



Permit to Construct Access Driveway Facilities on Highway Right of Way

Form 1058
(Rev. 8/20)
Page 1 of 2

Sharp Job

PERMIT NUMBER:

REQUESTOR	GPS*	ROADWAY	
	LATITUDE, LONGITUDE	HWY NAME	FOR TxDOT'S USE
NAME <i>Petman Park South</i>	<i>31.812582, -102.427701</i>	CONTROL	SECTION
			<i>0005-01</i>
MAILING ADDRESS <i>430 US Hwy 180 W</i>			
CITY, STATE, ZIP <i>Seminole TX 79360</i>			
PHONE NUMBER <i>432-758-6383</i>			

*GLOBAL POSITIONING SYSTEM COORDINATES AT INTERSECTION OF DRIVEWAY CENTERLINE WITH ABUTTING ROADWAY

Is this parcel in current litigation with the State of Texas? YES NO

The Texas Department of Transportation, hereinafter called the State, hereby authorizes *Jul Steel*, hereinafter called the Permittee, to construct / reconstruct a *driveway* (residential, convenience store, retail mall, farm, etc.) access driveway on the highway right of way abutting highway number *Wm Murphy CCT 01*, County, located *31.812582, -102.427701* *410 w of Halibuton driveway*
USE ADDITIONAL SHEETS AS NEEDED

This permit is subject to the Access Driveway Policy described on page 2 and the following:

1. The undersigned hereby agrees to comply with the terms and conditions set forth in this permit for construction and maintenance of an access driveway on the state highway right of way.
2. The Permittee represents that the design of the facilities, as shown in the attached sketch, is in accordance with the Roadway Design Manual, Hydraulic Design Manual and the access management standards set forth in the Access Management Manual (except as otherwise permitted by an approved variance).
3. Construction of the driveway shall be in accordance with the attached design sketch, and is subject to inspection and approval by the State.
4. Maintenance of facilities constructed hereunder shall be the responsibility of the Permittee, and the State reserves the right to require any changes, maintenance or repairs as may be necessary to provide protection of life or property on or adjacent to the highway. Changes in design will be made only with prior written approval of the State.
5. The Permittee shall hold harmless the State and its duly appointed agents and employees against any action for personal injury or property damage related to the driveway permitted hereunder.
6. Except for regulatory and guide signs at county roads and city streets, the Permittee shall not erect any sign on or extending over any portion of the highway right of way. The Permittee shall ensure that any vehicle service fixtures such as fuel pumps, vendor stands, or tanks shall be located at least 12 feet from the right of way line to ensure that any vehicle services from these fixtures will be off the highway right of way.
7. The State reserves the right to require a new access driveway permit in the event of: (i) a material change in land use, driveway traffic volume or vehicle types using the driveway, or (ii) reconstruction or other modification of the highway facility by the State.
8. The State may revoke this permit upon violation of any provision of this permit by the Permittee.
9. This permit will become null and void if the above-referenced driveway facilities are not constructed within six (6) months from the issuance date of this permit.
10. The Permittee will contact the State's representative *Zone 10 NC field* telephone, *(432) 634-7230* at least twenty-four (24) hours prior to beginning the work authorized by this permit.
11. The requesting Permittee will be provided instructions on the appeal process if this permit request is denied by the State.

The undersigned hereby agrees to comply with the terms and conditions set forth in this permit for construction and maintenance of an access driveway on the highway right of way.

Date: *8-18-23*

Signed: *Elvie Ladd*

(Property owner or owner's representative)
DocuSigned by:

Maylon C. Windham, P.E.
District Engineer, or designee Approval
BD08607/F6E9645C...

8/22/2023

Date of Issuance

District Engineer, or designee Approval

Date of Issuance as per Variance to AMM

District Engineer, or designee Approval

Date of Denial

District Engineer Denial (No Delegation)

Access Driveway Policy

Title 43 Texas Administrative Code (Transportation), Chapter 11 (Design), Subchapter C (Access Connections To State Highways) and the "Access Management Manual" establish policy for the granting of access and the design, materials, and construction of driveways connecting to state highways. All driveway facilities must follow this policy. To the extent there is any conflict between this permit and the policy, the policy shall control. If a proposed driveway does not comply with the access management standards, the owner may seek a variance to a requirement contained in the access management standards by contacting the local TxDOT office.

TxDOT Driveway Permit Request Contact

For a local contact for your TxDOT Driveway Permit Request or variance request, visit: <http://www.txdot.gov/inside-txdot/district.html>. You can click on the section of the map closest to your location to find the local TxDOT office. You can also click on the drop down box below the map to find the district for your county.

Other Conditions

In addition to Items 1 thru 11 on page 1 of this permit, the facility shall also be in accordance with the attached sketch and subject to the following additional conditions stated below:

CONSTRUCT (1) ONE PERMANENT DRIVEWAY USING 8" CALICHE COMPACTED TO 6", SURFACED WITH 4" HOT MIX OR 6" CONCRETE W/ #4 REBAR @12 O.C. THE DRIVEWAY WILL BE DESIGNED WITH A MAX OF 45' THROAT WIDTH AND A 60' RADIUS AT DITCH GRADE. THE DRIVEWAY WILL BE BUILT AT GRADE TO NOT OBSTRUCT THE EXISTING DRAINAGE FLOW OF THE ROADSIDE DITCH. ALL DRIVEWAYS MUST CONFORM TO SPECIFICATIONS AS SHOWN IN ATTACHMENTS TO INCLUDE A CONSTRUCTION EXIT (CATTLE GUARD OR OVERSIZED ROCK) IF THE SURFACE IS NOT PAVED OUTSIDE OF TXDOT ROW.

Variance Documentation Justification

For a Variance request, please indicate which of the below are applicable, as required by TAC §11.52(e):

- a significant negative impact to the owner's real property or its use will likely result from the denial of its request for the variance, including the loss of reasonable access to the property or undue hardship on a business located on the property.
- an unusual condition affecting the property exists that was not caused by the property owner and justifies the request for the variance.

For the conditions selected above, provide written justification below. (Attach additional sheets, if needed)

For TxDOT use below:

For Variance denials, please indicate which of the below conditions, as provided in TAC §11.52(e), were determined:

- adversely affect the safety, design, construction, mobility, efficient operation, or maintenance of the highway; or
- likely impair the ability of the state or the department to receive funds for highway construction or maintenance from the federal government.

Attachments:

Sketch of Installation

All Variance Documentation

Commercial and Industrial Driveway Access Request Form

Date: 8-18-23

District: Odessa

County: Ector

Highway: West Murphy ST

Limits:

1. Purpose of Request: Explain the need for access driveway

New driveway for building

2. Proposed use of the property: Operations, facilities, frequency of access use, types and sizes of vehicles for each individual year of the next three year period

sharp energy

3. Background: Dated chronology of previous correspondence, meetings, or discussions about driveway access, identification of property zoning or approved platting, if applicable

chad windham verbally on site

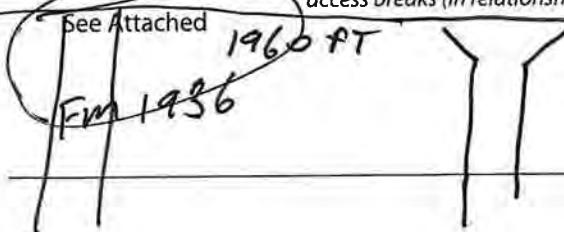
4. Participant(s) in the request process: Including as applicable city, county, developers, consultants, legal counsel, etc.

JNL Steel
piper surveying
chad windham

5. Highway layout showing the requested access site and upstream/downstream roadway system and other associated access: Attach vicinity map (surrounding area), project location map (adjacent highway/ramps and local streets), location of

access breaks (in relationship to property boundaries), West Murphy ST

See Attached



Commercial and Industrial Driveway Access Request Form

6. Existing roadway characteristics: *ADT, number/width of lanes/shoulders, posted speed, bridge structures, utility overhead and underground (location/relocation), geometrics at proposed access (Sight distance, grades, vertical/horizontal curves), pavement (structure, width, and material)*

7. Proposed driveway: *Proposed radii, throat width and length, entry/exit width*

SEE ATTACHED

PERMIAN PARK INDUSTRIAL

LOT 2, BLOCK 1, PERMIAN PARK SUBDIVISION,
CITY OF ODESSA, ECTOR COUNTY, TEXAS.

CIVIL CONSTRUCTION PLANS

ENGINEER'S NOTES

- THESE PLANS ARE NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS THE APPROVAL BLOCK HAS BEEN SIGNED BY THE APPROPRIATE AGENCIES. ALL WORK IS TO CONFORM TO THE CURRENT STANDARD SPECIFICATIONS, DETAILS AND SUPPLEMENTAL INFORMATION OF SAID AGENCY.
- A THOROUGH ATTEMPT HAS BEEN MADE TO SHOW THE LOCATIONS OF ALL UNDERGROUND OBSTRUCTIONS AND UTILITY LINES IN THE WORK AREA. HOWEVER, THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO OBSTRUCTIONS AND UTILITY LINES ENCOUNTERED DURING CONSTRUCTION AND IS TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES IN THE AREA.
- THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE. SUCH A GUARANTEE IS NOT POSSIBLE DUE TO THE VARYING FIELD CONDITIONS, CHANGING SOIL TYPES, ALLOWABLE CONSTRUCTION TOLERANCES, AND CONSTRUCTION METHODS THAT ARE BEYOND THE CONTROL OF THE ENGINEER.
- PRIOR TO BIDDING THE WORK, THE CONTRACTOR IS TO THOROUGHLY INVESTIGATE THE ACTUAL CONDITIONS OF THE SITE AND EARTHWORK QUANTITIES, IF ANY. NO CLAIM IS TO BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY IN EARTHWORK QUANTITIES, ACTUAL OR RELATIVE.
- MAVERICK ENGINEERING MAKES NO REPRESENTATION AS TO THE PRESENCE OF ROCK WITHIN EXCAVATION AREAS. ANY EXCAVATION IS TO BE CONSIDERED UNCLASSIFIED EXCAVATION, AND THE PRESENCE OF ROCK IS ONE OF THE EXISTING CONDITIONS THE CONTRACTOR IS EXPECTED TO FULLY INVESTIGATE PRIOR TO BIDDING THE WORK. NO CLAIM WILL BE MADE AGAINST MAVERICK ENGINEERING OR THE OWNER BASED ON MATERIALS ENCOUNTERED.
- THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS / PROGRAMS UTILIZED IN CONNECTION WITH THE WORK. THE ENGINEER IS NOT RESPONSIBLE IF THE CONTRACTOR FAILS TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- OWNER/CONTRACTOR IS RESPONSIBLE FOR SURVEY VERIFICATION OF EXISTING HORIZONTAL AND VERTICAL CONDITIONS PRIOR TO START OF CONSTRUCTION. A DEVIATION IN EXISTING CONDITIONS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF MAVERICK ENGINEERING, BEFORE CONSTRUCTION STARTS. MAVERICK ENGINEERING WILL NOT BE RESPONSIBLE FOR REMOVAL, REPLACEMENT, OR OTHER MODIFICATIONS THAT MAY BE REQUIRED AS A RESULT OF EXISTING CONDITIONS NOT PROPERLY VERIFIED AND CONFIRMED. SHOULD AN ERROR BE FOUND IN THE HORIZONTAL & VERTICAL CONDITIONS, MAVERICK ENGINEERING WILL BE NOTIFIED AND CONSTRUCTION WILL NOT PROCEED UNTIL REVISIONS AND/OR MODIFICATIONS HAVE BEEN PREPARED AND SUBMITTED BY MAVERICK ENGINEERING.
- OWNER/CONTRACTOR IS TO HAVE A PROFESSIONAL LAND SURVEYOR VERIFY FINISHED FLOOR ELEVATIONS PRIOR TO PLACING ANY FORM WORK OR CONCRETE. MAVERICK ENGINEERING WILL NOT BE RESPONSIBLE FOR REMOVAL, REPLACEMENT, OR OTHER MODIFICATIONS THAT MAY BE REQUIRED AS A RESULT OF THE FINISHED FLOOR NOT BEING PROPERLY VERIFIED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH EPA'S NPDES REGULATIONS 40-CFR-122, AND 40-CFR-123, AND 40-CFR-124 CONCERNING EROSION AND SEDIMENT CONTROL.
- AN APPROVED GRADING AND DRAINAGE PLAN IS TO BE MAINTAINED ON SITE AT ALL TIMES. THIS IS TO BE MADE AVAILABLE TO INSPECTORS UPON REQUEST.
- MAVERICK DOES NOT PROVIDE BUILDING FOUNDATION DESIGNS. REFER TO STRUCTURAL PLANS AND / OR GEOTECHNICAL REPORT FOR MATERIAL AND COMPACTION REQUIREMENTS UNDERNEATH BUILDING SLABS / STRUCTURAL FOUNDATIONS. MAKE NOTE IF SAID PLANS CALL FOR ADDITIONAL MATERIALS OR COMPACTION OR SIDEWALK IMMEDIATELY ADJACENT TO THE STRUCTURE / FOUNDATION.
- MAVERICK DOES NOT SUPPLY CONCRETE JOINTING PLANS, OR REVIEW THEM, UNLESS SPECIFICALLY CONTRACTED TO DO SO. THE CONTRACTOR IS RESPONSIBLE FOR CONCRETE JOINTING PLAN DEVELOPMENT AND IMPLEMENTATION.

ENGINEER:

ANDREW L. MELLEN, P.E.
MAVERICK ENGINEERING
1909 WEST WALL STREET, STE. K
MIDLAND, TX 79701
TELEPHONE: (432) 262-0999

SHEET INDEX:

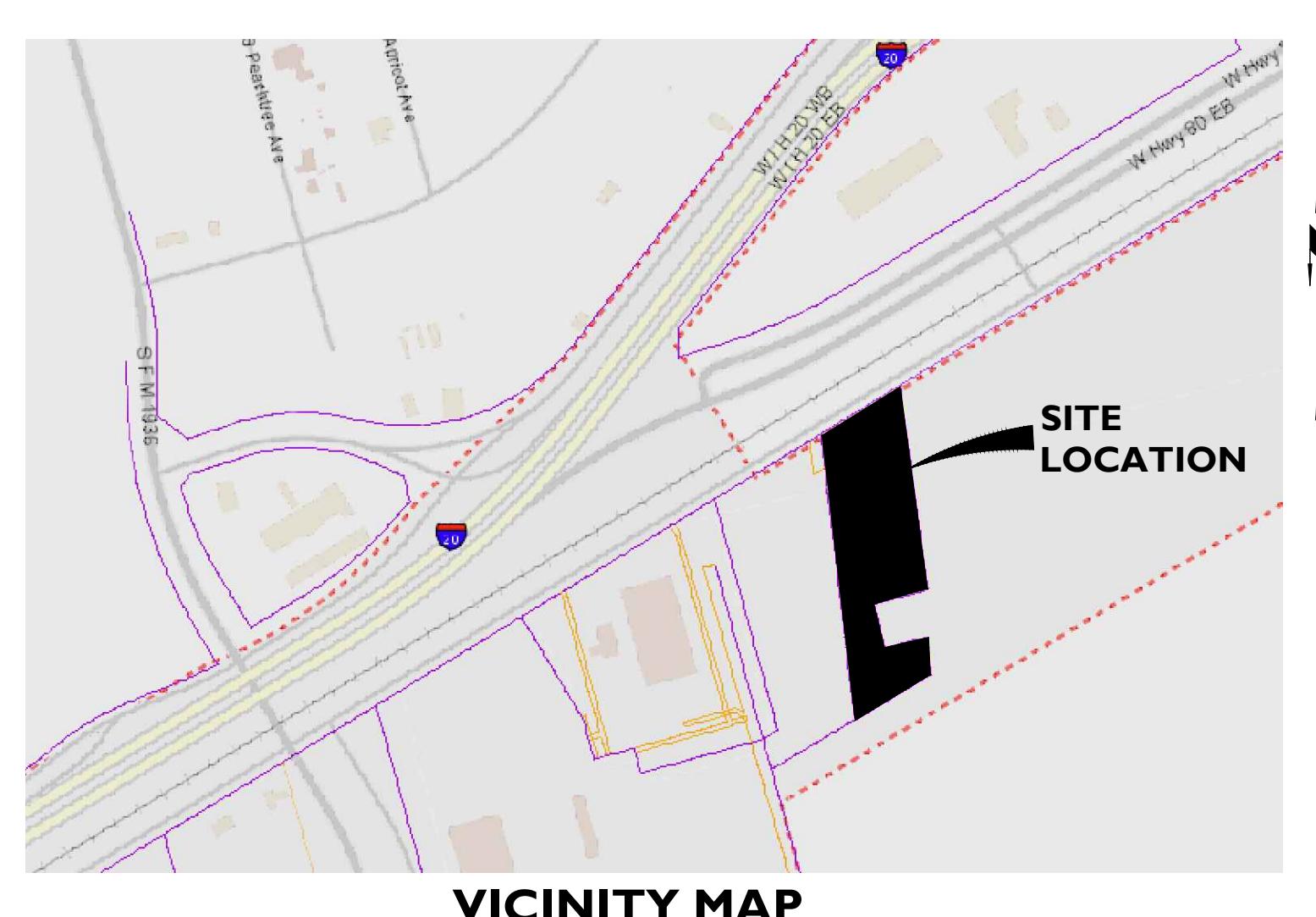
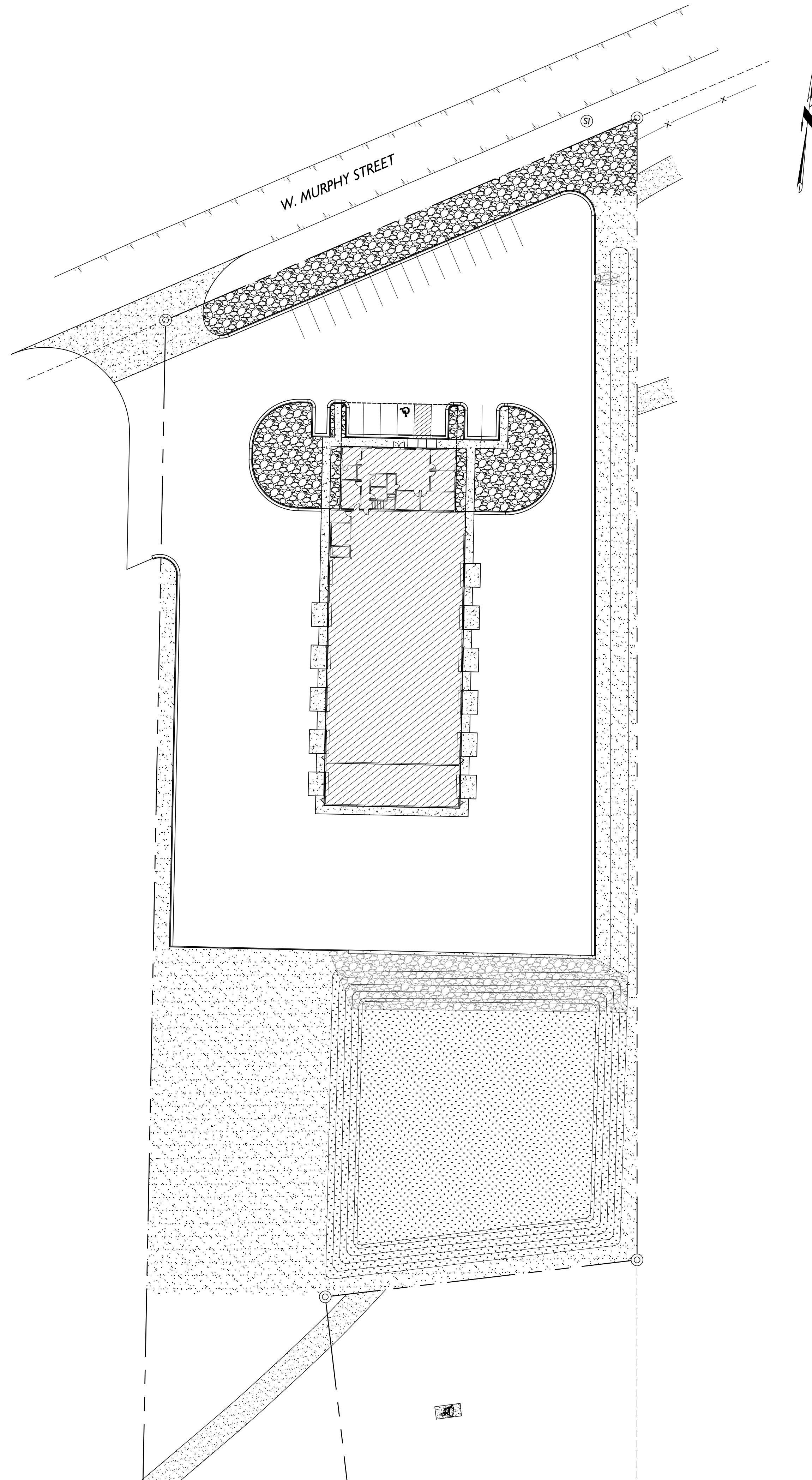
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BENCHMARK:

BEARINGS, DISTANCES AND COORDINATES SHOWN ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE, NAD 1983. ELEVATIONS ARE BASED ON GPS OBSERVATIONS CONFORMING TO NAVD 1988.

TEMPORARY BENCHMARK #1
1/2" FND. IRON ROD W/ CAP "PLS 1974"
ELEV.:2933.36
N:10,629,297.86
E:1,646,348.34

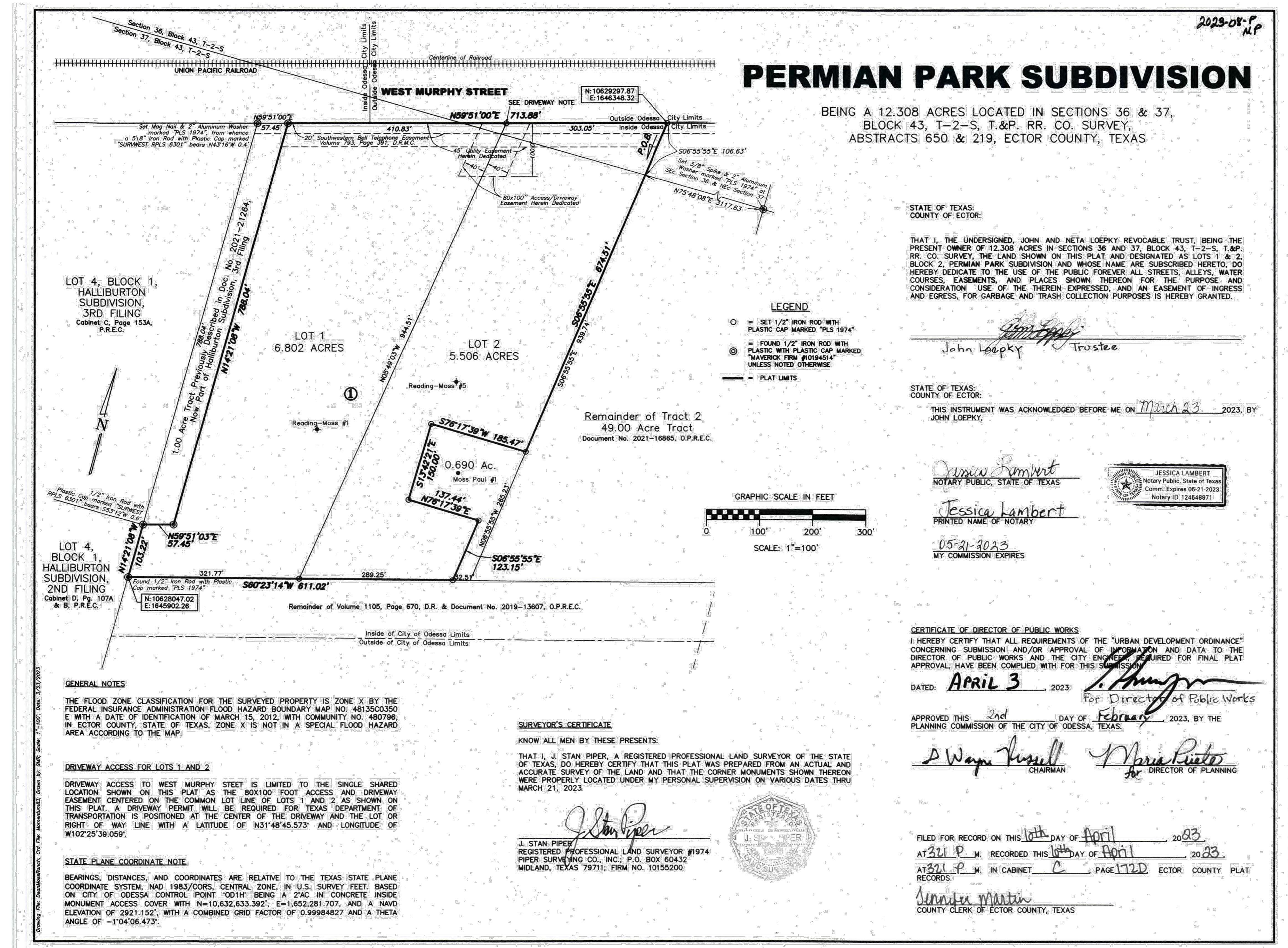
SURVEY PERFORMED BY MAVERICK ENGINEERING. CONTACT MAVERICK ENGINEERING FOR CONSTRUCTION BENCHMARKS OR CONTROL STAKING 432-262-0999



COVER SHEET
PERMIAN PARK INDUSTRIAL

Andrew L. Mellen
106572
LICENSED
PROFESSIONAL
ENGINEER
07/05/2023
SHEET C100 OF 18

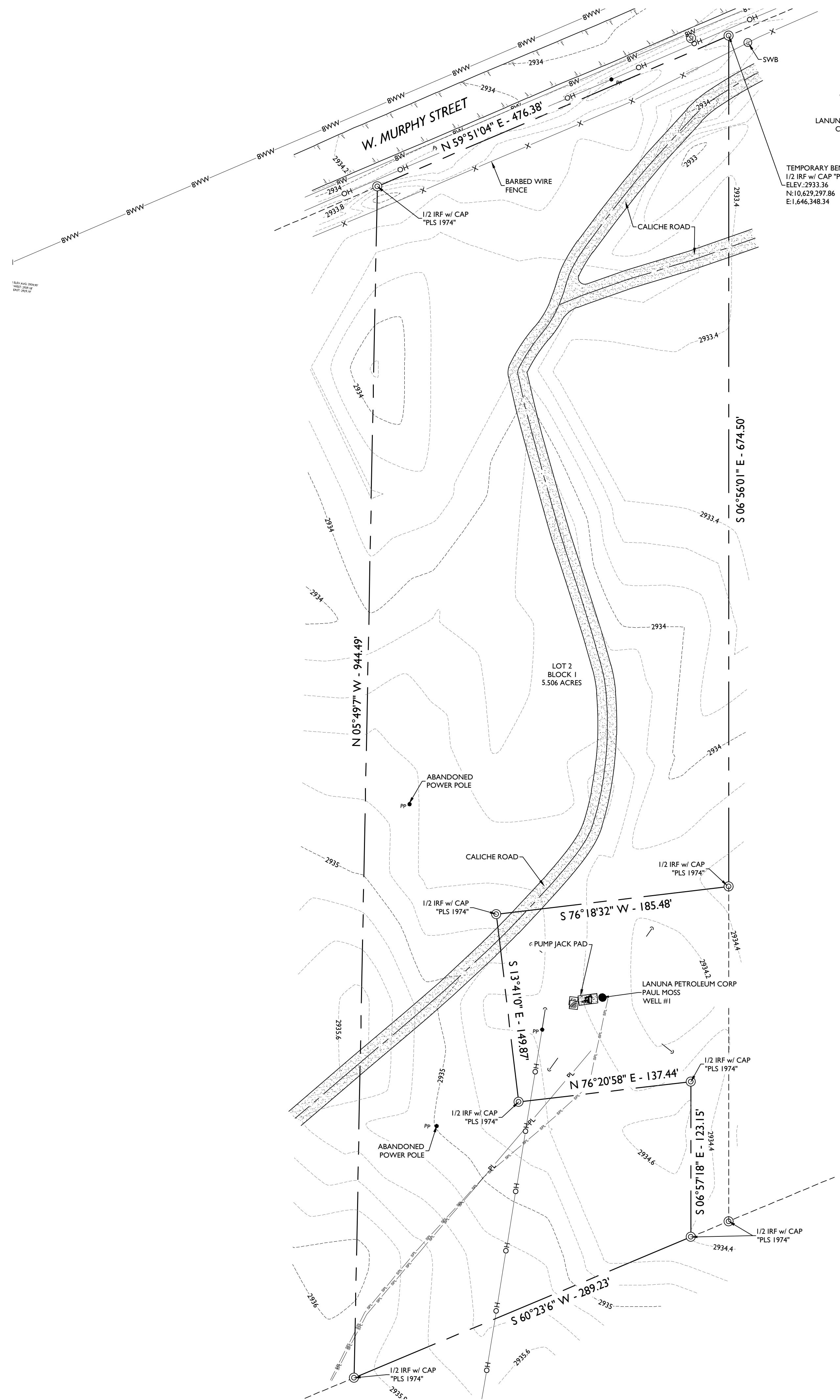
MAVERICK
ENGINEERING SURVEY / WATER RESOURCES
1909 W WALL ST, STE. "K", MIDLAND, TX 79701
SURVEY FIRM #: F-15089
TELEPHONE: (432) 262-0999
FAX: (432) 262-0999
www.Maverick-Eng.com



**EXISTING PLAT
PERMIAN PARK INDUSTRIAL**

PLAT NOTE:
THE PLAT SHOWN ON THIS SHEET IS
INCLUDED FOR REFERENCE PURPOSES
ONLY. IT'S NOT TO BE RECORDED FOR
ANY PURPOSE. THE SEALING
PROVISIONS OF THE
CONSTRUCTION DRAWING SET TAKES
NO OWNERSHIP OF THIS SHEET OR THE
INFORMATION PROVIDED THEREON,
BUT DOES AUTHORIZE THE USE OF
THIS CONSTRUCTION DRAWING SET.





