



HIDALGO COUNTY PLANNING DEPARTMENT

2818 S. BUSINESS HWY 281
EDINBURG TEXAS 78539
Tel. 956-318-2840 Fax. 956-318-2844

T.J. Arredondo
Director of Planning

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 7-11-2023

PROPOSED EI CORDERO SUBDIVISION, PRECINCT No. 3.

ENGINEER SOUTH TEXAS INFRASTRUCTURE DEVELOPER: PEÑA-CHAPA DEVELOPMENT

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: 33 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INSTITUTIONAL

ESTIMATED NUMBER OF STREETLIGHTS: 6

FILLING STATIONS: 3

LOCATION DESCRIPTION: WEST OF WESTERN ROAD, APPROXIMATELY 1/2 OF MILE NORTH OF MILE 6 ROAD.

SUBDIVISION LIES WITHIN THE: ETJ OF MISSION

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 3-30-2023 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY STORM SEWER SYSTEM AND DETENTION WILL BE PROVIDED BY NEW DRAIN DITCH.

ROAD R.O.W. DEDICATION: 20.0 FEET ONTO WESTERN ROAD.

H.C.R.O.W. PRELIMINARY APPROVAL DATE: 4-26-2023 BY PCT.3 R.O.W. AGENT

H.C.H.D. PRELIMINARY APPROVAL DATE: 4-27-2023 BY, ENVIRONMENTAL HEALTH DIVISION MANAGER

SEWER SYSTEM: OSSF'S

WATER SERVICE PROVIDER: AGUA SUD LINE SIZE: 8" LOCATION: WESTERN ROAD.

H.C.E.O.C. PRELIMINARY APPROVAL DATE: 4-19-2023 : BY ENVIRONMENTAL COMPLIANCE COORDINATOR

LARGE CONSTRUCTION

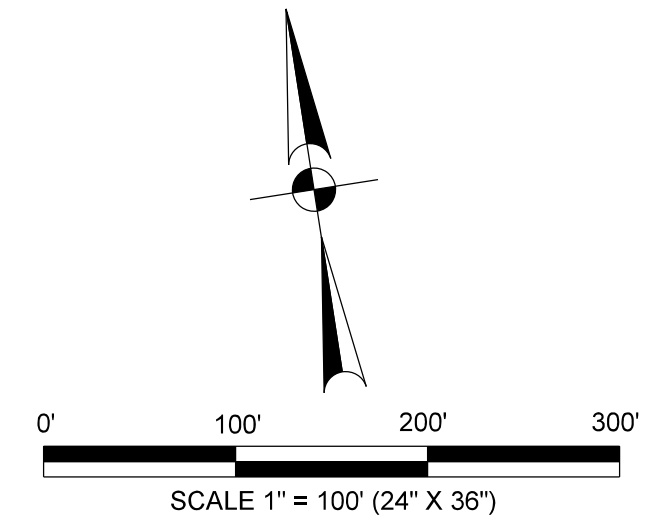
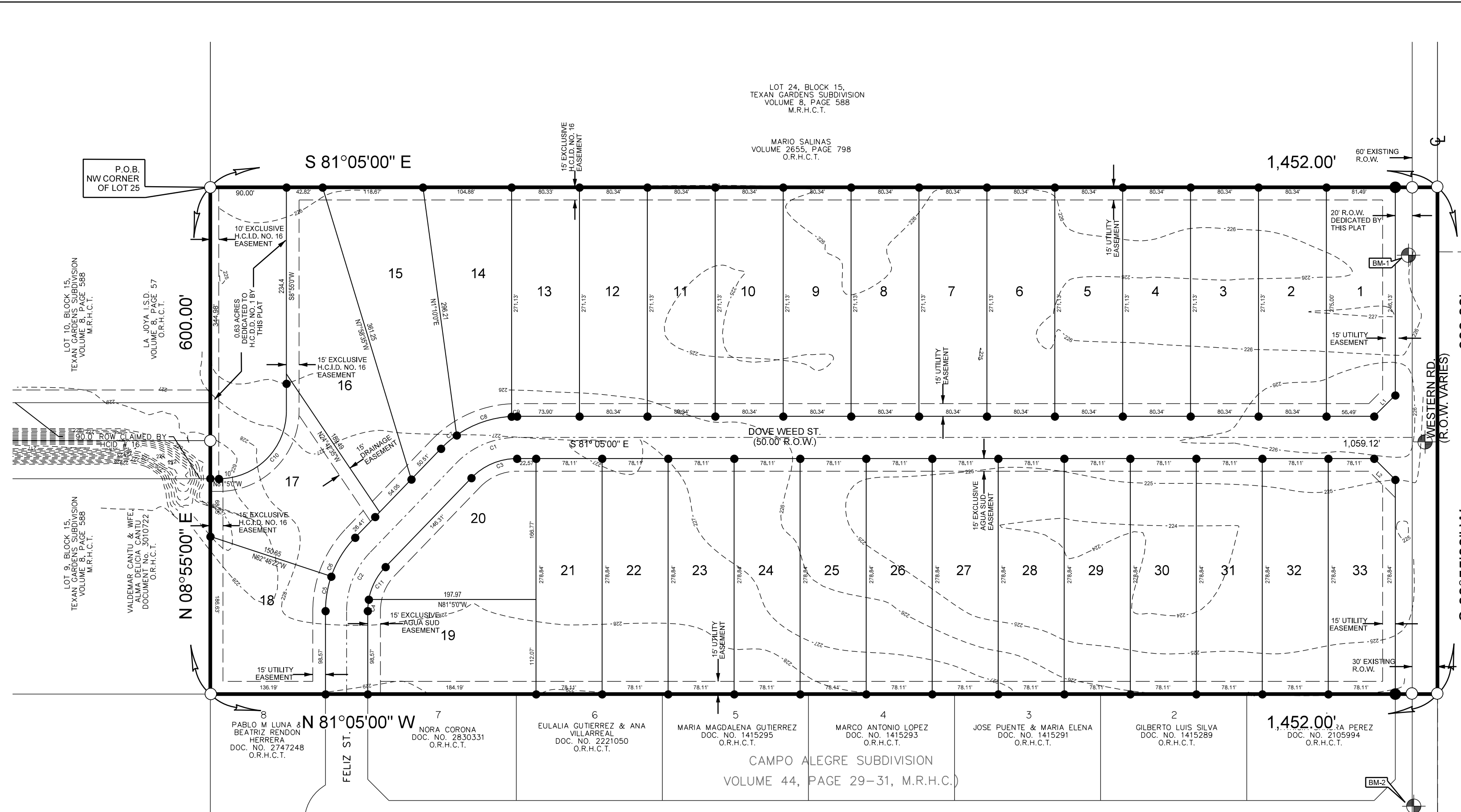
The applicant has submitted the required NOI as per Part II, Section E of the TPDES General Permit for Construction Activities (TXR150000) along with a copy of the Erosion Control Plan for the proposed Project.

PRELIMINARY APPROVAL FROM THE
HIDALGO COUNTY COMMISSIONERS COURT ON: N/A

STAFF RECOMMENDS: **Preliminary Approval** *subject to comments and future recommendations by planning, Other departments, and the approval of the City of MISSION.*

Final Approval *subject to recommendations other departments*

* This subdivision plat has been reviewed and complies with the Hidalgo County Subdivision Rules, Texas Water Development Board Model Subdivision Rules and The Texas Local Government Code.



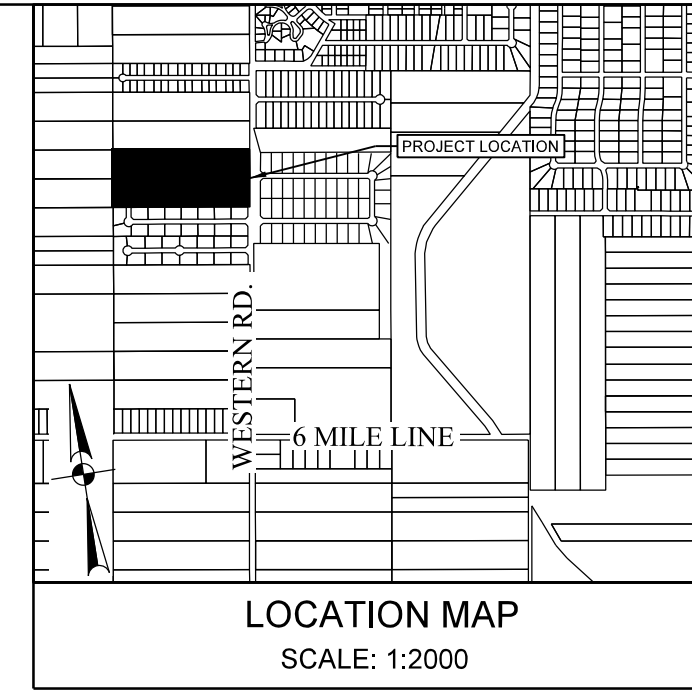
LOT	SQUARE FT.	ACRES
1	22438	0.515
2-14	22000	0.51
15	21996	0.50
16	20998	0.50
17	26580	0.61
18	21978	0.50
19	22301	0.51
20	25321	0.58
21-33	21908	0.51
34	22438	0.52

LINE	BEARING	DISTANCE
L1	N 81°05'00" E	35.35
L2	N 80°05'00" W	35.35

CURVE	DELTA	RADIUS	ARC LENGTH	CHORD	CHORD BEARING	DISTANCE
C1	46°00'41"	100	80.31	57°56'40" W	76.16	
C2	43°59'19"	100	76.745	53°54'40" W	74.9	
C3	46°00'41"	75	62.288	57°56'40" W	58.62	
C4	37°22'04"	75	53.573	53°00'00" W	53.55	
C5	39°01'12"	125	41.493	51°25'37" W	41.3	
C6	24°58'07"	125	54.429	54°25'16" W	54.04	
C7	11°11'37"	125	24.427	58°30'18" W	24.38	
C8	11°11'37"	125	69.257	58°03'39" W	68.63	
C9	43°02'43"	125	6.435	N 67°32'29" W	6.4343	
C10	90°00'00"	80	125.6637	N 51°50'00" E	133.13	
C11	37°37'15"	75	44.0096	53°05'42" W	43.38	

LEGEND:

- SET # 8" IRON ROD WITH PLASTIC CAP STAMPED "ROWS PROP. COR."
- FOUND IRON ROD WITH PLASTIC CAP STAMPED "ROWS PROP. COR.", UNLESS OTHERWISE NOTED
- OFFICIAL RECORDS HIDALGO COUNTY TEXAS
- MAP RECORDS HIDALGO COUNTY TEXAS
- DEED RECORDS HIDALGO COUNTY TEXAS
- RIGHT-OF-WAY HIDALGO COUNTY DRAINAGE DISTRICT
- H.C.D.D.



LOCATION DESCRIPTION

EL CORDERO SUBDIVISION IS LOCATED WITHIN HIDALGO COUNTY PRECINCT NO. 3 IN THE WEST SIDE OF THE INTERSECTION OF 6 MILE LINE AND WESTERN RD. THE ONLY NEARBY MUNICIPALITY IS THE CITY OF MISSION, ACCORDING TO THE OFFICIAL MAP IN THE CITY OFFICE OF PLANNING AND ZONING (POPULATION 83,394, 2015 CENSUS). EL CORDERO SUBDIVISION LIES APPROXIMATELY 2 1/2 MILE FROM THE CITY LIMITS OF MISSION AND IS WITHIN THE CITY'S 0 TO 3/4 MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE 42.021 AND 212.001.

STATE OF TEXAS
COUNTY OF HIDALGO

OWNER'S DECLARATION, CERTIFICATION, AND ATTESTATION:

PENA CHAPA DEVELOPMENT AS OWNER OF THE 20.0 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED EL CORDERO SUBDIVISION, HEREBY SUBORDINATE THE LAND AS DEPICTED IN THIS SUBDIVISION PLAN AND DEDICATED TO PUBLIC USE THE STREET, PARK, AND EASEMENTS SHOWN HEREIN.

I CERTIFY THAT I HAVE COMPLIED WITH THE REQUIREMENTS OF TEXAS LOCAL GOVERNMENT CODE 232.032 AND THAT:

(A) THE WATER QUALITY AND CONNECTIONS TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS.

