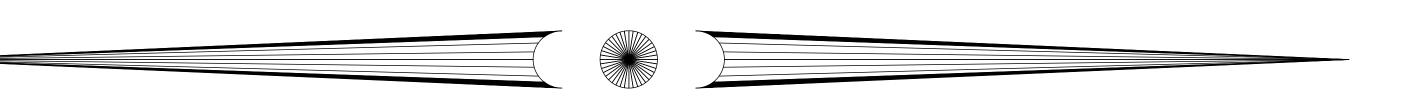
CONSTRUCTION PLANS FOR

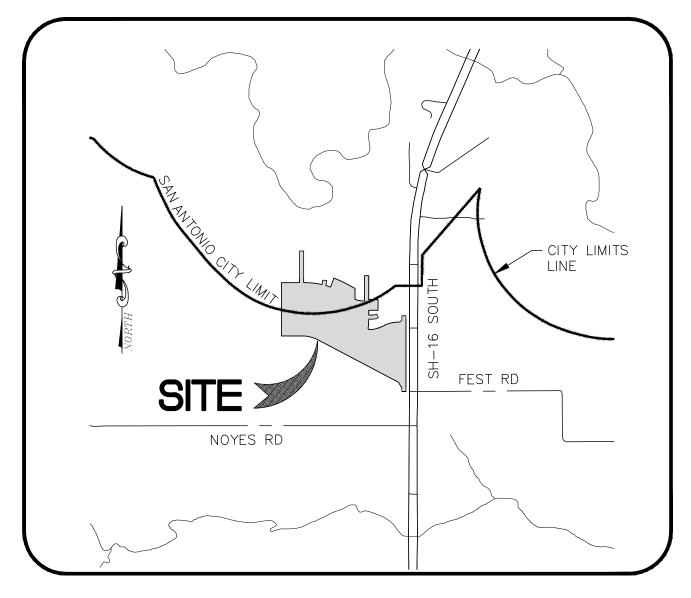


VERDIN SUBDIVISION, UNIT 1

SUBMITTED BY: MOY TARIN RAMIREZ ENGINEERS, LLC. 12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249 TEL: (210) 698-5051 FAX: (210) 698-5085

OWNER/DEVELOPER

KINGFISH DEVELOPMENT, LLC 2722 W. BITTERS RD. SUITE 106 SAN ANTONIO, TX 78248 210-882-6800



VICINITY MAP

SUBMITTAL DATE: SEPTEMBER 2022

RESUBMITTAL DATE: DECEMBER 2022

LEGAL DESCRIPTION:

BEING A 27.677 TRACT OF LAND PARTIALLY WITHIN THE CITY OF SAN ANTONIO CITY LIMITS, BEXAR COUNTY, TEXAS, BEING SITUATED IN THE RUFENO RODRIGUEZ SURVEY NO. 49, ABSTRACT NO. 613, COUNTY BLOCK NO. 4202, AS CONVEYED TO KINGFISH DEVELOPMENT, LLC BY WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN DOCUMENT NUMBER 20220169411, BEXAR COUNTY TEXAS.



PAUL LANDA, JR

100182

SHEET INDEX

SHEET NO. TITLE

C0.0	OVERALL COVER
C1.0	UTILITY COVER

C1.1	OVERALL UTILITY IMPORVEMENTS
C1 2	OVERALL LITH ITV IMPROVEMENTS

SEWER COVER

SEWER LINE F PLAN AND PROFILE SEWER LINE G PLAN AND PROFILE

TXDOT PAVEMENT MARKING DETAILS

C4.3 BEXAR TRAFFIC DETAILS BEXAR TRAFFIC DETAILS

KINGBIRD PATH PLAN AND PROFILE GROSBEAK WAY PLAN AND PROFILE

C4.9 LONGSPUR DR PLAN AND PROFILE

MURRE WAY PLAN AND PROFILE

KINGLET WAY PLAN AND PROFILE

STANDARD DETAILS

C4.13 STANDARD DETAILS

STANDARD STREET SECTIONS

DRAIN "A" PLAN AND PROFILE C4.16 DRAIN "B" PLAN AND PROFILE

DRAIN "C" PLAN AND PROFILE

DRAIN "D" PLAN AND PROFILE

C4.19 DRAIN "D" PLAN AND PROFILE DRAIN "G" PLAN AND PROFILE

DRAIN "G" DETAILS

C5.0 **GRADING PLAN**

C5.1 **GRADING PLAN**

SW3P PLAN SW3P DETAILS



TRENCH EXCAVATION SAFETY PROTECTION

Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The Contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

UTILITY GENERAL NOTES

- LOCATIONS AND DEPTHS OF EXISTING UTILITIES AND DRAINAGE STRUCTURES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND DEPTHS OF ALL UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WHETHER SHOWN ON THE PLANS OR NOT. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
- 2. ALL EXCAVATION IS UNCLASSIFIED. THERE IS NO ADDITIONAL PAYMENT
- 3. ALL SPOIL AND UNUSABLE MATERIAL FROM THIS PROJECT SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AT NO ADDITIONAL
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THE PROJECT.
- 5. CONSTRUCTION STAKING TO BE PROVIDED BY CONSULTANT IS AS
- A. STREET CENTERLINE STAKING FOR CLEARING. B. STREET STAKING (ONE SIDE) FOR STREET EXCAVATION AND WATER
- SEWER STAKING AT 100-FT INTERVALS.
- STAKING FOR WATER SERVICES.
- STAKING FOR DRAINAGE CHANNELS.
- FINAL STREET STAKING. G. METER BOX STAKING.
- H. CPS STAKING. I. SETTING OF LOT CORNERS.

CPS NOTES:

1. CPS TO SUPPLY ALL ELECTRIC CONDUITS FOR TRENCH AS FOLLOW:

- PRIMARY 2 1/2" HDPE SCHEDULE 40 SECONDARY - 3" PVC SCHEDULE 40 SERVICE STUBS - 2 1/2" PVC SCHEDULE 40
- 6" P.V.C. SCHEDULE 80 WILL BE REQUIRED FOR C.P.S. UTILITIES CROSSINGS WHEN DRAIN OR STREET CONSTRUCTION PRECEDES UTILITY INSTALLATION.
- 3. 4" P.V.C. SCHEDULE 40 WILL BE REQUIRED FOR UNDERGROUND TELEPHONE AND CABLE T.V. IF ABOVE APPLIES.
- 4. P.V.C. CONDUIT WITH 90° SWEEPS TO 6" ABOVE GRADE WITH CAP.

— PROP. WATER MAIN

H.M.A.C. TYPE "D"

PROP. WATER MAIN

H.M.A.C. TYPE "D"

PROP. SAN. SWR.

PROP. SAN. SWR.

TYPICAL STREET CROSS-SECTION (28' PAVEMENT)

4' CONC. SIDEWALK SOIL/PARKWAY

6' CONC. SIDEWALK

SOIL/PARKWAY

8"-12" MAIN, 4' MIN. DEPTH

MAX SLOPE 1"/FT.

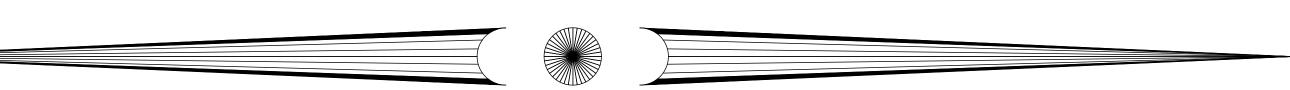
MIN. SLOPE 1/4"/FT.

MAX SLOPE 1"/FT. MIN. SLOPE 1/4"/FT.

8"-12" MAIN, 4' MIN. DEPTH

TELEPHONE AND CABLE LINES TO GO IN JOINT TRENCH WITH CITY

CONSTRUCTION PLANS FOR



VERDIN SUBDIVISION, UNIT 1 UTILITY IMPROVEMENTS

LEGEND EXISTING WATER MAIN ---- F8"W ---PROPOSED WATER MAIN PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT PROPOSED GATE VALVE EXISTING GATE VALVE PROPOSED SANITARY SEWER MAIN EXISTING SANITARY SEWER MAIN EXISTING OVERHEAD ELECTRIC EXISTING UNDERGROUND ELECTRIC EXISTING UNDERGROUND TELEPHONE EXISTING STREET LIGHT D.P.R.B.C.T. OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS O.P.R.M.C.T. PROPOSED STREET LIGHT UG, 100W AND SINGLE ARM PROPOSED STREET LIGHT UG, 250W AND SINGLE ARM EXISTING POWER POLE

EXISTING SECONDARY ENCLOSURE

PROPOSED POWER POLE PROPOSED TRANSFORMER

PROPOSED WATER SERVICE

EXISTING TRANSFORMER

EXISTING WATER METER

COMPACTED BASE

TREATED SUBGRADE 90% COMPACTED DENSITY

COMPACTED BASE

95% COMPACTED DENSITY

95% COMPACTED DENSITY

MAX SLOPE 1"/FT

MIN. SLOPE 1/4"/FT.

PROPOSED SECONDARY ENCLOSURE

EXISTING IRRIGATION CONTROL VALVE

PROPOSED SERVICE LATERAL WITH ONE-WAY CLEANOUT

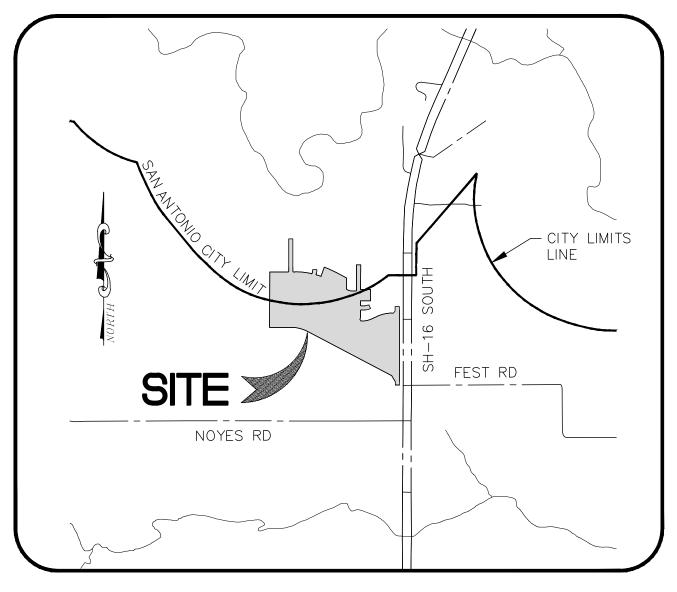
10' GAS, ELECTRIC, TELEPHONE, & CABLE TELEVISION EASEMENT

TRANSFORMER

SECONDARY ENCLOSURE

FRONT LOADED

(10' MIN. STUB FROM SERVICE)



VACINITY MAP

SUBMITTAL DATE: SEPTEMBER 2022

RESUBMITTAL DATE:

DECEMBER 2022

LEGAL DESCRIPTION:

BEING A 27.677 TRACT OF LAND PARTIALLY WITHIN THE CITY OF SAN ANTONIO CITY LIMITS, BEXAR COUNTY, TEXAS, BEING SITUATED IN THE RUFENO RODRIGUEZ SURVEY NO. 49, ABSTRACT NO. 613, COUNTY BLOCK NO. 4202, AS CONVEYED TO KINGFISH DEVELOPMENT LLC BY WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN DOCUMENT NUMBER 20220169411, BEXAR COUNTY TEXAS.

PAUL LANDA, JR

100182

NOTE TO CONTRACTOR:

BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS, SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.

THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT EACH INDIVIDUAL UTILITY, FOR ÁSSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION



Moy Tarin Ramirez Engineers, LLC FIRM TBPELS ENG F-5297 SVY F-10131500

Engineers

Surveyors

Planners

12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051 SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

PLAT NO. 22-11800357

SUBMITTED BY:

MOY TARIN RAMIREZ ENGINEERS, LLC. 12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249 TEL: (210) 698-5051 FAX: (210) 698-5085

OWNER/DEVELOPER

KINGFISH DEVELOPMENT, LLC 2722 W. BITTERS RD. SUITE 106 SAN ANTONIO, TX 78248 210-882-6800

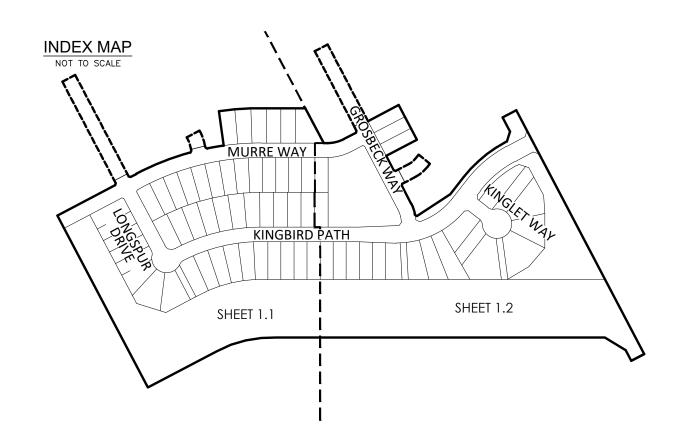
SHEET INDEX

Sheet Number Sheet Title

UTILITY COVER

C1.1 OVERALL UTILITY IMPORVEMENTS

OVERALL UTILITY IMPROVEMENTS



6" sand cover Foot of Separation i CPS Energy Gas Main Foot of Separation i CPS Energy Gas Main required at any Water & Sewer Crossing Depth of 48" Conduits will be random lay

Standards for Gas and Electric Trench or Electric Trench with Joint Utilities

Standards for Electric Trench or Electric Trench with Joint Utilities

TRENCH DETAILS

BEXAR COUNTY

TYPICAL STREET CROSS-SECTION (40' PAVEMENT)

TEXAS C1.0

PROJ. # DGN. BY: DWN. BY: CHKD. BY:

• Surveyors
• Planners

nirez Engineers, LLC

-5297/SURVEYING: F-10131500

SUITE 100 TEL: (210) 698-5051

Moy Tarin Ramirez
TBPELS: ENGINEERING F-5297/
12770 CIMARRON PATH, SUITE 10
SAN ANTONIO, TEXAS 78249

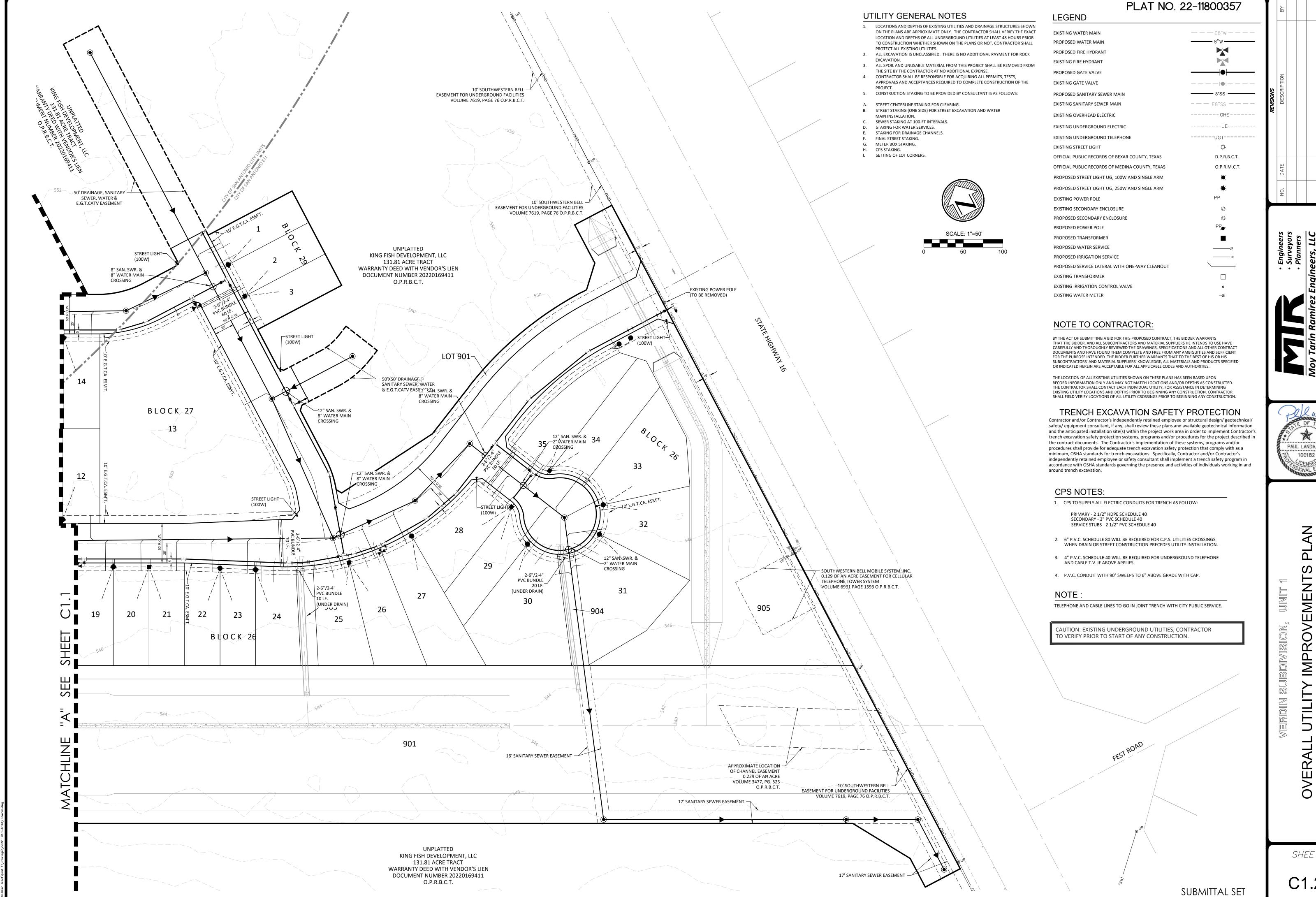


- UTILITY IMPROVEMENTS PLA

SHEET

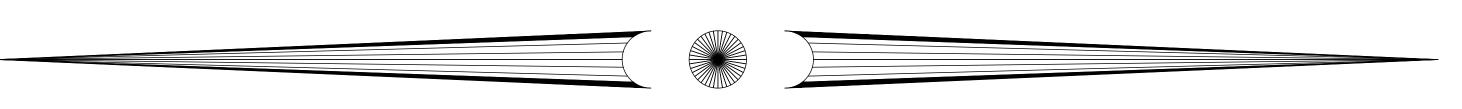
C1.1

SUBMITTAL SET



PAUL LANDA, JR. 100182

PLAT NO. 22-11800357



VERDIN SUBDIVISION, UNIT 1 SANITARY SEWER IMPROVEMENTS

SAWS CONSTRUCTION NOTES **COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT**

- 1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable: A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System", Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1
- B. Current TXDOT "Standard Specifications for Construction of Highways, Streets and Drainage". C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction".
- D. Current City of San Antonio "Standard Specifications for Public Works Construction".
- E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM). 2. The contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the consultant and has been notified by SAWS Construction Inspection Division to proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work

completed by the contractor without an approved Counter Permit and/or a GCP will be subject to removal and replacement

- at the expense of the contractors and/or the developer. 3. The Contractor shall obtain the SAWS Standard Details from the SAWS website,
- http://www.saws.org/business_center/specs. Unless otherwise noted within the design plans.
- 4. The Contractor is to make arrangements with the SAWS Construction Inspection Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners 48 hours prior to beginning any work.
- 5. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor at least 1 week prior to construction. It shall be the Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction
- 6. The Contractor shall verify the exact location of underground utilities and drainage structures at least 1-2 weeks prior to construction whether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location
- markers on SAWS facilities. The following contact information are supplied for verification purposes: SAWS Utility Locates: http://www.saws.org/Service/Locates
- COSA Drainage (210) 207-0724 or (210) 207-6026
- COSA Traffic Signal Operations (210) 206-8480
- COSA Traffic Signal Damages (210) 207-3951
- Texas State Wide One Call Locator 1-800-545-6005 or 811
- 7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction.
- 8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with respective construction specifications and permit requirements.
- 9. The Contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating 10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood
- 11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be
- Weekend Work: Contractors are required to notify the SAWS Inspection Construction Department 48 hours in advance to request weekend work. Request should be sent to constworkreg@saws.org.
- Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper
- 12. Compaction note (Item 804): The contractor shall be responsible for meeting the compaction requirements on all trench backfill and for paying for the tests performed by a third party. Compaction tests will be done at one location point randomly selected, or as indicated by the SAWS Inspector and/or the test administrator, per each 12-inch loose lift per 400 linear feet at a minimum. This project will not be accepted and finalized by SAWS without this requirement being met and verified by providing all necessary documented test results.
- 13. A copy of all testing reports shall be forwarded to SAWS Construction Inspection Division.

- 1. The Contractor is responsible for ensuring that no Sanitary Sewer Overflow (SSO) occurs as a result of their work. All contractor personnel responsible for SSO prevention and control shall be trained on proper response. Should an SSO
- Identify the source of the SSO and notify SAWS Emergency Operations Center (EOC) immediately at (210) 233-2014. Provide the address of the spill and an estimated volume or flow.
- Attempt to eliminate the source of the SSO.
- Contain sewage from the SSO to the extent of preventing a possible contamination of waterways. Clean up spill site (return contained sewage to the collection system if possible) and properly dispose of
- contaminated soil/materials. Clean the affected sewer mains and remove any debris.
- Meet all post-SSO requirements as per the EPA Consent Decree, including line cleaning and televising the affected sewer mains (at SAWS direction) within 24 hours.
- Should the Contractor fail to address an SSO immediately and to SAWS satisfaction, they will be responsible for all costs incurred by SAWS, including any fines from EPA, TCEQ and/or any other Federal, State or Local Agencies.
- No separate measurement or payment shall be made for this work. All work shall be done according to guidelines set by the
- 2. If bypass pumping is required, the Contractor shall perform such work in accordance with SAWS Standard Specification for Water and Sanitary Sewer Construction, Item No. 864, "Bypass
- Pumping". 3. Prior to tie-ins, any shutdowns of existing force mains of any size must be coordinated with the SAWS Construction Inspection Division at (210) 233-2973 at least one week in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.
- 4. Sewer pipe where water line crosses shall be 160 psi and meet the requirements of ASTM D2241, TAC 217.53 and TCEQ 290.44(e)(4)(B). Contractor shall center a 20' joint of 160 psi pressure rated PVC at the proposed water crossing. 5. ELEVATIONS POSTED FOR TOP OF MANHOLES ARE FOR REFERENCE ONLY: It shall be the responsibility of the Contractor to make allowances and adjustments for top of manholes to match the finished grade of the project's improvements. (NSPI) 6. Spills, Overflows, or Discharges of Wastewater: All spills, overflows, or discharges of wastewater, recycled water, petroleum products, or chemicals must be reported immediately to the SAWS Inspector assigned to the Counter Permit or General Construction Permit (GCP). This requirement applies to every spill, overflow, or discharge regardless of size.

ADDITIONAL SEWER NOTES

98% COMPACTION NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL TRENCH BACKFILL AND FOR PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED, OR AS INDICATED BY THE SAWS INSPECTOR/TEST ADMINISTRATOR, PER EACH 12-INCH LOOSE LIFT PER 400 LINEAR FEET AT A

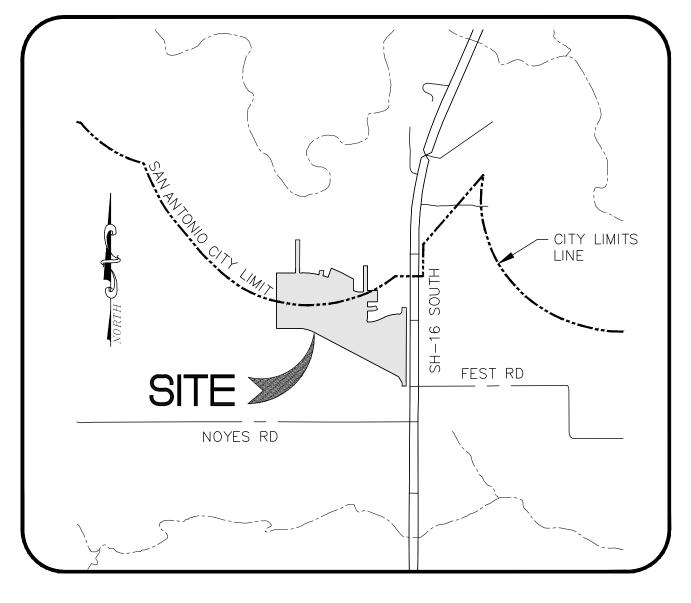
MINIMUM. THIS PROJECT WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL

- NECESSARY DOCUMENTED TEST RESULTS.
- 1. SANITARY SEWER LATERALS TO BE LOCATED AS SHOWN ON THE SANITARY SEWER PLANS.
- 2. PAY CUTS FOR SANITARY SEWERS LOCATED IN STREETS ARE ESTIMATED TO THE FINISHED SUBGRADE ELEVATION. PAY CUTS ARE TO EXISTING GROUND IN UNPAVED AREAS.
- 3. EXTEND ALL SANITARY SEWER LATERALS TO THE PROPERTY LINE OR TO THE EASEMENT LINE AS INDICATED. ALL LATERALS ARE 35' LONG
- 4. SANITARY SEWER LINES AND LATERALS WILL BE PVC SDR 26 ASTM D 3034 UNLESS OTHERWISE NOTED ON PLAN AND PROFILE SHEETS.
- 5. SDR FITTINGS WILL MATCH SDR SEWER MAIN, NO SEPARATE PAY ITEM.
- 6. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UPGRADIENT SIDE OF THE SEWER TRENCH THUS ALLOWING THE TRENCH TO INTERCEPT ANY SILT CONTAMINATED RUNOFF.
- 7. QUANTITIES ARE BASED ON CURRENT SAWS SPECIFICATIONS.
- 8. ALL MANHOLES TO HAVE WATERTIGHT RING AND COVERS.
- 9. ALL MANHOLES TO BE CONCRETE RING ENCASED.
- 10. MANHOLES TO BE VENTED AS SHOWN ON THE SANITARY SEWER PLANS.
- 11. AN "*" DENOTES AN EXISTING TEE.
- 12. ALL SANITARY SEWER LATERALS SHALL HAVE A MIN. 2.0
- 13. MINIMUM COVER FROM TOP OF SANITARY SEWER LATERALS TO TOP OF
 - A. IF LATERALS DO NOT CROSS WATER MAINS, 5' COVER
 - B. IF LATERALS CROSS WATER MAIN, WATER MAIN COVER
 - 6" 5.5' 5.7' 12" 6.0'
- 14. ALL MANHOLE OPENINGS SHALL BE 30".

CRITERIA FOR SEWER MAIN CONSTRUCTION IN THE VICINITY OF WATER MAINS

- I. WHERE A SEWER MAIN CROSSES OVER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE (9) FEET, ALL PORTIONS OF THE SEWER MAIN WITHIN NINE FEET (9) OF THE WATER LINE SHALL BE CONSTRUCTED USING 150 PSI PRESSURE RATED DUCTILE IRON, CAST IRON OR PVC PIPE AND JOINED WITH EQUALLY PRESSURE RATED PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL. A SECTION OF 150 PSI PRESSURE RATED PIPE AT LEAST EIGHTEEN (18) FEET IN LENGTH MAY BE CENTERED ON THE WATER MAIN IN LIEU OF PIPE CONNECTION REQUIREMENTS. (NO SEPARATE PAY ITEM)
- II. WHERE A SEMI-RIGID OR RIGID SEWER MAIN CROSSES UNDER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE FEET BUT GREATER THAN TWO FEET, THE INITIAL BACKFILL SHALL BE CEMENT STABILIZED SAND (TWO OR MORE BAGS OF CEMENT PER CUBIC YARD OF SAND) FOR ALL SECTIONS OF THE SEWER WITHIN NINE FEET OF THE WATER MAIN.
- III. WHERE A SEWER MAIN CROSSES UNDER A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN TWO FEET, THE SEWER MAIN SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI WITHIN NINE FEET OF THE WATER MAIN, SHALL HAVE A SEGMENT OF SEWER PIPE CENTERED ON THE WATER MAIN, SHALL BE PLACED NO CLOSER THAN SIX INCHES BETWEEN OUTER DIAMETERS, AND SHALL BE JOINED WITH PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL. A SECTION OF 150 PSI PRESSURE RATED PIPE OF A LENGTH GREATER THAN EIGHTEEN (18) FEET MAY BE CENTERED ON THE WATER MAIN IN LIEU OF PIPE CONNECTION REQUIREMENTS. (NO
- IV. WHERE A SEWER MAIN PARALLELS A WATER MAIN AND THE SEPARATION DISTANCE IS LESS THAN NINE FEET, THE SEWER MAIN SHALL BE BELOW THE WATER MAIN, SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON, OR PVC WITH A MINIMUM PRESSURE RATING OF 150 PSI FOR BOTH PIPE AND JOINTS FOR A DISTANCE OF NINE FEET BEYOND THE POINT OF CONFLICT, SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE BETWEEN OUTER DIAMETERS OF TWO FEET VERTICALLY AND FOUR FEET HORIZONTALLY, AND SHALL BE JOINED WITH PRESSURE RING GASKET CONNECTIONS OR CORROSION PROTECTED MECHANICAL COUPLING DEVICES OF A CAST IRON OR DUCTILE IRON MATERIAL.

SANITARY SEWER MANHOLES SHALL NOT BE INSTALLED ANY CLOSER THAN NINE FEET TO WATER MAINS.



VICINITY MAP





Surveyors

REVISION DATE: DECEMBER 2022

LEGAL DESCRIPTION:

BEING A 27.677 TRACT OF LAND PARTIALLY WITHIN THE CITY OF SAN ANTONIO, NEW CITY BLOCK 16595, BEXAR COUNTY, TEXAS, BEING SITUATED IN THE RUFENO RODRIGUEZ SURVEY NO. 49, ABSTRACT NO. 613, COUNTY BLOCK NO. 4202, BEING A PORTION OF A 131.81 ACRE TRACT, AS CONVEYED TO KINGFISH DEVELOPMENT, LLC BY WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN DOCUMENT NUMBER 20220169411, BEXAR COUNTY TEXAS.

SHEET INDEX SHEET NO. TITLE

SEWER OVERALL SEWER OVERALL C2.3 SEWER LINE B PLAN AND PROFILE C2.4 SEWER LINE C PLAN AND PROFILE SEWER LINE C PLAN AND PROFILE C2.6 SEWER LINE D PLAN AND PROFILE C2.7 SEWER LINE E PLAN AND PROFILE SEWER LINE F PLAN AND PROFILE

SEWER COVER

SEWER LINE G PLAN AND PROFILE SEWER DETAILS

ESTIMATED SANITARY SEWER QUANTITIES

ITEM	DESCRIPTION	UNIT	EST/QTY
1	TIE INTO EXISTING SANITARY SEWER MAIN	E.A.	1
2	TRENCH EXCAVATION SAFETY PROTECTION	L.F.	7,133
3	8" SANITARY SEWER PIPE, SDR-26 (6'-10')	L.F.	864
4	12" SANITARY SEWER PIPE, SDR-26 (0'-6')	L.F.	482
5	12" SANITARY SEWER PIPE, SDR-26 (6'-10')	L.F.	3,108
6	STANDARD SANITARY SEWER MANHOLE	EA.	19
7	DROP SANITARY SEWER MANHOLE	EA.	1
8	EXTRA DEPTH MANHOLE	V.F.	70
9	VERTICAL STACK	V.F.	79
10	CONCRETE ENCASEMENT	C.Y.	23
11	6" SANITARY SEWER LATERALS, SDR-26	L.F.	2,632
12	8" SEWER MAIN TELEVISION INSPECTION	L.F.	864
13	12" SEWER MAIN TELEVISION INSPECTION	L.F.	3,590

THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCT BANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

TRENCH EXCAVATION SAFETY PROTECTION Contractor and/or Contractor's independently retained employee or structural

design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The Contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

SEWIED: LOWED MEDINA DIVED WATERSHED - DOS DIOS W/ D.C.

Developer's Name	KINGFISH DEV	ELOPMEN	IT, LLC			
Developer's Address	2722 W. E	BITTERS RI	D. SUITE 106			
City SAN ANTONIO		State _	TX	Zip_	78248	
Phone #210-88	2-6800		Fax #			
SAWS Block Map # _	132-514		Total EDU's	70	Total Acreage	27.677
Total Linear Footage			AND 8" ~ 864	L.F.	Plat No. 22-1	11800357
Number of Lots	70		SAWS Job	No.	22-1650	

BEXAR COUNTY

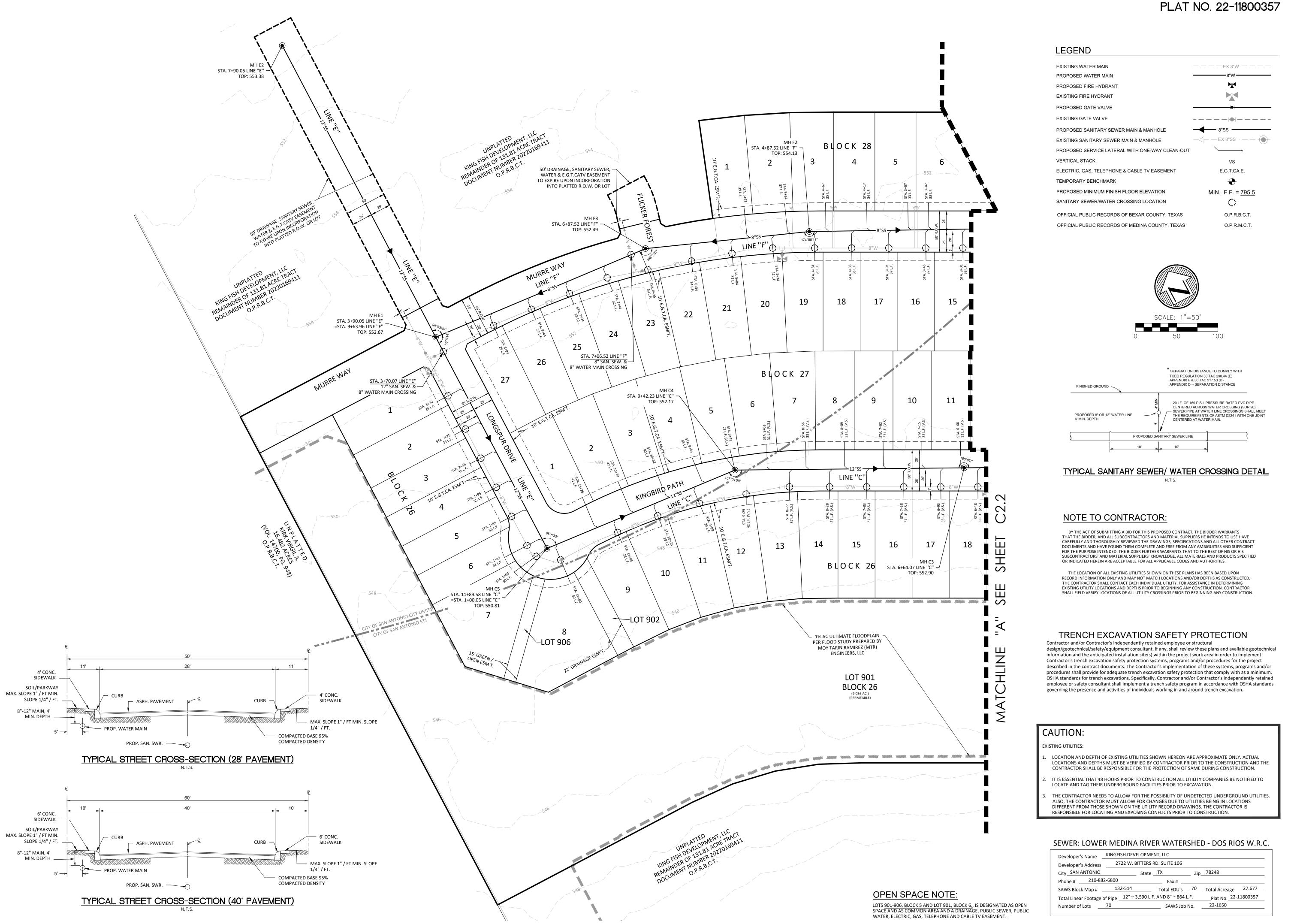
NOTE TO CONTRACTOR:

- BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER. AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS. SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.
- THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT FACH INDIVIDUAL LITILITY. FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.



FIRM TBPELS ENG F-5297 SVY F-10131500 12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051

SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085



SUBMITTAL SET

NO. DATE DESCRIPTION

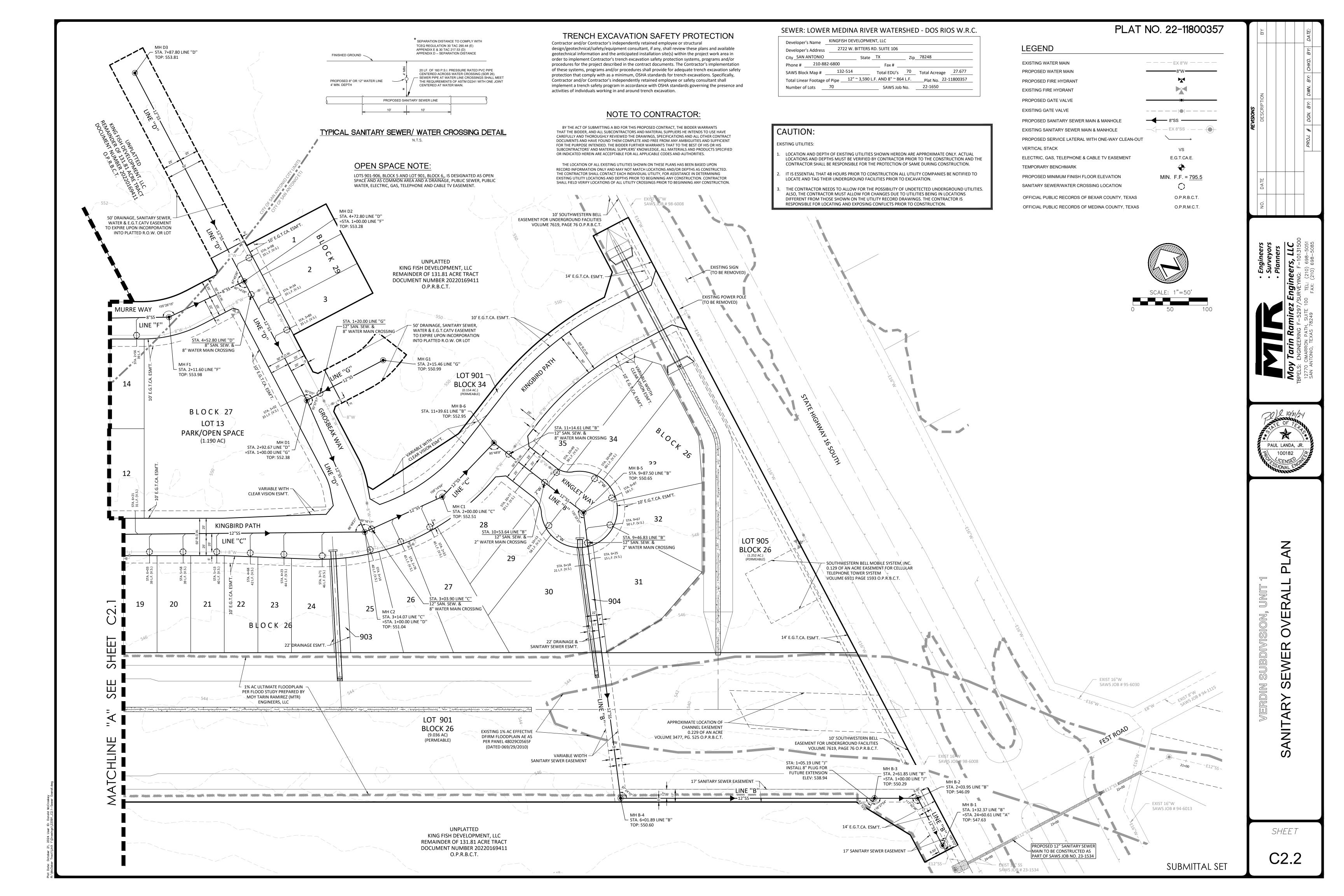
PROJ. # DGN. BY: CHKD. BY:

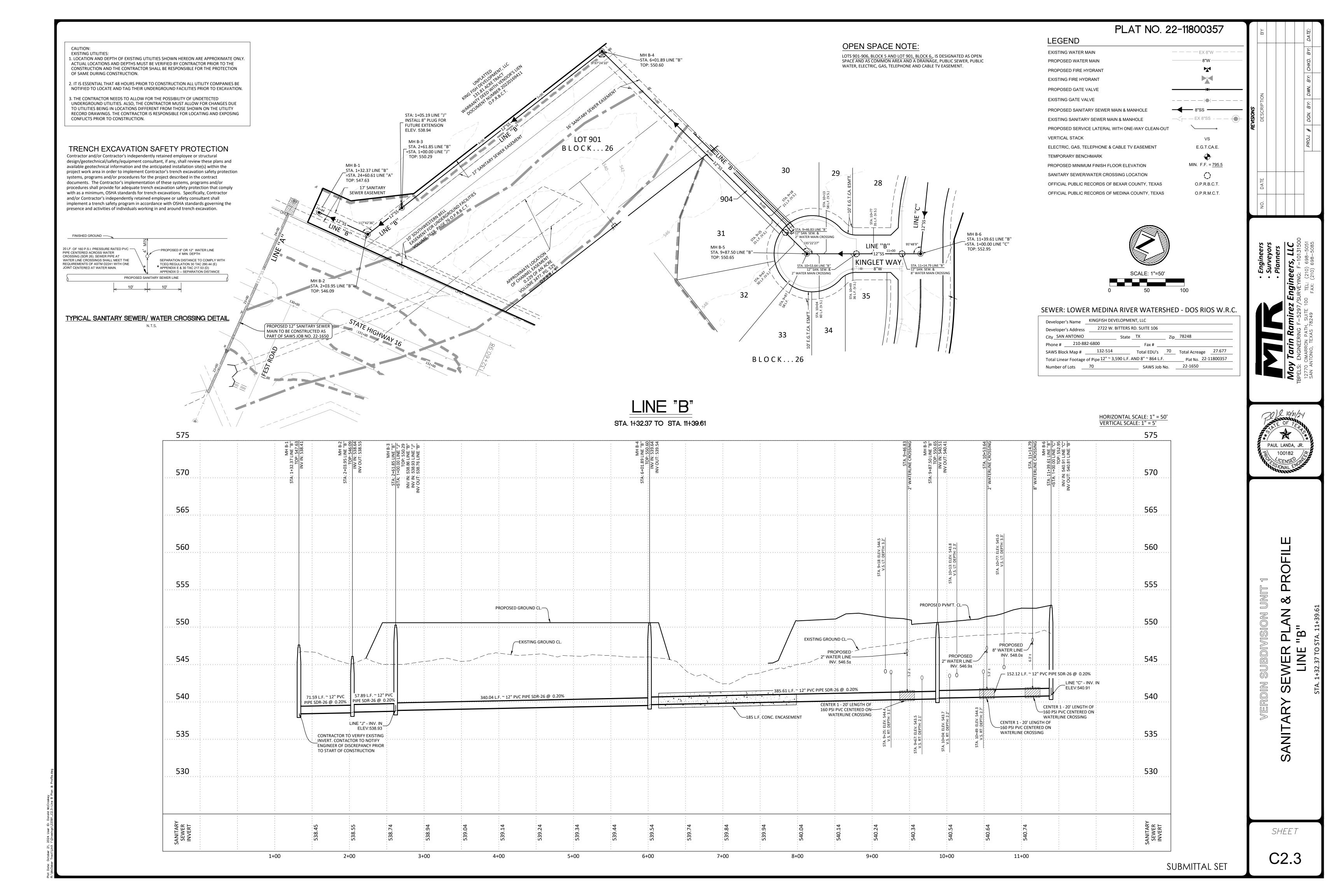
• Surveyors
• Planners
• Planners
• Ramirez Engineers, LLC
RING F-5297/SURVEYING: F-10131500
PATH, SUITE 100 TEL: (210) 698-5051
EXAS 78249 FAX: (210) 698-5085



ANITARY SEWER OVERALL PLAN

SHEET





CAUTION:
EXISTING UTILITIES:

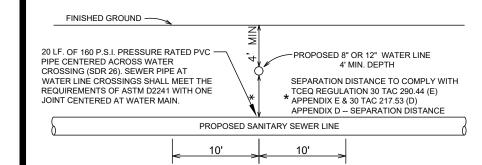
1. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY CONTRACTOR PRIOR TO THE CONSTRUCTION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF SAME DURING CONSTRUCTION.