A PETROLEUM
CORPORATION
H C FOSTER
WELL #20

ANCHMARK #1
LS 1974"

A scale bar for 150' (feet) with a 1" scale indicator. The bar is divided into three segments: a 50' segment (black and white checkered pattern), a 100' segment (solid black), and a 150' segment (solid black). Below the bar, the text "SCALE 1\" data-bbox="291 188 561 200" data-label="Text"/> = 50' is centered.

LEGEND

●	DENOTES SET 1/2-INCH IRON ROD W/RED PLASTIC CAP MARKED "MAVERICK FIRM #10194514"
○	DENOTES FOUND MONUMENT AS NOTED
☒	DENOTES BENCHMARK AS NOTED
EB	DENOTES EXISTING ELECTRICAL BOX
④	DENOTES EXISTING UTILITY MARKER
PP	DENOTES EXISTING POWER POLE
~	DENOTES EXISTING GUY ANCHOR
	DENOTES EXISTING PUMP JACK
— — — — —	DENOTES BOUNDARY LINE
— — — — —	DENOTES EXISTING PROPERTY LINE
— — — — —	DENOTES EXISTING EASEMENT LINE
	DENOTES EDGE OF ASPHALT
— — — — —	DENOTES EXISTING BARBED WIRE FENCE
OH	DENOTES EXISTING OVERHEAD ELECTRIC LINE
PL	DENOTES EXISTING PIPELINE
SPL — SPL — SPL — SPL —	DENOTES EXISTING POLY/STEEL LINE
8W	DENOTES EXISTING 8" WATER LINE
8WW	DENOTES EXISTING 8" WASTEWATER LINE

BENCHMARK:

BEARINGS, DISTANCES AND COORDINATES SHOWN ARE RELATIVE
TO THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS
CENTRAL ZONE, NAD 1983. ELEVATIONS ARE BASED ON GPS
OBSERVATIONS CONFORMING TO NAVD 1988.

TEMPORARY BENCHMARK #1
1/2" FND. IRON ROD W/ CAP "PLS 1974"
ELEV.:2933.36
N:10,629,297.86
E:141,318.34

SURVEY PERFORMED BY MAVERICK ENGINEERING., CONTACT
MAVERICK ENGINEERING. FOR CONSTRUCTION BENCHMARKS OR
CONTROL STAKING 432-262-0999

SURVEY NOTE:

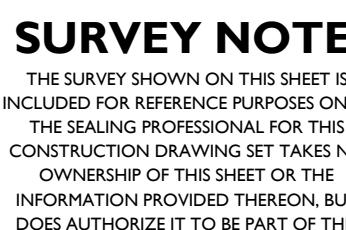
OWNER/CONTRACTOR IS RESPONSIBLE FOR SURVEY VERIFICATION OF EXISTING HORIZONTAL AND VERTICAL CONDITIONS PRIOR TO START OF CONSTRUCTION. A DEVIATION IN EXISTING CONDITIONS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF MAVERICK ENGINEERING, BEFORE CONSTRUCTION STARTS. MAVERICK ENGINEERING WILL NOT BE RESPONSIBLE FOR REMOVAL, REPLACEMENT, OR OTHER MODIFICATIONS THAT MAY BE REQUIRED AS A RESULT OF EXISTING CONDITIONS NOT PROPERLY VERIFIED AND CONFIRMED. SHOULD AN ERROR BE FOUND IN THE HORIZONTAL & VERTICAL CONDITIONS, MAVERICK ENGINEERING WILL BE NOTIFIED AND CONSTRUCTION WILL NOT PROCEED UNTIL REVISIONS AND/OR MODIFICATIONS HAVE BEEN PREPARED AND SUBMITTED BY MAVERICK ENGINEERING.

EXISTING TOPOGRAPHY PERMIAN PARK INDUSTRIAL

LOT 2, BLOCK I, PERMIAN PARK SUBDIVISION, CITY OF ODESSA,
ECTOR COUNTY, TEXAS.

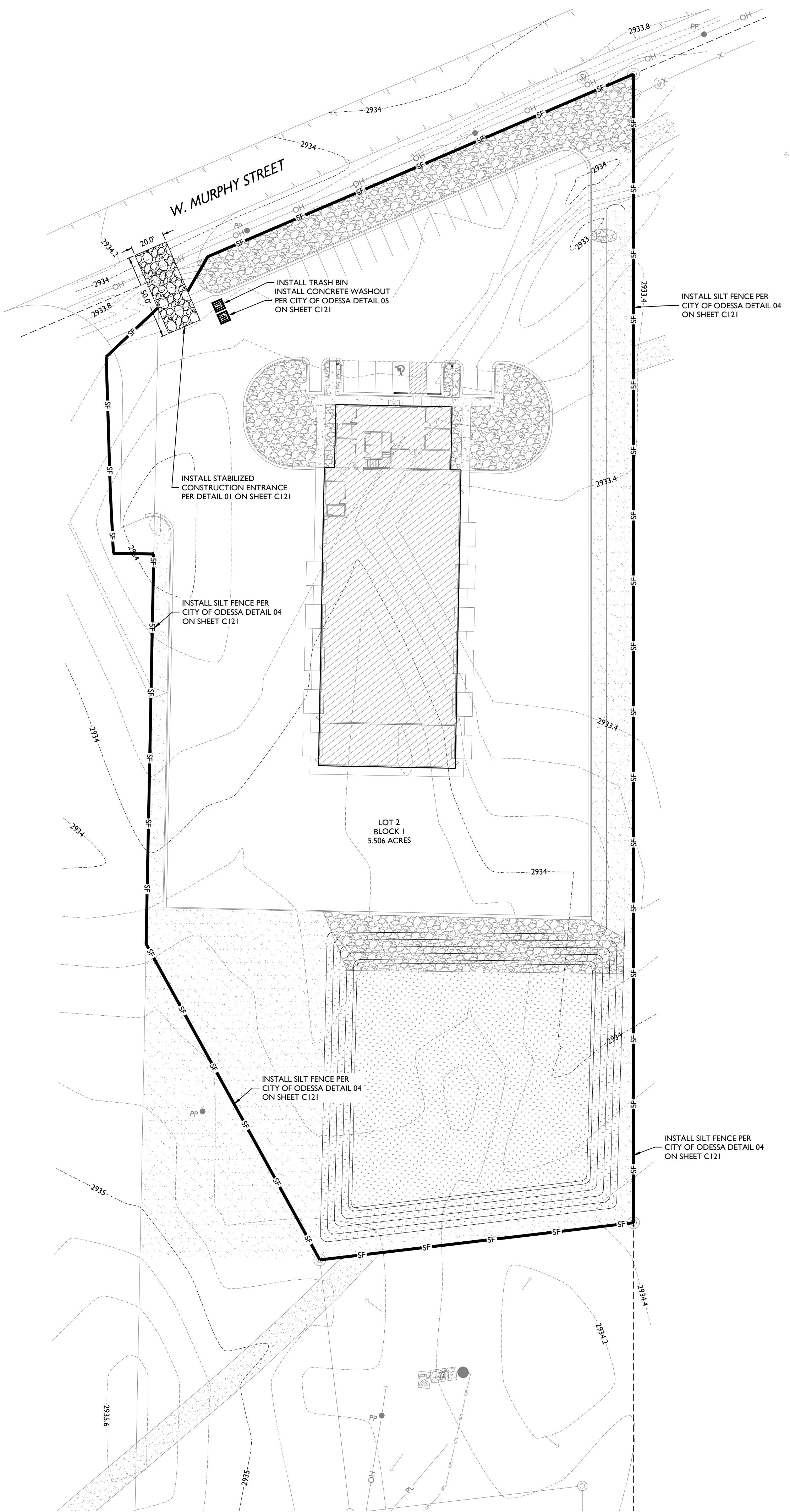


**Know what's below.
Call before you dig.**



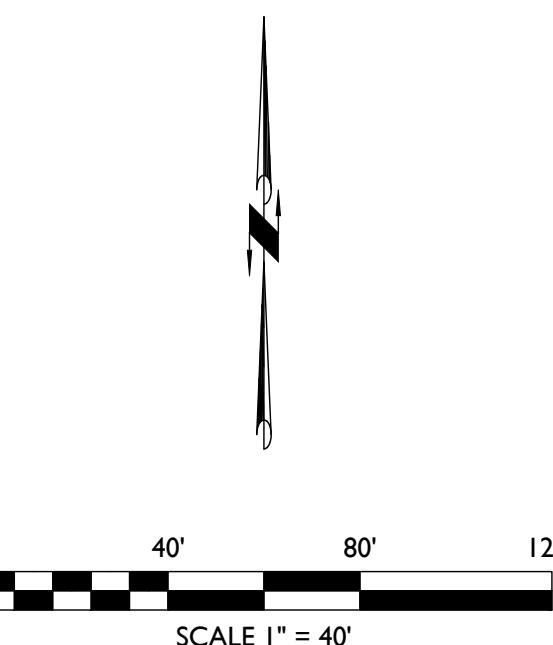
SURVEY NOTE:
THE SURVEY SHOWN ON THIS SHEET IS
INCLUDED FOR REFERENCE PURPOSES ONLY.
THE SEALING PROFESSIONAL FOR THIS
CONSTRUCTION DRAWING SET TAKES NO
OWNERSHIP OF THIS SHEET OR THE
INFORMATION PROVIDED THEREON, BUT
DOES AUTHORIZE IT TO BE PART OF THIS
CONSTRUCTION DRAWING SET.

SHEET
C III OF 18



SWPPP 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 AND TO ESTABLISH A MINIMUM BASIS OF COMPLIANCE WITH TPDES REGULATIONS. THE CONTRACTOR IS TO FILE NOTICE OF INTENT (NOI) UNDER 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. THE CONTRACTOR IS TO MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO THE TCEQ.
4. THE CONTRACTOR MUST AMEND THE STORM WATER POLLUTION PREVENTION PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE OF THE PLAN, OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK IS TO 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.
5. 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.
6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN IS TO BE MAINTAINED AND MADE PART OF THE PLAN.
7. 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.
8. THE CONTRACTOR IS TO 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 DESIGNATION OF CONTROL EQUIPMENT WASHING.
9. THE CONTRACTOR IS TO AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS, AND SEQUENCE. MODIFICATIONS ARE NOT TO COMPROMISE THE INTENT OR THE REQUIREMENTS OF THE LAW AND THIS PLAN. MODIFICATIONS ARE NOT TO BE A BASIS FOR ADDITIONAL COST TO THE OWNER.
10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE ARE TO CONFORM TO THE DETAILS SHOWN ON THE PLANS.
11. BORROW AREAS, IF EXCAVATED, ARE TO BE PROTECTED AND STABILIZED UTILIZING THE PLAN DETAILS. ALL WORK IS TO CONFORM TO GOVERNMENTAL REQUIREMENTS AND BECOME PART OF THE STORM WATER POLLUTION PREVENTION PLAN. THIS WORK IS TO BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER OR THE ENGINEER.
12. ALL NON-PAVED AREAS ARE TO BE MULCHED AND SEEDED WITH EROSION PROTECTION IMMEDIATELY UPON COMPLETION OF FINAL GRADING. THIS INCLUDES ALL DITCHES AND EMBANKMENTS. THE CONTRACTOR IS TO MAINTAIN THE FINAL GRADING AND KEEP SEEDED AREAS WATERED UNTIL FULLY ESTABLISHED AND ACCEPTED BY THE OWNER; EROSION PROTECTION IS TO BE CONSTRUCTED AS DETAILED ON THIS SHEET.
13. THE CONTRACTOR IS TO CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL TRAFFIC ENTRANCE / EXIT POINTS ALONG ANY PAVED ROADWAY. ENTRANCES ARE TO BE CONSTRUCTED AS DETAILED ON THIS SHEET.
14. THE CONTRACTOR IS TO CONSTRUCT A SILT FENCE AT ALL LOCATIONS SHOWN ON THE PLANS. THE SILT FENCE IS TO BE CONSTRUCTED AS DETAILED ON THIS SHEET.
15. THE CONTRACTOR IS TO DESIGNATE MATERIAL AND EQUIPMENT STORAGE AREAS MUTUALLY AGREED TO BY THE OWNER. THE STORAGE AREAS ARE TO BE GRADED FOR POSITIVE DRAINAGE AND THE SURFACE STABILIZED WITH A MINIMUM OF TWO INCHES OF CRUSHED ROCK OR GRAVEL. REINFORCED FILTER BARRIER IS TO BE INSTALLED AROUND THE STORAGE AREAS TO PREVENT ANY EROSION FROM LEAVING THE SITE.



LEGEND

		REVISIONS	BY	APPR.	DATE
●	DENOTES SET 1/2-INCH IRON ROD W/RED PLASTIC CAP MARKED "MAVERICK FIRM #10194514"				
○	DENOTES FOUND MONUMENT AS NOTED				
☒	DENOTES BENCHMARK AS NOTED				
EB	DENOTES EXISTING ELECTRICAL BOX				
⊕	DENOTES EXISTING UTILITY MARKER				
PP ●	DENOTES EXISTING POWER POLE				
›	DENOTES EXISTING GUY ANCHOR				
▲	DENOTES EXISTING PUMP JACK				
— — — — —	DENOTES BOUNDARY LINE				
— — — — —	DENOTES EXISTING PROPERTY LINE				
— — — — —	DENOTES EXISTING EASEMENT LINE				
— — — — —	DENOTES EDGE OF ASPHALT				
X	DENOTES EXISTING BARBED WIRE FENCE				
OH	DENOTES EXISTING OVERHEAD ELECTRIC LINE				
PL	DENOTES EXISTING PIPELINE				
SPL — SPL — SPL — SPL —	DENOTES EXISTING POLY/STEEL LINE				
2850 — — — —	DENOTES EXISTING CONTOUR				
SF — — — —	DENOTES PROPOSED SILT FENCE				
	DENOTES PROPOSED CONSTRUCTION ENTRANCE				

WPPP DETAILS:

VPPP DETAILS ARE INCLUDED ON THE NEXT SHEET. PLEASE REFER TO THOSE DETAILS.

OIL STABILIZATION NOTES:

AFTER DESIGNATED AREAS HAVE BEEN COMPLETED TO THE GRADES SHOWN ON THE PLANS, AREAS TO BE SEEDED ARE TO BE CULTIVATED TO A DEPTH OF 4 INCHES, EXCEPT WHERE SEEDING IS TO BE DONE USING A SEED DRILL SUITABLE FOR SEEDING INTO UNTILLED SOIL. THE SEEDBEDS ARE TO BE CULTIVATED SUFFICIENTLY TO REDUCE THE SOIL TO A STATE OF GOOD TILTH WHEN THE SOIL PARTICLES ON THE SURFACE ARE SMALL ENOUGH TO LIE CLOSELY ENOUGH TOGETHER TO PREVENT THE SEED FROM BEING COVERED TOO DEEPLY FOR OPTIMUM GERMINATION. CULTIVATION OF THE SEEDBED WILL NOT BE REQUIRED IN LOOSE SAND WHERE DEPTH OF SAND IS 4 INCHES OR MORE.

ALL DISTURBED AREAS ARE TO BE SEEDED OR OTHERWISE STABILIZED. IF THE SPECIFIED SEED MIX IS NOT AVAILABLE, SUBMIT A SUBSTITUTION TO THE ENGINEER. NO SUBSTITUTIONS WILL BE ENTERTAINED UNTIL IT HAS BEEN DEMONSTRATED TO THE ENGINEER'S SATISFACTION THAT THE SPECIFIED MATERIALS ARE NOT AVAILABLE. SEED WITH THE FOLLOWING MIX DURING THE SPECIFIED SEASON;

VARIETY	OCTOBER - FEBRUARY LBS, P.L.S./ACRE	MARCH - SEPTEMBER LBS, P.L.S./ACRE
RYEGRASS (ANNUAL)	8.0	-
WESTERN WHEATGRASS	2.0	-
MILLET	2.0	4.0
SIDEOATS GRAMA	1.5	3.0
KLEINGRASS	1.5	3.0
BRISTLEGRASS	1.5	3.0
BLUE GRAMA	0.5	1.0
BUFFALO GRASS	2.0	4.0
GREEN SPRANGLETOP	1.0	2.0

PRIOR TO PLANTING OPERATIONS, SUBMIT SUPPLIER SEED TAGS TO THE ENGINEER STATING;

- PERCENT PURITY
- PERCENT GERMINATION
- DATE SEED WAS HARVESTED.

SEEDED AREAS ARE TO BE EVENLY IRRIGATED TO A MINIMUM UNIFORM DEPTH OF 0.2 INCHES FOR ENTIRE SEEDED AREA AT A RATE OF NO LESS THAN ONCE PER DAY FOR 10 CONSECUTIVE DAYS AFTER SEEDED.

AFTER SEEDED, CHANNEL EMBANKMENTS ARE TO BE LINED WITH A STRAW OR STRAW/COCONUT SOIL RETENTION BLANKET. THE FOLLOWING PRODUCTS, OR AN EQUAL APPROVED BY THE CITY ENGINEER MAY BE USED;

- ECS S-I STANDARD STRAW
- ECS HIGH VELOCITY STRAW
- LANDLOK BON-TERRA S2, ENS2 OR ENCS2
- NORTH AMERICAN GREEN S75, S75BN, S150, S150BN, OR SC150
- ALTERNATELY, SOILGUARD BONDED FIBER MATRIX MAY BE USED.

BLANKETS ARE TO BE PLACED PARALLEL TO THE DIRECTION OF WATER FLOW TO STABILIZE THE CHANNEL SIDES WHERE SHOWN. BLANKETS ARE TO BE SPREAD EVENLY WITHOUT STRETCHING SO FIBERS ARE IN DIRECT CONTACT WITH THE SOIL.

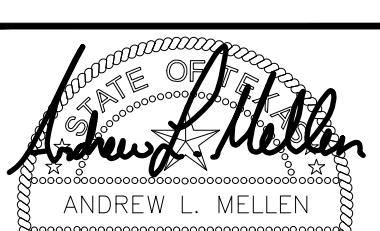
- THE UPSLOPE END OF EACH BLANKET IS TO BE BURIED AT LEAST 6 INCHES IN A VERTICAL TRENCH WITH THE SOIL PRESSED FIRMLY AGAINST THE EMBEDDED MAT. ADDITIONAL CHECK TRENCHES AT 50 FEET INTERVALS MAY BE DESIRABLE ON STEEP GRADES OR LONG FLOW AREAS.
- STRIP ENDS AND END OVERLAPS ARE TO BE STAPLED WITH NOT MORE THAN 20 INCHES BETWEEN STAPLES. ALL OTHER JOINTS AND EDGES ARE TO BE STAPLED AT 40 INCH INTERVALS.
- STAPLES USED TO ANCHOR BLANKETS ARE TO BE U SHAPED, 11 GAUGE OR HEAVIER STEEL WIRE HAVING A SPAN WIDTH OF 1 INCH AND A LENGTH OF 6 INCHES OR MORE FROM TOP TO BOTTOM AFTER BENDING.

DRAWN BY:	TDE
CHECKED BY:	ALM
APPROVED BY:	ALM
DATE:	07/05/2023
JOB:	230043

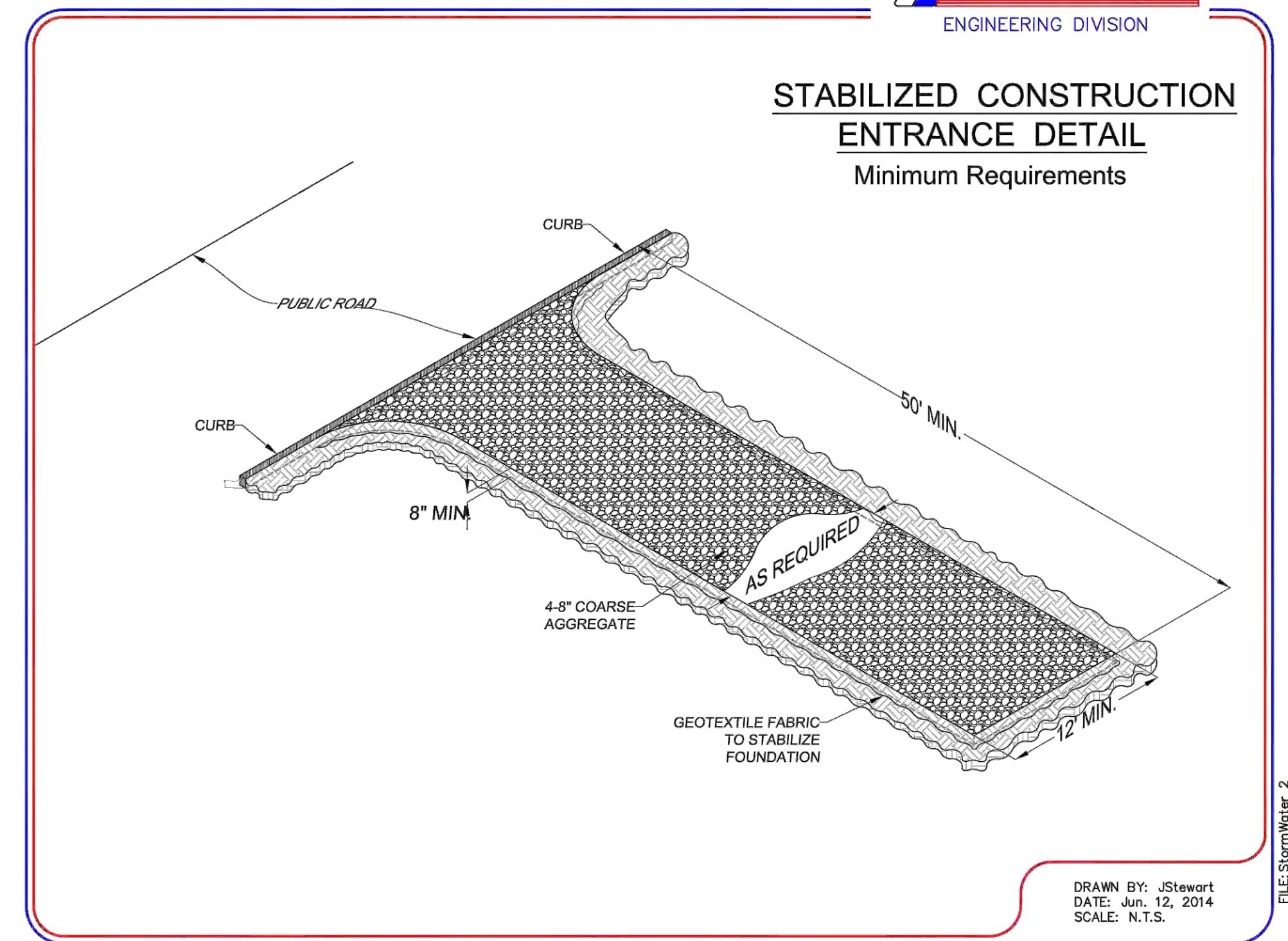
SWPPP
PERMIAN PARK INDUSTRIAL

LOT 2, BLOCK I, PERMIAN PARK SUBDIVISION, CITY OF ODESSA,
 ECTOR COUNTY, TEXAS.



