall proceed to make final measurements and prepare final statement of the value of all work performed and materials furnished under the terms of the Contract and shall certify same to the Owner, who shall pay to the Contractor the balance due the Contractor under the terms of this Contract, provided he has fully performed his obligations under the terms of this Contract. Notwithstanding any provision of these Contract Documents to the contrary, it is expressly understood and agreed by the parties hereto that neither the certificate of acceptance, nor the final or any other payment hereunder, nor any partial or total occupancy or possession of the project by the Owner, shall relieve the Contractor of his responsibility for completion of the entire project in a good and workmanlike manner and a full compliance with the plans and specifications and the fulfillment of any warranties which may be required in the Contract Documents.

6. OWNER'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF

In addition to the amount which the Owner may otherwise retain under the Contract, the Owner may withhold a sufficient amount or amounts of any payment or payment otherwise due to the Contractor, as in this judgment may be necessary to cover:

(a) Payments which may be past due and payable for just claims against the Contractor or any subcontractor for labor or materials furnished for the performance of this Contract.

(b) For defective work not remedied.

(c) For failure of the Contractor to make proper payments to his subcontractors.

7. CERTIFICATE OF PAYMENT

Contractor shall, prior to issuance of final payment pursuant to the terms herein stated, provide proof satisfactory to the owner that all debts, bills and expenses incurred by the Contractor, his agents, employees or subcontractors employed by him, for labor, wages, materials and other purposes, in the furtherance of this

project, have been paid and satisfied in full. Satisfactory proof shall consist of an executed Certificate of Payment.

8. EXTRA, ADDITIONAL OR OMITTED WORK PAYMENT

The Owner, upon proper action by its governing body, may require changes in this Contract, or additions to, or deductions from the work to be performed or the materials to be furnished pursuant to this Contract. No employee, agent or representative of the Owner, with the exception of the governing body authorized to award this Contract, has any power to approve any change in this Contract and it is the responsibility of the Contractor before proceeding with any change to satisfy himself that the change has been properly authorized on behalf of the Owner. No charge for any extra work or other change in the Contract will be allowed unless the extra work or change has been authorized in writing by the Owner, or its duly authorized representative, and the price therefore is stated in such written authority.

Adjustments, if any, in the amounts to be paid the Contractor where such adjustments are made by reason of additions to or deductions from the quantities of units or items bid upon in the proposal schedules, shall be paid for in accordance with the provisions of the Specifications, at the unit and/or lump sum prices bid in such proposal schedules.

Adjustments, if any, in the amounts to be paid the Contractor where such adjustments are made by reason of additions of items not appearing in the proposal schedules, or addition of work of such a nature that unit and/or lumps sum prices contained in the proposal schedules cannot reasonably or equitably be applied to provide proper payment therefore, the payment to the Contractor for such work shall be determined by one or more of the following methods:

(a) By an acceptable lump sum proposal from the Contractor.

(b) By unit prices contained in the Contractor's proposal and incorporated in the Contract or fixed by subsequent agreement between the Owner and the Contractor.

(c) By a cost method pursuant to which the Contractor shall be paid the costs of the change or addition. He shall be required to keep and present in such form as the Owner may direct, a correct account of the cost of the change or addition, together with all vouchers therefore. The cost may include an allowance for overhead and profit not to exceed fifteen percent (15%) of the net cost.

In computing the cost, there shall be considered reasonable and proper net expenditures for labor, materials, power tools and equipment, pro rata charges for foremen, deductions for social security, old age and unemployment benefits and workmen's compensation insurance and surety bond premium. In computing cost of machinery and equipment involved in additional work, the amount to be paid shall be not more than one hundred percent (100%) of the latest schedule of "Equipment Ownership Expense" adopted by Associated General Contractors of America. No overhead and profit shall be allowed on the deductions for Social Security, old age and unemployment benefits. All other expenditures shall be treated as overhead costs.

No extra work shall be performed or change made unless in pursuance of a written order from the Owner stating that the extra work or change is authorized and no claim for an addition to the Contract sum shall be valid unless so ordered; provided, however, that nothing in this Article shall excuse the Contractor from proceeding with the prosecution of the work so changed.

The Contractor shall, when required by the Owner, furnish an itemized breakdown of the quantities and prices used in computing the value of any change, addition or deduction that might be ordered.

If the Contractor should claim that any instruction, request, drawing, specification, action, condition, omission, default, or other situation obligated or may obligate the Owner to pay additional compensation to the Contract, or constitutes a waiver of any provision in the Contract, he shall notify the Owner in writing of such claim within ten (10) days from the date he has actual or constructive notice of the factual basis supporting the claim. The Contractor's failure to notify the Owner within such ten (10) days period shall be deemed a waiver and relinquishment of any such claim against the Owner. The procedure for consideration of such claims shall be as stated in this Article.

9. ASSIGNMENT OF CONTRACT

The Contractor shall not assign this Contract or any part thereof, nor any monies due or to become due thereunder without the prior written consent of the Owner. No assignment of this Contract shall be valid unless it shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or material supplied for performance of the work called for under this Contract in favor of all persons, firms, or corporations rendering such services or supplying such materials.

10. SUBCONTRACTORS

Specialty subcontractors may be utilized for the performance of such parts of the work under this Contract as, under normal practices, are performed by Specialty subcontractors, unless the Owner determines that the Contractor has heretofore customarily performed such specialty work with his own organization and is equipped to do so, or unless the Owner determines that performance of the specialty work by Specialty subcontractors will result in increased costs or inordinate delays.

The Contractor shall not subcontract any work to be performed or any materials to be furnished in the performance of this Contract without the prior written consent of the Owner. If the Contractor shall subcontract any part of this Contract, the Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractor and of the persons either directly or indirectly employed by the subcontractor as he is for the acts and omissions of persons directly employed by himself. Nothing contained in this Contract shall create any Contractual relations between any subcontractor and the Owner. The Contractor shall ensure that the sub contractor has the insurance coverage required by this contract.

The Owner's consent to or approval of any subcontract under this Contract shall not in any way relieve the Contractor of his obligations under this Contract and no such consent or approval shall be deemed to waive any provisions of this Contract.

11. SUSPENSION OF WORK

Pending settlement of disputes on any point of controversy, the Engineer may suspend action on all or any part of the work. The Contractor shall not be entitled to any claim for loss or damage by reason of such, nor shall he be entitled to extension of time, although such extension of time may be granted by the Engineer if he deems it in the interest of the work.

12. RIGHT OF OWNER TO TERMINATE CONTRACT

If, in the opinion of the Engineer, the Contractor shall be improperly performing the work under this Contract, or shall neglect or refuse to take out or rebuild such work as shall have been rejected by the Engineer as being defective or unsuitable, or if, any time, the Engineer shall be of the opinion that the work is unnecessarily delayed and will not be finished within the prescribed time, or if the Contractor shall abandon the work, or shall neglect or refuse to comply with the instructions of the Engineer relative thereto, or shall fail in any manner to comply with the Specifications or Stipulations herein contained, the Engineer shall notify the Contractor to that effect in writing, and if the Contractor shall not within five (5) days thereafter take such measures as will, in the judgment of the Engineer, insure the satisfactory performance or construction of the work, the City may annul and cancel the Contract, in which event it shall notify the Contractor to discontinue all work under this Contract, and the Contractor shall immediately respect such notice and stop work and cease to have any rights to the possession of the ground and shall forfeit his Contract. Such annulment shall not entitle the Contractor to any claim for damages on account thereof, nor shall it affect the right of the City of Midland to recover damages on account of such failure. The City Council may thereupon advertise and re-let a new Contract for the uncompleted work without further ordinance, in the same manner as was followed in the letting of this Contract, and any excess of cost arising there from over and above what would have resulted from the prices set forth in this Contract will be charged against the Contractor and his surety or sureties hereto, who shall be liable therefore.

13. RIGHT OF CONTRACTOR TO TERMINATE CONTRACT

If the work should be stopped under an order of any court or other public authority for a period of three (3) months, through no act or fault of the Contractor or of anyone employed by him, or if the City should fail to make payment to the Contractor within thirty (30) days after such payment is due, as set out in the Contract, then the Contractor may, upon seven (7) days written notice to the City and the Engineer, stop work or terminate his Contract and recover from the City payment for all work executed and for any loss sustained upon any plant or materials and reasonable profit and damages.

14. INCIDENTAL WORK

Any and all minor details 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 and included with the work for which the prices are named in the Contract Documents. The Contractor will not be entitled to any extra or additional compensation therefore, unless specifically stated otherwise.

15. PERMITS – COMPLIANCE WITH LAW

The Contractor shall, at his expense, obtain all permits and licenses necessary for the performance of this Contract, and give all necessary notices, pay all fees required by law, and comply with all laws, ordinances, rules and regulations governing the Contractor's performance of the Contract.

Portions of this contract qualify for exemption pursuant to the provisions of the Texas Limited Sales, Excise and Use Tax Act. The Contractor shall obtain a sales tax exemption certificate from the City. All labor performed on the project and all materials incorporated into the project qualify for such tax exemption. However, equipment and parts for equipment purchased to be used on the project, but are not incorporated into the project; do not qualify for said tax exemption. Contractor shall issue a resale certificate in lieu of paying such sales tax for all

materials incorporated into the project. Further Contractor shall separate the charges for materials incorporated into the project from the charges for labor.

16. INSPECTION BY OWNER

The Owner and its representatives shall at all times have access to all parts of the work and to the shops wherein the work is in preparation for the purpose of inspection, and the Contractor shall at all times maintain proper facilities and provide safe access for such inspection.

The Owner shall have the right to reject materials and workmanship which are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the Owner. If the Contractor does not correct such rejected work within a reasonable time, fixed by written notice, the Owner may correct same and charge the expense to the Contractor. No inspector shall have the power to waive the obligation resting upon the Contractor to furnish good material or do work as herein prescribed, and any failure or omission of any inspector or the Engineer to condemn any defective material or work shall not release the Contractor from the obligation to at once tear out, remove and properly rebuild the same at any time upon discovery of the defect and upon receipt of notice of the Engineer to do so.

Should it be considered necessary or advisable by the Owner at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out any portion thereof, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any respect due to the fault of the Contractor or his subcontractor, he shall defray all the expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and materials necessarily involved in such examination and replacement, plus fifteen percent (15%) for overhead and profit, shall be allowed the Contractor.

Where the Specifications require work to be specifically tested or approved, it shall not be tested or covered up without timely notice to the Owner of its readiness for inspection and without the approval or consent thereto by the Owner. Should any such work be covered up without such notice, approval or consent, it must, if required by the Owner, be uncovered for examination at the Contractor's expense.

17. PATENTS

The Contractor shall hold and save the Owner and its officers, agents, servants, and employees harmless from liability of any nature or kind, including all costs and legal expenses, for or on account of, any patented or unpatented invention, process, article or appliance, manufactured for or used in the performance of the Contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract.

18. MUTUAL RESPONSIBILITY OF CONTRACTORS

If, through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration, if such other Contractor or subcontractor will so settle. If such other Contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other Contracts that have been or may be awarded by the Owner in the prosecution of the project to the end that the Contractor may perform this Contract in the light of such other Contract, if any.

Nothing herein contained shall be interpreted as granting the Contractor exclusive occupancy of the site of the project. The Contractor shall not cause any unnecessary hindrance or delay to any other Contractor working on the project. If the performance of any Contract for the project is likely to be interfered with by the simultaneous execution of some other Contract or Contracts, the Owner shall decide which Contractor shall cease work temporarily and which shall continue, or whether the work under the Contracts can be coordinated so that the Contractors may proceed simultaneously. The Owner shall not be responsible for any damages suffered or extra costs incurred by the Contractor, resulting directly or indirectly from the award or performance or attempted performance of any other Contract or Contracts on the project, or caused by any decision or omission of the Owner respective to the order of precedence in the performance of Contracts.

19. NOTICE AND SERVICE THEREOF

Any notice from one party to another under the Contract shall be in writing and shall be dated and signed by the party giving such notice or by duly authorized representative of such party. Any such notice shall not be effective for any purpose whatsoever unless served in the following manner; namely, if the notice is given to the Owner, (a) by personal delivery thereof to the individual duly authorized to direct and supervise the project of the Owner, or (b) by depositing the same in the United States Mail, enclosed in a sealed envelope, addressed to the City of Midland, 300 North Loraine Street, Midland, Texas, 79701, postage prepaid and certified; or if the notice is given to the contractor (a) by personal delivery thereof to the project superintendent or other person authorized to act for the contractor, or (b) by depositing the same in the United States Mail, enclosed in a sealed envelope, addressed to the Contractor at his regular place of business or at such other address as may have been established for the conduct of the work under this Contract, postage prepaid and certified; or (c) if the notice is given to the Surety or any other person by personal delivery to such Surety or other person, or by depositing the same in the United States Mail, enclosed in a sealed envelope addressed to such Surety or other person, at the address of such surety or other person last communicated by him to the party giving the notice, postage prepaid and certified.

20. QUALITY OF MATERIALS AND WORKMANSHIP

It is the intention of this Contract to have only first class materials and the best workmanship throughout, and the methods and appliances adopted by the Contractor must be such as will secure a satisfactory quality of work and will enable him to complete the work in the time agreed upon. If at any time such methods and appliances appear inadequate, the Engineer may order the Contractor to improve their character or increase their efficiency, and the Contractor must conform to such order; but the failure of the Engineer to order such improvement of methods or increase of efficiency will not relieve the Contractor from his obligations to perform good work or finish it in the time agreed upon. The Contractor shall submit samples or specimens of any and all materials proposed to be used in the work when required to do so by the Engineer. All materials must be of specified quality and fully equal to approved samples. All work must be done and completed in a thorough and workmanlike manner. All materials furnished and all work done must be satisfactory to the Engineer and will be subject to rigid inspection, and if not in accordance with the Specifications in the opinion of the Engineer, shall be made to conform thereto.

It is understood that except as otherwise specifically stated in the Contract, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence of temporary

construction of every nature, and all other services and facilities required for the completion of the Contract within the specified time.

21. SPECIAL METHODS

The Engineer may consent to special methods for carrying out the work in difficult cases, but the Contractor will not be relieved of responsibility for the result. The Contractor shall be responsible for the result of all work performed by him whether directed by the Engineer or not.

22. REMOVAL OR REPLACEMENT OF WORK DONE WITHOUT LINES OR GRADES

Any work done without lines or grades given by the Engineer or under his direction or without the supervision of an inspector, may be ordered removed and replaced by the Engineer at the Contractor's expense.

23. COVERING WORK

No work shall be covered until it has been examined and approved by the Engineer.

24. UNFAVORABLE WEATHER

During unfavorable weather and other adverse conditions, only such portions of the work may be done which will not be damaged thereby, unless by special means or precautions approved by the Engineer.

25. ALL WORK SUBJECT TO FINAL INSPECTION

Failure to neglect on the part of the Engineer or his inspectors to condemn or reject bad or inferior work or materials shall not be construed to imply his acceptance of such work or materials if it becomes evident at any time prior to the final acceptance of the work and the release of the Contractor.

26. PUBLIC CONVENIENCE

When materials for construction are brought on the work site they shall be neatly piled so as to cause as little obstruction to travel as possible, and so that they may be conveniently inspected.

No material or other obstruction shall be placed within five (5) feet of fire hydrants, which must at all times be readily accessible to the fire department, nor shall any material be piled within two (2) feet of any trees.

The Contractor shall be responsible for all damages to persons or property that occur as a result of his fault or negligence in connection with the prosecution of the Contract and shall be responsible for the proper care and protection of all materials delivered and work performed until completion, and final acceptance by the Owner.

The Contractor shall provide such heat, covering and enclosures as are necessary to protect all work and materials against damage by weather conditions.

The Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavement, utilities, adjoining property, and structures, and avoid damage thereto, and he shall at his own expense completely repair any damage thereto caused by his operations.

If required by the Engineer, the Contractor shall shore up, brace, underpin, and protect as may be necessary, all foundations, and other parts of all existing structures adjacent and adjoining the site of the Project, which are in any way affected by the excavations or other operations connected with the completion of the work under this Contract. Whenever any notice is required to be given by the Owner or the Contractor to any adjoining or adjacent landowner or other party before commencement of any work under this Contract, such notice shall be given by the Contractor. The Contractor shall indemnify the Owner and save it harmless from any damages on account of settlement or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Owner may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

During the progress of the work the convenience of the public and of the residents along streets must be provided as far as practicable. Convenient access to driveways, houses and buildings along streets must be maintained whenever possible.

Temporary approaches and crossings of streets and sidewalks must be provided and kept in good condition whenever practicable.

The Contractor shall provide and maintain such fences, barriers, "Street Closed" signs, red lights and watchmen as may be necessary to prevent avoidable accidents to residents and to the public.

The Contractor alone shall be held responsible for all injuries to persons, and for all damages to property of the City or others, caused by or resulting from the negligence of himself, his employees or agents during the progress of or connected with the prosecution of the work, whether within the limits of the work or elsewhere. He must restore all injured public or private property to a condition as good as it was when he entered upon the work, purchasing new materials to replace all that which is injured or destroyed during the course of the work.

In an emergency affecting the safety of life or property, including adjoining property, the Contractor, without special instructions or authorization from the Owner is authorized to act at his discretion to prevent such threatened loss or injury and he shall so act.

27. TRAFFIC CONTROL

It is the policy of the City of Midland to keep at least two travel lanes open to traffic at all times and where possible to have three travel lanes between 7:30 a.m. and 9:00 a.m. and 4 p.m. and 6 p.m. (Two (2) lanes in the direction of peak travel).

At least 48 hours before beginning work the contractor shall present a traffic control and/or barricade plan prepared as per the approved Barricading Standards to the Traffic Engineering Division for review and approval. When approved and barricades are in place, they shall be inspected by the Traffic Engineering Division prior to beginning work.

Traffic control signs, such as stop signs, yield signs, etc., are placed in various intersections for the safety and protection of the traveling public. The contractor shall not move, alter or damage said signs for any reason. If said signs must be removed for construction purposes, contractor shall notify the City of Midland, Traffic Division Operations Superintendent at least 48 hours (not including weekends) before construction activities are scheduled to begin. All construction barricading, warning signs, and other construction traffic control devices shall be in place and shall be in accordance with the Texas Manual on Uniform Traffic Control Devices and approved Barricading Standards included in plans before traffic signs can be removed. The contractor shall notify the Traffic Division Operations Superintendent at least 72 hours (not including weekends) before

scheduled removal of construction barricades, warning signs, and traffic control devices. But in all cases the contractor shall not remove said barricades, warning signs, and traffic control devices until the City of Midland's Traffic Department has replaced stop signs, yield signs, etc., in their proper location. The Contractor shall notify Traffic Engineering Division at least 24 hours in advance of any Traffic Signal modification due to construction (i.e. eliminating left turn phases). Notice shall also be given to the Traffic Engineering Division at least 24 hours prior to removing barricades at signalized intersections.

28. PROTECTION OF NEW WORK

All new work shall be carefully protected by the Contractor, and any work injured from any cause before the completion of the whole project must be rebuilt by the Contractor at his own expense.

29. MONUMENTS OR STAKES

The Contractor must carefully protect from disturbance or injury all monuments, stakes and bench marks, of City County, State or Federal Government and shall not excavate nearer than five (5) feet to any of them without the permission of the Engineer, or until they have been removed, witnessed or otherwise disposed of by the Engineer.

30. USE OF COMPLETED PORTIONS

The City shall have the right to take possession of and use any completed or partially completed portions of the work notwithstanding the time for completing the entire work on such portions may not have expired; but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of, or delays the work, the Contractor shall be entitled to such extra compensation or extension of time, or both as the Engineer may determine.

The Owner, in taking possession of completed portions, shall agree to accept the decision of the Engineer on matters relating to responsibility for damages that may occur to any portions of the work during the period of possession preceding acceptance and final payment.

31. USE OF PREMISES

The Contractor shall confine his apparatus, storage of materials and construction operations to such limits as may be directed by the Owner, and shall not unreasonably encumber the premises with his materials.

The Contractor shall enforce any instructions of the Owner regarding advertising, fires, danger signals, barricades and smoking, and shall require all persons employed on the work to comply with all building, post or institutional regulations while on the premises.

32. SAFETY RESTRICTIONS

The following procedures will be followed regarding the subject item on this contract:

A warning sign painted yellow with black letters that are legible at twelve feet shall be placed inside and outside vehicles such as cranes, 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."

Equipment that may be operated within ten feet of high voltage lines shall have an insulating cage type of guard about the boom or arm, except back hoes or dippers, and insulator links on the lift hook connections.

When necessary to work within six feet of high voltage electric lines, notification shall be given to the power company who will erect temporary mechanical barriers, de – energize the line, or raise or lower the line. The notifying department

The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

No person shall work within six feet of high voltage line without precautions having been taken and protection provided as outlined in Paragraph (3) above.

33. INSURANCE REQUIREMENTS AND WORKERS COMPENSATION

INSURANCE REQUIREMENTS

Contractor 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
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 shall be on a per project aggregate, including completed operations, and shall be on an occurrence basis. This insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Business Automobile Liability insurance provided by Contractor 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 the City as an additional insured and waive subrogation in favor of the City.

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

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

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

The Contractor certifies that the certificate of insurance provided as required herein complies with the requirements of Senate Bill 425, passed during the 82nd regular session of the Texas Legislature, and effective January 1, 2012. The Contractor shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of the Contractor.

34. INDEMNIFICATION

INDEMNITY: THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND THE OWNER AND ALL OF THE OWNER'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, 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 THE CONTRACTOR, 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 CONTRACTOR WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST THE OWNER OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND THE OWNER AND ALL OF THE OWNER'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 THE OWNER, THE OWNER'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 THE CONTRACTOR OR THE CONTRACTOR'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 CONTRACTOR WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST THE OWNER OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

THE CONTRACTOR AGREES THAT HE WILL INDEMNIFY AND SAVE THE OWNER 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, ALL SUPPLIES, INCLUDING COMMISSARY INCURRED IN THE FURTHERANCE OF THE PERFORMANCE OF THIS CONTRACT. WHEN OWNER SO DESIRES, THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE THAT ALL OBLIGATIONS OF THE NATURE HEREINABOVE DESIGNATED HAVE BEEN PAID, DISCHARGED OR WAIVED. THE CONTRACTOR, ITS SURETIES AND INSURANCE CARRIERS SHALL DEFEND, INDEMNIFY AND SAVE HARMLESS THE OWNER 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 THE CONTRACTOR 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 THE OWNER OR ANY OF ITS OFFICERS, AGENTS, OR EMPLOYEES INCLUDING ATTORNEY'S FEES.

35. RELEASE

NOTWITHSTANDING ANY OTHER PROVISION, CONTRACTOR HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES OWNER, OWNER'S EMPLOYEES AND OFFICERS, FROM ANY AND ALL DEMANDS, CLAIMS, DAMAGES OR CAUSES OF ACTION OF ANY KIND WHATSOEVER WHICH CONTRACTOR HAS OR MIGHT HAVE IN THE FUTURE, INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, QUANTUM MERUIT, CLAIMS UNDER THE DUE PROCESS AND TAKING CLAUSES OF THE TEXAS AND UNITED STATES CONSTITUTIONS, TORT CLAIMS OR OWNER'S NEGLIGENCE.

36. INDEPENDENT CONTRACTOR

It is expressly understood and agreed that Contractor shall perform all work and services described herein as an independent contractor and not as an officer, agent, servant or employee of the Owner; that Contractor 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 respondent superior shall not apply as between Owner and Contractor, its officers, agents, employees, contractors and subcontractors; and

that nothing herein shall be construed as creating a partnership or joint enterprise between Owner and Contractor. No person performing any of the work and services described hereunder by Contractor shall be considered an officer, agent, servant or employee of the Owner. Further, it is specifically understood and agreed that nothing in this Contract 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. Contractor 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. The Owner does not have the power to direct the order in which the work is done. The Owner shall not have the right to control the means, methods or details of the Contractor's work. Contractor shall assume exclusive responsibility for the work. Contractor is entirely free to do the work in its own way.

37. QUALIFICATIONS FOR EMPLOYMENT

Preference shall be given to qualified local residents in the employment of laborers and mechanics for work on the Project under this Contract. No person under the age of sixteen (16) years shall be employed on the project under this Contract. No person whose age or physical condition is such as to make his employment dangerous to his health or safety or to the health or safety of others shall be employed on the Project under this Contract: Provided, that this shall not operate against the employment of physically handicapped persons, otherwise employable, where such persons may be safely assigned to work which they can ably perform. No person currently serving sentence in a penal or correctional institution and no inmate of an institution for mentally defective shall be employed on the project under this contract.

38. PAYROLLS OF CONTRACTOR AND SUBCONTRACTORS

The Contractor and each of his subcontractors shall prepare payrolls for the workers on the Project. Not later than the seventh (7th) day following the payment of wages, the Contractor shall transmit to the Owner, if requested, a certified legible copy and two confirmed copies of such payroll.

Such copies of payrolls shall be accompanied by substantial proof that all bills for services rendered and materials supplied have been duly paid and by such other data as the Owner may require.

39. POSTING WAGE RATES

The Contractor shall post at appropriate conspicuous points at the site of the Project a schedule showing the wage rates for the various classes of laborers and mechanics to be engaged in work on the Project under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.

40. PAYMENT OF EMPLOYEES

The Contractor shall post at appropriate conspicuous points at the site of the Project a schedule showing the wage rates for the various classes of laborers and mechanics to be engaged in work on the Project under this Contract and all deductions, if any, required by law to be made from unpaid wages actually earned by the laborers and mechanics so engaged.

41. WAGE UNDERPAYMENT AND ADJUSTMENTS

The Contractor agrees that, in case of underpayment of wages to any worker on the project under this Contract by the Contractor or any subcontractor, the Owner shall withhold from the Contractor out of payments due, an amount sufficient to pay such worker the difference between the wages required to be paid under this Contract and the wages actually paid such worker for the total number of hours worked and that the Owner may disburse such amount so withheld by it for and on account of the Contractor to the employee to whom such amount is due. The Contractor further agrees that the amounts to be withheld pursuant to this Article may be in addition to other amounts that may be retained by the Owner pursuant to other provisions of this Contract.

42. COMPUTATION OF WAGES ON 8 – HOUR DAY

The wages of each laborer and mechanic engaged in work on the project under this Contract shall be computed on a basis of eight (8) hours per day, eight (8) hours continuous employment except for lunch periods, constituting a day's work.

Legal holiday work shall be paid for at the regular governing per diem wage rates.

Work in excess of 40 hours per week shall be paid for at 1 ½ times the basic rate of pay.

43. OVERTIME WORK AND WORK ON SUNDAYS AND LEGAL HOLIDAYS

The Contractor will not be permitted to work on Sundays or legal holidays except in an emergency and then only upon written permission of the Engineer.

Any work necessary to be performed after regular working hours and when permitted on Sundays or legal holidays, shall be performed without additional expense to the Owner.

No work on any Contract item will be permitted before daylight or later than one hour after sundown.

44. CONTRACT SECURITY

The Contractor shall furnish a performance bond and payment bond in an amount equal to one hundred percent (l00%) of the amount of the Contract as security for the faithful performance of the Contract, including the payment of all persons performing labor on the project and furnishing of materials in connection with this Contract. All Bonds must be executed in five (5) original counterparts by a corporate surety authorized to do business in the State of Texas. Bonds executed by individuals or any other than recognized and authorized corporate surety companies will not be acceptable.

45. DELAYS

The Contractor shall receive no compensation for delays or hindrances to the work, except when, in the judgment of the Engineer, direct or unavoidable extra cost to the Contractor is caused by such hindrances or delays. When such extra compensation is claimed, a written statement thereof shall be presented by the Contractor, as provided in Paragraph 18 hereof. Such claim, if found correct, will be approved, and the decision of the Engineer whether extra cost has been incurred and the amount thereof, shall be final. If delays are caused by specific orders to stop work, given by the Engineer, or by the performance of extra work, or by unforeseen causes beyond the control of the Contractor, or by the failure of the Owner to provide materials or necessary instructions for carrying on the work, or to provide the necessary right-of-way or site for installation,

then delay will entitle the Contractor to an equivalent extension of time. Application for extension of time must be approved by the Owner and, shall not release the Sureties from their obligations, which shall remain in full force until the discharge of the Contract.

LATE COMPLETION; LIQUIDATED DAMAGES:

It is hereby understood and mutually agreed, by and between Contractor 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." Contractor agrees that said work shall be prosecuted regularly, diligently, and uninterruptedly at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed, by and between Contractor 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.

In the event Contractor shall neglect, fail or refuse to complete the work within the time herein specified, or any proper extension thereof granted by the City, then Contractor and Contractor'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 calendar day that Contractor 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 Contractor only those monies deemed appropriate by the City, in its sole discretion, to compensate Contractor for any work actually performed, less any liquidated damages Contractor owes the City.

The said amount is fixed and agreed upon by and between Contractor 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.

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 Contractor shall not be charged with liquidated damages or any excess cost when the City determines, in its sole discretion, that Contractor is without fault and Contractor's reasons for the time extension are acceptable to the City. Provided, further, that Contractor 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 Contractor, 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.

Provided, further, that Contractor shall, within ten (10) calendar 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 Contractor within a reasonable time of its decision in the matter.

CONTRACTOR 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, CONTRACTOR 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 CONTRACTOR AS LIQUIDATED DAMAGES FOR CONTRACTOR'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.

CONTRACTOR SHALL RECEIVE NO FINANCIAL COMPENSATION FOR DELAY OR HINDRANCE TO THE WORK. IN NO EVENT SHALL THE CITY BE LIABLE TO CONTRACTOR 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. CONTRACTOR'S SOLE REMEDY IN ANY SUCH CASE SHALL BE AN EXTENSION OF TIME.

46. ERRORS AND OMISSIONS

The Contractor will not be permitted to take advantage of any error or omission in these specifications. Suitable instructions will be given by the Engineer when such error or omission is discovered.

47. SPECIFICATIONS AND DRAWINGS

The Contractor shall keep on the work a copy of the Specifications and Drawings, and shall at all times give the Engineer access thereto. Any drawings or plans listed in the detailed specifications shall be regarded as part thereof and of the Contract. Anything mentioned in these specifications and not mentioned or shown in the drawings, or shown in the drawings and not mentioned in these specifications, shall be done as though shown or mentioned in both. The Engineer will furnish from time to time, such detailed drawings, plans, profiles and information as he may consider necessary for the Contractor's guidance.

In the event of any discrepancy between the plans and these specifications, the decisions of the Engineer will be decisive thereon. The written dimensions on the plans are to be taken as correct, but the Contractor is required to check carefully all dimensions before beginning work thereon. Should any errors or omissions be discovered, the Engineer's attention shall be called to the same, and the proper corrections made. All notes on the plans shall be carefully observed by the Contractor and are a part of the Contract.

48. CONSTRUCTION STAKING

The Engineer will furnish a complete set of plans and profiles and set control stakes at fifty foot (50') intervals along the entire length of the project and at such control points he deems necessary for proper execution of the work. The Contractor will thereafter be required to lay out the work accurately and furnish at his own expense, all lines, levels, and dimensions necessary to the proper and correct execution of the entire work and be responsible for any errors resulting from his own work.

The Contractor shall give the Engineer at least 36 hours notice in writing before requiring stakes to be set on any new portion of the work, and he shall state clearly in such notice the exact locality or localities where such stakes are needed for immediate use.

The Contractor must satisfy himself, before commencing work, as to the meaning or correctness of all stakes or marks, and no claim will be entertained by the Owner for or on account of any alleged inaccuracies, or for the alterations subsequently rendered necessary on account of such alleged inaccuracies unless the Contractor notifies the Engineer thereof in writing before commencing to work thereon.

The Contractor will at all times conduct the work in such a manner as to prevent damage to construction stakes set by the Engineer. When construction stakes are damaged to such extent that they must be reset, as a result of carelessness or negligence on the part of the Contractor or his workmen, the costs thereof shall be kept by the Engineer and shall be deducted from the moneys due or to become due the Contractor under the terms of his contract.

Benchmark and survey stakes shall be preserved by the Contractor, and in case of their destruction or removal by him or his employees, they will be replaced by the Engineer at the Contractor's expense.

49. SANITATION

The Contractor shall provide suitable drinking water receptacles or containers equipped with dust-tight covers and spigots or faucets. A supply of sanitary paper drinking cups shall be kept on hand for general use near the drinking water containers. The use of common drinking cups or tin cups will not be permitted.

The Contractor shall furnish "Porta-Johns" or other approved sanitary facilities for use by all workers on the Project. Such facilities shall be placed and kept in close proximity of the site where work is being performed. Such facilities shall be properly serviced and maintained.

The Engineer may establish such other sanitary rules and regulations as may seem necessary and desirable to the safe prosecution of the work, such rules and regulations to apply to all forces employed under this Contract, and if, the Contractor fails to observe and enforce these rules, the Engineer may enforce them at the expense of the Contractor.

50. WATER FOR CONSTRUCTION

The Contractor may obtain all water necessary for construction purposes from the Municipal Waterworks System at the regular customer service rate, but the Contractor must make all necessary arrangements with the Director of Utilities for necessary connections and meters. The Contractor must make his own provisions and provide such equipment as is necessary for conveying water from point of service to point of use. No extra compensation will be allowed and the Contractor shall anticipate the expense connected herewith and absorb said expense in the prices bid for the various bid items.

51. SEQUENCE AND SPEED OF WORK

The Engineer shall direct the order and sequence of the work. If at any time before the commencement or during the progress of the work, the materials and appliances used appear to the Engineer as insufficient and improper for securing the quality of work required or the required rate of progress, he may order the Contractor to increase their efficiency or to improve their character and the Contractor shall conform to such order. The

failure of the Engineer to demand any increase of such efficiency or improvement shall not release the Contractor from his obligations to secure the quality of work or the rate of progress specified.

52. INSPECTION AND TESTING OF MATERIAL

The sampling and testing of materials used or proposed to be used in the construction of this project will be made by the Engineer, his designated representative or certified testing laboratory personnel in accordance with methods prescribed by the American Society of Testing Materials and/or the American Association of State Highway Officials, with subsequent approved revisions made prior to the date of the Proposal. The selection of the method of test shall be designated by the Engineer. The Contractor shall bear the cost of all tests required before a material or a method is approved for use on the job, unless the Owner specifically agrees to bear the cost of these tests.

All tests required by the Owner after materials and/or methods have been approved and after they have been incorporated or used in the job will be paid for by the Owner, except if the Owner's tests reveal non-conformance with the specifications, subsequent tests on that part of the work required to determine if the replaced or reworked material meets the specifications, will be paid for by the Contractor. The City will pay only one time for any required testing.

The following is a summary of test required for the approval of materials or methods:

Material	**Test**
Subgrade	Maximum density, optimum moisture
Caliche Base:	Maximum density, optimum moisture, hardness, gradation, liquid limit, plasticity index, Texas Triaxial Classification
Aggregates for hot-mix:	Gradation, unit weight, abrasion, soundness, liquid limit, plasticity index, density
Asphalt, emulsions and tars:	Certified plant test and certificates of compliance with each shipment
Hot- Mix asphaltic concrete:	Design mix, swell test, stripping test
Portland cement concrete pavement:	Design mix with test cylinders

Any materials shipped by the Contractor from the factory prior to having satisfactorily passed such testing and inspection by the Owner's representative or prior to the receipt of notice from said representative that such testing and inspection will not be required, shall not be incorporated in the work.

The Owner may, at its discretion, approve materials and/or methods for use on this project without testing when they are from sources previously tested and approved for City of Midland projects.

53. CONSTRUCTION SCHEDULE

It shall be the responsibility of the Contractor to furnish the Construction Engineer prior to construction a schedule out – lining the anticipated time each phase of construction will begin and be completed, including sufficient time being allowed for clean – up.

54. PROFILES AND ELEVATIONS

Profiles and elevations of the ground are shown on the plans hereto attached. These profiles and elevations are believed to be reasonably correct, but are not guaranteed to be absolutely so, and are represented only as an approximation. Elevations are referred to datum given by the Engineer.

55. CLEANUP

During the progress of the work, the Contractor shall maintain the work area in a reasonably clean and safe condition. Dirt, debris, excess excavation and other objectionable materials shall be removed from the site and disposed of on a daily basis.

After completion of all the work contemplated to be done in accordance with the detailed plans and these specifications, the premises and area along the entire line of the work shall be thoroughly cleaned up and all remaining structural materials, excess or surplus excavation and debris of any nature shall be removed and disposed of in a satisfactory manner and as directed by the Engineer. The site of all work shall appear neat and finished. All portions of the project when completed shall be ready for use or occupancy.

No compensation or payment shall be made for any cleanup work. The price for such cleanup work shall be absorbed in the items covered in the proposal.

56. GUARANTEE

The contractor shall and hereby does guarantee: (1) all work performed by him directly and all work performed by his subcontractors; (2) that all material specified; and (3) that any defect due to improper workmanship or material discovered and made known to him within one year (1) f the date of final acceptance of the improvements shall be repaired, replaced, corrected or otherwise made good by him without additional expense to the Owner. The Contractor shall, in case of work performed by his subcontractors and where guarantees are required, secure guarantees from said subcontractors and deliver copies of same to the Engineer upon completion of the work.

57. WAIVER OF ATTORNEY FEES:

BY EXECUTING THIS CONTRACT, CONTRACTOR AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE CONTRACTOR SPECIFICALLY AGREES THAT IF THE CONTRACTOR 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, THE CONTRACTOR AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH CONTRACTOR MIGHT OTHERWISE BE ENTITLED.

CONTRACTOR AGREES THAT THIS IS THE VOLUNTARY AND INTENTIONAL RELINQUISHMENT AND ABANDONMENT OF A PRESENTLY EXISTING KNOWN RIGHT. THE CONTRACTOR ACKNOWLEDGES THAT IT UNDERSTANDS ALL TERMS AND CONDITIONS OF THE CONTRACT. THE CONTRACTOR FURTHER ACKNOWLEDGES AND AGREES THAT THERE WAS AND IS NO DISPARITY OF BARGAINING POWER BETWEEN

THE OWNER AND THE CONTRACTOR. THIS SECTION SHALL NOT BE CONSTRUED OR INTERPRETED AS A WAIVER OF SOVEREIGN IMMUNITY.

THE CONTRACTOR AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

58. 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. 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. The obligations and undertakings of each of the parties to this Contract shall be deemed to have occurred in Midland County, Texas. This Contract shall be governed by, interpreted, enforced and construed under the law 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 that would direct application of the laws of another jurisdiction.

59. SOVEREIGN IMMUNITY

By executing this Contract, the City is not waiving its right of sovereign immunity. The City is retaining its immunity from suit. The City is not granting consent to be sued by legislative resolution or action.

THERE IS NO WAIVER OF SOVEREIGN IMMUNITY.

60. NO THIRD – PARTY BENEFICIARY

The 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.

61. 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, Contractor or his legal representative, shall give the City Manager or any other reasonable official of the City, 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 and 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 Contractor will settle, the physical and mailing addresses of Contractor at the time and date the claim was presented and the physical and mailing addresses of Contractor for the six months immediately preceding the occurrence of such damages, and the names and addresses of the witnesses upon whom the Contractor 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 City from any liability whatsoever. The City is under no obligation to provide notice to Contractor that Contractor'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, Contractor's failure to comply with the requirements herein shall perpetually bar Contractor'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. Contractor agrees that the requirements of this entire Agreement are reasonable.

62. ASSIGNMENT

Contractor 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 the owner. The issue on whether or not to grant consent to an assignment is in the sole discretion of the owner.

63. 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 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.

64. PROMPT PAY ACT

The owner and contractor agree that Texas Government Code, Chapter 2251, Payment for Goods and Services (the "Prompt Pay Act") does not waive governmental immunity.

Updated September 2014

SPECIAL PROVISIONS

ATTENTION: All Bidders are directed to pay special attention to the NOTICE TO BIDDERS section of the bid packet. The Coronavirus (COVID-19) pandemic has resulted in several changes to the City of Midland's normal bid process, and 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 **Park Avenue Heights 2 Utility Project** to be performed as outlined in the Plans and Specifications, which are necessary to satisfactorily complete the work.

The project will include the removal, relocation, and installation of existing and proposed water, wastewater, and storm drain infrastructure and appurtenances including all necessary mobilization, saw-cutting, pavement removal, excavation, embedment, backfill, pavement repair, sidewalk repair, concrete joint sealing, erosion control, traffic control, coordination with City of Midland staff and organizations such as OSHA, franchise utilities, etc. as needed, One Call (Texas 811) notifications for pending work, notifications to adjacent property owners as directed by City of Midland Staff, and all other work to be performed as outlined in the Construction Drawings and Specifications, to satisfactorily complete the work.

The Owner reserves the right to abandon, without obligation to the Contractor, any part of the project, or the entire project, at any time before the Contractor begins any construction work authorized by the 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.

The 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 construction drawing set any written or noted dimension takes precedence over dimensions measured based on the drawing scale unless otherwise directed by the 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 (five percent, 5%) shall be per the General Conditions.

Due to the unusual and volatile nature of the supply market at the time of this project's bid, the City will pay for material delivery for specific bid items rather than only for work performed if ordering the material needed up-front will help bidders to achieve better pricing. Contractors must ensure that any material ordered is properly stored, and material that is found to be damaged or defective, including due to improper storage or exposure, will be rejected and must be replaced prior to installation at no additional cost to the City. This will apply to bid items for casing pipes, main pipes, valves, fire hydrants, fittings, tapping saddles, service connections, lateral pipes, manholes, drop structures, and storm drain pipes. All other bid items, including items for demolition and paving, will be paid as per the City's normal policy based upon material installed, and not based upon material delivered.

5. SAFETY REQUIREMENTS:

It is the responsibility of the 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.

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 twelve 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 ten 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 six 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) The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

5) No person shall work within six 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 Traffic Operations Division no less than two (2) 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, the Contractor shall only be responsible for notifying the Traffic Operations Division 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, Traffic Operations Division, 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. The 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
    iii. Ensuring the proper location, orientation, and operation of arrow boards or 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 (1) hour;
    b. On roadways with a posted speed limit of 45 MPH or greater, for closures lasting more than four (4) 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:

The 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 property must be maintained at all times unless otherwise directed by the Engineer. If the 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. CONSTRUCTION SCHEDULE:

It is the responsibility of the 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.

11. CONSTRUCTION STAKING:

It is the responsibility of the Contractor to provide the project construction staking at fifty foot (50') intervals along the entire length of the project as well as at such control points as the 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 the Engineer by the Contractor for review and approval.

12. SURVEY:

The 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 1.0' accuracy or better. Survey data is to be provided in Excel csv. file format with all rounding functions turned off.

13. CONSTRUCTION MATERIALS:

The 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 Fahrenheit and the ambient temperature in the shade is higher than 40 degrees Fahrenheit or is 40 degrees Fahrenheit 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.

14. EROSION CONTROL:

Erosion control is the responsibility of the 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 the Owner feel that supplementary erosion control measures are required in addition to those implemented by the Contractor then the Contractor will include additional erosion control measures within reason to the 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 the Engineer.

15. WASTE MATERIAL:

Excess material from excavation and other construction or demolition activity will become the property of the Contractor. Excess excavation will be disposed of at locations secured by the Contractor and if necessary, approved by the Engineer. No material is to be placed on private property or City property without the approval of the Engineer and the 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 the 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 indicated for removal as part of the project are to be returned to the City of Midland by the Contractor and remain City property. This is ancillary to the project and will not be paid as a separate item.

16. TESTING:

It is the 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 the Contractor unless required by the 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 the Contractor's work or actions; or unless additional testing outside of the project scope is performed at the request of the Engineer.

Required testing includes:

Concrete Pavement For Trench Repair – A Slump Test is required only if directed by the Engineer for pavement patches that are equal to or greater than 50 cubic yards (roughly equal to an 8' wide by 340' long by 6" thick pavement section). The slump test is to be performed once for every cylinder set (3 cylinders), and no less than 1 cylinder set per day when concrete is placed. Test results are to be given to the engineer upon completion of each test. There will be no testing for curb, ramps, and sidewalks.

Asphalt Hot-Mix Pavement For Trench Repair – A Nuclear Gauge Density Test is required only if directed by the Engineer for pavement patches that are equal to or greater than 620 square yards (roughly equal to an 8' wide by 700' long pavement section). The laboratory density limits will be a minimum limit of 96%, a maximum limit of 98%, and an optimum limit of 97%. The acceptable field density limit will be a minimum limit of 93%, a maximum limit of 98%, and an optimum limit of 95%. Test results are to be given to the Engineer upon completion of each test.

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 (4) hours rather than eight (8) hours. The acceptable field pressure limit will be a minimum 180 psi and a maximum 185 psi. A 2-3 psi drop in the measured pipe pressure during the first two (2) 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 (2) 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.

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 fifty-foot (50') 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 the Engineer.

17. 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.

18. PERSONNEL:

It is the Contractor's responsibility to have a supervising representative of the Contractor on the construction site any time that construction work is taking place. The Contractor's representative must be on the Contractor's direct payroll. Sub-contractors or paid consultants will not satisfy this requirement.

It is also the Contractor's responsibility to provide the City with a reliable contact for issue escalation coordination. Such contacts would include the Contractor's site foreman, the Contractor's construction project manager, etc.

19. 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.

20. 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 the 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 the Contractor in writing to Engineer for review, and the approval or denial of the request rests solely with the Engineer.

Unless specifically granted in writing by the Engineer, there will be no suspension of project time between phases of construction.

21. WARRANTY PERIOD:

There is a one (1) year calendar warranty period on this project for all work performed or materials installed effective immediately upon acceptance of the improvements by the 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.

22. 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 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 either an active Water Operator D license, an active Wastewater D license, or an active Class 1 Collections license, and the Contractor must maintain at least one of these active licenses for the entirety of the project. Any bid submittal that does not include this required documentation will be rejected as a non-responsive bid. If a Contractor allows the required license or 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 the Contractor to renew their active licenses before resuming work or to end the project immediately.

PROPOSAL

TO: Honorable Mayor and City Council
City of Midland
Midland, Texas

Gentlemen: The undersigned bidder, having examined the drawings, specifications and contract documents, the location of the proposed work, and being fully advised as to the extent and character of the work, proposes to furnish all material, equipment, and to perform all labor and work necessary for the completion of the construction of the work described by and in accordance with the attached drawings, specifications, and contract, for the following prices, to wit:

Project Name: Park Avenue Heights 2 Utility Project

Project Number: PU19-01

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	8 MO	Mobilization, furnished, installed, complete and in place, for the sum of: FIFTY FIVE HUNDRED dollars and NO cents per month. (Pay Note M1)	$5,500.00	$44,000.00
2)	200 LF	36" Steel Pipe Casing (1/4" Wall Thickness), furnished, installed, complete and in place, for the sum of: TWO HUNDRED FORTY dollars and NO cents per linear foot. (Pay Note M2)	$240.00	$48,000.00
3)	100 LF	20" Steel Pipe Casing (1/4" Wall Thickness), furnished, installed, complete and in place, for the sum of: ONE HUNDRED FORTY dollars and NO cents per linear foot. (Pay Note M2)	$140.00	$14,000.00
4)	8 MO	Erosion/Sediment Control, furnished, installed, complete and in place, for the sum of: EIGHT HUNDRED dollars and NO cents per month. (Pay Note M3)	$800.00	$6,400.00

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
5)	8 MO	Traffic Control, furnished, installed, complete and in place, for the sum of: TWENTY FIVE HUNDRED dollars and NO cents per month. (Pay Note M4)	$ 2,500.00	$ 20,000.00
6)	8 MO	Job Site Safety, furnished, installed, complete and in place, for the sum of: FIVE HUNDRED dollars and NO cents per month. (Pay Note M5)	$ 500.00	$ 4,000.00
7)	N/A	Material Mark-up, complete and in place, for the sum of: FIFTEEN percent. (Pay Note M6)	% 15	$ N/A
8)	N/A	Labor Mark-up (Regular Work Hours), complete and in place, for the sum of: FIFTEEN percent. (Pay Note M7)	% 15	$ N/A
9)	N/A	Equipment Rental Mark-up (Non-Standard Equipment Only), complete and in place, for the sum of: FIFTEEN percent. (Pay Note M8)	% 15	$ N/A
Total Miscellaneous Items 1-9		$ 136,400.00		

Base Bid: Demolition Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	1600 LF	Removal & Disposal of Existing Water Main, complete and in place, for the sum of: EIGHT dollars and NO cents per linear foot. (Pay Note D1)	$ 8.00	$ 12,800.00
2)	60 LF	Removal & Disposal of Existing Wastewater Main, complete and in place, for the sum of: FIFTEEN dollars and NO cents per linear foot. (Pay Note D1)	$ 15.00	$ 900.00
3)	3 CY	Flowable Fill for Existing Pipes Abandoned In Place, furnished, installed, complete and in place, for the sum of: ONE HUNDRED THIRTY FIVE dollars and NO cents per cubic yard. (Pay Note D2)	$ 135.00	$ 405.00
4)	2 EA	Removal & Disposal of Existing Fire Hydrant Assembly, complete and in place, for the sum of: ONE THOUSAND dollars and NO cents per each. (Pay Note D3)	$ 1,000.00	$ 2,000.00
5)	1300 SY	Removal & Dispose of Existing Unclassified Pavement, complete and in place, for the sum of: TEN dollars and NO cents per square yard. (Pay Note D4)	$ 10.00	$ 13,000.00
6)	50 LF	Removal & Dispose of Existing Concrete Curb & Gutter, complete and in place, for the sum of: TEN dollars and NO cents per linear foot. (Pay Note D5)	$ 10.00	$ 500.00
7)	10 SY	Removal & Disposal of Existing Concrete Sidewalk & Ramps, complete and in place, for the sum of: TWENTY dollars and NO cents per square yard. (Pay Note D6)	$ 20.00	$ 200.00
Total Demolition Items 1-7			$ 29,805.00	

Base Bid: Water Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	100 LF	12" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: EIGHTY THREE dollars and NO cents per linear foot. (Pay Note W1)	$83.00	$8,300.00
2)	2800 LF	8" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: SIXTY THREE dollars and NO cents per linear foot. (Pay Note W1)	$63.00	$176,400.00
3)	160 LF	6" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: SIXTY dollars and NO cents per linear foot. (Pay Note W1)	$60.00	$9,600.00
4)	5 EA	12" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: THIRTY FOUR HUNDRED dollars and NO cents per each. (Pay Note W2)	$3,400.00	$17,000.00
5)	11 EA	8" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: EIGHTEEN HUNDRED dollars and NO cents per each. (Pay Note W2)	$1,800.00	$19,800.00
6)	8 EA	6" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: TWELVE HUNDRED dollars and NO cents per each. (Pay Note W2)	$1,200.00	$9,600.00

Base Bid: Water Items				
Item No.	Quantity	Description	Unit Price	Total Amount
7)	8 EA	Fire Hydrant Assembly, furnished, installed, complete and in place, for the sum of: FORTY FIVE HUNDRED dollars and NO cents per each. (Pay Note W3)	$4,500.00	$36,000.00
8)	1.10 TON	Ductile Iron Fittings, furnished, installed, complete and in place, for the sum of: TWENTY SEVEN THOUSAND FOUR HUNDRED dollars and NO cents per ton. (Pay Note W4)	$27,400.00	$30,140.00
9)	1 EA	Dresser Coupling, furnished, installed, complete and in place, for the sum of: TWO THOUSAND dollars and NO cents per each. (Pay Note W5)	$2,000.00	$2,000.00
10)	1 EA	Connect to Existing Water Main, furnished, installed, complete and in place, for the sum of: THIRTY NINE HUNDRED dollars and NO cents per each. (Pay Note W6)	$3,900.00	$3,900.00
11)	20 EA	12"x1" Tapping Saddle for water service connection, furnished, installed, complete and in place, for the sum of: FOUR HUNDRED NINETY dollars and NO cents per each. (Pay Note W7)	$490.00	$9,800.00

Base Bid: Water Items				
Item No.	Quantity	Description	Unit Price	Total Amount
12)	39 EA	8"x1" Tapping Saddle for water service connection, furnished, installed, complete and in place, for the sum of: TWO HUNDRED SEVENTY dollars and NO cents per each. (Pay Note W7)	$270.00	$15,930.00
13)	59 EA	1" Water Service Connection, furnished, installed, complete and in place, for the sum of: ONE THOUSAND dollars and NO cents per each. (Pay Note W8)	$1,000.00	$59,000.00
14)	2200 LF	1" Water Service Lateral, furnished, installed, complete and in place, for the sum of: TEN dollars and NO cents per linear foot. (Pay Note W9)	$10.00	$22,000.00
15)	59 EA	Water Meter Installation (New Service Lateral), furnished, installed, complete and in place, for the sum of: FOUR HUNDRED TWENTY dollars and NO cents per each. (Pay Note W10)	$420.00	$24,780.00
16)	3060 LF	Open Trenching of Water Main, furnished, installed, complete and in place, for the sum of: SEVEN dollars and NO cents per linear foot. (Pay Note W11)	$7.00	$21,420.00
Total Water Items 1-16		$465,670.00		

Base Bid: Wastewater Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	1600 LF	6" SDR 26 ASTM D2241, PVC, Wastewater Main, furnished, installed, complete and in place, for the sum of: FIFTY EIGHT dollars and NO cents per linear foot. (Pay Note WW1)	$ 58.00	$ 92,800.00
2)	7 EA	48" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: FORTY THREE HUNDRED dollars and NO cents per each. (Pay Note WW2)	$ 4,300.00	$ 30,100.00
3)	15 VF	48" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: FOUR HUNDRED SEVENTY dollars and NO cents per vertical foot. (Pay Note WW3)	$ 470.00	$ 7,050.00
4)	1 EA	Connection to Existing Manhole, furnished, installed, complete and in place, for the sum of: SEVENTEEN HUNDRED dollars and NO cents per each. (Pay Note WW4)	$ 1,700.00	$ 1,700.00
5)	1 EA	6" Manhole Drop Structure (External), furnished, installed, complete and in place, for the sum of: THIRTY ONE HUNDRED dollars and NO cents per each. (Pay Note WW5)	$ 3,100.00	$ 3,100.00
6)	7 EA	6" Wastewater Service Connection, furnished, installed, complete and in place, for the sum of: EIGHT HUNDRED EIGHTY dollars and NO cents per each. (Pay Note WW6)	$ 880.00	$ 6,160.00

Base Bid: Wastewater Items				
Item No.	Quantity	Description	Unit Price	Total Amount
7)	43 EA	4" Wastewater Service Connection, furnished, installed, complete and in place, for the sum of: SEVEN HUNDRED dollars and NO cents per each. (Pay Note WW6)	$ 700.00	$ 30,100.00
8)	100 LF	6" Wastewater Service Lateral, furnished, installed, complete and in place, for the sum of: TWENTY EIGHT dollars and NO cents per linear foot. (Pay Note WW7)	$ 28.00	$ 2,800.00
9)	600 LF	4" Wastewater Service Lateral, furnished, installed, complete and in place, for the sum of: TWENTY FIVE dollars and NO cents per linear foot. (Pay Note WW7)	$ 25.00	$ 15,000.00
10)	1600 LF	Open Trenching of Wastewater Main, furnished, installed, complete and in place, for the sum of: NINE dollars and NO cents per linear foot. (Pay Note WW8)	$ 9.00	$ 14,400.00
Total Sewer Items 1-10		$ 203,210.00		

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	960 LF	24" ASTM F2881, Polypropylene Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: NINETY FIVE dollars and NO cents per linear foot. (Pay Note SD1)	$ 95.00	$ 91,200.00
2)	140 LF	18" ASTM F2881, Polypropylene Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: SEVENTY FIVE dollars and NO cents per linear foot. (Pay Note SD1)	$ 75.00	$ 10,500.00
3)	4 EA	60" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: FIFTY EIGHT HUNDRED dollars and NO cents per each. (Pay Note SD2)	$ 5,800.00	$ 23,200.00
4)	4 EA	48" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: THIRTY SEVEN HUNDRED dollars and NO cents per each. (Pay Note SD2)	$ 3,700.00	$ 14,800.00
5)	13 VF	60" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: NINE HUNDRED TWENTY dollars and NO cents per vertical foot. (Pay Note SD3)	$ 920.00	$ 11,960.00
6)	15 VF	48" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: FOUR HUNDRED SEVENTY dollars and NO cents per vertical foot. (Pay Note SD3)	$ 470.00	$ 7,050.00

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
7)	2 EA	24" Plug, furnished, installed, complete and in place, for the sum of: FIVE HUNDRED dollars and NO cents per each. (Pay Note SD4)	$ 500.00	$ 1,000.00
8)	6 EA	18" Plug, furnished, installed, complete and in place, for the sum of: FOUR HUNDRED dollars and NO cents per each. (Pay Note SD4)	$ 400.00	$ 2,400.00
9)	1100 LF	Open Trenching of Storm Drain, furnished, installed, complete and in place, for the sum of: TEN dollars and NO cents per linear foot. (Pay Note SD5)	$ 10.00	$ 11,000.00
Total Miscellaneous Items 1-9		$ 173,110.00		

Base Bid: Paving Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	50 LF	Concrete Curb & Gutter Repair, furnished, installed, complete and in place, for the sum of: FORTY TWO dollars and NO cents per linear foot. (Pay Note P1)	$ 42.00	$ 2,100.00
2)	1300 SY	2" Type D HMAC Asphalt Pavement Repair (PG70-22), furnished, installed, complete and in place, for the sum of: FIFTY EIGHT dollars and NO cents per square yard. (Pay Note P2)	$ 58.00	$ 75,400.00
3)	260 GAL	Bituminous Prime Coat (MC-30 or AEP, 0.20 Gal / SY), furnished, installed, complete and in place, for the sum of: SEVEN dollars and NO cents per gallon. (Pay Note P3)	$ 7.00	$ 1,820.00
4)	1312 SY	Flowable Fill / 2-Sack Backfill, furnished, installed, complete and in place, for the sum of: SIXTY THREE dollars and NO cents per square yard. (Pay Note P4)	$ 63.00	$ 82,656.00
Total Paving Items 1-4		$ 161,976.00		

Bid Price For:	
1. Miscellaneous Items	$ 136,400.00
2. Demolition Items	$ 29,805.00
3. Water Items	$ 465,670.00
4. Wastewater Items	$ 203,210.00
5. Storm Drain Items	$ 173,110.00
6. Paving Items	$ 161,976.00
Total Price	$ 1,170,171.00

In addition to providing the individual prices for the items above, Contract shall write the total bid amount in the sum of

ONE MILLION ONE HUNDRED SEVENTY THOUSAND ONE HUNDRED SEVENTY ONE dollars

and NO cents total.

The undersigned bidder hereby declares that he has visited the site of the work and has carefully examined the contract documents pertaining to the work covered by the above bid. The selected contractor will receive written notice to proceed.

Bidder agrees to substantially complete all work within 240 calendar days after receipt of notice to proceed.

PUBLIC INFORMATION

To the extent that Bidder is submitting a bid for a contract described by Section 552.371 of the Texas Government Code, Bidder 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 bid, 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.

Enclosed herewith in this proposal is a cashier's check, cash or bid bond on a form approved by the City Attorney, for

FIFTY EIGHT THOUSAND FIVE HUNDRED EIGHT dollars

and FIFTY FIVE cents total. ($ 58,508.55)

which it is agreed shall be collected and retained by the owner as liquidated damages in the event this proposal is accepted by the Owner within thirty days (30) after the date advertised for the reception of bids and the undersigned fails to execute the contract and required bonds with the owner, under the conditions thereof, within (15) days after the date said proposal is accepted; otherwise said check or bond shall be returned to the undersigned on demand.

TEC EXCAVATION, INC.

Name of Contractor

Twyla Clutter — Twyla Clutter Pres

Submitted By — Print Name and Title

P.O. BOX 80455

Mailing Address

MIDLAND | TX | 79708

City | State | Zip

PAY NOTES

Park Avenue Heights 2 Utility Project

Bid Item		Pay Quantity Note
Miscellaneous Items		
1	Mobilization	M1
2	36" Steel Pipe Casing (1/4" Wall Thickness)	M2
3	20" Steel Pipe Casing (1/4" Wall Thickness)	M2
4	Erosion/Sediment Control	M3
5	Traffic Control	M4
6	Job Site Safety	M5
7	Material Mark-up	M6
8	Labor Mark-up (Regular Work Hours)	M7
9	Equipment Rental Mark-up (Non-Standard Equipment Only)	M8
Demolition Items		
1	Removal & Disposal of Existing Water Main	D1
2	Removal & Disposal of Existing Wastewater Main	D1
3	Flowable Fill for Existing Pipes Abandoned In Place	D2
4	Removal & Disposal of Existing Fire Hydrant Assembly	D3
5	Removal & Disposal of Existing Unclassified Pavement	D4
6	Removal & Disposal of Existing Concrete Curb & Gutter	D5
7	Removal & Disposal of Existing Concrete Sidewalk & Ramps	D6
Water Items		
1	12" AWWA C-900 DR18, PVC, Water Main	W1
2	8" AWWA C-900 DR18, PVC, Water Main	W1
3	6" AWWA C-900 DR18, PVC, Water Main	W1
4	12" Gate Valve & Box (MJxMJ/FL)	W2
5	8" Gate Valve & Box (MJxMJ/FL)	W2
6	6" Gate Valve & Box (MJxMJ/FL)	W2
7	Fire Hydrant Assembly	W3
8	Ductile Iron Fittings	W4
9	Dresser Coupling	W5
10	Connect to Existing Water Main	W6
11	12"x1" Tapping Saddle	W7
12	8"x1" Tapping Saddle	W7
13	1" Water Service Connection	W8
14	1" Water Service Lateral	W9
15	Water Meter Installation (New Service Lateral)	W10
16	Open Trenching of Water Main	W11
Wastewater Items		
1	6" SDR 26 ASTM D2241, PVC, Wastewater Main	WW1
2	48" Fiberglass Manhole & Cover (0'-5' Deep)	WW2
3	48" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	WW3
4	Connect To Existing Manhole	WW4
5	6" Manhole Drop Structure (External)	WW5
6	6" Wastewater Service Connection	WW6
7	4" Wastewater Service Connection	WW6
8	6" Wastewater Service Lateral	WW7
9	4" Wastewater Service Lateral	WW7
10	Open Trenching of Wastewater Main	WW8

Storm Drain Items

1	24" ASTM F2619, HDPE, Storm Drain	SD1
2	18" ASTM F2619, HDPE, Storm Drain	SD1
3	60" Fiberglass Manhole & Cover (0'-5' Deep)	SD2
4	48" Fiberglass Manhole & Cover (0'-5' Deep)	SD2
5	60" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	SD3
6	48" Fiberglass Manhole Additional Bury Depth (> 5' Deep)	SD3
7	24" Plug	SD4
8	18" Plug	SD4
9	Open Trenching of Storm Drain	SD5

Paving Items

1	Concrete Curb & Gutter Repair	P1
2	2" Type D HMAC Asphalt Pavement Repair (PG70-22)	P2
3	Bituminous Prime Coat (MC-30 or AEP, 0.20 Gal / SY)	P3
4	Flowable Fill / 2-Sack Backfill	P4

PAY QUANTITY NOTES

M1 Includes the necessary equipment, labor, materials, and incidentals for all Mobilization to the job site complete and in place. Measurement and payment to be made per month.

M2 Includes the necessary equipment, labor, materials, and incidentals for the installation of Pipe Casing per the construction drawings and City of Midland standards and specifications, including all spacers, grout, embedment, detector wire, tracer tape, and appurtenances. Measurement and payment to be per linear foot measured along the ground surface following the pipe centerline through all valves, fittings, structures, and appurtenances.

M3 Includes the necessary equipment, labor, materials, and incidentals to implement the Erosion Control Plan per the construction drawings and City of Midland standards and specifications. Measurement and payment to be made per month.

M4 Includes the necessary equipment, labor, materials, and incidentals to implement Job Site Safety and to provide a safe work environment for the project work area (including all personal protection equipment, trench safety, etc.) per the construction drawings and in compliance with all applicable Federal, State, and Local requirements or regulations including those of OSHA and the City of Midland. JOB SITE SAFETY IS THE RESPONSABILITY OF THE CONTRACTOR. Measurement and payment to be made per month.

M5 Includes the necessary equipment, labor, materials, and incidentals to implement the Traffic Control per the approved Traffic Control Plan. Any required traffic control devices are to meet the City of Midland Traffic Division Standards. Measurement and payment to be made per month.

M6 Includes the Material Mark-up for materials and material sizes (pipe, valve, manhole, etc.) required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of the material in question plus the set percent increase established by this bid item. The Contractor must provide a copy of the invoice for the material cost from the supplier to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any material. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

M7 Includes the Labor Mark-up (Regular Work Hours) for labor required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of labor in question plus the set percent increase established by this bid item. The Contractor must provide a typical hourly pay rate for work crews prior to the percent increase along with the number of workers on the crew and the number of hours worked by the crew for the project in question to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any labor. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

M8 Includes the Equipment Rental Mark-up (non-standard equipment only) required to complete work for improvements not covered by the bid items listed in the Proposal for this project per the construction drawings and the City of Midland standards and specifications. Measurement and payment to be made per the cost of the equipment rental in question plus the set percent increase established by this bid item. The Contractor must provide a copy of the invoice for the rented equipment from the equipment supplier to the Engineer of Record or the City of Midland designee before this bid item may be claimed for any rented equipment. This will be applied solely at the discretion of the Engineer of Record or the City of Midland designee.

D1 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Utility Mains per the construction drawings and City of Midland standards and specifications, including the removal and disposal of all pipes, fittings, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all valves, manholes, fittings, junctions, structures, and appurtenances.

D2 Includes the necessary equipment, labor, materials, and incidentals for the placement of Flowable Fill for Existing Pipes Abandoned In Place (Portland Cement 2-Sack = 188 LBS/CY) per the construction drawings and City of Midland standards and specifications, including all plugging or caping the pipe to be abandoned, and appurtenances. Measurement and payment to be made per cubic yard volume of flowable fill placed in pipe abandoned in place.

D3 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Fire Hydrant Assembly per the construction drawings and City of Midland standards and specifications. Fire hydrant assemblies are to be returned to the City Utility Maintenance Department unless otherwise directed by the Engineer of Record or their representative. This includes removal and disposal of all structures, fittings, pipes, and appurtenances. Measurement and payment to be per each fire hydrant assembly removed.

D4 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Unclassified Pavement per the construction drawings and City of Midland standards and specifications including all saw-cutting and appurtenances. Depths given are approximate and pavement material is to be removed in its entirety. No additional compensation will be made for increased pavement depth removal. Saw-cut pavement edges are to be full pavement depth, cleanly cut, and clearly defined edges free of breaks. Measurement and payment to be made per square yard of unclassified pavement removed.

D5 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Concrete Curb & Gutter per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per linear foot.

D6 Includes the necessary equipment, labor, materials, and incidentals for the Removal & Disposal of Existing Concrete Sidewalk & Ramps per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per square yard.

W1 Includes the necessary equipment, labor, materials, and incidentals for the installation of Water Mains per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all valves, fittings, structures, and appurtenances.

W2 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Gate Valve & Box per the construction drawings and City of Midland standards and specifications, including all embedment, valve box, joint restraint, thrust blocking, concrete collar, and appurtenances. Measurement and payment to be made per each valve and box installed. Includes valves associated with tapping sleeves.

W3 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Fire Hydrant Assembly per the construction drawings and City of Midland standards and specifications, including all risers, embedment, gravel sump, thrust blocking, necessary testing, and appurtenances. Measurement and payment to be made per each fire hydrant assembly installed.

W4 Includes the necessary equipment, labor, materials, and incidentals for the installation of Ductile Iron Fittings per the construction drawings and City of Midland standards and specifications, including all embedment, wrapping, thrust blocking, joint restraints, and appurtenances. All fittings are to be C153 ductile iron compact fittings. Fitting weights are established from Tyler Union Quality Waterworks Products Catalog PC-U2014, December, 2014 and payment will be made at the standard compact weight. Nuts, bolds, glands, and other associated accessories are not included as part of the fitting weight and are considered subsidiary to the weight of the fitting. Any additional required fittings not shown on the drawings will be paid for at weights established in the Tyler Union Waterworks Catalog.

W5 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Dresser Coupling per the construction drawings and City of Midland standards and specifications, including all embedment, wrapping, thrust blocking, and appurtenances. Measurement and payment to be made per each dresser coupling installed.

W6 Includes the necessary equipment, labor, materials, and incidentals to Connect to Existing Water Main per the construction drawings and City of Midland standards and specifications, including all fittings, repairs, and appurtenances. Measurement and payment to be made per each connection made.

W7 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Tapping Saddle for a water service connection per the construction drawings and City of Midland standards and specifications, including all embedment, thrust blocking, and appurtenances. Measurement and payment to be per each tapping saddle installed.

W8 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Water Service Connection per the construction drawings and City of Midland standards and specifications, including all brass goods from the corporation stop to the brass angle valve (inclusive), as well as the installation of a new meter box and all appurtenances. Measurement and payment to be made per each water service connection installed.

W9 Includes the necessary equipment, labor, materials, and incidentals for the installation of Water Service Lateral pipe per the construction drawings and City of Midland standards and specifications, including all excavation, embedment, backfill, polyethylene service line or other pipe, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all valves, fittings, and appurtenances.

W10 Includes the necessary equipment, labor, materials, and incidentals for a new Water Meter Installation as part of a new water service lateral installation per the construction drawings and City of MIdland standards and specifications, including all appurtenances. The new water meter will be provided by the City of Midland. Measurement and payment to be per each water meter set.

W11 Includes the necessary equipment, labor, materials, and incidentals for Open Trenching of Water Main per the construction drawings and City of Midland standards and specifications, including all unclassified excavation, backfill not including flowable fill backfill, providing trench safety and protection for workers to install pipe, structures, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures, fittings, and appurtenances.

WW1 Includes the necessary equipment, labor, materials, and incidentals for the installation of Wastewater Mains per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures and appurtenances.

WW2 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole & Cover to a depth of 5' per the construction drawings and City of Midland standards and specifications, to the depth shown on the construction drawings and including all embedment, base, necessary testing, concrete collars, and appurtenances. Measurement and payment to be made per each manhole installed.

WW3 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole Additional Bury Depth (> 5' pipe invert bury depth) per the construction drawings and City of Midland standards and specifications, including all embedment and appurtenances. Measurement and payment to be made per vertical foot measured from the lowest flowlline invert at the manhole to 5' below the rim elevation.

WW4 Includes the necessary equipment, labor, materials, and incidentals to Connect to Existing Manhole per the construction drawings and City of Midland standards and specifications, including all coring, grouting, sealing, repairs, and appurtenances. Measurement and payment to be made per each connection made.

WW5 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Manhole Drop Structure (External) per the construction drawings and City of Midland standards and specifications, including all coring, repairs, and appurtenances for a vertical adjustment. Measurement and payment of drop structures to be made per each drop structure installed.

WW6 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Wastewater Service Connection to a wastewater main or manhole per the construction drawings and City of Midland standards and specifications, including all coring, repairs, and appurtenances. Measurement and payment to be made per each wastewater service connection installed.

WW7 Includes the necessary equipment, labor, materials, and incidentals for the installation of a Wastewater Service Lateral per the construction drawings and City of Midland standards and specifications, including all coring, repairs, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures and appurtenances.

WW8 Includes the necessary equipment, labor, materials, and incidentals for Open Trenching of Wastewater Main per the construction drawings and City of Midland standards and specifications, including all unclassified excavation, backfill not including flowable fill backfill, providing trench safety and protection for workers to install pipe, structures, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures, fittings, and appurtenances.

SD1 Includes the necessary equipment, labor, materials, and incidentals for the installation of Storm Drains per the construction drawings and City of Midland standards and specifications, including all embedment, detector wire, tracer tape, necessary testing, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures and appurtenances.

SD2 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole & Cover to a depth of 5' per the construction drawings and City of Midland standards and specifications, to the depth shown on the construction drawings and including all embedment, base, necessary testing, concrete collars, and appurtenances. Measurement and payment to be made per each manhole installed.

SD3 Includes the necessary equipment, labor, materials, and incidentals for the installation of Fiberglass Manhole Additional Bury Depth (> 5' pipe invert bury depth) per the construction drawings and City of Midland standards and specifications, including all embedment and appurtenances. Measurement and payment to be made per vertical foot measured from the lowest flowlline invert at the manhole to 5' below the rim elevation.

SD4 Includes the necessary equipment, labor, materials, and incidentals for the installation of a pipe Plug per the construction drawings and City of Midland standards and specifications, including all thrust blocking and appurtenances. Measurement and payment to be made per each plug installed.

SD5 Includes the necessary equipment, labor, materials, and incidentals for Open Trenching of Storm Drain per the construction drawings and City of Midland standards and specifications, including all unclassified excavation, backfill not including flowable fill backfill, providing trench safety and protection for workers to install pipe, structures, and appurtenances. Measurement and payment to be made per linear foot measured along the ground surface following the pipe centerline through all structures, fittings, and appurtenances.

P1 Includes the necessary equipment, labor, materials, and incidentals for Concrete Curb & Gutter Repair per the construction drawings and City of Midland standards and specifications including all forming, placement, jointing, fiber reinforcement, finishing, and appurtenances. Measurement and payment to be made per linear foot measured along the back-of-curb.

P2 Includes the necessary equipment, labor, materials, and incidentals for the installation of Type "D" HMAC Asphalt Pavement Repair (110 LBS / SY at 1" thick, PG 70-22) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per square yard measured along the ground surface.

P3 Includes the necessary equipment, labor, materials, and incidentals for application of Bituminous Prime Coat (MC-30, or AEP, 0.20 GAL / SY) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per gallon of material applied at the designated rate.

P4 Includes the necessary equipment, labor, materials, and incidentals for installation of Flowable Fill / 2-Sack Backfill (Portland Cement 2 Sack = 188 LBS/CY) per the construction drawings and City of Midland standards and specifications, including all appurtenances. Measurement and payment to be made per square yard measured along the ground surface.

Bid Bond

Surety Department

KNOW ALL MEN BY THESE PRESENTS,

That we, **TEC Excavation, Inc.**, as Principal, hereinafter called the Principal, and the **Merchants Bonding Company (Mutual)**, a Corporation created and existing under the laws of the State of **Iowa**, whose principal office is in Des Moines, Iowa, as Surety, hereinafter called the Surety, are held and firmly bound unto the **City of Midland, Texas**, as Obligee, hereinafter called the Obligee, in the sum of **Five Percent (5%) of the Greatest Amount Bid** Dollars ($ ------5%--------), for the payment of which sum, well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

Whereas, the Principal has submitted a bid for

Park Avenue Heights 2 Utility Project

NOW THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or contract documents with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this **12th** day of **May**, A.D. 20**21**.

Attest:

By: Lynette Gingerich

TEC Excavation, Inc.
(Principal)

By _____ (SEAL)

Witness:

_____

Merchants Bonding Company (Mutual)

By _____ (SEAL)
Kevin J. Dunn, Attorney-in-Fact

Form S-3266-4 Printed in U.S.A. 12-70

MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Kevin J Dunn; Roberta Erb; Steven Tucker; Tracy Tucker; W Lawrence Brown

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and aut hority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 11th day of February , 2020 .

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.

By Larry Taylor
President

STATE OF IOWA
COUNTY OF DALLAS ss.
On this 11th day of February 2020 , before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.

NOTARIAL SEAL IOWA

POLLY MASON
Commission Number 750576
My Commission Expires
January 07, 2023

Polly Mason
Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 12th day of May , 2021.

MERCHANTS NATIONAL BONDING, INC. INCORPORATED -o- 2003

MERCHANTS BONDING COMPANY (MUTUAL) INCORPORATED -o- 1933

William Warner Jr.
Secretary

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 Proposal to enter into a certain written contract for the construction of Park Avenue Heights 2 Utility Project.

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 AGREE that if said Principal should withdraw its Bid anytime 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 of such events, shall be entitled and is hereby given the right to collect the full amount of this Bid Bond as liquidated damage.

PROVIDED, further that if any legal action be filed upon this Bond venue shall lie in Midland County, Texas.

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

CONTRACT

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

THIS CONTRACT, made and entered into this 26th day of May, 20 21, by and between the City of Midland of the County of Midland and State of Texas, acting through its Mayor thereunto duly authorized so to do, Party of the First Part, hereinafter termed OWNER, and TEC Excavation, Inc. of the City Midland, County of Midland, State of Texas, Party of the Second Part, herein-after termed CONTRACTOR.

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the first Part (OWNER), and under the conditions expressed in the bond bearing even date herewith, the said Party of the Second Part (CONTRACTOR), hereby agrees with the said Party of the First Part (OWNER) to commence and complete the construction of certain improvements described as follows: Park Avenue Heights 2 Utility Project together with appurtenances and incidentals.

Conditions of the Contract and at his (or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendent, labor, insurance and other accessories and services necessary to complete the said construction in accordance with the conditions and prices stated in the Proposal attached hereto, and in accordance with the Notice to the Contractors, General and Special Conditions of Agreement, Plans and other drawings and printed or written explanatory matter thereof, and the Specifications and addenda therefore as prepared by Engineering and Transportation Department of the City of Midland, Texas, herein entitled the ENGINEER, together with the CONTRACTOR'S written Proposal, the General Conditions of the Contract, and the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire Contract.

The CONTRACTOR hereby agrees to commence work within fifteen (15) calendar days after the written notice to do so and to substantially complete the same within 240 calendar days after receipt of notice to proceed, subject to such extensions of time as are provided by the General and Special Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds the price or prices shown in the proposal, which forms a part of this Contract, such payments to be subject to the General and Special Conditions of the Contract.

The SUM TOTAL of this Contract shall be: $1,164,771.00.

INSURANCE

Contractor 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
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 shall be on a per project aggregate, including completed operations, and shall be on an occurrence basis. This insurance shall name the City as an additional insured and waive subrogation in favor of the City.

The Business Automobile Liability insurance provided by Contractor 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. The insurance shall name the City as an additional insured and waive subrogation in favor of the City.

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

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

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

The Contractor certifies that the certificate of insurance provided as required herein complies with the requirements of Senate Bill 425, passed during the 82nd regular session of the Texas Legislature, and effective January 1, 2012. The Contractor shall not use an unapproved certificate of insurance or insert inappropriate language on a certificate. Compliance with state law is the sole responsibility of the Contractor.

WAIVER OF ATTORNEY FEES

WAIVER OF ATTORNEY FEES: BY EXECUTING THIS CONTRACT, CONTRACTOR AGREES TO WAIVE AND DOES HEREBY KNOWINGLY, CONCLUSIVELY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY CLAIM IT HAS OR MAY HAVE IN THE FUTURE AGAINST THE OWNER, REGARDING THE AWARD OF ATTORNEY'S FEES, WHICH ARE IN ANY WAY RELATED TO THE CONTRACT, OR THE CONSTRUCTION, INTERPRETATION OR BREACH OF THE CONTRACT. THE CONTRACTOR SPECIFICALLY AGREES THAT IF THE CONTRACTOR 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 AMEDED), OR CHAPTER 271 OF THE TEXAS LOCAL GOVERNMENT CODE, THE CONTRACTOR AGREES TO ABANDON, WAIVE AND RELINQUISH ANY AND ALL RIGHTS TO THE RECOVERY OF ATTORNEY'S FEES TO WHICH CONTRACTOR MIGHT OTHERWISE BE ENTITLED.

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

THE CONTRACTOR AND OWNER ARE RELYING ON THEIR OWN JUDGMENT. EACH PARTY HAD THE OPPORTUNITY TO DISCUSS THIS CONTRACT WITH COMPETENT LEGAL COUNSEL PRIOR TO ITS EXECUTION.

SOVEREIGN IMMUNITY

By executing this Contract, the City is not waiving its right of sovereign immunity. The City is retaining its immunity from suit. The City is not granting consent to be sued by legislative resolution or action.

THERE IS NO WAIVER OF SOVEREIGN IMMUNITY.

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. 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. The obligations and undertakings of each of the parties to this Contract shall be deemed to have occurred in Midland County, Texas.

COMPLIANCE – Contractor agrees that it shall comply with Texas Government Code Section 2252.908, *et seq.*, as amended. Contractor agrees that it shall comply with Texas Local Government Code Section 176.006, *et seq.*, as amended.

VERIFICATION

To the extent that Section 2271.002 of the Texas Government Code applies to this Contract, Contractor hereby verifies that Contractor does not boycott Israel and will not boycott Israel during the term of this Contract. If Section 2271.002 of the Texas Government Code does not apply to this Contract, such verification is not required, and Contractor shall be deemed to have not made such verification.

RECORDS RETENTION AND PRODUCTION OF INFORMATION

To the extent that this Contract is a contract described by Section 552.371 of the Texas Government Code, Contractor shall (1) preserve all contracting information related to the Contract as provided by the records retention requirements applicable to the City of Midland for the duration of the contract, (2) promptly provide to the City of Midland any contracting information related to the Contract that is in the custody or possession of Contractor on request of the City of Midland, and (3) on completion of the Contract, either (i) provide at no cost to the City of Midland all contracting information related to the Contract that is in the custody or possession of Contractor, or (ii) preserve the contracting information related to the Contract as provided by the records retention requirements applicable to the City of Midland.

PUBLIC INFORMATION

To the extent that this Contract is a contract described by Section 552.371 of the Texas Government Code, Contractor 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 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.

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day first above written.

Parties of the First Part (Owner)

By: _____
Patrick Payton, Mayor

ATTEST:

_____
Amy Turner, City Secretary

APPROVED ONLY AS TO FORM:

By: _____
John Ohnemiller, City Attorney

By: _____
Party of the Second Part (CONTRACTOR)

By: _____
Title

THE STATE OF _____ §

COUNTY OF _____ §

BEFORE ME, the undersigned authority, on this _____ day of _____, 20__ personally appeared _____, an officer of TEC Excavation, Inc. _____, 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 an 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 _____ day of _____, 20_____

_____
Notary Public

Form Revised April 2021

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 Park Avenue Heights 2 Utility Project , 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 Obligee, 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 Obligee, dated the _____ day of _____, 20__, for the furnishing of materials, equipment to perform all labor and work necessary for Park Avenue Heights 2 Utility Project, 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

CERTIFICATE OF PAYMENT

THE STATE OF TEXAS §

COUNTY OF MIDLAND §

Park Avenue Heights 2 Utility Project

The undersigned states that all debts, bills, and expenses that were incurred by the undersigned, his agents, or subcontractors employed by him, for labor, wages, materials and other purposes furnished for the above project have been paid and satisfied in full.

The undersigned, as general contractor for the above described project agrees to indemnify, hold harmless and defend the City, its officers, agents, and employees, from and against all claims and suits for damages, expenses, including court costs and attorney fees, arising out of or resulting from the undersigned contractor, his agents or subcontractors employed by him for expenses, warranties for items furnished, or labor performed and for any party that has supplied materials in connection with the repair or construction of the above referenced premises.

The undersigned contractor agrees to waive any and all claims it may have against the City, associated with, resulting from or arising out of the work performed at the above premises.

Further, the undersigned states that all labor performed by the undersigned, his agents, and subcontractors employed by him, has been completed in the usual and customary workmanlike manner and all work performed is accompanied with the usual and appropriate warranties for such work or repair, absent any disclaimer previously approved by the City of Midland.

I, the undersigned, release and relinquish unto the City of Midland, and their assigns the above described lien upon the above referenced property and hereby certify that all debts, bills, and expenses incurred by the undersigned, his agents, or subcontractors employed by him in connection with work done at the above

premises have been fully paid, in exchange for payment in full to be made by the City of Midland for the performance on the above described premises.

WITNESS MY HAND on this _____ day of _____, 20_____.

_____
Signature

_____
Typed or Printed Name

_____
Title

_____
Name of Company

SUBSCRIBED AND SWORN to before me on the _____ day of _____, 20_____.

_____
Notary Public, State of Texas

_____
Typed or printed name

_____
My Commission expires:

Form Revised April 2021

City of Midland Specifications

PREPARATION OF RIGHT OF WAY

1. GENERAL

Includes the preparation of right-of-way for construction by clearing, grubbing, removing and disposing of all obstructions and objectionable material from the right-of-way and designated easements, which is not specifically provided for on the plans.

Obstructions and objectionable material refer to all objects or material that do not meet the quality of standards for the courses of pavement to be constructed or which protrude into the excavation for slopes.

Measurement and Payment - Measurement and payment will be at the units and prices for the applicable bid item in the proposal.

When no specific bid items are included in the bid proposal for work specified under this section this work shall be considered as incidental to other items of work and the cost shall be included in the bid for these items. No separate payment will be made.

2. CONSTRUCTION METHODS

Removal - Obstructions and objectionable material to be removed by blading, plowing, bulldozing, or other methods approved in writing by the Engineer. The use of explosives will not be permitted. Solid objects must be removed to a depth of at least one (1) foot below the finished slope or subgrade elevation. Hollow objects must be removed entirely.

Disposal - Material to be removed from the right-of-way becomes the property of the Contractor. If disposal areas are available, they will be indicated on the plans.

Preservation of Trees and Shrubs - Trees and shrubs to be preserved in the right of way are shown on the plans and must be protected from injury during construction.

Removal of Concrete - Cut concrete at the right-of-way line straight and vertical by sawing or other approved methods prior to the removal of concrete in the right-of-way.

EXCAVATION, EMBANKMENT AND PREPARATION OF SUBGRADE 1
1. GENERAL 2
2. CONSTRUCTION METHODS 2

EXCAVATION, EMBANKMENT AND PREPARATION OF SUBGRADE

1. GENERAL

Includes the excavation, embankment and preparation of subgrade determined by the lines, grades and sections shown on the plans and in accordance with the provisions of the specifications.

Excavation - Includes excavation to planned grade, disposal of the material, removal of unsuitable subgrade material and borrow material when required in the construction. All excavation to be classified as common.

Embankment - Consists of excavated or borrow materials placed and compacted in horizontal layers in accordance with the specifications.

Subgrade - The upper eight inches (8") of embankment or the upper eight inches (8") below the roadway excavation finished grade. The subgrade shall extend from six inches (6") back of curb to six inches (6") back of curb where curb and gutter is to be constructed.

Measurement and Payment - Measurement and payment to be at the units and prices for the applicable bid items in the proposal.

2. CONSTRUCTION METHODS

Excavation - Made at the location and to the lines and grades shown on the plans in areas previously prepared in accordance with provisions of Section 2A. Dispose of excess material not required in the embankment and material that is unsuitable for subgrade. Excavation tolerance to be plus or minus 1/10 foot from the plan grade.

The area between the curb and property line shall be excavated or filled, whichever is necessary, to curb height at back of curb and finished to a straight even surface to the property line. The minimum elevation at the property line shall be the elevation of the top of the curb. The maximum elevation at the property line shall be equal to a rise of 1/4 inch per foot from the back of the curb to the property line.

During the excavation of this project, it will be required that all parkways be excavated and shaped at the same time the roadway is excavated. Excess excavation will be disposed of at locations approved by the Engineer.

Embankment shall be constructed at the locations and to the lines and grades shown on the plans in areas previously prepared in accordance with Section 2A of these specifications. Top eight inches (8") of natural ground to be compacted

to embankment density requirements. Embankment shall be constructed from suitable material obtained from the excavation or borrow free of roots, rocks in excess of three inches (3"), debris and other objectionable material. Excavation deficiencies shall be supplemented from a borrow source approved by the Engineer. Embankment shall be constructed in uniform horizontal layers not to exceed eight inches (8") of loose depth and compact with suitable equipment to a minimum of ninety percent (90%) AASHTO T180. The materials shall be processed by aeration or watering to bring the material to the approximate optimum moisture. Dry layers will not be permitted. Soft spots that develop in the embankment shall be removed and replaced with suitable material. No payment will be made for removal of soft spots. Tolerance for embankment grading shall be one-half foot (1/2) plus or minus the plan grade.

Preparation of Subgrade - Eight inches (8") of the upper portion of the embankment or excavation shall be shaped and compacted to a minimum density of 95 percent (95%) AASHTO T180 and finished within a tolerance of one-half inch (1/2") in ten feet (10'). The finished subgrade shall be protected and maintained in a satisfactory condition until covered by succeeding construction.

Compaction Tests - Field density tests will be made by the Owner or by a laboratory selected by the Owner. The Contractor shall notify the Engineer when compaction has been achieved. The Contractor shall allow 24 hours for scheduling of test. Prior to the taking of subgrade density test, the entire subgrade will be tested by proof-rolling using a pneumatic roller weighing not less than 50,000 lbs. gross with tire pressure being not less than 110 psi. Any soft spots, pumping, or other evidence of weakness shall be remedied before density tests are made. Proof rolling shall be in the presence of the Engineer or his duly authorized representative.

The City will pay the cost of initial density tests made on the subgrade. If the subgrade fails to meet the density requirements on the first test, the contractor will be required to have subsequent density tests made by the commercial lab selected by owner. The cost of all subsequent density tests will be born by the contractor.

08/07

CONCRETE CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS,

VALLEY GUTTERS, CENTER DRAINS AND RIP RAP

1. GENERAL

Includes the construction of concrete curb and gutter, sidewalks, driveways, valley gutters, center drains and rip rap in accordance with lines, grades and the sections shown on the plans and constructed in full compliance with provisions of the specifications.

A proven performance record by the Texas Highway Department shall be supplied by material producers for all materials supplied by them.

2. MATERIALS

Concrete - All concrete other than rip rap shall be Class "A" concrete in accordance with Texas Highway Department specifications Item No. 421. Concrete for rip rap shall be the class as shown on the plans and detail drawings. When no concrete class is shown the plans concrete for rip rap shall be Class "B" concrete.

Concrete batch designs shall be furnished for each project and shall include all classes of concrete proposed for use on the project.

Reinforcing Steel - Reinforcing steel shall be deformed bars or wire mesh fabric conforming to the requirements of "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" Item No. 440 and shall be of the sizes and grades as shown on the plans.

The contractor, at his option, may use fiber reinforcing in lieu of the wire mesh for all concrete slab on grade. When fiber reinforcing is used, it shall be "Fiber Mesh" or "Caprolan RC" or approved equal. The material and rate of application shall be approved by the Engineer prior to its use.

Expansion Joints - Bituminous pre-molded joint filler shall be composed of top grade fiber, treated by special impregnation system with water repellent bituminous materials. It shall be a non-extruding type, resilient, expanding on release of compression, preventing open joint crevices. The pre-molded joint filler shall be of such character, that it will not be deformed by handling during hot weather, nor shall it become brittle in cold weather. It shall be free from visible external defects such as holes, ragged or untrue edges, breaks, cracks or tears. It may be covered on both sides with paper to facilitate handling.

The joint filler shall be accurately cut to the dimensions and shapes required. It shall be of the thickness required by the plans, or as specified elsewhere.

3. CONSTRUCTION METHODS

GENERAL

No concrete shall be placed when, in the Engineers opinion, weather or other conditions would be detrimental to the structure placed. No concrete shall be placed on grade when the ground temperature is 35° F or lower. Concrete may be placed when the ground temperature is rising from 35° F. Concrete placed in cold weather shall be protected from freezing for 72 hours after being placed.

CURB AND GUTTER

EXCAVATION AND SUBGRADE - Excavation for curb, gutter, and combined curb and gutter shall be done with the subgrade excavation for the street. Street subgrade shall extend from six inches (6") back of curb to (6") back of curb and shall be compacted for a full width to a minimum of 95% AASHTO T180-61. Where subgrade is more than three inches (3") below bottom of curb, fill shall be compacted caliche base constructed from six inches (6") back of curb to six inches (6") back of curb as specified for base course.

Whenever subgrade or base is dry or dusty, it shall be thoroughly moistened, not made muddy, before the concrete is placed.

Forms - Forms shall be of steel, of a type to be approved by the Engineer, except that curves may be formed with wood sections built up or laminated, upon prior approval by the Engineer.

The forms shall be attached securely to stakes, shall be set true to line and grade, and braced sufficiently to remain true during the placing and tamping of the concrete. Forms shall be thoroughly cleaned and oiled before each use.

Curves - All changes in direction of the curbs shall be by means of true circular curves of the radii as shown on the plans.

Expansion Joints - Expansion joints shall be placed between curb and gutter sections at the tangent points of all curves, at each side of the inlet boxes, drives, alleyways, and at intervals of not more than forty feet (40') in straight runs. The expansion material shall be pre-molded three-fourths inch (3/4") in thickness, and shall conform to the requirements of expansion material as specified herein. It shall be cut to the full size and shape or the cross section of the curb and gutter, less one-half inch (1/2") from the finished surface thereof. The edges of sections against the joint shall be finished with an edging tool and the joint raked clean of concrete.

Finishing - There shall be provided on the job a metal screed or mule designed to give proper shape to the curb and gutter. It shall be bent to the exact shape of the finished curb and gutter and the forward edge turned up slightly to prevent disturbing the mortar. It shall be designed to ride on the forms and when properly manipulated shall leave the curb and gutter in its proper shaped condition. An "S" trowel shall be used to finish the surface and minor imperfections shall be corrected with a mason's trowel. Care shall be taken to finish

the gutter flow line to a true, uniform grade. All edges shall be finished with an edging tool, and joints marked with a jointer. Joint marks shall coincide with actual joints and shall be straight and true.

Curing - The completed curb and gutter, shall be cured in accordance with the requirements of the item "Membrane Curing", Texas Highway Department Item 531.

DRIVEWAYS AND ALLEY RETURNS

Driveways and alley returns shall be constructed of Class "A" concrete to the lines and grades as shown on the plans and detail sheets. All driveways and alley returns shall be reinforced as shown on the detail drawings.

Excavation and Subgrade - Excavation shall be accomplished in the same manner as for streets and curbs. The subgrade for all driveways and alley returns shall be compacted to 95% modified proctor density for 8 inches depth.

Driveways for single family residences and property used for two family residential purposes (duplexes) may be placed on the compacted subgrade. All other driveways shall be considered as commercial driveways and shall be constructed on 6 inches compacted flexible base.

Flexible Base - Commercial driveways and alley returns shall be constructed on 6 inches of flexible base conforming to Section 2-C- Flexible Base, Caliche.

Forms - Forms shall be constructed of steel or, when approved by the engineer, wood conforming to the requirements for curb and gutter forms.

Expansion Joints - Expansion joints shall be placed at the ends of abutting curb and gutter at the end of radii for all driveways and alley returns. In addition, expansion joints shall be placed at the ends of abutting sidewalk sections and at any point where the driveway or alley return abuts another concrete structure. Expansion joint material shall be pre-molded three fourths inch (3/4") in thickness, cut to the shape and dimensions required and shall extend the full depth of the concrete.

Finishing - Shaping and finishing of driveways and alley returns shall be accomplished by using a screed to shape the driveway or alley return to the lines and grade required. Finishing shall be accomplished by use of wooden floats and stiff bristled brushes or brooms. The last finish shall be by brushing or brooming in
A direction transverse to the direction of traffic.

During the entire finishing process care shall be taken to maintain the true gutter invert in line with the street curb and gutter.

Curing - Finished driveways and alley returns shall be cured in accordance with the requirements "membrane curing" "Texas Department of Highways and Public Transportation, 1982 Standard Specifications for Highways, Streets and Bridges", Item Number 531.

CONCRETE VALLEY GUTTERS, CENTER DRAINS AND DRAINWAYS

Concrete slab type street drainage structures with or without curbs, shall be constructed of Class "A" concrete to the lines and grades as shown on the plans and detail sheets or as may be established in the field by the engineer.

Subgrade excavation preparation and compaction and flexible base shall be the same as specified for street construction. All drainage structures within the roadway shall be constructed on a flexible caliche base so that the thickness of the concrete slab plus base is equal to the thickness of the hot mix asphaltic concrete surface plus base.

Forms - Forms shall be as specified for curb and gutter.

Reinforcing - All slab type drainage structures shall be reinforced as shown on the plans and detail drawings. Care shall be taken to maintain all reinforcing in good condition and at its proper location within the slab.

Expansion Joints - Expansion joint material shall be as specified for curb and gutter and for driveways and alley returns.

Expansion joints for valley gutter shall be placed at the ends of radii and at the juncture between the fillet and the cross valley as shown on the detail sheet.

For center drains, expansion joints shall be placed at the ends of widened or transition sections and at each end of a section containing a manhole or other structure and at intervals of sixty feet (60') measured along the center line of the drain.

Additional expansion joints shall be placed where drainage slabs abut backs of curbs, sidewalks and at contact points with other concrete structures.

Contraction Joints - Contraction joints shall be spaced at 15' intervals along the center line of center drains. These contraction joints shall be saw cut 3/8" wide minimum and 1/4 the depth of the slab using an approved concrete saw.

Saw cut contraction joints shall be made after the concrete has set sufficiently to prevent excessive raveling during sawing and shall be completed before the concrete is 48 hours old.

Finishing - Finishing shall be the same as for alley returns and driveways with the last finishing operation for structures subject to vehicular traffic being by broom or stiff brush in a direction transverse to the direction of traffic.

Curing - Curing shall be the same as for curb and gutter and driveways and alley returns.

SIDEWALKS

Sidewalks shall be constructed of Class A" concrete to the lines and grades as shown on the plans and detail drawings or as may be established in the field by the engineer. Sidewalks shall be constructed parallel to the back of the curb and on a grade parallel to

the top of curb grade. The minimum thickness for any sidewalk is 4 inches. The minimum width of any sidewalk is 4 feet.

Excavation and Subgrade - Excavation for sidewalk shall be made with street excavation where applicable. Care shall be exercised in excavating for sidewalks. Any over excavation or any fill required for sidewalk must be brought to grade in lifts not to exceed two inches (2") and thoroughly tamped. Subgrade for sidewalks shall be compacted to at least the density of the adjacent soil or to 85% modified proctor whichever is greater.

When a sidewalk is to be constructed on an embankment the fill must extend at least 3 feet beyond the edge of the sidewalk.

If the subgrade is dry or dusty it must be thoroughly moistened but not made muddy before concrete is placed.

Forms - Forms for sidewalks may be either steel or wood. Forms must be in good shape and true to line and grade. If nominal 2" x 4" lumber is used the subgrade must be finished one half inch (1/2") below the bottom of the form to provide the required 4 inch thickness.

Expansion Joints - Expansion joint material shall be pre-molded conforming to these specifications and shall be one half inch (1/2") thick. The expansion joint shall extend the full depth of the sidewalk.

Expansion joints shall be placed at points where the sidewalk contacts the back of curb, at all junctures between sidewalks all directions, and at all points where the sidewalk abuts a driveway, alley return or other concrete structure including fence foundations.

Transverse expansion joints shall be constructed in the sidewalk at intervals not exceeding twenty eight feet (28') as measured along the centerline of the walk except for sidewalks that are constructed wider than four feet (4') in which case expansion joints may be placed at intervals that are multiples of the width but not exceeding thirty feet (30').

Contraction Joints - Contraction joints consisting of trowel cuts one and one half inches (1-1/2") deep shall be spaced at four foot (4') intervals along the sidewalk. Contraction joints shall be edged using an edging tool with a 1/4 inch or 3/8 inch radius.

For sidewalks wider than four feet (4') contraction joints may be placed at intervals equal to the width of the walk up to but not exceeding ten feet (10').

Finishing - Sidewalks shall be "struck off" with a screed to provide an even surface and float finished using a wooden float.

The final finish on the sidewalk shall be accomplished by brooming or brushing using a stiff bristled brush or broom with the final strokes being in the transverse direction.

Curing - Curing shall be as specified for curb and gutter and driveways and alley returns.

CONCRETE RIP RAP

Concrete rip rap shall be constructed of concrete of the class and to the line and grades as shown on the plans.

Excavation and Subgrade - Care shall be taken not to over excavate for rip rap. The subgrade for rip rap shall be compacted to at least the density of the adjacent undisturbed soil or 85% modified proctor whichever is higher.

Forms - Forms, where required, may be either steel or wood. Forms must be in good condition and true to line and grade.

Expansion Joints - Expansion joints, where required, will meet the requirements of expansion joints materials as specified herein and will be placed as shown on the plans or directed by the engineer.

Finishing - Finishing shall be by screed and wooden float to produce true uniform surface.

Curing - Curing shall be as specified for other concrete herein.

Slope Paving - Slope paving may be required behind the curb or behind sidewalks where street paving requires deeper cuts in developed areas. Slope paving shall be constructed of Class "A" concrete and shall be constructed to the lines and grades as shown on the plans or as established in the field. Slope pavement shall be four inches (4") thick and shall be constructed in accord with the specifications for sidewalks.

When no slope grade is given on the plans the slope gradient shall be l:l.

Unless listed separately on the bid proposal, slope pavement shall be measured and paid for as sidewalk.

4. BACKFILL AND CLEANUP

GENERAL

Backfill and clean up are an integral part of the various items covered by this specification and must be completed for each item before that item will be considered for payment.

CONCRETE STRUCTURES WITHIN THE PAVED AREA OF STREETS

Backfill and clean up for concrete structures within the paved areas of streets, alleys, etc. shall receive special attention to assure the integrity of the street pavement.

Structures constructed in previously paved areas shall have sufficient surface removed along with base and subgrade where necessary to set full face forms for the concrete. As soon as the forms are removed all loose material shall be removed from the form trench and the trench filled to the base level with Portland cement stabilized backfill material

consisting of two (2) sacks Portland cement to one (l) cubic yard of caliche base material or one (l) cubic yard "blow sand". When the cement stabilized backfill has cured the pavement edge shall be saw cut to provide true and straight lines and the pavement restored to its original or revised grade using Hot mix asphaltic concrete conforming to the requirements of Section 2-F of these specifications.

For structures constructed on previously prepared subgrade or base course, clean up and backfill shall be considered complete when the subgrade or base course has been made ready to receive the next course.

When a structure is constructed on a finished base course and it is necessary to remove base material to set forms, backfill and cleanup shall be as described for previously paved areas and shall be considered complete when the base course is made ready to receive the surface course or courses.

BACKFILL BEHIND CURBS AND ALONG SIDEWALKS

Backfill behind curbs and along sidewalks that is to be grassed shall be made using good top soil. Top soil shall be free of caliche, rocks, clods, lumps, debris and other objectionable material. This backfill shall be compacted to at least the density of undisturbed adjacent soil but not less than 85% modified proctor.

Backfill behind curbs and along sidewalks that is to receive paving shall be constructed to conform to the base and subgrade of the adjacent paving and shall be compacted to 95% modified proctor. Or the contractor may elect to backfill to the top of the base with two (2) sack cement stabilized backfill.

In undeveloped areas and in areas where no sidewalks exist the contractor shall slope from the back of the curb to a maximum height of 1/4 inch per foot rise from the top of the curb to the property line on a straight line grade. The minimum elevation at the property lines shall be top of curb elevation.

In deeper cut areas slope paving may be required. When slope paving is required it shall be constructed to the lines and grades shown on the plans. Backfill and shaping beyond the slope paving shall be in accord with the applicable portions of this specification.

08/07

CONCRETE CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS **1**

VALLEY GUTTERS, CENTER DRAINS AND RIP RAP **1**

1. GENERAL 1
2. MATERIALS 1
3. CONSTRUCTION METHODS 2

GENERAL *2*
CURB AND GUTTER *2*
DRIVEWAYS AND ALLEY RETURNS *3*
CONCRETE VALLEY GUTTERS, CENTER DRAINS AND DRAINWAYS *4*
SIDEWALKS *4*
CONCRETE RIP RAP *6*

4. BACKFILL AND CLEANUP 6

GENERAL *6*
CONCRETE STRUCTURES WITHIN THE PAVED AREA OF STREETS *6*
BACKFILL BEHIND CURBS AND ALONG SIDEWALKS *7*

CONCRETE STRUCTURES

1. GENERAL

This specification covers concrete structures including but not limited to junction boxes, culverts, head walls, cast in place manholes, valve vaults, meter vaults and retaining walls.

2. MATERIALS

CONCRETE

Concrete for cast in place manholes, junction boxes, storm sewer inlet boxes, valve vaults and direct traffic culvert and bridge decks shall be a modified class "C" concrete using a minimum of 6 sacks cement per cubic yard with a maximum water content of 5 gallons per sack of cement and producing a concrete with 4000 psi 28 day compressive strength.

Concrete for other structures shall be class "A" as specified in "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" item number 421. Concrete for riprap shall be class "B".

Reinforcing steel shall conform to the requirements of item number 440 or "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" and shall be of the sizes and grades as shown on the plans.

3. CONSTRUCTION

Construction of concrete structures shall be in accordance with the provisions of item 420 "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges".

FLEXIBLE BASE, CALICHE 1
1. GENERAL 2
2. MATERIALS 2
3. CONSTRUCTION 3
4. TESTING 3

FLEXIBLE BASE, CALICHE

1. GENERAL

This item consists of the construction of a caliche flexible base course to the lines, grades and thickness shown on the plans and in accordance with the provisions of the specifications.

Qualification of Material Source - There will be no designated material sources, but the source proposed by the Contractor must be approved by the Engineer. The contractor shall furnish evidence of capability to crush and screen the material with suitable equipment.

Measurement and Payment - Measurement and payment to be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Material from the approved source shall meet the following requirements when tested in accordance with the referenced testing standards:

Gradation - Tested by ASTM C 136-67 to meet the following gradation limits:

Sieve Size	Percent Passing
1-3/4"	100.0
7/8"	65-90
3/8"	50-70
No. 4	30-60
No. 40	15-35

Liquid Limit and Plasticity Index - Tested by ASTM D423-66 and D 424-59.

Liquid Limit - 30.0 Maximum
Plasticity Index - 10.0 Maximum
Triaxial Classification - Tested by Texas Highway Department Method TEX 117-E, Part II - minimum class 3.0.

Source Quality Control - The contractor shall exercise caution in the operation of the material source to prevent the inclusion of inferior materials.

3. CONSTRUCTION

A. The subgrade shall be finished true to the lines and grades as shown on the plans or as established by the Engineer and finished within specified tolerances and properly maintained to prevent drying and/or loosening of the surface.

No base material may be dumped on any subgrade until it has been tested and approved by the Engineer.

B. Flexible caliche base material shall be placed in uniform courses and processed to provide a uniformly mixed base course of the proper moisture content for compaction. The processing and compaction procedure used shall provide a uniform base course compacted to ninety-five percent (95%) modified proctor density (YACHT T180) minimum. The minimum thickness of any one compacted course shall be three inches (3"). The maximum thickness of any one compacted course shall be eight inches (8").

Any soft or segregated spots that appear in the base shall be removed, replaced or reprocessed and recompacted prior to final finishing of the base. The finished base shall conform to the lines and grades as shown on the plans or established by the Engineer. Finished tolerances shall not exceed one half inch (1/2") in ten feet (10').

The finished base shall be primed as soon after finishing as practical and shall be protected until the hot mix asphaltic concrete surface is applied. In no case will prime be applied until the finished base has been approved by the Engineer.

4. TESTING

A. All test for approval of the source shall be performed by a commercial lab selected by the owner and shall be paid for by the contractor.

B. Gradation and soil constants tests (ASTM C-136, D423 and D424) and THD Triaxial Test (THD TEX117-E Part II) will be performed for source approval. Should the appearance, workability or other visual checks indicate a possible change in the material being furnished, the Engineer may require the contractor to retest the material for source approval.

C. Field quality control test will consist of the finish tolerance test and density test.

The finish tolerance test will be performed by the contractor at his expense using a 10' rolling straight edge. This test shall be performed at the direction of the Engineer or his representative. When required, the test shall consist of checking one path in each lane with the rolling straight edge.

Density test will be made by the City or a commercial laboratory chosen by the City using Troxler 3411-B nuclear density gauges or approved equal at the minimum rate of one test for each 1000 square yards of base. In no case shall less than three tests be run on any one area processed as a unit. The City will bear the cost of the first test or set of tests only. If the base fails the first test the contractor, at his own expense, will be required to have all subsequent tests performed by the commercial laboratory chosen by the city.

8/07

BITUMINOUS PRIME

1. GENERAL

This item consists of the application of a bituminous prime coat to the finished caliche base in accordance with the provisions of the Specifications.

Qualification of Material Source - Material shall be supplied by a producer with a proven performance record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment will be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Cut-back asphalt grade MC-30, Texas Highway Department Item 300.

Source Quality Control - Certificates of compliance to be furnished by the producer to the Engineer.

3. CONSTRUCTION METHODS

Condition of Base - The surface of the base shall be tightly compacted to the line and grade shown on the plans and within the tolerances of the specifications. The surface shall be clean and the base shall contain sufficient moisture to assure the proper penetration of the prime.

The prime shall be applied with an approved distributor to the surface of the base at a rate of between 0.15 and 0.40 gallon per square yard. The application rate shall be varied to meet field conditions and to obtain uniform coverage, and adequate penetration. Properly applied prime coat should penetrate from 3/8" to 1/2" into the base and should cure in approximately 72 hours with ambient temperatures at or near 70 degrees F. The prime shall be applied at a temperature within the range of temperatures recommended in Item 300 of Texas Highway Department Standard Specifications. The temperature shall be varied within this range to provide a viscosity that will assure even spreading and penetration of the base. Air Temperatures at the time of application shall be above 50'F.

BITUMINOUS TACK

1. GENERAL

This item consists of the application of a bituminous tack coat to the primed base or existing asphaltic concrete or Portland cement concrete pavement in accordance with the provisions of the specification.

Qualification of Material Source - Material shall be supplied by producer with a proven performance record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment will be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Cut-back asphalt grade RC-250, Texas Highway Department Item 300.

3. CONSTRUCTION METHODS

Conditions of Surface - Prior to application of tack to the base course the prime must be completely penetrated into the base and the surface cleaned of foreign objects.

The tack shall be applied with an approved distributor at a rate of between 0.05 and 0.10 gallons per square yard. The temperature of application shall be within the range recommended by the Texas Highway Department in Item 300. The surface temperature to which tack is being applied shall be above 50 degrees F. at the time of application.

When the asphaltic concrete surface is being placed on primed caliche base, use of the tack coat may be waived by the Engineer if the contractor can show that adequate adhesion of the surface being placed to the base course is achieved without it.

Tack coat shall be placed on all asphaltic concrete or portland cement concrete surfaces on which an additional course of asphaltic concrete surfacing is to be placed. The tack coat shall be rolled with a pneumatic roller to assure even distribution over the entire surface and to achieve proper penetration into and adhesion to the surface being overlayed.

HOT MIX ASPHALTIC CONCRETE

I. GENERAL

Includes the construction of the hot mix asphaltic concrete surface in accordance with lines, grades and the sections shown on the plans and with the provisions of the specifications.

Qualification of Material Sources - Producers of oil asphaltic concrete mixture to have a proven record of acceptance by the Texas Highway Department.

Measurement and Payment - Measurement and payment to be at the units and price for the applicable bid item in the proposal.

2. MATERIALS

Oil Asphalt - Oil asphalt grade AC-l0 or AC-20, Texas Highway Department Item 300. When no asphalt grade is shown on the plans, and unless directed otherwise by the Engineer, asphalt for this project shall be grade AC-10.

Coarse Aggregate - Crushed stone or crushed gravel with a minimum of 75 percent of the aggregates having two or more crushed faces. Additional requirements:

(a) Los Angeles Abrasion: ASTM C l3l, Wear not to exceed 40.

(b) Decantation: Maximum 2.0 percent by weight

Fine Aggregates - Natural sand and screenings crushed from the same or similar material meeting the requirements of the course aggregates. Additional requirements.

(a) Plasticity Index: Maximum of 6.

(b) Sand Equivalents: Minimum of 50 for each individual fine aggregate.

Paving Mixtures - The paving mixture(s) shall be as shown on the plans and details. If no mixtures are shown on the plans surface or wearing courses up to l-3/4 inches thick shall be Type D, base courses up to 2 inches thick shall be Type C and base courses over 2 inches thick shall be Type B or Type A.

(a) Gradation: The master gradations for the paving mixtures are:

TYPE "A" (Coarse Graded Base Course):	Percent Aggregate by weight or volume
Passing 2" sieve	100
Passing l-3/4" sieve	95 to 100
Passing l-3/4" sieve, retained on 7/8" sieve	16 to 42
Passing 7/8" sieve, retained on 3/8" sieve	16 to 42
Passing 3/8" sieve, retained on No. 4 sieve	10 to 26
Passing No. 4 sieve, retained on No. l0 sieve	5 to 21
Total retained on No. l0 sieve	68 to 84
Passing No. l0 sieve, retained on No. 40 sieve	5 to 21
Passing No. 40 sieve, retained on No. 80 sieve	3 to 16
Passing No. 80 sieve, retained on No. 200 sieve	2 to 16
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

TYPE "B" (Fine graded Base or Leveling-up course)	Percent Aggregate by Weight or Volume
Passing l" sieve	100
Passing 78" sieve	95 to 100
Passing 7/8" sieve, retained on 3/8" sieve	21 to 53
Passing 3/8" sieve, retained on No. 4 sieve	11 to 42
Passing No. 4 sieve, retained on No. l0 sieve	5 to 26
Total retained on No. l0 sieve	58 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 21
Passing No. 80 sieve, retained on No. 200 sieve	3 to 21
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

Type "C" (Coarse Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing 7/8" sieve	100
Passing 5/8" sieve	95 to 100
Passing 5/8" sieve, retained on 3/8" sieve	16 to 42
Passing No. 4 sieve, retained on No. l0 sieve	11 to 37
Total retained on No. l0 sieve	54 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 27
Passing No. 80 sieve, retained on No. 200 Sieve	3 to 27
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 7 percent of the mixture by weight.

TYPE "D" (Fine Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing l/2" sieve	100
Passing 3/8" sieve	85 to 100
Passing 3/8" sieve, retained on 4" sieve	21 to 53
Passing No. 4 sieve, retained on No. l0 sieve	54 to 74
Total retained on No. l0 sieve	54 to 74
Passing No. l0 sieve, retained on No. 40 sieve	6 to 32
Passing No. 40 sieve, retained on No. 80 sieve	4 to 27
Passing No. 80 sieve, retained on No. 200 sieve	3 to 27
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 4 to 8 percent of the mixture by weight.

TYPE "F" (Fine Graded Surface Course):	Percent Aggregate by Weight or Volume
Passing 3/8" sieve	100
Passing No. 4 sieve	95 to 100
Passing No. 4 sieve, retained on No. l0 sieve	58 to 73
Passing No. l0 sieve, retained on No. 40 sieve	6 to 26
Passing No. 40 sieve, retained on No. 80 sieve	3 to 13
Passing No. 80 sieve, retained on No. 200 sieve	2 to 11
Passing No. 200 sieve	1 to 8

The asphaltic material shall form from 3.5 to 6.5 percent of the mixture by weight.

(b) Tolerances: Deviations from job mix formula limited to:

(l) Sizes larger than the l0 sieve- Plus or Minus 4 percent.

(2) No. l0 sieve and smaller - Plus or Minus 3 percent.

(3) The deviation from the job mix formula shall be further limited in that the total deviation from the job mix formula between any two adjacent aggregate grades shall not exceed the allowable deviation for either one.

(4) Asphalt - Plus or Minus 0.3 percent.

(c) Density - The mixture shall be designed to produce an acceptable mixture within tolerance, at or near optimum density. The mixture molded in the laboratory should have the following percent of maximum theoretical density:

Minimum	Maximum	Optimum
96	98	97

(d) Stability: Minimum of 35 Hveem

Source Quality Control - Paving mixture and plant tests to be performed by laboratory selected and paid by the Owner, except as noted.

Job Mix Formula - The contractor shall submit a job mix formula, prepared by laboratory chosen by the owner, at least l0 days in advance of laying operations to allow time for review by the engineer. Substitution of one or more materials will require a new job mix formula and must be approved by the engineer.

The design of job mix formula whether for original submittal or revisions shall be paid for by the contractor.

Plant Tests - Check of raw material uniformity, quality and flow, hot bin gradations, temperature of mixture, mixture tests for density, stability and percent asphalt and other necessary tests to be performed bythe laboratory selected by the owner for each day's production.

Oil Asphalt - Producer to furnish certificates of compliance to the Engineer.

3. CONSTRUCTION METHODS

A. GENERAL

Condition of Base - The surface of the base shall be tight and free of debris. The prime coat shall be uniformly distributed, well penetrated and completely cured prior to application of the tack coat. If the mixture will adhere to the surface of the base without the application of a tack coat, the tack coat can be eliminated. If the surface of the base is one half (l/2") inch or more lower than the proposed bottom of the asphaltic concrete it shall be corrected by placing and compacting a level up course of the asphaltic concrete before the mat is placed on it.

Stockpiling, Storage, Batching and Mixing - Shall meet the requirements of Item 340, "Texas Highway Department l982 Standard Specifications for Road and Bridge Construction.

Weather Limitations - Shall be the requirements of Item 340,"Texas Highway Department l982 Standard Specifications for Road and Bridge Construction." With the added provision that no asphaltic concrete shall be placed when the surface on which the mat is to be placed is below 50 degrees F.

Thickness - Shall be as shown on plans. Unless shown otherwise on the plans, the maximum compacted thickness of any one course of asphaltic concrete shall be two and one-half (2-l/2) times the maximum aggregate size of the mixture being placed. The minimum shall be one (l) inch or one and one fourth (1-1/4) times the maximum particle size which ever is greater.

B. PLACING

Placing of Asphaltic Concrete shall be accomplished using an approved self propelled spreading and finishing machine with a heated vibrating screed capable of producing a surface that will meet the requirements of the typical cross section and the surface test, and when the mixture is dumped directly into the finishing machine shall have adequate power to propel the delivery vehicles in a satisfactory manner. The finishing machine shall be equipped with a flexible spring and/or hydraulic type hitch sufficient in design and capacity to maintain contact between the rear wheels of the hauling equipment and the pusher rollers of the finishing machine while the mixture is being unloaded.

The use of any vehicle which requires dumping directly into the finishing machine and which the finishing machine cannot push or propel in such a manner as to obtain the desired lines and grades without resorting to hand finishing will not be allowed. Vehicles dumping directly or indirectly into the finishing machine shall be so designed and equipped that unloading into the finishing machine can be mechanically and/or automatically operated in such a manner that overloading the finishing machine being used cannot occur and the required lines and grades shall be obtained without resorting to hand finishing.

Automatic screed controls will be required and shall meet the requirements item, 528 "automatic screed controls for asphaltic concrete spreading and finishing machines "Texas Department of Highways and Public Transportation 1982 Specifications for Construction of Highways, Streets and Bridges".

The screed shall be ski controlled using a ski of not less than l8' in length. Curb shoe control will not be allowed.

The spreading and finishing machine shall be maintained in good working order and operated by competent trained personnel.

The Engineer may require the contractor to place a test strip to prove the capability of the machine and the competency of the operating personnel to produce a satisfactory finished surface.

In dips and on curved surfaces where the ski control cannot be used, the surface will be controlled using a l0' straight edge.

Fillet areas, turn outs and other areas not accessible to the spreading machine may be hand laid provided a satisfactory surface is produced.

C. COMPACTION AND FINISHING

Compaction Requirements - The asphaltic concrete surface shall be compacted so that the compacted mixture will contain not more than seven percent (7%) nor less than three percent (3%) air voids.

The surface of the pavement, after compaction, shall be smooth and true to the established line, grade and cross section, and when tested with a l0 foot rolling straightedge, except as provided herein, the maximum deviation shall not exceed l/8 inch in l0 feet, and any surface not meeting this requirement shall be corrected as directed by the engineer.

Raking and Leveling - Minor leveling may be accomplished using asphalt rakes prior to compacting the surface. The surface shall be leveled by loosening the surface of the asphaltic concrete using an asphalt rake then adding or removing material and smoothing the surface. Any large aggregate worked to the surface in this process shall be removed before compaction. The large aggregate shall not be spread over the new asphaltic concrete surface.

Edges and joints with compacted asphalt or concrete gutters shall be carefully squared and excess material removed before compaction. Care shall be taken to see that NO excess material laps over onto the surface of existing asphaltic concrete paving or concrete gutters. Large aggregate worked to the surface in this process shall be removed. It shall not be spread over the new asphaltic concrete surface.

Rolling - In general rolling shall conform to the requirements of item 340 of the Texas Department of Highways and Transportation 1982 Specifications for Construction of Highways, Streets an Bridges except as modified herein.

It shall be the responsibility of the contractor to have rolling equipment available on the job to properly compact the paving mixture in place as required without delay to the lay down operation. Rollers provided shall meet the qualifications for their type as follows:

PNEUMATIC TIRE ROLLERS: The rollers shall be acceptable medium pneumatic tire rollers conforming to the requirements of the item, "Rolling (pneumatic tire)", Type B, unless otherwise specified on plans.

TWO AXLE TANDEM ROLLER: This roller shall be an acceptable power driven tandem roller weighing not less than 8 tons.

THREE WHEEL ROLLER: This roller shall be an acceptable power driven three wheel roller weighing not less than l0 tons.

THREE AXLE TANDEM ROLLER: This roller shall be an acceptable power driven three axle roller weighing not less than l0 tons.

Vibrating rollers will not be used without prior written approval of the engineer. Written approval will be granted only upon demonstration by the contractor that the roller and operator can produce a satisfactory surface within the tolerances of these specifications. Only the operator or operators thus approved will be allowed to operate the vibrating roller on this project.

Areas not accessible to standard rollers shall be compacted using trench rollers, impact tampers, hand tamps or other approved means that will produce the density and surface required.

JOINTS- Shall be carefully rolled to provide compaction of the asphalt against the existing surface or face of the concrete gutter. Joints between concrete gutters and Hot Mix Asphaltic Concrete shall be placed so that the HMAC will be approximately l/2 inch higher than the concrete when compaction is completed. At transverse joints such as valley gutters and fillet areas where finishing asphalt paving 1/2 inch above the edge of concrete will adversely affect ride quality the asphalt shall be finished 1/4 inch above the edge of the concrete.

Transverse joints shall be rolled in the transverse direction with the first pass extending approximately six (6") inches onto the new asphalt each additional pass shall extend approximately twelve (12") inches further onto the new asphalt until the full width of the roller is on the new asphalt. Longitudinal rolling may begin then.

All transverse joints shall be checked with a l0" straight edge while the material is

still hot enough to roll. Any corrections shall be made by loosening the material using an asphalt rake and adding or removing material and recompacting the surface. The surface shall be rechecked and when the joint is acceptable the asphalt spreading machine may proceed with the pass.

Final or finish rolling shall be accomplished using a two axle tandem roller to remove roller marks. This rolling shall be accomplished after the surface has cooled sufficient to minimize further marking but before it is too cool to respond to rolling.

STRAIGHTEDGES AND TEMPLATES - The contractor shall provide acceptable l0 foot straightedge for surface testing. Satisfactory templates shall be provided as required by the Engineer.

4. FIELD QUALITY CONTROL

Test Lots - Field Quality Control Tests shall be made by lot with a lot being the amount of contiguous surface laid in one day. No lot shall exceed l0,000 S.Y. If a days laying exceeds l0,000 S.Y., that days laying shall be divided into two approximately equal lots. The same lot divisions shall be used for all Quality Control Tests. Each separate block or combination of contingeous (blocks) of paving shall be considered as a separate lot even though they may be placed in a single day and do not comprise l0,000 S.Y. of surface.

Surface Tests - Surface tolerance tests will be performed in both longitudinal and transverse directions. The test for longitudinal surface tolerance will be performed with a ten-foot rolling straightedge furnished by the contractor, and calibrated and used in accordance with the manufacturer's recommendation or other approved method.

The maximum allowable deviation in surface shall be 1/8 inch in 10 feet. Tests for longitudinal surface tolerance will be performed by the contractor, accompanied by the engineer within 24 hours of the completion of a lot. One path in each lane for the length of the entire lot will be tested. The location of the test path (Distance from centerline or pavement edge) will be determined by the engineer through the use of random numbers. Any deviations in the surface finish of a roadway wearing course which exceeds l/4 inch must be corrected. After corrections have been made, the entire lot must meet the l/8 inch surface tolerance.

Thin course "scab on" patching will NOT be permitted. Corrections may be made by planning, milling and patching or by removing and replacing affected surface area.

When milling and patching is used to correct surface defects the minimum depth of removal shall be l".

For milling and patching or surface removal the area removed or milled shall be sufficiently large to avoid the appearance of patching.

When planning is used to correct defects the thickness of the remaining paving shall meet the thickness requirements as shown on the plans.

Surface tolerance test will be performed on the last or wearing course only.

Asphaltic concrete pavement constructed under these specifications that does not meet the surface tolerance requirements and is allowed to remain in place will be paid for at a reduced rate determined by multiplying the price bid for the wearing surface course by a surface tolerance quality factor. This rate shall apply to the entire lot.

Lower courses will not be affected by this quality factor but will be paid for at the price bid or such price as it may be affected by other quality factors.

The surface tolerance quality factor will be determined according to the following schedule:

Linear % of pavement exceeding 1/8 inch surface tolerance	Surface tolerance quality factor
0.0 to 1.0	1.0
1.1 to 1.5	0.9
1.6 to 2.5	0.8
over 2.5	0.5

Roadway surface requirements will not be applied for paved drives, aprons, turnouts, and other irregular sections, however, asphaltic concrete shall be placed in such a manner as to provide a neat and uniform appearance and shall be compacted by methods satisfactory to the engineer.

The contractor may request permission to reconstruct a portion of the pavement when, in his opinion, the surface tolerance quality factor can be improved. Upon approval of the engineer, the contractor shall take sufficient tests to isolate the portion or portions of pavement to be pre- constructed and remove and reconstruct the pavement. All costs in connection with this reconstruction are to be born by the contractor. The minimum width of this reconstruction shall be l/2 the street width unless approved otherwise in writing by the engineer. The portions reconstructed shall be re-tested and the surface tolerance quality factor recomputed using the new information along with the test from the area within the portion of the lot not reconstructed.

When other quality factor reductions are provided for on the plans or in the specifications the effect shall be cumulative ie: QFl x QF2 x QF3 x ....x QFn x unit price.

No payment will be made for pavement with a combined quality factor of less than 0.5.

Thickness Test - Thickness test will be made by the engineer on each course of asphaltic concrete laid. Test specimens shall be made by a commercial laboratory selected by the owner. Test specimens shall be cores having a minimum nominal diameter of 6". These cores shall be made in the presence of the inspector at locations designated by the inspector using an approved power operated coring machine.

For thickness and compaction test, each lot shall be divided into approximately equal sublots corresponding in width to each pass of the lay down machine and containing up to but not exceeding 2,000 square yards each. If a lot contains less than 2,000 square yards the engineer may, at his option, divide the lot into two equal sublots, or, if the contractor has a record of satisfactory workmanship, the engineer may waive tests on said lots.

The engineer will locate one test spot for each l,000 S.Y. and/or fraction thereof in each sub-lot using random numbers. If a spot thus located falls within one foot of a longitudinal joint or lip of gutter or within two feet of an unsupported edge or within l5 feet of the beginning or ending edge of a pass, the engineer will relocate the spot using random numbers. The commercial laboratory chosen by the owner will remove the test specimen from each designated spot, mark the specimen and the adjacent pavement for future reference and perform the required tests. Test specimens shall be removed with special caliper type tongs having circular jaws of the diameter of the specimen being removed. These jaws shall grip at least 1/2 of the circumference of the specimen. Screw drivers or other type of prying instruments shall not be used to remove the specimens.

The thickness of a specimen shall be determined by averaging four (4) measurements made at ninety degree (90) intervals around the specimen. Any thickness less than design thickness shall be considered as deficient.

For hot mix asphaltic concrete pavement less than 2 inches thick the maximum allowable deficiency in any one test specimen is l/8 inch provided that no more than twenty five percent (25%) of the specimens tested show a deficiency. For pavement in excess of 2 inches in thickness the maximum allowable deficiency in any one specimen shall be l/8 inch plus l/l6 inch for each additional inch of thickness provided that no more than twenty five percent (25%) of the test specimens show a deficiency.

When a test specimen has a greater deficiency and less than (25%) of the test specimens show a deficiency the contractor shall, at his own expense, determine the extent of the deficiency and correct it by removing and replacing the surface. The minimum width for such correction will be the full width of the pass or passes of the lay down machine in which the deficiency occurs.

The minimum length of such correction shall be three times the width removed. When more than (25%) of the test specimens show a deficiency the surface may at

the engineers option be declared uniformly deficient and the contractor shall correct the deficiency by removing and reconstructing the surface or by constructing an overlay of not less than l inch thickness over the deficient area. The construction of an overlay will require milling at lip lines and dips.

The corrected surface shall meet all the requirements of these specifications.

Asphaltic concrete pavement constructed under these specifications that is less than design thickness, if allowed to remain in place, will be paid for at a reduced rate determined by multiplying the unit price bid in the bid proposal by a thickness quality factor. This rate shall apply to the entire lot in which the deficiency is found.

The thickness quality factor for hot mix asphaltic concrete pavement less than 2 inches in thickness shall be:

Thickness Deficiency	Quality Factor
Maximum l/8" for any one specimen with no more than 25% of the specimens showing a deficiency.	l.0
Pavement not meeting the 25% limitation with an average specimen deficiency up to l/8 inch.	0.75
Average specimen deficiency of l/8 inch to l/4 inch	.55
Average deficiency of more than l/4 inch	0.0

The thickness quality factor for hot mix asphaltic concrete more than 2 inches thick will be l.0 if the maximum deficiency for any one specimen is l/8 inch plus l/l6 inch for each additional inch of thickness over 2 inches and not more than twenty five percent (25%) of the test specimens in the lot are deficient. For thickness test that fall outside this area either by single specimen thickness deficiency or more than twenty five percent (25%) of the specimens showing deficiency the thickness quality factor shall be computed as follows:

$$\text{Thickness Quality Factor} = \frac{1}{\left(\frac{1}{\text{Thickness Ratio}}\right)^2}$$

The thickness ratio for a lot is the average specimen thickness for that lot, with no allowance for thickness in excess of design, divided by the design thickness. For determining the average specimen thickness, those specimens in excess of design thickness shall be considered at design thickness.

The minimum thickness quality factor for which payment will be allowed is .55. Any pavement with a thickness quality factor below .55 will be considered as having a thickness quality factor of 0. This shall apply only if the contractor requests, in writing, to have this paving remain in place and this request is approved in writing by the engineer.

When the deficient area is in a lower course of a multi-course paving structure the contractor may reduce or correct the deficiency by increasing the thickness of the subsequent course or courses as follows:

When subsequent course is	Maximum increase in course thickness
Type B	1/2"
Type C	3/8"
Type D	1/4"

When corrected in this manner the thickness quality factor shall be determined using the combined thickness of the corrected courses and shall apply to all unit prices applicable to this lot.

The contractor may request permission to reconstruct a portion of the pavement when, in his opinion, the thickness quality factor can be improved. Upon approval of the engineer, the contractor shall take sufficient tests to isolate the portion or portions of pavement to be reconstructed and remove and reconstruct the pavement. All cost in connection with this reconstruction are to be born by the contractor. The minimum width of this reconstruction shall be l/2 the street width unless approved otherwise in writing by the engineer. The portions reconstructed shall be retested and the thickness quality factor recomputed using the new information along with the test from the area within the portion of the lot not reconstructed.

When other quality factor reductions are provided for on the plans or in the specifications the effect shall be cumulative ie: QFl x QF2 x QF3 x....x QFn x unit price.

No payment will be made for pavement with a combined quality factor of less than 0.5.

Compaction Test: Compaction test will be made by the commercial laboratory chosen by the owner on the core samples removed from the paving for thickness testing.

The percent air voids will be calculated using maximum theoretical specific gravity of the mixture.

The contractor may attempt to correct deficiencies in compaction by additional pneumatic rolling upon written permission of the engineer. Requests for permission to conduct additional rolling shall be submitted, in writing, to the engineer no later than three days following notification of the deficiency by the commercial laboratory and the additional rolling shall be completed within ten (l0) days following said notification weather permitting.

In no case shall the additional rolling be delayed beyond thirty (30) days from the date the surface was laid. All cost for additional rolling and additional coring and testing of the re-rolled surface shall be born by the contractor.

Asphaltic concrete pavement not meeting this specification and that is allowed to remain in place shall be paid for at a reduced rate determined by multiplying the price bid in the bid proposal by a compaction quality factor determined according to the following schedule:

Percent air voids (average of all specimens for the lot)	Compaction Quality factor	
less than 3	0	
3.0 to 8.0	1.0	
8.1 to 9.0	0.9	
9.1 to 10.0	0.7	
10.1 to 11.0	0.5	and the engineer may require a chip seal to be applied at the contractor's expense
More than 11		0 and the engineer may require a chip seal to be applied at the contractor's expense.

NOTE: HMAC surfacing with between 11% and 15% air voids may, upon written request by the Contractor, be reviewed by the Engineer to determine if it may be left in place. The Engineer's review will consider the type of street and expected traffic conditions among other factors and a written determination will be issued. If the surface is allowed to remain in place, a chip seal will be required at the Contractor's expense. The quality factor for this paving will remain at 0.

The reduced rate shall apply to the entire lot.

The effect of compaction quality factors shall be cumulative and shall be applied as described for surface quality factors and thickness quality factors.

Cost for Field Quality Control - The surface tolerance test shall be made by the contractor at his expense.

The initial thickness and compaction test will be made at no cost to the contractor except for the cost of materials and labor to repair the holes left when cores are removed.

The cost of all thickness test to isolate a deficient area and the cost of retesting the corrected area shall be born by the contractor.

The cost of all retesting of compaction after additional rolling to correct compaction deficiencies shall be born by the contractor.

Areas reconstructed to remedy deficiencies shall meet all the requirements of these specifications and shall be tested in the same manner as original construction. The cost of all tests on reconstructed areas shall be born by the contractor.

5. ADDITIVES

Anti-stripping: An approved liquid anti-stripping agent shall be added to the asphalt used in the hot mix asphaltic concrete. The rate of application shall be in accordance with the manufacturer's recommendation. The minimum anti-stripping agent added shall be one-half (l/2) of l%.

The anti-stripping agent used shall have a proven record when used with similar aggregate and shall be approved by the engineer in writing prior to the date set for reception of bids.

DOUBLE COURSE ASPHALT SURFACE TREATMENT

1. SCOPE

The work to be done under this section consists of furnishing all labor, materials and equipment necessary to construct a Double Asphalt Surface Treatment on the prepared base course in accordance with the sections shown on the plans and as specified herein or as directed by the Engineer.

2. MATERIALS

2.1 Asphalt

The asphalt used shall be of the grade and type specified below. The material shall be homogeneous and free from water, shall not foam when heated to 347° F., and shall meet the following requirements.

Viscosity Grade AC-5
Texas Highway Department 1982 Specifications

Viscosity 140 F. Stokes	500 +/- 100	
	Min.	Max.
Viscosity 140 F. Stokes	1.4	--
Penetration 77° F. 100 g. 5 sec.	135	--
Flash Point C.O.C.F.	425	--
Solubility in trichlorethylene percent	99.0	--

Tests on residues from thin film oven test:

Viscosity 140 F. Stokes	--	1500
Ductility, 77° F. 5 cms per min. cms.	100	--

Spot Test – negative for all grades.

2.2 Aggregate

All aggregate shall be composed of sound and durable particles of crushed stone or crushed gravel. At least eighty-five percent (85%) of the particles of the aggregate retained on the No. 4 sieve shall have one or more crushed faces. Aggregate particles shall be free from organic matter, clay, loam, or pebbles coated therewith, and shall not contain more that (5%) of slate, shale, schist or soft particles of sandstone. The aggregates shall have a percent of wear of not more than thirty-five (35). (Los Angeles Abrasion Tests of Coarse Aggregate, AASHO Designation

T-96 as revised). Crushed limestone will not be acceptable for this project.

Double Asphalt Surface Treatment

No. 1 Aggregate –	Retained on ¾" Sieve -	0% by weight
(Texas Highway	Retained on 5/8" Sieve -	0 – 2% by weight
Department 1982	Retained on ½" Sieve -	20, 35% by weight
Grade 3)	Retained on 3/8" Sieve -	85 – 100% by weight
	Retained on ¼" Sieve	95 – 100% by weight
	Retained on No. 10 Sieve-	99-100% by weight

No. 2 Aggregate -	Retained on ½" Sieve -	0% by weight
(Texas Highway	Retained on 3/8" Sieve -	0 – 5% by weight
Department 1982	Retained on No. 4 Sieve -	40 – 85% by weight
Grade 5)	retained on No. 10 Sieve -	98 –100% by weight
	Retained on No. 20 Sieve-	99 100% by weight

3. CONSTRUCTION METHODS

3.1 Preparation of base

If the surface of the base course is not in proper condition for placement of surfacing, it shall first be brought true to the section and grade as established. The base shall be checked, and any deviation in excess of ¼-inch from grade or from true cross section shall be corrected by scarifying then adding or removing material, reshaping and re-compacting by sprinkling and rolling. No "scab" or "featheredge" patches will be permitted. After correction of any defects in the base, it shall be cleaned of dirt, dust, or other deleterious material by sweeping or other approved methods and primed.

The base course shall be primed with MC-30 Asphalt as directed by the Engineer. The asphalt used shall meet the 1982 Texas Highway Department Specifications Item 300.

The base course shall be checked at least 24 hours in advance of placing the surfacing and any defects shall be repaired and re-primed. Immediately prior to placing the surfacing, the base shall be cleaned of all dirt, dust, or other deleterious materials by sweeping with rotary and hand brooms or other approved methods.

Prime coats shall not be applied more than 7 days in advance of placing the surface course. Areas that have been primed longer than the time

specified above prior to placing the surface course shall be re-primed at the Contractor's expense.

3.2 Handling and Applying Asphalt

All storage tanks, piping, retorts, booster tanks, and distributors used in storing or handling asphalt shall be kept clean and in good operating condition at all times, and they shall be operated in such a manner that there will be no contamination of the asphalt with foreign material. Asphalt shall not be heated above 400° F. at any time, and when applied, it shall be at a temperature of not less than 300° F. and not more than 350° F. The Engineer will select the temperature of application, and the Contractor shall apply the asphalt at a temperature within 15° of the temperature selected. All asphalt material heated above 400° F. will be rejected. Re-circulating heating equipment shall be equipped with recording temperature gauges.

The prime coat shall not be applied when the air temperature is below 50° F. and falling or when in the opinion of the Engineer weather conditions are not suitable. Prime coat shall not be applied when the temperature of the surface on which it is to be applied is less than 40° F. The prime coat shall be applied at least 24 hours in advance of placing the surface course. Prime coat shall be applied with an approved distributor at a rate of 0.30 gallon per square yard, or as directed by the Engineer.

Double Asphalt Surface Treatment shall not be applied when the temperature of the surface on which it is to be placed is below 50° F. and is falling but may be applied when the air temperature is above 40° F. and rising. No asphalt shall be placed when general weather conditions, in the opinion of the engineer, are unsuitable. No double asphalt surface treatment shall be placed from September 30 to April 15.

Asphalt shall be applied on the clean surface by an approved type of self-propelled pressure distributor so operated as to distribute the material in the quantity specified, evenly and smoothly, under a pressure necessary for proper distribution. The Contractor shall provide necessary facilities for determining the temperature of the asphalt in all of the heating equipment and in the distributor, for determining the rate and pressure at which it is applied, and for securing uniformity at the junction of two distributor loads. The beginning and ending of each shot of asphalt shall start and stop on a strip of heavy craft paper of not less than thirty (30) inches in width.

In areas inaccessible to the distributor, asphalt shall be applied by means of a hose and spray nozzles attached to the distributor. Care shall be

taken during application of any asphalt to shield the curb and gutter from the asphalt spray; satisfactory means of handling this matter will be insisted upon.

3.3 Application of Aggregate

Immediately after making the first application of asphalt, the surface shall be covered with No. 1 aggregate. The aggregate shall be spread with an approved self-propelled continuous feet aggregate spreader box, or approved equal, at rates as specified below or as directed by the Engineer. If necessary to obtain uniform distribution of aggregates, hand brooming and hand spotting of aggregates will be required. After completion of placing the aggregates, all areas shall be bull-wheeled with a three- wheeled roller weighing not less than 8 tons followed immediately by two complete passes with an approved self propelled pneumatic roller.

The second application of asphalt shall then be made and the No. 2 aggregate shall be applied in the same manner as stated above for the No. 1 aggregate. The Contractor shall be responsible for the maintenance of the surface and the distribution of the excess aggregate until the work is accepted.

On the two successive days following completion of the work as specified above, all areas shall be rolled with at least four complete coverage's with a pneumatic roller. This rolling shall be done in the warm part of the day.

3.4 Rate of Application of Materials

The asphalt and aggregate shall be applied at the rates specified in the following schedule:

Double Asphalt Surface Treatment

Application	Aggregate Gal. Asphalt/Sq. Yd.	Aggregate Cu. Yd. To Sq. Yds.	Designation
First	0.30	1:70	No. 1
Second	0.40	1:110	No. 2

3.5 Cleanup

After completion of the asphalt surfacing, all debris resulting from the construction shall be cleaned up and removed from the site of the work to

an approved place of disposal. The ditches, shoulders and back slopes shall be bladed and graded to true grades and cross sections as shown on the plans. The entire premises of the work shall be left in a clean condition satisfactory to the Engineer, and all costs of cleanup shall be included in the contract unit prices for the items of work involved.

DOUBLE COURSE ASPHALT SURFACE TREATMENT 1
1. SCOPE 1
2. MATERIALS 1
2.1 Asphalt 1
Viscosity Grade AC-5 1
Texas Highway Department 1982 Specifications 1
Viscosity 140 F. Stokes 1.4 --..... 1
2.2 Aggregate 1
Double Asphalt Surface Treatment 2
3. CONSTRUCTION METHODS 2
3.1 Preparation of base 2
3.2 Handling and Applying Asphalt 3
3.3 Application of Aggregate 4
3.4 Rate of Application of Materials 4
Double Asphalt Surface Treatment 4
3.5 Cleanup 4

3/2006

PREPARATION OF ASPHALTIC CONCRETE SURFACE FOR OVERLAY OR SEAL COAT

1. GENERAL

This item includes patching, milling and incidentals to prepare the asphaltic concrete surface for tack coating and overlay or for application of a seal coat.

2. MATERIALS

a. Asphalt

Asphalt for hot mix asphaltic concrete shall be Grade ACI0 Texas Highway Department Item 300.

Asphaltic concrete shall be Type D or Type F Texas Highway Department Item 340 except when the overlay is the second phase of phased construction in which case the asphaltic concrete for full depth patching shall be the grade as shown on the plans.

b. Portland Cement Stabilized Base

Cement stabilized base shall conform to Texas Highway Department Item 274 and shall consist of caliche base materials described in Section 2-C of this specification. Stabilized using 2 sacks of Portland cement per cubic yard. Cement stabilized base may be blade mixed at or near the job site if the contractor can produce a uniformly mixed acceptable product by this method.