2. IT IS ESSENTIAL THAT 48 HOURS PRIOR TO CONSTRUCTION ALL UTILITY COMPANIES BE NOTIFIED TO LOCATE AND TAG THEIR UNDERGROUND FACILITIES PRIOR TO EXCAVATION.

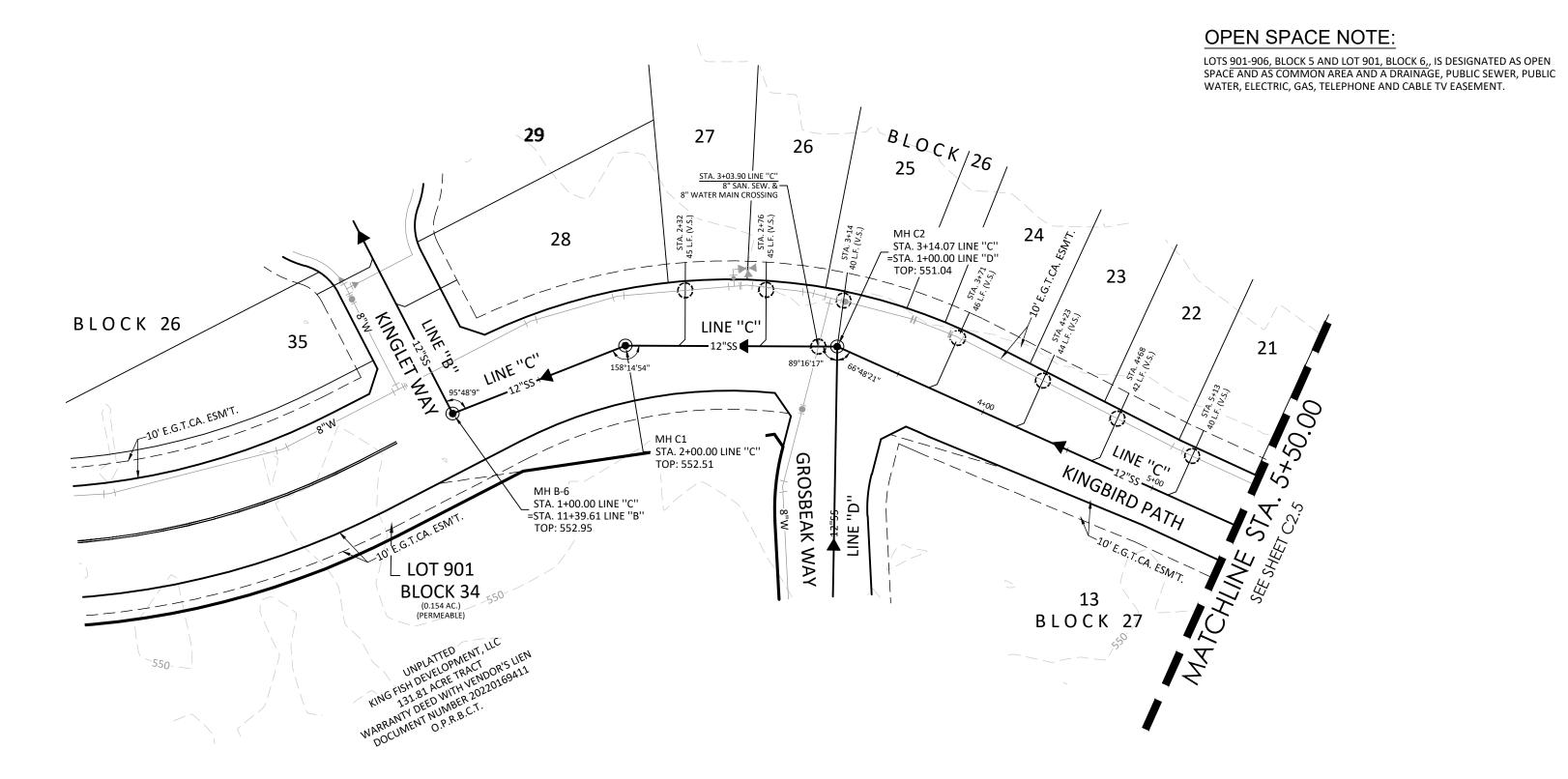
3. THE CONTRACTOR NEEDS TO ALLOW FOR THE POSSIBILITY OF UNDETECTED UNDERGROUND UTILITIES. ALSO, THE CONTRACTOR MUST ALLOW FOR CHANGES DUE TO UTILITIES BEING IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE UTILITY RECORD DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND EXPOSING CONFLICTS PRIOR TO CONSTRUCTION.

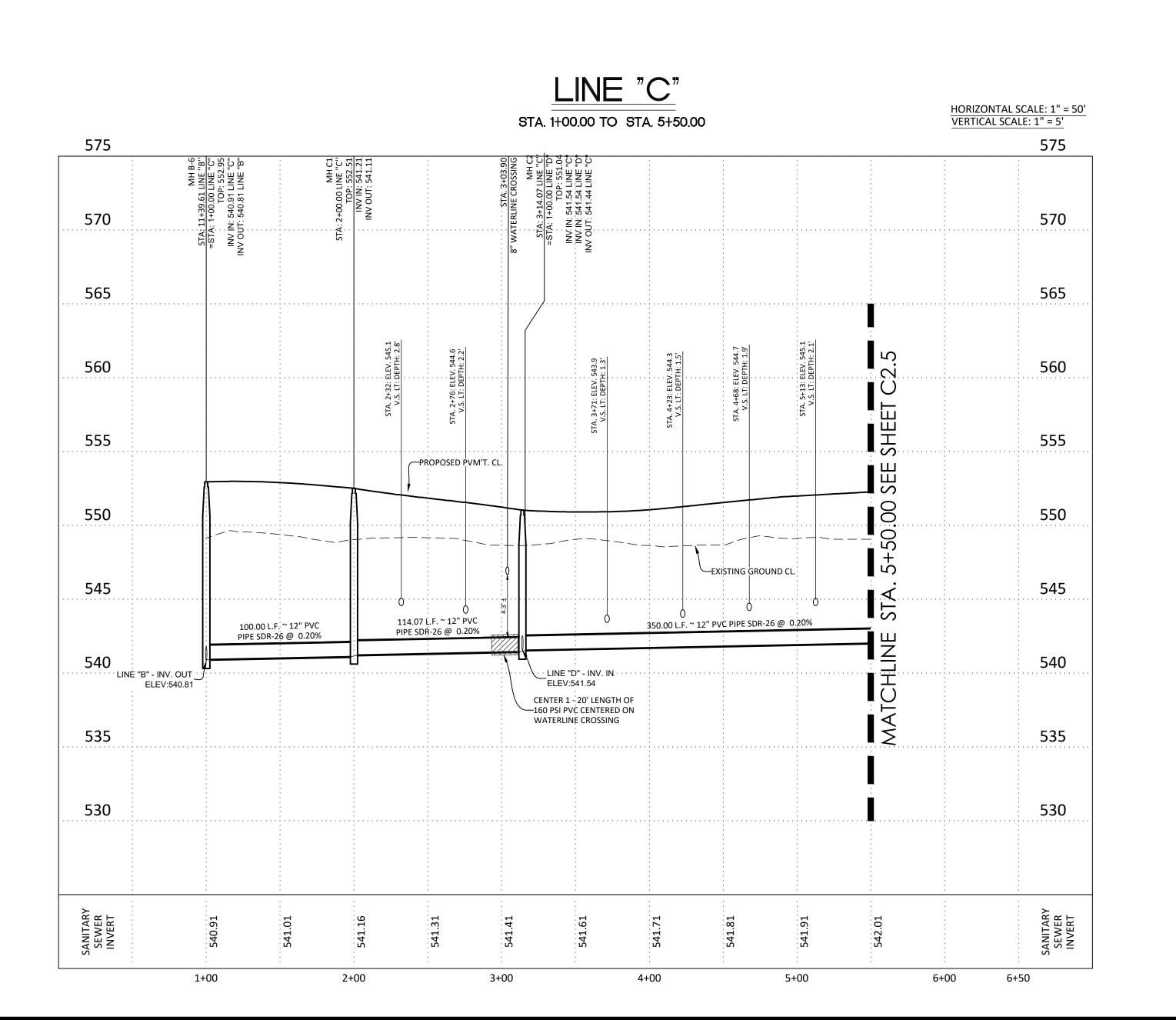
TRENCH EXCAVATION SAFETY PROTECTION

Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The Contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

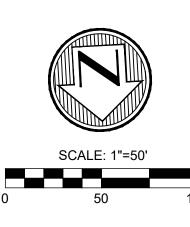


TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL





PLAT NO. 22-11800357 LEGEND EXISTING WATER MAIN — — — EX 8"W — — — PROPOSED WATER MAIN PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT PROPOSED GATE VALVE EXISTING GATE VALVE ----PROPOSED SANITARY SEWER MAIN & MANHOLE ____ EX 8"SS - _ _ EXISTING SANITARY SEWER MAIN & MANHOLE PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT VERTICAL STACK VS ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT E.G.T.CA.E. TEMPORARY BENCHMARK MIN. F.F. = <u>795.5</u> PROPOSED MINIMUM FINISH FLOOR ELEVATION SANITARY SEWER/WATER CROSSING LOCATION \circ OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS O.P.R.B.C.T. OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS O.P.R.M.C.T.



SEWER: LOWER MEDINA RIVER WATERSHED - DOS RIOS W.R.C.

Developer's Name _	KINGFISH DEVE	LOPME	NT, LLC			
Developer's Address	2722 W. B	ITTERS F	RD. SUITE 106			
City SAN ANTONIO		State	TX	Zip_	78248	
Phone #210-88	2-6800		Fax #			
SAWS Block Map # _	132-514		Total EDU's	70	Total Acreage	27.677
Total Linear Footage of Pipe 12" ~ 3,590 L.F. AND 8" ~ 864 L.F. Plat No. 22-11800357						
Number of Lots	70		SAWS Job	No.	22-1650	



Y SEWER PLAN & PROFILE
LINE "C"

SANITARY SE

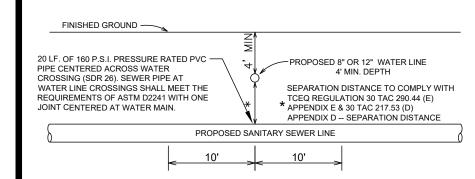
SHEET

CAUTION: **EXISTING UTILITIES:** 1. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY CONTRACTOR PRIOR TO THE CONSTRUCTION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF SAME DURING CONSTRUCTION. 2. IT IS ESSENTIAL THAT 48 HOURS PRIOR TO CONSTRUCTION ALL UTILITY COMPANIES BE NOTIFIED TO LOCATE AND TAG THEIR UNDERGROUND FACILITIES PRIOR TO EXCAVATION.

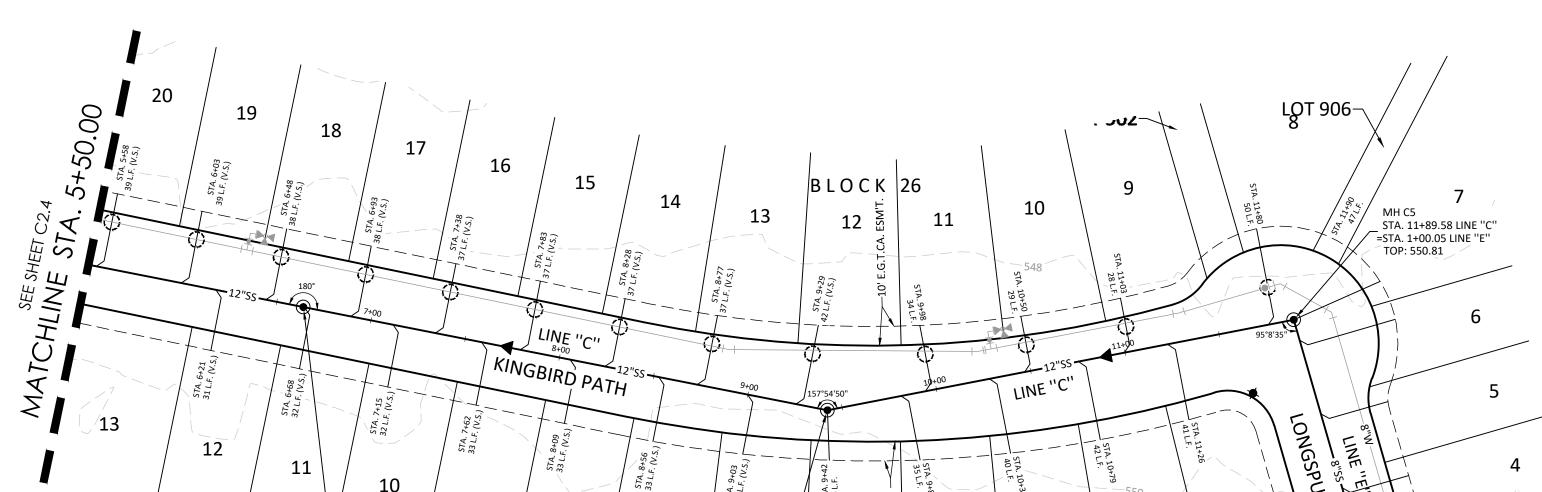
3. THE CONTRACTOR NEEDS TO ALLOW FOR THE POSSIBILITY OF UNDETECTED UNDERGROUND UTILITIES. ALSO, THE CONTRACTOR MUST ALLOW FOR CHANGES DUE TO UTILITIES BEING IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE UTILITY RECORD DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND EXPOSING CONFLICTS PRIOR TO CONSTRUCTION.

TRENCH EXCAVATION SAFETY PROTECTION

Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The Contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.



TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL



MH C4

TOP: 552.17

MH C3

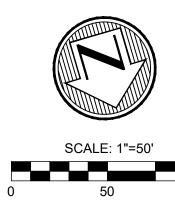
STA. 6+64.07 LINE "C" TOP: 552.90

OPEN SPACE NOTE:

LOTS 901-906, BLOCK 5 AND LOT 901, BLOCK 6,, IS DESIGNATED AS OPEN SPACE AND AS COMMON AREA AND A DRAINAGE, PUBLIC SEWER, PUBLIC WATER, ELECTRIC, GAS, TELEPHONE AND CABLE TV EASEMENT.

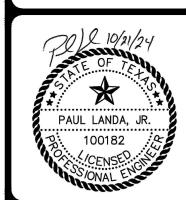
LEGEND EXISTING WATER MAIN — — — EX 8"W — — — PROPOSED WATER MAIN PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT PROPOSED GATE VALVE EXISTING GATE VALVE ----PROPOSED SANITARY SEWER MAIN & MANHOLE ____ EX 8"SS - _ _ _ EXISTING SANITARY SEWER MAIN & MANHOLE PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT VERTICAL STACK VS ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT E.G.T.CA.E. TEMPORARY BENCHMARK MIN. F.F. = <u>795.5</u> PROPOSED MINIMUM FINISH FLOOR ELEVATION SANITARY SEWER/WATER CROSSING LOCATION \circ OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS O.P.R.B.C.T. OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS O.P.R.M.C.T.

PLAT NO. 22-11800357



SEWER: LOWER MEDINA RIVER WATERSHED - DOS RIOS W.R.C.

Developer's Name _	KINGFISH DEV	ELOPME	NT, LLC			
Developer's Address	2722 W. E	BITTERS R	D. SUITE 106			
City SAN ANTONIO		State _	TX	Zip_	78248	
Phone #210-88	2-6800		Fax #			
SAWS Block Map # _	132-514		Total EDU's	_70	Total Acreage	27.677
Total Linear Footage		590 L.F. A	ND 8" ~ 864 L.F	=.	Plat No. 22-1	11800357
Number of Lots	70		SAWS Job	No.	22-1650	

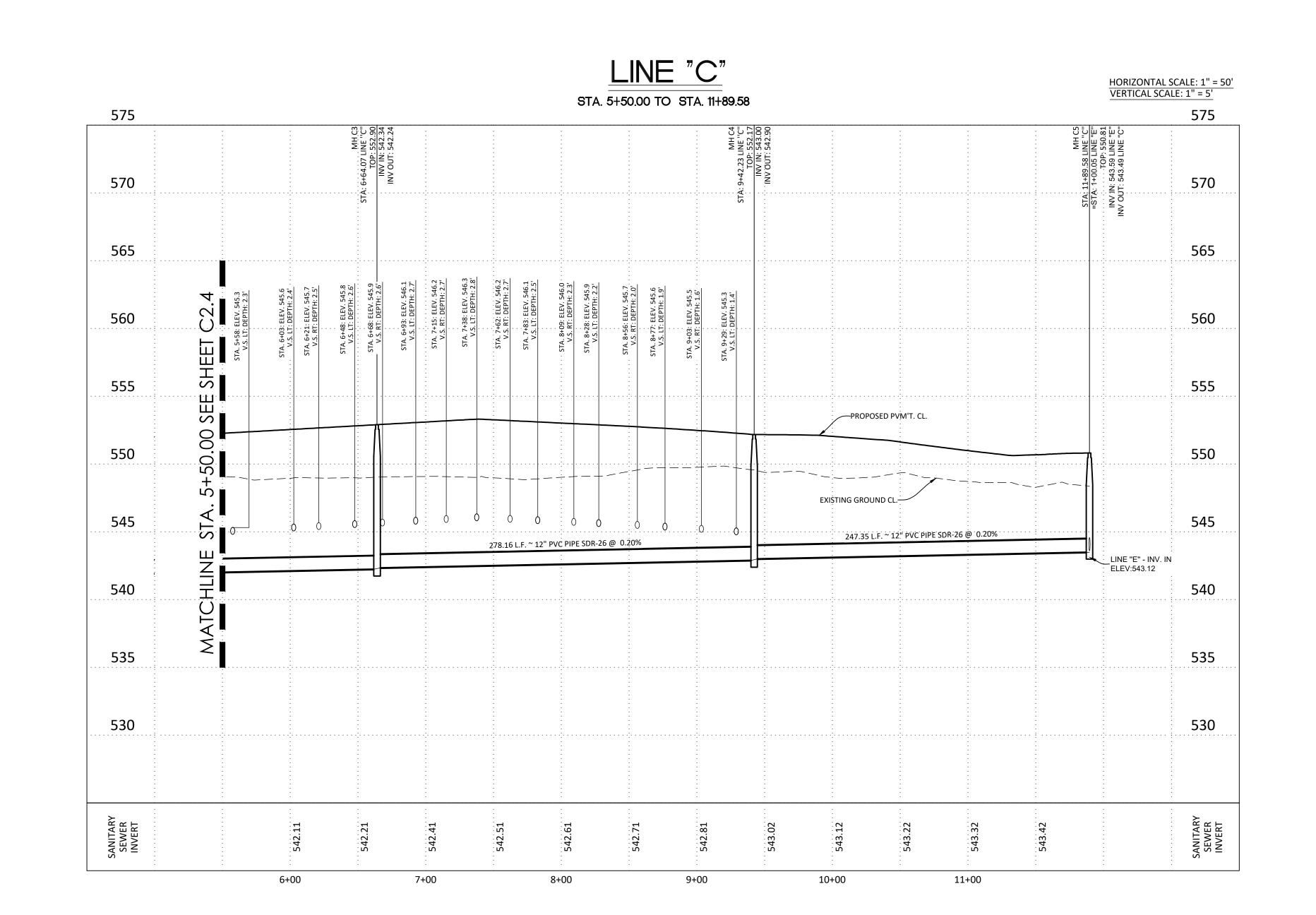


PROFILE SEWER PLAN & F LINE "C"

SANITARY

SHEET

C2.5



SUBMITTAL SET

CAUTION: **EXISTING UTILITIES:** 1. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY CONTRACTOR PRIOR TO THE CONSTRUCTION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF SAME DURING CONSTRUCTION. 2. IT IS ESSENTIAL THAT 48 HOURS PRIOR TO CONSTRUCTION ALL UTILITY COMPANIES BE NOTIFIED TO LOCATE AND TAG THEIR UNDERGROUND FACILITIES PRIOR TO EXCAVATION. 3. THE CONTRACTOR NEEDS TO ALLOW FOR THE POSSIBILITY OF UNDETECTED UNDERGROUND UTILITIES. ALSO, THE CONTRACTOR MUST ALLOW FOR CHANGES DUE TO UTILITIES BEING IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE UTILITY RECORD DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND EXPOSING CONFLICTS PRIOR TO CONSTRUCTION.

TRENCH EXCAVATION SAFETY PROTECTION

Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The Contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

FINISHED GROUND -20 LF. OF 160 P.S.I. PRESSURE RATED PVC — PROPOSED 8" OR 12" WATER LINE PIPE CENTERED ACROSS WATER CROSSING (SDR 26). SEWER PIPE AT WATER LINE CROSSINGS SHALL MEET THE SEPARATION DISTANCE TO COMPLY WITH REQUIREMENTS OF ASTM D2241 WITH ONE JOINT CENTERED AT WATER MAIN. * APPENDIX E & 30 TAC 217.53 (D) PROPOSED SANITARY SEWER LINE

TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL

LOTS 901-906, BLOCK 5 AND LOT 901, BLOCK 6,, IS DESIGNATED AS OPEN SPACE AND AS COMMON AREA AND A DRAINAGE, PUBLIC SEWER, PUBLIC WATER, ELECTRIC, GAS, TELEPHONE AND CABLE TV EASEMENT. 0 BLOCK 27 _ STA. 1+00.00 LINE "D" =STA. 3+14.07 LINE "C" TOP: 551.04 50' DRAINAGE, SANITARY -SEWER, WATER & STA. 2+92.67 LINE "D" E.G.T.CATV EASEMENT ∕−10' E.G.T.CA. ESM'T. =STA. 1+00.00 LINE "G" STA. 4+72.80 LINE "D" TOP: 552.38 - - STA. 4+52.80 LINE "D" 12" SAN. SEW. & 8" WATER MAIN CROSSING =STA. 1+00.00 LINE "F" LINE "D" 10' E.G.T.CA. ESM'T.~ LINE "D" LINE "D" 89°16'17" **GROSBEAK WAY** UNPLATTED KING FISH DEVELOPMENT, LLC STA. 7+87.80 LINE "D" — 27 131.81 ACRE TRACT TOP: 553.81 RRANTY DEED WITH VENDOR'S LIEN OOCUMENT NUMBER 20220169411 O.P.R.B.C.T. UNPLATTED 50' DRAINAGE, SANITARY -_KING FISH DEVELOPMENT, LLC SEWER, WATER & 131.81 ACRE TRACT

E.G.T.CATV EASEMENT

1+00

2+00

3+00

4+00

5+00

PLAT NO. 22-11800357 LEGEND EXISTING WATER MAIN — — — EX 8"W — — — PROPOSED WATER MAIN PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT PROPOSED GATE VALVE EXISTING GATE VALVE ----PROPOSED SANITARY SEWER MAIN & MANHOLE — EX 8"SS - — — € EXISTING SANITARY SEWER MAIN & MANHOLE PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT VERTICAL STACK VS ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT E.G.T.CA.E. TEMPORARY BENCHMARK MIN. F.F. = <u>795.5</u> PROPOSED MINIMUM FINISH FLOOR ELEVATION SANITARY SEWER/WATER CROSSING LOCATION \circ OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS O.P.R.B.C.T. OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS O.P.R.M.C.T.

OPEN SPACE NOTE:

WARRANTY DEED WITH VENDOR'S LIEN DOCUMENT NUMBER 20220169411 O.P.R.B.C.T.



SEWER: LOWER MEDINA RIVER WATERSHED - DOS RIOS W.R.C.

Developer's Name	KINGFISH DEVELO	OPMEN	IT, LLC			
Developer's Address	2722 W. BIT	TERS R	D. SUITE 106			
City SAN ANTONIO		State _	TX	Zip_	78248	
Phone #210-88	2-6800		Fax #			
SAWS Block Map #	132-514		Total EDU's	70	Total Acreage	27.677
Total Linear Footage of Pipe 12" ~ 3,590 L.F. AND 8" ~ 864 L.F. Plat No. 22-11800357						
Number of Lots	70		SAWS Job	No.	22-1650	

100182

PAUL LANDA, JR.

OFILI PR ∞ PLAN "D" SEWER LINE

SANITARY

SHEET

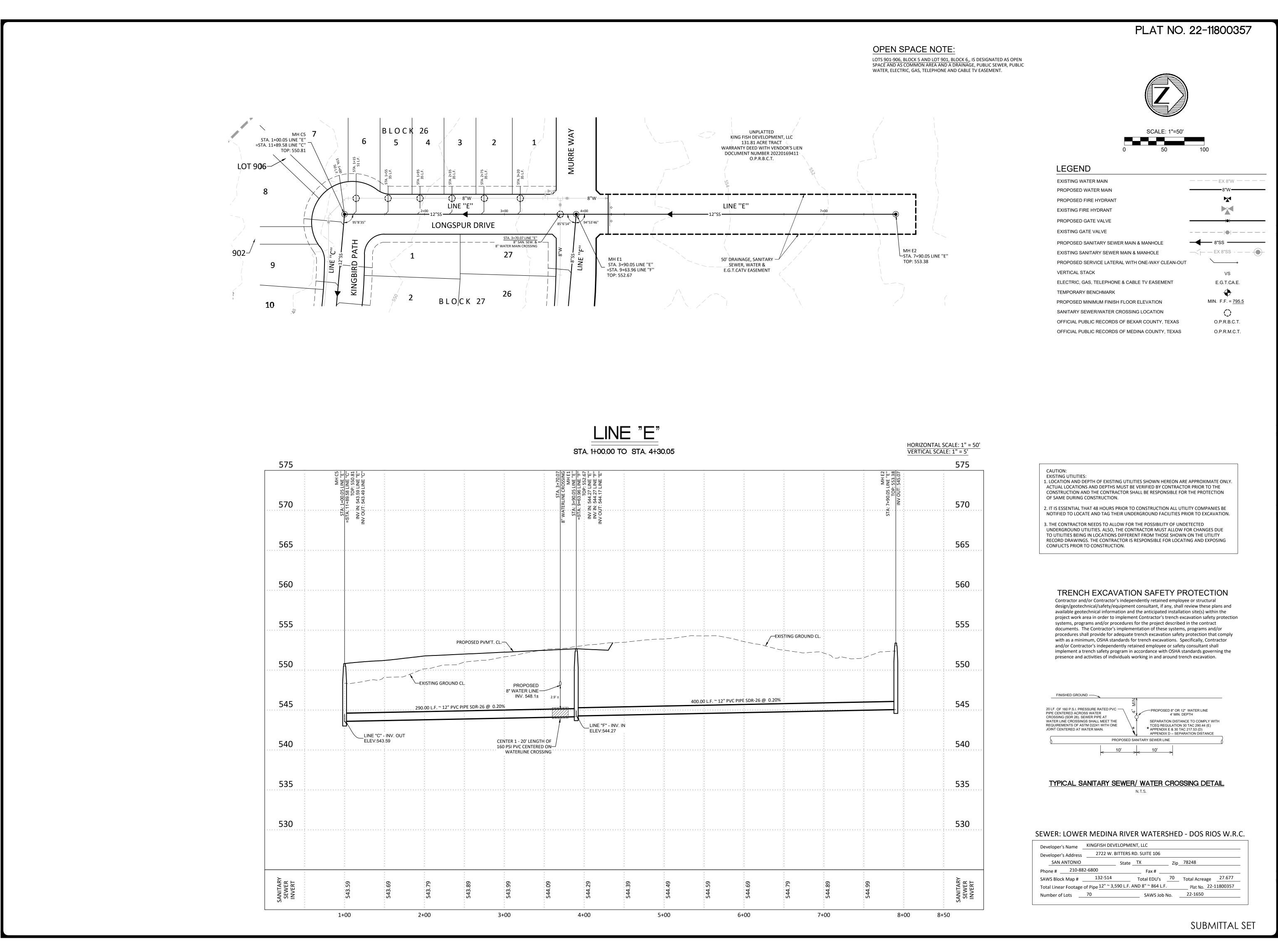
C2.6

HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1" = 5' STA. 1+00.00 TO STA. 7+87.80 575 575 00 L 07 L 170P: 54 L 54 L STA: 1+00 =STA: 3+14 INV IN: 541. INV IN: 541. NV OUT: 541. STA: 2+92 =STA: 1+00. INV IN: 542. INV IN: 541. 570 570 565 565 560 560 555 555 PROPOSED PVM'T. CL 550 550 PROPOSED 8" WATER LINE EXISTING GROUND CL.— INV. 548.7± 545 545 __LINE "F" - INV. IN ELEV:546.04 315.00 L.F. ~ 12" PVC PIPE SDR-26 @ 0.20% 180.13 L.F. ~ 12" PVC PIPE SDR-26 @ 0.20% 192.67 L.F. ~ 12" PVC PIPE SDR-26 @ 0.20% LINE "C" - INV. IN __ ELEV:541.44 540 540 LINE "G" - INV. IN _ ELEV:542.03 CENTER 1 - 20' LENGTH OF —160 PSI PVC CENTERED ON WATERLINE CROSSING 535 535 530 530 SANITARY SEWER INVERT

6+00

7+00

SUBMITTAL SET



NATE DESCRIPTION BY: CHKD. BY: DATE:

Surveyors
Surveyors
Planners

Z Engineers, LLC
7/SURVEYING: F-10131500

Moy Tarin Ramirez Eng TBPELS: ENGINEERING F-5297/SURVE

PAUL LANDA, JR.

100182

CENSE

PAUL LANDA, JR.

100182
CENSE

OFIL

 \Box

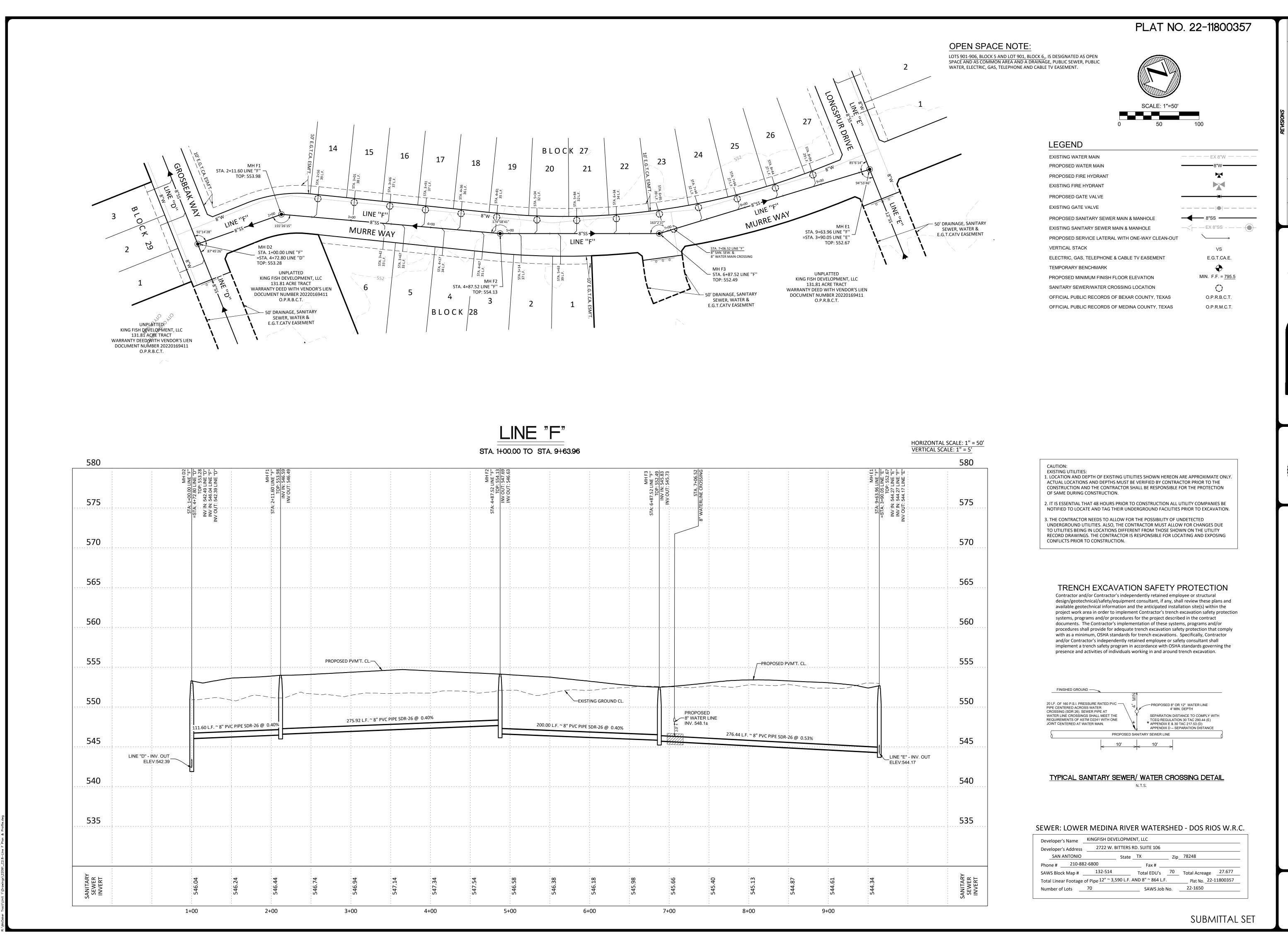
 ∞

EWER

S

ANITARY

SHEET



Engineers
Surveyors
Surveyors
Planners

ers, LLC
: F-10131500
10) 698-5085
0) 698-5085

Moy Tarin Ramirez Engine
TBPELS: ENGINEERING F-5297/SURVEYING



SEWER PLAN & PROFILE LINE "F"

SHEET

ANITAR

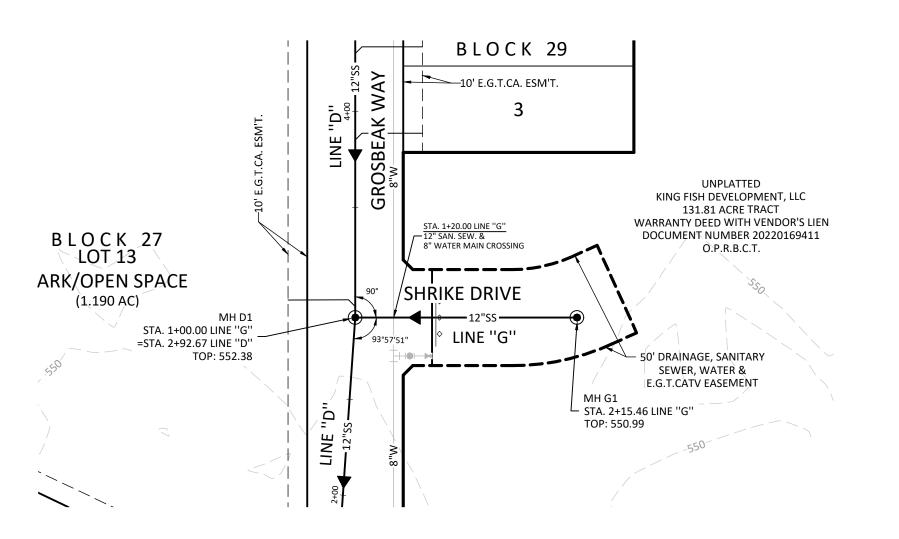
O.P.R.B.C.T.

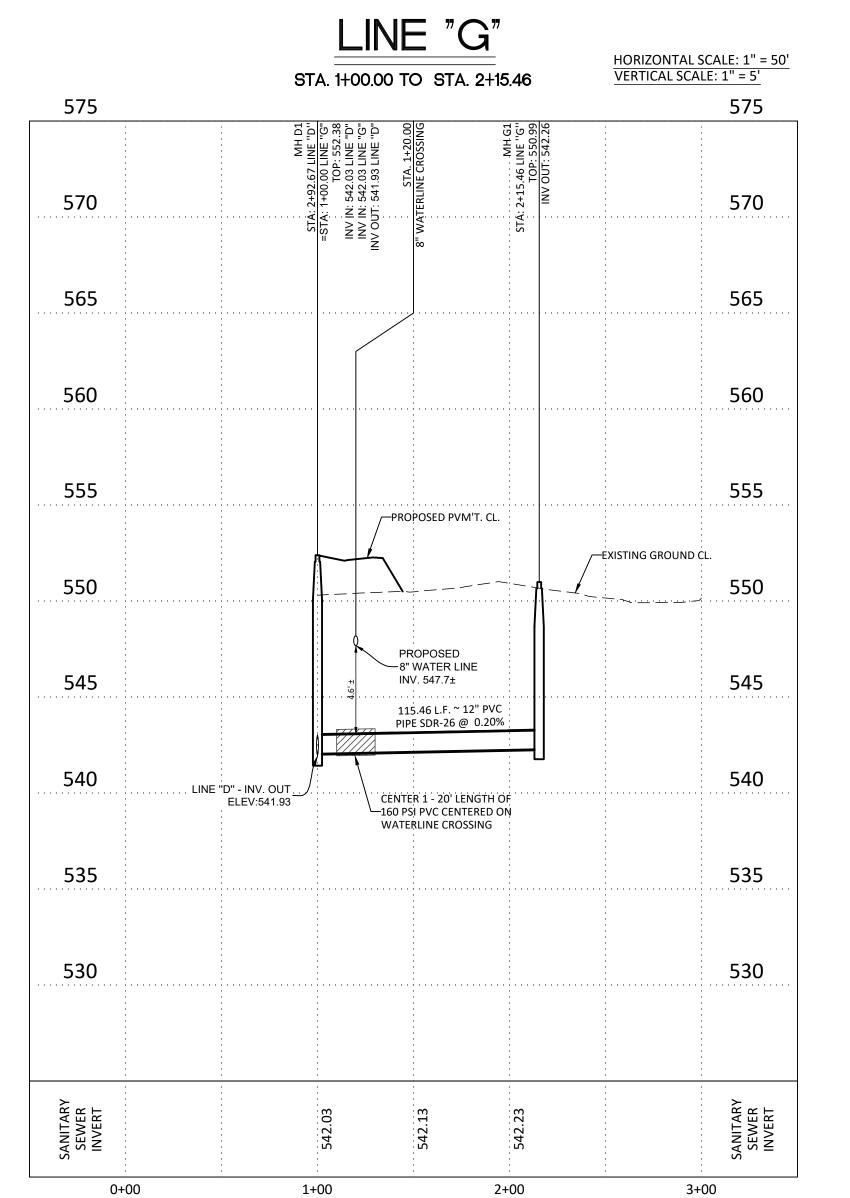
O.P.R.M.C.T.

SCALE: 1"=50'

OPEN SPACE NOTE:

LOTS 901-906, BLOCK 5 AND LOT 901, BLOCK 6,, IS DESIGNATED AS OPEN SPACE AND AS COMMON AREA AND A DRAINAGE, PUBLIC SEWER, PUBLIC WATER, ELECTRIC, GAS, TELEPHONE AND CABLE TV EASEMENT.





LEGEND EXISTING WATER MAIN — — — EX 8"W — — — PROPOSED WATER MAIN PROPOSED FIRE HYDRANT EXISTING FIRE HYDRANT PROPOSED GATE VALVE EXISTING GATE VALVE ----PROPOSED SANITARY SEWER MAIN & MANHOLE EXISTING SANITARY SEWER MAIN & MANHOLE PROPOSED SERVICE LATERAL WITH ONE-WAY CLEAN-OUT VERTICAL STACK VS ELECTRIC, GAS, TELEPHONE & CABLE TV EASEMENT E.G.T.CA.E. TEMPORARY BENCHMARK PROPOSED MINIMUM FINISH FLOOR ELEVATION MIN. F.F. = <u>795.5</u> SANITARY SEWER/WATER CROSSING LOCATION \bigcirc

OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS

OFFICIAL PUBLIC RECORDS OF MEDINA COUNTY, TEXAS

Moy Tarin Ramirez Engine
TBPELS: ENGINEERING F-5297/SURVEYING

PAUL LANDA, JR.

100182

STONAL ENGRY

0

 ∞

S

ANITARY

2. IT IS ESSENTIAL THAT 48 HOURS PRIOR TO CONSTRUCTION ALL UTILITY COMPANIES BE NOTIFIED TO LOCATE AND TAG THEIR UNDERGROUND FACILITIES PRIOR TO EXCAVATION.

3. THE CONTRACTOR NEEDS TO ALLOW FOR THE POSSIBILITY OF UNDETECTED UNDERGROUND UTILITIES. ALSO, THE CONTRACTOR MUST ALLOW FOR CHANGES DUE

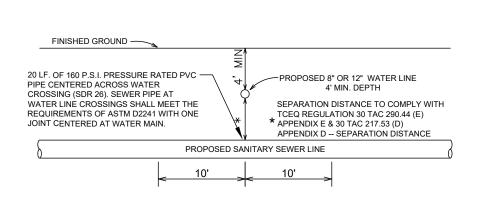
3. THE CONTRACTOR NEEDS TO ALLOW FOR THE POSSIBILITY OF UNDETECTED UNDERGROUND UTILITIES. ALSO, THE CONTRACTOR MUST ALLOW FOR CHANGES DUE TO UTILITIES BEING IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE UTILITY RECORD DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND EXPOSING CONFLICTS PRIOR TO CONSTRUCTION.

1. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY.

ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY CONTRACTOR PRIOR TO THE CONSTRUCTION AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION

TRENCH EXCAVATION SAFETY PROTECTION

Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The Contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

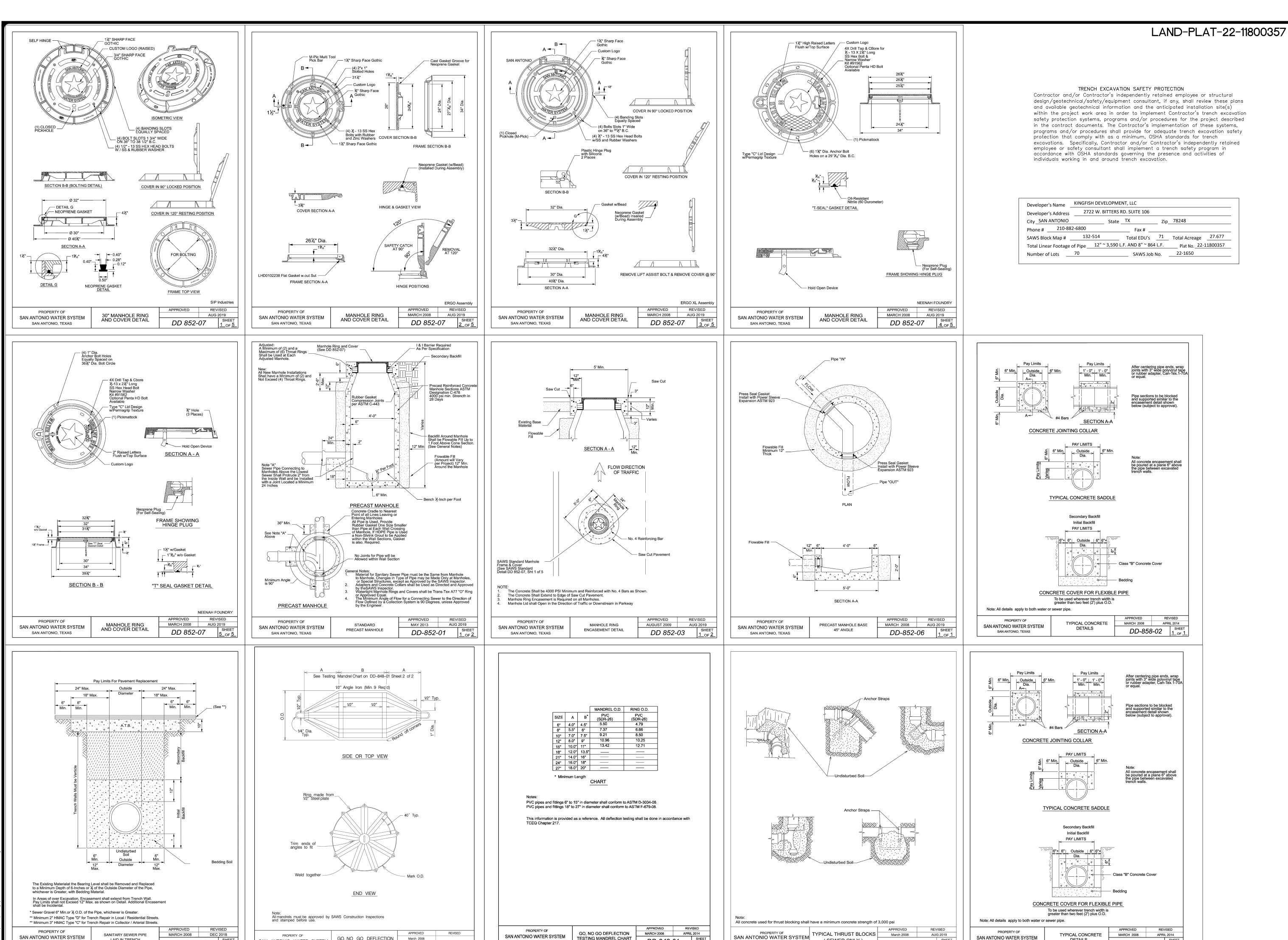


TYPICAL SANITARY SEWER/ WATER CROSSING DETAIL N.T.S.

SEWER: LOWER MEDINA RIVER WATERSHED - DOS RIOS W.R.C.

Developer's Name	KINGFISH DEV	ELOPME	NT, LLC			
Developer's Address	2722 W. B	ITTERS F	RD. SUITE 106			
SAN ANTONIO		State	TX	Zip_	78248	
Phone #210-88	2-6800		Fax #			
SAWS Block Map #	132-514		Total EDU's	70	Total Acreage	27.677
Total Linear Footage of Pipe 12" ~ 3,590 L.F. AND 8" ~ 864 L.F. Plat No. 22-11800357						
Number of Lots	70		SAWS Job	No.	22-1650	

SHEET



TESTING MANDREL CHART

SAN ANTONIO, TEXAS

DD-848-01

(SEWER ONLY)

SAN ANTONIO, TEXAS

DD-839-03

GO, NO GO DEFLECTION

TESTING MANDREL

AN ANTONIO WATER SYSTEM

SAN ANTONIO, TEXAS

LAID IN TRENCH

SAN ANTONIO, TEXAS

DD-804-01

March 2008

DD-848-01

SUBMITTAL SET

DETAILS

SAN ANTONIO, TEXAS

DD-858-02 1 SHEET 1 OF 1

SHEET

PAUL LANDA, JR. 100182

S

AR

ANIT

SUBMITTED BY:

MOY TARIN RAMIREZ ENGINEERS, LLC. 12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249 TEL: (210) 698-5051 FAX: (210) 698-5085

OWNER/DEVELOPER

KINGFISH DEVELOPMENT, LLC 2722 W. BITTERS RD. SUITE 106 SAN ANTONIO, TX. 78233 210-882-6800

SAWS CONSTRUCTION NOTES **COUNTER PERMIT AND GENERAL CONSTRUCTION PERMIT**

General Section

1. All materials and construction procedures within the scope of this contract shall be approved by the San Antonio Water System (SAWS) and comply with the Plans, Specifications, General Conditions and with the following as applicable: A. Current Texas Commission on Environmental Quality (TCEQ) "Design Criteria for Domestic Wastewater System",

B. Current TXDOT "Standard Specifications for Construction of Highways, Streets and Drainage".

Texas Administrative Code (TAC) Title 30 Part 1 Chapter 217 and "Public Drinking Water", TAC Title 30 Part 1

C. Current "San Antonio Water System Standard Specifications for Water and Sanitary Sewer Construction". D. Current City of San Antonio "Standard Specifications for Public Works Construction". E. Current City of San Antonio "Utility Excavation Criteria Manual" (UECM).

2. The contractor shall not proceed with any pipe installation work until they obtain a copy of the approved Counter Permit or General Construction Permit (GCP) from the consultant and has been notified by SAWS Construction Inspection Division to proceed with the work and has arranged a meeting with the inspector and consultant for the work requirements. Work completed by the contractor without an approved Counter Permit and/or a GCP will be subject to removal and replacement at the expense of the contractors and/or the developer

3. The Contractor shall obtain the SAWS Standard Details from the SAWS website,

http://www.saws.org/business center/specs. Unless otherwise noted within the design plans.

4. The Contractor is to make arrangements with the SAWS Construction Inspection Division at (210) 233-2973, on notification procedures that will be used to notify affected home residents and/or property owners

48 hours prior to beginning any work 5. Location and depth of existing utilities and service laterals shown on the plans are understood to be approximate. Actual locations and depths must be field verified by the Contractor at least 1 week prior to construction. It shall be the

Contractor's responsibility to locate utility service lines as required for construction and to protect them during construction 6. The Contractor shall verify the exact location of underground utilities and drainage structures at least 1-2 weeks prior to

construction whether shown on plans or not. Please allow up to 7 business days for locates requesting pipe location markers on SAWS facilities. The following contact information are supplied for verification purposes:

 SAWS Utility Locates: http://www.saws.org/Service/Locates COSA Drainage (210) 207-0724 or (210) 207-6026 COSA Traffic Signal Operations (210) 206-8480

COSA Traffic Signal Damages (210) 207-3951

Texas State Wide One Call Locator 1-800-545-6005 or 811

7. The Contractor shall be responsible for restoring existing fences, curbs, streets, driveways, sidewalks, landscaping and structures to its original or better condition if damages are made as a result of the project's construction. 8. All work in Texas Department of Transportation (TxDOT) and/or Bexar County right-of-way shall be done in accordance with

respective construction specifications and permit requirements. 9. The Contractor shall comply with City of San Antonio or other governing municipality's tree ordinances when excavating

10. The Contractor shall not place any waste materials in the 100-year Flood Plain without first obtaining an approved Flood Plain Permit. 11. Holiday Work: Contractors will not be allowed to perform SAWS work on SAWS recognized holidays. Request should be

Weekend Work: Contractors are required to notify the SAWS Inspection Construction Department 48 hours in advance to

request weekend work. Request should be sent to constworkrea@saws.org. Any and all SAWS utility work installed without holiday/weekend approval will be subject to be uncovered for proper

12. Compaction note (Item 804): The contractor shall be responsible for meeting the compaction requirements on all trench backfill and for paying for the tests performed by a third party. Compaction tests will be done at one location point randomly selected, or as indicated by the SAWS Inspector and/or the test administrator, per each 12-inch loose lift per 400 linear feet at a minimum. This project will not be accepted and finalized by SAWS without this requirement being met and verified by providing all necessary documented test results.

13. A copy of all testing reports shall be forwarded to SAWS Construction Inspection Division.

Water Section

1. Prior to tie-ins, any shutdowns of existing mains of any size must be coordinated with the SAWS Construction Inspection Division at least one week in advance of the shutdown. The Contractor must also provide a sequence of work as related to the tie-ins; this is at no additional cost to SAWS or the project and it is the responsibility of the Contractor to sequence the work accordingly.

 For water mains 12" or higher: SAWS Emergency Operations Center (210) 233-2014 2. Asbestos Cement (AC) pipe, also known as transite pipe which is known to contain asbestos- containing material (ACM),

may be located within the project limits. Special waste management procedures and health and safety requirements will be applicable when removal and/or disturbance of this pipe occurs. Such work is to be made under Special Specification Item No. 3000, "Special Specification for Handling Asbestos Cement Pipe". 3. Valve removal: Where the contractor is to abandon a water main, the control valve located on the abandoning branch will

be removed and replaced with a cap/plug. (NSPI) 4. Suitable anchorage/thrust blocking or joint restraint shall be provided at all of the following main locations: dead ends, plugs, caps, tees, crosses, valves, and bends, in accordance with the Standard Drawings DD-839 Series and Item No. 839, in

5. All valves shall read "open right". 6. PRVs Required: Contractor to verify that no portion of the tract is below ground elevation of 750 feet where the static pressure will normally exceed 80 PSI. At all such locations where the ground level is below 750 feet, the Developer or Builder shall install at each lot, on the customer's side of the meter, an approved type pressure regulator in conformance

with the Plumbing Code of the City of San Antonio. No dual services allowed for any lot(s) if *PRV is/are required for such lot(s), only single service connections shall be allowed.

the SAWS Standard Specifications for Construction.

*Note: A pressure regulator is also known as a pressure reducing valve (PRV). 7. Pipe Disinfection with Dry HTH for Projects less than 800 linear feet. (Item No. 847.3): Mains shall be disinfected with dry

HTH where shown in the contract documents or as directed by the Inspector, and shall not exceed a total length of 800 feet. This method of disinfection will also be followed for main repairs. The Contractor shall utilize all appropriate safety measure to protect his personnel during disinfection operations. 8. Backflow Prevention Devices:

All irrigation services within residential areas are required to have backflow prevention devices.

 All commercial backflow prevention devices must be approved by SAWS prior to installation. 9. Final connection to the existing water main shall not be made until the water main has been pressure tested, chlorinated, and SAWS has released the main for tie-in and use.

10. Division Valves: Division Valves shown on plans or not shown on plans but found in the field shall only be operated by SAWS Distribution and Collection staff and only with prior written approval of the SAWS Director of Production and Operations and proper coordination with all SAWS departments. Contractor shall provide written notification to the inspector a minimum of two weeks in advance to start the coordination process and will be informed by the Inspector when the division valve will be operated by the SAWS Distribution and Collection staff. The Division Valve can only be operated by SAWS Distribution and Collection staff member not the inspector or the contractor. Operation of a Division Valve without the express prior written approval of the SAWS Distribution and Collection staff will constitute a material breach of any written SAWS contract or permit in addition to subjecting the Contractor to liability for any and all fines, fees, or other damages, direct or consequential, that may arise from or be caused by the operation of the valve without prior written permission. Please be informed that the approval of the operation or opening or closing of a division valve can take several weeks for approval. Division Valves will also have a valve lid labeled Division Valve and a locking mechanism installed with a key. The lock and key mechanism will be paid for by the contractor but will be installed by SAWS Distribution and Collection staff.

VERDIN SUBDIVISION, UNIT 1 WATER IMPROVEMENTS

NOTE TO CONTRACTOR:

BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT. THE BIDDER WARRANT THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS. SPECIFICATIONS AND ALL OTHER CONTRAC DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT OR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES

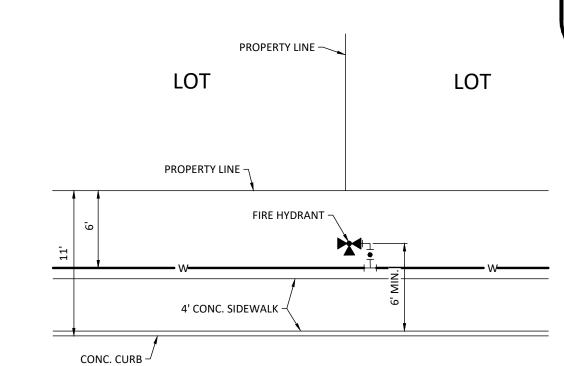
THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT FACH INDIVIDUAL UTILITY. FOR ASSISTANCE IN DETERMINING EXISTING LITH ITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.

TRAFFIC CONTROL NOTE:

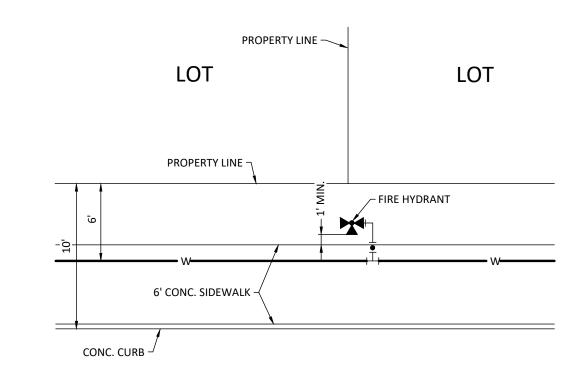
NECESSARY TRAFFIC CONTROL, FLAGMEN, DETOUR ROUTING AROUND WORK ACTIVITIES AND MAINTENANCE OF DETOUR SIGNS ARE THE CONTRACTOR'S RESPONSIBILITY. UNLESS DIRECTED OTHERWISE BY THE PLANS, IN ALL AREAS WHERE WORK IS ADJACENT TO OR CROSSING ROADWAYS, THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE OPEN TRAFFIC LANE (12 FT.), CONTROLLED WITH FLAGMEN, DURING WORKING HOURS. DURING ALL NON-WORKING HOURS A MINIMUM OF TWO TRAFFIC LANES (24 FT.) SHALL BE OPEN TO TRAFFIC. CONTRACTOR WILL FURNISH AND MAINTAIN ALL REQUIRED TRAFFIC CONTROL DEVICES PER TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD), TO PROPERLY WARN, GUIDE AND CONTROL TRAFFIC

MISCELLANEOUS GENERAL NOTES

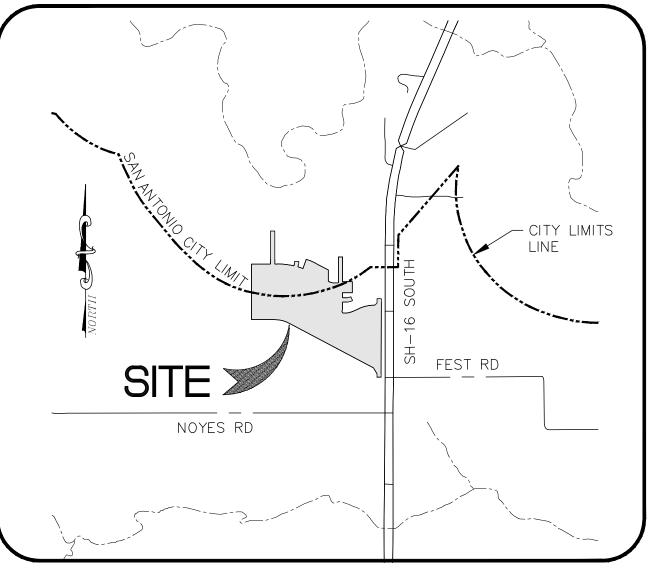
- 1 MACHINE CHI ORINATION BY THE SAN ANTONIO WATER SYSTEM FOR NEW WATER MAINS GREATER THAN 800 FEET, CONTRACTOR SHALL CHLORINATE NEW MAINS WITH HTH FOR NEW WATER MAINS 750 FEET AND LESS.
- JUMPER CONNECTIONS TO EXISTING WATER SERVICE TO BE PROVIDED AS REQUIRED OR DIRECTED BY THE SAWS INSPECTOR.
- 4. FITTINGS WEIGHT IS BASED ON M.J. DUCTILE IRON FITTINGS (COMPACT).
- CONTRACTOR TO OBTAIN STREET CUT PERMITS AS NECESSARY FOR WATER MAIN INSTALLATION, REPLACEMENT OF CURB, SIDEWALKS, BASE AND PAVEMENT WILL BE SURSIDIARY TO THE ITEMS THAT THE STREET CUT WAS NEEDED FOR
- *6. MINIMUM COVER OVER WATER MAIN BASED ON FINISHED GROUND. WATER LINE DIA. MIN. DEPTH



TYPICAL FIRE HYDRANT DETAIL FOR LOCAL A



TYPICAL FIRE HYDRANT DETAIL FOR LOCAL B



VICINITY MAP

SUBMITTAL DATE:

PAUL LANDA, JR.

• Engineers

Surveyors

LEGAL DESCRIPTION:

BEING A 27.677 TRACT OF LAND PARTIALLY WITHIN THE CITY OF SAN ANTONIO, NEW CITY BLOCK 16595, BEXAR COUNTY, TEXAS, BEING SITUATED IN THE RUFENO RODRIGUEZ SURVEY NO. 49, ABSTRACT NO. 613, COUNTY BLOCK NO. 4202, BEING A PORTION OF A 131.81 ACRE TRACT, AS CONVEYED TO KINGFISH DEVELOPMENT, LLC BY WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN DOCUMENT NUMBER 20220169411, BEXAR COUNTY TEXAS.

Moy Tarin Ramirez Engineers, LLC

FIRM TBPELS ENG F-5297 SVY F-10131500

12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051

SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

SHEET INDEX

WATER COVER

WATER OVERALL

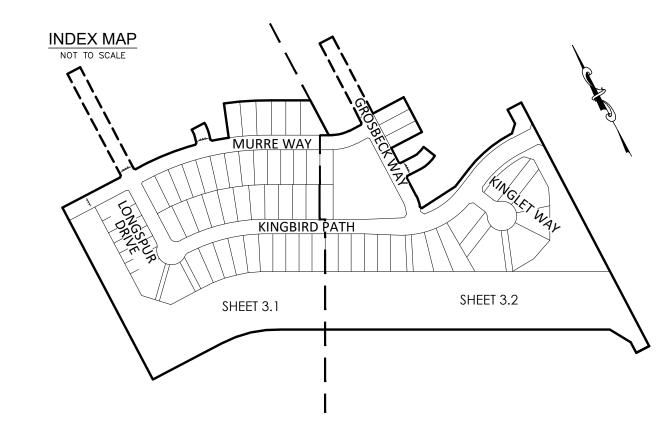
WATER DETAILS

WATER DETAILS

WATER OVERALL PLAN

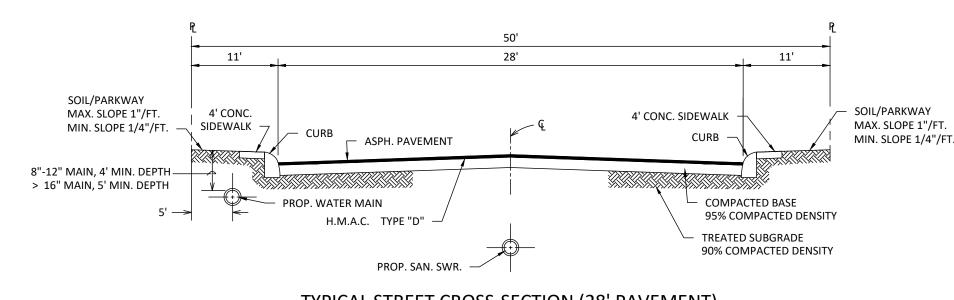
SHEET NO. TITLE

TYPICAL METER BOX DETAIL



ESTIMATED WATER QUANTITIES

ITEM	DESCRIPTION	UNIT	EST/QTY
1	Trench Excavation Protection	L.F.	3,570
2	Water Main Tie-In	EA.	1
3	8" Pipe, C900 DR 18 PVC Class 235 (Incl. Restraints)	L.F.	3,173
4	8" Pipe, D.I.	L.F.	75
5	2" Pipe, HDPE, DR 9	L.F.	322
6	8" Gate Valve, M.J.	EA.	13
7	16" Gate Valve, M.J.	EA.	1
8	Standard Fire Hydrant	EA.	6
9	2" Permanent Blow-off	EA.	5
10	2" Temporary Blow-off	EA.	1
11	3/4" Single Service: Short	EA.	51
12	3/4" Single Service: Long	EA.	19
13	Irrigation Service: Short	EA.	2
14	D.I. Fittings	TON	4.37
15	Hydrostatic Testing	EA.	1
16	16" x 8" Cut-In Tee	EA.	1
17	Meter Boxes	EA.	72



TYPICAL STREET CROSS-SECTION (28' PAVEMENT)

THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC. SECONDARY ELECTRIC. PRIMARY ELECTRICAL DUCT BANKS. LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON

TRENCH EXCAVATION SAFETY PROTECTION Contractor and/or Contractor's independently retained employee or structural design/geotechnical/safety/equipment consultant, if any, shall review these plans and available geotechnical information and the anticipated installation site(s) within the project work area in order to implement Contractor's trench excavation safety protection systems, programs and/or procedures for the project described in the contract documents. The Contractor's implementation of these systems, programs and/or procedures shall provide for adequate trench excavation safety protection that comply with as a minimum, OSHA standards for trench excavations. Specifically, Contractor and/or Contractor's independently retained employee or safety consultant shall implement a trench safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.

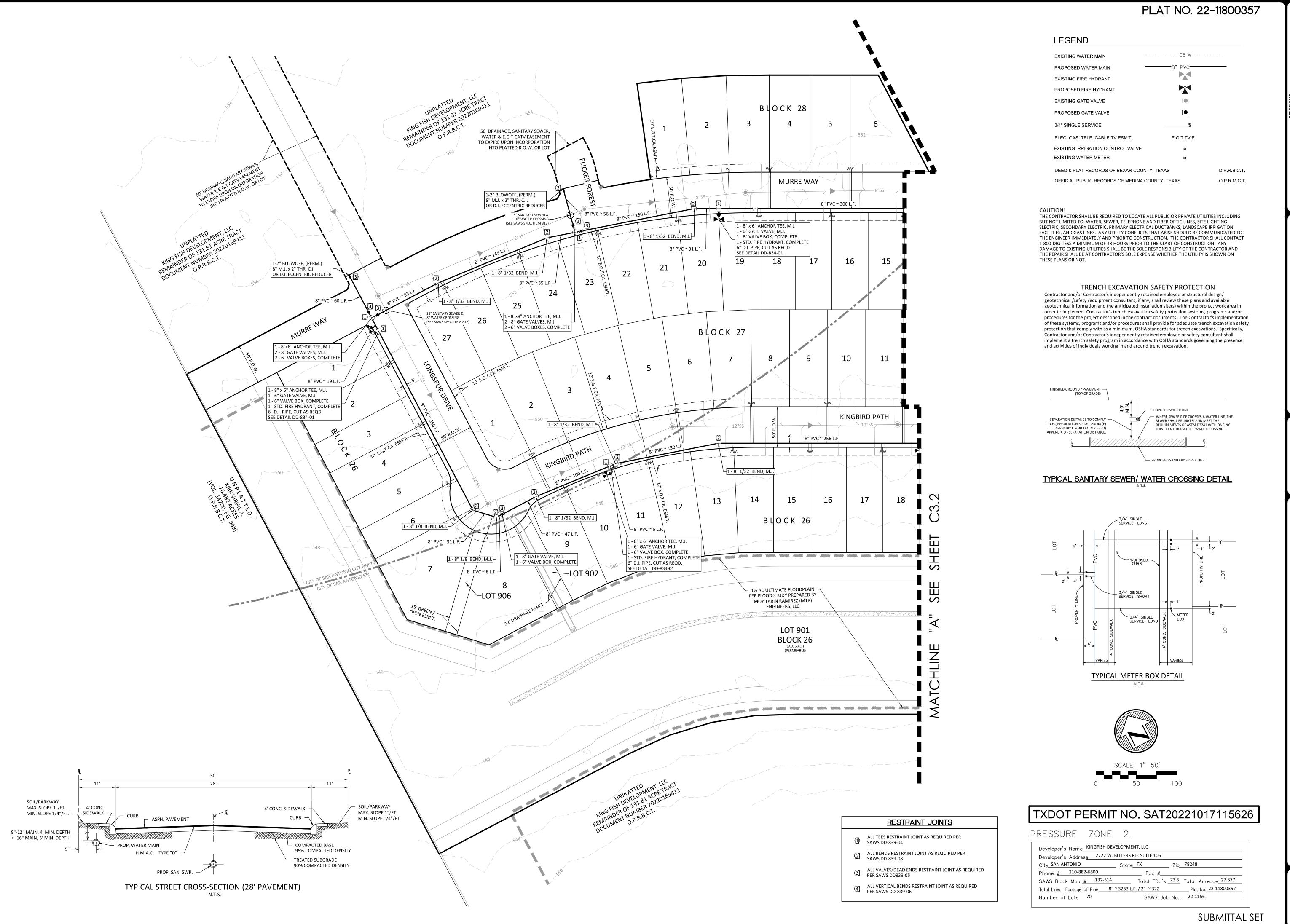
TXDOT PERMIT NO. SAT20221017115626

PRESSURE 70NF 2

NLOSUNL ZUNL Z					
Developer's Name	KINGFISH DEVELOPM	ENT, LLC			
Developer's Address	2722 W. BITTERS	RD. SUITE 106			
City SAN ANTONIO	State	TX	_ Zip_	78248	
Phone #210-88	2-6800	Fax #			
SAWS Block Map #	132-514	Total EDU's	72	Total Acreage	27.677
Total Linear Footage	of Pipe <u>8" ~ 3263 L.</u>	F. / 2" ~ 322 L.F.		Plat No. 22-1	1800357
Number of Lots	70	SAWS Job	No.	22-1156	

SUBMITTAL SET TEXAS C3.0

BEXAR COUNTY



NO. DATE

DESCRIPTION

PROJ. # DGN. BY: DWN. BY:

• Surveyors
• Planners

rez Engineers, LLC

297/SURVEYING: F-10131500
ITE 100 TEL: (210) 698-5051

Moy Tarin Ramirez E
TBPELS: ENGINEERING F-5297/SU
12770 CIMARRON PATH, SUITE 100
SAN ANTONIO, TEXAS 78249

PAUL LANDA, JR.