(B) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET, OR WILL MEET, THE MINIMUM REQUIREMENTS OF THE STATE STANDARDS

(C) ELECTRICAL CONNECTIONS PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS

(D) GAS CONNECTIONS, IF AVAILABLE, PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS

I ATTEST THAT THE MATTERS ASSERTED IN THIS PLAN ARE TRUE AND COMPLETE

PENA CHAPA DEVELOPMENT
MANUEL CHAPA (MEMBER)
P.O. BOX 1868
MISSION, TEXAS 78702

DATE _____

STATE OF TEXAS
COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED MANUEL CHAPA KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS _____ DAY OF _____

NOTARY PUBLIC

KNOW ALL MEN BY THESE PRESENTS:

I, VICTOR H. TREVIÑO, A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, LICENSE NUMBER 128195, DO HEREBY CERTIFY THAT THIS PLAN HAS BEEN GIVEN PROPER AND ADEQUATE ENGINEERING CONSIDERATION.

VICTOR H. TREVIÑO, P.E.
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195

DATE THIS THE _____ DAY OF _____, 20__

ATTEST: _____ DATE _____
PRESIDENT

SECRETARY

HIDALGO COUNTY
CERTIFICATE OF FLAT APPROVAL

I, THE UNDERSIGNED CERTIFY THAT THIS PLAN OF EL CORDERO SUBDIVISION WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT ON _____

ENVIRONMENTAL HEALTH DIVISION MANAGER DATE _____

STATE OF TEXAS
COUNTY OF HIDALGO

WE, THE UNDERSIGNED CERTIFY THAT THIS PLAN OF EL CORDERO SUBDIVISION WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY COMMISSIONERS COURT ON _____

HIDALGO COUNTY JUDGE DATE _____

ATTEST: HIDALGO COUNTY CLERK DATE _____

STATE OF TEXAS
COUNTY OF HIDALGO

KNOW ALL MEN BY THESE PRESENTS:

I, VICTOR H. TREVIÑO, A REGISTERED PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS, LICENSE NUMBER 128195, DO HEREBY CERTIFY THAT THIS PLAN HAS BEEN GIVEN PROPER AND ADEQUATE ENGINEERING CONSIDERATION.

VICTOR H. TREVIÑO, P.E.
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195

STATE OF TEXAS
COUNTY OF HIDALGO

KNOW ALL MEN BY THESE PRESENTS:

I, JOSE MARIO GONZALEZ, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, HEREBY CERTIFY THAT THIS PLAN IS TRUE AND CORRECTLY MADE AND PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND ON _____ UNDER MY DIRECTION.

JOSE MARIO GONZALEZ, R.P.L.S.
REG. PROFESSIONAL LAND SURVEYOR # 6571
RPLS # 001800

ROBERTO SALINAS, P.E.
GENERAL MANAGER
AGUA SPECIAL UTILITY DISTRICT

THIS PLAN OF EL CORDERO SUBDIVISION HAS BEEN SUBMITTED TO AND CONSIDERED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF MISSION, TEXAS AND IS HEREBY APPROVED BY SUCH COMMISSION.

DATED THIS _____ DAY OF _____, 20__

CHAIRMAN _____

CITY OF MISSION CERTIFICATE OF APPROVAL

UNDER LOCAL GOVERNMENT CODE 212.0118(B) THE UNDERSIGNED CERTIFY THAT THIS PLAN OF EL CORDERO SUBDIVISION WAS REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MISSION.

MAJOR CITY OF MISSION DATE _____

ATTEST: CITY SECRETARY DATE _____

APPROVED BY DRAINAGE DISTRICT:

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 HEREBY CERTIFIES THAT THE DRAINAGE PLANS FOR THIS SUBDIVISION COMPLY WITH THE MINIMUM STANDARDS OF THE DISTRICT ADOPTED UNDER TEXAS WATER CODE 46.211(C). THE DISTRICT HAS NOT REVIEWED AND DOES NOT CERTIFY THAT THE DRAINAGE STRUCTURES DESCRIBED ARE APPROPRIATE FOR THE SPECIFIC SUBDIVISION BASED ON GENERALLY ACCEPTED ENGINEERING CRITERIA. IT IS THE RESPONSIBILITY OF THE DEVELOPER AND HIS ENGINEER TO MAKE THEIR DETERMINATIONS.

HIDALGO COUNTY DRAINAGE DISTRICT NO. 1

RAUL E. SESIN, P.E., C.F.M.
GENERAL MANAGER DATE _____

I, ROBERTO SALINAS, HEREBY CERTIFY THAT THE AGUA SPECIAL UTILITY DISTRICT HAS APPROVED THE POTABLE WATER SUPPLY FOR THE CARRIZALES SUBDIVISION, HIDALGO COUNTY, TEXAS. THE AGUA SPECIAL UTILITY DISTRICT IS THE HOLDER OF THE CERTIFICATE OF CONVENIENCE AND NECESSITY (CCN) ISSUED BY THE STATE OF TEXAS TO FURNISH POTABLE WATER TO AN AREA IN HIDALGO COUNTY, TEXAS THAT INCLUDES THIS SUBDIVISION AND IS THEREFORE OBLIGATED TO SERVE THIS SUBDIVISION WITH POTABLE WATER TO THE EXTENT REQUIRED BY THE LAWS OF THE STATE OF TEXAS. THE AGUA SPECIAL UTILITY DISTRICT AGREES THAT IT WILL PROVIDE WATER TO THIS SUBDIVISION AT THE TIME WHEN ALL OF THE INFRASTRUCTURE REQUIREMENTS FOR THE SUBDIVISION ARE MET. WATER METERS ARE IMMEDIATELY AVAILABLE FOR THIS PURPOSE UPON COMPLETION OF THE WATER FACILITIES SHOWN ON THE PLAN OF THE SUBDIVISION.

ROBERTO SALINAS, P.E.
GENERAL MANAGER
AGUA SPECIAL UTILITY DISTRICT

REVISION NOTES			
NO.	SHEET	REVISION	DATE

- GENERAL NOTES:
- FLOOD ZONE STATEMENT:
FLOOD ZONE DESIGNATION: "X" & "A" ZONE "10" 100-YEAR FLOOD ZONE.
ZONE "X" NO BASE FLOOD ELEVATIONS DETERMINED; COMMUNITY PANEL NO. 480334 0230 D, REVISED JUNE 06, 2000. BASED ON RECENT IMPROVEMENTS TO THE SITE, WE HAVE DETERMINED THAT THE BASE FLOOD ELEVATION FOR THIS ZONE "A" ON THIS SPECIFIC PROPERTY IS _____ PROPERTY HAS BEEN TAKEN OUT OF THE FLOOD ZONE WITH LOW CASE NO. _____
CONSTRUCTION OF RESIDENTIAL HOUSING WITHIN ANY AREA OF THE SUBDIVISION THAT IS IN THE 100-YEAR FLOOD PLAIN IS PROHIBITED UNLESS THE HOUSING QUALIFIES FOR INSURANCE UNDER THE NATIONAL FLOOD INSURANCE ACT OF 1968 (42 U.S.C. SECTIONS 4001 THROUGH 4077).
 - MINIMUM BUILDING SETBACK LINES:
FRONT SETBACK:
25 FEET OR EASEMENT WHICHEVER IS GREATER
SIDE SETBACK:
INTERNAL LOT: 5.00 FEET OR EASEMENT WHICHEVER IS GREATER
CORNER LOT: 10.00 FEET OR EASEMENT WHICHEVER IS GREATER, 20 FEET IF ROW IS GREATER THAN 50 FT OR EASEMENT WHICHEVER IS GREATER.
REAR SETBACK: 15.00 FEET OR EASEMENT WHICHEVER IS GREATER
 - NO MORE THAN ONE SINGLE FAMILY DETACHED DWELLING SHALL BE LOCATED ON LOTS 1 THROUGH 33. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS.
 - NO COMMERCIAL USE SHALL BE ALLOWED ON ALL INTERNAL LOTS 1 THROUGH 33.
 - MINIMUM FINISHED FLOOR ELEVATION SHALL BE 1' ABOVE TOP OF CURB, WHICHEVER IS GREATER. ELEVATION CERTIFICATE MAY BE REQUIRED FOR LOTS LOCATED OUTSIDE A DESIGNATED FLOOD ZONE AT THE TIME OF APPLICATION FOR CONSTRUCTION TO VERIFY PRE AND POST CONSTRUCTION FINISHED FLOOR ELEVATIONS. AN ELEVATION CERTIFICATE SHALL BE REQUIRED FOR ALL LOTS WITHIN A DESIGNATED FLOOD ZONE AT THE TIME FOR DEVELOPMENT PERMIT APPLICATION.
 - THE FOLLOWING BENCHMARKS ARE IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS.
BM1 IS A SET 8" IRON ROD WITH BLUE PLASTIC CAP "R.O.W.S. CONTROL".
LOCATED ON WEST RIGHT-OF-WAY OF WESTERN ROAD, AT 21.12 FEET WEST OF WESTERN ROAD CENTERLINE.
N = 15,840,472.2922
E = 419,020,212.7
ELEV = 225.87'
BM2 IS A SET 5" IRON ROD WITH BLUE PLASTIC CAP "R.O.W.S. CONTROL".
LOCATED ON WEST RIGHT-OF-WAY OF WESTERN ROAD, AT 16.21 FEET WEST OF WESTERN ROAD CENTERLINE.
N = 15,841,448.4019
E = 419,019,448.4
ELEV = 224.71'
 - IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT NO. 1 A TOTAL OF 73,763 CUBIC FEET, 1.683 ACRE-FEET OF DETENTION IS REQUIRED FOR THIS SUBDIVISION. DRAINAGE REQUIREMENT IN ACCORDANCE WITH THE LOCAL REQUIREMENTS WILL BE ACCOMPLISHED AS FOLLOWS: (SEE SHEET 4 FOR PAVING LAYOUT AND DRAINAGE DESIGN)
 - NO STRUCTURE SHALL BE PERMITTED OVER ANY EASEMENTS. EASEMENTS SHALL BE KEPT CLEAR OF BUILDINGS, SHEDS, SHRUBS, TREES, AND OTHER PLANTINGS EXCEPT LOW LESS THAN 16 INCHES MATURE HEIGHT, GROUND COVER, GRASS, OR FLOWERS AND OTHER OBSTRUCTIONS THAT WOULD INTERFERE WITH THE OPERATIONS AND MAINTENANCE OF THE EASEMENT.
 - EACH PURCHASE CONTRACT MADE BETWEEN A SUBDIVIDER AND PURCHASER OF A LOT IN THIS SUBDIVISION SHALL CONTAIN A STATEMENT DESCRIBING HOW AND WHEN WATER, SEWER, ELECTRICITY, AND GAS SERVICES WILL BE MADE AVAILABLE TO THE SUBDIVISION.
 - ALL PUBLIC UTILITY EASEMENTS DEDICATED BY THIS PLAT SHALL BE A MINIMUM WIDTH OF 15.00 FEET AS PER THE HIDALGO COUNTY MODEL SUBDIVISION RULES. BY SIGNING THIS PLAT, DEVELOPER AND ENGINEER CERTIFY THAT ALL OTHER EASEMENTS SHOWN COMPLY WITH THE RULES REQUIRED BY EACH UTILITY PROVIDER OCCUPYING AN EASEMENT.
 - ON-SITE SEWAGE FACILITIES (OSSF): NOTE: THIS SUBDIVISION SHALL USE ON-SITE SEWAGE FACILITIES IN ACCORDANCE WITH TCEQ AND HIDALGO COUNTY REGULATIONS FOR SEWAGE DISPOSAL. THE SUBDIVIDER IS RESPONSIBLE FOR PROVIDING AN OSSF ON LOT.
 - OSSF SYSTEM IS BEING DESIGNED FOR DISPOSAL OF DOMESTIC SEWAGE ONLY.
 - EACH LOT ON THIS PLAT COMPLIES WITH THE MINIMUM 21,780 SQUARE FEET LOT AREA WITH POTABLE WATER SUPPLY.
 - OSSF SYSTEM SHALL REQUIRE INSPECTION AND APPROVAL BY HIDALGO COUNTY AUTHORIZED DEPARTMENT.
 - SOIL ANALYSIS HAS BEEN SUBMITTED TO THE AUTHORIZED HIDALGO COUNTY DEPARTMENT AND EXCERPTS MAY BE ALSO SEEN ON THE UTILITY LAYOUT FOR THIS SUBDIVISION AS SUBMITTED TO THE HIDALGO COUNTY PLANNING DEPARTMENT. THE ENGINEER HAS DETERMINED THAT THE SOIL IS SUITABLE FOR A STANDARD SEPTIC TANK AND ABSORPTIVE DRAINAGE SYSTEM.
 - APPROVED "OSSF" PERMIT APPLICATION IS REQUIRED INCLUDING INDIVIDUAL LOT PLANNING MATERIALS PRIOR TO OCCUPYING A LOT.
 - THERE ARE NO WATER HELLS WITHIN 15 FEET FROM THE BOUNDARIES ON THIS SUBDIVISION.
 - MANUEL CHAPA, THE OWNER & SUBDIVIDER OF CARRIZALES SUBDIVISION, RETAINS A BLANKET EASEMENT UPON EACH LOT FOR THE PURPOSE OF INSTALLING AN APPROVED OSSF ON THE LOT AS DESCRIBED ON SHEET NO. 2 OF THIS PLAT.
 - ALL LOTS SHALL HAVE A POST DEVELOPMENT FINISHED GRADE FROM THE REAR OF THE LOT TO THE CURB AND/or ROADSIDE DITCH AT A 0.25% SLOPE TO ACCOMPLISH POSITIVE DRAINAGE. THIS IS IN ACCORDANCE WITH HIDALGO COUNTY APPENDIX S: COUNTY CONSTRUCTION SPECIFICATIONS 3.1.4.
 - THE DEVELOPER SHALL BE RESPONSIBLE FOR DETAINING AND ACCOMMODATING MORE THAN THE DETAINED VOLUME SHOWN ON THIS PLAT IF IT IS DETERMINED AT THE DEVELOPMENT STAGE, THAT THE DETENTION REQUIREMENTS ARE GREATER THAN STATED ON THIS PLAT, DUE TO THE IMPROVED AREA BEING GREATER THAN THE PLAT ENGINEER CONSIDERED IN THE HYDRAULIC CALCULATIONS FOR THIS SUBDIVISION.
 - ALL IRRIGATION EASEMENTS ARE EXCLUSIVE TO HIDALGO COUNTY IRRIGATION DISTRICT NO. 16 AND THE DISTRICT ALLOWS NO OTHER UTILITIES OR USE WITHOUT EXPRESS APPROVAL.
 - NO UTILITY COMPANY OR OTHER PERSON IS ALLOWED TO CROSS ABOVE OR BELOW GROUND ANY DISTRICT EASEMENT OR RIGHT-OF-WAY WITH THE LINES, POLES, OPEN DITCHES OR OTHER USE WITHOUT FIRST OBTAINING A CROSSING PERMIT FROM THE DISTRICT.
 - NO PERMANENT STRUCTURE, (EXAMPLE: FENCES OR DRIVEWAYS OF ANY CONSTRUCTION) WILL BE ALLOWED TO BE CONSTRUCTED OR EXIST ON ANY DISTRICT EASEMENT AREAS SUBJECT TO REMOVAL.
 - NO UTILITY COMPANY OR OTHER PERSON IS ALLOWED TO CONNECT TO ANY DISTRICT FACILITY WITHOUT FIRST OBTAINING A PERMIT FROM THE HIDALGO COUNTY IRRIGATION DISTRICT #16. ANY CONNECTION NOT AUTHORIZED BY THE DISTRICT IS SUBJECT TO REMOVAL.
 - LOTS 1 & 33 SHALL NOT HAVE ACCESS/DRIEWAY ONTO WESTERN ROAD.