3. PATCHING

a. Patching Surface Raveling

Where, in the opinion of the engineer, surface raveling has caused sufficient loss of material to require patching, the contractor shall thoroughly clean the area to be patched by brooming, and/or compressed air nozzle. When the patched area is completely free of loose aggregate and other foreign matter the contractor shall lightly brush the area with emulsified asphalt type SS1 and apply Type F hot mix asphaltic concrete. The asphaltic concrete shall be raked using an asphalt rake and finished smooth a little higher than the existing surrounding surface and compacted using a steel wheel roller and/or a pneumatic roller. Rollers shall be sufficient size and weight to achieve

adequate compaction. Small areas may be compacted using vibrating plate compacters when approved by the Engineer.

b. Patching Deteriorated Surface

When, in the opinion of the engineer, the surface has deteriorated to a point where replacement is required the engineer shall mark the area to be removed and replaced. The contractor shall saw cut for the full depth of the asphaltic concrete and remove said pavement. The saw cut shall be rectangular in shape with the edges being parallel to and at 90` to the centerline of the street. The minimum width for any patch shall be one (I') foot. After the surface has been removed the base shall be carefully smoothed and all loose base material shall be removed. When needed the base shall be reprimed using a light shot of RC 250 or MC 30 asphalt. After the prime coat has penetrated the base material, the contractor shall apply tack coat to the sawed edges of the surface and place Type D asphaltic concrete to a sufficient depth above the existing surface to provide a compacted surface slightly higher than the adjacent surface. The patch shall be compacted to a density of 92% to 97% Rice density using steel wheel and or pneumatic rollers.

c. Patching Deteriorated Substructure

When the base and or subgrade have failed and are to be removed, the contractor shall remove the surface as specified for deteriorated surface patching. The weakened base shall be removed to a uniform depth to expose undamaged base or subgrade. The minimum depth of removal shall be six (6") inches. The base and subgrade thus removed shall be replaced with Portland cement stabilize base and compacted to 95% modified proctor density and finished at the level of the abutting base. The finished base shall be primed and the surface replaced as specified for patching deteriorated surface.

4. MILLING

Surface milling shall be accomplished using approved asphalt milling machines. The maximum depth of milling shall be one (I") inch.

Milling shall be as directed by the engineer to remove asphaltic concrete placed at valley gutters, gutters and at the ends of the first phase of phased construction for drainage and to remove the asphaltic concrete placed for a smooth connection between that phase and the existing paving. The Engineer may also direct milling to

remove ridges and ruts that have formed on the pavement surface.

The Contractor shall be responsible for controlling the milling operation so that only these areas which require milling are milled. No measurement or payment will be made for milling where only superficial surface marks are left and from which no material is removed. When milling is required to remove ridges and ruts the low areas between ridges and ruts will be considered as "milled surface" for payment.

If a smooth straight joint can not be made by milling the contractor may be required to saw cut a one (l") inch depth groove at the edge of the milled area and remove material between the saw cut and the milled area by hand. No separate payment will be made for this saw cut when required.

5. MEASUREMENT AND PAYMENT

a. Patching Surface Raveling

Measurement will be made of the actual square footage of surface area patched. Payment will be made at the price bid per square foot for patching surface raveling in the bid proposal.

b. Patching Deteriorated Surface

Measurement will be made of the square yards of street surface replaced.

Payment will be made for the actual number of square yards of street surface replaced at the price bid per square yard for patching deteriorated surface in the bid proposal.

c. Portland Cement Stabilized Base

Measurement will be made of the actual cubic yards of compacted cement stabilized base in place.

Payment will be made at the price per cubic yard bid for compacted in place Portland cement stabilized base in the bid proposal.

d. Saw Cutting

Measurement will be made of the actual length of full depth saw cut made as directed by the engineer. No measurement will be made of the sawing required to square up poor milling edges.

Payment will be made at the price per linear foot of full depth saw cutting for the actual number of feet of saw cut as measured above.

No payment will be made for saw cutting required to square up the edges left by improper, inadequate or poor quality milling.

e. Milling

Measurement will be made of the actual area milled. No measurement will be made of areas where milling leaves only superficial surface marks from which no material was removed.

Payment will be made for the actual number of square yards of surface milling as measured above at the unit price bid per square yard of surface milling in the bid proposal.

01/04

SEAL COAT

I. DESCRIPTION

This item shall consist of the application of liquid asphalt to the existing pavement surface followed by placement of cover aggregate and rolled to increase adhesion, together with other operations necessary to form a complete durable seal coat.

II. MATERIALS

A. Asphaltic Materials

The material shall be homogeneous, shall be free from water, shall not foam when heated to 347 degrees F and shall meet the following requirements:

		VISCOSITY GRADE	
TEST		AC-5 Min/Max	AC-10 Min/Max
Viscosity, 140 F stokes		500+100	1000+200
Viscosity, 275 stokes		1.4	1.9
Penetration, 77F, 100g, 5 sec.		135	85
Flash Point, C.O.C.F.		425	450
Solubility in trichlorethylene	%	99.0	99.0
Tests on residues from thin film oven test: Viscosity, 140 F stokes		1500	3000
Ductility, 77 F 5cms per min, cms		100	70
Spot Test		Negative for all grades	

B. Storage, Heating and Application Temperatures

Asphalt materials should be applied at the temperature which provides proper and uniform distribution and within practical limits avoiding higher temperatures than necessary. Satisfactory application usually should be obtained within the recommended ranges shown below. No material shall be heated above the following maximum temperatures:

Applications and Mixing

TYPE-GRADE	Recommended Range, F	Maximum Allowable, F	Heating and Storage Maximum, F
AC-5, 10	275-350	375	400

NOTE:Heating of asphalt materials (except emulsions) constitutes a fire hazard to various degrees. Proper precautions should be used in all cases and especially with RC cutbacks.

Warning to Contractors: Attention is called to the fact that asphaltic materials are very flammable. The utmost care shall be taken to prevent open flames from coming in contact with the asphaltic materials or the gases of same. The Contractor shall be responsible for damages from any fires or accidents which may result from heating the asphaltic materials.

C. Additives

1. Latex Additive: A minimum of two percent by weight latex additive (solids basis) shall be added to AC-5 asphalt when specified on the plans or in other specifications in the contract. The latex additive shall be governed by the following specifications:

The latex is to be an anionic emulsion of butadiene-styrene low-temperature copolymer in water, stabilized with fatty-acid soap so as to have good storage stability, and possessing the following properties:

Monomer ratio, B/S 70/30
Minimum solids content 67%
Solids content per gal @ 67% ..... 5.3 lbs
Coagulum on 80-mesh screen ..... 0.1% max

Type Anti-oxidant ..... staining
Mooney Viscosity of Polymer
(M/L4 @ 212 F) ....100 min
pH of Latex ..... 9.4 - 10.5
Surface Tension ..... 28-42 dynes/cm^2
Brookfield Viscosity
of Latex ..... 1200 ps max @ 67% solids

The finished latex-asphalt shall meet the following requirements:

Viscosity at 140 F, stokes ..... 1500 max
Ductility at 39.2F, 1cm per min, cm..... 100 min

2. Anti-stripping Agent. An approved liquid anti-stripping agent shall be added to the asphalt used on this project when called for on the plans or elsewhere in the specifications or bid proposal. The rate of application shall be in accordance with the manufacturers recommendations. The minimum anti-stripping agent added shall be one/half (1/2) of 1%. The anti-stripping agent shall be Permatac or approved equal.

D. Regular Aggregate

Regular aggregate shall be Type B Grade 4 or Grade 5 crushed gravel, or crushed stone as specified in Item 302 of the Texas State Department of Highways and Public Transportation (T.S.D.H.P.T.) 1982 Standard Specification for Construction of Highways, Streets, and Bridges with the following exceptions:

1. Limestone other than natural limestone rock asphalt will not be approved for use on this project.

2. Aggregate shall contain not more than 1% by weight of organic matter, clays, loam or pebbles coated therewith and shall contain not more than 5% by weight of any one of or combination of slate, shale, schist or soft particles of sandstone when tested in accordance with Test Method Tex-217-F.

3. Aggregate Gradation, expressed as a percentage of weight, shall be as follows:

Grade 4	Percent by Weight		
Retained on 5/8" sieve			0
Retained on 1/2" sieve	0	-	2
Retained on 3/8" sieve	5	-	35
Retained on No. 4 sieve	80	-	100
Retained on No. 10 sieve	98	-	100
Passing No. 200 sieve	0	-	0.5

Grade 5	Percent by Weight		
Retained on 1/2" sieve			0
Retained on 3/8" sieve	0	-	5
Retained on No. 4 sieve	40	-	85
Retained on No. 10 sieve	98	-	100
Retained on No. 20 sieve	99	-	100

When no aggregate grade is shown on the plans or called for elsewhere in the specifications or bid proposal, Grade 5 aggregate will be furnished.

4. The percent of wear, as determined by ASTM C-131, shall not exceed 25%.

5. The percent loss of the aggregate, as determined by ASTM C-88 using a magnesium sulfate solution and a four cycle test, shall not exceed 30%.

E. Precoated Aggregate

Precoated aggregate shall be Type PB Grade 4 or Grade 5 crushed gravel, or crushed stone as specified in Item 304 of the T.S.D.H.P.T. 1982 Standard Specification for Construction of Highways, Streets, and Bridges with the following exceptions:

1. Those exceptions listed in Paragraph II 2(B) above.

2. The precoated aggregate shall be coated with 1.0 to 2.0 per cent by weight of asphaltic cement of Grade AC-20.

F. Joint Paper

Paper used for starting and stopping asphalt application, as well as making fabricated paper discs to protect manhole covers and valve covers, shall be a non-absorbent, high grade 60# Kraft paper, 30" in width.

The contractor shall cover all manhole and valve box lids with paper discs, furnished by Contractor, immediately before application of asphalt and remove same immediately after application of rock.

G. Delivery Tickets

A legible copy of the delivery tickets for all materials to be used on this project shall be furnished to the City's representative at the time materials are delivered to the project stock pile and storage site.

III. CONSTRUCTION METHODS

A. Equipment

In general, all equipment used on this project shall be in good working order and in sufficient quantity to insure proper expedition of the seal operation.

1. Asphalt Handling Equipment

The asphalt distributor shall have been recently calibrated and the Engineer shall be furnished an accurate and satisfactory record of such calibration. The distributor shall be an approved type of self-propelled pressure distributor so operated as to distribute the material in the quantity specified, evenly and smoothly, under a pressure necessary for proper distribution. The Contractor shall provide all necessary facilities for determining the temperature of the asphaltic material in all of the heating equipment and in the distributor, for determining the rate at which asphalt is applied, and for securing uniformity at the junction of two distributor loads. All storage tanks, piping, retorts, booster tanks, and distributors used in storing or handling asphaltic material shall be kept clean and in good operating

condition at all times, and they shall be operated in such manner that there will be no contamination of the asphalt with foreign material. It shall be the responsibility of the Contractor to provide and maintain in good working order a recording thermometer at the storage heating unit at all times.

2. Drag Broom

A drag broom shall be required if the aggregate is not properly distributed. The drag broom shall be furnished at no additional cost to the City.

3. Pneumatic-tire Roller

Pneumatic-tire rollers shall be of the self-propelled type consisting of not less than 7 pneumatic-tired wheels, running on axles in such manner that the rear group of tires will not follow in the tracks of the forward group, and mounted on a rigid frame and provided with a loading platform or body suitable for ballast loading. The roller shall be not less that 10 tons in weight and carry not less than 50 pounds pressure in each tire.

4. Aggregate Spreader

Aggregate spreader shall be an approved self-propelled continuous feed aggregate spreader. The spreader shall be equipped with a disposable trash box for placing debris removed from spreader box scalping screen.

5. Miscellaneous Equipment

The Contractor shall have available for immediate use at no additional cost one rock blade and one drag broom if their use is required by the Engineer. These pieces of equipment shall not be pulled by rollers. In addition, the Contractor shall furnish one tail gate aggregate spreader and one dump truck, equipped to receive the tail gate spreader.

6. Truck Scale

A truck scale conforming to the requirements of item 520 of "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges" shall be furnished by the Contractor at aggregate stockpile sites.

B. Surface Preparation

The City of Midland will sweep all streets to be sealed ahead of the Contractor. This sweeping by the City of Midland is not intended to be a final cleaning preparation for the application of asphalt but is intended as an aid to the Contractor.

Prior to placing the seal coat, loose dirt and other objectionable material shall be removed from the existing surface by the Contractor. The surface will be cleaned with rotary brooms. Hand brooms will be used in areas not accessible to the rotary broom. The Engineer shall approve all streets before application of any asphalt.

C. Application of Bituminous Material

Paper shall be spread on the surface for a sufficient distance back form the end of each application so that flow through sprays may be started and stopped on the paper, and so that all sprays will operate properly over the entire length being treated.

No asphaltic material shall be applied when the total of air temperature plus pavement surface temperature is less than 120" F.

No equipment or vehicular traffic shall be allowed to cross over joint paper in place, except the distributor.

Immediately following the application of asphaltic material, the Contractor shall remove all joint paper and load same on a designated vehicle. At the end of each day, all paper shall be disposed of at the City Landfill.

Following all preparation outlined above, the Contractor shall immediately apply asphaltic materials at the specified rates and temperatures designated by the Engineer.

If the Contractor employs only one distributor in the seal operation, he shall be required to seal all designated filets and street stubs in the seal area before moving to another section of the City. If two distributors are used, one distributor will be employed only to seal filets and street stubs.

The use of a second distributor to seal filets and street stubs shall require the following additional equipment; one dump truck equipped with tailgate spreader, and one self-propelled pneumatic roller. All rolling shall be deferred until aggregate is dry.

D. Application of Aggregate

Aggregate shall be immediately and uniformly applied and spread by an approved self-propelled continuous-feed aggregate -8- spreader, unless otherwise authorized by the Engineer. Aggregate shall be applied at the approximately rate directed by the Engineer.

Vehicles used to transport aggregate from stockpiled area to spreading machine shall be weighed and a weight ticket issued for each load. Weight tickets shall show truck identification No., tare weight of truck, gross weight, and net weight of aggregate. The weight ticket shall be delivered to the city's representative at the aggregate spreader.

E. Rolling

A minimum of three (3) rollers shall be employed by the Contractor. Rolling shall be controlled by the Engineer during the entire project. The speed of all rollers will be held to a maximum of 5 miles per hour during the rolling process. When surface moisture is present on aggregate, "Rolling shall be deferred until aggregate is dry.

F. Stockpiling

All aggregate stockpiles shall be placed on a paved surface or areas acceptable to the Engineer.

When dust from the aggregate creates a nuisance or when aggregate fails to adhere to the asphalt the Engineer may require the Contractor to "water down" the aggregate stock pile.

When, directed by the Engineer, or desired by the Contractor, aggregate stockpiles will be "watered down". When the "watered down" aggregate does not adhere to the asphalt properly the Engineer may direct that water for this purpose contain 5% EA10S emulsified asphalt and/or an approved wetting agent. The Engineer may direct the contractor to increase the amount of emulsified asphalt added to the water if, in his opinion, desired results are not being achieved. No separate payment shall be made for emulsified asphalt, water or wetting agent but the cost shall be considered as an incidental cost for furnishing satisfactory aggregate.

G. Cleanup

Clean up shall be maintained on a timely manner as the work progresses. All debris scattered on the sidewalks and driveways shall be swept up by the Contractor. Sweeping debris onto freshly sealed streets shall not be allowed.

City forces will remove excess aggregate from the street and gutters after the project is completed.

H. Maintenance

The Contractor will be required to maintain all sealed streets until final acceptance of the project by the Engineer. Maintenance shall consist of adding additional coverstone when required, rolling, pony blading, or drag brooming.

IV. MEASUREMENT

Asphaltic material shall be measured in gallons at the applied temperature at the point of application.

Aggregate shall be measured by the ton in vehicles as delivered to the aggregate spreader and applied on the street. Trucks will not be allowed to leave the construction area with a partial load. If it becomes necessary for a truck to leave the area because of mechanical failure or other reasons, a second weigh ticket for that truck will be required.

Rolling shall be measured by the hours of actual rolling for each roller.

V. PAYMENT

Payment shall be made as provided under "Measurement" at the unit price bid for "aggregate", "asphalt", and "rolling" and shall be full compensation for furnishing and incorporating the materials "Aggregate" and "Asphalt" (and additives where applicable) into a composite product; for delivering, stockpiling; for brooming, compaction, and rolling; for cleaning the existing surface; for cleaning excess bituminous material; cleaning gutters; for cleaning sidewalks and driveways; for cleaning stockpile sites; for all required maintenance; for pony blading; for drag brooming; for adding additional cover aggregate; for all labor, equipment, supervision, tools, overhead, profit, and any other incidentals necessary to complete the work required under the conditions of these plans and specifications to the satisfaction of the Engineer.

08/07

ASPHALT - RUBBER SEAL COAT

(Stress Absorbing Membrane)

1. SCOPE

This specification covers the material, equipment, and construction procedures for a Stress Absorbing Membrane (seal coat).

2. PREQUALIFICATION OF A NEW ASPHALT-RUBBER MATERIAL

Pre-qualification of a new asphalt-rubber material or applicator may be requested at any time. Pre-qualification will be based on three controlled field applications evaluated after three years' performance under traffic. New asphalt-rubber material that has been evaluated and pre-qualified by an agency recognized nationally may be pre-qualified by that agency upon disclosure of suitable evidence of successful performance. Notwithstanding other agency pre-qualification, the City reserves the right to withhold pre-qualification pending the performance evaluation of local controlled field applications.

3. MATERIALS

3.1 Asphalt

The grade of asphalt cement for the asphalt-rubber mixture shall be AC - 5 or AC - 10 which shall comply with the requirements of Item 300 "Asphalt, oils and emulsions" of Texas State Department of Highways and Public Transportation 1982 Standard Specification for Construction of Highways, Streets and Bridges. The grade selected shall be based on laboratory testing by the asphalt-rubber supplier, to insure compatibility with the granulated reclaimed rubber.

If indicated necessary by laboratory testing, an approved anti-stripping additive may be added to the asphalt cement up to 1.0 percent by weight of asphalt.

3.2 Granulated Reclaimed Rubber

The granulated reclaimed rubber used shall be produced primarily from the processing of automobile and truck tires. The rubber shall be produced by ambient temperature grinding processes only.

The gradation of the granulated reclaimed rubber when tested in accordance with ASTM C-136 and using a 50 gram +/- 1 gram sample, shall meet the

following requirements:

Sieve Sizes	Percent Passing
#8	100
#10	95 - 100
#16	40 - 60
#30	0 - 10
#50	0 - 5

The use of rubber from multiple sources is acceptable provided that the overall blend of rubber meets the gradation requirements.

The individual granulated rubber particles, irrespective of diameter, shall not be greater in length than 3/16 inch (5mm).

The granulated rubber shall have a specific gravity of 1.15 +/- 0.05 and shall be free of loose fabric, wire and other contaminants except that up to 4 percent (by weight of rubber) calcium carbonate or talc may be added to prevent rubber particles from sticking together. The rubber shall be sufficiently dry so as to be free flowing and not produce a foaming problem when blended with the hot asphalt cement.

The granulated reclaimed rubber shall be accepted by certification from the rubber supplier.

3.3 **Diluent**

The diluent shall have the following properties:

Flash Point	130° F Minimum
Initial Boiling Point (ASTM D-86)	340° F Minimum
Dry Point (ASTM D-86)	390° - 415° F
Total Saturates	85% Minimum

3.4 **Asphalt - Rubber**

The asphalt-rubber supplier shall furnish to the engineer a minimum of 10 days before the beginning of membrane placement, the asphalt-rubber mix formulation which shall contain the following information:

Asphalt Cement
Source of Asphalt Cement

Grade of Asphalt Cement
Percentage of Asphalt Cement by total weight of the asphalt-rubber mixture.

Granulated Reclaimed Rubber
Source of Granulated Rubber
Grade of Granulated Rubber
Percentage of Granulated Rubber by total weight of the asphalt-rubber mixture.

If granulated rubber from more than one source is utilized the above information will be required for each granulated rubber used.

Diluent
Source of Diluent
Grade of Diluent
Percentage of Diluent allowable by volume of the asphalt-rubber mixture.

3.5 **Cover Aggregate**

Aggregate shall be composed of a clean and durable crushed rock, crushed gravel or crushed slag conforming to Item 304 "Aggregate for Surface Treatments (pre-coated)" of Texas State Department of Highways and Public Transportation 1982 Standard Specification for Construction of Highways, Streets and Bridges, grade No. 3 or No. 4.

Proposed aggregate samples shall be submitted to the asphalt-rubber supplier a minimum of 21 days prior to application, to test for aggregate stripping characteristics. The results shall be submitted to the engineer. Anti-strip will be included as a contingency bid item.

4. **EQUIPMENT**

4.1 **General**

The equipment used by the contractor shall include a self propelled rotary power broom or mobile pickup broom for pavement cleaning and excess cover material removal.

4.2 **Asphalt-Rubber Equipment**

All equipment utilized in the production and application of the asphalt-rubber shall be so designed and accessible that the Engineer can readily determine

the percentage by weight for each material being incorporated into the mixture and shall be as described as follows:

4.2.1 An asphalt heating tank with a hot oil heat transfer system or retort heating system capable of heating asphalt cement to the necessary temperature for blending with the granulated rubber. This unit shall be capable of heating a minimum of 3,000 gallons of asphalt cement.

4.2.2 An asphalt-rubber mechanical blender with a two stage continuous mixing process capable of producing a homogenous mixture of asphalt cement and granulated rubber, at the mix design specified ratios, as directed by the engineer. This unit shall be equipped with a granulated rubber feed system capable of supplying the asphalt cement feed system, as not to interrupt the continuity of the blending process. A separate asphalt cement feed pump and finished product pump are required. This unit shall have both an asphalt cement totaling meter in gallons and a flow rate meter in gallons per minute.

4.2.3 A truck mounted self powered distributor truck equipped with a retort heating unit, and an internal mixing device capable of maintaining a uniform mixture of asphalt cement and granulated rubber. It shall be equipped with a full circulating spreader bar and a pumping system capable of applying asphalt-rubber material within +/- .05 gallons per square yard tolerance of the specified application rate and must give a uniform covering of the surface to be treated. The distributor shall have a boot board on the rear of the vehicle and a bootman shall accompany the distributor. The bootman shall ride in a position so that all spray bar tips are in full view and readily accessible for unplugging if a plugged tip should occur. The distributor shall also include a tachometer, pressure gauge, volume measuring device and a thermometer.

4.3 Cover Material Spreader

The cover material (chip) spreader shall be a self-propelled machine with an aggregate receiving hopper in the rear, belt conveyors to carry the aggregate to the front, and a spreading hopper equipped with a full-width distribution auger and spread roll. The spreader shall be in good mechanical condition and be capable of applying the cover material uniformly across the spread at the specified rate.

4.4 Rolling Equipment

A minimum of three operational self-propelled pneumatic-tired rollers shall be used for the required rolling of the cover material. The pneumatic tired rollers shall carry a minimum loading of 3,000 pounds on each wheel and a

minimum air pressure of 100 pounds per square inch in each tire.

4.5 **Hauling Equipment**

Trucks for hauling cover material shall be tailgate discharge and shall be equipped with a device to lock onto the hitch at the rear of the cover material spreader. Haul trucks shall also be compatible with the cover aggregate spreader so that the dump bed will not push down on the spreader when fully raised or have too short a bed which results in aggregate spillage while dumping into the receiving hopper.

5. **CONSTRUCTION**

5.1 **General**

Streets to receive the asphalt-rubber stress absorbing membrane or seal coat shall be prepared in accord with Section 2-C-1 "Preparation of Asphaltic Concrete Surface for Overlay or Seal Coat" of these specifications.

Immediately prior to the application of the asphalt-rubber membrane, the surface shall be thoroughly cleaned in order to insure adequate adhesion of the asphalt-rubber to the pavement.

Due to the handling characteristics of asphalt-rubber, when radii and other irregular areas are to be sealed it is recommended that this be done with an RS or CRS chip seal emulsion or paving grade asphalt cement.

5.2 **Asphalt-Rubber Mixing and Reaction**

The percentage of granulated rubber shall be 23 percent plus or minus 3 percent by weight of total asphalt-rubber mixture, the exact granulated rubber content shall be as determined by the mix design submitted by the asphalt-rubber supplier. During membrane placement the granulated rubber percentage shall not fluctuate more than 1 percent by weight of total asphalt-rubber mixture.

The temperature of the asphalt cement shall be between 350^{o} and 400^{o} F at the addition of the granulated rubber. The asphalt and rubber shall be combined and mixed together in the asphalt-rubber blending unit and reacted in the distributor for a period of time as required by the engineer which shall be based on laboratory testing by the asphalt-rubber supplier. The temperature of the asphalt-rubber mixture shall be above 350^{o} F during the reaction period.

After the reaction between asphalt cement and granulated rubber has occurred, the viscosity of the hot asphalt-rubber-mixture may be adjusted for spraying and/or better "wetting" of the cover material by the addition of a diluent. The diluent shall comply with the requirements of Section 3.3 and shall not exceed 7.5 percent by volume of the hot asphalt-rubber mixture.

When a job delay occurs after full reaction, the asphalt-rubber may be allowed to cool. The asphalt-rubber shall be reheated slowly just prior to application but not to a temperature exceeding 350° F. An additional quantity of diluent not exceeding 3 percent by volume of the hot asphalt-rubber mixture may be added after reheating.

5.3 Application of Asphalt-Rubber Material

Placement of the asphalt-rubber membrane shall be made only under the following conditions.

1. The pavement surface temperature shall be 45° F and rising.

2. The pavement surface is clean and absolutely dry.

3. The wind conditions are not excessive.

4. All construction equipment such as asphalt-rubber distributor, cover material spreader, haul trucks with cover material, and rollers are in position and ready to commence membrane placement operations.

5. Rain is not imminent.

The asphalt-rubber mixture shall be applied at a temperature of 300° to 350° F at a rate of between .55 and .65 gallons per square yard. Transverse joints shall be constructed by placing building paper across and over the end of the previous asphalt-rubber application. Once the spraying has progressed beyond the paper, the paper shall be removed immediately and disposed of as directed by the engineer. All longitudinal joints shall not exceed a four inch overlap.

5.4 Application of Cover Material

Cover material shall be applied immediately to the asphalt-rubber after spreading at a rate of 25 to 35 pounds per square yard.
At the time of application to the asphalt-rubber, cover material shall be

surface dry so as to gain proper adhesion to the asphalt-rubber material.

5.5 Rolling

At least three operational pneumatic-tired rollers complying with the requirements of Section 4.4 shall be provided to accomplish the required embedment of the cover material. At some project locations or where production rates dictate, fewer rollers may be utilized as directed by the engineer. At no time shall there be less than two operational pneumatic tired rollers on a project.

Sufficient rollers shall be used for the initial rolling to cover the width of the aggregate spread with one pass. The first pass shall be made immediately behind the cover material spreader, and if the spreading is stopped for an extended period, the cover material spreader shall be moved ahead or off the site so that all cover material may be immediately rolled. Four complete passes with rollers shall be made with all rolling completed within one hour after the application of the cover material.

5.6 Traffic Control

Except when it is necessary that hauling equipment must travel on the newly applied membrane, traffic of all types must be kept off the membrane until it has had time to set properly. The speed of all hauling equipment shall not exceed 15 miles per hour when traveling over a membrane which is not adequately set. The minimum traffic free period shall not be less than one hour.

5.7 Removing Loose Cover Material

Sweeping can begin a minimum of one hour after membrane placement.

5.8 Method of Measurement and Basis of Payment

5.8.1 Asphalt-Rubber

a) Measurement will be made of the actual number of gallons of Asphalt-Rubber including asphalt placed in accord with these specifications.

b) Payment will be made at the price bid per gallon of Asphalt-Rubber in the bid proposal and will be full compensation for furnishing all asphalt, rubber, extender and for all labor,

equipment and incidentals for placing the asphalt-rubber on the Street surface.

5.8.2 **Cover Aggregate**

a) Measurement will be made of the actual number of tons of pre-coated aggregate placed in accord with these specifications.

b) Payment will be made at the price bid per ton of pre-coated aggregate in the bid proposal and shall be full compensation for furnishing all pre-coated aggregate and for all labor and equipment including rollers and rolling for the complete surface in place.

5.8.3 **Rolling**

a) No measurement will be made of rolling but rolling shall be considered as incidental to placing of the cover aggregate.

b) No separate payment will be made for rolling. The cost of rolling shall be included in the price per ton of cover aggregate in the bid proposal.

5.8.4 **Anti strip agent**

a) Anti stripping agent, when used, shall be measured by the gallon.
b) Payment for anti stripping agent shall be made at the price per gallon of anti stripping agent bid in the bid proposal.

08/07

POLYMER MODIFIED SLURRY SEAL (MICRO-SURFACE)

I. SCOPE

This specification covers the design, application, testing, quality control and measurement and payment for a complete in place "polymer modified micro surface" constructed on existing paved surfaces cleaned and prepared in accordance with the item 2-C-1 "PREPARATION OF ASPHALTIC CONCRETE SURFACE FOR OVERLAY OR SEAL".

2. DESCRIPTION

This specification covers all materials, equipment, construction and application procedures for rut filling and/or surfacing of existing paved surfaces. The micro-surfacing shall be a mixture of cationic polymer modified asphalt emulsion, mineral aggregate, mineral filler, water and other additives, properly proportioned, mixed and spread on the paved surface in accordance with this guideline and as directed by the Engineer.

3. MATERIALS

3.1 Emulsified Asphalt

(1.) The emulsified asphalt shall be a cationic emulsified type, designated as CSS-1P and shall comply with the following requirements.

	Min.	Max.
Viscosity, Saybolt Furol, 25 C (77 F), Sec.	**20**	**100**
Storage Stability test, one day, percent	**-**	**1**
Particle charge test		**Positive**
Sieve test, percent	**-**	**0.1**
Distillation:		**-** **-**
Oil distillate, by volume of emulsion, %	**-**	**0.5**
Residue, %		**62** **-**
Test on Residue from Distillation:		
Penetration, 77 F, 100 g, 5 seconds	**55**	**90**
Ductility, 77 F, 5 cm/min, cm	**70**	**-**
Solubility in trichloroethylene , %	**97**	**-**
Softening Point, R. & B., F	**135**	**-**
Viscosity, absolute 60 C (140 F), Poise		**8000** **-**

This standard distillation procedure shall be modified as follows: The temperature on the lower thermometer shall be brought slowly to 350 degrees plus or minus 10 degrees F and maintained at this point for 20 minutes. Complete the total distillation in 60 plus or minus 5 minutes from the first application of heat.

(2). The emulsion shall be modified with an approved Polymer. The distillation residue of the modified emulsion shall contain a minimum of three percent (3%) polymer solids by weight. The modified emulsion shall pass all applicable storage and settlement tests. The polymer material shall be milled into the emulsion or blended into the asphalt cement prior to the emulsification process. The cement-mixing test shall be waived for this emulsion.

(3). The polymer modified emulsified asphalt shall be so formulated that when the paving mixture is applied with the relative humidity at not more than 50% and the ambient temperature at least 75° F, the paving mixture will sufficiently cure so that uniformly moving traffic can be allowed in approximately one hour. Locations such as driveways, Intersections and where sharp turning may take place or where vehicles may accelerate sharply, additional curing time may be required.

(4). The contractor shall notify the Engineer of the source of his asphaltic material prior to the design or production of the surfacing mixture and this source shall not be changed during the course of the project, except on written permission by the Engineer.

3.2 Mineral Aggregate

(1) Description. One Hundred percent (100%) of the mineral aggregate shall be crushed and shall be composed of clean, tough and durable particles of traprock, granite, sandstone or other approved aggregates. A sand equivalent of 65 or higher is required. The aggregate shall have a weight loss of not more than 12% when sodium sulfate is used or 18% when magnesium sulfate is used in accordance with Test Method Tex-411-A, using 5 cycles. The aggregate shall be one that has proven resistant to polishing in roadway surfacing.

(2.) Grades. When tested by Test Method Tex-200-F, Part I, the gradation requirements shall be as follows:

Grade 1 (Fine Graded Surface Course)	Percent Aggregate By Weight
Passing 3/8" sieve	100
Passing No. 4 sieve	98-100
Passing No. 8 sieve	75 -90
Passing No. 16 sieve	50- 75
Passing No. 30 sieve	30- 50
Passing No. 50 sieve	18- 35
Passing No. 200 sieve	5 -15

Grade 2 (Coarse Graded Surface Course)	Percent Aggregate By Weight
Passing 1/2" sieve	100
Passing 3/8" sieve	99-100
Passing No.4 sieve	86- 94
Passing No. 8 sieve	45- 65
Passing No. 16 sieve	25- 46
Passing No. 30 sieve	15 - 35
Passing No. 50 sieve	10 - 25
Passing No. 200 sieve	5- 15

(3.) Mineral Filler. Mineral filler shall be non-air entrained Portland cement that is free of lumps or foreign matter.

3.3 Water

The water shall be portable and shall be free of harmful soluble salts.

3.4 Other Additives

Additives supplied by the emulsion manufacturer may be added to the emulsion mix or to any of the component materials to provide control of the set time in the field.

4. LABORATORY EVALUATION

4.l General

Before work commences, the contractor shall submit a signed mix design covering the specific materials to be used on the project. This design shall be performed by the contractors or suppliers laboratory or by a qualified laboratory chosen by the owner. Once the materials are approved, no substitution will be permitted, unless first tested and approved by the laboratory preparing the mix design. The cost of mix design shall be born by the contractor.

4.2 Designing Job Mix

The qualified laboratory shall develop the job mix design and present certified test results for the contractor approval. Compatibility of the aggregate and modified CSS-1P shall be verified by the mix design. The mix design must be made using samples taken from the actual materials proposed for use in the project and in accordance with the procedures and requirements of Article 5.1 below.

5. PAVING MIXTURE

5.1 Mixture Design.

The mix shall be designed in accordance with Texas State Highway Department Bulletin C-14 and Test Method Tex-204-F, using Test Method Tex-227-F to supplement Test Method Tex-201-F and Tex-202-F to conform to the requirements herein. The above laboratory mixing and curing procedures may be modified as approved by the Engineer. The emulsified asphalt content will be selected by the Engineer to provide an optimum laboratory compacted density within the range of 94 to 97%. A minimum Hveem stability of 35 is required for placements exceeding a depth of twice the maximum aggregate size.

This is a mix design requirement, to be verified by testing of trial batch material prior to placement of project material. Hveem Stability testing will be performed by the selected laboratory. The Engineer will determine the frequency of job control density and stability testing. The Contractor shall furnish the mix design for the type of mixture specified together with applicable design worksheets and data. The Bulk Specified Gravity will be determined for each aggregate to be used in the design mixture. If the determined values vary by 0.300 or more, the mixture design will be by the Volumetric Method, Test Method Tex-204-F, Part II. To substantiate the design, trial mixtures will be produced and tested using all of the proposed project materials and equipment prior to any placement. The Engineer may waive trial mixtures if the same design has been proven to be in conformance with these requirements.

5.2 Composition of Mixture.

The Engineer shall approve the design mix and all micro-surfacing materials and methods prior to use and shall designate the proportions to be used within the following limits.

Residual Asphalt	**6 to 9 percent by weight of dry aggregate or 13.5 to 23 percent by volume of the aggregate**
Mineral Filler	**0.5% to 3.0% by dry weight of aggregate**
Modifier	**As required to provide the specified properties**
Water	**As required to provide proper consistency**

5.3 Type

The paving mixture shall consist of a uniform mixture of coarse aggregate, fine aggregate and asphaltic material. The mix may also contain mineral filler and/or additives when required.

The mixture shall be designed so that the mineral aggregate will produce a gradation, which conforms to the limitations for the master grading for the type specified herein. The gradation will be determined in accordance with Test Method Tex-200-F (Dry Sieve Analysis) and shall be based upon aggregate only. The amount of asphaltic material shall conform to the limitation for the type specified.

The aggregate grade shall be as shown on the plans. If no grade is shown on the plan grade 2 aggregate shall be used.

5.4 Tolerances

The aggregate portion of the paving mixture produced shall not vary from the design gradation by more than the tolerances that follow. The material passing the No. 200 sieve is further restricted to conform to the limitations for the master grading for the type specified. The asphaltic material portion of the paving mixture shall not vary from the design amount by more than the allowed tolerance and is also restricted to conform to the master limits. The method of test for determining the aggregate gradation and asphalt content of the mixture shall be Test Method Tex-210-F or other methods of proven accuracy.

	Percent by Weight or Volume as Applicable
Passing 3/8" sieve, retained on No. 4 sieve	**Plus or minus 5**

Passing No. 4 sieve, retained on No. 8 sieve	**Plus or minus 5**
Total retained on No. 8 sieve	**Plus or minus 5**
Passing No. 8 sieve, retained on No. 16 sieve	**Plus or minus 3**
Passing No. 16 sieve, retained on No. 30 sieve	**Plus or minus 3**
Passing No. 30 sieve, retained on No. 50 sieve	**Plus or minus 3**
Passing No. 50 sieve, retained on No. 200 sieve	**Plus or minus 3**
Passing No. 200 sieve	**Plus or minus 2**

Asphaltic Material Plus or minus 0.5 by wt. or l.2 by vol.

6. EQUIPMENT

6.1 General.

All equipment for the handling of all materials and mixing and placing of the mixture shall be maintained in good repair and operating condition and subject to the approval of the Engineer. Any equipment found to be defective and potentially affecting the quality of the paving mixture will be replaced or, at the option of the Contractor, satisfactorily repaired. It will be the contractor responsibility to prove to the Engineer that the repaired equipment is properly functional.

6.2 Mixing and Proportioning Equipment.

(1.) The material shall be mixed by a self-propelled micro-surfacing mixing machine which shall be a continuous flow mixing unit able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, field control additive and water to a revolving multi-blade twin shafted mixer and discharge the mixed product on a continuous flow basis. The machine shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler, field control additive and water to maintain an adequate supply to the proportioning controls. The machine shall be equipped with self-loading devices, which provide for the loading of all materials while continuing to lay micro surfacing.

The machine shall be equipped with opposite side driving stations to optimize longitudinal alignment. The machine shall be equipped to allow the mix operator to have full hydrostatic control of the forward and reverse speed during application of the micro-surfacing material.

The self-loading devices, opposite side driving stations and forward and reverse speed controls shall be original equipment manufacturer design.

(2). Individual volume or weight controls for proportioning each material to be added to the mix shall be provided. Each material control device shall be calibrated and properly marked.

(3) The aggregate feed to the mixer shall be equipped with a revolution counter or similar device so the amount of aggregate used may be determined at any time.

(4) The emulsion pump shall be a positive displacement type and shall be equipped with a revolution counter or similar device so that the amount of emulsion used may be determined at any time.

(5.) The mixing machine shall be equipped with a water pressure system and nozzle type spray bar to provide a water spray immediately ahead of and outside the spreader box.

(6.) The mixing machine shall be equipped with an approved fines feeder that shall provide a uniform, positive, accurately metered, predetermined amount of the specified mineral filler.

6.3 Spreading Equipment.

The paving mixture shall be spread uniformly by means of a mechanical type spreader box attached to the mixer, equipped with paddles, screws or augers to agitate and spread the materials throughout the box. A front seal shall be provided to insure no loss of the mixture at the road contact surface. The rear seal shall act as a final strike off and shall be adjustable and shall break in the middle so that the screed can be adjusted to fit the crown of the street including inverted crowns. The rear seal carrier shall be capable of being fitted with a rubber seal or a steel strike off bar.

The spreading equipment shall be readily adjustable in width so that laying widths can be changed without undue delay before starting each pass if necessary.

The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike-off. The seam where two spreads join, shall be neat appearing and uniform.

7. STOCKPILING AND STORAGE.

7.1 Aggregate Storage.

If the mineral aggregates are stored or stockpiled, they shall be handled in such a manner as to prevent segregation, mixing of the various materials or sizes, and contamination with foreign materials. The grading of aggregates proposed for use and as supplied to the mixing plant shall be uniform. Suitable equipment of acceptable size shall be furnished by the Contractor to work the stockpiles and prevent segregation of the aggregates. The mineral aggregate shall be screened and weighed at the contractor stockpile prior to job site delivery. The Engineer shall approve screens and scales.

7.2 Storage and Heating of Asphaltic Materials.

The asphaltic material storage shall be ample to meet the requirements of the plant. Asphalt shall not be heated to a temperature in excess of that specified
in the Item "Asphalt's, Oils and Emulsions" Texas Highway Department 1982 Standard Specifications. All equipment used in the storage and handling of asphaltic material shall be kept in a clean condition at all times and shall be operated in such manner that there will be no contamination with foreign matter.

8. CONSTRUCTION METHODS

8.1 General

It shall be the responsibility of the Contractor to produce, transport, and place the specified paving mixture in accordance with these specifications and as approved by the Engineer.

8.2 Street Preparation

Prior to starting the micro-surfacing operation, streets designated to be surfaced shall be prepared in accordance with item 2-C-1 "Preparation of Asphaltic Concrete Surface for Overlay or Seal".

8.3 Weather Limitations.

The material shall be spread only when the atmospheric temperature is at least fifty (50 degrees) F and rising and the weather is not foggy or rainy. No material will be placed when the surface on which it is to be placed is below 50° F.

8.4 Final Surface Preparation

Immediately before placing the micro-surface, the area to be sealed shall be thoroughly cleaned of all vegetation, loose aggregate and soil, and moistened. Water for prewetting the surface shall be applied immediately ahead of the spreader box by use of a pressure spray bar equipped with nozzles that produce a fine mist. The rate of application of water shall be sufficient to dampen the entire surface without any free flowing water ahead of the spreader box. The rate of the mist spray shall be adjusted from time to time during the placing operation to accommodate changes in temperature, surface texture, humidity and dryness of the pavement surface.

8.5 Placing the Mix

(1). The mixture shall be spread to fill cracks and minor surface irregularities and leave a uniform skid resistant application of aggregate and asphalt on the surface. The finished surface shall be neat in appearance without drag marks, excessive buildup or other detracting irregularities.

(2). The speed of operation of the surfacing equipment shall be controlled by the mixer operator at forward speeds between 85 and 225 feet per minute depending on conditions and appearance of the newly placed surface.

If transverse rippling occurs the speed of the equipment shall be reduced until the ripples disappear.

(3). The Engineer shall designate either rubber seal/screed or the steel strike off screed according to the Project requirements.

(4). The depth of mixture in the spreader box shall be carefully controlled to prevent transverse ridging and premature setup of material in the corners of the box and ahead of the screed. In general the depth of mixture in the box should be approximately to the mid point of the auger-agitator.

(5). Auxiliary equipment shall be kept in good working order and free of leaks. Any truck or transport used to bring materials on to the street being surfaced that develops leaks either of the material being transported or fuel and/or oil leaks will be removed from the job site and not allowed to return until it has been thoroughly repaired.

Scales and screens used at the contractors stockpile and storage site shall be kept in good working order.

(6). Spills of surfacing materials or fuel, oil or other detrimental substances on the street ahead of the surfacing operation shall be thoroughly removed before the surface is placed. This may required the operation to be shut down until the street has been cleaned.

(7). No excessive streaks shall be left in the finished surface. When such excessive streaking occurs, the operation shall be immediately stopped and corrective action is taken before resuming the operation.

8.6 Joints

(1). Longitudinal joints shall be placed on lane lines. On residential streets an eight-foot parking lane will be assumed with the centerline being the other lane line.

(2). All longitudinal and transverse joints shall be straight and neat in appearance without excessive build up or bare spots. Any irregularity shall be corrected immediately before the material has started to set up.

(3). The overlap at longitudinal joints shall not exceed 4 inches. When the overlapped pass is only partially set care shall be exercised to avoid skid marks. Any skid marks that occur shall be immediately corrected by removing any partially set material that has been displaced and placing fresh mix in the mark and shaping by use of Lutes, squeegees, hand drags, etc.

Overlapping of longitudinal joints shall not leave a visible build up. Any buildup shall be immediately removed by use of lutes, squeegees, hand drags, shovels or other approved means.

8.7 Mix Stability

The modified mixture shall posses sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading; it shall be free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

8.8 Hand Work

Areas that cannot be reached with the mixing machine shall be surfaced using hand squeegees to provide complete and uniform coverage. The area to be hand-worked shall be lightly dampened prior to mix placement. Care shall be exercised to leave no unsightly appearance from handwork. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during the machine applying process.

8.9 Lines

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance.

8.10 Work Force

The contractor shall maintain a work force of adequate size to accomplish the work as specified herein, including the loading and transporting of materials to the job site, the placing of the micro surface, the monitoring of joints and surface and the correction of any deficiencies that occur.

If, at any time, the Engineer or his representative determines that the work force is not adequate to perform all the tasks required for the proper completion of the micro surfacing, work on the project will be halted until adequate personnel are provided and/or modifications in procedure are implemented that will assure proper placement of the surfacing material.

8.11 Scratch or Level up course

A scratch or level up course will be required on certain streets as shown on the plans and/or as directed by the Engineer. This course shall be the same material as the polymer modified surface course and will be placed in the same manner except the spreader shall be equipped with a steel strike off screed. This screed shall be set to run as close to the pavement surface as practical.

The appearance of this course is not as critical as the final surface so long as any marks or blemishes that occur are not of such magnitude that they will affect the appearance of the final course.

8.12 Correction of Deficiencies and Blemishes

After the laydown work is completed and before final acceptance by the

Engineer, spot application of micro- surfacing material may be required to correct any deficiencies such as streaks, scuff marks, tire tracks, gaps, etc. to improve the ride quality and overall appearance. The spot application shall be performed with a full width spreader box when required.

9. QUALITY CONTROL

9.1 Materials

The contractor will permit the Engineer and/or the Independent laboratory to take samples of the aggregate and asphalt emulsion used in the project at the Engineers discretion. Gradation and sand equivalent tests may be run on the aggregate and residual asphalt content tests on the emulsion. Test results will be compared to specifications. Tests will be run at the expense of the owner. The owner must notify the contractor immediately if any test fails to meet the specifications.

9.2 Polymer Modified Micro-Surfacing

Samples of the material may be taken directly from the mixing unit(s). Consistency and residual asphalt content tests may be made on the samples and compared to the specifications. Tests will be run at the expense of the owner. The owner must notify the contractor immediately if any test fails to meet specifications.
The Engineer may use the recorders and measuring facilities of the unit to determine application rates, asphalt emulsion content, mineral filler and additive.

9.3 Non-Compliance

If any two successive tests fail on the stockpile material, the job shall be stopped. It is the responsibility of the contractor, at his own expense, to prove to the Engineer that the conditions have been corrected. If any two successive tests on the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the contractor, at his own expense, to prove to the Engineer that the problems have been corrected and that the
machine is working properly.

10. CLEAN UP

10.1 Protecting and Cleaning Manholes and Valves

Prior to beginning the sealing operation the contractor shall locate all manhole covers and valve boxes in the area to be sealed. Placing one or

more layers of heavy craft paper or other suitable material over them shall protect manhole covers and valve boxes. The protective covering shall be secured in place so that it does not move or tear during the sealing operation. The contractor shall remove the protective covering and any seal material placed over manhole covers and valve boxes as soon as the seal has set sufficiently to prevent damage to the adjoining seal in the process. The edges around manhole covers and valve boxes shall be neat and smooth and shall conform to the shape and size of the manhole cover or valve box.

10.2 Streets

Clean up along streets shall be accomplished as the work progresses and any excess material that is raked onto or otherwise placed on adjoining concrete curb and gutter, valley gutters or fillet areas or on adjacent asphalt or concrete paving shall be removed before it breaks or sets up.

Before a section of street is opened to traffic all clean up work shall be completed on that section.

11. MEASUREMENT AND PAYMENT

11.1 General

Payment will be made for these items listed in the bid proposal only. All work, materials, labor and appurtenance required to complete the project as shown on the plans or called for in the specifications but not listed in the bid proposal shall be considered as incidental and no separate payment will be made. The cost of these incidentals must be included in the price bid for the various items listed in the bid proposal.

11.2 Measurements

(1). Measurement will be made of the actual number of tons of each type or grade of the Composite Polymer Modified Slurry Seal (Micro-Surface) complete in place. For this specification a ton is considered 2000 lbs. and the composite slurry seal mixture is defined as the asphalt,
aggregate and additives.

All materials shall be weighed on certified public scales or the contractor shall place a set of standard truck scales at a site approved by the Engineer. Scales shall conform to the requirements of the item "Weighing and measuring equipment" Texas Highway Department 1982 Standard Specifications.

(2). Aggregate - The quantity of aggregate used in the accepted portions of the work shall be measured by net ticket weight of each individual load of
aggregate shipped to the project from the approved job site scale.

The weight of mineral additive used shall be calculated and included in the total aggregate weight.

(3). Polymer Modified Asphalt Emulsion. The quantity of polymer modified asphalt emulsion in the accepted portion of the work shall be measured by tons of material based on the accepted load tickets issued from the manufacturer. At the completion of the project any unused emulsion shall be weighed back and that quantity deducted from the accepted asphalt emulsion quantity delivered.

11.3 Payment

Payment will be made for the number of tons of micro surface measured at the applicable unit price bid per ton of micro surface in the bid proposal. This payment shall be full and complete compensation for the complete in place micro surface.

08/07

P.V.C. PIPE CASINGS

1. SCOPE

   This item consists of furnishing and installing PVC pipe for casing for future water and electric lines at locations shown on the plans or as directed by the Engineer.

2. MATERIAL

   Pipe shall be ASTM D 1785 schedule 40 PVC pipe or ASTM D 2241 PVC SDR 32.5 pressure pipe. The ASTM designation and schedule or SDR shall be clearly marked on the outside of the pipe.

3. CONSTRUCTION

   Pipe shall be laid in straight alignment and grade in trenches as narrow as the diameter of the pipe can be laid. Pipe shall be placed after the sub grade is prepared but before base material is placed. Bedding under the pipe shall be a minimum of 2 inches in thickness and shall be carefully graded and leveled before pipe is placed. Joints shall be water tight. They may be solvent cement welded using approved materials, or may be made using a gasketed collars or push on gasketed bell and spigot. When collars are used care shall be exercised to assure that the collar is centered over the joint. All joints shall be made in accord with the manufacturer's recommendations. After pipe has been joined and inspected the pipe shall be encased in bedding/encasement material to a thickness of 3 inches above the pipe. Care shall be exercised to be sure the encasement material is worked in under the haunches of the pipe and compacted along the side of the pipe to assure adequate lateral support. The balance of the trench shall be back filled using cement stabilized backfill consisting of 2 sacks of Portland cement to 1 cubic yard of blow sand or crushed caliche mixed with sufficient water to form a stiff place able mixture that can be consolidated in the trench by rodding or vibrating. The back fill shall be "struck off" at the finished sub grade level using square point shovels or suitable screeds. The ends of the pipe shall be tightly plugged to prevent the entrance of water debris or other foreign material. These plugs shall be PVC or rubber stoppers designed to endure until the water lines and/ or electric lines are places.

4. MEASUREMENT AND PAYMENT

   Casing pipe shall be measured by the linear foot along the center of the pipe and shall be paid for at the unit price in the bid proposal.

WATER LINE SPECIFICATIONS

1. SCOPE OF WORK

The work covered by this section consists of all water pipe lines and piping, including valves, valve boxes, tapping sleeves, fire hydrants and other accessories, required to complete the project. The contractor shall furnish all materials, labor, superintendence, tools, equipment and incidentals necessary for the complete construction of this work in accordance with the drawings and these specifications.

2. PIPE AND MATERIAL

2.1 General

Pipe shall be polyvinyl chloride (PVC) AWWA C900, ductile iron AWWA C-151 or steel cylinder concrete pipe AWWA C-303.

2.2 Polyvinyl Chloride (PVC) Pipe

A. PVC pipe furnished for use on this project shall conform to the requirements of AWWA C900 Polyvinyl Chloride (PVC) Pressure Pipe, 4 in. through 12 in., for water distribution pressure class 150, DR18. and shall be NSF approved for potable water supply.

B. The pipe furnished shall have an integral bell designed for joint assembly using elastomeric seals.

C. Markings for the pipe shall include all the requirements of AWWA C900 and the MSF approval stamp.

D. Elastomeric seals shall be furnished by the pipe manufacturer. Seals shall be manufactured to conform with the requirements of ASTM F4 77 and shall be specifically designed for use with the pipe furnished.

E. Lubricants intended for use with PVC pipe and seals (gaskets) shall be compatible with both PVC and the seal material. Lubricant shall not support growth of bacteria and shall not adversely affect the potable quality of the water that is to be transported.

F. Pipe laying lengths shall be 20'.

G. Service taps on PVC water lines shall be made using hinged type or double strap type saddles. Tapping saddles shall support the full circumference of the pipe and shall have a bearing area of sufficient width along the axis of the pipe to prevent distortion of the pipe when saddle is tightened.

No direct taps into the wall of PVC pipe will be permitted.

Seals for tapping saddles shall be recessed into the body of the saddle and shall be

a rubber - compound conforming to the requirements of ASTM F477.

Tapping saddles shall be SMITH-BLAIR Taper Seal Style 313 or DMD Dresser style 194 or approved equal.

H. Tapped connections for water mains and fire lines made on PVC water mains shall be accomplished using full bodied ductile iron tapping sleeves of a pressure rating equal to or greater than the pressure rating of the pipe specified.

I. Bedding for AWWA C900 PVC water pipe shall extend from a minimum depth of 4 inches below the outside of the water line to a minimum cover of 6 inches over the top outside of the water line.

J. AWWA C900 PVC water pipe shall be installed in accord with the applicable requirements for installing ductile iron pipe.

Care shall be taken to install each joint of PVC water pipe to, but not beyond the factory insertion mark on the pipe.

When a joint of PVC water pipe must be cut, the end of the pipe shall be carefully beveled to match the factory bevel on the uncut pipe. An insertion mark matching the factory insertion mark on the uncut pipe must be made before the pipe is inserted into the bell.

When PVC water pipe is to be inserted into a ductile iron fitting or valve, the factory bevel must be removed to form a square plain end pipe.

2.2 (a) Metallic Marking Tape (For PVC Water Pipe)

2.2(a).1 General

When non-metallic pipelines are to be installed, then the Contractor shall furnish and lay, above the pipeline, a continuous strip of metallic identification tape.

2.2 (a).2 Tape Material

The metallic identification tape shall be at least two inches (2”) in width and shall be of corrosive resistant metal of sufficient thickness to be stable and reflect electronic signals to electronic pipeline detector when buried to a dept of twenty-four (24”) below normal ground level.

The metallic tape shall be painted blue on one side and shall have 1-inch high letters painted continuously on the same side of the tape which read, “CAUTION: BURIED WATER LINE BELOW” or other words to this effect.

The marking tape shall be “Detectable Warning Tape”, as manufactured by the Omega Marking Company, or equal approved by the Engineer.

2.2(a).3 Construction Methods

The Contractor shall backfill over non-metallic pipelines to a depth which is less than twenty-four (24”) and not more than twelve inches (12) from the top of the cut of the ditch section in which the pipeline is laid. Contractor shall stop the backfilling material to a generally uniform level. All machine tamping, jetting and other compaction activities shall be accomplished up to this point of height in the backfilling the marking tape is placed in the trench.

The Contractor shall then lay the marking tape in the pipe trench and shall be held in position by the spot placement of backfill materials over it to keep it from sliding t the sides and/or from being blown about in the ditch by the wind. The tape shall be lid with the painted side, which shall also be the side with the identification lettering on it, in the “up” position. The tape shall be laid in the flat position and kept there until backfill is accomplished.

The Contractor shall then complete the backfilling operation in such a manner that the marking tape is not cut, crimped, ruptured or separated by the backfilling work.

2.2(a).4 Measurement and Payment

No separate pay item will be provided for furnish and placing the marking tape. This item shall be considered subsidiary to the non-metallic pipe being placed.

2.3 Ductile Iron Pipe

A. All ductile iron pipe used in the construction of water works improvements shall be Cement Lined and shall be manufactured in accordance with and shall meet the requirements of AWWA Specification C-l5l.

B. Pipe shall be cast in lengths of not less than l2 feet and shall be designed for a working pressure of l50 pounds per square inch. Thickness of ductile iron pipe shall be as shown on the plans and bid proposal or shall be computed in accordance with AWWA Specification C-l50, based on l50 pounds per square inch working pressure for 10 feet of cover and laying condition 2.

C. All ductile iron pipe shall have an exterior, bituminous coating and an inside cement-mortar lining in accordance with the requirements of AWWA Specification C-l04.

2.4 Polyethylene Plastic Tubing

Service lines shall be constructed with polyethylene plastic tubing as specified in ASTM D 2737 with a rating of l60 psi.

2.5 Ductile Iron Pipe Fittings

All fittings for ductile iron pipe and PVC pipe shall be ductile iron and shall be mechanical joint all connections except tees for fire hydrant leads unless shown otherwise on the plans. Tees for connecting fire hydrant leads shall be MJ- with a flange outlet.

All ductile iron fittings shall conform to AWWA Specification C-110, designed for a working pressure of 250 psi. All ductile iron fittings shall have an external coating and shall be cement lined in accordance with the specifications for coating and lining the pipe.

2.6 Pretensioned Concrete Cylinder Pipe

A. The contractor shall furnish and install all concrete cylinder pipe and fittings, including connections and appurtenances complete as shown on the plans and specified herein.

B. The contractor shall submit six (6) sets of full and complete shop drawings on the concrete cylinder pipe and fittings. All of the drawings and data shall be complete and shall include a complete description of the pipe offered, including cuts, tabulated layout and all pertinent engineering data required for a complete evaluation of the submittal. Submittal data shall be in such form and so presented that the Engineer may readily review the data.

C. Prior to delivery of the pipe to the project site, the manufacturer shall furnish an affidavit certifying that all pipe, fittings, and specials, and other products and materials furnished, comply with the applicable provisions of this specification.

D. The pipe manufacturer shall furnish a factory trained, job experienced field representative who shall visit the project periodically during the course of installation. He shall also be subject to call by the contractor and/or engineer to advise and assist with the solution of field problems.

During visits, the representative shall observe all phases of the project including location and condition of pipe strung ahead of the contractor, trench width, if applicable, bedding and backfill, assembly of pipe joints and protection of steel. If, in the opinion of the representative any phase of the installation is unsatisfactory, he shall so advise the contractor's superintendent and also advise the owner or engineer's representative on the job site.

E. All closure sections shall be the jack on type and "field welding" will not be permitted without the written permission of the engineer.

F. Pipe manufacturer will install all necessary taps for the contractor to disinfect and field hydrostatic test the pipe.

G. Pretensioned concrete cylinder pipe, fittings and specials shall be designed, fabricated and tested in accordance with the latest requirements of AWWA C-303, "Reinforced Concrete Pressure Pipe Steel Cylinder Type, Pretensioned, for Water and Other Liquids" with additional requirements or modifications as described herein.

H. Pretensioned concrete cylinder pressure pipe shall be designed for l50 psi, working pressure and manufactured in 32 foot nominal lengths in accordance with the provisions of AWWA Standard C-303.

I. Inspection and Testing

(1) The owner reserves the option to have an independent testing laboratory, at the owner's expense, inspect pipe and fittings at the pipe manufacturer's plant to ensure compliance with the applicable specifications. The owner's testing laboratory and Engineer shall have free access to those parts of the manufacturer's plant that are necessary to ensure compliance with the governing standard. The pipe manufacturer shall notify the owner, in writing, at least two weeks ahead of pipe fabrication as to start of fabrication and fabricating schedule so that the owner can advise the manufacturer as to owners' decision regarding tests to be performed by an independent testing laboratory. In event the owner elects to retain an independent testing laboratory to make material tests and weld test, it is the intent that the tests be limited to one spot testing of each category unless the tests do not show compliance with the standard. If these tests do not show compliance, the owner reserves the right to have the laboratory make additional tests and observations to ensure compliance of the finished product with the standard.

(2) In any event, the manufacturer shall perform the tests described in AWWA C 303, and furnish the owner with a copy of the test reports, if requested, at the expense of the pipe manufacturer. The pipe manufacturer shall furnish the owner with affidavit of compliance as outlined in the standard.

(3) All welds for water tightness in special pipe and fittings that have not been hydrostatically tested may be examined by use of visible dye penetrant system meeting requirement of ASTM El65; however, collar reinforcement and all other lap welds shall be tested by introducing air under l0 psi pressure between the collar and cylinder and checking for leaks around and through the welds with soap solution.

The area to receive the dye penetrant shall be cleaned free from contaminants that might interfere with the penetrant process. The temperature of the steel in the weld area shall be between 60 and l25 degrees F. when the penetrant is applied. Dwell time of six hours shall be allowed after application of the penetrant and developer before interpreting the results.

Defects that are found shall be repaired and the test repeated until all defects

are eliminated. Colored penetrant shall be removed before fittings are lined.

2.7 Casing Pipe

Casing pipe to be installed in bore or open cut may be limited service pipe, corrugated galvanized steel pipe or new straight seam or spiral welded steel pipe. Casing pipe shall be furnished in thickness or gage as shown on the plans.

Limited service pipe proposed for use on this project must be approved a minimum of four (4) working days prior to the time of opening bids and shall be in good condition and shall meet the same service requirements as the corrugated galvanized steel or welded steel pipe.

Welded steel casing pipe shall be coated inside and out using a coal tar epoxy or shall be bituminous coated in side and out by the hot dip method.

2.8 Bedding Materials

A. All water pipelines placed on this project shall be bedded with crushed stone bedding materials to the minimum as shown on the plans and in the Detail Drawings.

B. Granular material furnished for foundation, bedding, encasement, backfill, or other purposes as may be specified, shall consist of any natural or synthetic mineral aggregate such as, crushed gravel, crushed rock, crushed stone, or slag, and shall conform to the following specifications and/or gradation.

Note, all materials used for these purposes shall be crushed and shall have at least two broken faces. Pea gravel will NOT be allowed.

	Foundation	Bedding	Encasement	Backfill
ASTM c33 Grade #57	X			
ASTM C33 Grade #67	X			
ASTM C33 Grade #8		X	X	
THD 1982 ITEM 302 Type "D" Grade #4		X	X	
THD 1982 Item 302 Type "D" Grade #5			X	
Crusher Fines**			*X	X

* 100 percent of crusher fines that are to be used within 12 inches of the top of pipe must pass the 3/4" sieve.

** Approximate Gradation for Crusher Fines

Sieve Size	% Passing
2 inch	100
#4	35 - 100
#10	20 - 100
#40	5 - 35
#200	4 - 10

Crushed stone material proposed as an alternate for use on this project and not meeting the above specifications must be approved in writing at least 48 hours prior to the time scheduled for opening bids.

C. Granular materials provided for Foundation, Bedding, Encasement, or backfill use as required by the contract, either as part of the pipe item work unit or as a separate contract item, shall be classified as to use in accordance with the following:

MATERIAL USE DESIGNATION	ZONE DESIGNATION
Granular Foundation	Placed below the bottom of pipe grade as replacement for unsuitable or unstable soils, to achieve better foundation support.
Granular Bedding	Placed below the midpoint of the pipe prior to pipe installation, to facilitate proper shaping and achieve uniform pipe support. Also for Class B Bedding where specified.
Granular Encasement	Placed below an elevation one half (6") foot above the top of pipe, after pipe installation, for protection of the pipe and to assure proper filling of voids and thorough consolidation of backfill.
Granular Backfill	Placed below the surface base course, if any, as the second stage of backfill, to minimize trench settlement and provide support for surface improvements.

In each case above, unless otherwise indicated, the lower limits of any particular zone shall be the top surface of the next lower course as constructed. The upper limits of each zone are established to define variable needs for material gradation and compaction or void content, taking into consideration the sequence of construction and other conditions. The material use and zone designations described above shall only serve to fulfill the objectives and shall not be construed to restrict the use of any particular material in other zones where the gradation requirements are met.

3. VALVES AND VALVE BOXES

3.1 General

A. Valves 4" through l2" shall be resilient seated gate valves with non-rising stems and shall open by turning to the left (counter clock wise).

B. Valves l4" and larger shall be resilient seated butterfly valves and have operators suitable for direct burial and shall open by turning to the left (counter clock wise).

All valves except valves for use in fire hydrant leads shall have mechanical joint ends unless shown otherwise on the plans. Valves for use in fire hydrant leads shall be flange by mechanical joint.

C. All valves and fire hydrants shall be spray coated with a two component thermal setting epoxy to cover all interior wetted ferrous surfaces. Finished coating shall have a minimum thickness of 4 mils. The coating shall conform to the coating section of these specifications.

D. All valves for buried service shall be equipped with 2" square AWWA operating nuts.

3.2 Gate Valves

A. Gate valves shall be iron body, resilient **wedge gate** and shall be in compliance with AWWA Standard C-509-80 or latest revision thereof and shall have the following design features:

B. All valves shall have a working pressure of 200 psi and shall be bottle tight tested at this pressure from both directions. The gate body shall also be hydrostatically tested at 400 psi. Zero leakage will be required in all tests. The body, bonnet, and stuffing box shall be flange together with ASTM A-307 Grade B bolts and nuts to insure repairability.

C. Stems shall be machined from modified manganese bronze rod with an integral forged thrust collar machined to size.

D. Stem seals shall be dual "O" ring type.

E. Valve discs shall be rubber encapsulated or have disc seat rings molded of natural rubber, internally steel reinforced retained to the disc by self-locking type 304 stainless steel screws. Valve gates shall seat against a machined epoxy coated mating surface in the body of the valve.

F. All internal ferrous metal surfaces (machined or cast) shall be factory spray coated with a two component thermosetting epoxy to a nominal thickness of 4 mils and the exterior shall be coated with asphalt varnish as specified for coating of the pipe. (See Sec. 3.4 of these specifications for epoxy coating).

G. Valves shall be Mueller A-**2360** or Dresser-M&H **4067** or approved equal. Any alternate (approved equal) to these specifications **shall have completely interchangeable parts with either of the specified valves.**

3.3 Butterfly Valves

A. General - All butterfly valves shall be of the rubber seated tight-closing type. They shall meet or exceed AWWA Standard C-504, Class l50B. Both valve ends shall be mechanical-joint per AWWA Standard C-lll. Accessories (bolts, glands, and gaskets) shall be supplied by the valve manufacturer.

B. All valves must use full AWWA C-504 Class l50 B valve shaft diameter, and full Class l50 B underground service operator torque rating throughout entire travel, to provide capability for operation in emergency service.

C. Valve body shall be high strength cast iron ASTM A 126 Class B with l8-8 type 304 stainless steel body seat. Valve vane shall be high strength cast iron ASTM A 48 Class 40 or ASTM A 536, Grade 65-45-l2 ductile iron having rubber seat mechanically secured with an integral l8-8 stainless steel clamp ring and l8-8 stainless steel self locking screws.

D. Rubber seat shall be a full circle 360^{o} seat not penetrated by the valve shaft. Valve shall have permanently set two way thrust bearing. Packing shall be designed for permanent duty in underground service.

E. Valve operator shall be of the traveling nut type, sealed, gasketed and lubricated for underground service. It shall be capable of withstanding an overload input torque of 450 ft. lbs. at full open or closed position without damage to the valve or valve operator. It shall be designed to resist submergence in water to 25 ft. head pressure. Number of turns to operate valve shall be as listed below in order to closely resemble conventional distribution valve practices and to minimize water hammer:

Pipe and Valve Size	Turns to close	Pipe and Valve Size	Turns to Close
4" - 6"	16-1/2	14" - 16"	48"
8"	24	18" - 20"	72
10" - 12"	36	24"	90

F. Valves shall be capable of easy closure by one man using standard valve key, even under emergency line-break conditions as severe as those that would - cause a valve maximum opening torque requirement of as much as two times AWWA Class l50 B.

G. All valves shall be tested bottle-tight at rated working pressure by the manufacturer as follows:

l4" up. . . . . l50 psi

In addition a hydrostatic test with vane partially open shall be given to the assembled valve as follow:

l4" up. . . . . 300 psi

H. Valve shafts shall be l8-8 type 304 stainless steel. Shaft bearings shall be of the self lubricating sleeve type.

I. Valve discs or vanes for valves 30" and larger shall be the flow through (bridge or truss) type.

J. Butterfly valves shall be Dresser-M&H Model "450", "4500" or "l450" or Mueller line seal III or approved equal. Alternates (approved equal) to these specifications must be approved in writing 48 hours prior to time bids are received.

3.4 Coating

A. The coating shall be a two part thermosetting epoxy protective coating and shall function as a physical, chemical and electrical barrier between the base metal to which it is applied and the surroundings.

B. The coating shall be non-toxic and shall not impart taste to water. The coating must be formulated from materials deemed acceptable per the FOOD AND DRUG ADMINISTRATION DOCUMENT TITLE 2l of the FEDERAL REGULATIONS ON FOOD ADDITIVES SECTION l2l.25l4 entitled, RESINS AND POLYMERIC COATINGS.

C. The coating shall have a satin finish and shall be suitable for field over coating and touchup with same coating material without sanding or special surface preparation, or application of heat in excess of room temperature.

D. The coating shall have a successful record of performance in valves, pipe or other allied equipment for a minimum of two years.

E. The coating adhesion to the substrate shall exceed cohesion of the coating film as demonstrated by the following test:

(1) Prepare test panel and apply coating per manufacturer's recommendation.

(2) After sample has properly cured per manufacturer's recommendation, scribe an "X" using a sharp knife or scalpel through the coating to the metal substrate.

(3) Then with the point of the knife at the juncture of two scribes, attempt to lift off coating. Coating should not lift off substrate or between coats readily, but should break up leaving coating material on the substrate of this damaged area.

(4) No disbandment of the film shall be noted as tested above after immersion in tap water for l500 hours at l00`F.

F. A falling sand abrasion test using ASTM D968 shall produce an abrasion coefficient of 25-30 liters/mil. As an alternative, a Taber Abrader Test should find 3.5 - 3.7 milligrams coating loss per l00 cycles when using a CSF l0 Wheel (l000 gram weight).

3.5 Valve Boxes

All valves to be used in buried service shall be enclosed in cast iron valve boxes. Care shall be taken to place and maintain the 2" square operating nut in the center of the valve box. The valve box shall be two piece cast iron suitable for use with PVC pipe box risers. The 6 inch diameter cover shall be marked " Water". The PVC riser pipe shall be furnished in lengths as required (minimum pipe cover 42") PVC pipe for valve box riser may be ASTM C-900, ASTM D1785 schedule 40, ASTM D2241 pressure class 125 or ASTM D3034 DR 35. Valve boxes shall have a concrete ring 8" thick and having a radius equal to the radius of the valve box plus one foot (1') cast around them. Valve boxes placed in unpaved areas shall be set level with or slightly higher than the finished ground elevation. Valve boxes set in paved areas shall match the finished pavement surface.

3.6 Fire Hydrants

A. Fire hydrants shall conform to the requirements of AWWA C 502 dry barrel type. The fire hydrants shall be designed for a depth of bury of 4.5 feet, however the depth of bury may vary according to field conditions and extensions or shorter bury depth may be required.

B. The hydrants shall have a 5-l/4 inch valve opening, two 2-l/2 inch hose nozzles and one 4-l/2 inch pumper nozzle.

C. Hose threads shall be National Standard threads.

D. The hydrants shall be sized for 6-inch mains and shall have an inlet connection compatible with the type pipe used. All gaskets, nuts, bolts and other jointing materials shall be considered part of the fire hydrant installation.

E. Operating nut shall be standard l-l/2 inch pentagon opening counter-clockwise. The hydrant shall close with the pressure.

F. Hydrants shall be painted Federal Safety Yellow.

G. Fire hydrants shall have all interior wetted ferrous surfaces epoxy coated as required in the general and coating section of this item.

H. The hydrants shall have a minimum of two (2) drain holes located on opposite sides of the hydrant. The entire drainage channel must be made of non-corrosive material and sealed by acceptable resilient material (metal and/or leather seals are not acceptable).

I. The hydrants shall have a breakable safety flange and breakable stem coupling which breaks cleanly upon impact.

J. The hydrants shall be AWWA improved type hydrants and shall have self-oiling reservoirs.

K. Fire hydrants shall be the Mueller Centurion, the Dresser -M & H 929 Reliant, or The American Darling.

4. EXCAVATION, TRENCHING BEDDING AND BACKFILLING

4.l Trenching

A. The trench shall be excavated to the lines and grades as established by the engineer and as shown on the plans. The depth of cover for all main lines on which the grades and elevations are not shown on the plans, shall in general be Forty-two (42) inches. The amount of cover may vary over or under 42 inches as directed by the engineer but in no case will the amount of cover be less than thirty-six (36) inches. Depth of cover for service lines shall be as shown on the detail drawings.

B. Water lines constructed in proposed streets and service drives shall have the depth of cover measured from the finished grade. The contractor is hereby cautioned that proposed street finished grades are sometimes cut below the existing ground elevation.

C. The minimum width of the trench shall be the outside diameter of the pipe plus twelve (l2) inches for pipe diameter through l8", the outside diameter of the pipe plus eighteen (l8) inches for pipe diameters over l8". The trenching equipment shall be maintained on a sufficiently level road bed to provide substantially vertical trench walls. The maximum horizontal offset of the trench wall from bottom of trench to the top of the trench (under-cutting) shall be four (4) inches.

D. The trench shall be over excavated to an even grade to the depth of required bedding so that the bottom of the pipe will rest on a uniform thickness of bedding material on the bottom of trench throughout the entire length of the pipe. In order to obtain a true even grade, the bedding material shall be fine graded by hand. On lines that are to be laid to established grades batter boards shall be set at fifty foot intervals and the trench graded to the established grade.

E. Any part of the trench excavated below grade shall be corrected by filling with bedding material. The bedding material shall be thoroughly compacted.

E. If large rock, rock fragments or other unyielding materials are encountered in the bottom of the trench they shall be removed to a depth of six inches below grade, and the void filled with thoroughly compacted approved bedding material.

G. Bell holes of ample dimensions shall be dug at each joint to permit the jointing of pipe to be made properly and of sufficient depth to prevent the bell of the pipe from resting on undisturbed materials.

H. Wherever necessary to prevent caving, the trench shall be adequately braced and sheeted. Trench safety shall be in accordance with item l4 "Shoring and Sheeting of this specification.

I. Trench digging machinery may be used to make the trench excavations except in places where operation of same would cause damages to trees, buildings or other existing structures either above or below ground. In such instances hand trenching methods shall be employed.

J. All excavated material shall be stockpiled in a manner that will not endanger the work or existing structures and that will cause the least amount of obstructions to walks and driveways.

K. There will be no classification of the excavated materials and the term excavation shall include all materials encountered in excavating the trenches or structural excavations.

L. The contractor shall take all necessary precautions for protecting paved areas from being damaged by the trenching and backfilling equipment. Any damage done to any paved area, outside of the area set forth in the plans, as a result of the construction work shall be repaired by the contractor at his own expense.

M. Where the lines are located behind curbs, the contractor shall take special precautions to protect trees and shrubs. Care shall be exercised to cause as little damage to lawns as possible.

Where lines cross under curbs, gutters or curbs and gutters, tunneling will be required.

N. Blasting for excavation of solid rock will be permitted only after securing the

approval of the Director of Engineering and Transportation and the engineer and only when proper precautions are taken for protection of persons and property. The hours of blasting will be fixed by the engineer. Any damage caused by blasting shall be paid for by the contractor. The method or procedure relative to blasting shall conform to all state laws and local ordinances.

O. The contractor will be required to locate all known utility lines, including consumer service lines, far enough in advance of the trenching to make proper provisions for protecting the lines and to allow for any deviations that may be required from the established lines and grades.

P. The contractor shall not be allowed to disrupt the service on any utility lines except consumers service lines, which may be taken out of service for short periods of time, if the contractor obtains permission from the engineer and from the owner of the premises being served by the utility.

Q. The contractor shall immediately notify the proper utility company of any damage to utility lines, in order that service may be reestablished with the least possible delay. Repair of any damage to existing lines and the repair of consumer lines which are authorized to be cut or temporarily taken out of service shall be made by the contractor at his own expense, and as directed by an official representative of the utility company involved.

R. All utility lines shall be properly supported to prevent settlement or damage to the line both during and after construction.

S. Any permanent relocations of existing utility lines shall be done by the proper utility company without expense to the contractor.

4.2 Backfill General

A. All pipeline excavations shall be backfilled in a manner that will restore pre-existing conditions as the minimum requirement and fulfill all supplementary requirements indicated in the Plans and Specifications. The backfilling operations shall be started as soon as conditions will permit on each section of pipeline to provide continuity in subsequent operations and restore normal public service as soon as practicable on a section-by- section basis. All operations shall be pursued diligently, with proper and adequate equipment, to assure acceptable results.

B. Depositing of the backfill shall be done so the shock of falling material will not injure the structure. Grading over and around all parts of the work shall be done as directed by the Engineer.

C. Whenever soil types which are determined by the Inspector to be undesirable for backfill are excavated from the trench, such material shall be hauled away and deposited where directed by the Inspector at no additional compensation.

D. In the absence of special work item requirements the backfilling shall be accomplished with the use of suitable materials selected from the excavated

materials to the extent available and practical. Should the materials available from the trench section be unsuitable or insufficient, the required additional materials shall be furnished from outside sources at the Owners expense.

E. Suitable material shall be defined as a mineral soil reasonable free of foreign materials (rubbish, debris, etc.) frozen clumps, oversize stone, rock, concrete or bituminous chunks and other unsuitable materials, that may damage the pipe installation, prevent thorough compaction, or increase the risks of after settlement unnecessarily. Material selection shall be such as to make the best and fullest utilization of what is available, taking into consideration particular needs of different backfill zones. Material containing stone, rock, or chunks of any sort shall only be utilized where and to the extent there will be no detrimental effects.

F. Backfill materials shall be carefully placed in relatively uniform depth layers spread over the full width and length of the trench section in a manner and/or sequence that will provide simultaneous support on both sides of the pipeline. Each layer shall be compacted effectively, by approved mechanical of hand methods, until there is no further visual evidence of increased consolidation. Compaction of the in place layer shall be completed acceptably before placing material for a succeeding layer thereon. The manner of placement, layer thickness, compaction equipment, and procedure effectiveness shall be subject to approval of the Engineer. Water jetting or flooding shall NOT be used to compact trench backfill.

G. Within the pipe bedding and encasement zones described as that portion of the trench which is below an elevation one foot above the top of the pipe, the materials placed shall be limited in particular size to 3/4 inch maximum. For larger pipe in access of 18 inches in diameter the Engineer may allow particle sizes up to 2 inches maximum if it can be shown that the backfill can be satisfactorily compacted without leaving voids or damaging pipe or joints. Above these zones, the placement of material containing stones, boulders, chunks, etc. shall be governed by the layer thickness and compaction equipment capabilities.

H. Compaction of materials placed within the pipe bedding and encasement zones shall be accomplished with portable or hand equipment methods to achieve thorough consolidation under and around the pipe and avoid damage to the pipe. Above the pipe zone material, the use of heavy roller type compaction equipment shall be limited to safe pipe loading.

I. The maximum loose thickness of each backfill layer shall be l2 inches, except that l6 inches will be permitted for Granular Materials placed above an elevation one foot above the top of pipe, and with the provision that, by authority of the Engineer in consideration of the demonstrated capability of special type vibratory compactors, these maximums may be increased at his discretion. "Hydro tamps" or "vibra tamp: or other heavy vibrating equipment shall not be used until the backfill has reached a depth of four (4) feet above the top of the pipe.

J. All surplus or waste materials remaining after completion of the backfilling operations shall be disposed of in an acceptable manner within 24 hours after

completing the backfill work on each particular pipeline section. Disposal at any location within the project limits shall be as specified, or as approved by the Engineer; otherwise, disposal shall be accomplished outside the project limits at the Contractor's discretion. The backfilling and surplus or waste disposal operations shall be a part of the work required under the pipeline installation items, not as work that may be delayed until final cleanup.

K. Until final acceptance of the project, the Contractor shall assume full Responsibility and expense for all backfill settlement and shall refill and restore the work as directed to maintain an acceptable surface condition. All additional materials required shall be furnished without additional cost to the Owner.

4.3 Backfill Procedure above Pipe Zone, in Public Rights-of-way and other areas where settlement is important.

A. Backfill above the pipe zone shall be made using Portland cement stabilized backfill or crushed stone screening (crusher fines).

B. Backfill around structures such as manholes, junction boxes, transformer boxes and valve boxes shall be made using portland cement stabilized backfill material or crushed stone screening (crusher fines).

C. The minimum depth of stabilized backfill or crusher fines shall be twelve (12") inches.

When utilities are being constructed under existing paving, the stabilized backfill or crusher fines shall extend from top of the pipe zone to the top of the base course.

When utilities are being constructed under existing unpaved streets that are not scheduled for immediate pavement construction, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the existing roadway surface.

When utilities are being constructed in new streets that are scheduled for immediate paving or in streets in a new subdivision for which a paving contract with the property developer has been approved the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the bottom edge of the eight (8") inches of subgrade, or, if the paving contractor has constructed a portion of the roadway prior to the construction of the utilities stabilized backfill shall extend to the top of the course the contractor has finished. In no case shall the backfill extend above the top of the base course.

If the final course of asphaltic concrete has been placed, the street or alley surface shall **NOT** be cut for utility installation.

In new streets where stabilized backfill is required only to the bottom of the subgrade course, the minimum depth of stabilized backfill may be reduced to six (6") inches in which case the maximum depth of the "pipe zone" shall be limited to six (6") inches above the top of the utility line or conduit.

D. Backfill Materials

(1) Portland cement stabilized backfill shall consist of caliche base material, blow sand or native soil stabilized by the addition of Portland cement. Crushed stone or concrete aggregate shall **NOT** be used.

The Contractor shall submit a mix design prepared by an approved Commercial Laboratory that will produce a minimum 7 day compressive strength of 150 psi. In no case shall the minimum cement content of the mix be less than 1 sack per cubic yard.

(2) Cement used in Portland cement stabilized backfill shall be Type I or Type II conforming to the requirements of ASTM Designation C150.

(3) Caliche used for Portland cement stabilized backfill shall be crushed material con-forming to Texas State Department of Highways and Transportation 1982Standard Specifications for Construction of Highways, Streets and Bridges Item 248 Type F, Grade 2.

(4) Blow sand used for Portland cement stabilized backfill shall be clean, free from organic matter, clay lumps, rock and other deleterious matter.

(5) Native soil used for Portland cement stabilized backfill shall be clean, free from clods and organic matter, and rock in excess of 2".

(6) Crushed stone screening (crusher fines) used for back fill shall be sharp grained particles of crushed stone conforming to the following gradation

Sieve Size	% Passing
2"	100
#4	35-100
#10	20-100
#40	5-35
#200	4-10

and may be the by product of crushing stone for other purposes or may be stone specifically crushed for use in backfill. Crusher fines not meeting these specifications may be approved for backfill upon demonstration that the desired results will be obtained.

E. Backfill Construction

(1) Portland cement stabilized caliche backfill or Portland cement stabilized native soil backfill may be constructed using either the "dry" method or the "wet" method.

(a) The dry method of stabilized backfill construction consists of dry mixing of the cement and caliche, sand or soil to produce a homogenous mixture then adding and mixing sufficient water for proper compaction and hydration of the cement. The water content of the mixture will be approximately one to two percent above the optimum moisture for soil compaction. The mixing may be accomplished by using batch mixers or on the job site by "blade Mixing" or other suitable method to produce the desired backfill material. The mixed material shall be placed in lifts of up to a maximum of 12 inches and compacted to ninety five (95%) modified proctor density by use of suitable compacting equipment.

(b) In the "wet" method of cement stabilized backfill construction, the materials shall be mixed in an approved concrete batching plant or mixer to the consistency of concrete and placed as concrete would be placed. The slump of the backfill material shall be such that all voids will be filled, approximately four (4") to six (6") inches. The backfill shall be consolidated by rodding or by the use of mechanical vibrators.

(c) The mix design used must be for the method of placement chosen.

(2) Portland cement stabilized blow sand backfill shall be mixed and placed by the "wet" method as described above.

(3) Crushed stone screening (crusher fines) shall be wetted uniformly throughout with sufficient moisture to assure proper compaction before being placed in the trench.

The moistened crushed stone screening (crusher fines) shall be placed in maximum lifts of twelve (12") inches and consolidated using vibratory type compaction equipment except when it has been demonstrated that the compaction equipment employed will adequately compact deeper lifts in which case the maximum depth of a lift shall be limited by the capabilities of the equipment used.

Tests to determine the compacted density of the backfill shall be ordered by the Engineer if in his opinion the compaction is not adequate. Test showing a minimum compacted density of 90% modified proctor will be deemed adequate compaction.

5. INSTALLATION OF DUCTILE IRON PIPE

5.1 Pipe Laying - General

A. All pipe and accessories shall be unloaded, handled, laid, jointed, tested for defects and for leakage and chlorinated in the manner herein specified.

B. The pipe, fittings, valves, and accessories shall be inspected upon delivery and during the progress of the work and any material found to be defective will be rejected by the engineer and the contractor shall remove such defective material from the site of the work.

C. The contractor shall be responsible for all material furnished by him and he shall replace at his own expense all such material that is found to be defective in manufacturer or has become damaged in handling after delivery.

D. All pipe, fittings, valves, and other accessories shall, unless otherwise directed, be unloaded at the point of delivery, hauled to and distributed at the site of the work by the contractor. Loading and unloading, of pipe and fittings shall be by hoisting or by sliding, or rolling on skidways in such a manner as to avoid shock or damage to the material. Under no circumstances shall pipe or fittings be dropped. Pipe handled on skidways must not be skidded or rolled against pipe already on the ground.

The pipe, fittings and accessories shall be placed along the site in such a manner as to be kept as free as possible from dirt, sand, mud, and other foreign matter.

E. All pipe shall be laid and maintained to the lines and grades shown on the plans
or as established on the ground by the engineer.

F. Wherever it is necessary to deflect pipe from a straight line either in a vertical or horizontal plane to avoid obstructions, to plumb valves and hydrants, or where vertical or horizontal curves are shown or permitted, the degree of deflection at each joint shall not exceed the maximum deflection recommended by the manufacturer of the particular kind of pipe being laid and the degree of deflection shall be approved by the engineer.

G. After the trench grade has been completed and all bell holes dug and the grade inspected, the pipes and accessories my be placed in the trench. All pipe, fittings, valves, and hydrants shall be carefully lowered into the trench piece by piece by means of derricks, ropes, or other suitable tools or equipment, in such a manner as to prevent damage to the material in any way. Under no circumstances shall pipe or accessories be dropped or dumped in the trench.

H. Before lowering into trench the pipe shall be again inspected for defects and the pipe while suspended shall be lightly hammered to detect cracks. Any defective, damaged or unsound pipe and materials shall be rejected.

I. All foreign matter or dirt shall be removed from the inside of the pipe and from all bells, spigots or parts of the pipe used in forming the joint, before the pipe is lowered into the trench, and it shall be kept clean by approved means during and after laying.

5.2 Laying and Jointing Ductile Iron Pipe

A. Unless otherwise directed, pipe shall be laid with bells facing in direction of laying; and for lines on appreciable slopes, bells shall, at the discretion of the engineer, face up grade. Cutting of pipe for inserting valves, fittings or closure pieces shall be done in a neat and workmanlike manner without damage to the pipe or the cement lining.

B. The jointing shall be completed for all pipe laid each day. No open joints will be left in the trench overnight. At times when pipe laying is not in progress, the open ends of pipe shall be closed by approved means. No trench water shall be permitted to enter the pipe.

C. No pipe shall be laid in water, or when the trench conditions or weather is unsuitable for such work, except by written permission of the engineer.

D. Rubber Gasket joints for cast iron or ductile iron pressure pipe and fittings shall conform to AWWA Standard C-lll.

E. Before laying the pipes, all lumps, blisters and excess coal tar coating shall be removed from the bell and spigot ends of each pipe; the outside of the spigot and the inside of the bell shall be wire brushed and wiped clean and dry. Pipe ends shall be kept clean until joints are made.

F. The pipe and fittings shall be properly aligned and free to move in any direction while bolting, and the bolts shall be gradually tightened at a uniform rate around the entire flange.

G. Flange joints where used shall be bolted with flange bolts of best quality mild steel and of the size and length required by AWWA C-ll5: Bolts and nuts shall be provided with standard hexagonal heads. Gasket rings shall be used and shall be made of best quality rubber composition sheet packing one-eighth (l/8) inch thick, of a brand and quality approved by the engineer.

H. Standard plugs shall be inserted into the bells of all dead end pipes, tees, or crosses and spigot ends shall be capped. Plugs or caps shall be jointed to the pipe or fittings in the same manner used in joining the pipe.

6. SPECIFICATIONS FOR INSTALLING PRETENSIONED CONCRETE CYLINDER PIPE

6.l General

The applicable portions of the specifications for installing ductile iron pipe shall apply except as amended or supplemented herein.

6.2 Pipe Laying

A. Pipe and fittings shall be handled with care at all times to avoid damage. They shall be lifted by hoists or slide or rolled on skid-ways in such manner as to avoid shock. Under no circumstances shall they be dropped. Pipe must not be skidded or rolled against other pipe or object.

B. Just before making the joint, the bell and spigot rings shall be thoroughly cleaned by wire-brushing until clean and dry. The gasket and the inside surface of the bell shall be lubricated with a light film or soft vegetable soap compound (flax soap) to facilitate telescoping the joint. The rubber gasket shall be stretched uniformly as it is placed in the spigot groove to insure a uniform volume of rubber around the circumference of the groove.

C. The joint shall be telescoped by pulling directly along the centerline of the pipe so that the spigot enters squarely into the bell. After the spigot has been telescoped into the bell, the bell end of the pipe being laid shall be moved in accordance with the plans to secure proper grade and alignment. After the joint is in place, a thin metal feeler gauge shall be used to check the position of the rubber gasket around the circumference of the joint.

D. The inside joint recess shall be filled immediately prior to placing the pipe together by buttering the bell end with mortar. After the joint is engaged, the joint mortar of pipe l8" in diameter and larger shall be finished off smooth by hand. The mortar in pipe smaller than l8" in diameter shall be smoothed and cleaned with a swab.

E. After the spigot has been telescoped into the bell, the joint checked and found satisfactory, a canvas wrapper shall be placed around the pipe, covering the joint. The canvas type wrapper shall be of the quality manufactured by the Mar-Mac Manufacturing Company or approved equal burlap type, and shall be hemmed at each edge to allow threading with a steel strap to securely fasten the wrapper around the pipe by means of a stretcher and sealer.

The wrapper shall have a minimum width of 7" and sufficient length to encircle the pipe leaving enough space between the ends at the top to allow the cement mortar to be poured. The entire joint shall be poured with cement mortar and rodded or agitated to eliminate voids and settlement. Prior to pouring the cement mortar the joint shall be thoroughly cleaned and saturated with clean water. Any joint showing shrinkage or excessive cracking shall be cleaned and remade. In hot weather,

additional measures may be required to obtain the best quality of joint, such as additional wet burlap, curing membrane, or immediate careful and well controlled backfilling of the joint with damp earth.

F. The mortar used at the exterior joint shall consist of one part Portland cement to 2-l/2 parts fine, sharp, clean sand and mixed with water to the consistency of thick cream. Mortar required at the joint shall not be placed in freezing weather unless adequately protected from freezing.

G. The joints for pipe to be installed in casing shall be made as for pipe laid in trench except that the outside portion of the joint shall be wrapped in a special polyurethane wrap impregnated with unhydrated cement manufactured for this purpose, prior to being jacked into the casing pipe. The wrap shall be "Flex-Protex" as manufactured by Mar-Mag Mfg. Corporation or approved equal. The interior of the joints shall be mortared after the pipe to be installed in casing has been jacked into place. The pipe shall not be moved after interior mortaring is completed. After the water line has been installed in the casing the ends of the casing shall be sealed using concrete or cement mortar.

H. Steel cylinder reinforced concrete pipe shall not be pressure tested until it has been in place a minimum of l4 days.

I. The contractor shall fill the steel cylinder reinforced concrete pipe under slight pressure and allow approximately 24 hours for water absorption by concrete lining before performing pressure test.

7. SETTING VALVES, VALVE BOXES, FIRE HYDRANTS AND FITTINGS

7.1 General

Valves and fittings shall be set at the locations shown on the plans or at locations as established by the engineer, and shall be set and jointed to the pipe in the manner heretofore specified for pipe installation. All valves buried in the ground shall have a cast iron valve box set over the valve and set to grade. All valves shall be set vertical, unless otherwise specified, and shall be thoroughly inspected and checked for operation before installation.

7.2 Valve Boxes

Cast Iron valve boxes shall be firmly supported and maintained centered and plumb over the wrench nut of the valve, with box cover flush with the surface of the ground or street paving.

Valve boxes shall be supported by a ring of concrete as shown on the plans and Detail Drawings. This ring shall be Class "A" concrete having a minimum thickness of six (6") inches and shall extend a minimum of twelve (12") inches in all directions from the outside diameter of the valve box and shall be supported on thoroughly compacted backfill.

7.3 Setting Fire Hydrants

A. Fire hydrants shall be located at points shown on the plans, the exact location of the hydrant to be established by the engineer. All hydrants shall be set plumb, to the grade as established by the engineer, and shall have their nozzles parallel with and/or at right angles to the curb, with the pumper nozzle facing the curb. The hydrants shall be supported in such a manner as not to cause a strain on the fire hydrant lead or branch.

The bowl of the hydrant shall be well braced against unexcavated earth at the end of the trench with concrete blocking. The concrete blocking shall be placed so as not to interfere with the hydrant drains and so that the joints or flanges are accessible.

B. Each hydrant shall be connected to the main with a six (6) inch ductile iron branch controlled by an independent six (6) inch gate valve. Each hydrant shall be set upon a stone or concrete slab not less than four (4) inches thick and not less than one square foot of surface area. Where solid rock exists in the bottom of the trench and same is excavated to the proper depth to form a foundation for the hydrant, the slab of stone or concrete may be omitted.

C. There shall be placed around the base of the hydrant not less than seven (7) cubic feet of sound broken stone or clean gravel, or other suitable material to provide reservoir capacity so that the hydrant will completely drain when closed. The gravel or broken stone shall reach from the bottom of the trench to at least six (6) inches above the waste opening in the hydrant. Each hydrant shall be operated by the contractor to prove to the inspector that the drain hole has not been plugged with concrete or other material.

8. **ANCHORAGE OF BENDS, TEES AND PLUGS, ETC.**

Reaction or thrust blocking shall be applied to all pipe lines at all tees, plugs, caps, valves, fire hydrants, and at bends deflecting ll-1/4 degrees or more. Concrete shall be used for blocking the pipe and fittings. Concrete for thrust block shall have a minimum compressive strength of 3,000 psi and shall conform to Texas Highway Department Class "A" concrete. Before thrust blocking is placed the element to be blocked shall be carefully wrapped in polyethylene sheeting having a minimum thickness of 3 mils. The blocking shall be placed between solid ground and the fitting to be anchored; the area of bearing on pipe and on the ground in each instance shall be that required by the engineer. The blocking shall be so placed that the pipe and fitting joints will be accessible for repair.

9. DISINFECTION OF PIPE LINES

The contractor shall furnish all labor, equipment, and materials necessary to the disinfecting of the new pipe lines which shall be disinfected before being placed in service. The lines shall be disinfected by the application of a chlorinating agent. The chlorinating agent may be a liquid chlorine, liquid chlorine gas water mixture, or a calcium hypochlorite solution, which shall be fed into the lines through a suitable solution feed device, or other methods approved by the engineer. The chlorinating agent shall be readily dissolvable and of a type that will rapidly mix with the water as it is loaded into the water line. Tablets or other solid form shall not be used unless they are dissolved before being placed into the line. The chlorinating agent shall be applied at or near the point from which the line is being filled, and through a corporation stop or other approved connection inserted in the horizontal axis of the newly laid pipe. The water being used to fill the line shall be controlled to flow into the section to be disinfected very slowly, and the rate of application of the chlorinating agent shall be in such proportion to the rate of water entering the pipe that the chlorine dose applied to the water entering the line shall be at least 50 parts per million. The treated water shall be retained in the pipe lines for a period of not less than twenty four (24) hours. At the end of the retention period all treated water shall be thoroughly flushed from the lines until the replacement water in the lines shall have a chlorine residual of not more than 0.2 parts per million. Where it is necessary to place the new lines in service in less than 24 hours, the concentration of chlorine may be increased to 300 ppm and the lines flushed and placed in service in 3 hours. Disinfecting procedures shall conform to AWWA C 60l.

l0. HYDROSTATIC TESTS

All pipe lines constructed under this contract before being accepted, shall be tested at l20% design pressure as described in the following paragraphs. This test shall apply to all newly laid pipe or any valved sections thereof.

The required test pressure (l80 pounds per square inch) shall be maintained over a continuous period of not less than eight (8) hours.

Each valved section of pipe shall be slowly filled with water, being certain that all air is expelled from the pipe by using hydrants, blow-offs or taps at points of highest elevation in the line. The specified pressure shall be applied by means of a pump and flow meter (gpm and amount) connected to the pipe in a manner satisfactory to the engineer. The contractor shall furnish all necessary equipment, materials and labor to satisfactorily make the hydrostatic tests.

After the line section to be tested has been brought to pressure, a visual inspection shall be made of all joints, fittings, valves, and appurtenance. Any leaks thus located shall be corrected before continuing with the test.

If the test indicates a leakage in excess of a rate equal to twenty-five (25) gallons per inch of nominal diameter of pipe line per mile per day (maximum 600 gallon per mile per day total leakage) the cause of such leaks shall be determined and corrected and the line retested until satisfactory results are obtained.

11. **REMOVING AND REPLACING PAVEMENT**

A. When it is necessary to cut existing paving to install utilities the paving shall be repaired as soon after the backfill is consolidated or the cement stabilized backfill has reached sufficient strength as practical. The repair shall be made using Texas Highway Department Type "D" Hot Mix Asphaltic Concrete and shall have a minimum thickness equal to the thickness of the existing surface.

B. Edges along the trenches and around pits shall be saw cut to remove damaged edges and/or surface. Saw cuts shall be straight and parallel to or at right angles to the street or alley center line in so far as practical. Meandering, zig-zag or notched saw lines will not be permitted. The saw cuts shall be such that a minimum of 6" of surface is removed beyond the edges of the trench.

C. The edges of the saw cut and surface of the backfill material shall be tack coated prior to the placing of hot mix asphaltic concrete. The tack coat shall be either RC-250 cut back asphalt or RS2h emulsified asphalt or approved equal. When emulsified asphalt is used for tack coat the asphaltic concrete shall not be placed until the break of the emulsion is complete and all free water has evaporated or has been removed.

D. After the tack coat is cured the hot mix asphaltic concrete shall be placed uniformly throughout the repair area. The edges of the repair shall be squared up and the hot mix asphaltic concrete thoroughly compacted. Any large aggregate that is separated from the mix during the leveling process shall be removed from the surface and disposed of off the project. Care shall be taken that none of the mix over laps the old paving. Any mix that has "scabbed" onto the paving shall be removed before the section is reopened to traffic.

Sufficient mix shall be placed so that the finished repair is from one eight (1/8") inch to one quarter (1/4") inch above the old paving surface to allow for further consolidation by traffic.

12. **TUNNELING UNDER UTILITY LINES, ETC**.

Where pipes, conduits or concrete curbs, gutters or other obstructions are encountered in the construction, the cost of tunneling under such obstructions shall be included as a part of the cost of the pipe line, or other pay items, complete in place.

13. **HIGHWAY CROSSING**

A. The City of Midland will obtain any required permits from the State Highway Department for installation of the water line along and across the highway right-of-way. It shall be the contractor's duty and responsibility to coordinate the time of making the crossing and the manner of handling traffic.

B. Installations of the casing pipe shall be accomplished by boring or open cut trench as indicated on the drawings and in accordance with the Texas Department of Transportation permit and requirements. Equipment used shall be of such size and capacity as to allow the placement of the casing to proceed in a safe and expeditions manner. Installation of the casing and the excavation and removal of the materials

within the casing shall proceed simultaneously.

The boring shall proceed from a pit provided for the boring equipment and workmen. Excavation and location of the pit shall be approved by the Engineer. Boring without the concurrent installation of the casing pipe will not be permitted. The use of water or other fluids in connection with the boring operation will be permitted only to the extent of lubricating cuttings. Jetting will not be permitted. Overcutting in excess of one inch shall be remedied by concrete pressure grouting the entire length of the installation. All joints for casing pipe installed in bore shall be welded. Care shall be taken to keep the casing pipe on the proper line and grade.

C. After the casing pipe has been installed and is accepted by the Engineer, the pipe shall be shoved through the casing. The pipe shall be pushed or pulled through the casing by exerting pressure on the barrel of the pipe and not on the bell, and shall be done in such a manner that the joint is always in compression during the shoving operation. Hardwood, or other suitable material skids shall be banded with stainless steel bands to each joint of pipe In accordance with the pipe manufacturers recommendation. The hardwood skids shall be of sufficient dimensions to allow the bell of the pipe to clear the casing pipe by at least one-half inch. The length of the skid shall be in accordance with the pipe manufacturers recommendations. A minimum of three bands shall be used to secure the skids to the pipe. The skids shall be such that the carrier pipe will be centered in the casing pipe. The design of skids and bonding techniques shall be submitted to the Engineer for approval prior to use.

In general waterline installation in the casing pipe shall conform to AWWA C 600-Section 6 requirements.

After completion of pipe installation in casing, the ends of the casing shall be sealed off by use of concrete grout. The minimum compressive strength of the grout shall be 2,000 psi in 28 days.

14. SHORING & SHEETING

14.1 Description

This item shall govern for the Trench Safety Systems required for the construction of all trench excavation to be utilized in the project and including all additional excavation and backfill necessitated by the safety system. A trench shall be defined as a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. The depth is five feet or more.

Trench Safety Systems include but are not limited to sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, dewatering or diversion of water to provide adequate drainage.

l4.2 Construction Methods

Trench safety systems shall be accomplished in accordance with the detailed specifications set out in the provisions of Excavation, Trench, and Shoring, Federal Occupational Safety and Health Administration (OSHA) Standards, 29CFR, Part 1926, Subpart P, as amended, including Proposed Rules published in the Federal Register (Vol. 52, No. 72) on Tuesday, October 31, l989. The sections that are incorporated into these specifications by reference include Sections 1926-650 through 1926-652. Legislation that has been enacted by the Texas Legislature, being Tex. Rev. Civ. Stat. Ann. arts. 1015q, 2368a.6 (Vernon Supp. 1988) with regard to Trench Safety Systems, is hereby incorporated, by reference into these specifications.

A reproduction of the OSHA Publication 2226 is attached for the convenience of the Contractor. The City assumes no responsibility for the accuracy of the reproduction or that it reflects current law. The Contractor is responsible for obtaining a copy of this section of the Federal Register for his use.

If the contractor elects to use a trench protective system that, in the Proposed Rules, requires "Design by a qualified person or a qualified engineer," [For example see 1926.652(b) (3) and 1926.652(c) (4)], "a qualified person or qualified engineer" shall be a Professional Engineer registered in the State of Texas. The Contractor is responsible for obtaining boring and soil analysis as required for the planned design. The trench excavation is to be designed in conformance with OSHA standards and regulations.

14.3 Safety Program

The Contractor shall submit a safety program specifically for the construction of trench excavation. The trench safety program shall be in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

14.4 Inspection

The Contractor shall make daily inspections of the Trench Safety Systems to ensure that the systems meet OSHA requirements. Daily inspection is to be made by a "competent person" provided by the Contractor. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench. It is the sole duty, responsibility and prerogative of the Contractor, not the owner or the Engineer, to determine the specific applicability of the designed trench safety systems to each field condition encountered on the project. The Contractor shall maintain a permanent record of daily inspections.

14.5. Safety Restrictions - work near high voltage lines

The following procedures will be followed regarding the subject item on this contract:

A. Warning signs painted yellow with black letters that are legible at twelve 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."

B. All equipment except back hoes or dippers that may be operated within ten feet of high voltage lines shall have an insulating cage-type of guard about the boom or arm and insulator links on the lift hook connections.

C. When necessary to work within six feet of high voltage electric lines, notification shall be given the power company 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.

D. The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

l5. MEASUREMENT AND PAYMENT

l5.l General

The unit price or lump sum price bid on each item, as stated in the proposal, shall include furnishing all labor, superintendence, machinery, equipment, and materials necessary to complete the various items of work in accordance with the plans and specifications. Cost of work or materials shown on the plans and called for in the specifications and on which no separate payment is made shall be included in the bid price on the various pay items.

l5.2 Water Lines

A. Measurement

The length of pipe lines for the various sizes, classes and types to be paid for will be determined by measurement along the center lines of the pipe installed, measurement being made from the center of fitting to center of fitting or end of pipe, without any deduction for the length of intermediate fittings or valves including pipe installed in casing.

B. Payment

Furnishing and installing approved type pipe of the various sizes and classes shown on the plans or as required will be paid for at the unit price bid per linear foot for furnishing and installing the various sizes and classes of approved pipe complete in place. The unit price bid shall be complete compensation for furnishing and installing the pipe complete in place including all excavation, backfilling, testing and disinfection of lines and shall include any and all incidental work not otherwise included in the bid items or otherwise provided for in the specifications.

I5.3 Solid Rock Excavation

All excavation for pipe trenches shall be unclassified and no extra compensation will be made for solid rock excavation. The contractor is expected to make boring of his own and satisfy himself to the character of material which will be encountered.

I5.4 Gate Valves or Butterfly Valves

A. Measurement

Gate valves or butterfly valves will be counted in the field after installation by the size and type specified and actually installed.

B. Payment

The unit price bid for each type and size valve shall be complete compensation for furnishing and installing the valves, complete in place, including the furnishing and installation of cast iron valve boxes on all valves to the finished grade of the adjacent surface. All valves in paved areas shall be set to finish pavement grades

I5.5 Fire Hydrants

A. Measurement

Fire hydrants will be counted in the field after installation in accordance with the plans and specifications.

B. Payment

The unit price bid shall be complete compensation for furnishing and installing the fire hydrants, complete in place, each, including lead pipe the gravel drain, concrete blocking, extension or additional bury depth as required for a complete installation.

I5.6 Service Connections

A. Measurement

The number of service connections of the type and size specified to be paid for will be counted in the field after complete installation.

B. Payment

The unit price bid shall be complete compensation for furnishing and installing the service connections, complete in place, including the meter box and lid, service line, corporation stop, meter stop and incidentals required for a complete installation.

I5.7 Ductile Iron Fittings

A. Measurement

The weight of the various ductile iron fittings and specials were estimated by using the standard weights for cast iron fittings as established by the American Water Works Association or American Standard Association. Measurement of ductile iron fittings will be made by counting the actual number of fittings installed and multiplying the number of fittings by the catalog weights for those types of fittings actually installed. Allowance will be made for glands and bolts.

B. Payment

The ductile iron fittings or specials required in the construction of the various size pipe lines as shown on the plans or as required will be paid for at the unit price bid per ton for furnishing and installing the ductile iron fittings complete in place. The unit price shall also include all materials, excavation, backfilling, concrete blocking and other incidental work required for the complete installation.

I5.8 Steel Cylinder Concrete Pipe Fittings

A. Measurement

No separate measurement or count of fittings and specials for steel cylinder concrete pipe will be made.

B. Payment

No separate payment will be made for fittings or specials for steel cylinder concrete pipe used on this project, but the cost of same shall be included in the price bid per linear foot for the various classes and sizes of pipe in the bid proposal.

I5.9 Casing Pipe In Bored Hole Or Open Cut

A. Measurement

Measurement of the casing pipe, of the type and size specified, shall be made by the linear foot of casing installed complete in bored hole or installed complete in open cut.

B. Payment

The unit price bid per linear foot for casing in bored hole or for casing in open cut shall be complete compensation for furnishing and installing the casing, complete in place, including all pits, boring equipment, materials and labor required for a complete installation. Payment for carrier pipe installed in the casing will be made as stated under Waterlines above.

I5.I0 Paving Cut and Repair

A. Measurement

Measurement of paving cut and repair will be made by the square yard for replacing pavement of the type specified. The area of the pavement replaced shall be determined by actual measurements on the ground; however, measurement will be limited to areas within widths of cuts as shown on the plans unless additional widths are authorized by the engineer. Any pavement removed or damaged outside of the aforementioned limits shall be replaced as prescribed with these specifications, but will not be measured for payment.

B. Payment

The unit price bid, per square yard, shall be complete compensation for cutting and removing the pavement, and constructing the concrete base and surfacing of the type specified, all as specified herein and as shown on the plans.

15.II Trench Safety Systems, Sheeting and Shoring

A. Measurement

Trench Safety Systems shall be measured by the linear foot along the centerline of trench including manholes and other line structures.

B. Payment

Payment for Trench Safety Systems, measured as prescribed above, shall be made at the unit price bid per linear foot of "Trench Safety Systems: Payment of all work prescribed under this item shall be full compensation for the Trench Safety Systems including all Engineering cost and any additional excavation and backfill required, for furnishing, placing, maintaining and removing all shoring, sheeting, or bracing; for dewatering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.

Revised 08/07

GRAVITY FLOW PIPE SEWERS AND FITTINGS FOR WASTE WATER AND STORM WATER

PART I – GENERAL

1.01 SCOPE

A. The work covered by this specification shall include the furnishing of all material, labor and equipment to construct, complete in place, all Gravity sewers including jointing, gaskets, fittings, castings, mortar, concrete, the placing of sewer pipe, and the construction of manholes and other appurtenance, all in accordance with the details shown on the plans and these specifications for the drainage of sanitary and/or storm sewage.

B. Sanitary and storm sewer lines constructed under these specifications shall be straight in grade and alignment between manholes. Manholes shall be constructed at any change in grade and at any change in alignment. In general manholes are to be constructed at 300 feet intervals or less with the maximum distance between manholes being 350 feet when approved by the Engineer.

1.02 QUALITY ASSURANCE

A. The Contractor, at the Engineer's request, shall furnish a certificate from the manufacturer of the pipe and fittings that the manufacturer is fully competent and capable of manufacturing sewer pipe, fittings, and accessories of the type, size and grade proposed for use in this project that are of uniform texture and strength that will fully comply with these specifications and have so manufactured this class of pipe in sufficient quantities to be certain that it will meet all normal field conditions of usage. The manufacturer must have adequate equipment and quality control facilities to be sure that each extrusion casting or run of pipe is uniform in texture, dimensions, and strength.

B. All PVC, HDPE, or plastic resin based pipe and fittings shall be covered during storage to protect them from excessive heat and direct sunlight.

C. All pipe and accessories shall be stored above ground and fully supported so that they will not bend or deflect excessively under their own weight.

D. Pipe in any way damaged or deformed during storage shall not be incorporated into this project, but at the direction of the Engineer, shall be permanently removed from the job site and project area.

1.03 TYPE OF PIPE

A. Pipe for sanitary sewers 15 inches in diameter and less shall be PVC. Pipe for storm drains 15 inches in diameter and less may be corrugated steel pipe when called for on the plans and in the bid proposal. Pipe 18 inches in diameter and larger shall be of the type shown on the plans and bid proposal.

B. The contractor may be allowed to bid a choice of two or more of the pipe materials when pipe 18 inches in diameter and larger are proposed for use on a project. When such choice is allowed the permissible choices will be clearly stated on the plans and/or bid proposal and a blank space will be provided for the contractor to write in the type of pipe proposed for use on the project. When such blank spaces are provided, the contractor must choose one of the permitted pipe materials as specified in part 2 “Materials” of these specifications and write in the type of pipe bid. Failure to write in the type of pipe bid may be reason to disqualify the bid. One or more types of pipe 18 inches in diameter and larger may be excluded from consideration on any given project by notes on the plans and/or the bid proposal.

PART 2 – MATERIALS

2.01 POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS FOR SANITARY AND STORM SEWERS

A. GRAVITY SEWERS

(1) Pipe and fittings in nominal diameters from 4-inch through 15-inch shall be manufactured in accordance with ASTM D3034, “Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings” and pipe and fittings in diameter 18” through 36” shall be manufactured in accordance with ASTM F-679 or ASTM F-794, closed profile, subject to the modifications and limitations below.

B. MODIFICATIONS AND LIMITATIONS

(1) The concrete slab manhole tops shall be reinforced with number 4 steel reinforcing bars spaced at 12 inches on center each way. Additional diagonal bars shall be placed on 4 sides around the manway opening. The diagonal bars shall be number 4 rebar with a minimum length equal to the diameter of the manway opening plus 4 inches. The steel reinforcing mat shall be placed in the bottom of the slab with 1-1/2 inches protective covering.

(2) The term Dimension Ratio (DR) or standard dimension ratio (SDR) is the ratio of the average outside pipe diameter to the minimum wall thickness rounded to the nearest 0.5. The maximum DR for PVC sewer pipe shall be 35. PVC pipe sewers that will have less than 4 feet of cover shall be DR26.

(3) PVC pipe manufactured under ASTM F679 or F794 shall have a wall thickness that will meet or exceed the D.R. and stiffness specified herein. The minimum pipe stiffness for pipe having a DR of 26 shall be 115 psi. The minimum pipe stiffness for DR 35 pipe shall be 46 psi.

(4) Where DR 26 pipe is specified, all necessary fittings shall be the same as for SDR 35 PVC pipe.

(5) Minimum wall thickness for ASTM D-3034 PVC pipe shall be as follows:

Nominal Size (in.)	Min. Wall Thickness (in.)	
	DR 26	DR 35
4	0.162	0.120
6	0.241	0.180
8	0.323	0.240
10	0.404	0.300
12	0.481	0.360
15	0.588	0.437

The minimum wall thickness for PVC pipe meeting ASTM F-679 or F-794 requirements shall be the thickness as set forth in said ASTM specification that will meet or exceed the pipe stiffness and DR required.

(5) The identification markings as shown in Section 12 of ASTM 3034 shall note the specified DR of 26 where applicable.

(6) All pipe and fittings shall have the dimensions for inside diameter, outside diameter, etc. as shown in ASTM D3034 and/or ASTM F-679 except that the inside diameter DR 26 may be reduced by the added wall thickness.

(7) The pipe and fittings shall be homogeneous throughout and free from visible cracks, holes, foreign inclusions, or other injurious defects. The pipe shall be as uniform as commercially practical in color, opacity, density, and other physical properties.

(8) The Contractor shall provide wyes, tees, bends, adapters, and any other fittings called for in the specifications and/or shown on the plans or directed by the Engineer.

(9) The standard length of ASTM, D-3034 SDR 35 or SDR 26 PVC pipe under this specification shall be 20 feet with a minimum of 10 feet, except that all pipe used in service lines shall not exceed 10 feet in length unless otherwise approved by the Engineer. The standard laying length for ASTM F-679 PVC pipe shall be 13 feet. The Engineer must approve other laying lengths.

C. SEWER LATERALS AND CONNECTIONS

Pipe and fittings for service lines shall be the same material and thickness class as required for the main sewer. Schedule 40 PVC pipe may be used for 4” service lines when PVC pipe meeting requirements of ASTM 3034, SDR 35 is required.

D. JOINING SYSTEMS

(1) PIPE JOINTS

The pipe shall be joined with an integral bell, bell and spigot type rubber gasket joint. Each integral bell joint shall consist of a formed bell complete with a single rubber o-ring gasket. Gaskets shall be manufactured in accordance with ASTM F477 and shall be installed in accordance with the pipe manufacturer's instructions using all the necessary materials, lubricants and equipment recommended by the manufacturer.

For pipe 18" through 36" gaskets shall be factory installed and chemically bonded to the bell end of the pipe.

Lubricant shall be water soluble, non-toxic and have no deteriorating effects on gasket or pipe materials and shall not support the growth of bacteria. Lubricant shall be suitable for use at temperatures from 5^{o} to 120^{o} F (-15^{o} to 50^{o} C). Containers shall be labeled with the manufacturer's name and identified as PVC pipe joint lubricant. Each lubricant container shall have printed instructions for usage and joint assembly.

Field welded joints will not be allowed.

(2) FITTING JOINTS

All fittings shall utilize rubber gasket joints of the same type design and specifications as pipe joints.

(3) PIPE SPIGOT

The pipe spigot shall have a bevel and an insertion stop mark. The assembled joint shall be designed so the gasket shall be radially compressed to assure a positive water-tight seal for all installation conditions recommended by the manufacturer and under all combinations of production tolerances for the joint components. Each size joint shall be qualified to no leakage under various test conditions in conformance with ASTM Specification D-3212, "Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals."

E. INSPECTION AND TESTING

(1) INSPECTION REQUIREMENTS

Certification: as the basis of the acceptance of the material, the manufacturer will furnish a certificate of conformance to these specifications. The manufacturer will furnish other conformance certification in the form of affidavit of conformances, test results, and copies of test reports.

(2) PHYSICAL TEST REQUIREMENTS

For each 4,000 linear feet of pipe manufactured of each class and size of pipe, the following certified test data shall be required:

1. The basic dimensions shall be measured.
2. The allowable crush load (lbs/ft ^{2}) shall be calculated.
3. Impact resistance, fusion quality and ductility shall be tested.

F. MARKING AND DELIVERY

Each pipe shall be identified with the name of manufacturer, nominal size, cell classification, ASTM designation F794, Uni-Bell Plastic Pipe Association designation Uni-B-9, the pipe stiffness designation “PS-46 psi” and manufacturer’s date code.

1. MANHOLE CONNECTIONS

The Contractor shall provide smooth pieces of pipe for connecting sewer line into manholes. The Contractor shall be required to assist the manhole gasket supplier with the nominal outside diameter of these smooth pieces of pipe, as manufactured. There shall be only one plain end thickness for each diameter of pipe specified for the project.

2. DELIVERY

All pipe couplings and fittings shall be prepared for standard commercial shipment.

The pipe shall be inspected upon delivery to the job site for final acceptance. The contractor shall be responsible for all material furnished by him and he shall replace, at his own expense, all such material that is found to be defective in manufacture or which has become damaged in handling until final acceptance has been made. Pipe, which exhibits excessive ovalty or curvature, shall be rejected.

PVC pipe and fittings shall be covered during storage to protect them from excessive heat and direct sunlight.

All pipe and accessories shall be stored above ground and fully supported so as not to bend or deflect excessively under its own weight.

2.01(a) Metallic Marking Tape (For PVC Sewer Pipe)

2.01 (a).1 General

When non-metallic pipelines are to be installed, then the Contractor shall furnish and lay, above the pipeline, a continuous strip of metallic identification tape.

2.01 (a).2 Tape Material

The metallic identification tape shall be at least two inches (2”) in width and shall be of corrosive resistant metal of sufficient thickness to be stable and reflect electronic signals to electronic pipeline detector when buried to a dept of twenty-four (24”) below normal ground level.

The metallic tape shall be painted green on one side and shall have 1-inch high letters painted continuously on the same side of the tape which read, “CAUTION: BURIED SEWER LINE BELOW” or other words to this effect.

The marking tape shall be “Detectable Marking Tape”, as manufactured by the Omega Marking Company, or equal approved by the Engineer.

2.01(a).3 Construction Methods

The Contractor shall backfill over non-metallic pipelines to a depth which is less than twenty-four (24”) and not more than twelve inches (12) from the top of the cut of the ditch section in which the pipeline is laid. Contractor shall stop the backfilling material to a generally uniform level. All machine tamping, jetting and other compaction activities shall be accomplished up to this point of height in the backfilling the marking tape is placed in the trench.

The Contractor shall then lay the marking tape in the pipe trench and shall be held in position by the spot placement of backfill materials over it to keep it from sliding t the sides and/or from being blown about in the ditch by the wind. The tape shall be lid with the painted side, which shall also be the side with the identification lettering on it, in the “up” position. The tape shall be laid in the flat position and kept there until backfill is accomplished.

The Contractor shall then complete the backfilling operation in such a manner that the marking tape is not cut, crimped, ruptured or separated by the backfilling work.

2.01(a).4 Measurement and Payment

No separate pay item will be provided for furnish and placing the marking tape. This item shall be considered subsidiary to the non-metallic pipe being placed.

2.02 CORRUGATED STEEL PIPE (CSP) FOR STORM SEWERS AND CULVERTS ONLY

1. PIPE

A. STEEL SHEET STOCK

(1) Corrugated steel pipe shall be manufactured using galvanized steel sheet AASHTO M 218 or aluminized steel sheet AASHTO M 274.

(2) The lining for smooth lined corrugated steel pipe shall be polymer coated on both sides. The minimum thickness of the polymer coating shall be 10 mils.

B. PIPE DESIGNATION

(1) Pipe furnished shall be manufactured in accordance with AASHTO Specification M 36.

(2) Corrugated steel pipe shall be one or more of the following type as designated in AASHTO M 36.

Type I - Full circular cross section having helical corrugations.

Type IA - Full circular smooth lined pipe constructed of an outer shell having helical corrugations with a smooth sheet lining attached to the outer shell at helical lock seams.

Type IR - Full circular cross section with helical rib protruding outward.

Type II - Type I pipe formed into a pipe arch.

Type IIA - Type IA pipe formed into a pipe arch.

The type of pipe furnished on this project will be as shown on the plans and in the bid proposal.

When no type of pipe is called for on the plans or in the bid proposal helically corrugated circular single wall pipe (Type I or Type IR) shall be furnished.

C. MANUFACTURERS CERTIFICATION

(1) The pipe manufacturer will be required to certify the adequacy of the pipe furnished for the application and design life of the project.

(2) The design life for storm sewers constructed under this specification is 50 years.

(3) The pipe manufacturer will be required to run soil pH, soil resistivity and such other test as they deem necessary to design pipe thickness and protective coatings required to assure the adequacy of the pipe supplied.

D. CORRUGATION AND MINIMUM THICKNESS

(1) Thickness used in this specification refers to the bare steel thickness before coating is applied. The minimum thickness for any single wall corrugated steel pipe furnished under this specification is 16 gage.

(2) All corrugated steel pipe furnished under these specifications shall have helical corrugations.

(3) Circular corrugated steel pipe 48” in diameter and smaller shall have 2-2/3” x ½” corrugation and shall be a minimum of 16 gage in thickness.

Circular corrugated steel pipe larger than 48” in diameter may have either 2-2/3 x ½” or 3” x 1” corrugations. The minimum thickness for corrugated steel pipe larger than 48” in diameter and having 2-2/3 x ½” corrugation shall be as follows:

54” Diameter - 12 gage
60” Diameter - 10 gage
66” through 90” Diameter - 8 gage

The minimum thickness for circular corrugated steel pipe having 3” x 1” corrugation and diameters of 54” through 90” shall be 14 gage.

(4) For smooth lined corrugated steel pipe the minimum thickness for the lining shall be 20 gage and the minimum thickness for the outer shell shall be 18 gage.

The corrugations for the outer shell shall be 2-2/3” x ½” for pipe 48” diameter and smaller. Larger diameter pipe may use 3” x 1” corrugations in the outer shell. The sum of the thickness for the outer shell and the liner shall be a minimum of one thickness unit greater than the thickness that would be required for single wall pipe of the same diameter or span.

(5) Spiral rib steel pipe (Type IR) shall have outward projecting spiral corrugations of ¾” x 1” at 11-1/2” on center in accord with AASHTO specification M 36 or ¾” x ¾” at 7-1/2” on center as described in AASHTO specification M 196.

The minimum thickness for spiral rib pipe 48” in diameter and smaller shall be 16 gage.

The minimum thickness for spiral rib pipe 54” and 60” in diameter shall be 14 gage.

The minimum thickness for spiral rib pipe 66” and 72” in diameter shall be 12 gage.

The minimum thickness for spiral rib pipe larger than 72” in diameter shall be as shown on the plans.

(6) The corrugations and minimum thickness of corrugated steel pipe arch shall be in accord with the following table:

EQUIV. Dia. (in.)	2-2/3" x ½" Corrugations Span (in.)	Rise (in.)	Gage	3" x 1" Nominal Size Span (in.)	Rise (in.)	Gage
15"	17	13	14			
18"	21	15	14			
24"	28	20	14			
30"	35	24	14			
36"	42	29	14	40	31	16
42"	49	33	12	40	36	14
48"	57	38	10	53	41	12
54"	64	43	10	60	46	12
60"	71	47	8	66	51	12
66"	77	52	8	73	55	12
72"	83	57	8	81	59	12
78"				87	63	12
84"				95	67	12
90"				103	71	12

When 2-2/3" x ½" corrugations are called for on the plans and/or on the bid schedule the substitution of 3" x 1" corrugations will be allowed only upon the demonstration by the contractor that there is sufficient head room to accommodate the higher rise for arch pipe of this cross section.

E. END TREATMENT AND JOINING

(1) The ends of all corrugated steel pipe furnished for this project shall be rolled to provide circumferential corrugations for coupling. The end corrugations for all pipe 48" in diameter and less shall be 2-2/3 x ½". The end corrugations for single wall helically corrugated steel pipe or for smooth lined corrugated steel pipe 54" in diameter and larger shall be the same pitch as the pipe furnished and may be either 2-2/3" x ½" or 3" x 1". The end corrugations for spiral rib (Type IR) corrugated steel pipe shall be 2-2/3" x ½" or 3" x 1" for pipe 54" and larger in diameter.

(2) Coupling bands shall be made of the same material as the pipe and shall be not more than 3 nominal sheet thicknesses lighter than the pipe joined and in no case less than .052 inch.

Jointing devices for joining corrugated steel pipe shall have a gasket and shall produce a joint meeting the infiltration/exfiltration requirements of these specifications.

If it should be necessary to cut a joint of Helically corrugated pipe and join the unreformed end to another section of pipe or fitting extra width bands will be required and special care must be taken to insure a water tight connection.

Locking bands shall be corrugated and shall securely fit into at least one full annular corrugation. The corrugations on the locking band must match the corrugations on the pipe being joined.
The minimum width for locking bands is as follows:

for 2-2/3 x ½ inch corrugations	10-1/2 inches
3 x 1 inch corrugation	12 inches

For helical corrugations that have not been reformed the coupling bands must be at least 2 inches wider than the widths listed above.

Unless shown otherwise on the plans all bolts for coupling or locking bands shall be ½ inch in diameter. Bands 12 inches wide or less shall have a minimum of 2 bolts. Bands wider than 12 inches shall have a minimum of 3 bolts.

Bolts must be galvanized in accordance with AASHTO Designation M232 or ASTM A164 Type RS.

(3) Gaskets for corrugated steel pipe shall be closed cell expanded rubber and shall be formed into a continuous band. Gaskets may be either “O” ring or flat band as recommended by the pipe manufacturer. Flat band gaskets shall be a minimum of 7” wide and 3/8” thick. “O” ring gaskets shall be 13/16” diameter minimum for pipe 36” in diameter or less and 7/8” for pipe larger than 36” diameter and having ½” deep corrugations. “O” ring gaskets shall be a minimum of 1-3/8” diameter for pipe having 1” deep corrugations. When “O” ring gaskets are furnished, an additional flat gasket shall be furnished and placed between the overlapping ends of the coupling band. This flat gasket shall completely fill the gap between the “O” rings. All gasket materials shall be capable of producing a water tight joint that will meet the leakage requirements of these specifications.

2. CORRUGATED STEEL MANHOLE FITTINGS, AND CLEAN OUTS

A. FABRICATION

(1) Corrugated steel manholes and fittings shall be constructed of the same material and type of pipe furnished for the storm sewer line with the exception that manhole risers shall be helical corrugated single wall circular pipe when used with pipe arch sewers or smooth lined corrugated steel pipe. The thickness of the manhole riser shall be the same as would be required for the same type and diameter pipe if it were used for the storm sewer.

(2) Cleanouts for use on shallow storm sewer and inlet leads shall be manufactured from pipe meeting the requirements of these specifications. Cleanouts shall be constructed to the dimensions and in accord with the details shown on the plans.

B. CONNECTION TO MANHOLES AND CLEANOUTS

(1) Stub outs from manholes and cleanouts for connection to storm sewers and inlet leads shall have annular corrugations and shall be compatible with the type and size of pipe being connected. Stub outs provided for connection to PVC pipe storm sewers and inlet leads shall be sized so that the PVC pipe can be inserted into the stub leaving the least amount of annular space between the PVC pipe and the CSP practical. The PVC pipe shall be connected using an approved molded rubber or PVC sleeve connector clamped to both pipes with stainless steel straps.

The connector shall be a flexible coupling as manufactured by Fernco, 300 S. Dayton St., Davison, MI., or approved equal.

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C. LEAKAGE

Manholes, fittings and cleanouts shall meet the leakage requirements of these specifications.

D. SHOP DRAWINGS

The contractor shall submit shop drawings of all manholes, fittings and cleanouts for approval prior to their fabrication. A minimum of 5 sets of drawings for each manhole, each fitting and each cleanout shall be submitted.

E. CONCRETE SLAB TOPS

A reinforced concrete slab top shall be constructed for each manhole and cleanout. The slab shall extend to one foot (1') outside the riser section on all sides and shall have an eccentric 2' diameter opening for the manway located at the outside edge of the riser section. For manholes and cleanouts designated for standard manhole rings and covers the concrete top shall be 8 inches thick and shall be finished smooth to receive the manhole ring.

For manholes designated to receive pressure type manhole rings and covers the concrete slab top shall be a minimum of 12 inches thick and shall have L bolts imbedded in the concrete to fit the requirements of the manhole ring furnished. The slab shall be finished smooth to receive the manhole ring. The manhole ring shall be securely bolted to the slab and sealed using "Ram Nek" or an approved equal bitumastic sealer between the manhole ring and the concrete slab.

The concrete slab manhole tops shall be reinforced with number 4 steel reinforcing bars spaced at 12 inches on center each way. Additional diagonal bars shall be placed on 4 sides around the manway opening. The diagonal bars shall be number 4 rebar with a minimum length equal to the diameter of the manway opening plus 4 inches. The steel reinforcing mat shall be placed in the bottom of the slab with 1-1/2 inches protective covering.

F. PRESSURE MANHOLE RING AND COVER

(1) Pressure type manhole rings and covers shall be Western Iron Works No. 380-24P or approved equal. The manhole cover shall be sealed with an “O” ring gasket in a ring groove and shall be secured to the ring by six (6) 5/8-inch stainless steel bolts.

(2) The ring shall have six (6) 1-1/4 inch bolt holes in the flange for securing the ring to the concrete slab top on the manhole.

3. CORRUGATED STEEL PIPE SLOTTED DRAIN

(1) Corrugated steel pipe slotted drains shall be fabricated from full circle corrugated steel pipe conforming to these specifications.

(2) C.S.P. Slotted drains shall be of a type as manufactured by “Contech Construction Products, Inc.”, “Texas Corrugators”, “Caldwell Culvert Company” or approved equal.

(3) The upstream end of CSP slotted drains shall be equipped with a bend and a ring and cover of the some size as the pipe from which the slotted drain was fabricated to allow cleaning equipment to be inserted into the slotted drain. The ring and cover shall be Nenah Foundry Co. R-5901 open grate or R-5900 solid lid or approved equal. Unless shown otherwise on the plans the open grate shall be furnished.

(4) When slotted drain is to be connected to PVC leads, molded rubber or PVC flexible connector as specified for connections to manholes and cleanouts shall be furnished.

4. DAMAGED COATING

A. PROTECTION OF PIPE

(1) Pipe fittings and specials shall be handled and stored in a manner that will minimize damage to the coating.

(2) The fabrication process shall be designed to minimize the burning of coatings during welding.

(3) Pipe and/or fittings showing excessive abuse or damage will be rejected.

B. REPAIRING DAMAGE

(1) Pipe on which the metallic coating has been burned by welding or has been otherwise damaged in fabricating or handling, shall be repaired. The repair shall be done so that the completed pipe shall show careful finished workmanship in all particulars.

(2) The damaged area shall be cleaned to bright metal by blast cleaning, power disk sanding, or wire brushing. The cleaned area shall extend at least ½ inch into the undamaged section of the coating. The cleaned area shall be coated within 24 hours and before any rusting or soiling.

(3) Zinc-rich paint shall be applied to a dry film thickness of at least 0.005 inches over the damaged section and surrounding cleaned area. Zinc-rich paint shall be used for repair of damage to all types of metallic coating -zinc, aluminum, and aluminum-zinc alloy.

2.03 CAST-IN-PLACE CONCRETE SEWER PIPE (NON-REINFORCED) FOR STORM SEWERS ONLY

1. DESCRIPTION

This item shall cover machine cast-in-place monolithic non-reinforced concrete pipe, which shall consist of Portland cement concrete placed in a prepared trench at such locations and grades shown on the plans and intended to be used for the conveyance of storm water. Items and item numbers referred to in this specification are the items as given in the "Texas State Department of Highways and Public Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges."

2. MATERIALS

The cast-in-place pipe shall be constructed of Class "C" concrete. The concrete shall meet the requirements of Item 421, "Concrete for Structures," and Special Provision thereto, except as otherwise noted herein or on the plans. Type III Portland Cement shall be used.

The minimum compressive strength for concrete used in this item is 4000 psi. Backfilling operations may proceed when the concrete has reached 2000 psi compressive strength.

The coarse aggregate grading for pipe diameters 48 inches or less shall conform to that of Aggregate Grade No. 3, one inch (1") maximum size aggregate under Item 421. For pipe diameters over 48 inches, Coarse Aggregate No. 2, one and one third inch (1-1/3") maximum size aggregate shall be used.

No concrete having a slump in excess of 2" will be permitted for use in pipes with diameters of 48 inches and over. For pipes with diameters less than 48 inches, no concrete having a slump in excess of 3" will be permitted for use. At the option of the Contractor, sections of precast reinforced concrete pipe (D-load) may be substituted for cast-in-place concrete pipe. Pipe and installation shall conform to the requirements of Item 465, "Pipe Sewers." Backfill shall be in accordance with the requirements for other storm sewers in these specifications using crusher fines (chat).

3. PIPE MAKING EQUIPMENT

The pipe shall be constructed with equipment specially designed for constructing cast-in-place monolithic concrete pipe. The equipment shall be acceptable to the Engineer and the Contractor may be required to furnish evidence of successful operation in other work of the equipment he proposes to use. Equipment not suitable to produce the quality of work required for the pipeline will not be permitted to operate on the project.

4. DIMENSIONS AND TOLERANCES

The design shell thickness shall be as specified in Table 1.

TABLE I

Internal Diameter inches	Min. Shell Thickness inches
18	2
24	2-1/2
30	3
36	3-1/2
42	4
48	5
54	5-1/2
60	6
66	6-1/2
72	7
84	8
96	9
108	10
120	11

Variation in the internal diameter shall not exceed plus or minus 3 percent. The maximum allowable deviation form the true grade of the design invert of the pipe shall not exceed ½ inch either side of true grade. Where deviation from true grade occurs, true grade shall be re-established at a maximum departure of one-eighth inch per foot.

5. EXCAVATION AND BACKFILL

Excavation shall be in accordance with the requirement for other types of storm drains, except as modified herein. The trench shall be excavated in the lines and grades shown on the plans or as directed by the Engineer. The width of the trench shall be sufficient to accommodate travel of the pipe machine only. The bottom of the trench shall be shaped to the nominal outside circumference of the pipe. Excavation shall be performed from the outlet to the inlet. If the trench is over-excavated for the bottom 210 degrees of the pipe the excess area shall be filled with concrete. If rock is encountered, it will be removed at least 6 inches below the bottom of the pipe and the trench refilled with material sufficiently compacted to

allow operation of the machine and provide a smooth firm surface. The sidewall of the pipe shall be placed against undisturbed material.

Backfill material will be a crusher fine (chat) as described elsewhere in these Specifications. No backfill other than permitted for curing purposes shall be placed until the line has been inspected and approved by the Engineer. The trench may be completely backfilled after the pipe has been in place at least 24 hours and concrete strength requirements have been reached. Light traffic, axle load less than 6,000 pounds, may be routed over the pipe after backfill has been completed for twenty-four (24) hours. Unrestricted traffic may be permitted over the pipe after the backfill has been in place for forty-eight (48) hours.

All backfill material shall be mechanically compacted to 95% modified proctor or as directed by the Engineer.

6. CONSTRUCTION

All surfaces against which concrete are to be placed shall be free from standing water, mud, and debris. Absorptive surfaces against which concrete are to be placed shall be moistened thoroughly so that moisture will not be drawn from the freshly placed concrete.

The concrete shall be placed in one operation around the full circumference of the pipe by means of a traveling form. The forms shall be of sufficient strength to withstand vibrating or tamping the concrete and to permit workmen to walk on the forms without causing springing or bulging at any point.

As the traveling form moves forward, forms shall be placed inside the newly formed pipe to support a minimum of 230 degrees of the upper portion of the pipe.

The concrete shall be vibrated, rammed, tamped or worked with suitable appliances until the concrete has been consolidated to the maximum practicable density, free of rock pockets, and closes snugly against all surfaces or forms and provides a bond between the pipe shell and supporting earth.

When placing operations cease for any reason, the end of the pipe shall be left rough with a slope of approximately 45 degrees. The ends of the pipeline shall be covered with canvas or other suitable cover material to prevent excessive loss of moisture from the interior of the pipe already placed.

When starting pipe laying operation from a previously laid cast-in-place pipe or section of pre-cast pipe, a construction joint shall be made by excavating a “bell” completely around the end of the existing pipe and constructing a concrete collar to extend at least one foot either side of the joint with a minimum thickness equal to that of the wall of the pipe. The end of the existing pipe shall be clean and damp before continuing pipe making operations. Cleaning of the construction joint shall consist of removing all latency, loose or defective concrete, coatings, and any other deleterious materials.

All forms shall be clean and shall be placed at the trench side at the location of their proposed use for inspection by the Engineer. Forms, which are defective in any way, will not be used, and upon condemnation they shall be removed from the site of the work. The forms shall not vary more than ½ inch from the lower edge of a straightedge laid parallel to the centerline of the form, and shall be free of any holes larger than 5/8 inch in greatest dimension. The pipe machine shall be thoroughly clean and serviced prior to the placing of the concrete. Particular attention will be given to all parts of the machine with which concrete comes into contact.

Concrete chutes or trunks shall be provided to reach within 1 foot of the pipe machine hopper. The end of the chute or trunk shall discharge the concrete at the center of the hopper. Provisions shall be maintained to minimize segregation of the concrete mix in all phases of the operation.

Delays in placing shall be handled as follows or as otherwise directed. The concrete hopper on the pipe laying machine shall be kept ½ full at all times, provided, however, that when placing operations cease or are delayed for any reason for more than 20 minutes, the pipe machine shall be pulled forward until all the concrete is exhausted and until the top troweling skirt is clear of the concrete. If the pipe laying operation proceeds within one hour of the time of the last placement, no further steps need to be taken. However, if longer than one hour has elapsed, then a construction joint must be made as previously described. The end of the pipe shall be left rough and at the natural slope when the machine is moved forward.

All junctions of pipe shall be provided for at the time the cast-in-place pipe is placed.

Inside forms shall be removed from the pipe not sooner than 4 hours nor longer than 24 hours after placement of the concrete. Care shall be taken when removing forms to prevent damage to the pipe. The inside of the pipe shall be carefully inspected for imperfections in placement, and any required repairs or smoothing shall be made immediately to provide a uniform interior surface. No wash, mortar or concrete shall be applied to a surface not properly moistened or cleaned. Visible cracks shall be brushed with cement paste or chipped out and pointed up with cement mortar. Any cracks that appear to go through the shell shall be grooved and filled with mortar. All construction operations and methods for providing a watertight pipeline shall be the responsibility of the Contractor. Mortar shall consist of one part cement; two parts well graded sand passing 1/8-inch sieve. Wash shall consist of four parts cement, one part fire clay. The finished surface of the concrete pipe shall be substantially free of fractures, cracks and surface roughness.

7. CURING CONCRETE

Immediately after the concrete is placed the exposed surface of the concrete shall be cured by covering the top with a sheet of polyethylene film sealed with dirt along the edges. During the curing period following the placement of the concrete, the ends of the pipeline and all other openings into the pipeline shall be covered with canvas or other suitable material, except at locations where work is actually in progress. The inside surface of the pipeline shall not be cured.

8. MANHOLES AND BENDS

Manhole bases shall be hand formed on top of the pipe as soon as the pipe-placing machine has passed. Where required, the extra width for manholes shall be excavated ahead of the pipe placing operation. The base for the manhole shall be formed to receive a standard precast concrete barrel section and shall be shaped and smoothed so that the joint can be sealed water tight by use of “Ram Nek” or other approved joint sealing material.

Bends may be formed and cast in place or fabricated using precast reinforced concrete pipe (load D). Design and shop drawings shall be submitted to and approved by the Engineer before the bends are fabricated or cast.

9. MEASUREMENT

Measurement of manholes shall be as specified elsewhere in these specifications. Measurement of bends shall be as for other storm sewer pipe. The method of pipe measurement shall conform to that for other types of storm drainpipe in the section or storm drains in these specifications.

10. PAYMENT

Payment for cast-in-place non-reinforced pipe sewers, measured as prescribed above, will be made at the unit price bid per linear foot for the various sizes of “Pipe Sewers (Cast-in-Place)” complete in place. Payment for manholes shall be as specified elsewhere in these specifications.

Such payment shall be full compensation for furnishing all concrete materials, precast reinforced concrete pipe used in place of cast-in-place pipe, and for all other materials, tools, labor, equipment, and incidentals required to perform the applicable work prescribed herein.

When precast reinforced concrete pipe at the Contractor’s option is used in a line of cast-in-place pipe the additional excavation for the pipe will be subsidiary.

2.04 CENTRIFUGALLY CAST FIBERGLASS REINFORCED RESIN PIPE SEWERS

A. DIRECT BURY PIPES

1. GENERAL

All pipes, joints and fittings shall be manufactured in accordance with the requirements of the applicable standard given below except as noted herein:

Service	Standard
Non pressure Sanitary Sewer	ASTM D3262
Sewer Force Main and Effluent Lines	ASTM D3754

Pipes shall be centrifugally cast, fiberglass-reinforced polyester resin as manufactured by Hobas USA, Inc. or approved equal.

Minimum pipe stiffness when tested in accordance with ASTM D2412 shall be 46 psi.

2. MATERIALS

The manufacturer shall use only approved polyester resin systems for which he can provide a proven history of performance in these particular applications. The historical data shall have been acquired from a composite material of similar construction and composition as the proposed product.

The reinforcing glass fibers used to manufacture the components shall be of highest quality commercial grade of E-glass filaments with binder and sizing compatible with impregnating resins. Sand shall be minimum 98% silica with a maximum moisture content of 0.2%

3. DIMENSIONS

Pipe outside diameters shall be in accordance with AWWA Standard C151 and C950. For diameters larger than covered in those documents, OD's shall be as shown in Table 1.