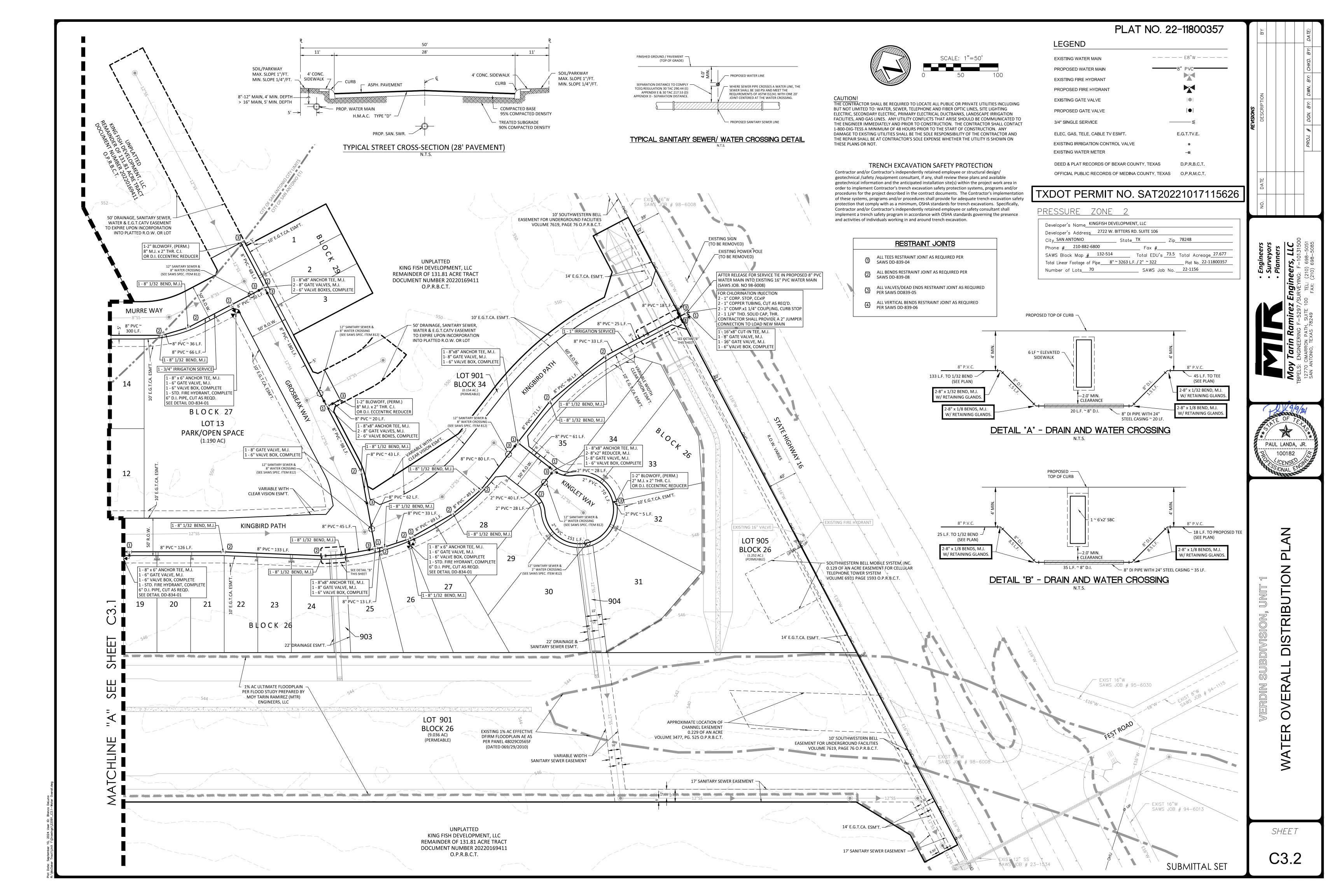
100182

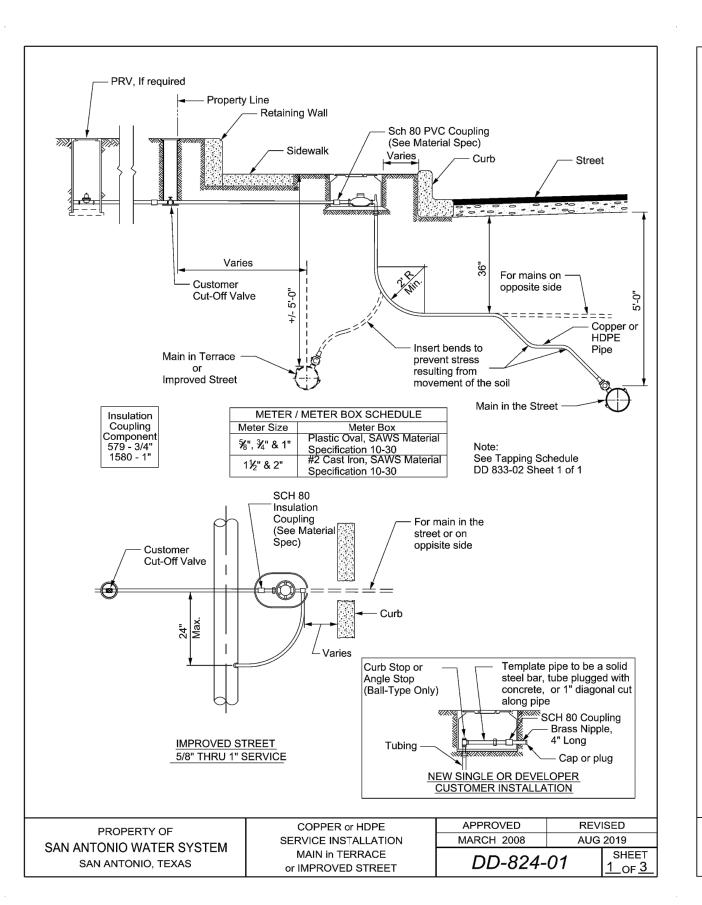
CENSE ON A CONTROL OF THE OF THE

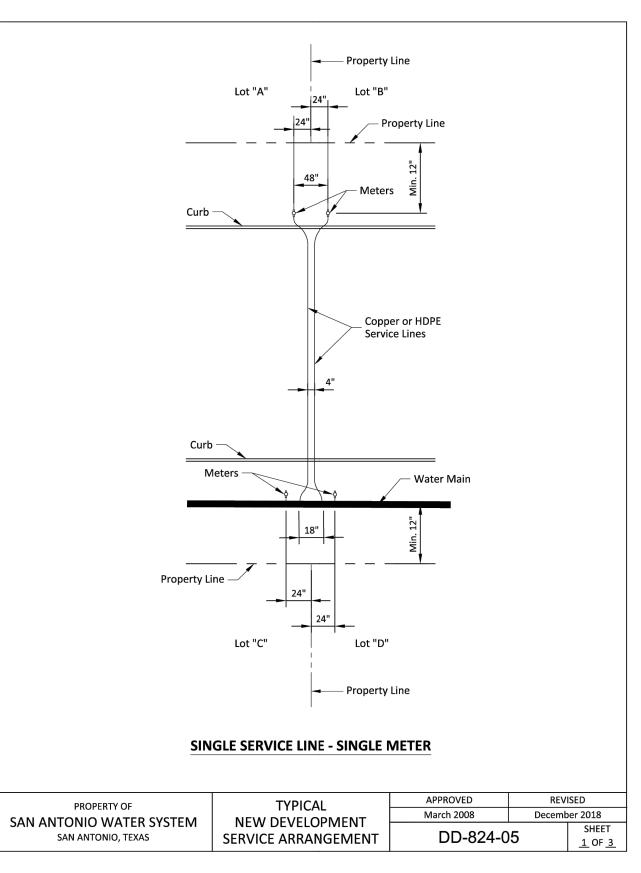
WATER OVERALL DISTRIBUTION PLAI

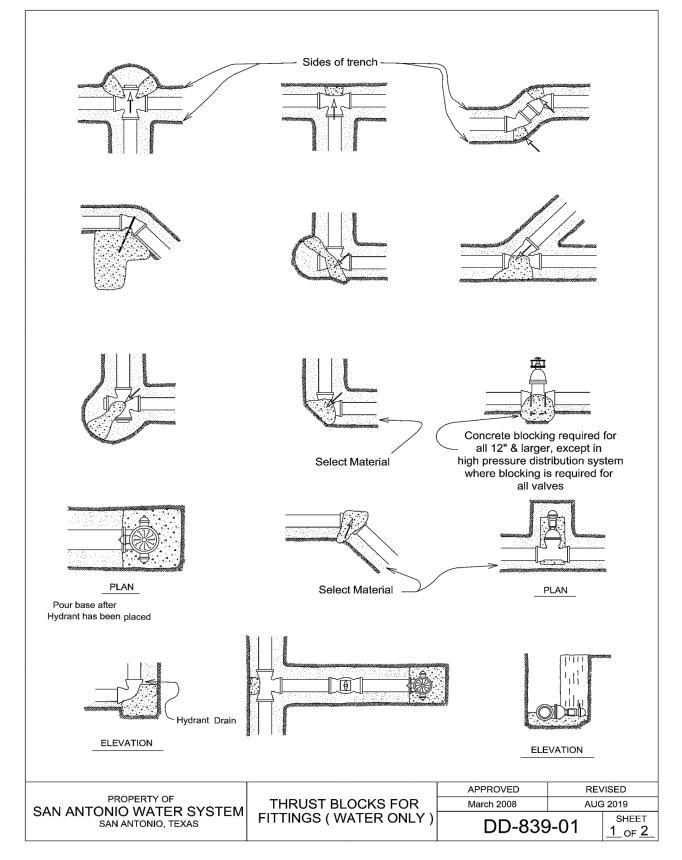
SHEET

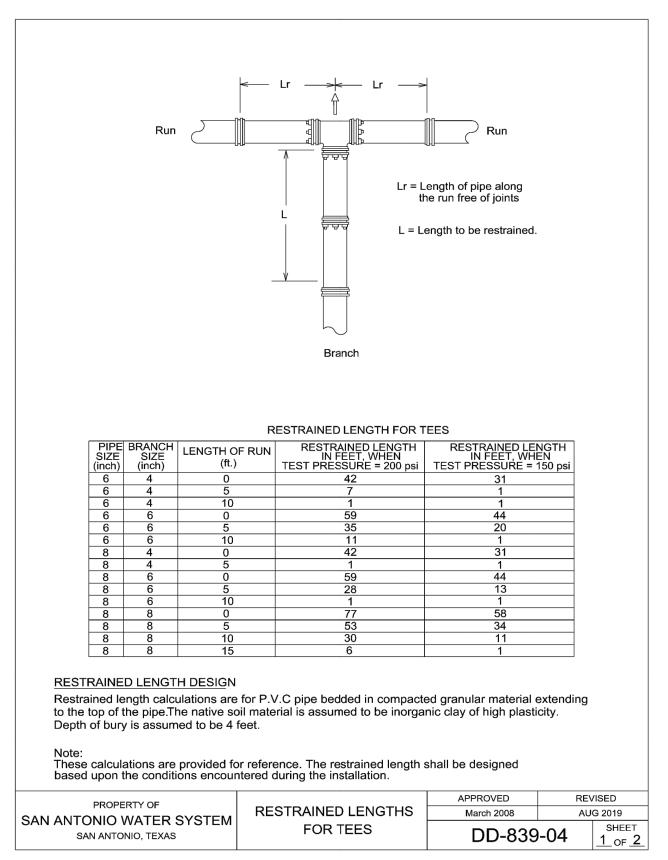
C3.1

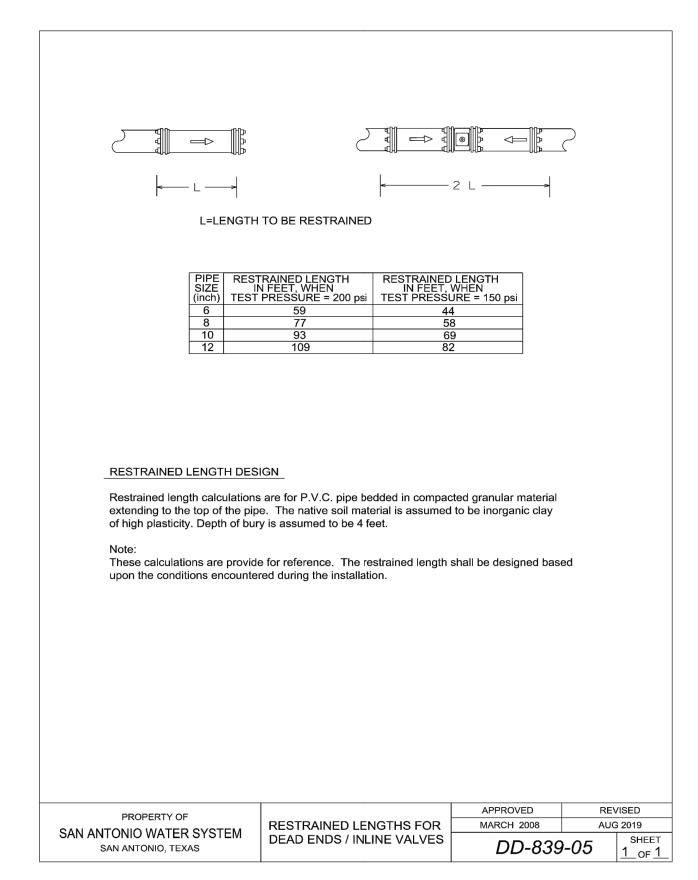


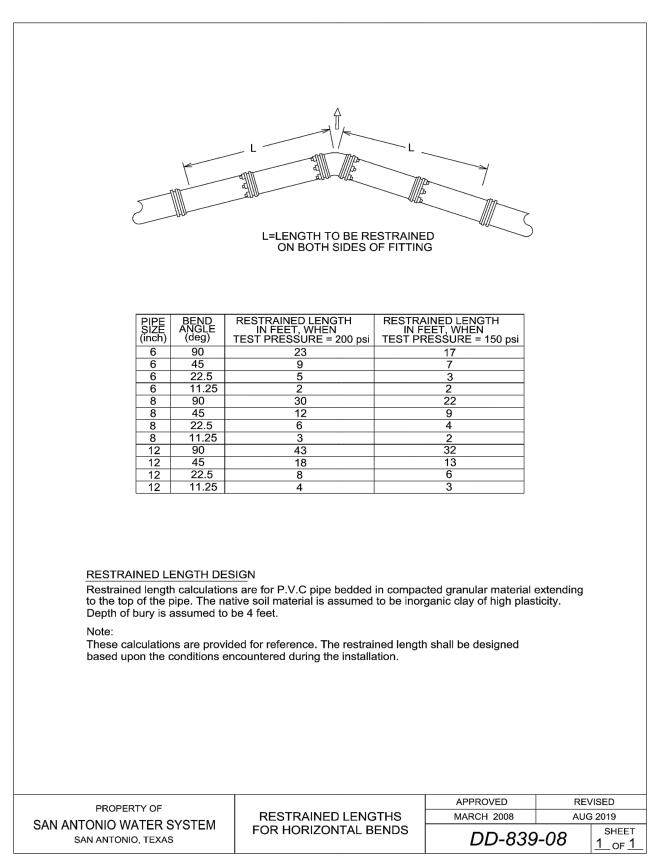


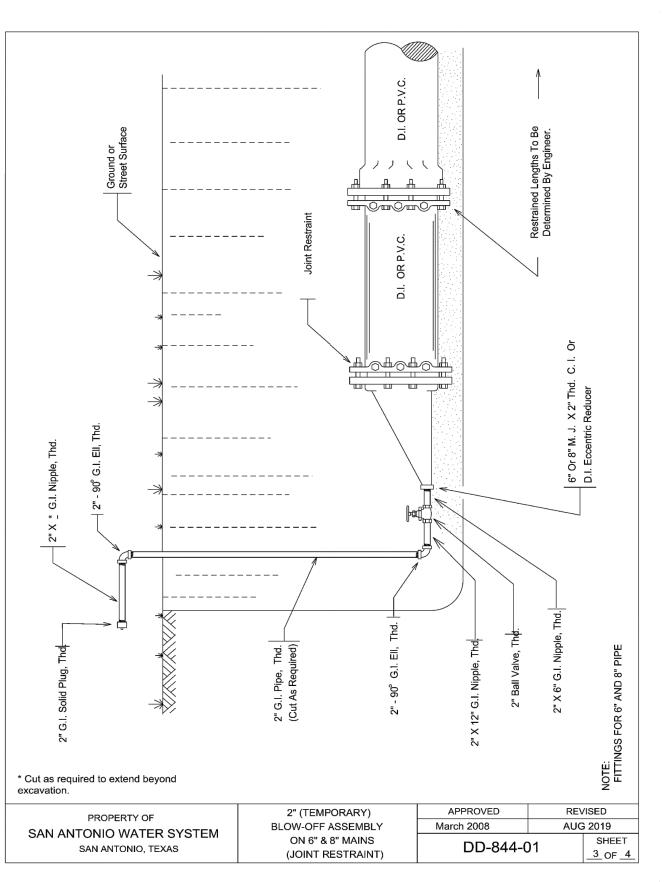


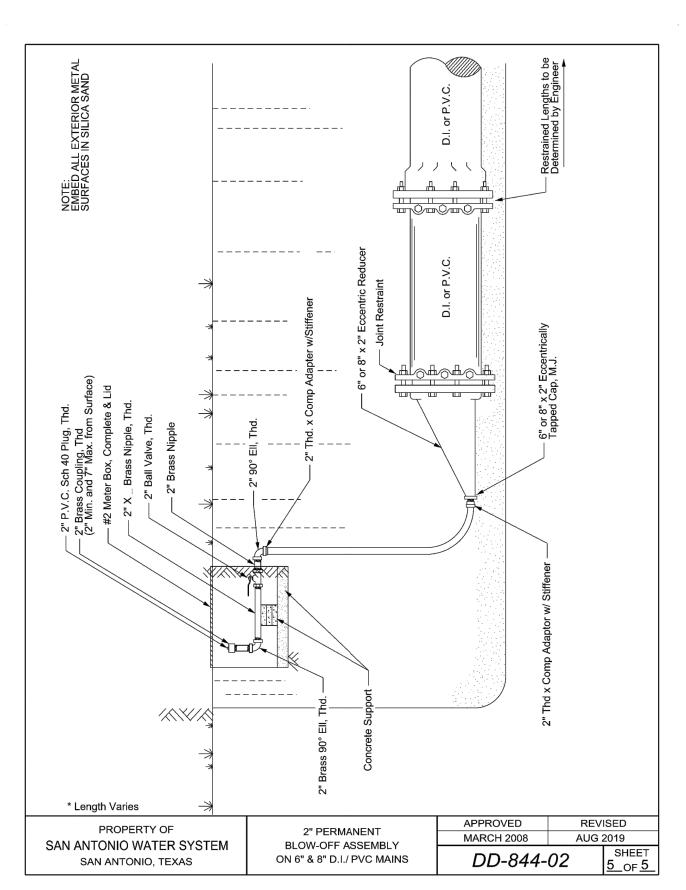












TXDOT PERMIT NO. SAT20221017115626

 PRESSURE ZONE 2

 Developer's Name_KINGFISH DEVELOPMENT, LLC

 Developer's Address_ 2722 W. BITTERS RD. SUITE 106

 City_SAN ANTONIO
 State_TX
 Zip_ 78248

 Phone #_ 210-882-6800
 Fax #_

 SAWS Block Map #_ 132-514
 Total EDU's _73.5
 Total Acreage_27.677

 Total Linear Footage of Pipe__ 8"~3263 L.F./2"~322
 Plat No. 22-11800357

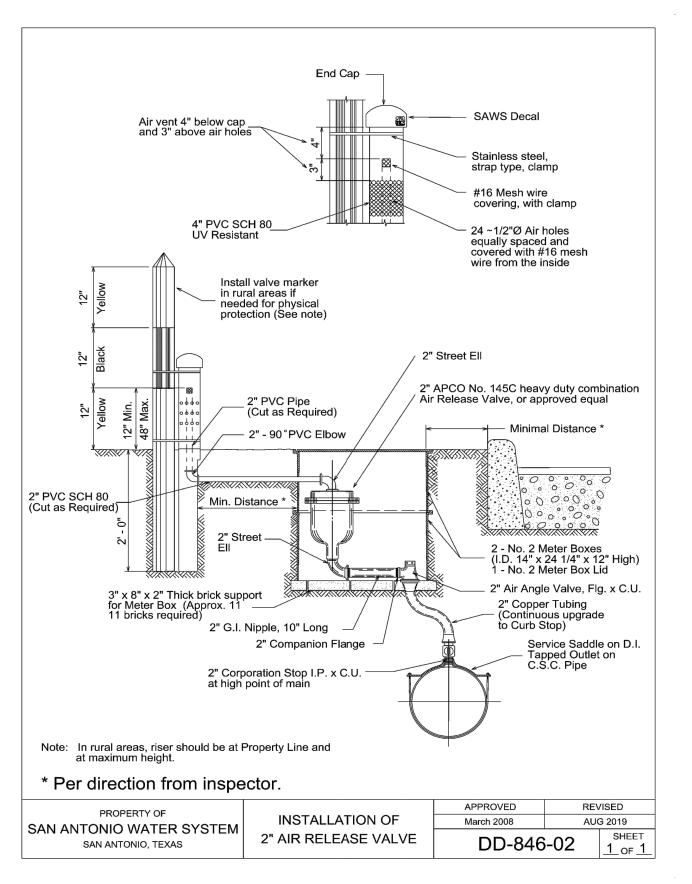
 Number of Lots__70
 SAWS Job No. __ 22-1156

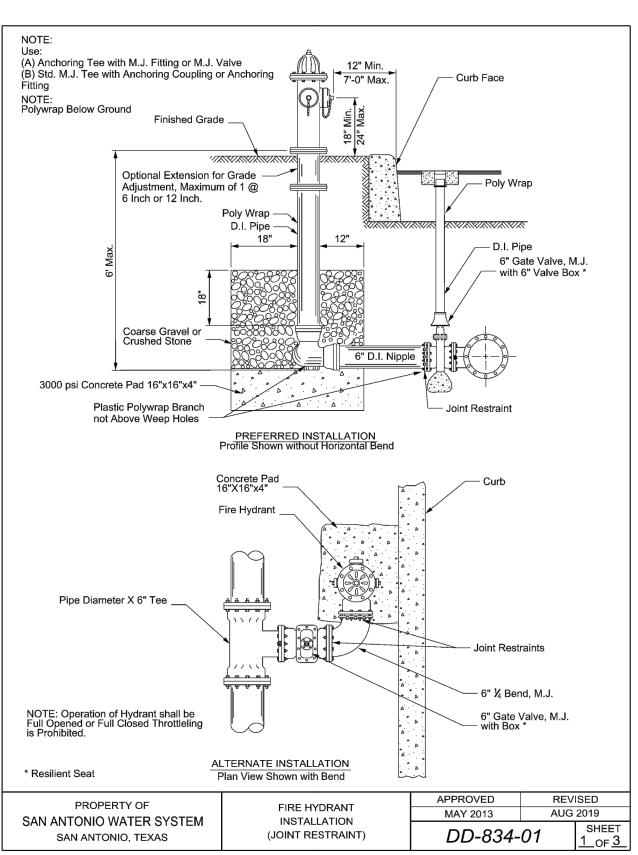
SUBMITTAL SET

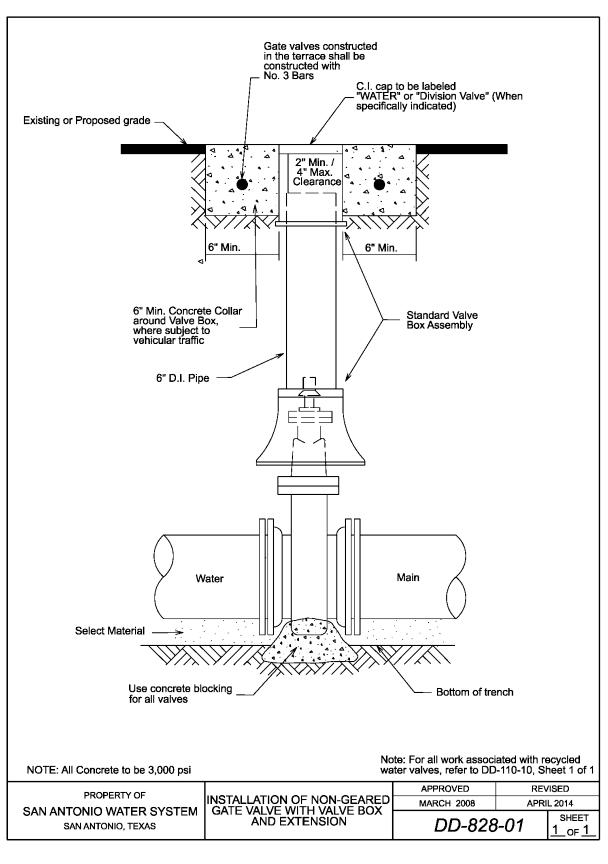
SHEET **C3.3**

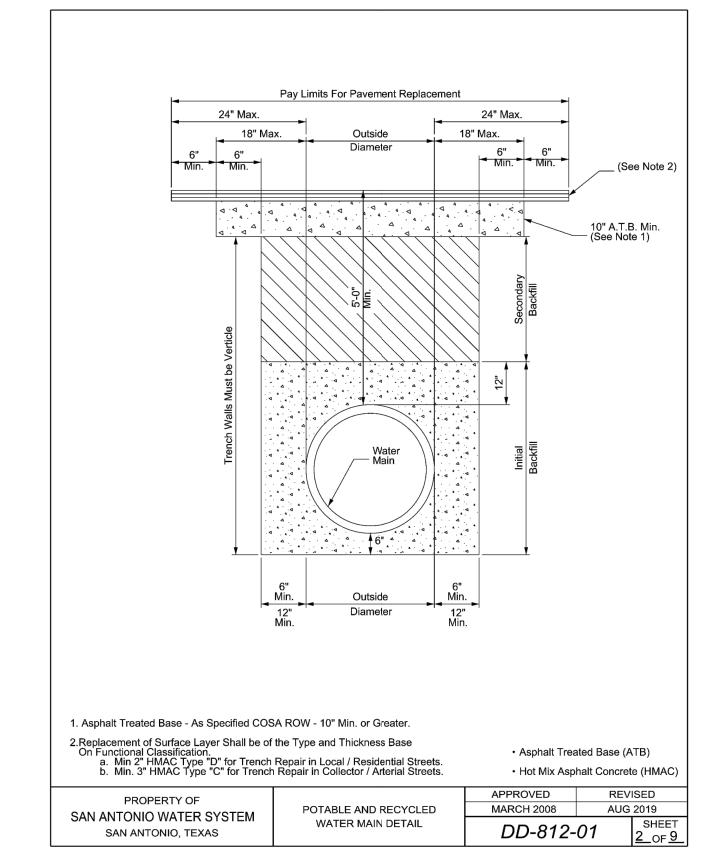
PAUL LANDA, JR.

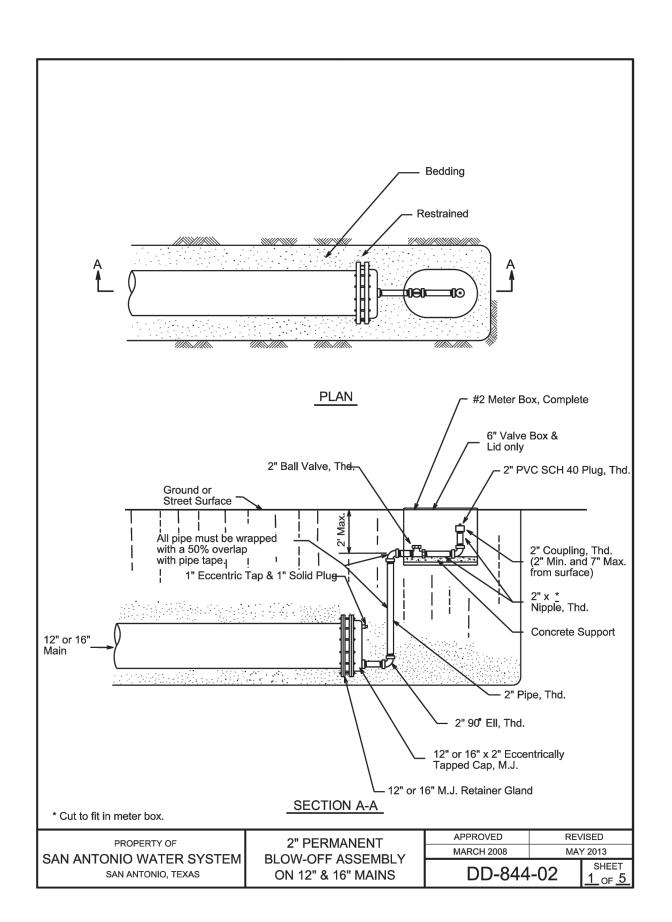
WATER

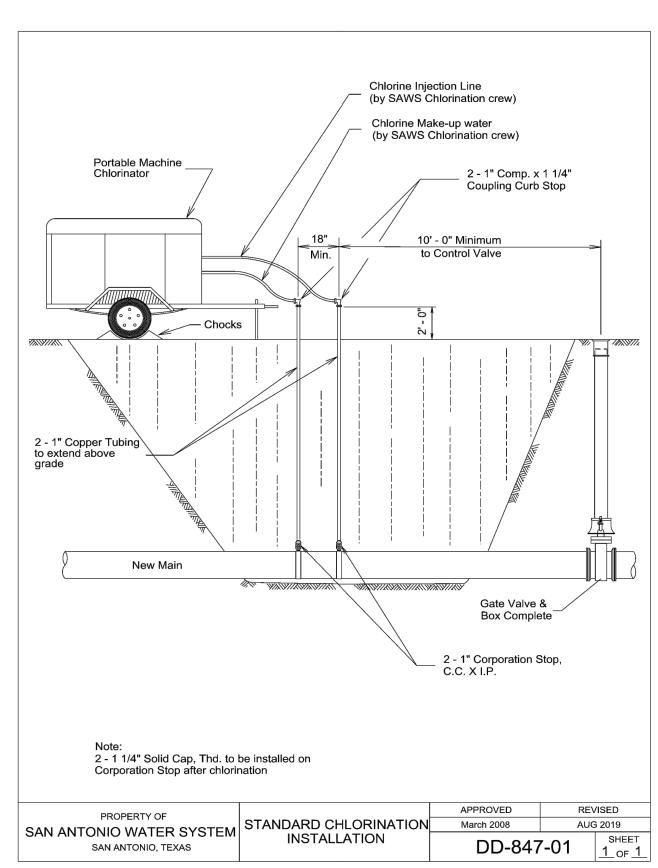


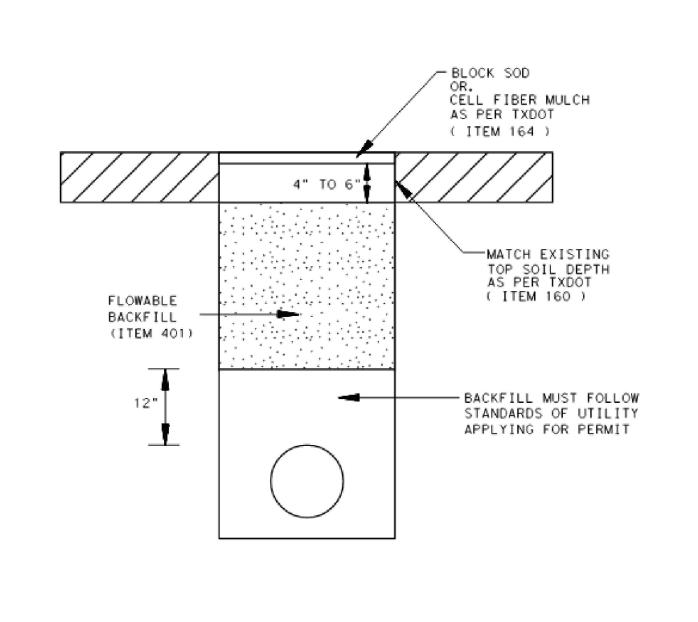


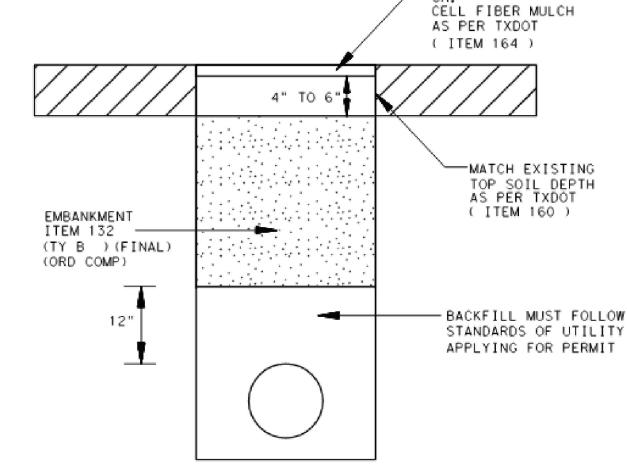












∠ BLOCK SOD

TRENCH DETAIL (NON PAVEMENT) LESS THAN OR EQUAL TO 10' FROM CURB/OR EDGE OF PAVEMENT

TRENCH DETAIL (NON PAVEMENT) MORE THAN 10' FROM CURB/OR EDGE OF PAVEMENT

PRESSURE ZONE 2

Developer's Name_KINGFISH DEV	ELOPMENT, LLC		
Developer's Addres <u>s</u> 2722 W. E			
City_SAN ANTONIO			78248
Phone # <u>210-882-6800</u>	Fax #_		
SAWS Block Map <u>#</u> 132-514	Total EDU	's <u>73.5</u>	Total Acreage 27.677
Total Linear Footage of Pipe8"	~ 3263 L.F. / 2" ~ 322		Plat No22-11800357
Number of Lots <u>70</u>	SAWS .	Job No.	22-1156

TXDOT PERMIT NO. SAT20221017115626

• PIPE 24" OR LESS USE 1' FROM O/D OF PIPE TO EXCAVATED WALLS
• PIPE 24" OR GREATER USE 2' FROM O/D OF PIPE TO EXCAVATED WALLS

TX-DOT SAN ANTONIO DISTRICT TRENCH BACKFILL DETAIL NON PAVEMENT

PAUL LANDA, JR. 100182 SONAL ENG

> ETAIL **WATER**

SUBMITTED BY:

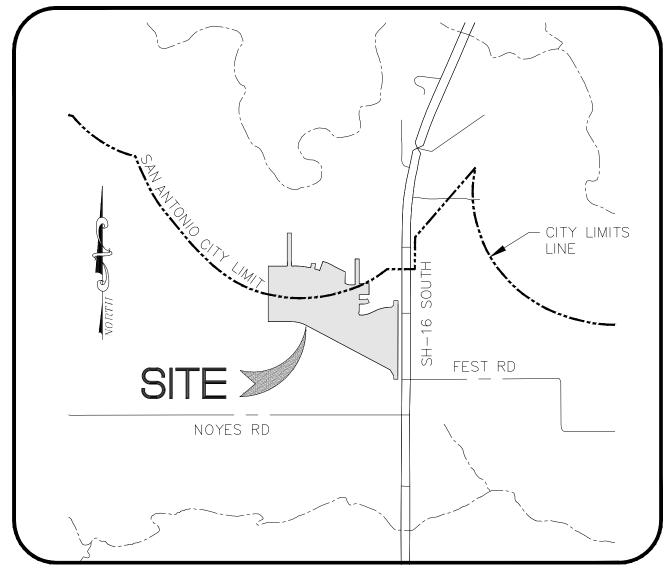
MOY TARIN RAMIREZ ENGINEERS, LLC. 12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249 TEL: (210) 698-5051 FAX: (210) 698-5085

OWNER/DEVELOPER

KINGFISH DEVELOPMENT, LLC 2722 W. BITTERS RD. SUITE 106 SAN ANTONIO, TX 78248 210-882-6800

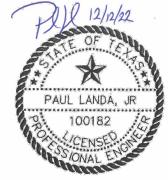
VERDIN SUBDIVISION, UNIT 1

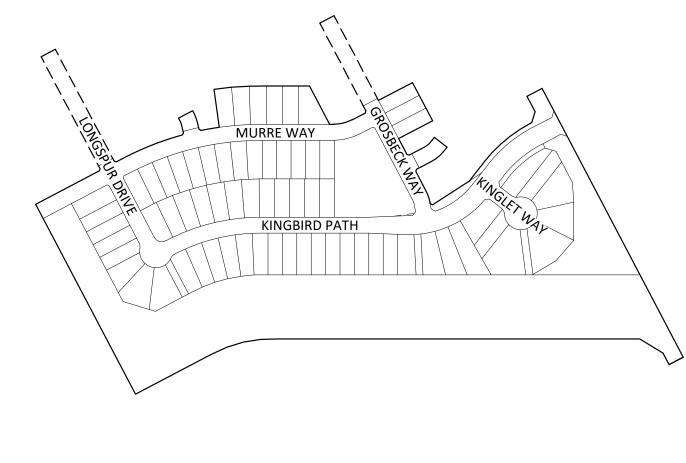
STREET AND DRAINAGE IMPROVEMENTS



SUBMITTAL DATE: SEPTEMBER 2, 2022

BEING A 27.677 TRACT OF LAND PARTIALLY WITHIN THE CITY OF SAN ANTONIO, NEW CITY BLOCK 16595, BEXAR COUNTY, TEXAS, BEING SITUATED IN THE RUFENO RODRIGUEZ SURVEY NO. 49, ABSTRACT NO. 613, COUNTY BLOCK NO. 4202, BEING A PORTION OF A 131.81 ACRE TRACT, AS CONVEYED TO KINGFISH DEVELOPMENT, LLC BY WARRANTY DEED WITH VENDOR'S LIEN AS RECORDED IN DOCUMENT NUMBER 20220169411, BEXAR COUNTY TEXAS.

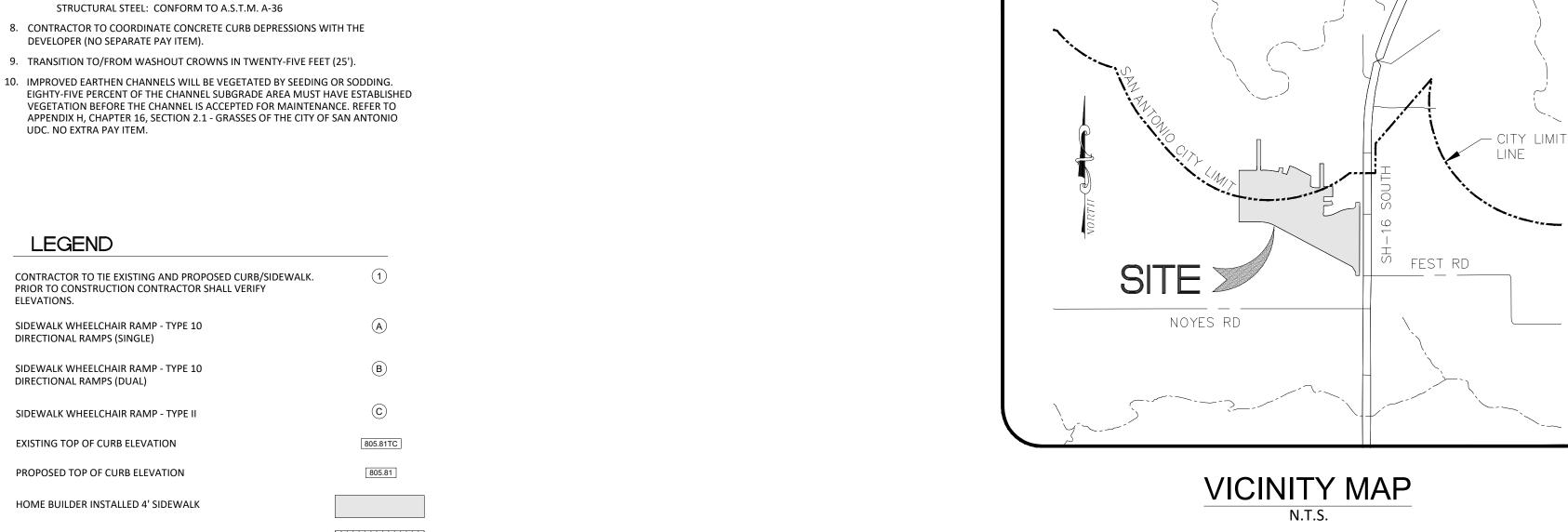




INDEX MAP NOT TO SCALE

SHEET INDEX

SHEET NO.	TITLE
C4.0	STREET COVER
C4.1	TRAFFIC PLAN
C4.2	TRAFFIC PLAN
C4.2A	TXDOT PAVEMENT MARKING DETAIL
C4.3	BEXAR TRAFFIC DETAILS
C4.4	BEXAR TRAFFIC DETAILS
C4.5	COSA TRAFFIC DETAILS
C4.6	KINGBIRD PATH PLAN AND PROFILE
C4.7	KINGBIRD PATH PLAN AND PROFILE
C4.8	GROSBEAK WAY PLAN AND PROFILE
C4.9	LONGSPUR DR PLAN AND PROFILE
C4.10	MURRE WAY PLAN AND PROFILE
C4.11	KINGLET WAY PLAN AND PROFILE
C4.12	STANDARD DETAILS
C4.13	STANDARD DETAILS
C4.14	STANDARD STREET SECTIONS
C4.15	DRAIN "A" PLAN AND PROFILE
C4.16	DRAIN "B" PLAN AND PROFILE
C4.17	DRAIN "C" PLAN AND PROFILE
C4.18	DRAIN "D" PLAN AND PROFILE
C4.19	DRAIN "D" PLAN AND PROFILE
C4.20	DRAIN "G" PLAN AND PROFILE
C4.21	DRAIN "G" DETAILS



LEGAL DESCRIPTION:





12770 CIMARRON PATH, SUITE 100 TEL: (210) 698-5051 SAN ANTONIO, TEXAS 78249 FAX: (210) 698-5085

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE TO THE CITY OF SAN ANTONIO SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

2. ALL CONSTRUCTION IS SUBJECT TO INSPECTION AND APPROVAL BY

UTILITIES PRIOR TO BEGINNING CONSTRUCTION:

TEXAS STATE WIDE ONE CALL LOCATOR

CITY PUBLIC SERVICE

TIME WARNER CABLE

THE TELEPHONE COMPANY DURING CONSTRUCTION.

STRUCTURES OR FENCES (NO SEPARATE PAY ITEM).

7. MATERIAL SPECIFICATIONS:

LEGEND

DEVELOPER INSTALLED 4' SIDEWALK

SIDEWALK WHEEL CHAIR RAMP

EXISTING SIDEWALK

WASH-OUT CROWN

PROPERTY LINE

FLOW ARROW

EXISTING CONTOUR

PROPOSED CONTOUR

PROPOSED CONCRETE CURB

FILL @ 95% COMPACTION

POSSIBLE DRIVEWAY LOCATION

SAN ANTONIO WATER SYSTEM

3. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES

DURING CONSTRUCTION. THE LOCATION AND DEPTH OF EXISTING UTILITIES

TELE. NO.: 210-704-7109

TELE. NO.: 800-545-6005

(2" COVER UNLESS OTHERWISE NOTED ON PLANS)

SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF EXISTING

4. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.181, CPS MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA. 5. THE CONTRACTOR HAS THE RESPONSIBILITY TO PROTECT AND SUPPORT

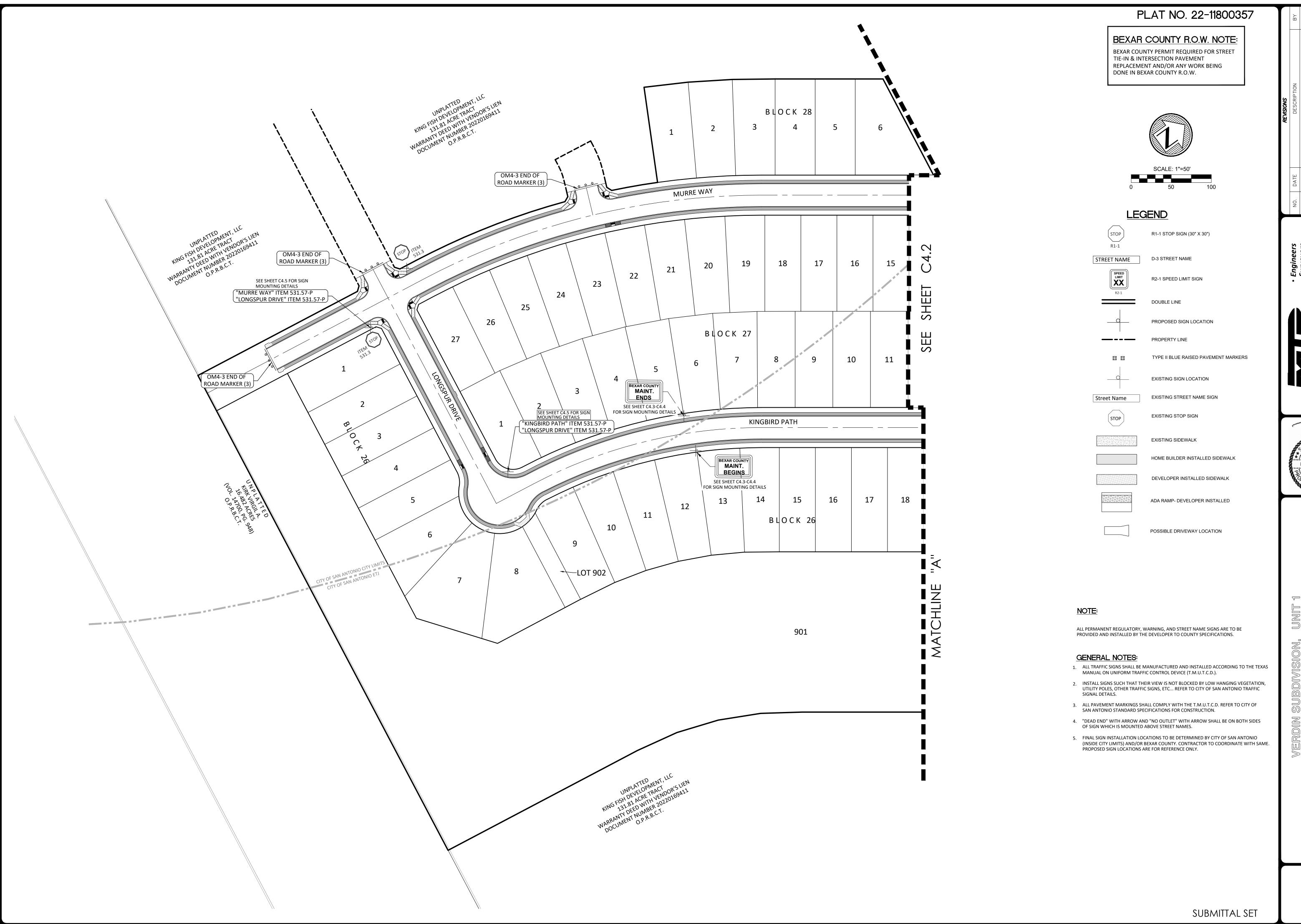
6. THE CONTRACTOR HAS THE RESPONSIBILITY OF RESTORING TO ITS ORIGINAL OR BETTER CONDITION, ANY DAMAGE DONE TO THE EXISTING PAVEMENT,

CONCRETE/CONCRETE RIPRAP: CLASS A 3000 PSI IN 28 DAYS UNLESS

REINFORCING STEEL: CONFORM TO A.S.T.M. A-615, GRADE 60

PIPE RAILING: CONFORM TO A.S.T.M. A-53, GRADE B, OR A-501

THE CITY OF SAN ANTONIO.



DESCRIPTION

PROJ. # DGN. BY: CHKD. BY: DAM.

· Engin

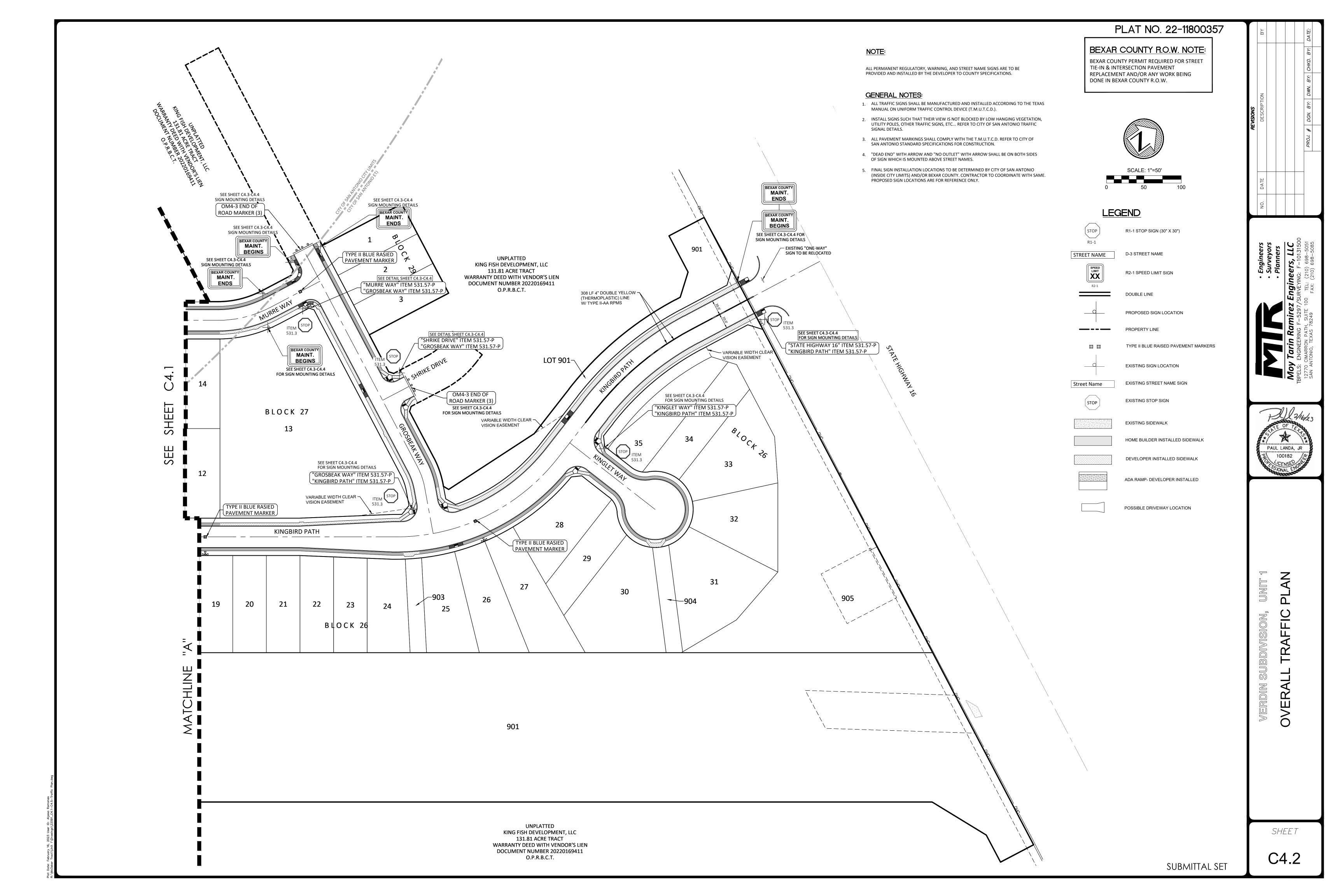
Moy Tarin Ramirez Er PELS: ENGINEERING F-5297/SUR 12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249