PRINCIPAL CONTACTS

	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	PENA CHAPA DEVELOPMENT	P.O. BOX 1658	MISSION, TEXAS 78702	(956) 581-3918	
ENGINEER:	VICTOR H. TREVIÑO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78702	(956) 424-3335	(956) 424-3132
SURVEYOR:	JOSE MARIO GONZALEZ, R.P.L.S.	24593 FM 88	MONTE ALTO, TEXAS 78538	(956) 380-6154	(956) 380-6156

METES AND BOUNDS

BEGINNING AT POINT OF BEGINNING OF THE HERIN DESCRIBED TRACT OF LAND;

THENCE SOUTH 81°05'00" EAST A DISTANCE OF 1,452.00 FEET;

THENCE SOUTH 08°55'00" WEST A DISTANCE OF 600.00 FEET;

THENCE NORTH 81°05'00" EAST A DISTANCE OF 1,452.00 FEET;

THENCE NORTH 08°55'00" EAST A DISTANCE OF 600.00 FEET; TO THE POINT OF BEGINNING AND CONTAINING COMPRISED AREA OF 20.00 ACRES OF LAND.

BEARING BASIS, TEXAS COORDINATE SYSTEM SOUTH ZONE, NORTH AMERICAN DATUM OF 1983.



FILED FOR RECORD IN
HIDALGO COUNTY
ARTURO GUJARDO, JR.
HIDALGO COUNTY CLERK

ON _____ AT _____ AM/PM
INSTRUMENT NUMBER _____
OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS

BY: _____ DEPUTY

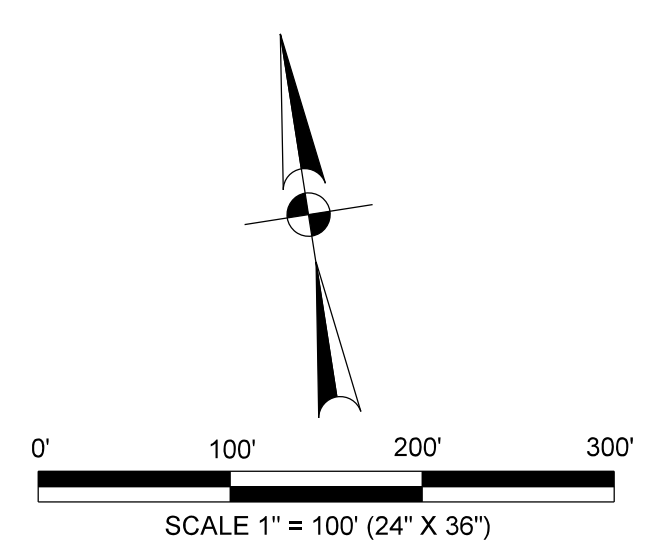
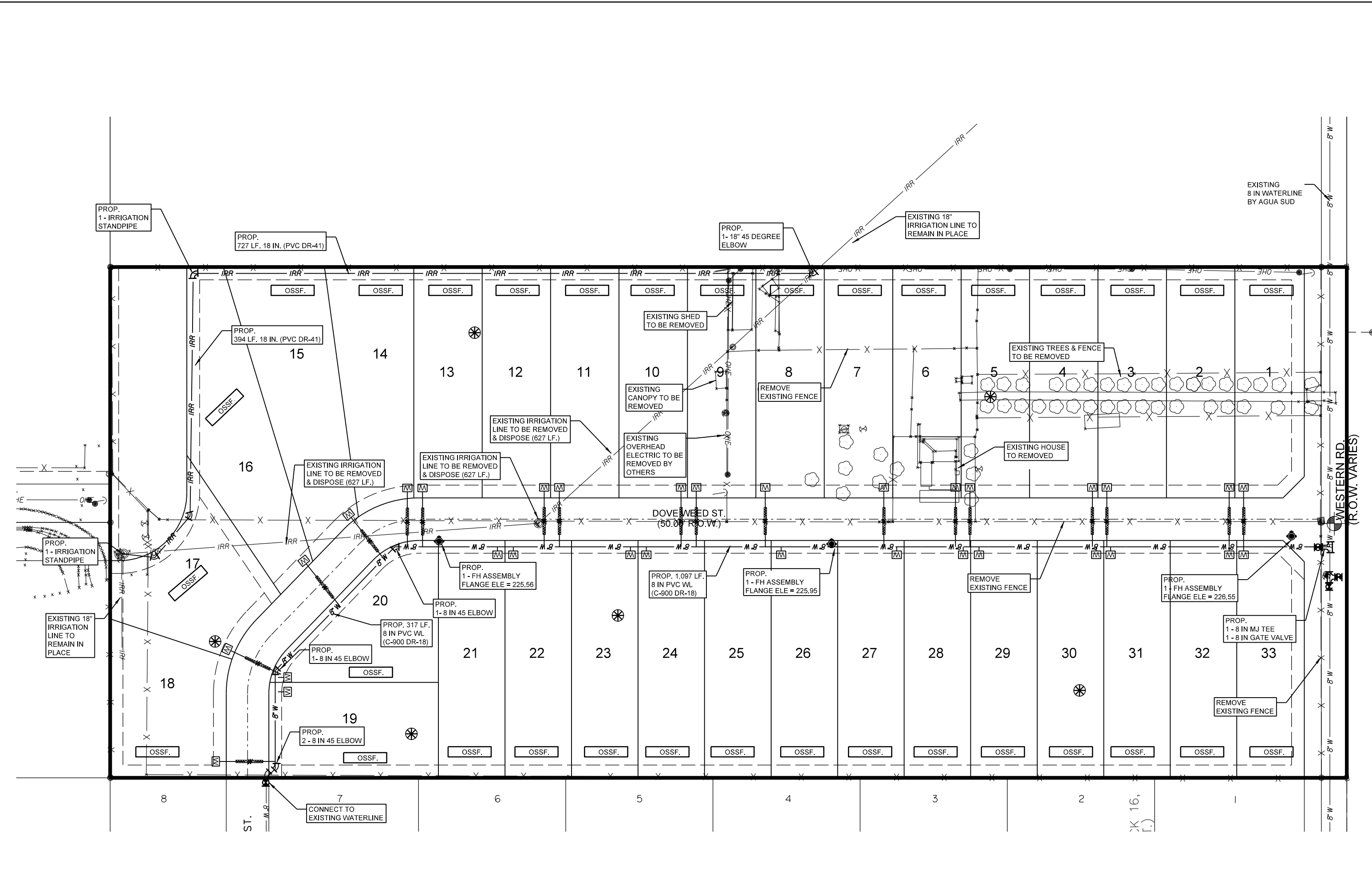
- INDEX OF SHEETS
- SHEET 1 - HEADING INDEX, LOCATION MAP AND ETC., PRINCIPAL CONTACTS, LOT, STREET, AND EASEMENT LAYOUT, ENGINEERS AND SURVEYORS CERTIFICATE, HIDALGO COUNTY CLERK'S RECORDING CERTIFICATE, METES & BOUNDS, OWNERS ACKNOWLEDGMENT, HIDALGO COUNTY HEALTH DEPT. CERTIFICATE, H.C.D.D. NO. 1 CERTIFICATION, COUNTY CLERK RECORDING CERTIFICATE, H.C.D.D. NO. 6 CERTIFICATE, CITY OF AMERSON CERTIFICATE OF APPROVAL, HIDALGO COUNTY ENVIRONMENTAL HEALTH DEPARTMENT CERTIFICATE, HIDALGO COUNTY JUDGE CERTIFICATE AND AGUA SUD CERTIFICATE.
 - SHEET 2 - WATER DISTRIBUTION AND SANITARY SEWER (OSSF) MAP, ENGINEERING REPORT, INCLUDING DESCRIPTION OF WATER AND WASTE WATER/OSSF AND ENGINEERS CERTIFICATION (ENGLISH AND SPANISH) SUBDIVIDER CERTIFICATE & STATEMENT.
 - SHEET 3 - PAVING & DRAINAGE LAYOUT, DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE, MAP OF TOPOGRAPHY, DRAINAGE AND PAVING MAP, ENGINEERING CERTIFICATION, REVISION NOTES.
 - SHEET 4 - PAVING & DRAINAGE DETAILS
 - SHEET 5 - WATER DISTRIBUTION STANDARDS DETAILS
 - SHEET 6 - STORM WATER POLLUTION PLAN

LOT LAYOUT
EL CORDERO SUBDIVISION

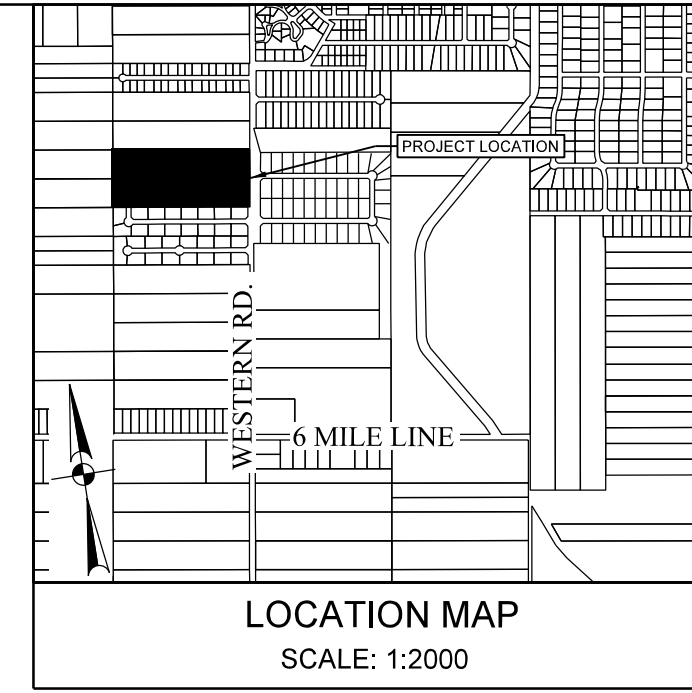
BEGING A 20.0 ACRE TRACT SITUATED IN YDOLFOSON RAMIREZ SURVEY, ABSTRACT 584, PORCION 7B, AND THE MARIA DE LUENA SURVEY, ABSTRACT 570, PORCION 8B, HIDALGO COUNTY TEXAS, BEING LOT 25 AND 26, BLOCK 15, TEXAN GARDENS SUBDIVISION, AS PER MAP OR PLAT THERE OF RECORDED IN VOLUME 8, PAGES 67-68, MAP RECORDS, HIDALGO COUNTY, TEXAS.