TABLE I

*WP/s		0/46		50/46		100/46		150/46		200/46	
Nomin Pipe Sz. (in.)	Pipe OD (in.)	Min. wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt. (lb/ ft)	Min. Wall (in.)	Wgt (lb/ ft.)
18	19.50	.42	20	.41	20	.40	19	.38	18	.37	18
20	21.60	.46	25	.45	24	.43	23	.42	22	.40	21
24	25.80	.54	35	.53	34	.51	33	.49	31	.47	30
30	32.00	.66	54	.65	53	.62	51	.60	49	.57	47
36	38.30	.78	77	.77	76	.74	73	.71	70	.68	67
42	44.50	.90	104	.88	101	.85	98	.82	94	.78	89
48	50.80	1.02	134	1.00	131	.96	126	.93	122	.88	115
54	57.10	1.14	169	1.12	166	1.08	160	1.04	155	.99	147
60	62.90	1.26	209	1.23	204	1.19	197	1.14	188	1.09	180
66	69.20	1.38	249	1.35	243	1.30	234	1.25	228		
72	75.40	1.50	298	1.47	292	1.41	280	1.36	270		
78	81.60	1.62	352	1.58	343	1.52	331	1.47	320		
84	88.00	1.74	409	1.70	399	1.64	385				
90	94.30	1.86	468	1.82	458	1.75	440				
96	100.6	1.98	531	1.94	520	1.87	501				

- **Maximum nominal working pressure in psi/pipe stiffness in psi**

Pipe shall be supplied in nominal lengths of 20 feet. Actual laying length shall be the nominal plus or minus 2 inches. At least 90% of the total footage of each size and class of pipe, excluding special order lengths, shall be furnished in nominal length sections.

4. **PRESSURE CLASS & TESTING FOR SEWER FORCE MAINS AND EFFLUENT LINES**

The pipe nominal pressure class (PN) shall be equal to or greater than the maximum sustained operating pressure of the line. The minimum pressure rating for non-pressure pipe shall be 15 psi.

The maximum transient (operating plus surge) pressure of the line shall not exceed the pipe nominal pressure class by more than 40%.

Pipe hoop tensile strength for pressure pipe shall be verified as specified in the applicable standard (D3754 or C950) or by random burst testing at the same sampling frequency. All pipes shall be capable of withstanding a test pressure of 2 times the maximum sustained operating pressure of the line without leaking or cracking. This performance shall be periodically verified at the factory for pressure pipe at least once per lot as defined in D3754, section 7.1.

A. JOINTS

Unless otherwise specified, the pipe shall be field connected with fiberglass sleeve couplings that utilize elastomeric sealing gaskets made of EPDM rubber compound as the sole means to maintain joint water tightness. The joints must meet the performance requirements of ASTM D4161.

B. FITTINGS

Flanges, elbows, reducers, tees, wyes, laterals and other fittings shall, when installed, be capable of withstanding all operating conditions. Acceptable configurations include contact molded or metered fiberglass or properly protected standard ductile iron.

Unbalanced thrust forces shall be restrained with thrust blocks or other approved suitable methods. Fiberglass tees, wyes, laterals, or other similar fittings shall be fully encased in reinforced concrete designed to withstand the pressure forces.

2.05 POLYETHYLENE SEWER PIPE

A. SCOPE

(1) This specification covers Polyethylene (PE) pipe with a corrugated outer wall and a smooth interior wall, for use with non-pressure sanitary sewer systems. The PVC fittings and joints are included in the specification.

B. MATERIAL AND MANUFACTURING

1. PIPE MATERIALS

The pipe shall be made from clean virgin Polyethylene compounds having a cell classification of 324420C as defined by ASTM D-3350.

2. FITTING MATERIALS

The fittings shall be made from clean virgin polyvinyl chloride (PVC) compounds having a cell classification of 12454B, 1245C or 13343C as defined by ASTM D-1784.

Pipe shall be manufactured by simultaneous extrusion of the corrugated and smooth walls with the smooth inner wall fused to the outer corrugated wall.

Fittings shall be molded or fabricated.

3. JOINING MATERIALS

a. Gaskets
b. Elastomeric gaskets shall meet the requirements of ASTM F-477.
c. Lubricants

The lubricants used for assembly shall have no detrimental effect on the gasket or the pipe, and shall be per published recommendations of the pipe manufacture.

4. MATERIAL CERTIFICATION

A manufacture's or an independent laboratory certification shall be furnished to the purchaser/engineer that the products were manufactured, sampled, tested, and inspected at the time of manufacture in accordance with this specification.

C. PIPE DIMENSIONS

Pipe dimensions shall meet the following requirements when tested in accordance with ASTM D-2122.

Nominal Size	Avg. O.D.	Avg. I.D.
4	4.790 (121.7)	4.00 (101.6)
6	6.930 (176.0)	6.00 (152.4)
8	9.145 (232.2)	8.00 (203.2)
10	11.405 (289.7)	10.00 (254.0)
12	14.450 (367.0)	12.00 (304.8)
15	17.530 (445.3)	15.00 (381.0)
18	21/150 (537.2)	18.00 (457.2)

D. INSTALLATION

1. Joint Tightness

Minimum joint performance shall show no leakage when tested in accordance with ASTM D-3212.

2. Supplier Assistance

A manufacturers representative of the above referenced pipe material shall be present at the beginning of the installation as required by the Design Engineer or Contractor and shall remain on site until released by the Design Engineer or Field Inspector/Engineer.

2.06 INLETS FOR STORM SEWERS

A. CURB TYPE INLETS

(1) Curb inlets shall be constructed at the locations and to the lines and grades or shown on the plans or as directed by the Engineer.

(2) Curb inlets shall be constructed of reinforced class “C” concrete in accordance with Section 1-B “Concrete Structures” and the plans and detail drawings.

(3) The curb section and the curb inlet shall conform to the curb and gutter section in which it is placed in so far as it is possible.

B. GRATE TYPE INLETS

(1) Grate inlets shall be constructed at the locations and the lines and grades as shown on the plans or as directed by the Engineer.

(2) Concrete boxes for grate inlets shall be constructed of reinforced Class “C” concrete in accordance with Section 1-B “concrete Structures” and the plans and detail drawings.

(3) Grates shall be constructed of ASTM A-48 gray iron having minimum tensile strength of 35,000 psi or ductile iron having a minimum tensile strength of 60,000 psi and a yield strength of 40,000 psi.

The size, style, shape, type, weight and class shall be as shown on the plans.

Grate frames shall be as manufactured for the grate by the grate fabricator. If more than one type or style or frame is available, the type and/or style shall be as indicated on the plans.

C. COMBINATION INLETS

(1) Combination curb and grate inlets shall be constructed at the locations and to the lines and grades as shown on the plans or as directed by the Engineer.

(2) Combination inlets shall be constructed in accordance with the applicable requirements for “Curb type inlets” and “Grate type inlets” above.

D. INLET LEADS

(1) Inlet leads may be PVC pipe or CSP as shown on the plans and called for in the bid proposal.

(2) Inlet leads shall be constructed in accordance with the specifications for type of material used and the plans and detail drawings.

(3) Where two or more leads are joined together to form a single lead to the storm sewer they shall be joined at a cleanout unless shown otherwise on the plans.

(4) Inlet leads shall be connected to the storm sewer at a manhole. The leads shall enter the manhole at a point that will match the .8 points of the two pipes as near as practical.

E. CLEANOUT FOR STORM SEWER INLET LEADS

Cleanouts at the juncture of inlet leads shall be constructed in accordance with the dimensions and requirements shown on the plans and detail drawings.

F. CORRUGATED STEEL SLOTTED DRAINS

(1) Corrugated steel slotted drains shall be as specified in section 2.02-3 of these specifications and shall be furnished in the lengths and diameters as shown on the drawings and in the bid proposal.

(2) Corrugated steel slotted drains are approved for nuisance water inlets only and are sized to allow for considerable clogging before they will cease to function in this capacity.

2.07 MANHOLES

1. GENERAL

A. **CONCRETE MANHOLES ARE NOT TO BE USED FOR SANITARY SEWERS AFTER DECEMBER 31, 2002. FIBERGLASS MANHOLES ARE TO BE USED FOR ALL SANITARY SEWERS**. Concrete manholes can be used for storm water sewers.

All manholes furnished for this project shall be precast unless noted otherwise on the plans and or bid proposal.

Precast manholes shall conform to the requirements of ASTM Specification C-478 with the modifications given in this article.

Concrete used for precast manholes shall have a minimum 28-day compressive strength of 4,000 psi and shall have a minimum cement content of 7 sacks per cubic yards.

All manhole sections shall be furnished with tongue and groove type joints suitable for sealing water tight with rubber or bituminous joint sealer or gaskets.

B. When cast in place components for manholes are called for on the plans the concrete used shall have a minimum 28 day compressive strength of 4,000 psi and a minimum cement content of 7 sacks per cubic yard and shall conform to the requirements of ASTM Specification C-478 with wall thickness as shown on the plans and detail drawings.

Aggregate for the concrete shall meet the sodium sulfate and magnesium sulfate test as required in ASTM Specification C-33.

C. Mortar for filling and shaping the inverts in precast manhole bases and for mortaring precast grade rings and cast iron rings and covers shall consist of one part Portland cement ASTM C150 Type 1 to 3 parts washed sand mixed with just enough water to make a workable mix.

D. Manholes for corrugated steel pipe may be precast concrete or corrugated steel as described in Article 2.02. The type and material shall be as shown on the plans and called for on the bid proposal.

2. PRECAST MANHOLES

A. Manhole base sections shall be cast with an integral floor and shall be constructed in accordance with the details shown on the plans.

B. Manhole riser sections shall be constructed in accordance with the plans and details and these specifications. When pipe openings are required in manhole riser sections they shall be of the same type and meet the same requirements as the pipe openings in the precast bases.

Manhole riser sections for each manhole shall be furnished in the proper combination of lengths to construct the manhole in conjunction with the other components to the finished grade shown on the plans.

C Eccentric cone sections shall be constructed in the same manner as other components except the top of the cone will have a flat surface to accommodate the manhole ring and cover or grade adjusting rings instead of a tongue or groove.

Generally openings will not be required in the wall of the cone section of the manhole.

D. Manhole grade rings shall comply with all the requirements for manhole riser sections except they shall be cast smooth both sides without tongues and/or grooves.

Manhole grade rings shall be sized to fit the smooth small end of the cone section and shall be cast in heights of 2", 4" or 6".

E. Joint seals for precast concrete manholes shall be a bitumastic sealer such as Ram-Nek or approved equal, a soft rubber sealer such as Butyl-Lok or approved equal or an approved "O" ring gasket or a combination of the above if required to achieve a water tight joint.

F. All water tight Storm Sewer Manholes constructed on this project shall have Neenah R-1755-C watertight manhole rings and covers or approved equal.

No separate payment will be made for the protective plastic manhole linings or for the water tight manhole rings and covers but the cost of these items shall be included in the price bid for water tight Storm Sewer Manholes.

In addition to the markings required by ASTM Specification C-478, all components of each manhole shall be, marked with location identifying information such as manhole number or line number and station value where manhole is to be installed. If the manhole has openings for installation of branch lines above the base section, each manhole section shall be clearly marked with the sequence of installation to assure the branch opening will be at the correct elevation.

3. FIBERGLASS MANHOLES

A. SCOPE

Fiberglass reinforced polyester manholes shall be manufactured from commercial grade polyester resin or other suitable polyester or vinyl resins, with fiberglass reinforcements and in accordance with the latest edition of ASTM D 3 753 (Standard Specification for Glass-Fiber Reinforced Polyester Manholes). Fiberglass manholes shall be used with fiberglass or plastic sewer pipe.

B. MATERIALS

1. **Resin:** The resins used shall be a commercial grade unsaturated polyester resin.

2. **Reinforcing Materials**: The reinforcing materials shall be commercial Grade "E" type glass in the form of mat, continuous roving, chopped roving, roving fabric, or a combination of the above, having a coupling agent that will provide a suitable bond with the resin and leave a resin rich surface.

3. **Surfacing Materials**: If reinforcing materials are used on the surface exposed to the contained substance, they shall be a commercial grade chemical-resistant glass organic surfacing mat having a coupling agent that will provide a suitable bond with the resin and leave a resin rich surface.

4. **Fillers and Additives**: Fillers, when used, shall be inert to the environment and wet well construction. Additives, such as thixotropic agents, catalysts, promoters, etc., may be added as required by the specific manufacturing process to be used. The resulting reinforced plastic material must meet the requirement of this specification.

C. FABRICATION

1. **Exterior Surface**: The exterior surface shall be relatively smooth with no sharp projections. Handwork finish is acceptable if enough resin is present to eliminate fiber show. The exterior surface shall be free of blisters larger than ½ inch in diameter, de-lamination and fiber show.

2. **Interior Surface**: The interior surface shall be resin rich with no exposed fibers. The surface shall be free of crazing, de-lamination, blisters larger than ½ inch in diameter, and wrinkles of 1/8 inch or greater in depth. Surface pits shall be permitted up to 6 per square foot if they are less than ¾ inch in diameter and less than 1/16 inch deep.

3. **Defects not permitted**:

Exposed fibers: glass fibers not wet out with resin.
Resin runs: runs of resin and sand on the surface
Dry areas: areas with glass not wet out with resin.
De-lamination: separation in the laminate.
Blisters: light colored areas larger than ½ inch in diameter.
Crazing: cracks caused by sharp objects
Pits or Voids: air pockets.
Wrinkles: smooth irregularities in the surface.
Sharp projection: fiber or resin projection necessitation gloves for handling.

D. PHYSICAL REQUIREMENTS

1. **Load Rating**: The complete manholes shall have a minimum dynamic-load rating of 16,000 ft-lbs. when tested in accordance with this standard. In order to establish this rating, the complete manhole shall not leak, crack, or suffer other damage when load

tested to 40,000 ft-lbs. and shall not deflect vertically downward more than ¼ inch at the point of load application when loaded to 24,000 lbs.

2. **Stiffness**: The manhole cylinder shall have a minimum pipe stiffness value as shown below when tested in accordance with A.S.T.M. 3753 8.5 (note 1)

Depth Ft.	F/dy.psi
3 – 6.5	0.75
7 – 12.5	1.26
13 – 20.5	2.01
21 – 25.5	3.02
26 – 35	5.24

3. **Soundness:** In order to determine soundness, apply an air or water pressure test to the manhole test sample. Test pressure shall not be less than 3 psig or greater than 5 psig. While holding at the established pressure, inspect the entire manhole for leaks. Any leakage through the laminate is cause for failure of the test. Refer to A.S.T.M. 3753 8.6.

4. **Chemical Resistance**: The fiberglass manhole and all related components shall be fabricated from corrosion proof material suitable for atmospheres containing hydrogen sulfide and dilute sulfuric acid as well as other gases associated with the wastewater collection.

5. **Physical Properties**:

	Hoop Direction	Axial Direction
a. Tensile Strength (pi)	18,000	5,000
b. Tensile Modulus (pi)	0.6×10^6	0.7×10^6
c. Flexural Strength (psi)	26,000	4,500
d. Flexural Modulus (psi)	1.4×10^6	0.7×10^6
e. Compressive (psi)	18,000	10,000

6. **Minimum Wall Thickness**: Shall be 0.48” nominal at all depths of the manholes.

E. TEST METHODS: All tests shall be performed as specified in A.S.T.M 3753 latest edition, section 8. Test method D-790 (see note 5) and test method D-695.

F. QUALITY CONTROL: Each completed manhole shall be examined for dimensional requirements, hardness, and workmanship. All required A.S.T.M 3753 testing shall be completed and records of all testing shall be kept and copies of test records shall be presented to customer upon formal written request within a reasonable time period.

G. CERTIFICATIONS: As a basis of acceptance the manufacturer shall provide a independent certification which consist of a copy of the manufacturer’s test report and accompanied by a copy of the test results that the manhole has been sampled, tested,

and inspected in accordance with the provisions of this specification and meets all requirements.

H. SHIPPING AND HANDLING: Do not drop or impact the fiberglass manhole. Fiberglass manhole may be lifted by inserting a 4" x 4" x 30" timber into the top of manhole with cable attached or by a sling or "choker" connection around center of manhole, lift as required. Use of chains or cables in contact with the manhole surface is prohibited.

I. CONCRETE:

1. **Fiberglass Bottom**: Manholes may have fiberglass bottoms that are a minimum of 6" below the OD of the pipe invert when concrete is used to form the invert. Manufactured fiberglass inverts and bench areas are allowed, or concrete may be used to form bench area and invert. Concrete is to be used on top of anti-flotation ring and around the reducer section as required for buoyancy.

2. **Concrete Bottom**: Lower manhole into wet concrete until it rests at the proper elevation, with a minimum of 4 inches of fiberglass manhole inserted into the wet concrete below flow line, then move manhole to plumb. The concrete shall extend a minimum of one foot from the outside wall of the manhole and a minimum of 6 inches above incoming lines. On the inside concrete shall form the bench and invert area and rise a minimum of 4 inches above incoming lines. If required by Engineer concrete may be used around reducer section for buoyancy control.

BACKFILL:

1. **Backfill Material**: Unless shown otherwise on drawings and approved by the Engineer, sand, crushed stone, or crushed gravel shall be used for backfill around the manhole for a minimum distance of one foot from the outside surface and extending from the bottom of the excavation to the top of the reducer section. Suitable material chosen from the excavation may be used for the remainder of the backfill. The material chosen shall be free of large lumps or clods, which will not readily break down under compaction. This material will be subject to approval by Engineer.

2. **Backfill Procedure**: Backfill shall be placed in layers of not more than 12 loose measure inches and mechanically tamped to 95% Modified Proctor Density, unless otherwise approved by Engineer. Backfill shall be placed in such a manner as to prevent any wedging action against the fiberglass manhole structure.

K. MARKING and IDENTIFICATION: Each manhole shall be marked on the inside and outside with the following information:

Manufacturer's name or trademark
Manufacturer's factory location
Manufacturer's serial number
Total length

4. MANHOLE RINGS AND COVERS

A. Manhole rings and covers furnished for this project shall be pattern No. 300-24 as produced by Western Iron Works, Inc., 21 E. 6th St., San Angelo, Texas 76903-5493 or Bass and Hays Foundry, Inc., 238 South Bagdad Rd., Grand Prairie, Texas 75050, or approved equal.

B. WATER TIGHT MANHOLE COVERS

(1) Water tight manhole rings and covers furnished for this project shall be number R-1755-C as manufactured by Neenah Foundry Company, P.O. Box 729, Neenah, Wisconsin 54957, or approved equal.

(2) When watertight replacement sanitary sewer manhole rings and covers are called for on the plans and in the bid proposal they shall be Neenah Foundry Co. No. R-1755-C or approved equal.

No separate payment will be made for adjusting to grade of the replacement watertight manhole rings and covers. The contractor shall schedule this work to coincide with other manhole and water valve adjustments and any costs that might be involved shall be included in the price bid for replacement water tight manhole rings and covers.

(3) Manhole vents shall be used in conjunction with watertight rings and covers spaced every third manhole or as indicated on the plans. Vents shall be constructed as indicated on City design and construction standards.

C. Pressure type manhole rings and covers may be required for certain storm sewer applications. When pressure type manhole rings and covers are called for on the plans and/or bid schedule they shall be Western Iron Works Pattern #380-24P or approved equal. The manhole cover shall be sealed with an “O” ring gasket in a ring groove and shall be secured to the ring by six (6) five-eighths inch (5/8”) stainless steel bolts. The ring shall have six (6) one and one quarter inch (1-1/4”) bolt holes in the flanges for securing the ring to the concrete slab top on the manhole.

D. All manhole covers except grate type shall have two blind pick holes or pick bar cast into them. The blind pick holes or pick bars shall be placed on opposite sides of the cover.

E. All manhole covers except grate type shall have cast into their tops in letters 2 inches high minimum one of the following:

CITY OF MIDLAND
SANITARY SEWER
OR
CITY OF MIDLAND
STORM DRAIN

which ever is applicable.

2.08 GRANULAR MATERIALS

A. GRANULAR MATERIAL GRADATION CLASSIFICATIONS:

Granular materials furnished for foundation, bedding, encasement, backfill, or other purposes as may be specified, shall consist of any natural or synthetic mineral aggregate such as sharp grained sand, crushed gravel, crushed rock, crushed stone, or slag, and shall conform to the following specifications and/or gradation.

Note all materials used for these purposes shall be crushed and shall have at least two broken faces. Pea gravel will NOT be allowed.

	Foundation	Bedding	Encasement	Backfill
ASTM C33 Grade #57	x			
ASTM C33 Grade #67	x			
ASTM C33 Grade #8		x	x	
THD 1982 Item 302 Type D Grade 4		x	x	
THD 1982 Item 302 Type D Grade 5			x	
Crusher fines**			*x	x

*100 percent of crusher fines that are to be used within 12 inches of the top of pipe must pass the ¾" sieve.

** Approximate Gradation for Crusher Fines.

Sieve Size	% Passing
2 inch	100
# 4	35 - 100
# 10	20 - 100
# 40	5 - 35
#200	4 - 10

Crushed stone material proposed as an alternate for use on this project and not meeting the above specifications must be approved in writing at least 48 hours prior to the time scheduled for opening bids.

B. GRANULAR MATERIAL USE DESIGNATIONS:

Granular materials provided for Foundation, Bedding, Encasement, or Backfill use as required by the contract, either as part of the pipe item work unit or as a separate contract item, shall be classified as to use in accordance with the following:

MATERIAL USE DESIGNATION	ZONE DESIGNATION
Granular Foundation	Placed below the bottom of pipe grade as replacement for unsuitable or unstable soils, to achieve better foundation support.
Granular Bedding	Placed below the midpoint of the pipe prior to pipe installation, to facilitate proper shaping and achieve uniform pipe support. Also for Class B bedding where specified.
Granular Encasement	Placed below an elevation one half foot (6”) above the top of pipe, after pipe installation, for protection of the pipe and to assure proper filling of voids and thorough consolidation of backfill.

In each case above, unless otherwise indicated, the lower limits of any particular zone shall be the top surface of the next lower course as constructed. The upper limits of each zone are established to define variable needs for material gradation and compaction or void content, taking into consideration the sequence of construction and other conditions. The material use and zone designations described above shall only serve to fulfill the objectives and shall not be construed to restrict the use of any particular material in other zones where the gradation requirements are met.

PART 3 – EXECUTION

3.01 LOCATION OF WORK

A. The work will be located as shown on the plans.

B. It may be necessary for the Engineer to shift lines as reasonable amount to avoid an obstruction to the construction or to reduce right of way difficulties. The Contractor will not be allowed any additional compensation due to shift of lines. Additional compensation will be allowed only for lengthening of lines.

3.02 PROTECTION OF SURFACE STRUCTURES

A. All surface structures and features located outside the permissible excavation limits for underground installations, together with those within the construction areas which are indicated in the Plans as being saved, shall be properly protected against damage and shall not be disturbed or removed without approval by the Engineer.

B. Obstructions such as street signs, guard posts, mail boxes and other items of prefabricated construction may be temporarily removed during construction provided that essential service is maintained in a relocated setting as

approved by the Engineer and that non-essential items are properly stored for the duration of construction. Upon completion of the underground work, all such items shall be replaced in their proper setting. This removal, relocation and replacement shall be at the sole expense of the Contractor.

In the event of damage to any surface structures or improvements, either privately or publicly owned, in the absence of construction necessity, the Contractor will be required to replace or repair the damaged property to the satisfaction of the Engineer and without cost to the Owner.

3.03 INTERFERENCE OF UNDERGROUND STRUCTURES

A. When any underground structure interferes with the planned placement of the pipeline or appurtenances to such an extent that alterations in the work are necessary to eliminate the conflict or avoid endangering effects on either the existing or proposed facilities, the Contractor shall immediately notify the Engineer and the Owner of the affected structure. When any existing facilities are endangered by the Contractor's operations, he shall cease his operations at the site and take such precautions as may be necessary to protect the in place structures until a decision is made as to how the conflict will be resolved.

B. Without specific authorization from the Engineer, no essential utility service shall be disrupted, nor shall any change be made in either the existing structures or the planned installations to overcome the interference. Alterations in existing facilities will be allowed only to the extent that service will not be curtailed unavoidably and then only when the encroachment or relocation will satisfy all applicable regulations and conditions.

C. Wherever alterations are required as a result of unforeseen underground interference not due to any fault or negligence of the Contractor, the Engineer will issue a written order covering any additional or extra work involved and specifying the revised basis of payment, if any. Any alterations made strictly for the convenience of the Contractor shall be subject to prior approval and shall be at the Contractor's expense.

D. No extra compensation will be allowed for delays caused by the interference of underground structures.

3.04 SEPARATION BETWEEN SANITARY SEWERS AND WATER MAINS

A. Sanitary sewers and service lines shall be installed so that the separation between the sewer and water mains is not less than 9 feet in all directions. The 9 feet shall be measured between the nearest outside edges of the pipe.

B. When the required 9 foot minimum separation cannot be maintained and a sanitary sewer must be constructed parallel to a water main, the sanitary sewer shall be constructed of ductile iron or PVC pipe meeting AWWA specification or having NSF approval for potable water pipe, with a pressure rating of 100 psi for both the pipe and the joint. The sanitary sewer line shall

be installed in a separate trench and may be placed no closer than 2 feet vertically and 4 feet horizontally from the water main, with the separation being measured from the nearest outside walls of the pipes. The sanitary sewer shall be constructed lower than the water main.

C. When a sanitary sewer must cross a water main and the 9 feet required separation cannot be maintained, the sanitary sewer may be constructed with a minimum clear separation between the outside diameters of the two pipes of 6 inches if that part of the sanitary sewer within 9 feet of the water main is constructed of ductile iron pipe or PVC pipe meeting AWWA specifications, having a 150 psi pressure rating and equipped with pressure type joints. One length of the sewer pipe must be centered on the water main and where possible, the sanitary sewer should pass under the water line.

D. When the 9 foot required separation cannot be maintained and a sanitary sewer force main must be constructed parallel to a water main, the sanitary sewer force main shall be constructed of ductile iron or PVC pipe meeting AWWA specifications and having a pressure rating of 150 psi and equipped with pressure type joints. The force main must be constructed with a minimum vertical separation of 2 feet and a minimum horizontal separation of 4 feet measured between the outside diameters of the pipes. The force main must be constructed lower than water main.

Table I showing separation of water and sewer lines and construction materials allowed:

TABLE 1
SEPARATION OF WATER AND SEWER LINES

Condition	Location	Material		Separation (Min.)		Comments
		Water	Sewer	Vert.	Horiz.	
NEW WATER AND NEW SEWER SYSTEM						
New Water & New Sewer Gravity Sanitary Sewer Parallel to Water Main	Water above Sewer	Std.	CI DI PVC 150 PSI	2’	4’	Separate Trenches
Gravity Sanitary Sewer Crossing Water Main	Water above Sewer or Sewer above Water	Std	CI DI PVC. 150 PSI	6”	NA	Center one joint of sewer pipe on water main
Gravity Sewer Crossing Water Main	Water above Sewer	Std	ABS, Clay Conc. composite	2’	NA	Cement stabilize sand initial backfill zone each side of crossing. Center of sewer for 9 ft one joint of sewer pipe on water Main
NEW WATER AND EXISTING SANITARY SEWER						
New Water Parallel Existing Sewer	Water above Sewer	Std.	Clay, Conc. ABS CI DI PVC	2’	4’	If sewer shows no sign of leakage, then leave sewer alone. If Sewer shows signs of leakage, then repair or replace.
New Water Crossing Existing Sewer	Water above Sewer	Std	Clay, ABS Conc. composite	2”	NA	If sewer shows no sign of leakage, then leave sewer alone if sewer shows signs of leakage then repair or replace.
New Water Crossing Existing Sewer	Sewer above Water	Std	Clay, ABS Conc. composite	2’	NA	Replace existing sewer with one joint CI,DI,PVC-150 Centering over waterline
New Water Parallel to Existing Sewer	Sewer above Water	Std	Clay, ABS Conc. composite	2’	4’	Replace existing sewer with CI, DI, PVC – 150 PSI or Cement Stabilized sand back- fill initial Backfill none of sewer where parallel closer than 9 ft., or Encase the water in 150 PSI Pipe two nominal sizes larger.

EXISTING WATER AND NEW SANITARY SEWER						
New Sewer parallel Existing Water	Water above Sewer Or Sewer above Water	Std	CI DI PVC 150 PSI	2’	4’	Separate trenches
New Sewer crossing Existing Water	Water above Sewer or Sewer above water	Std	CI DI PVC 150 PSI	6”	NA	Center one joint of sewer pipe on water main.
New Sewer crossing Existing Water	Water Above Sewer	Std	Clay, ABS Conc. composite	2’	NA	Cement Stabilize sand initial backfill zone of sewer for 9 ft each side of crossing. Center one joint of sewer pipe on water main.

3.05 EXCAVATION

A. Excavation of every description and of whatever materials encountered shall be made to the alignment and depth shown on the plans or as directed by the Engineer. Excavation shall be made by open cut. Sides of trenches shall be kept as nearly vertical as possible and the trench shall be so braced, sheeted and drained that workmen may work safely and efficiently therein. The trenches shall be sufficiently straight between designated angle points to permit the pipe to be laid true to line in the approximate center of the trench.

B. The trench width may vary with and depend upon the depth of trench, the diameter of pipe to be laid and the nature of the material to be excavated; but in any case shall be of ample width to permit the pipe to be laid and jointed properly and the backfill to be placed and compacted properly. The minimum width of unsheeted trench shall be 18 inches. The maximum clear width of trench at the top of the pipe shall be not more than two (2) feet greater than the outside diameter of the pipe for pipes up to 33” diameter except by consent of the Engineer. Whenever, for any reason, the maximum trench width is exceeded, the Contractor shall provide, at his own expense, pipe of higher class and/or bedding adequate to sustain the increased soil load as calculated by the Engineer.

C. Trenches shall be undercut to provide for the class bedding specified and/or shown on the plans. Bell holes shall be excavated to insure the pipe resting for its entire length upon the bedding material. Where trenches are under-cut beyond the depth required for bedding the trench shall be brought to grade by using crushed aggregate as specified for foundation herein. The use of loose native soil will NOT be permitted for this purpose.

D. No pipe shall be laid in water. Where the ground water table is at or above trench bottom, the Contractor shall de-water the trench to permit the pipe to be laid on a solid foundation.

   Costs for de-watering by whatever method selected shall be considered incidental to the price bid per foot of pipe.

   The Contractor shall discharge pumps to the natural drainage channels, or if permitted, to other sewer or drains.

Where sewer pipelines are located in or across streambeds or drainage ditches, the Contractor shall divert the stream flow and de-water each section as the work progresses.

E. Temporary support, adequate protection and maintenance of all underground and surface utility structures, drains, sewers, and other obstructions encountered in the progress of the work shall be furnished by the Contractor at his own expense under the direction of the Engineer.

F. Whenever wet, soft or unstable soil, incapable of properly supporting the pipe, manholes or other structure is encountered in the trench, a further depth and/or width shall be excavated and refilled to trench bottom grade with gravel or other approved suitable material thoroughly compacted to assure a firm foundation for the pipe.

G. Rock, boulders and large stones shall be removed to provide a clearance of at least six (6) inches below the outside barrel of the pipes, valves, or fittings and to a clear width of six (6) inches on each side of all pipe and appurtenances for pipe 15 inches in diameter or less, and a clear width of nine (9) inches on each side of all pipe and appurtenances for pipe larger than 15 inches in diameter. Adequate clearance for properly joining pipe laid in rock trenches shall be provided at bell holes. The space between the rock at the bottom of the trench and the bottom of the pipe barrel shall be filled with compacted bedding material.

H. The Engineer shall be notified of any need for blasting to remove materials which cannot be broken up mechanically, and there shall be no blasting operations conducted until the Engineer's approval has been secured. Blasting operations will be allowed only when proper precautions are taken to protect life and property, and then shall be restricted as the Engineer directs. The Contractor shall assume full responsibility for any damage caused by blasting, regardless of the requirements for notification and approval. The Contractor shall secure any required permits for blasting and shall conduct blasting operations in conformance with all applicable State and local laws, regulations and ordinances.

I. In the event the Contractor desires to employ tunneling in locations other than as shown on the Plans in order to avoid replacement of sidewalks, etc., he shall do so only upon receipt of specific permission from the Engineer. Tunneling of this nature shall be considered incidental.

J. Excavated materials will be classified for reuse as being either suitable or unsuitable for backfill or other specified use.

3.06 SPECIAL SAFETY PROVISIONS

1. TRENCH SAFETY SYSTEMS

A. DESCRIPTION

This item shall govern for the Trench Safety Systems required for the construction of all trench excavation to be utilized in the project and including all additional excavation and backfill necessitated by the safety system. A trench shall be defined as a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. The depth is five feet or more. Trench Safety Systems include but are not limited to sloping, sheeting, trench boxes or trench shields, sheet piling, cribbing, bracing, shoring, de-watering or diversion of water to provide adequate drainage.

B. CONSTRUCTION METHODS

Trench safety systems shall be accomplished in accordance with the detailed specifications set out in the provisions of Excavation, Trench, and Shoring, Federal Occupational Safety and Health Administration (OSHA) Standards, 29CFR, Part 1926, Subpart P, as amended, including Proposed Rules published in the Federal Register (Vol. 52, No. 72) on Tuesday, October 31, 1989. The sections that are incorporated into these specifications by reference include Sections 1926-650 through 1926-652. Legislation that has been enacted by the Texas Legislature, being Tex. Rev. Civ. Stat. Ann. Arts. 1015q, 2368a.6 (Vernon Supp. 1988) with regard to Trench Safety Systems, is hereby incorporated, by reference into these specifications.

A reproduction of the OSHA Publication 2226 is attached for the convenience of the Contractor. The City assumes no responsibility for the accuracy of the reproduction or that it reflects current law. The Contractor is responsible for obtaining a copy of this section of the Federal Register for his use.

If the contractor elects to use a trench protective system that, in the Proposed Rules, requires “Design by a qualified person or a qualified engineer,” [For example see 1926.652 (b) (3) and 1926.652 (c) (4)], a “qualified person or qualified engineer” shall be a Professional Engineer registered in the State of Texas. The Contractor is responsible for obtaining boring and soil analysis as required for the planned design. The trench excavation is to be designed in conformance with OSHA standards and regulations.

C. TRENCH SAFETY PROGRAM

The Contractor shall submit a safety program specifically for the construction of trench excavation. The trench safety program shall be in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

D. INSPECTION

The Contractor shall make daily inspections of the Trench Safety Systems to ensure that the systems meet OSHA requirements. Daily inspection is to be made by a "competent person" provided by the Contractor. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench. It is the sole duty, responsibility and prerogative of the Contractor, not the owner or the Engineer, to determine the specific applicability of the designed trench safety systems to each field condition encountered on the project. The Contractor shall maintain a permanent record of daily inspections.

2. SAFETY RESTRICTIONS - work near high voltage lines

The following procedures will be followed regarding the subject item on this contract:

A. Warning signs painted yellow with black letters that are legible at twelve 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."

B. All equipment except back hoes or dippers that may be operated within ten feet of high voltage lines shall have an insulating cage-type of guard about the boom or arm and insulator links on the lift hook connections.

C. When necessary to work within six feet of high voltage electric lines, notification shall be given the power company 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.

D. The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

3.07 PIPE LAYING

A. All gravity pipe shall be laid using approved grade boards, furnished and set by the Contractor at no additional cost to the Owner, according to the grade stakes established by the Engineer. The maximum spacing of grade boards shall be fifty (50) feet. No sewer shall be laid unless there is a minimum of three grade boards set to check the proper grade and alignment ahead. The Contractor shall provide and use a suitable grade rod to insure the proper grade of the pipe.

B. The Contractor may use the laser beam method of setting a line and grade for the sewer by using the laser beam coaxially through the center of the sewer being laid. The laser beam projector is to be rigidly mounted to its support platforms, with a two-point suspension, or equivalent, assuring that all ground and equipment vibrations are kept to an absolute minimum. The Contractor shall furnish all equipment including equipment necessary to control atmospheric conditions in the pipe to keep line and grade to acceptable standards of accuracy. Competent experienced people who have been properly trained to operate the equipment used must operate the laser beam system.

C. The Contractor shall stake check pegs at all manholes throughout the job. Check pegs midway between manholes and any other checkpoints deemed necessary to assure accuracy of the equipment shall be provided by the contractor.

D. Each piece of pipe and special fitting shall be carefully inspected before it is placed and no defective pipe shall be laid in the trench. Pipe laying shall proceed upgrade, starting at the lower end of the grade and with the bells uphill. No pipe shall be laid except in the presence of an inspector representing the Engineer. Any pipe laid except in the presence of an inspector representing the Engineer shall be subject, at the contractor's expense, to a television camera inspection and survey by the city. Trench bottoms found to be unsuitable for foundations after pipe laying operations have started shall be corrected and brought to exact line and grade with approved compacted granular material as specified for foundation in Item 2.07 A. of these specifications.

E. Pipe laying shall proceed up-grade with spigot or tongue ends pointing in the direction of flow. The spigot shall be centered in the bell, and pipe shoved into position, and brought into true alignment. It shall be secured there with bedding material carefully tamped under and on each side of it, excepting at bell holes. Care shall be taken to prevent dirt from entering the joint space.

F. Any defective or damaged pipe discovered after the line is laid or any gravity pipe, which has had its grade or joint, disturbed after laying shall be removed and replaced or relayed. The section of line in which such damaged or displaced section is discovered shall be retested after corrections are made.

G. Where excavation for buildings or other portions of the work have been carried below the line and grades of the pipe, thorough tamping of approved crushed stone backfill and the use of adequate bracing and blocking under the pipe will be required to insure against settling and shearing of the pipe. In areas where noted on plans, Portland cement stabilized material or concrete shall be used for backfill to provide adequate bracing for pipe and protection of structures.

H. All manhole connections for PVC or other Polymer based pipe shall be made using "A Lok Gaskets" or "Kor-N-Seal" boots or other approved water stop devices. Only Portland cement grout that expands upon curing or approved non-shrink grout will be incorporated into any manhole connection.

I. Connections to manholes for other types of pipe shall be in accord with the pipe manufacturers specifications and other applicable requirements of these specifications. The resulting joint shall meet the leakage test requirements of these specifications.

J. The exposed end of all pipes shall be fully protected with a stopper or bulkhead at the end of each day's work to prevent earth, debris, small animals, or other substances from entering the pipe. The interior of the sewer shall be carefully freed from all dirt, jointing compound, or superfluous material of every description as the work progresses.

3.08 CONNECTION AND ASSEMBLY OF JOINTS

1. JOINING PVC OR OTHER POLYMER BASED PIPE

A. The type of joint and the material to be used shall be as shown on the plans or specified herein. Factory cast compression joints shall be free of dirt and lubricated before inserting the barrel into the bell. After the spigot is centered in the bell, the pipe shall be shoved home solidly by using a wood block and bar. The Contractor shall keep the ends of the pipe closed to prevent dirt and other material from entering the pipe during placement. All joints must be water tight, and any leaks or defects discovered must be repaired immediately. Any pipe, which has been disturbed after being laid, must be taken up, the joint cleaned and properly relayed as directed by the Engineer.

Lubricant used shall be as recommended by the pipe manufacturer.

B. Field-cut pipe must be beveled for insertion into the gasketed bell or coupling. Bevels can be made with a hand or power tool. Bevels shall be made to pipe manufacturer's specifications. If pipe manufacturers specifications are not available the bevel may be made at 15 degrees to the longitudinal axis of the pipe through one half (l/2) the wall thickness.

C. After pipe has been cut and beveled, a new full insertion mark located as recommended by the pipe manufacture shall be made using a felt tip pen. The contractor may determine the location of the insertion mark by measuring the mark location on a factory marked joint of pipe if manufacturer's specifications are not available.

2. JOINTING CORRUGATED STEEL PIPE

A. Gaskets for corrugated steel pipe shall be "O" Ring or sleeve types. Sleeve gasket shall be carefully placed on one joint of pipe. When the pipe is aligned and brought end to end the gasket shall be carefully centered over the joint between the ends of the pipe. "O" ring gasket shall be installed in accordance with the manufacturer's recommendation.

B. When "O" ring gaskets are furnished a flat gasket shall be furnished and placed between the overlapping portions of the band. The gasket shall extend the full width of the band and shall be of sufficient depth to assure a watertight joint.

C. The coupling band shall be carefully centered over the joints and tightened to the pipe manufacturer specifications. Care shall be taken during the tightening process to assure a snug uniform fit for the entire circumference of the pipe.

3. PROTECTING AND COVERING JOINTS

A. The contractor shall keep the ends of the pipe closed during the time of construction to prevent the entry of dirt, debris, small animals and other foreign objects.

B. Joints shall not be covered until approved by Engineer or his representative. Connections, which are for future use, shall be properly capped.

3.09 CONNECTIONS TO EXISTING STRUCTURES

A. Where shown on the plans, the contractor shall connect the new sewer to existing manholes. If no stub out is present in the existing manhole for such connection, the contractor shall construct such connection by making a hole in the side of the existing manhole using a coring machine or other approved method and installing a “KOR N Seal” boot as manufactured by N.P.C. Systems, Inc. or other approved water tight manhole connector.

The contractor shall use caution in constructing the connection to the existing manhole. Damage to the manhole that, in the opinion of the Engineer, would impair the use and/or function of the manhole shall be just cause to require the contractor to reconstruct the manhole at contractor’s expense. Such damage shall include but not be limited to cracking of the manhole riser section, spalling around the connection significantly reducing manhole wall thickness or excessive oversize in the opening for the new connection requiring any filler other than the manhole connector and/or non-shrink grout specified.

The contractor shall make such changes in the invert of the manhole as may be necessary to provide a smooth flow of the water through the manhole. Any connection to existing structures required in the Plans shall be accomplished by the Contractor and shall be incidental item with no direct compensation being made unless listed as a pay item in the bid proposal.

B. If the work consists of the construction of a sewer that is to replace an existing sewer, all of the existing service lines shall be kept in operation and connected to the new line.

C. Connections shall be made to all existing sewer lines in the vicinity of the work by removing a section of the sewer for the existing line and inserting in the space a tee branch of proper size, or by the construction of a manhole, regulator chamber of other structure as shown on the Drawings.

D. Connections to building services shall be made in a neat and workman like manner. Clean out plugs shall be installed wherever feasible, by making the connections with a standard wye or tee-wye. When clean out plugs are installed they should be located as near the right of way line as practical.

3.10 BACKFILL OPERATIONS

1. GENERAL

A. All pipeline excavations shall be backfilled in a manner that will restore pre-existing conditions as the minimum requirement and fulfill all supplementary requirements indicated in the Plans and Specifications. The backfilling operations shall be started as soon as conditions will permit on each section of pipeline, so as to provide continuity in subsequent operations and restore normal public service as soon as practicable on a section-by-section basis. All operations shall be pursued diligently, with proper and adequate equipment, to assure acceptable results.

B. For this specification backfill is defined as any material placed in the trench above the bedding zone other than the pipe or conduit and appurtenance.

For flexible pipe the backfill between the bedding material and the crown of the pipe shall be crushed stone suitable for encasement as specified in article 2.07 of the specifications. When Portland cement stabilized backfill is used above the pipe zone; the crushed stone encasement shall extend to 1' above the crown of the pipe.

C. Depositing of the backfill shall be done so the shock of falling material will not injure the structure. Grading over and around all parts of the work shall be done as directed by the Engineer.

D. Whenever soil types which are determined by the Inspector to be undesirable for backfill are excavated from the trench, such material shall be hauled away and deposited at locations shown on the plans or as directed by the Engineer at no additional compensation.

E. Backfill materials placed in the pipe zone shall be carefully placed in relatively uniform depth layers spread over the full width and length of the trench section in a manner and/or sequence that will provide simultaneous support on both sides of the pipeline. Each layer shall be compacted effectively, by approved mechanical of hand methods, until there is no further visual evidence of increased consolidation. Above the pipe zone the backfill material shall be placed uniformly across and along the trench in depth suitable for the compaction method used and compacted to a minimum of the density specified for the material used and the trench location. Compaction of the in place layer shall be completed acceptably before placing material for a succeeding layer thereon.

The manner of placement, layer thickness, compaction equipment, and procedure effectiveness shall be subject to approval of the Engineer. Water jetting or flooding shall NOT be used to compact trench backfill.

F. Compaction of materials placed within the pipe bedding and encasement zones shall be accomplished with portable or hand equipment methods, so as to achieve thorough consolidation under and around the pipe and avoid damage to the pipe. Above the pipe zone, the use of heavy roller type compaction equipment shall be limited to safe pipe loading.

G. The maximum loose thickness of each backfill layer placed above the pipe zone shall be 12 inches, except that 16 inches will be permitted for Granular Materials placed above an elevation one foot above the top of pipe, and with the provision that, by authority of the Engineer and in consideration of the demonstrated capability of special type vibratory compactors, these maximums may be increased at his discretion. “Hydro tamps”, “vibra tamps” or other heavy compacting equipment shall not be used until the backfill has reached a depth of four (4) feet above the top of the pipe.

H. All surplus or waste materials remaining after completion of the backfilling operations shall be disposed of in an acceptable manner within 24 hours after completing the backfill work on each particular pipeline section. Disposal at any location within the project limits shall be as specified, or as approved by the Engineer; otherwise, disposal shall be accomplished outside the project limits at the Contractor’s discretion. The backfilling and surplus or waste disposal operations shall be a part of the work required under the pipeline installation items, not as work that may be delayed until final cleanup.

I. For the duration of the warranty period of the project, the Contractor shall assume full responsibility and expense for all backfill settlement and shall refill and restore the work as directed to maintain an acceptable surface condition. All additional materials required shall be furnished without additional cost to the Owner.

2. BACKFILL IN PUBLIC RIGHTS-OF-WAY AND OTHER AREAS WHERE SETTLEMENT IS CRITICAL

A. GENERAL REQUIREMENTS

(1). Backfill above the pipe zone in public rights-of-way and under paved parking lots, near structures or other utilities where settlement can cause damage shall be made using Portland cement stabilized backfill or crushed stone screenings (crusher fines).

The pipe zone is defined as that portion of the trench extending from the bottom of the trench to 12” above the crown of the pipe or conduit.

(2) Backfill around structures such as manholes, junction boxes, transformer boxes and valve boxes shall be made using Portland cement stabilized backfill material or crushed stone screening (crusher fines).

(3) The minimum depth of stabilized backfill or crusher fines shall be twelve (12”) inches.

When utilities are being constructed under existing paving, the stabilized backfill or crusher fines shall extend from top of the pipe zone to the top of the base course.
When utilities are being constructed under existing unpaved streets that are not scheduled for immediate pavement construction, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the existing roadway surface.

When utilities are being constructed in streets that are scheduled for immediate paving, the stabilized backfill or crusher fines shall extend from the top of the pipe zone to the bottom edge of the eight (8”) inches of subgrade, or, if the paving contractor has constructed a portion of the roadway prior to the construction of the utilities the backfill shall extend to the top of the course the contractor has finished, or the top of the base course, which ever is lower.

If the final course of asphaltic concrete has been placed, the street or alley surface shall not be cut for utility installation.

In streets where stabilized backfill is required only to the bottom of the subgrade course, the minimum depth of stabilized backfill may be reduced to six (6”) inches in which case the maximum depth of the “pipe zone” shall be limited to six (6”) inches above the top of the utility line or conduit.

B. BACKFILL MATERIALS

(1) Portland cement stabilized backfill shall consist of caliche base material, blow sand or native soil stabilized by the addition of Portland cement. Crushed stone or concrete aggregate shall NOT be used.

When Portland cement stabilized backfill is to be used, the contractor shall submit a mix design prepared by an approved commercial laboratory for approval before the trenching operation is begun. When native soil is to be used samples may be taken along the proposed route by boring or other approved means. Samples must be representative of the full trench depth.

The mix design shall be such that the minimum 7-day compressive strength is 150 psi when tested according to test method Tex 418-A.

The minimum cement content for Portland cement stabilized backfill shall be 1 sack per cubic yard.

Cement used in Portland cement stabilized backfill shall be Type I or Type II conforming to the requirements of ASTM Designation C150.

Caliche used for Portland cement stabilized backfill shall be crushed material conforming to Texas State Department of Highways and Transportation 1982 Standard Specifications for Construction of Highways, Streets and Bridges Item 248 Type F, Grade 2.

Blow sand used for Portland cement stabilized backfill shall be clean, free from organic matter, clay lumps, rock and other deleterious matter.

Native soil used for Portland cement stabilized backfill shall be clean, free of clods and organic matter, and free of rock in excess of 2”.

(2) Crushed stone screening (crusher fines) used for back fill shall be sharp grained particles of crushed stone conforming to the requirements of Article 2.07 of these specifications.

(3) Trencher excavated rock material shall be screened so that the largest diameter material is less than 2". The screened rock material used for backfill shall have sufficient moisture added so that the backfill will bind with the fines. The rock material backfill shall be tamped or compacted in two (2) foot lifts. A sheeps foot roller shall not be used unless there is two (2) feet or more compacted backfill above the pipe bedding.

C. BACKFILL CONSTRUCTION

(1) Portland cement stabilized caliche backfill or Portland cement stabilized native soil backfill may be constructed using either the "dry" method or the "wet" method.

(a) The dry method of stabilized backfill construction consists of dry mixing of the cement and caliche or soil to produce a homogenous mixture then adding and mixing sufficient water for proper compaction and hydration of the cement. The water content of the mixture will be approximately one to two percent above the optimum moisture for soil compaction. The mixing may be accomplished by using batch mixers or on the job site by "blade mixing" or other suitable method to produce the desired backfill material. The mixed material shall be placed in lifts of up to a maximum of 12 inches and compacted to ninety-five (95%) modified proctor densities by use of suitable compacting equipment.

(b) In the "wet" method of cement stabilized backfill construction, the materials shall be mixed in an approved concrete batching plant or mixer to the consistency of concrete and placed as concrete would be placed. The slump of the backfill material shall be such that all voids will be filled, approximately four (4") to six (6") inches. The backfill shall be consolidated by rodding or by the use of mechanical vibrators.

Portland cement stabilized blow sand backfill shall be mixed and placed by the "wet" method as described above.

Crushed stone screening (crusher fines) shall be wetted uniformly throughout with sufficient moisture to assure proper compaction before being placed in the trench. The moistened crushed stone screening (crusher fines) shall be placed in maximum lifts of twelve inches and consolidated using vibratory type compaction equipment except when it has been demonstrated that the compaction equipment employed will adequately compact deeper lifts in which case the maximum depth of a lift shall be limited by the capabilities of the equipment used.

Tests to determine the compacted density of the backfill shall be ordered by the Engineer if in his opinion the compaction is not adequate. Test showing a minimum compacted density of 90%-modified proctor will be deemed adequate.

3. BACKFILL OUTSIDE OF PUBLIC RIGHTS-OF-WAY WHERE SETTLEMENT IS NOT CRITICAL

A. In areas outside of public rights-of-way and in the absence of special work item requirements the backfilling shall be accomplished with the use of suitable materials selected from the excavated materials to the extent available and practical. Should the materials available from the trench section be unsuitable or insufficient, the required additional materials shall be furnished from outside sources at the Owners expense.

B. Suitable material shall be defined as a mineral soil reasonably free of foreign materials (rubbish, debris, etc.) frozen clumps, oversize stone, rock, concrete or bituminous chunks and other unsuitable materials, that may damage the pipe installation, prevent thorough compaction, or increase the risks of after settlement unnecessarily. Material selection shall be such as to make the best and fullest utilization of what is available, taking into consideration particular needs of different backfill zones. Material containing stone, rock, or chunks of any sort shall only be utilized where and to the extent there will be no detrimental effects.

C. The backfill material placed in this area shall be compacted by suitable means to a minimum density equal to the density of the undisturbed surrounding soil. City Engineer MUST approve water flooding as a means of compaction.

4. TRENCH BACKFILL BEHIND CURB AND GUTTER

A. When utilities are placed behind the curb in paved streets and other landscaped areas the backfill shall be the same as elsewhere in the right-of-way or other applicable location except that in grassed areas and in flower beds the top six (6”) inches of backfill shall be good quality top soil. When utilities are placed behind the curb in grassed or landscaped areas where no sidewalk is to be constructed and the edge of the trench is a minimum of 2 feet from the back of curb or where sidewalk is to be constructed and the minimum distance from both the back of curb and the edge of the sidewalk to the edge of the trench is 2 feet the contractor may elect to use suitable native soil for backfill. The native soil backfill shall be compacted to 95% modified proctor density to within 6” of the top of curb height. The top 6” of backfill shall be good topsoil and shall be compacted to the density of the adjacent soil.

B. Sidewalks shall be repaired by removing and replacing the complete section or sections that have been damaged. Strip patching through sidewalks will not be permitted.

The replacement sidewalk shall be of the same design and section as the walk removed and shall be of equal or better workmanship.

C. When utilities are placed in paved areas behind curbs the pavement shall be repaired as specified for street pavement.

D. Grassed areas and flowerbeds shall be restored as nearly as possible to the original condition. Care shall be taken to avoid damage to sprinkler systems.

Mail boxes and other appurtenance in the construction area. Any damage to said items shall be repaired immediately.

E. All repairs made behind the curb shall be to the satisfaction of the property owner responsible for their maintenance and/or to the satisfaction to the City Engineer.

3.11 INLET STRUCTURES AND LEADS AND CLEANOUTS FOR STORM SEWERS

A. Corrugated Galvanized Steel Slotted Drains for Nuisance water inlets only.

(1) Slotted drains shall be the sizes and lengths as shown on the plans and constructed at the locations as shown on the plans or at locations to be established on the job site.

(2) Slotted drains shall not be installed under asphalt pavement but shall have a section of concrete gutter constructed around it as shown on the detail drawings.

Slotted drains shall be protected from the entrance of debris, concrete or HMAC by closing the slot with one or two layers of heavy duct tape or similar material. In addition, the slot for slotted drain shall have a 2-½ inch or ¾ inch board attached to use as a guide for placing and edging the concrete.

Unless otherwise approved or directed by the Engineer the removal of tape and planking from the slotted drain should be accomplished as part of the final clean up.

B. Curb inlets, grate inlets and combination inlets

(1) General

Curb inlets, grate inlets and combination inlets may be pre-cast or cast-in-place at the contractor's option unless specifically shown otherwise on the plans and bid proposal.

(2) Pre-cast inlet boxes

(a) Construction and finish for pre-cast inlet boxes shall conform to details shown on the plans and all applicable requirements for pre-cast manholes.

(b) Tops for curb inlets and combination inlets may be cast in place or pre-cast. Extra care will be required in setting pre-cast tops to assure curb and gutter match.

(c) Pipe connections, bedding, setting and backfill for pre-cast inlets shall be in accord with the applicable requirements for pre-cast manholes article 3.12 of these specifications.

(3) Cast in place inlets

(a) Cast in place inlets shall be constructed of class "C" reinforced concrete as specified in item 1-B "Concrete for Structure" in these specifications.

(b) Forms for cast in place inlets shall be straight, clean and in good condition. Forms shall be properly cleaned and oiled before concrete is placed.

(c) Construction joints may be placed in cast in place inlets at locations shown on the plans. When construction joints are used, extra care will be required to assure that the joints are watertight.

(d) Cast in place inlets may be cast without outside forms if the soil conditions are such that true vertical walls can be cut and will stand during construction without sloughing or otherwise incorporation foreign materials into the concrete.

(e) When inlets are cast without outside forms, a plastic sheet lining may be required to prevent excessive loss of moisture from the concrete and/or to prevent incorporation of foreign material into the concrete.

A. Inlet Leads

(1) Inlet leads shall be constructed of corrugated steel pipe, PVC pipe or other material as called for on the plans and in the bid proposal.

(2) Construction of inlet leads shall be in accord with the applicable requirements for the type of pipe used.

(3) Junctions where two or more inlet leads are joined shall be made at clean outs or manholes.

B. Cleanouts

(1) Clean outs shall be constructed in accord with the plans and detail drawings.

(2) Construction and connections shall be in accord with the applicable specifications for construction of corrugated steel pipe manholes.

3.12 SANITARY SEWER SERVICES AND PLUGGED STUBS

A. Sanitary Sewer Services:

(1) On new sewer main construction all sewer laterals shall be constructed as part of the initial installation. Sewer wye fittings for sewer laterals in new construction shall be molded or fabricated with all gasketed connections. Four (4”) inch laterals shall be installed at all single-family residences and duplex. Laterals installed for apartment complexes, commercial and industrial areas shall be a minimum of six (6”) inches. Depth of laterals will be determined by depth of sewer main and applicable building codes. Laterals shall be installed using tee wyes or wyes and bends so that they will be at 90 degrees to the sewer main. Laterals shall extend to 3’ minimum beyond the property line of the served lot or tract. The contractor shall install sewer laterals according to the typical sewer lateral detail and the most current revisions of the Plumbing Code.

(2) Taps into existing lines shall use a gasketed fitting in conjunction with a full circle repair sleeve coupling, except that taps into existing ductile iron sewer may be made using the Genco Model DF sewer pipe saddle (The General Engineering Co., Frederic, MD Drawing No. R-3220-D dated 12/29/82) or approved equal.

(3) Cemented mitered connections without socket reinforcement shall not be permitted. The contractor will be permitted to use fittings, which are prefabricated, using pipe sections, molded saddles and PVC solvent cement, provided the solvent cement used in fabrication has cured for at least 24 hours prior to the installation. All solvent cement fittings shall e manufactured in the shop under controlled conditions.

(4) All caps and plugs shall be braced, staked, anchored, wired on or otherwise secured to the pipe to prevent leakage under maximum anticipated thrust from internal abnormal operating conditions or test pressures from water or air.

(5) It shall be the duty of the Contractor to keep a record of sewer service wye locations with respect to the nearest downstream manhole, but the Engineer will record ties on the end of all sewer services at the property line. When installing sewer services the Contractor shall, before backfilling, contact the Engineer or his representatives, and assist him in making ties to the end of the service in the open trench. At least two ties shall be made for each service, and if backfilling proceeds before such ties are made, the Contractor shall dig up the end of all such services, with no additional compensation, for the purpose of making ties. During backfilling the Contractor shall furnish and place a vertical steel post or 2 inch by 2 inch wooden stake set flush with finished ground surface, and extending down to the end of the sewer service, a nail shall be placed in the top of the stake to allow location of the service by metal finder.

(6) The main sewer service connection shall consist of installing an in-line wye section in the main sewer line at designated locations. Saddle wye installations will be permitted only when specifically called for. Orientation of service connection fittings shall be as shown in the standard drawings unless otherwise directed by the Engineer.

(7) Where the depth of cover over the main sewer invert is greater than 8 feet (or such other maximum as may be indicated), the service connection shall be extended outward then upward by use of bends to prevent excess loading on the sewer main in accordance with the details shown in the drawings.

(8) The Contractor shall provide the necessary wyes, tees and bends to bring the service to the proper place at the property line.

(9) Wherever service line connections to the main sewer are permitted or required to be made by the open cutout method in the absence of a built-in tee or wye fitting, the connection shall be made by using an approved type coring machine or by other approved methods producing a uniform, smooth circular cut-out as required for proper fit. The cutout discs shall be retrieved and shall not be allowed to remain within the main sewer pipe. The saddle tee shall be securely fastened to the main sewer pipe by means of epoxy resin or other approved adhesive. The entire connection fitting shall be encased in concrete to a minimum thickness of six inches and as may be shown in the standard drawings.

(10)Wherever service line connections to the main sewer are required to be made by means of built-in branch tee or wye fittings, the Contractor shall, in the absence of such fitting, remove a section of the main sewer pipe and replace it with the required branch tee wye or wye section connected by means of an approved sleeve coupling.

(11)Connections of service lines to the main sewer are required to be made by means of built-in branch tee or wye fittings, the Contractor shall, in the absence of such fitting, remove a section of the main sewer pipe and replace it with the required branch tee wye or wye section connected by means of an approved sleeve coupling.

(12)The end of all service connections shall be plugged with PVC plug and sealed with plastic joint material.

(13)Crushed stone bedding and backfill material, concrete encasement and protection, etc., for service line installation shall be the same as for the sewer lines.

(14)No service connections or laterals shall be covered until they have been inspected and located by the Engineer.

B. INSTALLATION OF PLUGGED STUBS ON SANITARY SEWERS

Plugged pipe stubs for future connections to manholes and sewerage structures shall be installed where shown on the Drawings or directed by the Engineer. The pipe stubs shall be installed in accordance with the specifications and details shown on the Drawings for connecting the type of pipe used to manholes.

3.13 MANHOLES

1. General

The manholes shall be constructed at the locations shown on the plans or as directed by the Engineer and in accordance with the details shown on the plans and as specified herein. After the excavation has been completed, the subgrade for the manhole base shall be graded and leveled. A crushed stone foundation having a minimum thickness of 6 inches shall then be placed on the subgrade. The crushed stone foundation shall be leveled and consolidated before the section of the manhole is placed. Pre-cast base sections shall sit in place level and plumb and to the lines and grade as shown on the plans. Cast in place bases shall be placed around the existing sewer line in accord with the plans and detail sheet. When pre-cast manhole bases are used, riser construction may proceed when the base is set on line and grade. When cast in place manhole bases are used, riser construction may proceed when the base has set sufficiently to support the weight of the riser.

Manholes shall be of the type and material shown on the plans and called for in the bid proposal and shall conform to these specifications.

All lift holes shall be filled with approved non shrink grout and bituminous material before final acceptance. Use of bituminous material or other flowable material alone to plug lift holes will not be permitted. Voids in the invert around the sewer pipe on the

inside wall of the manhole shall be grouted with cement rich grout, to conform to the rest of the wash, in accordance with the standard manhole details.

The backfill around the manhole shall be done in accordance with the details shown on the plans and trench backfill specifications.

The Contractor shall take whatever precautions necessary to protect the manholes that are under construction. At the end of the day or at such time as the Contractor deems necessary, all manholes not completed shall be covered, sealed, plugged, etc. to prevent the inflow of storm water or other objectionable material, and to prevent animals and humans from getting into the manhole.

2. PRE-CAST CONCRETE

A. Pre-cast tub bottom sections of manholes shall be set on a crushed stone foundation or bedding according to the details shown on the plans. Care shall be exercised to assure true alignment and grade for the pipe openings.

The invert of the manhole shall be constructed of cement rich grout and shall be formed to true lines; grades and curvature to assure smooth flow through the manhole. The invert shall have a steel trowel finish.

Joints for pre-cast concrete manhole riser sections shall be made Watertight by use of bitumastic or rubber sealers or “O” ring gaskets. Both sides of the tongue and groove joint shall be painted with a bitumastic primer before assembly.

The bitumastic or rubber sealer shall be clean and pliable and shall deform under the pressure of joint closure to assure a complete water tight seal. Care shall be exercised to assure proper alignment of the joint. The walls of the completed manhole shall be straight and vertical.

B. Pre-cast eccentric cone sections and precast slab manhole tops with eccentrically located manway shall be set with the manway adjacent to the up stream side of the manhole. The joints between the cone or slab top and the manhole riser shall be sealed in the same manner as the joints between the riser section. Care shall be taken in placing the cone and or slab tops to assure the manhole ring and cover can be set to match the finished paving.

C. Pre-cast grade rings will be used, when required, to bring the manhole ring and cover up to the finished grade. Grade rings may be set using cement rich grout or bitumastic seal and such as Ram-Nek or approved equal. When cement rich grout is used, care shall be taken that the space between the cone or slab top and the first grade ring and between the grade rings are completely filled without voids.

When bitumastic sealer is used the joints shall be constructed in the same manner as the joints between the riser sections.

When pre-cast manholes with PVC or other approved polymer lining are called for on the plans and bid proposal and are furnished under this contract they shall be constructed as other pre-cast concrete manholes.

In addition the joints in the lining shall be sealed by hot air welding, use of epoxy coating, or other approved means.

3. CAST IN PLACE MANHOLE BASES

A. Cast in place manhole bases shall be used only where shown on the plans or as directed by the Engineer and shall be constructed in accord with the details shown on the plans.

B. Special care shall be taken in casting the surfaces that will mate with the first risersection to assure a smooth even fit and a watertight joint.

C. The first riser section to be used with cast in place manhole bases shall be castwithout tongue or groove. The joint between the riser section and the cast in place base shall be sealed with a bitumastic or rubber sealant in the same manner as the joints in the pre-cast riser sections.

D. Care shall be taken in forming the invert of the manhole around existing sewers to assure adequate opening for the insertion of a “go – no go” mandrel or other testing equipment and cleaning tools.

4. MANHOLE RING AND COVER

A. The tops of the manhole frame and cover (ring) shall be built to the grade shown on the plans. The cast iron frame shall be firmly embedded in mortar.

B. When pressure type manhole rings and cover are specified on storm sewer manholes they shall be bolted to the concrete slab top using the “L” bolts cast into the slab for this purpose. The joint between the ring and the concrete slab top shall be made watertight using a bitumastic or rubber seal and conforming to the requirements of these specifications.

5. CORRUGATED STEEL MANHOLES

A. Corrugated steel manholes shall be constructed in accord with the details shown on the plans and in accord with the applicable requirements for the construction of corrugated steel pipe sewers.

B. Care shall be taken during the placing of backfill around corrugated steel pipe manholes to maintain the horizontal and vertical alignment of the manhole.

C. Since full contact of the flat top slab with the cement stabilized backfill is critical the backfill shall be finished smooth and to the proper grade. A thin layer of cement rich grout shall be placed on the cement stabilized backfill immediately prior to placing the concrete slab top. The grout shall be sufficient t fill all voids between the backfill and the slab and of a consistency to be forced into the voids under the weight of the slab.

3.14 TESTING GRAVITY SEWER MAINS AND MANHOLES

A. Upon completion of the sewer construction including all wyes and service laterals and before any house drains or services are connected, all sewers shall be cleaned and lamped. All runs of sewer between manholes shall be straight and true. Leakage tests shall be made to determine the amount of ground water infiltration into the sewers. Infiltration tests shall be made when groundwater level is 18 inches or more above the top of the outside of the pipe. Measurement will be taken by means of a weir placed in the lines. The maximum allowable rate of leakage shall be 25 gallons per inch diameter per mile of pipe per 24 hours, for any section of pipe with a maximum total leakage of 200 gallons per mile per 24 hours for sanitary sewers with the exception that the maximum leakage for storm drains shall be 200 gallons per inch of diameter per mile per 24 hours with a total maximum leakage of 6,000 gallons per mile per 24 hours.

When the groundwater is not at sufficient height for infiltration testing the Contractor shall use exfiltration to test the sewer lines.

B. In lieu of the infiltration or exfiltration tests the Contractor may perform air tests on the sewers.

C. If the infiltration, exfiltration, or air tests fail to meet requirements specified herein, the Engineer reserves the right to request television work to be done to locate leaks. The Contractor shall furnish all materials and equipment necessary to accomplish all infiltration, exfiltration, air or television testing.

The Contractor shall receive no additional compensation for this testing or inspection work or for repairs of corrective work required to be done to the sewers. The exfiltration tests shall be used in areas where no ground water is present.

D. Test Procedure Hydrostatic (Exfiltration)

(1) The test section shall be bulk headed and the pipe subject to a hydrostatic pressure produced by a head of water at a depth of three (3) feet above the invert of the sewer at the upper manhole under test. In areas where ground water exists, this head of water shall be three feet above the existing water table.

(2) This head of water shall be maintained for a period of one hour during which it is presumed that full absorption of the concrete manhole body has taken place and thereafter for a further period of one (1) hour for the actual test of leakage. Fiber glass manholes are exempt from the one hour absorption requirement. During this one (1) hour test period, the measured maximum allowable rate of exfiltration for any section of sewer shall be the same as allowed for the infiltration test.

E. TEST PROCEDURE AIR

(1) Where the Contractor elects to air test, he shall perform these tests with equipment similar to Air-Loc equipment manufactured by Cherne Industrial, Inc. Hopkins, Minnesota.

(2) The air test shall be made when the sewer is clean. The line shall be plugged at each manhole with pneumatic balls. Low pressure air shall be introduced into the plugged line until the internal air pressure reaches 4.0 psig greater than the average

back pressure of any ground water pressure that may submerge the pipe. At least two (2) minutes shall be allowed for the air temperature to stabilize before readings are taken and the timing started.

(3) When testing pipes 14 inches and less in diameter between consecutive manholes, the portion being tested shall pass if it does not lose air at a rate to cause the pressure to drop from 4.0 to 3.0 psig (greater than the average back pressure of any groundwater that may submerge the pipe) in less time than listed as calculated from Table 1.

When testing pipes greater than 15 inches in diameter between consecutive manholes the portion being tested shall pass if it does not lose air at a rate to cause the pressure to drop from 3.5 psig 3.0 psig (greater than the average back pressure of any groundwater that may submerge the pipe) in less time than that shown in or calculated from Table II.

TABLE I
Specification Time Required for a 1.0 PSIG Pressure Drop for Size and Length of Pipe indicated for Q = 0.0015

Specification Time for Length (L) Shown (min: sec)											
1	2	3	4 (xL)	100 ft.	150 ft.	200 ft.	250 ft.	300 ft.	350 ft.	400 ft.	450 ft.
4	3:46	597	.380	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854	5:40	5:40	5:40	5:40	5:40	5:40	5:42	5:42
8	7:34	298	1.520	7:34	7:34	7:34	7:34:	7:36	8:52	10:08	11:24
10	9:26	239	2.374	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48
12	11:20	199	3.418	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38
15	14:10	159	5.342	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04
18	17:00	133	7.692	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41
21	19:50	114	10.470	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31
24	22:40	99	13.674	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33
27	25:30	88	17.306	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48
30	28:20	80	21.366	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15
33	31:10	72	25.852	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53
36	34:00	66	30.768	51:17	75:55	102.34	128:12	153:50	179:29	205:07	230:46

1. Pipe Diameter (in.)
Minimum Time (min:sec)
Length for Minimum Time (ft.)
Time for Longer Length (sec)

NOTE: When using column 4 multiply the number in column 4 opposite the pipe diameter by the length of pipe of that diameter and sum the times for the various pipe size in the run being tested. Computations shall include lengths for service connection laterals.

Table II
Specification Time Required for 0.5 PSIG Pressure Drop for Size and Length of Pipe Indicated for Q + 0.0015

Specification Time for Length (L) Shown (min: sec)											
1	2	3	4 (xL)	100 ft.	150 ft.	200 ft.	250 ft.	300 ft.	350 ft.	400 ft.	450 ft.
4	1:53	597	.190	1:53	1:53	1:53	1:53	1:53	1:53	1:53	1:53
6	2:50	398	.427	2:50	2:50	2:50	2:50	2:50	2:50	2:51	3:12
8	3:47	298	.760	3:47	3:47	3:47	3:47	3:48	4:26	5:04	5:42
10	4:43	239	1.187	4:43	4:43	4:43	4:57	5:56	6:55	7;54	8:54
12	5:40	199	1.709	5:40	5:40	5:40	7:08	8:33	9:58	11:24	12:50
15	7:05	159	2.671	7:05	7:05	8:54	11:08	13:21	15:35	17:48	20:02
18	8:30	133	3.846	8:30	9:37	12:49	16:01	19:14	22:26	25:38	28:51
21	9:55	114	5.235	9:55	13:05	17:27	21:49	26:11	30:32	34:54	39:16
24	11:20	99	6.837	11:24	17:57	22:48	28:30	34:11	39:53	45:35	51:17
27	12:45	88	8.653	14:25	21:38	28:51	36:04	43:16	50:30	57:42	46:54

30 33 36	14:10 15:35 17:00	80 72 66	10.683 12.926 15:384	17:48 21:33 25:39	26:43 32:19 38:28	35:37 43:56 51:17	44:31 53:52 64:06	53:25 64:38 75:55	62:19 75:24 89:44	71:13 86:10 102:34	80:07 96:57 115:23

1 Pipe Diameter (in.)
2 Minimum Time (min:sec)
3 Length for Minimum Time (ft.)
4 Time for Longer Length (sec)

NOTE: When using column 4 multiply the number in column 4 opposite the pipe diameter by the length of pipe of that diameter and sum the times for the various pipe size in the run being tested. Computations shall include lengths for service connection laterals. All service plugs shall be secured in place to prevent displacement during testing operation.

F: DEFLECTION TEST

Deflection tests shall be performed on all flexible pipe, the tests shall be conducted after the backfill has been in place at least 30 days. No pipe shall exceed a deflection of 5 percent. The deflection tests shall be run using a Go-No-Go mandrel having a diameter equal to 95 percent of the inside diameter of the pipe. The tests shall be performed without mechanical pulling device, any pipe not meeting the deflection test shall be excavated and re-bedded at no cost to the owner.

The Contractor at no additional cost to the owner shall furnish the Go-No-GO Mandrel.

Upon completion of all tests, the Contractor shall provide personnel to remove each manhole cover in the presence of the Engineer's representative for inspection and depth measurement.

G. TESTING SANITARY SEWER MANHOLES

All sanitary sewer manholes shall be tested for water tightness by one of the following methods.

Manholes, except those in streets scheduled for immediate paving, shall be complete, having all adjusting rings and cover rings in place and shall be backfilled prior to testing.

Manholes in streets scheduled for immediate paving shall be complete as described above except those acceptance tests shall be made at the top of the cone section.

(1.) Vacuum Test

a. General

This item will govern the testing of all sanitary sewer manholes. All connections to manholes including drop connections shall be in place before testing.

b. Equipment

Equipment for vacuum testing manholes shall be:
MANHOLE VACUUM TESTER as manufactured by:

P.A. Glazier, Inc.
P.O. Box 1002
Worcester, MA. 01613

Or

THE CHERNE AIR-LOC MANHOLE TESTER as manufactured by:

Cherne Industries, Inc.
5700 Lincoln Dr.
Minneapolis, MN 55436-1695

Or approved equal.

c. Preparation for Testing

All connections to the manhole; except plugged stubs for future line extensions, shall be plugged using suitable pneumatic plugs. Line plugs shall be placed at a point outside of the manhole wall (approximately 8" to 10" into the sewer pipe). Drop connections shall be plugged at a point up stream from the drop.
All plugs, pipe connections and plugged stub outs shall be adequately braced to prevent them being drawn into the manhole when vacuum is applied.

d. Testing

The contractor shall set the test equipment in place and operate it in accord with the manufacturer instructions. A copy of these instructions shall be kept on the job site and shall be available to the inspector when tests are performed. When equipment is properly set up a vacuum of 10" of mercury (Hg) shall be drawn and the vacuum line valve closed. After the vacuum pump is shut off the hose shall be disconnected before the test is started.

Note: Vacuum must be at 10" Hg when test is started. The contractor may wish to draw up to 10.5" Hg vacuum and then bleed back to 10" Hg before starting the test. The test shall pass when the minimum time for the vacuum to drop from 10" Hg to 9" Hg is greater than the time shown in the following table:

TABLE 1: Minimum test times for various manhole diameters.

	DIAMETER		
Depth Feet	48"	60"	72"
8'	0:20	0:26	0:33
10'	0:25	0:33	0:41
12'	0:30	0:39	0:49
14'	0:35	0:46	0:57
16'	0:40	0:52	1:05
18'	0:45	0:59	1:13
20'	0:50	1:05	1:21
* ADD	0:05	0:06.5	0:08

Any manhole that fails the test shall be repaired and retested until it passes the test.

e. Contractors Optional Test

The contractor, at his option may wish to test manholes before they are backfilled to assure himself that the manhole is sound.
Manholes that fail the test prior to being backfilled may be repaired under vacuum by coating the area of the leak with a liquid quick setting grout allowing the grout to be drawn into the opening until the leak is stopped.

Manholes will not be accepted on the bases of this test.

f. Fiberglass Manholes

Fiberglass manholes may be tested in the same manner as concrete manholes except that all repairs to the fiberglass body of the manhole shall be made using materials furnished by the manufacturer. Repairs shall be made in accord with the manufacturer instructions.

g. No separate payment will be made for vacuum testing of manholes, but the cost shall be considered incidental to furnishing and construction of manholes as bid in the bid proposal.

2. HYDROSTATIC TESTING

a. General

This item shall govern the hydrostatic testing of manholes and may be used as an alternative to vacuum testing by the contractor.

All connections to manholes including drop connections shall be in place prior to testing manholes.

b. Testing

All connections to the manhole, except plugged stubs installed for future line extensions, shall be plugged upstream from the drop.

Plugs in pipe connections must be placed outside the manhole wall (approximately 8” to 10” into the pipe).

The manhole shall then be filled to the top of the cast iron ring (or top of the cone section for manholes in streets scheduled for immediate paving) and allowed to stand for a minimum of one hour to allow for absorption by the components of the manhole. The inspector may extend the absorption period if it appears that the manhole has not reached a stable state.

The manhole shall then be refilled to the top of the ring (or cone) and allowed to stand for up to 24 hours.

The manhole shall be checked at the end of 4 hours and will be deemed to have passed if no perceptible loss has occurred – if loss has occurred the manhole will be checked after the 24 hour period and will be considered to have passed if loss does not exceed the following schedule

Depth Ft.	Loss Inches
0 - 10’	.2
10 – 20’	.4
20 - 30’	.6

c. No separate payment will be made for Hydrostatic Testing of manholes but the cost shall be considered as incidental to furnishing and constructing manholes as bid in the bid proposal.

H. TELEVISING NEW SEWER LINES

It is the city’s intention to televise all new sanitary sewer lines for record purposes.

Immediately after the contractor completes all testing of sanitary sewer lines and manholes he shall leave all manholes accessible for televising and make allowances for the city’s camera crews working on the project site.

The contractor at his own expense before final acceptance must correct any defects discovered during the televising of sanitary sewers.

3.15 RESTORATION

A. Whenever any surface improvements such as pavement, curbing, pedestrian walks, fencing, or turf have been removed, damaged or otherwise disturbed by the Contractor’s operations, they shall be repaired or replaced to the Engineers satisfaction, to restore the improvement in kind and structure to the pre-existing condition. Each item of restoration work shall be done as soon as practicable after completion of installation and backfilling operations on each section of pipeline.

B. In absence of specific payment provisions, as separate Contract Items, the restoration work shall be compensated for as part of the work required under those Contract Items, which necessitated the destruction and replacement or repair, and there will be no separate payment therefor. If separate pay items are provided for restoration work, only that portion of the repair or reconstruction, which was necessitated by the contract, will be measured for payment. Any improvements removed or damaged unnecessarily shall be replaced or repaired at the Contractor’s expense.

C. Turf restoration shall be accomplished by sod replacement except where seeding is specifically allowed or required.

Caliche or gravel surfaced streets and driveway shall be restored to their original condition by salvaging and replacing the pre-existing caliche or gravel. If the Contractor does not salvage sufficient material during excavation operation, he will be required to furnish material to restore the surface to the depth of the original section. This caliche or gravel restoration shall be considered a part of excavation and backfill and no extra compensation will be made.

E. Bituminous and concrete surfaced streets and driveways will be restored to equal or better condition than existed prior to sewer construction. Measurement will be made of the actual quantities required to be replaced by the sewer construction and paid for at the price bid in the appropriate bid items in the proposal.

No measurement or payment will be made for work done outside the lines considered necessary for sewer construction. The Contractor will be required to replace damage outside these lines at his own expense.

F. Reconstruction of caliche base courses and concrete or bituminous surface courses shall be in substantial compliance with all applicable City of Midland Specifications pertaining to the item being restored.

3.16 CLEANUP

After completing each section of the sewer line, the Contractor shall remove all debris, construction materials, and equipment from the site of the work, grade and smooth over the surface on both sides of the line and leave the entire right-of-way in a clean, neat, and serviceable condition. No separate compensation shall be made for clean up.

3.17 PAYMENT

A. General

Payment in accordance with the following items, at the unit price bid for the work, shall constitute full and complete payment for the entire project including all incidental terms necessary for the complete and successful prosecution of the work in accordance with the intent of the plans and specifications.

Materials and work required to complete the project for which there is no bid item in the bid proposal shall be considered as incidental and the cost shall be included in the prices bid for the various items in the bid proposal.

Where payment is to be made on a unit price basis, it shall be made on the actual measured quantities as constructed in the work.

B. Sewer Pipe in Place

Unit prices bid shall cover furnishing and installation of pipe and jointing materials, including tests and all other necessary work and material to install the pipe complete in place at the depth specified. The unit of work shall be the lineal foot of the various types and sizes as shown in the proposal form. The pipe installation shall be measured

along the centerline of the sewer from center to center of manholes with no deduction in footage for manholes, wye branches, riser bases or other structure.

C. Foundation Corrections Materials

Payment for foundation correction materials shall be made at the unit price bid per cubic yard for material furnished and placed to pro vide adequate pipe base in unstable soil. The unit price shall include extra excavation below pipe grade, the material, placing and tamping.

Additional material required to backfill excess depth of excavation caused by neglect or error on the part of the Contractor or wet conditions, shall be furnished and placed at his own expense.

Removal of Street Surfacing

The Contractor shall receive no extra compensation for the removal of street surfacing including cutting of a straight edge.

E. Trench Safety Systems, Sheeting and Shoring

Measurement: Trench Safety Systems shall be measured by the linear foot of “Trench Safety Systems”: Payment for work prescribed under this item shall be full compensation for the Trench Safety Systems including any Engineering and/or consulting fees and any additional excavation and backfill required, for furnishing, placing, maintaining and removing all shoring, sheeting, or bracing; for de-watering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.

F. Manholes

Payment will be made for the various types of manholes at the unit prices bid for the various types of manholes 0 to 6’ deep which price shall include excavation, furnishing and installing all materials pumping where necessary, and backfilling and all incidentals for the complete manhole in place. Measurement for manholes over 6 feet in depth shall be made of the depth of manhole in excess of six (6) feet. Manholes will be measured from the invert to the top of the casting as set.

Payment will be made for the manhole depth in excess of 6 feet at the vertical foot price bid in the bid proposal for extra depth of manhole over 6 feet for each type of manhole furnished.

G. Drop Connections to Manholes

Payment shall be made for drop connections to manhole for each drop connection made as counted in the field at the price bid in the proposal.

Said payment shall be complete compensation for furnishing all materials and fittings and making all connections to the manhole including 2’ of vertical depth as measured from the invert of the incoming line to the invert of the manhole.

H. Drop Section for Manholes

Drop sections shall be paid for on a vertical footage basis as measured from the invert of the incoming line to the invert of the manhole less 2 feet and shall be paid for at the price bid per vertical foot for the various size drop connections in the bid proposal.

The price bid per vertical foot includes all fittings, granular material, if used and concrete and shall be full compensation for the complete in service drop connection.

I. Service Lines

Service lines will be measured from centerline of the sewer main to the plug end and paid for at the unit price bid per linear foot of each type of pipe as specified and as shown on the typical details.

J. Barricading and Traffic Control

The lump sum price bid in the bid proposal shall be full compensation for furnishing flag persons when required and all barricades, signs and other barricading and traffic control devices and for furnishing barricading plans and erecting and maintaining all such devices and signs as required for the duration of the period.

Updated
08/07

MIDLAND
Engineering Services

ADDENDUM #01

Project Number PU19-01

TO ALL BIDDERS ON THE SUBJECT BID: Park Avenue Heights 2 Utility Project

ADDENDUM #01

DATE: May 7, 2021

1. Q/A and Clarification
2. Revised Special Provisions
3. Revised Proposal
4. Construction Phasing Exhibit 01
5. Non-Mandatory Pre-Bid Teleconference Meeting Agenda
6. Non-Mandatory Pre-Bid Teleconference Meeting Attendance
7. Pre-Bid Meeting Attendance

PLEASE RETURN THIS ADDENDUM WITH YOUR BID BY THE CLOSING DATE.

All other terms and conditions shall remain the same.

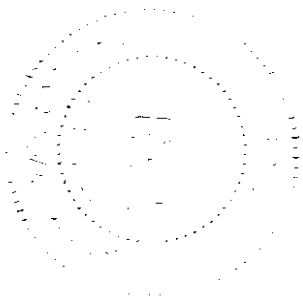
TEC EXCAVATION, INC. Type text here
Company Name

Twyla Clutter
Bidder Authorized Signature

5/12/21
Date

Twyla Clutter
Please Print Above Name

432-682-2619
Phone



Park Avenue Heights 2 Utility Project
Project Number PU19-01

Q/A and Clarification

During the Pre-Bid Meeting, the following questions were raised by one or more bidders. Below is a list of the questions along with the answers and clarifications.

Clarification: All addendum acknowledgement forms must be included with the bid for the bid to be considered complete. Bidders have sole responsibility for making sure they have and acknowledge all addendums provided for this project bid.

Clarification: Bidders must provide documentation as part of the bid packet submittal proving that they possess either an active Water Operator D license, an active Wastewater D license, or an active Class 1 Collections license, and the Contractor must maintain at least one of these active licenses for the entirety of the project. Any bid submittal that does not include this required documentation will be rejected as a non-responsive bid. If a Contractor allows the required license or 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 the Contractor to renew their active licenses before resuming work or to end the project immediately.

Clarification: The Special Provisions section of the Bid Packet has been revised to modify the language in Section 4. Payment. Remove the original Special Provisions section in its entirety and replace it with the revised Special Provisions section attached to this Addendum 01.

Clarification: The Proposal section of the Bid Packet has been revised for Demolition Bid Item 1, Water Bid Item 14, Storm Drain Bid Item 1, and Storm drain Bid Item 2. Remove the original Proposal section in its entirety and replace it with the revised Proposal section attached to this Addendum 01.

Clarification: Construction Phasing Exhibit 01 is attached to this Addendum 01 for reference regarding the sequence of construction phasing that will be required for this project. This document does not change, revise, replace, or otherwise alter anything in the original construction drawing set.

The Contractor for this project will be required to proceed with construction activity according to the directions given in the attached Construction Phasing Exhibit 01. This means construction is to proceed from Phase 1 to Phase 2 to Phase 3 as indicated by the exhibit, or generally from east to west across the project site. This is necessary as the paving project for this area is expected to occur while the utility project is still under construction, with the goal being to coordinate the construction activity of the two projects in such a way as to minimize the disruption to Cloverdale Road and the length of time that Cloverdale Road has construction activity taking place on it without impeding the construction activity for this project or delaying the progress of the future paving project once its construction activity begins. The

Contractor for this project will therefore be required to coordinate as needed with the City of Midland, TxDOT, and the paving project contractor to accomplish this goal.

Clarification: Contractor must be willing to sign contract as is.

Clarification: Check that all insurance forms are in order when submitting bids.

Clarification: Check that all conflict of interest forms are completed if applicable.

Clarification: Contractor must fill out all bid items in the Proposal for the bid to be considered complete.

Clarification: Contractor is responsible for all construction staking.

Clarification: All invoice submittals are to be itemized and are to match the Proposal item listed.

Clarification: Utility covers matching City Details are now available. All utility covers and cover patterns are to match the City standard details.

Clarification: Contractor is responsible for all traffic control during this project.

Clarification: There is a one (1) calendar year warranty period on this project.

Clarification: It is recommended that Bidders use the USPS mailing address rather than the physical City Hall address for bid submittals that are mailed in as the physical address has experienced issues on occasion in the past. The USPS mailing address is unchanged from what is listed in the original bid packet and the pre-bid teleconference meeting agenda.

Clarification: Contractor is responsible for notifying all adjacent properties of any planned service interruptions no less than two (2) business days in advance of any such interruptions. Service interruptions are to be kept as short as is reasonably possible. This requirement does not apply in emergency situations.

Clarification: Contractor is responsible for maintaining access to all adjacent properties at all times, barring those times when actual construction activity necessary to complete the work is taking place in front of driveway approaches or similar points of access. When such work is not occurring then access must be restored by means of traffic rated steel plates or other equivalent means until such time as the work is completed.

Clarification: Contractor is to return all existing fire hydrants removed during this project to the City of Midland Utilities. Fire hydrant removal is considered subsidiary to the bid items listed in the Proposal.

Clarification: Saw-cutting is considered subsidiary to the bid items listed in the Proposal.

Clarification: Contractor is to return all existing meters removed during this project to the City of Midland Utilities. Meter removal is considered subsidiary to the bid items listed in the Proposal.

Clarification: Bidders are reminded that Cloverdale Road is a TxDOT road and as such an approved TxDOT Utility Permit will be required for any activity within the TxDOT Right-of-Way. The City will submit the permit application request once the construction timeline is known.

Clarification: A future basin is shown for reference purposes south of Cloverdale Road in the construction drawing set, but this is part of a future paving project and is not part of this project's scope.

Clarification: This area has had sporadic development and construction activity throughout the design process, and thus some existing surface or sub-surface conditions shown in the construction drawing set may not reflect all existing conditions when construction commences. Contractor is reminded to verify all existing conditions before starting demolition, excavation, or construction activities.

Clarification: TxDOT is allowing open trenching of Cloverdale Road with the understanding that a larger than normal pavement repair will be put in place after construction. This larger pavement repair is being addressed through a follow-up paving project that will occur after the utility project. As a result, this utility project will be able to utilize normal trench repairs across Cloverdale Road. However, the utility project contractor will be required to coordinate with the City and paving project contractor to keep the disruptions to Cloverdale Road to a minimum and to ensure that the full Cloverdale Road pavement replacement is achieved as soon as possible after the utility crossing installations are complete.

Clarification: Due to the unusual and volatile nature of the supply market at the time of this project's bid, the City will pay for material delivery for specific bid items rather than only for work performed if ordering the material needed up-front will help bidders to achieve better pricing. Contractors must ensure that any material ordered is properly stored, and material that is found to be damaged or defective, including due to improper storage or exposure, will be rejected and must be replaced prior to installation at no additional cost to the City. This will apply to bid items for casing pipes, main pipes, valves, fire hydrants, fittings, tapping saddles, service connections, lateral pipes, manholes, drop structures, and storm drain pipes. All other bid items, including items for demolition and paving, will be paid as per the City's normal policy based upon material installed, and not based upon material delivered.

Question: Missing where the 12" C-900 water pipe quantities are coming from?
Answer: The quantity for Water Bid Item 1, 12" AWWA C-900 DR18, PVC, Water Main is included because this project will make multiple connections to existing 12" water mains, including removing and replacing several existing tee fittings that are in-line with the existing 12" water mains. So while the intent of this project is that the existing 12" water mains will be left in place, it is possible that during construction it

might become necessary to replace one or more existing 12" pipe sections, and so this bid item was included to cover such pipe replacements if they proved to be needed.

Question: Please confirm the quantities for fire hydrants and their valves. Have a different quantity of 7 from the plans than the 8 shown in the Proposal.

Answer: The Proposal quantities are correct in this case. The 8th fire hydrant is a possible replacement of the existing fire hydrant at the northeast corner of Cloverdale Road and Madison Street. The adjacent lot did not adequately account for the existing fire hydrant location when installing its driveway, and so the fire hydrant will likely need to be relocated to avoid being hit by vehicle traffic. This is a relatively new fire hydrant so the City is hoping it can simply be relocated rather than replaced, but if not then a quantity for a new fire hydrant assembly was included. The adjustment of the south end of the Madison Street water main on the west side of the road from this fire hydrant means the existing fire lateral will need to be replaced and the existing tee and valve for this fire hydrant will need to either be relocated or replaced depending on their current condition.

Question: Plans call for reconnection of services to California water main? Does the City just want to reconnect the existing service laterals, or to replace them? Please clarify what the intent of the plan set wording is.

Answer: The intent of this project is that all existing water laterals will be replaced in their entirety. That means everything from the tapping saddle at the water main to and including the meter box and water meter are to be replaced, including laterals, fittings, etc. New water meters will be provided by the City per standard policy, and existing water meters that are replaced are to be returned to the City also per standard policy.

Question: Will the bid opening be live-streamed, in person, or both?

Answer: Both.

Question: Existing Water Main removal in Demo Item 1 has proposal quantity of 1500LF for the 4" removal in California. Plan sheets C102, C208 and C210 have call outs to remove 784' of existing 8" main. Please confirm total existing water line removal quantity.

Answer: Demolition Bid Item 1, Removal & Disposal of Existing Water Main, has been corrected in the revised Proposal attached to this Addendum 01. The 784' of existing 8" main to be removed per the note on Sheet C102 of the construction drawing set is incorrect, and should instead be for a length of 160'. There is also 1,440' of existing 4" water main to be removed along California Avenue as indicated by Water Construction Note 26. This results in a total length of water main to be removed of 1,600' rather than the 1,500' that was originally stated.

Question: Please confirm Water Item 5 quantity for 8" Gate Valve assemblies. Proposal has a quantity of 11ea but the plans have new valve symbols and legend call outs for 13ea.

Answer: The Proposal quantities are correct in this case.

Question: Please confirm quantities for Water Items 6 and 7, 6" Gate Valve assemblies and Fire Hydrants. The proposal quantity is 8ea for both items but only 7ea have legend call outs or are clearly drawn as new or proposed. There appears to be a hydrant symbol at S. Madison and Cloverdale coming off the new 8" main tie in that could be the 8th assembly but was a bit hard to tell and there wasn't a legend call out.

Answer: The Proposal quantities are correct in this case. The 8th fire hydrant is a possible replacement of the existing fire hydrant at the northeast corner of Cloverdale Road and Madison Street. The adjacent lot did not adequately account for the existing fire hydrant location when installing its driveway, and so the fire hydrant will likely need to be relocated to avoid being hit by vehicle traffic. This is a relatively new fire hydrant so the City is hoping it can simply be relocated rather than replaced, but if not then a quantity for a new fire hydrant assembly was included. The adjustment of the south end of the Madison Street water main on the west side of the road from this fire hydrant means the existing fire lateral will need to be replaced and the existing tee and valve for this fire hydrant will need to either be relocated or replaced depending on their current condition.

Question: Please confirm quantities for Water Items 12 and 13. There are 40ea services on an 8" line drawn on overall plan sheet C102 as well as on waterline sheets C201, C202, C203.

a. This may affect Water item 15 quantity as well.

Answer: The Proposal quantity is correct. The water meter and lateral for the lot located on the east side of Bunche Street, 3rd south from California Avenue is less than 2 years old. Therefore, it is anticipated that the tapping saddle, fittings, meter box, etc. can all be and reused and relocated as needed, and only the lateral line pipe will need to be replaced. Should the field conditions prove otherwise during construction, then a quantity overrun of the applicable bid items will be used to address any additional materials and installation that are required.

Question: Please confirm quantity for Water Item 14. The plans have 20ea 12"x1" service laterals that scale from 37' to 42' long, 19ea 8"x1" laterals that scale 17' long, and 21ea 8"x1" that scale 42' long. This totals to roughly 2000' but the proposal quantity is only 1550'.

Answer: Water Bid Item 14, 1" Water Service Lateral, has been corrected in the revised Proposal attached to this Addendum 01 to reflect a total of 2,200' of 1" water service lateral pipe rather than the 1,550' that was originally stated.

Question: Do the wastewater service fittings and lateral pipe in WW items 6 through 9 need to be SDR26 D2241 in their entirety like the pipe called out for the new main or will there be a transition to SDR35 D3034 after the tee? Please confirm type of PVC for service materials on the new line as well as the 16ea services to be installed on the existing sewer line.

Answer: All wastewater service laterals installed are to be SDR 35 PVC pipe material.

Question: Storm Drain Items 1 & 2 in the proposal call out for HDPE with an ASTM rating of F2619 which is smooth wall fusion HDPE. In the storm drain notes on the plans, the first note mentions using N-12 WT or approved equal which is black corrugated HDPE and has an ASTM rating of F2648. The City has seemed to generally lean

towards gray corrugated HP Polypropylene with ASTM rating of F2881 for recent storm drain applications. Please confirm the type of storm drain pipe.

Answer: Storm Drain Bid Items 1 and 2 have been revised to call for 24" ASTM F2881, Polypropylene Dual Wall, Storm Drain and 18" ASTM F2881, Polypropylene Dual Wall, Storm Drain, respectively, rather than the previous pipe types called for in the construction drawing set or the original Proposal. All storm drain pipe in this project is to be ASTM F2881, Polypropylene Dual Wall pipe.

SPECIAL PROVISIONS

ATTENTION: All Bidders are directed to pay special attention to the NOTICE TO BIDDERS section of the bid packet. The Coronavirus (COVID-19) pandemic has resulted in several changes to the City of Midland's normal bid process, and 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 **Park Avenue Heights 2 Utility Project** to be performed as outlined in the Plans and Specifications, which are necessary to satisfactorily complete the work.

The project will include the removal, relocation, and installation of existing and proposed water, wastewater, and storm drain infrastructure and appurtenances including all necessary mobilization, saw-cutting, pavement removal, excavation, embedment, backfill, pavement repair, sidewalk repair, concrete joint sealing, erosion control, traffic control, coordination with City of Midland staff and organizations such as OSHA, franchise utilities, etc. as needed, One Call (Texas 811) notifications for pending work, notifications to adjacent property owners as directed by City of Midland Staff, and all other work to be performed as outlined in the Construction Drawings and Specifications, to satisfactorily complete the work.

The Owner reserves the right to abandon, without obligation to the Contractor, any part of the project, or the entire project, at any time before the Contractor begins any construction work authorized by the 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.

The 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 construction drawing set any written or noted dimension takes precedence over dimensions measured based on the drawing scale unless otherwise directed by the 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 (five percent, 5%) shall be per the General Conditions.

Due to the unusual and volatile nature of the supply market at the time of this project's bid, the City will pay for material delivery for specific bid items rather than only for work performed if ordering the material needed up-front will help bidders to achieve better pricing. Contractors must ensure that any material ordered is properly stored, and material that is found to be damaged or defective, including due to improper storage or exposure, will be rejected and must be replaced prior to installation at no additional cost to the City. This will apply to bid items for casing pipes, main pipes, valves, fire hydrants, fittings, tapping saddles, service connections, lateral pipes, manholes, drop structures, and storm drain pipes. All other bid items, including items for demolition and paving, will be paid as per the City's normal policy based upon material installed, and not based upon material delivered.

5. SAFETY REQUIREMENTS:

It is the responsibility of the 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.

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 twelve 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 ten 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 six 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) The Contractor is required to make arrangements with the Power Company for the temporary relocation or raising of high voltage lines at the Contractor's sole cost and expense.

5) No person shall work within six 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 Traffic Operations Division no less than two (2) 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, the Contractor shall only be responsible for notifying the Traffic Operations Division 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, Traffic Operations Division, 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. The 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
    iii. Ensuring the proper location, orientation, and operation of arrow boards or 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 (1) hour;
    b. On roadways with a posted speed limit of 45 MPH or greater, for closures lasting more than four (4) 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:

The 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 property must be maintained at all times unless otherwise directed by the Engineer. If the 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. CONSTRUCTION SCHEDULE:

It is the responsibility of the 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.

11. CONSTRUCTION STAKING:

It is the responsibility of the Contractor to provide the project construction staking at fifty foot (50') intervals along the entire length of the project as well as at such control points as the 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 the Engineer by the Contractor for review and approval.

12. SURVEY:

The 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 1.0' accuracy or better. Survey data is to be provided in Excel csv. file format with all rounding functions turned off.

13. CONSTRUCTION MATERIALS:

The 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 Fahrenheit and the ambient temperature in the shade is higher than 40 degrees Fahrenheit or is 40 degrees Fahrenheit 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.

14. EROSION CONTROL:

Erosion control is the responsibility of the 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 the Owner feel that supplementary erosion control measures are required in addition to those implemented by the Contractor then the Contractor will include additional erosion control measures within reason to the 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 the Engineer.

15. WASTE MATERIAL:

Excess material from excavation and other construction or demolition activity will become the property of the Contractor. Excess excavation will be disposed of at locations secured by the Contractor and if necessary, approved by the Engineer. No material is to be placed on private property or City property without the approval of the Engineer and the 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 the 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 indicated for removal as part of the project are to be returned to the City of Midland by the Contractor and remain City property. This is ancillary to the project and will not be paid as a separate item.

16. TESTING:

It is the 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 the Contractor unless required by the 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 the Contractor's work or actions; or unless additional testing outside of the project scope is performed at the request of the Engineer.

Required testing includes:

Concrete Pavement For Trench Repair – A Slump Test is required only if directed by the Engineer for pavement patches that are equal to or greater than 50 cubic yards (roughly equal to an 8' wide by 340' long by 6" thick pavement section). The slump test is to be performed once for every cylinder set (3 cylinders), and no less than 1 cylinder set per day when concrete is placed. Test results are to be given to the engineer upon completion of each test. There will be no testing for curb, ramps, and sidewalks.

Asphalt Hot-Mix Pavement For Trench Repair – A Nuclear Gauge Density Test is required only if directed by the Engineer for pavement patches that are equal to or greater than 620 square yards (roughly equal to an 8' wide by 700' long pavement section). The laboratory density limits will be a minimum limit of 96%, a maximum limit of 98%, and an optimum limit of 97%. The acceptable field density limit will be a minimum limit of 93%, a maximum limit of 98%, and an optimum limit of 95%. Test results are to be given to the Engineer upon completion of each test.

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 (4) hours rather than eight (8) hours. The acceptable field pressure limit will be a minimum 180 psi and a maximum 185 psi. A 2-3 psi drop in the measured pipe pressure during the first two (2) 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 (2) 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.

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 fifty-foot (50') 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 the Engineer.

17. 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.

18. PERSONNEL:

It is the Contractor's responsibility to have a supervising representative of the Contractor on the construction site any time that construction work is taking place. The Contractor's representative must be on the Contractor's direct payroll. Sub-contractors or paid consultants will not satisfy this requirement.

It is also the Contractor's responsibility to provide the City with a reliable contact for issue escalation coordination. Such contacts would include the Contractor's site foreman, the Contractor's construction project manager, etc.

19. 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.

20. 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 the 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 the Contractor in writing to Engineer for review, and the approval or denial of the request rests solely with the Engineer.

Unless specifically granted in writing by the Engineer, there will be no suspension of project time between phases of construction.

21. WARRANTY PERIOD:

There is a one (1) year calendar warranty period on this project for all work performed or materials installed effective immediately upon acceptance of the improvements by the 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.

22. 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 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 either an active Water Operator D license, an active Wastewater D license, or an active Class 1 Collections license, and the Contractor must maintain at least one of these active licenses for the entirety of the project. Any bid submittal that does not include this required documentation will be rejected as a non-responsive bid. If a Contractor allows the required license or 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 the Contractor to renew their active licenses before resuming work or to end the project immediately.

PROPOSAL

TO: Honorable Mayor and City Council
City of Midland
Midland, Texas

Gentlemen: The undersigned bidder, having examined the drawings, specifications and contract documents, the location of the proposed work, and being fully advised as to the extent and character of the work, proposes to furnish all material, equipment, and to perform all labor and work necessary for the completion of the construction of the work described by and in accordance with the attached drawings, specifications, and contract, for the following prices, to wit:

Project Name: Park Avenue Heights 2 Utility Project

Project Number: PU19-01

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	8 MO	Mobilization, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per month. (Pay Note M1)	$_____	$_____
2)	200 LF	36" Steel Pipe Casing (1/4" Wall Thickness), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note M2)	$_____	$_____
3)	100 LF	20" Steel Pipe Casing (1/4" Wall Thickness), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note M2)	$_____	$_____
4)	8 MO	Erosion/Sediment Control, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per month. (Pay Note M3)	$_____	$_____

Base Bid: Miscellaneous Items				
Item No.	Quantity	Description	Unit Price	Total Amount
5)	8 MO	Traffic Control, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per month. (Pay Note M4)	$_____	$_____
6)	8 MO	Job Site Safety, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per month. (Pay Note M5)	$_____	$_____
7)	N/A	Material Mark-up, complete and in place, for the sum of: _____percent. (Pay Note M6)	%_____	$_N/A_____
8)	N/A	Labor Mark-up (Regular Work Hours), complete and in place, for the sum of: _____percent. (Pay Note M7)	%_____	$_N/A_____
9)	N/A	Equipment Rental Mark-up (Non-Standard Equipment Only), complete and in place, for the sum of: _____percent. (Pay Note M8)	%_____	$_N/A_____
Total Miscellaneous Items 1-9		$_____		

Base Bid: Demolition Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	1600 LF	Removal & Disposal of Existing Water Main, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note D1)	$_____	$_____
2)	60 LF	Removal & Disposal of Existing Wastewater Main, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note D1)	$_____	$_____
3)	3 CY	Flowable Fill for Existing Pipes Abandoned In Place, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per cubic yard. (Pay Note D2)	$_____	$_____
4)	2 EA	Removal & Disposal of Existing Fire Hydrant Assembly, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note D3)	$_____	$_____
5)	1300 SY	Removal & Dispose of Existing Unclassified Pavement, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note D4)	$_____	$_____
6)	50 LF	Removal & Dispose of Existing Concrete Curb & Gutter, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note D5)	$_____	$_____
7)	10 SY	Removal & Disposal of Existing Concrete Sidewalk & Ramps, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note D6)	$_____	$_____
Total Demolition Items 1-7		$_____		

Base Bid: Water Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	100 LF	12" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note W1)	$_____	$_____
2)	2800 LF	8" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note W1)	$_____	$_____
3)	160 LF	6" AWWA C-900 DR18, PVC, Water Main, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note W1)	$_____	$_____
4)	5 EA	12" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W2)	$_____	$_____
5)	11 EA	8" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W2)	$_____	$_____
6)	8 EA	6" Gate Valve & Box (MJxMJ/FL), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W2)	$_____	$_____

Base Bid: Water Items				
Item No.	Quantity	Description	Unit Price	Total Amount
7)	8 EA	Fire Hydrant Assembly, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W3)	$_____	$_____
8)	1.10 TON	Ductile Iron Fittings, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per ton. (Pay Note W4)	$_____	$_____
9)	1 EA	Dresser Coupling, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W5)	$_____	$_____
10)	1 EA	Connect to Existing Water Main, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W6)	$_____	$_____
11)	20 EA	12”x1” Tapping Saddle for water service connection, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W7)	$_____	$_____

Base Bid: Water Items				
Item No.	Quantity	Description	Unit Price	Total Amount
12)	39 EA	8”x1” Tapping Saddle for water service connection, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W7)	$_____	$_____
13)	59 EA	1” Water Service Connection, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W8)	$_____	$_____
14)	2200 LF	1” Water Service Lateral, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note W9)	$_____	$_____
15)	59 EA	Water Meter Installation (New Service Lateral), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note W10)	$_____	$_____
16)	3060 LF	Open Trenching of Water Main, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note W11)	$_____	$_____
Total Water Items 1-16		$_____		

Base Bid: Wastewater Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	1600 LF	6" SDR 26 ASTM D2241, PVC, Wastewater Main, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note WW1)	$_____	$_____
2)	7 EA	48" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note WW2)	$_____	$_____
3)	15 VF	48" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per vertical foot. (Pay Note WW3)	$_____	$_____
4)	1 EA	Connection to Existing Manhole, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note WW4)	$_____	$_____
5)	1 EA	6" Manhole Drop Structure (External), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note WW5)	$_____	$_____
6)	7 EA	6" Wastewater Service Connection, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note WW6)	$_____	$_____

Base Bid: Wastewater Items				
Item No.	Quantity	Description	Unit Price	Total Amount
7)	43 EA	4" Wastewater Service Connection, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note WW6)	$_____	$_____
8)	100 LF	6" Wastewater Service Lateral, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note WW7)	$_____	$_____
9)	600 LF	4" Wastewater Service Lateral, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note WW7)	$_____	$_____
10)	1600 LF	Open Trenching of Wastewater Main, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note WW8)	$_____	$_____
Total Sewer Items 1-10		$_____		

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	960 LF	24" ASTM F2881, Polypropylene Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD1)	$_____	$_____
2)	140 LF	18" ASTM F2881, Polypropylene Dual Wall, Storm Drain, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD1)	$_____	$_____
3)	4 EA	60" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD2)	$_____	$_____
4)	4 EA	48" Fiberglass Manhole & Cover, (0'-5' Deep), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD2)	$_____	$_____
5)	13 VF	60" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per vertical foot. (Pay Note SD3)	$_____	$_____
6)	15 VF	48" Fiberglass Manhole Additional Bury Depth, (> 5' Deep), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per vertical foot. (Pay Note SD3)	$_____	$_____

Base Bid: Storm Drain Items				
Item No.	Quantity	Description	Unit Price	Total Amount
7)	2 EA	24" Plug, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD4)	$_____	$_____
8)	6 EA	18" Plug, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per each. (Pay Note SD4)	$_____	$_____
9)	1100 LF	Open Trenching of Storm Drain, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note SD5)	$_____	$_____
Total Miscellaneous Items 1-9		$_____		

Base Bid: Paving Items				
Item No.	Quantity	Description	Unit Price	Total Amount
1)	50 LF	Concrete Curb & Gutter Repair, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per linear foot. (Pay Note P1)	$_____	$_____
2)	1300 SY	2" Type D HMAC Asphalt Pavement Repair (PG70-22), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note P2)	$_____	$_____
3)	260 GAL	Bituminous Prime Coat (MC-30 or AEP, 0.20 Gal / SY), furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per gallon. (Pay Note P3)	$_____	$_____
4)	1312 SY	Flowable Fill / 2-Sack Backfill, furnished, installed, complete and in place, for the sum of: _____dollars and _____cents per square yard. (Pay Note P4)	$_____	$_____
Total Paving Items 1-4		$_____		

Bid Price For:	
1. Miscellaneous Items	$_____
2. Demolition Items	$_____
3. Water Items	$_____
4. Wastewater Items	$_____
5. Storm Drain Items	$_____
6. Paving Items	$_____
Total Price	$_____

In addition to providing the individual prices for the items above, Contract shall write the total bid amount in the sum of

_____dollars

and _____ cents total.

The undersigned bidder hereby declares that he has visited the site of the work and has carefully examined the contract documents pertaining to the work covered by the above bid. The selected contractor will receive written notice to proceed.

Bidder agrees to substantially complete all work within _240_ calendar days after receipt of notice to proceed.

PUBLIC INFORMATION

To the extent that Bidder is submitting a bid for a contract described by Section 552.371 of the Texas Government Code, Bidder 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 bid, 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.

Enclosed herewith in this proposal is a cashier's check, cash or bid bond on a form approved by the City Attorney, for

_____dollars

and _____ cents total. ($_____)

which it is agreed shall be collected and retained by the owner as liquidated damages in the event this proposal is accepted by the Owner within thirty days (30) after the date advertised for the reception of bids and the undersigned fails to execute the contract and required bonds with the owner, under the conditions thereof, within (15) days after the date said proposal is accepted; otherwise said check or bond shall be returned to the undersigned on demand.

Name of Contractor		
Submitted By	Print Name and Title	
Mailing Address		
City	State	Zip

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F:\2020\200069- CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C102 EXISTING CONDITIONS MASTER LAYOUT.DWG

CONSTRUCTION PHASING NOTES:

1. MARKUPS SHOWN ARE RELATED TO CONSTRUCTION PHASING FOR PARK AVENUE HEIGHTS 2 UTILITY PROJECT ONLY. THIS EXHIBIT MAKES NO CHANGES, ALTERATIONS, OR REPLACEMENTS TO ORIGINAL CONSTRUCTION DRAWING SET.
2. CONSTRUCTION OF UTILITY IMPROVEMENTS UNDER THIS PROJECT MUST PROCEED IN ORDER OF CONSTRUCTION PHASES INDICATED BY THIS EXHIBIT. IN GENERALLY THIS MEANS UTILITY CONSTRUCTION IS TO PROCEED FROM EAST TO WEST ACROSS PROJECT AREA.
3. A PAVING PROJECT WILL FOLLOW THIS UTILITY PROJECT, WITH PAVING WORK LIKELY TO COMMENCE WHILE UTILITY PROJECT IS STILL IN PROGRESS. SPECIFICALLY, PAVING WILL START AT CLOVERDALE ROAD AFTER UTILITY WORK IS COMPLETED FOR UTILITY CONSTRUCTION PHASE 2, AND THEN PAVING WILL PROCEED TO UTILITY CONSTRUCTION PHASE 1 AND WORK EAST TO WEST ACROSS PROJECT SITE. THIS IS INTENDED TO MINIMIZE DISRUPTIONS AND IMPACT TO TxDOT'S CLOVERDALE ROAD WHILE PROVIDING A SUFFICIENT HEAD-START FOR UTILITY CONTRACTOR THAT PAVING CONTRACTOR OPERATIONS NEVER CATCH UP TO THEM.
4. COORDINATION BETWEEN UTILITY PROJECT CONTRACTOR, PAVING PROJECT CONTRACTOR, CITY, AND TxDOT IS REQUIRED FOR THIS PROJECT.

EXISTING CONDITION NOTES:

1. EXISTING CONDITIONS SHOWN ARE BASED ON AVAILABLE PREVIOUS DESIGN DRAWINGS, CITY OF MIDLAND GIS DATA, SPOT SURVEY DATA, AND SITE VISITS. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. EXISTING GAS AND COMMUNICATION LINES WERE LOCATED FROM ONE-CALL MARKINGS. CONTRACTOR IS TO TAKE ALL NECESSARY STEPS AND PRECAUTIONS TO ENSURE THE SAFETY OF BOTH THE PUBLIC AND THE CONTRACTOR'S WORKERS WHEN ANY TRENCHING OR OTHER WORK IS TAKING PLACE NEAR THESE LINES.

LEGEND

- DENOTES FOUND 1/2" IRON ROD AS NOTED
- DENOTES FOUND BENCHMARK AS NOTED
- DENOTES EXISTING ELECTRICAL BOX
- DENOTES EXISTING WATER METER
- DENOTES EXISTING GAS METER
- DENOTES EXISTING MAILBOX
- DENOTES EXISTING TELEPHONE PEDESTAL
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING SIGN
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING 6" WASTE WATER
- DENOTES EXISTING 8" WASTE WATER
- DENOTES EXISTING 10" WASTE WATER
- DENOTES EXISTING 4" WATER MAIN
- DENOTES EXISTING 6" WATER MAIN
- DENOTES EXISTING 8" WATER MAIN
- DENOTES EXISTING 12" WATER MAIN
- DENOTES EXISTING UNDERGROUND CABLE
- DENOTES EXISTING OVERHEAD ELECTRIC LINE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED 6" WATER MAIN
- DENOTES PROPOSED 8" WATER MAIN
- DENOTES PROPOSED 12" WATER MAIN

SCALE 1" = 60'

CITY OF MIDLAND APPROVED &[Date] 04.21.2021 ENGINEERING

AUTHORIZATION TO CONSTRUCT CITY INFRASTRUCTURE
The issuance or granting of this APPROVAL shall not be construed to be an authorization of any violation of or the provisions of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction. No permit shall be issued to violate or cancel the provisions of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland. Approval shall not be valid. The issuance of this APPROVAL based on the construction drawings and other data submitted to the Engineering Services Department shall not prevent the Engineering Services Department from requiring the correction of errors in the construction drawings and other data. The Director of Engineering Services is authorized to order the correction of City infrastructure where such infrastructure is in violation of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction.

SHEET C102 OF 25

STATE OF TEXAS — ANDREW L. MELLEN — 106572 — LICENSED PROFESSIONAL ENGINEER — 04/16/2021

EXISTING CONDITIONS MASTER LAYOUT

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

DRAWN BY:	JAR
CHECKED BY:	CRT
APPROVED BY:	ALM
DATE:	5/12/2020
JOB:	200069

Δ	REVISIONS	BY	APPR.	DATE

MIDLAND Engineering Services

Park Avenue Heights 2 Utility Project
Non-Mandatory Pre-Bid Teleconference Meeting Agenda
Project No. PU19-01
May 5, 2021; 3:00 PM

Teleconference Call In Number: (866) 528-2256
Access Code: 4450719

Discussion Items

1. Sign-In Sheet
   - Please email jferguson@midlandtexas.gov if you plan to attend the teleconference so your name and contact information can be added to the attendance roll and to ensure you receive a copy of the Addendum following the pre-bid teleconference meeting.

2. Personnel Overview
   - Matt Carr – City Engineer
   - Mike Pacelli – Traffic Engineer
   - Cory Moose – Assistant Utilities Director
   - Josh Ferguson – Engineering Manager – CIP, project engineer
   - Bobby Wojciechowski – Construction Manager, construction management & inspections
   - Rex Swearinger – Operations Planner, utility coordination
   - Taha Sakrani – Associate Traffic Engineer
   - Troy Clabaugh – Sr. Transportation Technician
   - Gabe McClelland – Transportation Manager
   - Jesus Perez – Project Manager
   - Natalie Burgard – Administrative Assistant, document processing
   - Erika Martinez – Purchasing Manager, conduct bid process and bid opening

3. Project Overview and Scope
   - This project will include the removal, relocation, and installation of existing and proposed water, wastewater, and storm drain infrastructure and appurtenances as well as all equipment, labor, materials, etc. necessary to complete the work outlined in the Construction Drawings and Specifications, and to satisfactorily complete the work.
   - In general this project involves extending water and wastewater improvements throughout the Park Avenue Heights 2 project area and installing drainage improvements along the southern limits of the project area.

4. Bid Process
   - Pre-Bid Meeting Teleconference attendance is non-mandatory to bid on this project.
   - ATTENTION: All questions submitted before or after the Non-Mandatory Pre-Bid Meeting Teleconference must be submitted via email to the following email address: jferguson@midlandtexas.gov
   - Addendum distributed by email the Friday afternoon following the Pre-Bid Meeting.
     - The deadline to ask or send questions for the addendum is this Friday, May 7, 2021 at Noon.
     - Questions asked after the Noon deadline will be directed to the information already provided in the bid documents or included in the Addendum.

- ATTENTION: Due to the Coronavirus (COVID-19) pandemic, all bidders are encouraged to mail bid packets to one of the addresses below rather than delivering them in person in the interests of maintaining social distancing:

  USPS Mailing Address:
  City of Midland, Texas
  Attn: City Secretary's Office
  P O Box 1152
  Midland, TX 79702

  – OR –

  Physical Address for mail carriers other than USPS:
  City of Midland, Texas
  Attn: City Secretary's Office
  300 North Loraine St, Suite 330
  Midland, TX 79701

  If bid packets are delivered in person then bidders must drop the bid packets off at the first-floor front desk of City Hall before the bid opening deadline, and social distancing measures will be maintained for the health of all parties involved.

- **Bid Opening is Wednesday, May 12, 2021 at 2:00 PM** in the City Hall Council Chamber located on the 1st Floor of Midland's City Hall.
  - The Bid Opening will be open to the public, and bidders are free to attend in person. Bidders who attend in person are encouraged to wear a mask inside City Hall.
  - No late bids will be accepted.
  - Bidders must be willing to sign the contract as is.
  - Bidders must complete the conflict of interest forms if applicable.
  - Bidders must fill out all bid items in the Proposal. If bid items are left blank then the bid will be considered non-responsive.
  - Bidders have sole responsibility for making sure they have and acknowledge all addendums provided. If all acknowledgement forms are not included with the bid packet submittal then the bid will be considered non-responsive.

5. Notice to Proceed
   - Date of Notice to Proceed to be determined at the Pre-Construction Meeting.
   - Pre-Construction Meeting date will be set after the project bid is awarded.

6. Payment
   - Invoices should be submitted on or before the 1st day of each month and cover work completed up to the 25th day of the preceding month.
   - Invoice submittals need to be itemized and match the bid items listed in the bid packet Proposal.
   - Payment based on the portion of work completed only. No payment for material delivery.
   - 5% retainage until project completion, acceptance, and final payment.
   - Recommended that invoices state "Invoice Due Upon Receipt", or have a due date that is two (2) weeks after the date the invoice is submitted.

7. Project Schedule
   - City Inspector must be notified of all work occurring and be able to perform inspections on any construction or installation that occurs.
   - Typically Monday – Friday from 8:00 AM – 5:00 PM. No work earlier than 7:00 AM or later than 8:00 PM without City permission unless for emergency conditions.
   - Work will not occur on Sundays or legal holidays unless required for emergency situations.
   - Work will not occur on Saturdays unless requested by Contractor in writing at least 48-hours in advance and approved by the City Engineer.

8. Project Specifics
   - Bidders must provide documentation as part of the bid packet submittal proving that they possess either an active Water Operator D license, an active Wastewater D license, or

an active Class 1 Collections license, and the Contractor must maintain at least one of these active licenses for the entirety of the project.
- Comply with all OSHA and other applicable safety requirements and regulations at all times.
- Construction staking is solely the responsibility of the Contractor.
- Construction testing is solely the responsibility of the Contractor.
- Contractor is responsible for Traffic Control for this project.
- There is a one (1) calendar year warranty period on this project. This includes all infrastructure installed.

9. Additional Information, Clarifications, and Corrections
   - Bidders are directed to bid the item quantities listed in the Bid Packet's Proposal, not the quantities listed in the design drawings.
   - Cloverdale Road is a TxDOT road and as such an approved TxDOT Utility Permit will be required for any activity within the TxDOT Right-of-Way. The City has been coordinating with TxDOT throughout the design process for this project, and will submit the permit application request once the construction timeline is known.
   - TxDOT is allowing open trenching of Cloverdale Road with the understanding that a larger than normal pavement repair will be put in place after construction. This larger pavement repair is being addressed through a follow-up paving project that will occur after the utility project. As a result, this utility project will be able to utilize normal trench repairs across Cloverdale Road. However, the utility project contractor will be required to coordinate with the City and paving project contractor to keep the disruptions to Cloverdale Road to a minimum and to ensure that the full Cloverdale Road pavement replacement is achieved as soon as possible after the utility crossing installations are complete.
   - A future basin is shown for reference purposes south of Cloverdale Road, but this will be constructed during the follow-up paving project and is not part of this utility project.
   - Park Avenue Heights 2 is a partially developed subdivision, with both vacant and developed residential lots. Contractor will be required to maintain access and service to all developed lots throughout the project and to provide notice to property owners when service or access interruptions are unavoidable.
   - This area has had sporadic development and construction activity throughout the design process, and thus some existing surface or sub-surface conditions shown in the construction drawing set may not reflect all existing conditions when construction commences. Contractor is reminded to verify all existing conditions before starting demolition, excavation, or construction activities.

10. Any Additional Questions?

Please direct all questions or comments following the Pre-Bid Meeting to Josh Ferguson with the City of Midland.

Engineering Services

Josh Ferguson
Office Phone: (432) 685-7290
Cell Phone: (432) 241-5078
Email: jferguson@midlandtexas.gov

Pre-Bid Teleconference Meeting Attendance

PU19-01

Park Avenue Heights 2 Utility Project

Date: 05-05-2021 - 3:00 PM

☑	Name *(Please Print)*	Company Name *(Please Print)*	Phone Number	Fax Number	Email
	Josh Ferguson	City of Midland	(432) 685-7290		jferguson@midlandtexas.gov
	Bobby Wojciechowski	CoM			bwojciechowski@midlandtexas.gov
	Cory Moose	CoM			cmoose@midlandtexas.gov
	Michael Williams	CoM			mwilliams@midlandtexas.gov
	Carl Craigo	CoM			ccraigo@midlandtexas.gov
	Erika Martinez	CoM			emunoz@midlandtexas.gov
	Matt Carr	CoM			mcarr@midlandtexas.gov
	Emily Ford	Boler			emily@boler.net
	Carolina Jimenez	CoM			cjimenez@midlandtexas.gov

TEC EXCAVATION, INC.

P.O. Box 80455
MIDLAND, TX 79708

PH. 432-682-2619
FAX 432-684-1151

May 12, 2021

Joshua Ferguson
City of Midland
300 N. Loraine
Midland, TX 79701

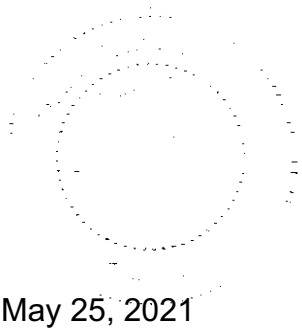
Project: PARK AVE. HEIGHTS 2 UTILITY PROJECT

Josh,

As per conditions of the Contract, TEC Excavation, Inc. is currently contracted with Jesse Montez to meet TCEQ requirements on the above-mentioned project. Jesse has agreed to help us out until TEC has completed the required courses to obtain our license.

Jesse Montez
TCEQ Licensing Number: W00027888

Eric Clutter, Vice-President
TEC Excavation, Inc.



CITY OF MIDLAND
PARK AVENUE HEIGHTS 2 UTILITY PROJECT
PROJECT NUMBER: PU19-01
APRIL 2021

MAYOR

PATRICK PAYTON

COUNCIL MEMBERS

SCOTT DUFFORD	DISTRICT 1
JOHN NORMAN	DISTRICT 2
JACK LADD	DISTRICT 3
LORI BLONG	DISTRICT 4
MICHAEL TROST	AT LARGE
SPENCER ROBNETT	AT LARGE

INTERIM CITY MANAGER

COURTNEY SHARP

DIRECTOR OF UTILITIES

CARL CRAIGO, P.E.

ENGINEERING SERVICES DIRECTOR

JOSE E. ORTIZ

CITY ENGINEER

MATT C. CARR, P.E.

CONTACT:
JOSH FERGUSON, P.E.
CITY OF MIDLAND,
300 N. LORAINE ST., MIDLAND, TX 79702

CONTRACTOR_____

DATE CONTRACTOR BEGAN WORK_____

DATE WORK WAS COMPLETED_____

DATE WORK WAS ACCEPTED_____

FINAL CONTRACT COST_____

Josh Ferguson, P.E. — ENGINEER — 4/21/2021 — SUBMITTED

Matt Carr, P.E. — CITY ENGINEER — 4/21/2021 — RECOMMENDED

ENGINEERING SERVICES DIRECTOR — 4/21/2021 — RECOMMENDED

CITY OF MIDLAND APPROVED 04.21.2021 ENGINEERING

AUTHORIZATION TO CONSTRUCT CITY INFRASTRUCTURE

The issuance or granting of this APPROVAL shall not be construed to be a permit for, or an approval of, any violation of any provision of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland. The issuance of this APPROVAL, based on the construction drawings and other data submitted to the Engineering Services Department and not prepared by the Director of Engineering Services Department, shall not prevent the Director of Engineering Services Department from thereafter requiring the correction of the construction drawings and other data. The Director of Engineering Services Department is authorized to deny acceptance or use of infrastructure where such infrastructure is in violation of the City Code, of any City Ordinance, of the City Standard Details & Specifications, or of any other ordinance or adopted policy of the City of Midland jurisdiction.



PACKET **VICINITY MAP**
N.T.S.

BID PLAN SET	
SHEET	DESCRIPTION
C100	COVER SHEET
C101	GENERAL NOTES
C102	EXISTING CONDITIONS / WATER MASTER LAYOUT
C110	PLAT
C200	WASTE WATER MAIN PLAN & PROFILE
C200A	WATER MAIN PLAN
C201	WATER MAIN PLAN & PROFILE
C202	WATER MAIN PLAN & PROFILE
C203	WATER MAIN PLAN & PROFILE
C204	WASTE WATER MAIN PLAN & PROFILE
C205	WASTE WATER MAIN PLAN & PROFILE
C206	WASTE WATER MAIN PLAN & PROFILE
C207	WATER MAIN AND STORM DRAIN PLAN & PROFILE
C208	WATER MAIN AND STORM DRAIN PLAN & PROFILE
C209	STORM DRAIN PLAN & PROFILE
C210	WATER MAIN PLAN & PROFILE
C211	STORM DRAIN PLAN & PROFILE
C212	EXISTING SEWER SERVICE LINE PLAN
C213	STORM DRAIN PLAN & PROFILE
C300	WATER DETAILS
C301	WATER DETAILS
C302	WATER DETAILS
C310	WASTE WATER DETAILS
C311	WASTE WATER DETAILS
C320	STORM DRAIN DETAILS
C400	EROSION CONTROL PLAN
C401	EROSION CONTROL DETAILS

MIDLAND Engineering Services

BY	APPR.	DATE	REVISIONS

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/1/2020
P.N.: 200069

COVER SHEET
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS
MIDLAND, TEXAS

STATE OF TEXAS — ANDREW L. MELLEN — 106572 — LICENSED PROFESSIONAL ENGINEER
04/16/2021

SHEET C100 OF 25

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F:\2020\200069 - CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C100 COVER SHEET.DWG

GENERAL NOTES:

a. THIS DESIGN IS FOR PUBLIC WATER IMPROVEMENTS FOR PARK AVENUE HEIGHTS 2 FROM SOUTH LAMESA ROAD TO SOUTH CAVER STREET.

b. ALL CONSTRUCTION IS TO COMPLY WITH CITY OF MIDLAND STANDARDS AND SPECIFICATIONS WHEREVER APPLICABLE. ALL OTHER STANDARDS AND REQUIREMENTS ARE TO COMPLY WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS, REQUIREMENTS, AND STANDARDS. WHEREVER CITY OF MIDLAND STANDARDS AND FEDERAL OR STATE REQUIREMENTS DIFFER THE MORE RESTRICTIVE STANDARD, REQUIREMENT, OR REGULATION WILL GOVERN.

c. ALL BEARINGS, DIMENSIONS, AND COORDINATES SHOWN IN THIS CONSTRUCTION DRAWING SET ARE RELATED TO TEXAS STATE PLAN COORDINATE SYSTEM, TEXAS CENTRAL ZONE, NORTH AMERICAN DATUM 1983. ALL ELEVATIONS ARE RELATED TO NORTH AMERICAN VERTICAL DATUM 1988.

d. EXISTING UTILITIES, INFRASTRUCTURE, AND OTHER OBJECTS INDICATED IN THESE PLANS HAVE BEEN LOCATED USING CITY OF MIDLAND RECORDS, SITE INSPECTIONS, AND SPOT SURVEYS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THIS INFORMATION PRIOR TO CONSTRUCTION AND NOTIFYING ENGINEER OF ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND PROJECT DESIGN.

e. CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL EXISTING FACILITIES THAT ARE ENCOUNTERED REGARDLESS OF WHETHER OR NOT THEY APPEAR IN THIS CONSTRUCTION DRAWING SET.

f. CONTRACTOR IS TO NOTIFY ALL AFFECTED PROPERTIES AT LEAST 48 HOURS IN ADVANCE OF ANY UNKNOWN OR PLANNED INTERRUPTION OF SERVICE OR ACCESS DUE TO ANY CONSTRUCTION ACTIVITY PERFORMED BY CONTRACTOR.

g. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING A TRAFFIC CONTROL PLAN TO THE CITY OF MIDLAND FOR REVIEW AND APPROVAL PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. TRAFFIC CONTROL PLAN MUST BE SUBMITTED TO CITY NO LESS THAN TWO (2) BUSINESS DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY BEGINNING.

h. ANY ISSUES, CONFLICTS, OR DISCREPANCIES ENCOUNTERED IN THE FIELD THAT CONFLICT WITH THIS CONSTRUCTION DRAWING SET ARE TO BROUGHT TO ENGINEER'S ATTENTION PRIOR TO MAKING ANY DESIGN CHANGES IN THE FIELD.

i. OSHA REQUIREMENTS AND ALL OTHER APPLICABLE FEDERAL, STATE, OR CITY OF MIDLAND REQUIREMENTS ARE TO BE FOLLOWED AND COMPLIED WITH AT ALL TIMES.

j. ALL DIMENSIONS MEASURED TO CURB ARE MEASURED TO BACK-OF-CURB.

k. ALL DIMENSIONS BETWEEN UTILITIES ARE MEASURED TO UTILITY CENTERLINE.

l. ALL NEW OR EXISTING VALVE, MANHOLE JUNCTION, INLET, AND METER COVERS MUST BE ADJUSTED TO FINISHED GRADE AND BE SET FLUSH WITH ADJACENT FINISHED SURFACE WHETHER FINISHED SURFACE IS PAVED OR UNPAVED.

m. ALL CONCRETE FIBER REINFORCEMENT IS TO BE INSTALLED AT A RATE OF 1.5-POUNDS OF FIBER REINFORCEMENT PER EACH 1.0-CUBIC YARD OF CONCRETE PLACED (1.5-LBS / 1.0-CY) UNLESS OTHERWISE NOTED IN THIS CONSTRUCTION DRAWING SET.

n. CONTRACTOR IS TO MATCH DESIGN GRADES AND ELEVATIONS SHOWN ON THIS CONSTRUCTION DRAWING SET.

o. NOTIFY CITY INSPECTOR OF ALL FRANCHISE UTILITY OR PRIVATE INFRASTRUCTURE ISSUES AND COORDINATE WITH BOTH CITY AND FRANCHISE UTILITY OR PRIVATE INFRASTRUCTURE OWNER.

p. CONTRACTOR IS TO COORDINATE WITH CITY FIRE DEPARTMENT FOR ANY FIRE HYDRANT OR FIRE LINE TESTING. FIRE DEPARTMENT TO INSTALL COLORED RING OR BONNET ON FIRE HYDRANT ONCE TESTED.

q. THERE IS TO BE NO MATERIAL STORAGE WITHIN CLOVERDALE ROAD RIGHT-OF-WAY OR LAMESA ROAD RIGHT-OF-WAY. MATERIAL STORAGE IS TO BE PLACED IN WORK ZONES APPROVED BY TRAFFIC CONTROL PLAN.

r. SURVEY CONTROL POINTS
CONTROL POINT GENERALLY LOCATED MIDWAY BETWEEN CALIFORNIA AND CLOVERDALE AS WELL AS MIDWAY BETWEEN BUNCHE AND MADISON.

N: 10692114.726
E: 1761654.504
ELEV: 2766.914

CONTROL POINT GENERALLY LOCATED ON CARVER STREET MIDWAY FROM CALIFORNIA TO CLOVERDALE
N: 10692174.407
E: 1762150.140
ELEV: 2765.60

DEMOLITION NOTES:

A. CONTRACTOR IS TO NOTIFY ENGINEER OF ANY ADDITIONAL DEMOLITION THAT MAY BE NEEDED AND RECEIVE WRITTEN CONFIRMATION THAT SUCH DEMOLITION IS APPROVED PRIOR TO ANY ADDITIONAL DEMOLITION TAKING PLACE.

B. CONSTRUCTOR IS TO TAKE CARE NOT TO DAMAGE OR REMOVE ANY EXISTING INFRASTRUCTURE OR PROPERTY, PUBLIC OR PRIVATE, THAT IS NOT INDICATED BY THIS CONSTRUCTION DRAWING SET. ANY SUCH DAMAGE OR REMOVAL MUST BE REPLACED OR REPAIRED BY CONTRACTOR AT THEIR SOLE EXPENSE TO EQUAL OR BETTER CONDITION.

C. EXISTING WATER MAIN PIPE IDENTIFIED FOR REMOVAL IS TO BE REMOVED IN ITS ENTIRETY, INCLUDING ANY FITTINGS STRUCTURES, AND APPURTENANCES.

D. EXISTING WATER MAIN IDENTIFIED TO BE ABANDONED IN PLACE MUST BE COMPLETELY FILLED WITH FLOWABLE FILL 2-SACK (2 SACK = 188 POUNDS PER CUBIC YARD) AND BE CAPPED AT EACH END OF WATER MAIN ABANDONED IN PLACE.

E. ALL SAW-CUTTING IS TO HAVE CLEAN AND STRAIGHT EDGES AND IS CONSIDERED INCIDENTAL TO ALL PAVEMENT REMOVAL. WHERE UTILITY MAINS ARE TO BE INSTALLED IN EXISTING PAVEMENT, PAVEMENT IS TO BE SAW-CUT.

F. ALL TRENCH PAVEMENT REPAIRS ARE TO INCLUDE 1.0' T-TOPPING ON EITHER SIDE OF ANY TRENCH EXCAVATION.

G. ALL EXISTING FIRE HYDRANTS REMOVED ARE TO BE RETURNED TO CITY OF MIDLAND.

H. ALL EXISTING WATER METERS REMOVED ARE TO BE RETURNED TO CITY OF MIDLAND UNLESS SPECIFICALLY NOTED OTHERWISE IN THIS CONSTRUCTION DRAWING SET OR PROJECT BID PACKET.

CONSTRUCTION NOTES:

1. ANY AND ALL FLOWABLE FILL 2-SACK (2 SACK = 188 POUNDS PER CUBIC YARD) MUST BE CURED FOR NO LESS THAN THREE (3) DAYS PRIOR TO PLACEMENT OF ANY PAVEMENT OVER FLOWABLE FILL MATERIAL.
2. ALL NEW WATER MAINS TO MAINTAIN MINIMUM COVER OF 3.5' AND MINIMUM VERTICAL SEPARATION OF 2.0' ABOVE EXISTING WASTEWATER MAINS UNLESS OTHERWISE INDICATED IN THIS CONSTRUCTION DRAWING SET.
3. WHENEVER POSSIBLE NEW PUBLIC UTILITY MAIN STUB-OUTS ARE TO END WITH A FULL PIPE SECTION.
4. ALL REPAIRS OR REPLACEMENT OF EXISTING PAVEMENT ARE TO BE TO EQUAL OR BETTER CONDITION THAN EXISTING PAVEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING AND SURVEY.
6. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION TESTING.
7. CONTRACTOR IS TO WRAP ALL FITTINGS.
8. CONTRACTOR IS TO INSTALL CONCRETE RINGS ON ALL MANHOLES IN THE ALLEYS.

APPROVED
CITY OF MIDLAND
ENGINEERING
04.21.2021
ATTENTION: THIS APPROVAL DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLIANCE WITH ALL CITY ORDINANCES, STANDARDS, AND SPECIFICATIONS.

811
Know what's **below.**
Call before you dig.

MIDLAND Engineering Services

	BY	APPR.	DATE
REVISIONS			

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

GENERAL NOTES

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

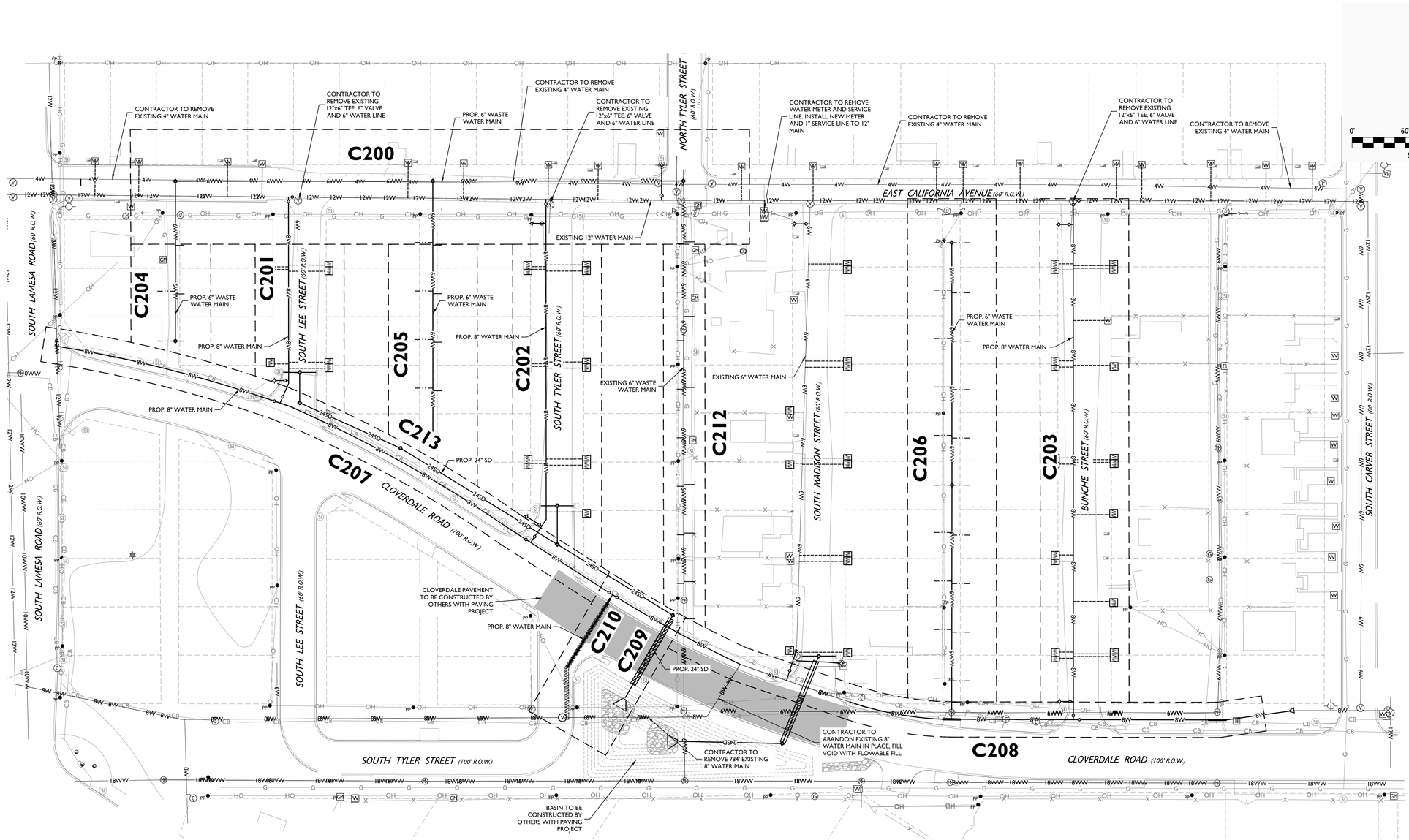
MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

SHEET C101 OF 25

F:\200\200069\ CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C101 GENERAL NOTES.DWG

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EXISTING CONDITION NOTES:

1. EXISTING CONDITIONS SHOWN ARE BASED ON AVAILABLE PREVIOUS DESIGN DRAWINGS, CITY OF MIDLAND GIS DATA, SPOT SURVEY DATA, AND SITE VISITS. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. EXISTING GAS AND COMMUNICATION LINES WERE LOCATED FROM ONE-CALL MARKINGS. CONTRACTOR IS TO TAKE ALL NECESSARY STEPS AND PRECAUTIONS TO ENSURE THE SAFETY OF BOTH THE PUBLIC AND THE CONTRACTOR'S WORKERS WHEN ANY TRENCHING OR OTHER WORK IS TAKING PLACE NEAR THESE LINES.