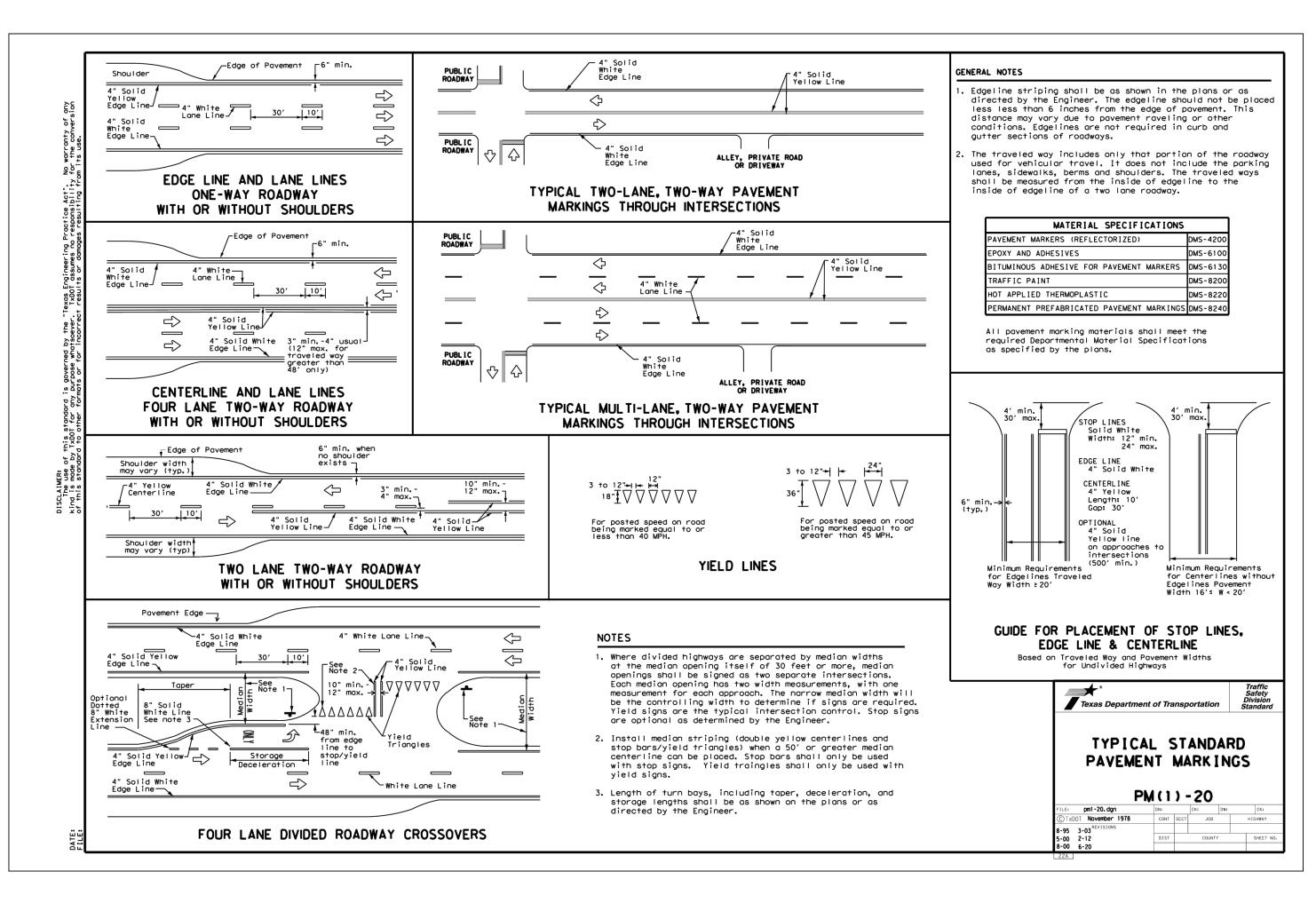
PAUL LANDA, JR
100182
CENSE

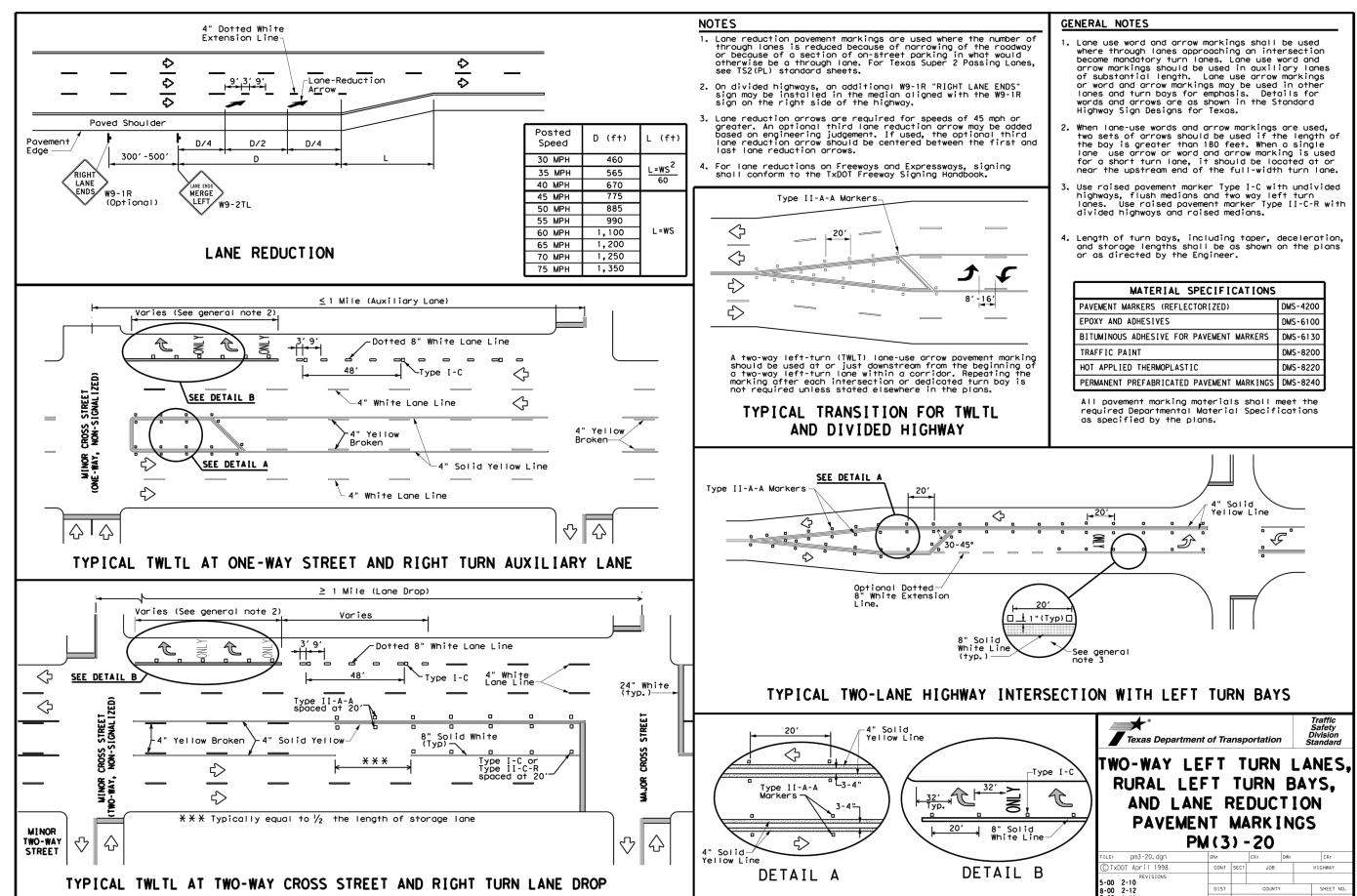
OVERALL TRAFFIC PLAN

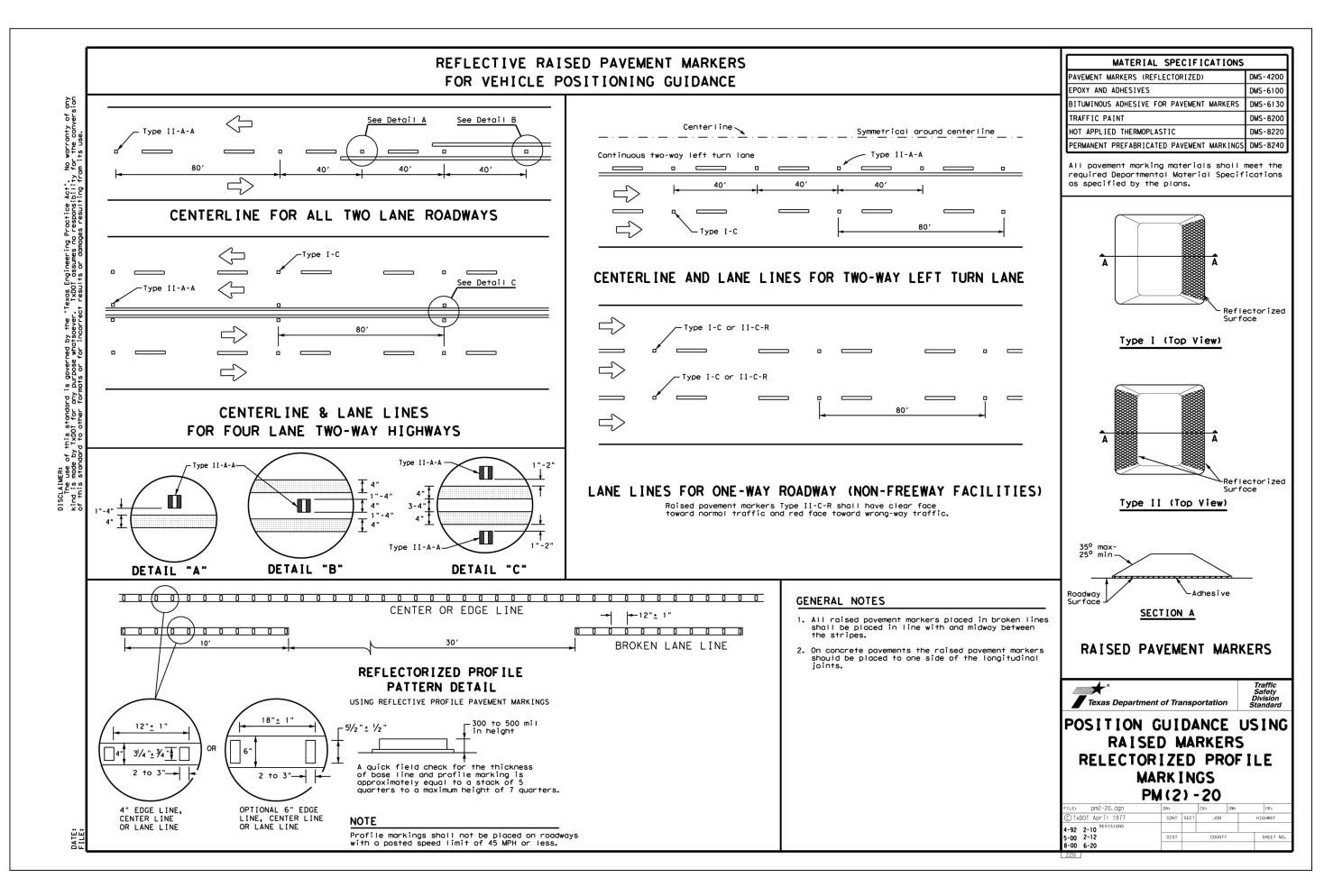
SHEET

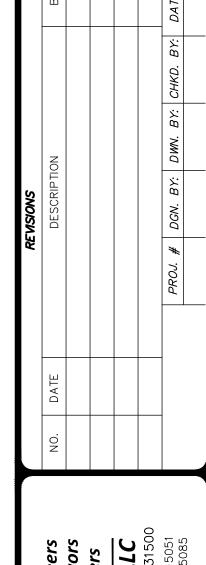
C4.1











* Engir

* Surva

* Surva

* Surva

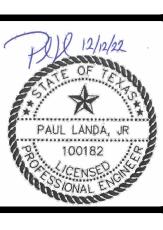
* Planı

* Moy Tarin Ramirez Engineers,

* TBPELS: ENGINEERING F-5297/SURVEYING: F-14

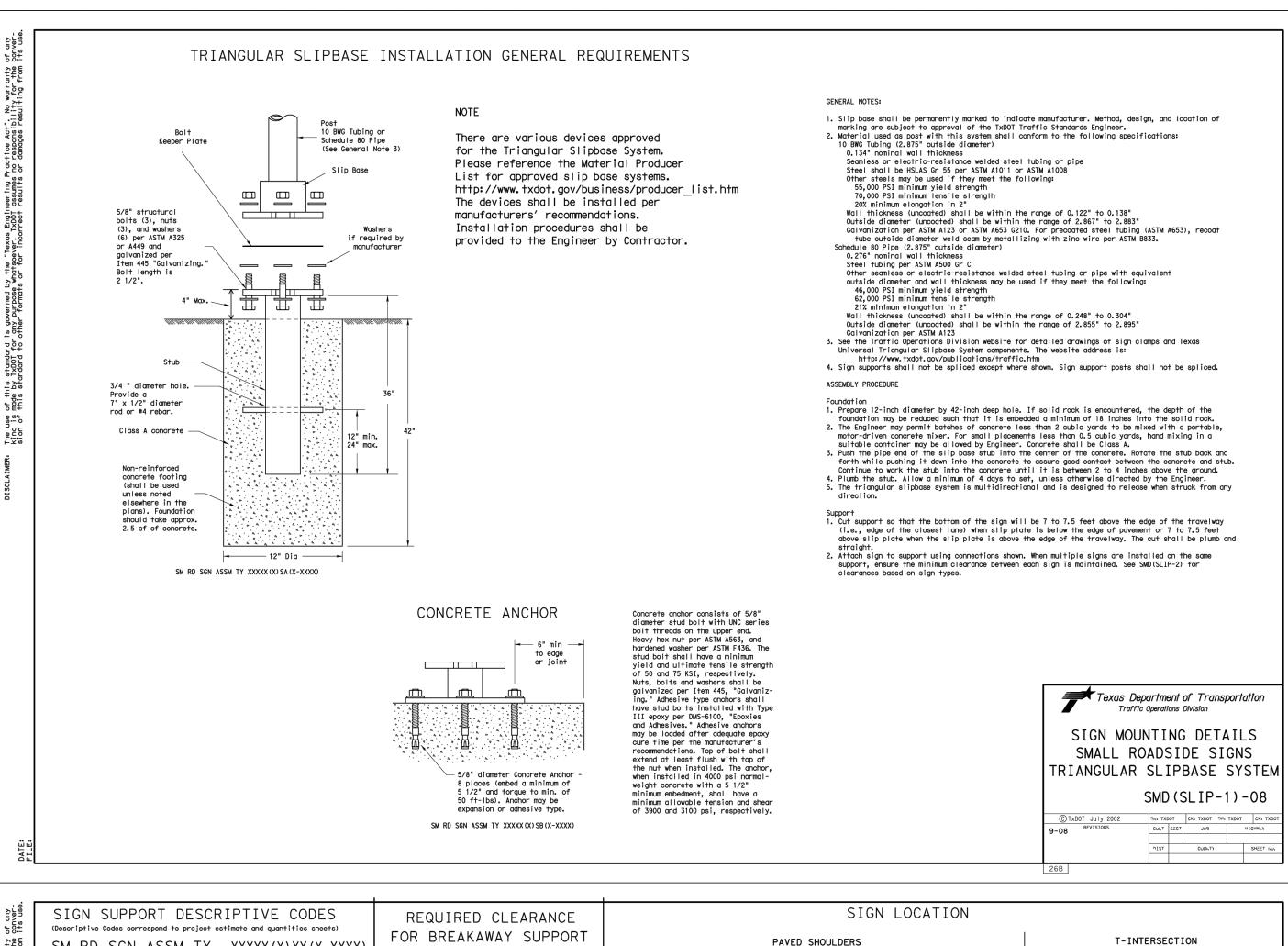
* 12770 CIMARRON PATH, SUITE 100 TEL: (210) 69

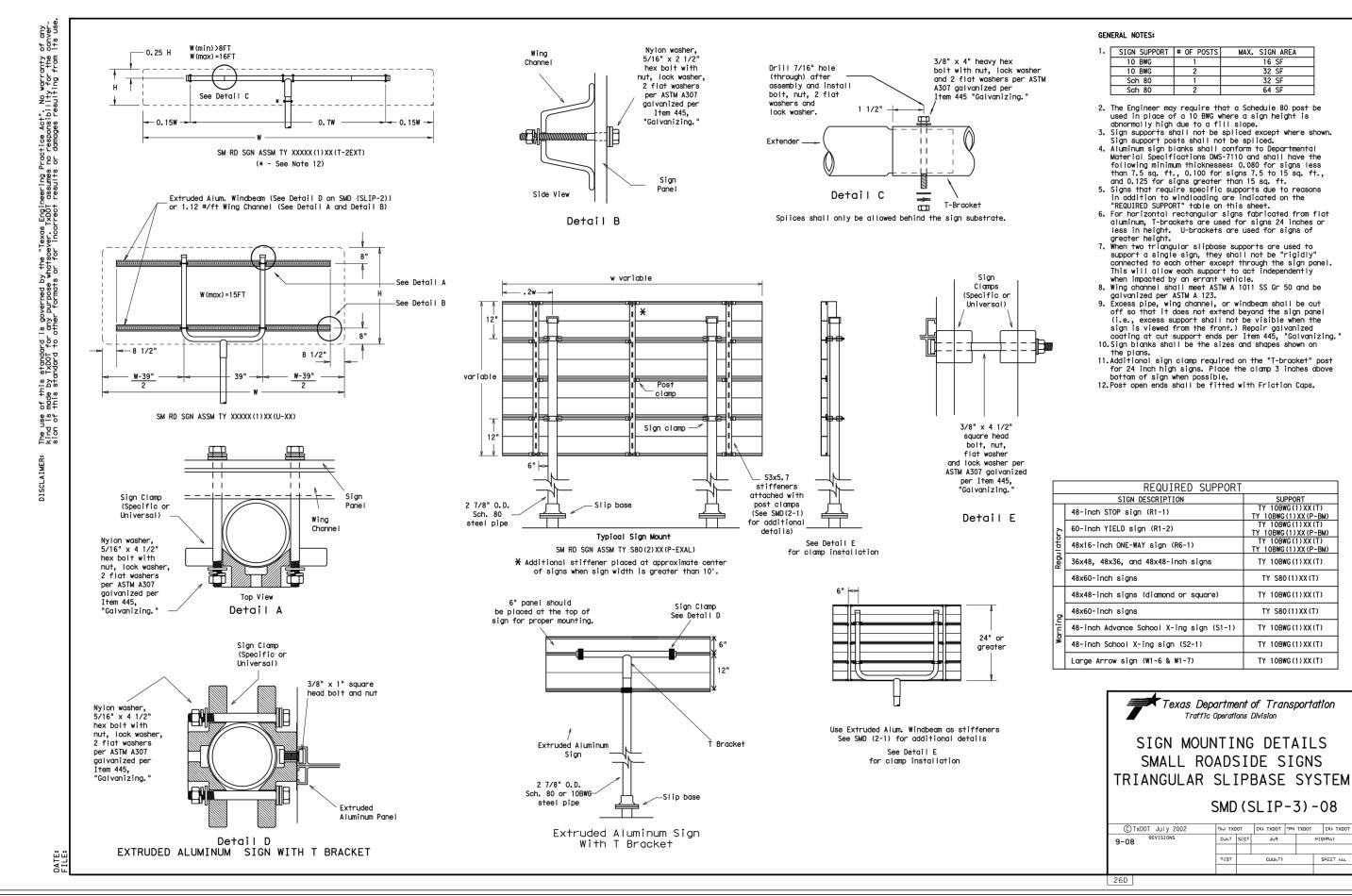
* SAN ANTONIO, TEXAS 78249 FAX: (210) 698

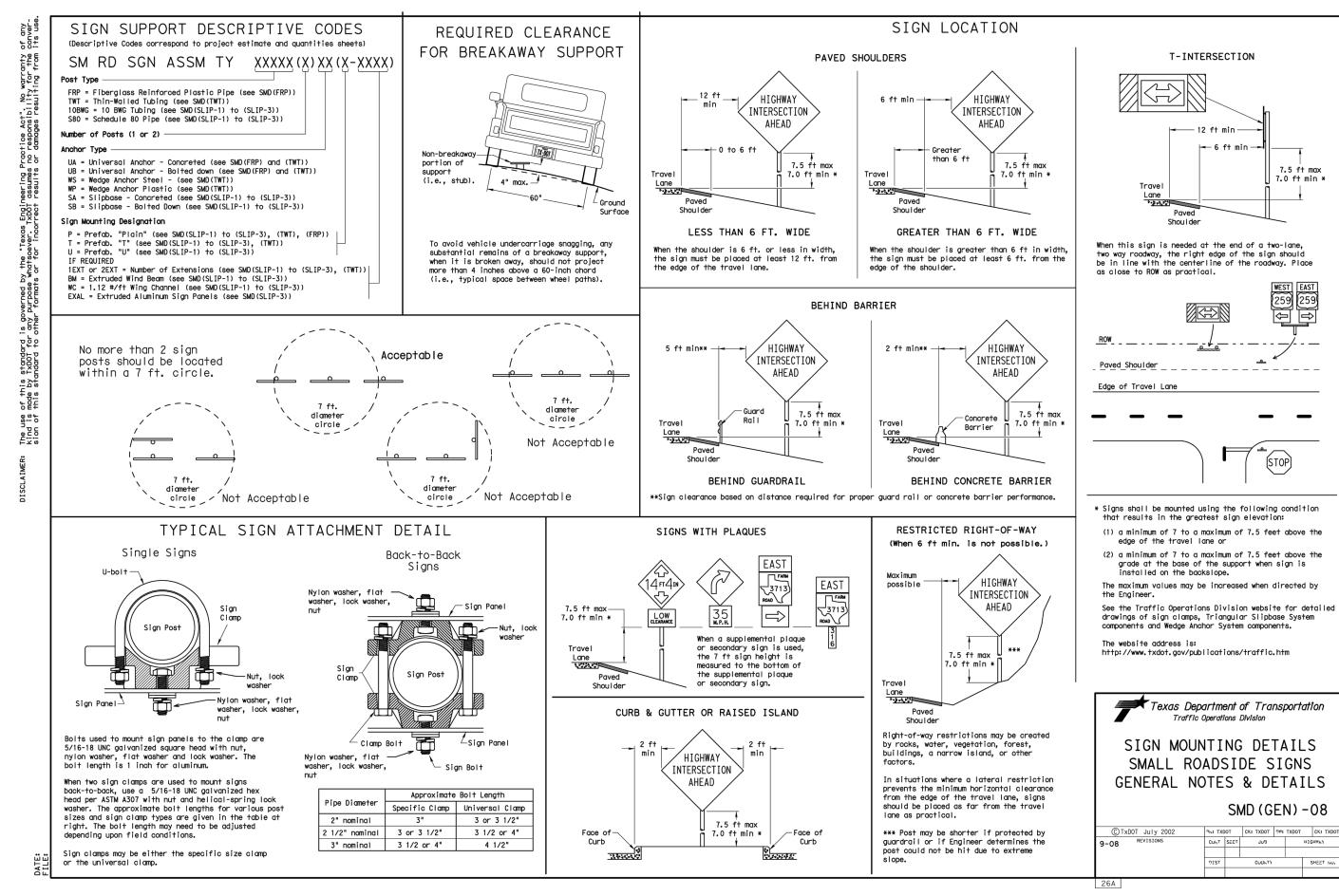


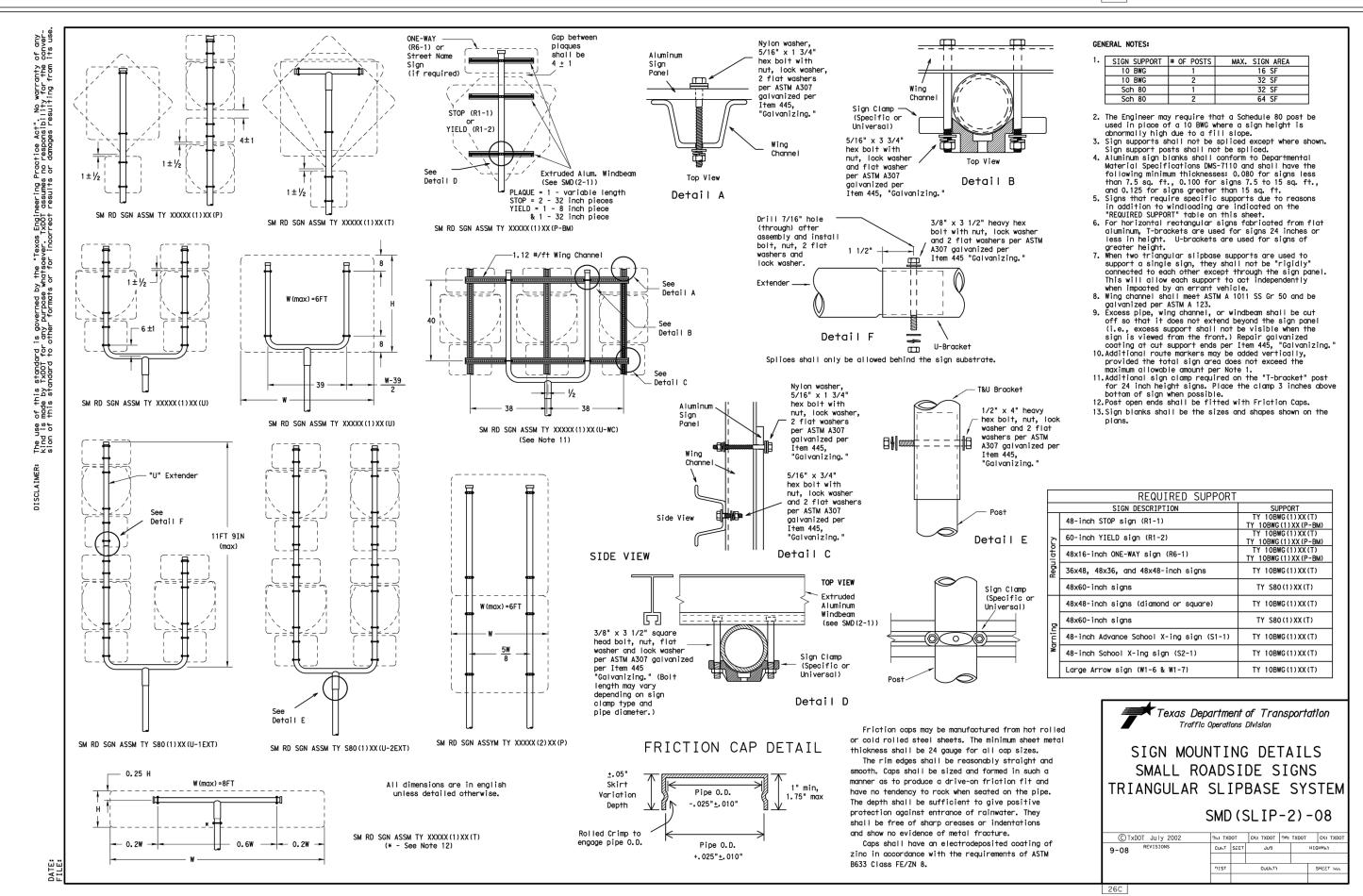
BEXAR TRAFFIC PLAN DETA

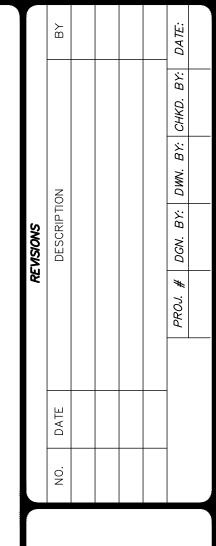
FOR SIGNS OUTSIDE OF CITY OF SAN ANTONIO CITY LIMITS





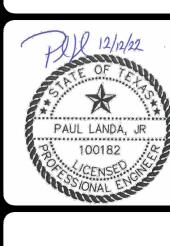




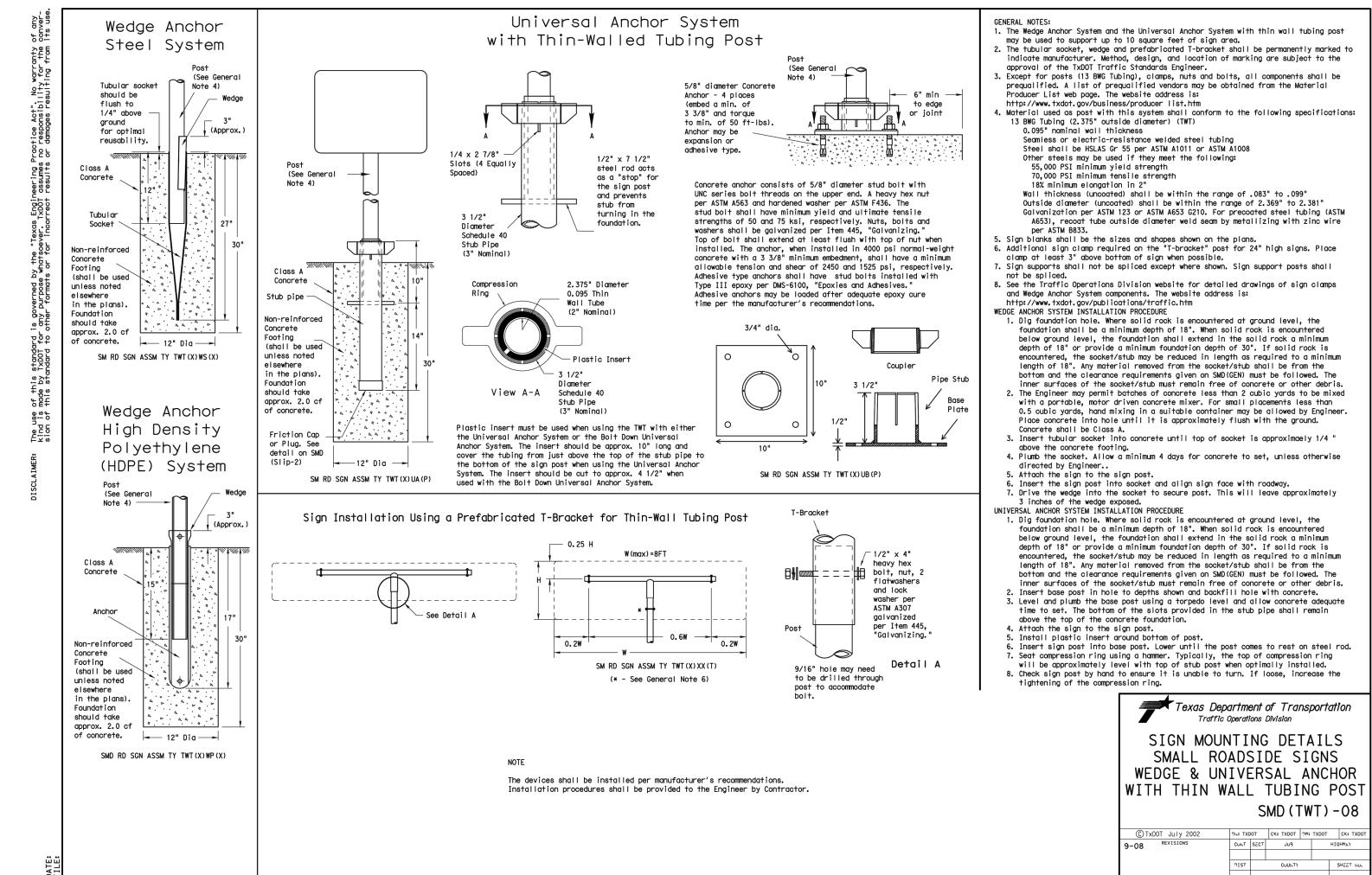


* ENGINEERING F – 5917

* Pla



BEXAR TRAFFIC PLAN DETAIL



PLAT NO. 22-11800357

FOR SIGNS OUTSIDE OF CITY OF SAN ANTONIO CITY LIMITS

9" GROUND MOUNT SIGNS

48" (1200 mm) MAX

SIGN FACE MATERIALS

SHALL CONFORM TO:

I. STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS &
BRIDGES ON FEDERAL HIGHWAY

CUSTOMARY UNITS SECTION 718
2. GENERAL SERVICES

ADMINISTRATION FEDERAL SPECIFICATIONS L-S-300C 3. ASTM D 4956 - 09**8**1

PROJECTS - FP-03 U.S.

48" (1200 mm) MIN. 72" (1800 mm) MAX.

BLUE FILM Ӿ

- ASTM Type XI Non-Fluorescent

* ACRYLIC ELECTRONIC CUTTABLE FILM

SUBSTRATE

SIGN FACE MATERIALS

MAINTAIN 1" FROM EDGE OF SIGN

Y WHITE BORDER

-11' - MAINTAIN 1" FROM EDGE OF SIGN

MAINTAIN 1" FROM EDGE OF SIGN

9" GROUND MOUNT STREET NAME SIGNS

9" GROUND MOUNT STREET NAME SIGNS

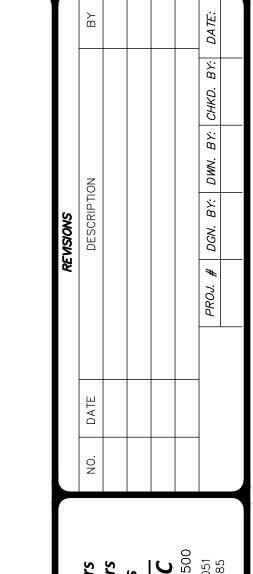
WITH STREET DESIGNATION

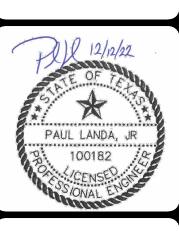
---LENGTH 2'-0' MIN. 6'-0' MAX----

18" OVERHEAD STREET NAME SIGNS

**Capital = 6"

**Capital = 8"



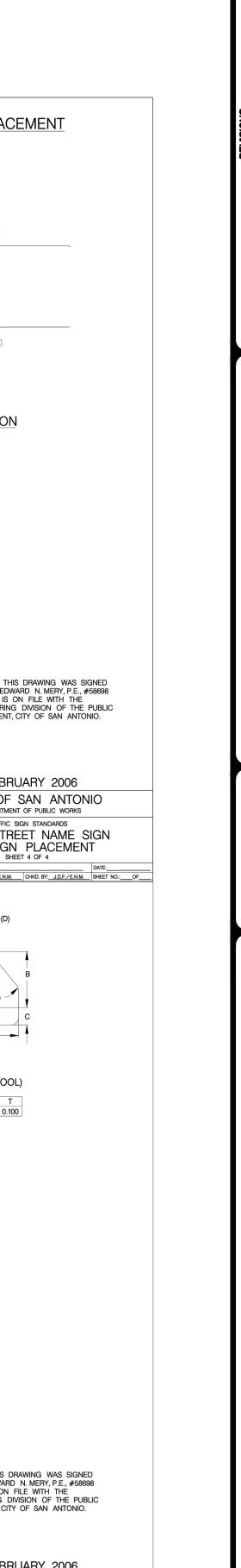


 $oldsymbol{\perp}$ 2

SHEET

C4.4

SUBMITTAL SET



ngin IRVEYIN

PAUL LANDA, JR.

100182

1

Z

Д

0

Ī

2

0

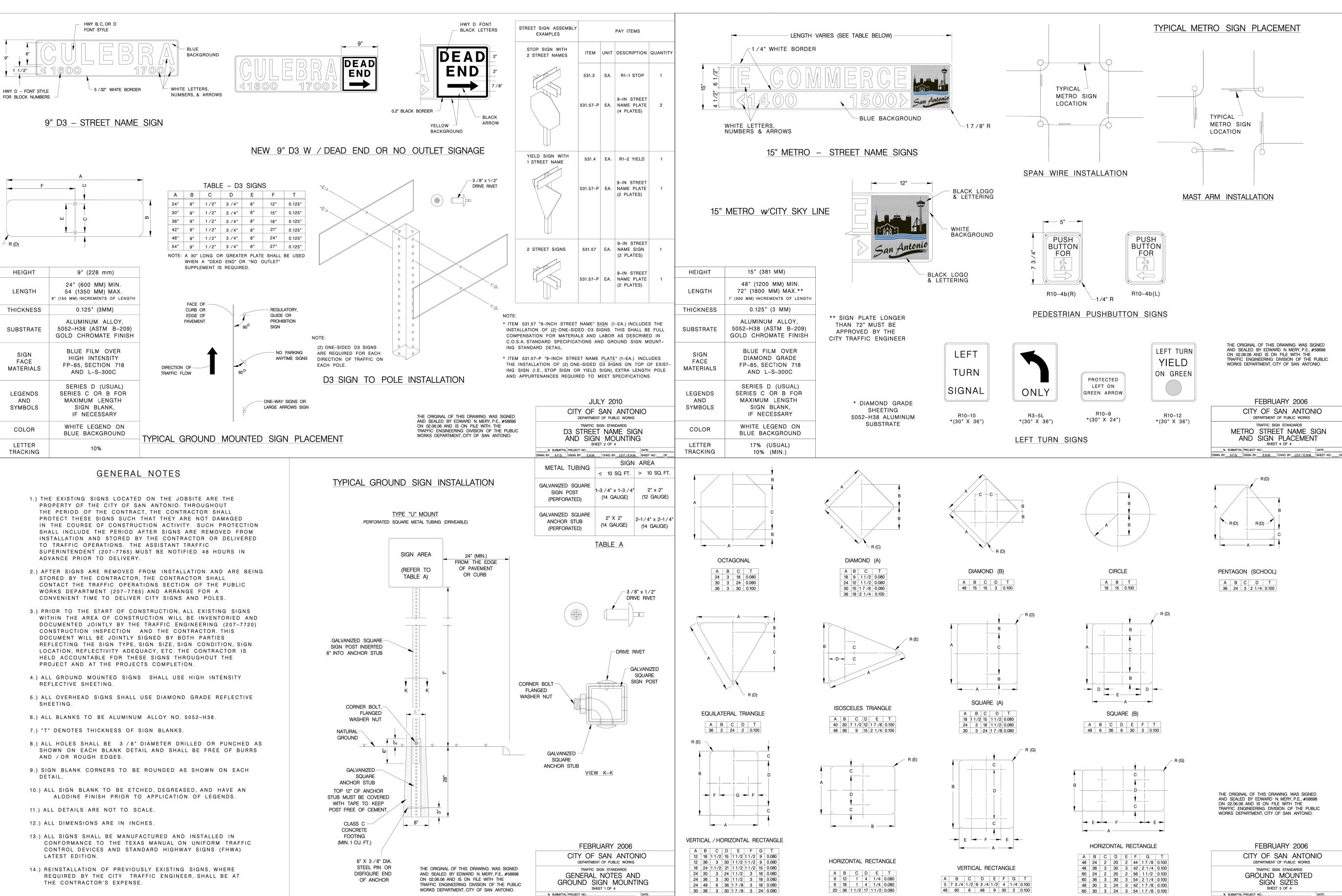
NO

Z Z

Z V

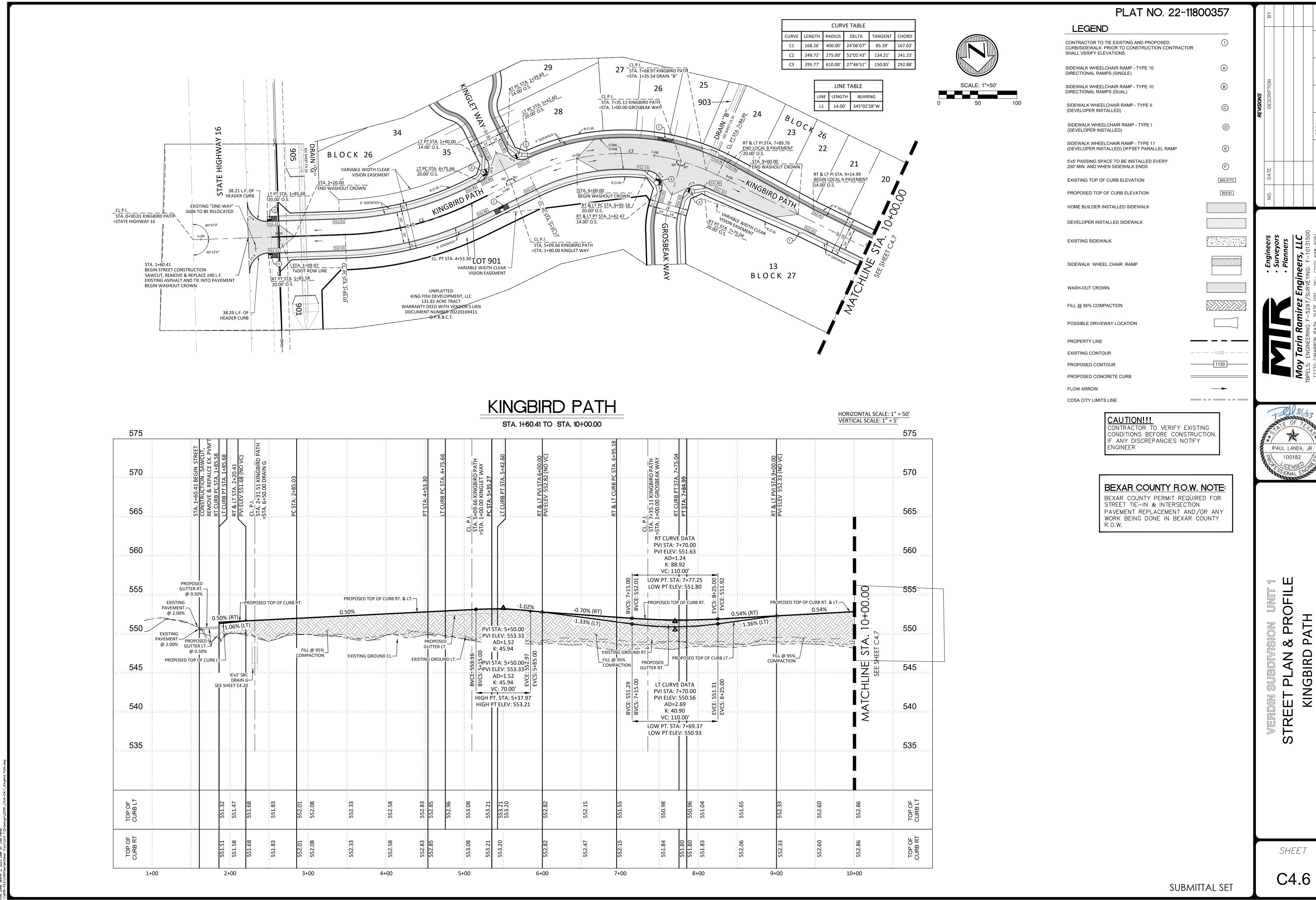
S

SHEET



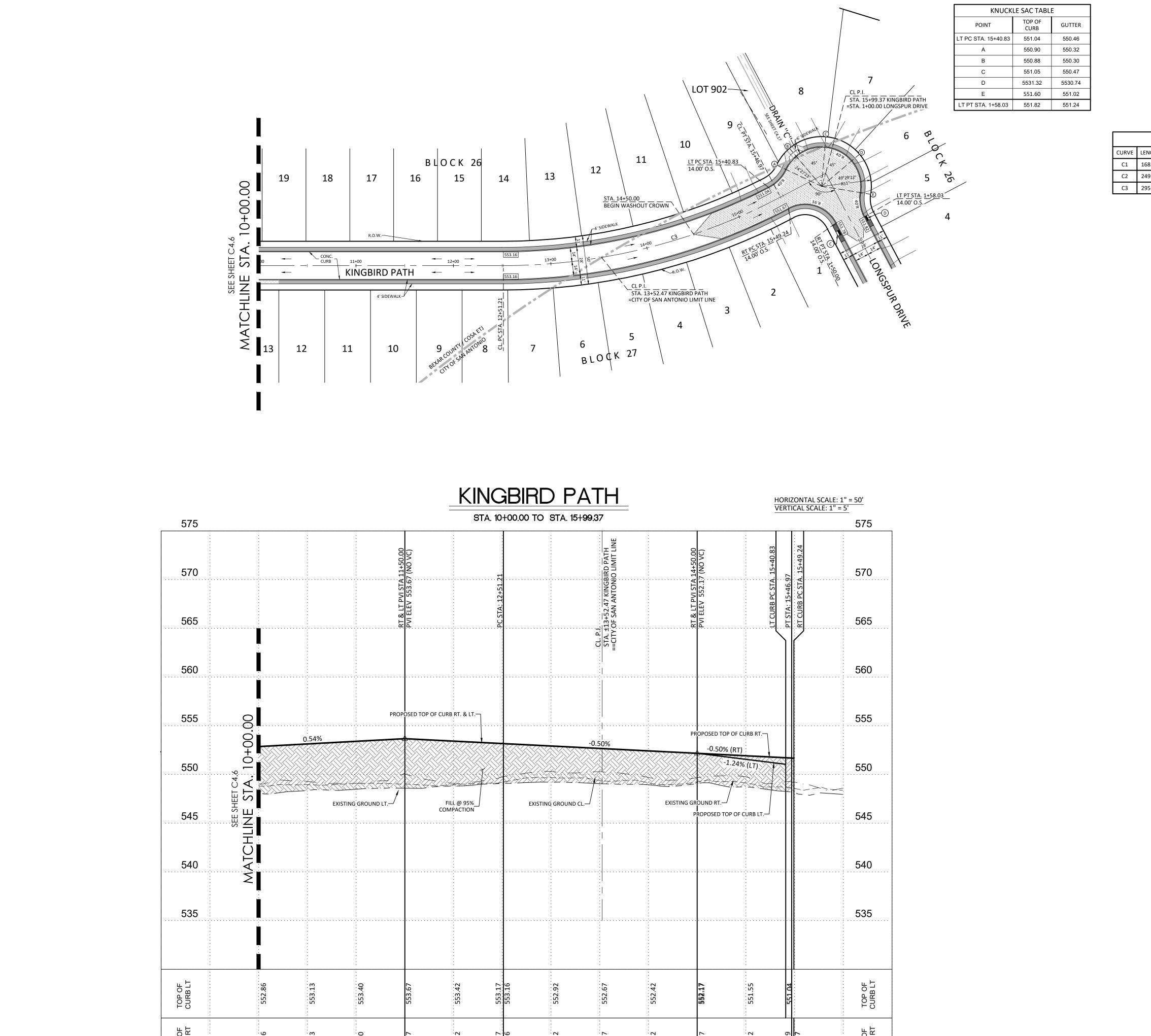
DRWN. BY: A.F.G. DSGN. BY: E.N.M. CHKD. BY: J.D.F./E.N.M. SHEET NO.: OF

DRWN. BY: A.F.G. DSGN. BY: E.N.M. CHKD. BY: J.D.F./E.N.M. SHEET NO.: OF



100182

KINGBIRD



14+00

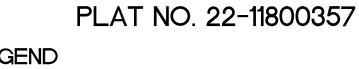
15+00

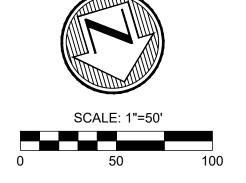
10+00

11+00

12+00

13+00





CURVE TABLE					
CURVE	LENGTH	RADIUS	DELTA	TANGENT	CHORD
C1	168.26'	400.00'	24°06'07"	85.39'	167.03'
C2	249.72'	275.00'	52°01'43"	134.21'	241.23'
С3	295.77'	610.00'	27°46'51"	150.85'	292.88'

LINE TABLE		
LINE	LENGTH	BEARING
L1	14.00'	S45°02'28"W

CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS. SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE)

SIDEWALK WHEELCHAIR RAMP - TYPE 10
DIRECTIONAL RAMPS (SINGLE)

SIDEWALK WHEELCHAIR RAMP - TYPE 10
DIRECTIONAL RAMPS (DUAL)

SIDEWALK WHEELCHAIR RAMP - TYPE II
(DEVELOPER INSTALLED)

C

SIDEWALK WHEELCHAIR RAMP - TYPE I
(DEVELOPER INSTALLED)

SIDEWALK WHEELCHAIR RAMP - TYPE 11
(DEVELOPER INSTALLED) OFFSET PARALLEL RAMP

5'x5' PASSING SPACE TO BE INSTALLED EVERY
200' MIN. AND WHEN SIDEWALK ENDS

F

EXISTING TOP OF CURB ELEVATION

805.81TC

PROPOSED TOP OF CURB ELEVATION

HOME BUILDER INSTALLED SIDEWALK

DEVELOPER INSTALLED SIDEWALK

EXISTING SIDEWALK

SIDEWALK WHEEL CHAIR RAMP

FILL @ 95% COMPACTION

POSSIBLE DRIVEWAY LOCATION

PROPERTY LINE

EXISTING CONTOUR

WASH-OUT CROWN

PROPOSED CONTOUR
PROPOSED CONCRETE CURB
FLOW ARROW

CAUTION!!!
CONTRACTOR TO VERIFY EXISTING

CONDITIONS BEFORE CONSTRUCTION IF ANY DISCREPANCIES NOTIFY ENGINEER

1120

BEXAR COUNTY R.O.W. NOTE:

BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY R.O.W.