SOUTH TEXAS INFRASTRUCTURE GROUP

900 S. STEWART, SUITE 13
MISSION, TEXAS 78702
PH: (956) 424-3335
FAX: (956) 424-3132
TBPE REG # 15000



- LEGEND:**
- CHAIN LINK FENCE
 - SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR"
 - FOUND IRON ROD
 - WOOD FENCE
 - PROPOSED PAVEMENT
 - OVERHEAD ELECTRIC
 - PROPOSED CASING
 - FOR 8" WATERLINE= 16" STEEL CASING
 - FOR 2" WATER LINE= 3" PVC CASING
 - FOR 1" WATER LINE= 2" PVC CASING
 - PROPOSED STREET LIGHT
 - SOIL BORING LOCATION
 - EXISTING POWER POLE
 - 1 IN SINGLE WATER SERVICE
 - 2 IN DOUBLE WATER SERVICE



WATER SUPPLY (DESCRIPTION, COST, AND OPERABILITY DATE):
 EL CORDERO SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). THE SUBDIVIDER AND AGUA SUD HAVE ENTERED INTO A CONTRACT IN WHICH AGUA SUD HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND AGUA SUD HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

EL CORDERO SUBDIVISION SUBDIVISION HAS 34 LOTS. AGUA SUD HAS ONE EXISTING 8" DIAMETER WATER LINE RUNNING THROUGH THE WEST SIDE OF THE RIGHT-OF-WAY OF WESTERN RD.

EL CORDERO SUBDIVISION SUBDIVISION WILL BE CONNECTED TO THE EXISTING WATER SYSTEM WITH ONE (1) 8" MI TEE EACH WITH ONE (1) GATE VALVE. WATER DISTRIBUTION FOR EL CORDERO SUBDIVISION CONSISTS OF SIXTEEN (16) 1" DIAMETER SINGLE SERVICES SHORT AND EIGHTEEN (18) 1" DIAMETER SINGLE SERVICE LINES THAT RUN INTO THE LOTS. THE 8" LINE, THE 1" SINGLE SERVICE LINES AND THE METER BOXES HAVE ALREADY BEEN INSTALLED. AT A TOTAL OF \$ _____ PER LOT. IN ADDITION TO THE SUBDIVIDER HAS PAID AGUA SUD THE SUM OF \$ _____ WHICH COVERS THE \$ _____ COST FOR LOTS AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUM REPRESENTS THE TOTAL COST OF WATER METER, RIGHTS ACQUISITION FEES, AND ALL MEMBERSHIP OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO AGUA SUD UPON REQUEST BY THE LOT OWNER. AGUA SUD WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE SUBDIVIDER HAS INSTALLED FIVE (5) FIRE HYDRANTS AT A UNIT COST OF \$ _____ FOR A TOTAL COST OF \$ _____. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY AGUA SUD AND SAID DISTRIBUTION SYSTEM OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

SEWAGE FACILITIES (DESCRIPTION, COSTS, AND OPERABILITY DATE)
 SEWAGE FROM EL CORDERO SUBDIVISION WILL BE TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENT SEPTIC TANK AND DRAIN FIELD ON LOTS 1 TO 34. THE UNDERSIGNED PROFESSIONAL ENGINEER HAS EVALUATED THE SUITABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THE SITE IS SUITABLE FOR OSSF. THE REPORT WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT. EACH LOT HAS ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.

SOIL EVALUATION REPORT:
 EACH LOT IN THE PROPOSED SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A SANDY LOAM SOIL FOR THE AREA. AT LEAST TWO SOIL EXCAVATIONS WERE PERFORMED ON THE SITE, AT OPPOSITE AREAS OF THE SUBDIVISION, A TOTAL OF 8 SOIL BORING EXCAVATION WERE PERFORMED. (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE ALL UNIFORM WITHIN THIS UNIT AREA. THE SOIL IS A UNIFORM SANDY LOAM EXTENDING UP TO 30" BELOW THE BOTTOM OF ANY PROPOSED EXCAVATIONS. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE PROPOSED EXCAVATIONS. THE SUBDIVISION DRAINS WELL.

THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ _____ INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. LOTS. ALL OSSF WILL BE INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST \$ _____. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ONE OSSF ON _____.
 ENGINEER CERTIFICATION:
 BY MY SIGNATURE BELOW, I CERTIFY THAT THE WATER AND SEWAGE SERVICE FACILITIES DESCRIBED ABOVE ARE IN COMPLIANCE WITH THE MODEL RULES ADOPTED UNDER SECTION 16.343, WATER CODE. I CERTIFY THAT THE COSTS TO INSTALL THE WATER AND THE UNCONSTRUCTED ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:
 WATER FACILITIES- THESE FACILITIES FULLY CONSTRUCTED, WITH THE INSTALLATION OF WATER METERS, WILL COST A GRAND TOTAL OF \$ _____ PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$ _____ FOR THE ENTIRE SUBDIVISION.
 SEWAGE FACILITIES- SEPTIC SYSTEM IS ESTIMATED TO COST \$ _____ PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$ _____ FOR THE ENTIRE SUBDIVISION.

SUBDIVIDER CERTIFICATION

1- BY COMPLETING THE IMPROVEMENTS DESCRIBED ON THE PLAT, SUBDIVIDER WILL COMPLY WITH MINIMUM STATE STANDARDS AND THAT (a) WATER QUALITY AND CONNECTIONS INCLUDING WATER METERS TO THE LOTS MEET SUCH STANDARDS AND (b) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET OR WILL MEET SUCH STANDARDS AND WILL BE CONSTRUCTED IN ACCORDANCE WITH STATE AND COUNTY REGULATIONS.

SUBDIVIDER STATEMENT:

1- I, PENA CHAPA DEVELOPMENT SUBDIVIDER FOR EL CORDERO SUBDIVISION HEREBY CERTIFY SEWER PERMITS, AS APPLICABLE, HAVE BEEN PAID AND COPIES OF RECEIPTS ARE ON FILE WITH THE HIDALGO COUNTY HEALTH DEPARTMENT AND THAT AN ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUALITY AND QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS

PENA CHAPA DEVELOPMENT _____ DATE _____
 MANUEL CHAPA (MEMBER)
 P.O. BOX 1958
 MISSION, TEXAS 78572

STATE OF TEXAS
 COUNTY OF HIDALGO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED MANUEL CHAPA, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS ____ DAY OF _____

 NOTARY PUBLIC

VICTOR H. TREVIÑO, P.E.
 LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195

REPORTE DE INGENIERIA DE AGUA Y DRENAJE
 WATER SUPPLY (DESCRIPCION, GASTOS Y FECHAS DE INICIO):

LA SUBDIVISION EL CORDERO RECIBIRA SU PROVISION DE AGUA DE AGUA SPECIAL UTILITY DISTRICT (AGUA SUD). EL DUEÑO DE LA SUBDIVISION Y AGUA SUD HAN FIRMADO UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRA SU PROVISION DE AGUA POR LOS PROXIMOS 30 ANOS. AGUA SUD HA PRESENTADO DOCUMENTACION PARA DEMOSTRAR A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ACCESIBLE PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

LA SUBDIVISION EL CORDERO TIENE 34 LOTES. AGUA SUD TIENE UNA LINEA EXISTENTE DE AGUA DE 8 PULGADAS DE DIAMETRO Y CORRE SOBRE EL LADO OESTE DE LA CALLE WESTERN.

LA SUBDIVISION EL CORDERO SERA CONECTADA CON UN MI TEE DISTANTE DE 30 PULGADAS DE DIAMETRO UNANIVALE. LA DISTRIBUCION DE AGUA PARA LA SUBDIVISION EL CORDERO CONSISTE EN DIECISIETE (17) SERVICIOS SENCILLOS CORTOS DE 1" DE DIAMETRO Y DIECIOCHO (18) SERVICIOS SENCILLOS LARGOS DE 1" DE DIAMETRO QUE CORREN HACIA LOS LOTES. SE HAN INSTALADO YA LA LINEA DE 8" Y LAS CUBIAS DE LOS MEDIDORES A UN COSTO TOTAL DE \$ _____ POR CADA LOTE. EL DUEÑO REPRESENTANTE DE LA SUBDIVISION LE HA PAGADO A AGUA SUD LA CANTIDAD DE \$ _____ QUE CUBRE EL COSTO DE LOS MEDIDORES IS. _____ POR CADA LOTE. ESTE PRECIO INCLUIRE TAMBIEN EL COSTO DE LA INSTALACION DE CADA MEDIDOR Y LOS GASTOS DE CONEXION CUANDO EL DUEÑO DE ALGUNO DE LOS LOTES SOLICITE UN MEDIDOR DE AGUA. AGUA SUD LO INSTALARA SIN COSTO ALGUNO. EL DUEÑO REPRESENTANTE DE LA SUBDIVISION HA INSTALADO 5 HIDRANTES CONTRA INCENDIO (FIRE HYDRANTS) A UN COSTO DE \$ _____ POR CADA UNO, LO CUAL REPRESENTA UNA CANTIDAD TOTAL DE \$ _____. EL SISTEMA DE AGUA ESTARA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL COMANDO DE HIDALGO.

DRENAJE: DESCRIPCION, GASTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISION
 SE INSTALARA UNA FOSA SEPTICA EN CADA SOLAR. ESTA FOSA SEPTICA CONSISTE DE UN TANQUE SEPTICO DE MODELO DUAL Y DE UN CAMPO DE DRENAJE PARA EL SOLAR. EL INGENIERO AUTOR DE ESTE DOCUMENTO HA EVALUADO EL AREA DONDE SE INSTALARA LA SUBDIVISION Y HA PREPARADO UN REPORTE QUE CONCLUYE QUE ESTE TERRENO ES ADECUADO PARA ESAS FOSAS SEPTICAS (OSSF). EL REPORTE FUE APROBADO POR EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO (HIDALGO COUNTY HEALTH DEPARTMENT) SEGUN EL REPORTE.

REPORTE DE EVALUACION DE SUELO:
 CADA LOTE EN LA SUBDIVISION PROPIETA MIDE MAS DE MEDIO ACRE. SE HICIERON OCHO EXCAVACIONES DE EVALUACION EN LUGARES OPUESTOS DE LA SUBDIVISION. UN TOTAL DE 8 EXCAVACIONES DE EVALUACION FUERON REALIZADAS. (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA AREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME (TERRENO ADICIONAL Y SUELO FONDOS) Y SE EXTIENDE A 36 PULGADAS BAJO TODAS LAS EXCAVACIONES PROPUSTAS. NO EXISTE EVIDENCIA DE AGUA 24 PULGADAS MAS ARRIBA DE LO MAS BAJO DE LAS EXCAVACIONES PROPUSTAS. EL AGUA EN ESTA AREA FLUYE BIEN.

EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSA SEPTICA ES DE \$ _____ DOLARES, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. TODAS LAS FOSAS SEPTICAS HAN SIDO INSTALADAS EN EL PROCESO DE LA APROBACION FINAL A UN COSTO TOTAL DE \$ _____. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO Y HA APROBADO LA INSTALACION DE LA FOSA SEPTICA DESDE _____.

CERTIFICACION:
 CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DRENAJE, DESCRITOS EN ESTE DOCUMENTO CUMPLEN CON LAS REGLAS GOBERNANDO LAS SUBDIVISIONES, ADOPTADAS EN LA SECCION 16.343 DEL TEXAS WATER CODE (CODIGO DE AGUA DE TEXAS). CERTIFICO QUE LOS GASTOS PARA INSTALAR LOS SISTEMAS DE AGUA Y DRENAJE SON:
 AGUA: EL SISTEMA SERVICIO DE AGUA SERA INSTALADO Y COMPLETAMENTE CONSTRUIDO MENOS EL MEDIDOR MECANICO DE AGUA QUE COSTAR UN TOTAL DE \$ _____.
 DRENAJE: SE ESTIMA QUE LA FOSA SEPTICA COSTARA \$ _____ A UN COSTO TOTAL DE \$ _____ TODA LA SUBDIVISION.