LEGEND

DENOTES FOUND 1/2" IRON ROD AS NOTED	DENOTES EXISTING 6" WASTE WATER
DENOTES FOUND BENCHMARK AS NOTED	DENOTES EXISTING 8" WASTE WATER
DENOTES EXISTING ELECTRICAL BOX	DENOTES EXISTING 10" WASTE WATER
DENOTES EXISTING WATER METER	DENOTES EXISTING 4" WATER MAIN
DENOTES EXISTING GAS METER	DENOTES EXISTING 6" WATER MAIN
DENOTES EXISTING MAILBOX	DENOTES EXISTING 8" WATER MAIN
DENOTES EXISTING TELEPHONE PEDESTAL	DENOTES EXISTING 12" WATER MAIN
DENOTES EXISTING LIGHT POLE	DENOTES EXISTING UNDERGROUND CABLE
DENOTES EXISTING WATER VALVE	DENOTES EXISTING OVERHEAD ELECTRIC LINE
DENOTES EXISTING FIRE HYDRANT	DENOTES PROPOSED FIRE HYDRANT
DENOTES EXISTING GAS RISER	DENOTES PROPOSED WATER METER
DENOTES EXISTING POWER POLE	DENOTES PROPOSED WATER VALVE
DENOTES EXISTING MANHOLE	DENOTES PROPOSED 6" WATER MAIN
DENOTES EXISTING SIGN	DENOTES PROPOSED 8" WATER MAIN
DENOTES EXISTING GUY ANCHOR	DENOTES PROPOSED 12" WATER MAIN

04.21.2021

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED PROFESSIONAL ENGINEER
04/21/2021

MIDLAND Engineering Services

	BY	APPR.	DATE
REVISIONS			

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

EXISTING CONDITIONS MASTER LAYOUT

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

SHEET C102 OF 25

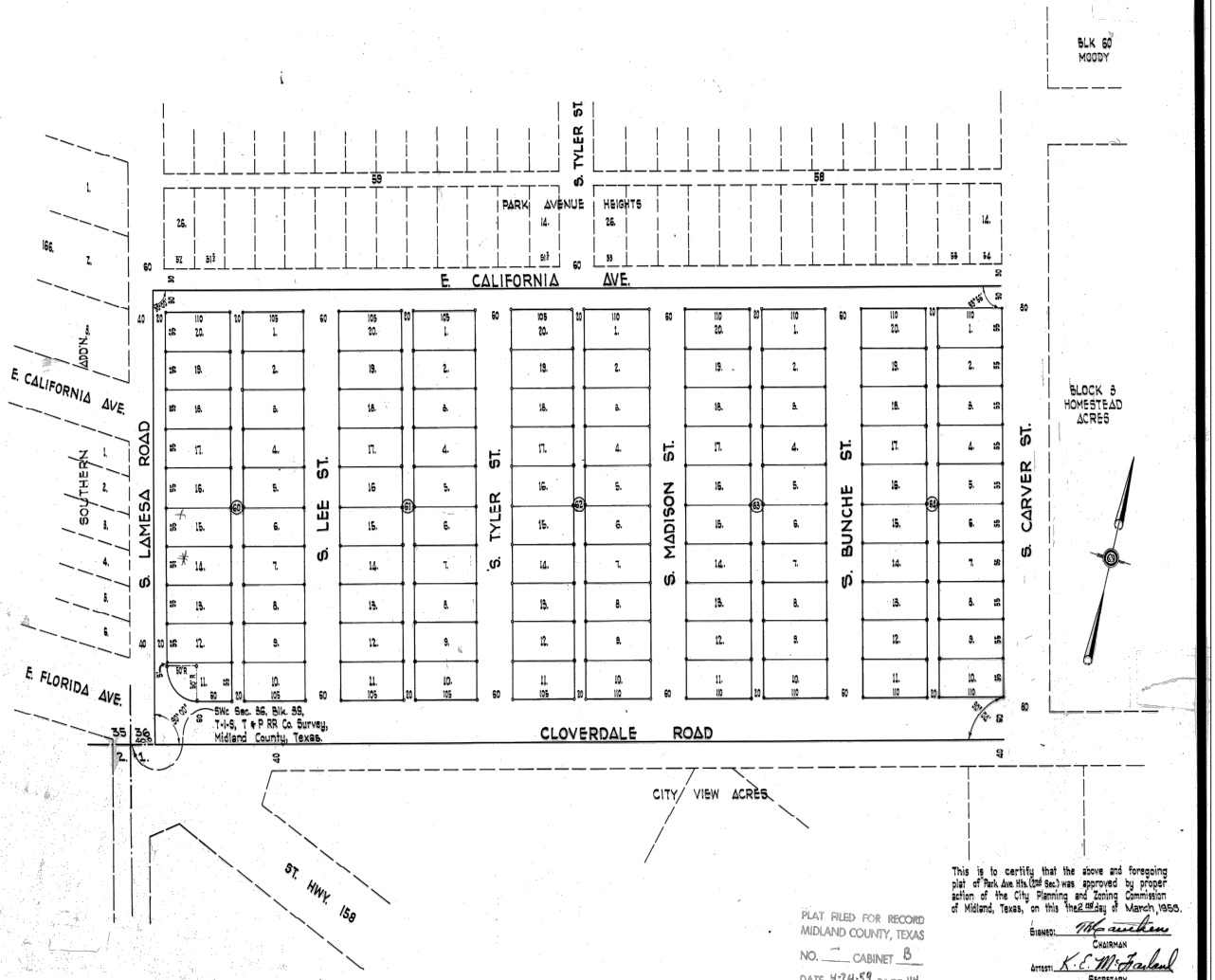
F:\2020\200069 - CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C103 EXISTING CONDITIONS MASTER LAYOUT.DWG
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PARK AVENUE HEIGHTS
(SECOND SECTION)

AN ADDITION TO THE CITY OF MIDLAND,
MIDLAND COUNTY, TEXAS
A SUBDIVISION OF THE SOUTH 645.5 FEET OF
BLOCKS 1 & 2, HOMESTEAD ACRES
OF MOODY'S SECOND ADDITION
SITUATED IN THE SW CORNER
SECTION 35, BLOCK 39, T-1-S,
T & P RR CO. SURVEY

MIDLAND COUNTY, TEXAS

SCALE: 1" = 100'



This plat has been checked for accessibility of utilities.

Robert L. Keith
For: Pioneer Natural Gas Co.

Wm. Hobbs
For: Southwestern Bell Telephone Co.

M. M. Garrett
For: Texas Electric Service Co.

JENKINS & SCHUMANN
Box 904 MU6-1802
Midland, Texas
Job #5008

PLAT FILED FOR RECORD
MIDLAND COUNTY, TEXAS
NO. — CABINET B
DATE 4-24-59 PAGE 114

I, Max A. Schumann, Jr. Registered Professional Engineer and Public Surveyor, State of Texas, hereby certify that this Subdivision of PARK AVE. HTS (2nd Sec) was made by me on the ground and that this plat is true and correct. 3rd March, 1959.

Max A. Schumann, Jr.
Max A. Schumann, Jr.

This is to certify that the above and foregoing plat of Park Ave. Hts. (2nd Sec.) was approved by proper action of the City Planning and Zoning Commission of Midland, Texas, on this the 2nd day of March, 1959.

Signed: M. A. Schumann
Chairman
Attest: K. C. McFarland
Secretary

This is to certify that the above and foregoing plat of Park Ave. Hts. (2nd Sec.) was approved by proper action of the City Council of Midland, Texas, on this the 14th day of April, 1959.

Signed: Robert S. Dewey
Mayor, City of Midland
Attest: J. C. Wedman
City Secretary

MIDLAND Engineering Services

BY	APPR.	DATE	REVISIONS	Δ

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

PLAT

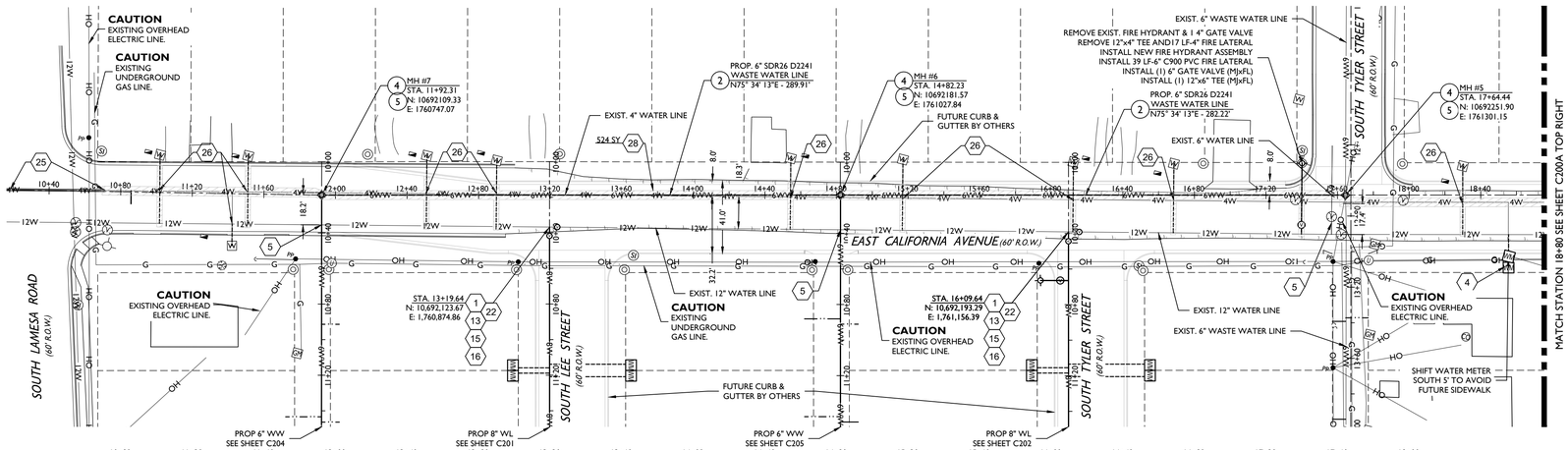
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

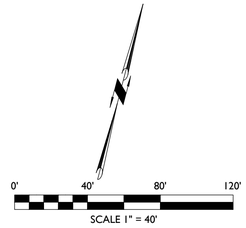
MIDLAND, TEXAS

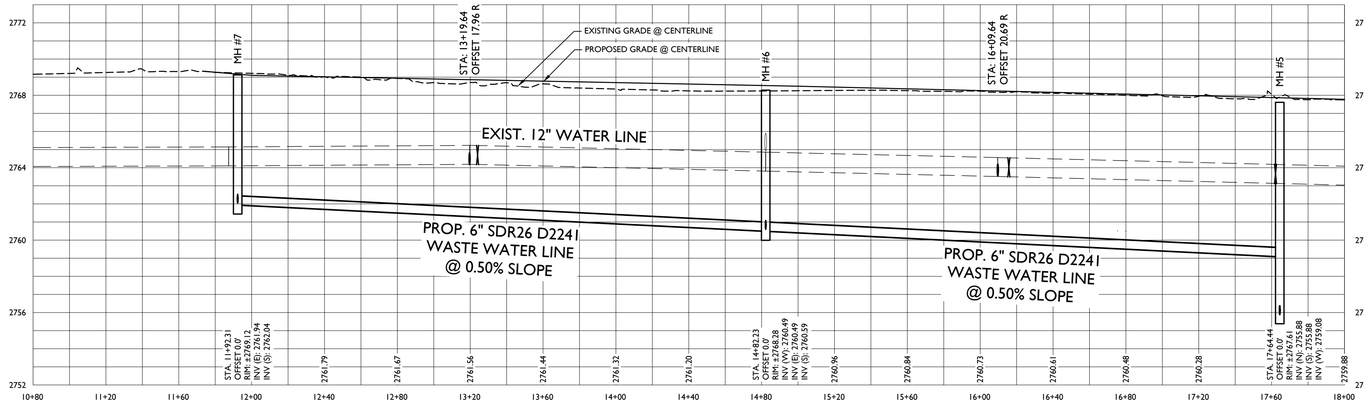
PLAT NOTE:

THE PLAT SHOWN ON THIS SHEET IS INCLUDED FOR REFERENCE PURPOSES ONLY. IT IS NOT TO BE RECORDED FOR ANY PURPOSE. THE SEALING PROFESSIONAL FOR THIS CONSTRUCTION DRAWING SET TAKES NO OWNERSHIP OF THIS SHEET OR THE INFORMATION PROVIDED THEREON, BUT DOES AUTHORIZE IT TO BE PART OF THIS CONSTRUCTION DRAWING SET.

SHEET C110 OF 25







SEWER CONSTRUCTION NOTES:

TYP. 1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

WATER CONSTRUCTION NOTES:

TYP. 1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED, COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

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F:\2020\200069\ CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C200 SL-A PLAN AND PROFILE.DWG

04.21.2021

MIDLAND Engineering Services

BY	APPR.	DATE

REVISIONS

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

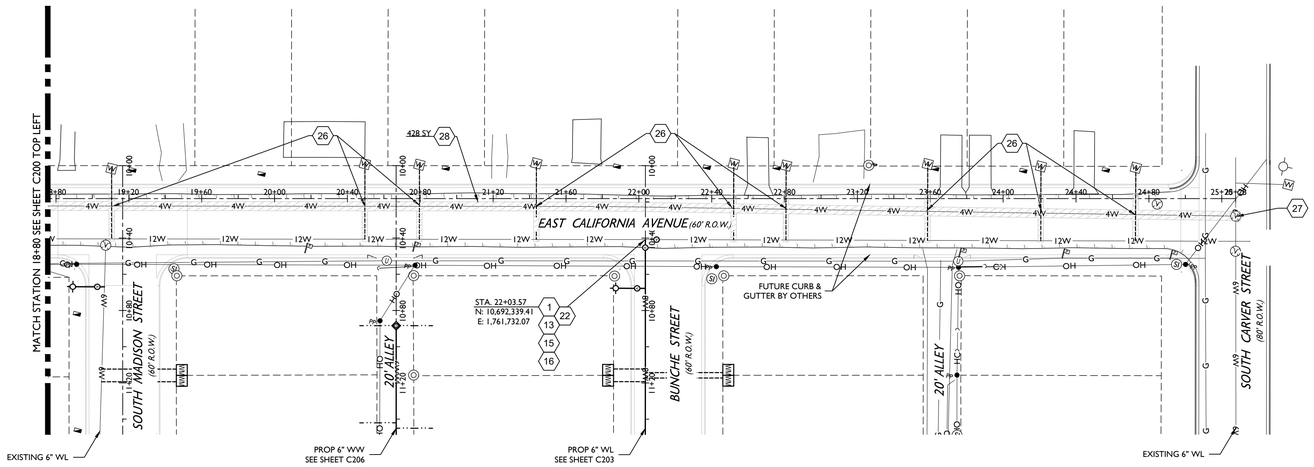
SL-A PLAN AND PROFILE

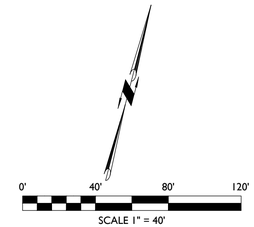
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

STATE OF TEXAS — ANDREW L. MELLEN — 106572 — LICENSED PROFESSIONAL ENGINEER — 04/16/2021

SHEET C200 OF 25





SEWER CONSTRUCTION NOTES:

TYP. (1) CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

WATER CONSTRUCTION NOTES:

TYP. (1) CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
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- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
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- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- WM — DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

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F:\2020\200069\A. CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\200069 C200A WL PLAN.DWG

MIDLAND Engineering Services

	BY	APPR.	DATE
REVISIONS			

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

APPROVED
MIDLAND DEVELOPMENT CODE
04.21.2021
AS [Date] NOTED
ALL IMPROVEMENTS TO CONFORM TO THE CITY OF MIDLAND DESIGN & CONSTRUCTION STANDARDS

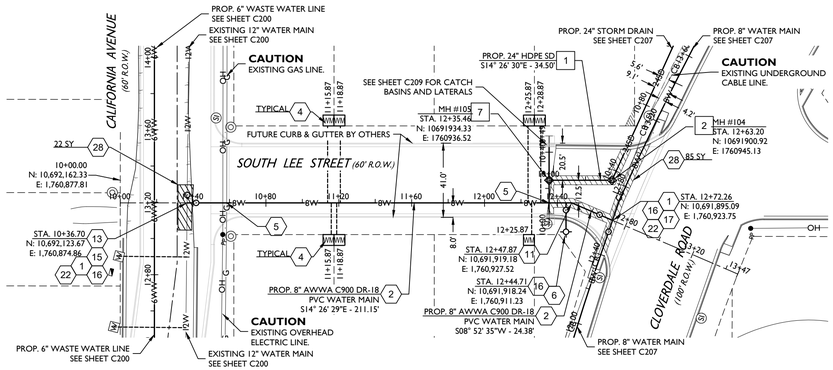
WL PLAN

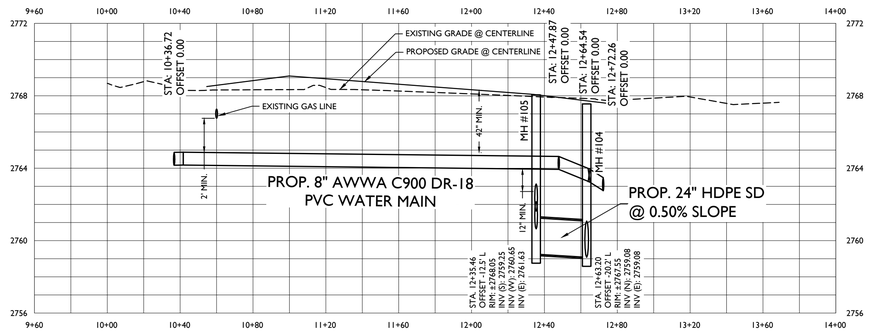
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

SHEET **C200A** OF 25





SEWER CONSTRUCTION NOTES:

TYP 1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

STORM DRAIN CONSTRUCTION NOTES:

TYP 1. INSTALL 24" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.

2. INSTALL 48" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
3. CURB INLETS TO BE INSTALLED WITH PAVING PROJECT. INSTALL STORM LATERAL AND 18" PLUG DURING UTILITY PHASE.
4. CONSTRUCT CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS PER DETAIL No. CH-FW-45 SEE SHEET C320.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL 18" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
7. INSTALL 60" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
8. INSTALL 36" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805C SEE SHEET 302.

WATER CONSTRUCTION NOTES:

TYP 1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- EB DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- G DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- MH DENOTES EXISTING MANHOLE
- PL DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- PP DENOTES EXISTING POWER POLE
- SBC DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- V DENOTES EXISTING WATER VALVE
- S DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB DENOTES EXISTING UNDERGROUND CABLE LINE
- X DENOTES EXISTING FENCE
- OH DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL DENOTES EXISTING UNDERGROUND PIPELINE
- 6W DENOTES EXISTING 6" WATER LINE
- 12W DENOTES EXISTING 12" WATER LINE
- 6SS DENOTES EXISTING 6" SEWER LINE
- 8W DENOTES PROPOSED 8" WATER LINE
- 8SS DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- WM DENOTES PROPOSED WATER METER
- V DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- SM DENOTES PROPOSED SEWER MANHOLE

04.21.2021
EXPIRES: 12/31/2021
TEXAS REGISTERED ENGINEERING FIRM F-2009
MAVERICK ENGINEERING, INC.
1104 N. MIDKIFF, SUITE B, MIDLAND, TEXAS 79701
(432) 687-1112
ATTENTION: ANY ALTERATION OF A SEALED DOCUMENT WITHOUT THE PERMISSION OF THE ENGINEER IS PROHIBITED BY LAW.

MIDLAND Engineering Services

BY	APPR.	DATE

REVISIONS

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

WL-2 PLAN AND PROFILE

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

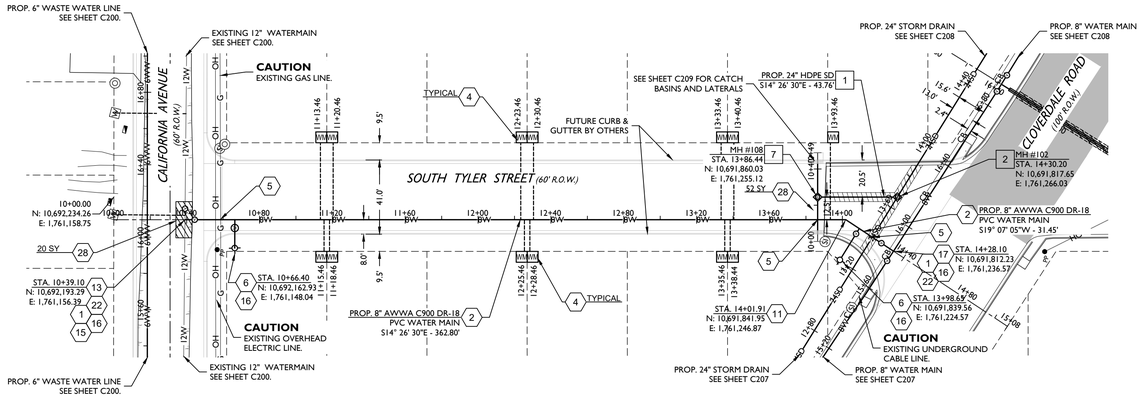
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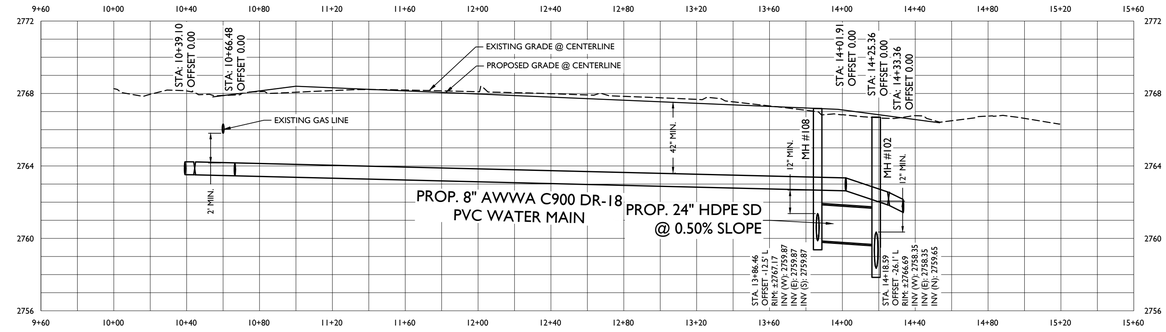
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

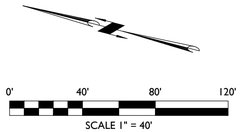
SHEET C201 OF 25

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SEWER CONSTRUCTION NOTES:

TYP. 1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

STORM DRAIN CONSTRUCTION NOTES:

TYP. 1. INSTALL 24" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.

2. INSTALL 48" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
3. CURB INLETS TO BE INSTALLED WITH PAVING PROJECT. INSTALL STORM LATERAL AND 18" PLUG DURING UTILITY PHASE.
4. CONSTRUCT CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS PER DETAIL No. CH-FW-45 SEE SHEET C320.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL 18" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
7. INSTALL 60" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
8. INSTALL 36" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805C SEE SHEET 302.

WATER CONSTRUCTION NOTES:

TYP. 1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1" PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT, THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
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- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
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LEGEND

	DENOTES FOUND MONUMENT AS NOTED
EB	DENOTES EXISTING ELECTRIC BOX
	DENOTES EXISTING FIRE HYDRANT
G	DENOTES EXISTING GAS RISER
	DENOTES EXISTING GUY ANCHOR
	DENOTES EXISTING LIGHT POLE
MH	DENOTES EXISTING MANHOLE
PL	DENOTES EXISTING PIPELINE MARKER
	DENOTES EXISTING PIPELINE VENT
PP	DENOTES EXISTING POWER POLE
SBT	DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
V	DENOTES EXISTING WATER VALVE
SI	DENOTES EXISTING SIGN
	DENOTES EXISTING MAIL BOX
	DENOTES BOUNDARY LINE
	DENOTES EXISTING EASEMENT LINE
	DENOTES EDGE OF ASPHALT
CB	DENOTES EXISTING UNDERGROUND CABLE LINE
X	DENOTES EXISTING FENCE
OH	DENOTES EXISTING OVERHEAD ELECTRIC LINE
PL	DENOTES EXISTING UNDERGROUND PIPELINE
6W	DENOTES EXISTING 6" WATER LINE
12W	DENOTES EXISTING 12" WATER LINE
6SS	DENOTES EXISTING 6" SEWER LINE
8W	DENOTES PROPOSED 8" WATER LINE
8SS	DENOTES PROPOSED 8" SEWER LINE
	DENOTES PROPOSED WATER SERVICE LINE
	DENOTES PROPOSED SEWER SERVICE LINE
WM	DENOTES PROPOSED WATER METER
V	DENOTES PROPOSED WATER VALVE
	DENOTES PROPOSED FIRE HYDRANT
SM	DENOTES PROPOSED SEWER MANHOLE

APPROVED
STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04.21.2021
ALL CHANGES
ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE ENGINEER OF RESPONSIBILITY FOR ERRORS AND OMISSIONS CONTAINED THEREIN. ACCEPTANCE DOES NOT ASSUME RESPONSIBILITY FOR ENGINEERING DESIGN, DIMENSIONS, QUANTITIES, CONSTRUCTION, OR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.

MIDLAND Engineering Services

	BY	APPR.	DATE
Δ			
REVISIONS			

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

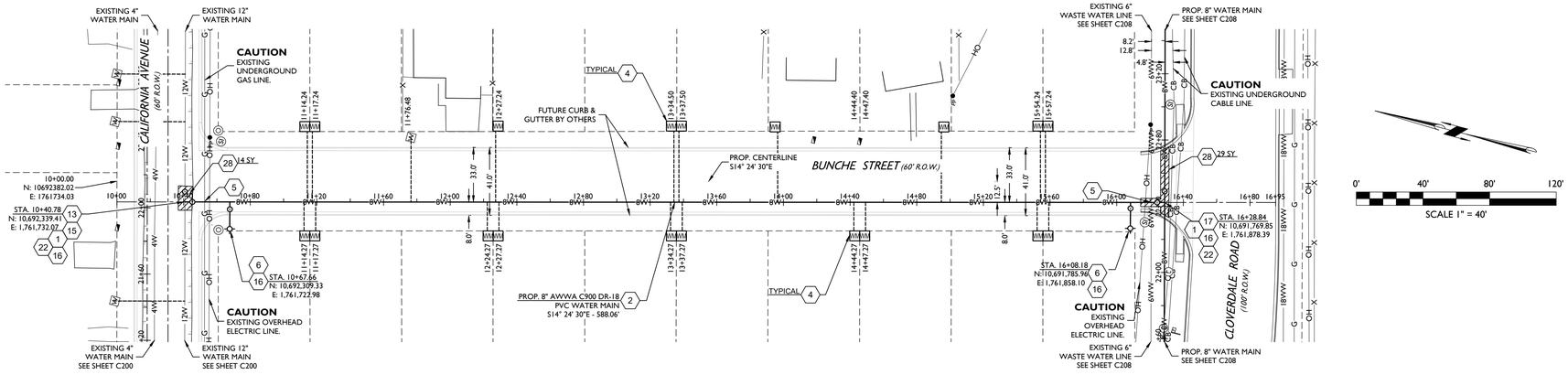
WL-2 PLAN AND PROFILE
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS
MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

SHEET C202 OF 25

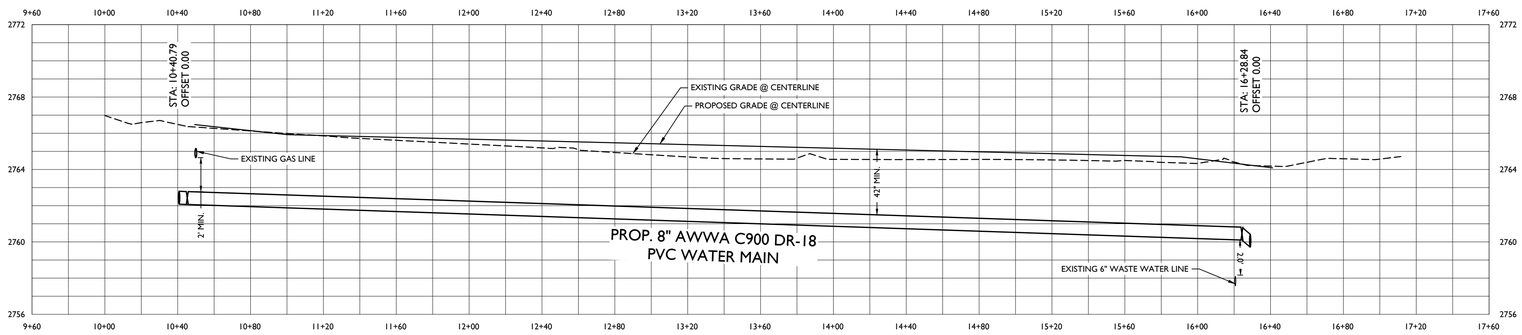
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0' 40' 80' 120'

SCALE 1" = 40'



SEWER CONSTRUCTION NOTES:

TYP. 1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

WATER CONSTRUCTION NOTES:

TYP. 1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

04.21.2021

MIDLAND Engineering Services

BY	APPR.	DATE

REVISIONS

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

WL-3 PLAN AND PROFILE

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

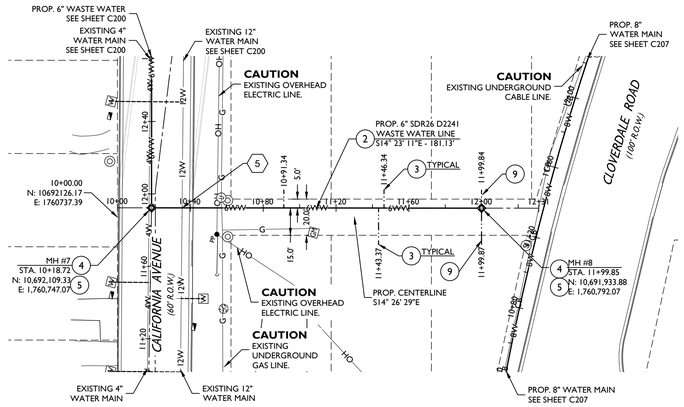
MIDLAND, TEXAS

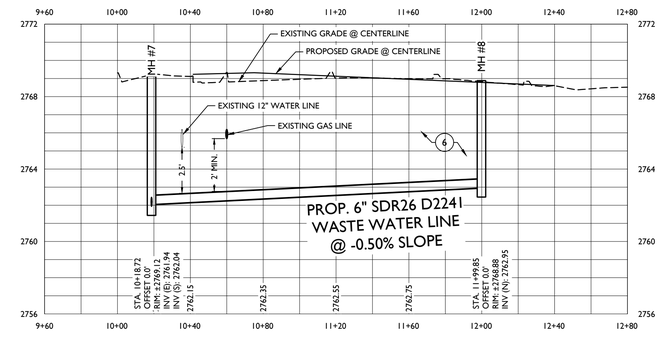
STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

SHEET C203 OF 25

F:\2020\200069\A. CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C203 WL-3 PLAN AND PROFILE.DWG

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SEWER CONSTRUCTION NOTES:

TYP (1)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

WATER CONSTRUCTION NOTES:

TYP (1)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300.
   DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE.
   MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE , TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300.
    INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
    INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN. BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
    CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
    CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAINLINE CROSSING A WATER MAINLINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

0' 40' 80' 120'
SCALE 1" = 40'

APPROVED
CITY OF MIDLAND
ENGINEERING DEPARTMENT
04.21.2021
ALL PROPOSED CONSTRUCTION SHALL CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS. ALL EXISTING UTILITIES SHALL BE PROTECTED DURING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS. ALL PROPOSED CONSTRUCTION SHALL BE INSPECTED BY THE CITY OF MIDLAND. THE CONTRACTOR SHALL NOTIFY THE CITY OF MIDLAND 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

MIDLAND Engineering Services

REVISIONS	BY	APPR.	DATE
Δ			

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

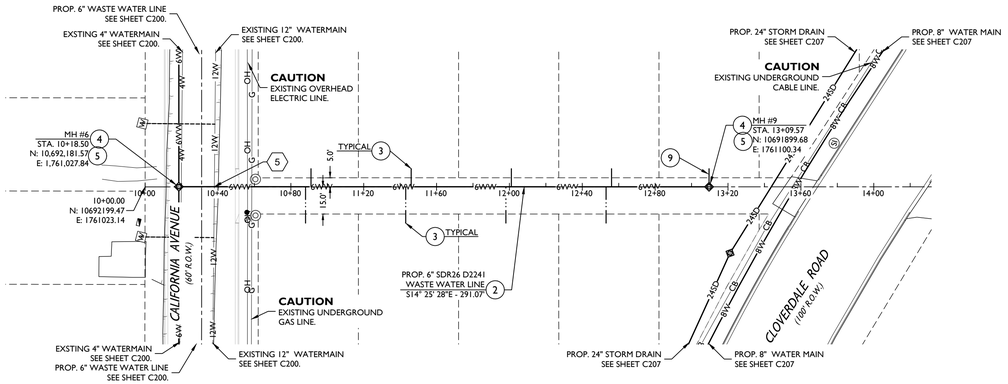
SL-B PLAN AND PROFILE
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS
MIDLAND, TEXAS

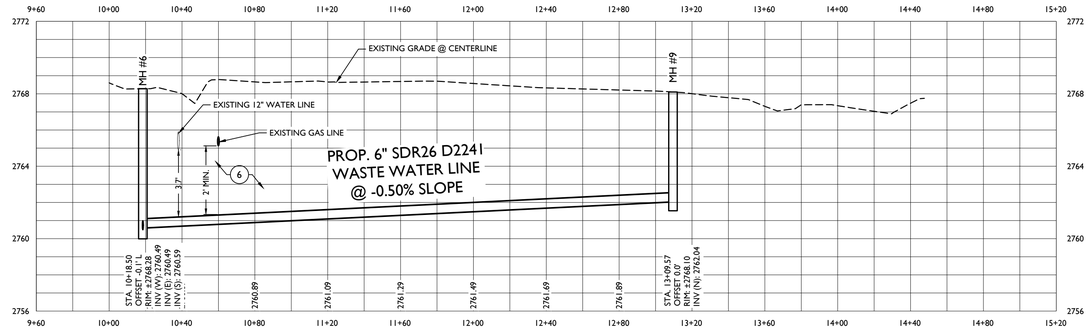
STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/19/2021

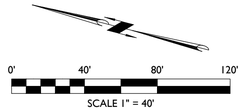
SHEET C204 OF 25

F:\2020\200069 - CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C204 SL-B PLAN AND PROFILE.DWG

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SEWER CONSTRUCTION NOTES:

TYP. (1) CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

WATER CONSTRUCTION NOTES:

TYP. (1) CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION,
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

APPROVED
CITY OF MIDLAND, TEXAS
04.21.2021
ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE ENGINEER OF RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE PLANS. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROPERLY PLACING THE IMPROVEMENTS ON THE CORRECT LOCATION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS, AND ORDINANCES. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR CONSTRUCTING THE IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR CORRECTING ANY ERRORS OR OMISSIONS NOTED DURING THE CONSTRUCTION OF THE IMPROVEMENTS. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR CONSTRUCTING THE IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR CORRECTING ANY ERRORS OR OMISSIONS NOTED DURING THE CONSTRUCTION OF THE IMPROVEMENTS.

MIDLAND Engineering Services

BY	APPR.	DATE

REVISIONS

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

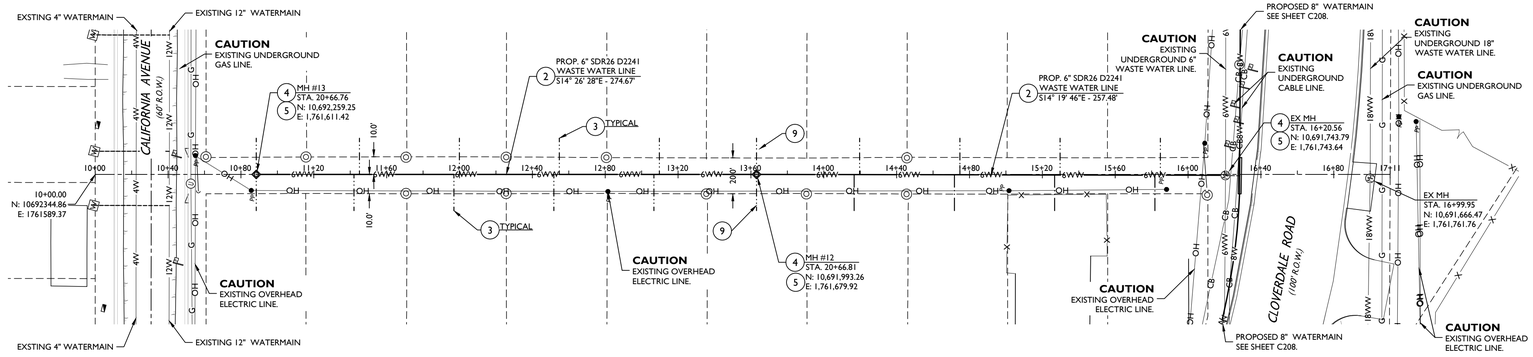
SL-C PLAN AND PROFILE
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS
MIDLAND, TEXAS

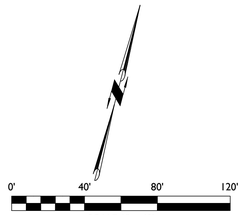
STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

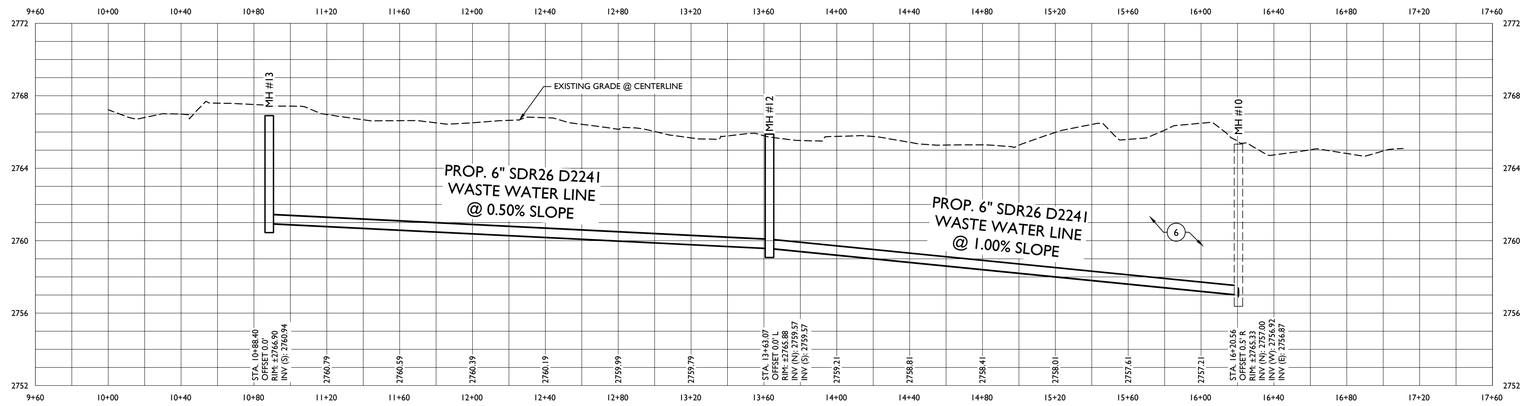
SHEET C205 OF 25

F:\2020\200069. CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\200069 C205 SL-C PLAN AND PROFILE.DWG

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SEWER CONSTRUCTION NOTES:

TYP. (1)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

WATER CONSTRUCTION NOTES:

TYP. (1)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300.
   DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE.
   MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300.
    INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
    INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
    CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
    CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- EB — DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- G — DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- MH — DENOTES EXISTING MANHOLE
- PM — DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- PP — DENOTES EXISTING POWER POLE
- SSMH — DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- V — DENOTES EXISTING WATER VALVE
- SI — DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- WM — DENOTES PROPOSED WATER METER
- V — DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- MH — DENOTES PROPOSED SEWER MANHOLE

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

04.21.2021

MIDLAND
Engineering Services

BY	APPR.	DATE

REVISIONS

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

SL-D PLAN AND PROFILE

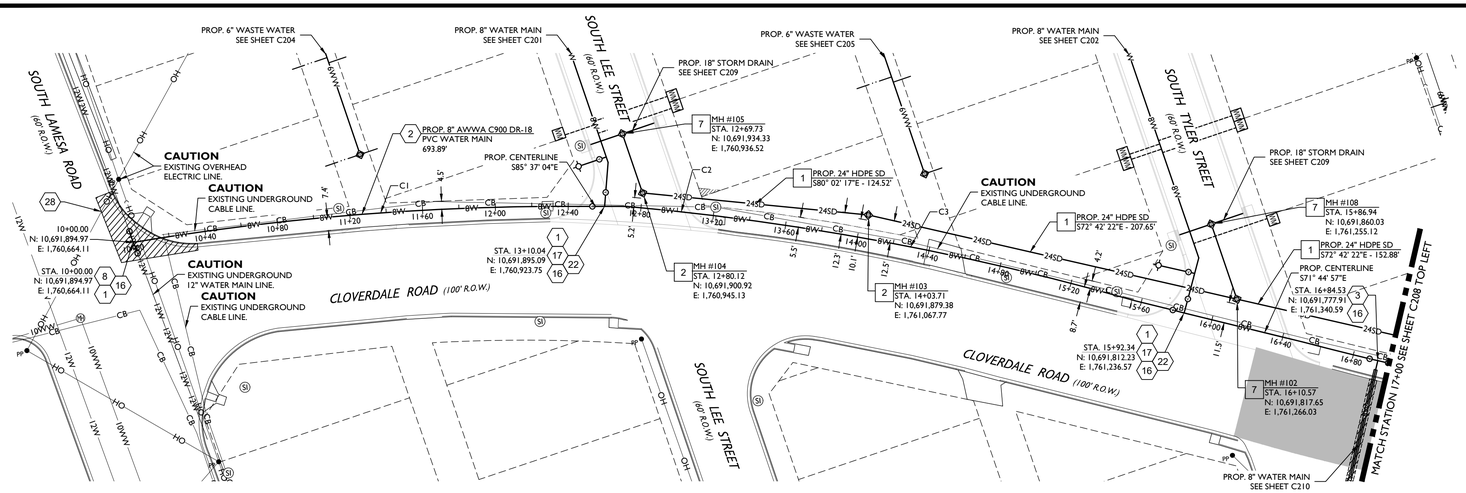
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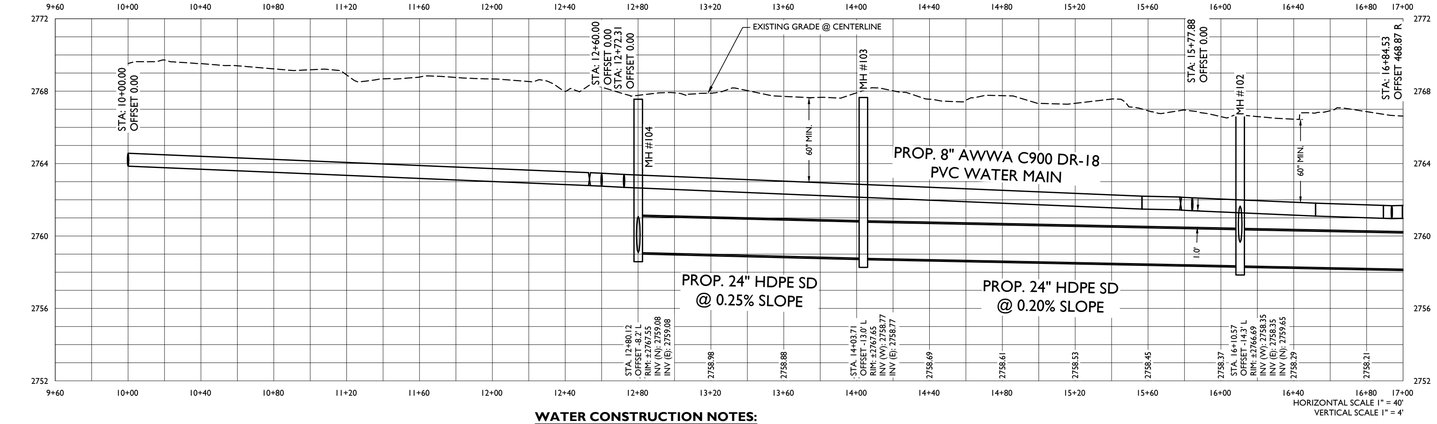
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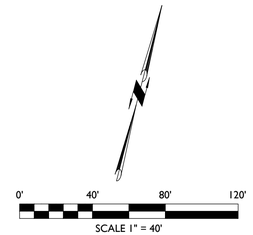
SHEET **C206** OF 25

F:\2020\200069_CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C206 SL-D PLAN AND PROFILE.DWG

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SEWER CONSTRUCTION NOTES:

TYP 1.
1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

STORM DRAIN CONSTRUCTION NOTES:

TYP L.
1. INSTALL 24" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
2. INSTALL 48" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
3. CURB INLETS TO BE INSTALLED WITH PAVING PROJECT. INSTALL STORM LATERAL AND 18" PLUG DURING UTILITY PHASE.
4. CONSTRUCT CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS PER DETAIL No. CH-FW-45 SEE SHEET C320.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL 18" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
7. INSTALL 60" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
8. INSTALL 36" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805C SEE SHEET 302.

WATER CONSTRUCTION NOTES:

TYP 1.
1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

CURVE TABLE

CURVE	ARC LENGTH	RADIUS	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	228.47'	1421.92'	228.22'	N 89° 21' 46" E	9°12'21"
C2	284.38'	1502.73'	283.95'	S 75° 03' 33" E	10°50'34"
C3	284.38'	1502.73'	283.95'	S 75° 03' 33" E	10°50'34"

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

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F:\2020\200069\5 - CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\200069 C207 WL-4 AND SD-1 PLAN AND PROFILE.DWG

MIDLAND Engineering Services

BY	APPR.	DATE

REVISIONS

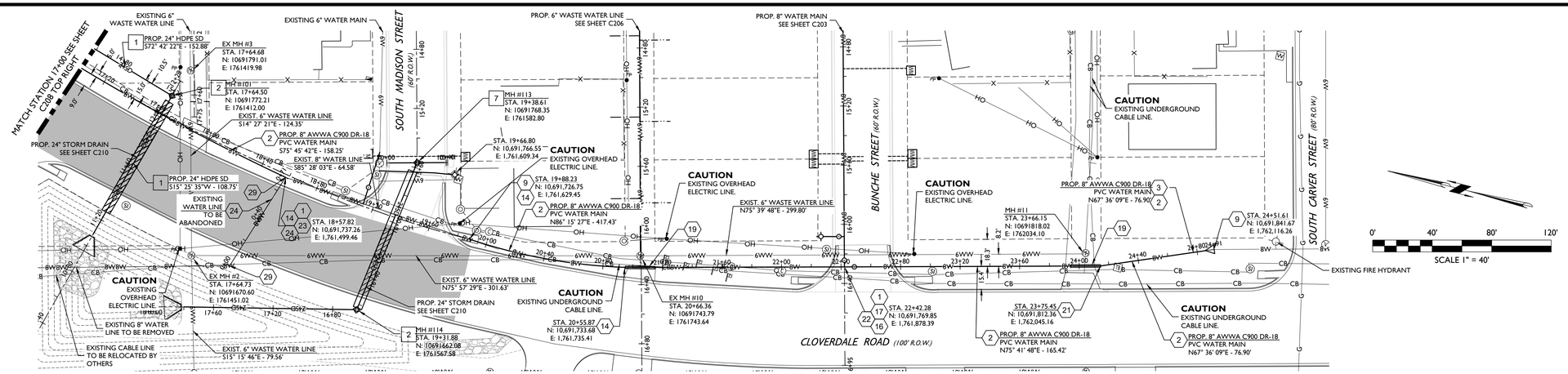
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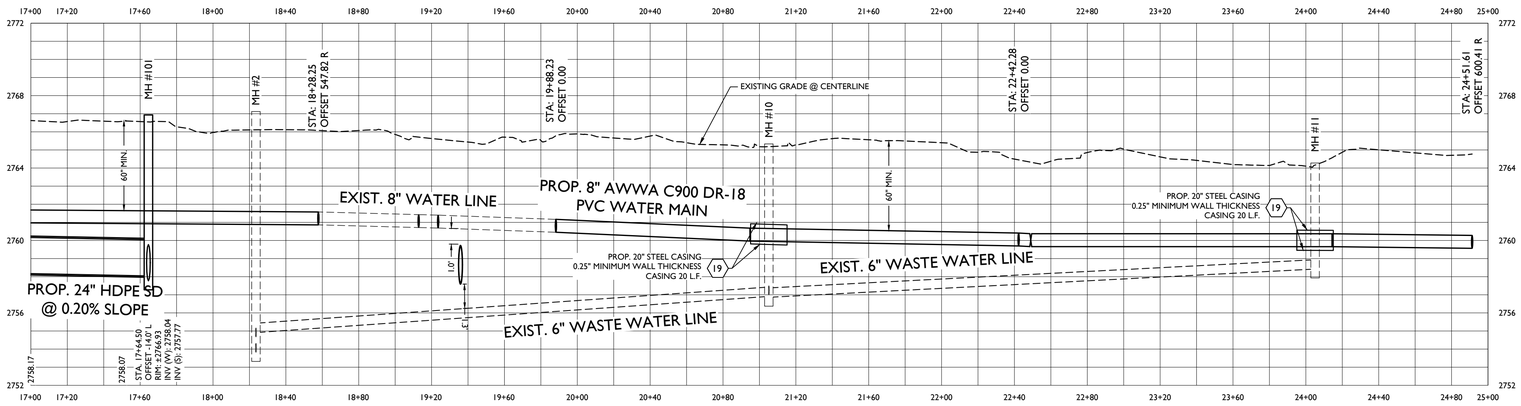
04.21.2021

WL-4 AND SD-1 PLAN AND PROFILE
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS
MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

SHEET C207 OF 25





HORIZONTAL SCALE 1" = 40'
VERTICAL SCALE 1" = 4'

SEWER CONSTRUCTION NOTES:

TYP. 1.

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

STORM DRAIN CONSTRUCTION NOTES:

TYP. 1.

1. INSTALL 24" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
2. INSTALL 48" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
3. CURB INLETS TO BE INSTALLED WITH PAVING PROJECT. INSTALL STORM LATERAL AND 18" PLUG DURING UTILITY PHASE.
4. CONSTRUCT CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS PER DETAIL No. CH-FWV-45 SEE SHEET C320.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL 18" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
7. INSTALL 60" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
8. INSTALL 36" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805C SEE SHEET 302.

WATER CONSTRUCTION NOTES:

TYP. 1.

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

APPROVED 04.21.2021 MIDLAND DEVELOPMENT CODE ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MIDLAND DEVELOPMENT CODE AND ALL OTHER APPLICABLE CITY ORDINANCES AND REGULATIONS

ANDREW L. MELLEN 106572 LICENSED PROFESSIONAL ENGINEER
04/16/2021

MIDLAND Engineering Services

BY	APPR.	DATE	REVISIONS

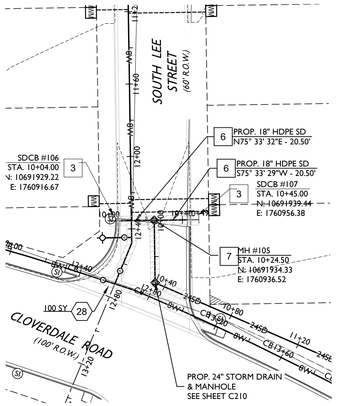
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JOB: 200069

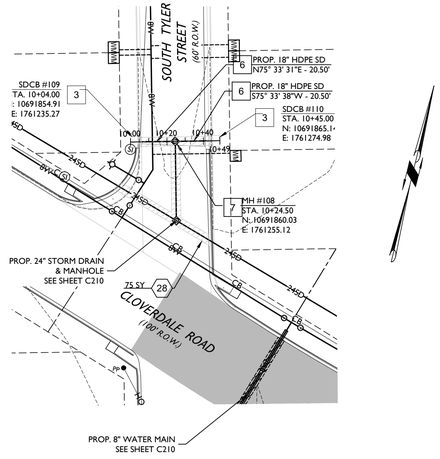
WL-4 PLAN AND PROFILE
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS
MIDLAND, TEXAS

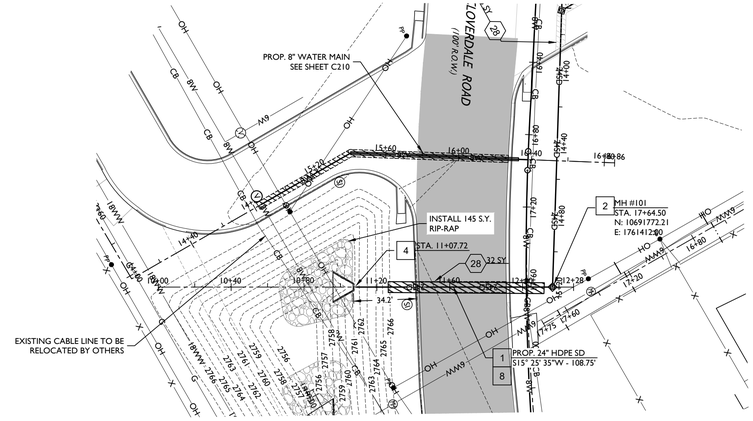
SHEET C208 OF 25

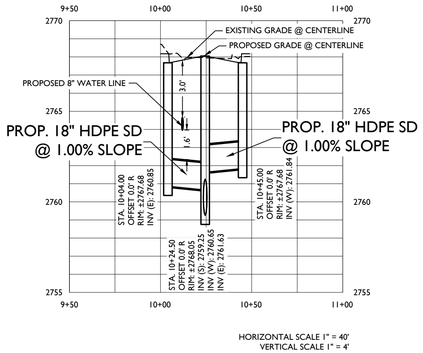
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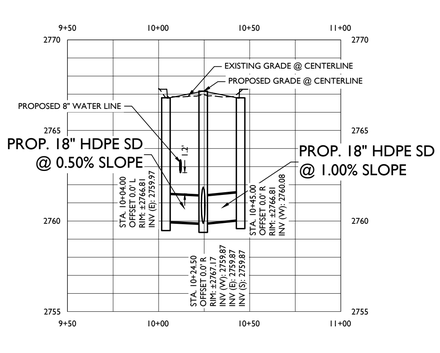
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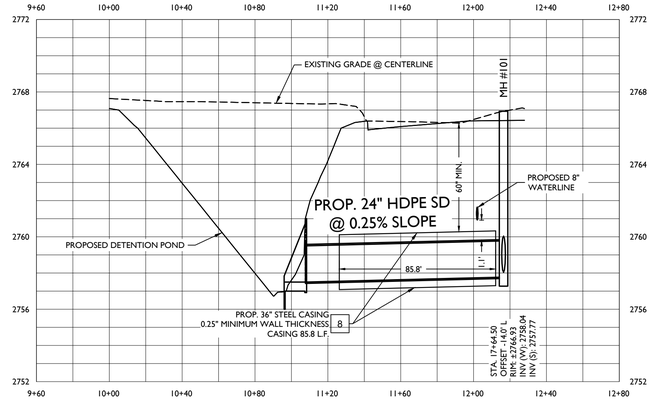












SEWER CONSTRUCTION NOTES:

TYP. (1.)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

STORM DRAIN CONSTRUCTION NOTES:

TYP. (1.)

1. INSTALL 24" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
2. INSTALL 48" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL NO. 313(A) AND 313(B) SEE SHEET C310.
3. CURB INLETS TO BE INSTALLED WITH PAVING PROJECT. INSTALL STORM LATERAL AND 18" PLUG DURING UTILITY PHASE.
4. PLUG STORM DRAIN AND MARK FOR FUTURE HEADWALL TO BE CONSTRUCTED WITH DETENTION POND BY PAVING CONTRACTOR.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL 18" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
7. INSTALL 60" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
8. INSTALL 36" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805C SEE SHEET 302.

WATER CONSTRUCTION NOTES:

TYP. (1.)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300. INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL NO. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAINLINE CROSSING A WATER MAINLINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION,
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

APPROVED 04.21.2021
ALL CHANGES MUST BE APPROVED BY THE ENGINEER AND CITY PRIOR TO CONSTRUCTION. ANY CHANGES MADE WITHOUT APPROVAL MAY BE REJECTED. ALL CONSTRUCTION MUST COMPLY WITH CITY OF MIDLAND STANDARDS AND SPECIFICATIONS. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR CORRECTING ERRORS OR OMISSIONS CONTAINED IN THESE PLANS. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR COMPLYING WITH ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE SAFETY MEASURES DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE TRAFFIC CONTROL DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE EROSION CONTROL DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE TRENCH SAFETY DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE SHORING DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE BARRICADES DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE LIGHTING DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE SIGNAGE DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE FENCING DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE BARRICADES DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE LIGHTING DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE SIGNAGE DURING CONSTRUCTION. APPROVAL OF THESE PLANS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROVIDING ADEQUATE FENCING DURING CONSTRUCTION.

MIDLAND Engineering Services

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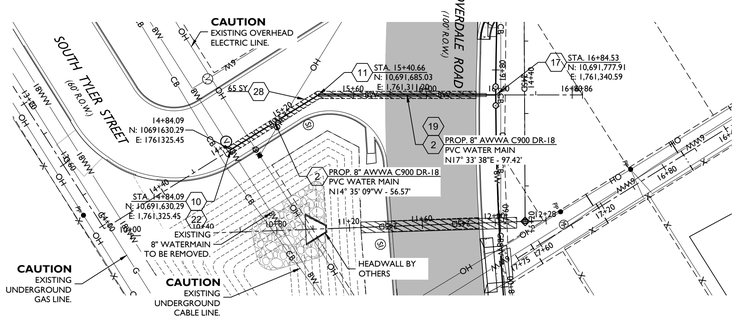
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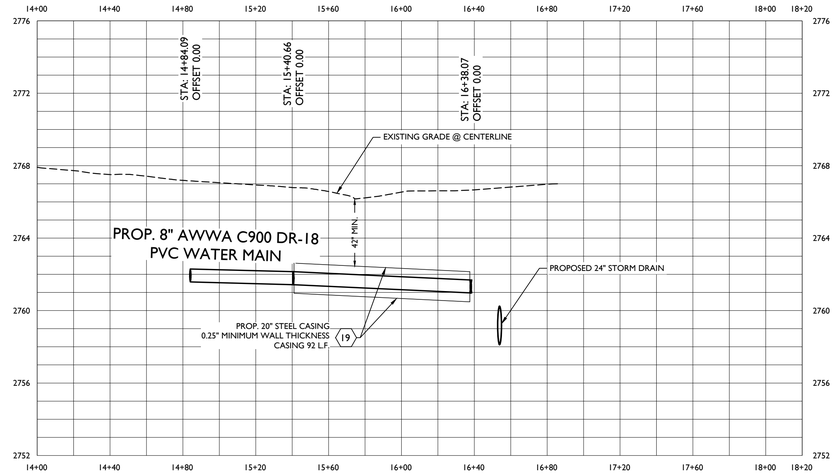
SD PLAN AND PROFILE
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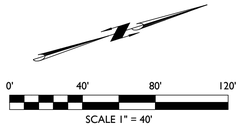
STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/07/2021

SHEET C209 OF 25

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F:\2020\200069\ CITY OF MIDLAND\PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C209 SD PLAN AND PROFILE.DWG







SEWER CONSTRUCTION NOTES:

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3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

WATER CONSTRUCTION NOTES:

TYP. (1)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300. DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE. MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300. INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
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9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
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19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
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21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
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24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
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- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
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- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
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- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

STATE OF TEXAS
APPROVED
ENGINEERING PLANS
ALL PERMITS REQUIRED FOR IMPLEMENTATION OF THIS PROJECT HAVE BEEN OBTAINED AND ARE VALID FOR CONSTRUCTION
DATE: 04.21.2021

MIDLAND
Engineering Services

	BY	APPR.	DATE
REVISIONS			

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

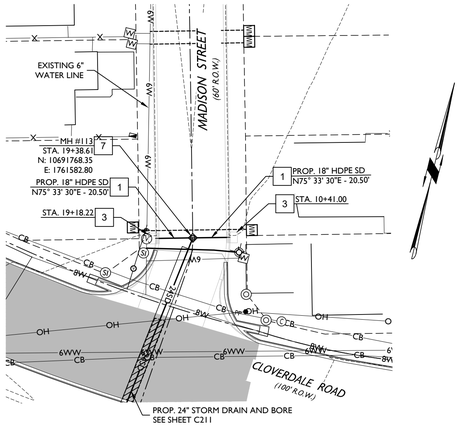
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MIDLAND, TEXAS

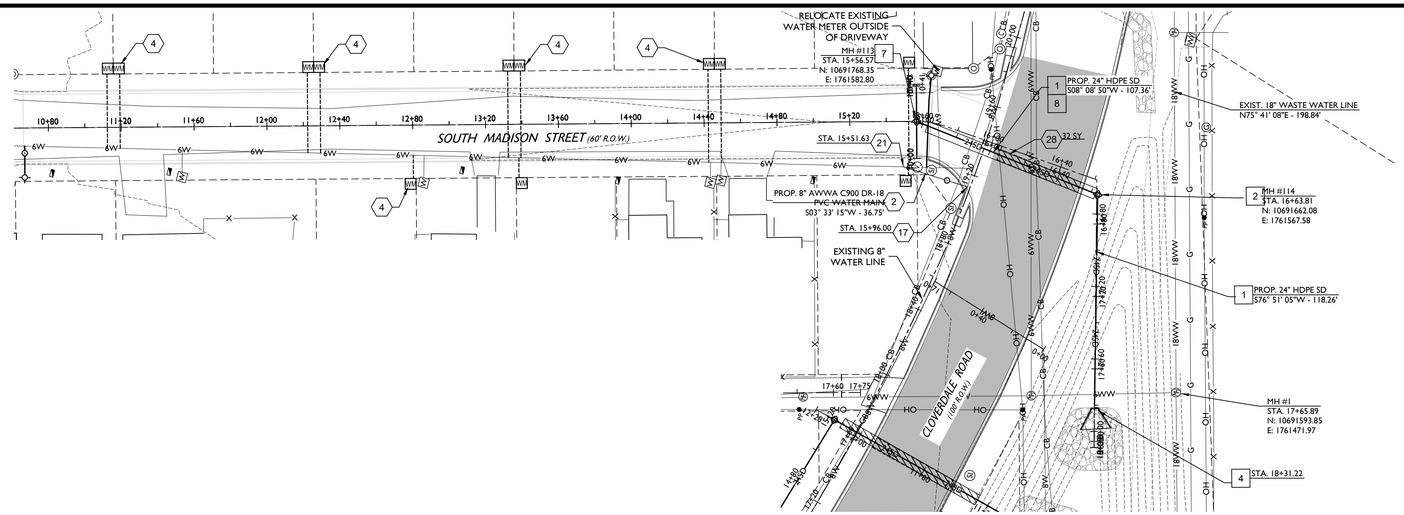
STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

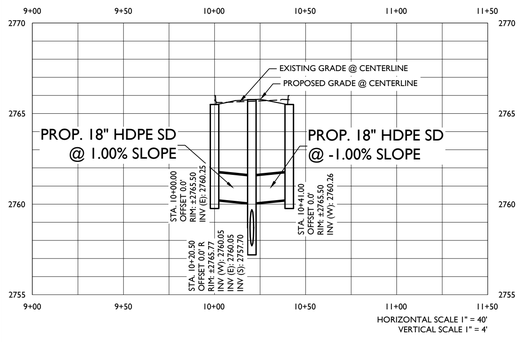
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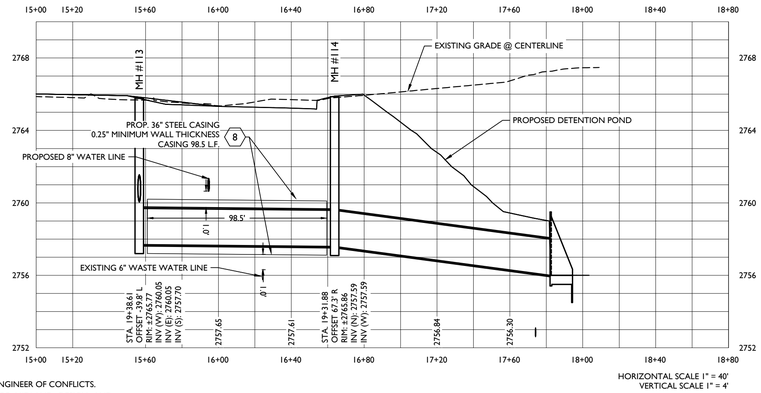
F:\2020\200069\ CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C110 WL-5 PLAN AND PROFILE.DWG

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SEWER CONSTRUCTION NOTES:

TYP. (1.)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS. WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

STORM DRAIN CONSTRUCTION NOTES:

TYP. (1.)

1. INSTALL 24" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
2. INSTALL 48" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
3. CURB INLETS TO BE INSTALLED WITH PAVING PROJECT. INSTALL STORM LATERAL AND 18" PLUG DURING UTILITY PHASE.
4. PLUG STORM DRAIN AND MARK FOR FUTURE HEADWALL TO BE CONSTRUCTED WITH DETENTION POND BY PAVING CONTRACTOR.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL 18" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
7. INSTALL 60" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
8. INSTALL 36" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805C SEE SHEET 302.

WATER CONSTRUCTION NOTES:

TYP. (1.)

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300.
   DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE.
   MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL No. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300.
    INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (MJ X MJ) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
    INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
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ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
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- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
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- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
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LEGEND

(C)	DENOTES FOUND MONUMENT AS NOTED
EB	DENOTES EXISTING ELECTRIC BOX
	DENOTES EXISTING FIRE HYDRANT
G	DENOTES EXISTING GAS RISER
	DENOTES EXISTING GUY ANCHOR
	DENOTES EXISTING LIGHT POLE
MH	DENOTES EXISTING MANHOLE
PL	DENOTES EXISTING PIPELINE MARKER
	DENOTES EXISTING PIPELINE VENT
PP	DENOTES EXISTING POWER POLE
SBT	DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
V	DENOTES EXISTING WATER VALVE
SI	DENOTES EXISTING SIGN
	DENOTES EXISTING MAIL BOX
	DENOTES BOUNDARY LINE
	DENOTES EXISTING EASEMENT LINE
	DENOTES EDGE OF ASPHALT
CB	DENOTES EXISTING UNDERGROUND CABLE LINE
X	DENOTES EXISTING FENCE
OH	DENOTES EXISTING OVERHEAD ELECTRIC LINE
PL	DENOTES EXISTING UNDERGROUND PIPELINE
6W	DENOTES EXISTING 6" WATER LINE
12W	DENOTES EXISTING 12" WATER LINE
6SS	DENOTES EXISTING 6" SEWER LINE
8W	DENOTES PROPOSED 8" WATER LINE
8SS	DENOTES PROPOSED 8" SEWER LINE
	DENOTES PROPOSED WATER SERVICE LINE
	DENOTES PROPOSED SEWER SERVICE LINE
WM	DENOTES PROPOSED WATER METER
V	DENOTES PROPOSED WATER VALVE
	DENOTES PROPOSED FIRE HYDRANT
MH	DENOTES PROPOSED SEWER MANHOLE

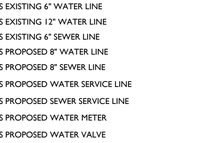


MIDLAND Engineering Services

REVISIONS	BY	APPR.	DATE

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

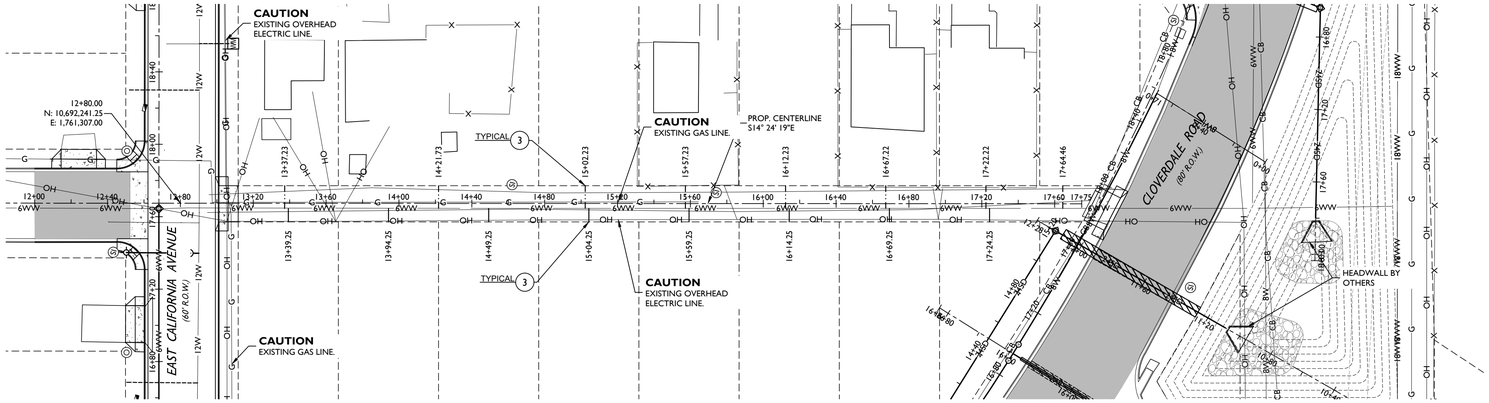
SD PLAN AND PROFILE
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MIDLAND, TEXAS

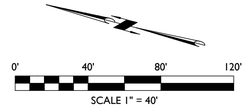


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TYP (1.) CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

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3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
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7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
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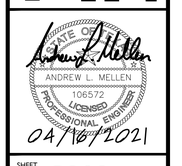
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G	DENOTES EXISTING GAS RISER
	DENOTES EXISTING GUY ANCHOR
	DENOTES EXISTING LIGHT POLE
MH	DENOTES EXISTING MANHOLE
PM	DENOTES EXISTING PIPELINE MARKER
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PP	DENOTES EXISTING POWER POLE
SBT	DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
V	DENOTES EXISTING WATER VALVE
S	DENOTES EXISTING SIGN
	DENOTES EXISTING MAIL BOX
	DENOTES BOUNDARY LINE
	DENOTES EXISTING EASEMENT LINE
	DENOTES EDGE OF ASPHALT
CB	DENOTES EXISTING UNDERGROUND CABLE LINE
X	DENOTES EXISTING FENCE
OH	DENOTES EXISTING OVERHEAD ELECTRIC LINE
PL	DENOTES EXISTING UNDERGROUND PIPELINE
6W	DENOTES EXISTING 6" WATER LINE
12W	DENOTES EXISTING 12" WATER LINE
6SS	DENOTES EXISTING 6" SEWER LINE
8W	DENOTES PROPOSED 8" WATER LINE
8SS	DENOTES PROPOSED 8" SEWER LINE
	DENOTES PROPOSED WATER SERVICE LINE
	DENOTES PROPOSED SEWER SERVICE LINE
WM	DENOTES PROPOSED WATER METER
V	DENOTES PROPOSED WATER VALVE
	DENOTES PROPOSED FIRE HYDRANT
MH	DENOTES PROPOSED SEWER MANHOLE





MIDLAND Engineering Services

△	REVISIONS	BY	APPR.	DATE

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200669

EXISTING SEWER SERVICE LINE PLAN

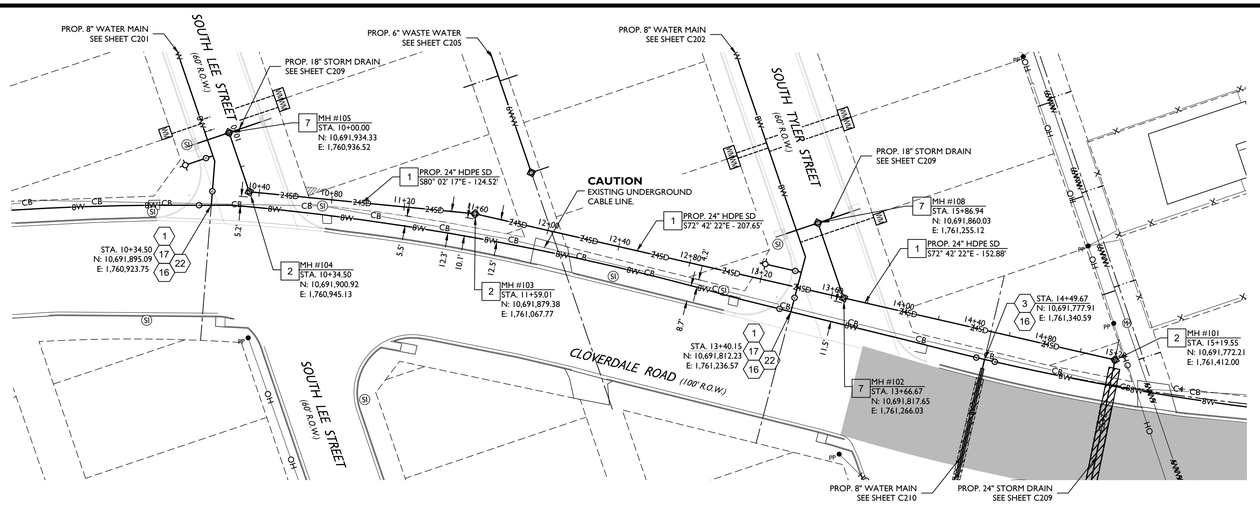
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

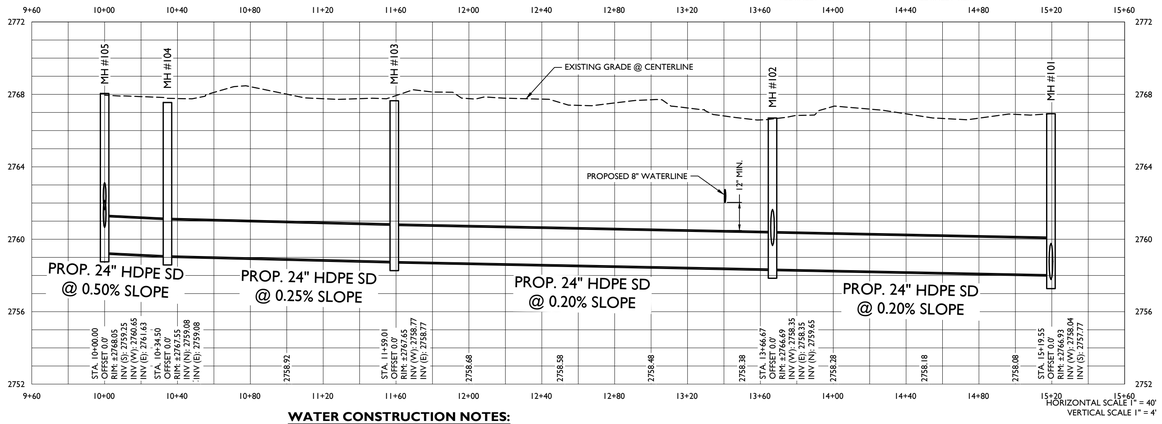
MIDLAND, TEXAS

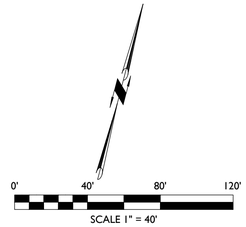
SHEET C212 OF 25

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F:\2020\200069 - CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS 200069 C212 EXISTING SEWER SERVICE LINE PLAN.DWG







SEWER CONSTRUCTION NOTES:

TYP. 1.

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL SDR35 OR ASTM D2241 SDR26 SPECIFIED PER PLANS, WASTEWATER MAIN. (SIZE AND SLOPE PER PLAN). WASTEWATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL No. 310(A) AND 310(B) SEE SHEET C310.
3. INSTALL 4" WASTEWATER SERVICE LINE TAP PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311.
4. INSTALL 48" DIA. FIBERGLASS WASTEWATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310. CONTRACTOR IS TO INSTALL CONCRETE RING AROUND MANHOLES IN ALLEYS.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
7. REMOVE PLUG, FIELD PREPARE PIPE FOR DRESSER COUPLING.
8. CONTRACTOR TO INSTALL PROPOSED WASTEWATER MAIN AT EXISTING INVERT IN EXISTING WASTEWATER MANHOLE.
9. INSTALL 6" WASTEWATER SERVICE LINE PER CITY OF MIDLAND DETAIL No. 507 SEE SHEET C311. INSTALL SERVICE LINE INTO MANHOLE.

STORM DRAIN CONSTRUCTION NOTES:

TYP. 1.

1. INSTALL 24" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
2. INSTALL 48" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
3. CURB INLETS TO BE INSTALLED WITH PAVING PROJECT. INSTALL STORM LATERAL AND 18" PLUG DURING UTILITY PHASE.
4. CONSTRUCT CONCRETE HEADWALLS WITH FLARED WINGS FOR 0° SKEW PIPE CULVERTS PER DETAIL No. CH-FW-45 SEE SHEET C320.
5. CONTRACTOR TO ADJUST MANHOLE FRAME AND COVER TO FINAL GRADE.
6. INSTALL 18" DIAMETER STORM DRAIN AS SHOWN. HDPE ADS N-12WT OR APPROVED EQUAL. LENGTH AND SLOPE OF PIPE SEGMENT PER PLANS.
7. INSTALL 60" STORM WATER MANHOLE PER CITY OF MIDLAND DETAIL No. 313(A) AND 313(B) SEE SHEET C310.
8. INSTALL 36" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805C SEE SHEET 302.

WATER CONSTRUCTION NOTES:

TYP. 1.

1. CAUTION: CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
2. INSTALL 8" DIAMETER AWWA C900 DR-18 PVC WATER MAIN. WATER MAIN BEDDING IS TO CONFORM TO THE CITY OF MIDLAND DESIGN AND CONSTRUCTION STANDARDS DETAIL NO. 310(A) AND 310(B) SEE SHEET C300. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE DURING CONSTRUCTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
3. INSTALL 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
4. INSTALL 1" WATER METER SERVICE CONNECTION PER CITY OF MIDLAND DETAIL No. 604(A) AND 604(B) SEE SHEET C300.
   DO NOT INSTALL WATER METERS AT VACANT LOTS, INSTALL BOXES ONLY.
5. MAINTAIN MIN. 2' OF CLEARANCE OVER TOP OF NON-POTABLE UTILITY LINE.
   MAINTAIN MIN. 1' OF CLEARANCE OVER TOP OF STORM DRAIN LINE.
6. INSTALL 8"x6" TEE, MJxFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL FIRE HYDRANT ASSEMBLY PER CITY OF MIDLAND DETAIL No. 603 SEE SHEET C300.
7. INSTALL 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 8" GATE VALVE WITH VALVE BOX MJxMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
8. INSTALL 12" x 8" TEE, MJxMJ PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
   INSTALL 2 EA. 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
9. REMOVE 8" CAP. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, PIPE AND MATERIALS AND PREPARE PIPE . TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
10. INSTALL 8" 90° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
11. INSTALL 8" 45° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C301.
12. INSTALL 8" CROSS (M) X M)) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
13. INSTALL 12" x 8" TEE, MJxFL PER CITY OF MIDLAND DETAIL No. 615 SEE SHEET C301 AND DETAIL No. 601 SEE SHEET C300.
14. BEGIN/END PIPE DEFLECTION. DEFLECT LINE A MAXIMUM OF 5° PER FITTINGS OR 1° PER JOINTS TO ADJUST FOR HORIZONTAL AND/OR VERTICAL ALIGNMENT.
15. INSTALL 12" GATE VALVE WITH VALVE BOX MJ X MJ PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
16. CONTRACTOR TO ADJUST VALVE AND VALE BOX TO FINAL GRADE.
17. INSTALL 8" TEE, MJXFL PER CITY OF MIDLAND DETAIL NO. 615 SEE SHEET C301 AND DETAIL NO. 601 SEE SHEET C300.
    INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
18. INSTALL 8" CROSS (M) X M)) WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 614 ON SHEET C300.
    INSTALL 3 EA. 8" GATE VALVE WITH VALVE BOX MJXMJ, PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
19. INSTALL 20" STEEL CASING, 0.25" MINIMUM WALL THICKNESS PER CITY OF MIDLAND DETAIL No. 805 SEET SHEET C302.
20. INSTALL TRENCH PROTECTION FOR EXCAVATIONS GREATER THAN 5 FEET.
21. INSTALL 8" 11.25° BEND WITH THRUST BLOCKING PER CITY OF MIDLAND DETAIL 616 ON SHEET C310.
22. INSTALL 1 EA. 8" GATE VALVE WITH VALVE BOX MJXFL PER CITY OF MIDLAND DETAIL NO. 608(A) AND 608(B) SEE SHEET C300.
23. CONTRACTOR TO CUT EXISTING 8" TEE AND TIE-IN PROPOSED 8" WATER MAIN TO EXISTING 8" WATER MAIN STUB OUT, INSTALL 1 EA. 8" DRESSER COUPLING.
24. CONTRACTOR TO FILL ABANDONED 8" WATER MAIN WITH CITY APPROVED FLOWABLE FILL.
25. CLOSE VALVE ON EXISTING 4" WATER MAIN, BREAK NUT, AND FILL VALVE BOX WITH CONCRETE. ABANDON EXISTING 4" WATER MAIN UNDER EXISTING PAVEMENT, FILL WITH FLOWABLE FILL AND CAP END.
26. REMOVE 1,440 LF OF EXISTING 4" WATER MAIN. RECONNECT ALL WATER SERVICES IN CALIFORNIA AVENUE TO 12" WATER MAIN. EXTEND LATERALS AS NEEDED. TYPICALLY 18 LF.
27. REMOVE 4" WATER VALVES AND TEE FITTING CONNECTED TO 4" WATER MAIN. REPLACE TEE WITH 6" WATER MAIN.
28. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MEET OR EXCEED EXISTING PAVEMENT SECTION PER CITY STANDARDS. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING ASPHALT. DETERMINATION OF EXACT LOCATION MAY NEED TO BE FIELD VERIFIED BY CONTRACTOR. CONTRACTOR TO NOTIFY ENGINEER OF RECORD OF ANY DAMAGE OR TIE IN PROBLEMS.
    CALIFORNIA PAVEMENT REPLACEMENT AREA: 951 SY
    CLOVERDALE PAVEMENT REPLACEMENT AREA: 337 SY
29. CONTACTOR TO INSTALL 8" CAP TO EXISTING WATER MAIN AFTER FILLING WITH FLOWABLE FILL.

ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF MIDLAND TO BE NOTIFIED 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
- PIPE DEFLECTION IS TO BE PER MANUFACTURER'S RECOMMENDATIONS OR PER CITY REQUIREMENTS, WHICHEVER ALLOWS THE LESSER AMOUNT OF DEFLECTION.
- ALL UTILITIES TO BE INSTALLED PER TEXAS ADMINISTRATIVE CODE (TAC) STANDARD SEPARATION SPECIFICATIONS.
- A TWO (2) FOOT MINIMUM VERTICAL SEPARATION IS TO BE PROVIDED BETWEEN ANY SEWER MAIN/LINE CROSSING A WATER MAIN/LINE.
- EXCEPTIONS OR DEVIATIONS FROM THE ABOVE MINIMUM CLEARANCES MUST BE APPROVED AND SHOWN ON THE APPROVED WATER AND SEWER PLANS. WHEN UTILITY CONFLICTS ARE FOUND DURING CONSTRUCTION, ALL CHANGES AND REVISIONS MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
- ANY AND ALL MORE STRINGENT REQUIREMENTS REQUIRED BY FEDERAL, STATE, COUNTY OR LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL CONSTRUCTION IN THE RIGHT OF WAY IS TO CONFORM TO THE CITY OF MIDLAND STANDARDS.
- ALL CONSTRUCTION ON SITE IS TO CONFORM TO MAVERICK ENGINEERING NOTES AND DETAIL SHEETS.
- CONCRETE OR ASPHALT DAMAGED DURING THE COURSE OF CONSTRUCTION IS TO BE REMOVED AND REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF MIDLAND PRIOR TO FINAL INSPECTION.
- WASTE WATER IS TO BE PVC-SDR-35 UNLESS NOTED OTHERWISE.
- WATER IS TO BE C-900 PVC PIPE UNLESS NOTED OTHERWISE.
- THE CONTRACTOR IS TO PROVIDE ALL THRUST BLOCKING AT ALL FITTINGS AND BENDS AS REQUIRED. COMPLY WITH DETAILS IN THE CITY OF MIDLAND'S DESIGN & CONSTRUCTION STANDARDS.
- THE CONTRACTOR IS TO KEEP ALL EXISTING WATER AND SEWER MAINS IN SERVICE DURING CONSTRUCTION.
- ANY PROPOSED GAS LINES SHOWN ARE FOR SCHEMATIC PLANNING PURPOSES ONLY. ACTUAL GAS LINE ROUTES ARE TO BE NEGOTIATED BETWEEN THE CONTRACTOR AND THE GAS UTILITY PROVIDER. MAVERICK ENGINEERING DOES NOT ENGAGE IN GAS LINE DESIGN. PLEASE CONSULT WITH YOUR M.E.P. PLAN PROVIDER AND GAS UTILITY PROVIDER FOR GAS LINE DESIGN.

LEGEND

- DENOTES FOUND MONUMENT AS NOTED
- DENOTES EXISTING ELECTRIC BOX
- DENOTES EXISTING FIRE HYDRANT
- DENOTES EXISTING GAS RISER
- DENOTES EXISTING GUY ANCHOR
- DENOTES EXISTING LIGHT POLE
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING PIPELINE MARKER
- DENOTES EXISTING PIPELINE VENT
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING SOUTHWESTERN BELL MANHOLE
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING SIGN
- DENOTES EXISTING MAIL BOX
- DENOTES BOUNDARY LINE
- DENOTES EXISTING EASEMENT LINE
- DENOTES EDGE OF ASPHALT
- CB — DENOTES EXISTING UNDERGROUND CABLE LINE
- X — DENOTES EXISTING FENCE
- OH — DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL — DENOTES EXISTING UNDERGROUND PIPELINE
- 6W — DENOTES EXISTING 6" WATER LINE
- 12W — DENOTES EXISTING 12" WATER LINE
- 6SS — DENOTES EXISTING 6" SEWER LINE
- 8W — DENOTES PROPOSED 8" WATER LINE
- 8SS — DENOTES PROPOSED 8" SEWER LINE
- DENOTES PROPOSED WATER SERVICE LINE
- DENOTES PROPOSED SEWER SERVICE LINE
- DENOTES PROPOSED WATER METER
- DENOTES PROPOSED WATER VALVE
- DENOTES PROPOSED FIRE HYDRANT
- DENOTES PROPOSED SEWER MANHOLE

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F:\2020\200669\6. CITY OF MIDLAND-PARK AVENUE HEIGHTS 3\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200669 C213 SD-1 PLAN AND PROFILE.DWG

MIDLAND Engineering Services

BY	APPR.	DATE

REVISIONS

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200669

04.21.2021 not released for construction

SD-1 PLAN AND PROFILE

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED PROFESSIONAL ENGINEER
04/07/2021

SHEET C213 OF 25

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F:\2020\200069- CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C300 WATER DETAILS.DWG

APPROVED COMPONENT LIST

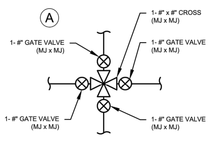
	1" WATER METER SERVICE	2" WATER METER SERVICE
1	SADDLE (OPTION 1: DUCTILE IRON WITH DUAL BRASS CC THREAD STEEL STRAP)	SADDLE (OPTION 1: DUCTILE IRON WITH DUAL BRASS CC THREAD STEEL STRAP)
2	FORD FCC000 SADDLE -OR- A.Y. MCDONALD SERIES 6855A -OR APPROVED EQUAL	FORD FCC000 SADDLE -OR- A.Y. MCDONALD SERIES 6855A -OR APPROVED EQUAL
3	SADDLE (OPTION 2: BRASS WITH DUAL BRASS CC THREAD STEEL STRAP)	SADDLE (OPTION 2: BRASS WITH DUAL BRASS CC THREAD STEEL STRAP)
4	FORD 202S60 SADDLE -OR- A.Y. MCDONALD SERIES 3855 -OR APPROVED EQUAL	FORD 202S60 SADDLE -OR- A.Y. MCDONALD SERIES 3855 -OR APPROVED EQUAL
1	CORPORATION STOP	CORPORATION STOP
2	FORD FB1000-4-G-NL -OR- A.Y. MCDONALD SERIES 74701B-22 1 -OR APPROVED EQUAL	FORD FB1000-4-G-NL -OR- A.Y. MCDONALD SERIES 74701B-22 2 -OR APPROVED EQUAL
3	CURB STOP METER VALVE	CURB STOP METER VALVE
4	FORD B44-333W-G-NL -OR- MUELLER B-24333N -OR- A.Y. MCDONALD SERIES 74603B-22 1 -OR APPROVED EQUAL	FORD B44-444W-G-NL -OR- MUELLER B-24444N -OR- A.Y. MCDONALD SERIES 74603B-22 2 -OR APPROVED EQUAL
1	WATER METER BOX	WATER METER BOX
2	EAST JORDAN 23197090A02 -OR APPROVED EQUAL	EAST JORDAN 23244090A01 -OR APPROVED EQUAL
3	SERVICE LINE PIPE 1. CITY APPROVED POLYETHYLENE TUBING 2. ASTM D2737 3. SDR 9, 200 PSI -OR APPROVED EQUAL	SERVICE LINE PIPE 1. CITY APPROVED POLYETHYLENE TUBING 2. ASTM D2737 3. SDR 9, 200 PSI -OR APPROVED EQUAL

NOTES:
1. ALL COMPONENTS OF ANY WATER METER SERVICE LINE MUST COME FROM THE SAME BRAND WHENEVER POSSIBLE.
2. PLASTIC MAY NOT BE USED ON ANY METER SERVICE LINE.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

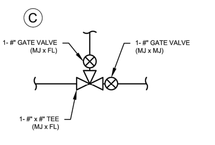
DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	1" AND 2" WATER METER AND SERVICE CONNECTION		604(B)
APPROVED: MCC			

MIDLAND Engineering Services

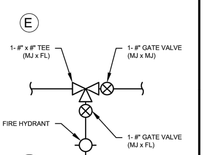
CROSS FITTING RESTRAINTS



TEE FITTING RESTRAINTS



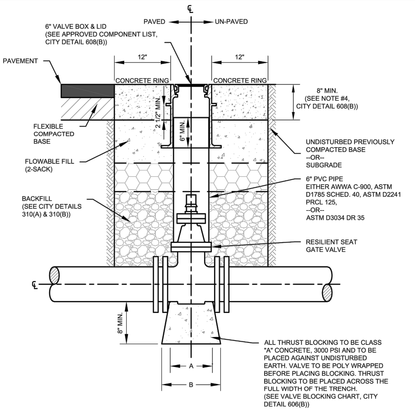
FIRE HYDRANT RESTRAINTS



NOTES:
1. ALL MECHANICAL JOINT (MJ) FITTINGS TO BE RESTRAINED.
2. ALL FLANGES (FL) TO BE ON THE BRANCH SIDE OF TEE FITTINGS.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	TYPICAL FITTING RESTRAINT CONFIGURATIONS		601
APPROVED: MCC			

MIDLAND Engineering Services



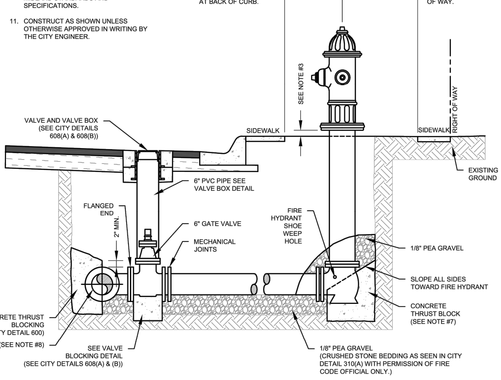
DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	TYPICAL VALVE AND VALVE BOX		608(A)
APPROVED: MCC			

MIDLAND Engineering Services

NOTES:
1. SET ALL VALVE BOXES IN A CONCRETE COLLAR WHEN PLACED AT THEIR FINAL GRADE. (SEE CITY DETAILS 606(A) & (B))
2. ALL CONCRETE PAVEMENT TO BE CLASS "C" CONCRETE, 3600 PSI.
3. LEAVE VALVE BOX 6" TO 12" ABOVE GRADE FOR NEW DEVELOPMENT AND OTHER STREETS AND ALLEYS SCHEDULED FOR IMMEDIATE PAVING UNTIL STREET WORK IS DONE. PAVING CONTRACTOR TO ADJUST VALVE BOX TO FINISHED GRADE BEFORE PLACING LAST COURSE OF HMAC SURFACE.
4. SET FRANGIBLE FLANGE OF FIRE HYDRANT A MINIMUM OF 2" AND A MAXIMUM OF 9" ABOVE SIDEWALK ELEVATION.
5. ON STREETS WHERE NO SIDEWALK IS TO BE CONSTRUCTED, SET CENTERLINE OF FIRE HYDRANT AT 3' FROM PROPERTY LINE WITHIN RIGHT OF WAY.
6. PLACE FIRE HYDRANT CUT-OFF VALVE A MINIMUM OF 3' FROM THE CENTER LINE OF THE FIRE HYDRANT. THIS MAY REQUIRE THE USE OF A 90° BEND TO OFFSET THE FIRE HYDRANT.
7. SHAPE CONCRETE THRUST BLOCKS SO THAT NO WATER DRAINS ARE BLOCKED.
8. A TEE FITTING IS REQUIRED FOR A CONNECTION TO A NEW WATER MAIN, AND A TAPPING SLEEVE IS REQUIRED FOR A CONNECTION TO AN EXISTING WATER MAIN.
9. DO NOT WRAP FIRE HYDRANT SHOE IN PLASTIC.
10. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
11. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

NOTE: 18" MIN. APPLIES WHEN SIDEWALK IS LOCATED AT BACK OF CURB.

NOTE: 12" MIN. APPLIES WHEN SIDEWALK IS AT RIGHT OF WAY.



DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	FIRE HYDRANT NEW WATER MAIN		603
APPROVED: MCC			

MIDLAND Engineering Services

CITY OF MIDLAND APPROVED ENGINEERING
4/12/2021
AUTHORIZATION TO CONSTRUCT PUBLIC INFRASTRUCTURE
The issuance or posting of this APPROVED shall not be construed to be a permit for, or an approval of, any violation of any provision of the ordinances of the City of Midland. The issuance of a permit based on plans, specifications and other data shall not prevent the City from thereafter requiring the correction of the City from thereafter requiring the correction of any City codes or ordinances. Any permit issued in error or in violation of any City codes or ordinances may be revoked. Any permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work can be recommenced, a new permit shall be obtained and the fee therefor shall be one-half the amount required for a new permit for such work, provided no changes have been made or will be made in the original plans and specifications for such work, and provided further that such suspension or abandonment has not exceeded one year. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new permit fee.

NO.	VALVES	VALVE COVERS	VALVE BOX
1	MUELLER 2360 M/J	MUELLER 2360 FL X FL	BASS & HAYS STANDARD 360-1 "SHORTY"
2	M & H 4067 M/J	M & H 4067-0	OR APPROVED EQUAL
3	CLOW 2838 M/J	CLOW 2840 FL X FL	
4	OR APPROVED EQUAL	OR APPROVED EQUAL	

APPROVED COMPONENT LIST

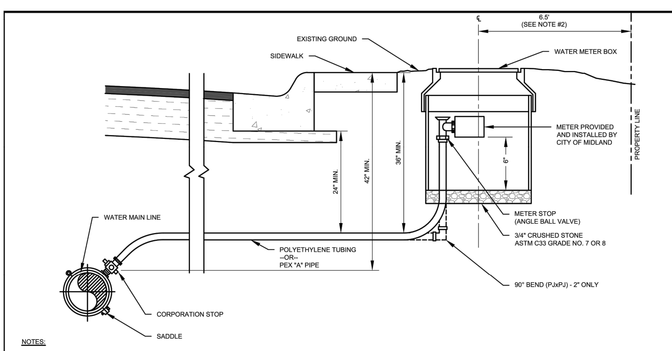
PIPE SIZE	A	B
4"	5.0"	10.5"
6"	6.5"	1'-0"
8"	6.5"	1'-0"
10"	8.0"	1'-1.0"
12"	8.5"	1'-2.0"

VALVE BLOCKING CHART

NOTES:
1. FOR VALVES ON WATER MAIN PIPES LARGER THAN 12" SEE CITY DETAIL 609.
2. SETTING VALVE BOX TO GRADE MAY REQUIRE ADDING PVC PIPE. IF ADDITIONAL PIPE IS REQUIRED, USE BELL SECTION WITH GASKET AND SET BELL DOWN OVER EXISTING PIPE RISER. A GASKETED SELF CENTERING COLLAR MAY BE USED IN LIEU OF THE BELL SECTION.
3. CONCRETE RING TO BE CITY OF MIDLAND CLASS "C", 3600 PSI, UNLESS OTHERWISE NOTED.
4. USE FIBER REINFORCEMENT FOR ALL CONCRETE , WHETHER PAVEMENT OR THRUST BLOCKING.
5. 12" MINIMUM FOR CONCRETE RING IN AN ARTERIAL ROADWAY.
6. FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT.) REQUIRED BENEATH ALL CONCRETE RINGS.
7. FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT.) REQUIRED FOR ALL OVER EXCAVATION BACKFILL.
8. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
9. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	TYPICAL VALVE AND VALVE BOX DETAILS		608(B)
APPROVED: MCC			

MIDLAND Engineering Services



NOTES:
1. ALL WATER SERVICES TO BE 1" OR 2" DIAMETER.
2. THE DISTANCE FROM PROPERTY LINE SHOWN IS FOR 5' SIDEWALK AT THE PROPERTY LINE. WHEN 5' SIDEWALK IS PLACED AT THE BACK OF CURB, PLACE METER BOXES A MINIMUM OF 6.5' FROM THE BACK OF CURB.
3. TWO ADJACENT SERVICE LATERALS MAY BE PLACED IN THE SAME TRENCH. EACH TAP MUST BE SEPARATE AND HAVE BOTH A CORPORATION STOP AND A METER STOP. ("BULLHEAD TAPS ARE NOT PERMITTED".)
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	1" AND 2" WATER METER AND SERVICE CONNECTION		604(A)
APPROVED: MCC			

MIDLAND Engineering Services

SHEET C300 OF 25

ANDREW L. MELLEN 136572 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
04/16/2021

WATER DETAILS

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

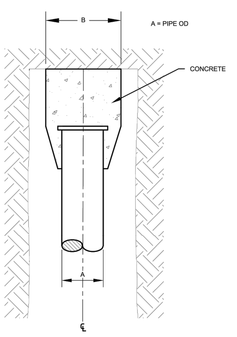
DRAWN BY: JAR	Δ	REVISIONS	BY	APPR.	DATE
CHECKED BY: CRT					
APPROVED BY: ALM					
DATE: 5/12/2020					
JOB: 200069					

MIDLAND Engineering Services

PACKET
6-319
May 25, 2021

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F:\2020\200069- CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\200069 C301 WATER DETAILS.DWG



CAP BLOCKING

PIPE OD A	BLOCKING DIMENSIONS	
	B	*C
4"	1'-0"	1'-0"
6"	1'-7"	1'-0"
8"	2'-2"	2'-2"
10"	2'-8"	2'-8"
12"	3'-2"	3'-2"
14"	3'-8"	3'-8"
16"	4'-3"	4'-3"

*C - VERTICAL DEPTH OF CONCRETE BEARING ON UNDISTURBED EARTH

NOTES:

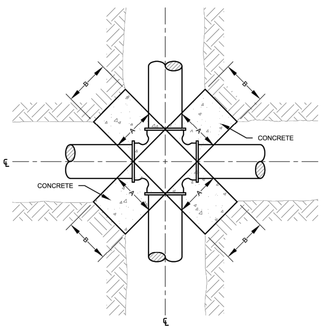
1. CAP ALL WATER MAIN STUB OUTS.
2. FORM ALL CONCRETE THRUST BLOCKING . DO NOT PLACE UN-FORMED THRUST BLOCKING.
3. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
4. FITTINGS TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
5. THRUST BLOCKING DESIGN TO BE PROVIDED IN CONSTRUCTION DRAWINGS FOR PIPES LARGER THAN 16" DIAMETER.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM
CHECKED: JCF
APPROVED: MCC

EFFECTIVE DATE: 10/01/2018 | SCALE: NTS | DETAIL: 617

BLOCKING FOR CAP



CROSS BLOCKING

CROSS BLOCKING
DESIGN 180 PSI LINE PRESSURE
SOIL BEARING CAP 2K/SF

CROSS DIA.	BLOCKING DIMENSIONS		
	A	B	*C
4"x 4"	0'-11"	1'-0"	1'-0"
6"x 6"	1'-3"	1'-7"	1'-0"
8"x 8"	1'-4"	2'-2"	2'-2"
10"x 10"	1'-8"	2'-8"	2'-8"
12"x 12"	1'-10"	3'-2"	3'-2"
14"x 14"	2'-2"	3'-8"	3'-8"
16"x 16"	2'-4"	4'-3"	4'-3"

*C - VERTICAL DEPTH OF CONCRETE BEARING ON UNDISTURBED EARTH

NOTES:

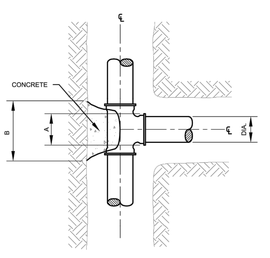
1. FORM ALL CONCRETE THRUST BLOCKING. DO NOT PLACE UN-FORMED THRUST BLOCKING
2. BLOCK CROSSES WITH DIFFERENT SIZE RUNS FOR THE LARGER RUN IN ALL DIRECTIONS.
3. BLOCKING FOR CROSSES LARGER THAN 16" WILL BE AS SHOWN ON THE PLANS.
4. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
5. FITTINGS TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM
CHECKED: JCF
APPROVED: MCC

EFFECTIVE DATE: 10/01/2018 | SCALE: NTS | DETAIL: 614

BLOCKING FOR CROSS



TEE

"T" BLOCKING
DESIGN 180 PSI LINE PRESSURE
SOIL BEARING CAP 2K/SF

"T" RUN DIA.	STEM DIA.	BLOCKING DIMENSIONS		
		A	B	*C
TEE				
4"	ALL	11"	1'-0"	1'-0"
6"	ALL	1'-3"	1'-7"	1'-0"
8"	ALL	1'-4"	2'-2"	2'-2"
10"	ALL	1'-8"	2'-8"	2'-8"
1'-0"	THRU 8"	1'-10"	1'-10"	1'-8"
1'-0"	OVER 8"	1'-10"	3'-2"	3'-2"
1'-2"	THRU 8"	2'-2"	2'-2"	1'-11"
1'-2"	OVER 8"	2'-2"	3'-8"	3'-8"
1'-4"	THRU 8"	2'-4"	2'-4"	2'-2"
1'-4"	OVER 8"	2'-4"	4'-3"	4'-3"

*C - VERTICAL DEPTH OF CONCRETE BEARING ON UNDISTURBED EARTH

NOTE:

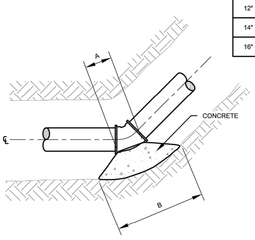
1. FORM ALL CONCRETE THRUST BLOCKING. DO NO PLACE UN-FORMED THRUST BLOCKING.
2. BLOCKING FOR TEES LARGER THAN 16" RUN TO BE SHOWN ON THE PLANS.
3. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
4. FITTING TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM
CHECKED: JCF
APPROVED: MCC

EFFECTIVE DATE: 10/01/2018 | SCALE: NTS | DETAIL: 615

BLOCKING FOR TEE



BLOCKING FOR HORIZONTAL BENDS
DESIGN 180 PSI LINE PRESSURE
SOIL BEARING CAP 2K/SF

DIA. OF PIPE	DEGREE OF BEND											
	11 1/4°			22 1/2°			45°			90°		
	A	B	*C	A	B	*C	A	B	*C	A	B	*C
4"	0'-4"	1'-0"	1'-0"	0'-5"	1'-0"	1'-0"	0'-6"	1'-0"	1'-0"	0'-11"	1'-3"	1'-3"
6"	0'-7"	1'-0"	1'-0"	0'-7"	1'-0"	1'-0"	0'-8"	1'-5"	1'-5"	1'-3"	1'-11"	1'-11"
8"	0'-8"	0'-10"	1'-2"	0'-9"	1'-4"	1'-4"	0'-10"	1'-10"	1'-10"	1'-6"	2'-6"	2'-6"
10"	0'-10"	1'-0"	1'-5"	0'-11"	1'-8"	1'-8"	1'-1"	2'-4"	2'-4"	1'-11"	3'-2"	3'-2"
12"	1'-0"	1'-3"	1'-8"	1'-1"	2'-0"	2'-0"	1'-3"	2'-10"	2'-10"	2'-2"	3'-10"	3'-10"
14"	0'-11"	1'-5"	1'-11"	1'-1"	2'-4"	2'-4"	1'-3"	3'-3"	3'-3"			
16"	1'-1"	1'-8"	2'-2"	1'-2"	2'-8"	2'-8"	1'-5"	3'-9"	3'-9"			

*C - VERTICAL DEPTH OF CONCRETE BEARING ON UNDISTURBED EARTH

NOTES:

1. FORM ALL CONCRETE THRUST BLOCKING. DO NOT PLACE UN-FORMED THRUST BLOCKING.
2. ALL THRUST BLOCKING TO BE CLASS "A" CONCRETE, 3000 PSI, AND TO BE PLACED AGAINST UNDISTURBED EARTH. USE FIBER REINFORCEMENT THROUGHOUT.
3. FITTING TO BE POLY WRAPPED BEFORE BLOCKING IS PLACED.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services

DRAWN: DPM
CHECKED: JCF
APPROVED: MCC

EFFECTIVE DATE: 10/01/2018 | SCALE: NTS | DETAIL: 616

BLOCKING FOR HORIZONTAL BENDS

CITY OF MIDLAND TEXAS
APPROVED
&[Date]
ENGINEER
04.21.2021

AUTHORIZATION TO CONSTRUCT OR INSTALL PUBLIC INFRASTRUCTURE

By issuance of this permit, the City of Midland does not represent that the Contractor has complied with any applicable federal, state or local laws, regulations, codes, standards, ordinances, rules, covenants, conditions, restrictions or any other requirements applicable to the construction of the Public Infrastructure, including, but not limited to, those regarding the protection of any endangered species or critical habitat, wetlands, historic properties, cultural resources, or those regarding subsurface or airborne contaminants. Without limiting the generality of the foregoing, the Contractor is responsible for complying with the requirements of the Texas Commission on Environmental Quality's Construction General Permit, which may require the preparation and implementation of a Storm Water Pollution Prevention Plan. The City of Midland does not represent that any permit that may be required by a state or federal agency has been obtained. The Contractor is responsible for obtaining any such permit that may be required for the construction of the Public Infrastructure.

SHEET C301 OF 25

PROFESSIONAL ENGINEER
ANDREW L. MELLEN
106572
LICENSED
04/19/2021

CITY OF MIDLAND TEXAS
APPROVED
&[Date]
ENGINEER
04.21.2021

WATER DETAILS

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

DRAWN BY:	JAR
CHECKED BY:	CRT
APPROVED BY:	ALM
DATE:	5/12/2020
JOB:	200069

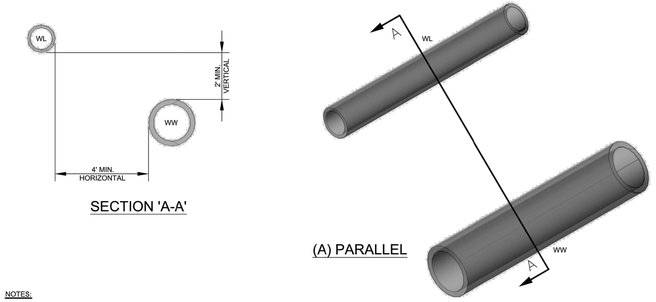
Δ	REVISIONS	BY	APPR.	DATE

MIDLAND Engineering Services

PACKET
6:32PM
May 25, 2021

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F:\2020\200609\A. CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\200609 C302 WATER DETAILS.DWG

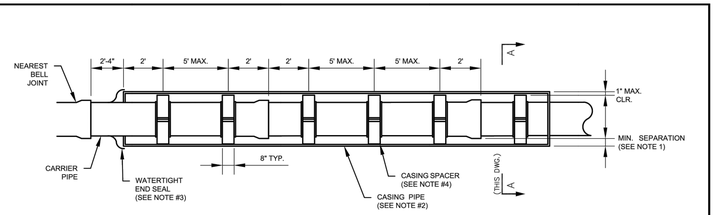


NOTES:

1. SEE CITY DETAIL 807 FOR NEW PETROLEUM OR NATURAL GAS LINE REQUIREMENTS WHEN IN PARALLEL WITH A WATER MAIN. REQUIREMENTS FOR WATER MAINS IN PARALLEL WITH PETROLEUM OR NATURAL GAS LINES ARE THE SAME AS WHEN THEY ARE PARALLEL WITH WASTEWATER MAINS UNLESS STATED OTHERWISE IN CITY DETAIL 807.
2. IF AN EXISTING PETROLEUM OR NATURAL GAS LINE PREDATES A PUBLIC ROW OR EASEMENT THAT THE WATER MAIN IS LOCATED IN THEN THE WATER MAIN DESIGN AND CONSTRUCTION MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS AS PER THE PETROLEUM OR NATURAL GAS LINE OWNER'S STANDARDS.
3. WASTEWATER MAINS AND MANHOLES MUST BE LOCATED AT LEAST 9.0' FROM ALL WATER MAINS IN ALL DIRECTIONS. IF THIS IS NOT POSSIBLE THEN AN ENGINEERING REPORT IS REQUIRED PER TAC TO JUSTIFY WHY, AND THE REQUIREMENTS OF THIS DETAIL WILL APPLY. THIS DETAIL IS INTENDED TO COMPLY WITH TAC 217.53(d) AND TAC 290.44(e). IF TAC AND THIS DETAIL DIFFER THEN THE MORE RESTRICTIVE STANDARD GOVERNS.
4. WHERE WATER MAINS ARE LOCATED IN PARALLEL WITH NEW WASTEWATER MAINS, WASTEWATER MAINS MUST BE CONSTRUCTED AT LEAST 150 PSI PRESSURE CLASS, CORROSION RESISTANT, NON-BRITTLE PIPE SUCH AS CIP, DIP, OR PVC PIPE THAT IS DESIGNED TO SEAL AT ATMOSPHERIC PRESSURE. EXISTING WASTEWATER MAINS IN PARALLEL THAT ARE LEAKING OR ARE DISTURBED AND THEN BEGIN TO LEAK MUST BE REPLACED WITH 150 PSI PRESSURE-RATED PIPE.
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

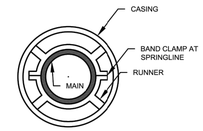
MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 306
		PARALLEL WATER & WASTEWATER SPACING		

04.21.2021

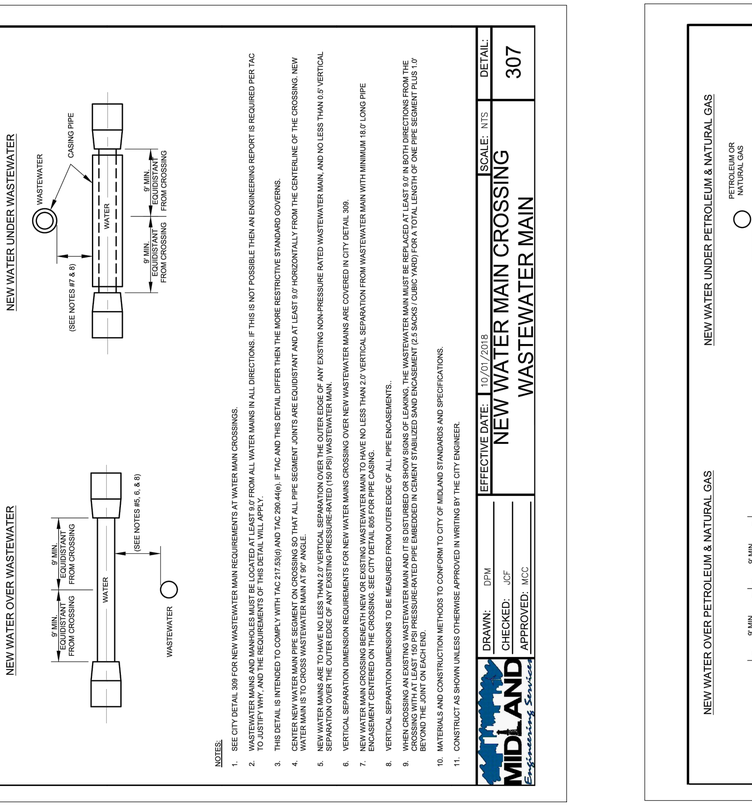


NOTES:

1. CASING PIPE TO BE MINIMUM TWO (2) NOMINAL SIZES LARGER IN DIAMETER THAN CARRIER PIPE.
2. CASING PIPE TO BE NO LESS THAN 12" DIAMETER PIPE. 12"-16" DIAMETER CASING PIPE MAY BE STEEL OR PVC PIPE. CASING PIPE LARGER THAN 16" DIAMETER MUST BE STEEL PIPE. STEEL CASING PIPE TO BE MINIMUM 1/4" WALL THICKNESS. PVC CASING PIPE TO BE SDR-26 D2241 OR C-900.
3. CASING PIPE TO BE STEEL OR PVC.
4. WATER TIGHT END SEAL TO BE GROUT OR APPROVED MANUFACTURED SEAL.
5. CASING SPACERS TO BE HDPE OR APPROVED EQUAL, MINIMUM FOUR (4) EQUALLY SPACED RUNNERS, WITH BAND CLAMP JOINT LOCATED AT SPRINGLINE. SPACERS FOR CASING PIPE LARGER THAN 24" DIAMETER REQUIRE MINIMUM SIX (6) EQUALLY SPACED RUNNERS.
6. CASING INSTALLED IN OPEN TRENCH IS TO BE BACKFILLED PER CURRENT CITY STANDARDS FOR AN UN-ENCASED MAIN.
7. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
8. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.



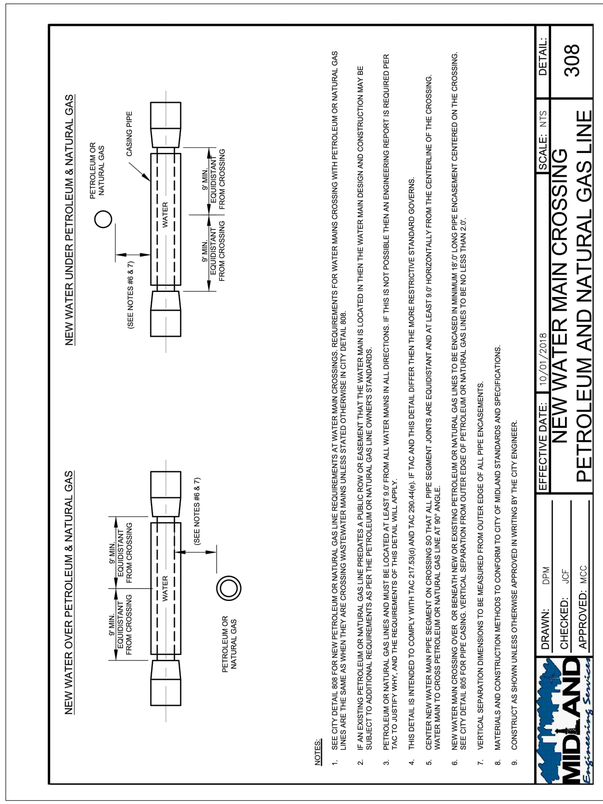
MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 805
		TYPICAL PIPE CASING DETAIL		



NOTES:

1. SEE CITY DETAIL 307 FOR NEW WATER MAIN REQUIREMENTS AT WASTEWATER MAIN CROSSINGS.
2. WASTEWATER MAINS AND MANHOLES MUST BE LOCATED AT LEAST 9.0' FROM ALL WATER MAINS IN ALL DIRECTIONS. IF THIS IS NOT POSSIBLE THEN AN ENGINEERING REPORT IS REQUIRED PER TAC TO JUSTIFY WHY, AND THE REQUIREMENTS OF THIS DETAIL WILL APPLY.
3. THIS DETAIL IS INTENDED TO COMPLY WITH TAC 217.53(d) AND TAC 290.44(e). IF TAC AND THIS DETAIL DIFFER THEN THE MORE RESTRICTIVE STANDARD GOVERNS.
4. CENTER NEW WATER MAIN PIPE SEGMENT ON CROSSING SO THAT ALL PIPE SEGMENT JOINTS ARE EQUIDISTANT AND AT LEAST 9.0' HORIZONTALLY FROM THE CENTERLINE OF THE CROSSING. NEW WATER MAIN IS TO CROSS WASTEWATER MAIN AT 90° ANGLE.
5. NEW WATER MAINS ARE TO HAVE NO LESS THAN 2.0' VERTICAL SEPARATION OVER THE OUTER EDGE OF ANY EXISTING NON-PRESSURE RATED WASTEWATER MAIN, AND NO LESS THAN 0.5' VERTICAL SEPARATION OVER THE OUTER EDGE OF ANY EXISTING PRESSURE-RATED (150 PSI) WASTEWATER MAIN.
6. VERTICAL SEPARATION DIMENSION REQUIREMENTS FOR NEW WATER MAINS CROSSING OVER NEW WASTEWATER MAINS ARE COVERED IN CITY DETAIL 309.
7. NEW WATER MAIN CROSSING BENEATH NEW OR EXISTING WASTEWATER MAIN TO HAVE NO LESS THAN 2.0' VERTICAL SEPARATION FROM WASTEWATER MAIN WITH MINIMUM 18.0' LONG PIPE ENCASEMENT CENTERED ON THE CROSSING. SEE CITY DETAIL 805 FOR PIPE CASING.
8. VERTICAL SEPARATION DIMENSIONS TO BE MEASURED FROM OUTER EDGE OF ALL PIPE ENCASEMENTS.
9. WHEN CROSSING AN EXISTING WASTEWATER MAIN IT IS REQUIRED OR SHOWN (SEE CITY DETAIL 309) THAT THE WASTEWATER MAIN MUST BE REPLACED AT LEAST 9.0' IN BOTH DIRECTIONS FROM THE CROSSING WITH AT LEAST 150 PSI PRESSURE-RATED PIPE EMBEDDED IN CEMENT STABILIZED SAND ENCASEMENT (2.5 SACKS / CUBIC YARD) FOR A TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 10' BEYOND THE JOINT ON EACH END.
10. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
11. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

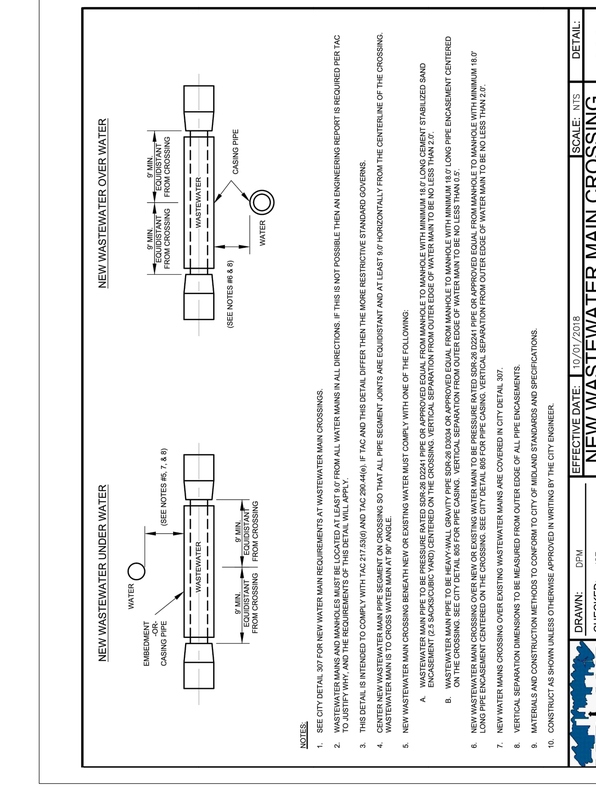
MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 307
		NEW WATER MAIN CROSSING WASTEWATER MAIN		



NOTES:

1. SEE CITY DETAIL 808 FOR NEW PETROLEUM OR NATURAL GAS LINE REQUIREMENTS AT WATER MAIN CROSSINGS. REQUIREMENTS FOR WATER MAINS CROSSING WITH PETROLEUM OR NATURAL GAS LINES ARE THE SAME AS WHEN THEY ARE CROSSING WASTEWATER MAINS UNLESS STATED OTHERWISE IN CITY DETAIL 808.
2. IF AN EXISTING PETROLEUM OR NATURAL GAS LINE PREDATES A PUBLIC ROW OR EASEMENT THAT THE WATER MAIN IS LOCATED IN THEN THE WATER MAIN DESIGN AND CONSTRUCTION MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS AS PER THE PETROLEUM OR NATURAL GAS LINE OWNER'S STANDARDS.
3. PETROLEUM OR NATURAL GAS LINES AND MUST BE LOCATED AT LEAST 9.0' FROM ALL WATER MAINS IN ALL DIRECTIONS. IF THIS IS NOT POSSIBLE THEN AN ENGINEERING REPORT IS REQUIRED PER TAC TO JUSTIFY WHY, AND THE REQUIREMENTS OF THIS DETAIL WILL APPLY.
4. THIS DETAIL IS INTENDED TO COMPLY WITH TAC 217.53(d) AND TAC 290.44(e). IF TAC AND THIS DETAIL DIFFER THEN THE MORE RESTRICTIVE STANDARD GOVERNS.
5. CENTER NEW WATER MAIN PIPE SEGMENT ON CROSSING SO THAT ALL PIPE SEGMENT JOINTS ARE EQUIDISTANT AND AT LEAST 9.0' HORIZONTALLY FROM THE CENTERLINE OF THE CROSSING. WATER MAIN TO CROSS PETROLEUM OR NATURAL GAS LINE AT 90° ANGLE.
6. NEW WATER MAIN CROSSING OVER, OR BENEATH NEW OR EXISTING PETROLEUM OR NATURAL GAS LINES TO BE ENCASED IN MINIMUM 18'.0' LONG PIPE ENCASEMENT CENTERED ON THE CROSSING. VERTICAL SEPARATION DIMENSIONS TO BE MEASURED FROM OUTER EDGE OF ALL PIPE ENCASEMENTS. NEW WATER MAINS CROSSING OVER OR UNDER PETROLEUM OR NATURAL GAS LINES TO BE NO LESS THAN 2.0'.
7. VERTICAL SEPARATION DIMENSIONS TO BE MEASURED FROM OUTER EDGE OF ALL PIPE ENCASEMENTS.
8. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
9. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 308
		NEW WATER MAIN CROSSING PETROLEUM AND NATURAL GAS LINE		



NOTES:

1. SEE CITY DETAIL 307 FOR NEW WATER MAIN REQUIREMENTS AT WASTEWATER MAIN CROSSINGS.
2. WASTEWATER MAINS AND MANHOLES MUST BE LOCATED AT LEAST 9.0' FROM ALL WATER MAINS IN ALL DIRECTIONS. IF THIS IS NOT POSSIBLE THEN AN ENGINEERING REPORT IS REQUIRED PER TAC TO JUSTIFY WHY, AND THE REQUIREMENTS OF THIS DETAIL WILL APPLY.
3. THIS DETAIL IS INTENDED TO COMPLY WITH TAC 217.53(d) AND TAC 290.44(e). IF TAC AND THIS DETAIL DIFFER THEN THE MORE RESTRICTIVE STANDARD GOVERNS.
4. CENTER NEW WASTEWATER MAIN PIPE SEGMENT ON CROSSING SO THAT ALL PIPE SEGMENT JOINTS ARE EQUIDISTANT AND AT LEAST 9.0' HORIZONTALLY FROM THE CENTERLINE OF THE CROSSING. WASTEWATER MAIN IS TO CROSS WATER MAIN AT 90° ANGLE.
5. NEW WASTEWATER MAIN CROSSING BENEATH NEW OR EXISTING WATER MUST COMPLY WITH ONE OF THE FOLLOWING:
   A. WASTEWATER MAIN PIPE TO BE PRESSURE RATED SDR-26 D2241 PIPE OR APPROVED EQUAL FROM MANHOLE TO MANHOLE WITH MINIMUM 18.0' LONG CEMENT STABILIZED SAND ENCASEMENT (2.5 SACKS/CUBIC YARD) CENTERED ON THE CROSSING. VERTICAL SEPARATION FROM OUTER EDGE OF WATER MAIN TO BE NO LESS THAN 2.0'.
   B. WASTEWATER MAIN PIPE TO BE HEAVY-WALL GRAVITY PIPE SDR-28 D3034 OR APPROVED EQUAL FROM MANHOLE TO MANHOLE WITH MINIMUM 18.0' LONG PIPE ENCASEMENT CENTERED ON THE CROSSING. SEE CITY DETAIL 809 FOR PIPE CASING. VERTICAL SEPARATION FROM OUTER EDGE OF WATER MAIN TO BE NO LESS THAN 0.5'.
6. NEW WASTEWATER MAIN CROSSING OVER NEW OR EXISTING WATER MAIN TO BE PRESSURE RATED SDR-26 D2241 PIPE OR APPROVED EQUAL FROM MANHOLE TO MANHOLE WITH MINIMUM 18.0' LONG PIPE ENCASEMENT CENTERED ON THE CROSSING. SEE CITY DETAIL 805 FOR PIPE CASING. VERTICAL SEPARATION FROM OUTER EDGE OF WATER MAIN TO BE NO LESS THAN 2.0'.
7. NEW WATER MAINS CROSSING OVER EXISTING WASTEWATER MAINS ARE COVERED IN CITY DETAIL 307.
8. VERTICAL SEPARATION DIMENSIONS TO BE MEASURED FROM OUTER EDGE OF ALL PIPE ENCASEMENTS.
9. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
10. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL: 309
		NEW WASTEWATER MAIN CROSSING WATER MAIN		

MIDLAND Engineering Services

REVISIONS	BY	APPR.	DATE
Δ			

DRAWN BY:	JAR
CHECKED BY:	CRT
APPROVED BY:	ALM
DATE	5/12/2020
JOB	200609

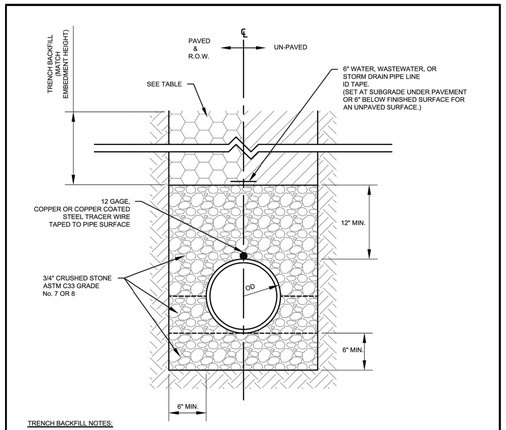
WATER DETAILS

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

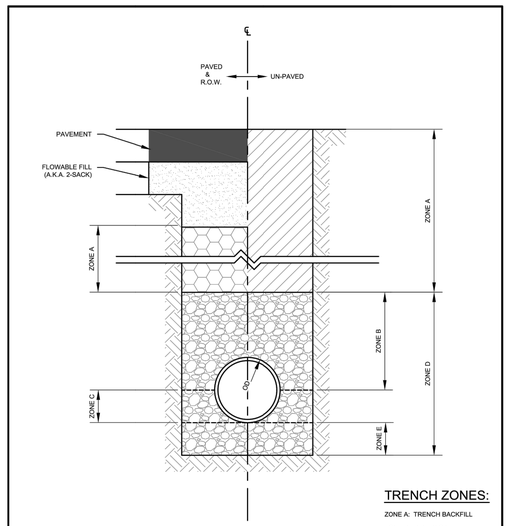
SHEET C302 OF 25



TRENCH BACKFILL NOTES:

1. APPLIES TO ALL PIPE TYPES. (DUCTILE IRON, PVC, ETC.)
2. UTILIZE SELECT FILL BACKFILL BENEATH ALL PAVED SURFACES. NATIVE MATERIAL BACKFILL CAN ONLY BE USER FOR UNPAVED TRENCH CONDITIONS IF BACKFILL MATERIAL IS ≤ 30LL AND ≤ 15 PI.
3. NATIVE MATERIAL TO BE EXISTING EXCAVATED SOIL FROM TRENCH WITH ALL MATERIAL BROKEN DOWN ≤ 2".
4. MOISTURE CONDITION ALL BACKFILL MATERIAL PRIOR TO PLACING IN TRENCH.
5. PLACE TRENCH BACKFILL MATERIAL IN MAXIMUM 12" LOOSE LIFTS AND COMPACT TO MAXIMUM 8" COMPACTED LIFTS.
6. REFER TO CITY DETAILS 311 AND 312 FOR TRENCH PAVEMENT REPLACEMENT REQUIREMENTS.
7. PLACE LAYERS B, C, AND E FOUND ON CITY DETAIL 310(B) AS SEPARATE LAYERS.
8. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
9. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

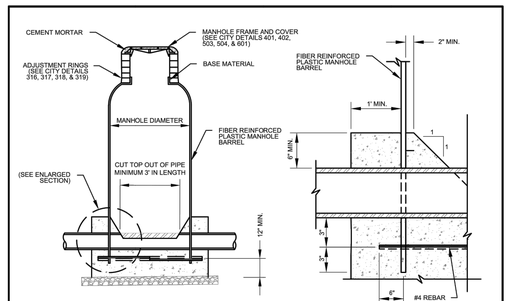
DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
MIDLAND Engineering Services	TRENCHING AND BEDDING		310(A)



TRENCH ZONES:

ZONE A: TRENCH BACKFILL
ZONE B: PIPE BACKFILL
ZONE C: HAUNCHING
ZONE D: PIPE EMBEDMENT
ZONE E: BEDDING

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
MIDLAND Engineering Services	TRENCHING AND BEDDING		310(B)

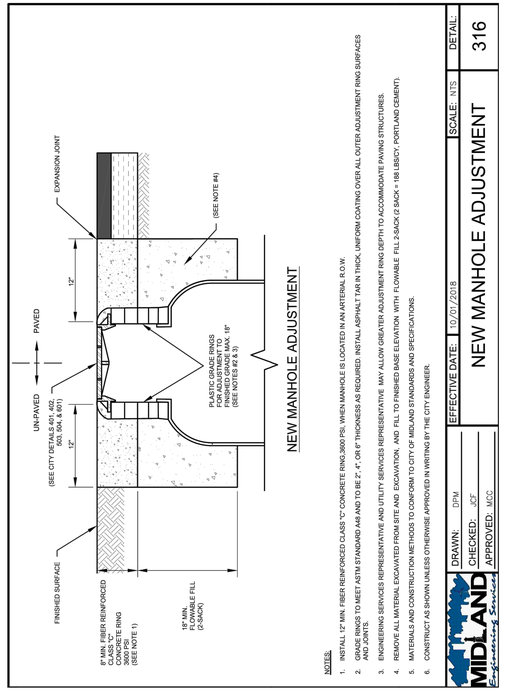


DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
MIDLAND Engineering Services	TYPICAL FIBERGLASS MANHOLE		313(A)

NOTES:

1. 48" DIAMETER MANHOLES TO BE USED FOR PIPE DIAMETERS OF 24" OR SMALLER ONLY.
2. INSTALL DROPS AND INTERSECTING PIPES ONLY WHEN CALLED FOR IN CONSTRUCTION DRAWINGS.
3. SET MANHOLE FRAME IN SEALANT PER CITY OF MIDLAND STANDARD SPECIFICATIONS.
4. NEW MANHOLE TO HAVE SEAMLESS AND CONTINUOUS NECK, SHOULDER, AND BARREL.
5. ALL CONCRETE TO BE CLASS "A" CONCRETE.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
MIDLAND Engineering Services	TYPICAL FIBERGLASS MANHOLE		313(B)



NEW MANHOLE ADJUSTMENT

NOTES:

1. INSTALL 12" MIN. FIBER REINFORCED CLASS "C" CONCRETE RING,3600 PSI, WHEN MANHOLE IS LOCATED IN AN ARTERIAL R.O.W.
2. GRADE RINGS TO MEET ASTM STANDARD A48 AND TO BE 2", 4", OR 6" THICKNESS AS REQUIRED. INSTALL ASPHALT TAR IN THICK, UNIFORM COATING OVER ALL OUTER ADJUSTMENT RING SURFACES AND JOINTS.
3. ENGINEERING SERVICES REPRESENTATIVE AND UTILITY SERVICES REPRESENTATIVE MAY ALLOW GREATER ADJUSTMENT RING DEPTH TO ACCOMMODATE PAVING STRUCTURES.
4. REMOVE ALL MATERIAL EXCAVATED FROM SITE AND EXCAVATION, AND FILL TO FINISHED BASE ELEVATION WITH FLOWABLE FILL 2-SACK (2 SACK = 188 LBS/CY, PORTLAND CEMENT).
5. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
6. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	NEW MANHOLE ADJUSTMENT		316
APPROVED: MCC			

MIDLAND Engineering Services



MIDLAND Engineering Services

REVISIONS	BY	APPR.	DATE

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

SEWER DETAILS

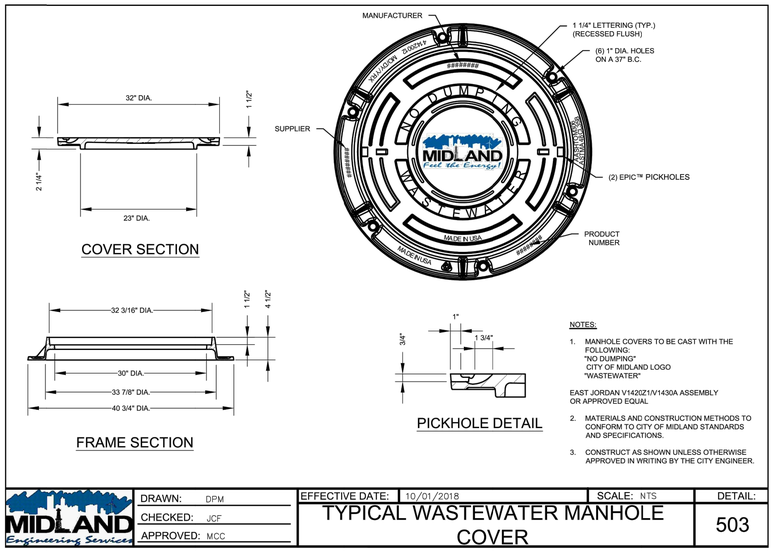
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

SHEET
C310 OF 25

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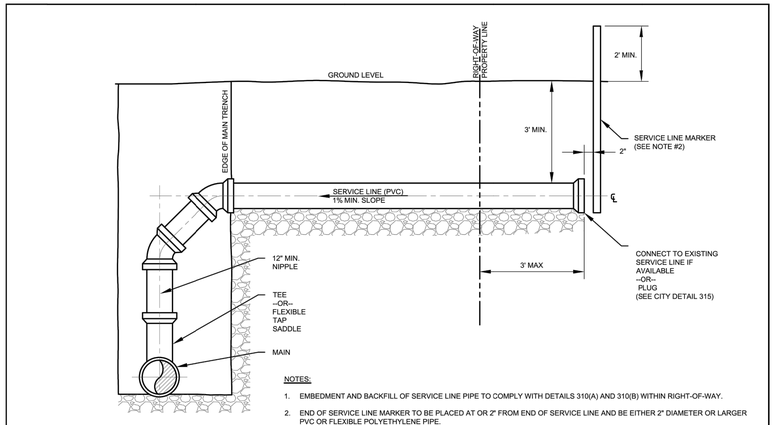
NOTES:

1. MANHOLE COVERS TO BE CAST WITH THE FOLLOWING:
   "NO DUMPING"
   CITY OF MIDLAND LOGO
   "WASTEWATER"

EAST JORDAN V1420Z1/V1430A ASSEMBLY OR APPROVED EQUAL

2. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
3. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:
CHECKED: JCF	TYPICAL WASTEWATER MANHOLE COVER		503
APPROVED: MCC			



NOTES:

1. EMBEDMENT AND BACKFILL OF SERVICE LINE PIPE TO COMPLY WITH DETAILS 310(A) AND 310(B) WITHIN RIGHT-OF-WAY.
2. END OF SERVICE LINE MARKER TO BE PLACED AT OR 2' FROM END OF SERVICE LINE AND BE EITHER 2" DIAMETER OR LARGER PVC OR FLEXIBLE POLYETHYLENE PIPE.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHER WISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	EFFECTIVE DATE: 10/01/2018	SCALE:	DETAIL:
CHECKED: JCF	4" AND 6" WASTEWATER SERVICE LATERAL TAP OPTION 1		507
APPROVED: MCC			



MIDLAND Engineering Services

	BY	APPR.	DATE
REVISIONS			

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200669

SEWER DETAILS

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS



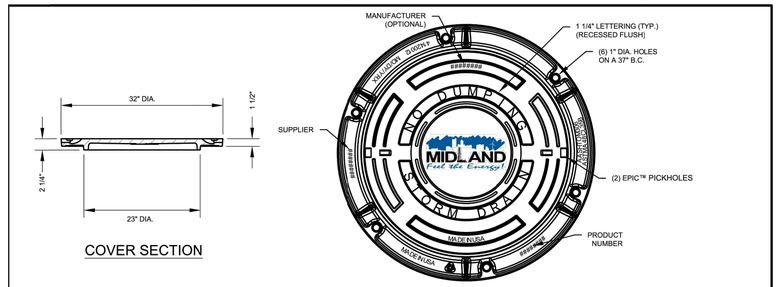
SHEET C311 OF 25

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F:\2020\200069\ CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\200069 C320 STORM DRAIN DETAILS.DWG



NOTES:

1. MANHOLE COVERS TO BE CAST WITH THE FOLLOWN
   "NO DUMPING"
   CITY OF MIDLAND LOGO
   "STORM DRAIN"

   EAST JORDAN V1420Z1/V1430A ASSEMBLY OR APPROVED EQUAL.
2. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
3. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

MIDLAND Engineering Services	DRAWN: DPM CHECKED: JCF APPROVED: MCC	EFFECTIVE DATE: 10/01/2018 SCALE: NTS	DETAIL: 401
		TYPICAL STORM DRAIN COVER	

MIDLAND Engineering Services

	BY	APPR.	DATE
REVISIONS			

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 200069

STORM DRAIN DETAILS

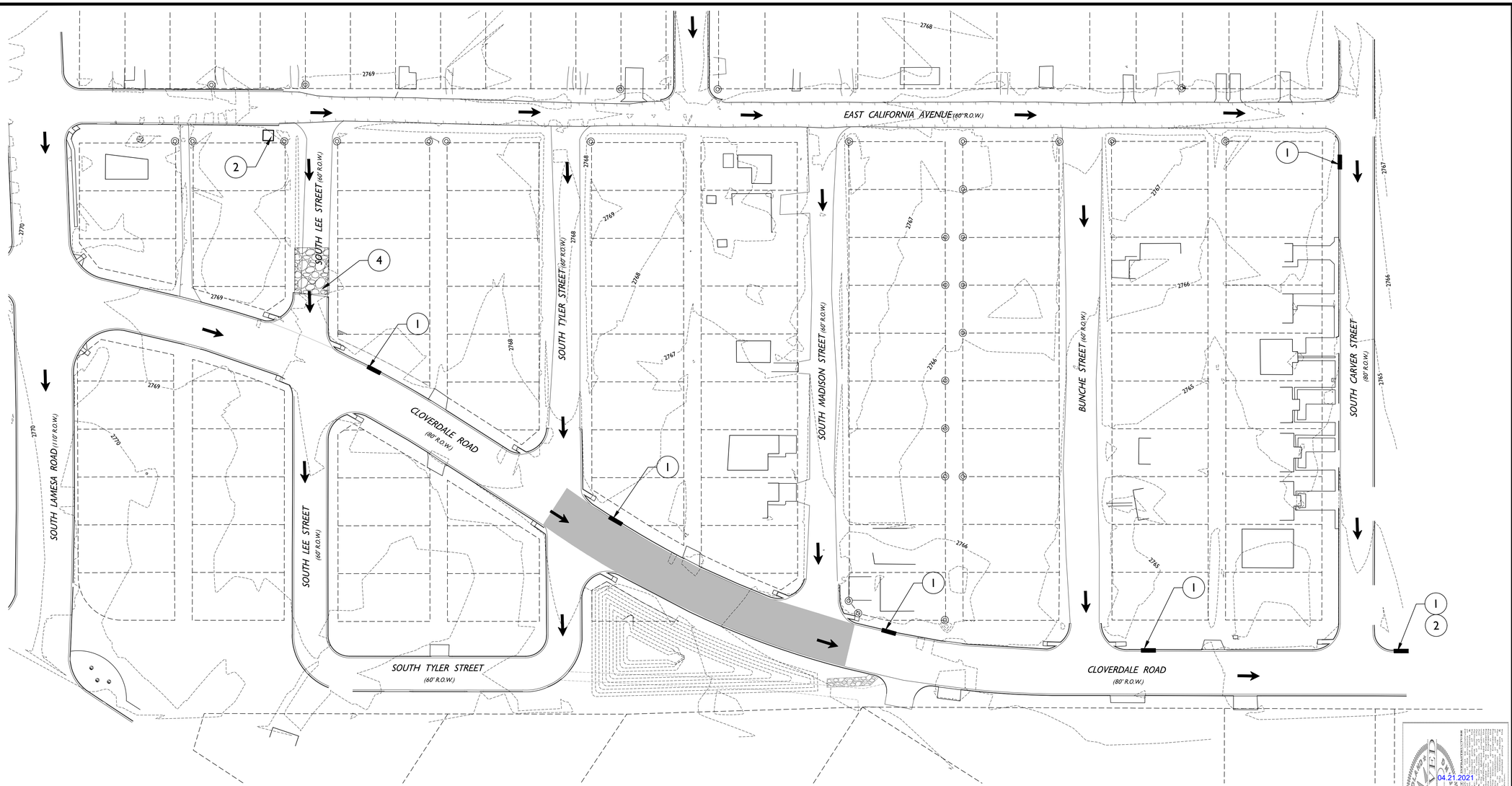
PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

SHEET C320 OF 25

APPROVED
CITY OF MIDLAND
ENGINEER
04.21.2021
ALDER



GENERAL NOTES:

1). IT IS THE INTENT OF THE INFORMATION PROVIDED ON THIS SHEET AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT TO ESTABLISH A MINIMUM BASIS OF THE COMPLIANCE WITH TPDES REGULATIONS. THE CONTRACTOR SHALL FILE NOTICE OF INTENT (NOI) TO BE COVERED BY TDPES CONSTRUCTION GENERAL PERMIT, TXR 150000.

2). THE STORM WATER POLLUTION PREVENTION PLAN SHOULD ADDRESS THREE GOALS: TO DIVERT WATER FROM UPSLOPE AREAS AROUND DISTURBED AREAS OF THE SITE, TO LIMIT EXPOSURE OF DISTURBED AREAS TO THE SHORTEST DURATION POSSIBLE, AND TO REMOVE SEDIMENT FROM STORM WATER BEFORE IT LEAVES THE SITE.

3). AVOID PLACING LARGE QUANTITIES OF SPOILS ON THE ROAD AND OTHER EXCAVATED AREAS. THE AREAS BEING EXCAVATED SHOULD BE SWEPT DAILY AND REMAIN CLEAN TO THE MAXIMUM EXTENT PRACTICABLE.

4). THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO THE TCEQ.

5). THE CONTRACTOR MUST AMEND THE STORM WATER POLLUTION PREVENTION PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. NO CHANGE TO EROSION CONTROL MEASURES SHOWN ON THESE PLANS AND SPECIFICATIONS SHALL BE MADE WITHOUT CONSENT OF OWNER AND ENGINEER.

6). STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES. REPAIRS OF INADEQUACIES REVEALED BY THE INSPECTIONS MUST BE IMPLEMENTED WITHIN SEVEN CALENDAR DAYS FOLLOWING THE INSPECTION.

7). AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE MAINTAINED AND MADE PART OF THE PLAN.

8). ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE NPDES CONSTRUCTION GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN.

9). THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE: DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR, REGULAR COLLECTION OF WASTES, CONVENIENTLY LOCATED WASTE RECEPTACLES, AND DESIGNATING AND CONTROL EQUIPMENT WASHING.

10). THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS, AND SEQUENCE. MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF THE REQUIREMENTS OF THE LAW AND THIS PLAN. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.

11). AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.

12). BORROW AREAS, IF EXCAVATED, SHALL BE PROTECTED AND STABILIZED UTILIZING THE PLAN DETAILS. ALL WORK SHALL CONFORM TO GOVERNMENTAL REQUIREMENTS AND BECOME PART OF THE STORM WATER POLLUTION PREVENTION PLAN. THIS WORK SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.

13). ALL NON-PAVED AREAS SHALL BE MULCHED AND SEEDED WITH EROSION PROTECTION IMMEDIATELY UPON COMPLETION OF FINAL GRADING. THIS INCLUDES ALL DITCHES AND EMBANKMENTS. THE CONTRACTOR SHALL MAINTAIN THE FINAL GRADING AND KEEP SEEDED AREAS WATERED UNTIL FULLY ESTABLISHED AND ACCEPTED BY THE OWNER; EROSION PROTECTION SHALL BE CONSTRUCTED AS DETAILED ON THIS SHEET.

14). THE CONTRACTOR SHALL DESIGNATE MATERIAL AND EQUIPMENT STORAGE AREAS MUTUALLY AGREED TO BY THE OWNER. THE STORAGE AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE AND THE SURFACE STABILIZED WITH A MINIMUM OF TWO INCHES OF CRUSHED ROCK OR GRAVEL. REINFORCED FILTER BARRIER SHALL BE INSTALLED AROUND THE STORAGE AREAS TO PREVENT ANY EROSION FROM LEAVING THE SITE.

15). CONTRACTOR TO COORDINATE WITH CITY OF MIDLAND AND PRIVATE LAND OWNER FOR THE STAGING AREA LOCATION AND DIMENSIONS. AFTER COMPLETION OF PROJECT CONTRACTOR TO RESTORE STAGING AREA TO ITS ORIGINAL OR BETTER CONDITIONS.

GRAVEL BAG INSTALLATION NOTES:

1. GRAVEL BURLAP BAGS SHALL BE PLACED ALONG CURB AND GUTTER SYSTEM TO PREVENT SEDIMENT FROM MOVING INTO THE DRAW.
2. SUFFICIENT SPACE SHALL BE PROVIDED UPSLOPE FROM BAGS SO THAT PONDING CAN OCCUR.
3. BAGS SHALL BE PLACED FLAT SO THAT THE MAXIMUM POSSIBLE AREA IS IN CONTACT WITH THE GROUND.
4. BAGS SHALL BE REPLACED ONCE EVERY THREE MONTHS, OR MORE OFTEN IF DEEMED NECESSARY BY THE CONTRACTOR, INSPECTOR OF ENGINEER.
5. BAG INSPECTIONS FOR RIPS, TEARS, LEAKS, AND OTHER DAMAGE ARE TO BE CONDUCTED AFTER EVERY RAIN EVENT. THE RESULTS OF THESE INSPECTIONS ARE TO BE DOCUMENTED IN THE SWPPP INSPECTION REPORT.
6. BAG OPENINGS SHALL FACE UP SO THAT THEY ARE NOT IN CONTACT WITH THE GROUND.
7. BAGS SHALL BE FILLED TO 60 PERCENT MAXIMUM CAPACITY WITH 80 PERCENT OR MORE OF THE AGGREGATE BETWEEN THE No. 4 SIEVE AND 3 INCHES IN SIZE.
8. PLACEMENT OF GRAVEL BAGS SHOULD NOT BLOCK ADA WALKING PATHS.

BMP CONSTRUCTION NOTES:

(1) GRAVEL BAGS ARE TO BE INSTALLED AT THE NEAREST DOWNSTREAM INTERSECTION FROM ANY PROJECT CONSTRUCTION ACTIVITY.

(2) LOCATE CONCRETE WASHOUT WITHIN PROJECT AREA AND SHIFT AS NECESSARY FOR CONSTRUCTION ACTIVITY. ALL WASHOUT AND OTHER SPOILS ARE TO BE REMOVE FROM SITE. CONCRETE TRUCKS ARE NEVER TO WASHOUT INTO ON-SITE TRENCHES.

(3) RESERVED.

(4) INSTALL CONSTRUCTION ENTRANCE.

APPROVED
04.21.2021
ACCEPTED
ENGINEERING DEPARTMENT
CITY OF MIDLAND, TEXAS
ACCEPTANCE OF THIS PLAN DOES NOT RELIEVE THE DESIGNER OF RESPONSIBILITY FOR CORRECTNESS OF DESIGN

MIDLAND Engineering Services

△	REVISIONS	BY	APPR.	DATE

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/13/2020
JOB: 200069

EROSION CONTROL PLAN

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

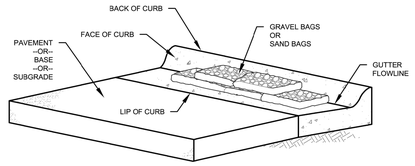
MIDLAND, TEXAS

STATE OF TEXAS
ANDREW L. MELLEN
106572
LICENSED
PROFESSIONAL ENGINEER
04/16/2021

SHEET C400 OF 25

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NOTES:

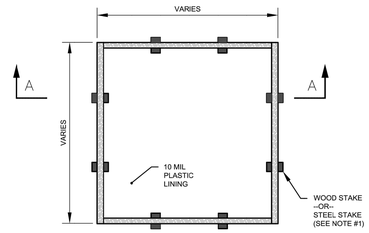
1. FILL BAGS TO 60% CAPACITY WITH EITHER CLEAN GRAVEL OR CLEAN SAND.
2. GRAVEL TO BE NO LESS THAN 1" DIAMETER OR GREATER THAN 2" DIAMETER.
3. PLACE BAGS WITH BAG OPENINGS SECURED AND FACE UP, AND SO THAT EACH BAG IS FLAT AND HAS THE GREATEST POSSIBLE SURFACE AREA CONTACT WITH THE CURB.
4. PLACE BAGS AGAINST THE FACE-OF-CURB AND DO NOT PLACE BAGS BEYOND THE LIP-OF-CURB.
5. DO NOT BLOCK ADA RAMPS OR WALKWAYS WITH BAGS.
6. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
7. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

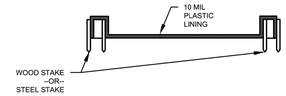
MIDLAND Engineering Services

CURB GRAVEL OR SAND BAGS

712



ELEVATED WASHOUT



SECTION 'A-A'

NOTES:

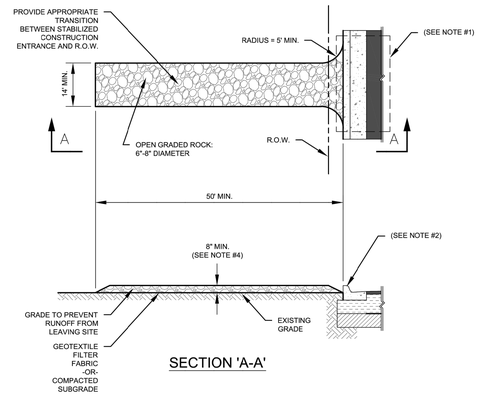
1. THIS WASHOUT CONFIGURATION MAY NOT BE USED IN PAVED AREAS.
2. WOOD FRAME IS TO BE EQUAL TO OR BETTER THAN TWO-STACKED 2X12 ROUGH WOOD FRAME.
3. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS.
4. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEERING.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services

CONCRETE WASHOUT OPTION 2

705



SECTION 'A-A'

NOTES:

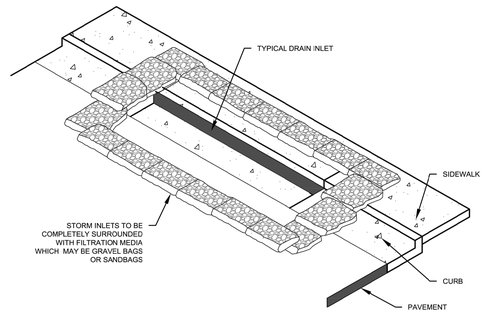
1. IF CURB DOES NOT EXIST OR IF EXISTING CURB IS REMOVED DURING CONSTRUCTION THEN STABILIZED CONSTRUCTION ENTRANCE IS TO EXTEND TO THE EDGE OF PAVEMENT.
2. IF CURB IS LEFT IN PLACE DURING CONSTRUCTION THEN INSTALL TEMPORARY CURB PROTECTION AS PER CITY DETAIL 713.
3. LENGTH SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN FIFTY (50) FEET.
4. THICKNESS OF OPEN GRADED ROCK TO BE NO LESS THAN EIGHT (8) INCHES.
5. WIDTH SHALL BE NO LESS THAN FOURTEEN (14) FEET OR THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS, WHICHEVER IS WIDER.
6. STABILIZED CONSTRUCTION ENTRANCE TO BE REMOVED UPON COMPLETION OF CONSTRUCTION.
7. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS
8. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services

STABILIZED CONSTRUCTION ENTRANCE OPTION 1

701



GRAVEL BAGS OR SANDBAGS

NOTES:

1. FILL BAGS TO 60% CAPACITY WITH CLEAN GRAVEL OR CLEAN SAND.
2. PLACE BAGS WITH BAG OPENINGS SECURED AND FACE UP, AND SO THAT EACH BAG IS FLAT AND HAS THE GREATEST POSSIBLE SURFACE AREA CONTACT WITH THE SURFACE.
3. GRAVEL TO BE NO LESS THAN 1" DIAMETER OR GREATER THAN 2" DIAMETER.
4. MATERIALS AND CONSTRUCTION METHODS TO CONFORM TO CITY OF MIDLAND STANDARDS AND SPECIFICATIONS
5. CONSTRUCT AS SHOWN UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY ENGINEER.

DRAWN: DPM	CHECKED: JCF	APPROVED: MCC	
	EFFECTIVE DATE: 10/01/2018	SCALE: NTS	DETAIL:

MIDLAND Engineering Services

CURB INLET PROTECTION

714



MIDLAND Engineering Services

BY	APPR.	DATE

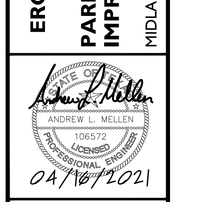
REVISIONS

DRAWN BY: JAR
CHECKED BY: CRT
APPROVED BY: ALM
DATE: 5/12/2020
JOB: 20069

EROSION CONTROL DETAILS

PARK AVENUE HEIGHTS 2 PUBLIC IMPROVEMENTS

MIDLAND, TEXAS



SHEET C401 OF 25

F:\2020\20069\9- CITY OF MIDLAND-PARK AVENUE HEIGHTS 2\DRAWINGS\CIVIL CONSTRUCTION PLANS\UTILITY CONSTRUCTION PLANS\20069 C401 EROSION CONTROL DETAILS.DWG

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City Council Meeting

Item Number: 7

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Mark Widmann, Director

Subject: **Motion authorizing the City Manager to execute an interlocal agreement with TML Multistate Intergovernmental Employee Benefits Pool, doing business as TML Health Benefits Pool, for the purpose of obtaining services for the administration of one or more life, sick, accident and other health benefits; and authorizing the City Manager to execute any documents necessary or appropriate to effectuate said interlocal agreement (DISTRICT: NONE) (ADMINISTRATIVE SERVICES)**

Purpose:

The purpose of this interlocal agreement is to allow the City to continue receiving services from Deer Oaks Employee Assistance Program under the existing rates and benefits for the remainder of the current term (10-1-2023); and The Standard, Life Insurance and AD & D benefits administration shall be directly between the City and The Standard effective 1-1-2022 with rates and benefits guaranteed through 1-23-2023.

Recommended City Council Action:

Approve

Fiscal Impact:

No fiscal impact

Discussion:

The Public Employee Benefits Alliance (PEBA) is dissolving effect December 31, 2021 and TML Multistate Intergovernmental Employee Benefits Pool is picking up the administration of the insurance products. This interlocal agreement will allow the City to continue receiving services from Deer Oaks Employee Assistance Program under the existing rates and benefits for the remainder of the current term (10-1-2023); and The Standard, Life Insurance and AD &

D benefits administration shall be directly between the City and The Standard effective 1-1-2022 with rates and benefits guaranteed through 1-23-2023. In addition, our Post-65 Retiree Medical plan is in the third year of a three-year agreement with United Healthcare as a result, TML Health is exploring other options and will issue an RFP. This Interlocal agreement will allow the City to take advantage of the post-65 RFP.

Morris Williams Jr.

City Manager's Office

Public Employee Benefits Alliance

March 23, 2021

RE: NOTICE OF PUBLIC EMPLOYEE BENEFITS ALLIANCE ("PEBA") WIND-DOWN PLAN, effective 12/31/2021

Dear Tammy Belman:

As a member of PEBA accessing the products listed below, we are writing to inform you that PEBA will be dissolving and winding down its operations effective December 31, 2021.

The Board of Directors has approved a wind-down plan ("Plan") to avoid any disruption to you or your employees. As part of the Plan, we have obtained a commitment that the following vendors will continue to honor the existing rates and benefits under the terms indicated below:

Deer Oaks Employee Assistance Program (EAP)—Deer Oaks has agreed to the assignment of the PEBA group program to TML Health. TML Health has adopted a new Non-Risk Interlocal so that employers who are not participating in TML Health's medical coverage can still access these fully-insured products with the discounts negotiated by the Pool. Deer Oaks has agreed to keep the current benefits and rates in place through October 1, 2023 for those employers who sign TML Health's Non-Risk Interlocal Agreement.

American Fidelity, Voluntary Benefits - American Fidelity has agreed to the assignment of the PEBA group program to TML Health. TML Health has adopted a new Non-Risk Interlocal so that employers who are not participating in TML Health's medical coverage can still access these fully-insured products with the discounts negotiated by the Pool. American Fidelity has agreed to keep the current benefits and rates in place indefinitely for those employers who sign TML Health's Non-Risk Interlocal Agreement.

The Standard, Life Insurance and AD&D—The Standard has agreed to honor your existing benefits and rates and your policy agreement will now be directly between you and The Standard. Your rates and benefits are guaranteed through the date indicated in your current agreement with The Standard.

United Healthcare Retiree Solutions, Post-65 Retiree Medical—This is the third year of a three-year agreement with United Healthcare Retiree Solutions (UHC) for the Post-65 retiree medical products. PEBA members currently have the options of a Medicare Advantage or a Senior Supplement, and Part D prescription plans through UHC. The vast majority of PEBA members are enrolled in the Senior Supplement products; however, UHC has indicated that they do not plan to offer Senior Supplements in 2022. As a result, TML Health is exploring other options for all current PEBA groups with retiree coverage. It is still early to get firm rate quotes from carriers for a January 1, 2022 effective date. TML Health will communicate the new carrier, plan design options and rates in July once all RFP negotiations have been concluded.

In order to continue accessing ***Deer Oaks EAP, UHC Post-65 Retiree Benefits, and The Standard*** at the discounted rate, ***City of Midland*** will need to complete the attached Vendor Election Form. If you choose to participate as a non-risk member of TML Health, you must execute a Non-Risk Interlocal Agreement with the TML Intergovernmental Employee Benefits Pool d/b/a TML Health. The agreement will be

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executed electronically via HelloSign. As a non-risk member of TML Health, you will be able to access these fully insured products even though you are not participating in the TML Health Benefits Pool for medical or dental coverage.

Also, as a non-risk member of TML Health, you will continue to be billed directly from the vendor and keep the same service contacts that you currently have in place. You will not be charged any annual dues for accessing the products and TML Health is not taking any fees on these products; we are simply creating an administrative vehicle to maintain the volume discounts for you as well as our existing Pool members.

We respectfully request that you complete and return the enclosed Vendor Election Form by April 30, 2021. Upon receipt, TML Health will forward an electronic copy of the Non-Risk Interlocal Agreement for signature via HelloSign. If you take no action, we will notify the vendors that you no longer wish to participate in the program and these coverages will be terminated as of December 31, 2021.

Once PEBA operations have concluded and the final financial statements are issued, any remaining member equity in PEBA will be returned to the PEBA members who are current with their dues payments.

If you have any questions about PEBA or the enclosed *SAMPLE* Non-Risk Interlocal Agreement, please contact Heather VonGonten at (512)921-8265.

Sincerely,

Jennifer Hoff
TML Health Executive Director

CC: Eric Smith, Smith & Associates Consulting

Public Employee Benefits Alliance

VENDOR ELECTION FORM

INSTRUCTIONS: To continue accessing ***Deer Oaks EAP, UHC Post-65 Retiree Benefits, and The Standard*** at the discounted rate, ***City of Midland*** will need to select the applicable Vendor below and identify who is authorized to sign the Non-Risk Interlocal Agreement:

☐ **Deer Oaks Employee Assistance Program (EAP).** Deer Oaks has agreed to keep the current benefits and rates in place through October 1, 2023 for those employers who sign TML Health's Non-Risk Interlocal Agreement.

☐ **American Fidelity, Voluntary Benefits.** American Fidelity has agreed to keep the current benefits and rates in place indefinitely for those employers who sign TML Health's Non-Risk Interlocal Agreement.

☐ **The Standard, Life Insurance and AD&D.** The Standard has agreed to honor your existing benefits and rates and your policy agreement will now be directly between you and The Standard.

Electronic Signature Authorization:

Name of Person Authorized to Execute Non-Risk Interlocal: Click or tap here to enter text.

Title of Authorized Person: Click or tap here to enter text.

Email Address for Authorized Person: Click or tap here to enter text.

IMPORTANT INFORMATION: ***The Non-Risk Interlocal Agreement must be approved by your governmental entity's governing body at an open meeting prior to electronic signature.***

1821 Rutherford Lane, Suite 300 | Austin, Texas 78754 | 512-719-8352

Interlocal Agreement



Non-Risk Qualified Employer

TML MultiState Intergovernmental Employee Benefits Pool

Austin, Texas

INTERLOCAL AGREEMENT

(NON-RISK PARTICIPATING QUALIFIED EMPLOYER)

WHEREAS, the TML MultiState Intergovernmental Employee Benefits Pool d.b.a. TML Health Benefits Pool, hereinafter referred to as TML Health, is a legal governmental entity created by Political Subdivisions of the State of Texas and governed by a Board of Trustees; and

WHEREAS, the undersigned Qualified Employer represents (1) that it is (a) a Political Subdivision of the State of Texas or of its state of domicile, (b) an Affiliated Service Contractor (as defined by Section 172.003, Texas Local Government Code) of a Political Subdivision of this state or of its state of domicile (each of which is referred herein to as "Political Subdivision"), or (c) an Economic Development Corporation organized under Subtitle C1, Title 12, Texas Local Government Code; (2) that it is qualified under the interlocal cooperation law of the Employer's domiciliary state to enter into this Interlocal Agreement; and (3) that its governing body has acted by majority vote, at a duly called and posted public meeting, to authorize the Employer to participate in this Interlocal Agreement; and

WHEREAS, the undersigned Qualified Employer has examined all the facts and issues it deems relevant and determined that it is in the best interest of the Employer, its Employees, officials, and retirees and their dependents to enter into this Interlocal Agreement and obtain the services provided by the TML Health in connection with one or more life, sick, accident and other health benefits provided to its employees, officials, and retirees and their dependents; and

WHEREAS, the undersigned Qualified Employer acknowledges that it is not an Employer Member participating in TML Health risk pool, and therefore, is not entitled to rights and privileges of an Employer Member under the First Amended and Restated Trust Agreement for the TML Multistate Intergovernmental Employee Benefits Pool (the Trust), as amended; and

WHEREAS, the undersigned Qualified Employer acknowledges that the purpose of this Interlocal Agreement is to permit Qualified Employer to access benefits contracts and services through TML Health as authorized under Chapter 791 of the Texas Government Code; and

WHEREAS, the TML MultiState IEBP represents that it is a Local Government qualified to enter into this Interlocal Agreement pursuant to Chapter 791 of the Texas Government Code;

NOW, THEREFORE, in consideration of the covenants and agreements herein set forth, the undersigned Qualified Employer, enters into this Interlocal Agreement for the purpose of obtaining services for the administration of one or more life, sick, accident and other health benefits provided by the Qualified Employer. The services will be provided under the authority of the laws of the State of Texas including the Interlocal Cooperation Act (Chapter 791, Texas Government Code). The Employer hereby designates the TML MultiState IEBP as its instrumentality to administer the business and supervise the performance of the Interlocal Agreement. The conditions are agreed upon by and between the parties as set forth hereinafter.

1. When used in this Interlocal Agreement, the capitalized terms shall have the meanings specified in this paragraph unless the context clearly requires otherwise:

"Board of Trustees" or "Board" or "Trustees" means the trustees selected pursuant to the Trust Agreement Establishing the TML MultiState Intergovernmental Employee Benefits Pool to supervise the operation of the TML MultiState IEBP.

"Qualified Employer" means a non-risk Political Subdivision, Affiliated Service Contractor, or Economic Development Corporation as these terms are defined herein that is qualified to enter into this Interlocal Agreement under Chapter 791 of the Texas Government Code.

"Employer Member" means a risk participating Political Subdivision, Affiliated Service Contractor, or Economic Development Corporation.

"Plan" or "Plans" mean the health benefit plan(s) and other benefit plans as contracted by the Qualified Employer through TML Health.

"Political Subdivision" means any legal entity included within the definition of political subdivision in Chapter 791, Texas Government Code.

"TML Health" means the TML MultiState Intergovernmental Employee Benefits Pool.

"Interlocal Agreement" or "this Agreement" means the TML MultiState Intergovernmental Employee Benefits Pool Non-Risk Qualified Employer Interlocal Agreement.

"Local Government" means any legal entity included within the definition of "local government" in Chapter 791, Texas Government Code.

"Affiliated Service Contractor" means an entity described by Section 172.003(1) of the Texas Local Government Code.

"Economic Development Corporation" means a corporation organized under Subtitle C1, Title 12, Texas Local Government Code.

2. The Qualified Employer agrees to be bound by this Interlocal Agreement and the policies and procedures established by the TML Health which collectively establish the conditions for non-risk Qualified Employers services.

3. TML Health and the Qualified Employer will comply in all respects with their respective obligations under the applicable benefits contracts accessed through this Interlocal Agreement.

4. This Interlocal Agreement may be terminated by either the Qualified Employer or the TML Health with 30 days written notice.

5. The Qualified Employer shall furnish all the information TML Health deems necessary and useful for the purposes of this Agreement and shall abide by the policies and procedures adopted for the benefits contracts services. TML Health may amend its policies and procedures at the time of annual renewal of this Agreement and its Trust Agreement. TML Health may contract with a third party administrator to perform some or all of TML Health's duties under this Interlocal Agreement.

6. Qualified Employer will designate and appoint a contact of department head rank or above and agrees that TML Health shall not be required to contact or provide notices to any other person. Further, any notice to, or agreement by a Qualified Employer's contact, with respect to services or claims hereunder, shall be binding on the Qualified Employer. Qualified Employer reserves the right to change the contact from time to time by giving written notice to the TML Health.

7. The Qualified Employer hereby acknowledges that TML Health will be responsible for any and all request for proposal processes pertaining to the benefits contracts and/or services Qualified Employer seeks to access and TML Health will not be responsible nor have any administrator responsibilities in relation to the benefit contracts and/or services Qualified Employer accesses through this Interlocal Agreement, unless by mutual written agreement of the Parties.

8. Any benefit contract coverages or services accessed by Qualified Employer will be subject to applicable carrier's payment provisions for the accessed coverages or services. In the event, Qualified Employer fails to comply with applicable carrier's payment provisions, TML Health may terminate this Interlocal Agreement for cause and any rates and/or coverage quoted as a result of Qualified Employers access to benefit contracts or service through TML Health will no longer be valid upon the effective date of termination of this Interlocal Agreement.

9. Each Qualified Employer, as the employer, acknowledges it has responsibility for compliance with the state and federal laws applicable to employee benefits.

10. To the extent authorized by law, the Qualified Employer agrees to indemnify and hold harmless TML Health for all claims, damages and expenses, including but not limited to attorney's fees and costs of court, arising out of acts or omissions of officers or employees of the Qualified Employer in connection with accessing benefits contracts through TML Health. Qualified Employer agrees to pay all such claims, damages, and expenses out of current revenues at the time the obligation is determined. In the event current revenues are inadequate to fund the obligation at the time it is determined, the Qualified Employer agrees to take the appropriate budgetary action sufficient to pay the obligation.

11. The Qualified Employer and the TML Health may contract for additional administrative services relating to the Qualified Employer benefits contracts.

12. No bond is required of the Board of Trustees of the TML Health.

13. If any part of this Interlocal Agreement, save and except paragraph 3, is declared invalid, void or unenforceable, the remaining parts and provisions shall continue in full force and effect. It is further agreed that venue for any dispute arising under the terms of this Interlocal Agreement shall be in Austin, Travis County, Texas.

14. This Agreement with attachment represents the complete understanding of the TML Health and the Qualified Employer and may not be amended, modified or altered without the written agreement of both parties.

15. The term of this Interlocal Agreement shall be concurrent with that of the applicable benefits contracts accessed by Qualified Employer. Absent notice of termination, the Qualified Employer may annually renew and extend this Agreement.

16. This Interlocal Agreement is entered into in the State of Texas, and it is understood and agreed that this Interlocal Agreement shall be governed by, construed, and enforced in accordance with and subject to the laws of the State of Texas.

17. Qualified Employer represents and warrants that (a) this Agreement fully complies with the laws of the State of Texas and (b) Qualified Employer has full legal authority to enter into this Agreement. By entering into this Agreement, a Qualified Employer who is an Affiliated Service Contractor further warrants that it is an organization qualified for exemption under Section 501(c), Internal Revenue Code (26 U.S.C. Section 501(c)), as amended, that provides governmental or quasi-governmental services on behalf of a political subdivision and derives more than 25 percent of its gross revenues from grants or funding from the political subdivision.

This Interlocal Agreement is entered into for the Employer Member under authorization of

_____
(Employer Member)

at duly called meeting held on _____
(Date of Meeting)

By _____
(Signature) (Typed or Printed Name)

Authorized Official Title _____

Date _____

This Interlocal Agreement entered into and Appointment Accepted By:

The TML MultiState Intergovernmental Employee Benefits Pool at Austin, Texas

By: _____

Date _____

Approved as to Form:

By: _____
Leah Simon, General Counsel

City Council Meeting

Item Number: 8

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Justine Ruff, Director

Subject: **Motion authorizing the City Manager or the City Manager's designee to advertise a request for proposals for non-exclusive fixed base operator services at Midland International Air & Space Port, and to negotiate a fixed-base operator services agreement for said services; provided, however, that said agreement shall not become effective until approved by the City Council (DISTRICT: FOUR) (AIRPORTS)**

Purpose:

Motion approving advertising for Request for Proposals (RFP) for Non-Exclusive Fixed Base Operator (FBO) Services at Midland International Air & Space Port, Midland, Texas

Recommended City Council Action:

Approve

Fiscal Impact:

To be determined.

Discussion:

In January 2003, the City Council authorized the execution of a Commercial Land and Fixed Base Operator Lease Agreement between the City of Midland and Deer Horn Aviation. Since that time, the ownership of Deer Horn has changed hands several times, with the current owner/operator being Signature Flight Support. The Airport has become much busier during the last few years, and there have been many requests for another FBO to provide competition in the marketplace.

In 2014, the Commemorative Air Force moved their national headquarters away from Midland and returned their lease area to the City. In 2018, the Airport used an FAA Grant to repave the ramp in front of the Commemorative Center and widened the taxilane that accesses that area; therefore, paving the way for a new FBO.
The RFP is very vague as we are interested in seeing what different ideas various companies envision for this space. There have been many inquiries concerning the contract for FBO services and this RFP will be advertised nationwide.

The RFP's will be evaluated by a committee comprised of Airport Board and staff members using the following criteria:

- **Proposed Plan** – Strength/quality of overall plan for provision of FBO services, including considerations related to operational, business, marketing and concept of proposal for provision of FBO services, and quality and range of aeronautical related products, facilities and services proposed to be offered on the Airport.

- **Relevant Experience** – Experience and qualifications of management and other key personnel, business references (at least five) and successful experience with development and operation of FBO's at comparable airports.

- **Capital Improvements** – Quality and value to the City of Midland, Midland International Air & Space Port, and Airport users of Airport improvements proposed for construction and capacity to develop Airport property as proposed.

- **Financial Value** – Financial value to the City and Airport, including proposed rents and fees and the Base Annual Rent (BAR) payable on a monthly basis.

- **Other factors** – Other factor(s) or information reasonably determined to be useful to the City's decision in determining the best interest of the City of Midland and Midland International Air & Space Port as identified by evaluators.

Proposals will be due on August 18th, with an anticipated award date in September 2021.

Morris Williams Jr.

City Manager's Office

City Council Meeting

Item Number: 9

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Morris Williams, Assistant City Manager

Subject: RESOLUTION APPROVING AN AMENDMENT TO THAT CERTAIN ECONOMIC DEVELOPMENT AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND KEPLER AEROSPACE, LTD. (CITY MANAGER)

Purpose:

The Board of Directors of the Midland Development Corporation approved at their regular meeting on May 3, 2021 a resolution authorizing an amendment to the economic development agreement between the Midland Development Corporation and Kepler Aerospace, Ltd.

Recommended City Council Action:

Approve

Fiscal Impact:

None

Discussion:

This resolution serves to extend all dates in the economic development agreement by one year, as Kepler works to bring aircraft purchased overseas to Midland after delays caused by the pandemic. The MDC provides lease abatement to Kepler at the MDC's facility at the Spaceport Business Park as Kepler meets and maintains payroll and capital investment benchmarks.

Morris Williams Jr.

City Manager's Office

RESOLUTION NO. _____

RESOLUTION APPROVING AN AMENDMENT TO THAT CERTAIN ECONOMIC DEVELOPMENT AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND KEPLER AEROSPACE, LTD.

WHEREAS, the City Council finds it to be in the public interest to approve an amendment to that certain Economic Development Agreement between the Midland Development Corporation and the Kepler Aerospace, Ltd.;

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

THAT the amendment to that certain Economic Development Agreement between the Midland Development Corporation and the Kepler Aerospace, Ltd., which is attached hereto as Exhibit A and incorporated herein for all purposes, is hereby approved.

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., 2021, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO FORM ONLY:

_____
John Ohnemiller, City Attorney

AMENDMENT TO THE ECONOMIC DEVELOPMENT AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND KEPLER AEROSPACE, LTD.

THIS AMENDMENT is made and effective May 26, 2021, by and between the Midland Development Corporation ("*MDC*" or "*Landlord*"), a Type A corporation existing under the authority of Chapter 504 of the Texas Local Government Code, and Kepler Aerospace, Ltd., a Delaware corporation licensed to do business in the state of Texas ("*Company*").

WHEREAS, MDC and Company entered into that certain Economic Development Agreement dated January 29, 2020 (the "*Agreement*"), which was approved by the Midland Development Corporation Board of Directors and the Midland City Council; and

WHEREAS, the Agreement has been in full force and effect since its effective date and has not been allowed to lapse; and

WHEREAS, Company and MDC desire to make certain amendments to the Agreement as set forth below;

WITNESSETH:

For and in consideration of the execution of this Amendment and the mutual promises and covenants of the parties hereto, it is mutually promised, understood and agreed as follows:

1) Section III.A of the Agreement is hereby deleted in its entirety and replaced with the following:

A. **Personal Property and Inventory Investment Obligation.** Company or its Affiliates shall invest in and maintain cumulative Personal Property and quarter-end Inventory balances (collectively referred to herein as the "*Personal Property and Inventory*") at the Property in accordance with the following schedule and as of the following measurement dates:

1. Personal Property and Inventory of $40,000,000.00 as of January 1, 2022.

2. Personal Property and Inventory of $80,000,000.00 as of January 1, 2023.

3. Personal Property and Inventory of $120,000,000.00 as of January 1, 2024.

The Personal Property and Inventory at the Property shall be evidenced by tax statements issued by the Midland Central Appraisal District, which shall be provided to MDC no later than October 1 of each year during the term of this Agreement. The value of the Personal Property and Inventory shall be determined in accordance with the tax statements issued by the Midland Central Appraisal District. Company shall maintain its investment in the Personal Property and Inventory for the duration of the term of this Agreement.

2) Section III.B of the Agreement is hereby deleted in its entirety and replaced with the following:

B. **Full-Time Jobs and Payroll Obligations.** Company shall create and maintain new Full-Time Jobs and Annual Payroll in accordance with the following schedule:

1. Twelve (12) Full-Time Jobs with an Annual Payroll of $1,010,000.00 as of January 1, 2022.

2. Twenty-One (21) Full-Time Jobs with an Annual Payroll of $1,850,000.00 as of January 1, 2023.

3. Twenty-Eight (28) Full-Time Jobs with an Annual Payroll of $2,430,000.00 as of January 1, 2024.

Company shall maintain said Full-Time Jobs and Payroll for the duration of the term of this Agreement.

3) Section III.E of the Agreement is hereby deleted in its entirety and replaced with the following:

E. **Company's Earned Rental Option.** If by January 1, 2024, Company certifies to MDC, in accordance with Section IX.B below, that Company has invested at least (i) $150,000,000.00 in Personal Property and Inventory or other tangible assets at the Property and (ii) created and maintained Forty (40) new Full-Time Jobs at the Property, then Company shall be entitled to an additional Three (3) years' worth of rent abatement (the "*Rental Option*"), as provided for in the Sublease described herein. The Rental Option and Company's exercise thereof shall be subject to the terms and conditions of this Agreement and the Sublease.

4) Article VII of the Agreement is hereby deleted in its entirety and replaced with the following:

VII.
Term

Upon execution by all of the parties, this Agreement becomes effective on the Effective Date and shall terminate on January 31, 2024, or when terminated by mutual agreement of the parties, or when terminated as set forth in Section X.E. Notwithstanding any contrary provision contained herein, in the event that Company exercises the Rental Option in accordance with Section III.E, the Agreement shall terminate upon the conclusion of the second three (3) year term during which Company's rent is abated.

5) The Agreement, inclusive of this Amendment, is hereby ratified and affirmed by Company and MDC, and the Agreement shall in all respects remain in full force and effect in accordance with its provisions and as amended above.

[Signature Pages Follow]

EXECUTED by the duly authorized officials as of the day and year first above written.

MIDLAND
DEVELOPMENT CORPORATION

Wesley Bownds, Chairman

ATTEST:

Berry Simpson, Secretary

KEPLER AEROSPACE, LTD.

Brent Nelson, Director and Founder

THE STATE OF Texas §
COUNTY OF ~~Ector~~ Midland §

BEFORE ME, Rachel Windhorst, a notary public, on this day personally appeared Brent Nelson, Director and Founder of Kepler Aerospace, Ltd., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same as the act and deed of said Company for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 28th day of April, A.D., 2021.

Rachel Windhorst
Notary Public, in and for
the State of Texas

RACHEL WINDHORST
Notary Public, State of Texas
My Comm. Exp. 09-23-2024
ID No. 13269245-1

AMENDMENT TO THE ECONOMIC DEVELOPMENT AGREEMENT BETWEEN THE MIDLAND DEVELOPMENT CORPORATION AND KEPLER AEROSPACE, LTD.

THIS AMENDMENT is made and effective May 26, 2021, by and between the Midland Development Corporation ("*MDC*" or "*Landlord*"), a Type A corporation existing under the authority of Chapter 504 of the Texas Local Government Code, and Kepler Aerospace, Ltd., a Delaware corporation licensed to do business in the state of Texas ("*Company*").

WHEREAS, MDC and Company entered into that certain Economic Development Agreement dated January 29, 2020 (the "*Agreement*"), which was approved by the Midland Development Corporation Board of Directors and the Midland City Council; and

WHEREAS, the Agreement has been in full force and effect since its effective date and has not been allowed to lapse; and

WHEREAS, Company and MDC desire to make certain amendments to the Agreement as set forth below;

WITNESSETH:

For and in consideration of the execution of this Amendment and the mutual promises and covenants of the parties hereto, it is mutually promised, understood and agreed as follows:

1) Section III.A of the Agreement is hereby deleted in its entirety and replaced with the following:

A. **Personal Property and Inventory Investment Obligation.** Company or its Affiliates shall invest in and maintain cumulative Personal Property and quarter-end Inventory balances (collectively referred to herein as the "*Personal Property and Inventory*") at the Property in accordance with the following schedule and as of the following measurement dates:

1. Personal Property and Inventory of $40,000,000.00 as of January 1, 2022.

2. Personal Property and Inventory of $80,000,000.00 as of January 1, 2023.

3. Personal Property and Inventory of $120,000,000.00 as of January 1, 2024.

The Personal Property and Inventory at the Property shall be evidenced by tax statements issued by the Midland Central Appraisal District, which shall be provided to MDC no later than October 1 of each year during the term of this Agreement. The value of the Personal Property and Inventory shall be determined in accordance with the tax statements issued by the Midland Central Appraisal District. Company shall maintain its investment in the Personal Property and Inventory for the duration of the term of this Agreement.

2) Section III.B of the Agreement is hereby deleted in its entirety and replaced with the following:

B. **Full-Time Jobs and Payroll Obligations.** Company shall create and maintain new Full-Time Jobs and Annual Payroll in accordance with the following schedule:

1. Twelve (12) Full-Time Jobs with an Annual Payroll of $1,010,000.00 as of January 1, 2022.

2. Twenty-One (21) Full-Time Jobs with an Annual Payroll of $1,850,000.00 as of January 1, 2023.

3. Twenty-Eight (28) Full-Time Jobs with an Annual Payroll of $2,430,000.00 as of January 1, 2024.

Company shall maintain said Full-Time Jobs and Payroll for the duration of the term of this Agreement.

3) Section III.E of the Agreement is hereby deleted in its entirety and replaced with the following:

E. **Company's Earned Rental Option.** If by January 1, 2024, Company certifies to MDC, in accordance with Section IX.B below, that Company has invested at least (i) $150,000,000.00 in Personal Property and Inventory or other tangible assets at the Property and (ii) created and maintained Forty (40) new Full-Time Jobs at the Property, then Company shall be entitled to an additional Three (3) years' worth of rent abatement (the "*Rental Option*"), as provided for in the Sublease described herein. The Rental Option and Company's exercise thereof shall be subject to the terms and conditions of this Agreement and the Sublease.

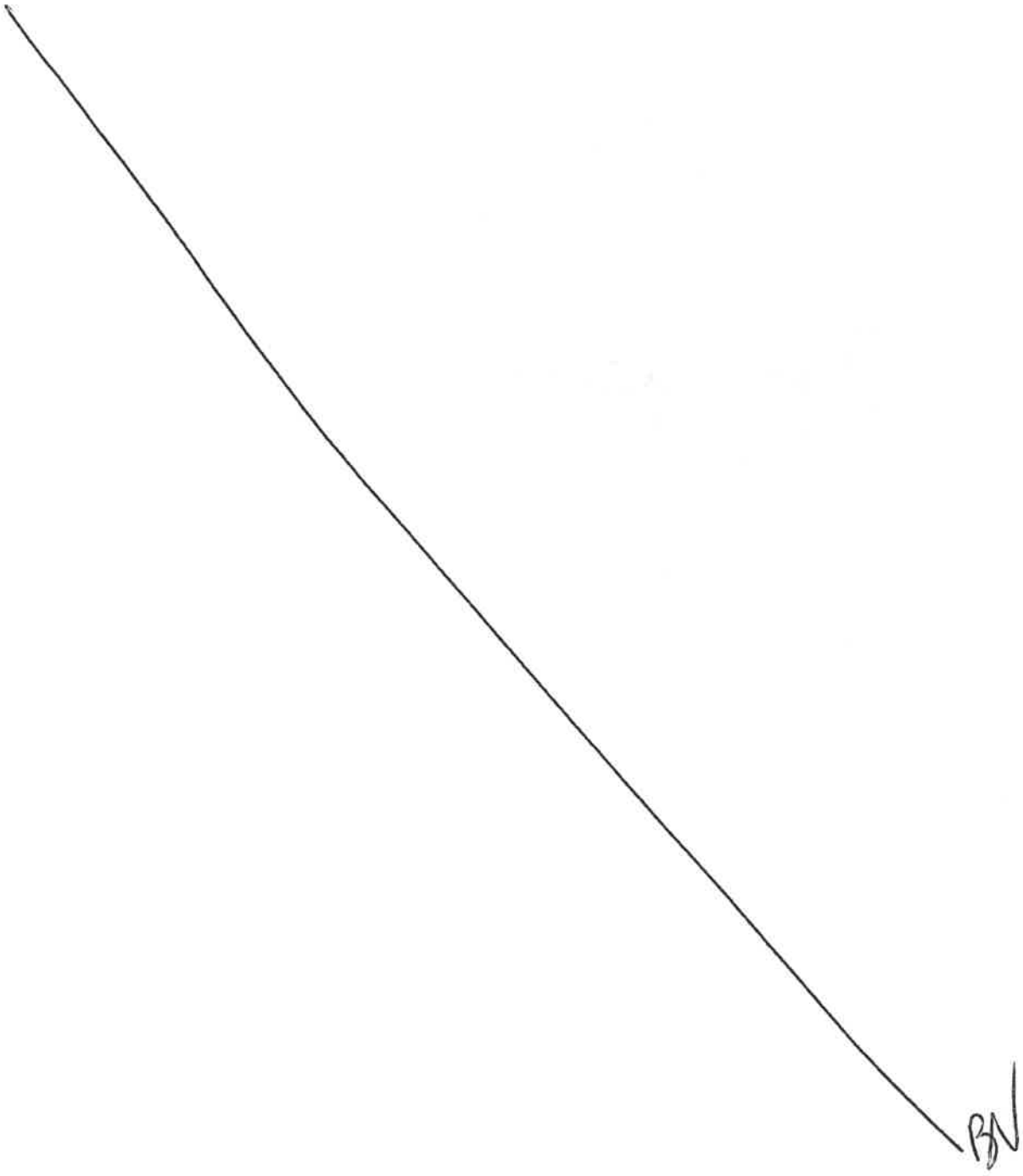
4) Article VII of the Agreement is hereby deleted in its entirety and replaced with the following:

VII.
Term

Upon execution by all of the parties, this Agreement becomes effective on the Effective Date and shall terminate on January 31, 2024, or when terminated by mutual agreement of the parties, or when terminated as set forth in Section X.E. Notwithstanding any contrary provision contained herein, in the event that Company exercises the Rental Option in accordance with Section III.E, the Agreement shall terminate upon the conclusion of the second three (3) year term during which Company's rent is abated.

5) The Agreement, inclusive of this Amendment, is hereby ratified and affirmed by Company and MDC, and the Agreement shall in all respects remain in full force and effect in accordance with its provisions and as amended above.

[Signature Pages Follow]



EXECUTED by the duly authorized officials as of the day and year first above written.

MIDLAND
DEVELOPMENT CORPORATION

Wesley Bownds, Chairman

ATTEST:

Berry Simpson, Secretary

KEPLER AEROSPACE, LTD.

Brent Nelson, Director and Founder

THE STATE OF Texas §
Midland §
COUNTY OF ~~Ector~~ §

BEFORE ME, Rachel Windhorst, a notary public, on this day personally appeared Brent Nelson, Director and Founder of Kepler Aerospace, Ltd., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same as the act and deed of said Company for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 28th day of April, A.D., 2021.

Rachel Windhorst
Notary Public, in and for
the State of Texas

RACHEL WINDHORST
Notary Public, State of Texas
My Comm. Exp. 09-23-2024
ID No. 13269245-1

City Council Meeting

Item Number: 10

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Laurie Williams, Assistant Director

Subject: RESOLUTION AUTHORIZING THE MIDLAND CHAMBER OF COMMERCE TO HOLD THE ANNUAL STAR SPANGLED SALUTE AT CENTENNIAL PARK AND ON THE ADJACENT PUBLIC RIGHTS OF WAY ON JULY 3, 2021; AND AUTHORIZING THE SALE AND CONSUMPTION OF ALCOHOLIC BEVERAGES AT SAID EVENT (COMMUNITY SERVICES)

Purpose:

A resolution authorizing the Midland Chamber of Commerce to hold the annual Star Spangled Salute in downtown Midland and where alcohol can be sold and consumed and authorizing the City Manager or his designee to notify the Texas Alcoholic Beverage Commission of the permission granted.

Recommended City Council Action:

Approve

Fiscal Impact:

None.

Discussion:

The annual Star Spangled Salute will be held July 3, 2021, in downtown Midland. The event is moving back downtown after taking place at Hogan Park the past five years. The event was not held in 2020. They have asked for permission to sell and consume alcohol at the location. The Chamber would provide a letter of permission in their application to the Texas Alcoholic Beverage Commission. Alcohol has previously been served at the event with City Council approval and an approved application to the Texas Alcoholic Beverage Commission.



City Manager's Office

RESOLUTION NO. _____

RESOLUTION AUTHORIZING THE MIDLAND CHAMBER OF COMMERCE TO HOLD THE ANNUAL STAR SPANGLED SALUTE AT CENTENNIAL PARK AND ON THE ADJACENT PUBLIC RIGHTS OF WAY ON JULY 3, 2021; AND AUTHORIZING THE SALE AND CONSUMPTION OF ALCOHOLIC BEVERAGES AT SAID EVENT

WHEREAS, the City Council finds it to be in the public interest to authorize the Midland Chamber of Commerce to hold the annual Star Spangled Salute at Centennial Park and on the adjacent public rights of way on July 3, 2021;

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

SECTION ONE. That the Midland Chamber of Commerce is hereby authorized to hold the annual Star Spangled Salute at Centennial Park on July 3, 2021. Said event shall be located at Centennial Park and on the following adjacent public rights of way:

- West Texas Avenue between North Colorado Street and North Main Street;
- West Wall Street between North Colorado Street and North Main Street; and
- North Colorado Street between West Texas Avenue and West Wall Street.

SECTION TWO. That the sale and consumption of alcoholic beverages shall be permitted during the event at the locations specified herein.

SECTION THREE. That the City Manager or his designee is hereby authorized to provide the Texas Alcoholic Beverage Commission or other appropriate entity a letter setting forth the permission granted by this Resolution.

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., 2021, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO FORM ONLY:

_____
John Ohnemiller, City Attorney

MIDLAND
Community Services

Health and Senior Services
432.681.7613

Animal Services
432.685.7420

Golf Course
432.685.7360

Martin Luther King, Jr.
Community Center
432.685.7355

Parks and Recreation
432.685.7355

Scarborough Linebery House
432.685.7368

May 26, 2021

Texas Alcoholic Beverage Commission
6010 East Highway 191, Suite 234
Odessa, TX 79762
432-367-0760

Dear Melissa Thorn,

I am writing this letter on May 26, 2021, on behalf of the City of Midland. The intent of the letter is to inform you that the City of Midland has granted permission to the Midland Chamber of Commerce and Mac's Bar-B-Q & Catering to sell/distribute alcohol on City property, specifically the section of W. Texas Ave. between N. Colorado St. and N. Main St. They have the permission of the City of Midland to do so on the date of July 3, 2021. Please contact me at 685-7354 with any questions in regards to this letter.

Sincerely,

Laurie M. Williams

Laurie Williams
Assistant Community Services Director
City of Midland

P.O. Box 1152, Midland TX 79702-1152 • 432-685-7356 • fax 432-685-7357

City Council Meeting

Item Number: 11

Meeting Date: May 25, 2021

To: City Council / City Manager

From: John Simmons, Manager, Right-of-Way

Subject: Motion authorizing the execution of a Right-of-Way License Amendment between the City of Midland and SCM Water, LLC, regarding City owned property described as sections 13, 17, 18,19 and 21, Block C-23, P.S.L. Survey, Abstract No. 1388, Winkler County, Texas (DISTRICT: NONE) (UTILITIES)

Purpose:

This ROW License amends the ROW License recorded in Winkler County as 2020-35378 effective January 15, 2020, which granted a 30' wide right of way to SCM Water, LLC to construct a 12" poly construction private water line. This pipeline was never constructed due to changing tie in points of the old lease operator. Applicant would like to amend and add to the routing to tie into the latest tank facilities of the new lease operator with above ground valve sites for the Lease Automatic Custody Transfer Units (LACT). Existing Right of Way License is paid up to date at this time, $15,887.60 total for the 771.96 rods and 4,484 sq. ft. of surface use area. New route will entail adding 206.35 rods for pipeline and 786.76 sq. ft. of surface area.

Recommended City Council Action:

Approve

Fiscal Impact:

New Annual Lease Rate (978.31 rods x $20/rod): $19,566.20
Lease rate paid for 2021: $15,887.60
Difference Due this amendment: $3,678.60

Surface Damages: Pipeline and surface never built from previous license

Paid in 2020: pipeline (771.96 rods x $10/rod): $ 7,717.60
surface area ($0.08 * 4,484 sq. ft.): $358.72

Difference due this amendment: pipeline difference (206.35 rods x $10/rod): $2,063.50
Surface use difference (786.76 sq. ft. x $0.08): $62.64

Discussion:

This private use, poly construction water line is twelve and three quarters inches (12.75) in diameter and buried thirty-six inches (36) deep and does not interfere with the City Water operations in this area.

Certificates of Insurance (COI) with City of Midland named as additional insured and a waiver of subrogation in favor of the City of Midland has been collected and on file.

City Secretary to record completed License Agreement

Morris Williams Jr.

City Manager's Office

AMENDMENT TO THE RIGHT OF WAY LICENSE
BETWEEN SCM WATER, LLC
AND
THE CITY OF MIDLAND, TEXAS

THIS AMENDMENT is made and effective this __ day of _____, 2021, by and between SCM Water, LLC ("Company"), and the City of Midland ("City"), a home-rule municipality.

WHEREAS, Company and City entered into that certain Right of Way License dated January 15, 2020 (the "License"), for the right to enter upon certain City-owned property for the purpose of placing, constructing, operating, repairing, maintaining, replacing and removing a poly construction water pipeline and a connection valve on and across City's property which was approved by the Midland City Council by Resolution No. 2020-016; and

WHEREAS, the License has been in full force and effect since its effective date and has not been allowed to lapse; and

WHEREAS, Company and City desire to make certain amendments to the License as set forth below;

W I T N E S S E T H:

For and in consideration of the execution of this Amendment and the mutual promises and covenants of the parties hereto, it is mutually promised, understood and agreed as follows:

1) The License is hereby amended so as to replace the original exhibit (referred to in the License as **Exhibit A**) in its entirety with **Exhibit "A"**, attached hereto and incorporated herein for all purposes.

2) The License is hereby amended so as to replace the original exhibit (referred to in the License as **Exhibit B**) in its entirety with **Exhibit "B"**, attached hereto and incorporated herein for all purposes

3) Section II(A)-(C) of the License is hereby amended to read in its entirety as follows:

A. License Fee. The first year's license fee in the amount of NINETEEN THOUSAND FIVE HUNDRED SIXTY-SIX and 20/100 Dollars ($19,566.20) shall be due and payable on or prior to the Commencement Date of this License ("License Fee"). Licensee's failure to make the License Fee payment within thirty (30) days after the License Fee is due shall constitute a late payment and Licensee shall pay Licensor a late charge of five percent (5%).

B. Surface Damage Fee. Licensee shall pay a one-time surface damage fee to the Licensor in the amount of TEN THOUSAND TWO HUNDRED TWO and 46/100 Dollars ($10,202.46), payable on or prior to the Commencement Date.

C. Annual Fee. Licensee shall pay to the Licensor an annual fee in the amount of NINETEEN THOUSAND FIVE HUNDRED SIXTY-SIX and 20/100 Dollars ($19,566.20) which shall be payable each year on or before the anniversary of the Commencement Date of this License.

4) Section III(A) of the License is hereby amended to read in its entirety as follows:

A. Permitted Use. Licensor does hereby grant unto Licensee, the right to enter upon the Property, being fifty-five (55) feet in width of the pipeline locations as shown on **Exhibit A** attached hereto and incorporated herein for the purpose of placing, constructing, repairing, maintaining, replacing and removing, thereon, along the herein described pipeline locations, a poly construction pipeline, not to exceed twelve and three-quarters (12.75) inches in diameter, for the transportation of water, to have the right of ingress and egress at convenient points for such purpose, and said construction width shall revert to thirty (30) feet after the pipeline is laid. Additionally, Licensor does hereby grant unto Licensee, the right to enter upon the Property to access the surface site location as shown on **Exhibit B**, attached hereto and incorporated herein for the purpose of placing, constructing, operating, repairing, maintaining, replacing and removing thereon, a connection valve and to have right of ingress and egress at convenient points for such purpose. **All activities conducted by Licensee pursuant to this License shall be conducted at least one hundred fifty (150) feet from all water wells. 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 with 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.**

5) The License, inclusive of this Amendment, is hereby ratified and affirmed by Company and City, and the License shall in all respects remain in full force and effect in accordance with its provisions and as amended above.

EXECUTED by the duly authorized officials as of the day and year first above written.

CITY OF MIDLAND

_____

Patrick N. Payton, Mayor

ATTEST:

Amy M. Turner, City Secretary

SCM WATER, LLC

John Nicholson, Chief Operating Officer

THE STATE OF Texas §
§
COUNTY OF Harris §

BEFORE ME, Allison Rogus a notary public, on this day personally appeared John Nicholson an officer of SCM Water, 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 company for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY AND SEAL OF OFFICE this the 12 day of May, 2021.

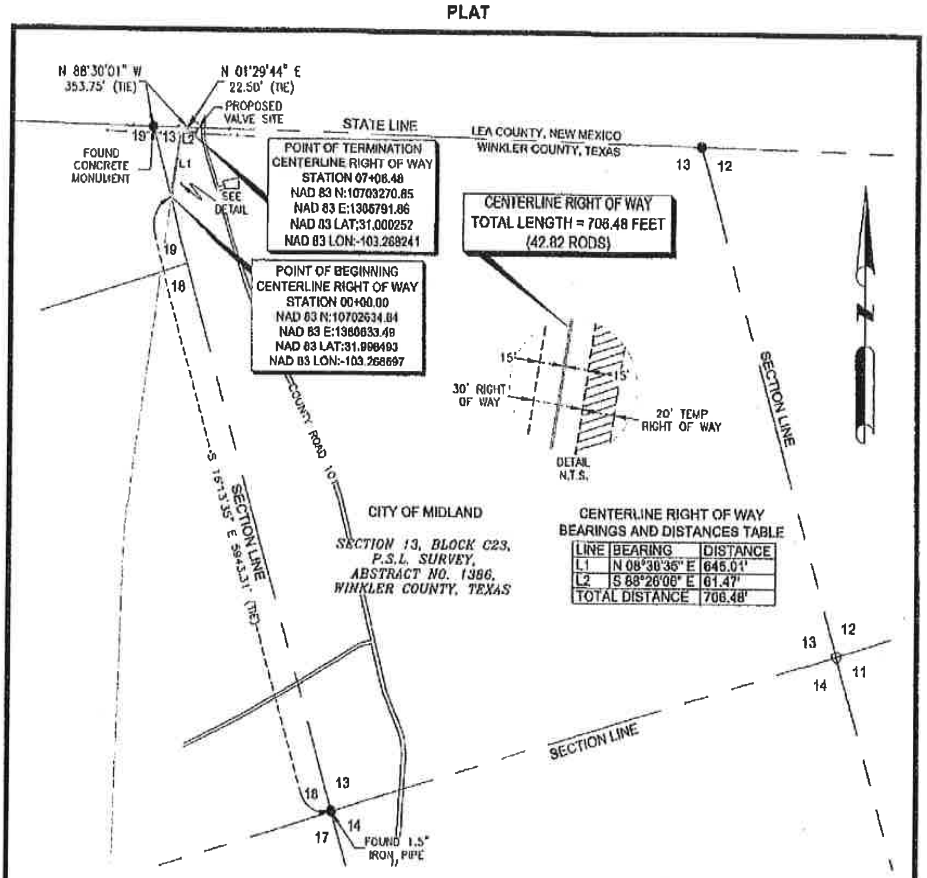
Allison Rogers
Notary Public, in and for
The State of Texas

ALLISON CAMILLE ROGERS, I
Notary Public, State of Texas
Comm. Expires 04-09-2023
Notary ID 131965925

Printed Name: Allison Rogers

My Commission Expires: 5/12/21

EXHIBIT "A"
PLAT



LINE	BEARING	DISTANCE
L1	N 08°38'35" E	645.01'
L2	S 88°26'06" E	61.47'
TOTAL DISTANCE		706.48'

CENTERLINE DESCRIPTION

BEING the centerline of a proposed pipeline right of way situated in SECTION 13, BLOCK C23, P.S.L. SURVEY, ABSTRACT NO. 1386, Winkler County, Texas. Said centerline being more particularly described as follows:

BEGINNING at a point in the West boundary line of said SECTION 13 from which a 1.5" iron pipe found for the Southwest corner of said SECTION 13 bears S 16°13'35" E, a distance of 5943.31 feet (TIE), said POINT OF BEGINNING having a TX-Central Zone 4203, NAD 83 coordinate value of N:10702634.84, E:1386633.49.

THENCE N 08°38'35" E, a distance of 645.01 feet to a point;

THENCE S 88°26'06" E, a distance of 61.47 feet to the POINT OF TERMINATION of the herein described centerline, at a point in said SECTION 13, from which a concrete monument found for the Northwest corner of said SECTION 13 bears N 01°29'44" E, a distance of 22.50 feet (TIE) and N 88°30'01" W, a distance of 353.75 feet (TIE), said POINT OF TERMINATION having a TX-Central Zone 4203, NAD 83 coordinate value of N:10703270.85, E:1386791.86.

Said centerline containing 706.48 feet or 42.82 rods in SECTION 13, more or less.

LEGEND

SURVEY LINE
OHE — OVERHEAD ELECTRIC
CENTERLINE RIGHT OF WAY
RIGHT OF WAY
TEMPORARY RIGHT OF WAY
EXISTING PIPELINE
FENCE LINE
POWER POLE
FOUND MONUMENT
CALCULATED CORNER
BEARING CHANGE

POINT OF BEGINNING BEING LOCATED APPROXIMATELY
14 MILES NORTHWEST OF KERMIT, TEXAS

2400' 0' 1200' 2400'

SCALE: 1" = 1200'

STATE OF TEXAS REGISTERED DEMPSEY D. HANNAH 5637 PROFESSIONAL LAND SURVEYOR

Dempsey D. Hannah 11-25-19

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

NOTES:

1.) ALL BEARINGS SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES ARE GRID.

2.) LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.

3.) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

REV.	DATE	BY:	DESCRIPTION	CHK
1	11/25/19	CPM	UPDATED TEXT	DDH

PROJECT NO. 1910121

SCM WATER, LLC

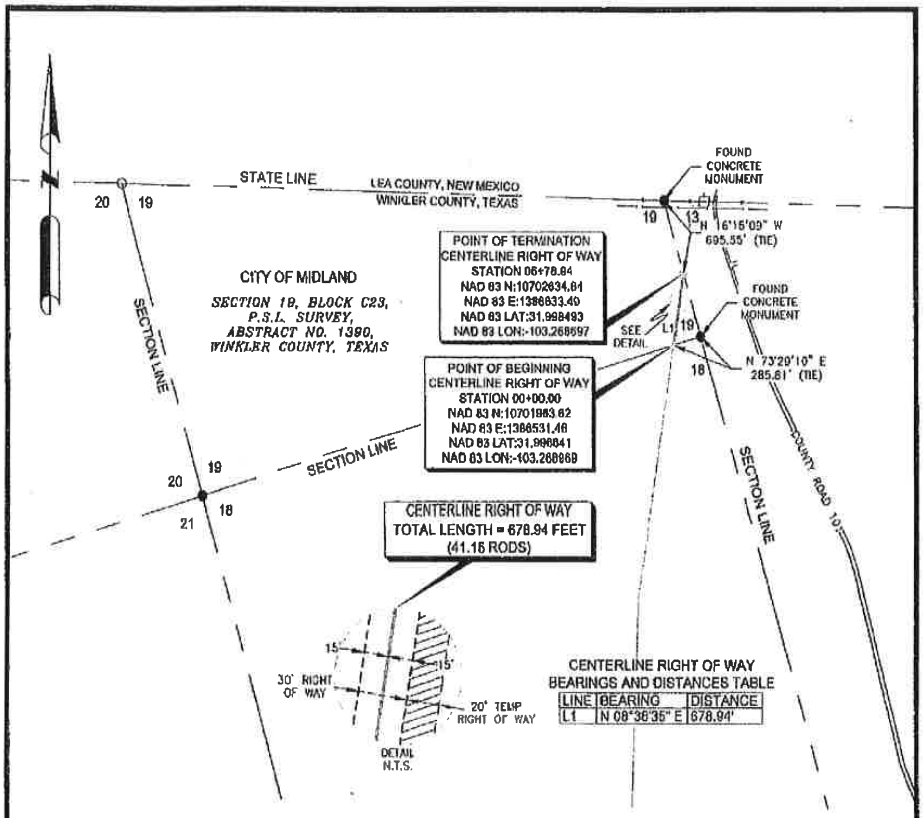
AMEREDEV WATER INTER
CITY OF MIDLAND
PROPOSED CENTERLINE RIGHT OF WAY

Situated in
SECTION 13, BLOCK C23,
P.S.L. SURVEY,
ABSTRACT NO. 1386,
Winkler County, Texas

TRANSGLOBAL SERVICES LLC
201 West Wall Street, Suite 325
Midland, Texas 79701
Phone: (432) 218-7942
TBPLS FIRM #10194245

DRAWN BY: CPM	DATE: 11-21-19	DWG. NO.	REV.
CHECKED BY: DDH	DATE: 11-21-19		1
SCALE: 1"=1200'	PAGE 1 OF 1		

EXHIBIT "A"
PLAT



CENTERLINE DESCRIPTION

BEING the centerline of a proposed pipeline right of way situated in SECTION 19, BLOCK C23, P.S.L. SURVEY, ABSTRACT NO. 1390, Winkler County, Texas. Said centerline being more particularly described as follows:

BEGINNING at a point in the South boundary line of said SECTION 19 from which a concrete monument found for the Southeast corner of said SECTION 19 bears N 73°29'10" E, a distance of 285.61 feet (TIE), said POINT OF BEGINNING having a TX-Central Zone 4203, NAD 83 coordinate value of N:10701983.62, E:1386531.46.

THENCE N 09°36'35" E, a distance of 678.94 feet to the POINT OF TERMINATION of the herein described centerline, at a point in the East boundary line of said SECTION 19, from which a concrete monument found for the Northeast corner of said SECTION 19 bears N 16°15'09" W, a distance of 695.55 feet (TIE), said POINT OF TERMINATION having a TX-Central Zone 4203, NAD 83 coordinate value of N:10702634.84, E:1386833.49.

Said centerline containing 678.94 feet or 41.16 rods in SECTION 19, more or less.

LEGEND

SURVEY LINE
OHE — OVERHEAD ELECTRIC
CENTERLINE RIGHT OF WAY
RIGHT OF WAY
TEMPORARY RIGHT OF WAY
EXISTING PIPELINE
FENCE LINE
POWER POLE
FOUND MONUMENT
CALCULATED CORNER
BEARING CHANGE

POINT OF BEGINNING BEING LOCATED APPROXIMATELY
14 MILES NORTHWEST OF KERMIT, TEXAS

2400' 0' 1200' 2400'

SCALE: 1" = 1200'

NOTES:

1.) ALL BEARINGS SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES ARE GRID.

2.) LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.

3.) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

STATE OF TEXAS REGISTERED DEMPSEY D. HANNAH 5637 PROFESSIONAL LAND SURVEYOR

Dempsey D. Hannah 11.25.19

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

REV.	DATE	BY:	DESCRIPTION	CHK
1	11/26/19	CPM	UPDATED TEXT	DDH

PROJECT NO. 1910121

TRANSGLOBAL SERVICES LLC

201 West Wall Street, Suite 325
Midland, Texas 79701
Phone: (432) 218-7942
TBPLS FIRM #10194245

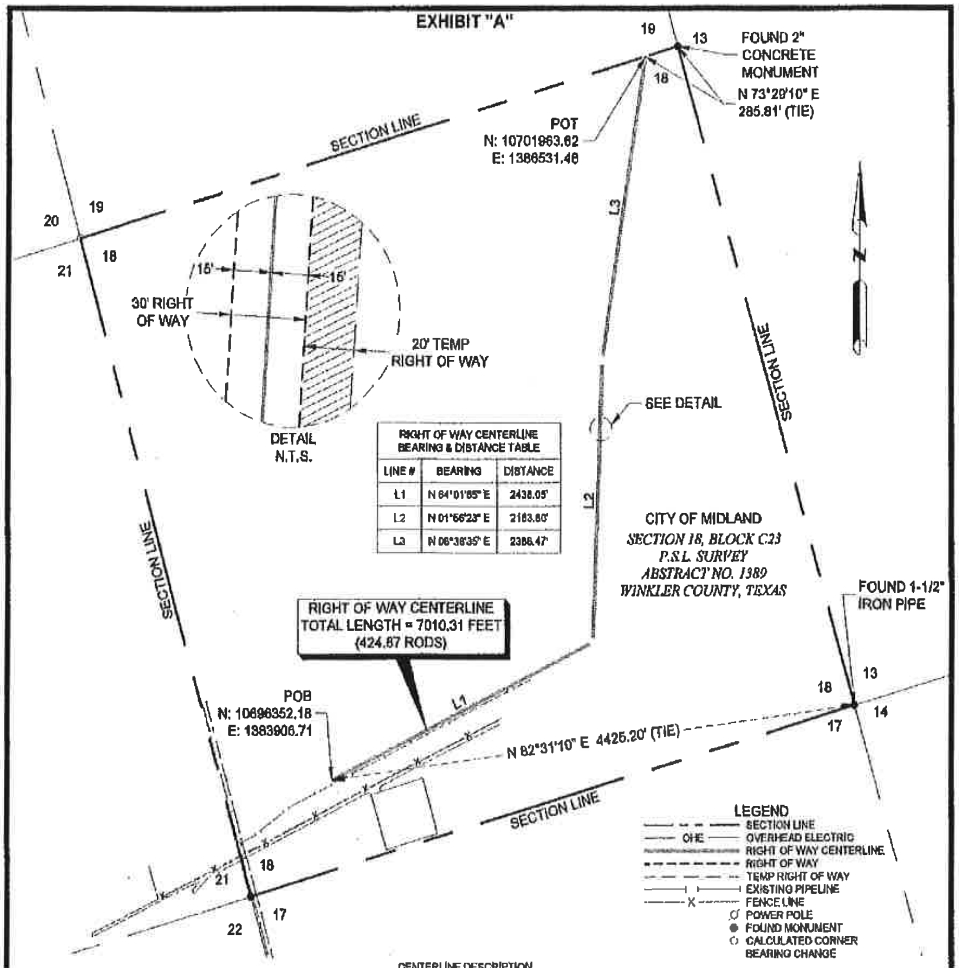
SCM WATER, LLC

AMEREDEV WATER INTER
CITY OF MIDLAND
PROPOSED CENTERLINE RIGHT OF WAY

Situated in
SECTION 19, BLOCK C23,
P.S.L. SURVEY,
ABSTRACT NO. 1390,
Winkler County, Texas

DRAWN BY: CPM	DATE: 11-21-19	DWG. NO.	REV.
CHECKED BY: DDH	DATE: 11-21-19		1
SCALE: 1"=1200'	PAGE 1 OF 1		

EXHIBIT "A"



RIGHT OF WAY CENTERLINE BEARING & DISTANCE TABLE

LINE #	BEARING	DISTANCE
L1	N 64°01'55" E	2438.05'
L2	N 01°56'23" E	2183.80'
L3	N 08°36'35" E	2386.47'

CENTERLINE DESCRIPTION

BEING THE CENTERLINE OF A PROPOSED PIPELINE RIGHT OF WAY SITUATED IN SECTION 18, BLOCK C23, P.S.L. SURVEY, ABSTRACT NO. 1389, WINKLER COUNTY, TEXAS. SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT (N: 10696352.18, E: 1383906.71) IN SAID SECTION 18, FROM WHICH A 1-1/2" IRON PIPE FOUND FOR THE SOUTHEAST CORNER OF SAID SECTION 18 BEARS N 82°31'10" E, A DISTANCE OF 4425.20 FEET (TIE).

THENCE N 64°01'55" E, A DISTANCE OF 2438.05 FEET TO A POINT;
THENCE N 01°56'23" E, A DISTANCE OF 2183.80 FEET TO A POINT;

THENCE N 08°36'35" E, A DISTANCE OF 2386.47 FEET TO THE POINT OF TERMINATION (N: 10701963.62, E: 1386531.46) OF SAID CENTERLINE, AT A POINT IN THE NORTH BOUNDARY LINE OF SAID SECTION 18, FROM WHICH A 2" CONCRETE MONUMENT FOUND FOR THE NORTHEAST CORNER OF SAID SECTION 18 BEARS N 73°29'10" E, A DISTANCE OF 285.81 FEET (TIE).

SAID CENTERLINE CONTAINING A TOTAL OF 7010.31 FEET OR 424.87 RODS IN SAID SECTION 18.

THE POINT OF BEGINNING IS LOCATED APPROXIMATELY 14 MILES NORTHWEST OF KERMIT, TEXAS

1000' 0' 1000'

Scale: 1" = 1000'

STATE OF TEXAS REGISTERED DEMPSEY D. HANNAH 5637 PROFESSIONAL LAND SURVEYOR

Dempsey D. Hannah 05/06/21

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

#	DATE	BY:	DESCRIPTION	CHK

PROJECT NO. 4994

TRANSGLOBAL SERVICES LLC

TBPELS FIRM# 10193740 / 10148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1160 ~ Fax (817) 529-1161

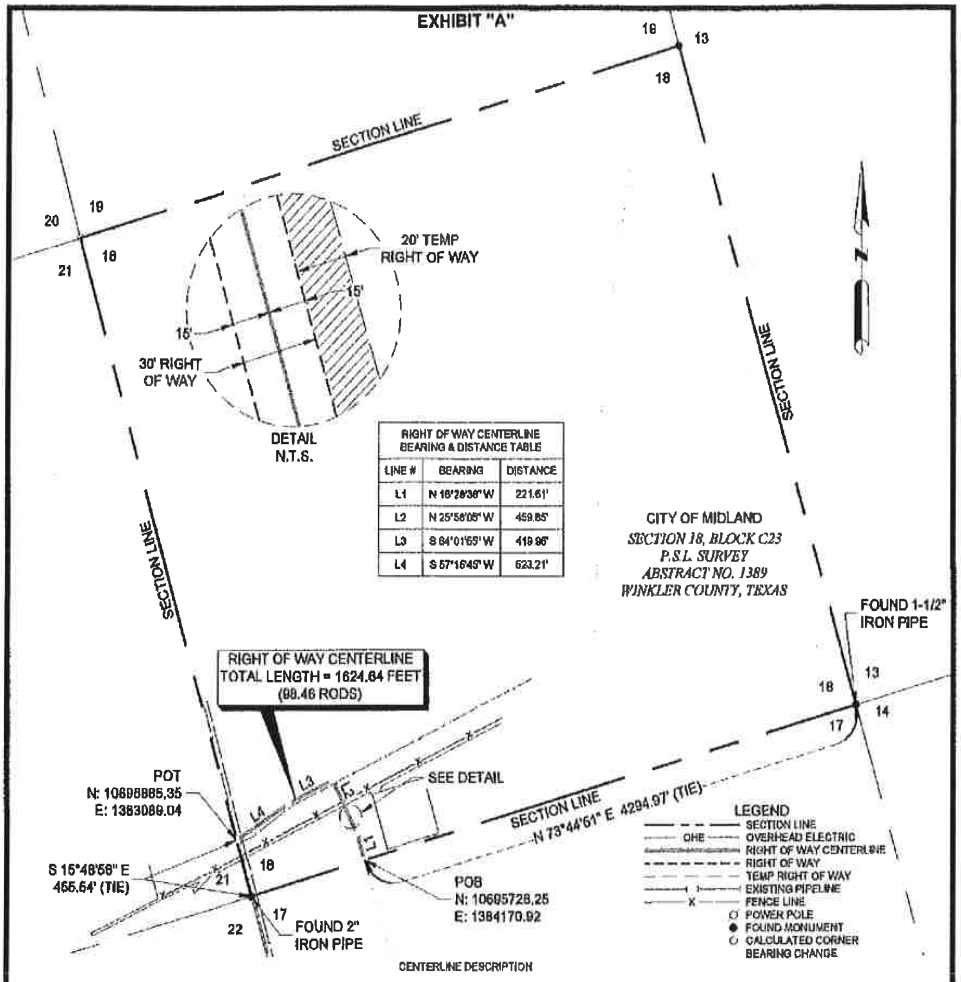
SCM WATER, LLC

GRIZZLY WATER
CITY OF MIDLAND
PROPOSED RIGHT OF WAY CENTERLINE

SITUATED IN
SECTION 18, BLOCK C23
P.S.L. SURVEY
ABSTRACT NO.1389
WINKLER COUNTY, TEXAS

DRAWN BY: BAB	DATE: 05/05/2021	DWG. NO. 4994_3.00 SEC 18 LATERAL	REV. 0
CHECKED BY: DDH	DATE: 05/05/2021		
SCALE: 1"=1000'	PAGE 1 OF 1		

EXHIBIT "A"



RIGHT OF WAY CENTERLINE BEARING & DISTANCE TABLE

LINE #	BEARING	DISTANCE
L1	N 18°28'38" W	221.61'
L2	N 25°58'05" W	459.85'
L3	S 64°01'55" W	419.96'
L4	S 57°16'45" W	623.21'

CENTERLINE DESCRIPTION

BEING THE CENTERLINE OF A PROPOSED PIPELINE RIGHT OF WAY SITUATED IN SECTION 18, BLOCK C23, P.S.L. SURVEY, ABSTRACT NO. 1389, WINKLER COUNTY, TEXAS. SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT (N: 10695728.25, E: 1384170.92) IN THE SOUTH BOUNDARY LINE OF SAID SECTION 18, FROM WHICH A 1-1/2" IRON PIPE FOUND FOR THE SOUTHEAST CORNER OF SAID SECTION 18 BEARS N 73°44'51" E, A DISTANCE OF 4294.97 FEET (TIE);

THENCE N 18°28'38" W, A DISTANCE OF 221.61 FEET TO A POINT;
THENCE N 25°58'05" W, A DISTANCE OF 459.85 FEET TO A POINT;
THENCE S 64°01'55" W, A DISTANCE OF 419.96 FEET TO A POINT;

THENCE S 57°16'45" W, A DISTANCE OF 623.21 FEET TO THE POINT OF TERMINATION (N: 10695885.35, E: 1383089.04) OF SAID CENTERLINE, AT A POINT IN THE WEST BOUNDARY LINE OF SAID SECTION 18, FROM WHICH A 2" IRON PIPE FOUND FOR THE SOUTHWEST CORNER OF SAID SECTION 18 BEARS S 15°46'56" E, A DISTANCE OF 455.64 FEET (TIE).

SAID CENTERLINE CONTAINING A TOTAL OF 1624.64 FEET OR 98.46 RODS IN SAID SECTION 18.

THE POINT OF BEGINNING IS LOCATED APPROXIMATELY
14 MILES NORTHWEST OF KERMIT, TEXAS

1000' 0' 1000'

Scale: 1" = 1000'

STATE OF TEXAS
REGISTERED
DEMPSEY D. HANNAH
5637
PROFESSIONAL
LAND SURVEYOR

Dempsey D. Hannah 05/06/21

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

#	DATE	BY:	DESCRIPTION	CHK

PROJECT NO. 4994

TRANSGLOBAL SERVICES LLC

TBPELS FIRM# 10193740 / 19148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1160 ~ Fax (817) 529-1181

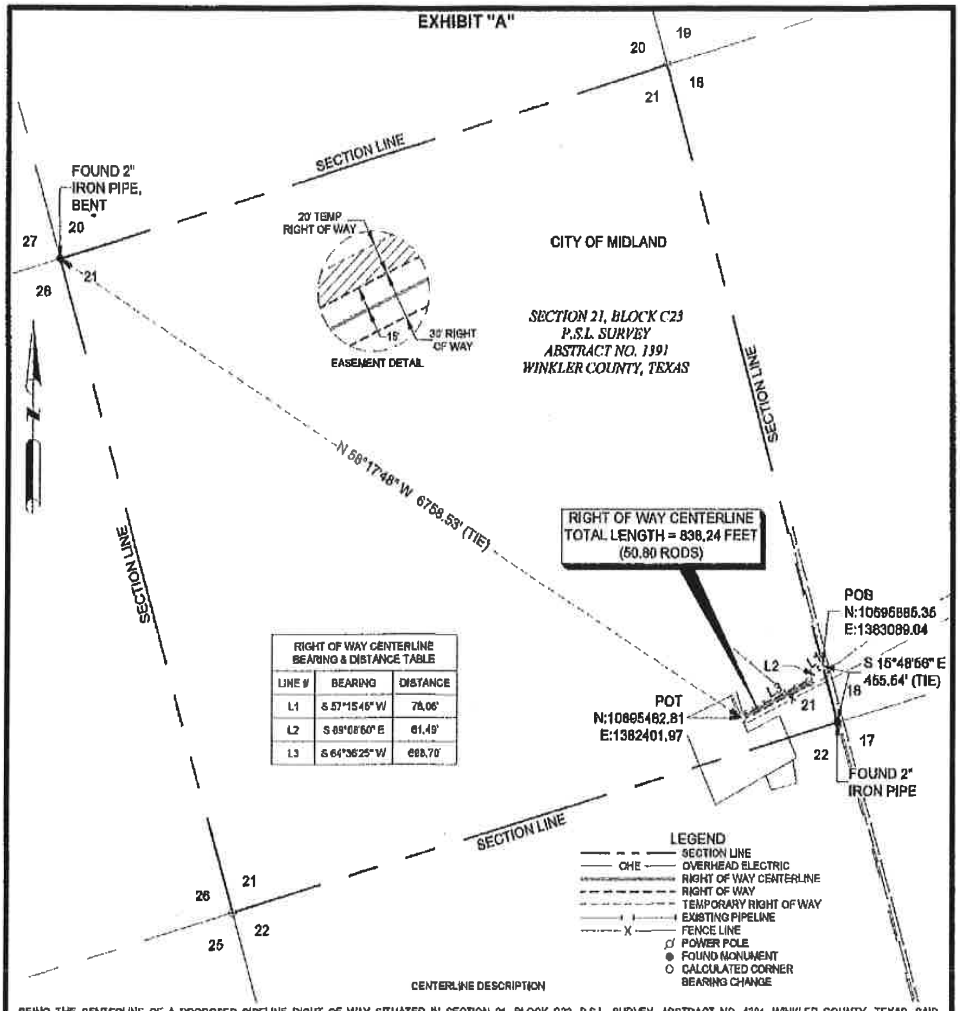
SCM WATER, LLC

GRIZZLY WATER
CITY OF MIDLAND
PROPOSED RIGHT OF WAY CENTERLINE

SITUATED IN
SECTION 18, BLOCK C23
P.S.L. SURVEY
ABSTRACT NO.1389
WINKLER COUNTY, TEXAS

DRAWN BY: BAB	DATE: 05/06/2021	DWG. NO. 4994_3.00 SEC 18	REV. 0
CHECKED BY: DDH	DATE: 05/06/2021		
SCALE: 1"=1000'	PAGE 1 OF 1		

EXHIBIT "A"



RIGHT OF WAY CENTERLINE BEARING & DISTANCE TABLE		
LINE #	BEARING	DISTANCE
L1	S 57°15'45" W	78.06'
L2	S 89°08'50" E	61.49'
L3	S 64°36'25" W	698.70'

CENTERLINE DESCRIPTION

BEING THE CENTERLINE OF A PROPOSED PIPELINE RIGHT OF WAY SITUATED IN SECTION 21, BLOCK C23, P.S.L. SURVEY, ABSTRACT NO. 1391, WINKLER COUNTY, TEXAS. SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT (N:10695885.35, E:1383089.04) IN THE EAST BOUNDARY LINE OF SAID SECTION 21, FROM WHICH A 2" IRON PIPE FOUND FOR THE SOUTHEAST CORNER OF SAID SECTION 21 BEARS S 15°48'56" E, A DISTANCE OF 465.54 FEET (TIE);

THENCE S 57°15'45" W A DISTANCE OF 78.06 FEET TO A POINT;
THENCE S 89°08'50" E A DISTANCE OF 61.49 FEET TO A POINT;

THENCE S 64°36'25" W A DISTANCE OF 698.70 FEET TO THE POINT OF TERMINATION (N:10695462.81, E:1382401.97) OF SAID CENTERLINE, AT A POINT IN SAID SECTION 21, FROM WHICH A 2" IRON PIPE, BENT FOUND FOR THE NORTHWEST CORNER OF SAID SECTION 21 BEARS N 68°17'48" W, A DISTANCE OF 6758.53 FEET (TIE).

SAID CENTERLINE CONTAINING A TOTAL OF 838.24 FEET OR 50.80 RODS IN SAID SECTION 21.

THE POINT OF BEGINNING IS LOCATED APPROXIMATELY
13 MILES NORTHWEST OF KERMIT, TEXAS

1000' 0' 1000'

Scale: 1" = 1000'

STATE OF TEXAS
REGISTERED
DEMPSEY D. HANNAH
5637
PROFESSIONAL
LAND SURVEYOR

05/06/21

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

#	DATE	BY:	DESCRIPTION	CHK

PROJECT NO. 4994

TRANSGLOBAL SERVICES LLC

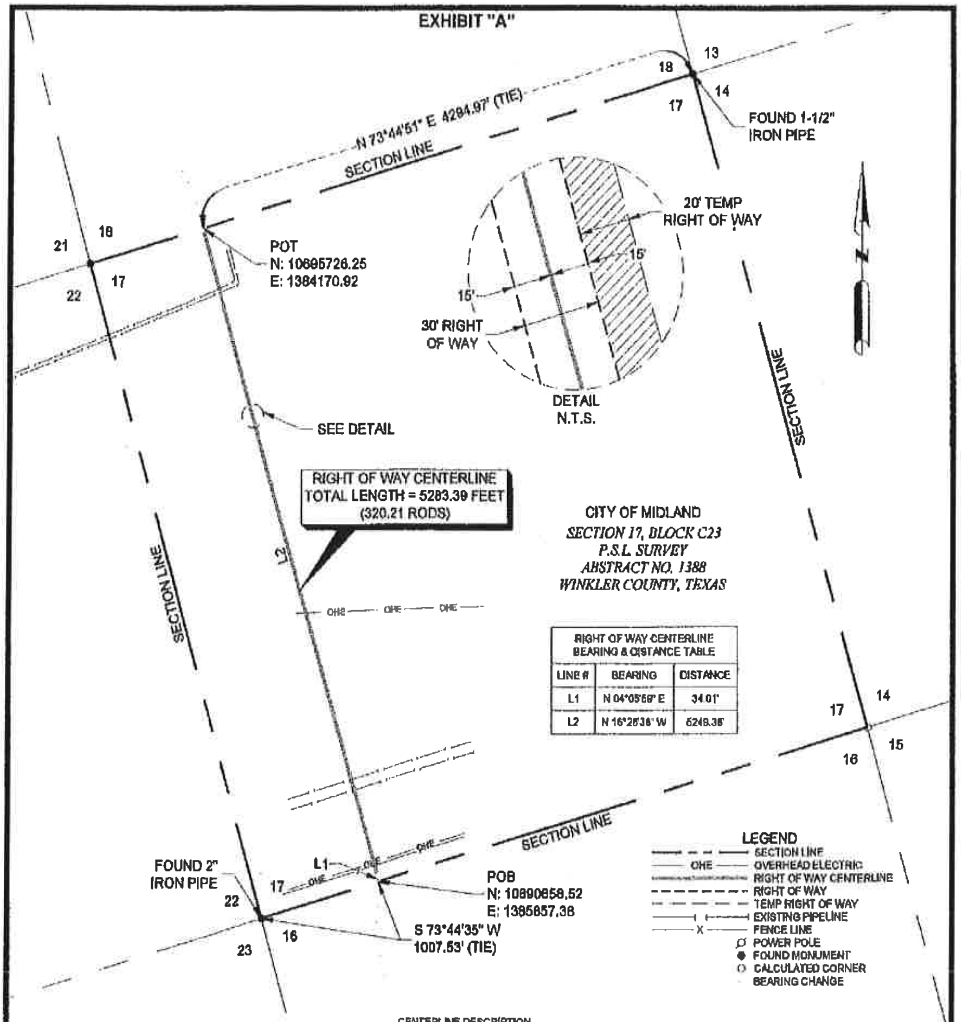
TBPELS FIRM# 10193740 / 10148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1180 ~ Fax (817) 529-1181

SCM WATER, LLC

GRIZZLY WATER
CITY OF MIDLAND
PROPOSED RIGHT OF WAY CENTERLINE

SITUATED IN
SECTION 21, BLOCK C23
P.S.L. SURVEY
ABSTRACT NO. 1391
WINKLER COUNTY, TEXAS

DRAWN BY: MAC	DATE: 05/05/21	DWG. NO. 4994 04.00 SEC 21	REV. 0
CHECKED BY: DDH	DATE: 05/05/21		
SCALE: 1"=1000'	PAGE 1 OF 1		



CENTERLINE DESCRIPTION

BEING THE CENTERLINE OF A PROPOSED PIPELINE RIGHT OF WAY SITUATED IN SECTION 17, BLOCK C23, P.S.L. SURVEY, ABSTRACT NO. 1388, WINKLER COUNTY, TEXAS. SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT (N: 10690658.52, E: 1385857.38) IN THE SOUTH BOUNDARY LINE OF SAID SECTION 17, FROM WHICH A 2" IRON PIPE FOUND FOR THE SOUTHWEST CORNER OF SAID SECTION 17 BEARS S 73°44'35" W, A DISTANCE OF 1007.53 FEET (TIE);

THENCE N 04°05'59" E, A DISTANCE OF 34.01 FEET TO A POINT;

THENCE N 16°26'38" W, A DISTANCE OF 5248.38 FEET TO THE POINT OF TERMINATION (N: 10695726.25, E: 1384170.92) OF SAID CENTERLINE, AT A POINT IN THE NORTH BOUNDARY LINE OF SAID SECTION 17, FROM WHICH A 1-1/2" IRON PIPE FOUND FOR THE NORTHEAST CORNER OF SAID SECTION 17 BEARS N 73°44'51" E, A DISTANCE OF 4294.97 FEET (TIE).

SAID CENTERLINE CONTAINING A TOTAL OF 5283.39 FEET OR 320.21 RODS IN SAID SECTION 17.

THE POINT OF BEGINNING IS LOCATED APPROXIMATELY 13 MILES NORTHWEST OF KERMIT, TEXAS

1000' 0' 1000'

Scale: 1" = 1000'

STATE OF TEXAS REGISTERED DEMPSEY D. HANNAH 5637 PROFESSIONAL LAND SURVEYOR

05/06/21

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

#	DATE	BY:	DESCRIPTION	CHK

PROJECT NO. 4994

TRANSGLOBAL SERVICES LLC

TBPELS FIRM# 10193740 / 10148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1160 ~ Fax (817) 529-1161

SCM WATER, LLC

GRIZZLY WATER

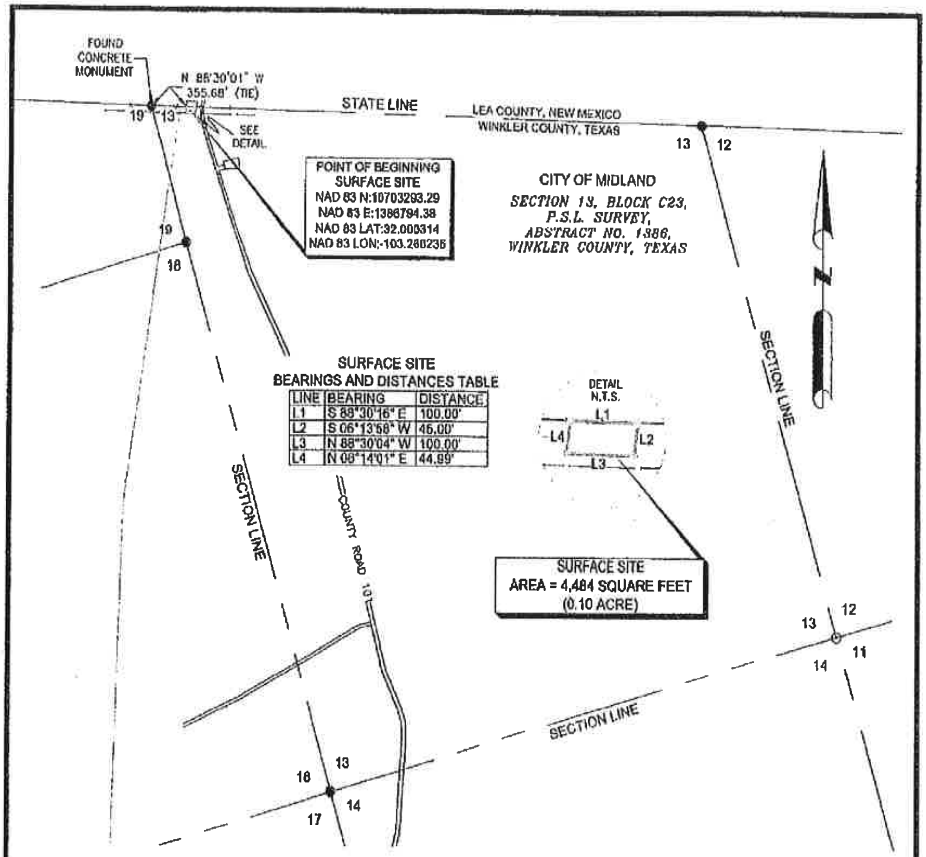
CITY OF MIDLAND

PROPOSED RIGHT OF WAY CENTERLINE

SITUATED IN
SECTION 17, BLOCK C23
P.S.L. SURVEY
ABSTRACT NO.1388
WINKLER COUNTY, TEXAS

DRAWN BY: BAB	DATE: 05/05/2021	DWG. NO. 4994_2.00 SEC 17	REV. 0
CHECKED BY: DDH	DATE: 05/05/2021		
SCALE: 1"=1000'	PAGE 1 OF 1		

EXHIBIT "B"
PLAT



METES AND BOUNDS DESCRIPTION

BEING a proposed surface site situated in SECTION 13, BLOCK C23, P.S.L. SURVEY, ABSTRACT NO. 1386, Winkler County, Texas. Said surface site being more particularly described as follows:

BEGINNING at a point in the North boundary line of said SECTION 13 from which a concrete monument found for the Northwest corner of said SECTION 13 bears N 88°30'01" W, a distance of 355.68 feet (TIE), said POINT OF BEGINNING having a TX-Central Zone 4203, NAD 83 coordinate value of N:10703293.29, E:1386794.38.

THENCE S 88°30'16" E, a distance of 100.00 feet to a point;
THENCE S 06°13'58" W, a distance of 45.00 feet to a point;
THENCE N 88°30'04" W, a distance of 100.00 feet to a point;

THENCE N 06°14'01" E, a distance of 44.99 feet to the POINT OF BEGINNING.

Said surface site containing 4,484 square feet or 0.10 acre in SECTION 13, more or less.

LEGEND

SURVEY LINE
OHE — OVERHEAD ELECTRIC
SURFACE SITE
EXISTING PIPELINE
FENCE LINE
POWER POLE
FOUND MONUMENT
CALCULATED CORNER
BEARING CHANGE

STATE OF TEXAS REGISTERED DEMPSEY D. HANNAH 5637 PROFESSIONAL LAND SURVEYOR

POINT OF BEGINNING BEING LOCATED APPROXIMATELY 14 MILES NORTHWEST OF KERMIT, TEXAS

2400' 0' 1200' 2400'

SCALE: 1" = 1200'

Dempsey D. Hannah 11.26.19

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

NOTES:

1.) ALL BEARINGS SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES ARE GRID.

2.) LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.

3.) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

REV.	DATE	BY:	DESCRIPTION	CHK

PROJECT NO. 1910121

TRANSGLOBAL SERVICES LLC
201 West Wall Street, Suite 325
Midland, Texas 79701
Phone: (432) 218-7842
TBPLS FIRM #10194245

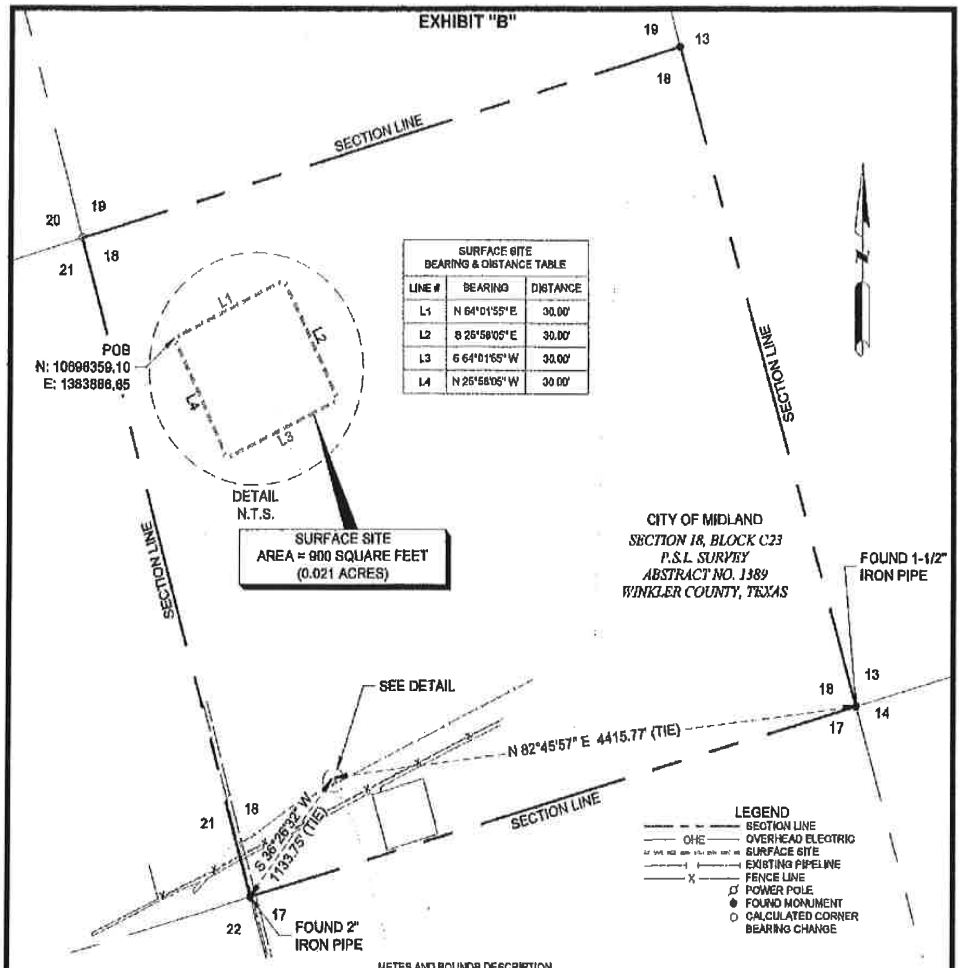
SCM WATER, LLC

AMEREDEV WATER INTER
CITY OF MIDLAND
PROPOSED SURFACE SITE

Situated in
SECTION 13, BLOCK C23,
P.S.L. SURVEY,
ABSTRACT NO. 1386,
Winkler County, Texas

DRAWN BY: RAK	DATE: 11-21-2019	DWG. NO.	REV.
CHECKED BY: DDH	DATE: 11-23-2019		0
SCALE: 1"=1200'	PAGE 1 OF 1		

EXHIBIT "B"



SURFACE SITE BEARING & DISTANCE TABLE		
LINE #	BEARING	DISTANCE
L1	N 64°01'55" E	30.00'
L2	S 25°58'05" E	30.00'
L3	S 64°01'55" W	30.00'
L4	N 25°58'05" W	30.00'

METES AND BOUNDS DESCRIPTION

BEING A PROPOSED SURFACE SITE SITUATED IN SECTION 18, BLOCK C23, P.S.L. SURVEY, ABSTRACT NO. 1389, WINKLER COUNTY, TEXAS. SAID SURFACE SITE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT (N: 10696359.10, E: 1383886.65) IN SAID SECTION 18, FROM WHICH A 2" IRON PIPE FOUND FOR THE SOUTHWEST CORNER OF SAID SECTION 18 BEARS S 36°26'32" E A DISTANCE OF 1133.75 FEET (TIE).

THENCE N 64°01'55" E, A DISTANCE OF 30.00 FEET TO A POINT, FROM WHICH A 1-1/2" IRON PIPE FOUND FOR THE SOUTHEAST CORNER OF SAID SECTION 18 BEARS N 82°45'57" E, A DISTANCE OF 4416.77 FEET (TIE);
THENCE S 25°58'05" E, A DISTANCE OF 30.00 FEET TO A POINT;
THENCE S 64°01'55" W, A DISTANCE OF 30.00 FEET TO A POINT;

THENCE N 25°58'05" W, A DISTANCE OF 30.00 FEET TO THE POINT OF BEGINNING.

SAID SURFACE SITE CONTAINING A TOTAL AREA OF 900 SQUARE FEET OR 0.021 ACRES IN SAID SECTION 18.

THE POINT OF BEGINNING IS LOCATED APPROXIMATELY
14 MILES NORTHWEST OF KERMIT, TEXAS

1000' 0' 1000'

Scale: 1" = 1000'

STATE OF TEXAS
REGISTERED
DEMPSEY D. HANNAH
5637
PROFESSIONAL
LAND SURVEYOR

Dempsey D. Hannah 05/06/21

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
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#	DATE	BY:	DESCRIPTION	CHK

PROJECT NO. 4994

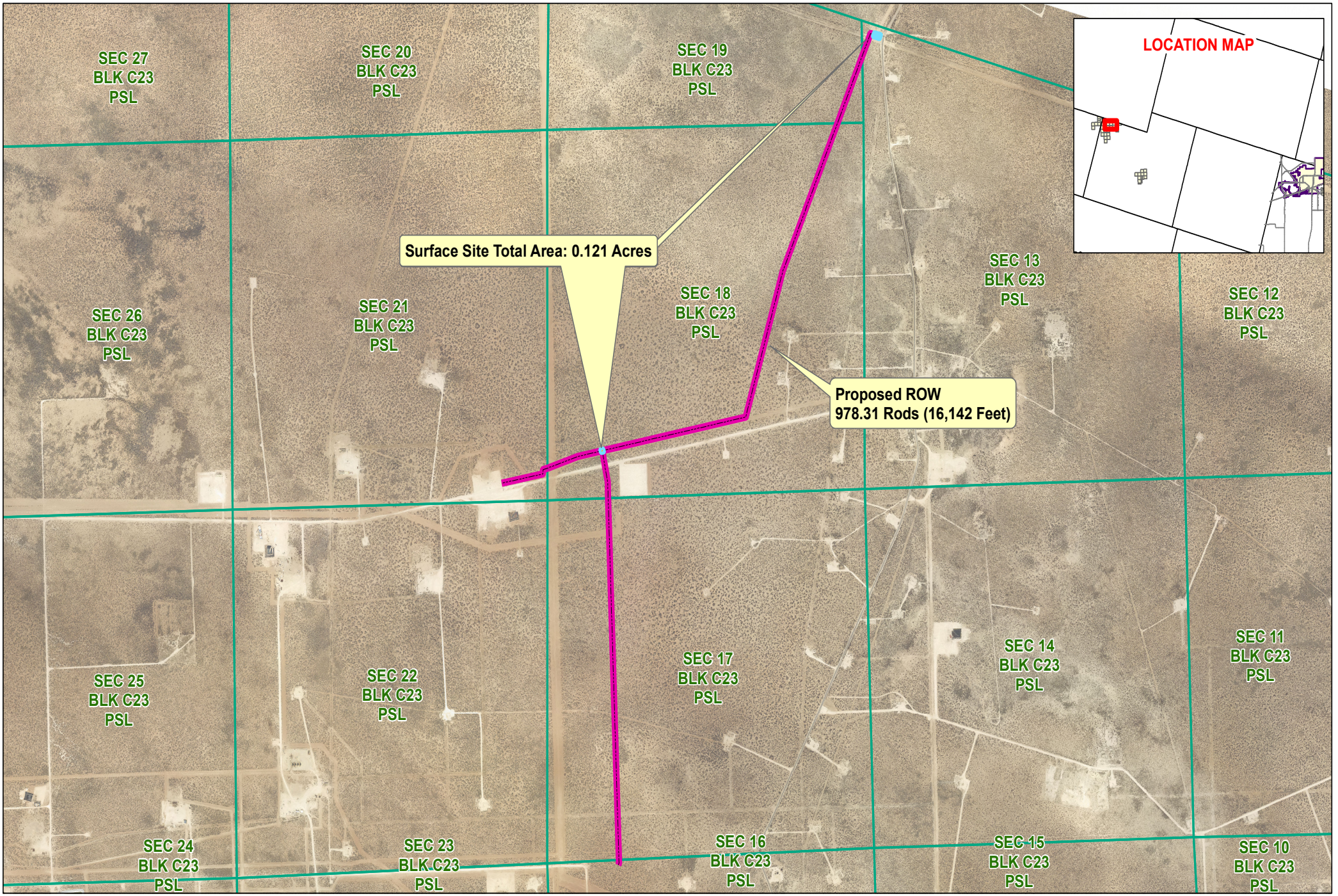
TRANSGLOBAL SERVICES LLC
TBPELS FIRM# 10193740 / 10148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1160 ~ Fax (817) 529-1161

SCM WATER, LLC

GRIZZLY WATER
CITY OF MIDLAND
PROPOSED SURFACE SITE

SITUATED IN
SECTION 18, BLOCK C23
P.S.L. SURVEY
ABSTRACT NO. 1389
WINKLER COUNTY, TEXAS

DRAWN BY: BAB	DATE: 05/05/2021	DWG. NO. 4994_3.00 SEC 18 SURFACE SITE	REV. 0
CHECKED BY: DDH	DATE: 05/05/2021		
SCALE: 1"=1000'	PAGE 1 OF 1		



Date: 5/10/2021

Legend

- Surface Site
- Proposed ROW
- Survey Section

PACKET 41.14

SCM Water, LLC
Grizzly Water Proposed Right of Way (ROW)

May 25, 2021

0 500 1,000 Feet

©THE CITY OF MIDLAND - 2021
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.

CERTIFICATE OF LIABILITY INSURANCE

11/2/2021

DATE (MM/DD/YYYY) 11/4/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	LOCKTON COMPANIES 3657 BRIARPARK DRIVE, SUITE 700 HOUSTON TX 77042 866-260-3538	**CONTACT NAME:**	
		PHONE (A/C, No, Ext):	**FAX (A/C, No):**
		E-MAIL ADDRESS:	
		INSURER(S) AFFORDING COVERAGE	**NAIC #**
		INSURER A : Starr Indemnity & Liability Company	38318
INSURED 1445999	SCM Water, LLC 5825 N. Sam Houston Pkwy, Suite 150 Houston TX 77086	**INSURER B :**	
		INSURER C :	
		INSURER D :	
		INSURER E :	
		INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 16379553 **REVISION NUMBER:** XXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [ ] PRO-JECT [ ] LOC [ ] OTHER:	Y	Y	1000090463201	11/2/2020	11/2/2021	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
A	**AUTOMOBILE LIABILITY** [X] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [ ] HIRED AUTOS ONLY [ ] NON-OWNED AUTOS ONLY	Y	Y	1000635757201	11/2/2020	11/2/2021	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$ XXXXXXX
							BODILY INJURY (Per accident)	$ XXXXXXX
							PROPERTY DAMAGE (Per accident)	$ XXXXXXX
								$ XXXXXXX
A	[ ] **UMBRELLA LIAB** [X] OCCUR [X] **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $	Y	Y	1000095299201	11/2/2020	11/2/2021	EACH OCCURRENCE	$ 10,000,000
							AGGREGATE	$ 10,000,000
							Other Aggregate	$ 10,000,000
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [N] **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	Y	1000004323	11/2/2020	11/2/2021	[X] PER STATUTE [ ] OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
THIS CERTIFICATE SUPERSEDES ALL PREVIOUSLY ISSUED CERTIFICATES FOR THIS HOLDER, APPLICABLE TO THE CARRIERS LISTED AND THE POLICY TERM(S) REFERENCED.
Re: Tract 01.00, Tract 02.00, Tract 03.00 Tract 04.00.

CERTIFICATE HOLDER

16379553

City of Midland
300 N Loraine
Midland TX 79701

CANCELLATION See Attachment

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

PACKET 11.15 May 25, 2021

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All policies (except Workers' Compensation/EL) include a blanket automatic additional insured [provision] that confers additional insured status to the certificate holder only if there is a written contract between the named insured and the certificate holder that requires the named insured to name the certificate holder as an additional insured. In the absence of such a contractual obligation on the part of the named insured, the certificate holder is not an additional insured under the policy. All policies include a blanket automatic waiver of subrogation endorsement [provision] that provides this feature only when there is a written contract between the named insured and the certificate holder that requires it. In the absence of such a contractual obligation on the part of the named insured, the waiver of subrogation feature does not apply. All policies include a blanket notice of cancellation to certificate holders endorsement, providing for 30 days' advance notice if the policy is cancelled by the company other than for nonpayment of premium, 10 days' notice if the policy is cancelled for nonpayment of premium. Notice is sent to certificate holders with mailing addresses on file with the agent or the company. The endorsement does not provide for notice of cancellation if the named insured requests cancellation.

Named Insured Schedule

SCM Intermediate Topco, LLC
SCM Intermediate Holdco, LLC
ARM Midstream Management, LLC
SCM Topco, LLC
Salt Creek Holdco, LLC
Salt Creek Aggregator Holdco, LLC
SCM Intermediate Crude, LLC
SCM Intermediate Water, LLC
Imperial Crude, LLC
SCM Crude, LLC
SCM Water, LLC
Salt Creek Midstream, LLC
Delaware Crossing, LLC
SCM Water Pecos, LLC
Delaware Crossing Holdings, LLC
Delaware Crossing Operating, LLC
SCM Epic, LLC
SCM Intermediate Alpine, LLC
SCM Alpine, LLC
SCM Operations, LLC

City Council Meeting

Item Number: 12

Meeting Date: May 25, 2021

To: City Council / City Manager

From: John Simmons, Manager, Right-of-Way

Subject: RESOLUTION AUTHORIZING THE ACCEPTANCE OF A 7.097-ACRE RIGHT-OF-WAY GRANT LOCATED IN SECTIONS 18 AND 19, BLOCK 38, T-1-S, T&P RR. CO SURVEY, MIDLAND, TEXAS FROM MORIAH LAND & CATTLE, LLC; ORDERING THE CITY SECRETARY TO RECORD SAID INSTRUMENT IN THE OFFICIAL REAL PROPERTY RECORDS OF MIDLAND COUNTY, TEXAS; AND APPROPRIATING FUNDS (DISTRICT: ALL) (UTILITIES)

Purpose:

This resolution accepts a Pipeline Right-of-Way Grant from Moriah Land & Cattle, LLC, for a 40’ wide right of way for the construction and operation of the 36” Northeast Sanitary Sewer pipeline.

Recommended City Council Action:

Approve

Fiscal Impact:

Compensation for this right of way is a one-time payment of $377,273.60

Discussion:

This section of right of way is part of the overall 8 mile sewer project being built to service for the 10,000 housing equivalents estimated in this area and relief to the existing service serving the downtown and south east areas.

Morris Williams Jr.

City Manager's Office

RESOLUTION NO. _____

RESOLUTION AUTHORIZING THE ACCEPTANCE OF A 7.097-ACRE RIGHT-OF-WAY GRANT LOCATED IN SECTIONS 18 AND 19, BLOCK 38, T-1-S, T&P RR. CO SURVEY, MIDLAND, TEXAS FROM MORIAH LAND & CATTLE, LLC; ORDERING THE CITY SECRETARY TO RECORD SAID INSTRUMENT IN THE OFFICIAL REAL PROPERTY RECORDS OF MIDLAND COUNTY, TEXAS; AND APPROPRIATING FUNDS

WHEREAS, the City Council finds it to be in the public interest to accept a 7.079-acre right-of-way grant located in Sections 18 and 19, Block 38, T-1-S, T&P RR. Co Survey, Midland, Texas from Moriah Land & Cattle, LLC;

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 right-of-way grant with Moriah Land & Cattle, LLC, said right-of-way grant being substantially in the form attached hereto as Exhibit "1" and incorporated herein for all purposes.

SECTION TWO. That the City Secretary is hereby ordered to record said instrument in the official real property records of Midland County, Texas.

SECTION THREE. That funding in the amount of $377,273.60 is hereby appropriated in Fund 370 to a project for the Northeast Sanitary Sewer Expansion.

SECTION FOUR. That the City Comptroller is hereby authorized and directed to pay Moriah Land & Cattle, LLC, pursuant to the terms of said right-of-way grant from funds available in the project fund for the Northeast Sanitary Sewer Expansion 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., 2021, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Carl Craigo, Utilities Director

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

NOTICE OF CONFIDENTIALITY RIGHTS. IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

STATE OF TEXAS)
) PIPELINE RIGHT-OF-WAY GRANT
COUNTY OF MIDLAND)

KNOW ALL MEN BY THESE PRESENTS:

FOR AND IN CONSIDERATION OF THE SUM of Ten Dollars ($10.00) in hand paid and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, MORIAH LAND & CATTLE, LLC, a Texas limited liability company, whose address is 6 DESTA DRIVE, SUITE 3100, MIDLAND, TX 79705, (designated herein as "GRANTOR") does hereby grant, sell and convey to the CITY OF MIDLAND, TEXAS, whose address is 300 N. Loraine, Midland, Texas, 79701, its successors or assigns (designated herein as "GRANTEE"), a Right-of-Way and Easement for the purposes of surveying, laying, constructing, installing, maintaining, operating, repairing, replacing, inspecting, altering, reconstructing, changing the size, removing and/or abandoning in place one (1) pipeline, together with all fittings, tie-overs, valves, metering facilities, pipeline markers, cathodic protection equipment, and all other equipment and appurtenances used or useful in connection with the transportation of refuse or waste liquids (sewage) or the products thereof (collectively the "Facilities") in, to, on, under, across and/or through the following described tract of land (the "Property") situated in MIDLAND County, TEXAS, to-wit:

All of Section 18, Block 38, Block 38, T1S, T&P Ry. Co. Survey, Midland County, Texas and 170.239 acres out of the East portion of Section 19, Block 38, T1S, T&P Ry. Co. Survey, Midland County, Texas, as being more particularly described in that certain Warranty Deed dated July 17, 2018, recorded as Instrument 2018-20726, of the Official Public Records of Midland County, Texas

said Right-of-Way to be forty (40) feet in width as more particularly described in Exhibit A attached hereto and made a part hereof (the "Easement" or "Easement Area"). The Easement Area shall be expanded temporarily during any period of construction to two hundred (200) feet, for a total width of two hundred thirty (230) feet. Temporary workspace shall expire one-year past construction of said pipeline.

GRANTEE shall have all privileges necessary or convenient for the full use of the rights herein granted, together with ingress and egress along said Easement Area as well as over and across said Property and GRANTOR'S adjacent lands to and from said Easement Area, which includes the right to use existing roads over and across the Property and said lands. GRANTEE shall bury the top of its pipeline at least thirty-six (36) inches below the surface of the ground except in areas of consolidated rock where the minimum depth will be eighteen (18) inches. GRANTEE shall have the right hereafter to cut and keep clear all trees, shrubs, brush and other obstructions that GRANTEE determines may injure, endanger or interfere with the Facilities or

the exercise by GRANTEE of its rights, privileges and Easement granted herein. GRANTOR agrees not to build, create or construct or allow to be built, created or constructed, any obstructions, including without limitation impounded water, buildings, barns, workshops, engineering works, or other structures or improvements within the Easement Area nor shall GRANTOR change, or permit the change of, the grade of the surface of the ground, or remove drift from, within the Easement Area. The consideration paid herein by GRANTEE includes payment for actual damages to the surface as well as to crops, pasture, fences and timber, which arise from surveying, laying, installing and/or constructing said Facilities.

1.1 GRANTEE agrees to comply at all times and at its sole cost with all federal, state, and local laws, rules, and regulations and safety standards applicable to the exercise of GRANTEE'S rights under this Agreement including, without limitation, the construction, use, operation, maintenance, repair, and service of GRANTEE'S pipelines and appurtenances.

1.2 GRANTEE is solely responsible for all safety, legal, and other considerations posed by the presence of other pre-existing petroleum pipelines, electric lines, and other utilities in the area including locating the Right-of-Way and pipeline at an appropriate distance from such other preexisting pipelines and utilities.

1.3 During construction GRANTEE (and GRANTEE'S contractors and subcontractors) shall prevent the spread of toxic, invader, and other harmful plants. If such plants should appear on or adjacent to the Right-of-Way and it is reasonably evident that such intrusion was caused by GRANTEE'S operations, GRANTEE shall eradicate these plants in accordance with the reasonable specifications of GRANTOR.

1.4 During initial construction, GRANTEE shall clear, in a good and workmanlike manner, all trees, brush and woody plants within the Right-of-Way and (where necessary) the temporary workspace. Mesquite, tarbrush, prickly pear, and other woody plants shall be cleared by grubbing or excavating such that the root crowns of the plants are removed (versus blading the plants). Any trees, brush, woody plants and debris so removed shall be removed from at the Property. In no event will hydro-axe or like method be used.

GRANTEE shall insofar as is reasonably practicable, but consistent with the exercise of its rights hereunder, restore the surface of the land to substantially the condition as it existed prior to GRANTEE's installation of the Facilities, such restoration to include the repair of any cut fences, leveling of the ground, and cleaning up all debris, and removing all rocks four (4) inches in diameter or larger unearthed, in each case, as a result of its Facilities installation. Notwithstanding the foregoing, GRANTEE shall be entitled to install, maintain, and use gates in all fences that now or hereafter cross the Easement Area, including any such fences at the boundaries of the Property. GRANTEE, at its election, shall further be entitled to install its own lock on any such gates.

1.5 GRANTEE shall use a high degree of care and take all precautions to prevent livestock from escaping from individual pastures and from escaping onto any public road. GRANTEE shall use temporary wire gaps and otherwise conduct its construction and other operations in a manner to prevent livestock from passing through a cut fence, gate, or other opening resulting from GRANTEE'S operations on the Property. Before any fence on the Property is cut, GRANTEE shall brace the fence on both sides of the cut by constructing H-braces on each side of the cut and

reattaching the existing fence firmly and tautly so as to prevent any sagging or loosening. The H-braces shall be constructed to the specifications as described and illustrated in Exhibit B, attached hereto and made a part hereof.

Where the Right-of-Way intersects any fence, GRANTEE shall -- at GRANTOR'S option -- replace the fence or construct a new sixteen (16) foot gate in accordance with the following specifications: Any gate must be of heavy tubing or pipe and full paneled. H-braces for gates shall meet the H-brace specifications per Exhibit B. GRANTEE shall use new wire -- 12-1/2 gauge, 6-inch, 1047 -- to replace any fencing needed in building or rebuilding fence gaps or gates on the Right-of-Way. GRANTOR reserves the right to require that any gate be locked; GRANTOR may determine the method of locking the gate so long as it is reasonable, and GRANTEE has the ability to unlock and open such gate. If any gates are left in any fence by GRANTEE, then GRANTEE shall cause the same to be locked, if requested by GRANTOR, and a duplicate key/combination to the lock will be furnished to GRANTOR. Said gate or gates shall at all times be kept in a good state of repair by GRANTEE, at GRANTEE'S sole cost and expense.

In the event a gate, temporary fence gap. or other opening is improperly left open by GRANTEE, then GRANTEE shall pay to GRANTOR the following liquidated damages (in addition to all other available remedies): (1) for the first violation--$1,000.00; (2) for the second violation--$2,500.00; and (3) for the third and all subsequent violations--$3.000.00. GRANTEE will provide 2 locks at each gate (1) being the GRANTEE'S lock of choosing and (2) being the GRANTOR'S lock which will be, at minimum, a resettable combination padlock designed for commercia/industria1 applications. The locks will be positioned in a manner that allows any violations to be identified if GRANTEE or anyone on GRANTEE'S behalf violates this provision. The payment shall be paid within 30 days of written request by GRANTOR.

1.6 As to ditching, the topsoil will be placed on one side of the ditch and the subsoil on the opposite side. In backfilling the ditch, the subsoil will be replaced first and the topsoil last and then in pasture areas, the land reseeded. If there is excess topsoil remaining. after the ditch has been backfilled, GRANTEE shall stockpile the topsoil on or near the Right-of-Way.

The digging of the ditch or trench for the pipeline shall be done by what is known as the double ditching method, that is, placing up to twelve inches (12") of the topsoil removed on one side of the line and placing the sub-soil on the other side of the line, and when the line is refilled, first placing the sub-soil in the trench and then placing the topsoil in the trench. GRANTEE shall pack the fill of its excavation, or backfill and crown the trench sufficiently in such a manner as to make the fill substantially firm upon the filling of the excavation, and further, again fill and pack any portion of the fill which has settled to any appreciable extent.

1.7 During construction of the pipeline, GRANTEE shall construct soft plugs and cross-overs at reasonable locations including livestock trails and road crossings to allow vehicles. livestock and wildlife to cross all open ditches and pipe laid on top of the surface. In livestock pasture(s). GRANTEE shall taper the ends of open ditches to allow for the escape of livestock and the tapered ends shall not be obstructed by pipe or other obstruction. No portion of any ditch shall be left open more than 60 days and no pipe will be left on top of the surface more than 90 days. If a ditch is

open more than 60 days or if pipe is on the surface more than 90 days, GRANTEE shall pay GRANTOR the sum of $1000.00 for such open ditch and/or pipe on the surface per week or portion of any week during which the same is open or the pipe is on the surface past such permitted period. GRANTEE shall regularly patrol uncovered areas for any livestock or wildlife, which may become entrapped, and, if so, remove the same and pay damages for injuries to or loss of same.

1.8 Promptly (in no event later than 60 days weather permitting) upon completion of initial construction of the pipeline. GRANTEE shall restore the surface of the Easement Area, temporary workspace and additional workspace. as near as reasonably practicable, to their natural grade and prior condition including leveling and reseeding. GRANTOR reserves the right to reasonably control and designate the areas and manner of disposal of all rock and other material displaced by construction. All rock greater than 3" in diameter will be removed from the Property. GRANTOR may direct GRANTEE to spread the rock, pile (or stockpile) the rock, place the rock in sloped areas selected by GRANTOR so as to construct water diversion berms and spreader dams to divert the flow of water to minimize soil erosion on and near the Right-of-Way area, or utilize any other reasonable manner of disposal.

1.9 Where, in this Agreement, reseeding is required, the seed mixture shall be as follows: Grass Species (Pounds Pure Live Seed [PLS]): Sideoats Grama (4.5 PLS), Plains Bristlegrass (3.0 PLS), Green Sprangletop (1.5 PLS), Sand Dropseed (1.0 PLS), WW Spar Bluestem (1.7 **PLS),** Sorghum Alum (0.5 PLS). The seeding rate shall be at 12.2 PLS pounds per acre. The obligation to reseed the affected portion of the Property will continue until successful growth has been established.

1.10 Throughout the term of this Agreement, if subsidence of the pipeline ditch (or part thereof) occurs, GRANTEE must add additional clean. locally sourced and GRANTOR approved topsoil similar to that originally removed until the surface of the ditch area has settled uniformly with the surface of adjacent land.

1.11 Throughout this Agreement, GRANTEE shall be obligated for the reasonable maintenance of the Right-of-Way. All gates and H-braces must be painted with rust-resistant paint in a color approved by GRANTOR and be maintained in good repair and in a neat, clean, and well-painted condition.

1.12 During initial construction of the pipeline and throughout the term of this Agreement, GRANTEE shall be obligated for the reasonable cleanliness of the Right-of-Way and adjacent areas. GRANTEE must use reasonable diligence to keep such areas free and clear of litter, trash, debris, discarded materials and the like. Due to the risk of injury to livestock, GRANTEE must pay particular attention to and immediately remove all thread protectors and all discarded pieces of plastic or poly (including pipeline shavings. other shavings, packing materials, and the like).

1.13 GRANTEE shall have an obligation to construct or implement reasonable erosion treatments (such as berms, diversion terraces and the like) so that erosion of the Right-of-Way area and immediately adjacent areas is prevented, or halted, or reasonably minimized if it is evident that such erosion is caused by the placement of the pipeline on the Property or otherwise caused by GRANTEE'S operations on the Property. GRANTEE understands the Easement location is in close proximity to a draw and subject to high levels of erosion and grade change. GRANTEE

understands special attention to ongoing terrain change will be needed to maintain the proper depth of the pipeline and fill any subsidence of the ditch.

1.14 After the initial construction of the pipeline, GRANTEE shall notify GRANTOR at least 48 hours prior to construction or repair activities that require portions of the Right-of-Way to be excavated. This shall not apply to any situation that GRANTEE deems to be an emergency. GRANTOR shall be notified as soon as practical in an emergency.

1.15 No employee, contractor. or other person entering the Property under the authority of GRANTEE shall be permitted to engage in any recreational activities on the Property, including but not limited to hunting, fishing. swimming, camping, picnicking, searching for Indian relics, or sightseeing. No dogs (other than contraband search dogs or trained leak detection dogs) or other animals, guns, firearms, or fishing equipment or other type of sport paraphernalia will be permitted on the Property. Nothing will be brought on or removed from the Property nor any activity engaged in on the Property nor will anyone go anywhere on the Property except as directly and necessarily required in carrying on GRANTEE'S operations. Anyone found on the Property in violation of this clause may be immediately ejected and thereafter excluded from the Property. No employee, contractor, or other person entering the Property under the authority of GRANTEE shall bring alcohol, illegal drugs, illegal controlled substances, weapons of any kind including firearms, air guns, bows, crossbows, spear guns, and blow guns (but excluding pocketknives and belt-carried sheath knives). Anyone found on the Property in possession of these items may be immediately ejected and thereafter excluded from the Property and (if applicable) prosecuted.

1.16 GRANTEE shall take reasonable safeguards to prevent the occurrence and spread of range fires. During all times when a county burn ban is in effect or when the risk of range fire is likely, GRANTEE shall provide water trucks and other prudent fire-prevention equipment for welding, dozing, ditching or other higher risk-of-fire operations. GRANTEE shall comply with all requirements of a county burn ban applicable to Grantee's operations.

1.17 GRANTEE has no right to dispose of any water generated or produced in connection with hydrostatic testing of the pipeline upon the Right-of-Way or GRANTOR'S adjoining lands unless GRANTOR consents in advance and in writing.

1.18 The provisions of this paragraph I applicable to the initial construction of the pipeline also apply to repair and removal of said pipelines.

GRANTEE shall have the right to adjust the location of the Easement Area within the Property as a result of various engineering factors or to correct the legal description of the Easement Area to conform to the actual location of the Easement Area based on the actual location of the Facilities. In the event such a modification is required by GRANTEE, GRANTEE may adjust the location of the Easement Area by recording a "Revised Exhibit A" referring to this instrument and setting forth the modified legal description of the Easement Area, which description may be set forth as a map on the Revised Exhibit A. A copy of said Revised Exhibit A shall be delivered to the GRANTOR. Without limiting GRANTEE'S right to modify the location of the Easement Area by recording a "Revised Exhibit A" as aforesaid, GRANTOR agrees to execute and deliver to GRANTEE any additional documents GRANTEE may request to modify

or correct the legal description of the Easement Area to conform with the actual location of the Easement Area based on the actual location of the Facilities. If such documents are required, they will be prepared by GRANTEE at its expense. GRANTOR shall receive additional reasonable compensation only if the area within the Easement Area increases as a result of the changed location. Adjustment of the Easement Area beyond that set out in Exhibit A shall be upon GRANTOR approval.

GRANTEE and GRANTOR agree that this Agreement, together with the Payment Agreement for the North East Sanitary Sewer Line Project entered into concurrent herewith, constitute the entire agreement between the parties and that no other agreements have been made modifying, adding to or changing the terms of the same. Except as provided in the immediately preceding paragraph, this Agreement shall not be abrogated, modified, rescinded or amended in whole or in part without the consent of GRANTEE and GRANTOR, in writing and executed by each of them, and duly recorded in the appropriate real property records.

GRANTEE shall reasonably compensate GRANTOR or its tenants on the Property (if any), as applicable, for any actual loss or damage to their respective property, or injury or death to them, caused by GRANTEE, or any of its employees, agents, contractors, subcontractors or invitees, in connection with the exercise of GRANTEE's rights hereunder, except for any losses or damages to their property which are included within the initial consideration paid GRANTEE hereunder. In addition, GRANTEE does hereby covenant and agree to defend, indemnify and hold GRANTOR and its tenants on the Property (if any) harmless from and against any and all claims, suits and causes of action of persons or entities for loss of or injury to the property of, and injuries to or death of any such persons or entities caused by GRANTEE, its employees, contractors, subcontractors or invitees in connection with the exercise of GRANTEE's rights hereunder. In no event, however, will GRANTEE be responsible for any of the foregoing to the extent caused by the negligence or willful acts or omissions of GRANTOR or its tenants (if any), or its or their employees, agents, contractors, subcontractors or invitees.

At GRANTEE'S sole cost, risk and expense, GRANTEE shall observe, comply with and conform to all present and future municipal, parish, state and federal laws, ordinances, regulations, rules, orders and directives applicable to (1) the construction, maintenance, operation, use, repair, replacement and removal of the pipeline and associated appurtenances, (ii) corrective actions required to address the release of hazardous substances arising from GRANTEE'S operations ("corrective actions"), and/or (iii) the commodities or products transported in the pipeline (collectively, "applicable laws"). GRANTEE shall indemnify and hold harmless GRANTOR against third-party claims and related losses, including reasonable attorneys' fees, caused by (a) the violation of applicable laws by GRANTEE, its contractors, subcontractors, agents or employees occurring after GRANTEE'S acquisition of the Easement, (b) the release of hazardous substances on the property to the extent caused by GRANTEE or arising from GRANTEE'S operations or GRANTEE'S use of the Easement property (an "environmental release"), or (c) GRANTEE'S corrective actions applicable to the property in response to an environmental release.

GRANTEE shall defend with counsel of GRANTEE'S choice, indemnify, protect and hold harmless GRANTOR, GRANTOR'S heirs, successors, assigns and related or affiliated entities (the "indemnified parties"), from any and all liens, claims, demands, costs (including but not limited to reasonable attorneys' fees), expenses, damages, losses and causes of action for damages

asserted by persons or entities unaffiliated with the indemnified parties because of injury to persons (including death) and injury or damage to or loss of any property or improvements to the extent caused by GRANTEE'S negligence, gross negligence, willful misconduct or strict liability.

GRANTOR hereby warrants the title to the Property, subject only to outstanding mortgages and rights of way, if any, now of record in the land records of the above specified county, and in the event of default by GRANTOR, GRANTEE shall have the right to discharge or redeem for GRANTOR, in whole or in part, any mortgage, tax ox other lien on the Property and thereupon be subrogated to such lien and rights incident thereto. This Right-of-Way and Easement shall create a covenant and burden on the Property and running therewith.

GRANTOR shall, subject to the other provisions hereof, have the use of the Property except for any use which hinders, conflicts or interferes with the purposes for which this Right-of-Way and Easement is granted, or which disturbs or otherwise creates any actual or potential hazard to the Facilities.

TO HAVE AND TO HOLD said Right-of-Way and Easement unto said GRANTEE, its successors and assigns (with such assignment permitted in whole or in part), until such Facilities are constructed and so long thereafter as any of the Facilities are maintained thereon or thereunder. In the event none of the Facilities are maintained as set forth in the preceding sentence, GRANTEE may abandon the Facilities in place in accordance with applicable laws.

Term: The Right-of-Way and Easement granted hereby shall continue in effect unless and at any time after five (5) years from the date hereof, GRANTEE should abandon all of the rights and permitted uses granted herein for said pipeline and appurtenances constructed upon said land and if such abandonment should continue for a continuous twenty-four (24) month period, this Right-of-Way and Easement shall terminate and revert to GRANTOR, his heirs, legal representatives, and assigns, provided, however, that any period of time that GRANTEE is unable to exercise its rights granted hereunder because of Force Majeure shall not be considered part of the period of abandonment. Force Majeure shall be any event beyond the reasonable control of GRANTEE. GRANTEE shall have the right for two (2) years following a final determination of the termination of this Agreement to remove its pipe, valves and all other property or to abandon same in place. Following the expiration of such period, any such property remaining on said land shall be and become the property of GRANTOR in its "AS-IS" "WHERE-IS" condition. GRANTEE shall ensure that the pipeline is abandoned in an environmentally safe manner in accordance with applicable laws, rules and regulations.

The undersigned hereby bind themselves, their heirs, executors, administrators, successors and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof. The undersigned hereby covenant and agree to account to any other persons legally due any portion of the monies hereto paid for damages.

It is hereby understood that the party(ies) securing this Right-of-Way and Easement on behalf of the GRANTEE are without authority to make any covenant or agreement not herein expressed.

This Right-of-Way and Easement may be executed in multiple counterparts, each of which shall be considered an original for all purposes and all of which taken together shall constitute one and the same agreement, and be binding upon the parties who executed any counterpart, regardless of whether it is executed by all parties named herein.

IN WITNESS WHEREOF, GRANTOR has caused these premises to be signed, executed and delivered this 14th day of April, 2021.

GRANTOR:

Moriah Land & Cattle, LLC

By: Tom M Brandt

Name: Tom M. Brandt

Title: Manager

STATE OF TEXAS §
§
COUNTY OF MIDLAND §

This instrument was acknowledged before me on the 14th day of April, 2020, by Tom M. Brandt.

My Commission Expires: 09/09/2021

Sherry Roberts

Notary Public
Sherry Roberts
State of Texas

SHERRY ROBERTS
Notary Public, State of Texas
ID# 702902-0
My Commission Expires
SEPTEMBER 9, 2021

GRANTEE:

The City of Midland, Texas

By: _____

Name: Robert Patrick

Title: City Manager

ATTEST:

_____

Amy M. Turner, City Secretary

EXHIBIT A

Parkhill

40-FOOT WIDE SANITARY SEWER EASEMENT IN SECTION 18, BLOCK 38, TOWNSHIP 1-SOUTH, T. & P. RR. CO. SURVEY, MIDLAND COUNTY, TEXAS

A 40-foot wide sanitary sewer easement in Section 18, Block 38, Township 1-South, T. & P. RR. Company Survey, Midland County, Texas, situated in that certain tract of land conveyed to Moriah Land & Cattle, LLC, described in a special warranty deed recorded in Instrument Number 2018-20726 of the Official Public Records of Midland County, Texas, said sanitary sewer easement contains 4.865 acres (211,934 square feet) being further described by metes and bounds as follows:

BEGINNING at a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set in the north line of said Section 18 for the northwest corner of this easement, said beginning point having coordinates of NORTHING: 10,724,346.98 and EASTING: 1,761,226.28, Texas Coordinate System, Central Zone 4203, North American Datum, whence a 1/2-inch iron rod found at the northwest corner of said Section 18 bears *South 75 degrees 31 minutes 11 seconds West*, a distance of 3396.33 feet;

(1) THENCE *North 75 degrees 31 minutes 11 seconds East*, along the north line of said Section 18, a distance of 40.00 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the northeast corner of this easement;

(2) THENCE *South 14 degrees 39 minutes 08 seconds East* a distance of 5298.34 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set in the south line of said Section 18 for the southeast corner of this easement;

(3) THENCE *South 75 degrees 30 minutes 05 seconds West*, along the south line of said Section 18, a distance of 40.00 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the southwest corner of this easement, said point having coordinates of NORTHING: 10,719,220.94 and EASTING: 1,762,566.49, Texas Coordinate System, Central Zone 4203, North American Datum of 1983, whence the southwest corner of said Section 18 bears *South 75 degrees 30 minutes 05 seconds West* a distance of 3422.48 feet;

(4) THENCE *North 14 degrees 39 minutes 08 seconds West* a distance of 5298.35 feet to the **POINT OF BEGINNING**. Bearings, coordinates, distance and areas called in this description are based on the Texas Coordinate System, Central Zone 4203, North American Datum of 1983. This survey is subject to any facts which may be disclosed by a full and accurate title search. Record documents other than those shown may affect these tracts. A plat of this survey is included on page 2 of this document.

This description was prepared from an actual survey of the property and the information hereon represents the findings of this survey to the best of my knowledge and belief.

Surveyed: March 22, 2021



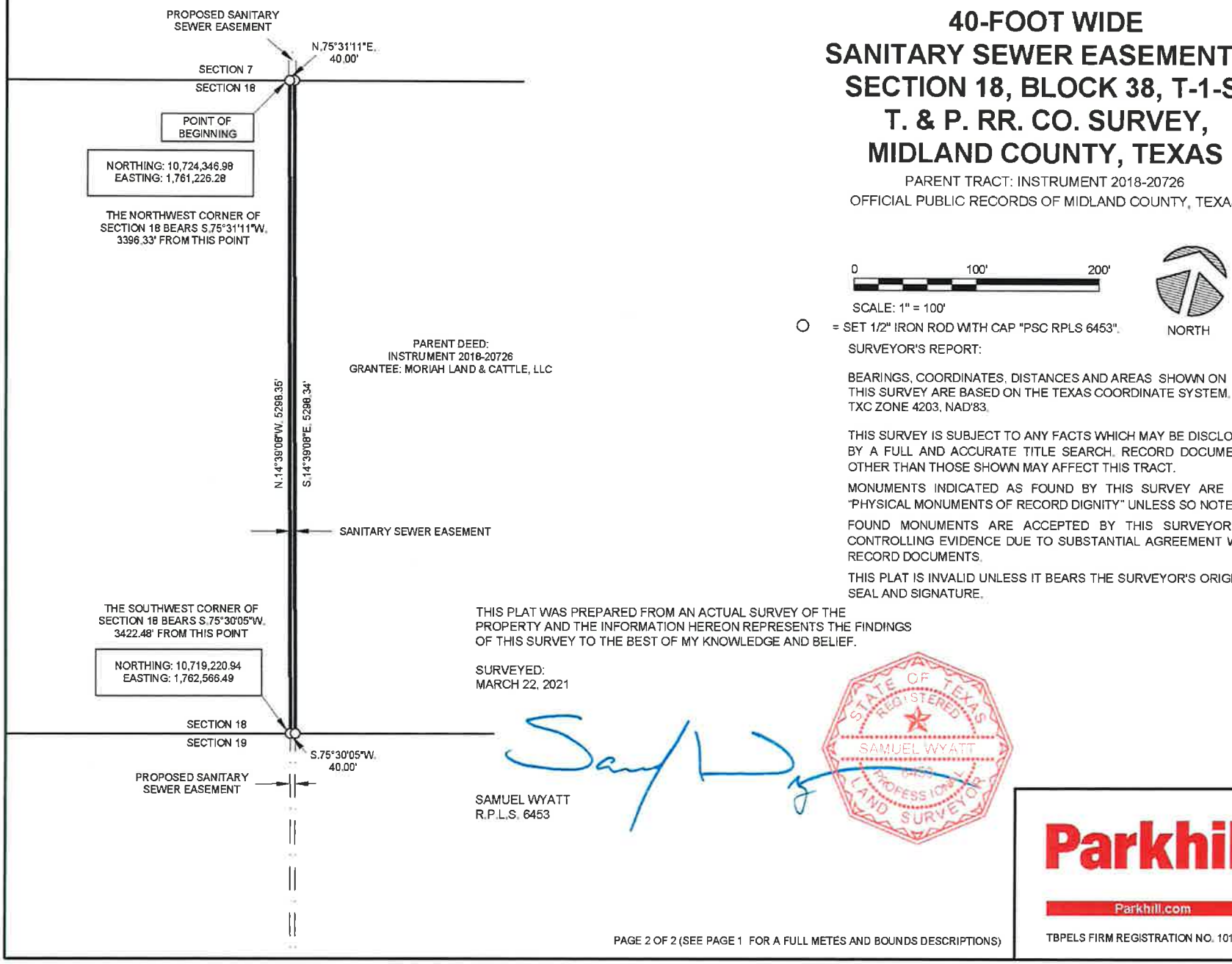
Samuel Wyatt, R.P.L.S. 6453

Texas Registered Surveying Firm # 10194091

Parkhill.com

40-FOOT WIDE SANITARY SEWER EASEMENT IN SECTION 18, BLOCK 38, T-1-S, T. & P. RR. CO. SURVEY, MIDLAND COUNTY, TEXAS

PARENT TRACT: INSTRUMENT 2018-20726
OFFICIAL PUBLIC RECORDS OF MIDLAND COUNTY, TEXAS



○ = SET 1/2" IRON ROD WITH CAP "PSC RPLS 6453".

SURVEYOR'S REPORT:

BEARINGS, COORDINATES, DISTANCES AND AREAS SHOWN ON THIS SURVEY ARE BASED ON THE TEXAS COORDINATE SYSTEM, TXC ZONE 4203, NAD'83.

THIS SURVEY IS SUBJECT TO ANY FACTS WHICH MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH. RECORD DOCUMENTS OTHER THAN THOSE SHOWN MAY AFFECT THIS TRACT.

MONUMENTS INDICATED AS FOUND BY THIS SURVEY ARE NOT "PHYSICAL MONUMENTS OF RECORD DIGNITY" UNLESS SO NOTED.

FOUND MONUMENTS ARE ACCEPTED BY THIS SURVEYOR AS CONTROLLING EVIDENCE DUE TO SUBSTANTIAL AGREEMENT WITH RECORD DOCUMENTS.

THIS PLAT IS INVALID UNLESS IT BEARS THE SURVEYOR'S ORIGINAL SEAL AND SIGNATURE.

THIS PLAT WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY AND THE INFORMATION HEREON REPRESENTS THE FINDINGS OF THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SURVEYED:
MARCH 22, 2021

STATE OF TEXAS REGISTERED SAMUEL WYATT 6453 PROFESSIONAL LAND SURVEYOR

SAMUEL WYATT
R.P.L.S. 6453

Parkhill
Parkhill.com

TBPELS FIRM REGISTRATION NO. 10194091

Parkhill

40-FOOT WIDE SANITARY SEWER EASEMENT IN SECTION 19, BLOCK 38, TOWNSHIP 1-SOUTH, T. & P. RR. CO. SURVEY, MIDLAND COUNTY, TEXAS

A 40-foot wide sanitary sewer easement in Section 19, Block 38, Township 1-South, T. & P. RR. Company Survey, Midland County, Texas, partly situated in that certain 170.239-acre tract of land conveyed to Moriah Land and Cattle, LLC, described in a general warranty deed recorded in Instrument Number 2018-20726 of the Official Public Records of Midland County, Texas, said sanitary sewer easement contains 2.232 acres (97,230 square feet) being further described by metes and bounds as follows:

BEGINNNG at a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set in the north line of said Section 19 for the northwest corner of this easement, said beginning point having coordinates of NORTHING: 10,719,220.94 and EASTING: 1,762,566.49, Texas Coordinate System, Central Zone 4203, North American Datum of 1983, whence the northwest corner of said Section 19 bears *South 75 degrees 30 minutes 05 seconds West* a distance of 3422.48 feet, and a 1/2-inch iron rod found at the northwest corner of said 170.239-acre tract bears *South 52 degrees 35minutes 28 seconds West* a distance of 29.72 feet;

(1) THENCE *North 75 degrees 30 minutes 05 seconds East*, along the north line of said Section 19, a distance of 40.00 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the northeast corner of this easement;

(2) THENCE *South 14 degrees 39 minutes 08 seconds East*, at a distance of 11.85 feet pass the north line of said 170.239-acre tract, continuing for a total distance of 2373.20 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the southeast corner of this easement;

(3) THENCE *South 48 degrees 00 minutes 48 seconds West*, at a distance of 84.88 feet pass the west line of said 170.239-acre tract, continuing for a total distance of 92.37 feet to a point in the east line of a tract of land conveyed to Parsley Energy, LP, described as "Tract Three" in a warranty deed recorded in Instrument Number 2018-2268 of the Official Public Records of Midland County, Texas, for the southwest corner of this easement;

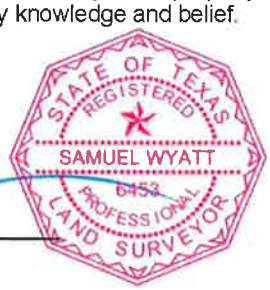
(4) THENCE *North 14 degrees 30 minutes 33 seconds West*, along the east line of said Parsley Energy tract, a distance of 45.09 feet to a point of intersection for a corner of this easement, said point having coordinates of NORTHING: 10,716,916.79 and EASTING: 1,763,125.56, Texas Coordinate System, Central Zone 4203, North American Datum of 1983, whence a 1/2-inch iron rod with a plastic cap set in the previous location of a bent 1/2-inch iron rod found at the northeast corner of Sunset Ridge Addition to the City of Midland, Midland County, Texas, according to the map, plat and/or dedication deed thereof recorded in Plat Cabinet "J", Page 198 of the plat records of Midland County, Texas bears *South 48 degrees 55 minutes 03 seconds West* a distance of 634.08 feet;

(5) THENCE *North 48 degrees 00 minutes 50 seconds East*, at a distance of 7.54 feet pass the west line of said 170.239-acre tract, continuing for a total distance of 47.22 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set at a point of intersection for a corner of this easement;

(6) THENCE *North 14 degrees 39 minutes 08 seconds West*, at a distance of 2337.26 feet pass the north line of said 170.239-acre tract, continuing for a total distance of 2348.95 feet to the **POINT OF BEGINNING**. Bearings, coordinates, distance and areas called in this description are based on the Texas Coordinate System, Central Zone 4203, North American Datum of 1983. This survey is subject to any facts which may be disclosed by a full and accurate title search. Record documents other than those shown may affect these tracts. A plat of this survey is included on page 3 of this document.

This description was prepared from an actual survey of the property and the information hereon represents the findings of this survey to the best of my knowledge and belief.