NO. DATE DESCRIPTION BY: CHKD. BY: DAY

1

Planners

Planners

**This is a second of the seco

Moy Tarin Ramire
TBPELS: ENGINEERING F-529



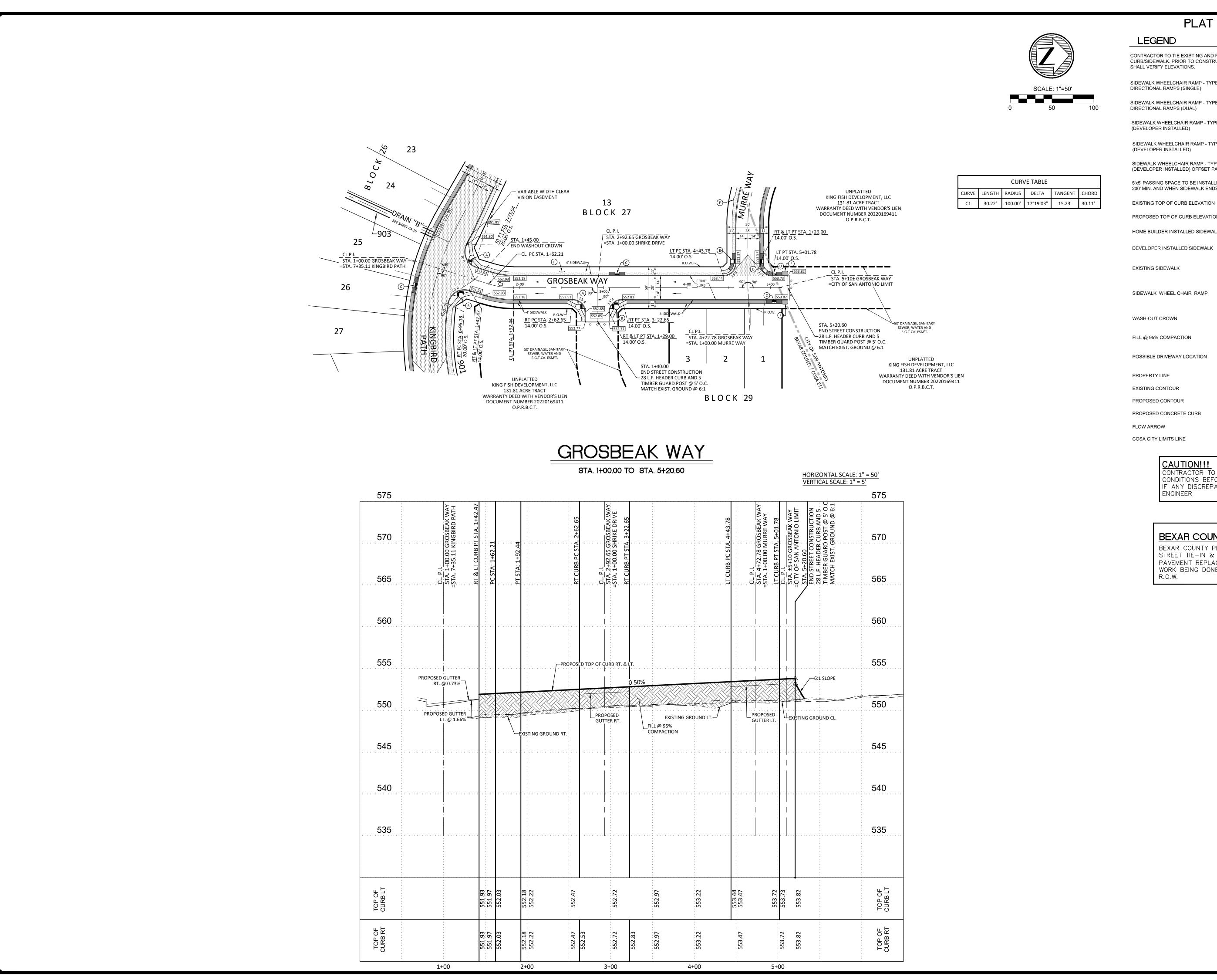
PAUL LANDA, JR.

100182
CENSE
ONAL E

REET PLAN & PROFILE
KINGBIRD PATH
STA. 10+00.00 TO STA. 15+99.37

SHEET

C4.7



PLAT NO. 22-11800357

LEGEND

1 CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS. SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL) SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED) SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED)

SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP 5'x5' PASSING SPACE TO BE INSTALLED EVERY 200' MIN. AND WHEN SIDEWALK ENDS

PROPOSED TOP OF CURB ELEVATION HOME BUILDER INSTALLED SIDEWALK

FILL @ 95% COMPACTION

POSSIBLE DRIVEWAY LOCATION

PROPERTY LINE

PROPOSED CONTOUR PROPOSED CONCRETE CURB

COSA CITY LIMITS LINE

CAUTION!!!
CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION. IF ANY DISCREPANCIES NOTIFY

BEXAR COUNTY R.O.W. NOTE:

BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION PAVEMENT REPLACEMENT AND/OR ANY WORK BEING DONE IN BEXAR COUNTY

805.81TC

805.81

1120

PAUL LANDA, JR 100182

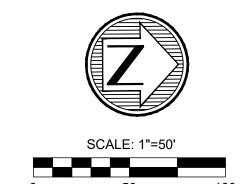
ONAL ENG

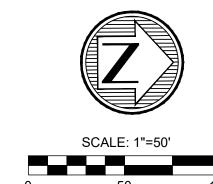
GROSBEAK

SHEET

C4.8

SUBMITTAL SET





STA. 3+90.00 LONGSPUR DRIVE =STA. 9+64.65 MURRE WAY

RT & LT PT STA. 4+19.00 /14.00' O.S.

STA. 4+30.00

50' DRAINAGE, SANITARY SEWER, WATER AND E.G.T.CA. ESM'T.

END STREET CONSTRUCTION

28 L.F. HEADER CURB AND 5

TIMBER GUARD POST @ 5' O.C.

MATCH EXIST. GROUND @ 6:1

UNPLATTED KING FISH DEVELOPMENT, LLC

131.81 ACRE TRACT
WARRANTY DEED WITH VENDOR'S LIEN

DOCUMENT NUMBER 20220169411 O.P.R.B.C.T.

SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (DUAL) SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED) FORDOSED TOP OF CURB ELEVATION SIDEWALK WHEELCHAIR RAMP SIDEWALK SIDEWALK SIDEWALK WHEELCHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120 PROPOSED CONCRETE CURB	CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.	1
DIRECTIONAL RAMPS (DUAL) SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED) SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED) SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP SYS' PASSING SPACE TO BE INSTALLED EVERY 200' MIN. AND WHEN SIDEWALK ENDS EXISTING TOP OF CURB ELEVATION BOSSITC PROPOSED TOP OF CURB ELEVATION HOME BUILDER INSTALLED SIDEWALK DEVELOPER INSTALLED SIDEWALK EXISTING SIDEWALK SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR 1120		A
(DEVELOPER INSTALLED) SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED) SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP 5'x5' PASSING SPACE TO BE INSTALLED EVERY 200' MIN. AND WHEN SIDEWALK ENDS EXISTING TOP OF CURB ELEVATION PROPOSED TOP OF CURB ELEVATION HOME BUILDER INSTALLED SIDEWALK EXISTING SIDEWALK EXISTING SIDEWALK SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR 1120 1120		B
(DEVELOPER INSTALLED) SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP 5'x5' PASSING SPACE TO BE INSTALLED EVERY 200' MIN. AND WHEN SIDEWALK ENDS EXISTING TOP OF CURB ELEVATION PROPOSED TOP OF CURB ELEVATION B05.81 HOME BUILDER INSTALLED SIDEWALK DEVELOPER INSTALLED SIDEWALK EXISTING SIDEWALK SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR 1120		©
(DEVELOPER INSTALLED) OFFSET PARALLEL RAMP (E) 5'x5' PASSING SPACE TO BE INSTALLED EVERY 200' MIN. AND WHEN SIDEWALK ENDS EXISTING TOP OF CURB ELEVATION PROPOSED TOP OF CURB ELEVATION HOME BUILDER INSTALLED SIDEWALK DEVELOPER INSTALLED SIDEWALK EXISTING SIDEWALK SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120		D
200' MIN. AND WHEN SIDEWALK ENDS EXISTING TOP OF CURB ELEVATION PROPOSED TOP OF CURB ELEVATION B05.81TC B05.81TC		Œ
PROPOSED TOP OF CURB ELEVATION HOME BUILDER INSTALLED SIDEWALK DEVELOPER INSTALLED SIDEWALK EXISTING SIDEWALK SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120		F
HOME BUILDER INSTALLED SIDEWALK DEVELOPER INSTALLED SIDEWALK EXISTING SIDEWALK SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120	EXISTING TOP OF CURB ELEVATION	805.81TC
DEVELOPER INSTALLED SIDEWALK EXISTING SIDEWALK SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120	PROPOSED TOP OF CURB ELEVATION	805.81
EXISTING SIDEWALK SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120	HOME BUILDER INSTALLED SIDEWALK	
SIDEWALK WHEEL CHAIR RAMP WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120	DEVELOPER INSTALLED SIDEWALK	
WASH-OUT CROWN FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120	EXISTING SIDEWALK	
FILL @ 95% COMPACTION POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120	SIDEWALK WHEEL CHAIR RAMP	,070070070070 ,000000000000000000000000
POSSIBLE DRIVEWAY LOCATION PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120	WASH-OUT CROWN	
PROPERTY LINE EXISTING CONTOUR PROPOSED CONTOUR 1120	FILL @ 95% COMPACTION	
EXISTING CONTOUR 1120 1120	POSSIBLE DRIVEWAY LOCATION	
PROPOSED CONTOUR1120	PROPERTY LINE —	
	EXISTING CONTOUR	— — — 1120 — — —
PROPOSED CONCRETE CURB =	PROPOSED CONTOUR —	1120
	PROPOSED CONCRETE CURB ==	

PLAT NO. 22-11800357

CAUTION!!!

CONTRACTOR TO VERIFY EXISTING
CONDITIONS BEFORE CONSTRUCTION.
IF ANY DISCREPANCIES NOTIFY

LONGSPUR DR

BLOCK 27

RT PC STA. 15+49.24 14.00' O.S.

RT & LT PC STA. 3+61.00 / 14.00' O.S. 27

CL P.I.

STA. 1+00.00 LONGSPUR DRIVE
=STA. 15+99.37 KINGBIRD PATH

DRAIN "C"

SEE SHEET C4.17

10

LDT 902-/

KNUCKLE SAC TABLE

LT PC STA. 15+40.83

CURB

551.04 550.90

550.88

551.05

5531.32

551.60

LT PT STA. 1+58.03 551.82

550.46

550.32

550.30

550.47 5530.74

551.02

551.24

CITY OF SAN ANTONIO

	STA. 1+00.00 TO STA. 4+30.00	HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1" = 5'
575		575
570	B PC STA. 15+40.83 B PT STA. 1+50.00 B PT STA. 1+58.03 B PT STA. 1+58.03 CURB PC STA. 3+61.00 8, PVI 90.00 LONGSPUR DRIVE 64.65 MURRE WAY CURB PT STA. 4+19.00 30.00END STREET RUCTION SLOPE @ 6.1 FCH EXISTING GROUND	570
565	T. CURB F S550.94 RT & LT C STA. 3+96 STA. 4+3C CONSTRU TO MATC	565
560	PVI @ POINT B	560
555	PVI ELEV: 550.79 AD=1.41 K: 35.39 PROPOSED TOP OF CURB ALONG SAC PROPOSED TOP OF CURB RT. & LT. — EXISTING GROUND CL. —	555
550	0.50% -0.83% -0.83% -6:1 SLOPE	550
545	FILL @ 95%_ COMPACTION FILL @ 95%_ COMPACTION	545
540		540
535		535
TOP OF CURB LT	551.04 550.90 550.88 552.28 552.28 552.83 552.93 552.83 552.83 552.83 552.83	TOP OF CURB LT
TOP OF CURB RT	552.28 552.83 552.83 552.83 552.83 552.83	TOP OF CURB RT
	1+00 2+00 3+00 4+00	

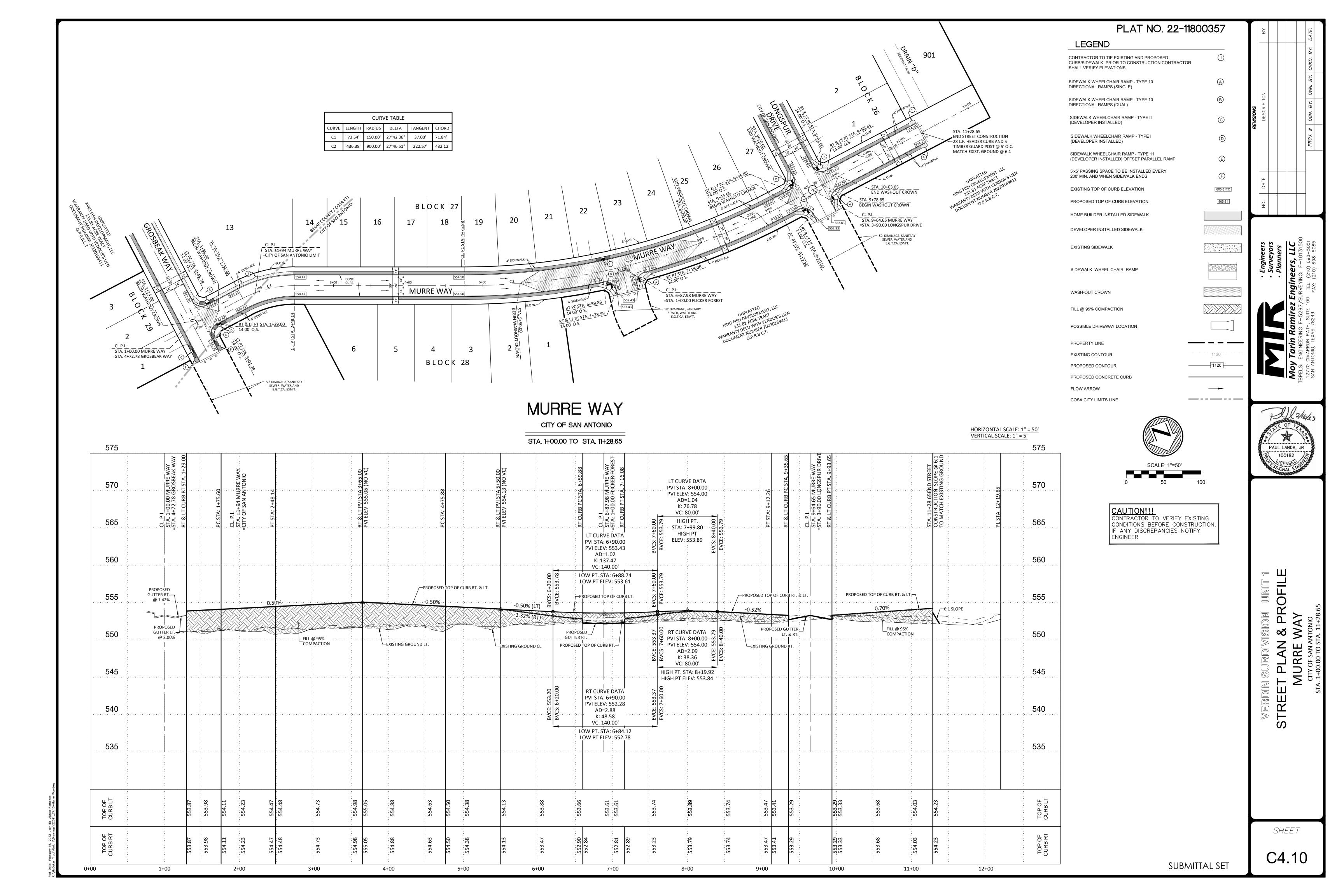
C4.9

SHEET

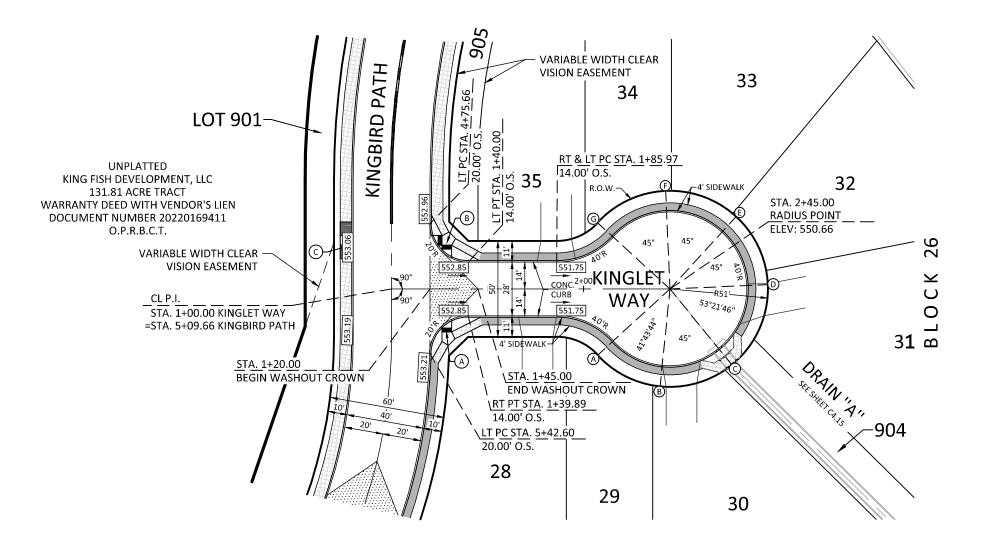
PAUL LANDA, JR. 100182

SUBMITTAL SET

COSA CITY LIMITS LINE

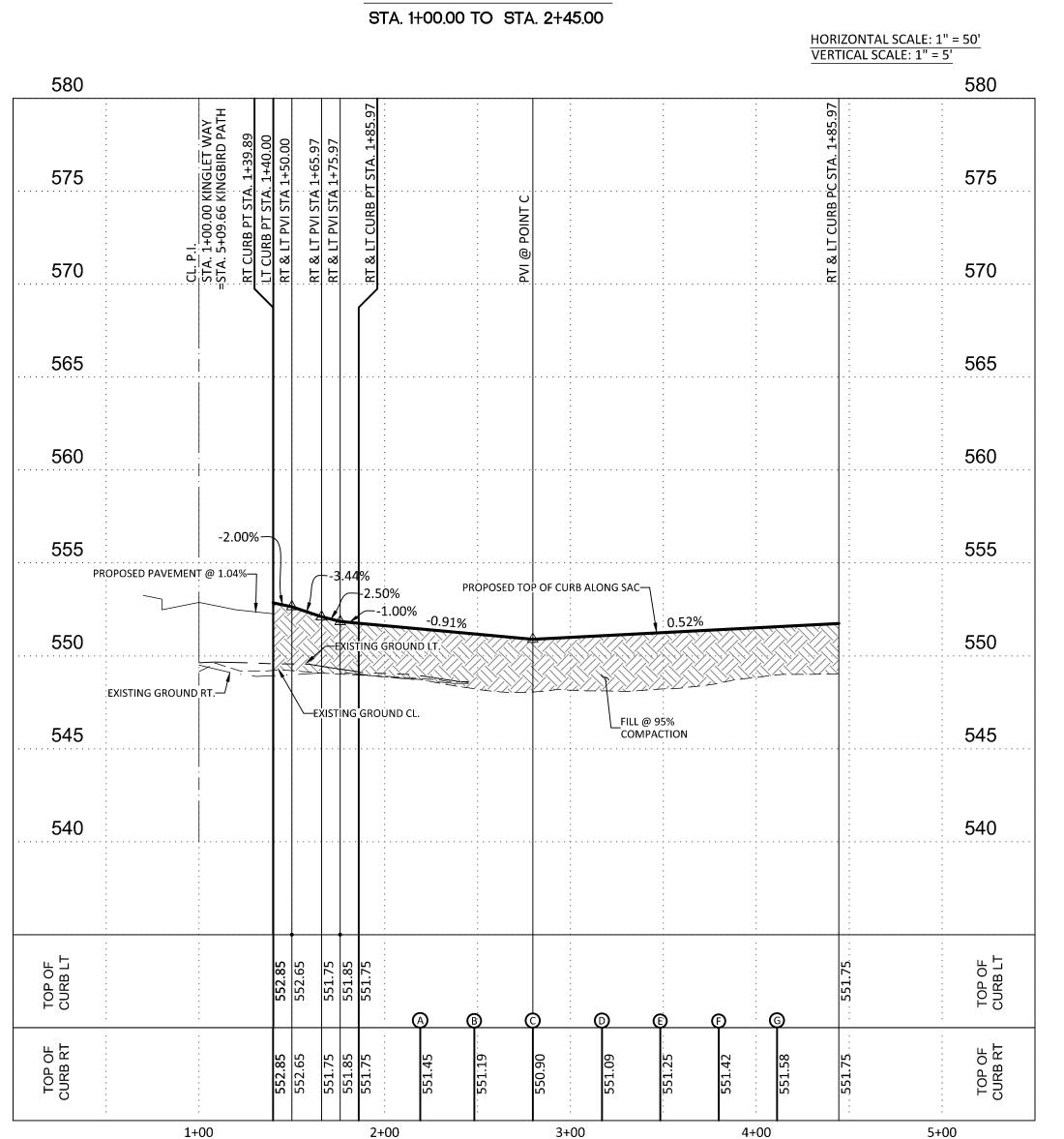






CUL-DE-SAC TABLE			
POINT	TOP OF CURB	GUTTER	
RT & LT PC STA. 1+85.97	551.75	551.17	
А	551.45	550.87	
В	551.19	550.61	
С	550.90	550.32	
D	551.09	550.51	
Е	551.25	550.67	
F	551.42	550.84	
G	551.58	551.00	
RT & LT PC STA. 1+85.97	551.75	551.17	

KINGLET WAY



PLAT NO. 22-11800357

1

805.81TC

805.81

LEGEND CONTRACTOR TO TIE EXISTING AND PROPOSED CURB/SIDEWALK. PRIOR TO CONSTRUCTION CONTRACTOR SHALL VERIFY ELEVATIONS.

SIDEWALK WHEELCHAIR RAMP - TYPE 10 DIRECTIONAL RAMPS (SINGLE) SIDEWALK WHEELCHAIR RAMP - TYPE 10

DIRECTIONAL RAMPS (DUAL) SIDEWALK WHEELCHAIR RAMP - TYPE II (DEVELOPER INSTALLED)

SIDEWALK WHEELCHAIR RAMP - TYPE I (DEVELOPER INSTALLED)

SIDEWALK WHEELCHAIR RAMP - TYPE 11 (DEVELOPER INSTALLED) OFFSET PARALLEL RAMP 5'x5' PASSING SPACE TO BE INSTALLED EVERY 200' MIN. AND WHEN SIDEWALK ENDS

EXISTING TOP OF CURB ELEVATION PROPOSED TOP OF CURB ELEVATION

DEVELOPER INSTALLED SIDEWALK

HOME BUILDER INSTALLED SIDEWALK

SIDEWALK WHEEL CHAIR RAMP

WASH-OUT CROWN

EXISTING SIDEWALK

FILL @ 95% COMPACTION

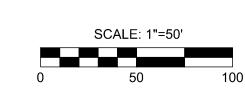
POSSIBLE DRIVEWAY LOCATION

PROPERTY LINE EXISTING CONTOUR

PROPOSED CONTOUR PROPOSED CONCRETE CURB

COSA CITY LIMITS LINE

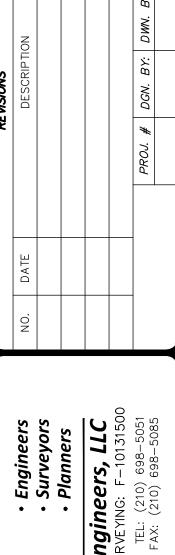
1120 FLOW ARROW ___

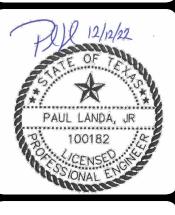


CAUTION!!!
CONTRACTOR TO VERIFY EXISTING CONDITIONS BEFORE CONSTRUCTION.
IF ANY DISCREPANCIES NOTIFY ENGINEER

BEXAR COUNTY R.O.W. NOTE:

BEXAR COUNTY PERMIT REQUIRED FOR STREET TIE-IN & INTERSECTION
PAVEMENT REPLACEMENT AND/OR ANY
WORK BEING DONE IN BEXAR COUNTY R.O.W.

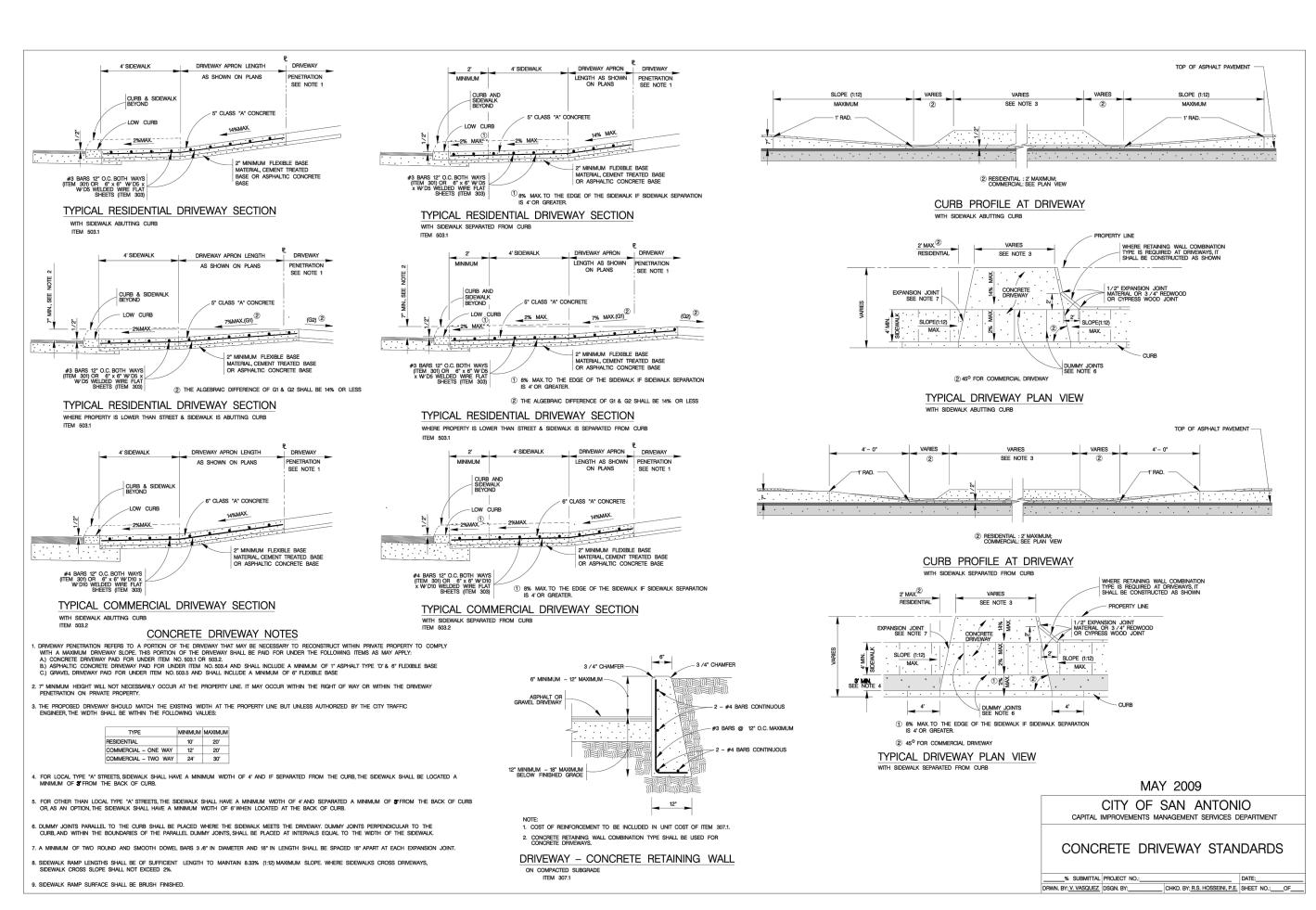


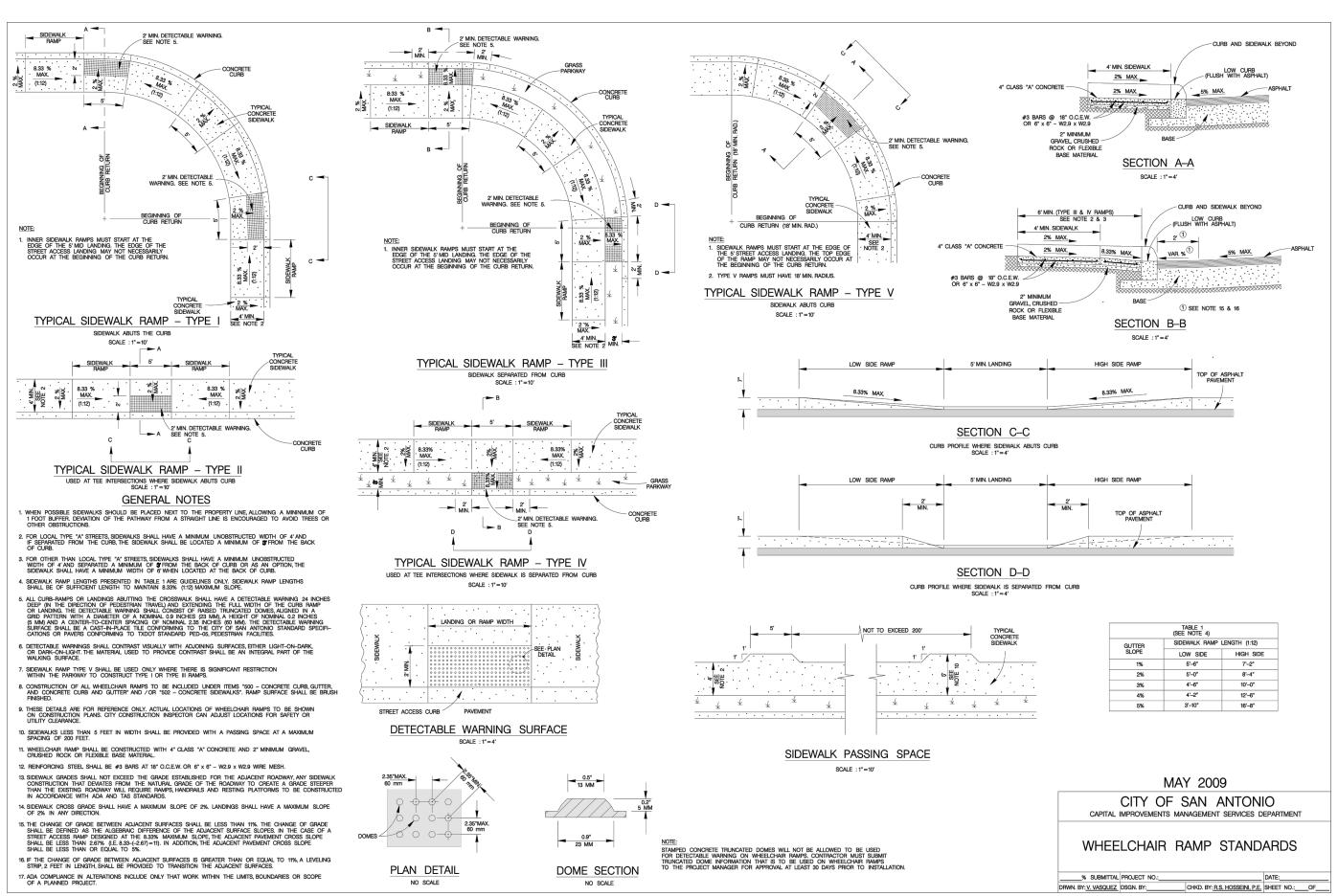


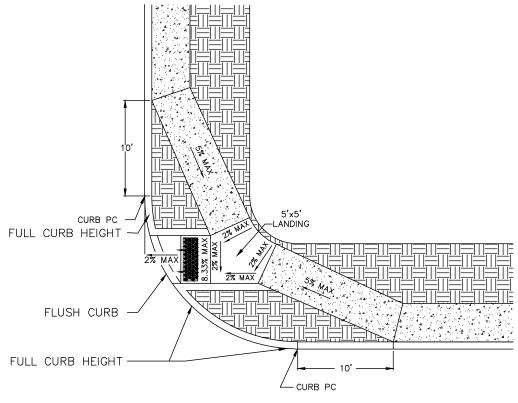
SHEET

C4.11

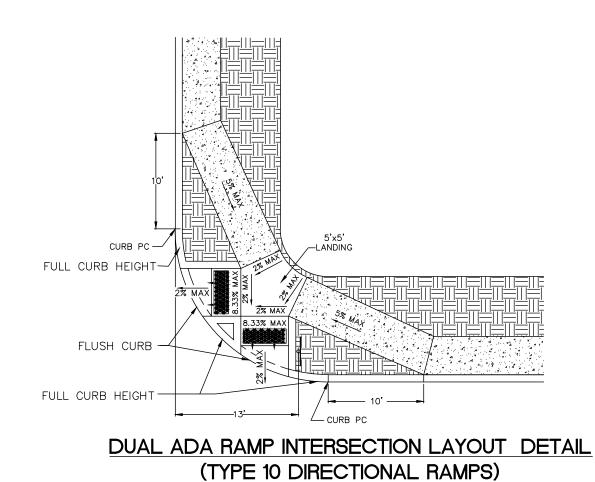
SUBMITTAL SET

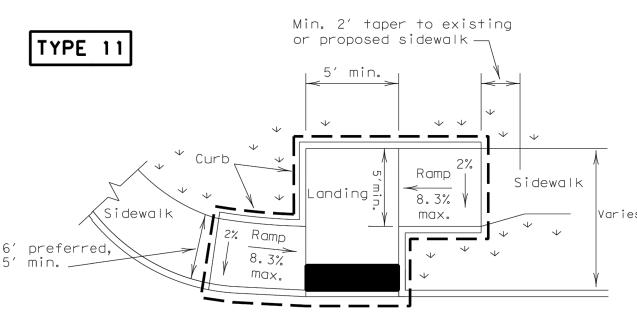




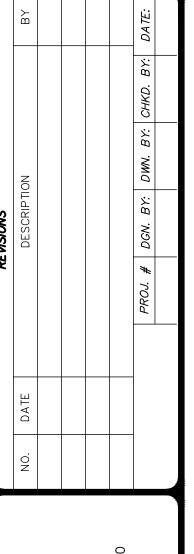


SINGLE ADA RAMP INTERSECTION LAYOUT DETAIL (TYPE 10 DIRECTIONAL RAMPS)

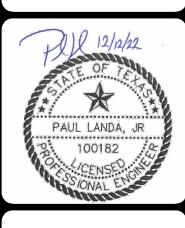




OFFSET PARALLEL CURB RAMP (TYPE 11)



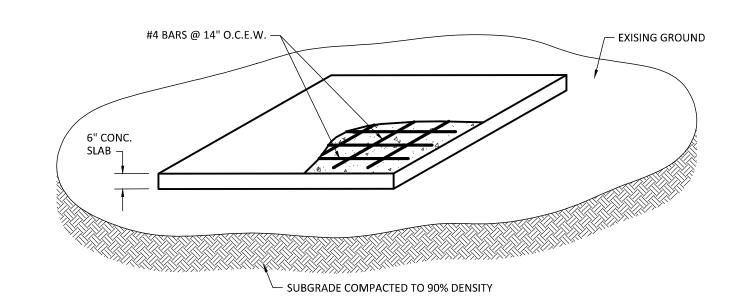
• Surve • Plani • Tarin Ramirez Engineers, ENGINEERING F-5297/SURVEYING: F-10 CIMARRON PATH, SUITE 100 TEL: (210) 698 NTONIO, TEXAS 78249 FAX: (210) 698



VERDIN SUBDIVISION UNIT 1
STREET PLAN & PROFILE
STANDARD DETAILS

18''x 24'' White Prismatic Background Green Overlay Film Hwy C lettering

BEXAR COUNTY MAINTENANCE SIGNAGE



NOTES:

- 1) THE CONTRACTOR WILL CONSTRUCT CONCRETE SLABS FOR "TEMPORARY MAIL BOX COLLECTION PAD" FOR THE UNITED STATES POSTAL SERVICE AT THE LOCATIONS AND SIZES SPECIFIED BY THE CITY ENGINEER DURING CONSTRUCTION.
- 2) THE CONSTRUCTION OF SLABS SHALL CONFORM TO ITEM NO. 502 "CONCRETE SIDEWALKS AND DRIVEWAYS"
- PAYMENT WILL BE MADE UNDER ITEM NO. 502-2 DRIVEWAYS -PER SQUARE YARD.
- 4) UNIT PRICE WILL INCLUDE REMOVAL OF "TEMPORARY MAIL BOX COLLECTION PAD" SLABS AT THE END OF THE PROJECT. NO SEPARATE PAY ITEM.

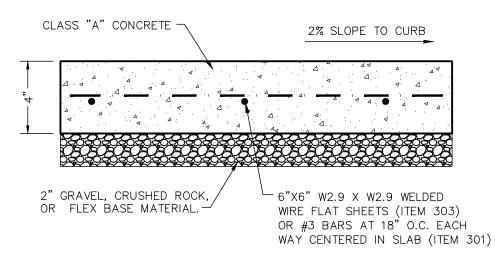
TEMPORARY MAIL BOX COLLECTION PAD

CONCRETE DRIVEWAY NOTES:

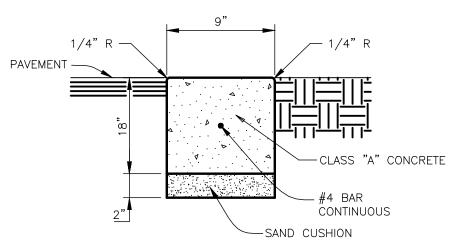
1. THE PROPOSED DRIVEWAY SHOULD MATCH THE EXISTING WIDTH AT THE PROPERTY LINE BUT UNLESS AUTHORIZED BY THE CITY TRAFFIC ENGINEER, THE WIDTH SHALL BE WITHIN THE FOLLOWING VALUES:

TYPE	MINIMUM	MAXIMUM
RESIDENTIAL	10'	20'
COMMERCIAL - ONE WAY	12'	20'
COMMERCIAL - TWO WAY	24'	30'

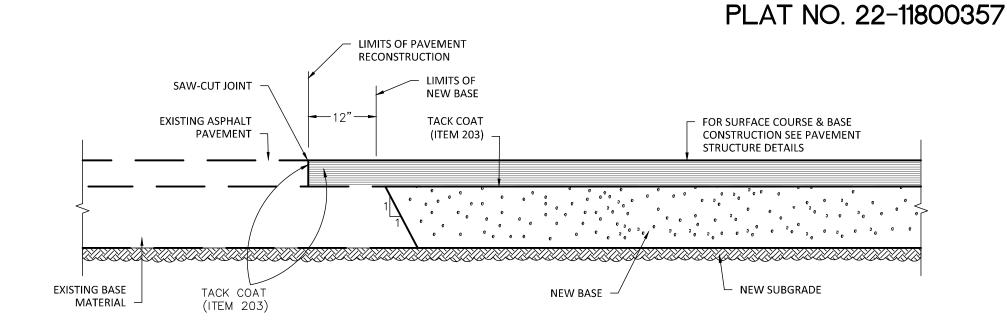
- 2. FOR LOCAL TYPE "A" STREETS, SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 4' AND IF SEPARATED FROM THE CURB, THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 3' FROM THE BACK OF CURB.
- 3. FOR OTHER THAN LOCAL TYPE "A" STREETS, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH 4' AND SEPARATED A MINIMUM OF 3' FROM THE BACK OF CURB OR, AS AN OPTION, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.
- 4. DUMMY JOINTS PARALLEL TO THE CURB SHALL BE PLACED WHERE THE SIDEWALK MEETS THE DRIVEWAY.
 DUMMY JOINTS PERPENDICULAR TO THE CURB, AND WITHIN THE BOUNDARIES OF THE PARALLEL DUMMY
 JOINTS, SHALL BE PLACED AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK.
- 5. A MINIMUM OF TWO ROUND AND SMOOTH DOWEL BARS 3/8" IN DIAMETER AND 18" IN LENGTH SHALL BE SPACED 18" APART AT EACH EXPANSION JOINT.
- 6. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE. WHERE SIDEWALKS CROSS DRIVEWAYS, SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%..
- 7. SIDEWALK RAMP SURFACE SHALL BE BRUSH FINISHED.



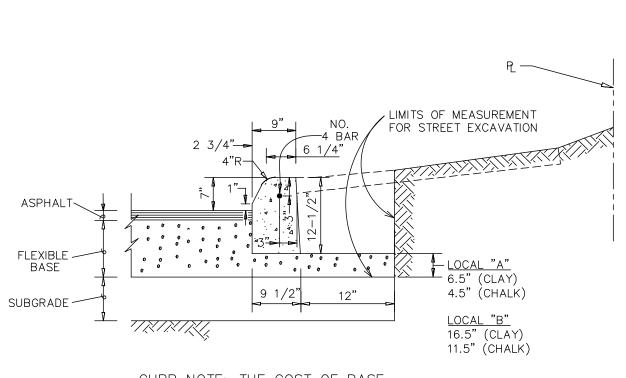
CONCRETE SIDEWALK DETAIL



HEADER CURB



PAVEMENT JUNCTION DETAILS
N.T.S.