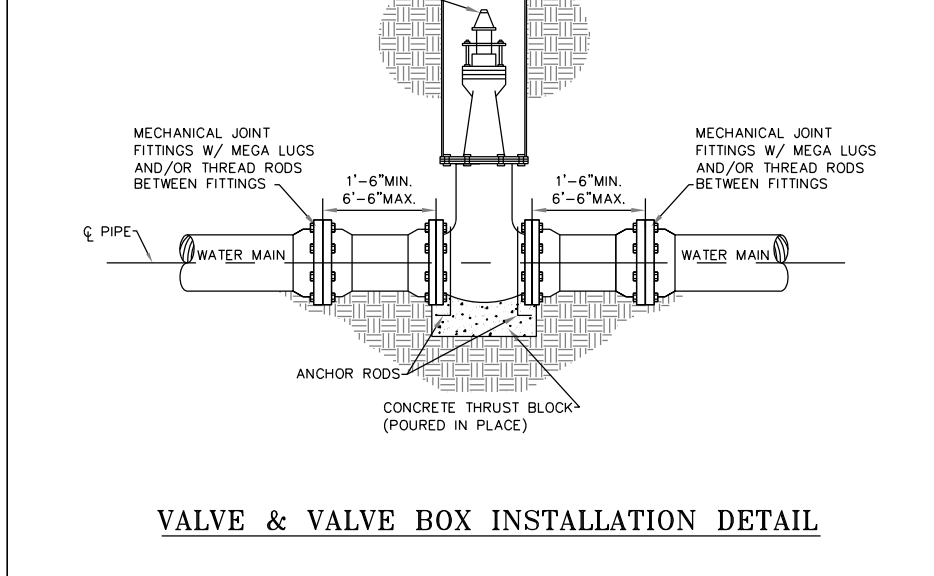
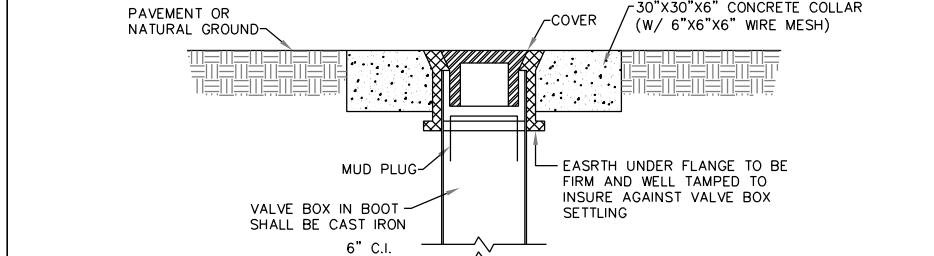
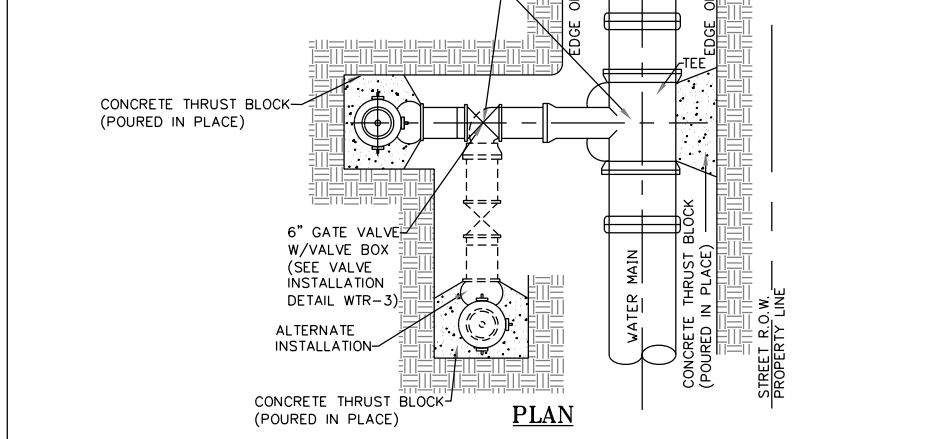
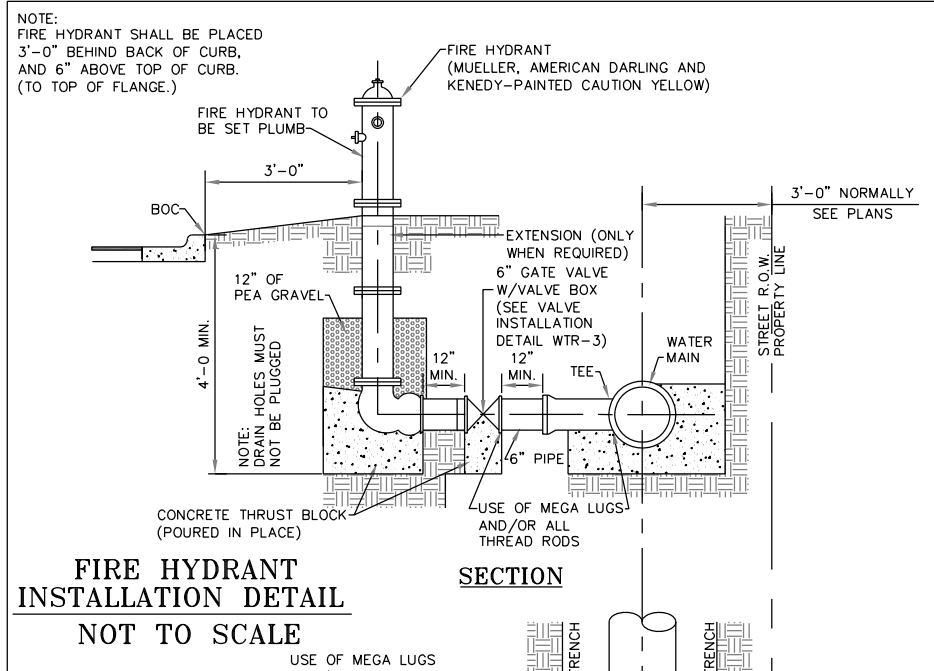
VICTOR H. TREVIÑO, P.E.
 LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195

REVISION NOTES			
No.	SHEET	REVISION	DATE

COST ESTIMATE	
WATER DISTRIBUTION:	\$ _____
DRAINAGE IMPROVEMENT:	\$ _____
SEPTIC TANK (OSSF):	\$ _____
FIRE HYDRANT:	\$ _____
EROSION CONTROL:	\$ _____

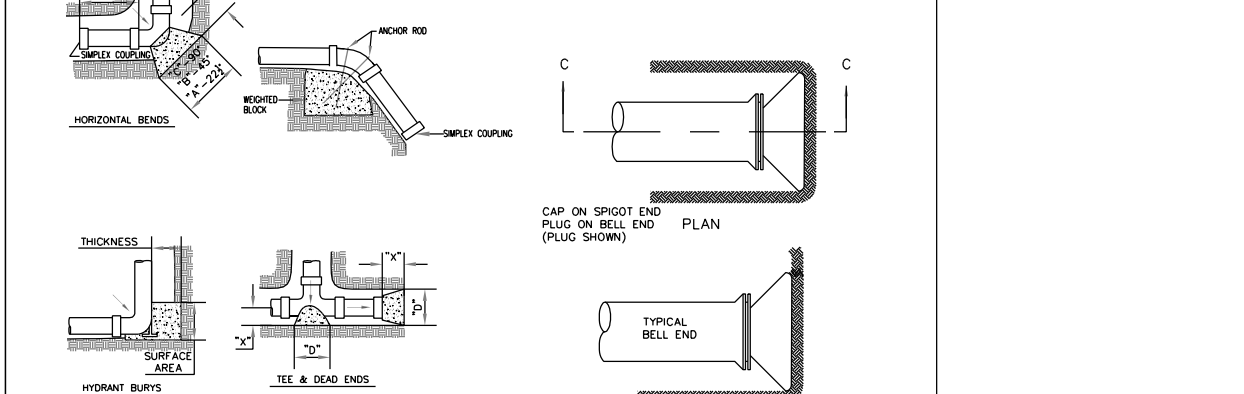
PRINCIPAL CONTACTS					
NAME	ADDRESS	CITY & ZIP	PHONE	FAX	
OWNER:	PENA CHAPA DEVELOPMENT	P.O. BOX 1958	MISSION, TEXAS 78572	(956) 581-3918	
ENGINEER:	VICTOR H. TREVIÑO, P.E.	800 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	JOSE MARIO GONZALEZ, R.P.L.S.	24593 FM 88	MONTE ALTO, TEXAS 78538	(956) 380-6154	(956) 380-6156

SOUTH TEXAS INFRASTRUCTURE GROUP
 800 S. STEWART, SUITE 13
 MISSION, TEXAS 78572
 PH: (956) 424-3335
 FAX: (956) 424-3132
 TBPE REG # 15000



GENERAL NOTES:

- THE LOCATION OF THRUST BLOCKS DEPENDS UPON THE LOCATION OF STREET AND TYPE OF FITTINGS.
- THRUST BLOCK CALCULATIONS ARE BASED ON A WATER LINE PRESSURE OF 100 PSI AND AN ALLOWABLE SOIL BEARING VALUE OF 2,000 PSF.
- 3" DIMENSIONS SHALL BE LARGE ENOUGH TO MAKE ANGLE & EQUAL TO ANGLE THEREIN.
- ANGLE & SHALL BE EQUAL TO OR LARGER THAN 45°.
- ALL FITTINGS TO BE WRAPPED IN PLASTIC.



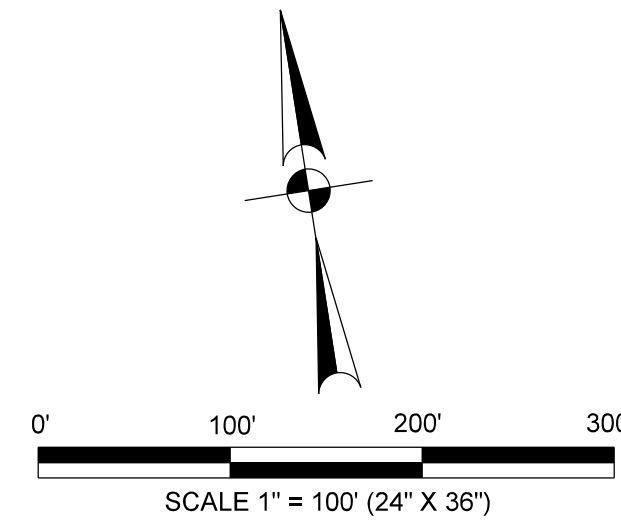
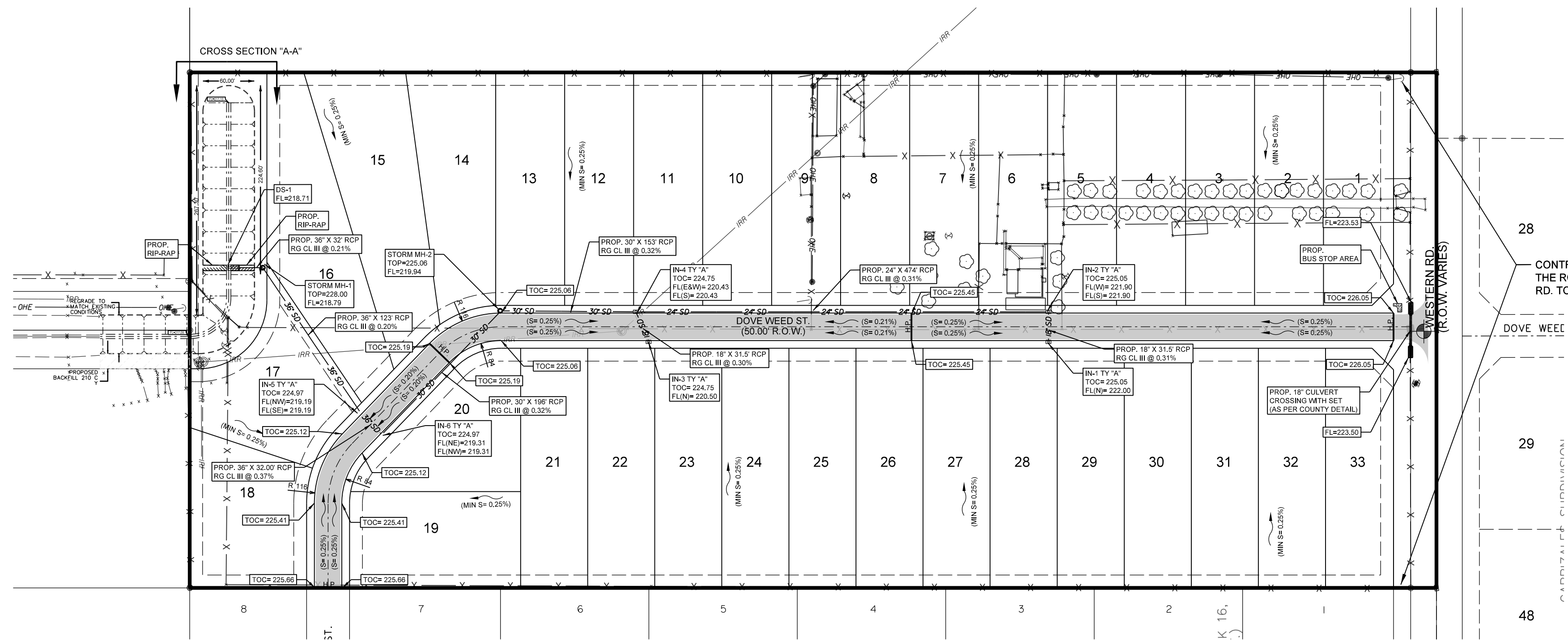
HORIZONTAL BLOCKING TABLE									
PIPE SIZE (IN)	2" TO 10" BORES	4" BORES	6" BORES	8" BORES	10" BORES	12" BORES	14" BORES	16" BORES	18" BORES
2"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
6"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
8"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
12"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
14"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
16"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
18"	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE OF CASING SIZES