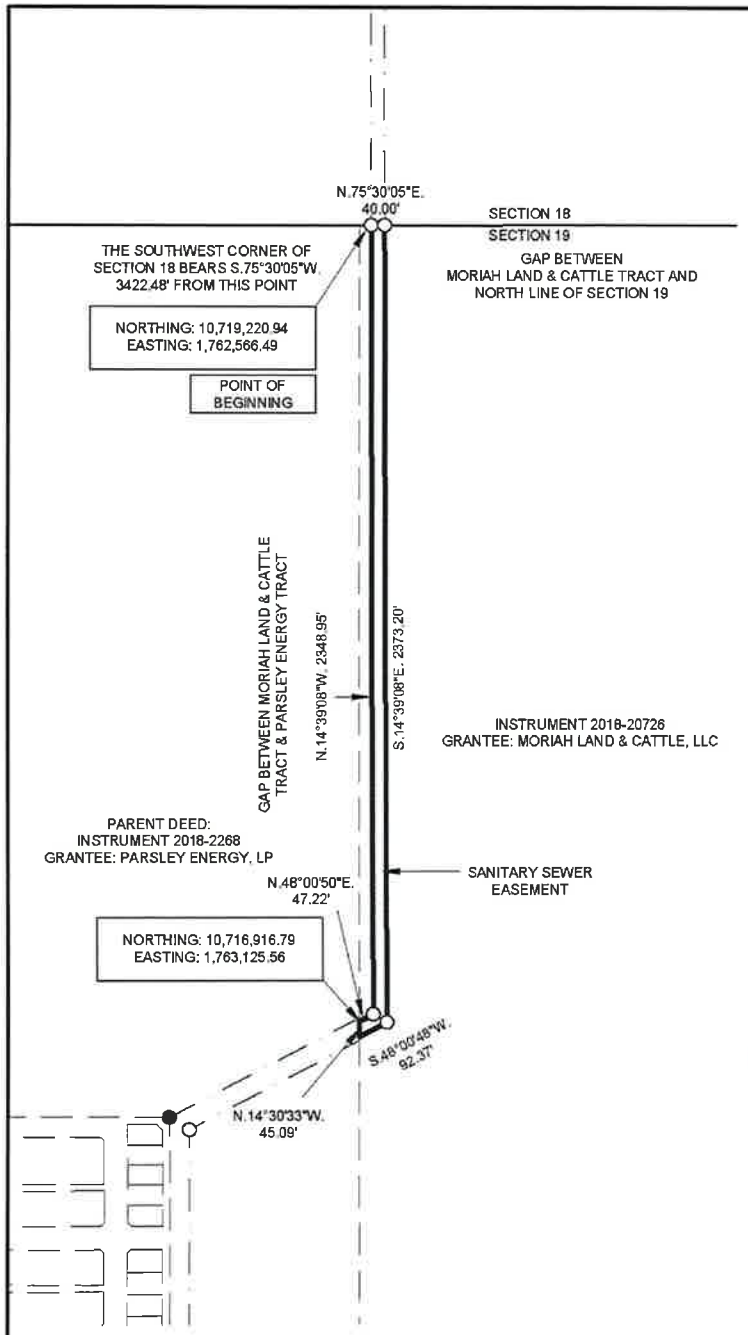
Surveyed: March 22, 2021



Samuel Wyatt, R.P.L.S. 6453

40-FOOT WIDE SANITARY SEWER EASEMENT IN SECTION 19, BLOCK 38, T-1-S, T. & P. RR. CO. SURVEY, MIDLAND COUNTY, TEXAS

PARENT TRACT: INSTRUMENT 2018-20726,
OFFICIAL PUBLIC RECORDS OF MIDLAND COUNTY, TEXAS



0 500' 1000'

SCALE: 1" = 500'

NORTH

○ = SET 1/2" IRON ROD WITH CAP "PSC RPLS 6453".

SURVEYOR'S REPORT:

BEARINGS, COORDINATES, DISTANCES AND AREAS SHOWN ON THIS SURVEY ARE BASED ON THE TEXAS COORDINATE SYSTEM, TXC ZONE 4203, NAD'83.

THIS SURVEY IS SUBJECT TO ANY FACTS WHICH MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH. RECORD DOCUMENTS OTHER THAN THOSE SHOWN MAY AFFECT THIS TRACT.

MONUMENTS INDICATED AS FOUND BY THIS SURVEY ARE NOT "PHYSICAL MONUMENTS OF RECORD DIGNITY" UNLESS SO NOTED.

FOUND MONUMENTS ARE ACCEPTED BY THIS SURVEYOR AS CONTROLLING EVIDENCE DUE TO SUBSTANTIAL AGREEMENT WITH RECORD DOCUMENTS.

THIS PLAT IS INVALID UNLESS IT BEARS THE SURVEYOR'S ORIGINAL SEAL AND SIGNATURE.

THIS PLAT WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY AND THE INFORMATION HEREON REPRESENTS THE FINDINGS OF THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SURVEYED:
MARCH 22, 2021

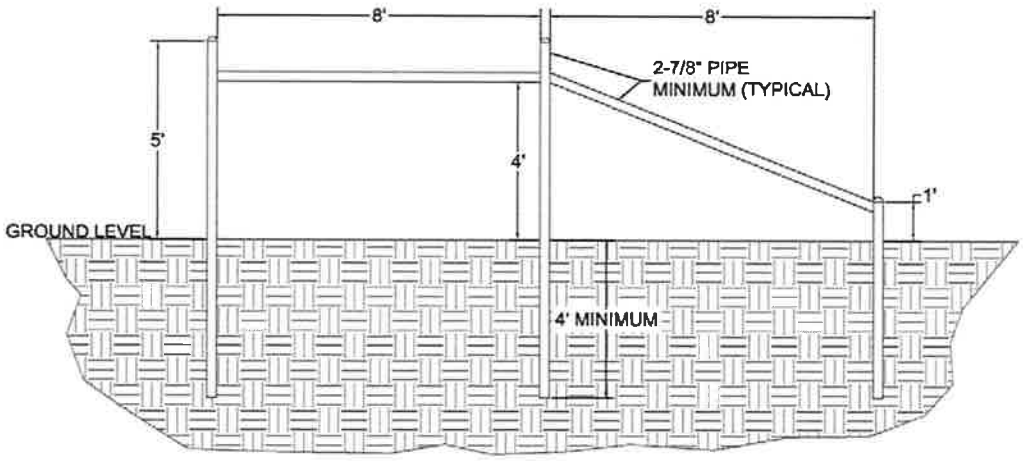
STATE OF TEXAS REGISTERED SAMUEL WYATT 6453 PROFESSIONAL LAND SURVEYOR

SAMUEL WYATT
R.P.L.S. 6453

Parkhill

Parkhill.com

TBPELS FIRM REGISTRATION NO. 10194091



H-Brace Detail

H-Brace Specifications

H-Braces shall be constructed and installed according to the following specifications and photos.

Dimensions, Materials, Construction, and Installation:

1. All pipe used for verticals, horizontals, and diagonals shall be a minimum of 2 7/8 inch pipe and all joints shall be welded.
2. Three holes shall be dug with a minimum hole diameter of 12 inches and 4 feet deep. The center of the holes shall be 8 feet apart in line with the existing fence or new fence to be built.
3. All vertical pipe shall be buried **with concrete** a minimum of 4 feet below ground level and capped at the top.
4. The vertical pipe shall be 9 feet in total length (4 feet buried with 5 feet sticking above ground level) with a 5 foot pipe for the stob/kicker (4 feet buried with 1 foot sticking above ground level).
5. One horizontal brace shall be welded, parallel to the ground, between the two 9 foot vertical pipes at a distance of 4 feet (48 inches) from ground level.
6. The diagonal brace shall be welded at this height angling down to the top of the stob/kicker.
7. Painting of the pipe is not required although it is recommended.

H-Brace Specifications and Detail

March 4, 2021

NOTICE OF CONFIDENTIALITY RIGHTS. IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

STATE OF TEXAS)
) PIPELINE RIGHT-OF-WAY GRANT
COUNTY OF MIDLAND)

KNOW ALL MEN BY THESE PRESENTS:

FOR AND IN CONSIDERATION OF THE SUM of Ten Dollars ($10.00) in hand paid and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, MORIAH LAND & CATTLE, LLC, a Texas limited liability company, whose address is 6 DESTA DRIVE, SUITE 3100, MIDLAND, TX 79705, (designated herein as "GRANTOR") does hereby grant, sell and convey to the CITY OF MIDLAND, TEXAS, whose address is 300 N. Loraine, Midland, Texas, 79701, its successors or assigns (designated herein as "GRANTEE"), a Right-of-Way and Easement for the purposes of surveying, laying, constructing, installing, maintaining, operating, repairing, replacing, inspecting, altering, reconstructing, changing the size, removing and/or abandoning in place one (1) pipeline, together with all fittings, tie-overs, valves, metering facilities, pipeline markers, cathodic protection equipment, and all other equipment and appurtenances used or useful in connection with the transportation of refuse or waste liquids (sewage) or the products thereof (collectively the "Facilities") in, to, on, under, across and/or through the following described tract of land (the "Property") situated in MIDLAND County, TEXAS, to-wit:

All of Section 18, Block 38, Block 38, T1S, T&P Ry. Co. Survey, Midland County, Texas and 170.239 acres out of the East portion of Section 19, Block 38, T1S, T&P Ry. Co. Survey, Midland County, Texas, as being more particularly described in that certain Warranty Deed dated July 17, 2018, recorded as Instrument 2018-20726, of the Official Public Records of Midland County, Texas

said Right-of-Way to be forty (40) feet in width as more particularly described in Exhibit A attached hereto and made a part hereof (the "Easement" or "Easement Area"). The Easement Area shall be expanded temporarily during any period of construction to two hundred (200) feet, for a total width of two hundred thirty (230) feet. Temporary workspace shall expire one-year past construction of said pipeline.

GRANTEE shall have all privileges necessary or convenient for the full use of the rights herein granted, together with ingress and egress along said Easement Area as well as over and across said Property and GRANTOR'S adjacent lands to and from said Easement Area, which includes the right to use existing roads over and across the Property and said lands. GRANTEE shall bury the top of its pipeline at least thirty-six (36) inches below the surface of the ground except in areas of consolidated rock where the minimum depth will be eighteen (18) inches. GRANTEE shall have the right hereafter to cut and keep clear all trees, shrubs, brush and other obstructions that GRANTEE determines may injure, endanger or interfere with the Facilities or

the exercise by GRANTEE of its rights, privileges and Easement granted herein. GRANTOR agrees not to build, create or construct or allow to be built, created or constructed, any obstructions, including without limitation impounded water, buildings, barns, workshops, engineering works, or other structures or improvements within the Easement Area nor shall GRANTOR change, or permit the change of, the grade of the surface of the ground, or remove drift from, within the Easement Area. The consideration paid herein by GRANTEE includes payment for actual damages to the surface as well as to crops, pasture, fences and timber, which arise from surveying, laying, installing and/or constructing said Facilities.

1.1 GRANTEE agrees to comply at all times and at its sole cost with all federal, state, and local laws, rules, and regulations and safety standards applicable to the exercise of GRANTEE'S rights under this Agreement including, without limitation, the construction, use, operation, maintenance, repair, and service of GRANTEE'S pipelines and appurtenances.

1.2 GRANTEE is solely responsible for all safety, legal, and other considerations posed by the presence of other pre-existing petroleum pipelines, electric lines, and other utilities in the area including locating the Right-of-Way and pipeline at an appropriate distance from such other preexisting pipelines and utilities.

1.3 During construction GRANTEE (and GRANTEE'S contractors and subcontractors) shall prevent the spread of toxic, invader, and other harmful plants. If such plants should appear on or adjacent to the Right-of-Way and it is reasonably evident that such intrusion was caused by GRANTEE'S operations, GRANTEE shall eradicate these plants in accordance with the reasonable specifications of GRANTOR.

1.4 During initial construction, GRANTEE shall clear, in a good and workmanlike manner, all trees, brush and woody plants within the Right-of-Way and (where necessary) the temporary workspace. Mesquite, tarbrush, prickly pear, and other woody plants shall be cleared by grubbing or excavating such that the root crowns of the plants are removed (versus blading the plants). Any trees, brush, woody plants and debris so removed shall be removed from at the Property. In no event will hydro-axe or like method be used.

GRANTEE shall insofar as is reasonably practicable, but consistent with the exercise of its rights hereunder, restore the surface of the land to substantially the condition as it existed prior to GRANTEE's installation of the Facilities, such restoration to include the repair of any cut fences, leveling of the ground, and cleaning up all debris, and removing all rocks four (4) inches in diameter or larger unearthed, in each case, as a result of its Facilities installation. Notwithstanding the foregoing, GRANTEE shall be entitled to install, maintain, and use gates in all fences that now or hereafter cross the Easement Area, including any such fences at the boundaries of the Property. GRANTEE, at its election, shall further be entitled to install its own lock on any such gates.

1.5 GRANTEE shall use a high degree of care and take all precautions to prevent livestock from escaping from individual pastures and from escaping onto any public road. GRANTEE shall use temporary wire gaps and otherwise conduct its construction and other operations in a manner to prevent livestock from passing through a cut fence, gate, or other opening resulting from GRANTEE'S operations on the Property. Before any fence on the Property is cut, GRANTEE shall brace the fence on both sides of the cut by constructing H-braces on each side of the cut and

reattaching the existing fence firmly and tautly so as to prevent any sagging or loosening. The H-braces shall be constructed to the specifications as described and illustrated in Exhibit B, attached hereto and made a part hereof.

Where the Right-of-Way intersects any fence, GRANTEE shall -- at GRANTOR'S option -- replace the fence or construct a new sixteen (16) foot gate in accordance with the following specifications: Any gate must be of heavy tubing or pipe and full paneled. H-braces for gates shall meet the H-brace specifications per Exhibit B. GRANTEE shall use new wire -- 12-1/2 gauge, 6-inch, 1047 -- to replace any fencing needed in building or rebuilding fence gaps or gates on the Right-of-Way. GRANTOR reserves the right to require that any gate be locked; GRANTOR may determine the method of locking the gate so long as it is reasonable, and GRANTEE has the ability to unlock and open such gate. If any gates are left in any fence by GRANTEE, then GRANTEE shall cause the same to be locked, if requested by GRANTOR, and a duplicate key/combination to the lock will be furnished to GRANTOR. Said gate or gates shall at all times be kept in a good state of repair by GRANTEE, at GRANTEE'S sole cost and expense.

In the event a gate, temporary fence gap. or other opening is improperly left open by GRANTEE, then GRANTEE shall pay to GRANTOR the following liquidated damages (in addition to all other available remedies): (1) for the first violation--$1,000.00; (2) for the second violation--$2,500.00; and (3) for the third and all subsequent violations--$3.000.00. GRANTEE will provide 2 locks at each gate (1) being the GRANTEE'S lock of choosing and (2) being the GRANTOR'S lock which will be, at minimum, a resettable combination padlock designed for commercia/industria1 applications. The locks will be positioned in a manner that allows any violations to be identified if GRANTEE or anyone on GRANTEE'S behalf violates this provision. The payment shall be paid within 30 days of written request by GRANTOR.

1.6 As to ditching, the topsoil will be placed on one side of the ditch and the subsoil on the opposite side. In backfilling the ditch, the subsoil will be replaced first and the topsoil last and then in pasture areas, the land reseeded. If there is excess topsoil remaining. after the ditch has been backfilled, GRANTEE shall stockpile the topsoil on or near the Right-of-Way.

The digging of the ditch or trench for the pipeline shall be done by what is known as the double ditching method, that is, placing up to twelve inches (12") of the topsoil removed on one side of the line and placing the sub-soil on the other side of the line, and when the line is refilled, first placing the sub-soil in the trench and then placing the topsoil in the trench. GRANTEE shall pack the fill of its excavation, or backfill and crown the trench sufficiently in such a manner as to make the fill substantially firm upon the filling of the excavation, and further, again fill and pack any portion of the fill which has settled to any appreciable extent.

1.7 During construction of the pipeline, GRANTEE shall construct soft plugs and cross-overs at reasonable locations including livestock trails and road crossings to allow vehicles. livestock and wildlife to cross all open ditches and pipe laid on top of the surface. In livestock pasture(s). GRANTEE shall taper the ends of open ditches to allow for the escape of livestock and the tapered ends shall not be obstructed by pipe or other obstruction. No portion of any ditch shall be left open more than 60 days and no pipe will be left on top of the surface more than 90 days. If a ditch is

open more than 60 days or if pipe is on the surface more than 90 days, GRANTEE shall pay GRANTOR the sum of $1000.00 for such open ditch and/or pipe on the surface per week or portion of any week during which the same is open or the pipe is on the surface past such permitted period. GRANTEE shall regularly patrol uncovered areas for any livestock or wildlife, which may become entrapped, and, if so, remove the same and pay damages for injuries to or loss of same.

1.8 Promptly (in no event later than 60 days weather permitting) upon completion of initial construction of the pipeline. GRANTEE shall restore the surface of the Easement Area, temporary workspace and additional workspace. as near as reasonably practicable, to their natural grade and prior condition including leveling and reseeding. GRANTOR reserves the right to reasonably control and designate the areas and manner of disposal of all rock and other material displaced by construction. All rock greater than 3" in diameter will be removed from the Property. GRANTOR may direct GRANTEE to spread the rock, pile (or stockpile) the rock, place the rock in sloped areas selected by GRANTOR so as to construct water diversion berms and spreader dams to divert the flow of water to minimize soil erosion on and near the Right-of-Way area, or utilize any other reasonable manner of disposal.

1.9 Where, in this Agreement, reseeding is required, the seed mixture shall be as follows: Grass Species (Pounds Pure Live Seed [PLS]): Sideoats Grama (4.5 PLS), Plains Bristlegrass (3.0 PLS), Green Sprangletop (1.5 PLS), Sand Dropseed (1.0 PLS), WW Spar Bluestem (1.7 **PLS),** Sorghum Alum (0.5 PLS). The seeding rate shall be at 12.2 PLS pounds per acre. The obligation to reseed the affected portion of the Property will continue until successful growth has been established.

1.10 Throughout the term of this Agreement, if subsidence of the pipeline ditch (or part thereof) occurs, GRANTEE must add additional clean. locally sourced and GRANTOR approved topsoil similar to that originally removed until the surface of the ditch area has settled uniformly with the surface of adjacent land.

1.11 Throughout this Agreement, GRANTEE shall be obligated for the reasonable maintenance of the Right-of-Way. All gates and H-braces must be painted with rust-resistant paint in a color approved by GRANTOR and be maintained in good repair and in a neat, clean, and well-painted condition.

1.12 During initial construction of the pipeline and throughout the term of this Agreement, GRANTEE shall be obligated for the reasonable cleanliness of the Right-of-Way and adjacent areas. GRANTEE must use reasonable diligence to keep such areas free and clear of litter, trash, debris, discarded materials and the like. Due to the risk of injury to livestock, GRANTEE must pay particular attention to and immediately remove all thread protectors and all discarded pieces of plastic or poly (including pipeline shavings. other shavings, packing materials, and the like).

1.13 GRANTEE shall have an obligation to construct or implement reasonable erosion treatments (such as berms, diversion terraces and the like) so that erosion of the Right-of-Way area and immediately adjacent areas is prevented, or halted, or reasonably minimized if it is evident that such erosion is caused by the placement of the pipeline on the Property or otherwise caused by GRANTEE'S operations on the Property. GRANTEE understands the Easement location is in close proximity to a draw and subject to high levels of erosion and grade change. GRANTEE

understands special attention to ongoing terrain change will be needed to maintain the proper depth of the pipeline and fill any subsidence of the ditch.

1.14 After the initial construction of the pipeline, GRANTEE shall notify GRANTOR at least 48 hours prior to construction or repair activities that require portions of the Right-of-Way to be excavated. This shall not apply to any situation that GRANTEE deems to be an emergency. GRANTOR shall be notified as soon as practical in an emergency.

1.15 No employee, contractor. or other person entering the Property under the authority of GRANTEE shall be permitted to engage in any recreational activities on the Property, including but not limited to hunting, fishing. swimming, camping, picnicking, searching for Indian relics, or sightseeing. No dogs (other than contraband search dogs or trained leak detection dogs) or other animals, guns, firearms, or fishing equipment or other type of sport paraphernalia will be permitted on the Property. Nothing will be brought on or removed from the Property nor any activity engaged in on the Property nor will anyone go anywhere on the Property except as directly and necessarily required in carrying on GRANTEE'S operations. Anyone found on the Property in violation of this clause may be immediately ejected and thereafter excluded from the Property. No employee, contractor, or other person entering the Property under the authority of GRANTEE shall bring alcohol, illegal drugs, illegal controlled substances, weapons of any kind including firearms, air guns, bows, crossbows, spear guns, and blow guns (but excluding pocketknives and belt-carried sheath knives). Anyone found on the Property in possession of these items may be immediately ejected and thereafter excluded from the Property and (if applicable) prosecuted.

1.16 GRANTEE shall take reasonable safeguards to prevent the occurrence and spread of range fires. During all times when a county burn ban is in effect or when the risk of range fire is likely, GRANTEE shall provide water trucks and other prudent fire-prevention equipment for welding, dozing, ditching or other higher risk-of-fire operations. GRANTEE shall comply with all requirements of a county burn ban applicable to Grantee's operations.

1.17 GRANTEE has no right to dispose of any water generated or produced in connection with hydrostatic testing of the pipeline upon the Right-of-Way or GRANTOR'S adjoining lands unless GRANTOR consents in advance and in writing.

1.18 The provisions of this paragraph I applicable to the initial construction of the pipeline also apply to repair and removal of said pipelines.

GRANTEE shall have the right to adjust the location of the Easement Area within the Property as a result of various engineering factors or to correct the legal description of the Easement Area to conform to the actual location of the Easement Area based on the actual location of the Facilities. In the event such a modification is required by GRANTEE, GRANTEE may adjust the location of the Easement Area by recording a "Revised Exhibit A" referring to this instrument and setting forth the modified legal description of the Easement Area, which description may be set forth as a map on the Revised Exhibit A. A copy of said Revised Exhibit A shall be delivered to the GRANTOR. Without limiting GRANTEE'S right to modify the location of the Easement Area by recording a "Revised Exhibit A" as aforesaid, GRANTOR agrees to execute and deliver to GRANTEE any additional documents GRANTEE may request to modify

or correct the legal description of the Easement Area to conform with the actual location of the Easement Area based on the actual location of the Facilities. If such documents are required, they will be prepared by GRANTEE at its expense. GRANTOR shall receive additional reasonable compensation only if the area within the Easement Area increases as a result of the changed location. Adjustment of the Easement Area beyond that set out in Exhibit A shall be upon GRANTOR approval.

GRANTEE and GRANTOR agree that this Agreement, together with the Payment Agreement for the North East Sanitary Sewer Line Project entered into concurrent herewith, constitute the entire agreement between the parties and that no other agreements have been made modifying, adding to or changing the terms of the same. Except as provided in the immediately preceding paragraph, this Agreement shall not be abrogated, modified, rescinded or amended in whole or in part without the consent of GRANTEE and GRANTOR, in writing and executed by each of them, and duly recorded in the appropriate real property records.

GRANTEE shall reasonably compensate GRANTOR or its tenants on the Property (if any), as applicable, for any actual loss or damage to their respective property, or injury or death to them, caused by GRANTEE, or any of its employees, agents, contractors, subcontractors or invitees, in connection with the exercise of GRANTEE's rights hereunder, except for any losses or damages to their property which are included within the initial consideration paid GRANTEE hereunder. In addition, GRANTEE does hereby covenant and agree to defend, indemnify and hold GRANTOR and its tenants on the Property (if any) harmless from and against any and all claims, suits and causes of action of persons or entities for loss of or injury to the property of, and injuries to or death of any such persons or entities caused by GRANTEE, its employees, contractors, subcontractors or invitees in connection with the exercise of GRANTEE's rights hereunder. In no event, however, will GRANTEE be responsible for any of the foregoing to the extent caused by the negligence or willful acts or omissions of GRANTOR or its tenants (if any), or its or their employees, agents, contractors, subcontractors or invitees.

At GRANTEE'S sole cost, risk and expense, GRANTEE shall observe, comply with and conform to all present and future municipal, parish, state and federal laws, ordinances, regulations, rules, orders and directives applicable to (1) the construction, maintenance, operation, use, repair, replacement and removal of the pipeline and associated appurtenances, (ii) corrective actions required to address the release of hazardous substances arising from GRANTEE'S operations ("corrective actions"), and/or (iii) the commodities or products transported in the pipeline (collectively, "applicable laws"). GRANTEE shall indemnify and hold harmless GRANTOR against third-party claims and related losses, including reasonable attorneys' fees, caused by (a) the violation of applicable laws by GRANTEE, its contractors, subcontractors, agents or employees occurring after GRANTEE'S acquisition of the Easement, (b) the release of hazardous substances on the property to the extent caused by GRANTEE or arising from GRANTEE'S operations or GRANTEE'S use of the Easement property (an "environmental release"), or (c) GRANTEE'S corrective actions applicable to the property in response to an environmental release.

GRANTEE shall defend with counsel of GRANTEE'S choice, indemnify, protect and hold harmless GRANTOR, GRANTOR'S heirs, successors, assigns and related or affiliated entities (the "indemnified parties"), from any and all liens, claims, demands, costs (including but not limited to reasonable attorneys' fees), expenses, damages, losses and causes of action for damages

asserted by persons or entities unaffiliated with the indemnified parties because of injury to persons (including death) and injury or damage to or loss of any property or improvements to the extent caused by GRANTEE'S negligence, gross negligence, willful misconduct or strict liability.

GRANTOR hereby warrants the title to the Property, subject only to outstanding mortgages and rights of way, if any, now of record in the land records of the above specified county, and in the event of default by GRANTOR, GRANTEE shall have the right to discharge or redeem for GRANTOR, in whole or in part, any mortgage, tax ox other lien on the Property and thereupon be subrogated to such lien and rights incident thereto. This Right-of-Way and Easement shall create a covenant and burden on the Property and running therewith.

GRANTOR shall, subject to the other provisions hereof, have the use of the Property except for any use which hinders, conflicts or interferes with the purposes for which this Right-of-Way and Easement is granted, or which disturbs or otherwise creates any actual or potential hazard to the Facilities.

TO HAVE AND TO HOLD said Right-of-Way and Easement unto said GRANTEE, its successors and assigns (with such assignment permitted in whole or in part), until such Facilities are constructed and so long thereafter as any of the Facilities are maintained thereon or thereunder. In the event none of the Facilities are maintained as set forth in the preceding sentence, GRANTEE may abandon the Facilities in place in accordance with applicable laws.

Term: The Right-of-Way and Easement granted hereby shall continue in effect unless and at any time after five (5) years from the date hereof, GRANTEE should abandon all of the rights and permitted uses granted herein for said pipeline and appurtenances constructed upon said land and if such abandonment should continue for a continuous twenty-four (24) month period, this Right-of-Way and Easement shall terminate and revert to GRANTOR, his heirs, legal representatives, and assigns, provided, however, that any period of time that GRANTEE is unable to exercise its rights granted hereunder because of Force Majeure shall not be considered part of the period of abandonment. Force Majeure shall be any event beyond the reasonable control of GRANTEE. GRANTEE shall have the right for two (2) years following a final determination of the termination of this Agreement to remove its pipe, valves and all other property or to abandon same in place. Following the expiration of such period, any such property remaining on said land shall be and become the property of GRANTOR in its "AS-IS" "WHERE-IS" condition. GRANTEE shall ensure that the pipeline is abandoned in an environmentally safe manner in accordance with applicable laws, rules and regulations.

The undersigned hereby bind themselves, their heirs, executors, administrators, successors and assigns, against every person whomsoever lawfully claiming or to claim the same, or any part thereof. The undersigned hereby covenant and agree to account to any other persons legally due any portion of the monies hereto paid for damages.

It is hereby understood that the party(ies) securing this Right-of-Way and Easement on behalf of the GRANTEE are without authority to make any covenant or agreement not herein expressed.

This Right-of-Way and Easement may be executed in multiple counterparts, each of which shall be considered an original for all purposes and all of which taken together shall constitute one and the same agreement, and be binding upon the parties who executed any counterpart, regardless of whether it is executed by all parties named herein.

IN WITNESS WHEREOF, GRANTOR has caused these premises to be signed, executed and delivered this 14th day of April, 2021.

GRANTOR:

Moriah Land & Cattle, LLC

By: Tom M Brandt

Name: Tom M. Brandt

Title: Manager

STATE OF TEXAS §
§
COUNTY OF MIDLAND §

This instrument was acknowledged before me on the 14th day of April, 2020, by Tom M. Brandt.

My Commission Expires: 09/09/2021

Sherry Roberts

Notary Public
Sherry Roberts
State of Texas

SHERRY ROBERTS
Notary Public, State of Texas
ID# 702902-0
My Commission Expires
SEPTEMBER 9, 2021

GRANTEE:

The City of Midland, Texas

By: _____

Name: Robert Patrick

Title: City Manager

ATTEST:

_____

Amy M. Turner, City Secretary

EXHIBIT A

Parkhill

40-FOOT WIDE SANITARY SEWER EASEMENT IN SECTION 18, BLOCK 38, TOWNSHIP 1-SOUTH, T. & P. RR. CO. SURVEY, MIDLAND COUNTY, TEXAS

A 40-foot wide sanitary sewer easement in Section 18, Block 38, Township 1-South, T. & P. RR. Company Survey, Midland County, Texas, situated in that certain tract of land conveyed to Moriah Land & Cattle, LLC, described in a special warranty deed recorded in Instrument Number 2018-20726 of the Official Public Records of Midland County, Texas, said sanitary sewer easement contains 4.865 acres (211,934 square feet) being further described by metes and bounds as follows:

BEGINNING at a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set in the north line of said Section 18 for the northwest corner of this easement, said beginning point having coordinates of NORTHING: 10,724,346.98 and EASTING: 1,761,226.28, Texas Coordinate System, Central Zone 4203, North American Datum, whence a 1/2-inch iron rod found at the northwest corner of said Section 18 bears *South 75 degrees 31 minutes 11 seconds West*, a distance of 3396.33 feet;

(1) THENCE *North 75 degrees 31 minutes 11 seconds East*, along the north line of said Section 18, a distance of 40.00 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the northeast corner of this easement;

(2) THENCE *South 14 degrees 39 minutes 08 seconds East* a distance of 5298.34 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set in the south line of said Section 18 for the southeast corner of this easement;

(3) THENCE *South 75 degrees 30 minutes 05 seconds West*, along the south line of said Section 18, a distance of 40.00 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the southwest corner of this easement, said point having coordinates of NORTHING: 10,719,220.94 and EASTING: 1,762,566.49, Texas Coordinate System, Central Zone 4203, North American Datum of 1983, whence the southwest corner of said Section 18 bears *South 75 degrees 30 minutes 05 seconds West* a distance of 3422.48 feet;

(4) THENCE *North 14 degrees 39 minutes 08 seconds West* a distance of 5298.35 feet to the **POINT OF BEGINNING**. Bearings, coordinates, distance and areas called in this description are based on the Texas Coordinate System, Central Zone 4203, North American Datum of 1983. This survey is subject to any facts which may be disclosed by a full and accurate title search. Record documents other than those shown may affect these tracts. A plat of this survey is included on page 2 of this document.

This description was prepared from an actual survey of the property and the information hereon represents the findings of this survey to the best of my knowledge and belief.

Surveyed: March 22, 2021



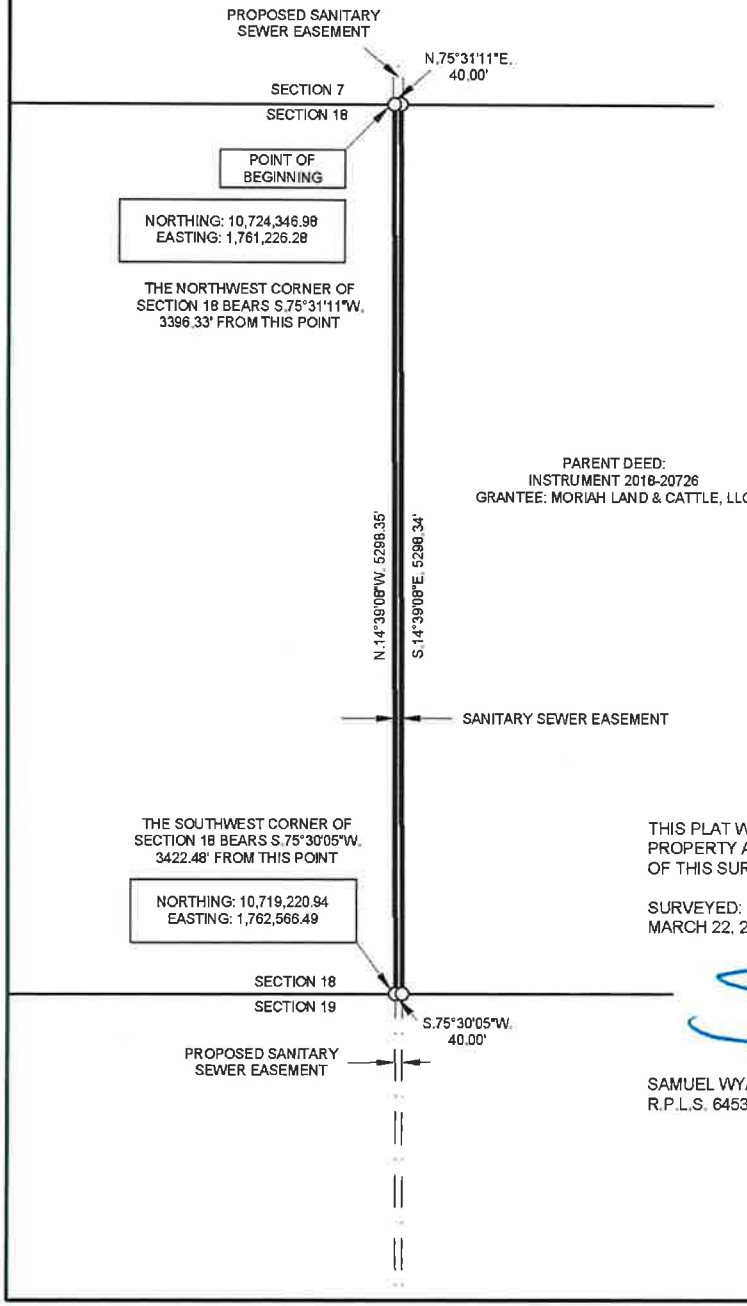
Samuel Wyatt, R.P.L.S. 6453

Texas Registered Surveying Firm # 10194091

Parkhill.com

40-FOOT WIDE SANITARY SEWER EASEMENT IN SECTION 18, BLOCK 38, T-1-S, T. & P. RR. CO. SURVEY, MIDLAND COUNTY, TEXAS

PARENT TRACT: INSTRUMENT 2018-20726
OFFICIAL PUBLIC RECORDS OF MIDLAND COUNTY, TEXAS





SCALE: 1" = 100'

○ = SET 1/2" IRON ROD WITH CAP "PSC RPLS 6453".

SURVEYOR'S REPORT:

BEARINGS, COORDINATES, DISTANCES AND AREAS SHOWN ON THIS SURVEY ARE BASED ON THE TEXAS COORDINATE SYSTEM, TXC ZONE 4203, NAD'83.

THIS SURVEY IS SUBJECT TO ANY FACTS WHICH MAY BE DISCLOSED BY A FULL AND ACCURATE TITLE SEARCH. RECORD DOCUMENTS OTHER THAN THOSE SHOWN MAY AFFECT THIS TRACT.

MONUMENTS INDICATED AS FOUND BY THIS SURVEY ARE NOT "PHYSICAL MONUMENTS OF RECORD DIGNITY" UNLESS SO NOTED.

FOUND MONUMENTS ARE ACCEPTED BY THIS SURVEYOR AS CONTROLLING EVIDENCE DUE TO SUBSTANTIAL AGREEMENT WITH RECORD DOCUMENTS.

THIS PLAT IS INVALID UNLESS IT BEARS THE SURVEYOR'S ORIGINAL SEAL AND SIGNATURE.

THIS PLAT WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY AND THE INFORMATION HEREON REPRESENTS THE FINDINGS OF THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SURVEYED:
MARCH 22, 2021



SAMUEL WYATT
R.P.L.S. 6453

Parkhill
Parkhill.com
TBPELS FIRM REGISTRATION NO. 10194091

Parkhill

40-FOOT WIDE SANITARY SEWER EASEMENT IN SECTION 19, BLOCK 38, TOWNSHIP 1-SOUTH, T. & P. RR. CO. SURVEY, MIDLAND COUNTY, TEXAS

A 40-foot wide sanitary sewer easement in Section 19, Block 38, Township 1-South, T. & P. RR. Company Survey, Midland County, Texas, partly situated in that certain 170.239-acre tract of land conveyed to Moriah Land and Cattle, LLC, described in a general warranty deed recorded in Instrument Number 2018-20726 of the Official Public Records of Midland County, Texas, said sanitary sewer easement contains 2.232 acres (97,230 square feet) being further described by metes and bounds as follows:

BEGINNNG at a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set in the north line of said Section 19 for the northwest corner of this easement, said beginning point having coordinates of NORTHING: 10,719,220.94 and EASTING: 1,762,566.49, Texas Coordinate System, Central Zone 4203, North American Datum of 1983, whence the northwest corner of said Section 19 bears *South 75 degrees 30 minutes 05 seconds West* a distance of 3422.48 feet, and a 1/2-inch iron rod found at the northwest corner of said 170.239-acre tract bears *South 52 degrees 35minutes 28 seconds West* a distance of 29.72 feet;

(1) THENCE *North 75 degrees 30 minutes 05 seconds East*, along the north line of said Section 19, a distance of 40.00 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the northeast corner of this easement;

(2) THENCE *South 14 degrees 39 minutes 08 seconds East*, at a distance of 11.85 feet pass the north line of said 170.239-acre tract, continuing for a total distance of 2373.20 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set for the southeast corner of this easement;

(3) THENCE *South 48 degrees 00 minutes 48 seconds West*, at a distance of 84.88 feet pass the west line of said 170.239-acre tract, continuing for a total distance of 92.37 feet to a point in the east line of a tract of land conveyed to Parsley Energy, LP, described as "Tract Three" in a warranty deed recorded in Instrument Number 2018-2268 of the Official Public Records of Midland County, Texas, for the southwest corner of this easement;

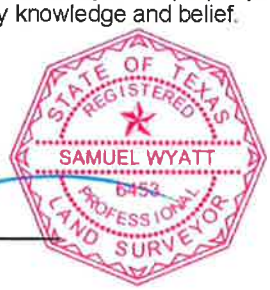
(4) THENCE *North 14 degrees 30 minutes 33 seconds West*, along the east line of said Parsley Energy tract, a distance of 45.09 feet to a point of intersection for a corner of this easement, said point having coordinates of NORTHING: 10,716,916.79 and EASTING: 1,763,125.56, Texas Coordinate System, Central Zone 4203, North American Datum of 1983, whence a 1/2-inch iron rod with a plastic cap set in the previous location of a bent 1/2-inch iron rod found at the northeast corner of Sunset Ridge Addition to the City of Midland, Midland County, Texas, according to the map, plat and/or dedication deed thereof recorded in Plat Cabinet "J", Page 198 of the plat records of Midland County, Texas bears *South 48 degrees 55 minutes 03 seconds West* a distance of 634.08 feet;

(5) THENCE *North 48 degrees 00 minutes 50 seconds East*, at a distance of 7.54 feet pass the west line of said 170.239-acre tract, continuing for a total distance of 47.22 feet to a 1/2-inch iron rod with a plastic cap marked "PSC RPLS 6453" set at a point of intersection for a corner of this easement;

(6) THENCE *North 14 degrees 39 minutes 08 seconds West*, at a distance of 2337.26 feet pass the north line of said 170.239-acre tract, continuing for a total distance of 2348.95 feet to the **POINT OF BEGINNING**. Bearings, coordinates, distance and areas called in this description are based on the Texas Coordinate System, Central Zone 4203, North American Datum of 1983. This survey is subject to any facts which may be disclosed by a full and accurate title search. Record documents other than those shown may affect these tracts. A plat of this survey is included on page 3 of this document.

This description was prepared from an actual survey of the property and the information hereon represents the findings of this survey to the best of my knowledge and belief.

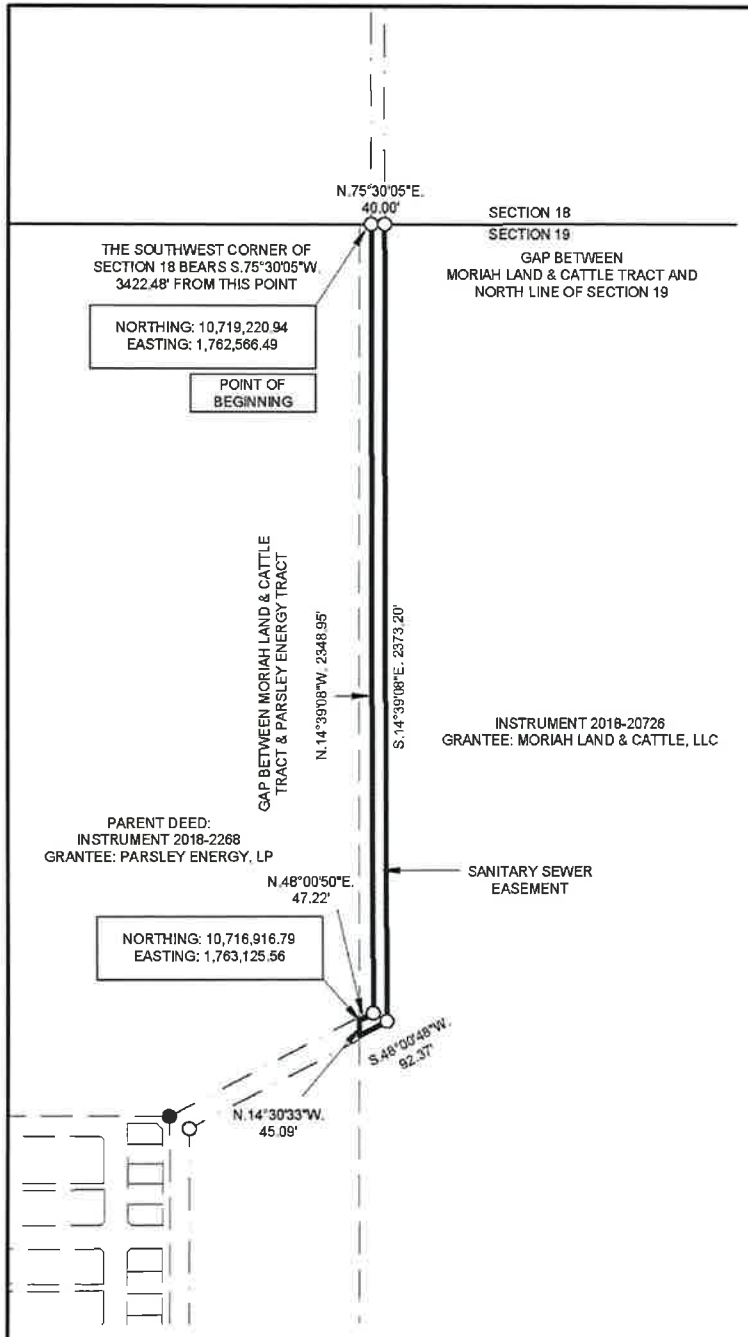
Surveyed: March 22, 2021



Samuel Wyatt, R.P.L.S. 6453

40-FOOT WIDE SANITARY SEWER EASEMENT IN SECTION 19, BLOCK 38, T-1-S, T. & P. RR. CO. SURVEY, MIDLAND COUNTY, TEXAS

PARENT TRACT: INSTRUMENT 2018-20726,
OFFICIAL PUBLIC RECORDS OF MIDLAND COUNTY, TEXAS



0 500' 1000'

SCALE: 1" = 500'

○ = SET 1/2" IRON ROD WITH CAP "PSC RPLS 6453".

NORTH

SURVEYOR'S REPORT:

BEARINGS, COORDINATES, DISTANCES AND AREAS SHOWN ON THIS SURVEY ARE BASED ON THE TEXAS COORDINATE SYSTEM, TXC ZONE 4203, NAD'83.

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THIS PLAT WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY AND THE INFORMATION HEREON REPRESENTS THE FINDINGS OF THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SURVEYED:
MARCH 22, 2021

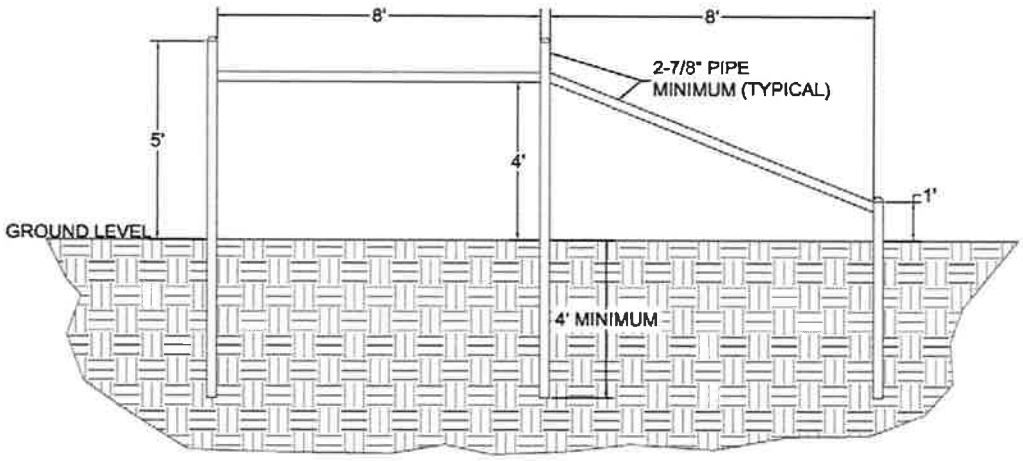
STATE OF TEXAS REGISTERED SAMUEL WYATT 6453 PROFESSIONAL LAND SURVEYOR

SAMUEL WYATT
R.P.L.S. 6453

Parkhill

Parkhill.com

TBPELS FIRM REGISTRATION NO. 10194091



H-Brace Detail

H-Brace Specifications

H-Braces shall be constructed and installed according to the following specifications and photos.

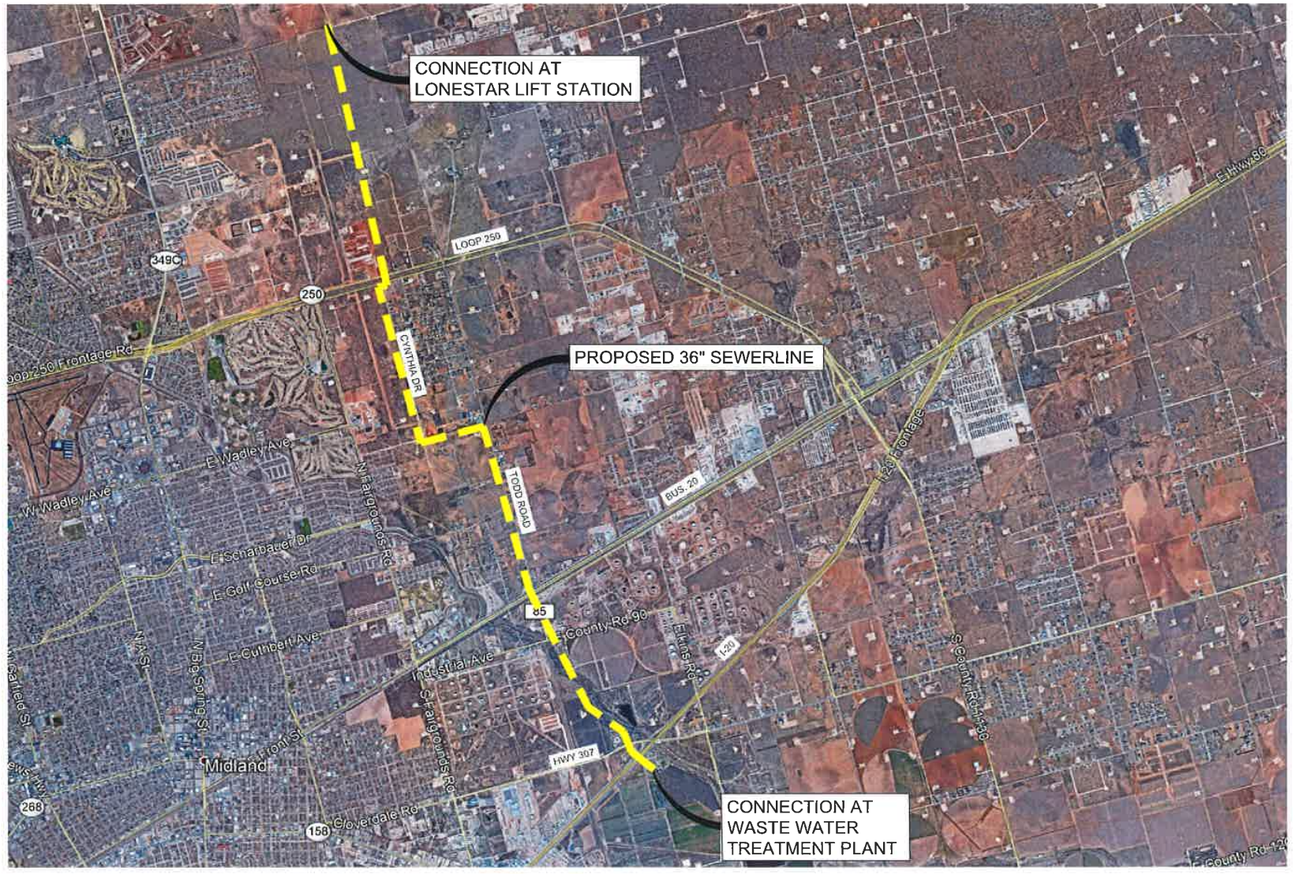
Dimensions, Materials, Construction, and Installation:

1. All pipe used for verticals, horizontals, and diagonals shall be a minimum of 2 7/8 inch pipe and all joints shall be welded.
2. Three holes shall be dug with a minimum hole diameter of 12 inches and 4 feet deep. The center of the holes shall be 8 feet apart in line with the existing fence or new fence to be built.
3. All vertical pipe shall be buried **with concrete** a minimum of 4 feet below ground level and capped at the top.
4. The vertical pipe shall be 9 feet in total length (4 feet buried with 5 feet sticking above ground level) with a 5 foot pipe for the stob/kicker (4 feet buried with 1 foot sticking above ground level).
5. One horizontal brace shall be welded, parallel to the ground, between the two 9 foot vertical pipes at a distance of 4 feet (48 inches) from ground level.
6. The diagonal brace shall be welded at this height angling down to the top of the stob/kicker.
7. Painting of the pipe is not required although it is recommended.

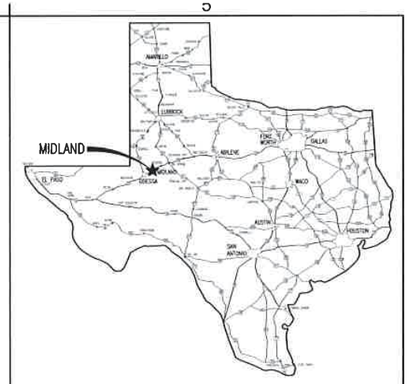
H-Brace Specifications and Detail

March 4, 2021

PACKET
12.35
May 25, 2021



A1 PROJECT LOCATION MAP



VICINITY MAP

SHEET INDEX

SHEET NO.	SHEET TITLE
G-001	COVER SHEET
G-002	PROJECT LOCATION MAP, VICINITY MAP AND SHEET INDEX
G-003	GENERAL NOTES, LEGEND, CONTACT LIST & ABBREVIATIONS
C-101	PLAN AND PROFILE STA 0+00 TO 12+00
C-102	PLAN AND PROFILE STA 12+00 TO 24+00
C-103	PLAN AND PROFILE STA 24+00 TO 36+00
C-104	PLAN AND PROFILE STA 36+00 TO 48+00
C-105	PLAN AND PROFILE STA 48+00 TO 60+00
C-106	PLAN AND PROFILE STA 60+00 TO 72+00
C-107	PLAN AND PROFILE STA 72+00 TO 84+00
C-108	PLAN AND PROFILE STA 84+00 TO 96+00
C-109	PLAN AND PROFILE STA 96+00 TO 108+00
C-110	PLAN AND PROFILE STA 108+00 TO 120+00
C-111	PLAN AND PROFILE STA 120+00 TO 132+00
C-112	PLAN AND PROFILE STA 132+00 TO 144+00
C-113	PLAN AND PROFILE STA 144+00 TO 156+00
C-114	PLAN AND PROFILE STA 156+00 TO 168+00
C-115	PLAN AND PROFILE STA 168+00 TO 180+00
C-116	PLAN AND PROFILE STA 180+00 TO 192+00
C-117	PLAN AND PROFILE STA 192+00 TO 204+00
C-118	PLAN AND PROFILE STA 204+00 TO 216+00
C-119	PLAN AND PROFILE STA 216+00 TO 228+00
C-120	PLAN AND PROFILE STA 228+00 TO 240+00
C-121	PLAN AND PROFILE STA 240+00 TO 252+00
C-122	PLAN AND PROFILE STA 252+00 TO 264+00
C-123	PLAN AND PROFILE STA 264+00 TO 276+00
C-124	PLAN AND PROFILE STA 276+00 TO 288+00
C-125	PLAN AND PROFILE STA 288+00 TO 300+00
C-126	PLAN AND PROFILE STA 300+00 TO 312+00
C-127	PLAN AND PROFILE STA 312+00 TO 324+00
C-128	PLAN AND PROFILE STA 324+00 TO 336+00
C-129	PLAN AND PROFILE STA 336+00 TO 348+00
C-130	PLAN AND PROFILE STA 348+00 TO 356+00
C-131	PLAN AND PROFILE STA 356+00 TO 362+71.72
C-501	MISCELLANEOUS SEWER DETAILS
C-502	MISCELLANEOUS SEWER DETAILS
C-503	MISCELLANEOUS SEWER DETAILS

PSC
PARKHILL SMITH & COOPER

THIS DOCUMENT IS RELEASED ON 8-3-2020, FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF KYLE W. KRUEGER, P.E., TEXAS LICENSE #122046. IT IS NOT TO BE USED FOR REGULATORY APPROVAL, CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PARKHILL SMITH & COOPER, INC. F-560

MIDLAND
Feel the Energy!

MIDLAND NORTH EAST SEWER LINE

300 N. LORAINE
MIDLAND, TX 79701-4725
(432) 686-1600

KEY PLAN

DATE	INITIALS	
8-3-2020	MM	DESIGNED BY:
8-3-2020	KWK	PROJECT MANAGER:
		QA/QC BY:

NO	DATE	DESCRIPTION
1	8-3-2020	50% REVIEW

ISSUING OFFICE: MIDLAND PROJECT NO: 2859 18

PROJECT LOCATION MAP, VICINITY MAP AND SHEET INDEX

G-002

FILE NAME: X:\2018\02859.18\03_DSGN\01_DWG\01\0_GEN\G-002-2859.dwg LAYOUT NAME: G-002 PRINTED: Thursday, July 30, 2020 - 3:07pm USER: MMullins

Parkhill

CITY OF MIDLAND - PAYMENT ORDER
North East Sanitary Sewer Line Project

PAYMENT ORDER No.: 210317-02-1

DATE: 03.17.2021 COUNTY: Midland

PAYABLE TO: Moriah Land & Cattle, LLC

ADDRESS: PO Box 50465 SSN or TAX ID:

CITY, STATE, ZIP: Midland, TX 79710 LANDOWNER #: 02

LEGAL: All of Section 18, Block 38, T1S, T&P Ry. Co. Survey, Midland County, Texas, and 170.239 acres out of the East portion of Section 19, Block 38, T1S, T&P Ry. Co. Survey, Midland County, Texas, as being more particularly described in that certain Warranty Deed dated July 17, 2018, recorded as Instrument 2018-20726, of the Official Public Records of Midland County, Texas

RIGHT OF WAY PAYMENT:

RODS: 471.592 PRICE PER ROD: $800.00

OWNER INTEREST: 100.000000% ROW PAYMENT: **$377,273.60**

TOTAL PAYMENT ORDER AMOUNT:

TOTAL OF PAYMENT ORDER: $377,273.60

LANDOWNER INITIALS:

HANDLING INSTRUCTIONS: Mail payment to landowner at address provided above

APPROVED BY: SIGNATURE:

RECEIVED BY: SIGNATURE:

FOR COM's USE ONLY

CHECK NUMBER: DATED:

ISSUED BY: RETURNED TO:

City Council Meeting

Item Number: 13

Meeting Date: May 25, 2021

To: City Council / City Manager

From: John Simmons, Manager, Right-of-Way

Subject: Motion authorizing the execution of a right-of-way license between the City of Midland and Nustar Permian Transportation & Storage, LLC, regarding city-owned property described as Section 2, Block 37, Township 3 South, T&P RR Co. Survey, Midland County, Texas (DISTRICT: NONE) (UTILITIES)

Purpose:

Applicant is requesting a 30' wide right of way to place a six and a half inch (6.6") common carrier, steel construction, crude pipeline on City of Midland owned real property known as the Spraberry Farm. Applicant also will need two 50 x 50' above ground valve sites, with a 40' wide temporary workspace for construction. Pipeline and valve sites are located away from farming operations.

This Right-of-Way License is proposed for a single five (5) year period with the option for a single five (5) year renewal. Terms are consistent with the City's standard license for pipeline facilities of this nature.

Recommended City Council Action:

Approve

Fiscal Impact:

Application fee (one time): $1,000

Pipeline:
Annual Lease Rate (65.01 rods x $20/rod): $1,300.20
Surface Damages: (65.01 rods x $10/rod): $650.10

Valve sites:

Annual Lease rate: #1- (2,502 square feet x $0.10) $250.00 / $400 minimum per year
#2 – (2,499 square feet x $0.10) $250.00 / $400 minimum per year

Total Collected: $3,750.30

Discussion:

This common carrier, steel construction crude line is 6.6 inches (6.6) in diameter and buried thirty-six inches (36) deep.

All fees have been collected.

Certificates of Insurance (COI) with City of Midland named as additional insured and a waiver of subrogation in favor of the City of Midland has been collected and on file.

City Secretary to record completed License Agreement

Morris Williams Jr.

City Manager's Office

RIGHT OF WAY LICENSE

THE STATE OF TEXAS	§	
	§	KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF MIDLAND	§	

Date:	May 25, 2021
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:	Nustar Permian Transportation and Storage, LLC
Licensee's Representative:	**R. Heath Reininger**
Licensee's Mailing Address:	19003 IH 10 West –Real Estate Department San Antonio, Texas 78257
Property:	See **Exhibits A and B** attached hereto and incorporated herein for all purposes.

Licensee desires use of property owned by Licensor in Midland County, Texas (the "Property"), 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 and the mutual promises and covenants of the parties hereto, it is mutually promised, understood and agreed as follows:

I. Term

A. Initial Term. This License shall be for a term of five (5) years (the "Initial Term"), commencing with the date of this License (the "Commencement Date") unless terminated earlier as provided hereafter.

B. Renewal Term. This License shall automatically renew at the end of the Initial Term for one (1) additional term of five (5) years, upon the written request of Licensee received by Licensor on or before one hundred twenty (120) days prior to the expiration of the Initial Term then in effect, subject to the express written consent of the governing body of Licensor.

C. 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 cancel the License during the term of the 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 the License. All work and services under the License shall be suspended upon termination of the License becoming effective.

Upon 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 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 and eighty (180) days after termination of this License.

II. Financial Consideration

A. License Fee. The first year's license fee in the amount of TWO THOUSAND ONE HUNDRED and 20/100 Dollars ($2,100.20) shall be due and payable on or prior to the Commencement Date of this License ("License Fee"). Licensee's failure to make the License Fee payment within thirty (30) days after the License Fee is due shall constitute a late payment and Licensee shall pay Licensor a late charge of five percent (5%).

B. Surface Damage Fee. Licensee shall pay a one-time surface damage fee to Licensor in the amount of SIX HUNDRED FIFTY and 10/100 Dollars ($650.10), payable on or prior to the Commencement Date.

C. Annual Fee. Licensee shall pay to Licensor an annual fee in the amount of TWO THOUSAND ONE HUNDRED and 20/100 Dollars ($2,100.20), which shall be payable each year on or before the anniversary of the Commencement Date of this License.

D. Application Fee. At the same time the first year License Fee is due, 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 the License.

E. Fee Adjustment. Prior to commencement of any renewal term, Licensor and Licensee shall negotiate in good faith to agree to an adjustment of the Annual Fee. If Licensor and Licensee are unable to reach an agreement regarding an adjustment to the Annual Fee, then the Annual Fee shall be determined by Licensor in its sole discretion, provided the new Annual Fee shall not exceed twenty-five percent (25%) of the Annual Fee paid for the last year of the Initial Term.

F. Delivery of Payment. The License Fee payment shall be made to Licensor at the office of Licensor's Representative, Attn: Right of Way Manager, P.O. Box 1152, Midland, Texas, 79702. The License Fee payment 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.

III. Use

A. Permitted Use. Licensor does hereby grant unto Licensee, the right to enter upon the Property, being forty (40) feet in width of the pipeline location as shown on **Exhibit A** attached hereto and incorporated herein for the purpose of placing, constructing, operating, repairing, maintaining, replacing and removing, thereon, along the herein described pipeline locations, a steel construction pipeline, not to exceed six and a half (6.5) inches in diameter, for the transportation of crude oil, to have the right of ingress and egress at convenient points for such purpose, and said construction width shall revert to thirty (30) feet after the pipeline is laid. Licensor does hereby grant unto Licensee, the right to enter upon the Property, being forty (40) feet in width of the surface site locations as shown on **Exhibit B** attached hereto and incorporated herein for the purpose of placing, constructing, operating, repairing, maintaining, replacing and removing, thereon, along the herein described surface site locations, two (2) above ground valve sites, to have the right of ingress and egress at convenient points for such purpose, and said construction width shall revert to thirty (30) feet after the above ground valves are installed. **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 any of Licensor's roads that Licensee damages 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 and water meters owned by Licensor that Licensee, its employees, its agents or assigns, damage so that such water lines, sewer lines and water meters shall comply with the requirements of Licensor's Standard Specifications.

D. Depth. Licensee covenants and agrees that it will bury the pipeline(s) to be constructed hereunder no less than thirty-six (36) inches in depth. All backfill used in burying such line shall be compacted to a density of ninety percent (90%), except where such pipeline(s) crosses under a paved or traveled portion of 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(s) intersects with a City of Midland utility line location, the pipeline(s) shall be bored at a depth of a 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, the specifications shall be approved by Licensor's Representative.

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.

Licensor 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 Licensor, in, on, across, along, over, under, and through any property occupied by Licensee. In permitting such work to be done, Licensor 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(S), CASING, OR COMPRESSOR STATION, ARISING OUT OF THE NEGLIGENCE BY LICENSOR, ITS EMPLOYEES, OFFICERS OR AGENTS, OR LICENSOR'S CONTRACTORS OR SUBCONTRACTORS**. If Licensor 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 Licensor, 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 Licensor, without claim for reimbursement for the cost of the relocation or for damages against Licensor. If these requirements impose a financial hardship upon Licensee, Licensee shall have the right to present alternative proposals for Licensor's consideration.

G. Non-exclusive. Licensor 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 to 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 revert to Licensor, its successors or assigns, free and clear of any right, title, or interest in Licensee, or any re-entry by Licensor.

I. Approval of Specifications. In the event Licensee desires to reconstruct, repair, maintain, replace or remove any pipeline or casing system built hereunder, Licensee shall submit the plans and specifications that pertain to the rebuilding or repairs of Licensor's streets and roads and the rebuilding or repairs of any of Licensor's public utilities to Licensor's Representative for his or her approval. In the event of emergency repairs necessary to restore service, Licensee shall notify Licensor's Representative before making any repairs if during a Licensor work day. If not on a work day, Licensee shall notify Licensor's Representative on the first work day after repairs have

begun.

J. Gates and Fences. 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 Licensor, securely locked except during operations related to this License. At any gate that is to be locked, Licensor 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 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 by 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 above the land covered by this License for any purpose allowed by law and deemed necessary 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 said right of way occupied by Licensee. In the event of such work in connection with said purposes it shall be deemed necessary by Licensor, at Licensor's sole discretion, to alter, change, adapt, conform 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's City Council without any

claim for reimbursement for the cost of the relocation or damages against Licensor. The relocation 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 or relocation of its system to which it may be lawfully entitled to under applicable federal or state laws with respect to relocation payments.

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.

The parties agree that, prior to the execution of the License, Licensee shall provide one or more certificates of insurance showing that the requirements of this article have been met. This decision shall be in Licensor's sole discretion.

Licensor shall be provided the 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 by Licensee, and name the City of Midland as an additional insured. 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. LICENSEE SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND LICENSOR, AND ALL OF LICENSOR'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES AND EXPENSE 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 LICENSEE, LICENSEE'S OFFICERS, AGENTS OR EMPLOYEES, 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', AGENTS' OR SUBCONTRACTORS' NEGLIGENCE, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS LICENSE INCLUDING 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(S),CASING SYSTEM, OR COMPRESSOR STATION IN LICENSOR'S RIGHT OF WAY. LICENSEE WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST LICENSOR OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

LICENSEE AGREES THAT LICENSEE SHALL INDEMNIFY AND SAVE LICENSOR 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, ALL SUPPLIES, CONSTRUCTION, OPERATION, REPAIR, MAINTENANCE, REPLACEMENT OR REMOVAL OF THE PIPELINE(S), CASING SYSTEM, OR COMPRESSOR STATION DESCRIBED HEREIN.

LICENSEE SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND LICENSOR, AND ALL OF LICENSOR'S OFFICERS, AGENTS OR EMPLOYEES FROM ALL SUITS, ACTIONS, CLAIMS, DAMAGES, PERSONAL INJURIES, ACCIDENTAL DEATH, PROPERTY DAMAGE, LOSSES AND EXPENSE 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 LICENSOR, LICENSOR'S OFFICERS, AGENTS OR EMPLOYEES, 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', AGENTS' OR SUBCONTRACTORS' NEGLIGENCE, IN THE EXECUTION, SUPERVISION AND OPERATIONS GROWING OUT OF OR IN ANY WAY CONNECTED WITH THE PERFORMANCE OF THIS LICENSE INCLUDING 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(S),CASING SYSTEM, OR COMPRESSOR STATION IN LICENSOR'S RIGHT OF WAY. LICENSEE WILL BE REQUIRED TO PAY ANY JUDGMENT WITH COSTS WHICH MAY BE OBTAINED AGAINST LICENSOR OR ANY OF ITS OFFICERS, AGENTS OR EMPLOYEES, INCLUDING ATTORNEY'S FEES.

LICENSEE SHALL INDEMNIFY AND HOLD HARMLESS AND DEFEND LICENSOR, AND ALL OF LICENSOR'S OFFICERS, AGENTS AND EMPLOYEES FROM ALL CLAIMS, LOSSES, DAMAGES, LIABILITIES, LIENS, FINES, PENALTIES, CAUSES OF ACTION, SUITS, CHARGES, JUDGMENTS, ADMINISTRATIVE ORDERS, REMEDIATION REQUIREMENTS, ENFORCEMENT ACTIONS OF ANY KIND, AND ALL COSTS AND EXPENSES OF ANY CHARACTER WHATSOEVER, INCLUDING ATTORNEY'S FEES, BROUGHT FOR OR ON ACCOUNT OF FAILURE OF LICENSEE, ANY CONTRACTOR, SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY THEM, OR ANYONE THAT THEY CONTROL OR EXERCISE CONTROL OVER 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 OF LICENSEE'S OPERATIONS OR ACTIVITIES ON THE PROPERTY, OR ANY OF LICENSEE'S HANDLING, STORING, RELEASING, 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.

C. Assignment. The rights granted by this License inure to the benefit of Licensee. The rights and privileges shall not be assignable by Licensee without the express written consent of Licensor's City Manager. 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 and services 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 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 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 and services 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.

E. Waiver of Attorney Fees. 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 THE LICENSE, THE CONSTRUCTION, OR INTERPRETATION, VALIDITY OR BREACH OF THE LICENSE. LICENSEE SPECIFICALLY AGREES THAT IF LICENSEE BRINGS OR COMMENCES ANY LEGAL ACTION OR PROCEEDING RELATED TO THIS LICENSE, 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 payment 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, LICENSEE HEREBY RELEASES, ACQUITS, RELINQUISHES AND FOREVER DISCHARGES LICENSOR, 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. Licensor's approval of this License does not create a third party beneficiary. There is no third party beneficiary to this License. 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. 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 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 sufficieney of whieh is hereby aeknowledged by the parties named herein.

M. Waiver of Governmental Immunity; Chapter 271, TEX. LOC. GOV'T CODE. The parties agree that this License does not constitute a Lieense or Contract for providing goods and/or services to Licensor as discussed in Subchapter I of Chapter 271 of the Texas Loeal 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 greatest extent allowed by law, nothing in this Lieense constitutes a waiver of Licensor's governmental immunity and the parties expressly agree that this Lieense shall not constitute, nor be interpreted as a waiver of Licensor's governmental immunity under Subehapter I of Chapter 271 of the Texas Loeal Governmeut Code, nor shall it constitute nor be interpreted as a waiver of Licensor's governmental immunity for the benefit of any third party laeking privity to the License.

This Liceuse does not obligate Licensee to use the Property to construct, repair, operate, replace, and maintain Licensor's facilities or structures deseribed herein, it merely prohibits Licensee from using the Property for any other purpose. This License restricts the use of the Propeıty to a specific purpose, but does not require the use of the Property for a specific purpose. This License does not require Liceusee to construct, operate, repair, maintain, replace or remove any of Lieensee's facilities or structures described herein. Licensee is not providing a service to Licensor but is providing a service to Licensee's eustomers. Lieensee is paying Licensor for a temporary interest iu real property not for a service. Any such provision shall be deemed to be a eovenant against noncomplying use, not a covenant to use. Licensee's use of the Property in compliance with a restriction shall not constitute a serviee, 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 ameuded, to the extent that this statute applies to this License. Lieensee 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 exeeuting this License, Lieensee 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 commeneing any operations on the Property if the Commission so requests and deliver the same to Licensor. Notwithstanding any provision contaiued herein, in the event that any site, objeet, 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 Licensor and the Commission so that adequate measures may be undertaken to proteet or recover such discoveries or findings, as deemed appropriate by Licensor or the Commission.

LICENSOR:
CITY OF MIDLAND, TEXAS

By:_____
Robert Patrick, City Manager

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

LICENSEE:
NUSTAR PERMIAN TRANSPORTATION AND STORAGE, LLC

By:_____
Printed Name: R. Heath Reininger
Title: Executive Director of Real Estate

THE STATE OF Texas §
§
COUNTY OF Bexar §

BEFORE ME, the undersigned authority, on this 12th day of May 2021 personally appeared R. Heath Reininger as, Executive Director of Real Estate of Nustar Permian Transportation and Storage, 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.

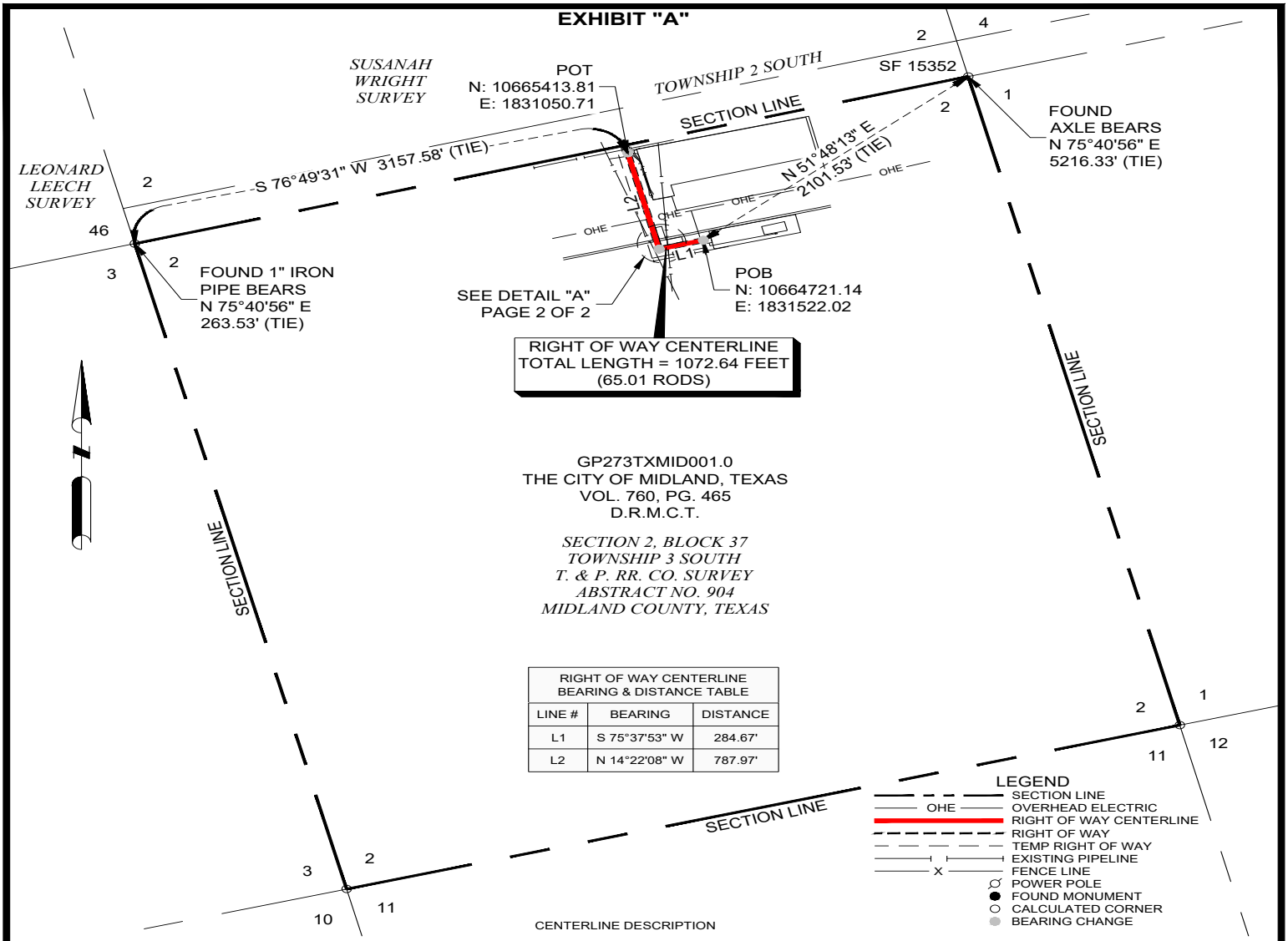
GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 12th day of May,2021.

_____
Notary Public, State of Texas.

JUSTINA CORTES
Notary ID #131630591
My Commission Expires
July 3, 2022

Reference No. 21-329-017

EXHIBIT "A"



RIGHT OF WAY CENTERLINE BEARING & DISTANCE TABLE		
LINE #	BEARING	DISTANCE
L1	S 75°37'53" W	284.67'
L2	N 14°22'08" W	787.97'

CENTERLINE DESCRIPTION

BEING THE CENTERLINE OF A PROPOSED PIPELINE RIGHT OF WAY SITUATED IN SECTION 2, BLOCK 37, TOWNSHIP 3 SOUTH, T. & P. RR. CO. SURVEY, ABSTRACT NO. 904, MIDLAND COUNTY, TEXAS. SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT (N: 10664721.14, E: 1831522.02) IN SAID SECTION 2, FROM WHICH THE CALCULATED NORTHEAST CORNER OF SAID SECTION 2 BEARS N 51°48'13" E, A DISTANCE OF 2101.53 FEET (TIE), FROM WHICH A FOUND AXLE BEARS N 75°40'56" E, A DISTANCE OF 5216.33 FEET (TIE);

THENCE S 75°37'53" W, A DISTANCE OF 284.67 FEET TO A POINT;

THENCE N 14°22'08" W, A DISTANCE OF 787.97 FEET TO THE POINT OF TERMINATION (N: 10665413.81, E: 1831050.71) OF SAID CENTERLINE, IN SAID SECTION 2, FROM WHICH THE CALCULATED NORTHWEST CORNER OF SAID SECTION 2 BEARS S 76°49'31" W, A DISTANCE OF 3157.58 FEET (TIE), FROM WHICH A FOUND 1" IRON PIPE BEARS N 75°40'56" E, A DISTANCE OF 263.53 FEET (TIE).

SAID CENTERLINE CONTAINING A TOTAL OF 1072.64 FEET OR 65.01 RODS IN SAID SECTION 2.

THE POINT OF BEGINNING IS LOCATED APPROXIMATELY
15 MILES SOUTHEAST OF MIDLAND, TEXAS

1000' 0' 1000'

Scale: 1" = 1000'

STATE OF TEXAS REGISTERED DEMPSEY D. HANNAH 5637 PROFESSIONAL LAND SURVEYOR

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 — 05/06/21 DATE

#	DATE	BY:	DESCRIPTION	CHK
1	05/06/21	BAB	UPDATED TEXT	DDH

PROJECT NO. 4360

CQ ALKALINE EARTH
THE CITY OF MIDLAND, TEXAS
PROPOSED RIGHT OF WAY CENTERLINE

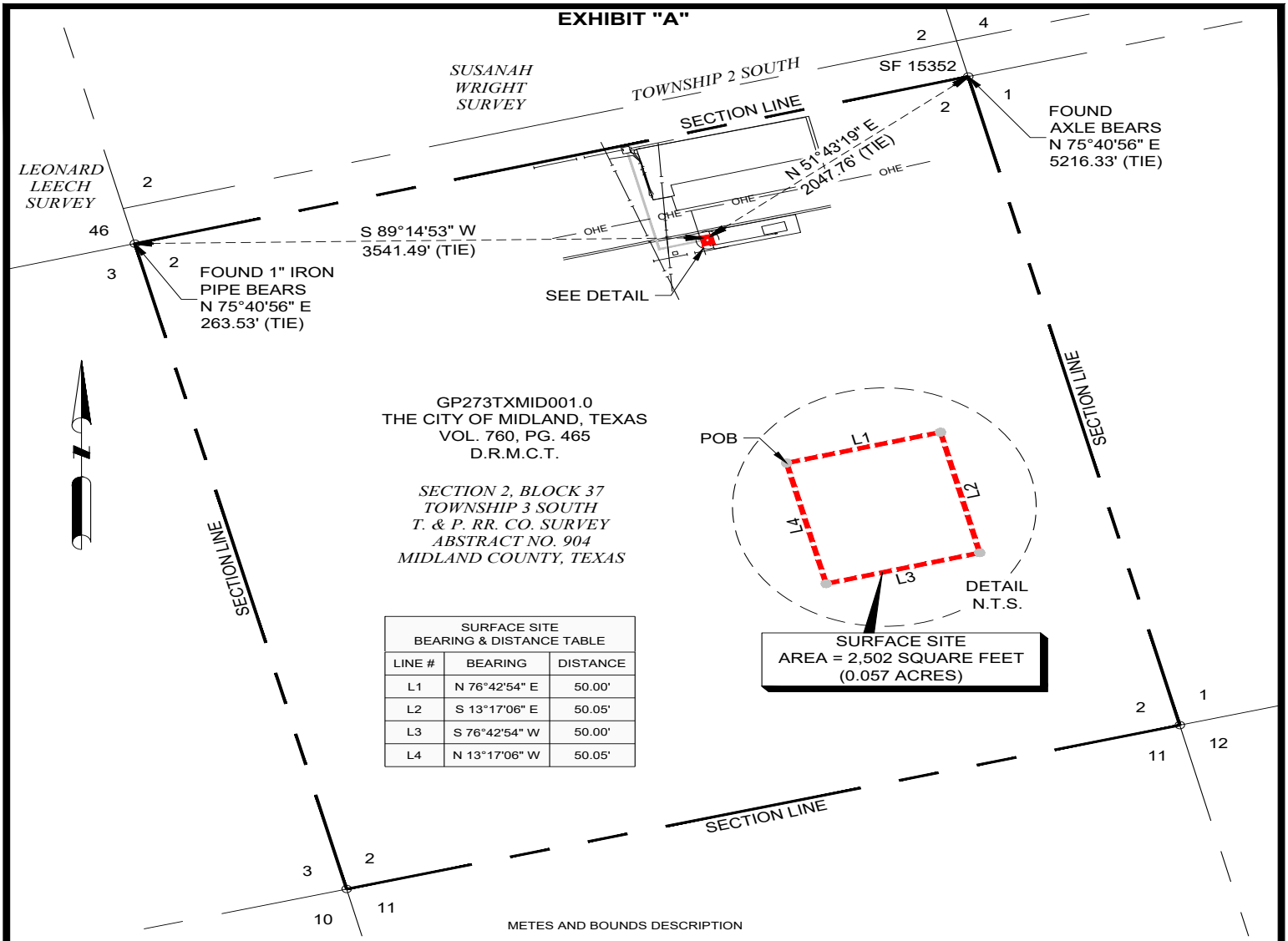
SITUATED IN
SECTION 2, BLOCK 37, TOWNSHIP 3 SOUTH
T. & P. RR. CO. SURVEY
ABSTRACT NO. 904
MIDLAND COUNTY, TEXAS

PACKET
TRANSGLOBAL SERVICES LLC
TBPELS FIRM# 10193740 / 19148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1180 ~ Fax (817) 529-1181

DRAWN BY: BAB	DATE: 05/03/2021	DWG. NO. 4360_1.00 SEC 2_REV1	REV. 1
CHECKED BY: DDH	DATE: 05/03/2021		
SCALE: 1"=1000'	PAGE 1 OF 2		

May 25, 2021

EXHIBIT "A"



SURFACE SITE BEARING & DISTANCE TABLE		
LINE #	BEARING	DISTANCE
L1	N 76°42'54" E	50.00'
L2	S 13°17'06" E	50.05'
L3	S 76°42'54" W	50.00'
L4	N 13°17'06" W	50.05'

METES AND BOUNDS DESCRIPTION

BEING A PROPOSED SURFACE SITE SITUATED IN SECTION 2, BLOCK 37, TOWNSHIP 3 SOUTH, T. & P. RR. CO. SURVEY, ABSTRACT NO. 904, MIDLAND COUNTY, TEXAS. SAID SURFACE SITE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT (N: 10664740.60, E: 1831517.43) IN SAID SECTION 2, FROM WHICH THE CALCULATED NORTHWEST CORNER OF SAID SECTION 2 BEARS S 89°14'53" W, A DISTANCE OF 3541.49 FEET (TIE), FROM WHICH A FOUND 1" IRON PIPE BEARS N 75°40'56" W, A DISTANCE OF 263.53 FEET (TIE);

THENCE N 76°42'54" E, A DISTANCE OF 50.00 FEET TO A POINT, FROM WHICH THE CALCULATED NORTHEAST CORNER OF SAID SECTION 2 BEARS N 51°43'19" E, A DISTANCE OF 2047.76 FEET (TIE), FROM WHICH A FOUND AXLE BEARS N 75°40'56" E, A DISTANCE OF 5216.33 FEET (TIE);
THENCE S 13°17'06" E, A DISTANCE OF 50.05 FEET TO A POINT;
THENCE S 76°42'54" W, A DISTANCE OF 50.00 FEET TO A POINT;

THENCE N 13°17'06" W, A DISTANCE OF 50.05 FEET TO THE POINT OF BEGINNING.

SAID SURFACE SITE CONTAINING A TOTAL OF 2,502 SQUARE FEET OR 0.057 ACRES IN SAID SECTION 2.

THE POINT OF BEGINNING IS LOCATED APPROXIMATELY
15 MILES SOUTHEAST OF MIDLAND, TEXAS

1000' 0' 1000'

Scale: 1" = 1000'

STATE OF TEXAS
REGISTERED
DEMPSEY D. HANNAH
5637
PROFESSIONAL
LAND SURVEYOR

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

Dempsey D. Hannah 05/05/21

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

#	DATE	BY:	DESCRIPTION	CHK

PROJECT NO. 4360

PACKET

TRANSGLOBAL SERVICES LLC
TBPELS FIRM# 10193740 / 19148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1180 ~ Fax (817) 529-1181

13.16

NuStar

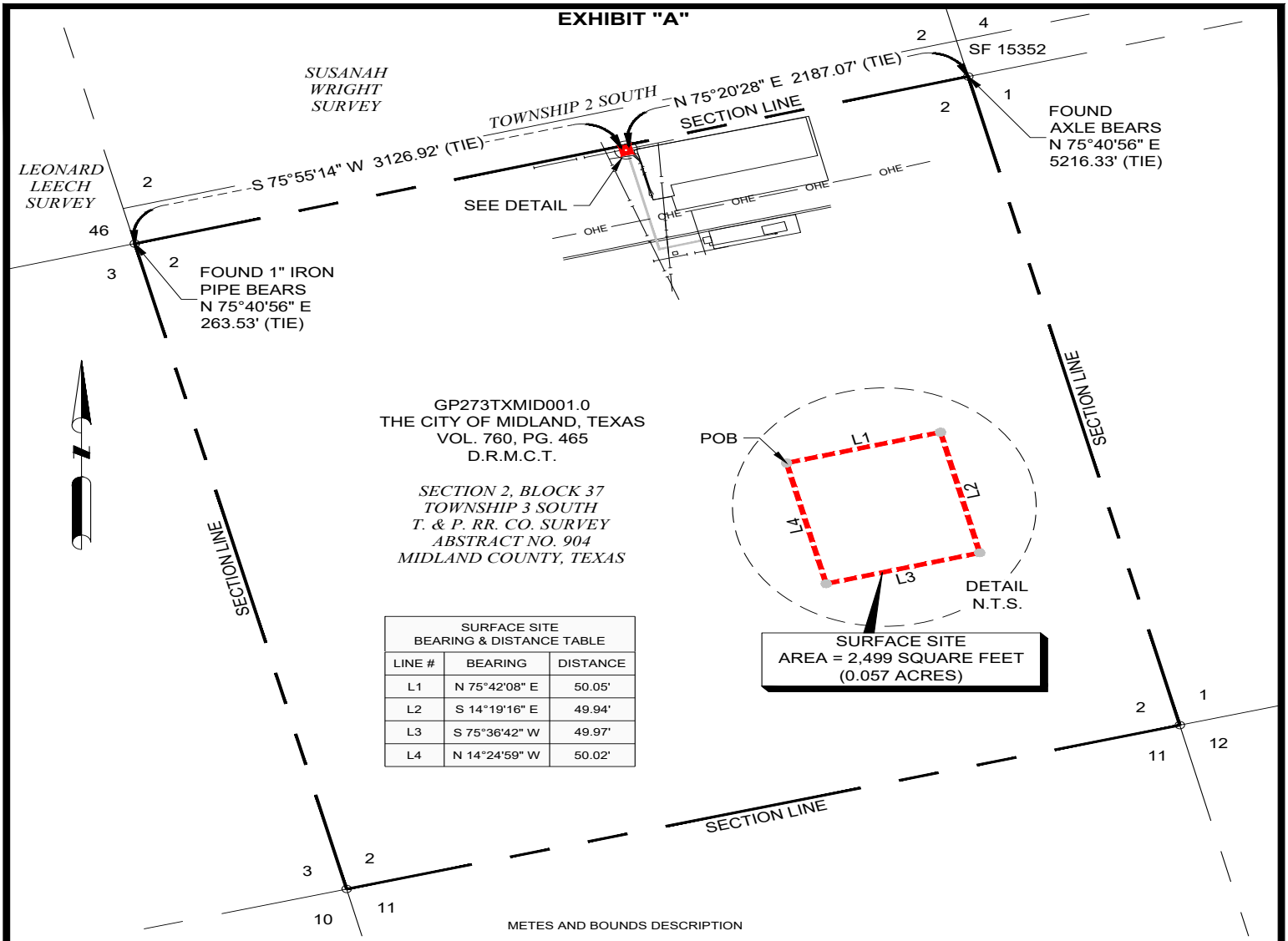
CQ ALKALINE EARTH
THE CITY OF MIDLAND, TEXAS
PROPOSED SURFACE SITE

SITUATED IN
SECTION 2, BLOCK 37, TOWNSHIP 3 SOUTH
T. & P. RR. CO. SURVEY
ABSTRACT NO. 904
MIDLAND COUNTY, TEXAS

May 25, 2021

DRAWN BY: BAB	DATE: 05/03/2021	DWG. NO. 4360_1.00 SEC 2_SURFACE SITE	REV. 0
CHECKED BY: DDH	DATE: 05/03/2021		
SCALE: 1"=1000'	PAGE 1 OF 1		

EXHIBIT "A"



SURFACE SITE BEARING & DISTANCE TABLE		
LINE #	BEARING	DISTANCE
L1	N 75°42'08" E	50.05'
L2	S 14°19'16" E	49.94'
L3	S 75°36'42" W	49.97'
L4	N 14°24'59" W	50.02'

METES AND BOUNDS DESCRIPTION

BEING A PROPOSED SURFACE SITE SITUATED IN SECTION 2, BLOCK 37, TOWNSHIP 3 SOUTH, T. & P. RR. CO. SURVEY, ABSTRACT NO. 904, MIDLAND COUNTY, TEXAS. SAID SURFACE SITE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT (N: 10665454.81, E: 1831009.23) IN SAID SECTION 2, FROM WHICH THE CALCULATED NORTHWEST CORNER OF SAID SECTION 2 BEARS S 75°55'14" W, A DISTANCE OF 3126.92 FEET (TIE), FROM WHICH A FOUND 1" IRON PIPE BEARS N 75°40'56" W, A DISTANCE OF 263.53 FEET (TIE);

THENCE N 75°42'08" E, A DISTANCE OF 50.05 FEET TO A POINT, FROM WHICH THE CALCULATED NORTHEAST CORNER OF SAID SECTION 2 BEARS N 75°20'28" E, A DISTANCE OF 2187.07 FEET (TIE), FROM WHICH A FOUND AXLE BEARS N 75°40'56" E, A DISTANCE OF 5216.33 FEET (TIE);
THENCE S 14°19'16" E, A DISTANCE OF 49.94 FEET TO A POINT;
THENCE S 75°36'42" W, A DISTANCE OF 49.97 FEET TO A POINT;

THENCE N 14°24'59" W, A DISTANCE OF 50.02 FEET TO THE POINT OF BEGINNING.

SAID SURFACE SITE CONTAINING A TOTAL OF 2,499 SQUARE FEET OR 0.057 ACRES IN SAID SECTION 2.

THE POINT OF BEGINNING IS LOCATED APPROXIMATELY
15 MILES SOUTHEAST OF MIDLAND, TEXAS

1000' 0' 1000'

Scale: 1" = 1000'

STATE OF TEXAS
REGISTERED
DEMPSEY D. HANNAH
5637
PROFESSIONAL
LAND SURVEYOR

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT AND THE REVIEW OF THE ABSTRACT OF TITLE. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON. LOCATION OF ALL IMPROVEMENTS WAS BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAS BEEN SPECIFICALLY OMITTED. VESTING DOCUMENTS NOT FURNISHED FOR THIS SURVEY.

Dempsey D. Hannah 05/05/21

DEMPSEY D. HANNAH TEXAS R.P.L.S. NO. 5637 DATE

#	DATE	BY:	DESCRIPTION	CHK

PROJECT NO. 4360

CQ ALKALINE EARTH
THE CITY OF MIDLAND, TEXAS
PROPOSED SURFACE SITE

SITUATED IN
SECTION 2, BLOCK 37, TOWNSHIP 3 SOUTH
T. & P. RR. CO. SURVEY
ABSTRACT NO. 904
MIDLAND COUNTY, TEXAS

NuStar

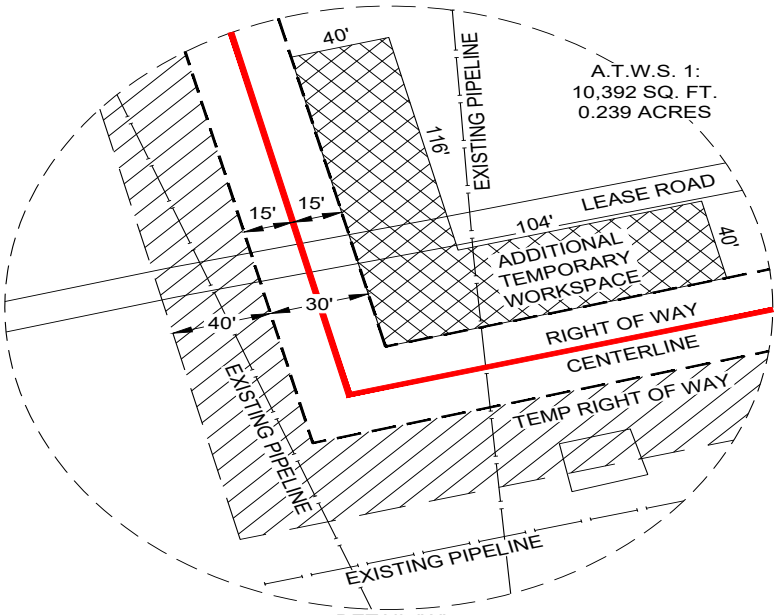
PACKET 13.17

TRANSGLOBAL SERVICES LLC
TBPELS FIRM# 10193740 / 19148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1180 ~ Fax (817) 529-1181

DRAWN BY: BAB	DATE: 05/03/2021	BWG. NO. 4360_1.00 SEC 2_SURFACE SITE 2	REV. 0
CHECKED BY: DDH	DATE: 05/03/2021		
SCALE: 1"=1000'	PAGE 1 OF 1		

May 25, 2021

EXHIBIT "A"



DETAIL "A"
N.T.S.

LEGEND

- SECTION LINE
- OHE — OVERHEAD ELECTRIC
- RIGHT OF WAY CENTERLINE
- RIGHT OF WAY
- TEMP RIGHT OF WAY
- EXISTING PIPELINE
- X — FENCE LINE
- POWER POLE
- FOUND MONUMENT
- CALCULATED CORNER
- BEARING CHANGE

NOTES:

1. BEARINGS, DISTANCES, AREA AND COORDINATES SHOWN HEREON ARE CORRELATED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS CENTRAL ZONE (4203). ALL BEARINGS AND DISTANCES SHOWN ARE GRID.
2. LATITUDE & LONGITUDE ARE NAD 83 DECIMAL GEOGRAPHIC.
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#	DATE	BY:	DESCRIPTION	CHK
1	05/06/21	BAB	UPDATED TEXT	DDH

PROJECT NO. 4360

PACKET 13-18

TRANSGLOBAL SERVICES LLC
TBPELS FIRM# 10193740 / 19148
2129 S Great Southwest Parkway Suite 313
Grand Prairie, TX 75051
(817) 529-1180 ~ Fax (817) 529-1181

NuStar

CQ ALKALINE EARTH

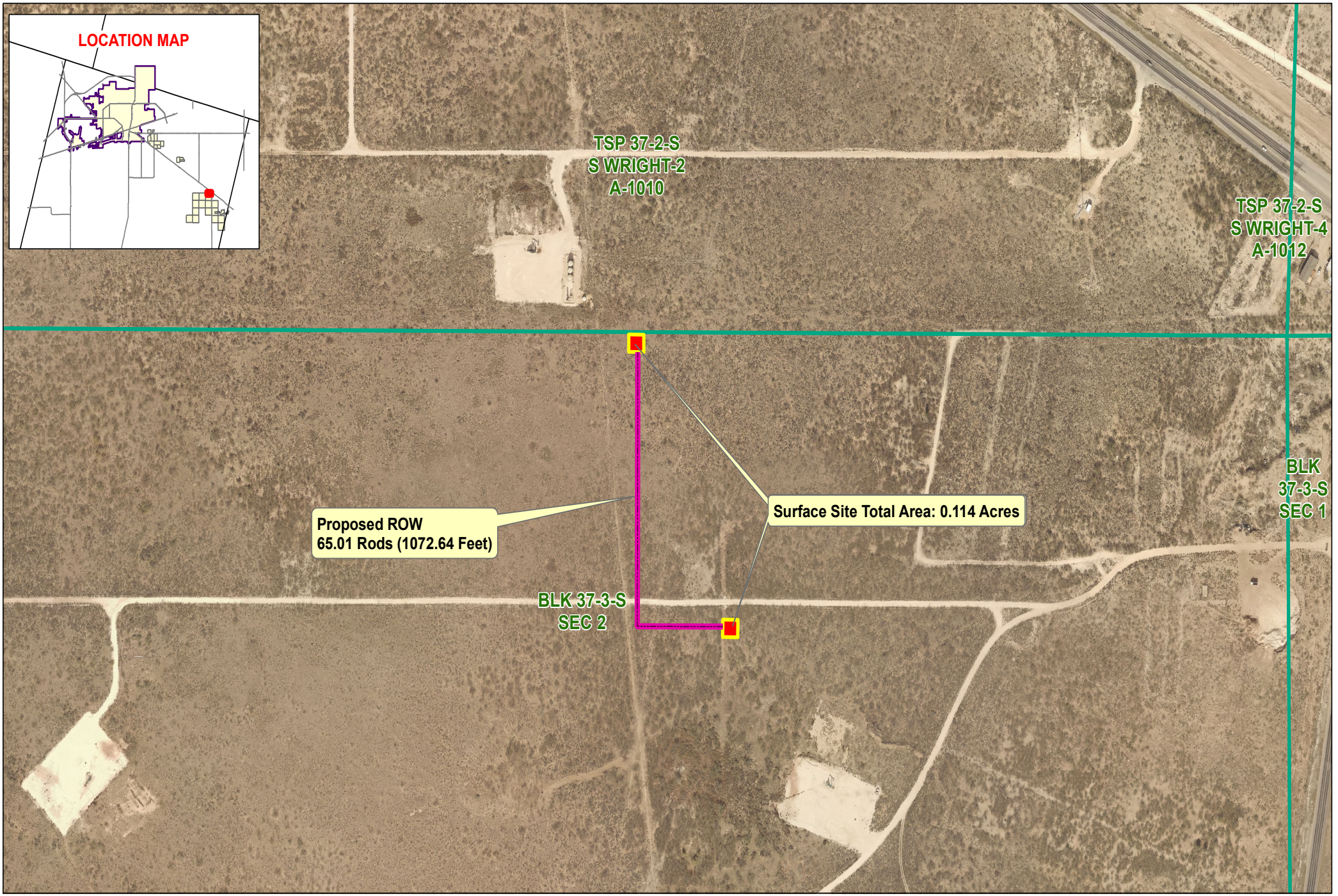
THE CITY OF MIDLAND, TEXAS

PROPOSED RIGHT OF WAY CENTERLINE

SITUATED IN
SECTION 2, BLOCK 37, TOWNSHIP 3 SOUTH
T. & P. RR. CO. SURVEY
ABSTRACT NO. 904
MIDLAND COUNTY, TEXAS

May 25, 2021

DRAWN BY: BAB	DATE: 05/03/2021	DWG. NO. 4360_1.00 SEC 2_REV1	REV. 1
CHECKED BY: DDH	DATE: 05/03/2021		
SCALE: 1"=1000'	PAGE 2 OF 2		



Date: 5/10/2021

Legend

- Proposed ROW
- Surface Site
- Survey Section

PACKET

13:19

CQ Alkaline Earth
Proposed Right of Way (ROW) & Surface Sites

May 25, 2021

0 100 200 Feet

©THE CITY OF MIDLAND - 2021
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.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/08/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Marsh USA Inc.
2929 Allen Parkway, Suite 2500
Houston, TX 77019

CN101857056--+XS-20-21 10M

CONTACT NAME:
PHONE (A/C, No, Ext): **FAX (A/C, No):**
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Zurich American Insurance Co	16535
INSURER B : American Guarantee & Liability Ins Co	26247
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
NuStar Permian Transportation and Storage, LLC
19003 IH 10 West
San Antonio, TX 78257

COVERAGES **CERTIFICATE NUMBER:** HOU-003765286-01 **REVISION NUMBER:** 1

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	X **COMMERCIAL GENERAL LIABILITY** CLAIMS-MADE X OCCUR X Marine Terminal Operators Liab GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:			GLO 6724286-10	09/01/2020	09/01/2021	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ $ $ $ $ $	5,000,000 100,000 EXCLUDED 5,000,000 6,000,000 6,000,000
A	**AUTOMOBILE LIABILITY** X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY			BAP 6724287-10	09/01/2020	09/01/2021	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ $ $ $	5,000,000
B	X **UMBRELLA LIAB** X OCCUR **EXCESS LIAB** CLAIMS-MADE DED X RETENTION $ 10,000			AUC 6724325-10	09/01/2020	09/01/2021	EACH OCCURRENCE AGGREGATE	$ $	10,000,000 10,000,000
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WC 6724283-10 (AOS)	09/01/2020	09/01/2021	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ $ $	2,000,000 2,000,000 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Re: Right of Way License
City of Midland is included as additional insured where required by written contract and allowed by law. Waiver of Subrogation is applicable where required by written contract and allowed by law.

CERTIFICATE HOLDER
City of Midland
300 N. Loraine
Midland, TX 79701

CANCELLATION
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE of Marsh USA Inc.
Keith Wright

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City of Midland
Office Memorandum

DATE: May 25, 2021

TO: The Honorable Mayor and City Council Members

FROM: John Ohnemiller, City Attorney
Nicholas Toulet, Assistant City Attorney

SUBJECT: A Proposed Resolution Amending Chapter IV, "Applications, Applicants, and Conditions of Employment," Section 15, "City of Midland Drug and Alcohol Testing Policy," Subsection D, "Required Tests," Paragraph 3, "Reasonable Suspicion Testing," Chapter VIII, "Adverse Action," and Chapter IX, "Grievance Procedure," of the City of Midland Personnel Policies; and establishing an effective date of June 1, 2021

The proposed resolution amends the current language contained in Chapter VIII, "Adverse Action," and Chapter IX, "Grievance Procedure," of the City of Midland Personnel Policies.

City staff seeks to simplify and streamline the language contained in Chapter VIII and Chapter IX of the City of Midland Personnel Policies. If approved, the entirety of Chapter VIII and Chapter IX will be replaced with the language contained in the exhibits attached to the resolution.

City staff attempted to develop language that honors the substantive provisions of the current policies in a manner that is clear and concise. Accordingly, the substance of Chapter VIII and Chapter IX remains largely unchanged.

One change to the adverse action policies includes a revised threshold for suspensions appealable to the Personnel Appeals Board. Currently, a suspension of three (3) days or less may only be appealed and reviewed by a hearing officer. The proposed resolution increases this threshold to five (5) days. Suspensions of five (5) days or less generally involve less serious conduct that can be appropriately handled by the City's administrative staff.

Please note that the resolution also amends a portion of Chapter IV of the City of Midland Personnel Policies that contains a specific reference to a subsection in Chapter VIII. Due to the reorganization of Chapter VIII, the specific reference in Chapter IV needs to be amended.

If you have any questions regarding this matter, please do not hesitate to contact our office.

RESOLUTION NO. _____

RESOLUTION AMENDING CHAPTER IV, "APPLICATIONS, APPLICANTS, AND CONDITIONS OF EMPLOYMENT," SECTION 15, "CITY OF MIDLAND DRUG AND ALCOHOL TESTING POLICY," SUBSECTION D, "REQUIRED TESTS," PARAGRAPH 3, "REASONABLE SUSPICION TESTING," CHAPTER VIII, "ADVERSE ACTION," AND CHAPTER IX, "GRIEVANCE PROCEDURES," OF THE CITY OF MIDLAND PERSONNEL POLICIES; AND ESTABLISHING AN EFFECTIVE DATE OF JUNE 1, 2021

WHEREAS, the City Council finds it to be in the public interest to approve and adopt certain amendments to the City of Midland Personnel Policies;

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

SECTION ONE. That Chapter IV, "Applications, Applicants, and Conditions of Employment," Section 15, "City of Midland Drug and Alcohol Testing Policy," Subsection D, "Required Tests," Paragraph 3, "Reasonable Suspicion Testing," of the City of Midland Personnel Policies is hereby amended in its entirety to read as follows:

3) Reasonable Suspicion Testing

An employee will be required to submit to a drug and alcohol test whenever the City has a reasonable suspicion to believe that an employee has used drugs and/or alcohol in violation of these policies.

Reasonable suspicion shall be based on specific, objective facts and reasonable inferences drawn from those facts in light of the experience that the employee has engaged in Prohibited Conduct with regard to the use of drugs and/or alcohol, as described in Chapter VIII of the City of Midland Personnel Policies.

Reasonable suspicion exists when an employee's behavior, appearance, speech or body odor indicates drug and/or alcohol use; such must be personally observed and documented by City of Midland supervisory personnel who have received training regarding the physical, behavioral, speech, and performance indicators of probably drug and/or alcohol use.

If an employee is required to submit to a drug and alcohol test based on a reasonable suspicion regarding his/her use of drugs and/or alcohol ("Reasonable Suspicion Test"), the employee shall be informed that he/she may:

a) Submit to a Reasonable Suspicion Test;
b) Appeal the matter to another supervisor (to begin at the Division Manager level) authorized to act as an Appeals Officer; or

c) Refuse the Reasonable Suspicion Test and be subject to Adverse Action (as defined in Chapter VIII) up to and including termination.

If the employee requests an appeal, a hearing shall be conducted immediately with the supervisor requesting the Reasonable Suspicion Test, the Appeals Officer, and the employee present.

The Appeals Officer shall determine whether there is a reasonable suspicion to believe that the employee engaged in Prohibited Conduct with regard to the use of drugs and/or alcohol. The Appeals Officer shall have the authority to either:

a) Order the employee to submit to a Reasonable Suspicion Test; or
b) Order that the allegations against the employee be dismissed.

An employee who is required or ordered to submit to a Reasonable Suspicion Test shall be escorted by supervisory personnel to a testing site.

An employee who is required or ordered to submit to a Reasonable Suspicion Test is prohibited from performing safety-sensitive functions while awaiting the results of the Reasonable Suspicion Test.

An employee who receives a positive Reasonable Suspicion Test, or fails to timely submit to a Reasonable Suspicion Test, shall be subject to Adverse Action up to and including termination.

SECTION TWO. That Chapter VIII, "Adverse Action," of the City of Midland Personnel Policies is hereby amended and restated in its entirety to read as set forth in Exhibit A, which is attached hereto and incorporated herein for all purposes.

SECTION THREE. That Chapter XI, "Grievance Procedure," of the City of Midland Personnel Policies is hereby amended and restated in its entirety to read as set forth in Exhibit B, which is attached hereto and incorporated herein for all purposes.

SECTION FOUR. That should any section, clause, or provision of this Resolution or the City of Midland Personnel Policies be declared by a court of competent jurisdiction to be invalid, same shall not effect the validity of this Resolution or any other resolution of the City as a whole, or any part thereof, or the City of Midland Personnel Policies other than the part so declared to be invalid.

SECTION FIVE. That this Resolution shall become effective on June 1, 2021.

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., 2021, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Mark Widmann, Administrative Services Director

APPROVED AS TO FORM ONLY:

_____
John Ohnemiller, City Attorney

Chapter VIII
Adverse Action

Section 1. Adverse Action

a. Purpose of Chapter

The purpose of this Chapter is to establish policies and administrative procedures for addressing Prohibited Conduct (as defined herein) and employment separation of City of Midland employees. The policies and procedures established herein are authorized and adopted, and the same shall be construed according to the plain meaning of its language unless defined otherwise. No policy or procedure established by this Chapter shall be enforced or interpreted in a manner that limits or abrogates protections afforded by law. The remedies set forth in this Chapter are exclusive.

b. Definitions.

In this Chapter:

1) "Adverse Action" means an administrative action taken by a Department Manager against an Employee because of the Employee's Prohibited Conduct. Said administrative actions include the following:
    a) Oral Reprimand;
    b) Written Reprimand;
    c) Suspension from employment without pay;
    d) Demotion from a current position to a lower position with lesser responsibility or compensation; and
    e) Termination of employment.
2) "Appeal Hearing" is the initial proceeding at which the Employee may contest an Adverse Action.
3) "Business Day" means a day on which the City of Midland is open for business.
4) "City" means the City of Midland.
5) "Department Manager" means the City department manager for the department that the Employee is assigned to. For the purpose of this Chapter, "Department Manager" also means an Assistant City Manager, Deputy City Manager, or the City Manager if a City department manager, Assistant City Manager, or Deputy City Manager is deemed to have engaged in Prohibited Conduct.
6) "Employee" means an employee of the City of Midland. For the purpose of this Chapter, "Employee" also means a Department Manager or Employee within the City Manager's Office if such person is deemed to have engaged in Prohibited Conduct.
7) "Hearing Officer" means the City official that presides over the Appeal Hearing.
8) "Lay-Off" means the employment separation between the Employee and the City that is not the result of an Adverse Action.
9) "Name-Clearing Hearing" means a proceeding before the City Manager at which the Employee may address allegations made by the City or its officials relating to the Employee's termination.
10) "Notice of Appeal" means the written notice submitted to the Administrative Services Department by the Employee seeking administrative review of an Adverse Action.

11) “Notice of Appeal to the Personnel Appeals Board” means the written notice submitted to the Administrative Services Department by the Employee seeking the Personnel Appeals Board’s review of an Adverse Action.
12) “Notice of Hearing Officer Determination” means the written notice issued by the Hearing Officer containing the Hearing Officer’s final determination resulting from the administrative review of an Adverse Action following an Appeal Hearing.
13) “Notice of Personnel Appeals Board Determination” means the written notice issued by the Personnel Appeals Board containing its final determination resulting from its review of an Adverse Action following a Personnel Appeals Board Hearing.
14) “Personnel Appeals Board” means the administrative body that presides over the Personnel Appeals Board Hearing.
15) “Personnel Appeals Board Hearing” means the final proceeding at which the Employee may contest an Adverse Action.
16) “Prohibited Conduct” means conduct of a character and nature that constitutes or is reasonably related to the following:
    a) Consumption and/or possession of alcohol or narcotics while on duty or using City-owned property;
    b) Consumption and/or possession of alcohol or narcotics in a manner that forms the basis of a crime;
    c) Criminal conduct;
    d) Delinquency;
    e) Dishonesty, including forgery, falsification of documentation, or any other falsifying action;
    f) Disruptive behavior that limits or restricts workplace efficiency;
    g) Failure to maintain necessary professional certifications or authorizations;
    h) Failure to perform employment duties;
    i) Immoral behavior, including behavior that may adversely affect the City or its officers, officials, employees, or agents, or behavior that may reasonably undermine the confidence of the public;
    j) Misappropriation or destruction of City property or information;
    k) Subversive behavior, including fighting, intimidation, profanity, insubordination, negligent or reckless actions, discourteousness, safety rule violations, misuse of City property, or violation of any established procedure, order, directive, or protocol;
    l) Unsatisfactory attendance;
    m) Failure to reasonably cooperate during an investigation involving alleged misconduct; and
    n) Violation of any policy, standard, or provision of the City of Midland, Texas Personnel Policies.
17) “Supervisor” means the person charged with the daily oversight and management of the Employee contesting an Adverse Action.
18) “Workday” means a day (including weekend days) on which the Employee is scheduled to report to work.

c. Notice Requirements

1) Any notice or communication required or permitted pursuant to this Chapter shall be in writing.
2) Subject to Section 1.c(3), a notice or communication required or permitted pursuant to this Chapter shall be deemed to be delivered and received on the date said notice or communication is:
    a) Personally delivered to the respective party to whom it is directed;
    b) Deposited by certified mail; or
    c) Sent by electronic mail.
3) Notwithstanding Section 1.c(2), a notice or communication that is sent to the City, or its employees or officials, shall be deemed to be delivered and received on the date that Administrative Services Department is in actual or physical receipt of said notice or communication.
4) The delivery of a notice or communication to the Employee shall be directed to one of the following:
    a) The City email address of the Employee;
    b) The email address of the Employee's authorized representative;
    c) The Employee's physical address on file with the Administrative Services Department; or
    d) The physical address of the Employee's authorized representative.
5) The delivery of a notice or communication to the City or its officers, officials, or employees shall be directed to one of the following unless directed otherwise:
    a) The City email address of the current Administrative Services Director; or
    b) City of Midland
    300 N. Loraine Street
    Midland, Texas 79701
    Attn: Administrative Services Director.

d. Prohibited Conduct; Adverse Action

Employees shall refrain from engaging in Prohibited Conduct. An Employee that is deemed to have engaged in Prohibited Conduct may be subject to Adverse Action in accordance with the policies and procedures of this Chapter.

e. Discretionary Factors and Considerations Regarding Adverse Action Administration

If a Department Manager determines that the Employee engaged in Prohibited Conduct, the Department Manager may, in the Department Manager's sole and absolute discretion, incorporate the following factors and considerations in the Department Manager's decision regarding an Adverse Action to be administered to the Employee:

1) Nature of the Employee's duties;
2) Nature of the Prohibited Conduct;
3) Circumstances of the Prohibited Conduct;

4) The Employee's disciplinary history; and
5) Any other relevant facts or information.

f. Authorized Adverse Actions

Upon a Department Manager's determination that the Employee engaged in Prohibited Conduct, said Department Manager may administer (or cause to be administered) the following Adverse Actions:

1) Oral Reprimand – verbal discussion identifying the standard(s) of conduct that the Employee violated, and the corrective action required, if applicable. An Oral Reprimand may contain:
    a) Additional facts and information as deemed appropriate by the Department Manager; and
    b) A warning that future violations may result in additional Adverse Action(s) in accordance with this Chapter.
2) Written Reprimand – memorandum to the Employee (with a copy to the Employee's personnel file) identifying the standard(s) of conduct that the Employee violated, and the corrective action required, if applicable. A Written Reprimand may contain:
    a) Additional facts and information as deemed appropriate by the Department Manager; and
    b) A warning that future violations may result in additional Adverse Action(s) in accordance with this Chapter.
3) Suspension – temporary removal of the Employee from performing his/her duties and from receiving compensation. No Employee shall be suspended:
    a) For a period exceeding thirty (30) workdays; or
    b) More than thirty (30) workdays in any fiscal year.
4) Demotion – permanent reassignment of the Employee to a position with lesser responsibility or compensation.
5) Termination – permanent severance of the employment relationship between the Employee and the City.

g. Adverse Action Administration

Adverse Actions shall be administered in accordance with the following procedures:

1) Oral and Written Reprimands shall be issued as deemed appropriate by the Department Manager.
2) Suspension, Demotion, Termination
    a) Prior to issuing a Notice of Adverse Action to the Employee, a Department Manager shall deliver a copy of the proposed Notice of Adverse Action to the Administrative Services Department.
    b) Upon approval of the form of the Notice of Adverse Action by the Administrative Services Department, the Department Manager shall issue the Notice of Adverse Action to the Employee in accordance with the requirements of Section 1.c.

h. Notice of Appeal

1) If the Employee is issued a Notice of Adverse Action that results in a Suspension, a Demotion, or Termination, the Employee may seek administrative review of the Adverse Action by filing a Notice of Appeal.
2) A Notice of Appeal must be filed within two (2) Business Days of the affected Employee's receipt of a Notice of Adverse Action.
3) A Notice of Appeal shall consist of the following information:
    a) Employee name;
    b) Employee position;
    c) Department Manager name;
    d) Supervisor name; and
    e) General description of the basis for appeal.
4) A proper and timely Notice of Appeal shall be perfected upon the Administrative Services Department's receipt of the Notice of Appeal. If a Notice of Appeal does not contain the information required by Section 1.h(3), but is otherwise proper and timely, the Administrative Services Director shall notify Employee of such defect within two (2) Business Days following the Administrative Services Department's receipt of the Notice of Appeal.
5) Upon receiving notification that a Notice of Appeal does not contain the information required by Section 1.h(3), the Employee shall correct the defect and supplement the missing information within two (2) Business Days of the Employee's receipt of the notice required by Section 1.h(4).

i. Designation of Hearing Officer

1) Upon the perfection of a Notice of Appeal, the Administrative Services Director shall notify the City Manager of said Notice of Appeal within a reasonable amount of time after its delivery to the Administrative Services Department.
2) Upon receipt of the notice prescribed by Section 1.i(1), the City Manager shall designate a person to serve as the Hearing Officer to preside over the Appeal Hearing, which shall be:
    a) The City Manager;
    b) The Deputy City Manager; or
    c) An Assistant City Manager.
3) The City Manager shall notify the Administrative Services Director of the designation required by Section 1.i(2) following the same.
4) Upon request of the City Manager and agreement of the Presiding Judge of the Municipal Court, the Presiding Judge or Associate Judge of the Municipal Court may serve as the Hearing Officer.
5) If none of the foregoing individuals are available to serve as the Hearing Officer, the City Manager may designate another department manager with no knowledge of the facts that give rise to the Appeal Hearing to serve as the Hearing Officer.

j. Setting of Appeal Hearing

1) Following the designation of the Hearing Officer, the Hearing Officer shall provide the Administrative Services Director with dates and times of availability for the scheduling of the Appeal Hearing.
2) The Appeal Hearing shall occur no later than fifteen (15) Business Days following the perfection of the Notice of Appeal.
3) Notwithstanding Section 1.j(2), the Appeal Hearing may occur later than fifteen (15) Business Days following the perfection of the Notice of Appeal upon: (i) the mutual agreement of the Department Manager and the Employee; and (ii) the consent of the Hearing Officer.
4) Upon final setting of the Appeal Hearing, the Administrative Services Director shall send a Notice of Hearing to the Employee, the Hearing Officer, and the Department Manager. The Notice of Hearing shall consist of the following information:
    a) The name and position of the Employee;
    b) The name and position of the Employee's Supervisor;
    c) The date, time, and location of Appeal Hearing; and
    d) The reason/basis for appeal, as indicated by the Employee in the Notice of Appeal.

k. Appeal Hearing Procedure

1) The following persons shall be entitled to participate in an Appeal Hearing:
    a) Hearing Officer;
    b) Administrative Services Director;
    c) The Employee;
    d) A designated representative of the Employee (if any); and
    e) Department Manager.
    f) A representative of the City Attorney's Office may represent the Department Manager at the Appeal Hearing if the City Attorney receives and agrees to a request for representation from the Department Manager.
2) Minutes or Recording
    a) The Administrative Services Director shall take minutes of the Appeal Hearing or cause a recording to be made of the Appeal Hearing.
    b) The Administrative Services Department shall maintain the minutes or recording of an Appeal Hearing for at least three (3) years or as long as may be required by law.
    c) The Employee may provide, at the Employee's sole cost and expense, for a court reporter to record the Appeal Hearing. If the Employee provides for a court reporter to record the Appeal Hearing, the Employee shall provide the City with a copy of said recording (at no cost to the City) upon receiving a written request for such from the Administrative Services Director.
    d) The Employee may submit a written request for a transcript of an Appeal Hearing recording from the Administrative Services Department; provided, however, that the Employee shall pay all expenses associated with transcribing the Appeal Hearing recording, which shall be reasonably determined by the Administrative Services Director.

e) Upon the submission of a request for a transcript of an Appeal Hearing recording, the Employee shall submit a deposit to the Administrative Services Department in an amount equal to the cost associated with transcribing the Appeal Hearing recording.

3) Witnesses
   a) The Employee, the Department Manager, and their respective witnesses shall be entitled to testify at the Appeal Hearing.
   b) The Employee and the Department Manager shall be responsible for securing the availability of their respective witnesses.
   c) The Employee and the Department Manager shall be entitled to call and question any witness who has knowledge of the incident(s) or alleged Prohibited Conduct that resulted in the Department Manager's administration of the Adverse Action.
   d) The Hearing Officer shall have the right to exclude the testimony of any witness who is shown to not possess knowledge of the incident(s) or alleged Prohibited Conduct that resulted in the Department Manager's administration of the Adverse Action.
   e) At the request of the Employee or the Department Manager, all witnesses shall be excluded from the Appeal Hearing; provided, however, that the Employee, the Department Manager, and their respective representatives may not be excluded (provided that a representative shall not testify). A request to exclude witnesses pursuant to this Section must be made prior to the commencement of any testimony.

4) Appeal Hearing Process

   The Appeal Hearing shall proceed in the following manner:

   a) Introduction; Swearing in of Witnesses

      The Administrative Services Director shall make a formal introduction to the Appeal Hearing, which shall consist of the factual circumstances that form the basis for the Appeal Hearing. Said factual circumstances shall consist of, but not be limited to, the following:

      1. Basis for Adverse Action as described in the Notice of Adverse Action;
      2. Notice of Adverse Action administration date;
      3. Notice of Appeal perfection date;
      4. Identification of the Appeal Hearing participants; and
      5. Identification of the representatives of the Employee and the Department Manager.

      The Employee and the Department Manager shall notify the Administrative Services Director of their respective witnesses expected to testify during the Appeal Hearing. The Administrative Services Director shall swear in such witnesses prior to the elicitation of witness testimony.

   b) Opening Statements

      1. The Employee and the Department Manager (or their respective representatives) are entitled to give an opening statement prior to the commencement of any testimony. The Hearing Officer shall consider the

opening statements of the Employee and the Department Manager in the following order:

a. Department Manager
b. Employee

2. The Employee and the Department Manager may waive the right to give an opening statement.

c) Case-in-Chief; Department Manager

1. The Department Manager's case-in-chief may consist of witness testimony, the submission of exhibits, and the Department Manager's testimony. The Hearing Officer shall have the sole discretion to determine the relevance of evidence presented during the Department Manager's case-in-chief.
2. Following the direct examination of a witness by the Department Manager, the Employee shall be afforded the opportunity to cross-examine said witness.
3. Following the cross-examination of a witness, the Department Manager shall be afforded the opportunity to re-examine said witness.
4. Following the re-examination of a witness, the Employee shall be afforded the opportunity to cross-examine said witness.
5. The Hearing Officer may examine a witness, the Department Manager, the Employee, or a representative of the Department Manager or Employee at any time.

d) Case-in-Chief; Employee

1. The Employee's case-in-chief may consist of witness testimony, the submission of exhibits, and the Employee's testimony. The Hearing Officer shall have the sole discretion to determine the relevance of evidence presented during the Employee's case-in-chief.
2. Following the direct examination of a witness, the Department Manager shall be afforded the opportunity to cross-examine said witness.
3. Following the cross-examination of a witness, the Employee or the Employee's representative shall be afforded the opportunity to re-examine said witness.
4. Following the re-examination of a witness, the Department Manager shall be afforded the opportunity to cross-examine said witness.
5. The Hearing Officer may examine a witness, the Department Manager, the Employee, or a representative of the Department Manager or Employee at any time.

e) Closing Statements

1. Following the cases-in-chief of the Department Manager and the Employee, the Department Manager and the Employee are entitled to give closing statements prior to the conclusion of the Appeal Hearing. The Hearing Officer shall consider the closing statements in the following order:

a. Department Manager
b. Employee
c. Department Manager's rebuttal

f) Conclusion
The Administrative Services Director shall conclude the Appeal Hearing and notify the parties of the date and time by which the Hearing Officer shall make a final determination.

g) The Rules of Evidence are not applicable to the Appeal Hearing; the Hearing Officer may consider all evidence submitted by the parties that the Hearing Officer deems relevant and consistent with the provisions of this Chapter.

h) The standard of compliance for observation of the rules and procedures contained in this Chapter shall be substantial compliance. The failure to observe any rule or procedure contained in this Chapter shall not form the basis of or give rise to any claims, damages, demands, suits, proceedings, or causes of action of any kind or character whatsoever against the City or its employees, agents, representatives, officials, Council or board members, including, but not limited to, claims for declaratory relief, claims under the state or federal constitutions, contract, tort, or other statutory or common law claims.

i) The Hearing Officer may adopt additional rules and procedures as may be deemed necessary for the orderly conduct of the Appeal Hearing. The Hearing Officer shall have the sole discretion to implement additional rules and procedures necessary for the orderly conduct of the Appeal Hearing.

5) Determination of Hearing Officer

a) The Hearing Officer shall consider the evidence presented at the Appeal Hearing and determine the following issues:
   1. Whether reasonable grounds exist to support the allegation(s) that the Employee engaged in Prohibited Conduct; and
   2. Whether a reasonable basis exists for the Department Manager's administration of the Adverse Action.

b) The Hearing Officer shall make his/her final determination within two (2) Business Days of the conclusion of the Appeal Hearing and issue a Notice of Appeal Hearing Determination.

c) Notice of Appeal Hearing Determination
   1. The Hearing Officer's final determination shall uphold, modify, or reverse the Adverse Action.
   2. The Hearing Officer shall issue a Notice of Appeal Hearing Determination to the Employee detailing said final determination, and issue a copy of the same to the Department Manager and the Administrative Services Director.
   3. If the Hearing Officer's final determination results in a suspension of five (5) Workdays or less, the Employee shall have no right to seek administrative review of the Adverse Action by the Personnel Appeals Board and the Hearing Officer's final determination shall be final.
   4. If the Hearing Officer's final determination results in a Suspension of more than five (5) Workdays, a Demotion, or Termination, the Employee shall have the right to seek administrative review of the Adverse Action by the Personnel Appeals Board. The Notice of Appeal Hearing Determination shall

contain a statement indicating that the Employee has the right to seek administrative review of the Adverse Action by the Personnel Appeals Board in accordance with the requirements and procedures of this Chapter.

5. A final determination resulting in the Employee's Suspension, Demotion, or Termination shall be stayed upon the filing of a Notice of Appeal to the Personnel Appeals Board in accordance with the requirements and procedures of this Chapter.

l. Notice of Appeal to the Personnel Appeals Board

1) If the Hearing Officer's final determination results in a Suspension of more than five (5) Workdays, a Demotion, or Termination, the Employee may seek administrative review of the Adverse Action by the Personnel Appeals Board by filing a Notice of Appeal to the Personnel Appeals Board.
2) A Notice of Appeal to the Personnel Appeals Board must be filed within two (2) Business Days of the Employee's receipt of a Notice of Appeal Hearing Determination.
3) A Notice of Appeal to the Personnel Appeals Board shall contain the information required by Section 1.h(3).
4) A proper and timely Notice of Appeal to the Personnel Appeals Board shall be perfected upon the Administrative Services Department's receipt of the Notice of Appeal. If a Notice of Appeal to the Personnel Appeals Board does not contain the information required by Section 1.h(3), but is otherwise proper and timely, the Administrative Services Director shall notify the Employee of such defect within two (2) Business Days following the Administrative Services Department's receipt of the Notice of Appeal to the Personnel Appeals Board.
5) Upon receiving notification that a Notice of Appeal to the Personnel Appeals Board does not contain the information required by Section 1.h(3), the Employee shall correct the defect and supplement the missing information within two (2) Business Days of the Employee's receipt of the notice required by Section 1.l(4).

m. Personnel Appeals Board; Composition

1) The Personnel Appeals Board shall consist of three (3) members, to include: (i) two (2) City Council members; and one (1) resident of the City who is not employed by the City.
2) All appointments to the Personnel Appeals Board shall be made by the Mayor.
3) The Mayor shall designate a Board member to serve as Chairman of the Personnel Appeals Board.

n. Setting of Personnel Appeals Board Hearing

1) Following the perfection of a Notice of Appeal to the Personnel Appeals Board, the Administrative Services Director shall notify the Personnel Appeals Board members of said notice and the Board members shall provide the Administrative Services Director with dates and times of availability for the scheduling of the Appeal Hearing.

2) The Personnel Appeals Board hearing shall occur no later than fifteen (15) Business Days following the perfection of the Notice of Appeal to the Personnel Appeals Board.
3) Notwithstanding Section 1.n(2), the Personnel Appeals Board hearing may occur later than fifteen (15) Business Days following the perfection of the Notice of Appeal upon mutual agreement of the Department Manager and the Employee.
4) Upon final setting of the Personnel Appeals Board Hearing, the Administrative Services Director shall send the Notice of Appeals Board Hearing to the Employee, Board members, and Department Manager. Upon final setting of the Personnel Appeals Board Hearing, the Administrative Services Director shall send a Notice of Personnel Appeals Board Hearing to the Employee, the Personnel Appeals Board members, and the Department Manager. The Notice of Personnel Appeals Board Hearing shall consist of the following information:
    a) The name and position of the Employee;
    b) The name and position of the Employee's Supervisor;
    c) The date, time, and location of Personnel Appeals Board Hearing; and
    d) The reason/basis for appeal, as indicated by the Employee in the Notice of Appeal.

o. Personnel Appeals Board Hearing Procedure

1) For purposes of the Personnel Appeals Board Hearing, the Personnel Appeals Board shall observe the rules and procedures prescribed by Section 1.k unless otherwise stated herein.
2) The Personnel Appeals Board shall serve as the final arbiter of all matters appealed pursuant to Section 1.l and shall have all rights, privileges, and obligations delegated to the Hearing Officer by Section 1.k for the purpose of this Section.
3) Open Meetings Act; Compliance
    a) The Personnel Appeals Board shall observe all applicable requirements of Chapter 551 of the Texas Government Code, as amended, with respect to any Personnel Appeals Board Hearing conducted pursuant to this Chapter.
    b) A Personnel Appeals Board Hearing shall commence and conclude in open session, and all final decisions of the Personnel Appeals Board shall be voted on in open session. For the purpose of this Chapter, "open session" means the portion of the Personnel Appeals Board Hearing that is conducted in a manner that is open to the public.
    c) The Personnel Appeals Board may conduct a hearing and deliberation in a closed session.
    d) At commencement of a Personnel Appeals Board Hearing, the Employee shall notify the Personnel Appeals Board of the Employee's election to have the hearing conducted in open session.
    e) If the Employee wishes for the Personnel Appeals Board's deliberation of the evidence presented at the hearing to occur in open session, the Employee shall object to the Personnel Appeals Board recessing to closed session following the announcement that the Board will recess to closed session.
    f) Upon receiving the Employee's objection pursuant to Section 1.o(3)(e), the Personnel Appeals Board shall not recess to closed session and said deliberation shall occur in open session.

g) Notwithstanding the Employee's objection pursuant to Section 1.o(3)(e), the Personnel Appeals Board shall have the sole and absolute discretion to include any person in a closed session whose participation necessary to the matter under consideration.

4) Closed Session; Certified Agenda or Recording
    a) The Administrative Services Director shall keep a certified agenda or make a recording of a closed session held by the Personnel Appeals Board.
    b) A certified agenda of a closed session shall include the following:
        1. A statement of deliberation subject matter;
        2. A record of any action taken; and
        3. The date and time of the beginning and end of the closed session.
5) Determination of the Personnel Appeals Board
    a) The Personnel Appeals Board shall consider the evidence presented at the Personnel Appeal Board Hearing and make a determination as set forth in Section 1.k.5(a)i.
    b) The Personnel Appeals Board shall make its final determination by majority vote in open session following its deliberation of the evidence presented at the hearing. The decision of the Personnel Appeals Board shall be the final and cumulative determination of an Adverse Action matter.
6) Notice of Personnel Appeals Board Determination
    a) The Personnel Appeals Board's final determination shall uphold, modify, or reverse the Adverse Action.
    b) The Personnel Appeals Board shall issue a Notice of Personnel Appeals Board Determination to the Employee detailing said final determination, and issue a copy of the same to the Department Manager and the Administrative Services Director.
    c) The Notice of Personnel Appeals Board Determination shall be issued within three (3) Business Days following the adjournment of the Personnel Appeals Board Hearing.

p. Litigation; Judicial Review

The Employee who has exhausted all administrative remedies and appeals pursuant to this Chapter may file suit in a Midland County state district court.

1) A suit filed pursuant to this Section shall be by verified petition specifying the grounds of illegality regarding the final administrative decision. The verified petition shall be filed no later than the thirtieth (30th) day following the date on which the Employee has exhausted all administrative remedies and appeals pursuant to this Chapter.
2) A state district court shall confine its review of an action made pursuant to this Chapter to the City's record and any evidence of procedural errors alleged to have occurred by the Employee. In performing such review, a state district court shall apply the substantial evidence standard.
3) A state district court that reviews a final determination made pursuant to this Chapter shall not award any costs or attorney fees against the City.

Section 2. Lay-Off

a. Notwithstanding any contrary provision contained in this Chapter, a Department Manager is authorized to lay-off an Employee for reasons that include, but are not limited to, the following:
    1) Change in the Employee's job duties and/or functions;
    2) Change in the organizational structure of the City's administration; and
    3) Lack of funding for the Employee's position or other budgetary constraint.
b. If a Department Manager seeks to lay-off an Employee pursuant to Section 2.a, the Department Manager shall use reasonable efforts to give said Employee at least two (2) weeks' written notice when feasible; provided, however, that no such notice shall be due for the lay-off of a temporary or part-time worker.
c. An Employee that was previously laid off pursuant to Section 2.a and had satisfactory service while employed with the City shall be eligible for rehire upon the subsequent vacancy of a position for which such former employee is eligible.

Section 3. Exit Interview

Upon the request of a Department Manager or an Employee who is due to be laid off or terminated, an exit interview between the Department Manager or his/her designee and the Employee shall occur in the Administrative Services Office.

Section 4. Name-Clearing Hearing

Upon the finalization of any Termination and an Employee's exhaustion of all appeal procedures pursuant to this Chapter, the Employee shall be entitled to a Name-Clearing Hearing before the City Manager.

a. An Employee seeking a Name-Clearing Hearing shall submit a written request for such hearing to the Administrative Services Director.
b. Upon receipt of an Employee's request for a Name-Clearing Hearing, the Administrative Services Director shall deliver said written request to the City Manager within two (2) Business Days.
c. A Name-Clearing Hearing shall occur within ten (10) Business Days of the City Manager's receipt of the Employee's written request.
d. At the Name-Clearing Hearing, an Employee may address any allegation made by the City or its employees, agents, officials, Council or board members relating to said Employee's discharge.
e. Following the Name-Clearing Hearing, the City Manager may issue an exculpatory statement deemed to be just or necessary. If the City Manager issues an exculpatory statement, he/she shall cause said statement to be mailed to the Employee's address on file with the Administrative Services Department and place a copy in the Employee's personnel file. It shall be in the City Manager's sole and absolute discretion whether to issue an exculpatory statement.

Chapter IX
Grievance Procedure

Section 1. Policy

It is the policy of the City to treat all employees fairly and equitably. Any employee who feels aggrieved in his/her employment with the City has a right to present a grievance to appropriate management officials for prompt consideration. The filing of a grievance by an employee shall not reflect unfavorably on the employee's standing, and the employee should not fear reprisal or retaliation for utilizing the procedures below. For the purposes of this Chapter, capitalized terms used herein without definition shall have the meanings assigned in Chapter VIII.

Section 2. Definitions

a. "Grievance" means a formal complaint (and any relevant supporting documentation) raised by an Employee regarding an employment matter.

b. "Immediate Supervisor" means the person charged with the daily oversight and management of the Employee claiming a grievance.

Section 3. General Provisions

a. The City shall attempt to resolve a Grievance using reasonable efforts and due diligence with regard to the procedures prescribed by this Chapter. The time limits prescribed by Section 4 may be extended by mutual written agreement between the Employee and pertinent City representative.

b. The Supervisor's or Department Manager's failure to address a written Grievance in accordance with the procedures prescribed by Section 4 shall permit the Employee to proceed to the following Step and file the written Grievance with the Department Manager or City Manager, as applicable.

c. An Employee's failure to respond to a decision within the time limits specified in Section 4 shall be deemed to be an acceptance of said decision.

d. A Grievance shall be initiated within ten (10) Business Days of: (i) the date on which the matter that is the subject of the Grievance occurred, or (ii) the date on which the matter that is the subject of the Grievance became known to the Employee.

Section 4. Procedure

a. Informal Step: The Employee may discuss a Grievance with his/her Immediate Supervisor in an effort to resolve the matter informally.

b. Step 1:
   1) The Employee may file a written Grievance with his/her Immediate Supervisor and request a conference to occur within five (5) Business Days to discuss a formal resolution of the matter.

2) Upon receipt of a written Grievance, the Immediate Supervisor shall either: (i) schedule a conference to discuss a formal resolution of the matter in accordance with Section 4.b(1); or (ii) take action that addresses the matter described in the written Grievance to the reasonable satisfaction of the Employee.
3) Following a conference to discuss a formal resolution of a Grievance, the Immediate Supervisor shall render a written decision regarding the Grievance within ten (10) Business Days.
4) Following an action taken by the Immediate Supervisor to address the matter described in the written Grievance, the Immediate Supervisor shall issue a memorandum that details the Immediate Supervisor's action.

c. Step 2:

1) If the Employee is not satisfied with the Immediate Supervisor's decision pursuant Section 4.b, the Employee may file the written Grievance with the Department Manager and request a conference to occur within five (5) Business Days to discuss a formal resolution of the matter. The Employee shall file the written Grievance within five (5) Business Days of the Employee's receipt of the Immediate Supervisor's decision.
2) Upon receipt of a written Grievance, the Department Manager shall either: (i) schedule a conference to discuss a formal resolution of the matter in accordance with Section 4.c(1); or (ii) take action that addresses the matter described in the written Grievance to the reasonable satisfaction of the Employee.
3) Following a conference to discuss a formal resolution of a Grievance, the Department Manager shall render a written decision regarding the Grievance within ten (10) Business Days.
4) Following an action taken by the Department Manager to address the matter described in the written Grievance, the Department Manager shall issue a memorandum that details the nature of the Department Manager's action.

d. Step 3:

1) If the Employee is not satisfied with the Department Manager's decision pursuant to Section 4.c, the Employee may file the written Grievance with the City Manager (through the Administrative Services Director) and request a conference to occur within ten (10) Business Days. The Employee shall file the written Grievance within five (5) Business Days of the Employee's receipt of the Department Manager's decision. The written Grievance shall contain all complaints and relevant facts that pertain to the matter described in the written Grievance.
2) Upon receipt of a written Grievance, the City Manager or his/her designee shall either: (i) schedule a conference to discuss a formal resolution of the matter in accordance with Section 4.d(1); or (ii) take action that addresses the matter described in the written Grievance to the reasonable satisfaction of the Employee.
3) Following a conference to discuss a formal resolution of a Grievance, the City Manager or his/her designee shall render a written decision regarding the Grievance within ten (10) Business Days.
4) Following an action taken by the City Manager or his/her designee to address the matter described in the written Grievance, the City Manager or his/her designee shall issue a memorandum that details the nature of the City Manager's or his/her designee's action.

5) A decision or action taken by the City Manager or his/her designee shall be final and satisfy the City's obligations regarding the consideration of the Grievance.

Section 5 Written Decisions and Memorandums

A written decision or memorandum issued pursuant to Section 4 shall be sent to the Employee, the Department Manager, and the Immediate Supervisor, as applicable. A copy of a written decision or memorandum issued pursuant to Section 4 shall be attached to a copy of the written Grievance and kept in the Employee's personnel file in the Administrative Services office.

City Council Meeting

Item Number: 15

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Valerie A. Sherman, Senior Planner

Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 9.92-ACRE TRACT OF LAND OUT OF SECTION 11, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM AE, AGRICULTURAL ESTATE DISTRICT TO PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF NORTH STATE HIGHWAY 349 AND TEJAS); 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 (DEVELOPMENT SERVICES)

Purpose:

The applicant, Landgraf, Crutcher & Associates, is requesting this zone change form AE, Agricultural Estates District to PD, Planned Development District for a shopping center to develop a shopping center.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the city.

Discussion:

Surrounding Zoning and Land Use:

The property to the north is zoned PD, Planned District for an Industrial District and the location

of a business park. The properties to the east across N. State Highway 349, are zoned PD, Planned District for an Industrial District and the location of a storage facility, and RR, Regional Retail District, and the location of vacant lots. The property to the south is zoned PD, Planned District for a Housing Development and the location of a residence. The properties to the west are zoned AE, Agricultural Estate District and the location of a residence, and PD, Planned Development District for a Recreation Center and the location of a golf course.

Analysis:

The applicant is requesting this zone change form AE, Agricultural Estates District to PD, Planned Development District for a Shopping Center with an underlying zoning district of RR, Regional Retail District, to develop a shopping center.

Per the Zoning Ordinance, a Shopping Center is permitted in the RR, Regional Retail District.

This proposed project 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.

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.

Engineering: (Approved)

No objection to zone change.

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.

Our staff has examined the FEMA flood map and it appears that this property lies entirely within Zone AH, which is a Special Flood Hazard Area subject to inundation by the 1% annual chance flood. Compensatory excavation will be required within floodplain for any fill being placed within the floodplain.

An elevation certificate based off of construction drawings will be required to get a building permit to show compliance to the 1 foot of freeboard above the base flood elevation for residential structures. An elevation certificate based off of finish construction will be required for the Certificate of Occupancy.

Code: (Approved)

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.

Transportation: (Approved)

Access spacing will be required to adhere to the TxDOT Access Management Standards along the state highway.

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.

No objection to zone change.

Planning:

Per the Future Land Use map, this location is designated as Urban Residential; which calls for single-family detached development, and civic uses are generally allowed with special permission for higher intensity uses; therefore, this zone change complies with the Future Land Use plan.

This request has been recommended for approval by a unanimous vote at the April 19, 2021 Planning and Zoning Commission meeting.

Staff recommends approval of the zone change from AE, Agricultural Estate District to amended PD, Planned Development District for a Shopping Center, subject to conditions A through F.

Conditions:

A. **That the use and development of this property shall conform to the regulations of the RR, Regional Retail District, except as stated below.**

B. **That this property shall conform to the site plan, which is attached hereto and incorporated herein as Exhibit “B”.**

C. **That the landscaping shall conform to the regulations set forth in Title XI, Chapter 9 of the City Code.**

D. **That the minimum number of required parking spaces shall be shown on Exhibit "B”.**

E. **That the fencing shall significantly conform to Exhibit “B”.**

F. That the signage for this property shall conform to the regulations set forth in Title XI, Chapter 7a. of the City Code.

Letters of Objection:

Staff has not received any objections as of April 28, 2021.

Attachments:

Metes and Bounds (Exhibit A)
Site Plan (Exhibit B)
Application
Maps

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 9.92-ACRE TRACT OF LAND OUT OF SECTION 11, BLOCK X, H.P. HILLIARD SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM AE, AGRICULTURAL ESTATE DISTRICT TO PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF NORTH STATE HIGHWAY 349 AND TEJAS); 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 a 9.92-acre tract of land out of Section 11, Block X, H.P. Hilliard Survey, City and County of Midland, Texas, said tract being more specifically described by metes and bounds in Exhibit "A", which is attached hereto and incorporated herein (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 AE, Agricultural Estate District 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 "B" 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 Property shall significantly conform to the site plan attached hereto as Exhibit "B".