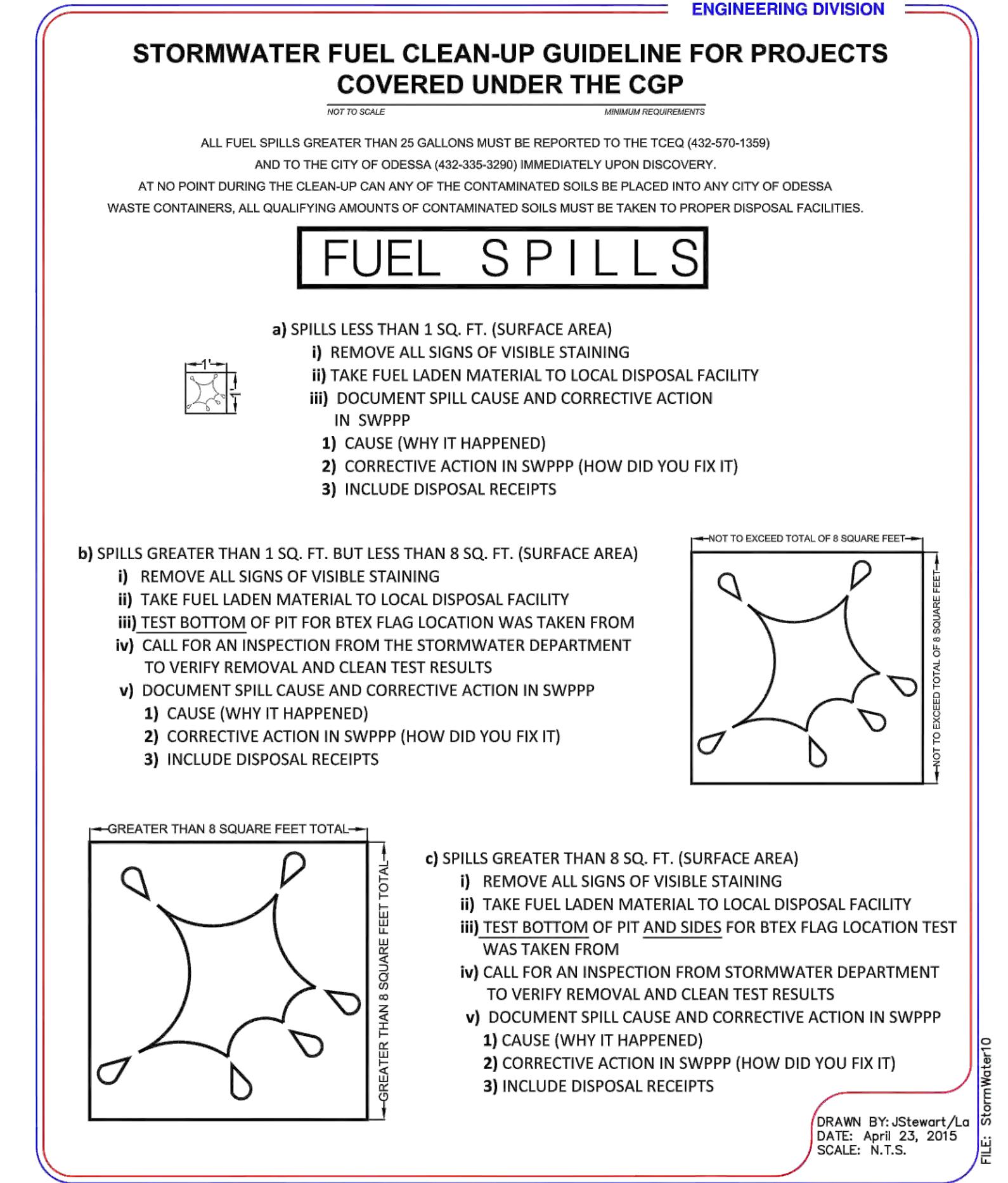


SHEET **CI20** OF **18**

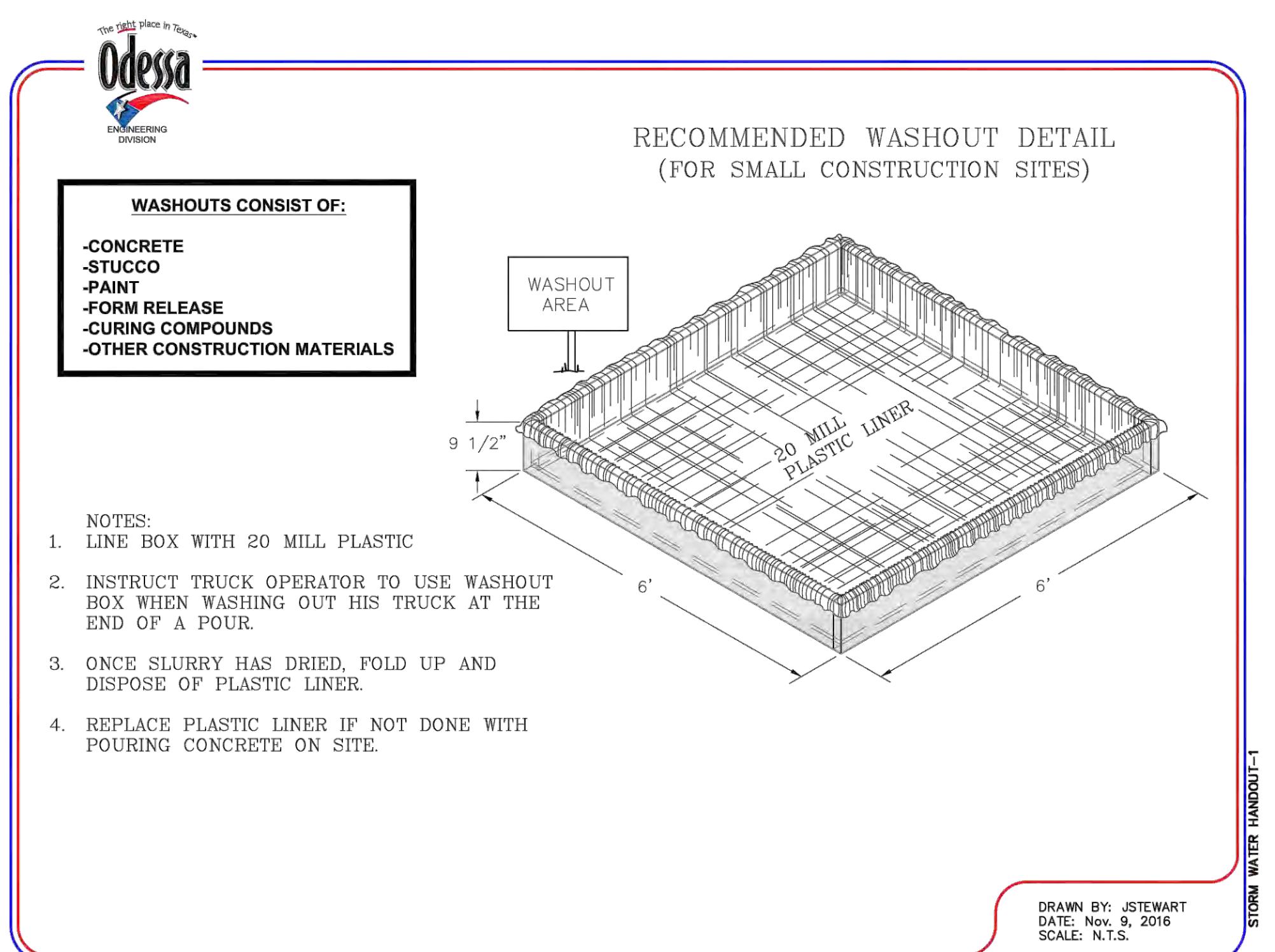


I CONSTRUCTION ENTRANCE DETAIL

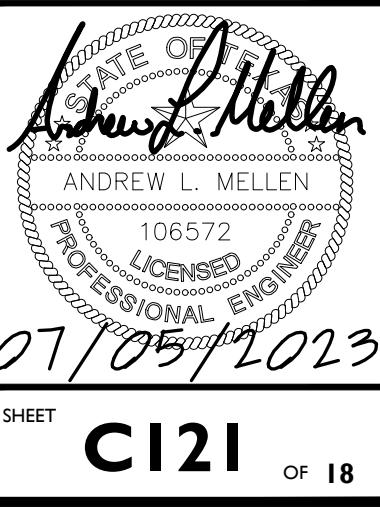
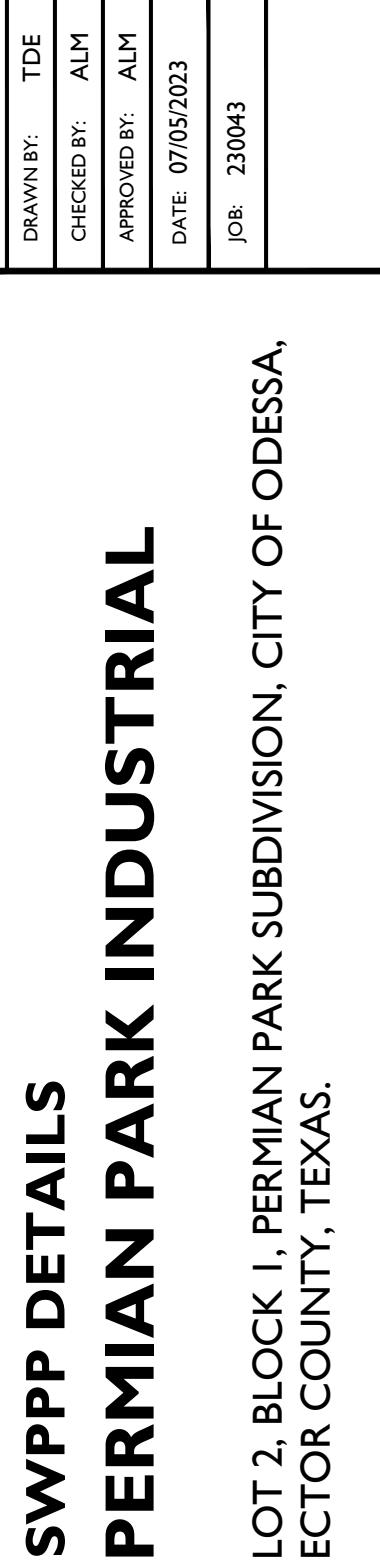
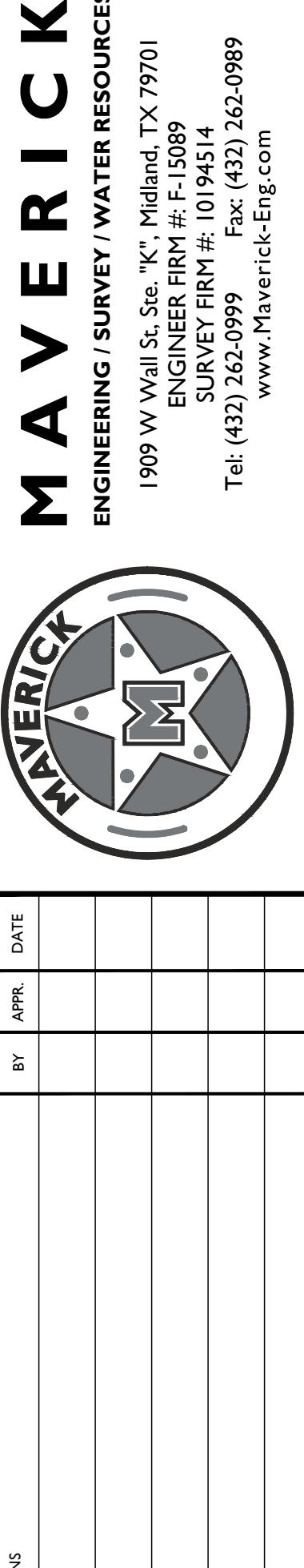
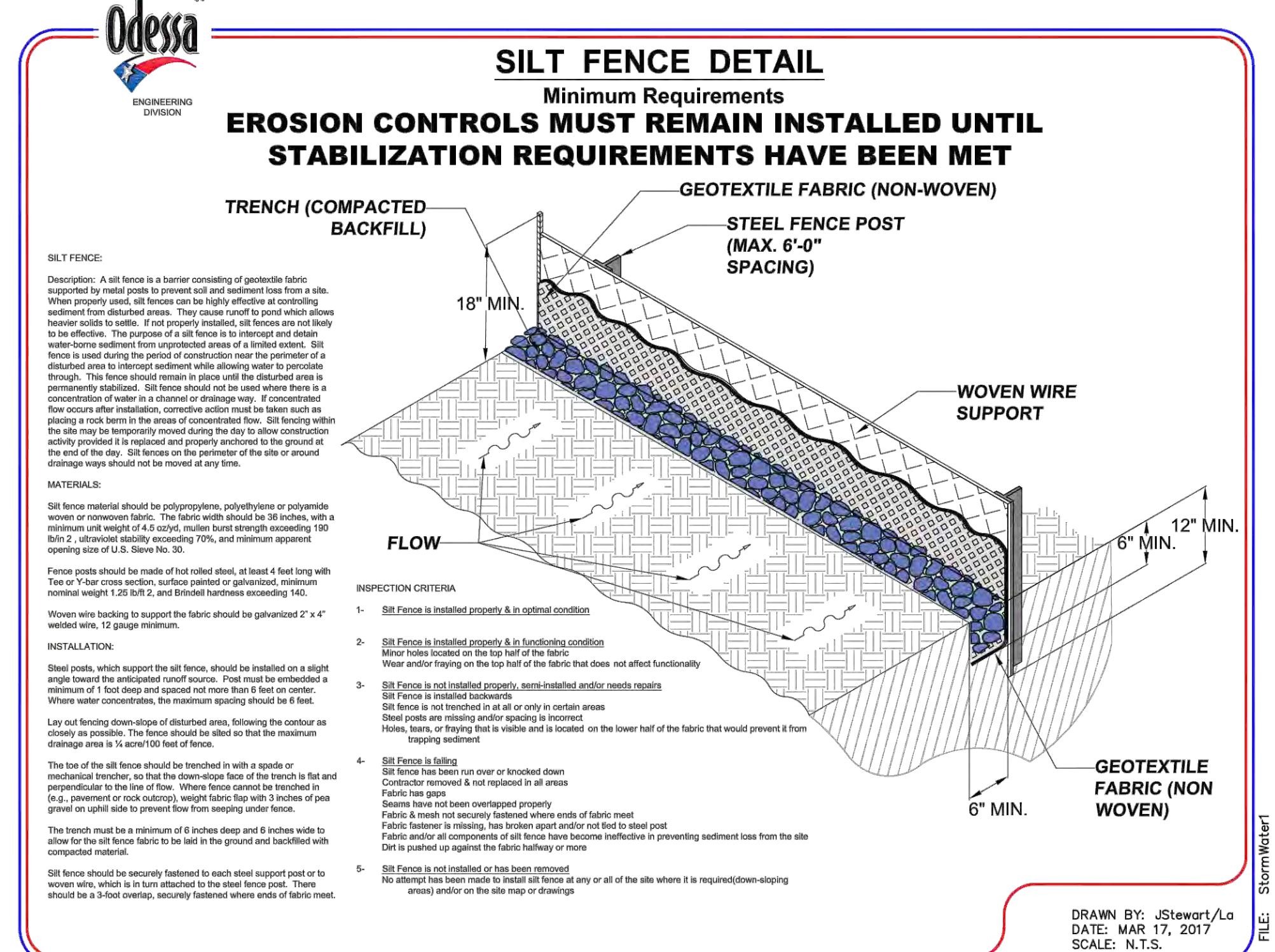
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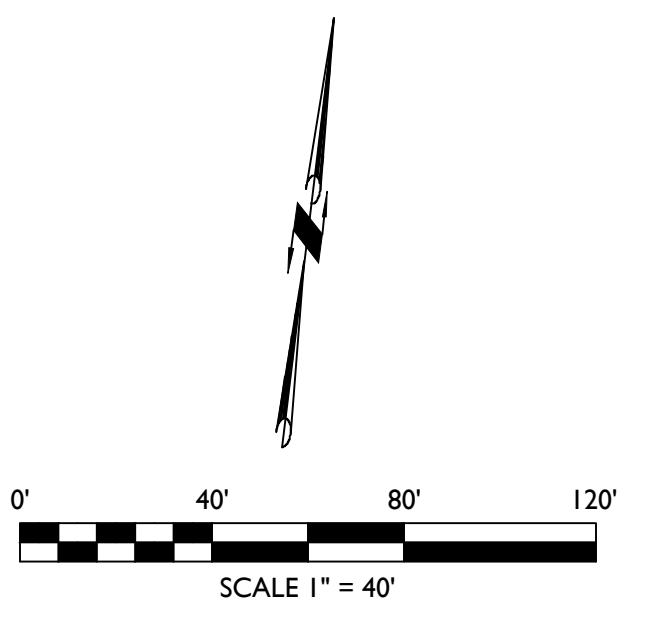
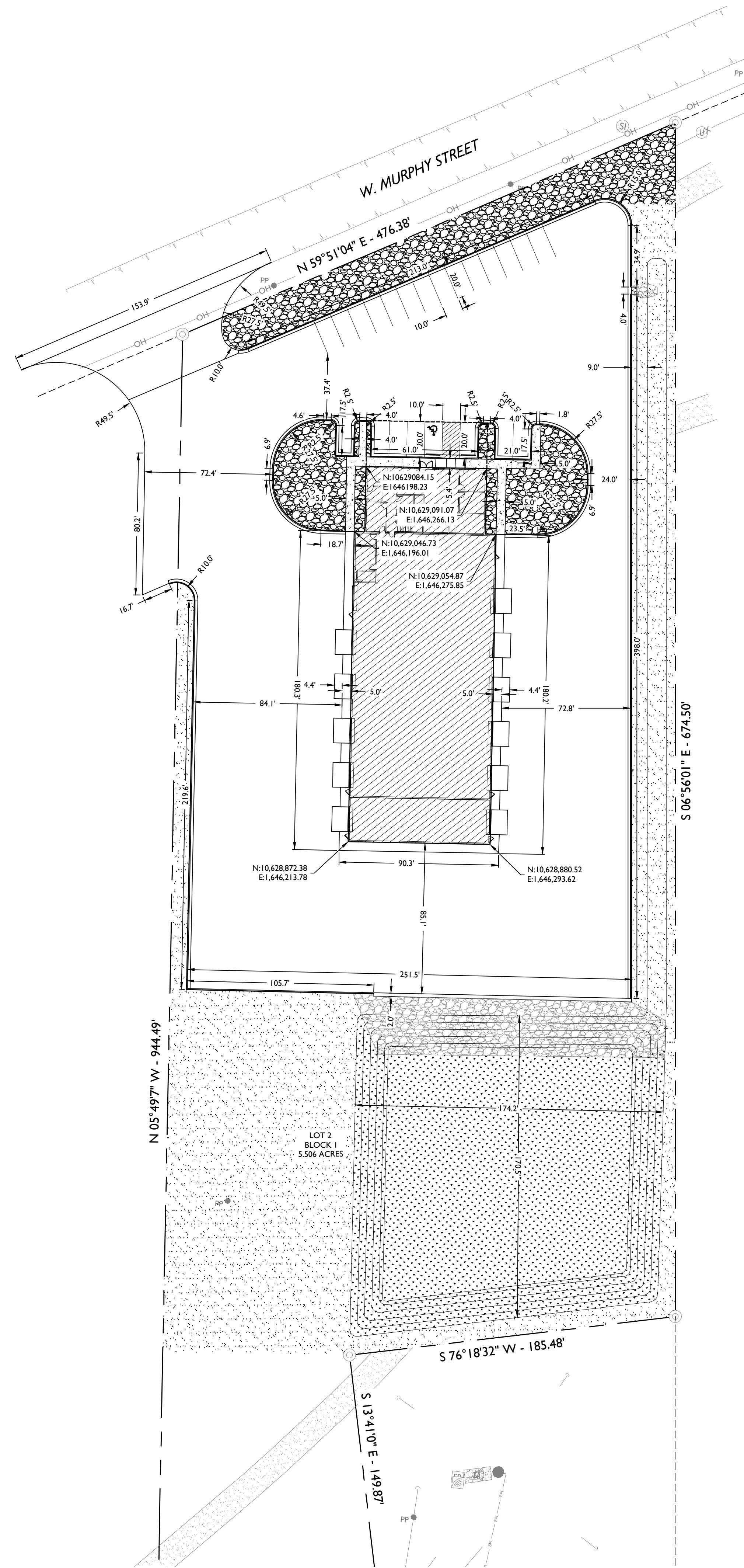


2 FUEL SPILL GUIDELINES



4 SILT FENCE N.T.S.





LEGEND

- PP: DENOTES SET 1/2-INCH IRON ROD W/RED PLASTIC CAP MARKED "MAVERICK FIRM #10194514"
- OM: DENOTES FOUND MONUMENT AS NOTED
- BM: DENOTES BENCHMARK AS NOTED
- EB: DENOTES EXISTING ELECTRICAL BOX
- UM: DENOTES EXISTING UTILITY MARKER
- PP: DENOTES EXISTING POWER POLE
- GA: DENOTES EXISTING GUY ANCHOR
- PJ: DENOTES EXISTING PUMP JACK
- BL: DENOTES BOUNDARY LINE
- PL: DENOTES EXISTING PROPERTY LINE
- EL: DENOTES EXISTING EASEMENT LINE
- EA: DENOTES EDGE OF ASPHALT
- BF: DENOTES EXISTING BARBED WIRE FENCE
- OL: DENOTES EXISTING OVERHEAD ELECTRIC LINE
- PL: DENOTES EXISTING PIPELINE
- SL: DENOTES EXISTING POLY/STEEL LINE
- WL: DENOTES EXISTING 8" WATER LINE
- WWL: DENOTES EXISTING 8" WASTEWATER LINE

BENCHMARK:

BEARINGS, DISTANCES AND COORDINATES SHOWN ARE RELATIVE TO THE TEXAS STATE PLANE COORDINATE SYSTEM, TEXAS CENTRAL ZONE, NAD 1983. ELEVATIONS ARE BASED ON GPS OBSERVATIONS CONFORMING TO NAVD 1988.

TEMPORARY BENCHMARK #1
1/2" FND. IRON ROD W/ CAP "PLS 1974"
ELEV. 2933.36
N:10629.297.86
E:1646.348.34

SURVEY PERFORMED BY MAVERICK ENGINEERING.. CONTACT MAVERICK ENGINEERING FOR CONSTRUCTION BENCHMARKS OR CONTROL STAKING 432-262-0999

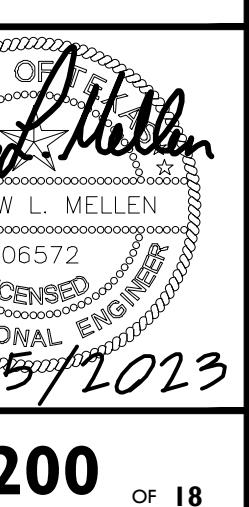
DIMENSIONAL NOTE:

DIMENSIONS SHOWN ARE TYPICALLY TO BACK OF CURB UNLESS NOTED OTHERWISE.
RADII SHOWN ARE TYPICALLY TO FACE OF CURB UNLESS NOTED OTHERWISE.



1909 W Wall St. Ste. "K", Midland, TX 79701
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SURVEY FIRM #: 10194514
Tel: (432) 262-0999 Fax: (432) 262-0989
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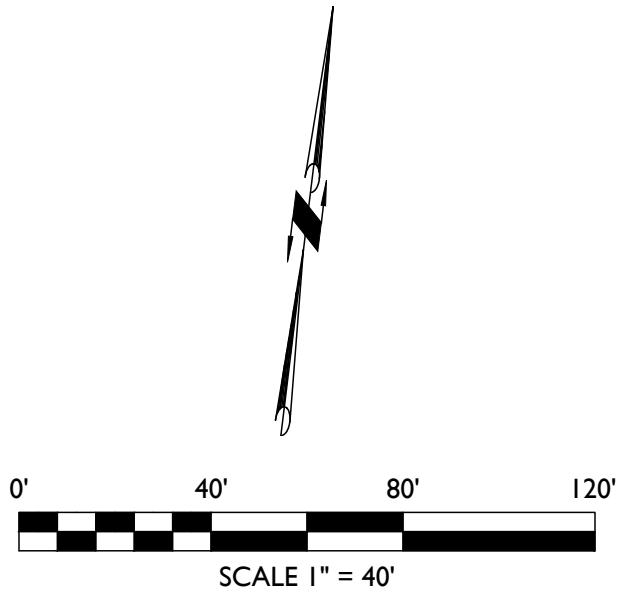
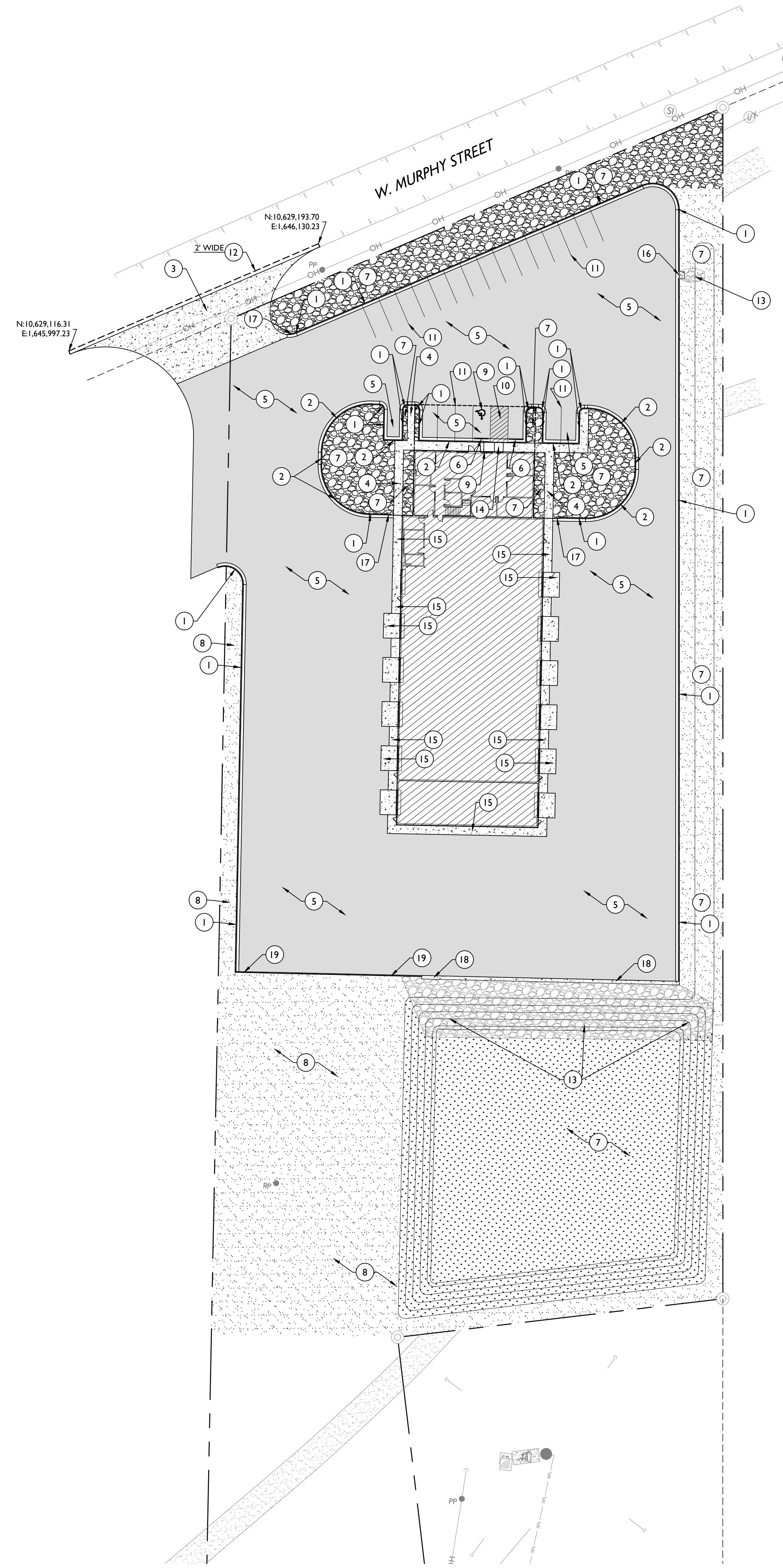
DIMENSIONAL PLAN PERMIAN PARK INDUSTRIAL



81
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07/05/2023

C200



LEGEND

●	DENOTES SET 1/2-INCH IRON ROD W/RED PLASTIC CAP MARKED "MAVERICK FIRM #10194514"
○	DENOTES FOUND MONUMENT AS NOTED
☒	DENOTES EXISTING BENCHMARK AS NOTED
■	DENOTES EXISTING ELECTRICAL BOX
◎	DENOTES EXISTING UTILITY MARKER
PP	DENOTES EXISTING POWER POLE
•	DENOTES EXISTING GUY ANCHOR
PP	DENOTES EXISTING PUMP JACK
—	DENOTES BOUNDARY LINE
- - -	DENOTES EXISTING PROPERTY LINE
- - -	DENOTES EXISTING EASEMENT LINE
—	DENOTES EDGE OF ASPHALT
X	DENOTES EXISTING BARBED WIRE FENCE
OH	DENOTES EXISTING OVERHEAD ELECTRIC LINE
PL	DENOTES EXISTING PIPELINE
SPL	DENOTES EXISTING POLY/STEEL LINE
8V	DENOTES EXISTING 8" WATER LINE
8WW	DENOTES EXISTING 8" WASTEWATER LINE
■■■■■	DENOTES PROPOSED CONCRETE
■■■■■	DENOTES PROPOSED LANDSCAPE UNLESS OTHERWISE NOTED
■■■■■	DENOTES PROPOSED PAVEMENT

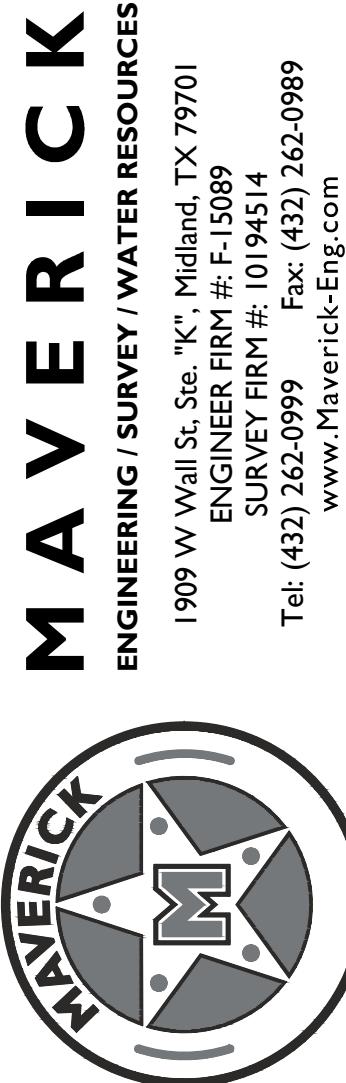
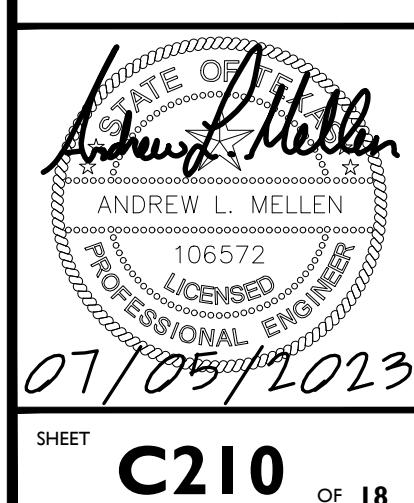
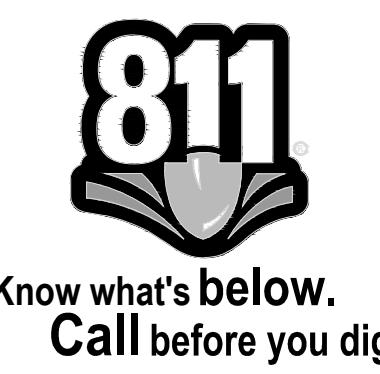
PAVING NOTES:

TYPE ① CONSTRUCT 6" STANDARD CURB SECTION PER DETAIL SS-2 OF THE CITY OF ODESSA'S STANDARD CONSTRUCTION DETAILS, INCLUDED ON SHEET C220.

2. CONSTRUCT LIP DOWN STANDARD CURB SECTION PER DETAIL SS-2 OF THE CITY OF ODESSA'S STANDARD CONSTRUCTION DETAILS, INCLUDED ON SHEET C220.
3. CONSTRUCT STANDARD RESIDENTIAL & COMMERCIAL DRIVEWAY PER DETAIL SS-12 OF THE CITY OF ODESSA'S STANDARD CONSTRUCTION DETAILS, INCLUDED ON SHEET C220.
4. CONSTRUCT STANDARD STEEL REINFORCED SIDEWALK PER DETAIL SS-3 OF THE CITY OF ODESSA'S STANDARD CONSTRUCTION DETAILS, INCLUDED ON SHEET C220.
5. INSTALL HEAVY DUTY CONCRETE OR ASPHALT PAVEMENT PER OWNER DIRECTION, SEE DETAILS 01 OR 02 ON SHEET C221.
6. INSTALL PRECAST CONCRETE WHEEL STOPS AT ADA STALLS PER DETAIL 03 ON SHEET C221.
7. LANDSCAPING. SEE LANDSCAPE PLANS.
8. EXISTING LANDSCAPING TO REMAIN.
9. INSTALL ADA PARKING SPOT SIGN (ATTACHED TO BUILDING) AND INDICATOR PER DETAIL 04 ON SHEET C221. HANDICAP PARKING SPOT INDICATOR TO BE MARKED AS SHOWN. MARKING IS TO BE [SHERWIN WILLIAMS PROMAR ALKYD FAST DRY ZONE MARKING PAINT, TXDOT DMS-8220 THERMOPLASTIC MATERIAL (100 MM)] OR APPROVED EQUAL.
10. AISLE / ISLAND / ACCESSIBLE ROUTE TO BE MARKED AS SHOWN. MARKINGS ARE TO BE PAINTED WITH WHITE 4" WIDE STRIPES, SPACED AT 2 FT APART DIAGONALLY ACROSS AREAS INDICATED, AND OUTLINED AROUND THE AREA WITH THE SAME. PAINT IS TO BE SHERWIN WILLIAMS PROMAR ALKYD FAST DRY ZONE MARKING PAINT OR APPROVED EQUAL. CONTRACTOR IS TO ENSURE SURFACE IS CLEAN AND DRY PRIOR TO PAINT APPLICATION. PAINT IS TO BE APPLIED IN TWO COATS, SPRAYED IN OPPOSITE DIRECTIONS.
11. PARKING LOT STRIPING TO BE MARKED AS SHOWN. EACH PARKING STRIPE IS TO BE MARKED WITH A WHITE 4" WIDE STRIPE USING SHERWIN WILLIAMS PROMAR ALKYD FAST DRY ZONE MARKING PAINT OR APPROVED EQUAL. CONTRACTOR IS TO ENSURE SURFACE IS CLEAN AND DRY PRIOR TO PAINT APPLICATION. WIDTH AND LENGTH OF SPACES AND AISLES PER SITE DIMENSIONS SHOWN. PAINT IS TO BE APPLIED IN TWO COATS, SPRAYED IN OPPOSITE DIRECTIONS.
12. CONTRACTOR TO SAWCUT AND REMOVE TWO (2) FEET MINIMUM ASPHALT FROM EXISTING CURB AND GUTTER LIP. THE EXISTING ASPHALT PAVEMENT REPLACED IS TO MATCH CURRENT SECTION OF EXISTING ROADWAY. CONTRACTOR IS TO CLEANLY TIE INTO EXISTING CURB. 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.
13. CONTRACTOR IS TO INSTALL RIP-RAP, NOMINAL D_{50} (6" AVERAGE DIAMETER LOOSE RIP-RAP OR BULL ROCK AT 12" DEPTH). ROCK IS TO BE PLACED FLUSH WITH GRADE PER GRADING PLAN. A FILTER FABRIC COMPLIANT WITH TXDOT DMS-6200 TYPE 2 (OR APPROVED EQUAL) IS TO BE PLACED BEHIND THE RIP-RAP. AREA PER LAYOUT PLAN.
14. CONSTRUCT "TYPE A" ADA RAMP PER DETAIL A01 ON SHEET C220.
15. INSTALL HEAVY DUTY CONCRETE, SEE DETAIL 01 ON SHEET C221.
16. INSTALL 4' CURB CUT W/ CONCRETE SPLASH PAD.
17. TRANSITION CURB HEIGHT FROM 0" TO 6" OVER THIS LENGTH, SEE GRADING PLAN.
18. CONSTRUCT CONCRETE THICKENED EDGE PER DETAIL 05 ON SHEET C221.
19. CONSTRUCT MOUNTABLE CURB PER DETAIL 06 ON SHEET C221.