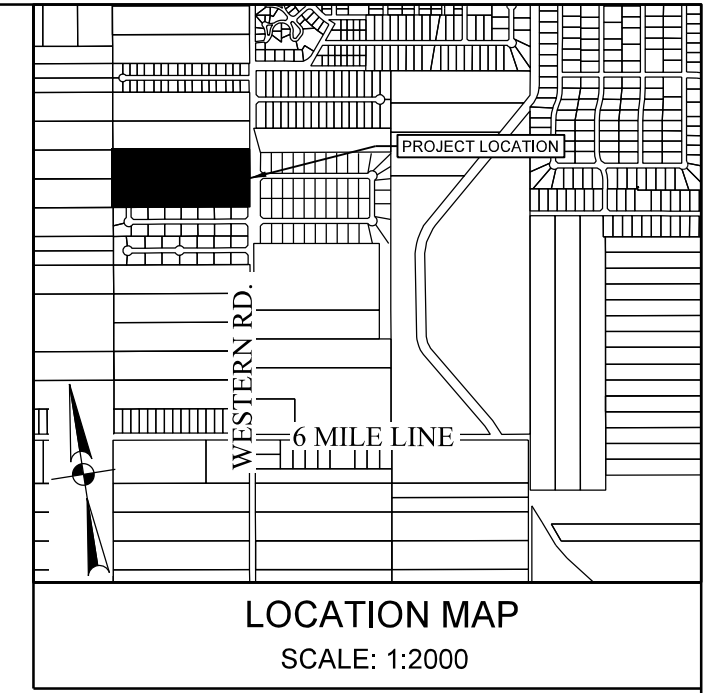
NOMINAL (IN)	CASING SIZE (IN)	CASING MINIMUM WALL THICKNESS (IN)
16"	24"	0.237"

UTILITY LAYOUT EL CORDERO SUBDIVISION
 BEING A 20.0 ACRE TRACT SITUATED IN VOLEFONSON RAMIREZ SURVEY, ABSTRACT 584, PORCION 7B, AND THE MARIA DE LUJA SURVEY, ABSTRACT 570, PORCION 8B, HIDALGO COUNTY TEXAS, BEING LOT 25 AND 26, BLOCK 15, TEXAN GARDENS SUBDIVISION, AS PER MAP OR PLAT THERE OF RECORDED IN VOLUME 8, PAGES 87-88, MAP RECORDS, HIDALGO COUNTY, TEXAS.

SHEET 2



- LEGEND:**
- CHAIN LINK FENCE
 - SET # 5/8" IRON ROD WITH PLASTIC CAP STAMPED "ROWSS PROP. COR."
 - FOUND IRON ROD
 - WOOD FENCE
 - PROPOSED PAVEMENT
 - OVERHEAD ELECTRIC
 - PROPOSED CASING
 - FOR 8" WATERLINE= 16" STEEL CASING
 - FOR 2" WATER LINE= 3" PVC CASING
 - FOR 1" WATER LINE= 2" PVC CASING
 - PROPOSED STREET LIGHT
 - SOIL BORING LOCATION
 - EXISTING POWER POLE
 - 1 IN SINGLE WATER SERVICE
 - 2 IN DOUBLE WATER SERVICE



DRAINAGE REPORT

El Cordero Subdivision is a proposed 34 Lot Single Family Residential lots subdivision located within the city of Mission 3 1/2 Mile extrajurisdiction (E.L.). The property is located on Western Rd. and approximately 2,700 feet north of 6 Mile Line Rd. Being a 20 acre tract of land out of Lots 25 and 26 Block 15, Texan Gardens Subdivision, recorded in Volume 8, Page 57-58, Map Records, Hidalgo County, Texas.

FLOOD PLAIN

The property is in zone "X" & "A". Zone "X" are areas of 500-year flood and Zone "A" are areas with No base flood elevations determined. Community Panel No. 480334 0200 D, revised June 16, 2000. Based on recent improvements to the data, we have determined that the Base Flood Elevation for this Zone "A" on this specific property is _____. Property is in process to be taken out of the flood zone with LOMA Case No. _____.

SOIL CONDITIONS

According to the Soil Survey Report prepared for Hidalgo County by the U.S.D.A. Soil Conservation Service, the site consists of 96.5% of Brennan fine sandy loam, with 0 to 1 percent slopes and 3.5% of Ramadero sandy clay loam, with 0 to 1 percent slopes. Existing terrain has a westerly natural flow direction. These soils are well drained; surface runoff is negligible; permeability is moderately high to high, and the water capacity is high. Both soils are listed in Hydrologic Group B, having moderate infiltration rate when thoroughly wet. See Appendix C.

EXISTING CONDITIONS

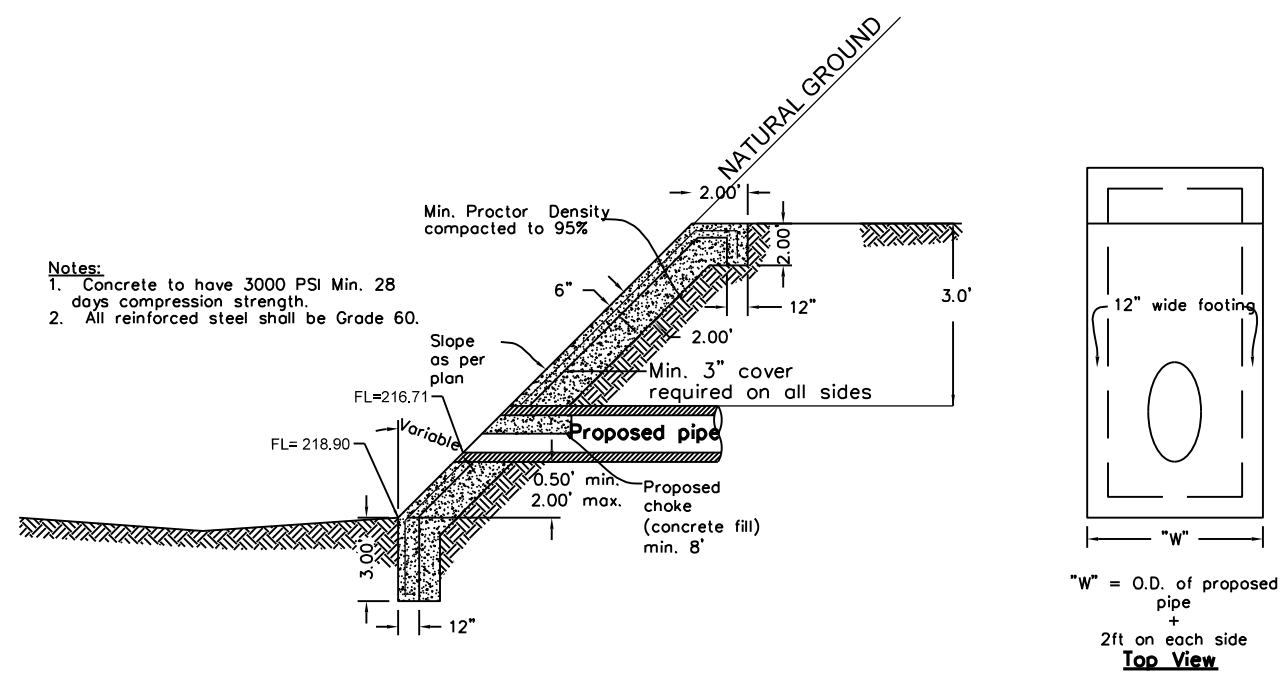
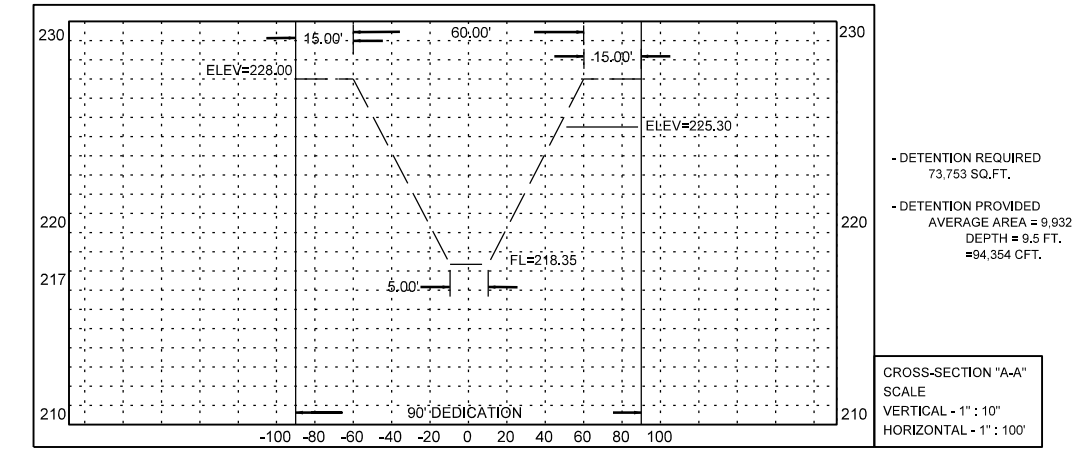
The subject property is currently undeveloped. Topographic elevations obtained from the site indicate that the existing terrain has a very slight grade approximately (0.8%). In accordance with the Drainage policies of the City of Mission and County of Hidalgo, the Rational Method, 15-year frequency storm event was utilized to determine the existing storm water runoff for this site. The total contributing 15-year existing storm water runoff from this site is approximately 17.17 cfs.

PROPOSED CONDITIONS

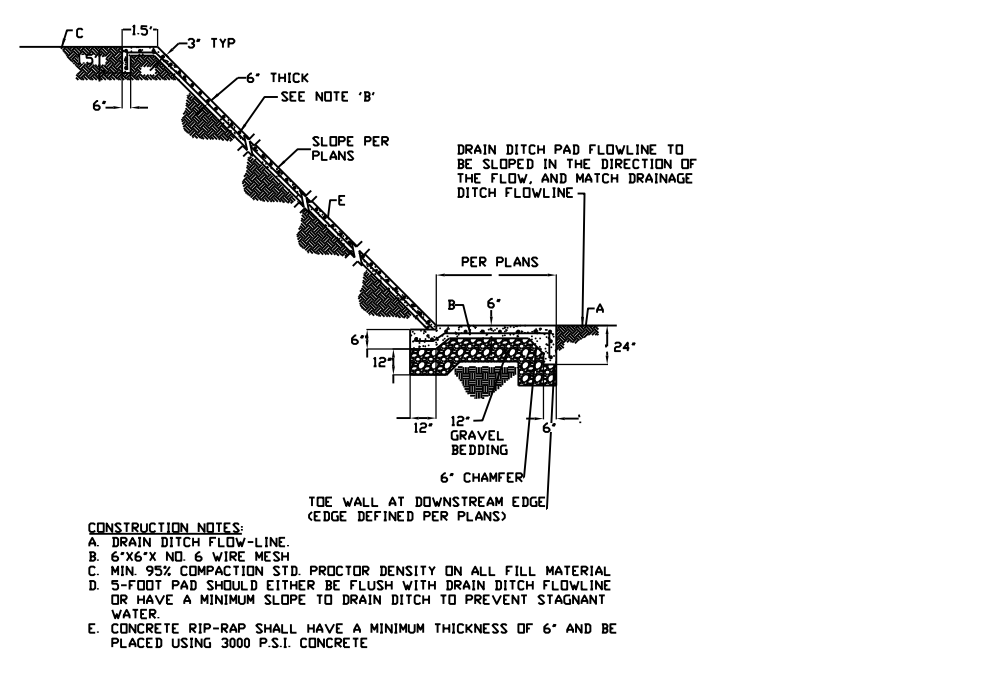
The proposed drainage system shall consist of an internal storm sewer system with in-lets in the street to collect surface runoff from lots and street. This system will be sized as per calculations on Appendix F. Pipe sizes range from 18" to 30" and will consist of a proposed outlet to P.D.Lateral (E.D. 1250), maintained by HCD No. 1.