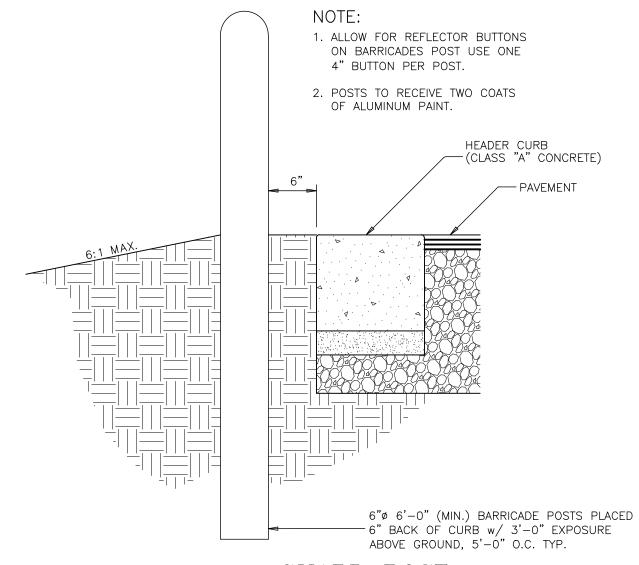


CURB NOTE: THE COST OF BASE MATERIAL UNDER & BEHIND THE CURB SHALL BE INCLUDED IN THE COST OF THE CURB.

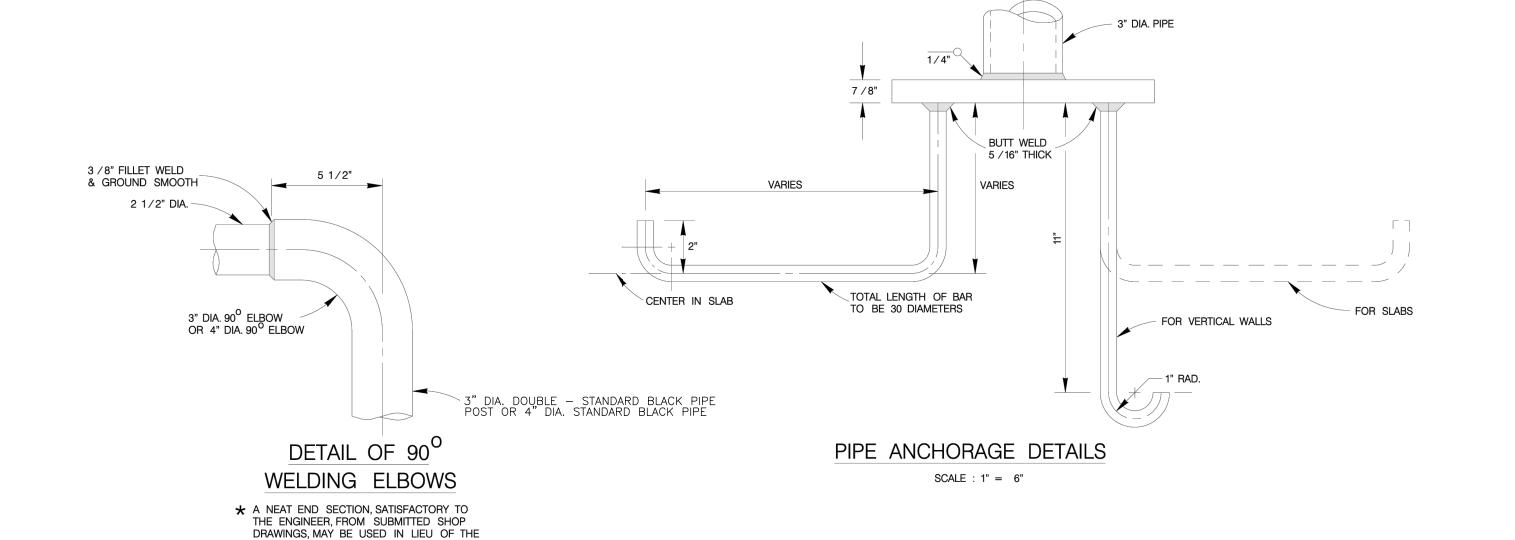
90° WELDING ELBOW SHOWN.

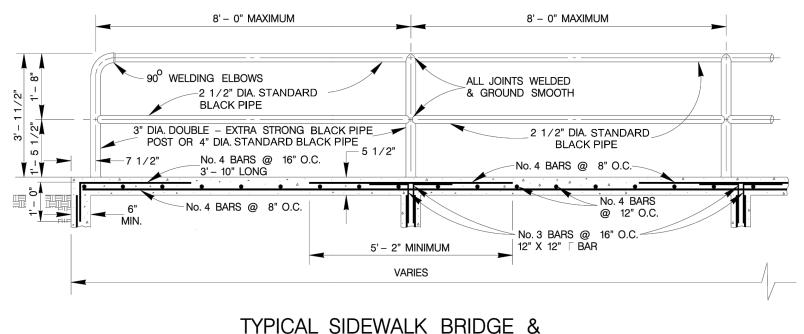
SCALE : 1" = 8"

MACHINE LAID CURB
N.T.S. ITEM 500



GUARD POST





TYPICAL SIDEWALK BRIDGE &
SIDEWALK PIPE RAILING SECTION
SCALE: 1" = 4'

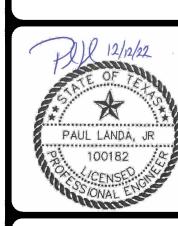
SHEE

NO. DATE DESCRIPTION B

PROJ. # DGN. BY: CHKD. BY: DATE

• Engineer
• Surveyor
• Surveyor
• Planners
• Tarin Ramirez Engineers, LL

ENGINEERING F—5297/SURVEYING: F—101313
CIMARRON PATH, SUITE 100 TEL: (210) 698–50



C4.13

LOCAL "B TYPICAL STREET CROSS-SECTION (40' PAVEMENT)

- ASPH. PAVEMENT

6" H.M.A.C. TYPE "B"/

N.T.S.

KINGBIRD PATH ~ STA. 1+60.41 TO STA. 7+89.76

6" LIME STABILIZED

(4% BY WEIGHT)

SUBGRADE (19.0 LBS/SY)

(SEE BELOW) *

3" H.M.A.C. TYPE "D"

(SEE BELOW) *

PAVEMENT MATERIAL	<u>CLAY SUBGRAD</u> LOCAL A	E (CBR 3.0) LOCAL B
TYPE D ASPHALTIC CONCRETE	2.0 IN.	3.0 IN.
TYPE B ASPHALTIC CONCRETE		6.0 IN.
FLEXIBLE BASE (TxDOT ITEM 247 TYPE A GRADE 2)	8.25 IN.	8.0 IN.
LIME STABILIZED SUBGRADE (19.0 LBS/SY) (4% BY WEIGHT)	6.0 IN.	6.0 IN.

PAVEMENT SECTIONS *

1, E.G.T.TV.E A:1,

-PARKWAY

95% COMPACTED DENSITY

* AT TIME OF CONSTRUCTION,

PAVEMENT SECTION TO BE

DETERMINED BY ENGINEER

AFTER INSPECTION OF SUBGRADE

MIN. SLOPE 1/4"/FT.

MAX. SLOPE 1"/FT.

-8" COMPACTED FLEXIBLE BASE (SEE BELOW) *

FAVENCE MATERIAL	LOCAL A	LOCAL
TYPE D ASPHALTIC CONCRETE	2.0 IN.	3.0
TYPE B ASPHALTIC CONCRETE		6.0
FLEXIBLE BASE (TxDOT ITEM 247 TYPE A GRADE 2)	8.25 IN.	8.0
LIME STABILIZED SUBGRADE (19.0 LBS/SY)	6.0 IN.	6.0 I

NOTES:

1. APPLICABLE SPECIFICATIONS FROM "CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION"- JUNE 2008 200 - FLEXIBLE BASE 202 - PRIME COAT 203 - TACK COAT

VERDIN SUBDIVISION, UNIT 1, BEXAR COUNTY, TEXAS PAVEMENT DESIGN

FROST GEOSCIENCES, INC. PROJECT NO. FGS-G 22122-1 REVISED (DECEMBER 13, 2022)

205 - HOT MIX ASPHALT CONCRETE PAVEMENT

NOTE: THE SUBGRADE SOILS SHOULD BE TESTED

FOR SOLUBLE SULPHATE CONTENT PRIOR

TO INSTALLATION OF LIME OR CEMENT

SELECT FILL MATERIAL SHALL HAVE A PLASTICITY INDEX OF LESS THAN 20 AND A CALIFORNIA BEARING RATIO (CBR) OF AT LEAST 3.0

<u>GEOTECHNICAL REPORT::</u> FROST GEOSCIENCES, INC.

- 2. REFER TO INTEC GEOTECHNICAL REPORTS FOR ADDITIONAL PAVEMENT CONSTRUCTION INFORMATION A. "VERDIN SUBDIVISION, UNIT 1, BEXAR COUNTY, TEXAS, PAVEMENT DESIGN, FROST GEOSCIENCES, INC. PROJECT NO.: FGS-G 22122-1, AUGUST 11,
- 3. CONTRACTOR TO COORDINATE ALL MATERIAL TESTING
- 4. CONTRACTOR SHALL FILL ANY GAPS BETWEEN THE EXISTING LIMESTONE SUBGRADE AND THE BOTTOM OF THE FLEXIBLE BASE WITH EITHER SELECT FILL (ITEM 410.2) GRAVEL, OR WITH LIMESTONE MILLINGS

FOR CONSTRUCTION VERIFICATION THE FOLLOWING SHALL BE CONDUCTED IN THE FIELD:

- AFTER INITIAL MIXING THE SOIL-LIME MIXTURE SHALL MELLOW FOR A PERIOD OF TWO TO THREE (2-3) DAYS. MAINTAIN
- MOISTURE DURING MELLOWING; AFTER MELLOWING AND FINAL MIXING, THE PULVERIZATION SHALL BE CHECKED USING THE FOLLOWING CRITERIA (REMOVE) NON-SLAKING AGGREGATES RETAINED ON THE 3/4 INCH SIEVE FROM THE SAMPLE): •• MINIMUM PASSING 13/4 SIEVE
- COMPACT AND CHECK FIELD DENSITY (MINIMUM OF 95% OF MDD REQUIRED);

KINGBIRD PATH ~ STA. 7+89.76 TO STA. 15+99.37

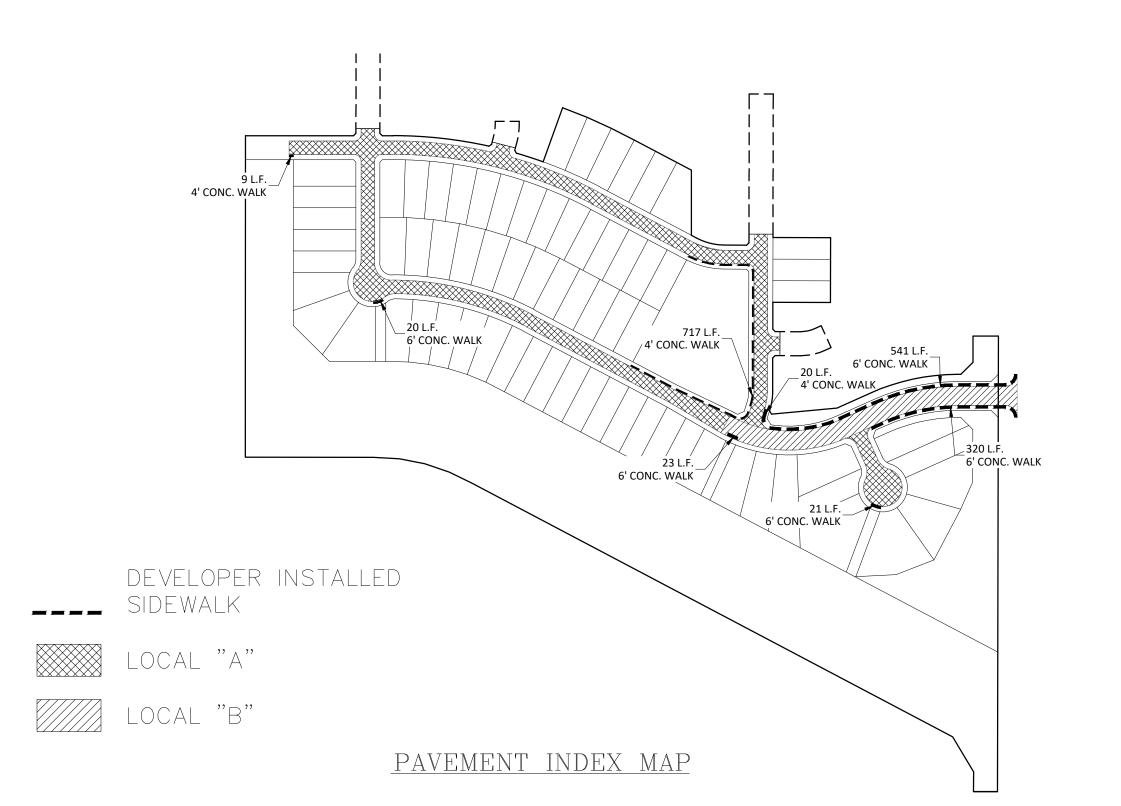
GROSBEAK WAY ~ STA. 1+20.00 TO STA. 5+20.60

LONGSPUR DR ~ 1+00.00 TO STA. 4+30.00

SHRIKE DRIVE ~ STA. 1+00.00 TO STA. 1+40.00 FLICKER FOREST ~ STA. 1+00.00 TO STA. 1+35.00

MURRE WAY ~ STA. 1+00.00 TO STA. 11+28.65 KINGLET WAY ~ STA. 1+00.00 TO STA. 2+45.00

CURE FOR AN ADDITIONAL 2 TO 5 DAYS (TOTAL MELLOWING AND CURING TIME SHOULD TOTAL AT LEAST 5 DAYS).
 VERIFY DEPTH OF LIME STABILIZED LAYER TO DEPTH AS NOTED ON PLAN TO WITHIN ±1.0 INCH.



PLAT NO. 22-11800357

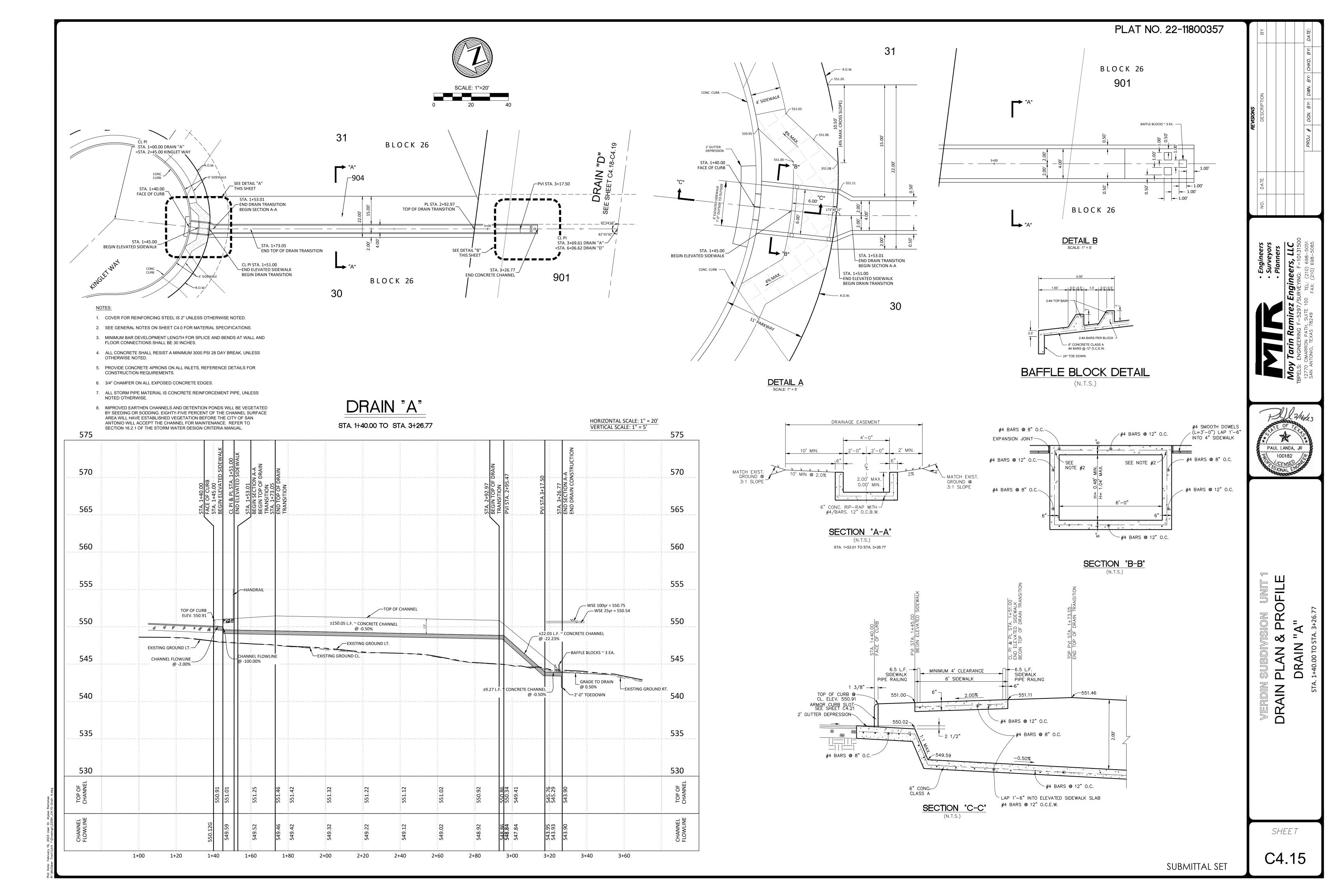


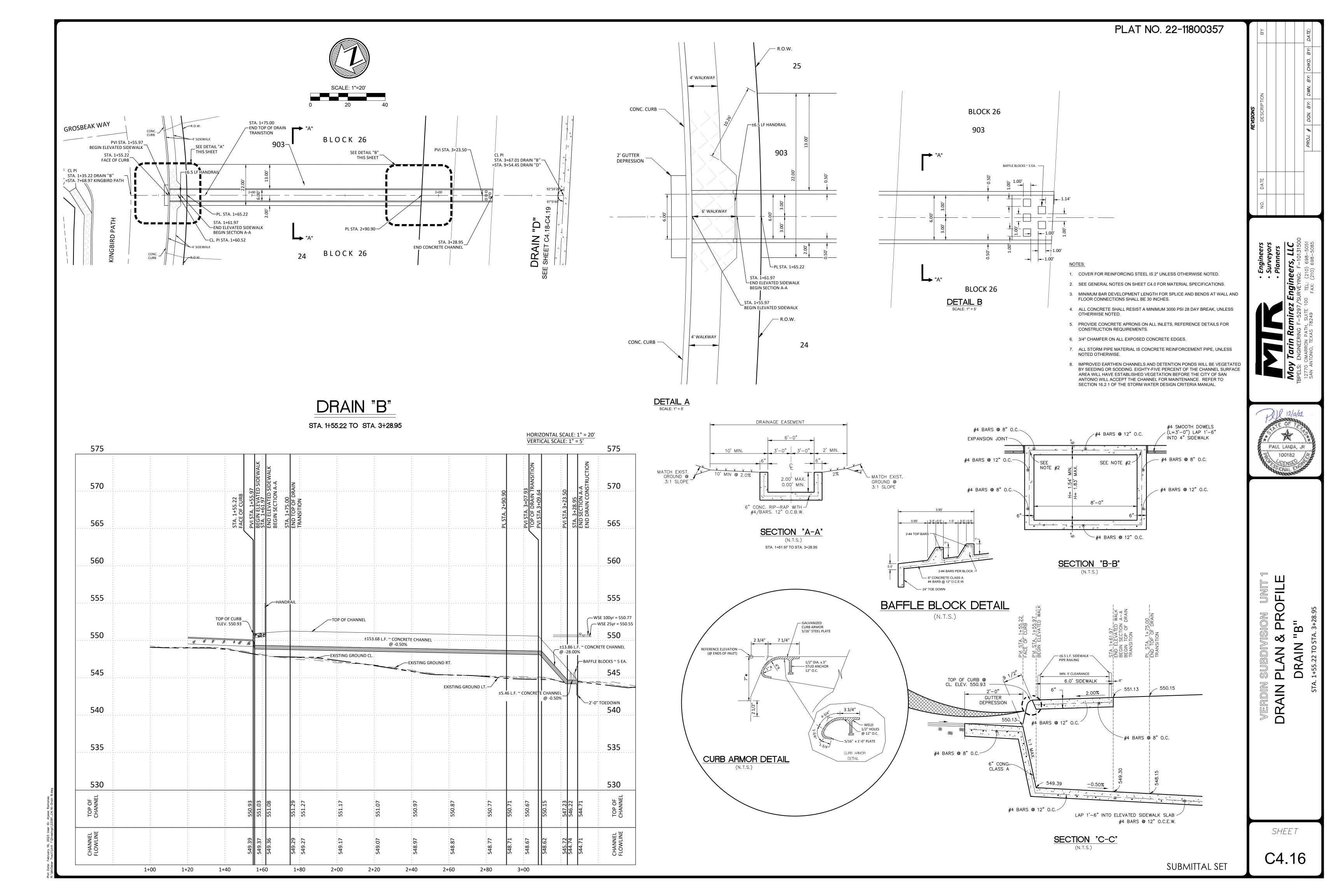
DET, TRE S STANDARD

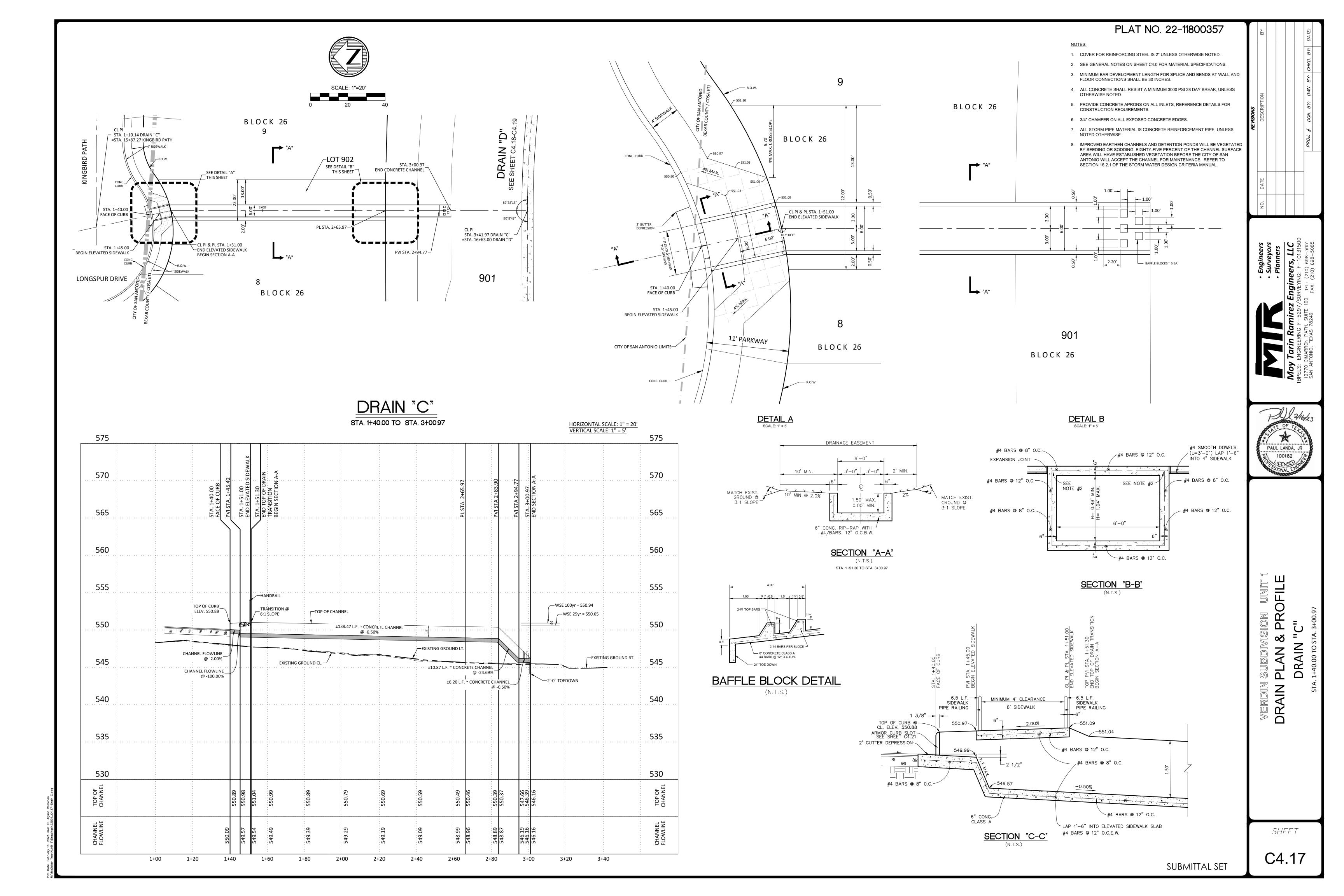
SHEET

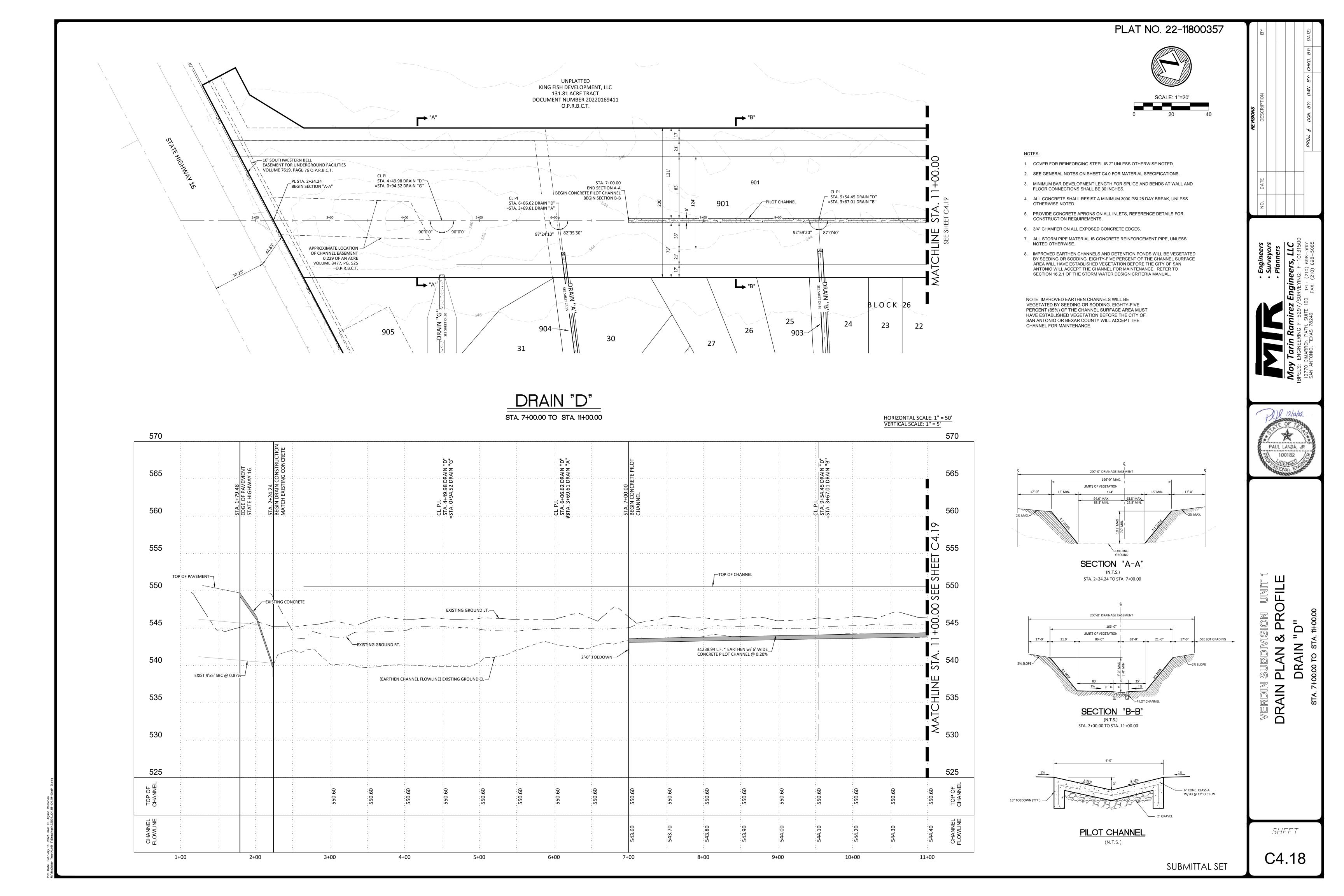
C4.14

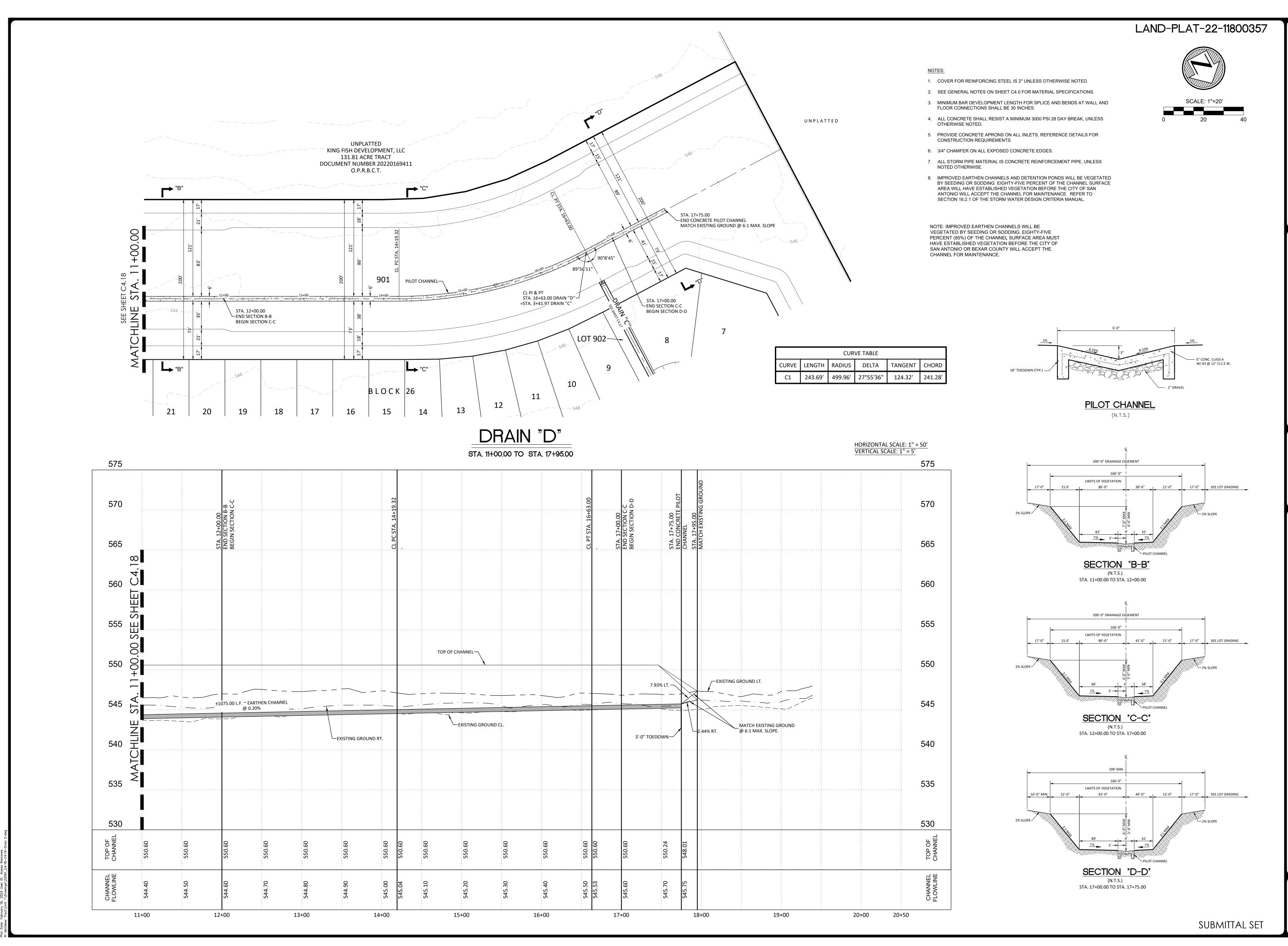
SUBMITTAL SET











urveyors

lanners

Prs, LLC

F-10131500

) 698-5051

) 698-5085

Surve

Surve

Plant

arin Ramirez Engineers,

IGINEERING F-5297/SURVEYING: F-16

ARRON PATH, SUITE 100 TEL: (210) 69

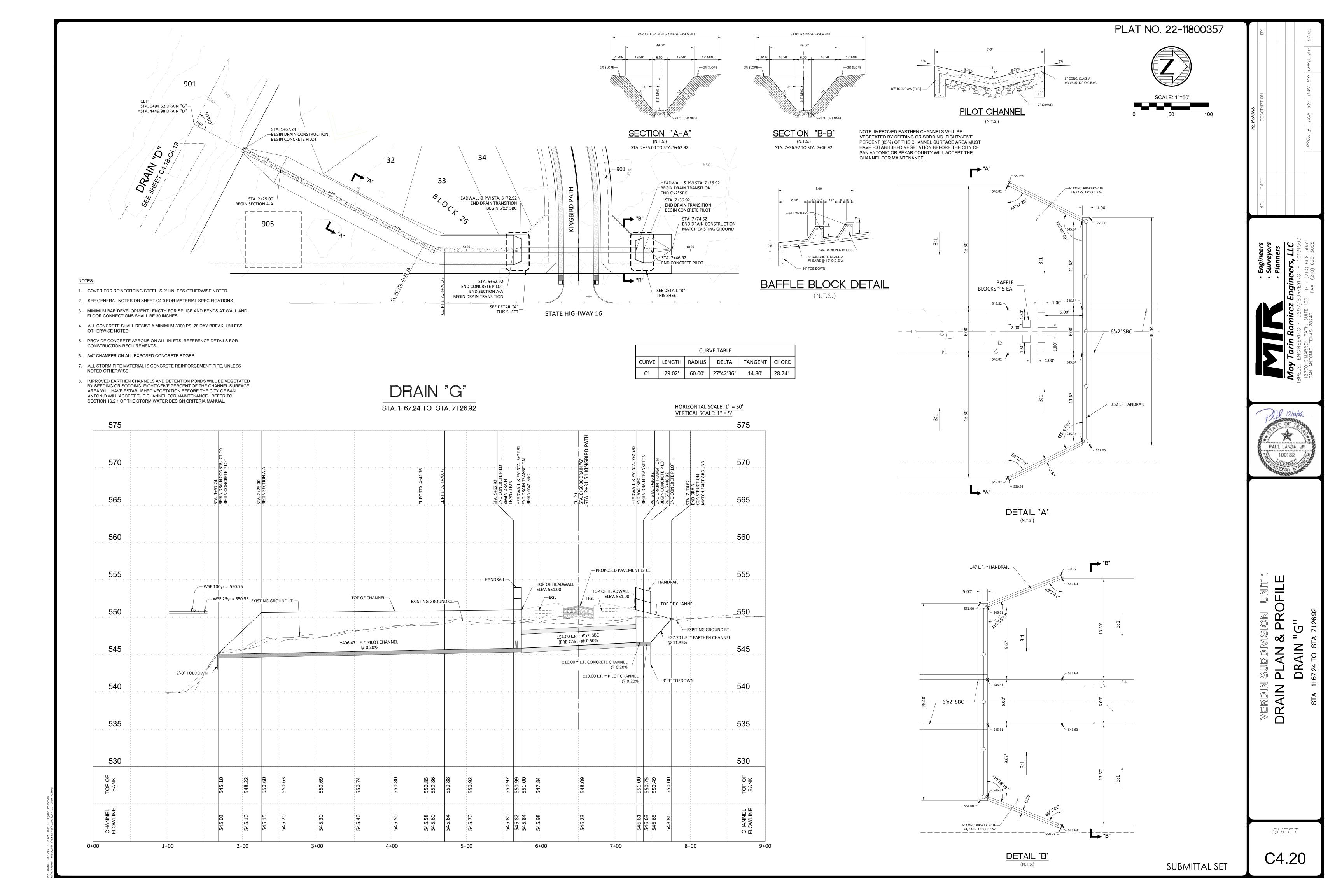
PAUL LANDA, JR
9 100182 &
CENSES

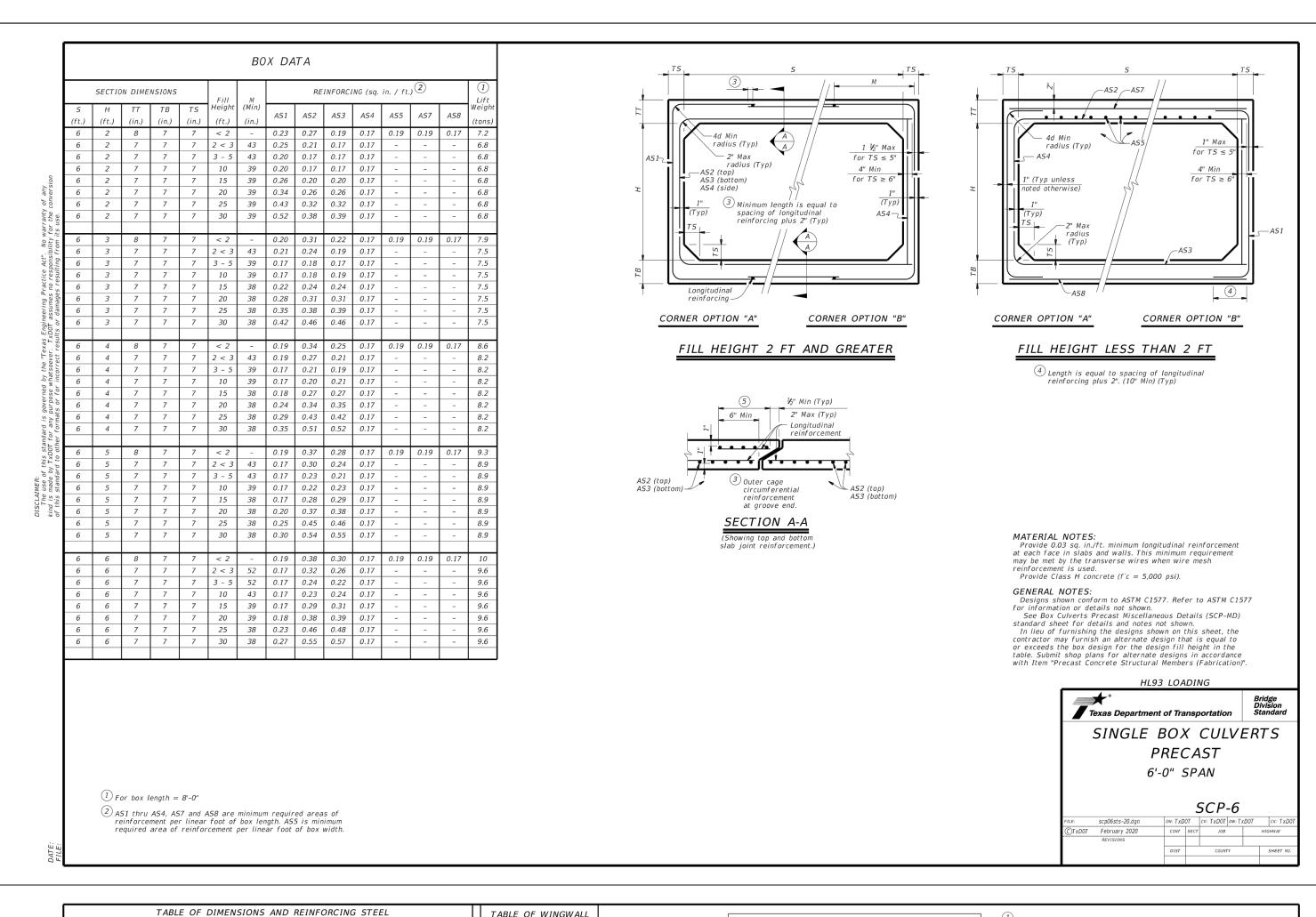
DRAIN PLAN & PROFILE

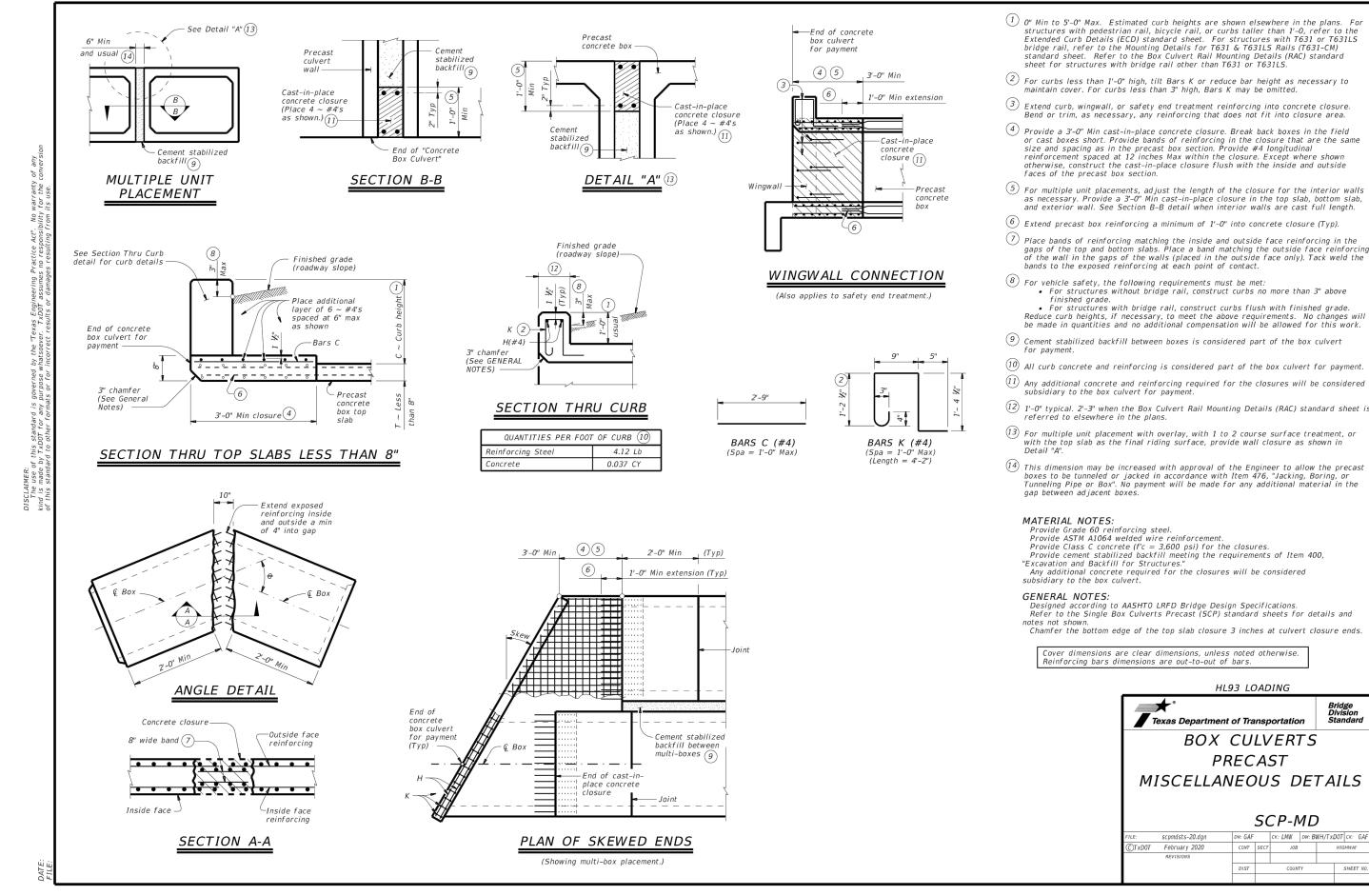
DRAIN "D"