CONCRETE JOINTING NOTE:

MAVERICK DOES NOT SUPPLY CONCRETE JOINTING PLANS, OR REVIEW THEM, UNLESS SPECIFICALLY CONTRACTED TO DO SO. THE CONTRACTOR IS RESPONSIBLE FOR CONCRETE JOINTING PLAN DEVELOPMENT AND IMPLEMENTATION. MAVERICK CAN PROVIDE THIS SERVICE TO THE CONTRACTOR AT AN ADDITIONAL EXPENSE. PLEASE CONTACT MAVERICK FOR MORE INFORMATION ON THIS ADDITIONAL DESIGN SERVICE.

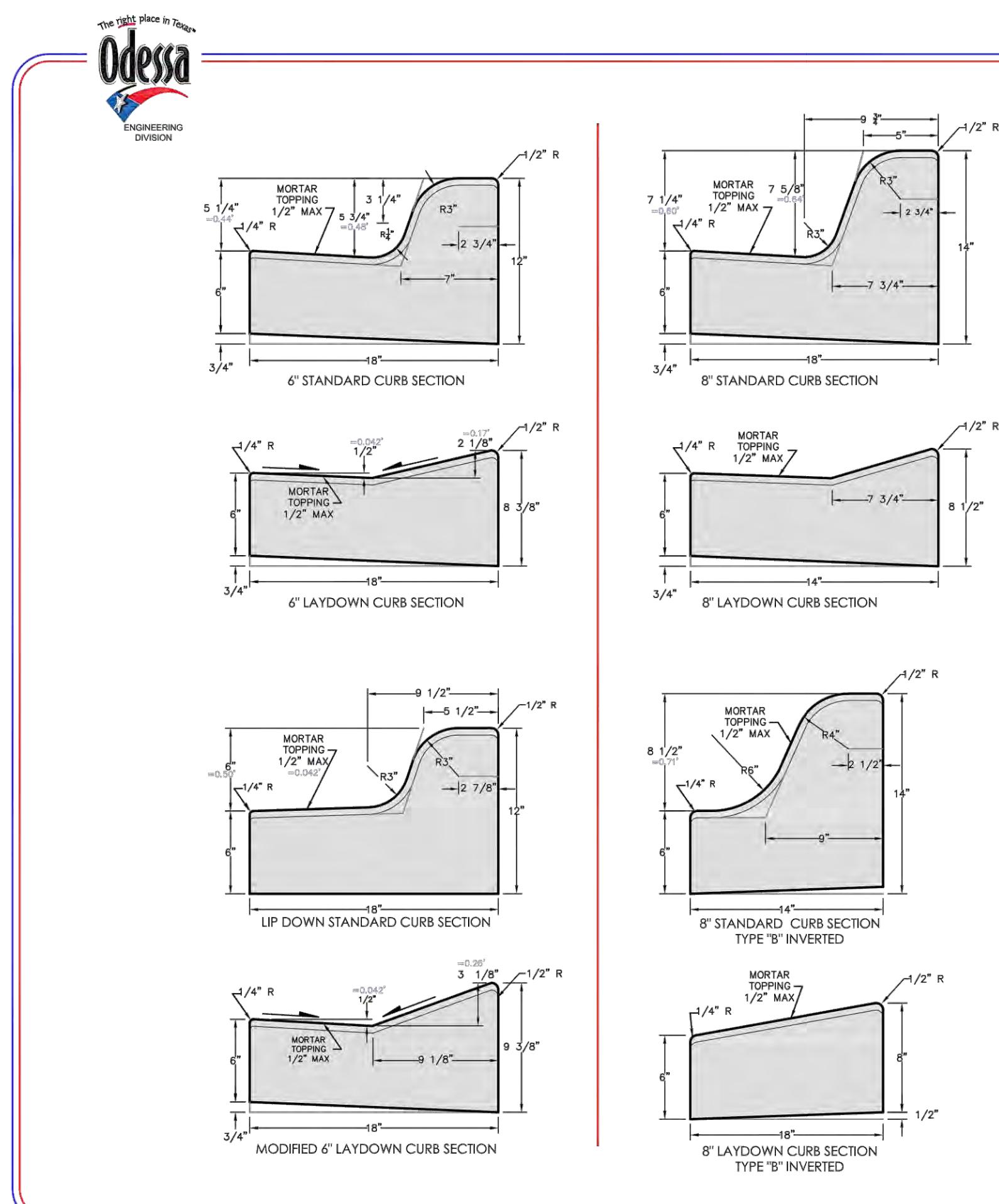


PAVING PLAN
PERMIAN PARK INDUSTRIAL

LOT 2, BLOCK 1, PERMIAN PARK SUBDIVISION, CITY OF ODESSA,
Ector County, Texas.

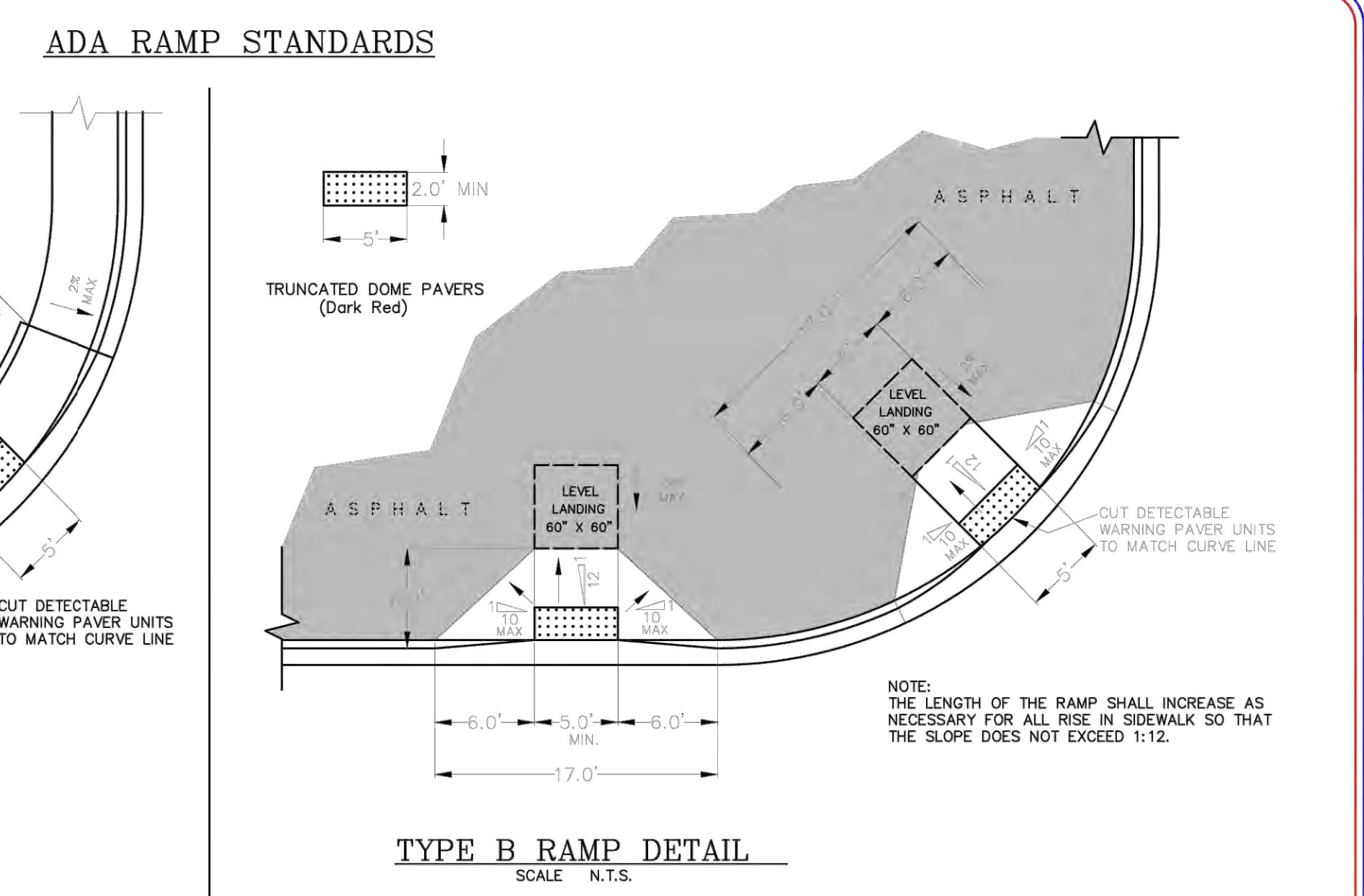
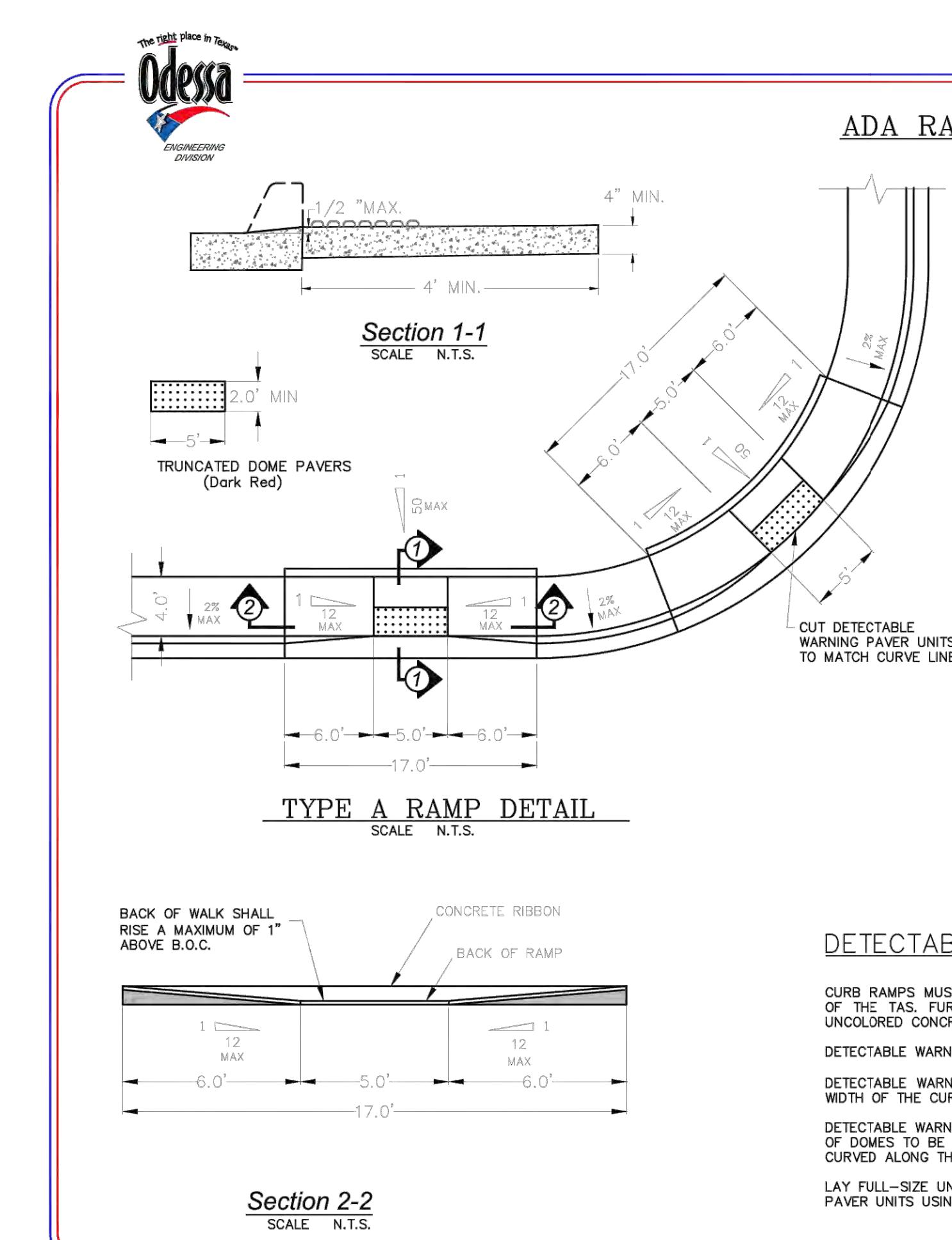
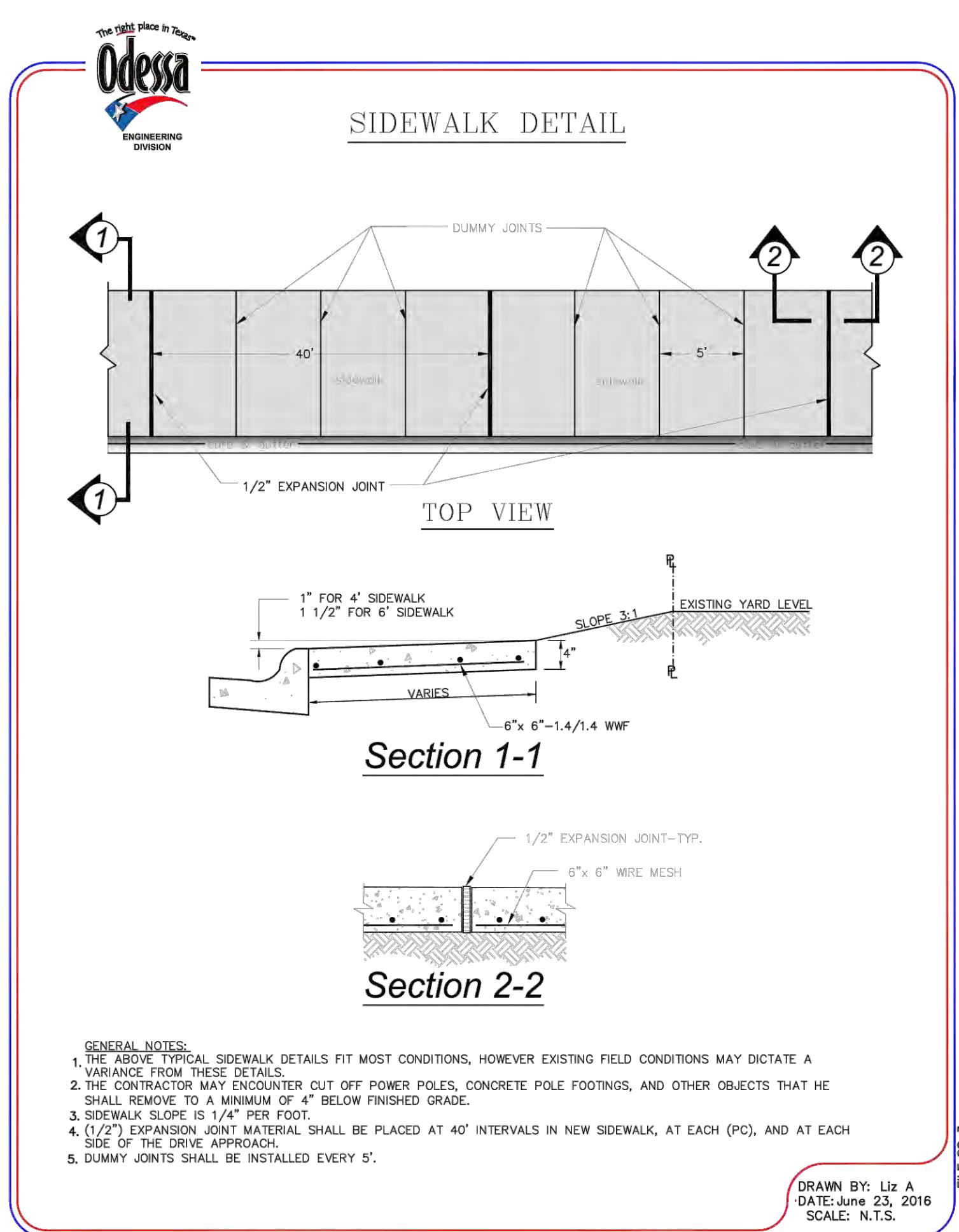
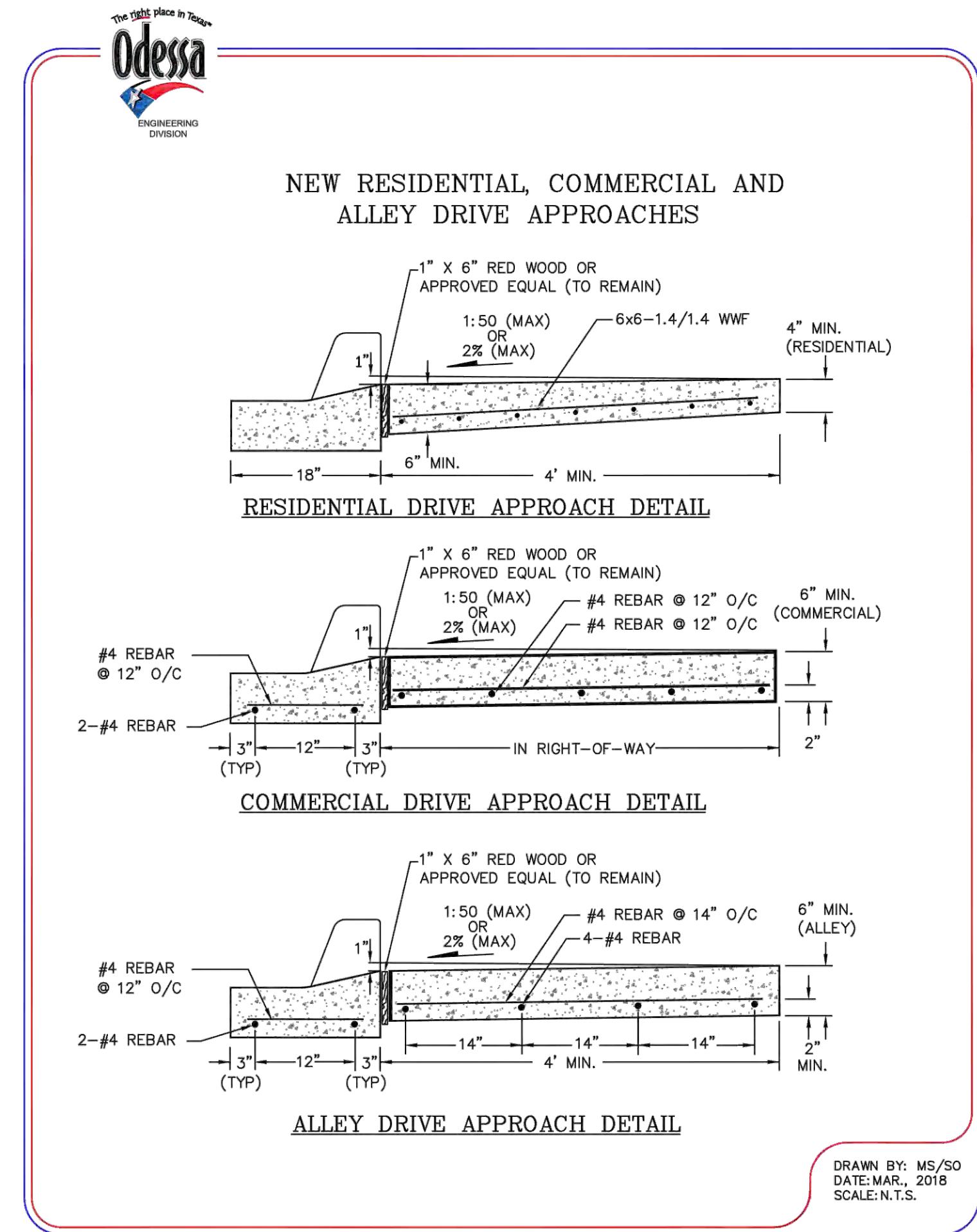
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ENGINEER FIRM #: F-15089
SURVEY FIRM #: I0194514
Tel: (432) 261-0999 Fax: (432) 262-0989
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SHEET C210 OF 18



CURB & GUTTER NOTES

1. ALL CONCRETE SHALL BE CLASS "A" CONFORMING TO THE REQUIREMENTS OF ITEM 400.
THE CURB & GUTTER SHALL BE TOPPED WITH RICH MORTAR AND FINISHED AS A MONOLITHIC UNIT.
2. 1/2" PREMOLDED EXPANSION JOINTS SHALL BE PLACED AT INTERVALS NOT GREATER THAN 40 FEET, DUMMY JOINTS SHALL BE CUT AT 10' INTERVALS.
3. ALL EXPOSED CURB SURFACES SHALL HAVE A TROWELLED FINISH FOLLOWED BY A LIGHT BRUSHING AND ALL VALLEY GUTTER AND SPANDREL SURFACES SHALL BE GIVEN THE SAME TYPE OF FINISH.
4. ALL CURB AND GUTTER SHALL BE BACKFILED AND THE R.O.W. SHALL BE CLEANED AND NEATLY FINISHED.
5. CURB SHALL BE SAWED WHERE REMOVED OTHER THAN AT A JOINT OR WHERE NEEDED TO PREVENT BREAKING OF EXISTING CURB, PRICE TO BE INCLUDED IN THE BID ITEM FOR REMOVED CURB AND GUTTER.



DETECTABLE WARNING MATERIAL

CURB RAMPS MUST CONTAIN A DETECTABLE WARNING SURFACE THAT CONSISTS OF RAISED TRUNCATED DOMES COMPLYING WITH SECTION 705 OF THE TAS. FURNISH AND INSTALL AN APPROVED DARK BROWN OR DARK RED DETECTABLE WARNING SURFACE MATERIAL ADJACENT TO UNCOLORED CONCRETE, UNLESS SPECIFIED ELSEWHERE IN THE PLANS.

DETECTABLE WARNING SURFACES MUST BE SLIP RESISTANT AND NOT ALLOW WATER TO ACCUMULATE.

DETECTABLE WARNING SURFACES SHALL BE A MINIMUM OF 24" IN DEPTH IN THE DIRECTION OF PEDESTRIAN TRAVEL.

DETECTABLE WARNING SURFACES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS AT THE BACK OF CURB. ALIGN THE ROWS OF DOMES TO BE PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP RUN AND THE STREET. DETECTABLE WARNING SURFACES MAY BE

LAY FULL-SIZE UNITS FIRST FOLLOWED BY CLOSURE UNITS CONSISTING OF AT LEAST 25 PERCENT OF A FULL UNIT. CUT DETECTABLE WARNING PAVER UNITS USING A POWER SAW.

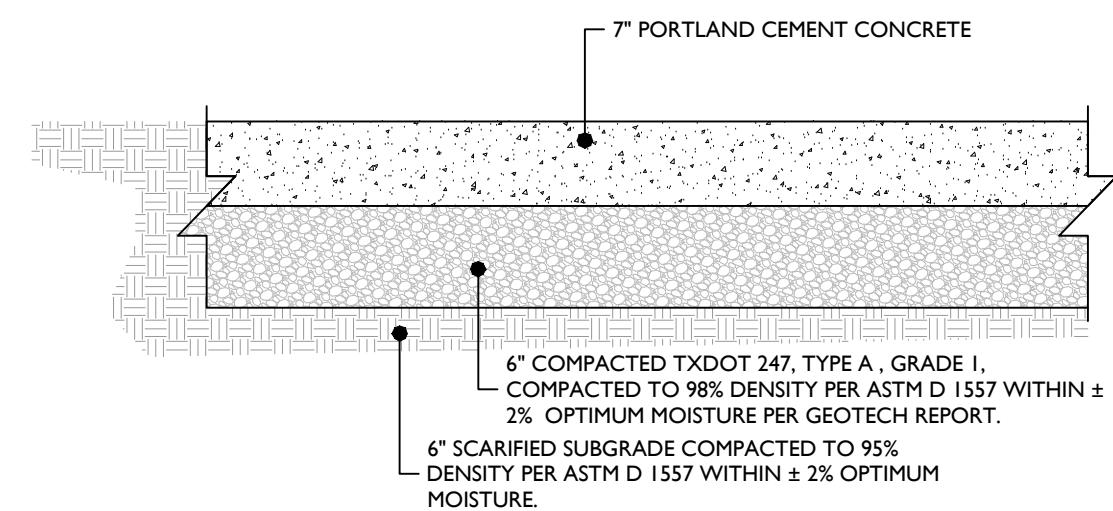
PAVER UNITS USING A POWER SAW.

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STATE OF TEXAS
Andrew Mellen
ANDREW L. MELLIN
106572
LICENSED PROFESSIONAL ENGINEER
07/05/2023

SHEET C220 OF 18

of 18



PAVEMENT SECTION NOTE:

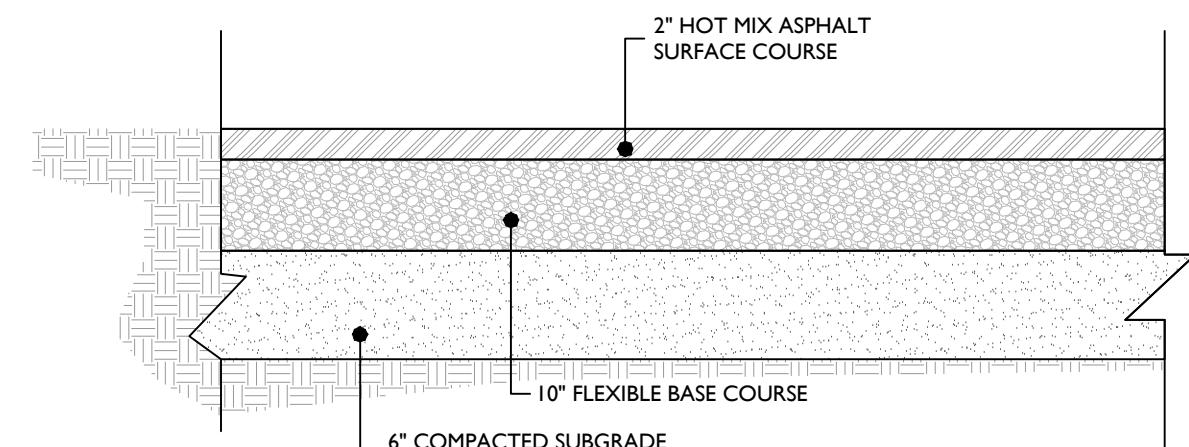
THE INCLUDED PAVEMENT SECTIONS ARE BASED ON HISTORIC PERFORMANCE OF THE SAME OR SIMILAR SECTIONS WITHIN THE PERMIAN BASIN AREA. DUE TO THE VARIED NATURE OF SOIL A TRUE PAVEMENT SECTION DESIGN CANNOT BE PROVIDED WITHOUT OBTAINING A GEOTECHNICAL INVESTIGATION. MAVERICK ENGINEERING WILL NOT BE HELD ACCOUNTABLE FOR PAVEMENT FAILURES.

NOTES:

- WHERE NOT SPECIFIED ELSEWHERE, CONCRETE IS TO HAVE THE FOLLOWING PROPERTIES:
 - 3,600 PSI COMPRESSIVE STRENGTH @ 28 DAYS.
 - COARSE AGGREGATE IS TO BE ASTM C33, GRADE NO. 67 COMPLIANT.
 - CEMENT IS TO BE ASTM C150 TYPE I / II OR C595 TYPE II COMPLIANT.
 - THE MAXIMUM CONTROL JOINT SPACING SHOULD BE HELD AT A RANGE FROM 24 TO 36 TIMES THE SLAB THICKNESS, WITH A MAXIMUM LENGTH TO WIDTH RATIO OF 1.5.
 - REINFORCE WITH #6 BARS @ 18" O.C.E.W. JOINT LAYOUT DESIGN IS TYPICALLY PROVIDED BY THE CONTRACTOR.
 - CONCRETE IS TO BE PLACED IN ACCORDANCE WITH TXDOT ITEM 421.

1 CONCRETE PAVEMENT - HEAVY DUTY

N.T.S.

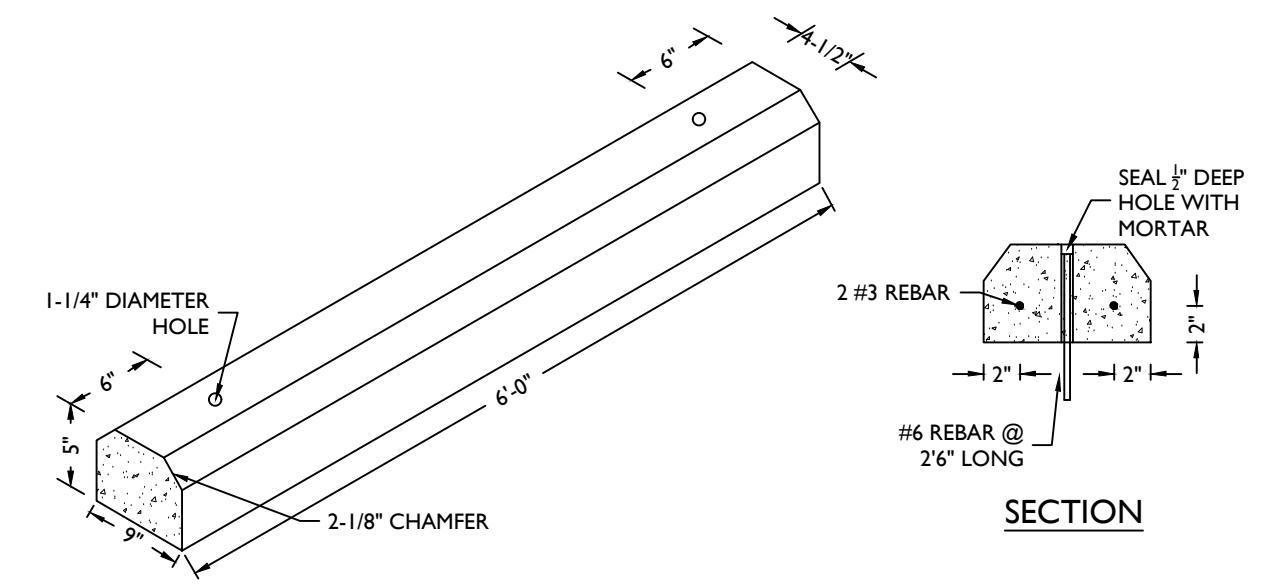


NOTES:

- INSTALL TXDOT ITEM 340/341 TYPE ID HOT MIX ASPHALTIC CONCRETE WITH A MINIMUM PERFORMANCE GRADE BINDER OF PG42-22. SUBSTITUTE PG BINDERS MUST BE APPROVED BY THE ENGINEER.
- ASPHALT IS TO BE COMPACTION TO AT LEAST 98% PER ASTM D1557.
- FLEXIBLE BASE COURSE TO BE TXDOT TYPE "A" (CRUSHED STONE, NO GRAVEL), GRADE I-2.
- FLEXIBLE BASE COURSE TO BE COMPACTION TO AT LEAST 100% OF THE MAXIMUM DRY UNIT DENSITY PER TEX-113-E.
- SUBGRADE COMPACTED PER GEOTECH REPORT. IF GEOTECH IS NOT AVAILABLE, SCARIFY 6" AND COMPACT TO AT LEAST 100% OF THE MAXIMUM DRY UNIT DENSITY PER TEX-113-E.