In accordance with the City of Mission and County of Hidalgo Drainage Policy, the peak rate for runoff for this development will be mitigated to the proposed 50-year storm water runoff. The peak rate will be 59.95 cfs which will give us a net increase of 39.79 cfs. For proposed Cordero Subdivision only 73.73 cubic-feet, or 1.693 acre-feet of storm water runoff will be required to detain. We are proposing an extension for the existing drain ditch (P.D.LATERAL, FID.1250) located at the west of the proposed subdivision.

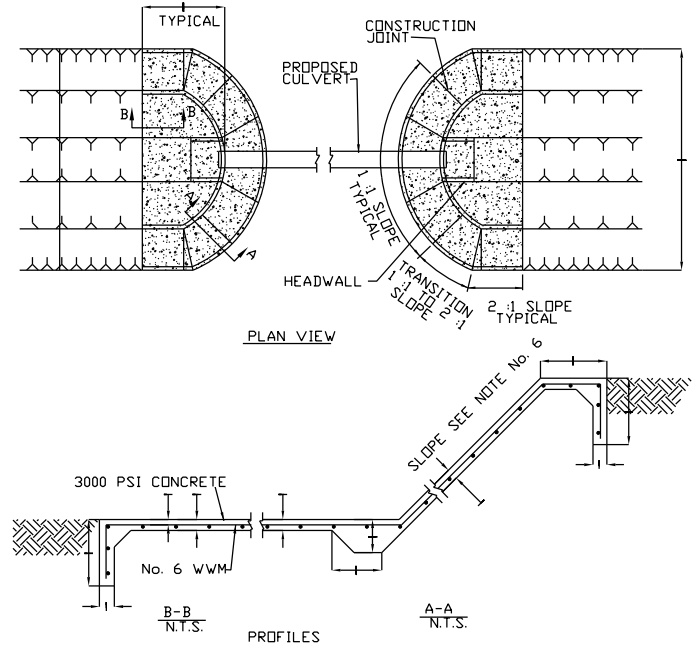
VICTOR H. TREVINO, P.E.
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195



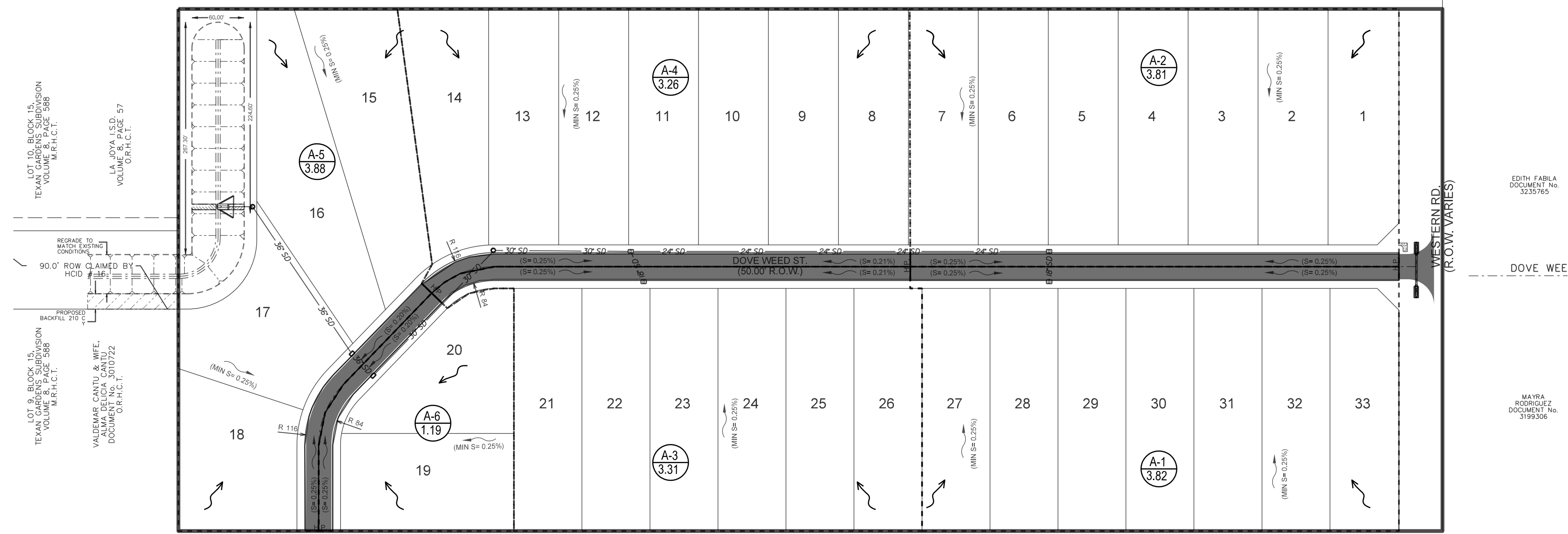
D-2 STORM DISCHARGE STRUCTURE



D-12 CONCRETE RIP RAP SLOPE PROTECTION (1 OF 2)



D-11 CONCRETE RIP RAP SLOPE PROTECTION (2 OF 2)



Hydraulic Calculation

ID	ID	ID	HGL	HGL	Discharge	Capacity	Slope	Loss	Velocity	Depth	Velocity	Depth
SD6	MH1	DS1	221.16	220.52	31.24	35.79	0.22	0.33	5.400	2.29	7.00	1.81
SD5	IN5	MH1	221.65	221.16	31.24	34.71	0.20	0.08	5.203	2.38	5.22	2.37
SD9	IN6	IN5	222.04	221.65	25.04	47.56	0.37	0.37	6.390	1.63	4.04	2.46
SD7	MH2	IN6	222.75	222.04	23.45	27.18	0.32	0.15	5.84	1.91	4.78	2.50
SD4	IN4	MH2	224.22	222.75	23.45	27.01	0.32	1.04	5.84	1.91	4.78	2.50
SD2	IN2	IN4	225.96	224.22	13.12	14.66	0.31	0.36	4.92	1.58	4.18	2.00
SD3	IN3	IN4	224.49	224.22	5.78	6.52	0.28	0.17	3.85	1.19	3.27	1.50
SD1	IN1	IN2	226.29	225.96	6.59	6.84	0.32	0.22	4.11	1.28	3.73	1.50

Drainage Area	Combined C Value	Drainage Area(Ac.)	Time of Conc. (Min)	Intensity (Sf/seg)	Discharge (Cfs/seg)
A1	0.33	3.829	22	5.217	6.589
A2	0.33	3.818	22	5.217	6.571
A3	0.334	3.314	22	5.217	5.783
A4	0.322	3.264	21	5.344	5.619
A5	0.329	3.887	21	5.344	6.841
A6	0.36	1.196	21	5.344	2.303

PRINCIPAL CONTACTS

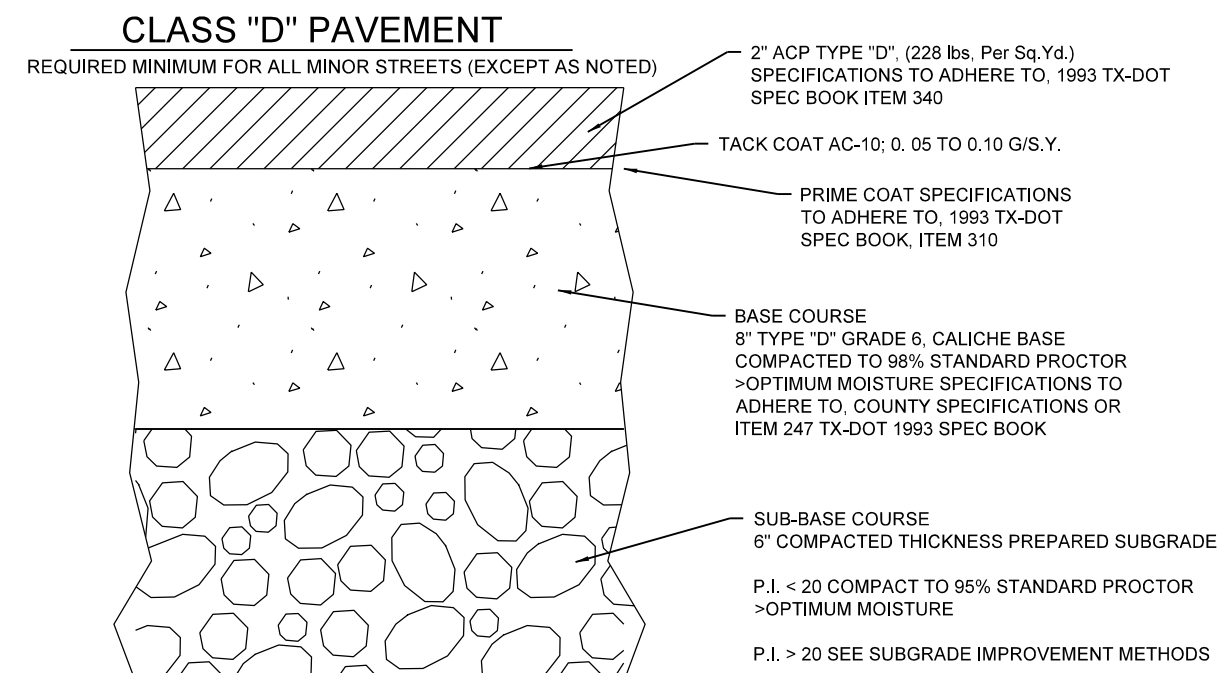
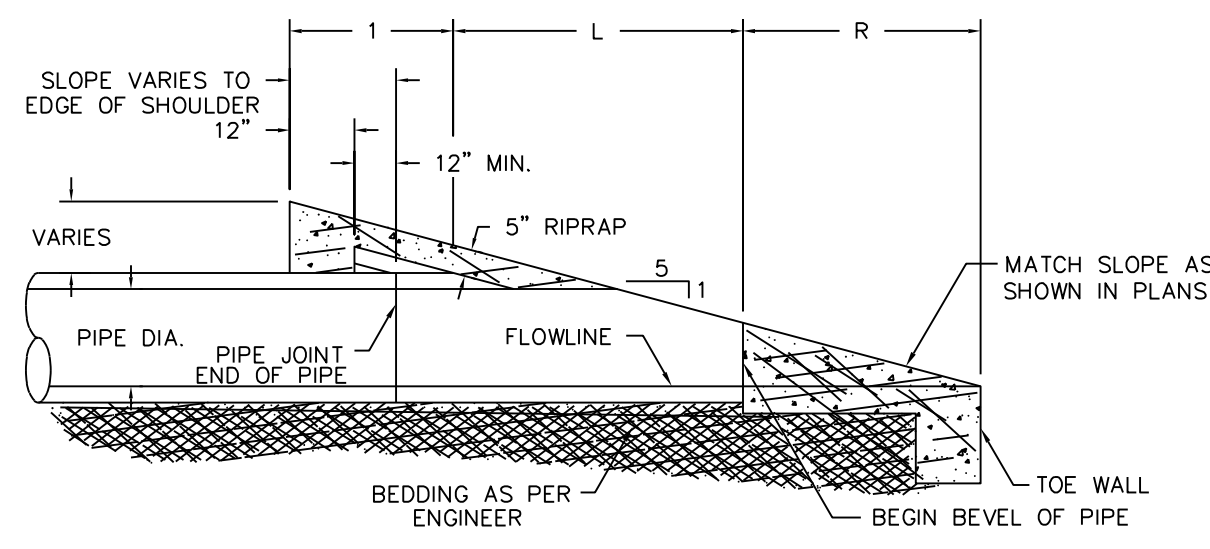
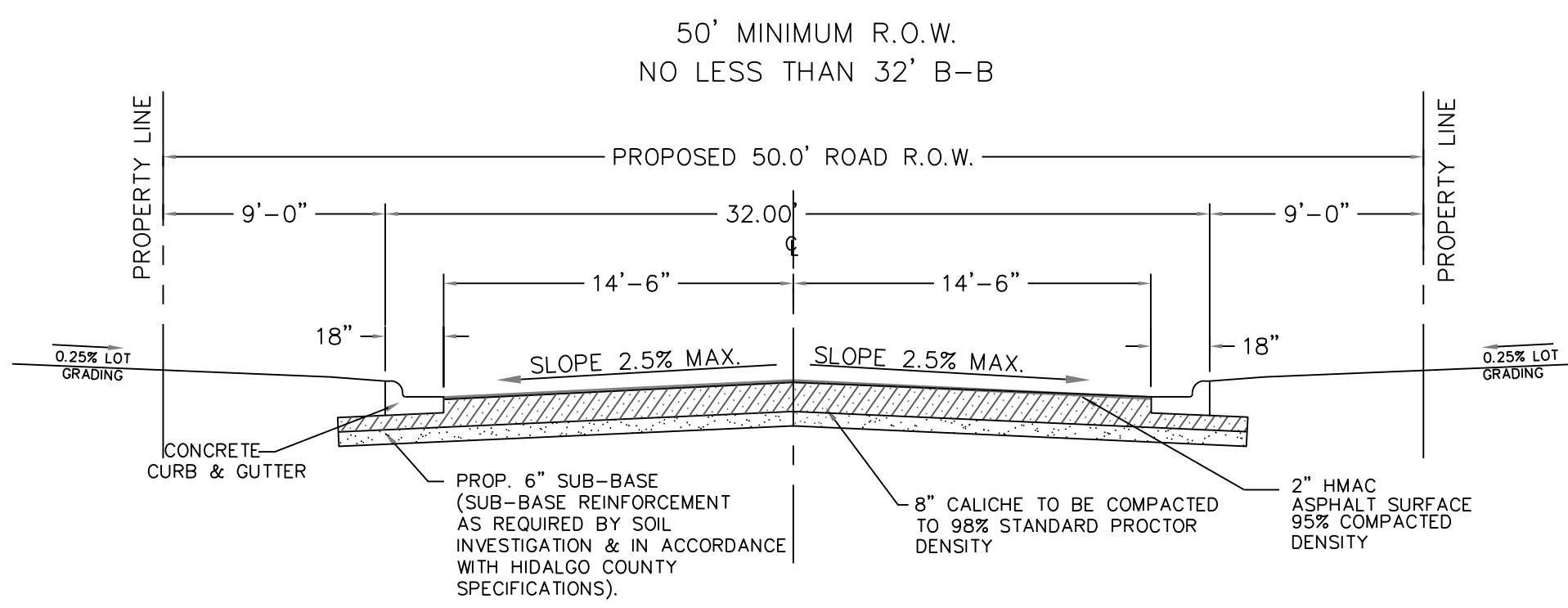
NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	PENA CHAPA DEVELOPMENT	P.O. BOX 1658	MISSION, TEXAS 78572	(956) 581-3918
ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335 (956) 424-3132
SURVEYOR:	JOSE MARIO GONZALEZ, R.P.L.S.	24593 FM 88	MONTE ALTO, TEXAS 78538	(956) 380-6154 (956) 380-6156