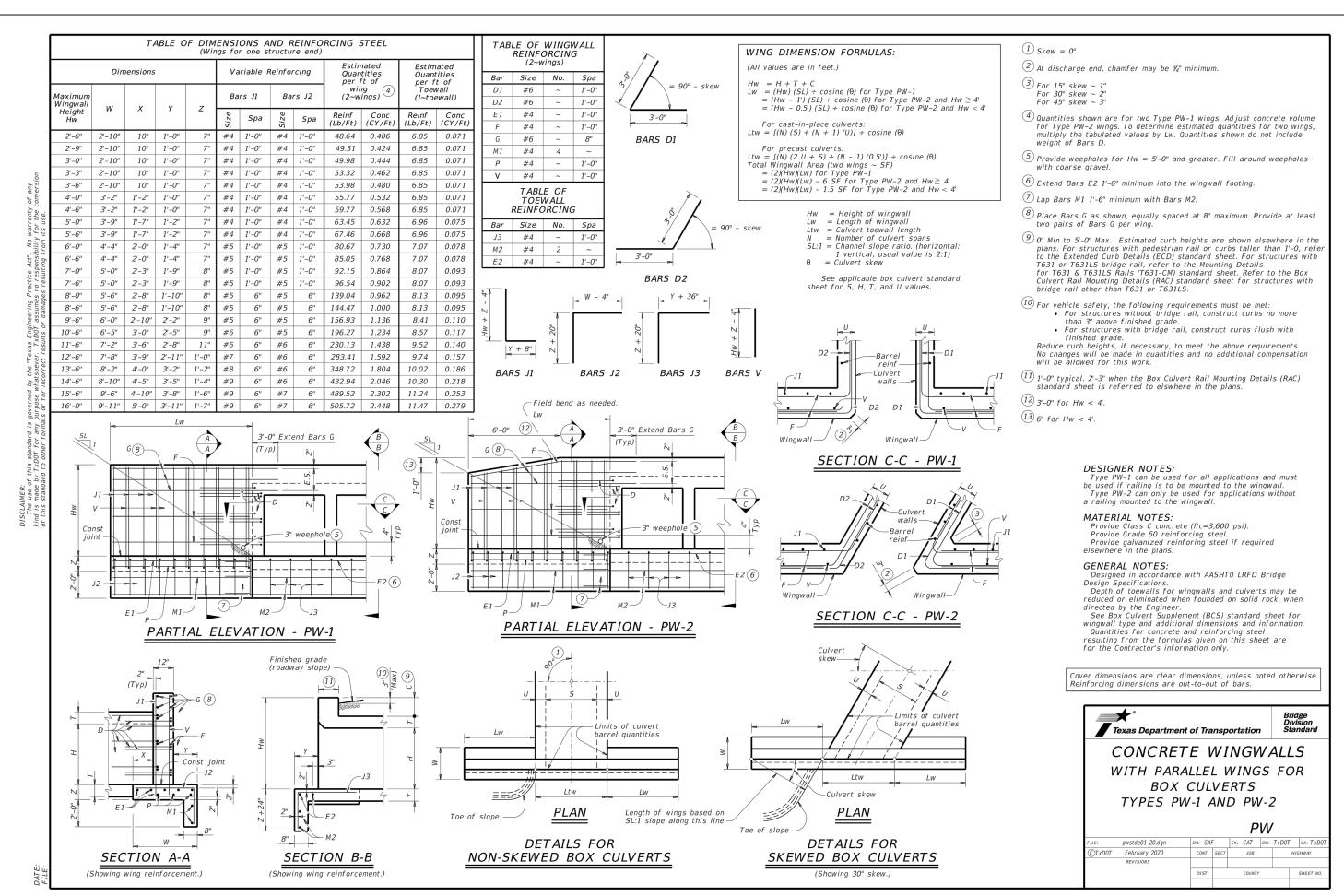
SHEET

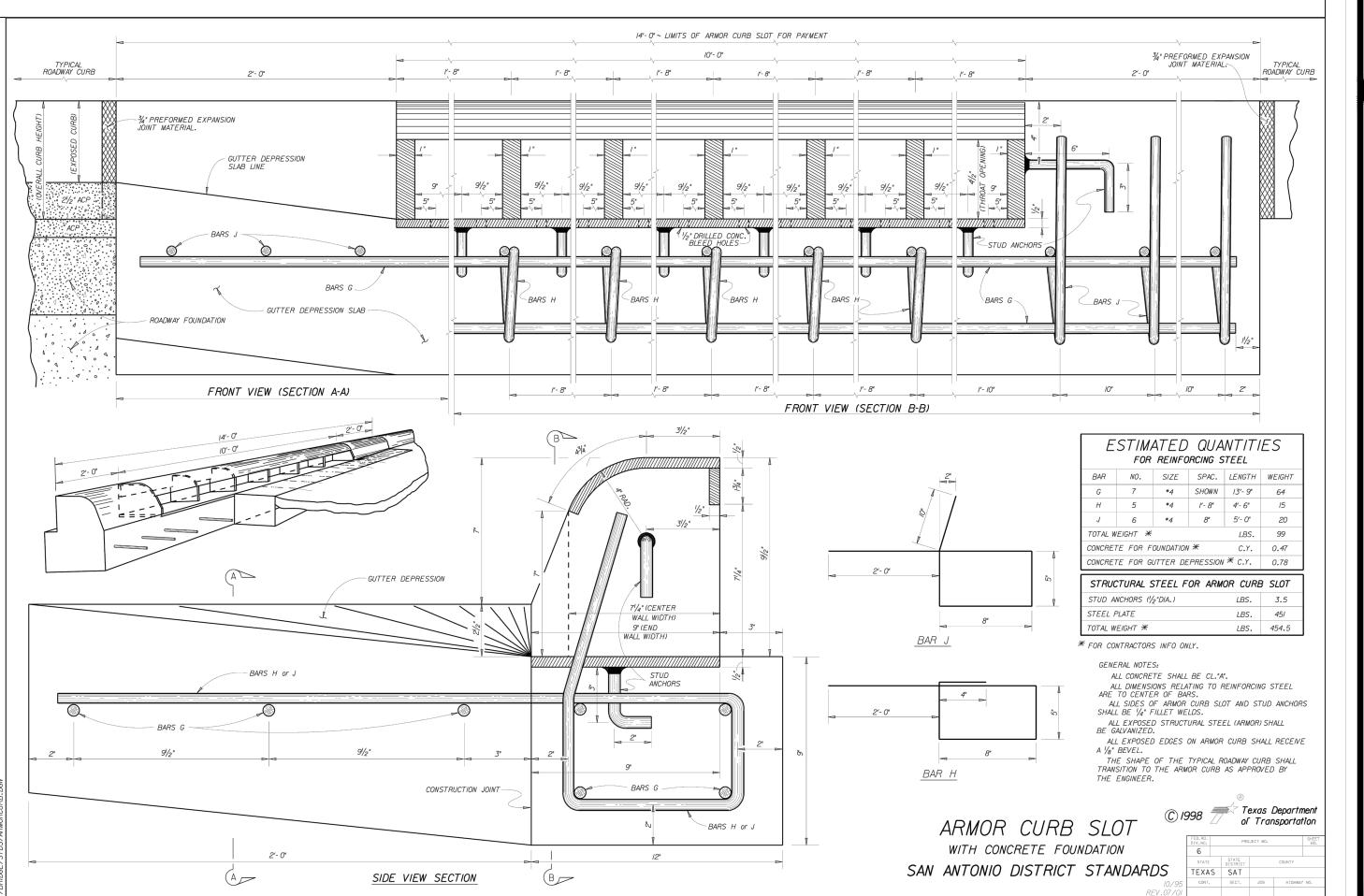
C4.19





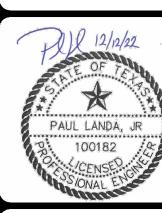






NO. DATE
DESCRIPTION
BY
PROJ. # DGN. BY: CHKD. BY: DATE:

• Surveyors
• Planners
in Ramirez Engineers, LLC
EERING F-5297/SURVEYING: F-1013150C
ON PATH, SUITE 100 TEL: (210) 698-5051
TEXAS 78249 FAX: (210) 698-5085



REET PLAN & PROFILE
STANDARD DETAILS

PLAT NO. 22-11800357

GENERAL SPECIFICATIONS FOR SITE PREPARATION

1. GENERAL DESCRIPTION

THIS ITEM SHALL CONSIST OF ALL CLEARING AND GRUBBING, DEMOLITION, PREPARATION OF LAND TO BE FILLED, FILLING OF THE LAND, SPREADING, COMPACTION TESTING AND INSPECTION OF THE FILL, AND ALL SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING OF THE CUT AND FILL AREAS TO CONFORM WITH THE LINES, GRADES AND SLOPES AS SHOWN ON THE APPROVED PLANS ALL LOT GRADING MUST MEET REQUIREMENTS OF FHA/HUD HANDBOOK 4140.3, SPECIFICATIONS FOR LAND DEVELOPMENTS ON CONTROLLED EARTHWORK, DATASHEET 79g. HUD 79g REQUIREMENTS FOR FILL MATERIAL OF 6 INCHES AND MORE WILL BE CONDUCTED. ALL CUT AREAS WILL ALSO MEET THE REQUIREMENTS FOR HUD 79g

2. CLEARING THE AREA TO BE FILLED

ALL TIMBER, LOGS, TREES, BRUSH AND RUBBISH SHALL BE REMOVED FROM

3. SCARIFYING THE AREA TO BE FILLED

ALL ORGANIC MATTER SHALL BE REMOVED FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED, AND THE SURFACE SHALL THEN BE DISKED OR SCARIFIED TO A MINIMUM DEPTH OF SIX INCHES (6"), ALL SURFACE RUTS OR OTHER UNEVEN FEATURES WILL BE LEVELED PRIOR TO FIELD DENSITY TESTING. WHERE FILLS ARE MADE ON HILLSIDES OR SLOPES, THE SLOPE OF THE ORIGINAL GROUND UPON WHICH THE FILL IS TO BE PLACED SHALL BE DISKED OR SCARIFIED. WHERE THE SLOPE RATIO OF THE ORIGINAL GROUND IS STEEPER THAN 5 HORIZONTAL TO 1 VERTICAL, THE BANK SHALL BE STEPPED OR BENCHED. GROUND SLOPES WHICH ARE FLATTER THAN 5 TO 1 SHALL BE BENCHED WHEN CONSIDERED NECESSARY BY THE GEOTECHNICAL

4. COMPACTING THE AREA TO BE FILLED

FOLLOWING THE CLEARING AND DISKING OR SCARIFYING OF THE FILL AREA, IT SHALL BE BLADED UNTIL IT IS UNIFORM AND FREE FROM LARGE CLODS. THE AREA SHALL BE BROUGHT TO THE ADEQUATE MOISTURE CONTENT AND COMPACTED (TYPICALLY) TO NOT LESS THAN NINETY PERCENT (90%) OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT ASTM D 1557 COMPACTION PROCEDURE, OR 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT THD--TEX--113--E COMPACTION PROCEDURE.

5. FILL MATERIALS

THE MATERIALS USED SHALL BE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES, SUCH AS TREES, BRUSH AND RUBBISH, AND SHALL NOT CONTAIN ROCKS OR LUMPS HAVING A DIAMETER OF MORE THAN SIX INCHES (6").

6. DEPTH AND MIXING OF FILL LAYERS

THE SELECTED FILL MATERIAL SHALL BE PLACED IN LEVEL, UNIFORM LAYERS WHICH, WHEN COMPACTED, SHALL HAVE A DENSITY CONFORMING TO THAT STIPULATED ABOVE. EACH LAYER SHALL BE THOROUGHLY MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. COMPACTED LAYER THICKNESS MAY VARY DEPENDING ON THE COMPACTION EQUIPMENT OF DEMONSTRATED CAPABILITY. THE MAXIMUM LOOSE DEPTH FOR ANY MATERIAL SHALL NOT EXCEED TWELVE INCHES (12"). FOR TESTING REQUIREMENTS OF FILL MATERIAL, SEE DENSITY TESTING.

WHEN FILL MATERIAL INCLUDES ROCK, THE MAXIMUM ROCK SIZE SHALL BE AS APPROVED BY THE GEOTECHNICAL ENGINEER. NO LARGE ROCKS SHALL BE ALLOWED TO NEST AND ALL VOIDS MUST BE FILLED WITH SMALL STONES OR SOIL AND ADEQUATELY COMPACTED. NO LARGE ROCKS WILL BE PERMITTED WITHIN EIGHTEEN INCHES (18") OF THE FINISHED GRADE.

8. COMPACTION OF FILL LAYER

COMPACTION EQUIPMENT SHALL BE CAPABLE OF COMPACTING THE FILL TO THE SPECIFIED DENSITY. COMPACTION SHALL BE ACCOMPLISHED WHILE THE FILL MATERIAL IS AT OR NEAR THE APPROPRIATE MOISTURE CONTENT. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER THE ENTIRE STRUCTURAL AREA (BENEATH PROPOSED

9. COMPACTION OF SLOPES

THE FACES OF FILL SLOPES SHALL BE COMPACTED. COMPACTING OPERATIONS SHALL BE CONTINUED UNTIL THE SLOPE FACES ARE STABLE BUT NOT TOO DENSE FOR PLANTING ON THE SLOPES. COMPACTION OF THE SLOPE FACES MAY BE DONE PROGRESSIVELY IN INCREMENTS OF THREE TO FIVE FEET (3' TO 5') IN FILL HEIGHT AS THIS FILL PROGRESSES OR AFTER THE FILL HAS BEEN BROUGHT TO ITS TOTAL HEIGHT.

10. MOISTURE CONTENT

THE FILL MATERIAL SHALL BE COMPACTED AT THE APPROPRIATE MOISTURE CONTENT SPECIFIED FOR THE SOILS BEING USED. APPROPRIATE MOISTURE CONTENT IS DEFINED, TYPICALLY, AS OPTIMUM MOISTURE CONTENT; HOWEVER, FOR EXPANSIVE SOILS IT MAY BE GREATER THAN OPTIMUM MOISTURE CONTENT, AND OTHER MOISTURE CONTENTS MAY BE NECESSARY TO PRODUCE THE DESIRED RESULTS WITH CERTAIN SOILS.

11. DENSITY TESTS

FIELD DENSITY TESTS SHALL BE PERFORMED ON LAYERS OF FILL WHEN THE FILL IS BEING PLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE MAXIMUM FILL HEIGHT BETWEEN DENSITY TESTING SHALL BE TWELVE INCHES (12") AND AS SPECIFIED BY GEOTECHNICAL ENGINEER. ALL TESTING SHALL BE REQUESTED BY THE CONTRACTOR TO MEET THE CONTRACTOR'S CONSTRUCTION SCHEDULE. NOTIFICATION BY THE CONTRACTOR FOR GEOTECHNICAL ENGINEER TO CONDUCT TESTS SHALL BE AT LEAST THE DAY BEFORE. THIS NOTIFICATION SHALL INCLUDE THE FILL AREA LOCATION (LOT AND BLOCK), THE LIFT OR HEIGHT OF FILL AND APPROXIMATE DESIRED TIME OF TESTING. WHEN THESE TESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY, THE PARTICULAR LAYER OR PORTION SHALL BE REWORKED AND RETESTED AT THE EXPENSE OF THE CONTRACTOR UNLESS THE CONTRACTOR CAN SHOW EVIDENCE THAT CIRCUMSTANCES BEYOND HIS CONTROL REQUIRED THE RETESTING. GENERALLY, THE SPECIFIC TESTING WILL BE AS FOLLOWS AND CONDUCTED BY GEOTECHNICAL ENGINEER.

1. THE LAND TO BE FILLED (PREPARED SUBGRADE) SHALL BE PREPARED AND TESTED AT A FREQUENCY AS DETERMINED BY THE GEOTECHNICAL ENGINEER. THE FIRST LIFT OF COMPACTED FILL (GENERALLY 8 TO 12-IN.) SHALL BE TESTED AS DETERMINED BY THE GEOTECHNICAL ENGINEER. ANY AREAS SUPPORTING THE PROPOSED STRUCTURES REQUIRING FILL SHALL BE TESTED FOR DENSITY COMPLIANCE. 3. FILLS SHALL BE TESTED A MAXIMUM OF EACH TWELVE INCHES (12") AND AS SPECIFIED BY GEOTECHNICAL ENGINEER, OF FILL 4. TEST RESULTS WILL BE PROVIDED BY THE FIELD TECHNICIAN TO THE CONTRACTOR WHEN POSSIBLE; HOWEVER, ALL TEST RESULTS ARE TO BE REVIEWED BY THE GEOTECHNICAL ENGINEER FOR COMPLIANCE. THE ENGINEER WILL NOTIFY THE CONTRACTOR OF ALL TEST RESULTS.

12. CUT/FILL LOTS

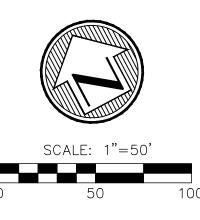
AREAS INVOLVING CUT ON ONE PORTION AND FILL ON ANOTHER PORTION OF A SPECIFIC LOT SHALL BE PREPARED TO A MINIMUM DEPTH OF 6-IN. AND WILL BE THE SAME MATERIAL CLASSIFICATION AT THE SAME COMPACTION AND MOISTURE CONTENT. A MINIMUM OF TWO (2) FIELD DENSITY TESTS SHALL BE REQUIRED ON EACH CUT/FILL LOT FOR THE PURPÒSÉ OF DETERMINING UNIFORMITY OF THE AREA SUPPORTING THE PROPOSED STRUCTURES.

NOTES:

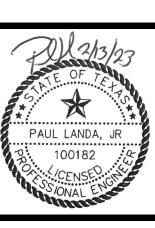
MINIMUM SLAB EXPOSURE IS 1.0'. ALL ELEVATIONS AT FRONT PROPERTY LINE ARE 0.18' ABOVE CURB ELEVATION.

CONTRACTOR TO VERIFY 1.5% MINIMUM SLOPE ON LOTS AND REGRADE TO MEET MINIMUM PROPOSED

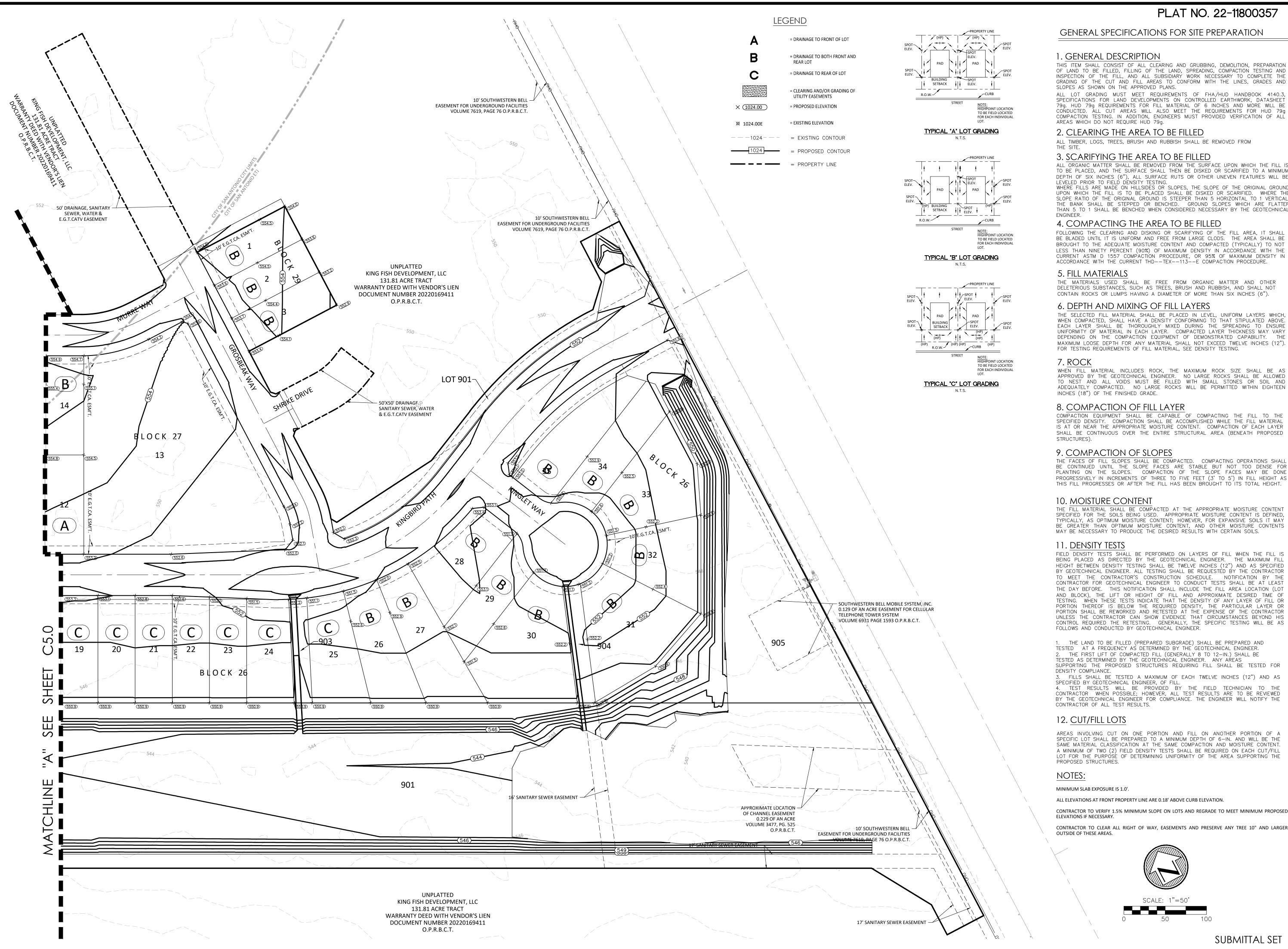
CONTRACTOR TO CLEAR ALL RIGHT OF WAY, EASEMENTS AND PRESERVE ANY TREE 10" AND LARGER



SUBMITTAL SET



 \Box (1)



PLAT NO. 22-11800357

GENERAL SPECIFICATIONS FOR SITE PREPARATION

OF LAND TO BE FILLED, FILLING OF THE LAND, SPREADING, COMPACTION TESTING AND INSPECTION OF THE FILL, AND ALL SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING OF THE CUT AND FILL AREAS TO CONFORM WITH THE LINES, GRADES AND ALL LOT GRADING MUST MEET REQUIREMENTS OF FHA/HUD HANDBOOK 4140.3, SPECIFICATIONS FOR LAND DEVELOPMENTS ON CONTROLLED EARTHWORK, DATASHEET 79g. HUD 79g REQUIREMENTS FOR FILL MATERIAL OF 6 INCHES AND MORE WILL BE CONDUCTED. ALL CUT AREAS WILL ALSO MEET THE REQUIREMENTS FOR HUD 79g COMPACTION TESTING. IN ADDITION, ENGINEERS MUST PROVIDED VERIFICATION OF ALL

ALL TIMBER, LOGS, TREES, BRUSH AND RUBBISH SHALL BE REMOVED FROM

ALL ORGANIC MATTER SHALL BE REMOVED FROM THE SURFACE UPON WHICH THE FILL IS TO BE PLACED, AND THE SURFACE SHALL THEN BE DISKED OR SCARIFIED TO A MINIMUM DEPTH OF SIX INCHES (6"), ALL SURFACE RUTS OR OTHER UNEVEN FEATURES WILL BE WHERE FILLS ARE MADE ON HILLSIDES OR SLOPES, THE SLOPE OF THE ORIGINAL GROUND UPON WHICH THE FILL IS TO BE PLACED SHALL BE DISKED OR SCARIFIED. WHERE THE SLOPE RATIO OF THE ORIGINAL GROUND IS STEEPER THAN 5 HORIZONTAL TO 1 VERTICAL, THE BANK SHALL BE STEPPED OR BENCHED. GROUND SLOPES WHICH ARE FLATTER THAN 5 TO 1 SHALL BE BENCHED WHEN CONSIDERED NECESSARY BY THE GEOTECHNICAL

FOLLOWING THE CLEARING AND DISKING OR SCARIFYING OF THE FILL AREA, IT SHALL BE BLADED UNTIL IT IS UNIFORM AND FREE FROM LARGE CLODS. THE AREA SHALL BE BROUGHT TO THE ADEQUATE MOISTURE CONTENT AND COMPACTED (TYPICALLY) TO NOT LESS THAN NINETY PERCENT (90%) OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT ASTM D 1557 COMPACTION PROCEDURE, OR 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CURRENT THD-TEX-113-E COMPACTION PROCEDURE.

THE MATERIALS USED SHALL BE FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES, SUCH AS TREES, BRUSH AND RUBBISH, AND SHALL NOT CONTAIN ROCKS OR LUMPS HAVING A DIAMETER OF MORE THAN SIX INCHES (6").

6. DEPTH AND MIXING OF FILL LAYERS

THE SELECTED FILL MATERIAL SHALL BE PLACED IN LEVEL, UNIFORM LAYERS WHICH, WHEN COMPACTED, SHALL HAVE A DENSITY CONFORMING TO THAT STIPULATED ABOVE. EACH LAYER SHALL BE THOROUGHLY MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. COMPACTED LAYER THICKNESS MAY VARY DEPENDING ON THE COMPACTION EQUIPMENT OF DEMONSTRATED CAPABILITY. THE MAXIMUM LOOSE DEPTH FOR ANY MATERIAL SHALL NOT EXCEED TWELVE INCHES (12"). FOR TESTING REQUIREMENTS OF FILL MATERIAL, SEE DENSITY TESTING.

WHEN FILL MATERIAL INCLUDES ROCK, THE MAXIMUM ROCK SIZE SHALL BE AS APPROVED BY THE GEOTECHNICAL ENGINEER. NO LARGE ROCKS SHALL BE ALLOWED TO NEST AND ALL VOIDS MUST BE FILLED WITH SMALL STONES OR SOIL AND ADEQUATELY COMPACTED. NO LARGE ROCKS WILL BE PERMITTED WITHIN EIGHTEEN

COMPACTION EQUIPMENT SHALL BE CAPABLE OF COMPACTING THE FILL TO THE SPECIFIED DENSITY. COMPACTION SHALL BE ACCOMPLISHED WHILE THE FILL MATERIAL IS AT OR NEAR THE APPROPRIATE MOISTURE CONTENT. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER THE ENTIRE STRUCTURAL AREA (BENEATH PROPOSED

THE FACES OF FILL SLOPES SHALL BE COMPACTED. COMPACTING OPERATIONS SHALL BE CONTINUED UNTIL THE SLOPE FACES ARE STABLE BUT NOT TOO DENSE FOR PLANTING ON THE SLOPES. COMPACTION OF THE SLOPE FACES MAY BE DONE PROGRESSIVELY IN INCREMENTS OF THREE TO FIVE FEET (3' TO 5') IN FILL HEIGHT AS THIS FILL PROGRESSES OR AFTER THE FILL HAS BEEN BROUGHT TO ITS TOTAL HEIGHT.

THE FILL MATERIAL SHALL BE COMPACTED AT THE APPROPRIATE MOISTURE CONTENT SPECIFIED FOR THE SOILS BEING USED. APPROPRIATE MOISTURE CONTENT IS DEFINED, TYPICALLY, AS OPTIMUM MOISTURE CONTENT; HOWEVER, FOR EXPANSIVE SOILS IT MAY BE GREATER THAN OPTIMUM MOISTURE CONTENT, AND OTHER MOISTURE CONTENTS MAY BE NECESSARY TO PRODUCE THE DESIRED RESULTS WITH CERTAIN SOILS.

FIELD DENSITY TESTS SHALL BE PERFORMED ON LAYERS OF FILL WHEN THE FILL IS BEING PLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. THE MAXIMUM FILL HEIGHT BETWEEN DENSITY TESTING SHALL BE TWELVE INCHES (12") AND AS SPECIFIED BY GEOTECHNICAL ENGINEER. ALL TESTING SHALL BE REQUESTED BY THE CONTRACTOR TO MEET THE CONTRACTOR'S CONSTRUCTION SCHEDULE. NOTIFICATION BY THE CONTRACTOR FOR GEOTECHNICAL ENGINEER TO CONDUCT TESTS SHALL BE AT LEAST THE DAY BEFORE. THIS NOTIFICATION SHALL INCLUDE THE FILL AREA LOCATION (LOT AND BLOCK), THE LIFT OR HEIGHT OF FILL AND APPROXIMATE DESIRED TIME OF TESTING. WHEN THESE TESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY, THE PARTICULAR LAYER OR PORTION SHALL BE REWORKED AND RETESTED AT THE EXPENSE OF THE CONTRACTOR UNLESS THE CONTRACTOR CAN SHOW EVIDENCE THAT CIRCUMSTANCES BEYOND HIS CONTROL REQUIRED THE RETESTING. GENERALLY, THE SPECIFIC TESTING WILL BE AS

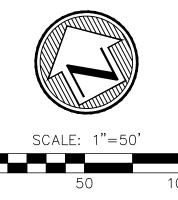
1. THE LAND TO BE FILLED (PREPARED SUBGRADE) SHALL BE PREPARED AND TESTED AT A FREQUENCY AS DETERMINED BY THE GEOTECHNICAL ENGINEER. THE FIRST LIFT OF COMPACTED FILL (GENERALLY 8 TO 12-IN.) SHALL BE TESTED AS DETERMINED BY THE GEOTECHNICAL ENGINEER. ANY AREAS SUPPORTING THE PROPOSED STRUCTURES REQUIRING FILL SHALL BE TESTED FOR 3. FILLS SHALL BE TESTED A MAXIMUM OF EACH TWELVE INCHES (12") AND AS 4. TEST RESULTS WILL BE PROVIDED BY THE FIELD TECHNICIAN TO THE CONTRACTOR WHEN POSSIBLE; HOWEVER, ALL TEST RESULTS ARE TO BE REVIEWED BY THE GEOTECHNICAL ENGINEER FOR COMPLIANCE. THE ENGINEER WILL NOTIFY THE

AREAS INVOLVING CUT ON ONE PORTION AND FILL ON ANOTHER PORTION OF A SPECIFIC LOT SHALL BE PREPARED TO A MINIMUM DEPTH OF 6-IN. AND WILL BE THE SAME MATERIAL CLASSIFICATION AT THE SAME COMPACTION AND MOISTURE CONTENT A MINIMUM OF TWO (2) FIELD DENSITY TESTS SHALL BE REQUIRED ON EACH CUT/FILL LOT FOR THE PURPOSÉ OF DETERMINING UNIFORMITY OF THE AREA SUPPORTING THE

ALL ELEVATIONS AT FRONT PROPERTY LINE ARE 0.18' ABOVE CURB ELEVATION.

CONTRACTOR TO VERIFY 1.5% MINIMUM SLOPE ON LOTS AND REGRADE TO MEET MINIMUM PROPOSED

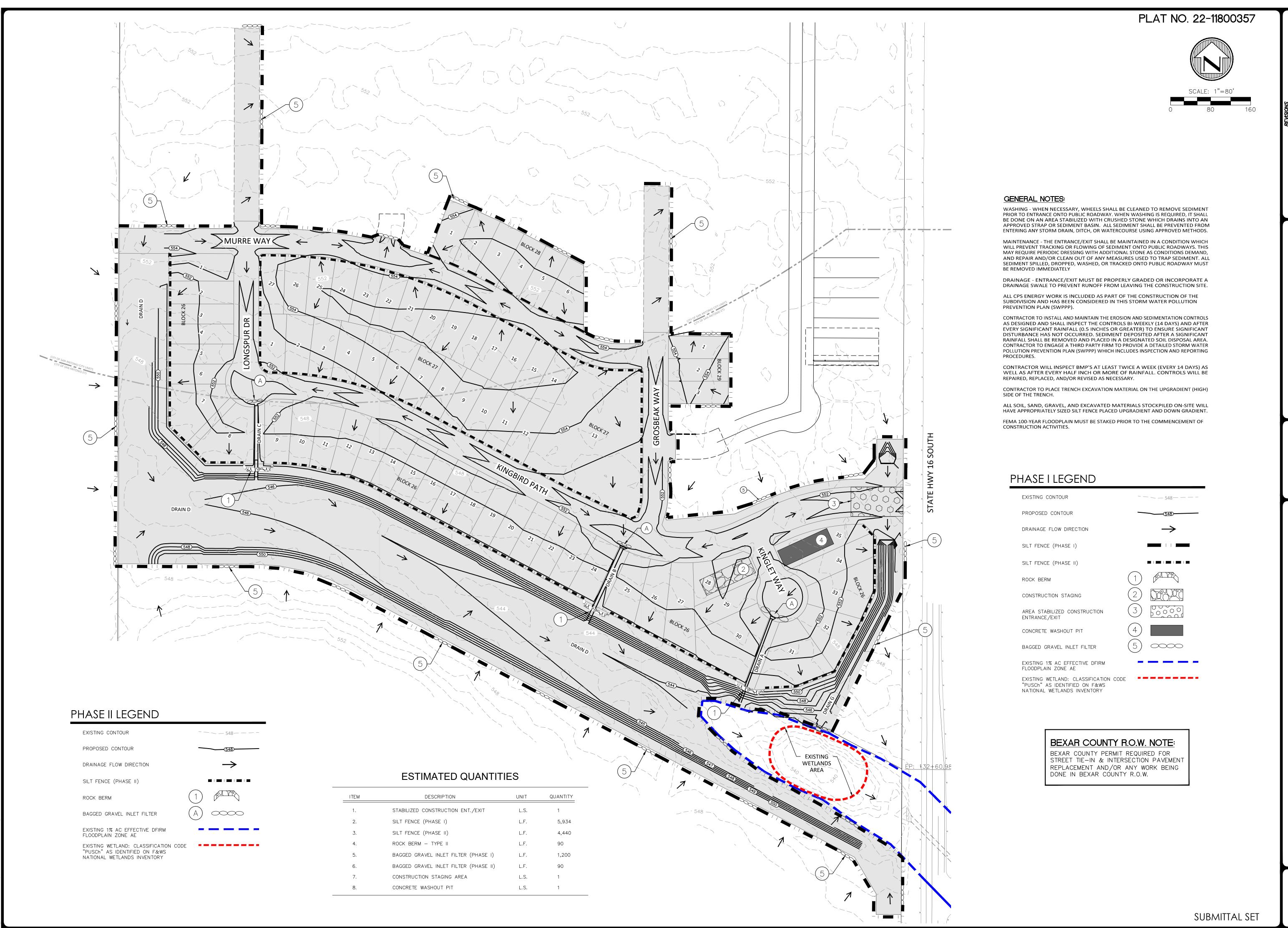
CONTRACTOR TO CLEAR ALL RIGHT OF WAY, EASEMENTS AND PRESERVE ANY TREE 10" AND LARGER



SUBMITTAL SET



(7)



PROJ. # DGN. BY: DWN. BY: CHKD. BY: DA

• Surveyors
• Planners

'amirez Engineers, LLC

G F-5297/SURVEYING: F-10131500

TH, SUITE 100 TEL: (210) 698-5051

Moy Tarin Ramirez | TBPELS: ENGINEERING F-5297/S 12770 CIMARRON PATH, SUITE 100 SAN ANTONIO, TEXAS 78249

PAUL LANDA, JR.

100182

CENSE

NONAL ENGINE

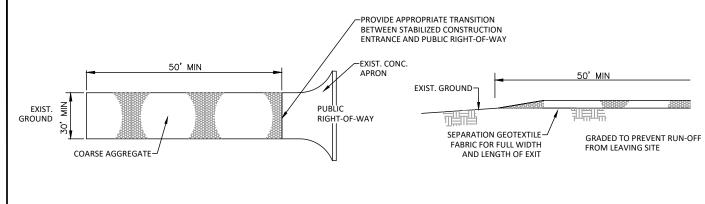
L STORM WATER POLLUTION PREVENTION PLAN

SHEET

C6.0

SILT FENCE NOTES

- 1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN 2 , ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
- 2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT 2 , AND BRINDELL HARDNESS EXCEEDING 140. 3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12.5 GAUGE MINIMUM.
- 4. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1 FOOT DEEP AND SPACED NOT MORE THAN 5 FEET ON CENTER. 5. LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO
- THAT THE MAXIMUM DRAINAGE AREA IS 1/4 ACRE/100 FEET OF FENCE. 6. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE
- TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
- 7. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND
- 8. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3—FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
- 9. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE. 10. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES, OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE OLD FENCE. 11. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
- 12. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.

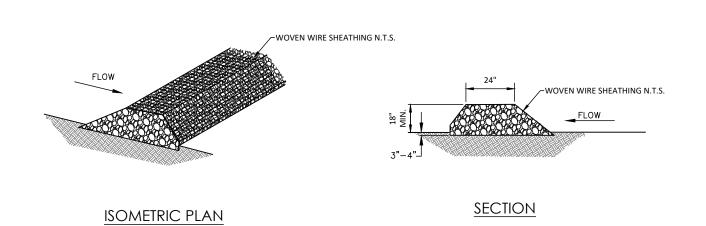


TEMPORARY CONSTRUCTION ENTRANCE/EXIT NOTES

- 1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION.
- 2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.

PLAN VIEW

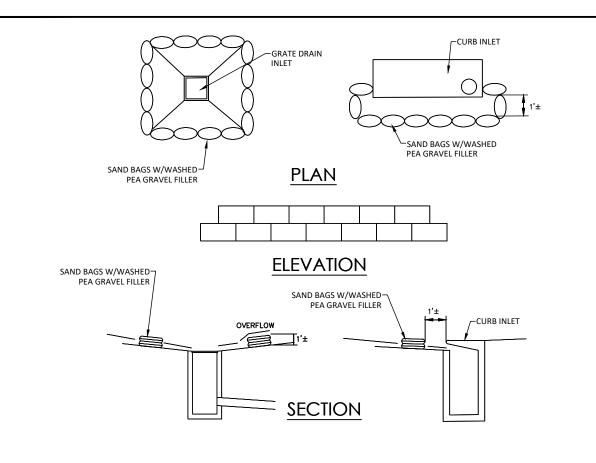
- 3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD 2 , A MULLEN BURST RATING OF 140 LB/IN 2 , AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
- AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
- 5. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
- 6. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG. 7. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
- 8. PLACE STONE TO DIMENSIONS AND GRADE SHOWN. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
- 9. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- 10. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- 11. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. 12. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED
- 13. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE.



ROCK BERM NOTES

ROCK BERM

- THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 1 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.
- 2. CLEAN, OPEN GRADED 3-TO 5-INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5-TO 8-INCH DIAMETER ROCKS MAY BE USED.
- 3. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE.
- 4. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
- 5. PLACE THE ROCK ALONG THE SHEATHING TO A HEIGHT NOT LESS THAN 18".
- 6. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
- 7. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
- 8. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- 9. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- 10. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT OF IN AN APPROVED MANNER 11. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS,
- 12. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.



- . THE GRAVEL BAG MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE, POLYAMIDE OR COTTON BURLAP WOVEN FABRIC, MINIMUM UNIT WEIGHT 4 OZ/YD 2 , MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70 PERCENT.
- 2. THE BAG LENGTH SHOULD BE 24 INCHES, WIDTH SHOULD BE 18 INCHES AND THICKNESS SHOULD BE 6
- 3. THE GRAVEL BAGS SHOULD BE FILLED WITH 34" GRAVEL .

MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.

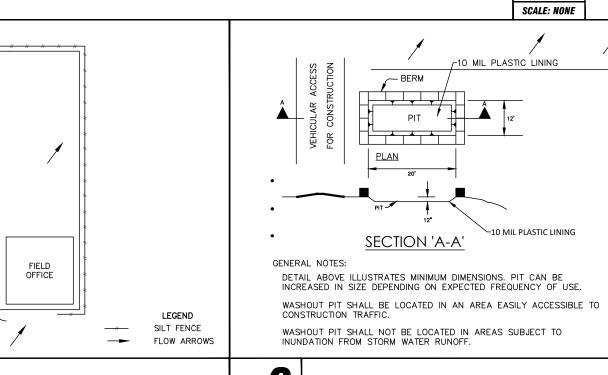
- 4. WHEN A GRAVEL BAG IS FILLED WITH GRAVEL, THE OPEN END OF THE GRAVEL BAG SHOULD BE STAPLED OR
- 5. THE GRAVEL BAGS SHOULD BE PLACED AS SHOWN ON THE DETAIL. THE GRAVEL BAGS SHALL BE STACKED TO FORM A CONTINUOUS BARRIER AROUND THE INLETS. THE BAGS SHOULD BE TIGHTLY ABUTTED AGAINST
- EACH OTHER TO PREVENT RUNOFF FROM FLOWING BETWEEN THE BAGS. 6. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE
- 7. CHECK PLACEMENT OF DEVICE TO PREVENT GAPS BETWEEN DEVICE AND CURB. 8. REMOVE SEDIMENT WHEN BUILDUP REACHES A DEPTH OF 3 INCHES. REMOVED SEDIMENT SHOULD BE
- DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. 9. STRUCTURES SHOULD BE REMOVED AND THE AREA STABILIZED ONLY AFTER THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

SCALE: NONE

BAGGED GRAVEL INLET FILTER

PROFILE

STABILIZED CONSTRUCTION ENTRANCE / EXIT



CONSTRUCTION STAGING AREA SCALE: NONE

SILT FENCE DETAIL

SCALE: NONE

CONSTRUCTION EQUIPMENT

&
VEHICLE
STORAGE
AND
MAINTENANCE
AREA

CONSTRUCTION MATERIAL STORAGE AREA

> CONCRETE TRUCK WASHOUT PIT SCALE: NONE

100182

PAUL LANDA, JR

EVENTION PR OLLUTION

STORM WATER

SHEET

C6.1