2 ASPHALT PAVEMENT - HEAVY DUTY

N.T.S.

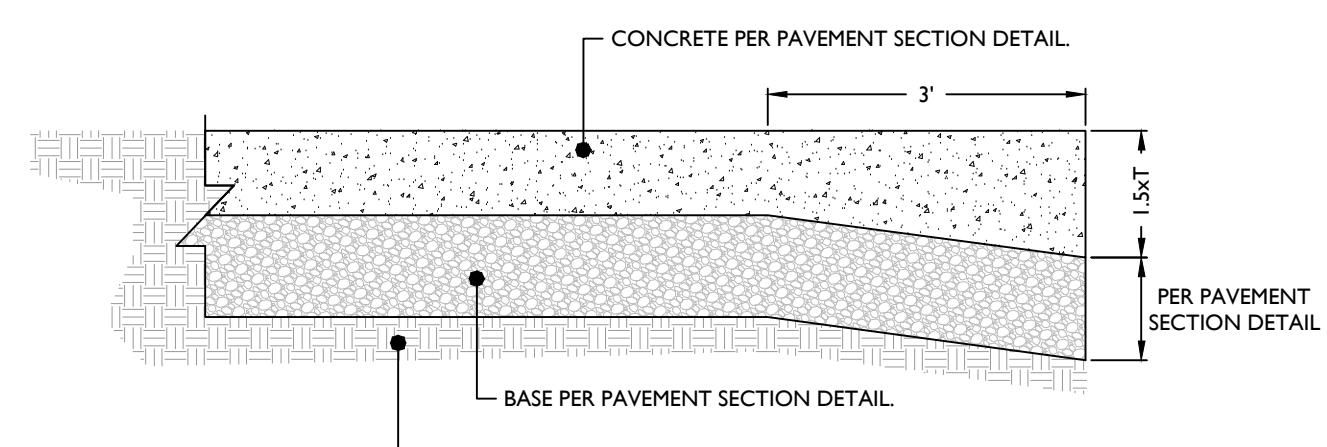


NOTES:

- 3,600 COMPRESSIVE STRENGTH @ 28 DAYS, REINFORCED WITH #3 BARS @ 16" ON CENTER.

3 CONCRETE WHEEL STOP

N.T.S.

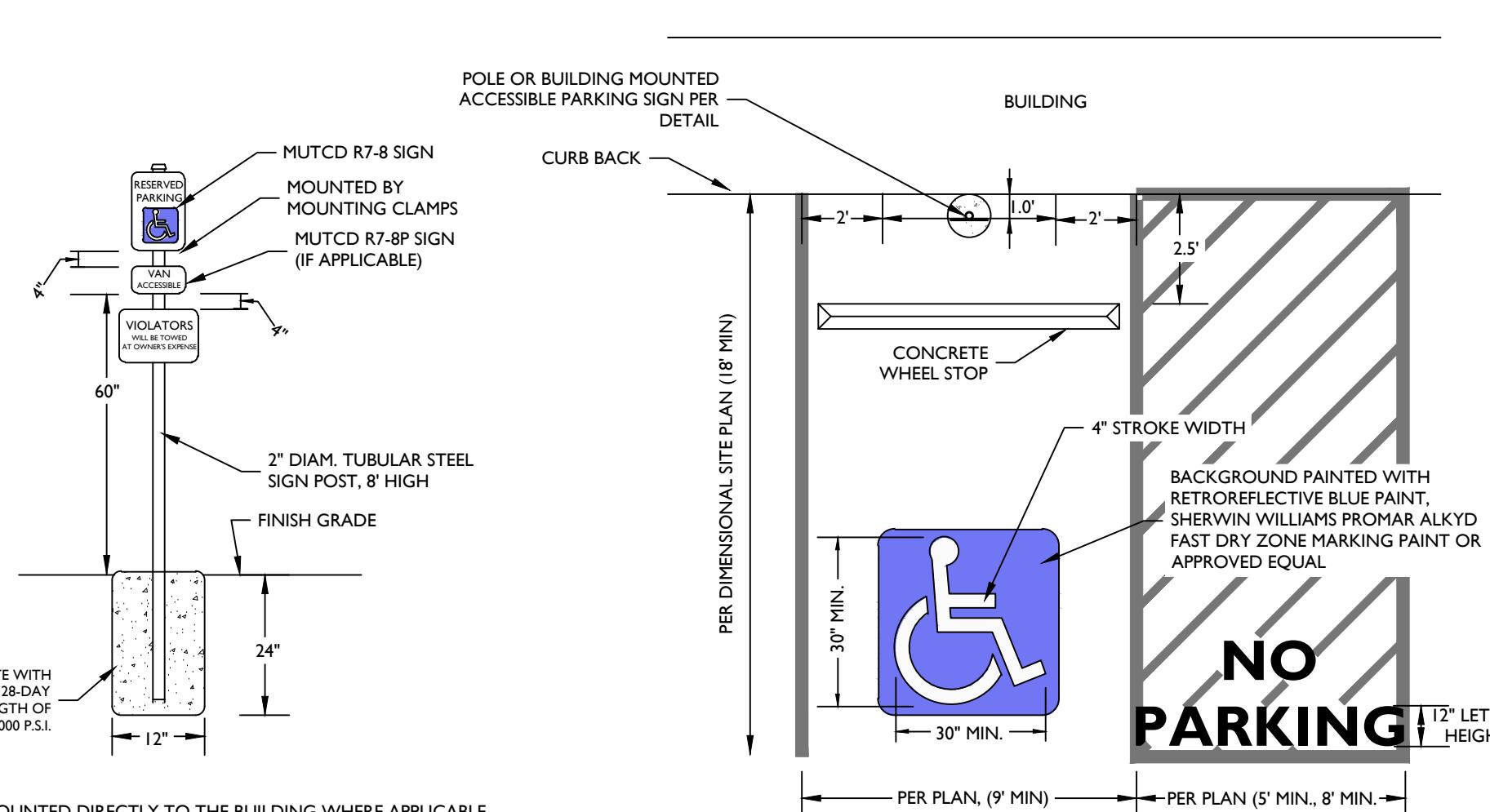


NOTES:

- CONCRETE MATERIALS AND REINFORCEMENT PER THE PAVEMENT SECTION DETAIL.
- THE MAXIMUM CONTROL JOINT SPACING SHOULD BE HELD AT A RANGE FROM 24 TO 36 TIMES THE SLAB THICKNESS, WITH A MAXIMUM LENGTH TO WIDTH RATIO OF 1.5.

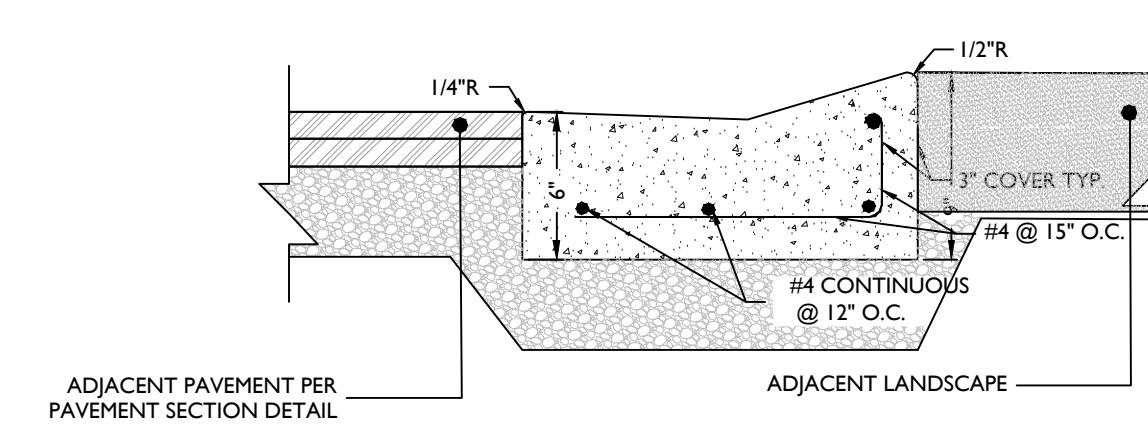
5 CONCRETE THICKENED EDGE

N.T.S.



4 ACCESSIBLE SPACE MARKING

N.T.S.



6 3" MOUNTABLE CURB

N.T.S.

CONCRETE SPECIFICATIONS:

MATERIALS

- FURNISH A MIX DESIGN IN ACCORDANCE WITH ACI 211, OR TEX-470.
- CONCRETE IS TO BE PLACED IN ACCORDANCE WITH TXDOT ITEM 421.

AGGREGATE:

- BLAST FURNACE SLAG OR RECLAIMED PAVEMENTS ARE NOT ALLOWED ON THIS PROJECT.
- COARSE AGGREGATE IS TO BE NO LARGER THAN 3/4 INCH IN DIAMETER.
- COARSE AGGREGATE IS TO BE COMPLIANT WITH ASTM C33, GRADE NO. 67 OR TXDOT ITEM 421, GRADE 5.
- COARSE AND FINE AGGREGATES ARE TO BE TESTED SEPARATELY FOR ALKALI REACTIVITY PER ASTM C1260. EXPANSION IS TO BE LESS THAN 0.10%.

CEMENT:

- PORTLAND CEMENT IS TO BE COMPLIANT WITH ASTM C150 TYPE I/II OR ASTM C595 TYPE II.
- DESIGN STRENGTH 3,600 PSI
- WATER TO CEMENT RATIO 0.6 MAX SLUMP 4-6"

FLY ASH:

- FLY ASH IS TO BE COMPLIANT WITH ASTM C618 WITH EXCEPTIONS BELOW.
- LOSS OF IGNITION IS TO BE LESS THAN 6%.
- CALCIUM OXIDE CONTENT IS TO BE LESS THAN 15%.
- TOTAL ALKALI CONTENT IS TO BE LESS THAN 3% PER ASTM C311.
- FLY ASH IS TO BE FROM A SINGLE SOURCE.

- CURING COMPOUNDS ARE TO BE COMPLIANT WITH ASTM C309, TYPE 2, CLASS A OR B.
- ISOLATION JOINT FILLERS ARE TO BE COMPLIANT WITH ASTM D1751.
- EXPANSION JOINT SEALANT IS TO BE COMPLIANT WITH ASTM C920, TYPE M, CLASS 2.
- CHEMICAL ADMIXTURES ARE TO BE COMPLIANT WITH TXDOT DMS-4640 OR ASTM C494 (TYPE A, B, OR D).

REQUIRED TESTING:

- COARSE AGGREGATE:
 - LA ABRASION 35% MAX LOSS
 - MAGNESIUM SULFATE 30% MAX LOSS
 - CRUSHED FACES 85 MINIMUM
- FINE AGGREGATE:
 - DELETERIOUS MATERIALS 1% MAX
 - FINENESS MODULUS 2.3-3.1

GRADATION REQUIREMENTS:

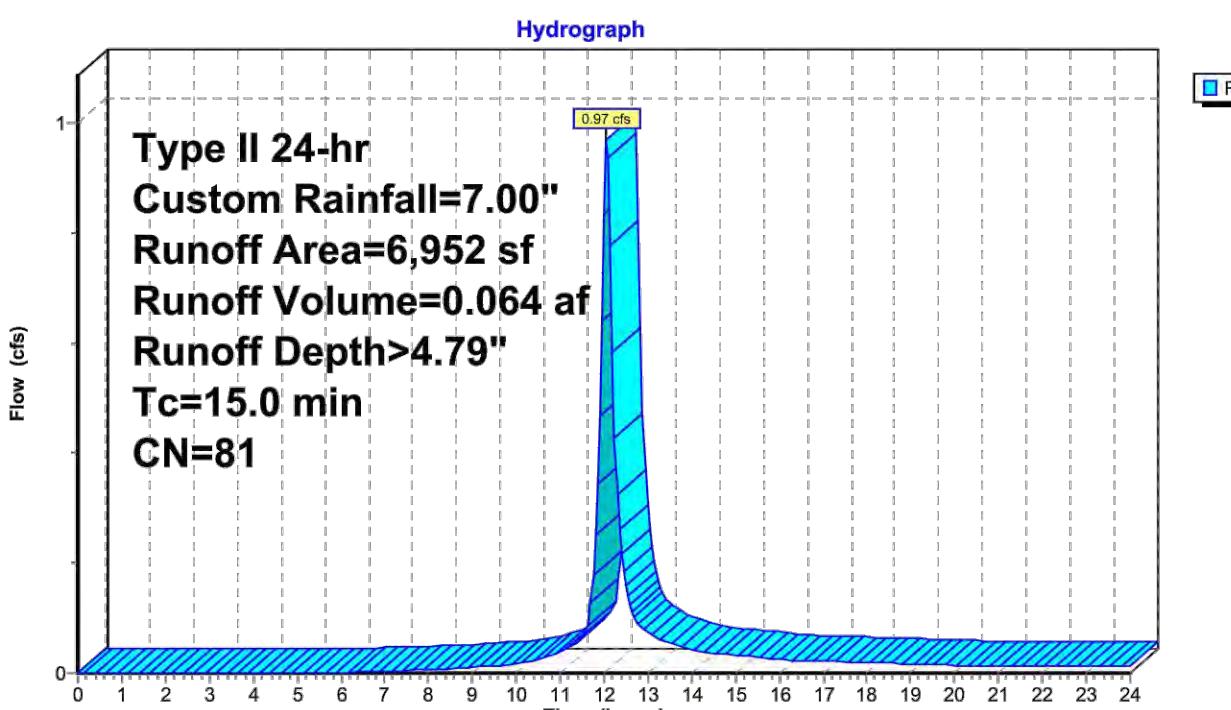
COARSE AGGREGATE	
3/4" SIEVE	90-100% PASS
1/2" SIEVE	75-90% PASS
3/8" SIEVE	20-55% PASS
NO. 04 SIEVE	0-10% PASS
NO. 08 SIEVE	0-5% PASS
NO. 200 SIEVE	2-7% PASS
FINE AGGREGATE	
3/8" SIEVE	100% PASS
NO. 04 SIEVE	95-100% PASS
NO. 08 SIEVE	80-100% PASS
NO. 16 SIEVE	50-85% PASS
NO. 30 SIEVE	25-65% PASS
NO. 50 SIEVE	10-35% PASS
NO. 100 SIEVE	0-10% PASS
NO. 200 SIEVE	0-3% PASS

- WHERE NOT SPECIFIED ELSEWHERE, CONCRETE IS TO HAVE THE FOLLOWING PROPERTIES:
 - 3,600 PSI COMPRESSIVE STRENGTH @ 28 DAYS.
 - COARSE AGGREGATE IS TO BE ASTM C33, GRADE NO. 67 COMPLIANT.
 - CEMENT IS TO BE ASTM C150 TYPE I / II OR C595 TYPE II.
 - REINFORCEMENT AS SHOWN. REINFORCEMENT IS TO COMPLY WITH ASTM A615 AND HAVE A MINIMUM TENSILE YIELD STRENGTH OF 60,000 PSI.
 - BACKFILLING AGAINST CURB IS NOT TO BE PERFORMED UNTIL CONCRETE HAS REACHED ITS FULL 28 DAY STRENGTH. CARE IS TO BE TAKEN TO AVOID EXERTING LARGE IMPACT FORCE ON THE CURB.
 - PROVIDE 3 INCH CLEAR CONCRETE COVER AT ALL REINFORCEMENT STEEL, TYPICAL.
 - NATIVE BACKFILL MATERIAL IS TO BE FREE OF ALL ROCKS GREATER THAN 3" IN DIAMETER AND ALL ORGANIC AND DELETERIOUS MATERIALS.



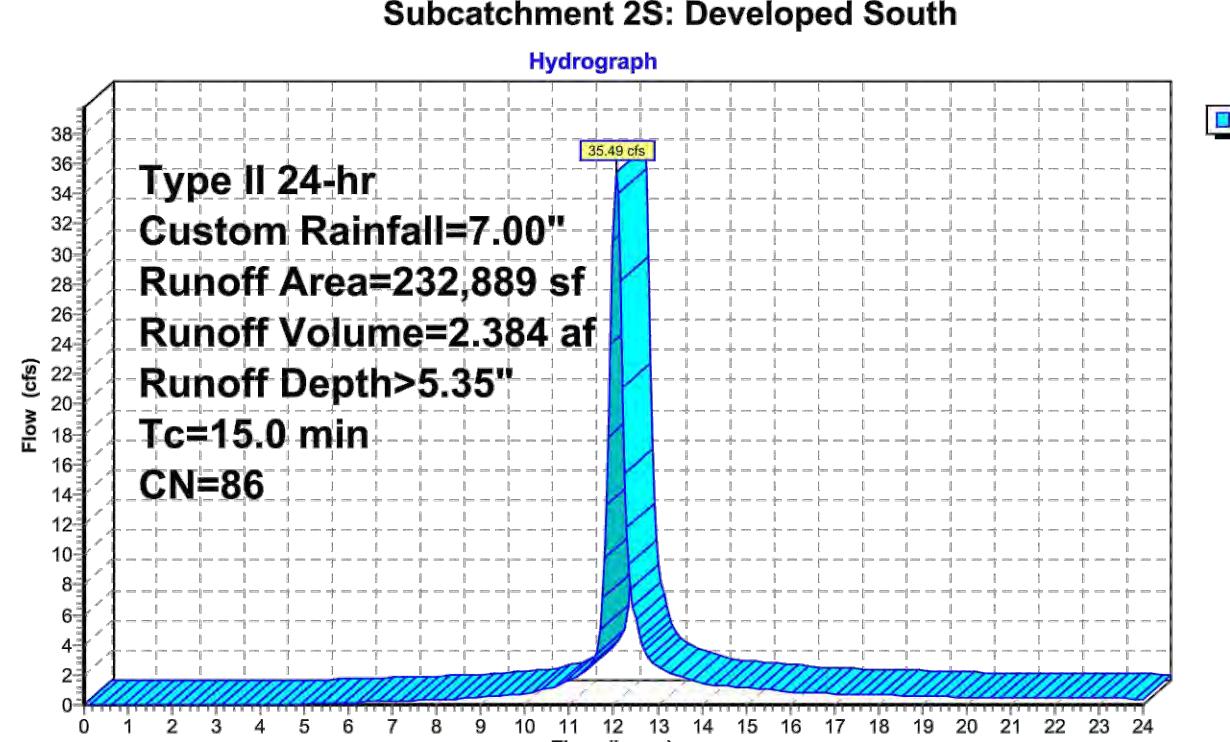
Area (sf)			CN	Description	
571	98	Paved parking, HSG B			
6,381	79	<50% Grass cover, Poor, HSG B			
6,952	81	Weighted Average			
6,381	77	Natural western desert, HSG B			
571		91.79% Pervious Area			
		8.21% Impervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

Subcatchment 4S: Developed North

3 POST DEV NORTH HYDROGRAPH
N.T.S.

Area (sf)			CN	Description	
93,581	98	Paved parking, HSG B			
75,791	79	<50% Grass cover, Poor, HSG B			
63,517	77	Natural western desert, HSG B			
232,889	86	Weighted Average			
139,308		59.82% Pervious Area			
93,581		40.18% Impervious Area			
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

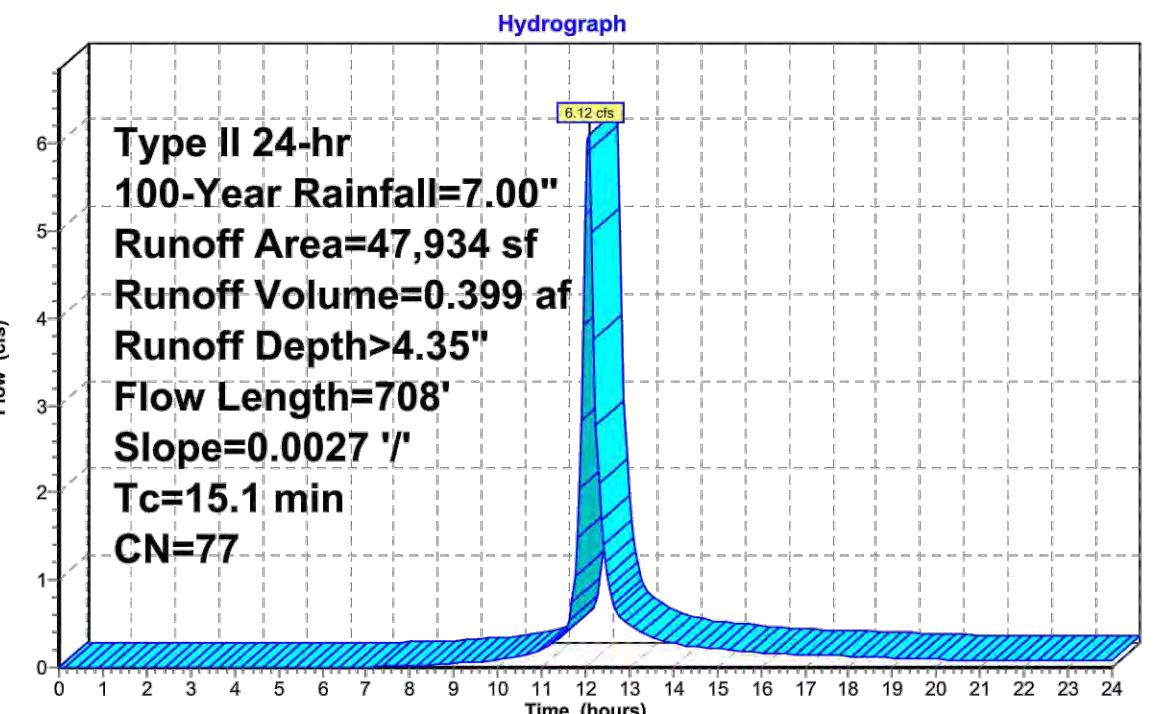
Subcatchment 2S: Developed South

4 POST-DEV SOUTH HYDROGRAPH
N.T.S.

Area (sf)	CN	Description	
47,934	77	Desert shrub range, Poor, HSG B	
47,934		100.00% Pervious Area	
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)
15.1	708	0.0027	0.78

Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps

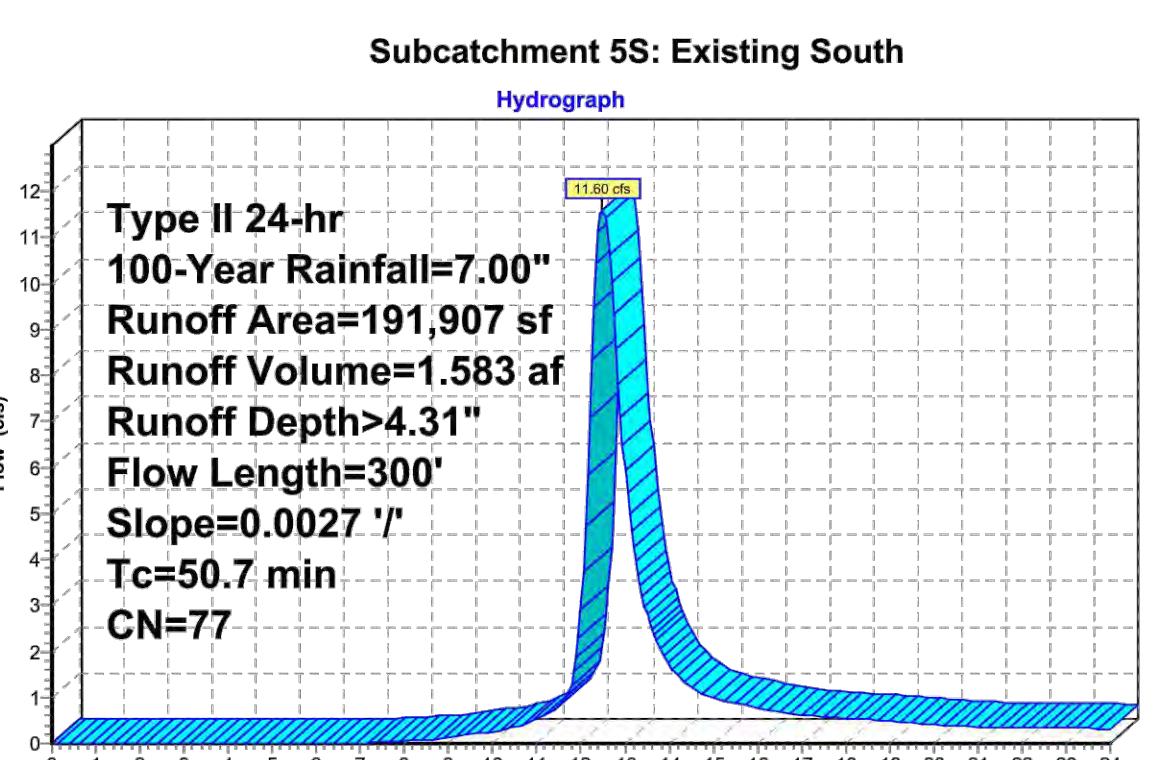
Subcatchment 1S: Existing North



1 PRE-DEVELOPMENT NORTH CONDITIONS

Area (sf)	CN	Description	
191,907	77	Desert shrub range, Poor, HSG B	
191,907		100.00% Pervious Area	
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)
50.7	300	0.0027	0.10

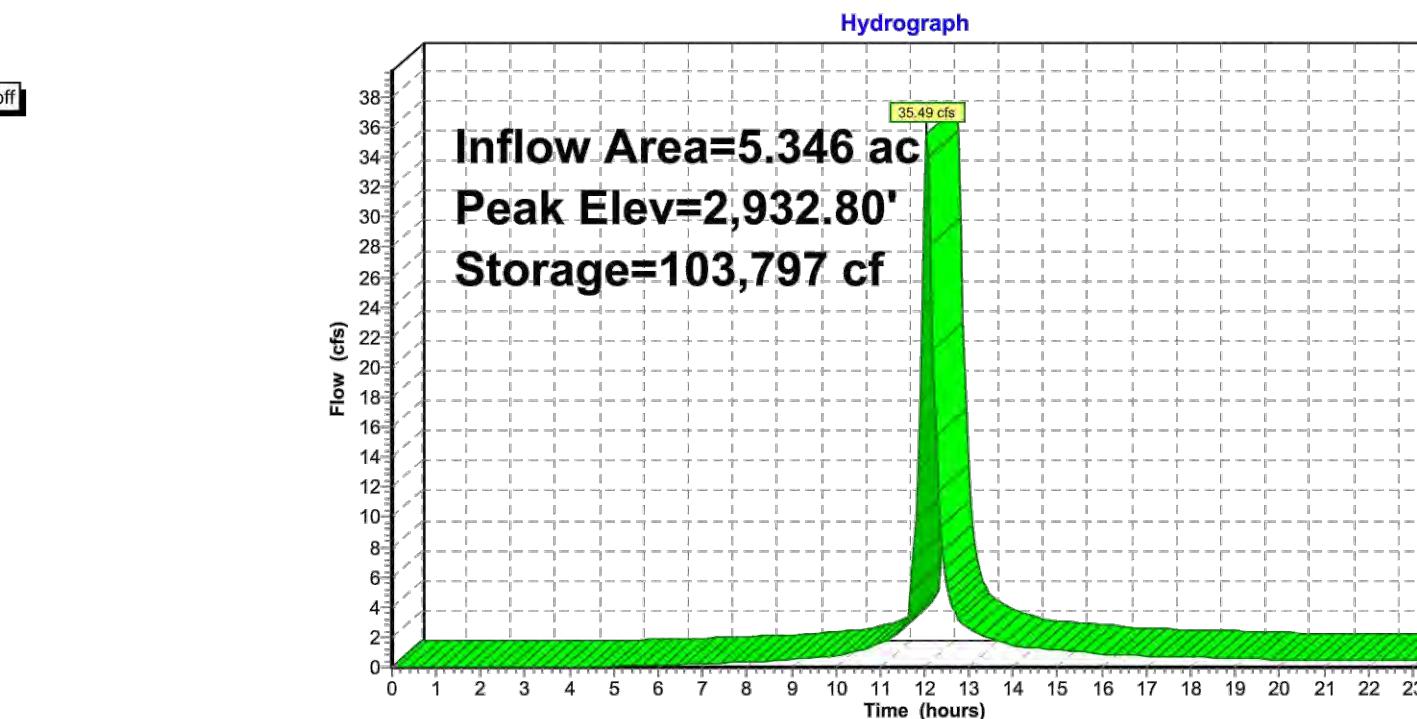
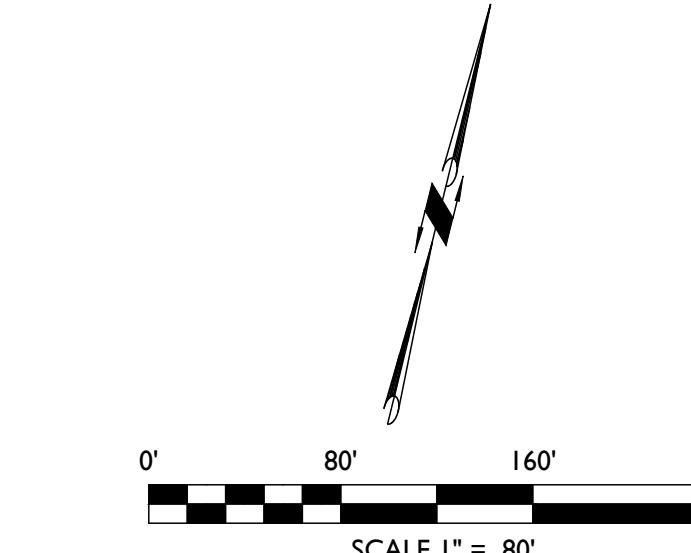
Sheet Flow, Range n= 0.130 P2= 2.74"



Subcatchment 5S: Existing South

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
2,928.50	18,650	0	0
2,929.00	19,756	9,602	9,602
2,930.00	22,070	20,913	30,515
2,931.00	24,518	23,294	53,809
2,932.00	27,096	25,807	79,616
2,933.00	35,006	31,051	110,667

Pond 4P: Retention pond

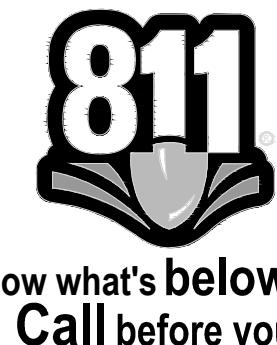
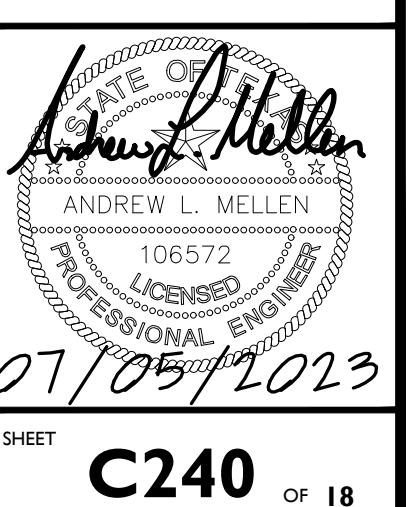
5 POST-DEV SOUTH HYDROGRAPH
N.T.S.