B. That the landscaping shall conform to the regulations set forth in Title XI, Chapter 9 of the City Code.

C. That the minimum number of required parking spaces shall be as shown in Exhibit "B".

D. That the fencing shall significantly conform to Exhibit "B".

E. That all signage shall conform to the regulations set forth in Title XI, Chapter 7a of the City Code.

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., 2021; 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., 2021, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2021.

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

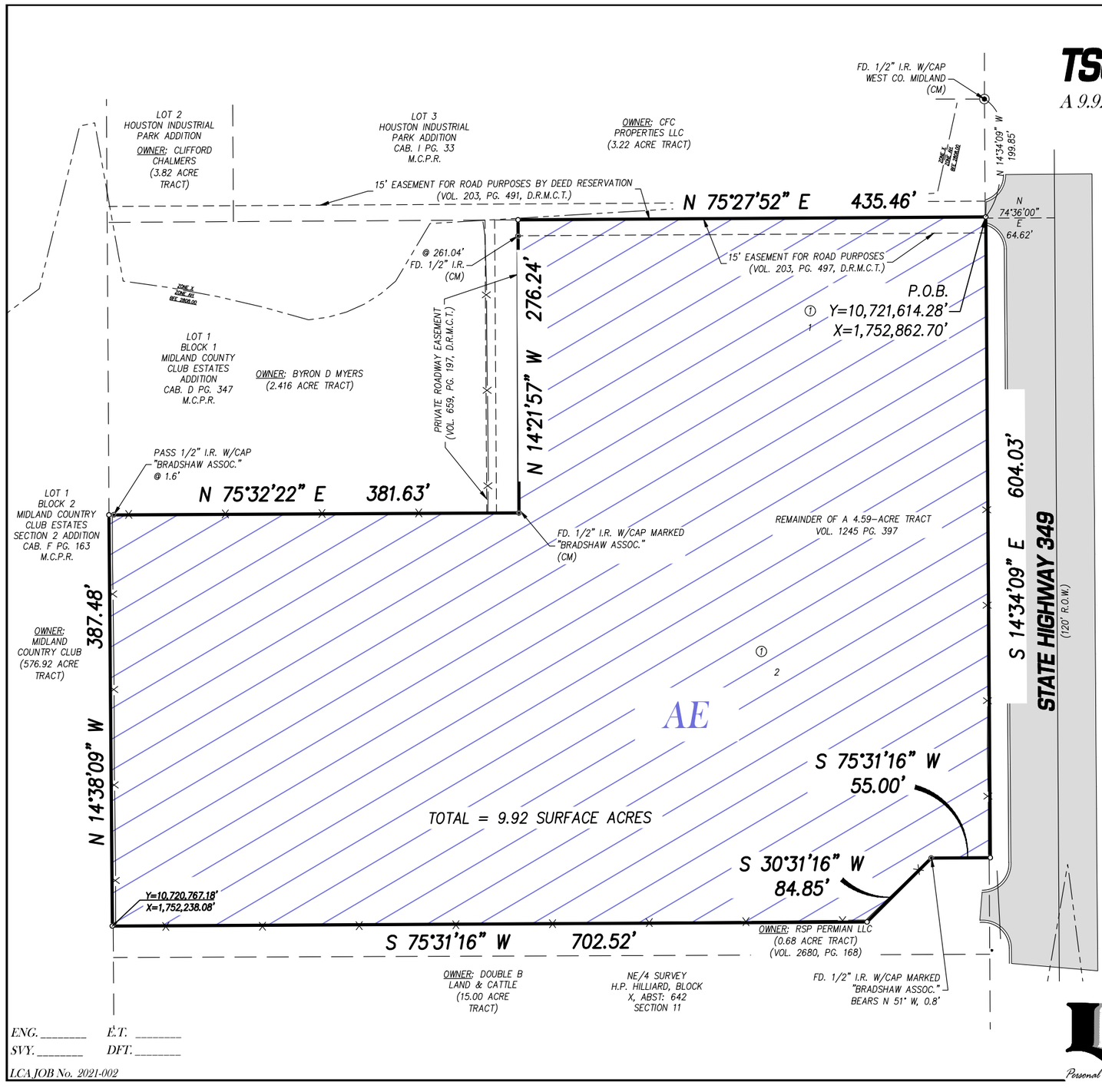
_____
John Ohnemiller, City Attorney

E:\2021\2021-002\Dwg\Drafting\Exhibit\2021-002 Zoning Exhibit.dwg, 3/24/2021 2:14:11 PM, AutoCAD PDF (General Documentation).pc3

ZONING EXHIBIT

TSC DEVELOPMENT, SECTION 1

A 9.92 ACRE TRACT LOCATED IN SECTION 11, BLOCK "X",
H.P. HILLIARD SURVEY
CITY AND COUNTY OF MIDLAND, TEXAS



LEGEND

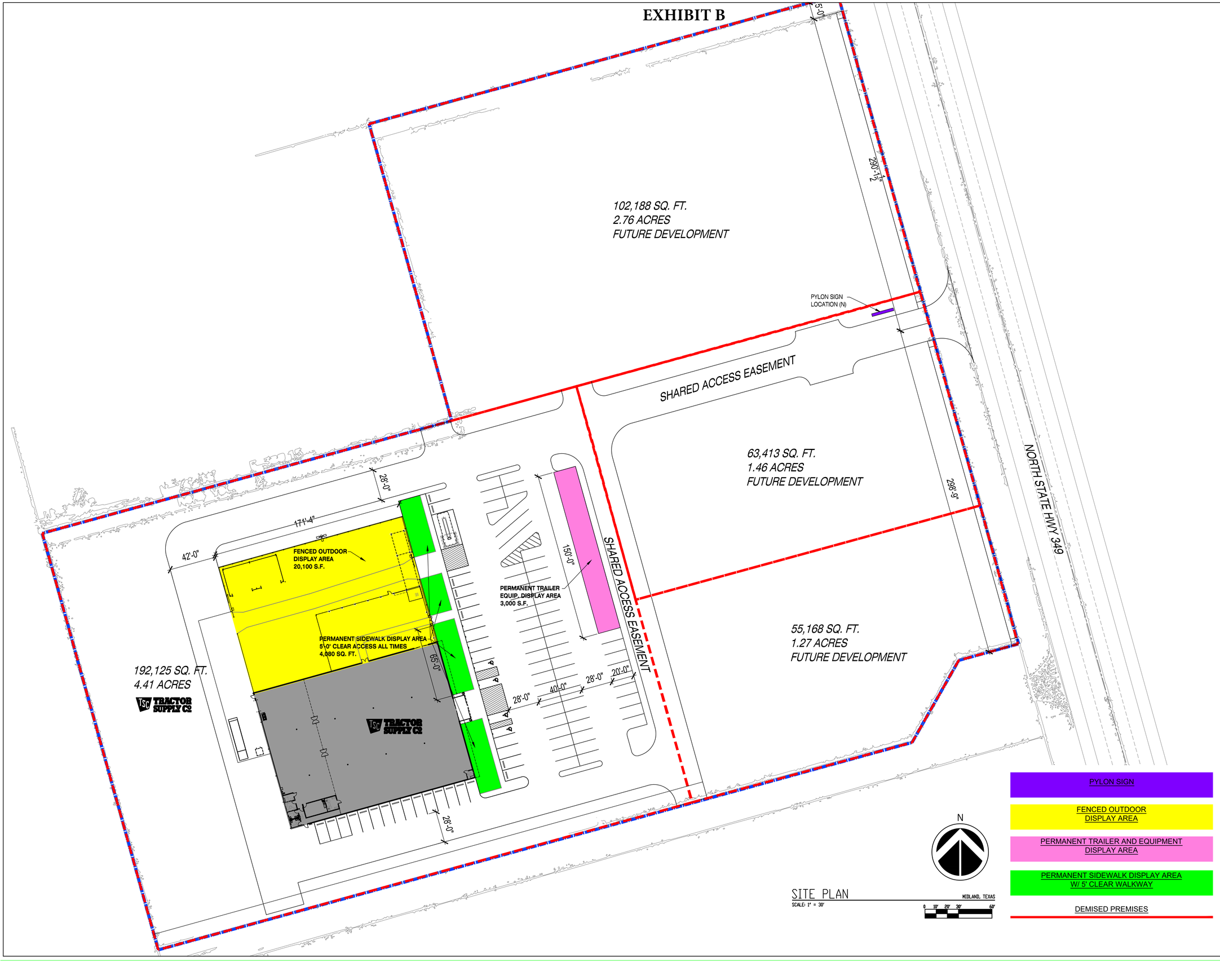
AE — AE TO R-2

ENG. _____ E.T. _____
SVY. _____ DFT. _____

LCA JOB No. 2021-002

LCA ENVIRONMENTAL • CIVIL ENGINEERING • LAND SURVEYING
521 North Texas, Odessa Tx. 79761 F-001363 F-10034300
Phone # (432) 332-5058 E-Mail : lca@lcaodessa.com
Personal Service, Today and Tomorrow

EXHIBIT B



N

SITE PLAN
SCALE: 1" = 30'

MIDLAND, TEXAS
0 10' 20' 30' 60'

PYLON SIGN

FENCED OUTDOOR DISPLAY AREA

PERMANENT TRAILER AND EQUIPMENT DISPLAY AREA

PERMANENT SIDEWALK DISPLAY AREA W/ 5' CLEAR WALKWAY

DEMISED PREMISES

COROLLA CAPITAL PARTNERS, LLC
2208 FOWLER AVE.
JONESBORO, AR 72401

Tractor Supply Company
Midland, Texas

REVISIONS

PROJECT DATA

DATE: 03.23.2021
JOB NUMBER: 20036
SHEET TITLE: SITE PLAN
SHEET NUMBER:

SITE

LCA Job # 21-002

MIDLAND Planning Division

Zone Change/Planned District Amendment/Site Plan Approval

Project Number: _____

Case Number: 2-21-0232

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Property Owner Printed Name: **Christopher Lewis Gurgevich**		Phone (N/A) Email N/A	
Address: **6401 N. Hwy 349**	City: **Midland**	State: **TX**	Zip: **79705**

Representative *(if different from Applicant or Property Owner)* Firm: ***Landgraf, Crutcher & Associates*** Printed Name: **LCA**		Phone (**432**) **332-5058** Email lca@lcaodessa.com	
Address **521 N. Texas Avenue**	City **Odessa**	State **TX**	Zip **79761**

Street Address: 6401 N. Hwy 349

Legal Description
Lot: **Prop. 1** Block: **Prop. 1** Subdivision: **Proposed TSC DEVELOPMENT, SECTION 1**

Current Zoning: Agricultural Estates District (AE)	**Proposed Zone: Planned Development (PD)** *(List by tracts if more than one district is requested)*

Reason for Zone Change Request: **To comply with a shopping center zoning requirements**

Present Use of Property: **residential and partially vacant**

Proposed Use of Property: **Shopping center**

How would this zone change affect the public health, safety and welfare?
Traffic may increase in this area

Describe how conditions affecting the property have changed since present zoning designation. **Not known**

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):	Date:
Applicant (printed):	
Property Owner (signature):	Date:
Property Owner (printed) :	

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.

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 George E. Thornley who, being by me duly sworn, upon oath says: That (s)he is authorized by Texas NH Management LLC, 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.

George E. Thornley
Authorized Agent (*signature*)

Subscribed and sworn to before me, this 24 day of March, 20 21, to certify which witness my hand and seal of office.

NOTARY PUBLIC • STATE OF TEXAS
Melanie Martinez
My Commission Expires
12/09/2022
ID No. 130046270

Melanie Martinez
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

FOR OFFICE USE ONLY

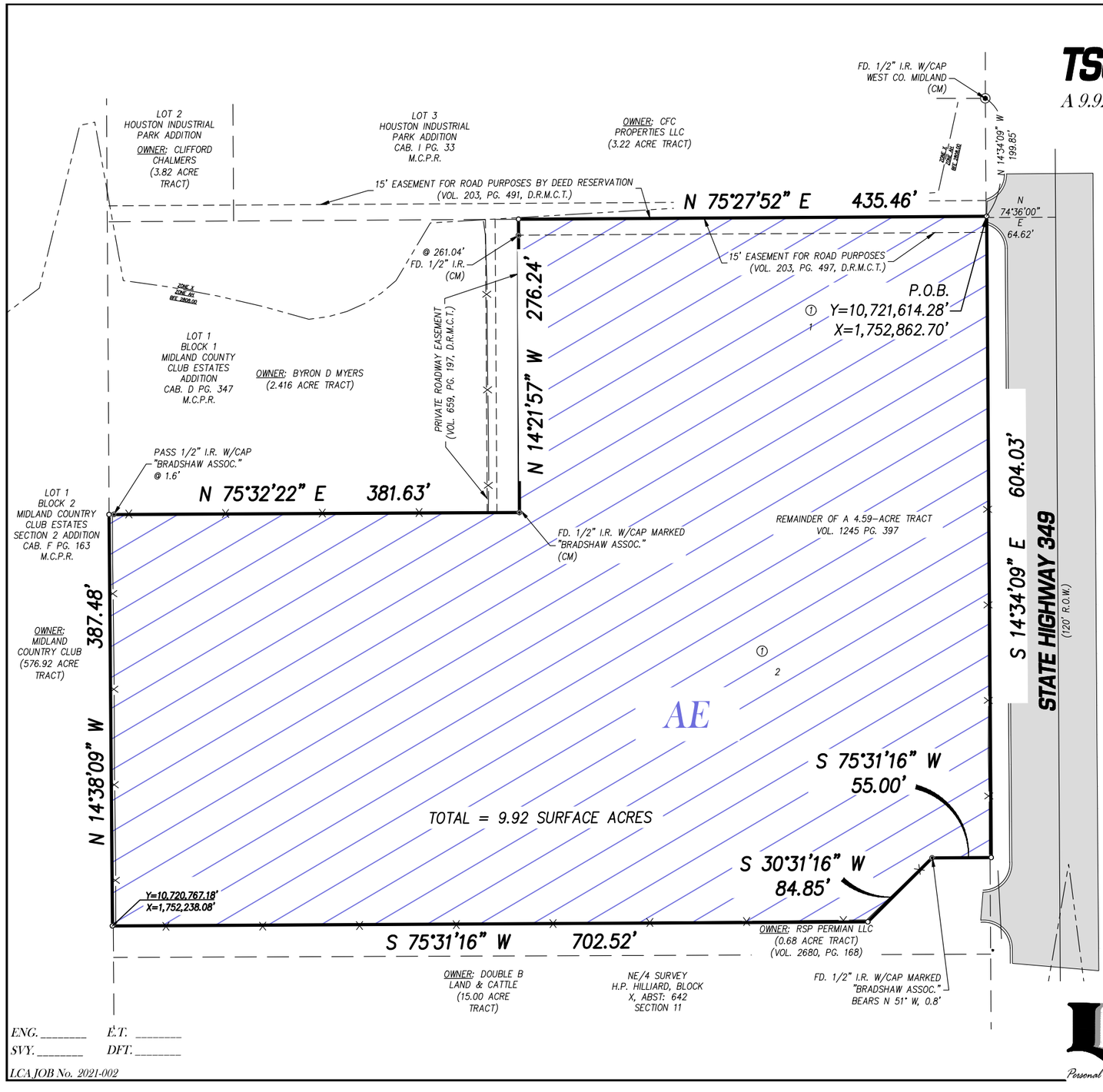
☒ Property Owner Authorization	☒ Dimensioned Site Plan
☒ Application Fee	☒ Plans in Digital Format (PDF/JPEG)
Check # 38967	
Received By: KM	Date: 3/24/21

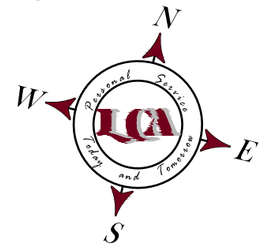
Application will not be considered for scheduling until reviewed by staff.

ZONING EXHIBIT

TSC DEVELOPMENT, SECTION 1

A 9.92 ACRE TRACT LOCATED IN SECTION 11, BLOCK "X",
H.P. HILLIARD SURVEY
CITY AND COUNTY OF MIDLAND, TEXAS





100' 0 100'

SCALE : 1" = 100'

LEGEND

AE — AE TO R-2

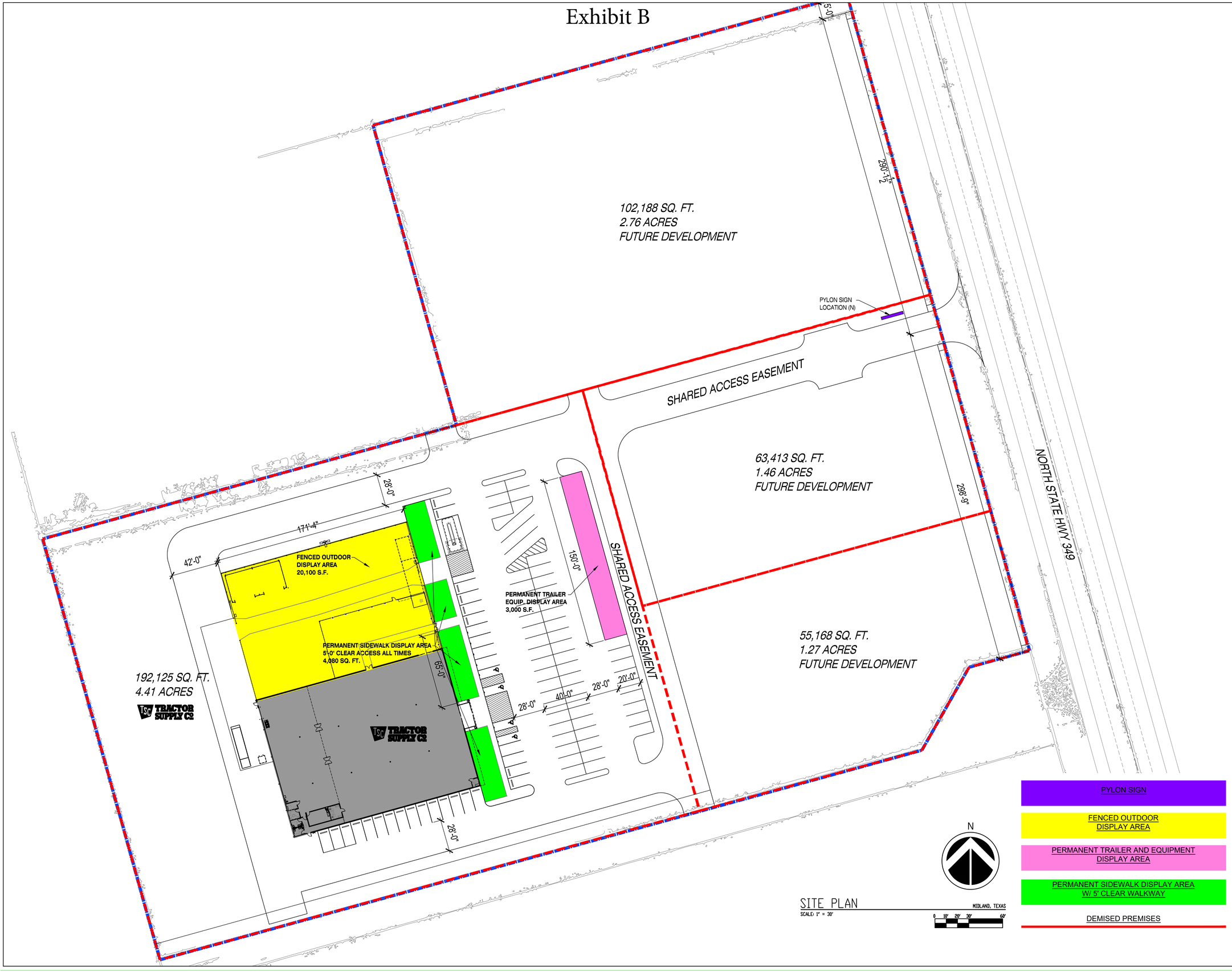
ENG. _____ E.T. _____
SVY. _____ DFT. _____

LCA JOB No. 2021-002

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Phone # (432) 332-5058 E-Mail : lca@lcaodessa.com
Personal Service, Today and Tomorrow

E:\2021\2021-002\Dwg\Drafting\Exhibit\2021-002 Zoning Exhibit.dwg, 3/24/2021 2:14:11 PM, AutoCAD PDF (General Documentation).pc3

Exhibit B



SITE PLAN
SCALE: 1" = 30'

N

MIDLAND, TEXAS
0 10' 20' 30' 60'

PYLON SIGN

FENCED OUTDOOR DISPLAY AREA

PERMANENT TRAILER AND EQUIPMENT DISPLAY AREA

PERMANENT SIDEWALK DISPLAY AREA W/ 5' CLEAR WALKWAY

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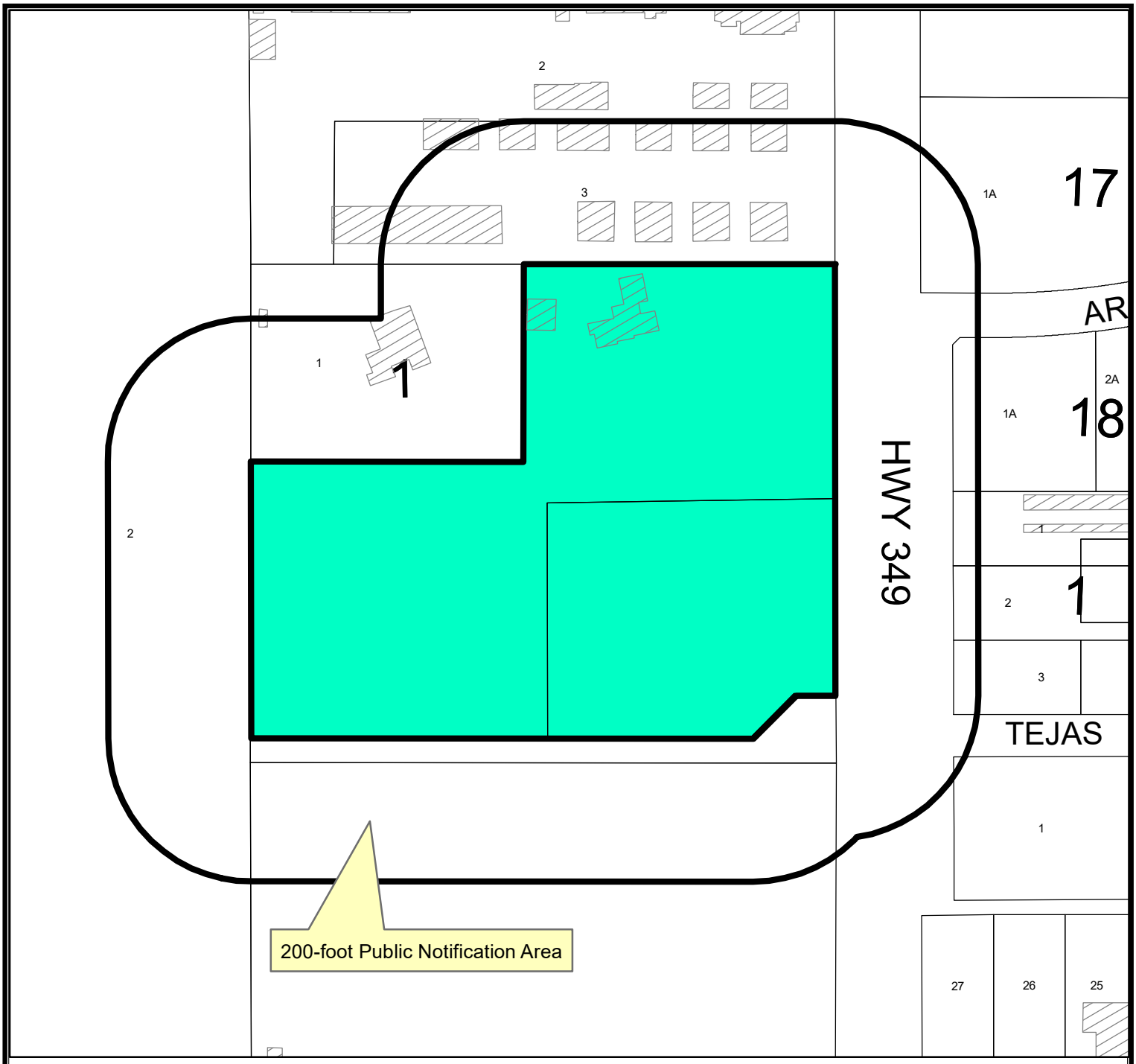
Tractor Supply Company
Midland, Texas

REVISIONS

PROJECT DATA

DATE: 03.23.2021
JOB NUMBER: 20036
SHEET TITLE: SITE PLAN
SHEET NUMBER:

SITE



LOCATION MAP

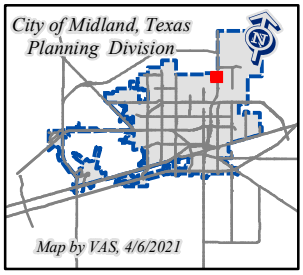
Z-21-0232 **Scale: 1" = 200'**

Consider a request by Landgraf, Crutcher & Associates, for a zone change from AE, Agricultural Estates District, to PD, Planned Development District for a Shopping Center, on a 9.92-acres tract of land out of Section 11, Block X, H.P. Hilliard Survey, City and County of Midland, Texas.

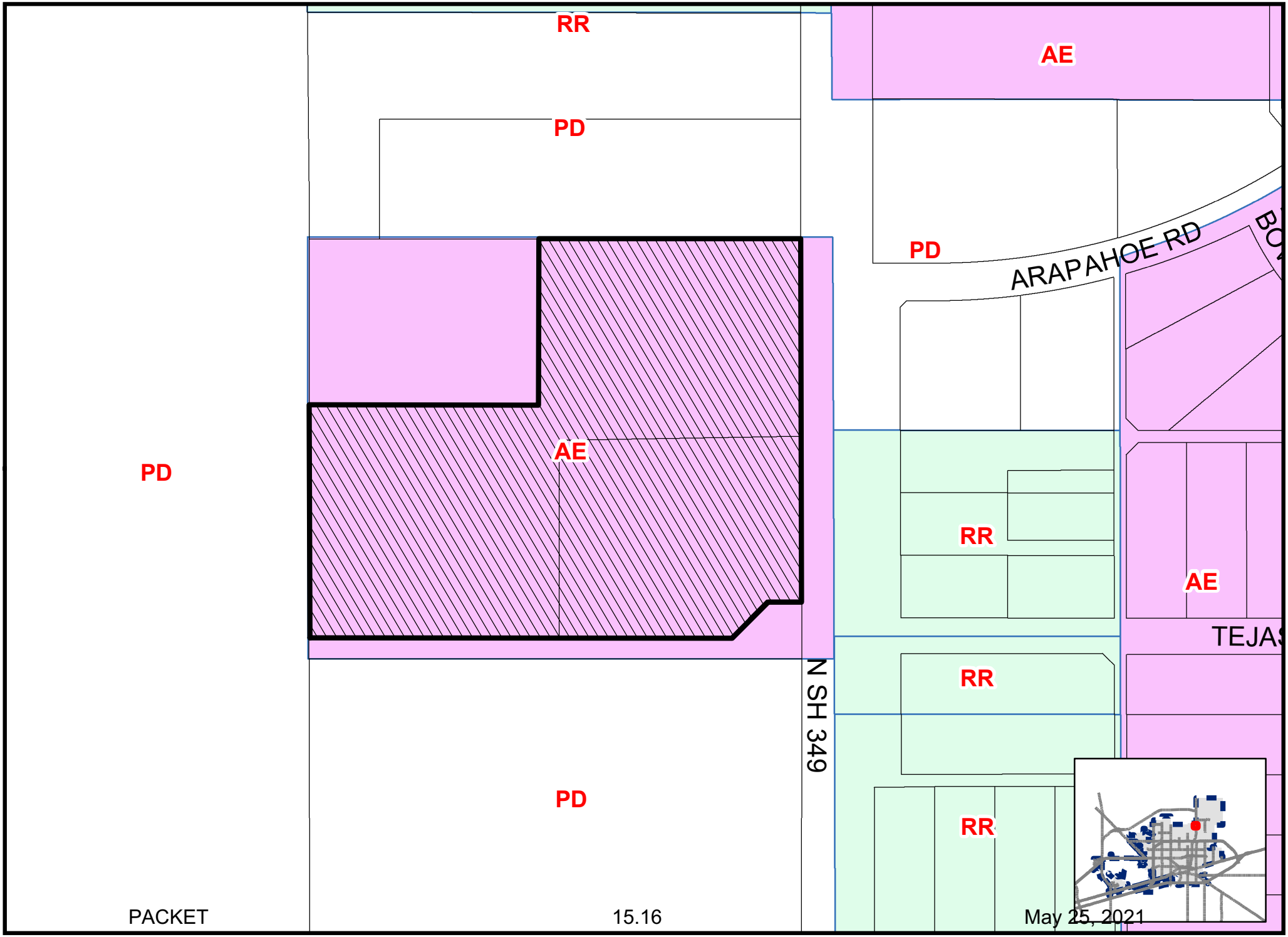
Generally located on the northwest corner of the intersection of N. State Highway 349 and Tejas. (Council District 1)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



May 25, 2021



PACKET 15.16 May 25, 2021

Map By VAS, 4/11/2021

Z-21-0232

Scale: 1" = 200'

ZONING MAP

© THE CITY OF MIDLAND - 2021: 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.











City Council Meeting

Item Number: 16

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Kelly Martinez, Planner

Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO GRANT A SPECIFIC USE DESIGNATION WITH TERM FOR A 10,250-SQUARE FOOT PORTION OF LOT 1, BLOCK 8, POLO PARK, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH GARFIELD STREET AND WEST LOOP 250 NORTH), WHICH IS PRESENTLY ZONED PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER, 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 (DEVELOPMENT SERVICES)

Purpose:

The applicant, Gomca Family Restaurant, LLC, is requesting to amend the Specific Use Designation with Term (SUD) for the sale of all alcoholic beverages, for on-premises consumption, in a restaurant located at 4610 Garfield Street, Suite C1.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the City.

Current Zoning:

PD, Planned District for a Shopping Center. (Ordinance 7771**)**

Surrounding Zoning and Land Use:

The properties to north are zoned O-1, Office District, and PD, Planned District for a Housing Development, and are the locations of Quality Suites and Polo Park Retirement Center. The properties to the east are zoned SF-2, Single- Family Dwelling District, and PD, Planned District for a Shopping Center, and the location of single-family houses and Extra Space Storage. The property to the south is zoned SF-1, Single Family Dwelling District, and the location of the Midland Airpark. The properties to the west across Garfield Street are zoned LR, Local Retail District and PD, Planned District for a Shopping Center, and the locations of Fairfield Inn & Suites by Marriot Midland and Talbots.

Discussion:

The property is located at 4610 N. Garfield Street, Suite C1, in a PD, Planned District for a Shopping Center, which is regulated by Ordinance No. 7771. This zoning district permits the sale of all alcoholic beverages, for on-premises consumption, in a restaurant with the approval of a Specific Use Designation.

The restaurant, Tkilaz Mexican Restaurant Bar and Grill currently has a Specific Use Permit (Ordinance No. 9835) for the sale of alcoholic beverages for on-premises consumption. The alcohol serviceable area includes a maximum floor area of 10,250 square feet. Currently, the allowed days and hours of alcoholic beverage sales is the following:

Monday through Saturday from 11:00 a.m. to 12:00 a.m. (midnight); and
Sunday from 12:00 p.m. to 11:00 p.m.

The applicant is requesting to amend their alcohol service hours to the following:

Monday through Friday from 11:00 a.m. to 11:00 p.m.
Saturday through Sunday from 10:00 a.m. to 11:00 p.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.

Engineering: (Approved)

No objections.

Fire: (Approved)

No objections.

Transportation: (Approved)

No objection to zone change.

Code Administration: (Approved)

The SUD for Tkilaz is acceptable. The property must adhere to the current maximum occupant load of 306. Occupancy loads must be posted in accordance with section 1004.3 of the 2015 International Fire Code.

Planning:

This request is in compliance with the Tall City Tomorrow Comprehensive Plan, Chapter 6-Character Plan Goal 2, “Identify partnerships to produce neighborhood and commercial centers that are attractive, functional, and of high quality.” (Tall City Tomorrow page 137) Tkilaz Mexican Restaurant Bar and Grill is an establishment that promotes a positive environment where Midland residents can gather and socialize.

This request was recommended for approval at the April 19, 2021 Planning and Zoning Commission Meeting.

This request meets all requirements; therefore, staff recommends approval of the Specific Use Designation with Term for the sale of all alcoholic beverages, for on-premises consumption, in a restaurant, subject to Conditions A through E.

Conditions:

A. That the serviceable area of the establishment shall be limited to approximately 10, 250-square feet, as shown in Exhibit A.

B. That the permitted hours of the sale of alcoholic beverages shall be limited to:

Monday through Friday from 11:00 a.m. to 11:00 p.m.
Saturday through Sunday from 10:00 a.m. to 11:00 p.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.

Letters of Objection:

As of May 5, 2021, staff has not received any letters of objections.

Attachments:

Application
Floor Plan (Exhibit A)
Maps
Ordinance 7771, 9835

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 10,250-SQUARE FOOT PORTION OF LOT 1, BLOCK 8, POLO PARK, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH GARFIELD STREET AND WEST LOOP 250 NORTH), WHICH IS PRESENTLY ZONED PD, PLANNED DEVELOPMENT DISTRICT FOR A SHOPPING CENTER, 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 10,250-square foot portion of Lot 1, Block 8, Polo Park, Section 3, 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 PD, Planned Development District for a Shopping Center.

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 10,250 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:

Monday through Friday from 11:00 a.m. to 11:00 p.m.; and
Saturday and Sunday from 10:00 a.m. to 11:00 p.m.

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.

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., 2021; 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., 2021, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2021.

_____
Patrick N. Payton, Mayor

ATTEST:

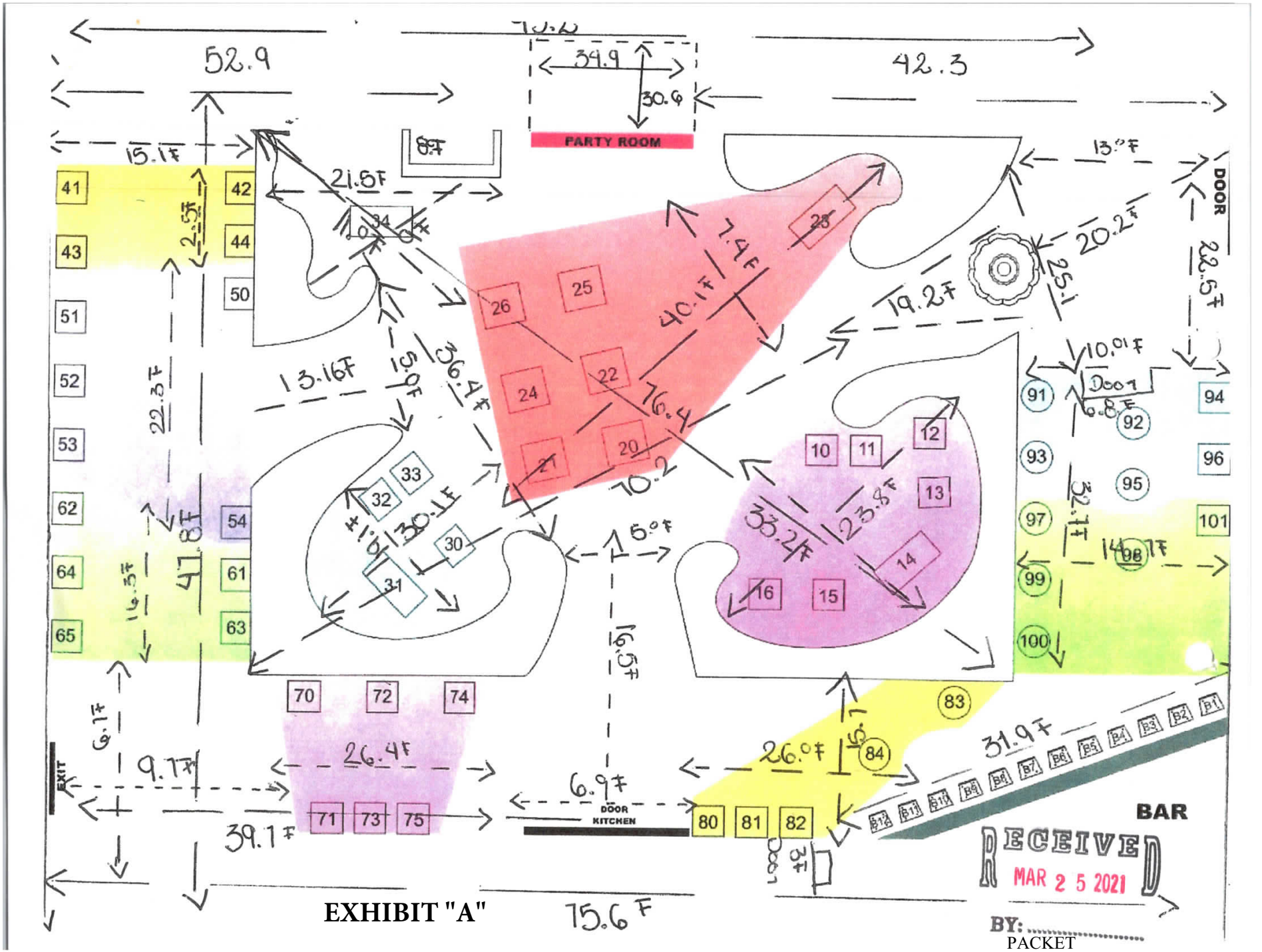
_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney


52.9
39.9
30.9
42.3
PARTY ROOM
DOOR
EXIT
DOOR
KITCHEN
BAR
RECEIVED
MAR 2 5 2021
BY:
EXHIBIT "A"
75.6 F

MIDLAND
Planning Division

Specific Use Designation with Term for the Sale of Alcoholic Beverages for On-Premises Consumption

Project Number:
Case Number: SUP-21-0098

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Gomca Family Restaurants LLC		Phone (432) 247 5455 Email fragoK13@hotmail.com	
Address 4610 N Garfield st, ste C1	City Midland	State Tx	Zip 79705
Property Owner Printed Name: Colonnade @ Polo Park LP		Phone (817) 927 0050 Email	
Address 3113 S University Dr #600	City Fort Worth	State Tx	Zip 76109
Representative *(if different from Applicant or Property Owner)* Firm: Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Street Address: 4610 N Garfield st, ste C1

Business Name: Gomca Family Restaurants, LLC.

Legal Description
Lot: 1 Block: 8 Subdivision: Polo Park

Current Zoning: PDSC

Reason for Request: Change of hours

Type of Business *(restaurant, bar, lounge, nightclub, etc.)*:

Proposed/Current Days and Hours of Operation: Mon - Wed 11 am - 10 pm
Thu - Frid 11am-11 pm Sat 10 am - 11 pm Sun 10 am - 10pm

Proposed Days and Hours of Alcohol Service:

Total Square Footage of Business:

Square Footage of Alcohol Serviceable Area:

Restroom Fixtures:	*Men*	**Toilets/Urinals:**	1 / 3	**Bathroom Sinks:**	2
	Women	**Toilets:**	3	**Bathroom Sinks:**	2

RECEIVED
MAR 25 2021
BY: .....

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 (if applicable)
  - 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):	Date: 03-25-2021
Applicant (printed): Francisco Gomez Castellanos	
Property Owner (signature):	Date:
Property Owner (printed) :	

The Specific Use Designation 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~~ Tarrant

Before me, the undersigned authority, on this day personally appeared James A. Ryffel who, being by me duly sworn, upon oath says That (s)he is authorized by Colonnade at Polo Park LP, 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*)

sworn to before me, this 25 day of March, 2021, to certify which witness hand and seal of office.

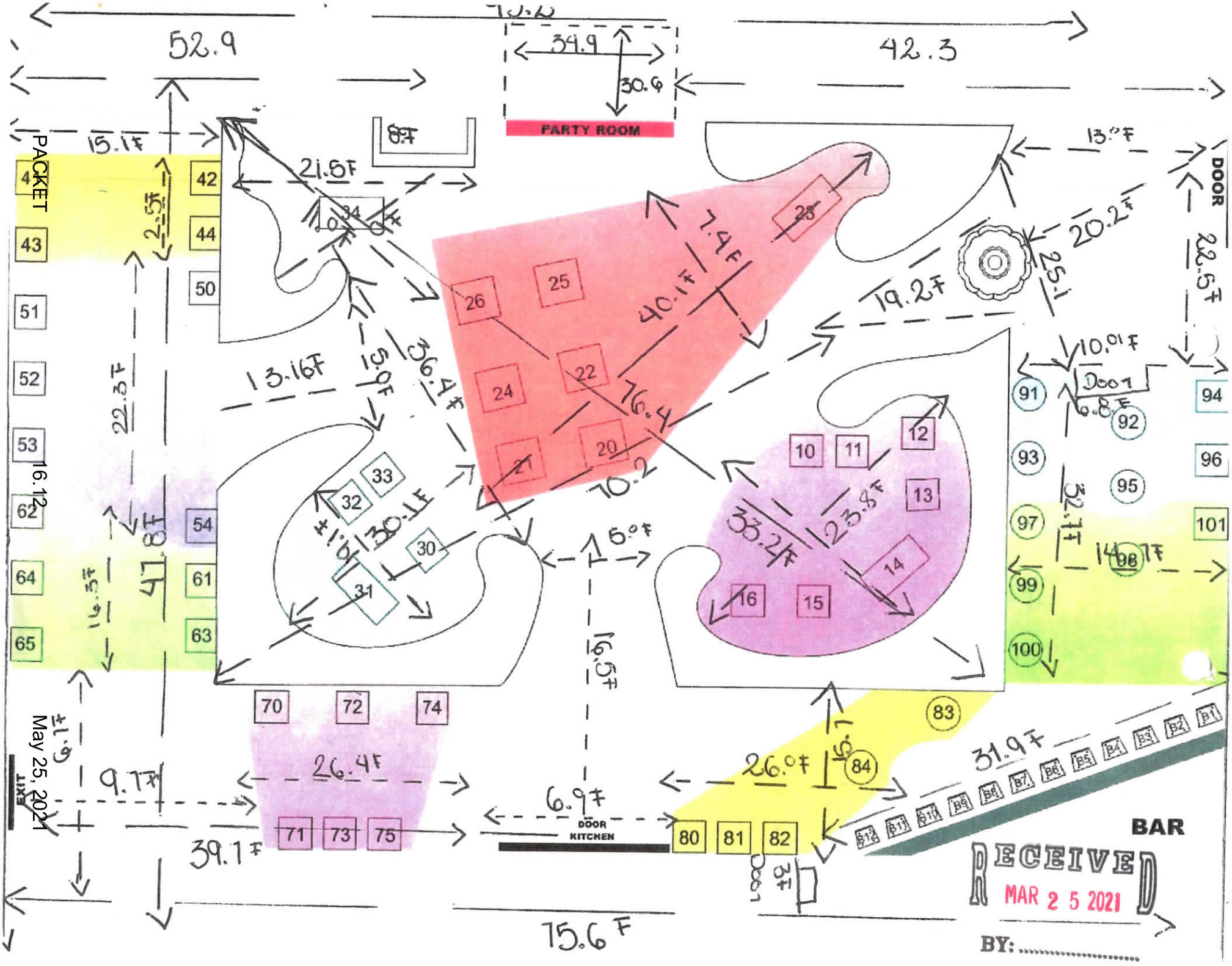
TERESA JO MANIRE
Notary Public
STATE OF TEXAS
ID#4210288
My Comm. Jan. 31, 2022

NOTARY PUBLIC, ~~MIDLAND COUNTY~~, TEXAS
Tarrant County

RECEIVED
MAR 25 2021

...ication will not be considered for scheduling until reviewed by a planner.**

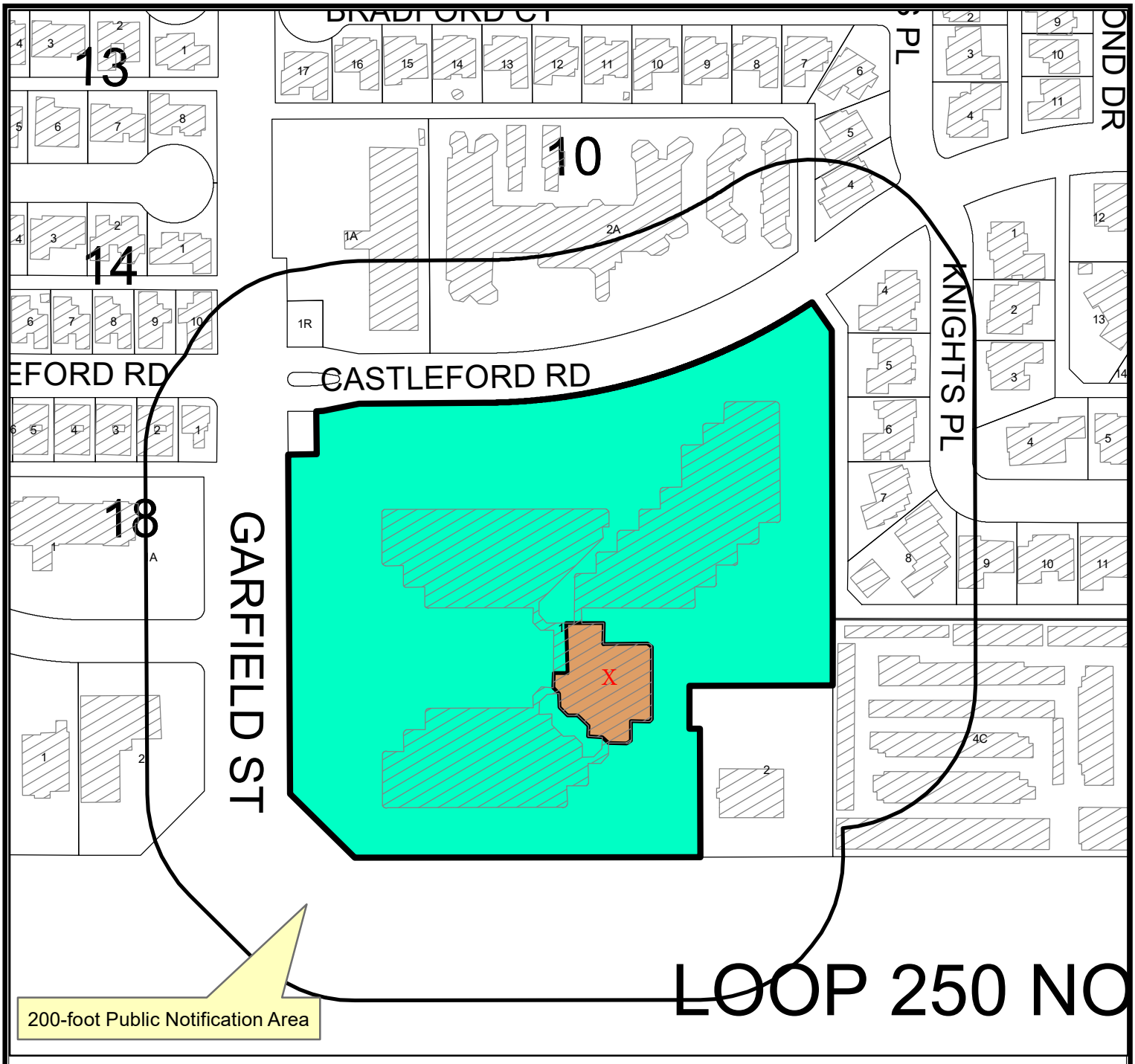
BY: .....



PACKET

16.12

May 25, 2021



LOCATION MAP

SUD-21-0098 **Scale: 1" = 200'**

Consider a request by Gomca Family Restaurant for a Specific Use Designation with Term for the Sale of all Alcoholic Beverages, for on premises consumption in a restaurant, on a 10,250 square foot portion of Lot 1, Block 8, Polo Park, Section 3, City and County of Midland, Texas.

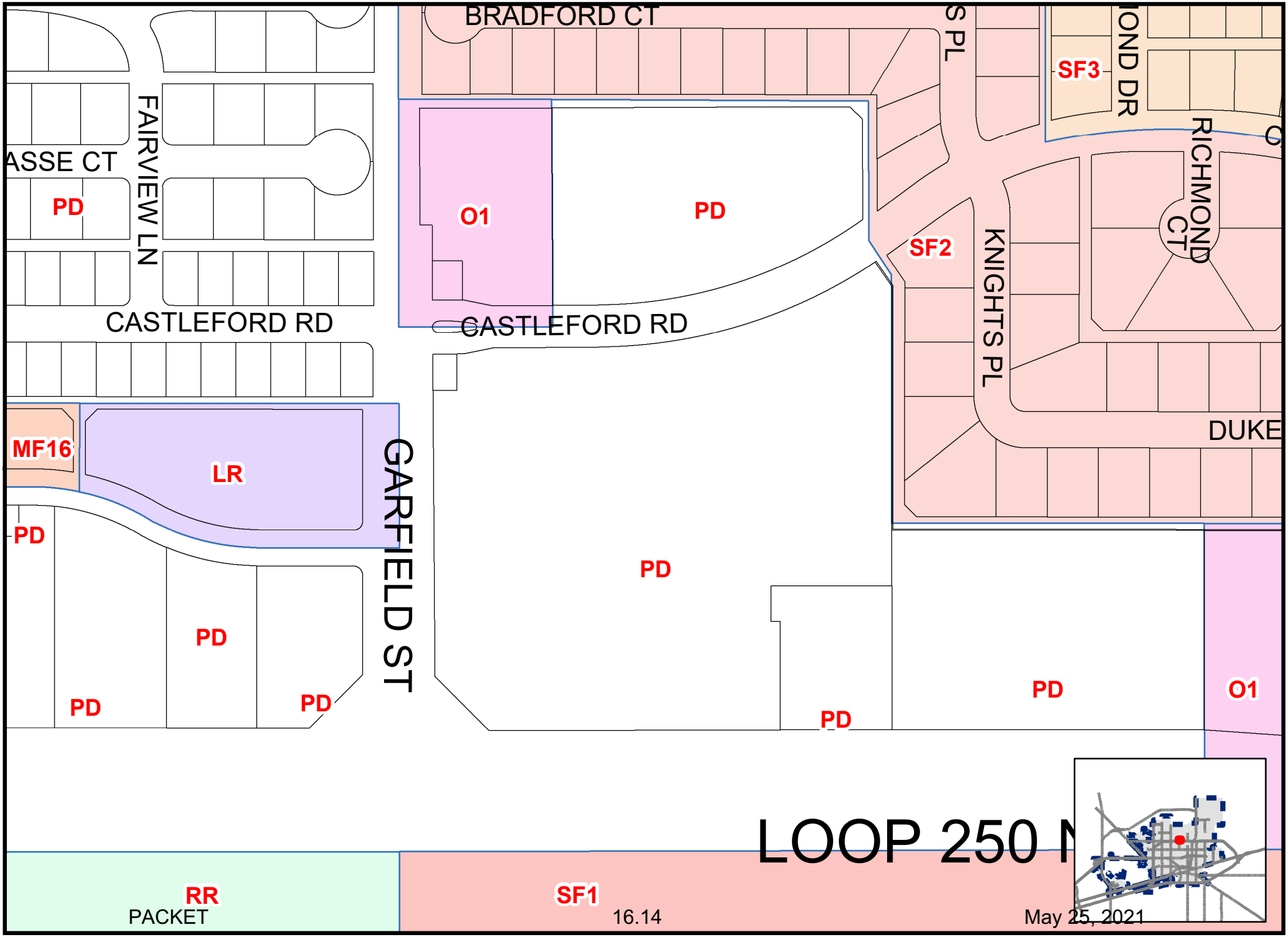
Generally located on the northeast corner of the intersection of N. Garfield St. and W. Loop 250 North. (Council District 1)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



May 25, 2021



Map By KM, 4/08/2021

SUD-21-0098

Scale: 1" = 200'

ZONING MAP

© THE CITY OF MIDLAND - 2021: 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.

IKIGAZ
MEXICAN RESTAURANT BAR & GRILL
"House of the famous Cantaritos & Caudos"

chili's

reset SALON & SPA
SILVERADO
TEXAS
MZR•159

ORDINANCE NO. 9835

AN ORDINANCE CHANGING THE ZONING USE CLASSIFICATION OF THE PROPERTY DESCRIBED AS A 10,250-SQUARE FOOT PORTION OF LOT 1, BLOCK 8, POLO PARK, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH GARFIELD STREET AND WEST LOOP 250 NORTH), WHICH IS PRESENTLY ZONED PD, PLANNED DISTRICT FOR A SHOPPING CENTER, BY PERMITTING SAID PROPERTY TO BE USED UNDER A SPECIFIC USE PERMIT WITH TERM FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID PERMIT 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 and the State law with reference to the granting of specific use permits under the zoning ordinance regulations and zoning map, 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 the granting of a Specific Use Permit With Term, set out hereinafter, on the property described in Section One hereof;

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

SECTION ONE. That the zoning use classification of the following described property, which is presently zoned PD, Planned District for a Shopping Center, to-wit:

> A 10,250-square foot portion of Lot 1, Block 8, Polo Park, Section 3, City and County of Midland, Texas;

is hereby changed to permit said property to be used under a Specific Use Permit With Term

for the sale of all alcoholic beverages for on-premises consumption in a restaurant (the "Establishment"), together with the uses permitted in the present PD, Planned District for a Shopping Center.

SECTION TWO. That said property shall be subject to the following conditions and restrictions:

A. That the location of the Establishment shall conform to the site plan, which is attached hereto as Exhibit "A" and incorporated herein.

B. That the area of the Establishment shall be limited to 10,250 contiguous square feet as shown in the floor plan, which is attached hereto as Exhibit "B" and incorporated herein.

C. That the occupancy of the Establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.

D. That the sale and on-premises consumption of alcoholic beverages shall conform to all applicable state and local laws.

E. That the days and hours of alcoholic beverage sales and consumption shall be limited to the following:

Monday through Saturday from 11:00 a.m. to 12:00 a.m. (midnight); and Sunday from 12:00 p.m. (noon) to 11:00 p.m.

F. That the Establishment shall meet all requirements of the Fire Department and the Code Administration Division.

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 23rd day of October, A.D., 2018; and passed to second reading on motion of Council member Love, seconded by Council member Robnett, by the following vote:

Council members voting "AYE": Hotchkiss, Love, Sparks, Morales, Dufford, Lacy, Robnett

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 Lacy, seconded by Council member Robnett, on the 6th day of November, A.D., 2018, at a regular meeting of the City Council:

Council members voting "AYE": Hotchkiss, Love, Sparks, Morales, Dufford, Lacy, Robnett

Council members voting "NAY": None

PASSED AND APPROVED THIS 6th day of November, A.D., 2018.

Jerry F. Morales, Mayor

ATTEST:

Amy M. Turner, City Secretary

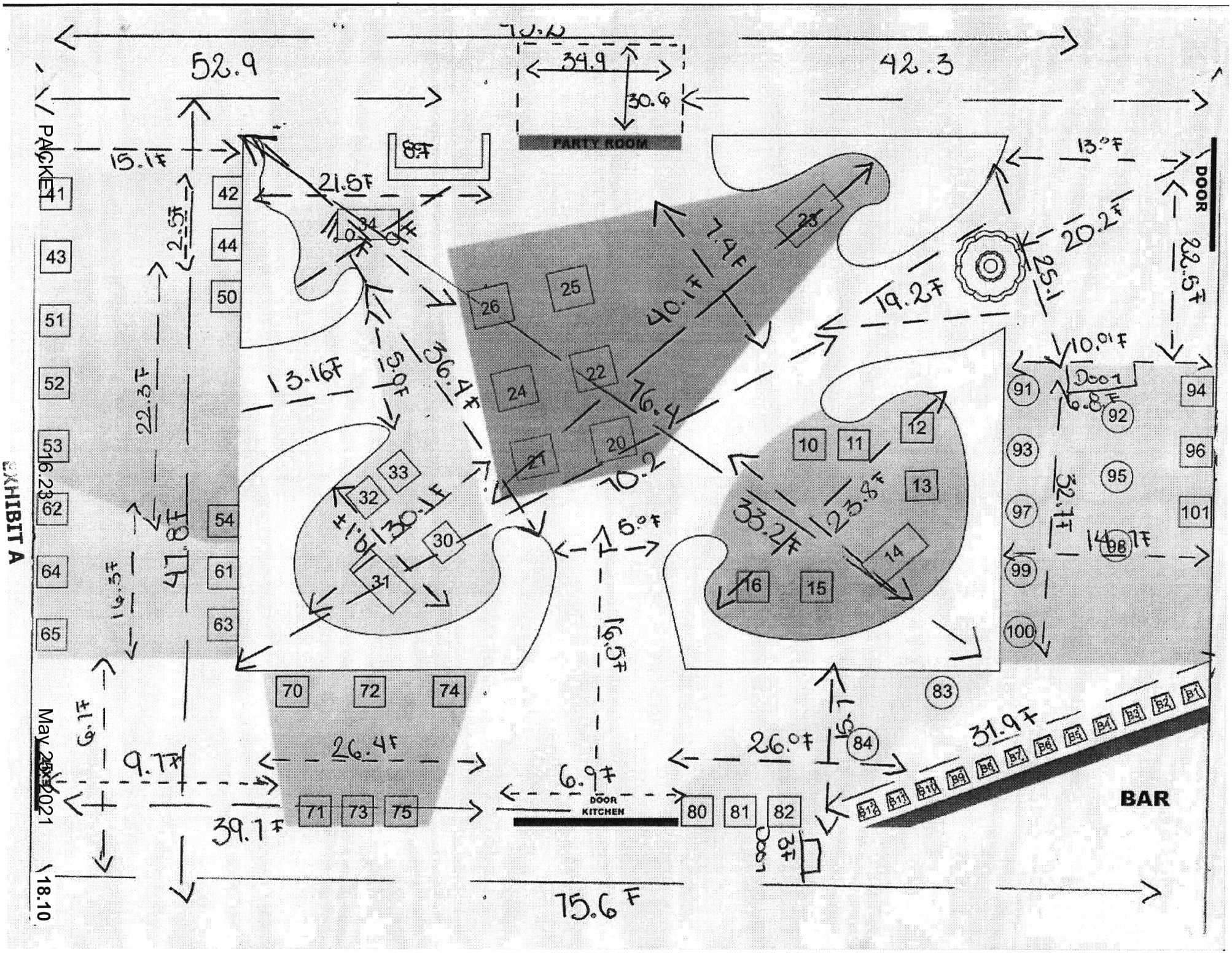
APPROVED AS TO CONTENT
AND COMPLETENESS:

Frank Salvato, Assistant City Manager

Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney


52.9
42.3
39.9
30.9
PARTY ROOM
DOOR
PACKET
EXHIBIT A
May 26, 2021
18.10
BAR
DOOR
KITCHEN
Door
15.6 F
39.1 F
26.4 F
26.0 F
31.9 F
9.7 F
6.9 F
16.5 F
47.8 F
22.3 F
13.16 F
36.4 F
40.1 F
7.4 F
19.2 F
20.2 F
25.1
22.5 F
10.01 F
9.8 F
32.7 F
14.7 F
23.9 F
30.2 F
30.1 F
21.5 F
15.1 F
2.5 F
16.23
16.3 F
6.1 F
6.0 F
10.2
16.4
1.6 F
1.9 F
1.5 F
13.0 F
3 F
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 41 42 43 44 50 51 52 53 54 61 62 63 64 65 70 71 72 73 74 75 80 81 82 83 84 91 92 93 94 95 96 97 98 99 100 101
B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12

Parking



Parcel
School Property
City Limit

Street Centerline_En...
Arterial; Collector
Resid,; County Rd; Frontage; Park
Interstate; State Highway
Lease Road; Misc

1:820
0 0.004 0.008 0.016 Miles

RECEIVED
SEP 2 4 2018
CITY OF MIDLAND
PLANNING DIVISION OFFICE

EXHIBIT A

9835

APPROVED

City Council Agenda

Approved for Agenda:

fsalvato

City Manager's Office

MEETING DATE: **November 6, 2018**

TO: **City Council / City Manager**

FROM: **Rolandrea Russell, Senior Planner**

SUBJECT: **Consider an ordinance on second reading on a request by Tkilaz Mexican Restaurant Bar and Grill for a Specific Use Permit with Term, for the sale of all alcoholic beverages for on-premises consumption, in a restaurant, on a 10,250 square foot portion of Lot 1, Block 8, Polo Park, Section 3, City and County of Midland, Texas. (Generally located on the northeast corner of the intersection of North Garfield Street and West Loop 250 North. Council District 1)**

Purpose:

The applicant, Tkilaz Mexican Restaurant Bar, is requesting a Specific Use Permit with Term, for the sale of all alcoholic beverages for on-premises consumption, in a restaurant, on a 10,250 square foot portion of Lot 1, Block 8, Polo Park, Section 3, City and County of Midland, Texas.

Recommended City Council Action:

☒ Approve ☐ Deny ☐ Direction/Informational

Fiscal Impact:

No City funds are required to process this request.

Discussion:

The property located at 4610 North Garfield Street, Suite C-1, is currently zoned PD, Planned District for a Shopping Center with the underlying zoning of LR-2, Local Retail District, which permits the sale of alcoholic beverages, with the approval of a Specific Use Permit.

The property is a part of an existing shopping center that was rezoned from a 1F-1, One-Family Dwelling District to PD, Planned District for a Shopping Center (Ordinance No. 5864) on November 24, 1981, with the condition that no building permit shall be issued unless a detailed site plan was reviewed and approved by the Planning and Zoning Commission and City Council. Since the establishment of the PD, Planned District for a Shopping Center, at this location the site plan and ordinance have been amended several times with the final amendment being approved on September 22, 1998 (Ordinance No. 7771).

The floor plan provided, attached hereto as Exhibit B, shows the proposed alcohol serviceable area will have a total square footage of 10,250 square feet, including the dining area, party room, and bar area. The breakdown of the square footage of the proposed alcohol serviceable areas are as follows;

- Dining area = 7,750 square feet
- Bar area = 1,550 square feet
- Party Room = 950 square feet

The applicant is now requesting the following alcohol serviceable hours.

Monday through Saturday, from 11:00 a.m. to 12:00 a.m. (midnight)
Sunday, from 12:00 p.m. (noon) to 11:00 p.m.

The proposed operating hours for the restaurant are;

Monday through Wednesday, from 11:00 a.m. to 10:00 p.m.
Thursday through Friday, from 11:00 a.m. to 11:00pm.
Saturday, from 9:00 a.m. to 11:00 p.m.
Sunday, from 9:00 a.m. to 10:00 p.m.

There are no schools or churches within 300 feet of the property using the front door to door distance measurement.

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.

This request has been circulated to and reviewed by respective City departments for internal review and their comments, conditions, and requirements are as follows:

Engineering: Approved

No objection.

Transportation: Approved

No Comments

Fire: Approved

No comments.

Code Administration: Approved

Occupant load has been calculated to be a maximum of 359 persons.

Planning:

This request is in compliance with the *Tall City Tomorrow Comprehensive Plan, Chapter 6-Character Plan Goal 2,* "Identify partnerships to produce neighborhood and commercial centers that are attractive, functional, and of high quality." (Tall City Tomorrow page 137) Tall City Brewing Company is an establishment that promotes a positive environment where Midland residents can gather and socialize.

Staff recommends approval of a Specific Use Permit with Term for the sale of all alcoholic beverages for on-premises consumption, for on-premises consumption, in a restaurant, subject to the following conditions.

Conditions:

A. **That the establishment shall not exceed 10,250 contiguous square feet in area as shown in Exhibit "B", which is attached hereto and incorporated herein.**

B. **That the occupancy of the establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.**

C. **That the establishment shall meet all requirements of the Fire Department and the Code Administration Division.**

D. **That the sale and on-premises consumption of all alcoholic beverages shall conform to all applicable state and local laws.**

E. **That the days and hours of all alcoholic beverages sales and consumption shall be limited to:**

Monday through Saturday, from 11:00 a.m. to 12:00 a.m. (midnight)
Sunday, from 12:00 p.m. (noon) to 11:00 p.m.

Letters of Objection:

As of October 12, 2018, staff has received no letters of objection to this request.

Attachments:

Site Plan (Exhibit A)
Floor Plan (Exhibit B)
Ordinance Nos. 5864 and 7771
Application
Maps

MIDLAND Planning Division

Specific Use Permit with Term for the Sale of Alcoholic Beverages for On-Premises Consumption

Project Number: SUP-18-0025

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: Francisco Gomez Thiaz Mexican Restaurant bar and Grill		Phone (432) 312-7870 Email Mely62.hotmail.com	
Address: 4610 N. Garfield st/10 Marshall ct.	City: Midland	State: Tx	Zip: 79705

Property Owner Printed Name: Woodcrest Capital		Phone ( ) Email	
Address	City	State	Zip

Representative *(if different from Applicant or Property Owner)* Firm: _____ Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Street Address: 4610 N Garfield St Suite C-1

Business Name: Thiaz Mexican Restaurant bar and Grill

Legal Description
Lot: Block: Subdivision:

Current Zoning:

Reason for Request: _____

Type of Business *(restaurant, bar, lounge, nightclub, etc.)*: Restaurant

Proposed/Current Days and Hours of Operation: Monday to Thursday 11am to 22pm Friday and Saturday 11:00am to 23:00pm

Proposed Days and Hours of Alcohol Service: ALL days Mon-Fri 11:00 - 22:00 11:00-23:00 Fri-Sat

Total Square Footage of Business:

Square Footage of Alcohol Serviceable Area:

Restroom Fixtures:	1 *Men*	**Toilets/Urinals:**	1 / 3	**Bathroom Sinks:**	2
	1 *Women*	**Toilets:**	3	**Bathroom Sinks:**	2

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SEP 24 2018
CITY OF MIDLAND
PLANNING DIVISION OFFICE

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): [signature]	Date: 09/21/2018
Applicant (printed): Francisco Gomez	
Property Owner (signature):	Date:
Property Owner (printed) : _____	

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 _____ 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.

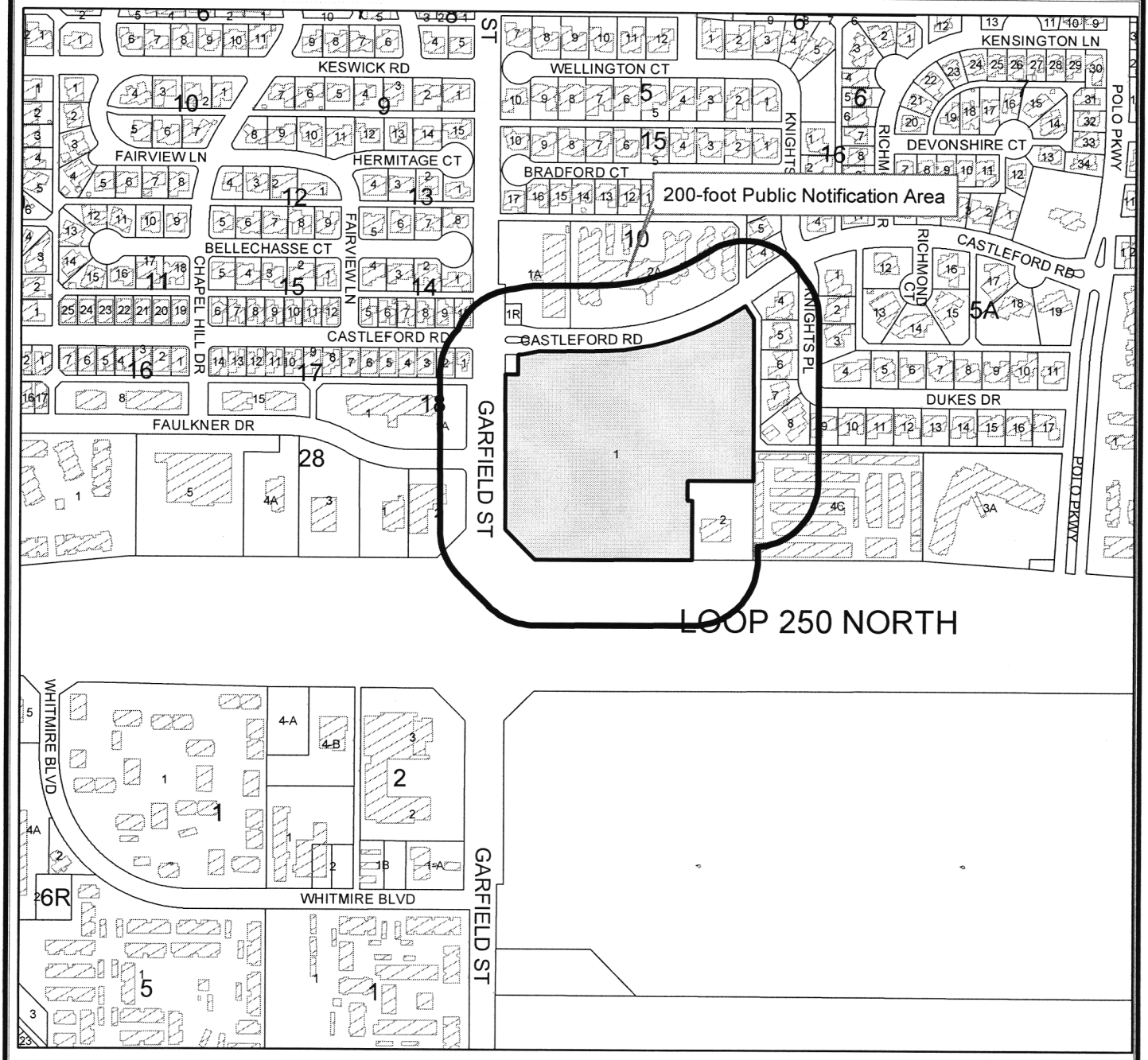
_____
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

****Application will not be considered for scheduling until reviewed by a planner.****

FOR OFFICE USE ONLY		
☑ Property Owner Authorization	☑ Dimensioned Floor Plan	
☑ Application Fee	☑ Site Plan	
Check #_____	☐ Plans in Digital Format (PDF/JPEG)	
Received By: Rolondrea Russell		Date:_____

CITY OF MIDLAND
PLANNING DIVISION OFFICE
SEP 24 2018
RECEIVED

Application will not be considered for scheduling until reviewed by a planner.



LOCATION MAP

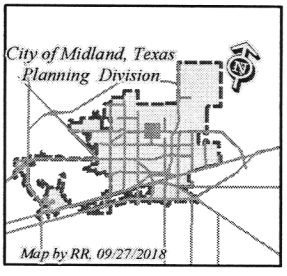
SUP-18-0025 **Scale: 1" = 3000'**

Consider a request for a Specific Use Permit with Term, for the sale of all alcoholic beverages for on-premises consumption, in a restaurant, on a 10, 250 square foot portion Lot 1, Block 8, Polo Park, Section 3, City and County of Midland, Texas.

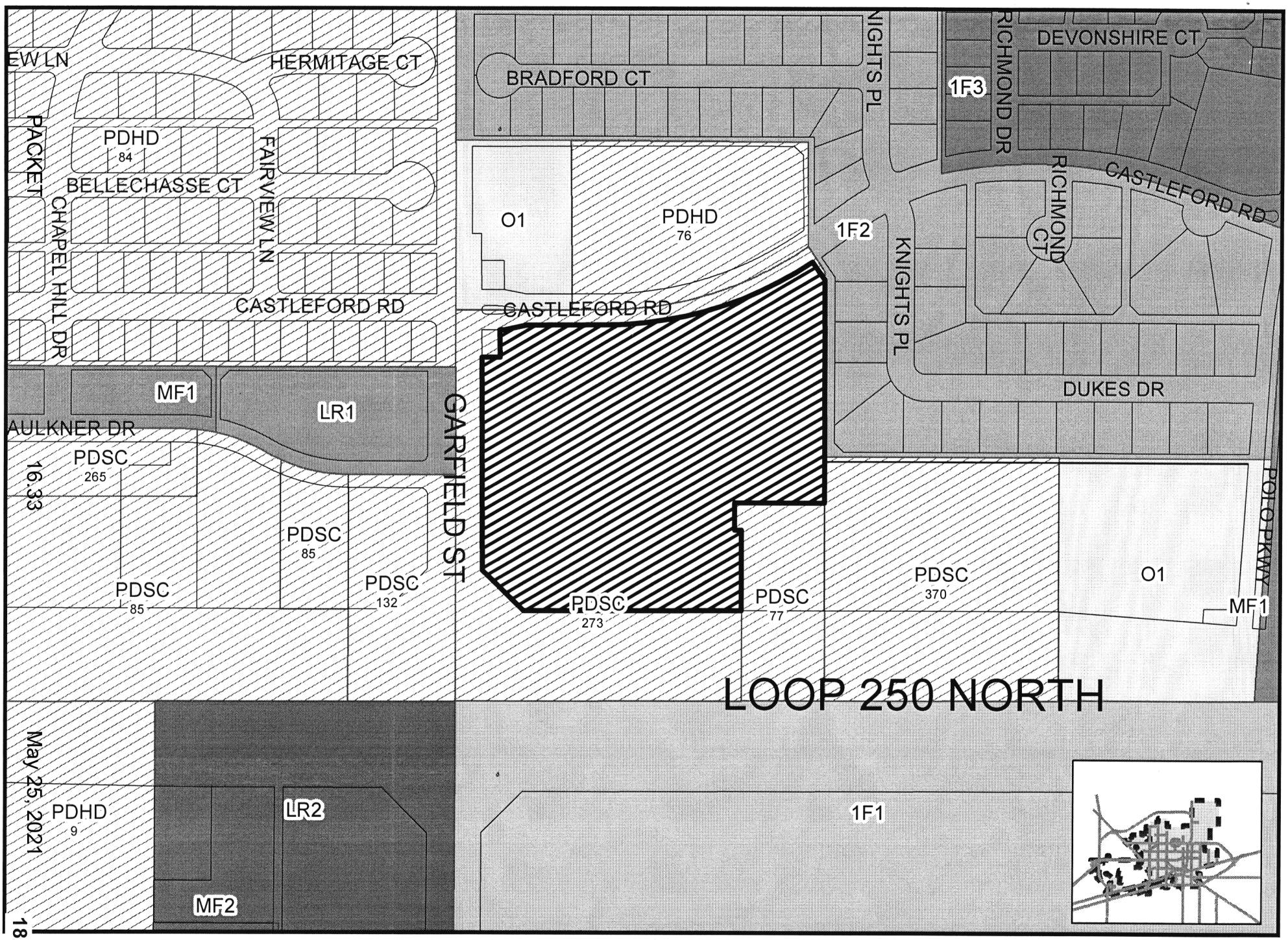
Generally located on the northeast corner of the intersection of North Garfield Street and West Loop 250 North, Council District 1

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



tp By RR, 09/27/2018

SUP-18-0025

Scale: 1" = 2500'

ZONING MAP

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PR

#L 39

ORDINANCE NO. 5864

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 "1F-1", ONE-FAMILY DWELLING DISTRICT, 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 SITE PLAN, ORDINANCES AND OTHER SPECIFICATIONS SET OUT AND REFERRED TO HEREIN; ADDING THE PROPERTY DESCRIBED IN SECTION ONE HEREOF TO THE FIRE DISTRICT; CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; 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; and

WHEREAS, the Council, by Ordinance No. 4531, created a Fire District within the City limits of Midland, Texas, and adopted a Fire District Map, appropriately shaded; and

WHEREAS, because of the less restrictive zoning being established for the property involved in Section One hereof, the Council finds it to be in the public interest to amend the Fire District so as to add said premises thereto;

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, Tesas, are hereby amended insofar as the hereinafter described property is concerned, which is presently zoned "1F-1", One-Family Dwelling District, 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 12.088 acre tract of land out of the SW/4 of Section 3, Block "X", H. P. Hilliard Survey, Midland County, Texas, and being a part of a tract formerly referred to as "St. Ann's Catholic Church Property", and being more particularly described by metes and bounds as follows:

Commencing at the SW corner of said Section 3, and the centerline of North Garfield Street;

Thence N. 15° 20' 52" W., a distance of 311.69 feet along the centerline of North Garfield Street, to a point for reference;

Thence N. 74° 47' 55" E., a distance of 150.00 feet to a point on the north right-of-way line of State Highway Loop 250, said point being the Point of Beginning;

Thence N. 60° 13' 52" W., a distance of 127.54 feet along the NE cut-back for said North Garfield Street to a point on the easterly right-of-way line of North Garfield Street;

Thence N. 15° 20' 52" W., along the easterly right-of-way line of North Garfield Street, a distance of 572.00 feet to a point for a corner;

Thence N. 74° 39' 08" E., a distance of 263.25 feet to the beginning of a curve to the left, having a central angle of 34° 29' 44", and a radius of 800.00 feet;

Thence along the arc of said curve a distance of 481.65 feet to a point for a corner at the end of said curve;

Thence S. 49° 50' 36" E., a distance of 82.41 feet to a point for a corner;

Thence S. 15° 06' 52" E., a distance of 737.85 feet to a point on the north right-of-way line of the aforementioned State High-Way Loop 250;

Thence S. 74° 53' 08" W., along the north right-of-way of said State Highway Loop 250, a distance of 670.00 feet to the Point of Beginning and containing 12.088 acres of land, more or less.

SECTION TWO. That the property described in Section One hereof shall be subject to the following special conditions and restrictions:

A. That the development and use of the property shall conform to all regulations applicable to an "LR-2", Local Retail District, except as specified otherwise on the attached site plan or in this ordinance.

B. That no building permit shall be issued for any construction on any part of the property involved herein until a detailed site plan for that part of the development thereof has

been reviewed by the Planning and Zoning Commission and reviewed and approved by the City Council, all in accordance with the procedure applicable to a zoning change. Each such detailed site plan, upon final approval, shall automatically become a part of this ordinance and be placed on file in the office of the City Secretary, identified by the number of this ordinance and date adopted.

SECTION THREE. That the Fire District be amended so as to add thereto the premises described in Section One hereof and the Building Inspector is authorized and directed to add to the Fire District Map said premises.

SECTION FOUR. 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 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 City Secretary is hereby authorized and directed to publish the descriptive caption of this ordinance, together with the general penalty provision contained in Section

1-3-1 of the City Code of Midland, Texas, 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 10th day of November, A.D., 1981; and passed to second reading on motion of Councilman Marcum, seconded by Councilman Hatfield, by the following vote:

Councilmen voting "AYE":	Marcum, Hatfield, Davidson, Akins and Thomas
Councilmen voting "NAY":	None

The above and foregoing ordinance was read in full and finally adopted by the following vote upon motion of Councilman Marcum, seconded by Councilman Thomas, on the 24th day of November, A.D., 1981, at a regular meeting of the City Council:

Councilmen voting "AYE":	Marcum, Thomas, Davidson, Akins and Hatfield
Councilmen voting "NAY":	None

PASSED AND APPROVED THIS 24th day of November, A.D., 1981.

G. Thane Akins, Mayor

ATTEST:

J. W. McCullough, City Secretary

APPROVED AS TO FORM:

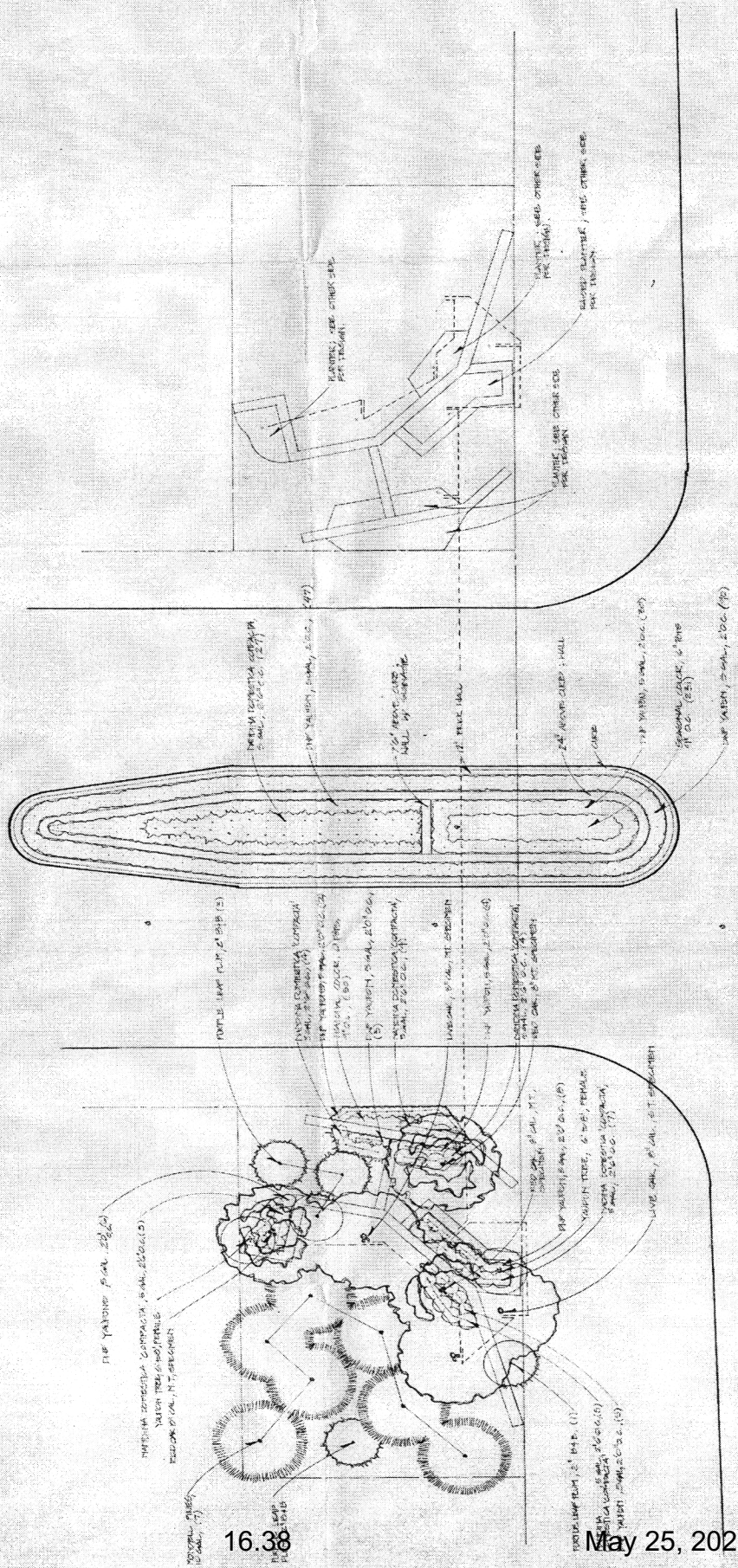
J. M. Nuessle, City Attorney

POLO PARK
MIDLAND, TEXAS

DATE: 1/10/83
SCALE: 1/8" = 1'0"

CASTLEFORD RD ENTRY
LANDSCAPE AND WALL PLAN

BLUE HERON DESIGNS, INC.



ORDINANCE NO. 7771

AN ORDINANCE AMENDING ORDINANCE NO. 7324, WHICH ADOPTED A SITE PLAN FOR A "PLANNED DISTRICT" FOR A SHOPPING CENTER SO AS TO ADOPT AN AMENDED SITE PLAN; 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 the site plan for a "Planned District" for a Shopping Center by amending Ordinance No. 7324; 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 amend the site plan adopted by Ordinance No. 7324;

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

SECTION ONE. That the "Planned District" site plan adopted for the property described in Section One of

Ordinance No. 7324, specifically Lot 1, Block 8, Polo Park, Section III, City and County of Midland, Texas, shall be amended in its entirety as set forth in Exhibit "A", attached hereto and incorporated herein by reference subject to the following conditions:

A. That the maximum sign area for all free standing signs for this development not exceed 640 square feet.

B. That no future free standing sign associated with this development be allowed on the Loop 250 frontage.

C. That the Site Plan (Exhibits A & B) be adhered to in regard to the locations and types of signs proposed for this development.

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 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 8th day of September, A.D., 1998; 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, Simpson and Washburn

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 Brooks, seconded by Council member Cuevas, on the 22nd day of September, A.D., 1998, at a regular meeting of the City Council:

Council members voting "AYE": Brooks, Cuevas, Wood, Brown, Burns, Simpson and Washburn

Council members voting "NAY": None

PASSED AND APPROVED THIS 22nd day of September, A.D., 1998.

Robt. E. Burns, Mayor

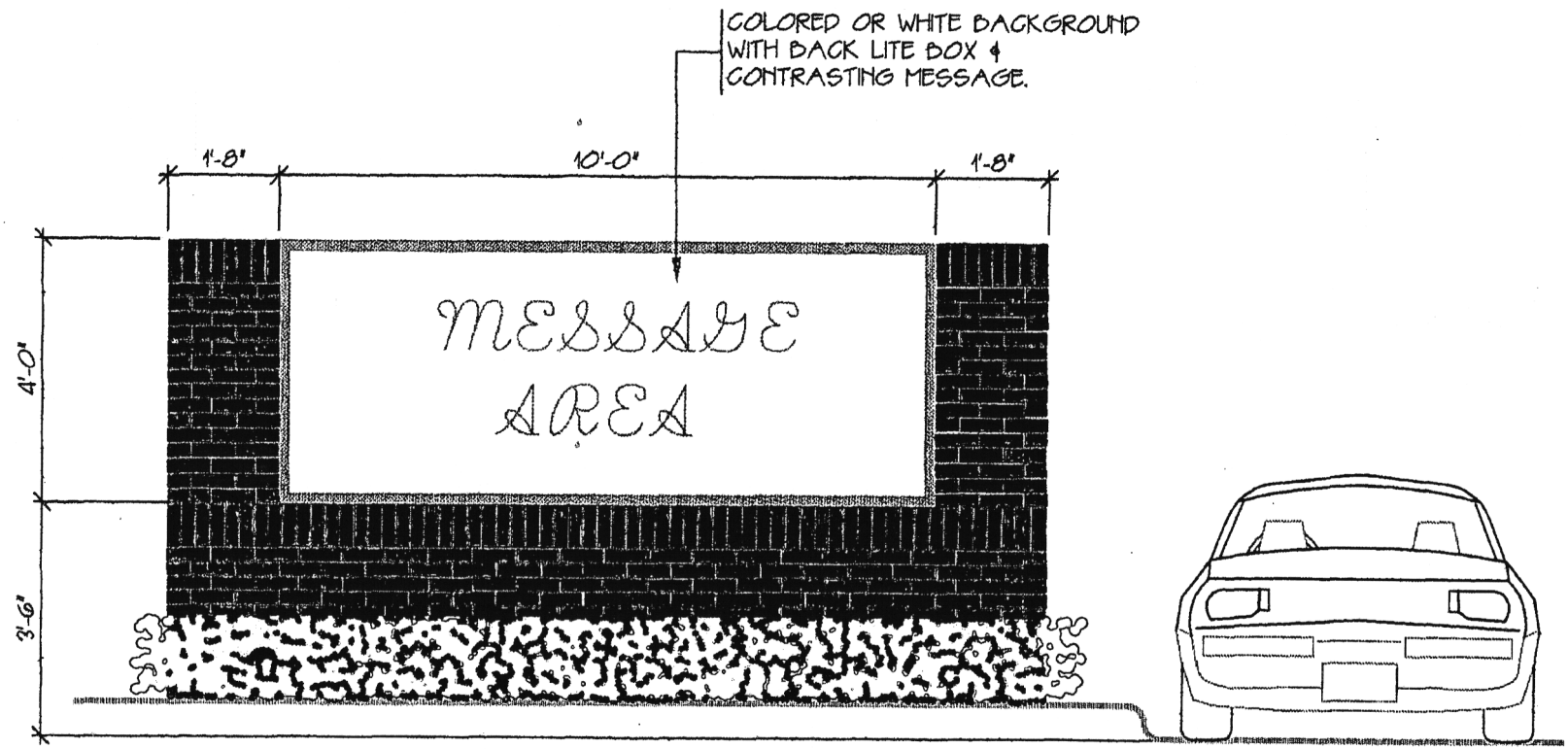
ATTEST:

Kaylah J. McCord, City Secretary

APPROVED AS TO FORM:

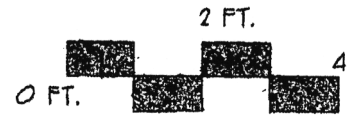
Keith Stretcher, City Attorney

ord\planning\plndist\Z-98-022 Red Oak



MONUMENT SIGN PROPOSAL

COLONADE SHOPPING CENTER
MIDLAND, TEXAS



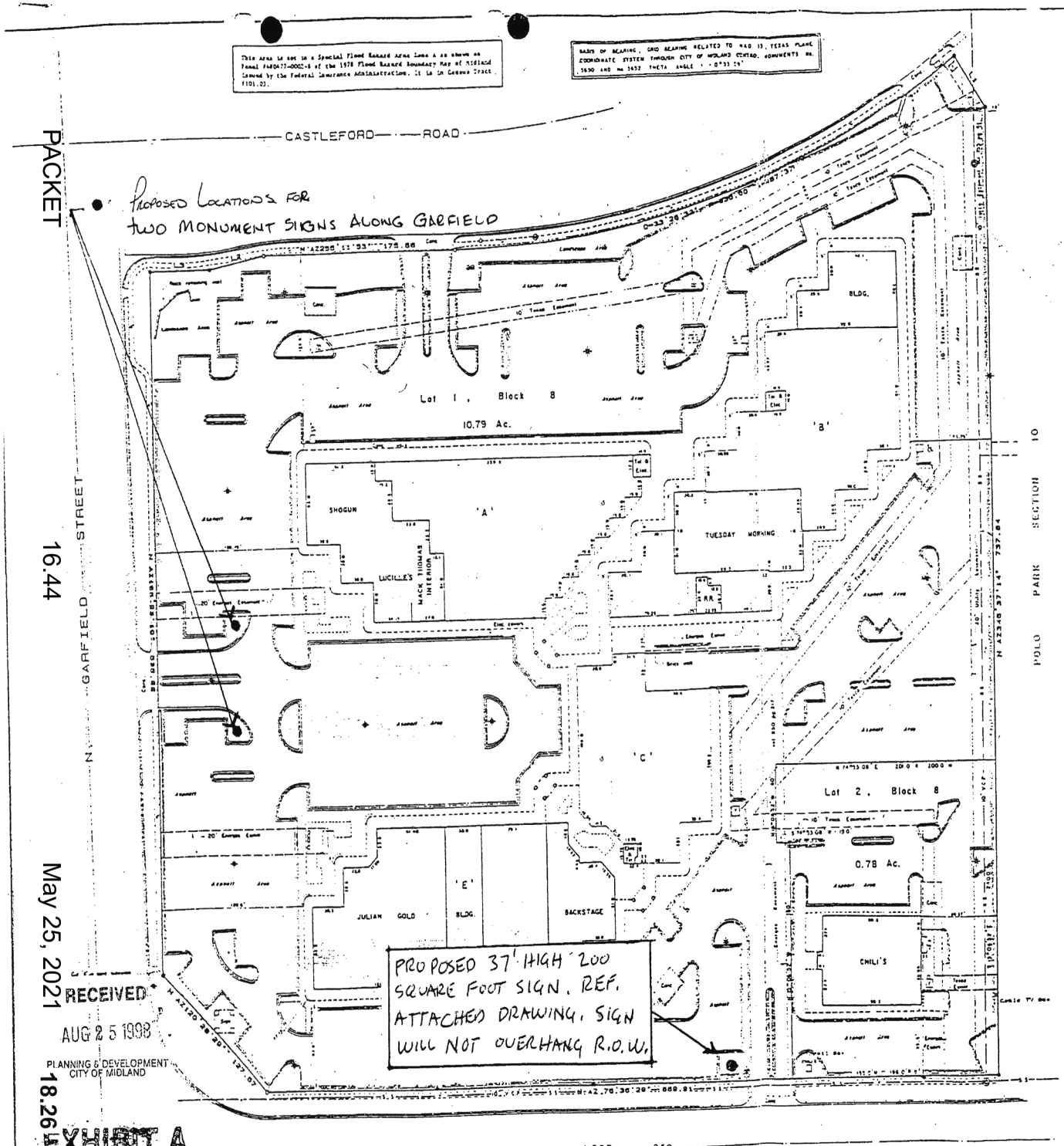
RECEIVED
AUG 25 1998
PLANNING & DEVELOPMENT
CITY OF MIDLAND

VANDERGRIFF GROUP
ARCHITECTS • PLANNERS
312 N. BIG SPRING, SUITE 100 (915) 687-0781 MIDLAND, TEXAS
MEMBER AMERICAN INSTITUTE OF ARCHITECTS

8-11-98

EXHIBIT B CASE NO. Z-98-022

PACKET 16.44 May 25, 2021 18.26



No.	Direction	Length
1	N AZ310°48'02"	47.87
2	N AZ244°19'33"	20.05
3	N AZ255°11'33"	48.86

LEGEND

SURVEYOR'S CERTIFICATE

The undersigned Registered Professional Land Surveyor (the "Surveyor") hereby certifies that (a) this plat of survey and the property description set forth hereon are true and correct and were prepared from an actual on-the-ground survey of the real property (the "Property") shown hereon; (b) such survey was conducted by the Surveyor or under his supervision; (c) all monuments shown hereon actually exist and the location, size and type of material thereof are correctly shown; (d) except as shown hereon, there are no encroachments onto the Property or protrusion therefrom, there are no improvements on the Property, there are no visible easements or right-of-way on the Property, and there are no visible discrepancies, conflicts, shortages in area, or boundary line conflicts; (e) the size, location and type of improvements are as shown hereon, and all are located within the boundaries of the Property and set back from the Property lines the distance indicated; (f) the distance from the nearest intersecting street or road is shown; (g) the Property has access to and from a public roadway; (h) all recorded easements have been correctly platted hereon; and (i) the boundaries, dimensions and other details shown hereon are true and correct.

The Surveyor expressly understands and agrees that (a) this certificate is made for the benefit of Federal Deposit Insurance Corporation as _____ ("FDIC") and for the benefit of Chicago Title Insurance Company ("Title Company") to issue a policy of title insurance insuring the validity and priority of such deed of trust lien; (b) both FDIC and Title Company are entitled to rely on this plat of survey as being true and accurate in all respects and upon this certificate as being true and accurate.

Executed this 1st day of March, 1991.

John Wallis
Registered Professional Land Surveyor No. 3522

CASE NO. Z-98-022

Receivership from: First Gibraltar
Asset Number: 7401-000008-00-1
Asset Name: Colonnade 6 Polo Park
Property Description: NEC Garfield & Loop 250
John Wallis Tax ID#: 75-1928020

Survey Plat of Lots 1 and 2, Block 8, POLO PARK - SECTION III, an addition to the City of Midland, Midland County, Texas: Plat Cab. C, Pg 170

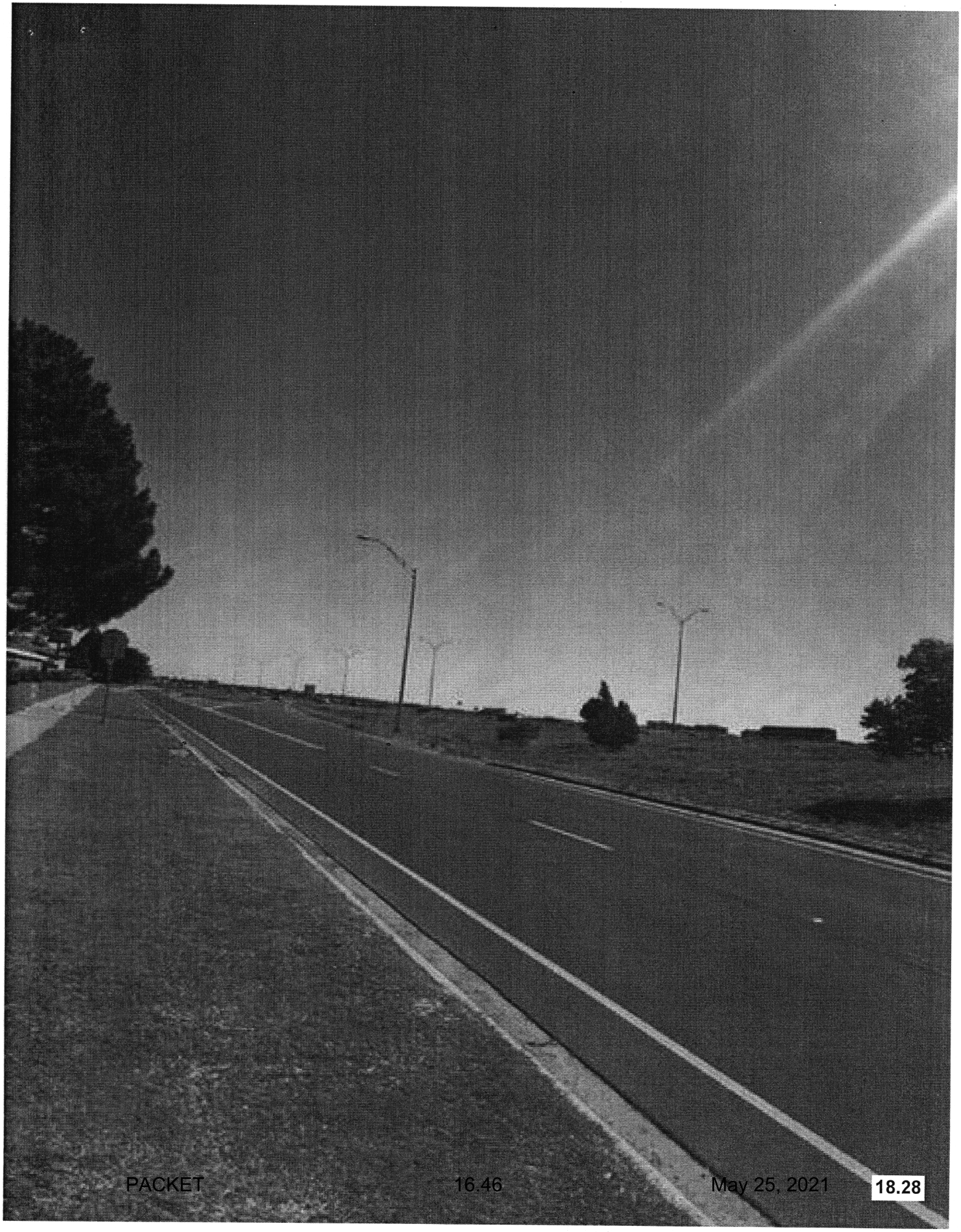
WALLIS LAND SURVEYORS

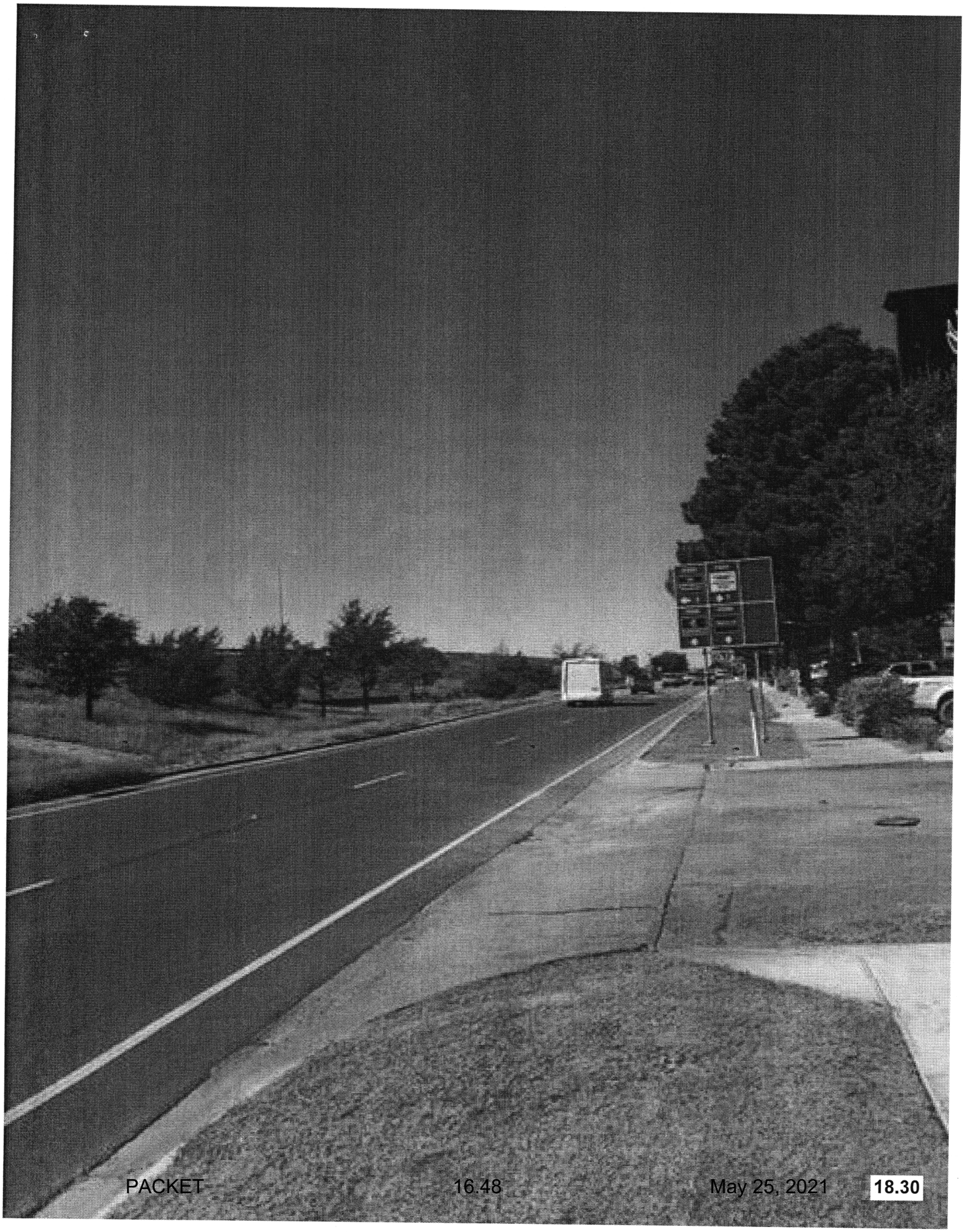
P.O. Box 4111 Midland, Texas 79704-4111 (915) 697-6790

Scale: 1"=60' | Date: Mar. | Drawing Number: 0-03-20-91

RECEIVED
AUG 25 1998
PLANNING & DEVELOPMENT
CITY OF MIDLAND

EXHIBIT A





ORDINANCE NO. 9835

AN ORDINANCE CHANGING THE ZONING USE CLASSIFICATION OF THE PROPERTY DESCRIBED AS A 10,250-SQUARE FOOT PORTION OF LOT 1, BLOCK 8, POLO PARK, SECTION 3, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH GARFIELD STREET AND WEST LOOP 250 NORTH), WHICH IS PRESENTLY ZONED PD, PLANNED DISTRICT FOR A SHOPPING CENTER, BY PERMITTING SAID PROPERTY TO BE USED UNDER A SPECIFIC USE PERMIT WITH TERM FOR THE SALE OF ALL ALCOHOLIC BEVERAGES IN A RESTAURANT FOR ON-PREMISES CONSUMPTION; MAKING SAID PERMIT 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 and the State law with reference to the granting of specific use permits under the zoning ordinance regulations and zoning map, 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 the granting of a Specific Use Permit With Term, set out hereinafter, on the property described in Section One hereof;

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

SECTION ONE. That the zoning use classification of the following described property, which is presently zoned PD, Planned District for a Shopping Center, to-wit:

> A 10,250-square foot portion of Lot 1, Block 8, Polo Park, Section 3, City and County of Midland, Texas;

is hereby changed to permit said property to be used under a Specific Use Permit With Term

for the sale of all alcoholic beverages for on-premises consumption in a restaurant (the "Establishment"), together with the uses permitted in the present PD, Planned District for a Shopping Center.

SECTION TWO. That said property shall be subject to the following conditions and restrictions:

A. That the location of the Establishment shall conform to the site plan, which is attached hereto as Exhibit "A" and incorporated herein.

B. That the area of the Establishment shall be limited to 10,250 contiguous square feet as shown in the floor plan, which is attached hereto as Exhibit "B" and incorporated herein.

C. That the occupancy of the Establishment shall not exceed the maximum occupancy determined by the Building Code and Fire Code.

D. That the sale and on-premises consumption of alcoholic beverages shall conform to all applicable state and local laws.

E. That the days and hours of alcoholic beverage sales and consumption shall be limited to the following:

Monday through Saturday from 11:00 a.m. to 12:00 a.m. (midnight); and Sunday from 12:00 p.m. (noon) to 11:00 p.m.

F. That the Establishment shall meet all requirements of the Fire Department and the Code Administration Division.

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 23rd day of October, A.D., 2018; and passed to second reading on motion of Council member Love, seconded by Council member Robnett, by the following vote:

Council members voting "AYE": Hotchkiss, Love, Sparks, Morales, Dufford, Lacy, Robnett

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 Lacy, seconded by Council member Robnett, on the 6th day of November, A.D., 2018, at a regular meeting of the City Council:

Council members voting "AYE": Hotchkiss, Love, Sparks, Morales, Dufford, Lacy, Robnett

Council members voting "NAY": None

PASSED AND APPROVED THIS 6th day of November, A.D., 2018.

Jerry F. Morales, Mayor

ATTEST:

Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

Frank Salvato, Assistant City Manager

Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

John Ohnemiller, City Attorney

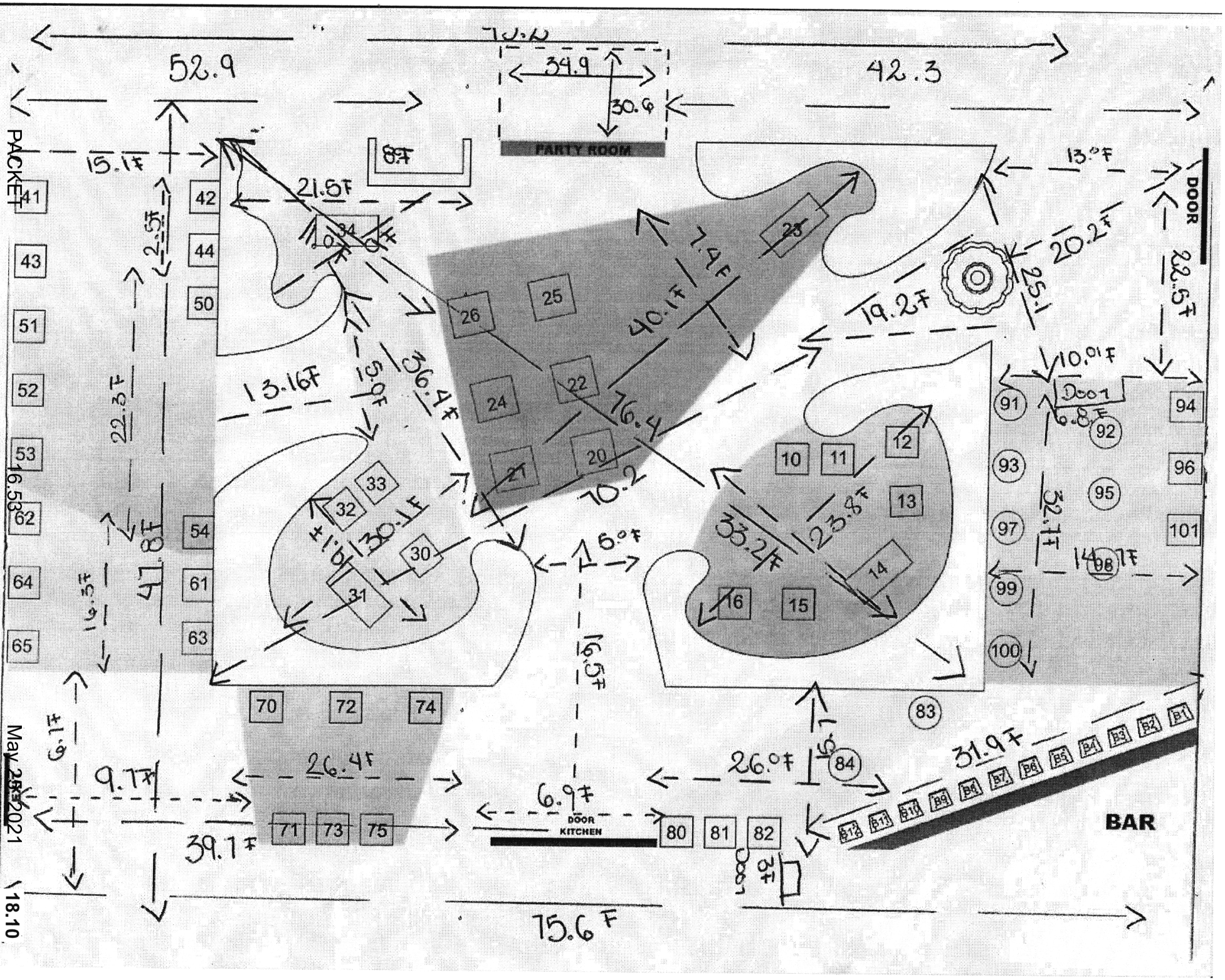
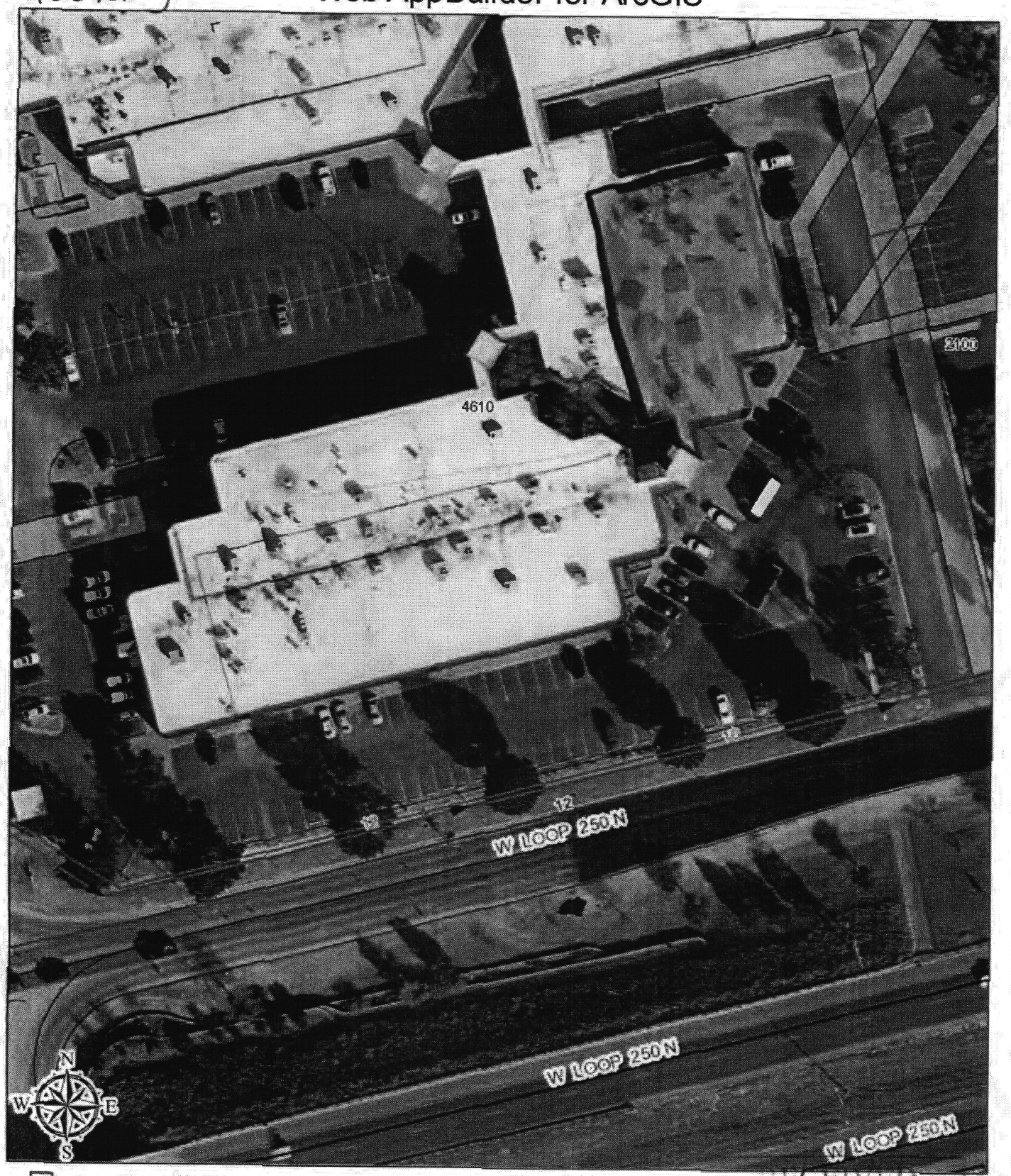


EXHIBIT A

May 28, 2021

18.10



Parcel
School Property
City Limit

Street Centerline_En...
Arterial; Collector
Resid.; County Rd; Frontage; Park
Interstate; State Highway
Lease Road; Misc

1:820
0 0.004 0.008 0.016 Miles

RECEIVED
SEP 24 2018
CITY OF MIDLAND
PLANNING DIVISION OFFICE

ORDINANCE NO. 7771

AN ORDINANCE AMENDING ORDINANCE NO. 7324, WHICH ADOPTED A SITE PLAN FOR A "PLANNED DISTRICT" FOR A SHOPPING CENTER SO AS TO ADOPT AN AMENDED SITE PLAN; 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 the site plan for a "Planned District" for a Shopping Center by amending Ordinance No. 7324; 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 amend the site plan adopted by Ordinance No. 7324;

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

SECTION ONE. That the "Planned District" site plan adopted for the property described in Section One of

Ordinance No. 7324, specifically Lot 1, Block 8, Polo Park, Section III, City and County of Midland, Texas, shall be amended in its entirety as set forth in Exhibit "A", attached hereto and incorporated herein by reference subject to the following conditions:

A. That the maximum sign area for all free standing signs for this development not exceed 640 square feet.

B. That no future free standing sign associated with this development be allowed on the Loop 250 frontage.

C. That the Site Plan (Exhibits A & B) be adhered to in regard to the locations and types of signs proposed for this development.

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 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 8th day of September, A.D., 1998; 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, Simpson and Washburn

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 Brooks, seconded by Council member Cuevas, on the 22nd day of September, A.D., 1998, at a regular meeting of the City Council:

Council members voting "AYE": Brooks, Cuevas, Wood, Brown, Burns, Simpson and Washburn

Council members voting "NAY": None

PASSED AND APPROVED THIS 22nd **day of** September **,**

A.D., 1998.

Robt. E. Burns, Mayor

ATTEST:

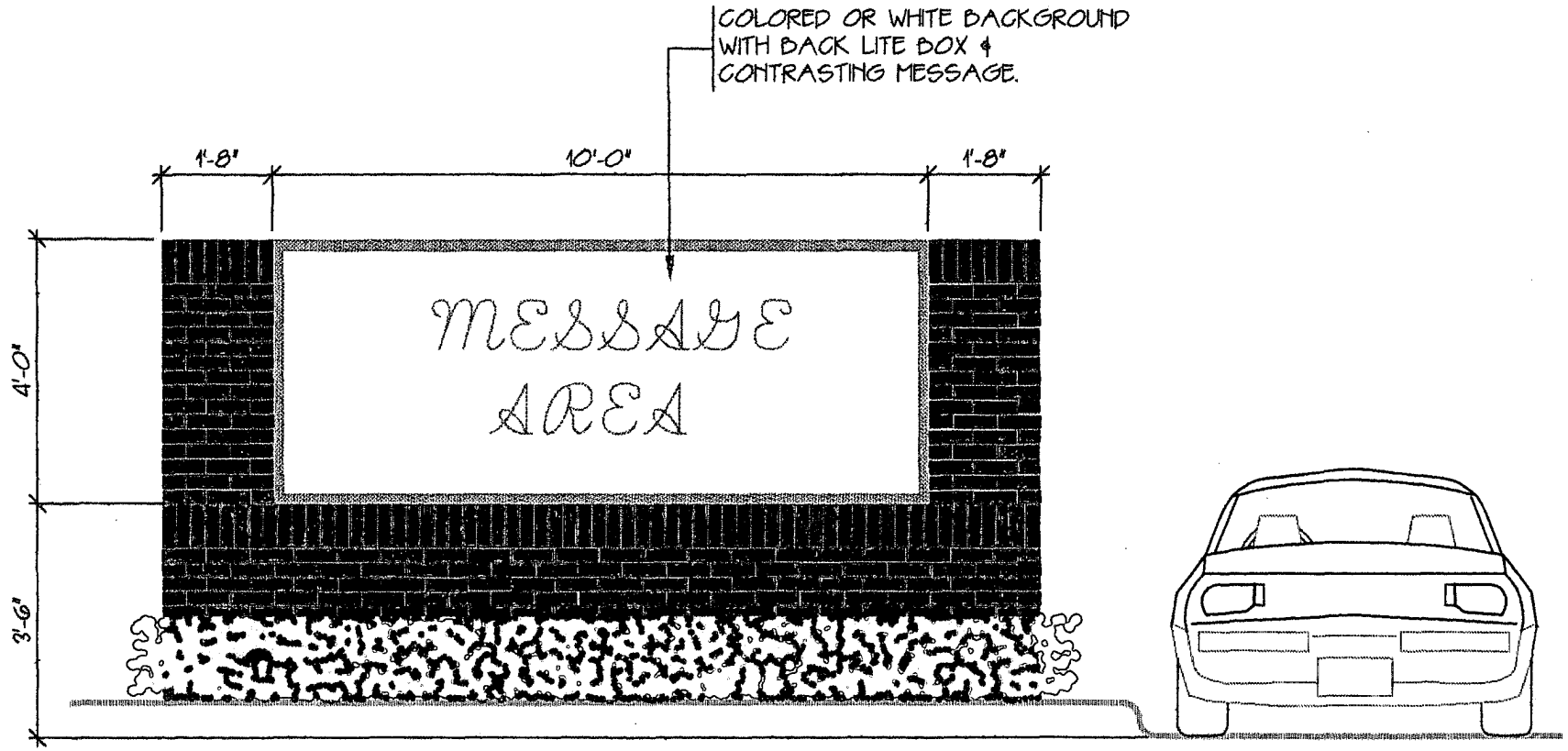
Kaylah J. McCord

Kaylah J. McCord, City Secretary

APPROVED AS TO FORM:

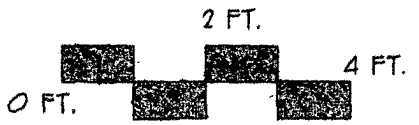
Keith Stretcher, City Attorney

ord\planning\plndist\Z-98-022 Red Oak



MONUMENT SIGN PROPOSAL

COLONADE SHOPPING CENTER
MIDLAND, TEXAS



RECEIVED
AUG 25 1998
PLANNING & DEVELOPMENT
CITY OF MIDLAND

VANDERGRIFF GROUP
ARCHITECTS • PLANNERS
312 N. BIG SPRING, SUITE 100 (915) 687-0781 MIDLAND, TEXAS
MEMBER AMERICAN INSTITUTE OF ARCHITECTS

8-11-98

EXHIBIT B CASE NO. Z-98-022

PACKET

This Area is not in a Special Flood Hazard Area Zone A as shown on Panel #480477-0002-B of the 1978 Flood Hazard Boundary Map of Midland issued by the Federal Insurance Administration. It is in Census Tract #101.03.

BASIS OF BEARING, GRID BEARING RELATED TO NAD 83, TEXAS PLANE COORDINATE SYSTEM THROUGH CITY OF MIDLAND CONTROL MONUMENTS No. 3630 AND No 3632 THETA ANGLE = -0°33'29"

CASTLEFORD ROAD

Proposed Locations for two Monument Signs along Garfield

N AZ266°11'53" 178.56

Lot 1, Block 8
10.79 Ac.

'A'

'B'

'C'

'E'

SHOGUN

LUCILLE'S

MACK THOMAS INTERIOR

TUESDAY MORNING

BLDG.

RR

JULIAN GOLD BLDG.

BACKSTAGE

Lot 2, Block 8
0.78 Ac.

CHILI'S

PROPOSED 37' HIGH 200 SQUARE FOOT SIGN. REF. ATTACHED DRAWING. SIGN WILL NOT OVERHANG R.O.W.

N AZ 70°36'29" 669.91

LOOP 250

GARFIELD STREET

POLO PARK SECTION 10

No.	Direction	Length
1	N AZ310°48'02"	47.87
2	N AZ244°19'33"	50.95
3	N AZ259°11'53"	49.98

LEGEND

- Fnd. 1/2" iron rod
- Set 1/2" iron rod
- SWBT / Tel. vault
- SWBT manhole
- Sanitary Sewer manhole
- Handicap ramp
- Concrete walk
- Concrete curb / valley
- Texas Transformer box
- Gas Marker
- SWBT Telephone pedestal
- Texas Electric marker
- Cable T.V. pedestal
- Texas Pedestal
- Power pole w/ guy wire
- Light pole
- Water meter
- Traffic sign

SURVEYOR'S CERTIFICATE

The undersigned Registered Professional Land Surveyor (the "Surveyor") hereby certifies that (a) this plat of survey and the property description set forth hereon are true and correct and were prepared from an actual on-the-ground survey of the real property (the "Property") shown hereon; (b) such survey was conducted by the Surveyor or under his supervision; (c) all monuments shown hereon actually exist and the location, size and type of material thereof are correctly shown; (d) except as shown hereon, there are no encroachments onto the Property or projection therefrom, there are no improvements on the Property; there are no visible easements or right-of-way on the Property; and there are no visible discrepancies, conflicts, shortages in area, or boundary line conflicts; (e) the size, location and type of improvements are as shown hereon, and all are located within the boundaries of the Property and set back from the Property lines the distance indicated; (f) the distance from the nearest intersecting street or road is shown; (g) the Property has access to and from a public roadway; (h) all recorded easements have been correctly plotted hereon; and (i) the boundaries, dimensions and other details shown hereon are true and correct.

The Surveyor expressly understands and agrees that (a) this certificate is made for the benefit of Federal Deposit Insurance Corporation as _____ ("FDIC") and for the benefit of Chicago Title Insurance Company ("Title Company") to issue a policy of title insurance insuring the validity and priority of such deed of trust lien; (b) both FDIC and Title Company are entitled to rely on this plat of survey as being true and accurate in all respects and upon this certificate as being true and accurate.

Executed this 21st day of March, 1991.

John Wallis

Registered Professional Land Surveyor No. 1572

CASE NO. Z-98-022

Survey Plat of Lots 1 and 2, Block 8, POLO PARK - SECTION III, an addition to the City of Midland, Midland County, Texas; Plat Cab. C Pg 170

WALLIS LAND SURVEYORS

P.O. Box 4111
Midland, Texas 79704-4111
(915) 697-6790

Scale	Date Rev.	Drawing number
1" = 100'		D-03-20-91
Date: 3-20-91		

Receivership Name: First Gibralter
Asset Number: 1602-003008-00-1
Asset Name: Colonnade @ Polo Park
Property Description: NEC Garfield & Loop 250
John Wallis Tax ID#: 75-1918020

RECEIVED
AUG 25 1998
PLANNING & DEVELOPMENT
CITY OF MIDLAND

May 25, 2021

16.60

EXHIBIT A

City Council Meeting

Item Number: 17

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Elizabeth Shaughnessy, Senior Planner

Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 27.05-ACRE TRACT OF LAND OUT OF SECTION 7, BLOCK 38, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM SF-3, SINGLE-FAMILY DWELLING DISTRICT TO PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT (GENERALLY LOCATED ON THE SOUTH SIDE OF OCCIDENTAL PARKWAY, APPROXIMATELY 1,335 FEET EAST OF CARRIAGE ROAD); 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 (DEVELOPMENT SERVICES)

Purpose:

The applicant, Betenbough Homes is requesting approval of a zone change to allow for the development of smaller, more affordable homes.

Recommended City Council Action:

Deny

Fiscal Impact:

This proposal does not have a significant financial impact to the city.

Surrounding Zoning and Land Use:

The properties to the north and east are zoned AE, Agricultural Estate District, and the location of vacant land; The property to the south is zoned SF-3, Single Family Dwelling District, and the location of vacant land. The property to the west is zoned PD, Planned Development District and

the location of vacant land.

Discussion:

The applicant, Betenbough Homes, is requesting approval of a zone change for the development of smaller, more affordable homes. This proposed subdivision will have a total of one hundred and twenty-one (121) residential lots and one (1) common area. The current zoning of this property is SF-3, Single-Family Dwelling District, which requires a minimum lot area of 5,500 square feet; interior lots to measure 50'x100' and corner lots to measure 55'x100'. In addition, a maximum lot area allowed coverage of 65%.

With this zone change, the developer will be able to plat 78 lots with widths ranging from 37.14 - 45 feet, and depths ranging from 65 – 85 feet. The lot areas will range from 4,145 to 5,192 square feet, with a majority of the lots with a square footage of 4,250. The breakdown that the developer has provided as average lot sizes are as followed:

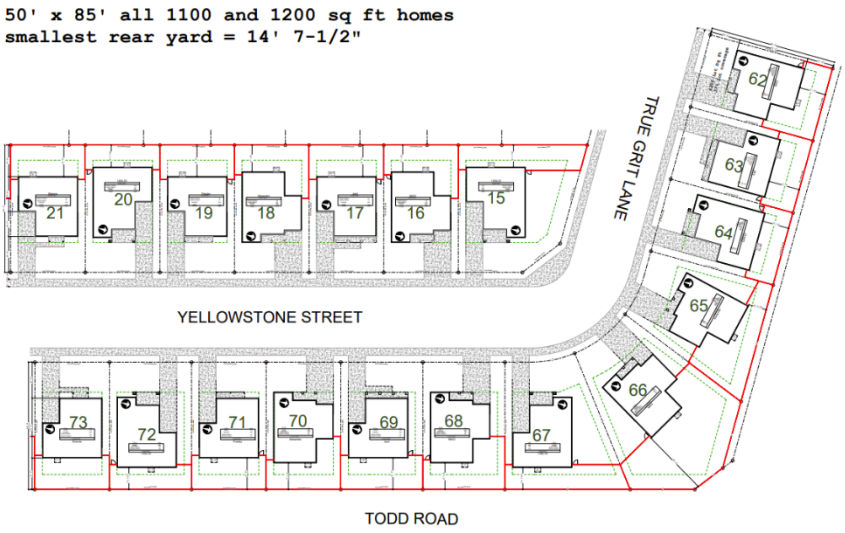
- 50' x 85' = 57 (approx. 4,250 sqft)
- 45' x 115' = 21 (approx. 5,175 sqft)
- 50' x 115' = 42 (approx. 5,750 sqft)

In addition, the developer has provided some data in retrospect to the smaller rear yard dimensions (14' 7-1/2").

Chart 1

Lot Size	Least Lot Ft^2	Product	Smallest Rear Yard Depth	Avg Lot Coverage
50' x 85'	4145	1100 – 1200 Ft^2	14' 7-1/2"	38%
45' x 115'	5175	1300 - 1600 Ft^2	25'	39%
50' x 115'	5500	1300 – 2000 Ft^2	25'	44%

And a diagram laying out some of the smallest rear yards.



The appropriate setbacks and maximum height of future development must meet the regulations as described in Section 5.04 Residential Zoning District Dimensional Regulations chart. For an SF-3, Single Family Dwelling District the minimum front yard setback is of 20'; minimum interior lot side yard setback is of 5' and corner lot yard setback is of 10'; and a minimum rear yard lot seatback where no alley adjoins the rear lot line is 10' for a 1-story structure.

This proposed zone change has been circulated to and reviewed by respective City departments and their comments, conditions, and requirements are as follows:

Engineering: (Approved)

No objection to zone change.

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.

Fire: (Approved)

No objections.

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 Compliance: (Approved)

No Oil or Gas wells or tank battery identified within 500 ft. permitted well radius or in the 135 ft.

non-permitted well radius of location on plat.

Transportation: (Approved with Conditions)

Street layout may need to be adjusted as per discussion with the Applicant's engineer regarding the plat.

Provide 20 ft x 20 ft intersection corner clips at property corners adjacent to all public street intersections, including at Todd Dr.

No objection to zoning variances.

Planning:

This request overall does not comply with the Tall City Tomorrow Comprehensive Plan.
The proposed development does satisfy one aspect of the comprehensive plan, however they ignore several others which are equally if not more important.

Principle 4 of Chapter 3 of the Tall City Tomorrow Plan seeks to increase the diversity of the housing stock in Midland specifically including the need of smaller lot homes. Principle 5 of the same chapter, however, requests planning for community amenities such as parks and open space to support “community activity, personal interaction a sense of place, and ultimately a sense of ownership in the community.” Additionally, Principle 8 of the same chapter requests that land use policies and regulations support the creation of more balanced neighborhoods, which include “a variety of housing options, access to open space, and contain activity centers such as parks…” The applicant is not proposing to provide recreation amenities throughout the subdivision, meaning that the yards of these properties will serve this purpose for residents. With the reduced lot sizes, each property would have approximately 30% smaller yards when compared to the same size house placed on a standard SF-3 sized lot. This is a significant reduction in open space for the residents, especially due to the lack of proposed community amenities in this subdivision.

Chapter 9 of the Tall City Tomorrow Plan also seeks to keep us aware of the need for parks and recreational development as Midland continues to expand. Goal 1 of Chapter 9 seeks to provide park facilities accessible to the growing population, nothing that “Midland’s historic trend has been to focus on the need for housing and commercial needs during growth periods without the consideration of additional open space needs.” Allowing this development to continue as it is planned would fall directly into this trend and make it difficult to supply this community with the needed recreation amenities in the future. Chapter 9 also highlights that creating park space in the area outside of Loop 250 should be a priority as developments continue. Ignoring this opportunity to create park space.

In conclusion, this project does not represent a true planned district as it lacks an overall scheme of a diverse mix use of residential development and no appreciable amenities for the planned district. In addition, due to the reduced lot size, lot coverage would be increased compared to putting the small house on an appropriately sized SF-3 lot.

Therefore, staff recommends denial of the Zone Change from SF-3, Single Family Dwelling District to PD, Planned Development District for a Housing Development. However, if is approved, staff recommends that it should be subject to conditions A through D.

Conditions:

A. **That the use and development of this property shall conform to the regulations of the SF-3, Single-Family Dwelling District, except as stated below.**

B. **That this property shall significantly conform to the site plan, attached hereto and incorporated herein as Exhibit B.**

C. **That the minimum lot width shall be 37.14 feet.**

D. **That the minimum lot area shall be 4,145 square feet.**

Letters of Objection:

As of April 29, 2021, staff has not received any letters of objection.

Attachments:

Application
Site Plan (Exhibit A)
Diagram (Exhibit B)
Letter of Developer
Maps

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 27.05-ACRE TRACT OF LAND OUT OF SECTION 7, BLOCK 38, T-1-S, T&P RR CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS, FROM SF-3, SINGLE-FAMILY DWELLING DISTRICT TO PD, PLANNED DEVELOPMENT DISTRICT FOR A HOUSING DEVELOPMENT (GENERALLY LOCATED ON THE SOUTH SIDE OF OCCIDENTAL PARKWAY, APPROXIMATELY 1,335 FEET EAST OF CARRIAGE ROAD); 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 a 27.05-acre tract of land out of Section 7, Block 38, T-1-S, T&P RR Co. Survey, City and County of Midland, Texas, said tract being more specifically described by metes and bounds in Exhibit "A", which is attached hereto and incorporated herein (the "Property") to PD, Planned Development District for a Housing Development 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 SF-3, Single-Family Dwelling District to PD, Planned Development District for a Housing Development.

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

SF-3, Single-Family Dwelling 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 Property shall significantly conform to the site plan attached hereto as Exhibit "A".

B. That the minimum lot width shall be 37.14 feet.

C. That the minimum lot area shall be 4,145 square feet.

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., 2021; 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., 2021, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2021.

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

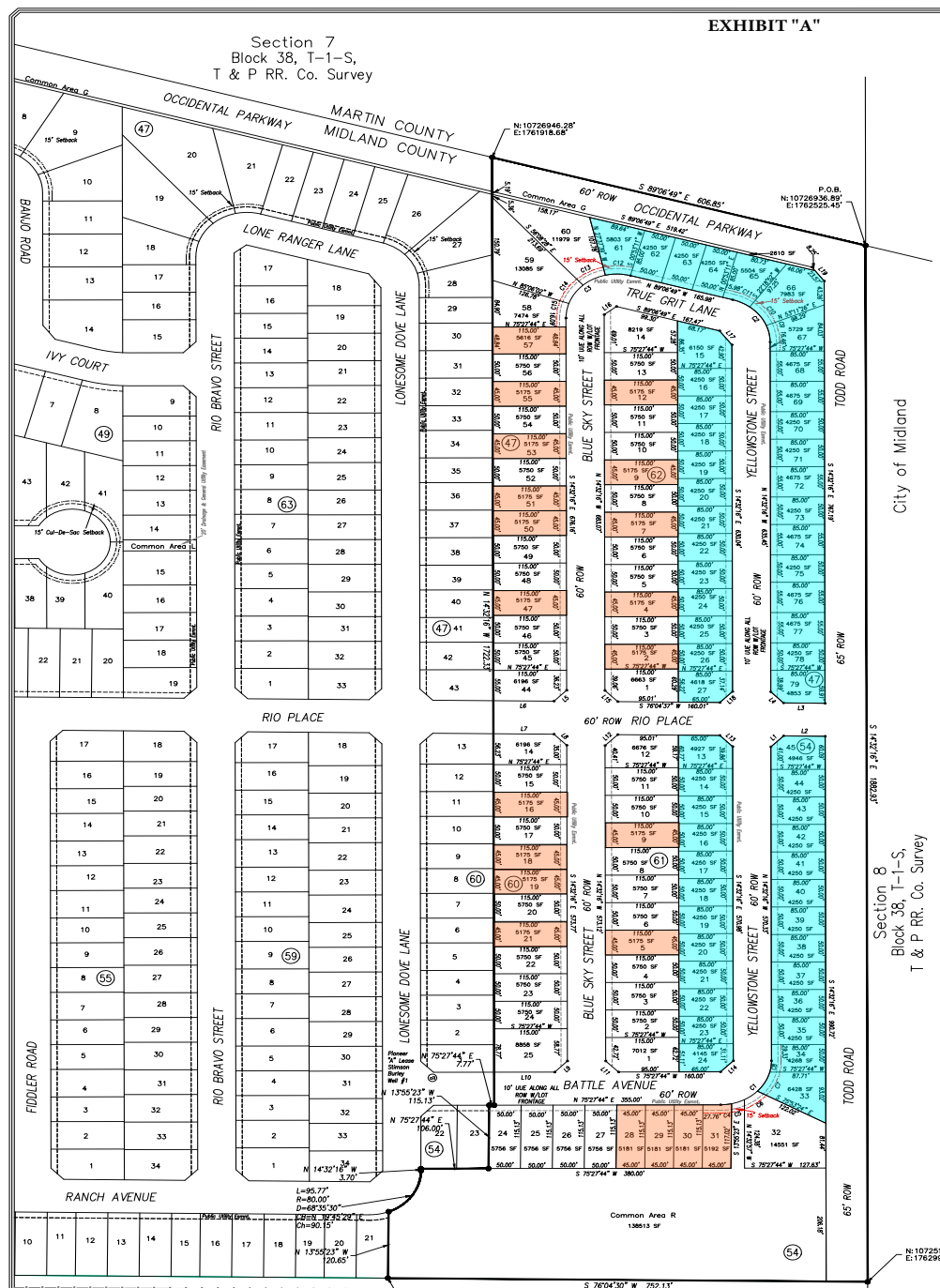
APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

EXHIBIT "A"

LONE STAR TRAILS II, SECTION 13

BEING A 27.05 ACRE TRACT OF LAND IN SECTION 7, BLOCK 38, T-1-S, T. & P. RR. CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS



Legal Description for Lone Star Trails II, Section 13.

Being a 27.05 Acre Tract of Land in a 354.08 Acre Tract recorded in Document No. 2017-36824, Official Public Records, located in Section 7, Block 38, T-1-S, T&P RR Co Survey, City of Midland, Midland County, Texas.

Boundary more fully described by metes and bounds as follows:

Beginning at (N:10726936.89', E:1762525.45') a ½" iron rod found in the north line of said 354.08 acre tract, the Midland-Martin County Line, the east line of said Section 7, and the west line of Section 8, said Block 38, T-1-S, for the northeast corner of this tract, whence a ½" iron rod found at the southeast corner of said Section 7 bears South 14°32'16" East, a distance of 2182.80 feet;

Thence South 14°32'16" East with the east line of said Section 7 and the west line of said Section 8, a distance of 1882.93 feet to a ½" iron rod found for the southeast corner of this tract;

Thence through said 354.08 acre tract the following nine (9) courses and distances:

1. South 76°04'30" West, a distance of 752.13 feet to a ½" iron rod found for the southwest corner of this tract;
2. North 13°55'23" West, a distance of 120.65 feet to a ½" iron rod found for a point of curvature in the west line of this tract;
3. With a curve to the left in a northeasterly direction, said curve having a radius length of 80.00 feet, an arc length of 95.77 feet, a delta angle of 68°35'30", and a chord length of 90.15 feet bearing North 19°45'29" East to a ½" iron rod found for a point of tangency in the west line of this tract;
4. North 14°32'16" West, a distance of 3.70 feet to a ½" iron rod found for a point of deflection in the west line of this tract;
5. North 75°27'44" East, a distance of 106.00 feet to a ½" iron rod found for a point of deflection in the west line of this tract;
6. North 13°55'23" West, a distance of 115.13 feet to a ½" iron rod found for a point of deflection in the west line of this tract;
7. North 75°27'44" East, a distance of 7.77 feet to a ½" iron rod found for a point of deflection in the west line of this tract;
8. North 14°32'16" West, a distance of 1722.33 feet to a ½" iron rod found in the north line of said 354.08 acre tract and the Midland-Martin County Line for the northwest corner of this tract;

Thence South 89°06'49" East, with the north line of said 354.08 acre tract and the Midland-Martin County Line, a distance of 606.85 feet to a to the Point of Beginning.

Containing 27.05 surface acres of land.

Bearings, distances, and coordinates are based on the Texas Coordinate System, NAD 1983, Central Zone (CORS).

Betenbough PD

50' X 85' = 57
45' X 115' = 21
50' X 115' = 42

Total: 120

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	80.00'	125.66'	113.14'	N 30°27'44" E	90°00'00"
C2	80.00'	104.13'	96.93'	N 51°49'33" W	74°34'33"
C3	80.00'	147.20'	127.30'	S 38°10'27" W	105°25'27"
C4	80.00'	17.46'	17.42'	N 69°11'54" E	12°30'40"
C5	80.00'	21.45'	21.39'	N 58°19'08" E	15°21'50"
C6	80.00'	25.90'	25.79'	N 39°21'17" E	18°33'11"
C7	80.00'	40.00'	39.58'	N 14°45'35" E	28°38'52"
C8	80.00'	20.91'	20.85'	N 07°03'04" W	14°58'29"
C9	80.00'	31.10'	30.90'	N 25°40'25" W	22°16'18"
C10	80.00'	43.11'	42.59'	N 52°14'51" W	30°52'34"
C11	80.00'	39.92'	39.75'	N 78°23'58" W	21°20'45"
C12	80.00'	39.81'	39.40'	S 72°19'48" W	28°30'10"
C13	80.00'	39.81'	39.40'	S 43°49'37" W	28°30'09"
C14	80.00'	40.54'	40.01'	S 13°22'45" W	29°02'43"
C15	80.00'	127.19'	27.01'	S 04°49'09" E	19°26'15"

LINE	BEARING	DISTANCE
L1	N 30°48'11" E	89.10'
L2	N 76°04'37" E	65.00'
L3	S 76°04'37" W	65.00'
L4	N 59°13'49" W	28.44'
L5	N 30°46'11" E	28.13'
L6	S 76°04'37" W	90.00'
L7	N 76°04'37" E	90.00'
L8	S 59°13'49" E	28.44'
L9	S 30°27'44" W	28.28'
L10	S 75°27'44" W	95.00'
L11	N 59°35'16" W	28.28'
L12	N 30°46'11" E	28.13'
L13	S 59°13'49" E	28.44'
L14	S 30°27'44" W	28.28'
L15	N 59°13'49" W	28.44'
L16	N 30°10'27" E	44.62'
L17	S 51°49'33" E	51.96'
L18	S 30°46'11" W	28.13'
L19	S 51°49'33" E	51.82'

NOTES:

1. SELLING A PORTION OF THIS ADDITION BY METES AND BOUNDS MAY BE A VIOLATION OF CITY ORDINANCE AND STATE LAW AND SUBJECT TO FINES AND WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
2. APPROVAL OF A SITE PLAN BY THE CITY OF MIDLAND MAY BE REQUIRED BEFORE THE DEVELOPMENT OF ANY LOT AND BEFORE A BUILDING PERMIT MAY BE OBTAINED.

FLOOD NOTE:
Special Flood Hazard Areas as graphically scaled from FEMA Map No. 48329C0100F, Dated September 16, 2005, Prepared for Midland County, Texas are shown hereon.

PLANNING NOTE:
Initial Impact Fees will be assessed during the final platting process. Implementation and collection of impact fees will take place during the building permit process. Additional impact fees or increases in fees may not be assessed against the tract unless the number of service units to be developed on the tract increases.

Bearings shown on this survey are relative to the Texas Coordinate Systems, NAD 1983, Central Zone (CORS).

Professional Land Surveying & Mapping
Aaron Burrell Land Surveyors, LLC
415 W. Wall St., Suite 204
Midland, Texas 79701
432-848-4439
P.O. Box 81041
Midland, Texas 79708
aabsurveyors.com
TBPLS Firm No. 10194212

Page 1 of 1
LSTII-13 Prelim

UTILITY COMPANY'S CERTIFICATE

THIS PLAT HAS BEEN CHECKED FOR ACCESSIBILITY OF UTILITIES.

SIGNED: _____ ATMOS ENERGY PRINT NAME

SIGNED: _____ ONCOR ELECTRIC DELIVERY PRINT NAME

SIGNED: _____ AT&T TEXAS PRINT NAME

SIGNED: _____ SUDDENLINK COMMUNICATIONS PRINT NAME

SIGNED: _____ GRANDE COMMUNICATIONS PRINT NAME

PACKET

17.10

Scale 1" = 100'

LEGEND
● Fd ½" Iron Rod
○ Set ½" Iron Rod
------ Utility Easement

OWNERS' CERTIFICATE:

THE STATE OF TEXAS
COUNTY OF MIDLAND

WHEREAS, I, _____, Agent of Betenbough Homes Inc. as the recorded owner of a 27.05 Acre Tract of land, out of a 354.08 Acre Tract of Land, as recorded in Instrument No. 2017-36824, Official Public Records, Midland County, Texas, located in Section 7, Block 38, T-1-S, T. & P. RR. Co. Survey, Midland County, Texas, and more particularly shown and described hereon:

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT, I, _____, Agent of Betenbough Homes Inc., do hereby adopt this plat designating the herein above described property as "LONE STAR TRAILS II, SECTION 13" an Addition to the City of Midland, Midland County, Texas, and do hereby dedicate to the public use forever the streets, alleys, and easements shown thereon.