LEGEND

- Denotes set 1/2-inch iron rod w/red plastic cap marked "MAVERICK FIRM #10194514"
- Denotes found monument as noted
- Denotes benchmark as noted
- Denotes existing electrical box
- Denotes existing utility marker
- Denotes existing power pole
- Denotes existing pump jack
- Denotes boundary line
- Denotes existing property line
- Denotes existing easement line
- X Denotes edge of asphalt
- OH Denotes existing overhead electric line
- PL Denotes existing pipeline
- SPL Denotes existing poly/steel line
- 8W Denotes existing 8" water line
- 8WW Denotes existing 8" wastewater line
- - - - - - Denotes watershed boundary
- → Denotes drainage flow direction
- Area I 5.00 AC Denotes watershed ID
- Denotes watershed area
- Denotes impervious area
- Denotes landscape area

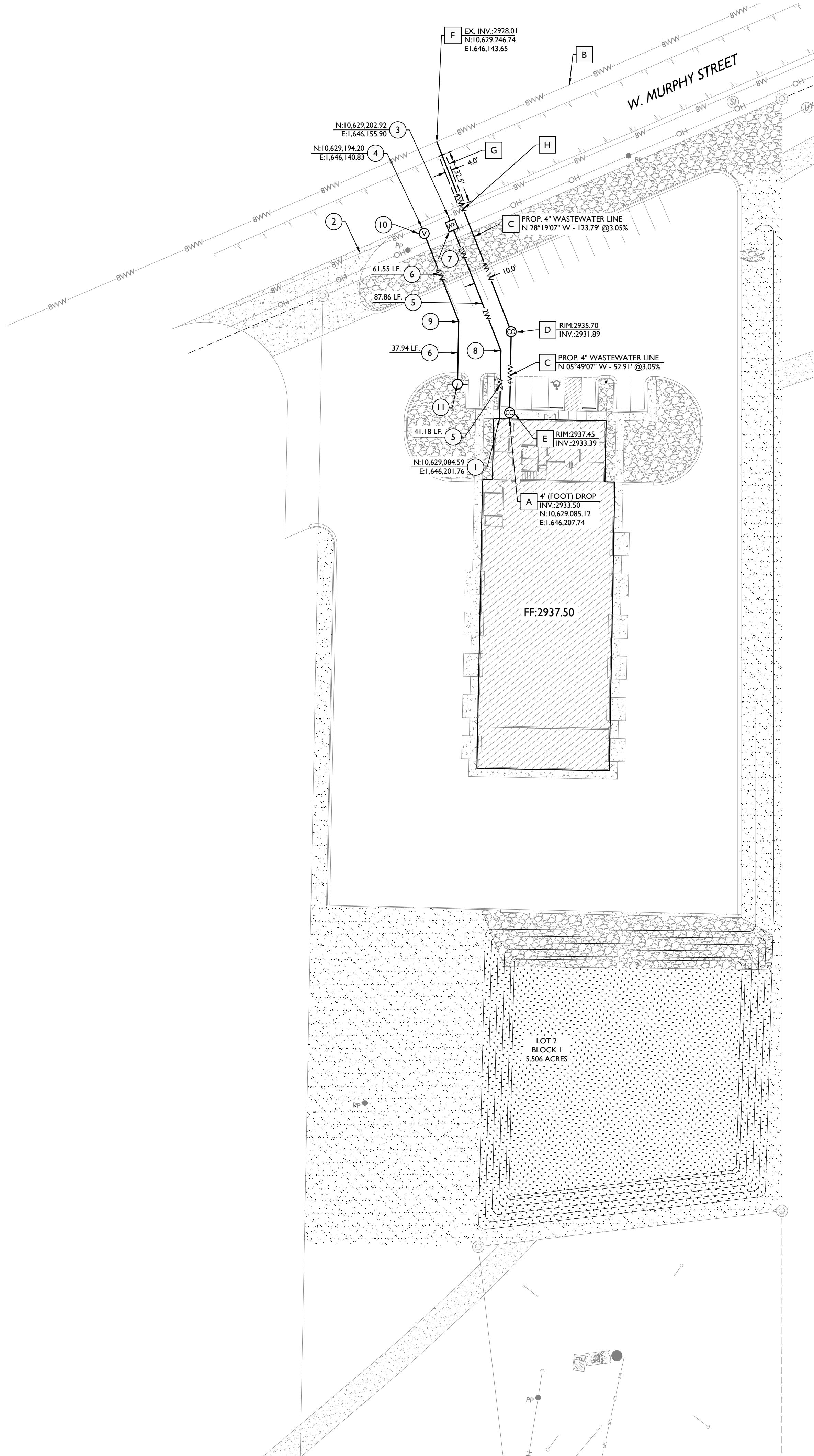
DRAINAGE NOTES:

- PRE-DEVELOPMENT WATERSHEDS: THE SITE WAS ANALYZED AS TWO WATERSHEDS. THE PROPERTY WAS MODELED WITH A CURVE NUMBER OF 77 NATURAL WEST DESERT. THE PRE-DEVELOPED WATERSHED DA 1 (NORTH) HAS A DISCHARGE OF 6.12 CFS AND WATERSHED DA 2 (SOUTH) HAS A DISCHARGE OF 11.60 CFS AND PRE DEVELOPMENT AS A WHOLE HAS PEAK DISCHARGE OF 17.72 CFS.
- POST-DEVELOPMENT WATERSHEDS: THE SITE WAS BROKEN INTO TWO WATERSHEDS. DRAINAGE AREA 1 IS DIRECTED NORTH TO THE EXISTING RIGHT OF WAY, DRAINAGE AREA 2 IS DIRECTED SOUTH TO A PROPOSED BASIN. THE DEVELOPED PEAK DISCHARGE IS DA 1 - 0.97 CFS, DA 2 - 35.49 CFS. THE TOTAL PEAK DISCHARGE IS 36.46 CFS.
- SOIL TYPE: WEBSOILSURVEY REPORTS THE SOILS IN THIS AREA TO BE PRIMARILY FASKIN DOURO ASSOCIATION, WHICH IS PART OF HYDROLOGIC SOIL GROUP B.
- DRAINAGE AREA 2 IMPROVEMENTS: DA 2 ARE SLOPED TO THE PROPOSED RETENTION BASIN AT THE SOUTH SIDE OF THE SITE, RESULTING IN A REDUCTION FROM 35.49 CFS TO 0.00 CFS.
- LANDSCAPE %: THE LANDSCAPE PERCENTAGE WAS CALCULATED USING THE SITE AREA MINUS THE BUILDING FOOT PRINT. THE LANDSCAPE PERCENTAGE WAS FOUND TO BE APPROXIMATELY 64.95% OF THIS AREA.
- TIME OF CONCENTRATION WAS CALCULATED WITH THE SCS METHOD TO BE 15 MINUTES.
- DRAINAGE CALCULATIONS WERE PERFORMED WITH HYDROCAD SOFTWARE.
- RAINFALL DEPTH DURATION WAS TAKEN FROM FIGURE 2-2 IN THE CITY OF ODESSA DRAINAGE MANUAL, PAGE 2-5, DATED 12/77. (7.00 IN., 100YR, 24 HR STORM)

DRAINAGE PLAN
PERMIAN PARK INDUSTRIALLOT 2, BLOCK 1, PERMIAN PARK SUBDIVISION, CITY OF ODESSA,
Ector County, Texas.

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SURVEY FIRM #: 10194514
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C240 OF 18



ENGINEER'S UTILITY NOTES:

- CONTRACTOR TO VERIFY ALL EXISTING UTILITY TIE-IN CONNECTIONS AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION OR EQUIPMENT MOBILIZATION.
- CONTRACTOR TO BUILD SEWER FROM TIE-IN POINT (A.K.A. DOWNHILL) AND PROCEED UPHILL.
- CITY OF ODESSA 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 ODESSA 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 ODESSA PRIOR TO FINAL INSPECTION.
- SANITARY SEWER 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 ODESSA'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.
- CONTRACTORS PERFORMING ANY WORK ON, EXTENSIONS OF, OR CONNECTIONS TO ANY PUBLIC WATER, WASTEWATER, OR UNDERGROUND STORM DRAIN SYSTEM MUST FIRST PROVIDE DOCUMENTATION TO THE CITY OF ODESSA SHOWING THAT THE CONTRACTOR POSSESSES ACTIVE LICENSES THAT ARE EQUIVALENT TO, OR HIGHER THAN;
 - A "WATER OPERATOR D" LICENSE AND
 - EITHER A "WASTEWATER D" LICENSE OR A "CLASS I COLLECTIONS" LICENSE

BOTH OF THESE LICENSES MUST BE ACTIVE AND MAINTAINED WHILE THE CONTRACTOR PERFORMS ANY WORK RELATED TO PUBLIC UTILITY CONNECTIONS. IF A CONTRACTOR ALLOWS EITHER ,OR BOTH, OF THE REQUIRED LICENSES TO LAPSE AT ANY TIME DURING THE COURSE OF THE PROJECT WORK DESCRIBED IN THIS NOTE, THEN ALL WORK UNDER THE PROJECT IS TO BE HALTED. WORK IS NOT TO RESUME UNTIL ADEQUATE DOCUMENTATION OF THE RENEWED LICENSES (OR NEW, PROPERLY LICENSED CONTRACTOR) ARE PROVIDED TO THE CITY OF ODESSA.

UTILITY WATER NOTES:

TYP. 1 SEE M E P PLANS FOR CONTINUATION

2. CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

3. INSTALL 8"x2" TAP PER CITY OF ODESSA DETAIL US 10 ON SHEET 310.

4. INSTALL 8"x6" TAPPING SLEEVE & VALVE.

5. CONSTRUCT 2" DIAMETER WATER SERVICE LINE AS SHOWN. LENGTH OF LINE PER PLANS. LINE IS TO BE SCHEDULE 40 PVC, HDPE, DPS, DR11, PE4710 OR APPROVED EQUAL. TRENCHING AND BEDDING PER CITY OF ODESSA DETAIL US 4 ON SHEET 310.

6. CONSTRUCT 6" DIAMETER WATER SERVICE LINE AS SHOWN. LENGTH OF LINE PER PLANS. LINE IS TO BE C-900 DR18 OR APPROVED EQUAL. TRENCHING AND BEDDING PER CITY OF ODESSA DETAIL US 4 ON SHEET C310.

7. INSTALL 2" WATER METER PER CITY OF ODESSA DETAIL US 10 ON SHEET C310.

8. CONSTRUCT 2" 22.5° BEND WITH RESTRAINED JOINT SYSTEM ON EACH END (PRIVATE UTILITY) / THRUST BLOCKING PER CITY OF ODESSA DETAIL US 8 ON SHEET C310 (PUBLIC UTILITY).

9. CONSTRUCT 6" 22.5° BEND WITH RESTRAINED JOINT SYSTEM ON EACH END (PRIVATE UTILITY) / THRUST BLOCKING PER CITY OF ODESSA DETAIL US 8 ON SHEET C310 (PUBLIC UTILITY).

10. INSTALL 6" GATE VALVE (FL X MJ) & VALVE BOX WITH RESTRAINED JOINT SYSTEM PER CITY OF ODESSA DETAIL US 7 ON SHEET C311.

11. INSTALL PRIVATE FIRE HYDRANT PER CITY OF ODESSA DETAIL US 7 ON SHEET C311. FIRE HYDRANT BONNET IS TO BE PAINTED RED BY MANUFACTURER.

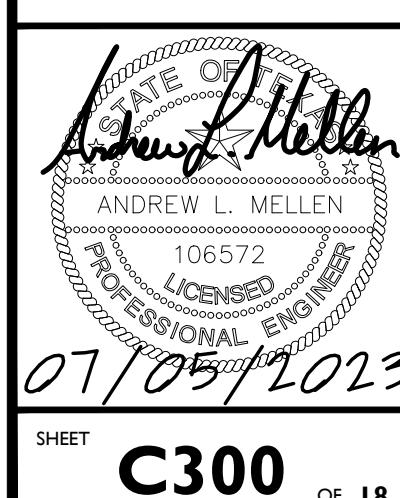
UTILITY SEWER NOTES:

TYP. A SEE M.E.P. PLANS FOR CONTINUATION

- B. CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.
- C. CONSTRUCT 4" DIAMETER SEWER SERVICE LINE. LENGTH AND SLOPE OF LINE PER PLANS. LINE IS TO BE SDR-35 OR APPROVED EQUAL. TRENCHING AND BEDDING PER CITY OF ODESSA DETAIL US 4 ON SHEET C310.
- D. INSTALL ONE WAY (SINGLE) CLEANOUT PER DETAIL 01 ON SHEET C311.
- E. INSTALL TWO WAY (DOUBLE) CLEANOUT PER DETAIL 02 ON SHEET C311.
- F. CONSTRUCT 4" DIAMETER SDR-35 SEWER SERVICE TAP PER CITY OF ODESSA DETAIL US 23 ON SHEET C311.
- G. CONTRACTOR TO BORE BENEATH EXISTING STREET OR PAVEMENT AREA. ANY DAMAGE TO PAVEMENT WILL BE CONSIDERED A TOTAL LOSS, AND IS TO BE REPAIRED FULL DEPTH FROM EDGE TO EDGE FOR A LENGTH DETERMINED BY THE CITY ENGINEER AT THE SOLE EXPENSE OF THE CONTRACTOR.
- H. MAINTAIN MIN. SLOP CLEARANCE BELOW BOTTOM OF WATER LINE.



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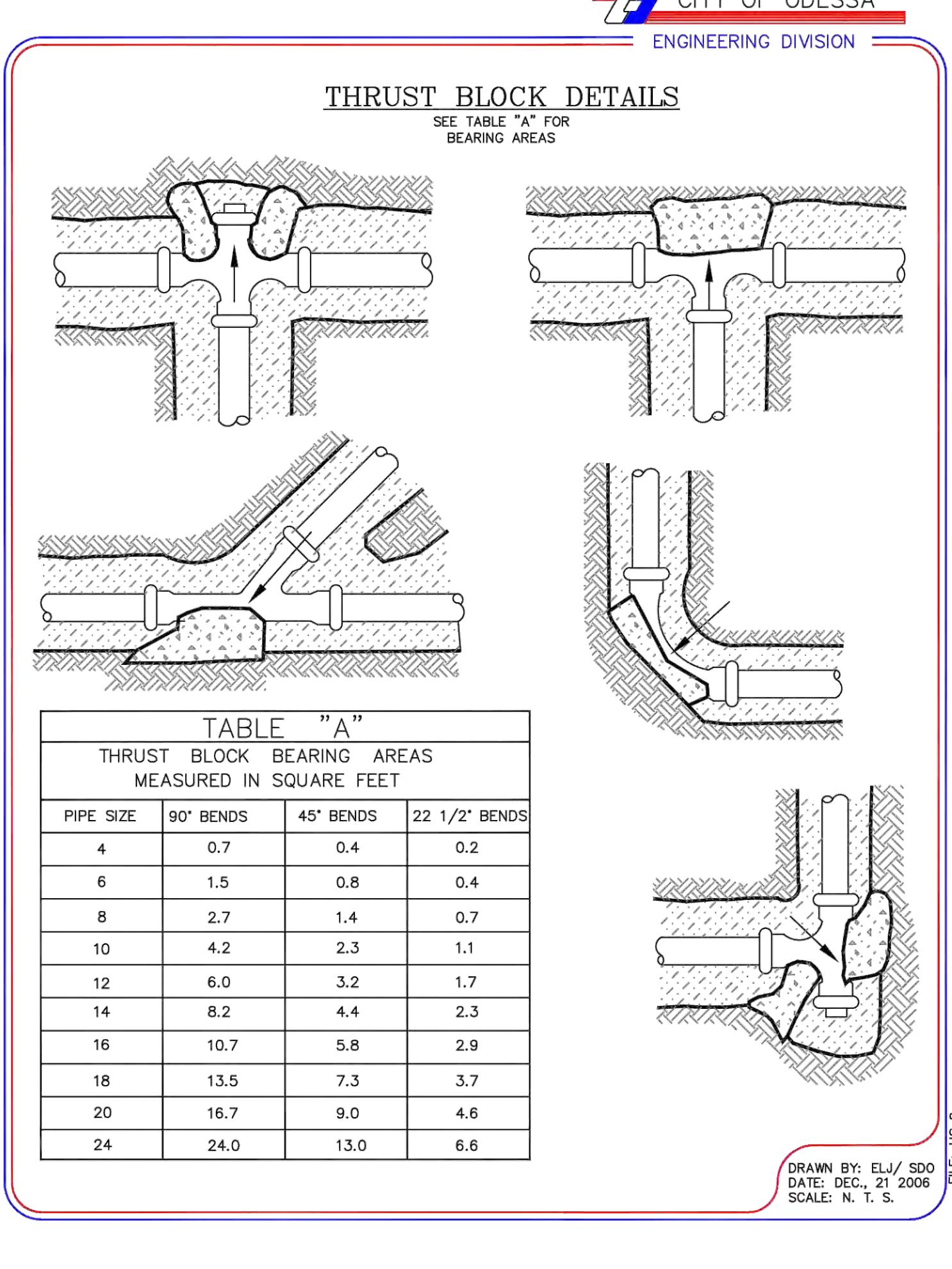
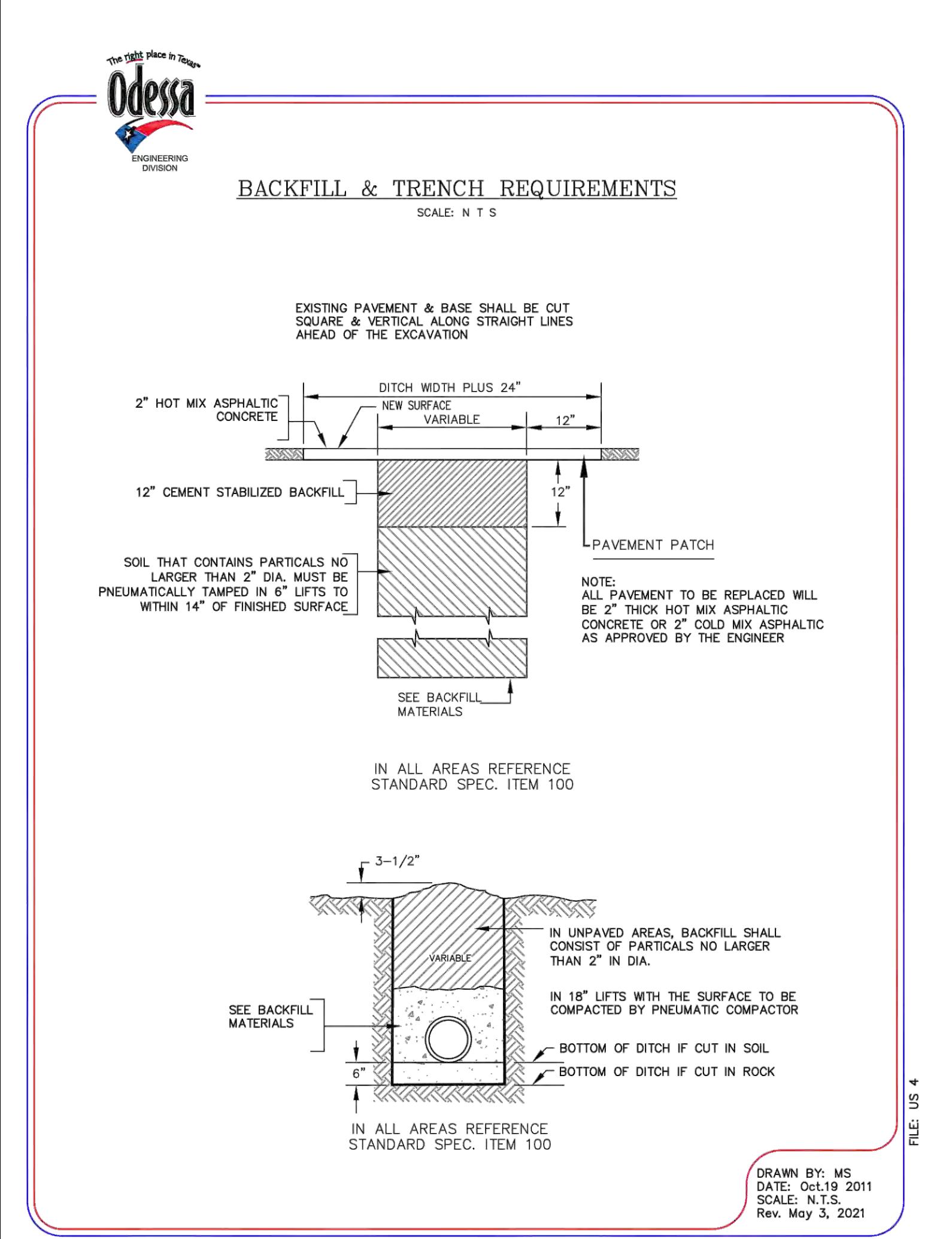
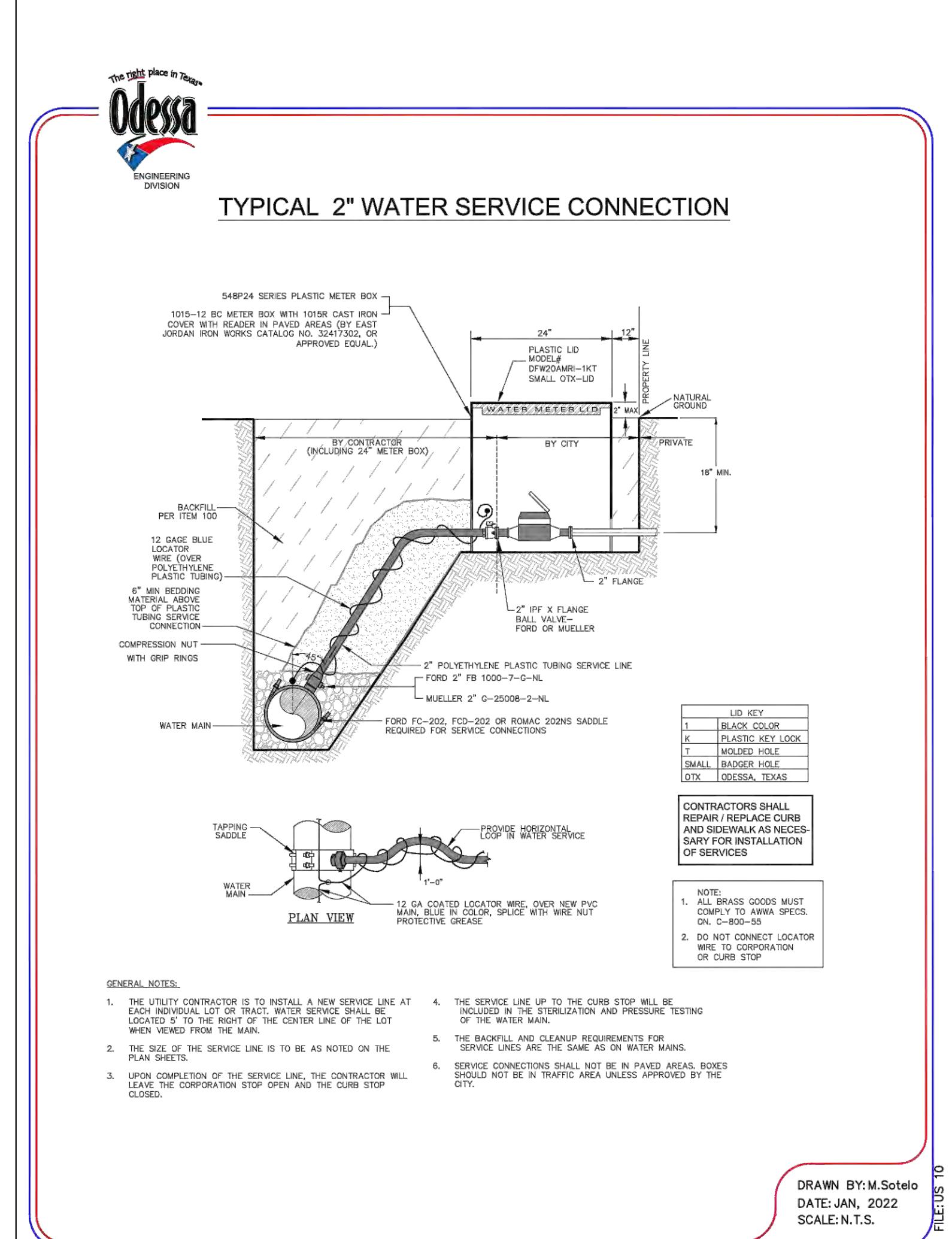
Odessa
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Engineering Division

City of Odessa
Department of Public Works and Engineering
Approved Material List for Water Distribution System
Effective Date - March 10, 2022

AM#	Product Description	Manufacturer	Model	Remark	
W-1	Tapping Sleeve	Ford	FTSS	Stainless steel, stainless steel flared outlet with recessed cavity for mating to tapping valve; requires a full-facing gasket; minimum working pressure of 150 psi and 316 stainless steel removable bolts with coating to prevent galling.	
W-2	Service Saddles 1" to 2" Taps	Romac	SM III	Stainless steel saddle with 1" to 2" tapping sleeves (Teflon tape) approval on case-by-case basis	
W-3	Fire Hydrants	Mueller	Super Centurion	Max. bury depth is 5 ft. (including height adjustment adapters). Color to be Yellow. Effective date August 1, 2010	
W-4	Gate Valves Sizes 4" through 12"	Mueller	n/a	All gate valves are resilient wedge type, mechanical joint or flange, 2" square block operating nut.	
W-5	Gate Valves Sizes 14" and Larger	Mueller	n/a	Mueller	
W-6	Tapping Valves Sizes 4" through 12"	Mueller	n/a	All tapping valves are resilient wedge type with tongue and groove type to fit for the tapping saddle cavity for auto centering of the valve in the saddle.	
W-7	Tapping Valves Sizes 14" and Larger	Mueller	n/a	Mueller	
W-8	Compression Curb Stops (Ball Valves with Grip Rings & Lock Hoops)	Ford	B41-444WR-G-NL	1" Straight 1" Angle 1" Straight BPH43-777WR-G-NL 2" Straight 2" Angle BFA43-777WR-G-NL Mueller 1" Straight G-25170-1-NL G-24274-1-NL 1" Angle G-24335-2-NL 2" Straight Flanged Double Drilled for 1.5" & 2" 2" Angle G-24276-2-NL	Curb stops will be full port, double O-ring, locking wing, and 1/4 turn for on and off position. Sized 3/4" to 2" curb stops (ball valves) for 3/4" and 1" will be CC outlet. Curb stops (ball valves) 2" size will be 2" IPT inlet and 2" outlet. All ball valves will be 2" female compression and 1-1/2" male flange outlet. All ball valves are 360 rotation with locking wing.
W-9	Compression Corporation Stops with Grip Rings	Ford	BPH43-777WR-G-NL	Corporation stops will be CC thread inlet and outlet for 3/4" & 1" and CC thread inlet and IPT outlet for 2". Note, the city does not use 1-1/2" corporation stops. The tap and service line for 1-1/2" meter applications will be constructed using 2" tap and 2" service line and a 2" x 1-1/2".	
W-10	Brass Fittings	Mueller	Brass	All brass fittings used to splice or connect to flared copper or HDPE service lines and meter brass will be the listed brand. Flare fittings will not be acceptable.	
W-11	Protective Wrapping	n/a	n/a	All mechanical joint connections, tapping sleeves and service saddles will be wrapped with a 8 mil low-density polyethylene material to protect it from contact with the backfill material and concrete.	
W-12	1" x 3" Bushing	Mueller	BBAA-43		
W-13	Meter Coupling/Nipple	Ford	C38-23-2.5-NL	1" - 2.5" Long 1" - 2" Long	
W-14	Megalugs	EBAA	Iron Series 1100	Iron Series 1100 for D.I. or 2000PV for PVC approved equal. STAR Pipe Product Series 4000 PVC. Series 3000 Ductile Iron. All Mechanical Joint Connections	

DRAWN BY: MS
DATE: MAR 2022
SCALE: N.T.S

FILE: US 2



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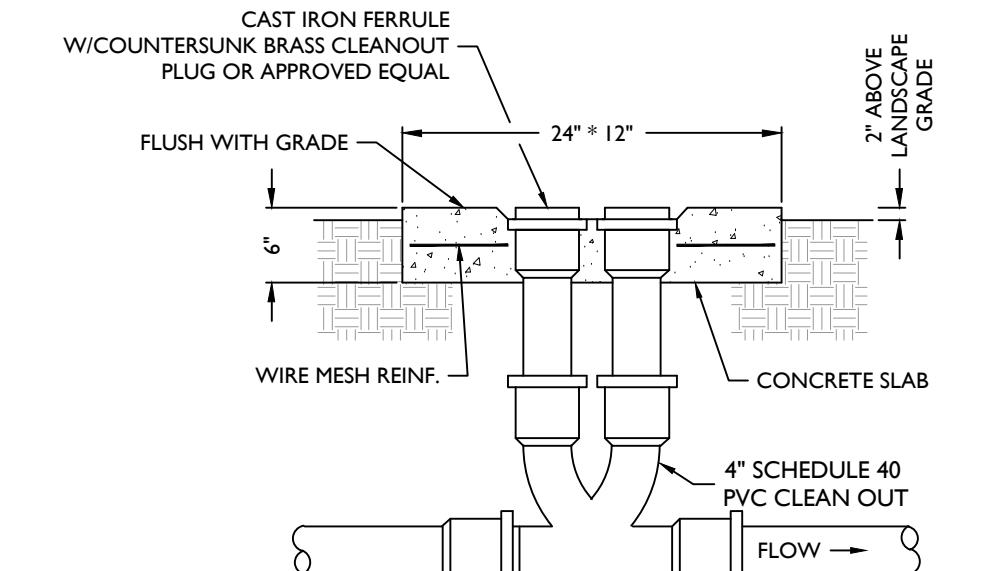
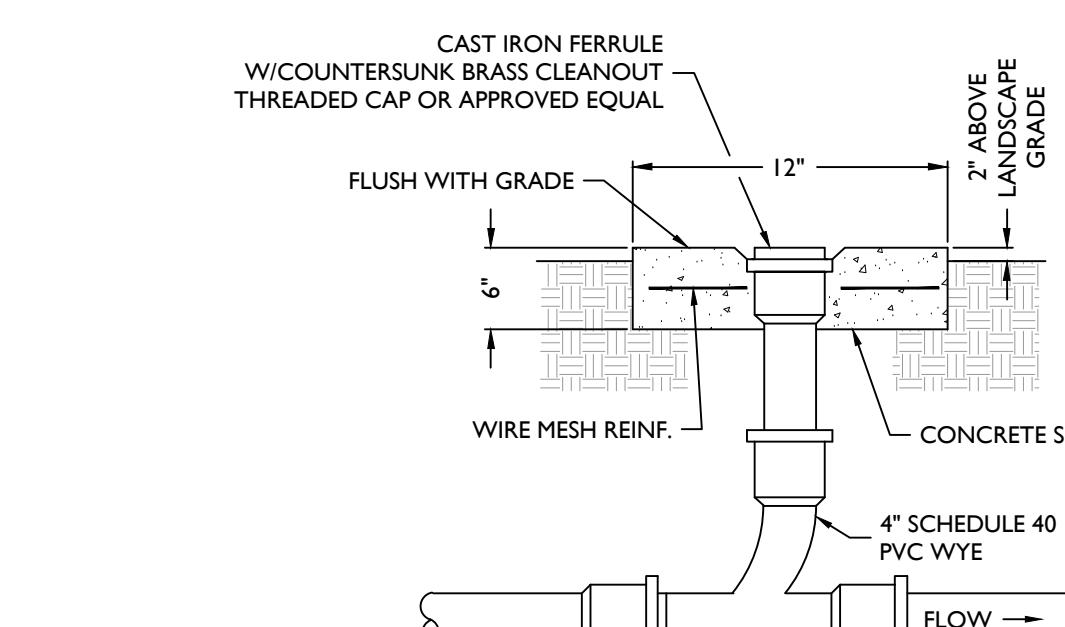
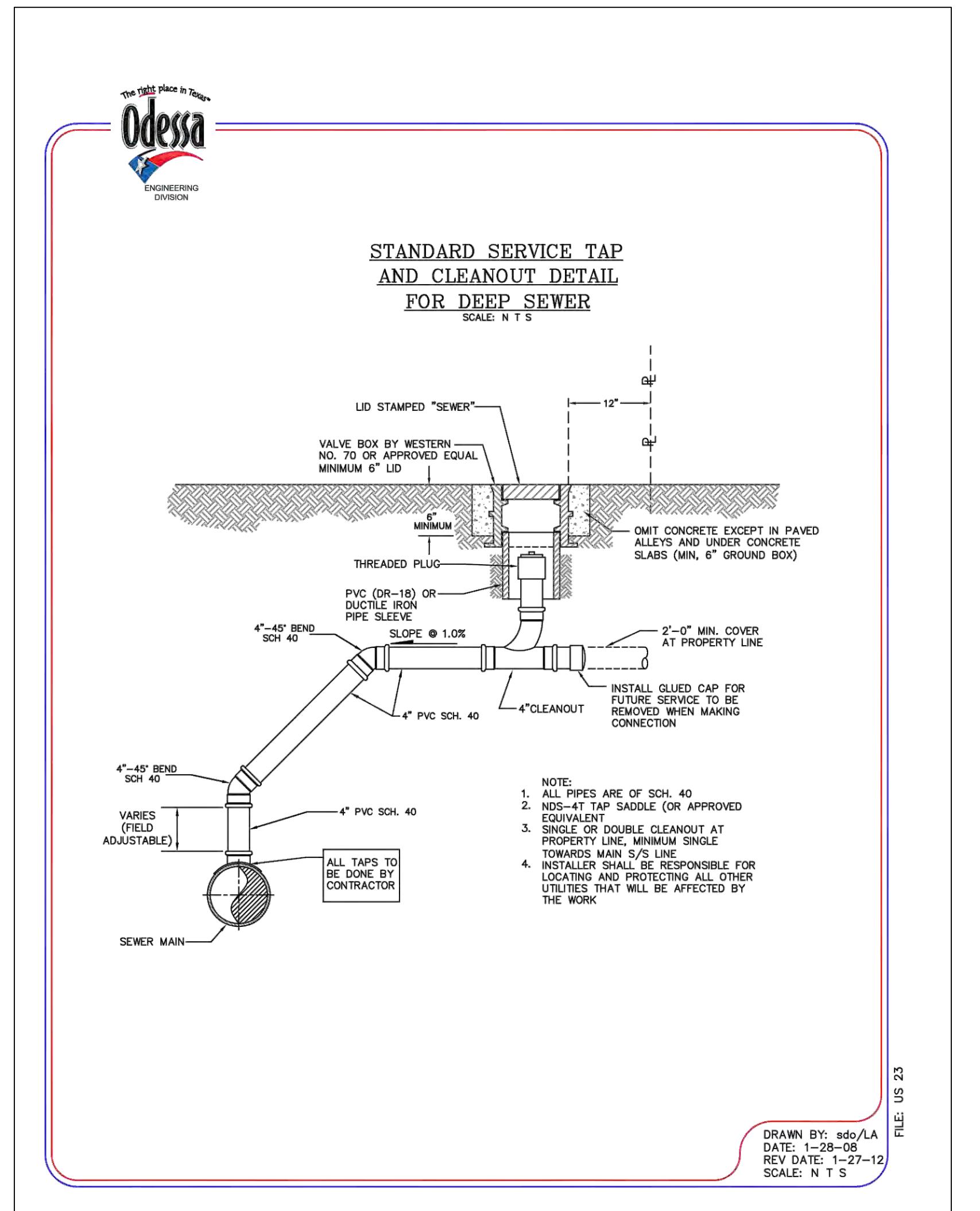
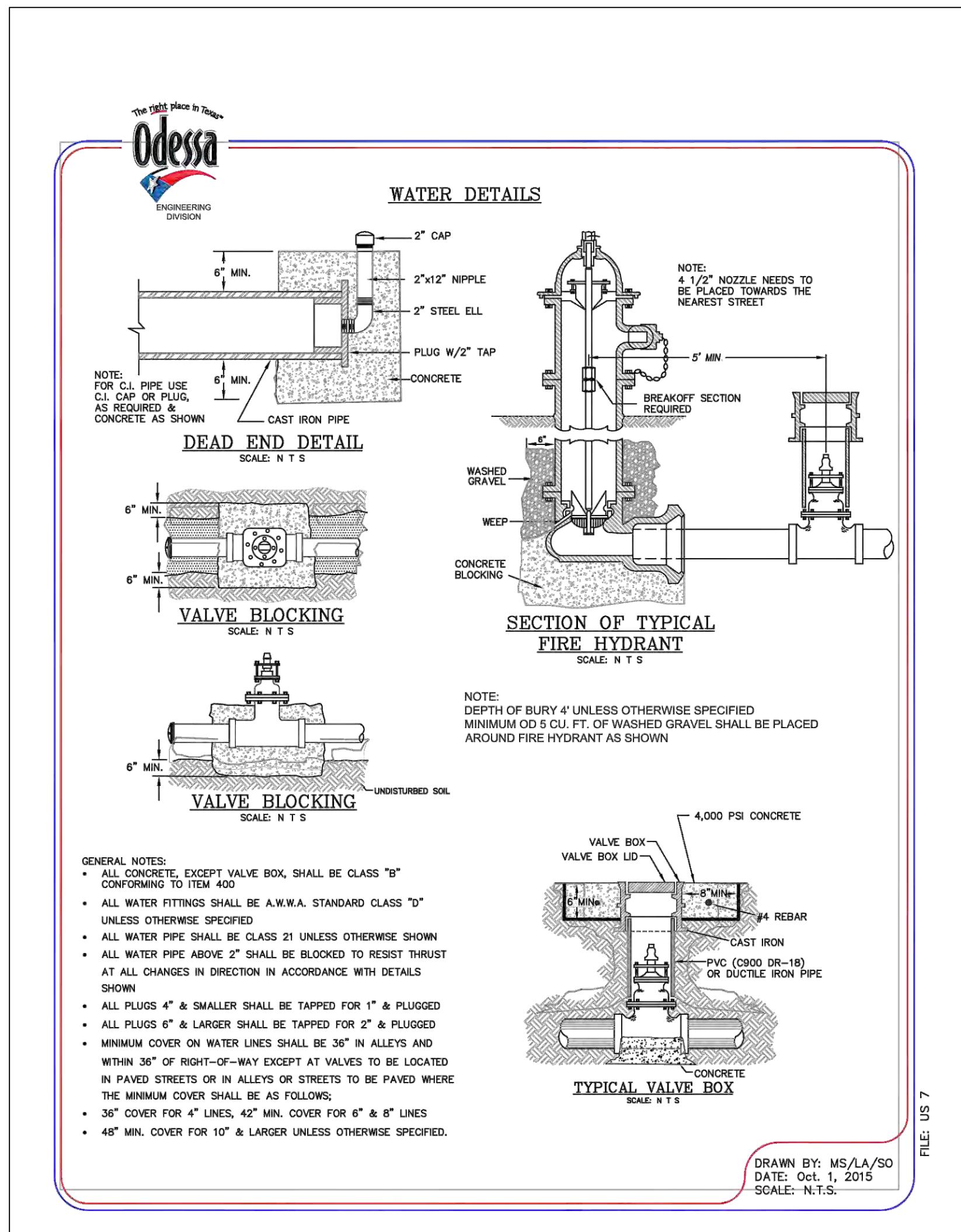
**UTILITY DETAILS
PERMIAN PARK INDUSTRIAL**

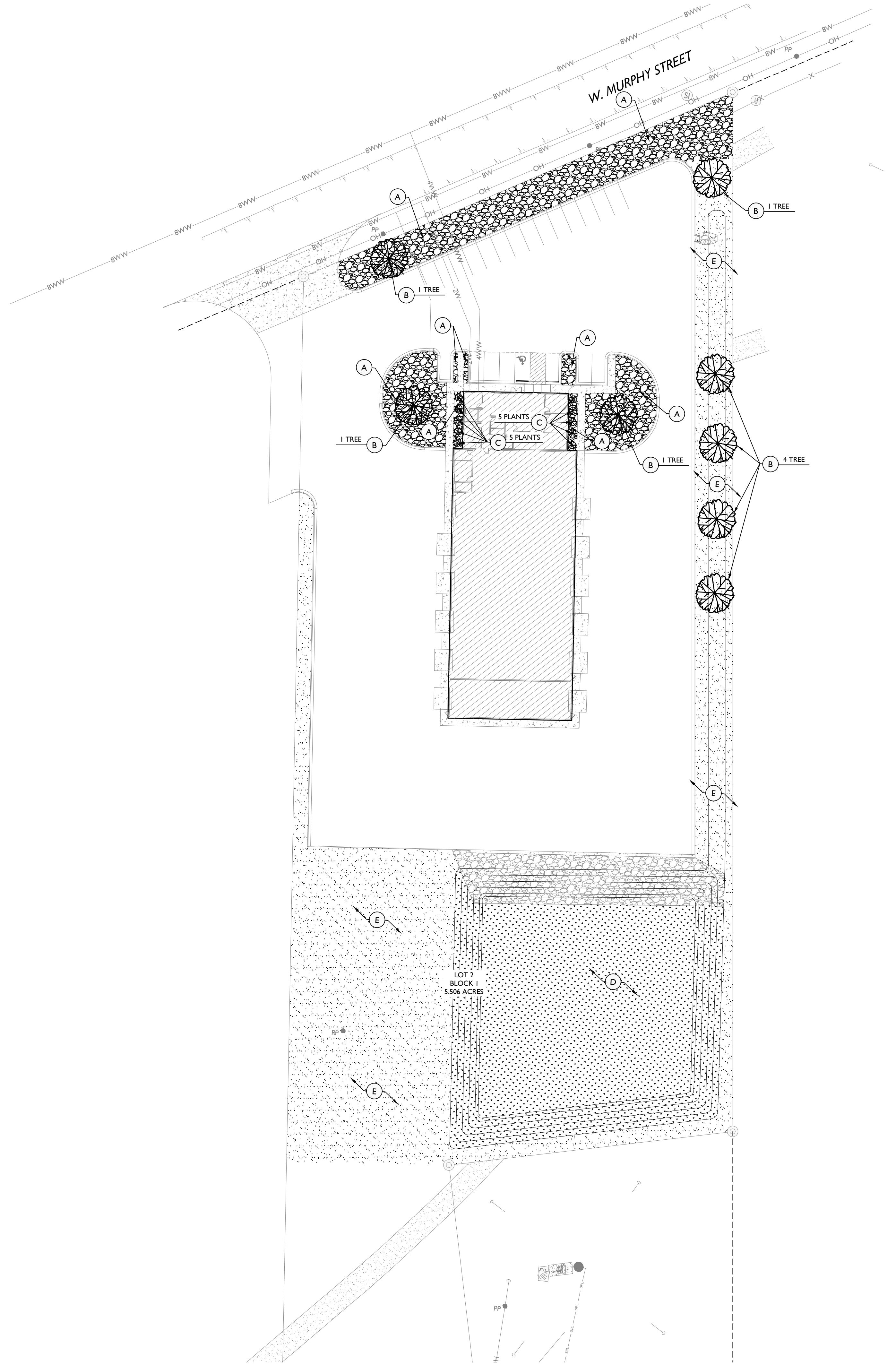
LOT 2, BLOCK 1, PERMIAN PARK SUBDIVISION, CITY OF ODESSA,
Ector County, Texas.

Signature of Andrew L. Mellen
Andrew L. Mellen
LIC# 106572
PROFESSIONAL
LICENSED
ENGINEER
07/05/2023
Sheet C310 of 18



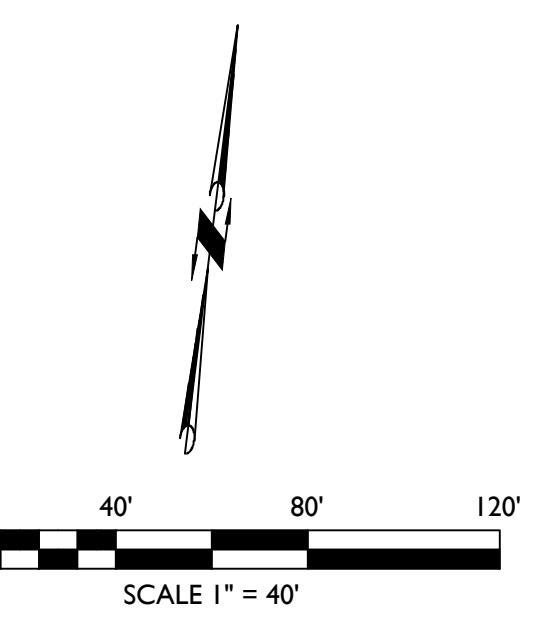
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LANDSCAPE NOTES:

- PRIOR TO INSTALLING SOD, CONTRACTOR TO SPRAY ALL EXISTING VEGETATION WITH ROUNDUP OR OTHER APPROVED HERBICIDE. APPLY HERBICIDE TWO WEEKS PRIOR TO ANTICIPATED SOD PLACEMENT. OBSERVE VEGETATION WITHIN THE FOLLOWING WEEK AND APPLY A SECOND APPLICATION OF HERBICIDE TO ANY REMAINING VEGETATION.
- LANDSCAPE CONTRACTOR IS TO COORDINATE AS NECESSARY WITH ANY OTHER SUB-CONTRACTORS ON THE PROJECT.
- TOP SOIL FOR PLANTING IS TO BE MANUFACTURED BASIC TOPSOIL WITH A MINIMUM ORGANIC CONTENT OF 4%. TOP SOIL IS TO HAVE A PH OF 5.0-7.5. TREAT WITH SULFUR AS NEEDED TO ADJUST PH. TOP SOIL IS TO BE MIXED WITH A COMMERCIAL FERTILIZER PRIOR TO PLACEMENT.
- CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE IN ALL LAWNS AND PLANTING BEDS ACCORDING TO THE DESIGN SHOWN ON THE GRADING PLANS. LANDSCAPE CONTRACTOR IS TO COORDINATE ALL TOP SOIL WORK WITH THE OTHER RELEVANT SUB-CONTRACTORS FOR TOPSOIL INSTALLATION AND REQUIREMENTS ASSOCIATED WITH SITE WORK.
- WARRANTY FOR ALL TREES, SHRUBS, AND PERENNIAL PLANTS IS TO BE FOR ONE YEAR AFTER ACCEPTANCE, TYPICALLY DURING SUBSTANTIAL COMPLETION PHASE.
- THE LANDSCAPE CONTRACTOR IS TO SUBMIT DETAILED SCHEDULE OF YEARLY MAINTENANCE PROCEDURES TO BE FOLLOWED BY THE SITE OWNER. INSTRUCTIONS ARE TO COVER: WEED CONTROL, FERTILIZING, TRIMMING, PRUNING, WATERING, EDGING, AND MOWING. A TYPED ELECTRONIC COPY OF THIS MAINTENANCE PROGRAM IS TO BE SUBMITTED TO OWNER PRIOR TO FINAL ACCEPTANCE.
- CONTRACTOR IS TO PROVIDE TOPSOIL TO THE DEPTHS SPECIFIED BELOW FOR EACH TYPE OF LANDSCAPE:
 - LAWNS: 4"
 - PLANTING BEDS 12"
 - SEEDING AREAS 2"
- CONTRACTOR IS TO VERIFY ALL QUANTITIES AND EXISTING CONDITIONS PRIOR TO BIDDING. CONTRACTOR IS TO BID VERIFIED QUANTITIES.
- POURED CONCRETE EDGING OR APPROVED EQUAL SHOULD BE INSTALLED BETWEEN GRASS AREAS AND DECOMPOSED GRANITE, GRAVEL, OR PLANTING BEDS. STEEL EDGING IS TO BE USED ONLY WITH OWNER'S PRIOR APPROVAL.
- ALL PLANTING BEDS ARE TO HAVE AN AUTOMATIC IRRIGATION SYSTEM, TO BE DESIGNED AND INSTALLED BY A LICENSED IRRIGATOR. LOCATION OF IRRIGATION METER AS WELL AS PVC CONDUITS FOR IRRIGATION LINES UNDER PAVED AREAS ARE SHOWN ON THE UTILITY PLAN OF THIS PLAN SET.
- DO NOT MOUND LANDSCAPE AREAS: ALL LANDSCAPE FINISH GRADES SHALL BE 1/2" BELOW ADJACENT CURBING/EDGING UNLESS OTHERWISE NOTED.



LEGEND

●	DENOTES SET 1/2-INCH IRON ROD W/RED PLASTIC CAP MARKED "MAVERICK FIRM #10194514"
○	DENOTES FOUND MONUMENT AS NOTED
■	DENOTES BENCHMARK AS NOTED
□	DENOTES EXISTING ELECTRICAL BOX
△	DENOTES EXISTING UTILITY MARKER
◆	DENOTES EXISTING POWER POLE
▲	DENOTES EXISTING GUY ANCHOR
◆◆	DENOTES EXISTING PUMP JACK
—	DENOTES BOUNDARY LINE
—	DENOTES EXISTING PROPERTY LINE
—	DENOTES EXISTING EASEMENT LINE
—	DENOTES EDGE OF ASPHALT
X	DENOTES EXISTING BARBED WIRE FENCE
OH	DENOTES EXISTING OVERHEAD ELECTRIC LINE
PL	DENOTES EXISTING PIPELINE
SPL	DENOTES EXISTING POLY/STEEL LINE
BW	DENOTES EXISTING 8" WATER LINE
BWW	DENOTES EXISTING 8" WASTEWATER LINE
2W	DENOTES PROPOSED 2" WATER LINE
4WW	DENOTES PROPOSED 4" WASTEWATER LINE
■■■	DENOTES EXISTING LANDSCAPE TO REMAIN
●●●	DENOTES PROPOSED RIVER ROCK
◆◆◆	DENOTES PROPOSED SHADE TREE
◆◆◆◆◆	DENOTES PROPOSED YUCCA/PERENNIAL

LANDSCAPE KEYED NOTES:

- COLORADO RIVER ROCK(2.5" OR LARGER SIZE), DECOMPOSED GRANITE BED, OR SIMILAR. COLORADO RIVER ROCK - EXCAVATE EXISTING SOIL, INSTALL "DEWITT PRO 5" WEED-BARRIER FABRIC OR APPROVED EQUAL, AND BACKFILL WITH RIVER ROCK TO MINIMUM DEPTH OF 4". WHERE PLANTINGS ARE SHOWN IN ROCK AREAS, UNDER SOIL Drip IRRIGATION SHALL BE PROVIDED UNDERNEATH WEED BARRIER FABRIC. PLANTS TO BE PLANTED AFTER INSTALLATION OF STONE- EXCAVATE PLANTING HOLE AND CUT HOLE IN WEED BARRIER FABRIC, PLANT ROOTBALL IN SOIL, AND THEN BACKFILL AS NECESSARY.
- DECOMPOSED GRANITE BED - EXCAVATE SOIL TO MINIMUM DEPTH OF 4" BELOW THE FINISH GRADE. LAY DEWITT PRO-5 WEED BARRIER OR APPROVED EQUAL, AND BACKFILL WITH DECOMPOSED GRANITE, MAXIMUM SIZE: 1/2" WITH PASSINGS OR LESS. SELECTED MATERIAL SHOULD BE LIGHT TAN COLOR.
- PROPOSED SHADE TREE. SELECT FROM EITHER CEDAR ELM (*ULMUS CRASSIFOLIA*) OR LIVE OAK (*QUERCUS VIRGINIANA*). TREES TO BE CONTAINER GROWN, UNLESS PLANTING OCCURS BETWEEN OCTOBER AND MARCH, IN WHICH CASE BALLED IN BURLAP PLANTS MAY BE USED. TREE SIZE: 3" CALIPER MINIMUM AT 12" ABOVE GRADE. Drip IRRIGATION TO BE PROVIDED TO TREES.
- FLOWERING PERENNIAL PLANTED AS SHOWN. COTTON LAVENDER (*SANTOLINA INCANA*), BLACKFOOT DAISY (*MELAMPodium LEUCANTHEMUM*) GOLD MOUND LANTANA (*LANTANA CAMARA*), OR SIMILAR. 1-GALLON MINIMUM PLANT SIZE.
- BERMUDA GRASS SOD-- TILL SOIL TO DEPTH OF 3" AND RAKE TO LEVEL BEFORE PLANTING. CONTRACTOR TO PLANT "CELEBRATION BERMUDA" OR APPROVED EQUAL.
- EXISTING LANDSCAPE TO REMAIN.

LANDSCAPE CALCULATIONS:

GENERAL:

- PER CITY OF ODESSA ORDINANCE, MINIMUM LANDSCAPE AREA = 5% OF LOT AREA LESS STRUCTURE FOOTPRINTS.
- TOTAL PROJECT AREA = 4.095 Acres (178,419.91 ft²)
- TOTAL STRUCTURE FOOTPRINT: 16,589.06 ft²
- REQUIRED LANDSCAPE AREA: 8,091.54 ft² (5%)
- PROVIDED LANDSCAPE AREA: 79,244.46 ft² (50%)

REQUIREMENTS:

- LANDSCAPE PLAN INCLUDES THE FOLLOWING:
 - PERMEABLE WEED BARRIER
 - Drip IRRIGATION IN AREAS 15' OR LESS THAN IN WIDTH.
 - DROUGHT TOLERANT SOD IS PRIMARY VARIETY OF TURF GRASS
 - 50% OF LANDSCAPE AREA IS TO BE PLANT MATERIAL.
 - LANDSCAPE AREA IS CURBED OR SHAPED TO HOLD WATER.

FRONTAGE TREE COUNT:

- 1 TREE FOR EVERY 50 LF. STREET FRONTAGE
- 303 LF. W. MURPHY ST. FRONTAGE
- 7 FRONTAGE TREES REQUIRED

PARKING LOT TREE COUNT:

- 1 TREE PER 30 SPACES WITH A MINIMUM OF 2 SPACES.
- 22 UNCOVERED PARKING SPACES PROVIDED
- 1 PARKING LOT SHADE TREES REQUIRED

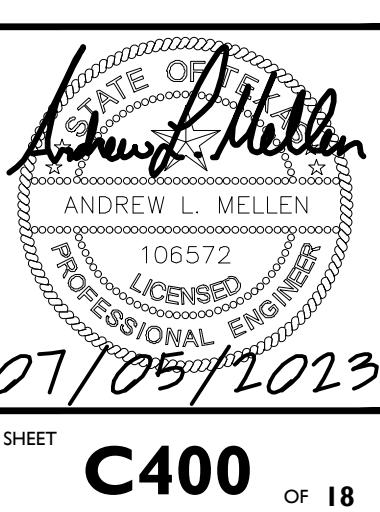
TOTAL TREES:

- 8 TREES REQUIRED
- 8 TREES PROVIDED

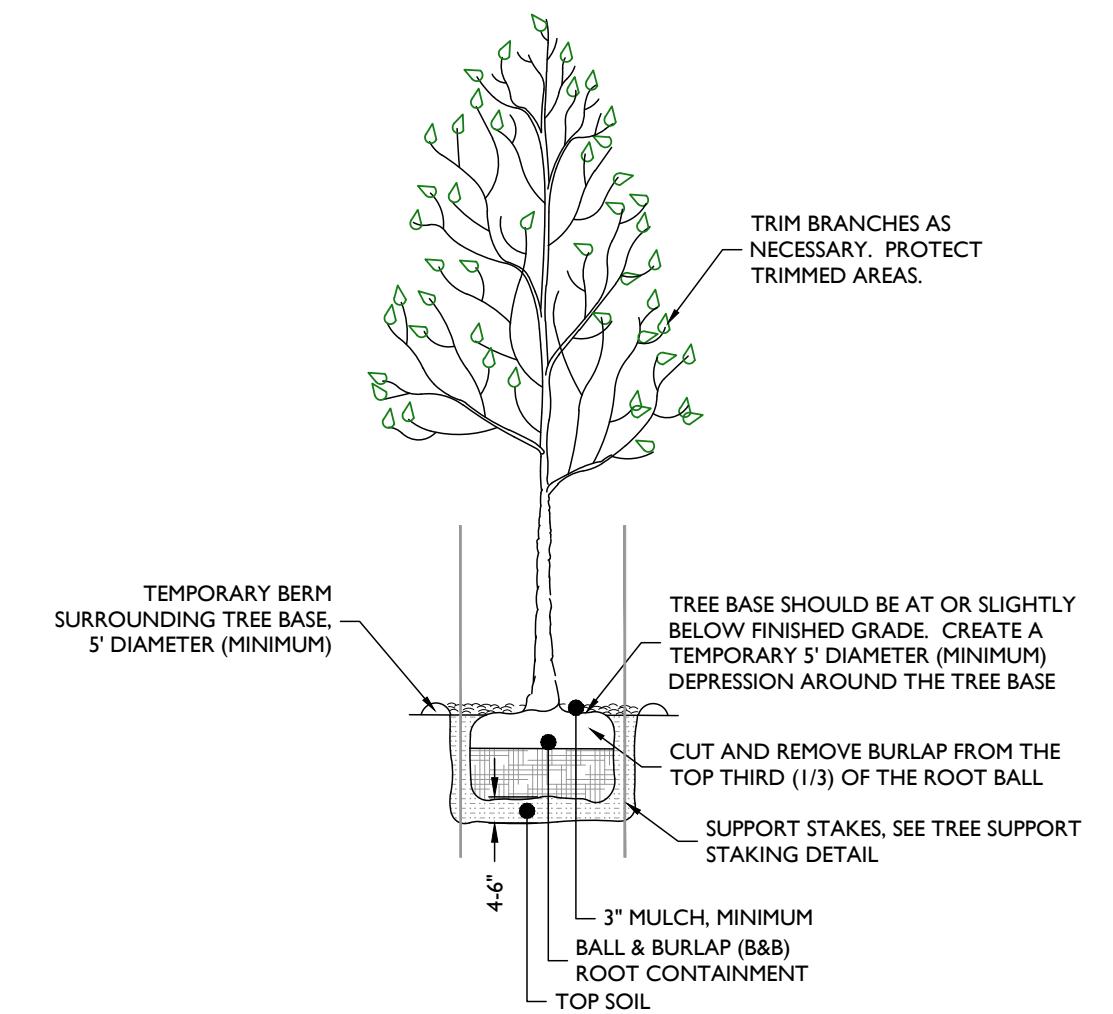
LANDSCAPE PLAN PERMIAN PARK INDUSTRIAL

LOT 2, BLOCK 1, PERMIAN PARK SUBDIVISION, CITY OF ODESSA,
Ector County, Texas.