WITNESS our hands at Midland, Texas, this the_____day of_____, 2021.

_____
By: _____
Agent of Betenbough Homes Inc.

ACKNOWLEDGMENT
THE STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared _____, Agent of Betenbough Homes Inc., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act as owner, and that he executed the same as the act for the purpose and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office this _____day of _____, 2021.

_____
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

CERTIFICATE OF APPROVAL

This is to certify that the above and foregoing plat of "LONE STAR TRAILS II, SECTION 13" was approved by proper action of the City Planning and Zoning Commission of the City of Midland, on this_____day of _____, 2021.

SIGNED:_____

PRINT:_____
Chairman

ATTEST:_____

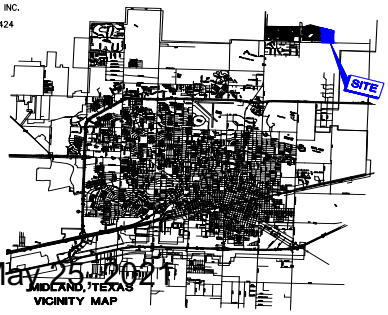
PRINT:_____
Secretary

THAT I, AARON S. BURRELL, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE STATE OF TEXAS, DO HEREBY CERTIFY THAT I PREPARED THIS PLAT FROM AN ACTUAL AND ACCURATE SURVEY OF THE LAND AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY PERSONAL SUPERVISION, IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF MIDLAND, TEXAS

23 March 2021
DATE

AARON SCOTT BURRELL TX RPLS 5689

OWNER:
BETENBOUGH HOMES INC.
6305 82nd STREET
LUBBOCK, TEXAS 79424
806-797-9494



PLAT FILED FOR RECORD
MIDLAND COUNTY, TEXAS
NO._____CABINET_____
DATE_____PAGE_____

May 25, 2021

PRELIMINARY PLAT
LONE STAR TRAILS II, SECTION 13

MIDLAND Planning Division

Zone Change/Planned District Amendment/Site Plan Approval

Project Number: 2-21-0231

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)*			
Printed Name: Ronnie Wallace, Betenbough Homes		Phone (806) 412 - 6611 Email Ronniew@betenbough.com	
Address 6305 82nd Street	City Lubbock	State Texas	Zip 79424

Property Owner			
Printed Name: Betenbough Homes		Phone (806) 412 - 6611 Email Ronniew@betenbough.com	
Address 6305 82nd Street	City Lubbock	State Texas	Zip 79424

Representative *(if different from Applicant or Property Owner)*			
Firm: N / A Printed Name:		Phone ( ) Email N / A	
Address	City	State	Zip

Street Address: See Attached Site Plan

Legal Description
Lot: See Attached Plat Block: See Attached Plat Subdivision: 27.32 Acre Tract In Section 7, Block 38, T-1-S, T. & P. RR. Co. Survey, City and County of Midland, Texas (Lone Star Trails)

Current Zoning: **SF-3**

Proposed Zone: **PD (Planned District)**
(List by tracts if more than one district is requested)

Reason for Zone Change Request Request to build affordable, smaller homes on lots less than 5,500 Total Square Feet and therefore requesting PD (Planned District) Zone designation. (See attached Site Plan)

Present Use of Property: Vacant

Proposed Use of Property: Single Family Homes

How would this zone change affect the public health, safety and welfare?
Our smaller homes provide an additional, affordable option for new homeowners in Midland.

Describe how conditions affecting the property have changed since present zoning designation: We want to meet the needs of future homebuyers in Midland.

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):	Date: March 24th, 2021
Applicant (printed): Ronnie Wallace, Land Planner, Betenbough Homes	
Property Owner (signature): Ronnie Wallace (on behalf of Betenbough Homes)	Date: March 24th, 2021
Property Owner (printed) : Ronnie Wallace, Land Planner, Betenbough Homes	

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.

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

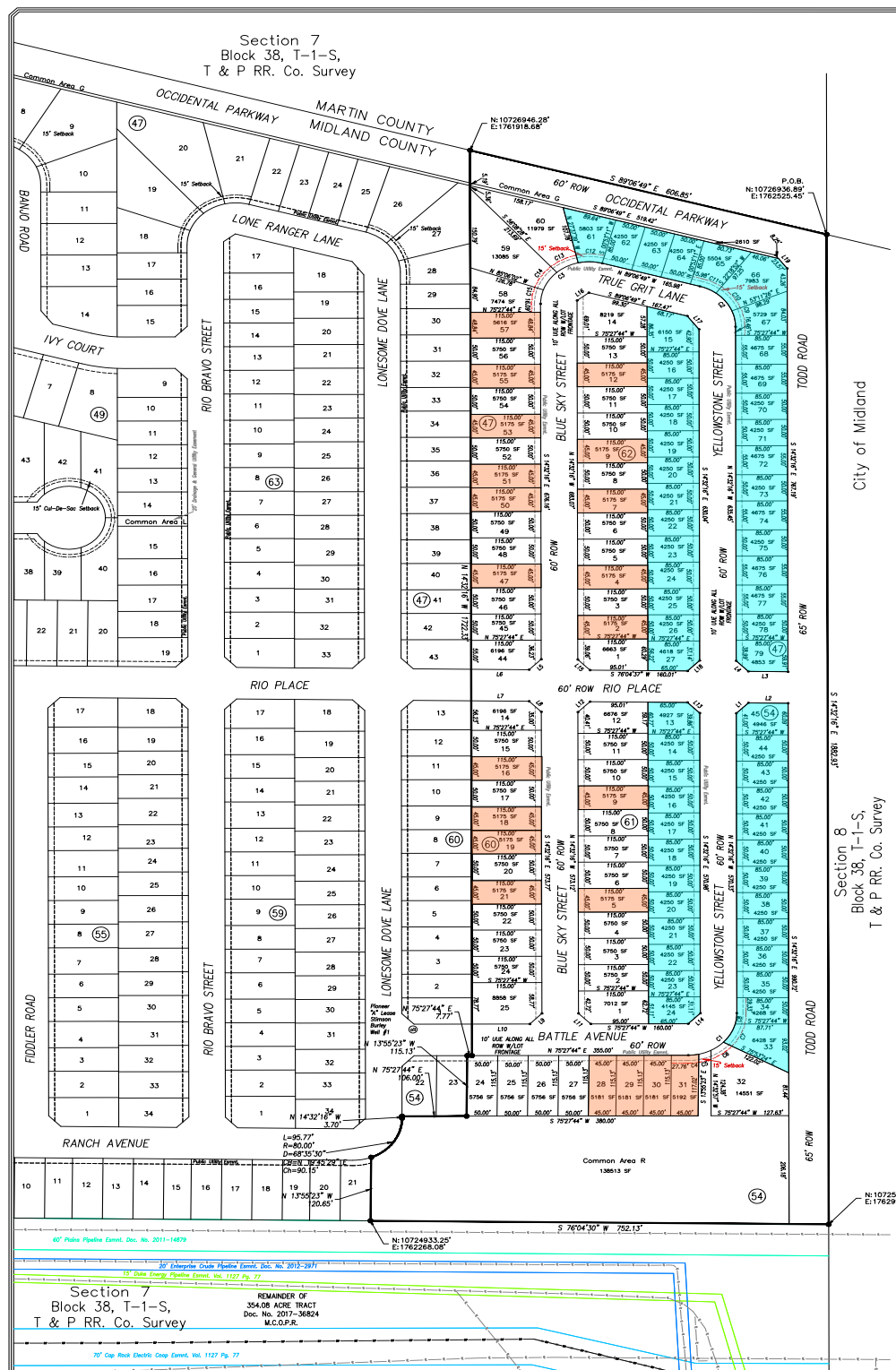
FOR OFFICE USE ONLY

☐ Property Owner Authorization	☐ Dimensioned Site Plan
☐ Application Fee	☐ Plans in Digital Format (PDF/JPEG)
Check #_____	
Received By:	Date:

****Application will not be considered for scheduling until reviewed by a planner.****

LONE STAR TRAILS II, SECTION 13

BEING A 27.05 ACRE TRACT OF LAND IN SECTION 7, BLOCK 38, T-1-S, T. & P. RR. CO. SURVEY, CITY AND COUNTY OF MIDLAND, TEXAS



Legal Description for Lone Star Trails II, Section 13.

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Boundary more fully described by metes and bounds as follows:

Beginning at (N:10726936.89', E:1762525.45') a ½" Iron rod found in the north line of said 354.08 acre tract, the Midland-Martin County Line, the east line of said Section 7, and the west line of Section 8, said Block 38, T-1-S, for the northeast corner of this tract, whence a ½" iron rod found at the southeast corner of said Section 7 bears South 14°32'16" East, a distance of 2182.80 feet;

Thence South 14°32'16" East with the east line of said Section 7 and the west line of said Section 8, a distance of 1882.93 feet to a ½" iron rod found for the southeast corner of this tract;

Thence through said 354.08 acre tract the following nine (9) courses and distances:

1. South 76°04'30" West, a distance of 752.13 feet to a ½" iron rod found for the southwest corner of this tract;
2. North 13°55'23" West, a distance of 120.65 feet to a ½" iron rod found for a point of curvature in the west line of this tract;
3. With a curve to the left in a northeasterly direction, said curve having a radius length of 80.00 feet, an arc length of 95.77 feet, a delta angle of 68°35'30", and a chord length of 90.15 feet bearing North 19°45'29" East to a ½" iron rod found for a point of tangency in the west line of this tract;
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Thence South 89°06'49" East, with the north line of said 354.08 acre tract and the Midland-Martin County Line, a distance of 606.85 feet to a to the Point of Beginning.

Containing 27.05 surface acres of land.

Bearings, distances, and coordinates are based on the Texas Coordinate System, NAD 1983, Central Zone (CORS).

Betenbough PD

50' X 85' = 57
45' X 115' = 21
50' X 115' = 42

Total: 120

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	80.00'	125.66'	113.14'	N 30°27'44" E	90°00'00"
C2	80.00'	104.13'	96.93'	N 51°49'33" W	74°34'33"
C3	80.00'	147.20'	127.30'	S 38°10'27" W	105°25'53"
C4	80.00'	17.46'	17.42'	N 69°11'54" E	12°30'40"
C5	80.00'	21.45'	21.39'	N 58°19'08" E	15°21'50"
C6	80.00'	25.90'	25.79'	N 39°21'17" E	18°33'11"
C7	80.00'	40.00'	39.58'	N 14°45'35" E	28°38'52"
C8	80.00'	20.91'	20.85'	N 07°03'04" W	14°58'29"
C9	80.00'	31.10'	30.90'	N 25°40'25" W	22°16'18"
C10	80.00'	43.11'	42.59'	N 52°14'51" W	30°52'34"
C11	80.00'	39.92'	39.75'	N 78°23'58" W	21°20'45"
C12	80.00'	39.81'	39.40'	S 72°19'48" W	28°30'10"
C13	80.00'	39.81'	39.40'	S 43°49'37" W	28°30'09"
C14	80.00'	40.43'	40.01'	S 15°22'45" W	28°57'43"
C15	80.00'	127.19'	27.01'	S 04°49'09" E	91°06'15"

LINE	BEARING	DISTANCE
L1	N 30°46'11" E	28.13'
L2	N 76°04'37" E	85.00'
L3	S 76°04'37" W	85.00'
L4	N 59°13'49" W	28.44'
L5	N 30°46'11" E	28.13'
L6	S 76°04'37" W	90.00'
L7	N 76°04'37" E	90.00'
L8	S 59°13'49" E	28.44'
L9	S 30°27'44" W	28.28'
L10	S 75°27'44" W	85.00'
L11	N 59°32'16" W	28.28'
L12	N 30°46'11" E	28.13'
L13	S 59°13'49" E	28.44'
L14	S 30°27'44" W	28.28'
L15	N 59°13'49" W	28.44'
L16	N 30°10'27" E	44.62'
L17	S 51°49'33" E	51.96'
L18	S 30°46'11" W	28.13'
L19	S 51°49'33" E	51.82'

NOTES:

1. SELLING A PORTION OF THIS ADDITION BY METES AND BOUNDS MAY BE A VIOLATION OF CITY ORDINANCE AND STATE LAW AND SUBJECT TO FINES AND WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
2. APPROVAL OF A SITE PLAN BY THE CITY OF MIDLAND MAY BE REQUIRED BEFORE THE DEVELOPMENT OF ANY LOT AND BEFORE A BUILDING PERMIT MAY BE OBTAINED.

FLOOD NOTE:
Special Flood Hazard Areas as graphically scaled from FEMA Map No. 48329C0100F, Dated September 16, 2005, Prepared for Midland County, Texas are shown hereon.

PLANNING NOTE:
Initial Impact Fees will be assessed during the final platting process. Implementation and collection of impact fees will take place during the building permit process. Additional impact fees or increases in fees may not be assessed against the tract unless the number of service units to be developed on the tract increases.

Bearings shown on this survey are relative to the Texas Coordinate System, NAD 1983, Central Zone (CORS).

Professional Land Surveying & Mapping
Aaron Burrell Land Surveyors, LLC
415 W. Wall St., Suite 204
Midland, Texas 79701
432-848-4439
P.O. Box 81041 midlandsurveyors.com
Midland, Texas 79708
TBPLS Firm No. 10194212

Page 1 of 1
L379-13 Prelim

UTILITY COMPANY'S CERTIFICATE

THIS PLAT HAS BEEN CHECKED FOR ACCESSIBILITY OF UTILITIES.

SIGNED: _____ ATMOS ENERGY PRINT NAME

SIGNED: _____ ONCOR ELECTRIC DELIVERY PRINT NAME

SIGNED: _____ AT&T TEXAS PRINT NAME

SIGNED: _____ SUDDENLINK COMMUNICATIONS PRINT NAME

SIGNED: _____ GRANDE COMMUNICATIONS PRINT NAME

OWNERS' CERTIFICATE:

THE STATE OF TEXAS
COUNTY OF MIDLAND

WHEREAS, I, _____, Agent of Betenbough Homes Inc. as the recorded owner of a 27.05 Acre Tract of land, out of a 354.08 Acre Tract of Land, as recorded in Instrument No. 2017-36824, Official Public Records, Midland County, Texas, located in Section 7, Block 38, T-1-S, T. & P. RR. Co. Survey, Midland County, Texas, and more particularly shown and described hereon:

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT, I, _____, Agent of Betenbough Homes Inc., do hereby adopt this plat designating the herein above described property as "LONE STAR TRAILS II, SECTION 13" an Addition to the City of Midland, Midland County, Texas, and do hereby dedicate to the public use forever the streets, alleys, and easements shown thereon.

WITNESS our hands at Midland, Texas, this the_____day of_____, 2021.

_____
By: _____
Agent of Betenbough Homes Inc.

ACKNOWLEDGMENT
THE STATE OF TEXAS
COUNTY OF MIDLAND

Before me, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared _____, Agent of Betenbough Homes Inc., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act as owner, and that he executed the same as the act for the purpose and consideration therein expressed and in the capacity therein stated.

Given under my hand and seal of office this _____day of _____, 2021.

_____
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

CERTIFICATE OF APPROVAL

This is to certify that the above and foregoing plat of "LONE STAR TRAILS II, SECTION 13" was approved by proper action of the City Planning and Zoning Commission of the City of Midland, on this_____day of _____, 2021.

SIGNED:_____
PRINT:_____
Chairman

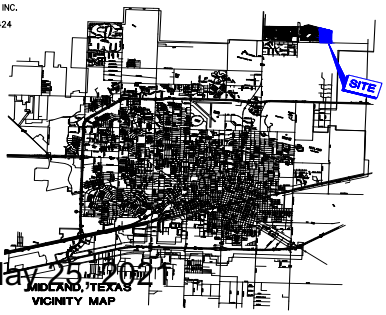
ATTEST:_____
PRINT:_____
Secretary

THAT I, AARON S. BURRELL, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE STATE OF TEXAS, DO HEREBY CERTIFY THAT I PREPARED THIS PLAT FROM AN ACTUAL AND ACCURATE SURVEY OF THE LAND AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY PERSONAL SUPERVISION, IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF MIDLAND, TEXAS

23 March 2021
DATE

AARON SCOTT BURRELL TX RPLS 5689

OWNER:
BETENBOUGH HOMES INC.
6305 82nd STREET
LUBBOCK, TEXAS 79424
806-797-9494



PLAT FILED FOR RECORD
MIDLAND COUNTY, TEXAS
NO._____CABINET_____
DATE_____PAGE_____

PACKET 17.13

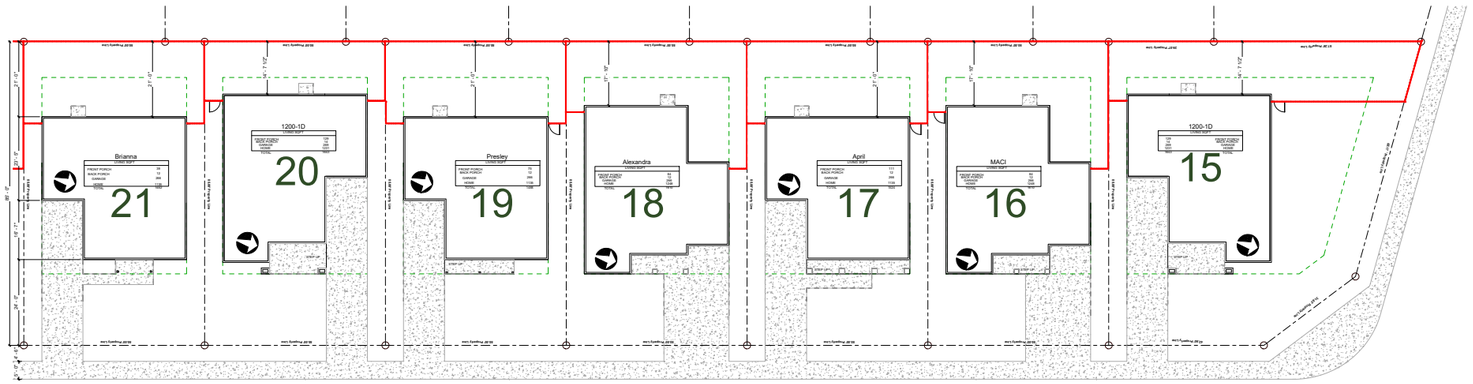
May 25th, 2021

PRELIMINARY PLAT
LONE STAR TRAILS II, SECTION 13

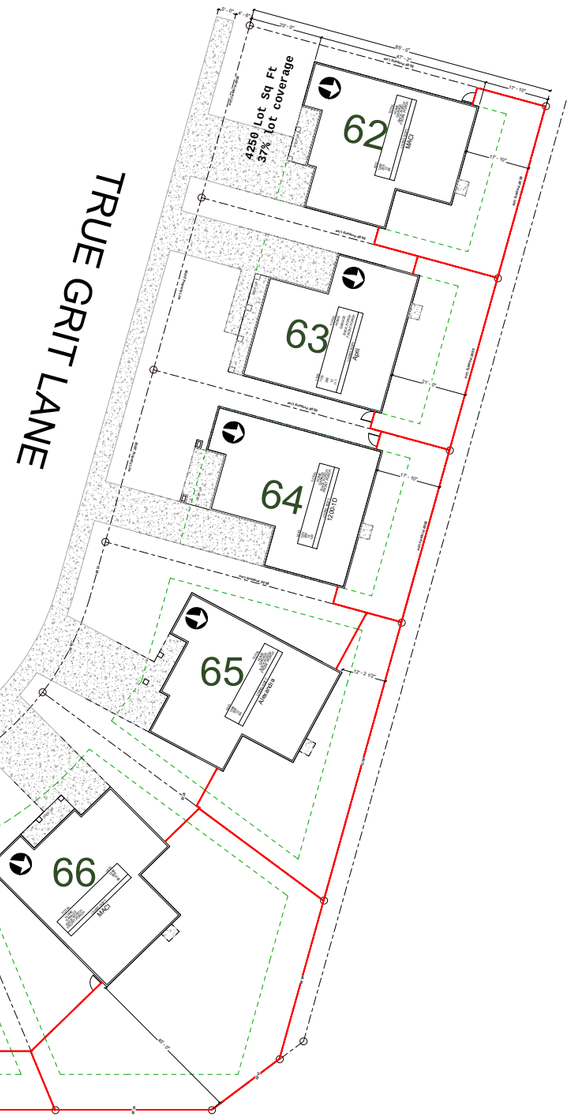
Scale 1" = 100'

LEGEND
● Fd ½" Iron Rod
○ Set ½" Iron Rod
------ Utility Easement

50' x 85' all 1100 and 1200 sq ft homes
smallest rear yard = 14' 7-1/2"



YELLOWSTONE STREET



TODD ROAD

BETENBOUGH B·H HOMES®

To whom it may concern,

Over the years we have worked closely with the planning department. We are currently seeking a zone change request for our last portion of LST II which buffers the future Todd rd. Within this Planned District request, we have a couple of different types of homesites. (see table) We feel that this is market has a true need for this more affordable product. Over the past year, only 37 homes sold, were above 2,050 $Ft^{2.}$ with the top spot at 1,350 Ft^2. We are aware that this smaller lot size is outside the norms of the current zoning code. We feel although it is a smaller lot size, it is proportional to the standard 50' x 115' lots. The smallest rear yard dimension is 14' 7-1/2" with most at 17' or 21'. This equates to a little bit smaller lot coverage than our standard lots (see chart). It is for these reasons we are asking staff to help support this request for a true mixed use of SFR in this PD. We have also attached a few exhibits to help give a visual of how homes (1100 and 1200 Ft^2) would be laid out on a site plan.

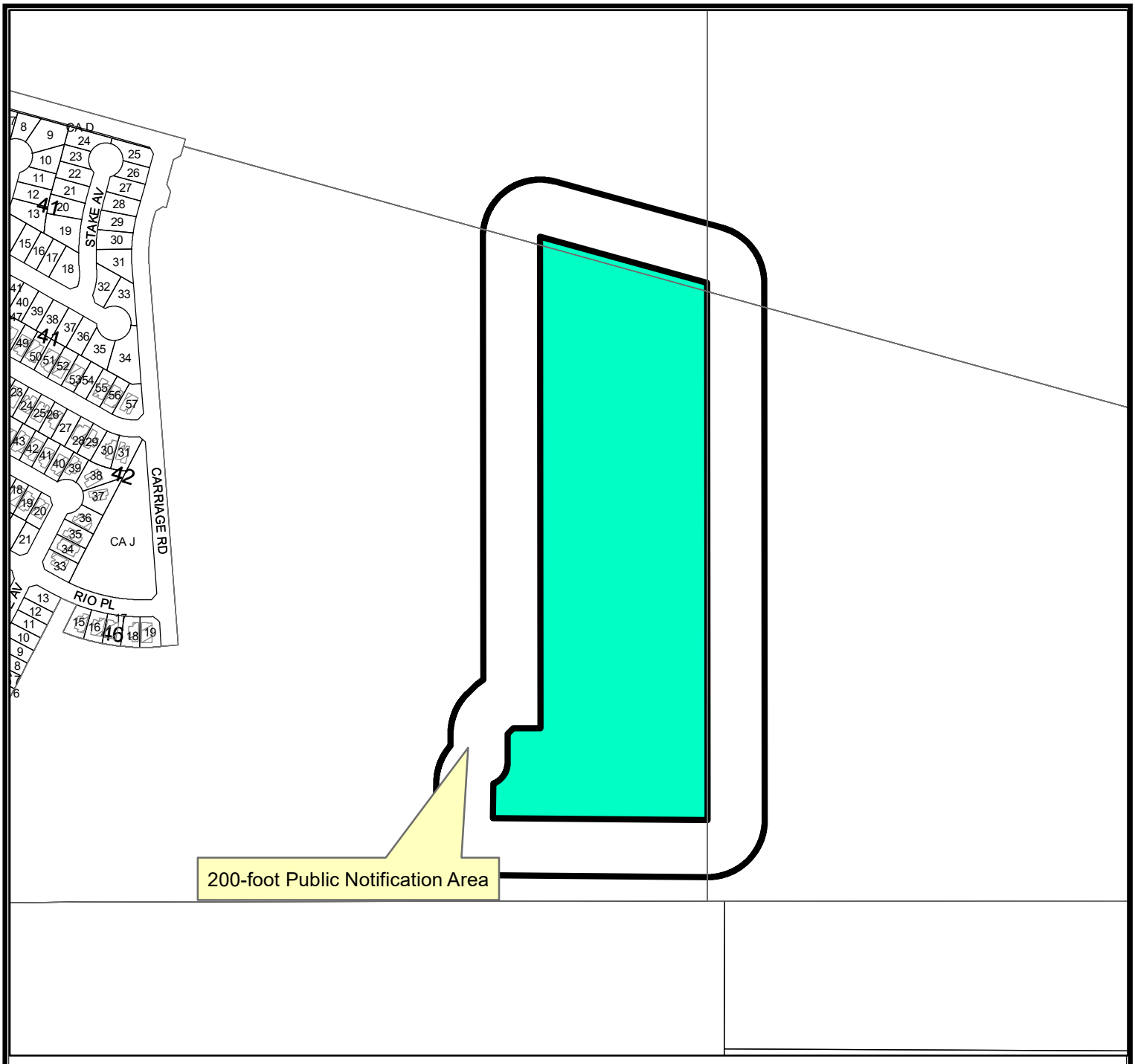
Lot Size	Least Lot Ft^2	Product	Smallest Rear Yard Depth	Avg Lot Coverage
50' x 85'	4145	1100 – 1200 Ft^2	14' 7-1/2"	38%
45' x 115'	5175	1300 - 1600 Ft^2	25'	39%
50' x 115'	5500	1300 – 2000 Ft^2	25'	44%

Sincerely

Chris Berry

Chris Berry
Land Planning Manager

LUBBOCK | MIDLAND | ODESSA | AMARILLO | BETENBOUGH.COM



LOCATION MAP

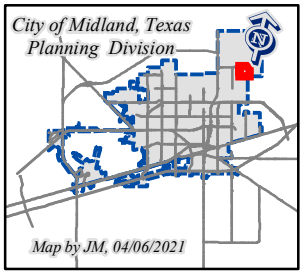
Z-21-0231 **Scale: 1" = 500'**

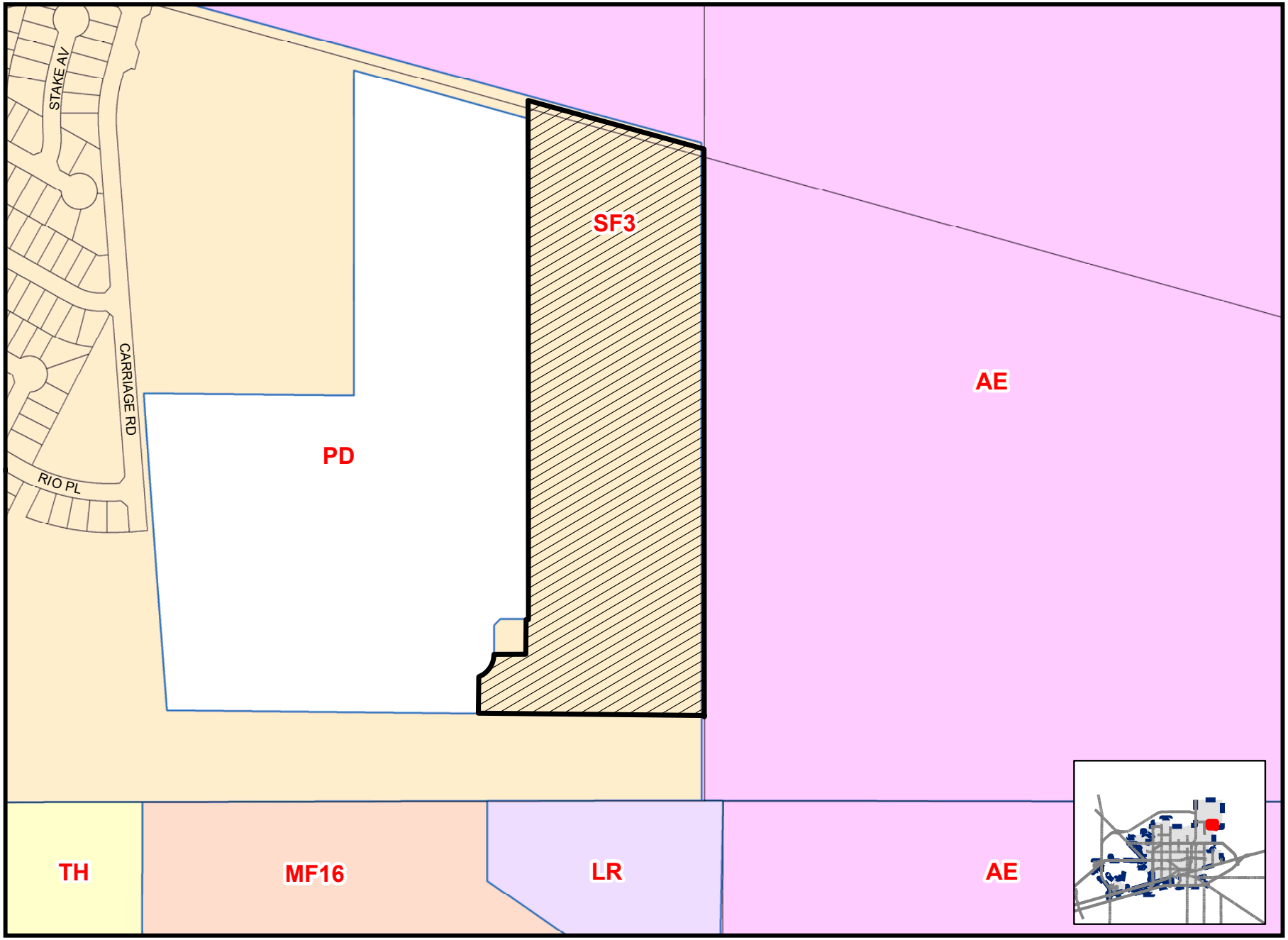
Consider a request by Betenbough Homes for a Zone Change from SF-3, Single Family Dwelling District to PD, Planned Development District for a Housing Development on a 27.05-acre tract of land located in Section 7, Block 38, T-1-S, T&P, R.R. Co. Survey, City and County of Midland, Texas.

Generally located on the south side of Occidental Parkway, approximately 1, 335- feet east of Carriage Road..(Council District 1)

L E G E N D

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS





Map By ES, 04/06/2021

Z-21-0231

Scale: 1" = 400'

ZONING MAP

NOR IS IT DESIGNED
INFORMATION CONTAINED
THE USE OF THIS DATA.









City Council Meeting

Item Number: 18

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Kelly Martinez, Planner

Subject: AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 141.53-ACRE TRACT OF LAND OUT OF SECTION 12, BLOCK 39, T-1-S, T&P RR CO. SURVEY, CITY OF MIDLAND, MIDLAND AND MARTIN COUNTIES, TEXAS, FROM AE, AGRICULTURAL ESTATE DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED AT THE NORTHEAST CORNER OF NORTH STATE HIGHWAY 349 AND OCCIDENTAL PARKWAY); 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 (DEVELOPMENT SERVICES)

Purpose:

To consider a request Shenandoah Bar M Ranch, for a zone change from AE, Agricultural Estate District to SF-3, Single Family Dwelling District to construct single-family homes.

Recommended City Council Action:

Approve

Fiscal Impact:

This proposal does not have a significant financial impact to the city.

Surrounding Zoning and Land Use:

The properties to the north and east are zoned AE, Agricultural Estate District and the locations of vacant lots. The properties to the south are zoned PD, Planned District, and LR, Local Retail District and the locations of single-family homes and vacant lots. The property to the west is zoned ETJ, Extraterritorial Jurisdiction and the location of pump jacks.

Analysis:

The applicant is requesting approval of a zone change for the development of single-family homes. The property is currently vacant and in the process of being platted. This subdivision will have a total of five hundred and thirty-two (532) residential lots. The minimum lot width of SF-3, Single-Family Dwelling District is 55 feet for corner lots. With that being said, not all corner lots will meet the minimum lot width requirement.

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 objections.

Building: (Approved)

No issues. All future structures must adhere to the 2018 International Building Codes, the 2015 International Energy Code, the 2017 NEC requirements, the 2015 International Fire Codes, local city ordinances, zoning requirements, established setbacks, and floodplain requirements if necessary.

Engineering: (Approve)

No objection to zone change.

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.

Our staff has examined the FEMA flood map and it appears that this property lies partially within Zone AH, which is a Special Flood Hazard Area subject to inundation by the 1% annual chance flood.

An elevation certificate based off of construction drawings will be required to get a building permit to show compliance to the 1 foot of freeboard above the base flood elevation for residential structures. An elevation certificate based off of finish construction will be required for the Certificate of Occupancy.

Code: (Approved)

There are three Oil and Gas permitted wells of the ones identified on the plat. (1) Mabee #6 permitted as the #4 with city on 1-25-11, (2) Mabee D #5 permitted on 1-24-12 (3) Mabee #5

permitted as #3 with city on 1-24-12. All currently operated by Pioneer Natural Resources. A 500' radius needs to be included around these wells to identify the area that will need a future variance. A 250' radius is identified, assume that is a working distance that has been worked out with Pioneer. Any occupied residential/commercial permits inside the 500 ft. radius would require a variance to the permitted well from the City Council. A variance would have to be presented to the City Council by the City Building Official. The variance request would be best if it included a letter of endorsement/support to the approved requested distance from the Operator. The needed information/example for variance request can be provided from the City Building Official- Jeff Pinkstaff. Access to well is shown as an ingress/egress. Developer will want to visit with operator to identify exact location of flow lines and electrical lines for all Wells identified on the plat. Recommend that flow lines are located and follow Engineering requirements of depth and location under any city streets.

Transportation: (Approved with Conditions)

Access spacing will be required to adhere to the TxDOT Access Management Standards along the state highway.
Depending on the nature and scale of the proposed development, a Traffic Impact Analysis MAY be required prior to approval of construction drawings.

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.

No objection to zone change.

Planning:

This request is in compliance with the *Tall City Tomorrow Comprehensive Plan, Chapter 3 An Integrated Land Use Vision*, *Principle 8*, "Land use polices and regulations should create and support balanced neighborhoods." (Tall City Tomorrow pg. 59). This request will aid in promoting balanced neighborhoods offering a variety of housing options.

This request has been recommended for approval by a unanimous vote at the May 3, 2021 Planning and Zoning Commission meeting.

Staff recommends approval of this zone change from AE, Agriculture Estates District, to SF-3, Single-Family Dwelling District, subject to the following condition.

Condition:

A. That the use and development of the property shall conform to the regulations of the SF-3, Single-Family Dwelling District.

Letters of Objection:

Staff has not received any objections as of May 12, 2021.

Attachments:

Application
Site Plan (Exhibit A)
Meets and Bounds (Exhibit B)
Maps



City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE ZONING DISTRICT MAP OF THE CITY OF MIDLAND TO REZONE A 141.53-ACRE TRACT OF LAND OUT OF SECTION 12, BLOCK 39, T-1-S, T&P RR CO. SURVEY, CITY OF MIDLAND, MIDLAND AND MARTIN COUNTIES, TEXAS, FROM AE, AGRICULTURAL ESTATE DISTRICT TO SF-3, SINGLE-FAMILY DWELLING DISTRICT (GENERALLY LOCATED AT THE NORTHEAST CORNER OF NORTH STATE HIGHWAY 349 AND OCCIDENTAL PARKWAY); 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 a 141.53-acre tract of land out of Section 12, Block 39, T-1-S, T&P RR Co. Survey, City of Midland, Midland and Martin Counties, Texas, said tract being more specifically described by metes and bounds in Exhibit "A", which is attached hereto and incorporated herein (the "Property") to SF-3, Single-Family Dwelling District, 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 AE, Agricultural Estate District to SF-3, Single-Family Dwelling District.

SECTION TWO. 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 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., 2021; 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., 2021, at a regular

meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2021.

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, 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"

MAVERICK
ENGINEERING · SURVEY · WATER RESOURCES
1909 West Wall Street, Suite K · Midland, TX 79701
Tel: 432.262.0999 · Fax: 432.262.0989 · maverick-eng.com
ENGINEER FIRM #: F-15089 | SURVEY FIRM #:10194514

FIELD NOTE DESCRIPTION OF A 141.53 ACRE TRACT OF LAND

FIELD NOTE DESCRIPTION OF A 141.53 ACRE TRACT SITUATED IN AND BEING OUT OF SECTION 12, BLOCK 39, TOWNSHIP 1 SOUTH, TEXAS and PACIFIC RAILWAY COMPANY SURVEY, MIDLAND COUNTY, TEXAS AND BEING THE REMAINDER OF SAID SECTION 12, AND BEING TRACT 10 IN EXHIBIT "A", AS CONVEYED IN DOCUMENT NUMBER 2007-3688, IN VOLUME 2814 ON PAGE 708 OF THE OFFICIAL PUBLIC RECORDS OF SAID MIDLAND COUNTY, TEXAS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT N.(Y)10724912.06 AND E.(X)1752128.54, A ONE HALF INCH IRON ROD WITH A RED PLASTIC CAP MARKED "MAVERICK FIRM #10194514" (RPC) SET IN THE EAST LINE OF STATE HIGHWAY 349, AS RECORDED IN VOLUME 56 ON PAGE 365 OF THE DEED RECORDS OF SAID MIDLAND COUNTY, AT THE NORTHWEST CORNER OF A 60 FOOT WIDE ROADWAY EASEMENT ON THE LONE STAR TRAILS, SECTION 1 PLAT RECORDED AS PLAT NUMBER 2014-22017 IN PLAT CABINET J ON PAGE 32 OF THE PLAT RECORDS OF SAID MIDLAND COUNTY, TEXAS AND BEING THE SOUTHWEST CORNER HEREOF;

THENCE N.14°34'43"W., ALONG THE EAST LINE OF SAID STATE HIGHWAY 349, 1222.43 FEET TO AN "RPC" SET IN POSITION OF A SPIKE NAIL FOUND FOR THE WESTERN MOST SOUTHWEST CORNER OF A CALLED 1.712 ACRE TRACT OF LAND DESCRIBED IN A RESOLUTION OF LIMITED LIABILITY COMPANY WITH CONSENT TO SELL PROPERTY AND AN ANGLE CORNER HEREOF;

THENCE THE FOLLOWING FOUR CALLS OF BEARING AND DISTANCE, ALL TO RPC'S, GOING AROUND SAID 1.712 ACRE TRACT AND BACK TO THE NORTHWEST OF SAID 1.712 ACRE TRACT ON THE EAST LINE OF SAID STATE HIGHWAY 349 AND AN ANGLE CORNER HEREOF; N.82°35'43"E., 120.00 FEET; S.68°34'43"E., 347.26 FEET; N.14°34'43"W., 321.10 FEET; S.75°25'17"W., 400.00 FEET;

THENCE N.14°34'43"W., ALONG THE EAST LINE OF SAID STATE HIGHWAY 349, 423.52 FEET TO AN "RPC" SET FOR THE WEST NORTHWEST CORNER HEREOF;

THENCE S.59°30'36"E., 28.32 FEET TO AN "RPC" SET FOR AN ANGLE CORNER HEREOF;

THENCE N.75°33'31"E., 271.23 FEET TO AN "RPC" SET FOR AN ANGLE CORNER HEREOF;

THENCE N.14°26'20"W., AT 456.17 FEET CROSSING THE LINE COMMON TO SAID MIDLAND COUNTY AND MARTIN COUNTY, TEXAS, IN ALL 670.00 FEET TO AN "RPC" SET FOR THE NORTH NORTHWEST CORNER HEREOF;

THENCE N.75°33'31"E., 2761.96 FEET TO AN "RPC" SET FOR NORTHEAST CORNER HEREOF;

THENCE S.14°26'20"E., AT 969.77 FEET CROSSING THE LINE COMMON TO SAID MARTIN COUNTY AND MIDLAND COUNTY, IN ALL 1833.58 FEET TO AN RPC SET FOR THE POINT OF CURVATURE ON A CURVE TO THE LEFT WITH A RADIUS OF 470.00 FEET AND A CHORD BEARING AND DISTANCE OF S.25°33'39"E., 181.33 FEET;

THENCE ALONG THE ARC OF SAID CURVE 182.47 FEET TO AN "RPC" SET FOR THE POINT OF REVERSE CURVATURE FOR A CURVE TO THE RIGHT HAVING A RADIUS OF 530.00 FEET AND A CHORD BEARING AND DISTANCE OF S.25°33'39"E., 204.47 FEET;

THENCE ALONG THE ARC OF SAID CURVE 205.76 FEET TO AN "RPC" SET FOR THE POINT OF TANGENCY

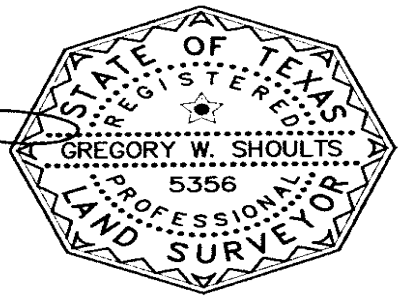
THENCE S.14°26'20"E., 185.94 FEET TO AN "RPC" SET IN THE NORTH LINE OF A 60 FOOT WIDE ROADWAY EASEMENT ON THE LONE STAR TRAILS, SECTION 5 PLAT RECORDED IN CABINET J ON PAGES 172 AND 173 OF THE PLAT RECORDS OF SAID MIDLAND COUNTY, TEXAS AND BEING THE SOUTHEAST CORNER HEREOF;

THENCE S.75°33'40"W., ALONG THE NORTH LINE OF SAID 60 FOOT WIDE ROADWAY EASEMENT 1500.63 FEET TO AN RPC SET FOR THE SOUTHEAST CORNER OF RENEW LIFE CHURCH AS SHOWN ON A PLAT IN DOCUMENT NUMBER 2018-3291 IN CABINET L, ON PAGE 23 OF THE PLAT RECORDS OF SAID MIDLAND COUNTY, TEXAS AND BEING AN ANGLE CORNER HEREOF;

THENCE THE FOLLOWING FOUR CALLS OF BEARING AND DISTANCE, ALL TO RPC'S, GOING AROUND SAID RENEW LIFE CHURCH AND BACK TO A P.K. NAIL WITH A WASHER FOUND FOR THE SOUTHWEST CORNER OF SAID RENEW LIFE CHURCH AND ON THE NORTH LINE OF SAID 60 FOOT WIDE ROADWAY EASEMENT FOR AN ANGLE CORNER HEREOF; N.14°26'20"W., 364.66 FEET; S.75°33'40"W., 521.32 FEET; N.14°26'20"W., 512.34 FEET; S.75°33'40"W., 823.58 FEET; S.14°34'43"E., 877.00 FEET;

THENCE S.75°33'40"W., ALONG THE NORTH LINE OF SAID 60 FOOT WIDE ROADWAY EASEMENT 280.00 FEET TO THE **POINT OF BEGINNING**, CONTAINING 141.53 ACRES OF LAND.

March 28, 2021



Gregory W. Shoults
www.maverick-eng.com
Texas RPLS - No. 5356
Maverick Engineering (FIRM – No. 10194514)

M A V E R I C K
ENGINEERING · SURVEY · WATER RESOURCES
1909 West Wall Street, Suite K · Midland, TX 79701
Tel: 432.262.0999 · Fax: 432.262.0989 · maverick-eng.com
ENGINEER FIRM #: F-15089 | SURVEY FIRM #:10194514

FIELD NOTE DESCRIPTION OF A 141.53 ACRE TRACT OF LAND

FIELD NOTE DESCRIPTION OF A 141.53 ACRE TRACT SITUATED IN AND BEING OUT OF SECTION 12, BLOCK 39, TOWNSHIP 1 SOUTH, TEXAS and PACIFIC RAILWAY COMPANY SURVEY, MIDLAND COUNTY, TEXAS AND BEING THE REMAINDER OF SAID SECTION 12, AND BEING TRACT 10 IN EXHIBIT "A", AS CONVEYED IN DOCUMENT NUMBER 2007-3688, IN VOLUME 2814 ON PAGE 708 OF THE OFFICIAL PUBLIC RECORDS OF SAID MIDLAND COUNTY, TEXAS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS;

BEGINNING AT N.(Y)10724912.06 AND E.(X)1752128.54, A ONE HALF INCH IRON ROD WITH A RED PLASTIC CAP MARKED "MAVERICK FIRM #10194514" (RPC) SET IN THE EAST LINE OF STATE HIGHWAY 349, AS RECORDED IN VOLUME 56 ON PAGE 365 OF THE DEED RECORDS OF SAID MIDLAND COUNTY, AT THE NORTHWEST CORNER OF A 60 FOOT WIDE ROADWAY EASEMENT ON THE LONE STAR TRAILS, SECTION 1 PLAT RECORDED AS PLAT NUMBER 2014-22017 IN PLAT CABINET J ON PAGE 32 OF THE PLAT RECORDS OF SAID MIDLAND COUNTY, TEXAS AND BEING THE SOUTHWEST CORNER HEREOF;

THENCE N.14°34'43"W., ALONG THE EAST LINE OF SAID STATE HIGHWAY 349, 1222.43 FEET TO AN "RPC" SET IN POSITION OF A SPIKE NAIL FOUND FOR THE WESTERN MOST SOUTHWEST CORNER OF A CALLED 1.712 ACRE TRACT OF LAND DESCRIBED IN A RESOLUTION OF LIMITED LIABILITY COMPANY WITH CONSENT TO SELL PROPERTY AND AN ANGLE CORNER HEREOF;

THENCE THE FOLLOWING FOUR CALLS OF BEARING AND DISTANCE, ALL TO RPC'S, GOING AROUND SAID 1.712 ACRE TRACT AND BACK TO THE NORTHWEST OF SAID 1.712 ACRE TRACT ON THE EAST LINE OF SAID STATE HIGHWAY 349 AND AN ANGLE CORNER HEREOF; N.82°35'43"E., 120.00 FEET; S.68°34'43"E., 347.26 FEET; N.14°34'43"W., 321.10 FEET; S.75°25'17"W., 400.00 FEET;

THENCE N.14°34'43"W., ALONG THE EAST LINE OF SAID STATE HIGHWAY 349, 423.52 FEET TO AN "RPC" SET FOR THE WEST NORTHWEST CORNER HEREOF;

THENCE S.59°30'36"E., 28.32 FEET TO AN "RPC" SET FOR AN ANGLE CORNER HEREOF;

THENCE N.75°33'31"E., 271.23 FEET TO AN "RPC" SET FOR AN ANGLE CORNER HEREOF;

THENCE N.14°26'20"W., AT 456.17 FEET CROSSING THE LINE COMMON TO SAID MIDLAND COUNTY AND MARTIN COUNTY, TEXAS, IN ALL 670.00 FEET TO AN "RPC" SET FOR THE NORTH NORTHWEST CORNER HEREOF;

THENCE N.75°33'31"E., 2761.96 FEET TO AN "RPC" SET FOR NORTHEAST CORNER HEREOF;

THENCE S.14°26'20"E., AT 969.77 FEET CROSSING THE LINE COMMON TO SAID MARTIN COUNTY AND MIDLAND COUNTY, IN ALL 1833.58 FEET TO AN RPC SET FOR THE POINT OF CURVATURE ON A CURVE TO THE LEFT WITH A RADIUS OF 470.00 FEET AND A CHORD BEARING AND DISTANCE OF S.25°33'39"E., 181.33 FEET;

THENCE ALONG THE ARC OF SAID CURVE 182.47 FEET TO AN "RPC" SET FOR THE POINT OF REVERSE CURVATURE FOR A CURVE TO THE RIGHT HAVING A RADIUS OF 530.00 FEET AND A CHORD BEARING AND DISTANCE OF S.25°33'39"E., 204.47 FEET;

THENCE ALONG THE ARC OF SAID CURVE 205.76 FEET TO AN "RPC" SET FOR THE POINT OF TANGENCY

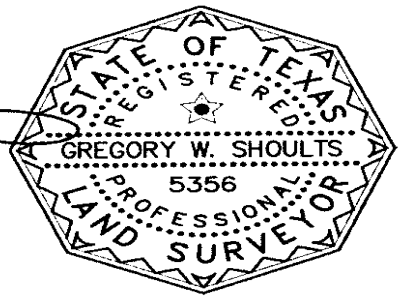
THENCE S.14°26'20"E., 185.94 FEET TO AN "RPC" SET IN THE NORTH LINE OF A 60 FOOT WIDE ROADWAY EASEMENT ON THE LONE STAR TRAILS, SECTION 5 PLAT RECORDED IN CABINET J ON PAGES 172 AND 173 OF THE PLAT RECORDS OF SAID MIDLAND COUNTY, TEXAS AND BEING THE SOUTHEAST CORNER HEREOF;

THENCE S.75°33'40"W., ALONG THE NORTH LINE OF SAID 60 FOOT WIDE ROADWAY EASEMENT 1500.63 FEET TO AN RPC SET FOR THE SOUTHEAST CORNER OF RENEW LIFE CHURCH AS SHOWN ON A PLAT IN DOCUMENT NUMBER 2018-3291 IN CABINET L, ON PAGE 23 OF THE PLAT RECORDS OF SAID MIDLAND COUNTY, TEXAS AND BEING AN ANGLE CORNER HEREOF;

THENCE THE FOLLOWING FOUR CALLS OF BEARING AND DISTANCE, ALL TO RPC'S, GOING AROUND SAID RENEW LIFE CHURCH AND BACK TO A P.K. NAIL WITH A WASHER FOUND FOR THE SOUTHWEST CORNER OF SAID RENEW LIFE CHURCH AND ON THE NORTH LINE OF SAID 60 FOOT WIDE ROADWAY EASEMENT FOR AN ANGLE CORNER HEREOF; N.14°26'20"W., 364.66 FEET; S.75°33'40"W., 521.32 FEET; N.14°26'20"W., 512.34 FEET; S.75°33'40"W., 823.58 FEET; S.14°34'43"E., 877.00 FEET;

THENCE S.75°33'40"W., ALONG THE NORTH LINE OF SAID 60 FOOT WIDE ROADWAY EASEMENT 280.00 FEET TO THE **POINT OF BEGINNING**, CONTAINING 141.53 ACRES OF LAND.

March 28, 2021



Gregory W. Shoults
www.maverick-eng.com
Texas RPLS - No. 5356
Maverick Engineering (FIRM – No. 10194514)

DocuSign Envelope ID: 97AFBC30-1683-4F92-B764-B6CEA13CF0A2

MIDLAND Planning Division

Zone Change/Planned District Amendment/Site Plan Approval

Project Number: 2-21-0234

Case Number:

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Property Owner Printed Name: Shenandoah Bar M Ranch LLC		Phone ( ) Email	
Address 24 Smith Rd Ste 601	City Midland	State TX	Zip 79705

Representative *(if different from Applicant or Property Owner)* Firm: Maverick Engineering Printed Name: Paladin Huckaba		Phone (432)262-0999 Email phuckaba@maverick-eng.com	
Address 1909 W Wall St Ste K	City Midland	State TX	Zip 79701

Street Address: NA (N Hwy 349/Occidental Pkwy)

Legal Description Section 12
Lot: Block: 39 Subdivision:

Current Zoning: AE

Proposed Zone: SF3
(List by tracts if more than one district is requested)

Reason for Zone Change Request: Allow for the construction of Single Family homes

Present Use of Property: Vacant

Proposed Use of Property: Single Family Homes

How would this zone change affect the public health, safety and welfare? No adverse affect.

Describe how conditions affecting the property have changed since present zoning designation: none

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):	Date:
Applicant (printed):	
Property Owner (signature): DocuSigned by: Troy Martin 9E4E5B9295D1478...	Date: 3/31/2021
Property Owner (printed): Troy Martin	

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.

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 Andrew L Mellen who, being by me duly sworn, upon oath says: That (s)he is authorized by Troy Martin, 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.

Andrew L Mellen
Authorized Agent (*signature*)

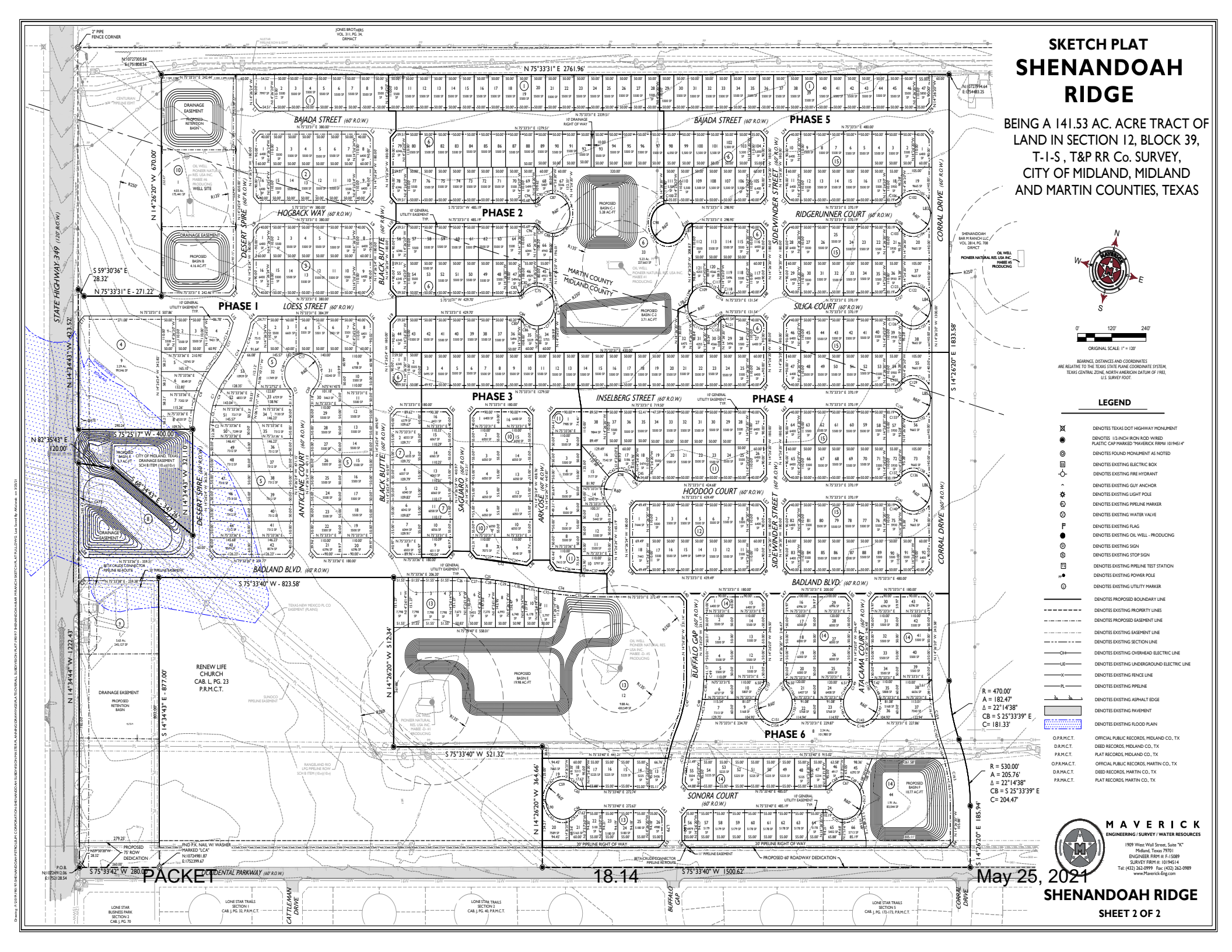
Subscribed and sworn to before me, this 31st day of March, 2021, to certify which witness my hand and seal of office.

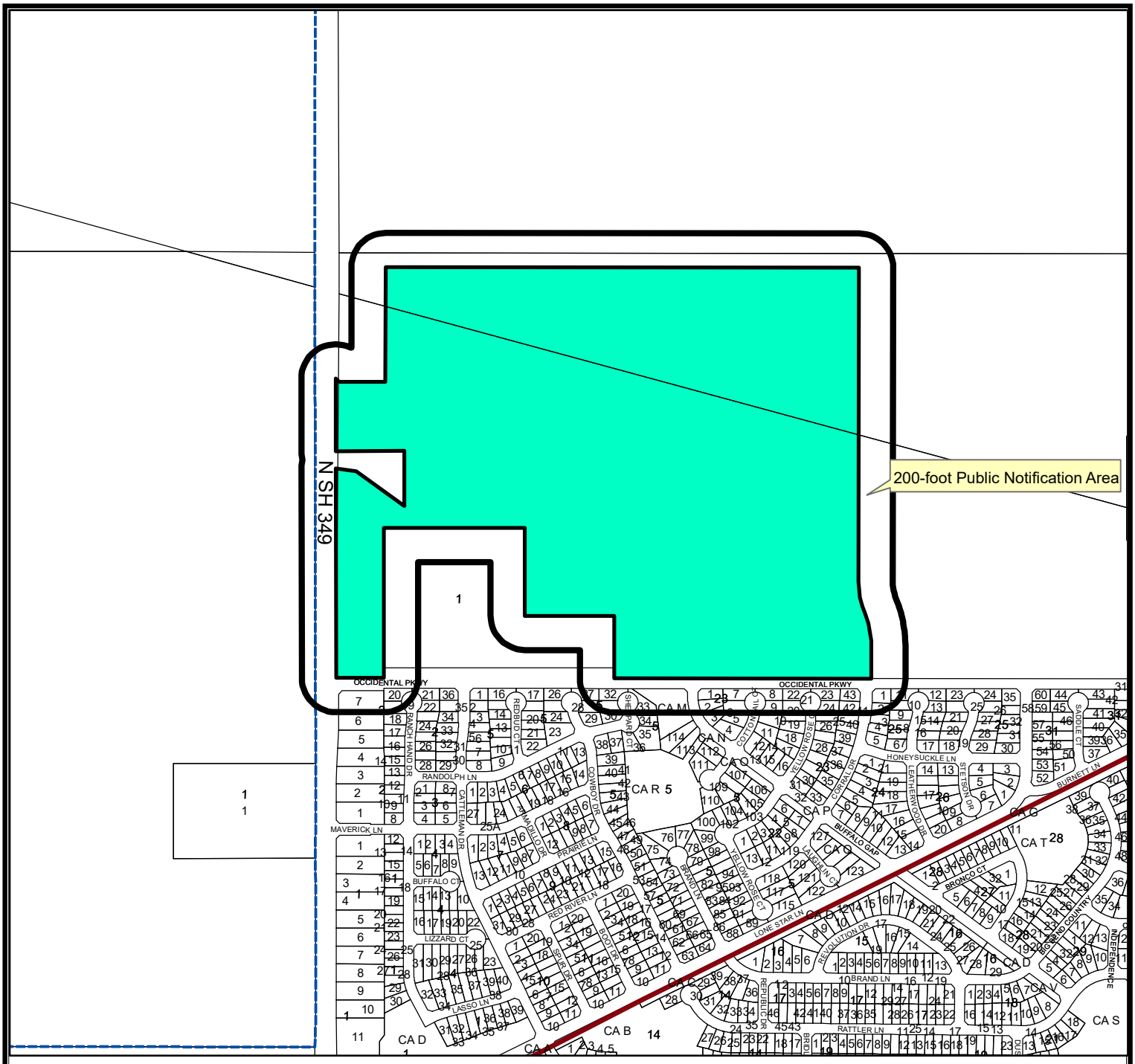
Kelsey Ann Stine
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

NOTARY PUBLIC STATE OF TEXAS
Kelsey Ann Stine
My Commission Expires
02/19/2022
ID No. 131456388

FOR OFFICE USE ONLY	
☒ Property Owner Authorization	☐ Dimensioned Site Plan
☒ Application Fee	☐ Plans in Digital Format (PDF/JPEG)
Check # 3422	
Received By: V. Sherma	Date: RECEIVED MAR 31 2021 BY:

**Application will not be considered for scheduling until reviewed by a planner.


SKETCH PLAT
SHENANDOAH RIDGE
BEING A 141.53 AC. ACRE TRACT OF LAND IN SECTION 12, BLOCK 39, T-1-S , T&P RR Co. SURVEY, CITY OF MIDLAND, MIDLAND AND MARTIN COUNTIES, TEXAS
PHASE 1
PHASE 2
PHASE 3
PHASE 4
PHASE 5
PHASE 6
BAJADA STREET (60' R.O.W.)
HOGBACK WAY (60' R.O.W.)
DESERT SPIRE (60' R.O.W.)
LOESS STREET (60' R.O.W.)
BLACK BUTTE (60' R.O.W.)
ANTICLINE COURT (60' R.O.W.)
SAGUARO (60' R.O.W.)
ARKOSE (60' R.O.W.)
INSELBERG STREET (60' R.O.W.)
HOODOO COURT (60' R.O.W.)
SIDEWINDER STREET (60' R.O.W.)
DEWINDER STREET (60' R.O.W.)
RIDGERUNNER COURT (60' R.O.W.)
SILICA COURT (60' R.O.W.)
BUFFALO GAP (60' R.O.W.)
ATACAMA COURT (60' R.O.W.)
SONORA COURT (60' R.O.W.)
BADLAND BLVD. (60' R.O.W.)
OCCIDENTAL PARKWAY (60' R.O.W.)
CORRAL DRIVE (60' R.O.W.)
STATE HIGHWAY 349 (100' R.O.W.)
CATTLEMAN DRIVE
CONRAL DRIVE
N 75°33'31" E 2761.96'
S 75°33'40" W - 823.58'
S 75°33'40" W 521.32'
S 75°33'40" W 1500.62'
S 75°33'42" W 280.00'
N 14°26'20" W 670.00'
N 14°34'43" W 423.52'
N 14°34'43" W 321.10'
N 14°34'44" W 1222.43'
N 14°34'43" E - 877.00'
N 14°26'20" W 512.34'
N 14°26'20" W 364.66'
S 14°26'20" E 1833.58'
S 14°26'20" E 185.94'
S 59°30'36" E 28.32'
N 75°33'31" E - 271.22'
S 75°25'17" W - 400.00
N 82°35'43" E 120.00'
S 68°34'43" E - 247.61'
R = 470.00'
A = 182.47'
Δ = 22°14'38"
CB = S 25°33'39" E
C= 181.33'
R = 530.00'
A = 205.76'
Δ = 22°14'38"
CB = S 25°33'39" E
C= 204.47'
LEGEND
DENOTES PROPOSED BOUNDARY LINE
DENOTES EXISTING PROPERTY LINES
DENOTES PROPOSED EASEMENT LINE
DENOTES EXISTING EASEMENT LINE
DENOTES EXISTING SECTION LINE
DENOTES EXISTING OVERHEAD ELECTRIC LINE
DENOTES EXISTING UNDERGROUND ELECTRIC LINE
DENOTES EXISTING FENCE LINE
DENOTES EXISTING PIPELINE
DENOTES EXISTING ASPHALT EDGE
DENOTES EXISTING PAVEMENT
DENOTES EXISTING FLOOD PLAIN
O.P.R.M.C.T. OFFICIAL PUBLIC RECORDS, MIDLAND CO., TX
D.R.M.C.T. DEED RECORDS, MIDLAND CO., TX
P.R.M.C.T. PLAT RECORDS, MIDLAND CO., TX
O.P.R.M.A.C.T. OFFICIAL PUBLIC RECORDS, MARTIN CO., TX
D.R.M.A.C.T. DEED RECORDS, MARTIN CO., TX
P.R.M.A.C.T. PLAT RECORDS, MARTIN CO., TX
ORIGINAL SCALE: 1" = 120'
BEARINGS, DISTANCES AND COORDINATES ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE, NORTH AMERICAN DATUM OF 1983, U.S. SURVEY FOOT.
MAVERICK
ENGINEERING / SURVEY / WATER RESOURCES
1909 West Wall Street, Suite "K"
Midland, Texas 79701
ENGINEER FIRM #: F-15089
SURVEY FIRM #: 10194514
Tel: (432) 262-0999 Fax: (432) 262-0989
www.Maverick-Eng.com
SHENANDOAH RIDGE
SHEET 2 OF 2
PACKET 18.14 May 25, 2021



LOCATION MAP

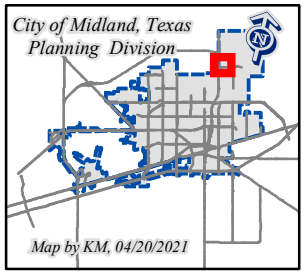
Z-21-0234 **Scale: 1" = 833'**

Consider a request by Shenandoah Bar M Ranch for a zone change from AE, Agricultural Estate District to SF-3, Single-Family Dwelling District on a 141.53-acre tract of land located in Section 12, Block 39, T-1-S, T&P. RR. Co. Survey, City of Midland, Midland and Martin Counties, Texas.

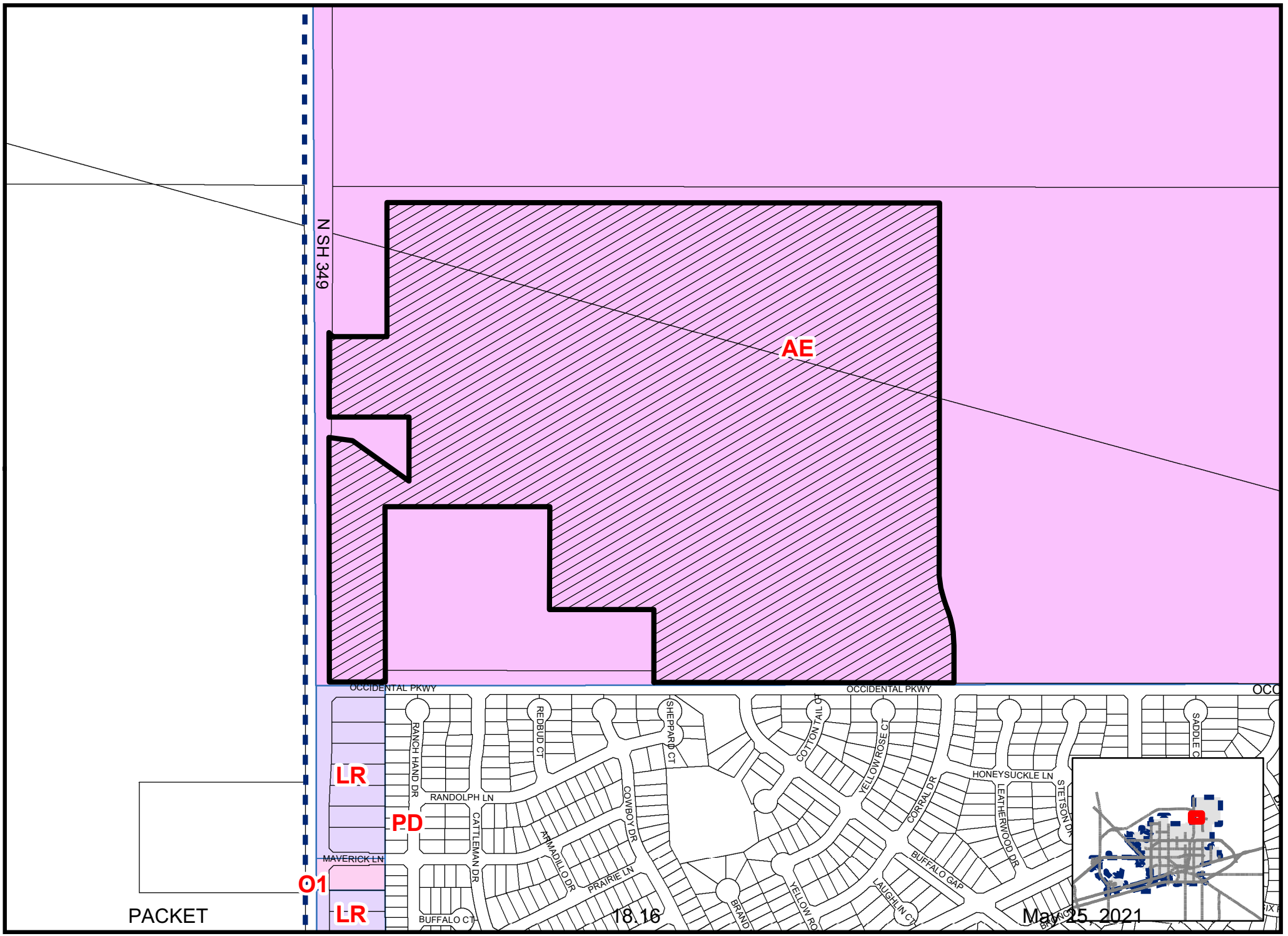
Generally located on the northeast corner of North State Highway 349 and Occidental Parkway. (Council District 1)

L E G E N D

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



May 25, 2021



Map By KM, 4/20/2021

Z-21-0234

Scale: 1" = 600'

ZONING MAP

© THE CITY OF MIDLAND - 2021: 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.

STOP

City Council Meeting

Item Number: 19

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Valerie A. Sherman, Senior Planner

Subject: AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOTS 4, 5 AND 6, WEST WAY ADDITION, SECTION 4, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF WEST GOLF COURSE ROAD AND HUGHES STREET), BY PERMITTING A REDUCED MINIMUM FRONT YARD SETBACK; 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 (DEVELOPMENT SERVICES)

Purpose:

The applicant, Mark Pelletier, is requesting a Special Exception from the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart, concerning the minimum front yard setback for a corner lot to be able to construct an addition for two new restrooms, on the east side of the building.

Recommended City Council Action:

Deny

Fiscal Impact:

No City funds are required to process this request.

Discussion:

The applicant's property is located at 1701 Hughes Street. This property is currently zoned SF-1, Single-Family Dwelling District and is the location of a church.

Per our City of Midland Zoning Ordinance, *Section 5.04 – Residential Zoning District Dimensional Regulations Chart:*

SF-1, Single-Family Dwelling District
Lot Setbacks
Minimum Front Yard Setback: 25 feet

The applicant's property would have to meet the minimum front yard setback of 25 feet, as listed in the zoning ordinance.

The applicant is requesting to construct an addition for two new restrooms, which would be built at 19 feet and 11 inches from the east front yard lot line, encroaching 5' – 1" into the front yard setback.

This request has been circulated to all pertinent City departments for review. Below are the departments' comments.

Engineering: (Approved)

No objection to zone change.

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.

Transportation: (Approved with Conditions)

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.

No objection to zone change.

Fire: (Approved)

No objection to zone change.

Code Compliance: (Approved)

No oil or Gas issues.

Building: (Approved)

No objections. Addition must be built to the 2018 International Building Codes.

Planning Analysis:

As this request represents a deviation from the existing Zoning Ordinance and no hardship has been shown, staff recommends denial of this request for a Special Exception to the City of Midland Zoning Ordinance, *Section 5.04 – Residential Zoning District Dimensional Regulations Chart,* concerning the minimum front yard setback on the east property line. If approved, staff recommends it should be subject to conditions A and B:

Conditions:

A. **That the property shall significantly conform to the site plan as shown in Exhibit "A", which is attached hereto and incorporated herein for all purposes.**

B. **That the minimum front yard setback on the east side of the lot shall be nineteen (19) feet and eleven (11) inches.**

Letters of Objection:

As of May 21, 2021, staff has not received any letters of objections.

Attachments:

Site Plan (Exhibit A)
Application
Maps

Robert Patrick

City Manager's Office

ORDINANCE NO. _____

AN ORDINANCE GRANTING A SPECIAL EXCEPTION FOR LOTS 4, 5 AND 6, WEST WAY ADDITION, SECTION 4, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF WEST GOLF COURSE ROAD AND HUGHES STREET), BY PERMITTING A REDUCED MINIMUM FRONT YARD SETBACK; 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 Code, 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 Lots 4, 5 and 6, West Way Addition, Section 4, City and County of Midland, Texas. Said special exception shall allow a reduced minimum front yard setback.

SECTION TWO. Said special exception is subject to the following special conditions:

A. That the minimum front yard setback shall be nineteen feet, eleven inches (19' 11").

B. That the Property shall significantly conform to Exhibit "A", which is attached hereto and incorporated herein for all purposes.

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., 2021; 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., 2021, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2021.

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

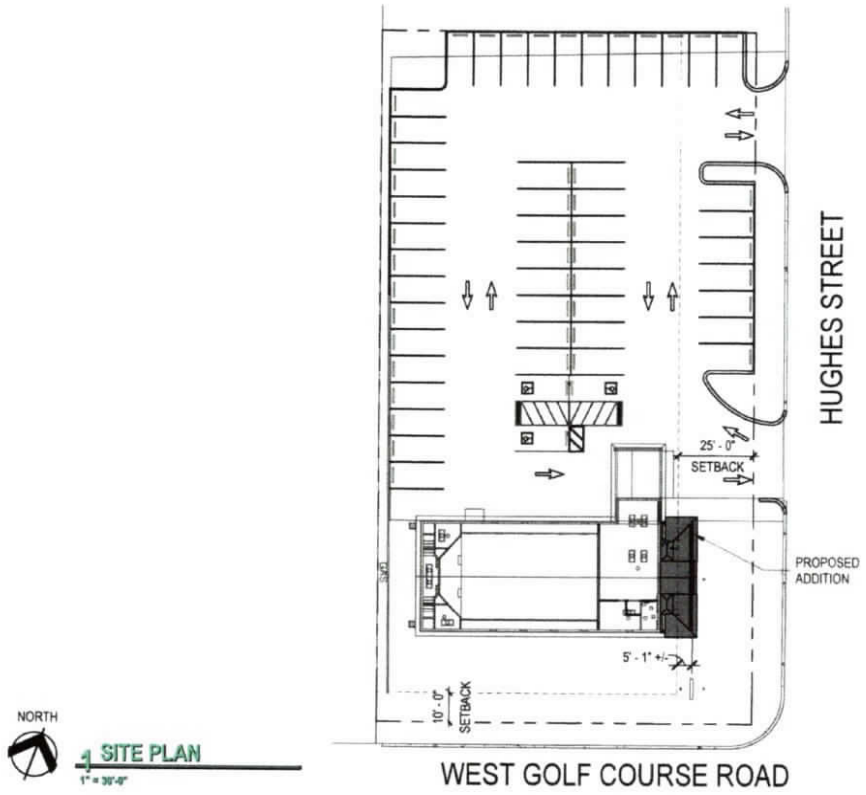
APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

Exhibit A



X2.02
SITE PLAN
SCALE: 1" = 30'-0"
DATE: 2-20-2020
H:\projects\00120 - WESTWAY CHURCH of CHRIST\00120-Westway Church of Christ-V.JR.rvt

WESTWAY CHURCH of CHRIST
INTERIOR RENOVATIONS

VANDERGRIFF GROUP
ARCHITECTS • PC
312 N. BIG SPRING SUITE 100 (432)687-0781 MIDLAND, TEXAS
© Copyright 2020 Vandergriff Group Architects PC

MIDLAND Planning Division

Special Exception Application

Project Number: E-21-0052

Case Number: _____

Applicant *(if acting as Agent, see affidavit on page 2)* Printed Name: MARK PELLETIER		Phone (432) 687-0781 Email mpelletier@vandergriff-group.com	
Address 312 N. BIG SPRING ST.	City MIDLAND	State TX	Zip 79701

Property Owner Printed Name: CHRIST TRUSTEES		Phone (432) 889-6987 Email WESTWAYCHURCH@gmail.com	
Address 1701 HUGHES ST.	City MIDLAND	State TX	Zip 79705

Representative *(if different from Applicant or Property Owner)* Firm: _____ Printed Name:		Phone ( ) Email	
Address	City	State	Zip

Street Address: 1701 HUGHES ST. MIDLAND, TX.

Legal Description
Lot: 004-006 Block: 001 Subdivision: ADD'N WEST WAY SEC 4

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: WOULD LIKE TO ENCROACH ON FRONT YARD SETBACK 5'-1" FOR A BATHROOM ADDITION. PLACEMENT ON MADLEY HAS SAFETY CONCERNS AS THE MONUMENT SIGN HAS BEEN HIT IN THE PAST.

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)

Signatures

Applicant (signature): Mark R Pelletier	Date: 4/23/21
Applicant (printed): MARK R. PELLETIER	
Property Owner (signature): KAF Christ Trustees Representative	Date: 4/27/21
Property Owner (printed): Kevin A. Fox Christ Trustee Representative	

The Special Exception 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 MARK R. PELLETIER who, being by me duly sworn, upon oath says: That (s)he is authorized by KEVIN FOX, CHRIST TRUSTEES REPRESENTATIVE, 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.

Mark R Pelletier
Authorized Agent (*signature*)

Subscribed and sworn to before me, this 27TH day of APRIL, 2021, to certify which witness my hand and seal of office.

NOTARY PUBLIC STATE OF TEXAS
Jeri Lin Getz
My Commission Expires
02/24/2023
ID No. 130129323

Jeri Lin Getz
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

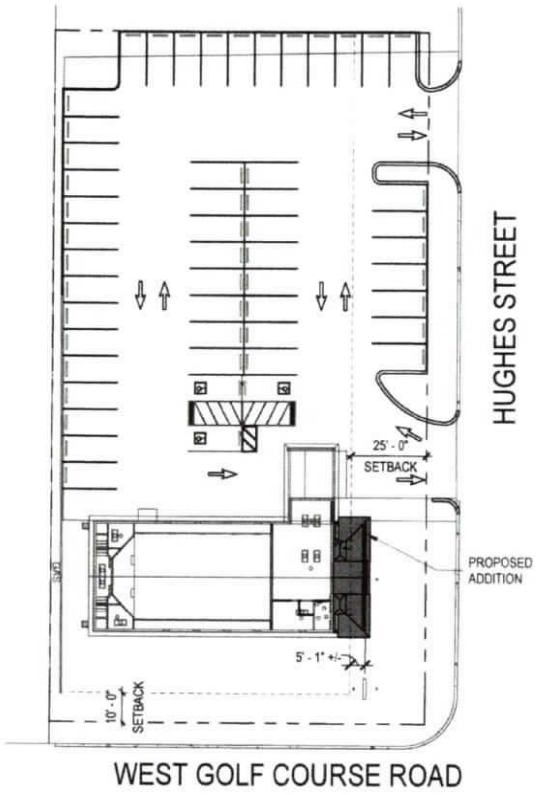
FOR OFFICE USE ONLY

☑ Property Owner Authorization	☐ Dimensioned Site Plan
☑ Application Fee	☑ Plans in Digital Format (PDF/JPEG)
Check # 22139	
Received By: Joseph Marquardt	Date: RECEIVED APR 30 2021

BY:

Application will not be considered for scheduling until reviewed by a planner.

Exhibit A



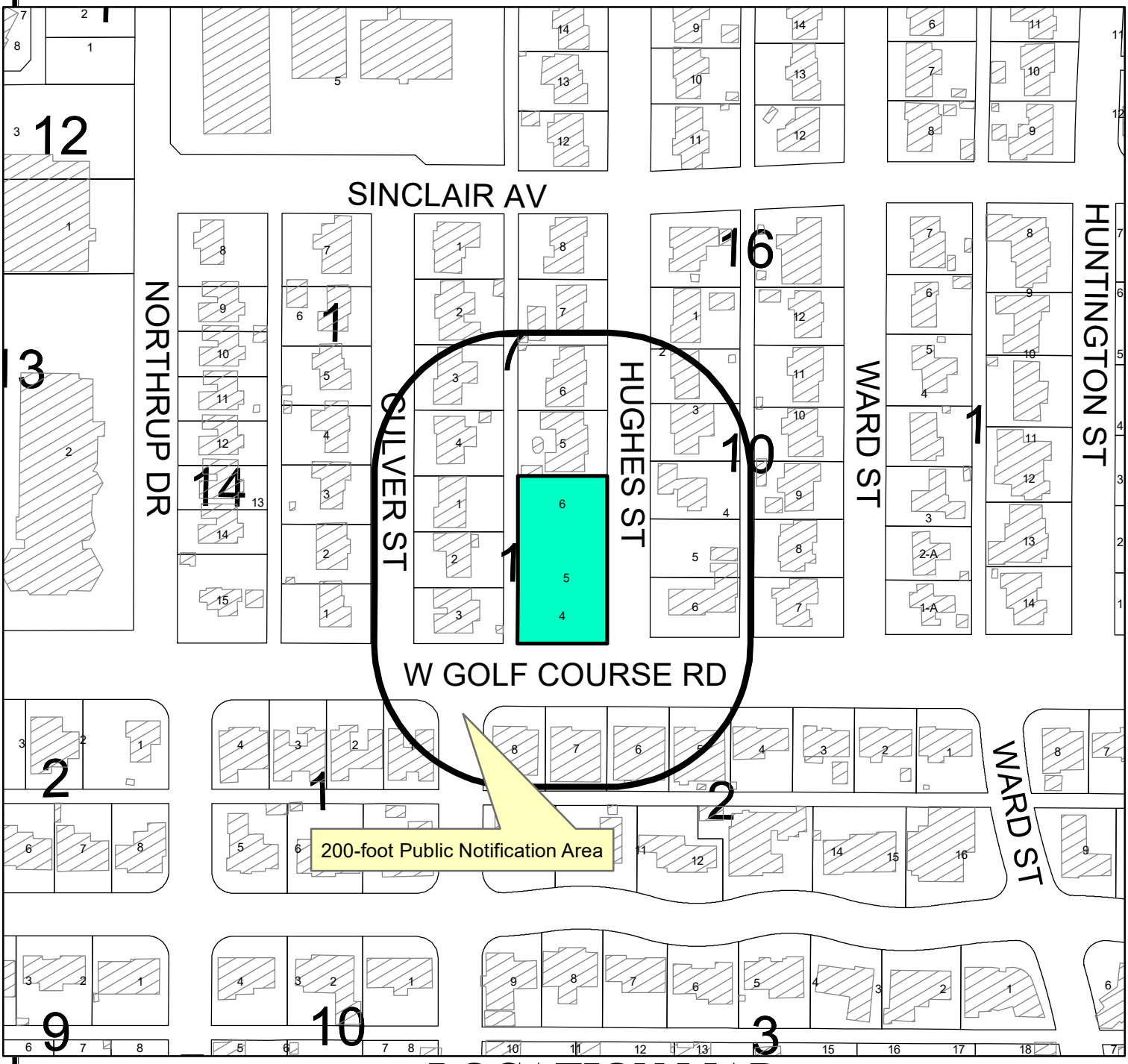
NORTH

1 SITE PLAN
1" = 30'-0"

X2.02
SITE PLAN
SCALE: 1" = 30'-0"
DATE: 2-20-2020
H:\projects\00120 - WESTWAY CHURCH of CHRIST\00120-Westway Church of Christ-V.JR.rvt

WESTWAY CHURCH of CHRIST
INTERIOR RENOVATIONS

VANDERGRIFF GROUP
ARCHITECTS • PC
312 N. BIG SPRING SUITE 100 (432)687-0781 MIDLAND, TEXAS
© Copyright 2020 Vandergriff Group Architects PC



LOCATION MAP

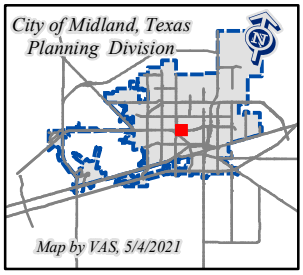
E-21-0052 **Scale: 1" = 200'**

Consider a request by Mark Pelletier for a Special Exception from the City of Midland Zoning Ordinance, Section 5.04 – Residential Zoning District Dimensional Regulations Chart, concerning the minimum front yard setback for a corner lot on Lots 4, 5, and 6, Block 1, West Way Addition, Section 4, City and County of Midland, Texas.

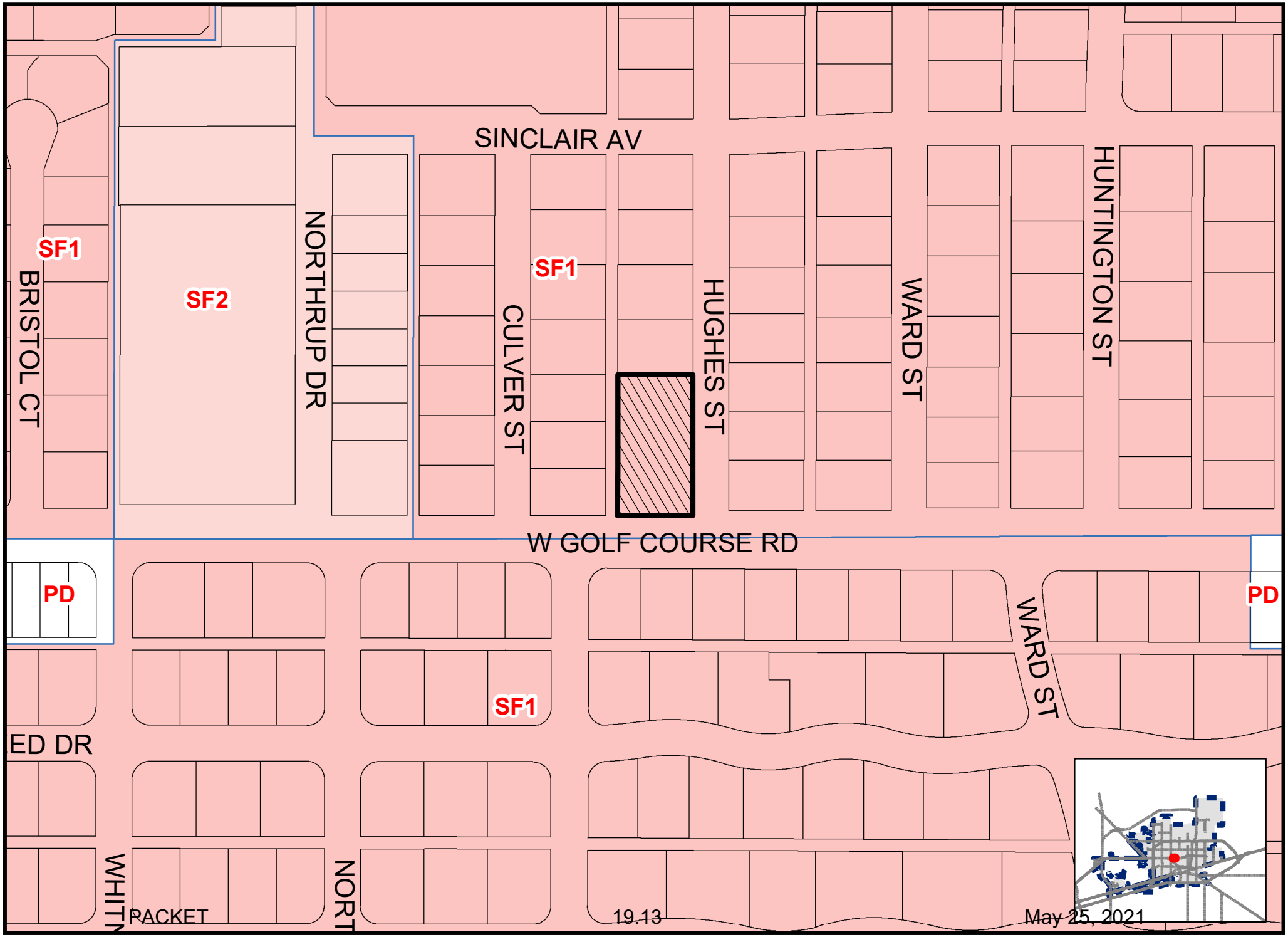
Generally located on the northwest corner of the intersection of W. Golf Course Road and Hughes Street. (Council District 3)

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



May 25, 2021



Map By VAS, 5/4/2021

E-21-0052

Scale: 1" = 200'

ZONING MAP

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Westway
Church of Christ






W GOLF COURSE RD
2800
STOP

City Council Meeting

Item Number: 20

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Isaac Garnett, Manager, Community Development

Subject: Hold a public hearing in order for the City of Midland and the CDBG Prioritization Committee to receive public comments, guidance and recommendations regarding the 2021-2022 CDBG grant application submissions and the Second Year Action Plan in accordance with the Five Year Consolidated Plan goals (DISTRICT: NONE) (DEVELOPMENT SERVICES)

Purpose:

Hold a public hearing in order for the City of Midland and the CDBG Prioritization Committee to receive public comments, guidance and recommendations regarding the 2021-2022 CDBG grant application submissions and the Second Year Action Plan in accordance with the Five Year Consolidated Plan goals.

Recommended City Council Action:

Directional / Informational

Fiscal Impact:

No fiscal impact to the City of Midland Budget.

Discussion:

The purpose of the public hearing is to allow the citizens to participate in the development of the City's 2021/2022 Community Development Program and the Second Year Action Plan. Past usage of Community Development Block Grant (CDBG) funds, community development and housing needs, and proposed uses of 2021/2022 CDBG funds will be discussed. The City will receive a grant of approximately $1,083,648 for 2021/2022 from the U.S. Department of Housing and Urban Development. The City also expects to receive $80,000 in program income which is included in the CDBG program-year (PY 2021-2022) allocation. A minimum 70% of

CDBG funds must be allocated to projects that benefit low and moderate-income persons. Examples of activities eligible for CDBG funding are housing rehabilitation, sidewalk and street improvement, park improvements, code enforcement, lot clearance, economic development and public services.



City Manager's Office

City Council Meeting

Item Number: 21

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Joseph Marynak, Planner

Subject: RESOLUTION AUTHORIZING THE TEMPORARY USE OF LAND FOR A VENDOR MARKET AND CONCERT ON LOT 1A, BLOCK 54, ALL OF BLOCK 55, A 0.57-ACRE PORTION OF WEST WALL STREET RIGHT-OF-WAY, A 0.57-ACRE PORTION OF NORTH COLORADO STREET RIGHT-OF-WAY, AND A 0.57-ACRE PORTION OF THE WEST TEXAS AVENUE RIGHT-OF-WAY, ALL ADJACENT TO BLOCK 55, ALL OUT OF ORIGINAL TOWN ADDITION, SECTION 14, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF NORTH COLORADO STREET AND WEST TEXAS AVENUE) SUBJECT TO CERTAIN SPECIAL CONDITIONS AND RESTRICTIONS (DISTRICT 2) (DEVELOPMENT SERVICES)

Purpose:

Consider a request by Lauren Johnston for approval of a Temporary Land Use Permit for a Vendor Market and Street Concert.

Recommended City Council Action:

Directional/Informational

Fiscal Impact:

Processing this request does not require any City funds.

Discussion:

Lauren Johnston is requesting a Temporary Land Use Permit for a vendor market event at Centennial Park, as shown on the site plan (Exhibit A). The proposed dates and times of the event are 8:00 a.m. to 10:00 p.m.Saturdays, May 29, 2021, June 5, 2021, August 7, 2021, September 4, 2021, October 2, 2021, November 6, 2021, December 4, 2021, January 8, 2022, February 5, 2022, March 5, 2022, April 2, 2022, as well as Friday, December 3, 2021 and Sunday, December 5, 2021.

This event will consist of a market, live music, and activity spaces.The applicant is proposing to use the Centennial Park restrooms throughout all operating hours of the event.

This request has been circulated to all pertinent City departments for review. Below are the departments's comments:

Engineering: (Approved with Conditions)

Comply with Temporary Traffic Control Procedure per Traffic's comments.

Otherwise, no objection.

Traffic: (Approved with Conditions)

July 3 date conflicts with Star Spangled Salute and cannot be approved.

Closure of Texas Ave requires extensive traffic control due to the number of lanes involved and is only approved for major events such as concerts and festivals (minimum projected attendance of at least 10,000 per agreement with Centennial Park).

Closures of Colorado and Wall St are acceptable provided the intersections at each end of the closures to be kept open and clear for two-way traffic.

Street closures to be set up no earlier than 10 pm on the day before each event.

Street closures to be fully removed no later than 5 am on the day after each event.

A Temporary Traffic Control Plan must be submitted by a qualified barricade company and approved by Engineering Services prior to the event or activity. The event organizer shall be responsible for coordinating with businesses or property owners whose access will be impacted.

Fire: (Approved with Conditions)

Access to fire protection supply connections may not be blocked

Building Code: (Approved)

No objections. Sanitary facilities must be easily located by the public as well as maintained properly. Any tents, canopies, or trailers must be erected according to manufacturer's installation instructions and tied down to prevent any damage caused by adverse weather

Planning:

This temporary land use permit for a fundraising event complies with Goal #2 of Chapter 7 of the Tall City Tomorrow Comprehensive Plan, which is to "create a 'cultural core' in Downtown Midland that is a living, working, and entertainment destination," as it creates an opportunity for an entertainment event that residents and visitors of Midland can enjoy.

Per table 403.1 of the 2018 International Plumbing Code, mercantile use requires water closets at a rate of 1 per 500 people. The applicant is proposing to have approximately 10,000 attendees for the event. This equates to a need of 20 water closets and, therefore, the Centennial Park restroom facilities are inadequate for the proposed event.

Staff recommends that if this temporary land use permit is approved, it should be subject to conditions A through L.

A. That the days and hours of operation of the Event tent sale shall be limited to the following:

May 29, 2021, June 5, 2021, August 7, 2021, September 4, 2021, October 2, 2021, November 6, 2021, December 3, 2021, December 4, 2021, December 5, 2021, January 8, 2022, February 5, 2022, March 5, 2022, and April 2, 2022, from 8:00 a.m. to 10:00 p.m.

B. That the operation of the Event shall conform to the site plan, which is attached hereto as Exhibit "A" and incorporated herein for all purposes.

C. That the Applicant shall provide a minimum of 20 restrooms that shall be made available for use during all operating hours of the Event.

D. That live music shall be allowed during all operating hours of the Event.

E. That the sale of alcoholic beverages for on-premises consumption shall be prohibited.

F. That the Applicant shall obtain approval from the Traffic Operations Division of a traffic control plan submitted by a qualified barricade company for the temporary closures of the portions of rights-of-way on which the Event will be operated, and the Event shall be operated in accordance with said traffic control plan. To the extent that portions of rights-of-way are closed during the operation of the Event, the intersections at each end of any such closure shall remain unobstructed and available for vehicular and pedestrian traffic. The Applicant shall coordinate with businesses and property owners whose access may be impacted by the Event to ensure that access is available for such businesses and property owners during

the operation of the Event.

G. That Event-related equipment, materials, and traffic control devices:
   1. **May be placed on the Property beginning at 10:00 p.m. on the day before each day of operation of the Event; provided, however, that the placement of equipment, materials, and traffic control devices on rights-of-way shall be in accordance with the approved traffic control plan; and**
   2. **Shall be completely removed from the Property no later than no later than 5:00 a.m. on the day after each day of operation of the Event.**

H. That each tent, canopy, and booth shall be erected according to its manufacturer's instructions, including the use of tie-downs that will resist the local estimated wind load.

I. That the Event shall be operated in compliance with all requirements of the Fire Code. The Applicant shall call for an inspection by the Fire Marshal prior to commencing operation of the Event.

J. That the Applicant shall obtain approval from the Solid Waste Department for a refuse collection and clean-up plan prior to operation of the Event.

K. That the Code Administration Division and the Planning Division shall be notified no later than 48 hours preceding operation of the Event.

L. That the Applicant shall be responsible for ensuring that the conditions herein are observed and satisfied.

Letters of Objection:

As of May 20, 2021, staff has not received any letters of objection.

Attachments:

Application
Site Plan (Exhibit A)
Maps

Robert Patrick

City Manager's Office

RESOLUTION NO. _____

RESOLUTION AUTHORIZING THE TEMPORARY USE OF LAND FOR A VENDOR MARKET AND CONCERT ON LOT 1A, BLOCK 54, ALL OF BLOCK 55, A 0.57-ACRE PORTION OF WEST WALL STREET RIGHT-OF-WAY, A 0.57-ACRE PORTION OF NORTH COLORADO STREET RIGHT-OF-WAY, AND A 0.57-ACRE PORTION OF THE WEST TEXAS AVENUE RIGHT-OF-WAY, ALL ADJACENT TO BLOCK 55, ALL OUT OF ORIGINAL TOWN ADDITION, SECTION 14, CITY AND COUNTY OF MIDLAND, TEXAS (GENERALLY LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF NORTH COLORADO STREET AND WEST TEXAS AVENUE) SUBJECT TO CERTAIN SPECIAL CONDITIONS AND RESTRICTIONS

WHEREAS, pursuant to Section 11-1-4.05 of the City Code of Midland, Texas, Lauren Johnston (the "Applicant") has applied for authorization to temporarily use Lot 1A, Block 54, all of Block 55, a 0.57-acre portion of West Wall Street right-of-way, a 0.57-acre portion of North Colorado Street right-of-way, and a 0.57-acre portion of the West Texas Avenue right-of-way, all adjacent to Block 55, all out of Original Town Addition, Section 14, City and County of Midland, Texas (the "Property") for a vendor market and concert (the "Event"); and

WHEREAS, the Council finds and determines that such temporary use shall be allowed;

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

SECTION ONE. That the Applicant is hereby authorized by the City Council to temporarily use the Property for the Event subject to the following conditions and restrictions:

A. That the days and hours of operation of the Event tent sale shall be limited to the following:

May 29, 2021, June 5, 2021, August 7, 2021, September 4, 2021, October 2, 2021, November 6, 2021, December 3, 2021, December 4, 2021, December 5, 2021, January 8, 2022, February 5, 2022, March 5, 2022, and April 2, 2022, from 8:00 a.m. to 10:00 p.m.

B. That the operation of the Event shall conform to the site plan, which is attached hereto as Exhibit "A" and incorporated herein for all purposes.

C. That the Applicant shall provide a minimum of 20 restrooms that shall be made available for use during all operating hours of the Event.

D. That live music shall be allowed during all operating hours of the Event.

E. That the sale of alcoholic beverages for on-premises consumption shall be prohibited.

F. That the Applicant shall obtain approval from the Traffic Operations Division of a traffic control plan submitted by a qualified barricade company for the temporary closures of the portions of rights-of-way on which the Event will be operated, and the Event shall be operated in accordance with said traffic control plan. To the extent that portions of rights-of-way are closed during the operation of the Event, the intersections at each end of any such closure shall remain unobstructed and available for vehicular and pedestrian traffic. The Applicant shall coordinate with businesses and property owners whose access may be impacted by the Event to ensure that access is available for such businesses and property owners during the operation of the Event.

G. That Event-related equipment, materials, and traffic control devices:

1. May be placed on the Property beginning at 10:00 p.m. on the day before each day of operation of the Event; provided, however, that the placement of equipment, materials, and traffic control devices on rights-of-way shall be in accordance with the approved traffic control plan; and

2. Shall be completely removed from the Property no later than no later than 5:00 a.m. on the day after each day of operation of the Event.

H. That each tent, canopy, and booth shall be erected according to its manufacturer's instructions, including the use of tie-downs that will resist the local estimated wind load.

I. That the Event shall be operated in compliance with all requirements of the Fire Code. The Applicant shall call for an inspection by the Fire Marshal prior to commencing operation of the Event.

J. That the Applicant shall obtain approval from the Solid Waste Department for a refuse collection and clean-up plan prior to operation of the Event.

K. That the Code Administration Division and the Planning Division shall be notified no later than 48 hours preceding operation of the Event.

L. That the Applicant shall be responsible for ensuring that the conditions herein are observed and satisfied.

SECTION TWO. That the City Council reserves at all times the full right and power

to revoke said temporary use for violation of any of its terms or any misrepresentations contained in the application, after a hearing of which the holder of said temporary use has been given at least one (1) day notice.

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., 2021, by the following vote:

Council members voting "AYE":

Council members voting "NAY":

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

RECOMMENDED AND APPROVED:

_____
Robert Patrick, City Manager

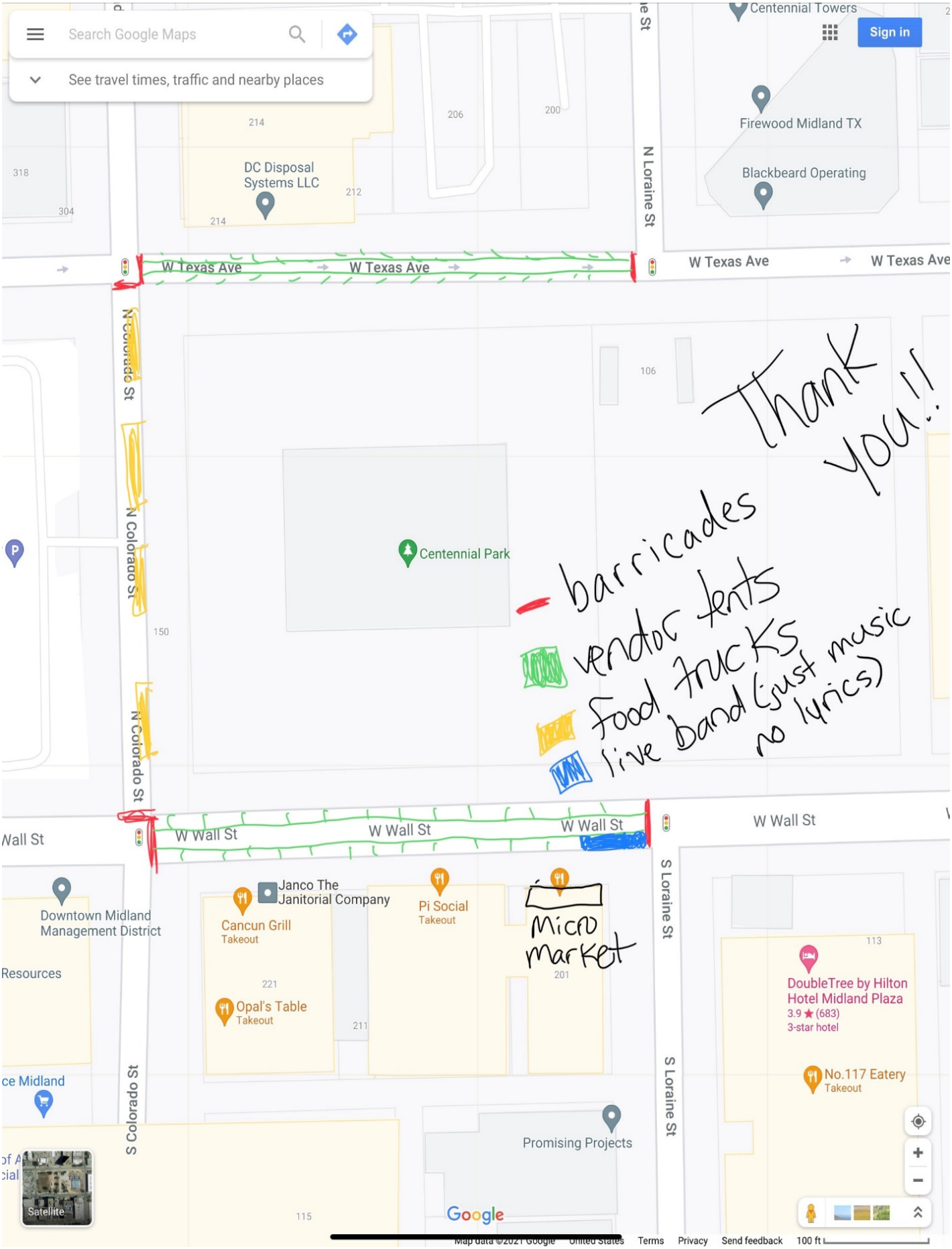
APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Charles Harrington, Director of Development Services

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

EXHIBIT "A"


Search Google Maps
See travel times, traffic and nearby places
Centennial Towers
Sign in
Firewood Midland TX
Blackbeard Operating
DC Disposal Systems LLC
N Loraine St
W Texas Ave
W Texas Ave
W Texas Ave
W Texas Ave
N Colorado St
N Colorado St
N Colorado St
Centennial Park
Thank you!!
barricades
vendor tents
food trucks
live band (just music no lyrics)
W Wall St
W Wall St
W Wall St
W Wall St
S Loraine St
S Loraine St
S Colorado St
Downtown Midland Management District
Janco The Janitorial Company
Cancun Grill
Takeout
Pi Social
Takeout
Micro market
Opal's Table
Takeout
DoubleTree by Hilton Hotel Midland Plaza
3.9 ★ (683)
3-star hotel
No.117 Eatery
Takeout
Promising Projects
Resources
Satellite
Google
Map data ©2021 Google
Terms
Privacy
Send feedback
100 ft

MIDLAND Planning Division

Temporary Land Use Application

Project Number: TLU-21-0087

Case Number: _____

Event Name: Lo. Street Market

Applicant *(if acting as Agent, see affidavit on page 2)*		Phone (432) 296-2727	
Printed Name: Lauren Johnston		Email micromarketmidland@gmail.com	
Address 3406 Sinclair Ave	City Midland	State TX	Zip 79707

Property Owner		Phone ( )	
Printed Name: City of Midland		Email	
Address	City	State	Zip

Representative *(if different from Applicant or Property Owner)*		Phone ( )	
Firm: _____		Email	
Printed Name:			
Address	City	State	Zip

Street Address:

Legal Description 200 W Wall + 200 W Texas + 100 N Colorado
Lot: Block: Subdivision:

Current Zoning:

Type of Temporary Use Requested:

Description of Event: vendor market, activity space, street concert

Duration of Temporary Use: 8 AM - 10 PM (one day) 1 year day to day
If event lasts for more than (1) day and is located within any residential district or is located within 1,000 feet of any residential district, then a public hearing is required. May 29,

Proposed Days and Hours: 8 AM - 10 PM June 5, July 3, August 7, September 4, October 2, November 6, December 3,4,5 Jan 8, Feb 5, March 5, April 2

Will alcoholic beverages be sold? ☐ Yes ☑ No
If yes, you must comply with all Texas Alcoholic Beverage Commission (TABC) regulations for the event.

Are you requesting the temporary closure of any streets? ☑ Yes ☐ No
If yes, you must:

A. Complete the "**Special Event and Street Closure Application**", available from the Planning Division (4th Floor, City Hall), as well as submit a "**Traffic Control Plan**" to the Transportation Division (5th Floor, City Hall).
B. Provide the City with a **general liability insurance certificate**, naming the **City** as an **Additional Insured**, in the amount of one million dollars ($1,000,000) for the term of the closure.

RECEIVED
MAY 11 2021
BY: ES

Number of Peace Offices Provided: _____ *Contact the Midland Police Department to schedule off-duty police officers.*			
Type of Music (*carnival, live, etc.*): live, bluetooth speaker			
Showmobile (*portable stage*) **Requested:** ☐ Yes ☒ No		Days & Hours:	
Number of Restroom Fixtures Provided:	*Men*	**Toilets/Urinals:** 2 / 2	**Bathroom Sinks:** 2
Centennial Park has public restrooms!	*Women*	**Toilets:** 4	**Bathroom Sinks:** 2
	Unisex	**Toilets:**	**Bathroom Sinks:**

Submittal and Fees

Items to be submitted with this application form:

- Application Fee – Payable to the 'City of Midland'
- Damage Deposit
- Clean-Up Deposit
- 1 FOLDED Copy of Site Plan*
- Digital Copies of Site Plan (PDF/JPEG)

**Should show existing buildings, parking, access arrangements, surrounding streets, activity areas, areas of alcoholic beverage sales, proposed street closures, etc.*

Signatures	
Applicant (signature): CJohnston	Date: 5-11-2021
Applicant (printed):	
Property Owner (signature):	Date:
Property Owner (printed):	
Representative (signature):	Date:
Representative (printed) :_____	

The Temporary Land Use Permit 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.

****Application will not be considered for scheduling until reviewed by a planner.****

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 Lauren Johnston 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.

LJohnston
Authorized Agent (*signature*)

Subscribed and sworn to before me, this 11th day of May, 2021, to certify which witness my hand and seal of office.

DENISE HUBBARD
NOTARY PUBLIC - STATE OF TEXAS
ID# 3312551
COMM. EXP. 06-18-2023

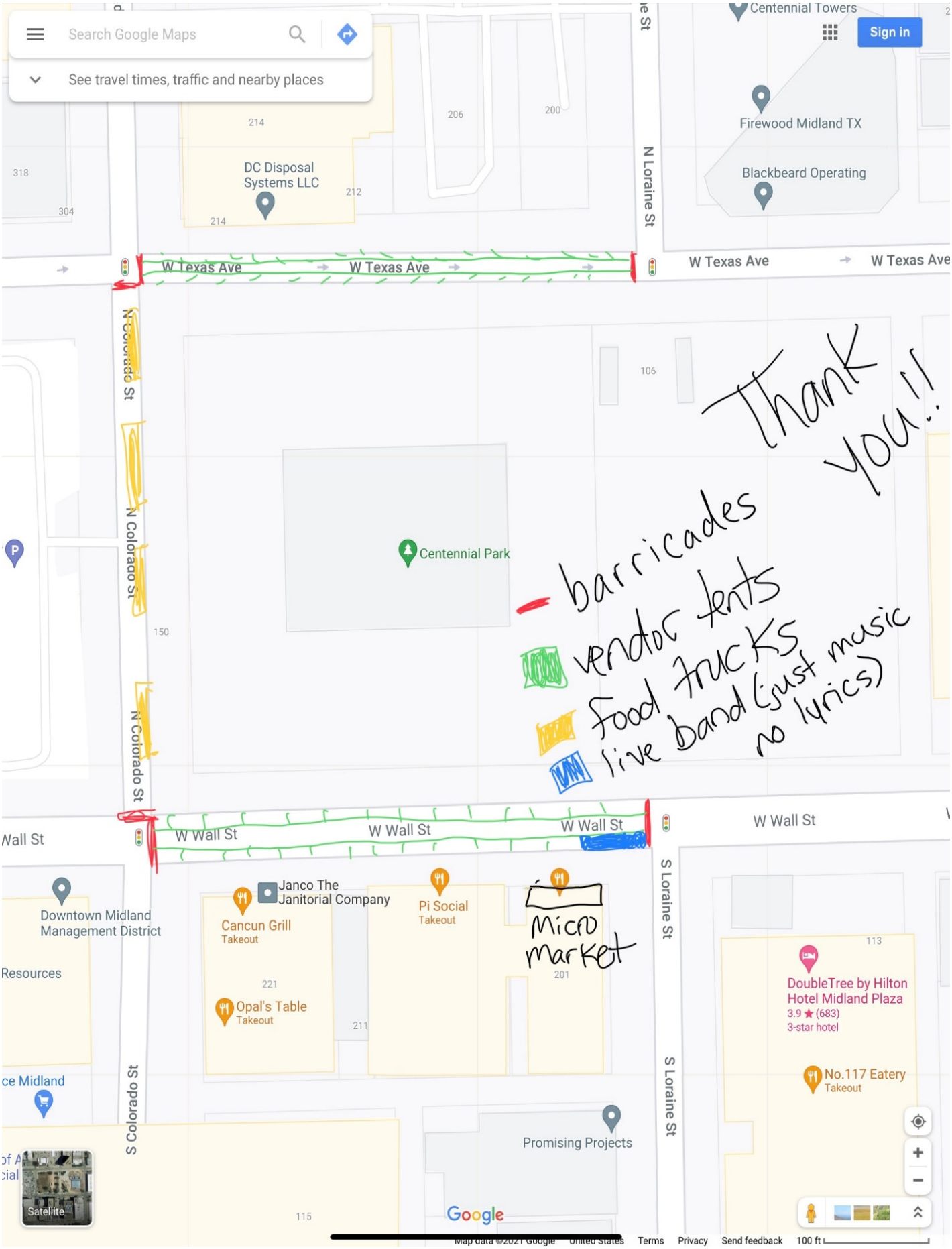
Denise Hubbard
NOTARY PUBLIC, MIDLAND COUNTY, TEXAS

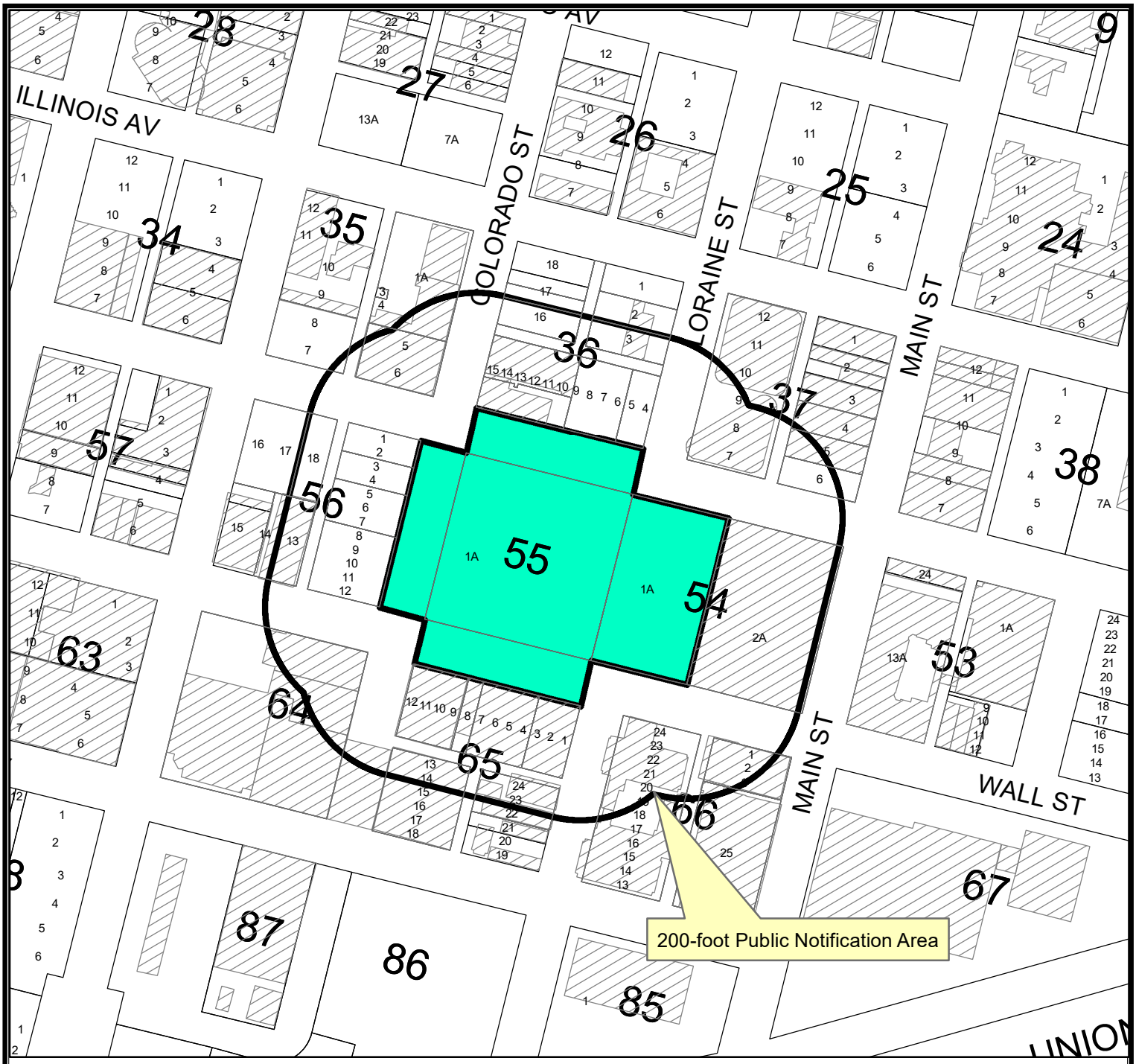
FOR OFFICE USE ONLY

☑ Property Owner Authorization	☑ Liability Insurance (Street Closure)
☑ Dimensioned Site Plan	☐ Traffic Control Plan (Street Closure)
☑ Plans in Digital Format (PDF/JPEG)	☑ Clean-Up Deposit
☑ Application Fee	Check #_____
Check #1122	☑ Damage Deposit
☐ Administrative Approval	Check #1122
Received By: ES	Date: 5/11

RECEIVED
MAY 11 2021
BY: ES

****Application will not be considered for scheduling until reviewed by a planner.****


Search Google Maps
See travel times, traffic and nearby places
Centennial Towers
Sign in
Firewood Midland TX
Blackbeard Operating
DC Disposal Systems LLC
N Loraine St
W Texas Ave
W Texas Ave
W Texas Ave
W Texas Ave
N Colorado St
N Colorado St
N Colorado St
Centennial Park
Thank you!!
barricades
vendor tents
food trucks
live band (just music no lyrics)
W Wall St
W Wall St
W Wall St
W Wall St
S Loraine St
S Loraine St
S Colorado St
Downtown Midland Management District
Janco The Janitorial Company
Cancun Grill
Takeout
Pi Social
Takeout
Micro market
Opal's Table
Takeout
DoubleTree by Hilton Hotel Midland Plaza
3.9 ★ (683)
3-star hotel
No.117 Eatery
Takeout
Promising Projects
Resources
Satellite
Google
Terms
Privacy
Send feedback
100 ft



LOCATION MAP

TLU-21-0087 **Scale: 1" = 250'**

Consider a request by Lauren Johnston for a Temporary Land Use Permit for a Vendor Market and Street Concert on Lot 1A, Block 54, all of Block 55, a 0.57 acre portion of the W Wall Street right-of-way, a 0.57 acre portion of the N Colorado Street right-of-way, and a 0.57 acre portion of the W Texas Avenue right-of-way, all out of Original Town Addition, Section 14, City and County of Midland, Texas.

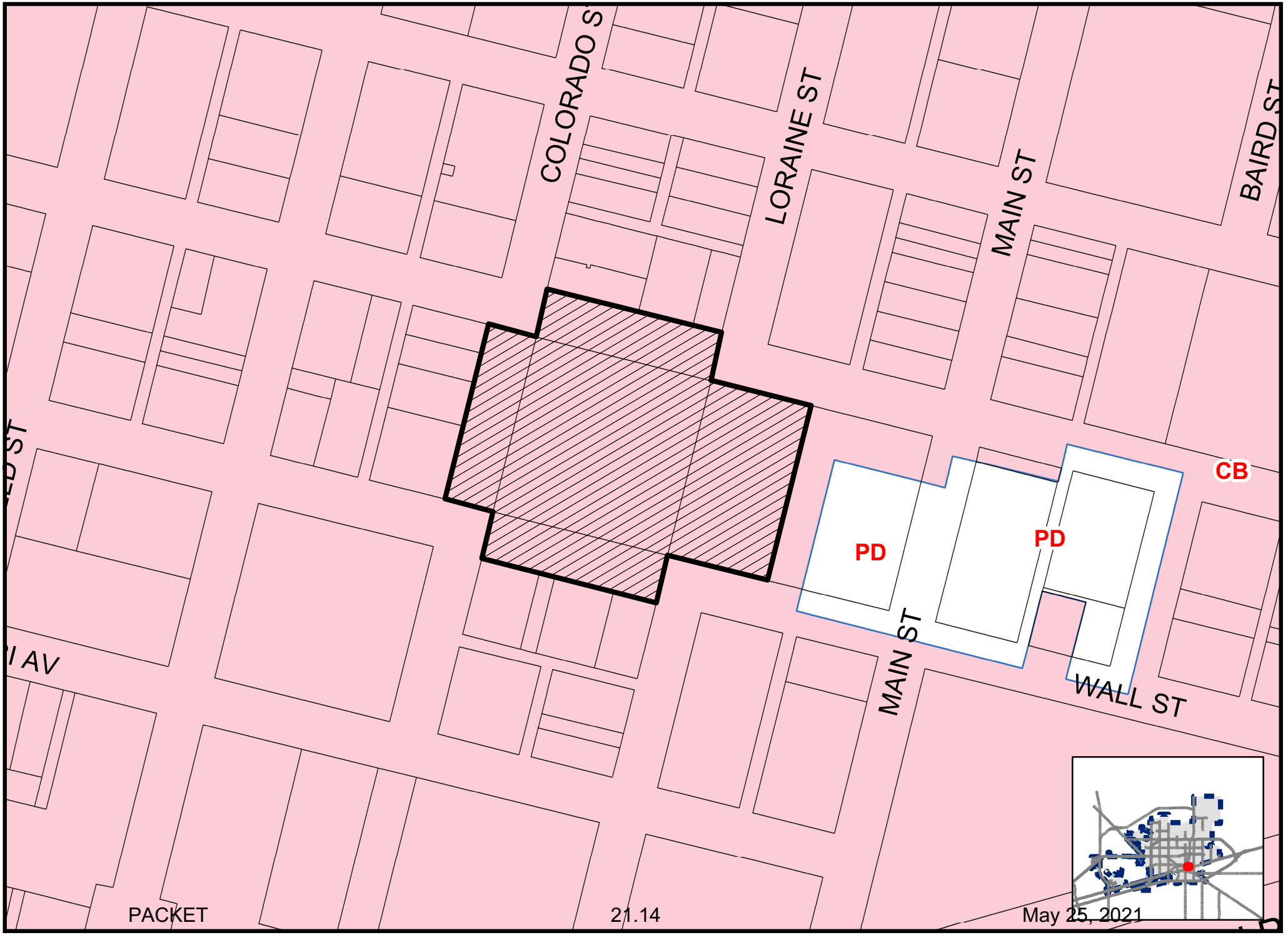
Generally located on the southeast corner of the intersection of North Colorado Street and West Texas Avenue. (Council District 2).

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



May 25, 2021



Map By JM, 05/12/2021

TLU-21-0087

Scale: 1" = 200'

ZONING MAP

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STOP


LORAINE ST



City of Midland
Office Memorandum

DATE: May 25, 2021

TO: The Honorable Mayor and City Council Members

FROM: John Ohnemiller, City Attorney

SUBJECT: A proposed ordinance amending Title III, "Departments", Chapter 3, "Hotel Occupancy Tax", Section 1, "Definitions", of the City Code of Midland, Texas, so as to define "hotel" in accordance with state law.

The proposed ordinance amends Title III, "Departments", Chapter 3, "Hotel Occupancy Tax", Section 1, "Definitions", of the City Code of Midland, Texas, by defining "hotel" in accordance with Section 156.001 of the Texas Government Code.

The ordinance would expressly include "short-term rental" in the definition of "hotel." "Short-term rental" means "the rental of all or part of a residential property to a person who is not a permanent resident" (e.g., an Airbnb rental). Section 156.001(b) of the Texas Government Code includes "short-term rental" in the definition of "hotel," and expressing this in the City Code will prevent confusion among local short-term rental operators regarding whether the City's hotel occupancy tax must be collected and paid.

Additionally, the ordinance would exclude "oilfield portable unit," as that term is defined by Section 152.001 of the Texas Government Code, from the definition of "hotel." Section 156.001(a) of the Texas Government Code excludes "oilfield portable unit" from the definition of "hotel," so it is not subject to state or local hotel occupancy tax. Thus, it would be prudent to exclude it from the City's definition of "hotel." Section 152.001 of the Texas Government Code defines "oilfield portable unit" as "a bunkhouse, manufactured home, trailer, or semitrailer that:

(A) is not a travel trailer, as defined by Section 502.166(e), Transportation Code;
(B) is designed to be used for temporary lodging or as temporary office space;
(C) is used exclusively at any oil, gas, water disposal, or injection well site to provide to well site employees, contractors, or other workers sleeping accommodations or temporary work space, including office space; and
(D) does not require attachment to a foundation or to real property to be functional."

Please do not hesitate to contact me should you have any questions.

ORDINANCE NO. _____

AN ORDINANCE AMENDING TITLE III, "DEPARTMENTS", CHAPTER 3, "HOTEL OCCUPANCY TAX", SECTION 1, "DEFINITIONS", OF THE CITY CODE OF MIDLAND, TEXAS, SO AS TO DEFINE "HOTEL" IN ACCORDANCE WITH STATE LAW; PROVIDING FOR A MAXIMUM PENALTY OR FINE OF FIVE HUNDRED DOLLARS ($500.00); CONTAINING A CUMULATIVE CLAUSE; CONTAINING A SAVINGS AND SEVERABILITY CLAUSE; AND ORDERING PUBLICATION

WHEREAS, the City Council finds it to be in the public interest to make certain amendments to the Midland City Code so as to define "hotel" in accordance with Section 156.001, Government Code;

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

SECTION ONE. That the Midland City Code Title III, "Departments", Chapter 3, "Hotel Occupancy Tax", Section 1, "Definitions", shall hereby be amended to read in its entirety as follows:

3-3-1. Definitions.

As used in this Chapter:

(A) "Hotel" means a building in which members of the public obtain sleeping accommodations for consideration. The term includes a hotel, motel, tourist home, tourist house, tourist court, lodging house, inn, rooming house, bed and breakfast, or short-term rental. The term does not include:

(1) a hospital, sanitarium, or nursing home;

(2) a dormitory or other housing facility owned or leased and operated by an institution of higher education or a private or independent institution of higher education as those terms are defined by Section 61.003, Education Code, as amended, used by the institution for the purpose of providing sleeping

accommodations for persons engaged in an educational program or activity at the institution; or

(3) an oilfield portable unit, as defined by Section 152.001, Government Code, as amended.

(B) "Permanent resident" means a person who has the right to use or possess a room in a hotel for at least 30 consecutive days, so long as there is no interruption of payment for the period.

(C) "Short-term rental" means the rental of all or part of a residential property to a person who is not a permanent resident.

(D) "Tourism" means the guidance or management of tourists.

(E) "Tourist" means an individual who travels from the individual's residence to a different municipality, county, state, or country for pleasure, recreation, education, or culture.

SECTION TWO. The provisions of any ordinance which are 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 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 five hundred dollars ($500.00) pursuant to State law.

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 _____ day of _____, A.D., 2021; 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., 2021, at a regular meeting of the City Council:

Council members voting "AYE":

Council members voting "NAY":

PASSED AND APPROVED THIS _____ day of _____, A.D., 2021.

_____
Patrick N. Payton, Mayor

ATTEST:

_____
Amy M. Turner, City Secretary

APPROVED AS TO CONTENT
AND COMPLETENESS:

_____
Morris Williams, Assistant City Manager

APPROVED ONLY AS TO FORM:

_____
John Ohnemiller, City Attorney

City Council Meeting

Item Number: 23

Meeting Date: May 25, 2021

To: City Council / City Manager

From: Joseph Marynak, Planner

Subject: MOTION GRANTING CACTUS SIGN COMPANY'S APPEAL AND REVERSING THE BUILDING OFFICIAL'S DENIAL OF A SIGN PERMIT FOR THE SOUTH HALF OF LOTS 7 THROUGH 9 AND THE SOUTH 93.32 FEET OF LOTS 10 THROUGH 12, BLOCK 5, AND ALL OF BLOCKS 1, 2, 6, AND 7, ALL OUT OF HIGH SCHOOL ADDITION, CITY AND COUNTY OF MIDLAND, TEXAS. (GENERALLY LOCATED AT THE NORTHWEST CORNER OF THE INTERSECTION OF NORTH A STREET AND WEST ILLINOIS AVENUE) (DISTRICT 3) (DEVELOPMENT SERVICES)

Purpose:

The applicant, Cactus Sign Co., is requesting a variance to the allowed area for an electronic message center (EMC) for Midland High School located at 906 West Illinois Avenue.

Recommended City Council Action:

Deny

Fiscal Impact:

Processing this request does not require any City funds.

Discussion:

Per the proposed sign plans, the applicant is requesting to install a 55 square foot, wall mounted EMC on the gymnasium at Midland High School.

The request does not meet the requirements per the City of Midland Zoning Ordinance Section 11-7a-7.- *Sign Standards.*

(F)Use of an electronic message center (EMC) sign.

2. Size limitations. In all cases, the use of an electronic message center (EMC) shall count toward the total area of signs allowed on a property.

a. In the AE-MF-2 Districts a sign permit may be issued for property occupied by a conforming, non-residential use in accordance with the following:

i. An EMC shall not exceed 24 square feet in area.

Additionally,

(H) General business sign.

1. In the AE - MF-2 Districts, a sign permit may be issued for property occupied by a conforming, non-residential use in accordance with the following:

c. For institutional uses and all other non-residential uses:

v. Wall signs shall not exceed 50 square feet or 15 percent of the area of the wall to which such signs are painted or affixed, whichever is less, except that the use of an EMC as wall sign shall comply with paragraph (F) above.

The proposed wall sign exceeds the limitations for EMC signs by 31 square feet as well as exceeding the maximum sign area allowed for any wall sign by five square feet.

Planning:

As this request represents a deviation from the existing sign regulations and no hardships have been shown to exist, staff would recommend denial of this application for a variance to the allowed area for an electronic message center.

Attachments:

Appeal Request
Building Official's Denial Letter
Application and Proposed Sign Plans
Maps

Robert Patrick

City Manager's Office

MIDLAND
Code Administration

PERMANENT SIGN
PERMIT APPLICATION

1. PROJECT INFORMATION

Project Address: 906 West Illinois	Project Description: Install EMC Sign on wall 5'3" x 10'6"
Name of Business: Think Sign	
Valuation of Job: $ 15,000.00	Zoning:
Property Line Setbacks: Front ____ Side ____ Rear ____	Property Easements: Yes ____ No ____
Lot/Tract:	Block: / Subdivision/Survey: / Lot Size: (sq. ft.)
Type of Work: New Construction ✓ Additional ____ Repair Existing ____	Engineering Required: ____
Sign Type: Pole/Pylon ____ Monument ____ Directional ____ Wall ✓ LED ____ Other ____	
Illumination: Internal: 1 External ____ None ____	Proposed Sign Area: ____ Facade: Height: ____ Width: ____
Number of Signs: 1	Height Above Grade: ____ / Overhang Permitted: ____ / Other: ____

2. BUILDING OWNER INFORMATION

Name: Thinksigns	Address: 5680 Shepherdsville Rd	
Phone: 877-767-9949	Fax:	Email:

3. SIGNAGE / CONTRACTOR INFORMATION

Name: Cactus Sign Co	Address: 3504 W Wall	
Phone: 570-7446	Fax:	Email: misty@cactussign.com

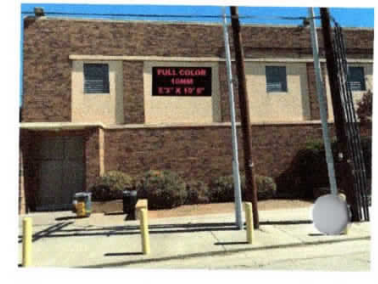
4. PLEASE READ CAREFULLY

- Attach three (3) copies of the Signage Site Plan and Signage Elevations showing building dimensions and square footages of the signage areas.
- All signs with lighting must have an Underwriters Laboratory label affixed to cabinet and electrical.
- Be advised incomplete applications may be rejected, denied or cause permit processing delays.
- This permit becomes null and void if work authorized is not commenced within 180 days of issuance or if work is suspended or abandoned for a period of 180 days at any time after work is commenced.
- I hereby certify that I am the property owner or their authorized agent, and have the owner's consent to apply for the permit requested and receive all subsequent communications and business related to this application. I further certify that the information provided is true and correct to the best of my knowledge. This work shall comply with all provisions of laws and ordinances, whether specified or not. The granting of a permit does not presume to give authority to violate or cancel the provisions of any federal, state or local law regulating construction or the performance of construction.

Signature of Applicant: Rob Waldron	Date: 3/7/21
Printed Name of Applicant: Rob Waldron	Phone: 570-7446
Email: misty@cactussign.com	Fax:

Code Administration Division
Development Services Department
300 N. Loraine Street - P.O. Box 1152 - Midland, Texas 79702
Office: 432-685-7310 - Fax 432-686-1609


100'
34'
Google Earth
© 2021 Google
10 ft
N



SIGN PERMIT PLAN REVIEW LETTER
Sent via Electronic Mail
Denial Letter

May 5, 2021

Cactus Sign
3504 W Wall St.
Midland, TX 79705

RE: EMC Sign Think Sign

Mr. Waldron:

The plan review for the building permit for this project has been completed. The following comments or conditions that must be addressed prior to completion of the review and issuance of the building permit. Should you or the design consultants need further clarification regarding these comments or conditions, please contact the appropriate department or staff member.

Planning Division- Joseph Marynak- 432-685-7409 jmarynak@midlandtexas.gov

Per 11-7a-7.F.2, EMC signs on non-residential properties are allowed to be a maximum of 24 square feet.
Per 11-7a-7.H.1.c, wall mounted signs for institutional uses in a residential district are allowed to be a maximum of 50 square feet

Code Administration – Liliana Morales – 432-685-7396 lmorales@midlandtexas.gov

Date: 5/5/2021

No issues as submitted

Sincerely,

Liliana Morales
Residential Plan Examiner
City of Midland, TX Code Administration
432-685-7396
lmorales@midlandtexas.gov

Joseph Marynak

From: Liliana Morales
Sent: Wednesday, May 5, 2021 4:32 PM
To: Joseph Marynak
Subject: FW: sign Permit for Midland High school

From: Misty Hutson <misty@cactussign.com>
Sent: Wednesday, May 5, 2021 4:31 PM
To: Liliana Morales <lmorales@midlandtexas.gov>
Subject: RE: sign Permit for Midland High school

Liliana

In would like appeal this and request a variance for this sign.

Cactus Sign Co.
Misty Hutson
3504 W Wall Street Suite B
Midland Texas
Office 432-570-7446 Ext # 104
Cell 432-352-9672

From: Liliana Morales <lmorales@midlandtexas.gov>
Sent: Wednesday, May 5, 2021 4:04 PM
To: Misty Hutson <misty@cactussign.com>
Cc: Rob Waldron <rob@cactussign.com>
Subject: RE: sign Permit for Midland High school

Please see attachment.

From: Joseph Marynak <jmarynak@midlandtexas.gov>
Sent: Tuesday, April 27, 2021 12:54 PM
To: Liliana Morales <lmorales@midlandtexas.gov>
Subject: RE: sign Permit for Midland High school

Liliana,

Denied for the following:
Per 11-7a-7.F.2, EMC signs on non-residential properties are allowed to be a maximum of 24 square feet.
Per 11-7a-7.H.1.c, wall mounted signs for institutional uses in a residential district are allowed to be a maximum of 50 square feet.

Please send the applicant an official denial letter.

Thank you,

Joseph Marynak
Planner | Development Services | City of Midland
O: (432) 685-7409

MIDLAND
Feel the Energy!
300 N. Loraine Street | P.O. Box 1152 | Midland, TX 79701

From: Liliana Morales <lmorales@midlandtexas.gov>
Sent: Thursday, April 8, 2021 12:44 PM
To: Joseph Marynak <jmarynak@midlandtexas.gov>
Subject: FW: sign Permit for Midland High school

Ready for review SGN-033623-2021

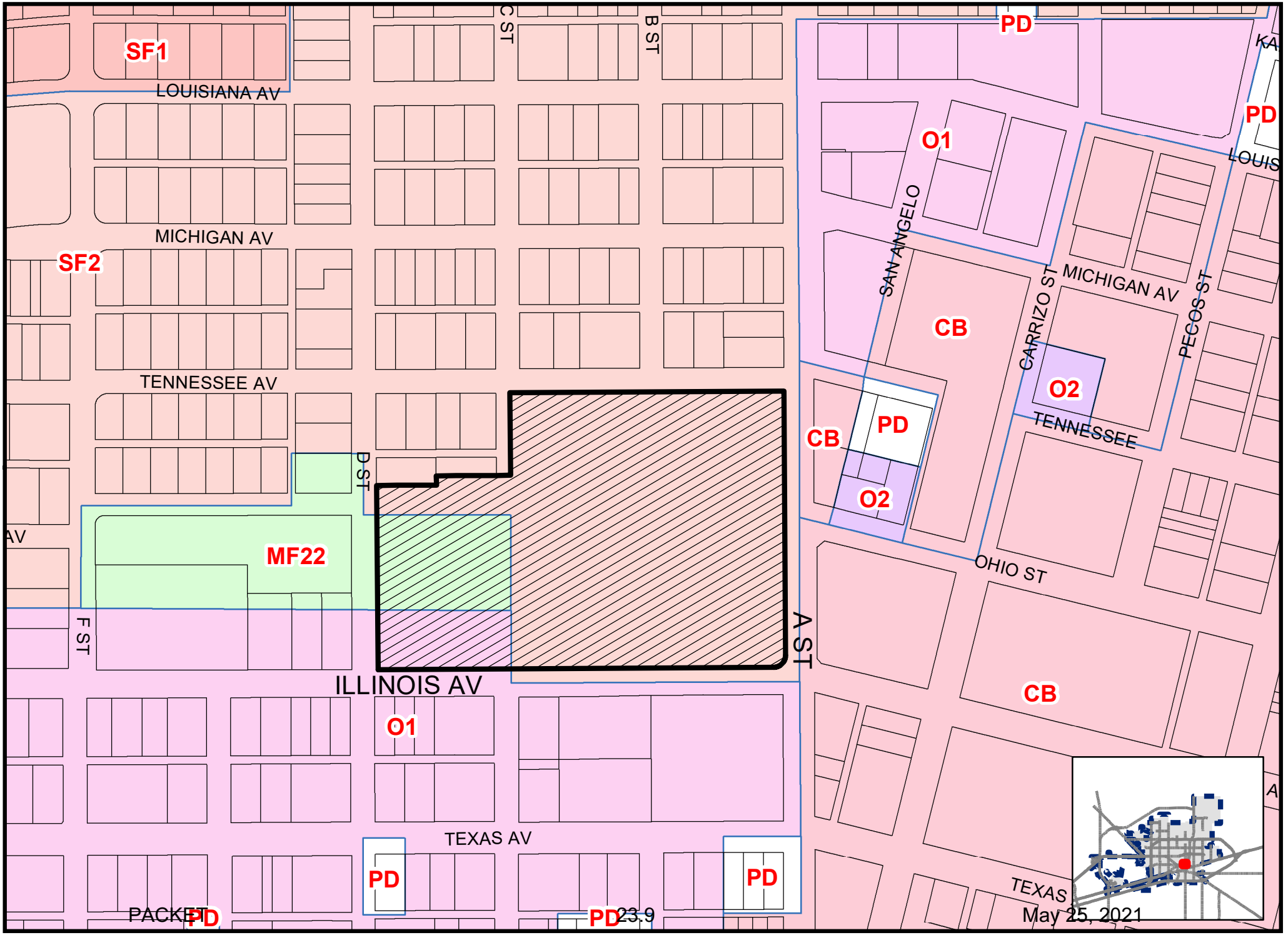
From: Misty Hutson <misty@cactussign.com>
Sent: Wednesday, April 7, 2021 4:27 PM
To: Shadonna Stitt <sstitt@midlandtexas.gov>
Cc: Jeremy Mills <jmills@midlandtexas.gov>; Liliana Morales <lmorales@midlandtexas.gov>
Subject: sign Permit for Midland High school

Application for a 5'3" X 10'6" EMC
Midland High school
906 W Illinois
Midland Texas

Cactus Sign Co.
Misty Hutson
3504 W Wall Street Suite B
Midland Texas
Office 432-570-7446 Ext # 104
Cell 432-352-9672

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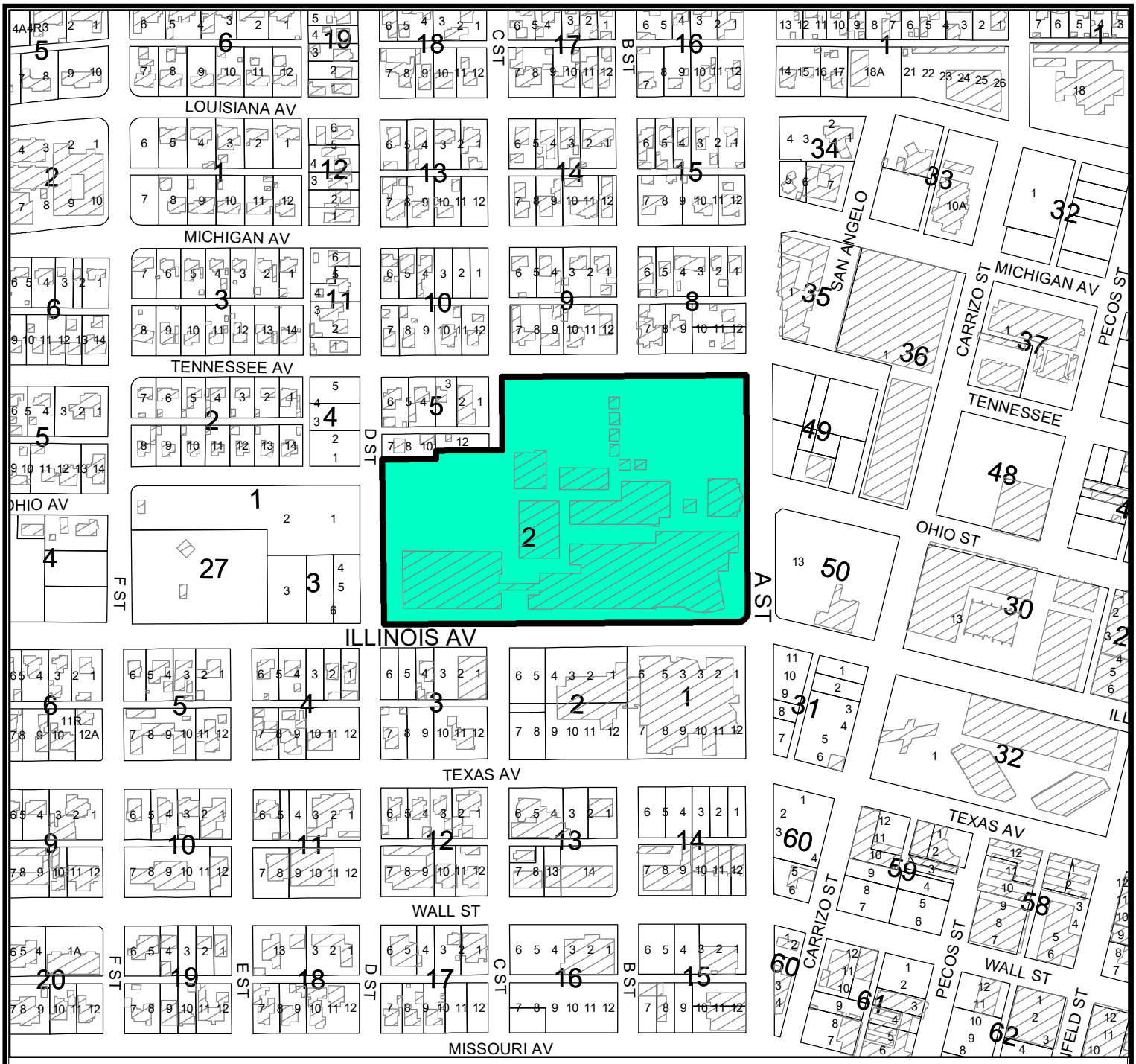
Map By JM, 05/11/2021

SGN-033623-2021

Scale: 1" = 300'

ZONING MAP

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LOCATION MAP

SGN-033623-2021 **Scale: 1" = 400'**

XXXX

LEGEND

- CITY LIMITS
- PARCEL
- PRIVATE BLDGS



PACKET 23.10 May 25, 2021