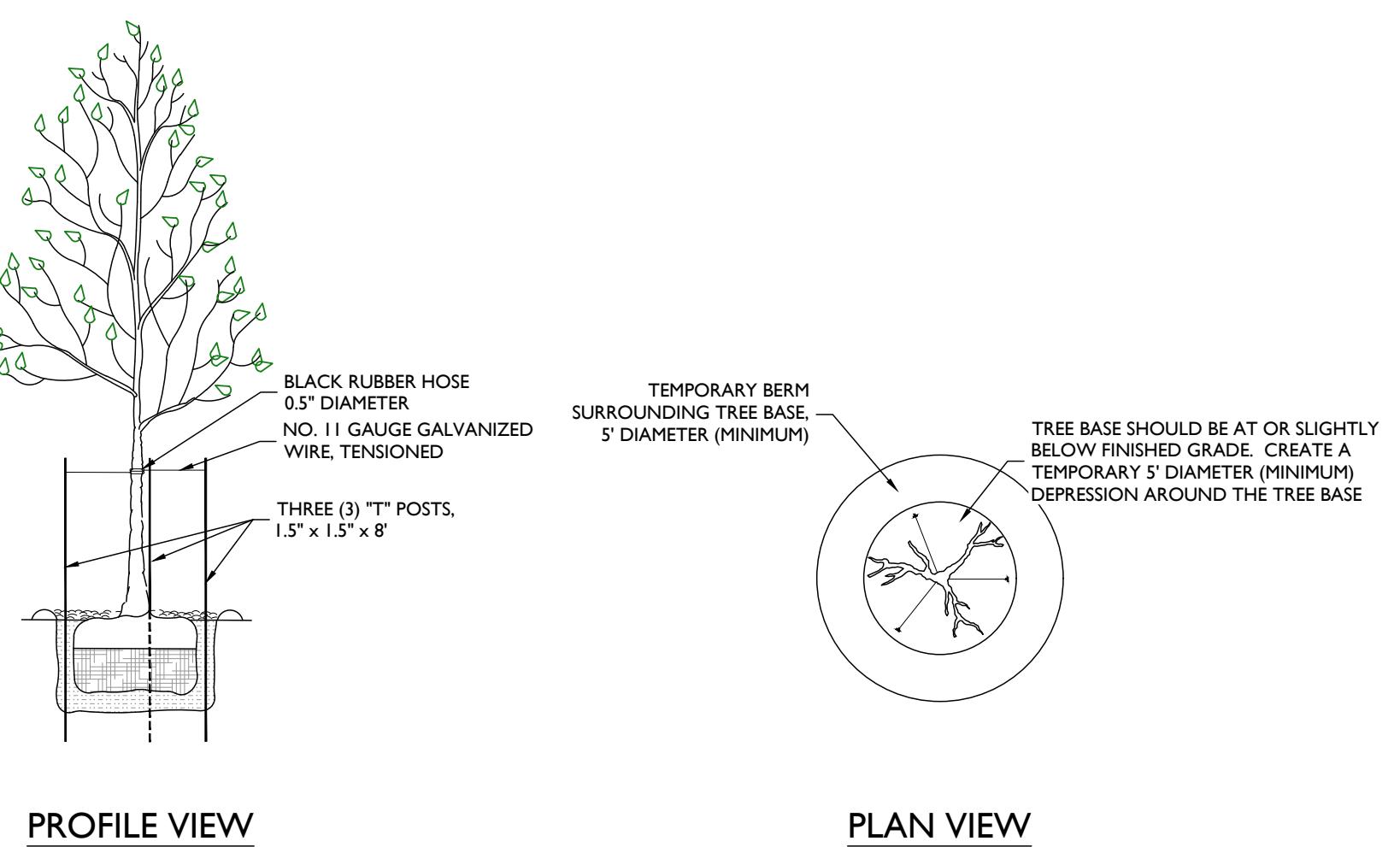
MAVERICK
ENGINEERING SURVEY / WATER RESOURCES
1909 W. Wall St. Ste. "K", Midland, TX 79301
SURVEY FIRM #: 10194514
TELE: (432) 261-0999
FAX: (432) 262-0989
www.Maverick-Eng.com



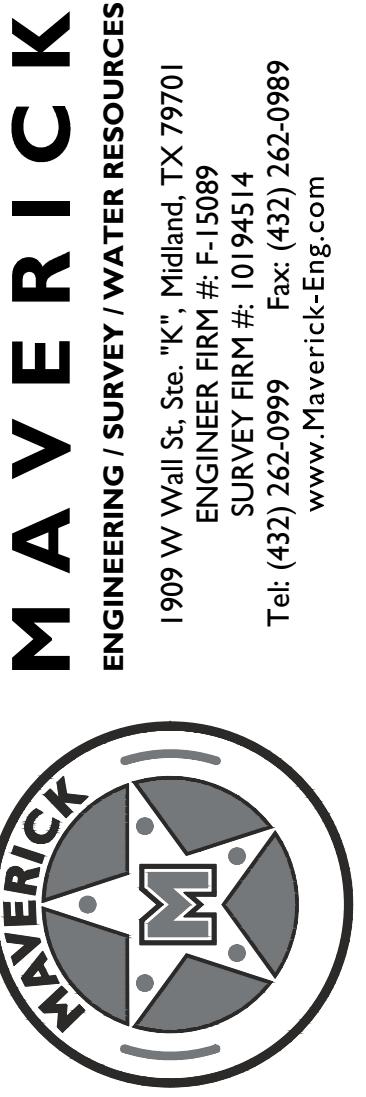
SHEET C400 OF 18



I **TREE PLACEMENT**
N.T.S.

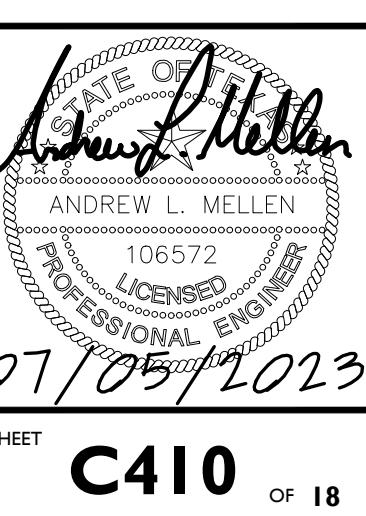


I **TREE SUPPORT STAKING**
N.T.S.



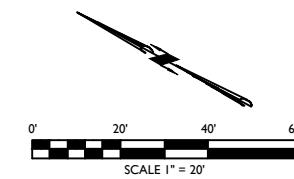
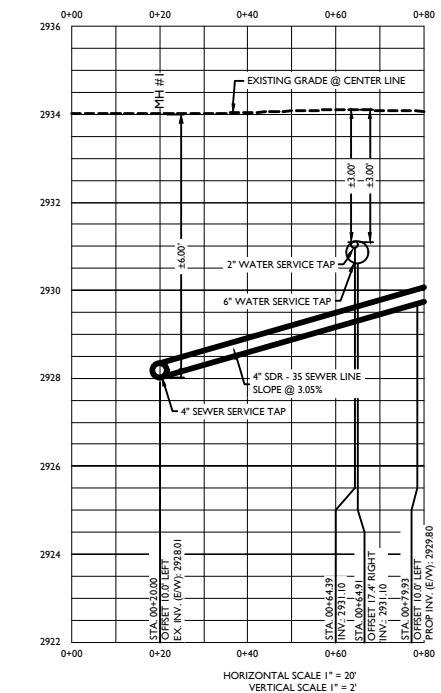
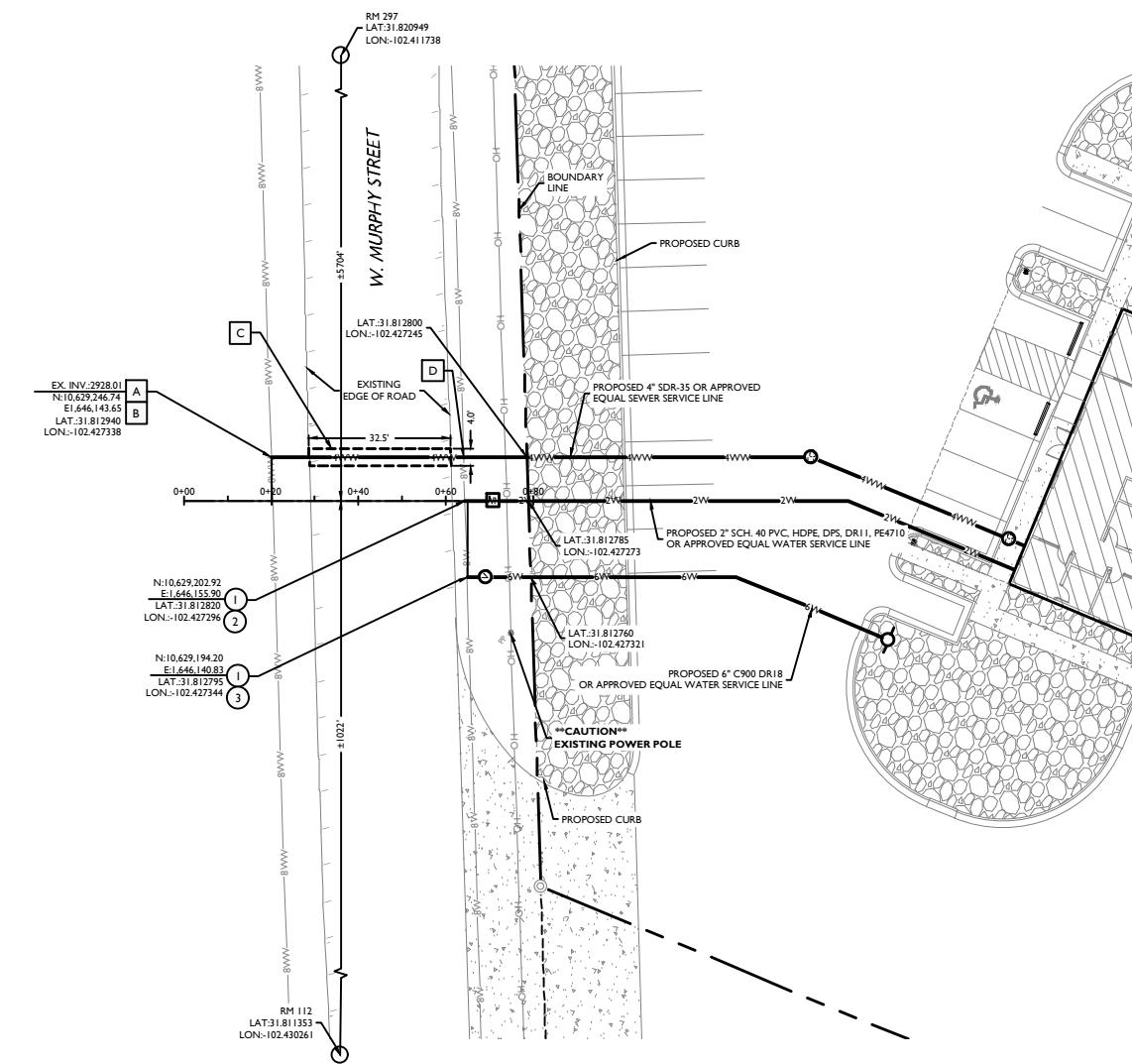
1909 W Wall St. Ste. 100, Midland, TX 79701
ENGINEER FIRM #: F-15089
SURVEY FIRM #: 10194514
Tel: (432) 261-0999 Fax: (432) 262-0989
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LANDSCAPE DETAILS
PERMIAN PARK INDUSTRIAL



811
Know what's below.
Call before you dig.

LOT 2, BLOCK 1, PERMIAN PARK SUBDIVISION, CITY OF ODESSA,
Ector County, Texas.



LEGEND

	DENOTES SET 1/2-INCH IRON RD WIRED PLASTIC CAP MARKED "MAVERICK FIRM #10194514"
	DENOTES FOUND MONUMENT AS NOTED
	DENOTES BENCHMARK AS NOTED
	DENOTES EXISTING ELECTRICAL BOX
	DENOTES EXISTING UTILITY MARKER
	DENOTES EXISTING POWER POLE
	DENOTES EXISTING GUY ANCHOR
	DENOTES EXISTING PUMP JACK
	DENOTES BOUNDARY LINE
	DENOTES EXISTING PROPERTY LINE
	DENOTES EXISTING EASEMENT LINE
	DENOTES EDGE OF ASPHALT
	DENOTES EXISTING BARBED WIRE FENCE
	DENOTES EXISTING OVERHEAD ELECTRIC LINE
	DENOTES EXISTING PIPELINE
	DENOTES EXISTING POLY/STEEL LINE
	DENOTES EXISTING 8" WATERLINE
	DENOTES EXISTING 8" WASTEWATER LINE
	DENOTES PROPOSED WATER METER
	DENOTES PROPOSED MANHOLE
	DENOTES PROPOSED CLEANOUT
	DENOTES PROPOSED 2" WATER LINE
	DENOTES PROPOSED 6" WATER LINE
	DENOTES PROPOSED 4" WASTEWATER LINE

UTILITY WATER NOTES:

TYPE 1 CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

2. INSTALL 8" x 2" TAP PER CITY OF ODESSA DETAIL US 10 ON SHEET 310.
3. INSTALL 8" x 6" TAPPING SLEEVE & VALVE

UTILITY SEWER NOTES:

TYPE A CONTRACTOR TO VERIFY UTILITY SIZE, LOCATION, ELEVATION AND TYPE PRIOR TO CONSTRUCTION AND INFORM ENGINEER OF CONFLICTS.

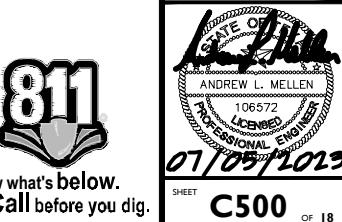
B. CONSTRUCT 4" DIAMETER SDR-35 SEWER SERVICE TAP PER CITY OF ODESSA DETAIL US 23 ON SHEET C311.

C. CONTRACTOR TO BORE BENEATH EXISTING STREET OR PAVEMENT AREA. ANY DAMAGE TO PAVEMENT WILL BE CONSIDERED A TOTAL LOSS, AND IS TO BE REPAIRED FULL DEPTH FROM EDGE TO EDGE FOR A LENGTH DETERMINED BY THE CITY ENGINEER AT THE SOLE EXPENSE OF THE CONTRACTOR.

D. MAINTAIN MIN. 2' OF CLEARANCE BELOW BOTTOM OF WATER LINE

NOTES:

- ALL TRAFFIC CONTROL IS TO BE IN ACCORDANCE WITH THE 2011 TMUTCD.
- THE TRAFFIC CONTROL FOR CONSTRUCTION OF THE WATER LINE CONNECTION IS TO COMPLY WITH TxDOT DETAIL TCP (2-5)-18.



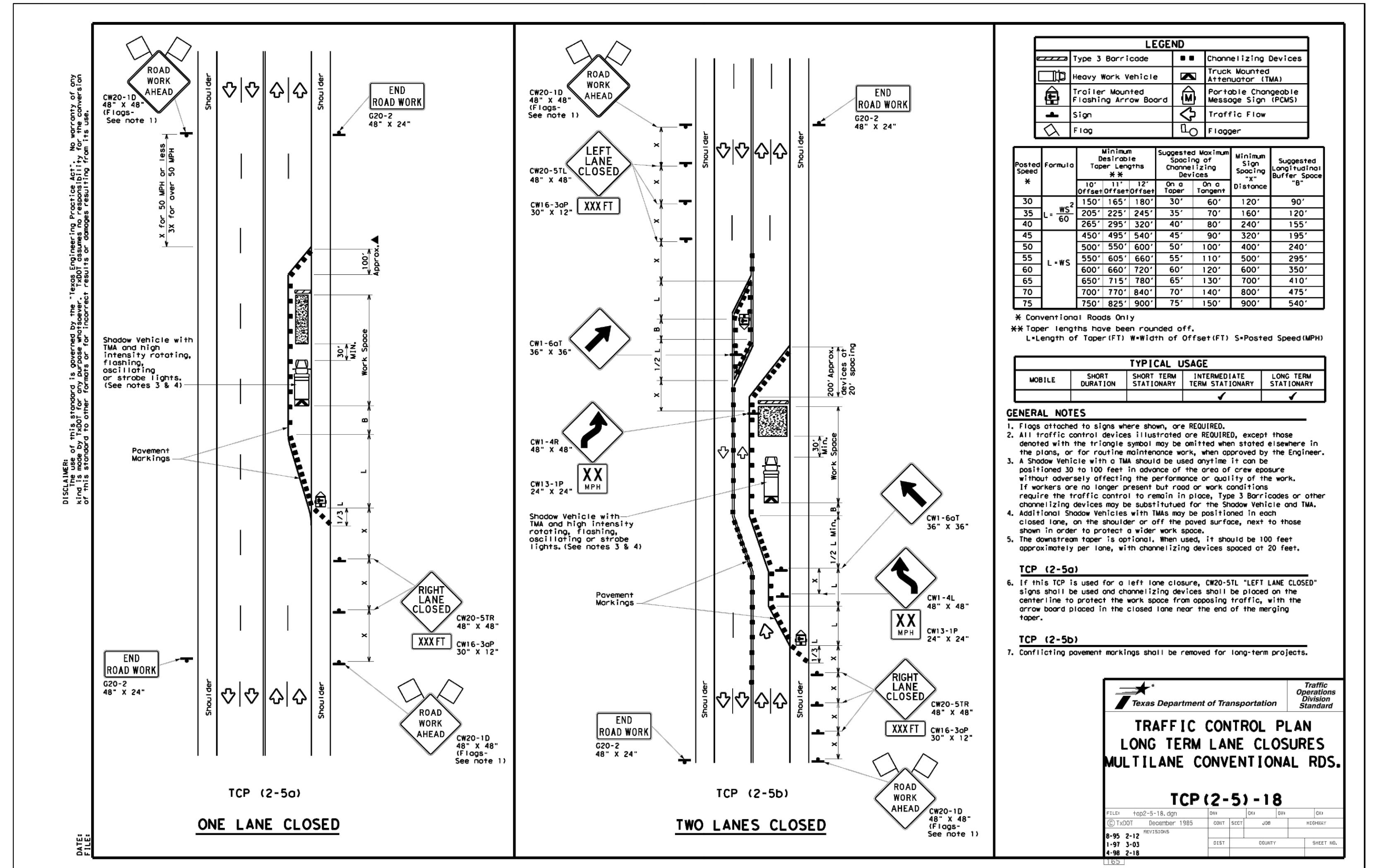
Know what's below.
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HEET C500

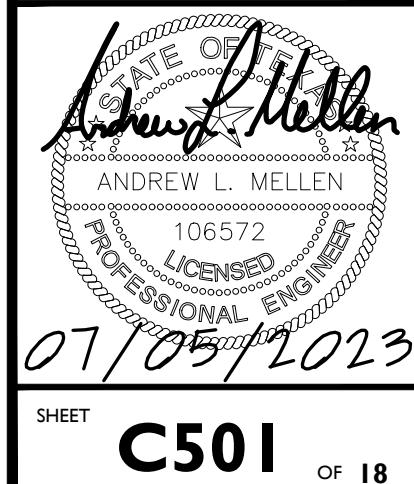
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TX DOT UTILITY PLAN PERMIAN PARK INDUSTRIAL

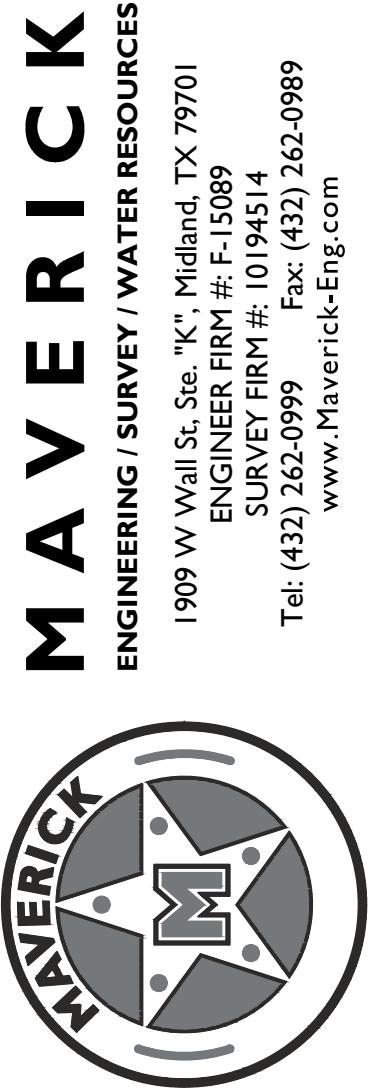
LOT 2, BLOCK I, PERMIAN PARK SUBDIVISION, CITY OF ODESSA,
ECTOR COUNTY, TEXAS.



TX DOT UTILITY DETAILS PERMIAN PARK INDUSTRIAL

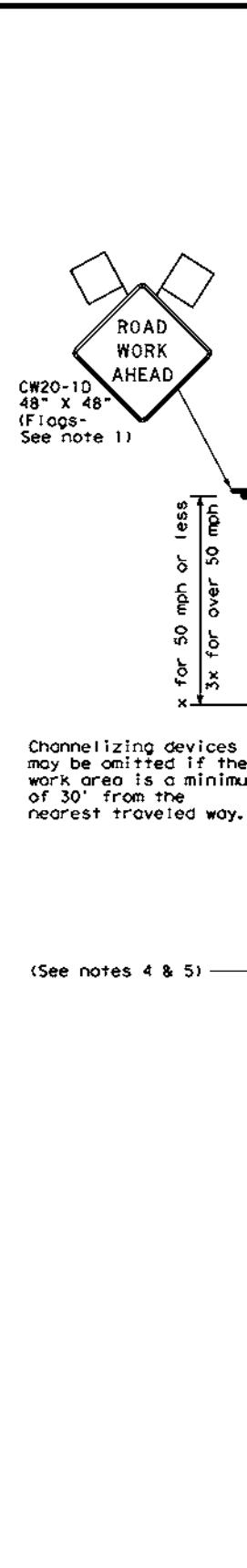


81
Know what's below.
Call before you dig.
07/05/2023



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SURVEY FIRM #: I0194514
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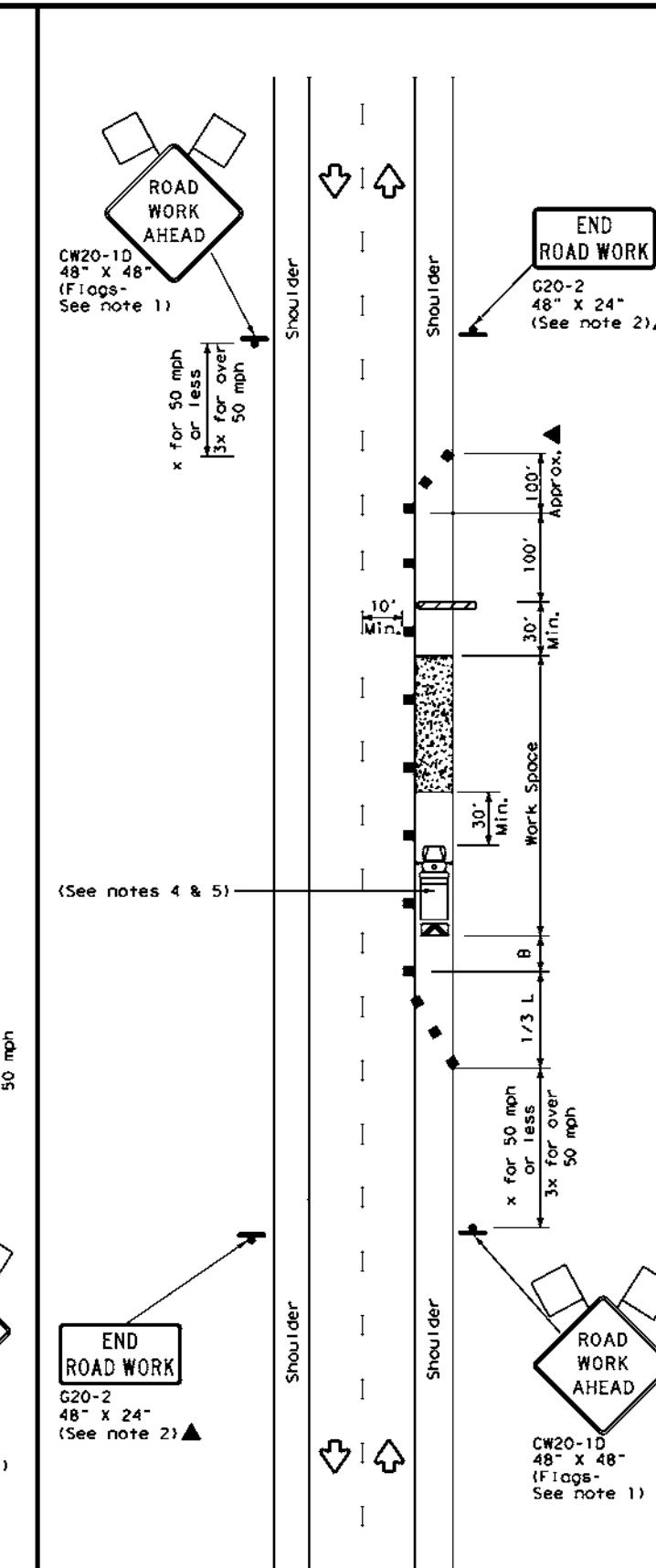
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TCP (2-1a)

WORK SPACE NEAR SHOULDER

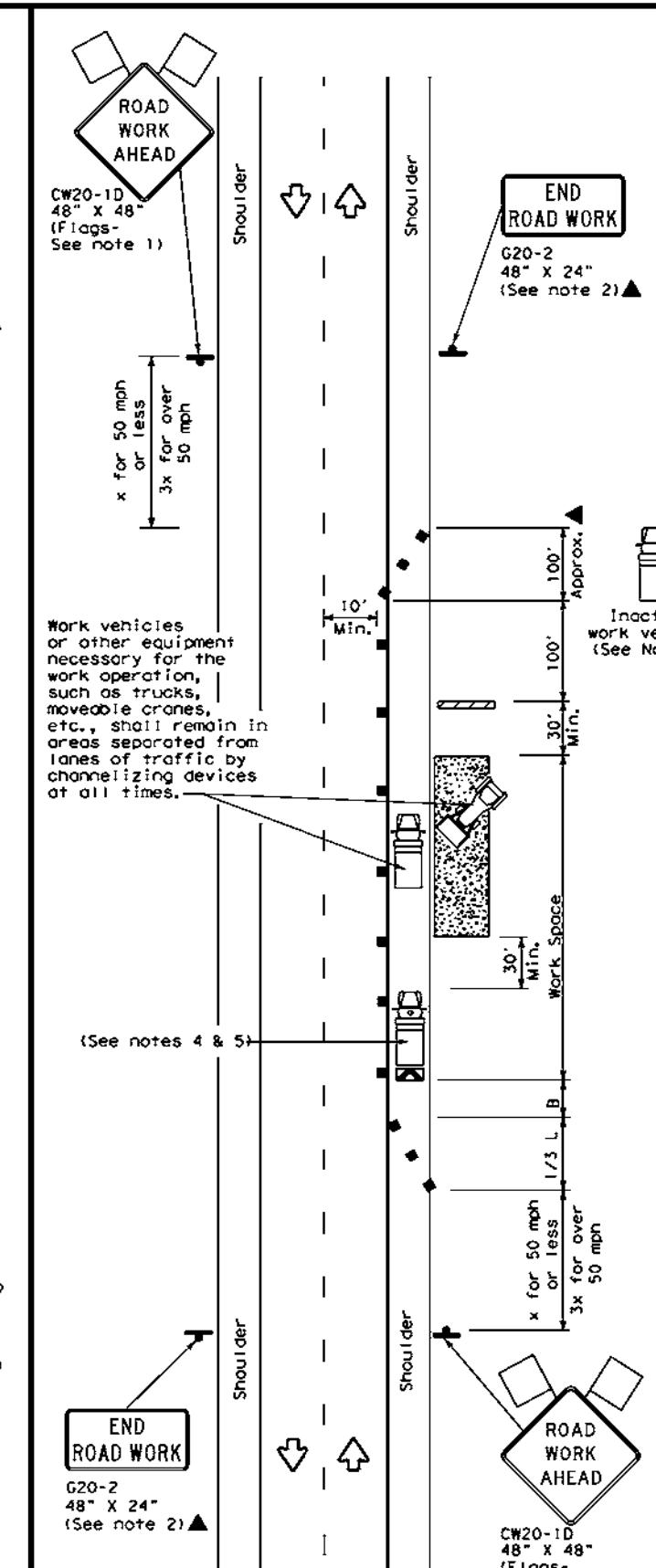
Conventional Roads



TCP (2-1b)

WORK SPACE ON SHOULDER

Conventional Roads



WORK VEHICLES ON SHOULDER

Conventional Roads

TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK

TCP (2-1) - 18

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45		450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

*** Conventional Roads Only**

** Paper lengths have been rounded off.

L=Length of taper (FT) W=Width of offset (FT) S=Posted Speed (MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
3. Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
4. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
6. See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
7. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
8. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.



Texas Department of Transportation

**Traffic
Operations
Division
Standard**

FILE	tcp2-1-18.dgn	DN:	CKI	DN:	CKI
TxDOT	December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS					
2-94	4-98	DIST	COUNTY		SHEET NO.
3-95	2-12				
-97	2-18				