SOUTH TEXAS INFRASTRUCTURE GROUP
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TBP REG # 15000

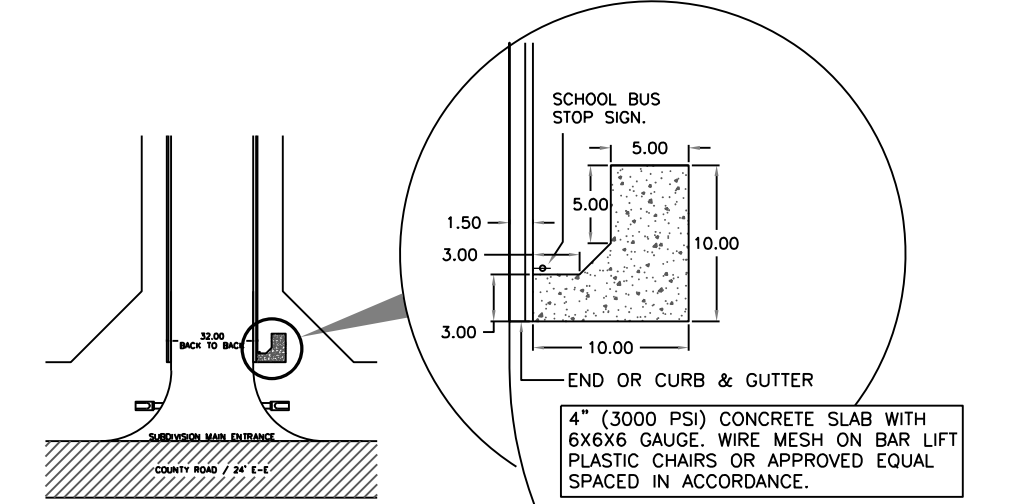
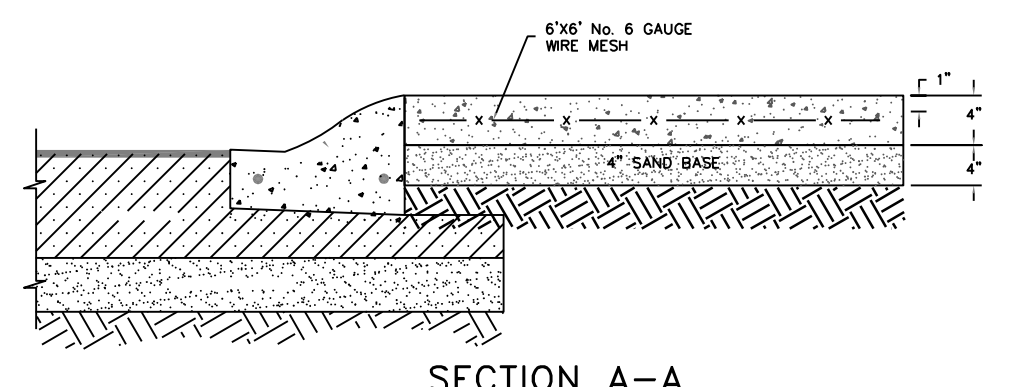
PAVING AND DRAINAGE
EL CORDERO SUBDIVISION

BEING A 20.0 ACRE TRACT SITUATED IN YDELINSON RAMIREZ SURVEY, ABSTRACT 584, PORCION 78, AND THE MARIA DE LUANA SURVEY, ABSTRACT 570, PORCION 80, HIDALGO COUNTY TEXAS, BEING LOT 25 AND 26, BLOCK 15, TEXAN GARDENS SUBDIVISION, AS PER MAP OR PLAT THERE OF RECORDED IN VOLUME 8, PAGES 57-58, MAP RECORDS, HIDALGO COUNTY, TEXAS.

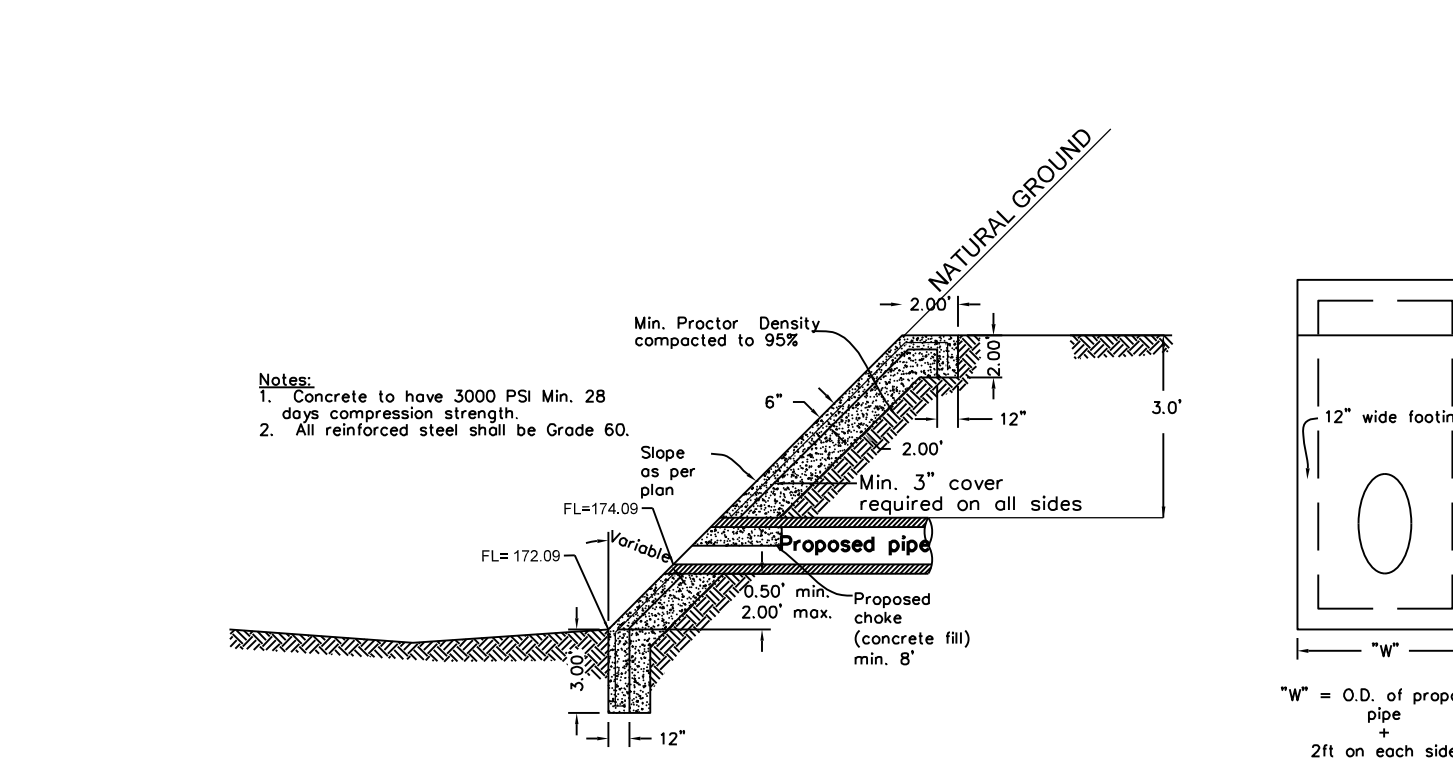
MINOR RESIDENTIAL STREET SECTION



CONCRETE SCHOOL BUS STOP PICKUP AREA

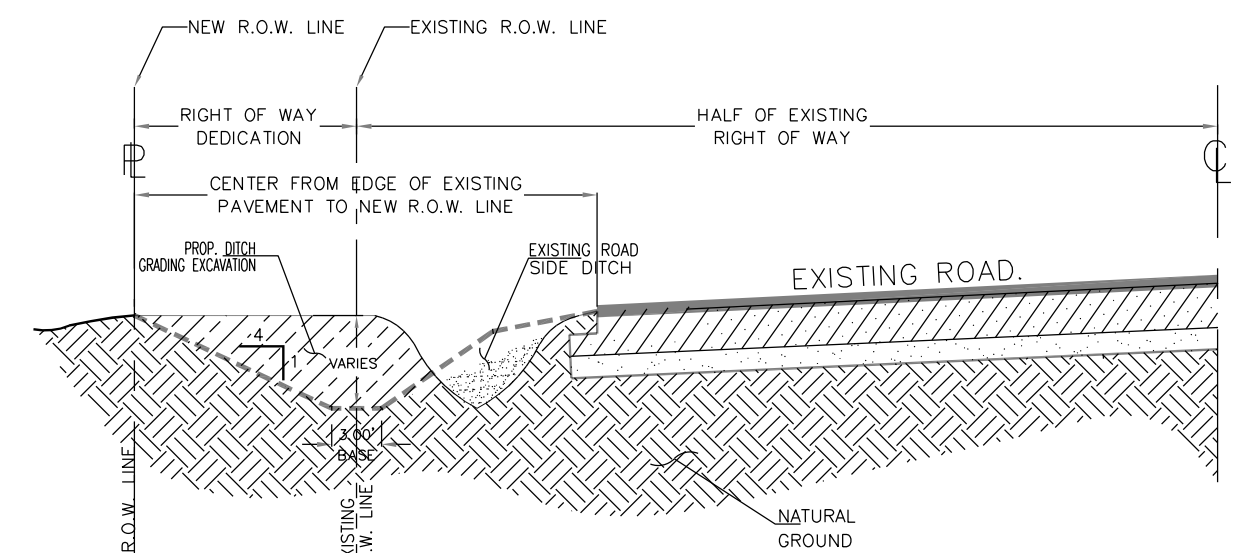


SAFETY END TREATMENT (TYPE "P OR C")

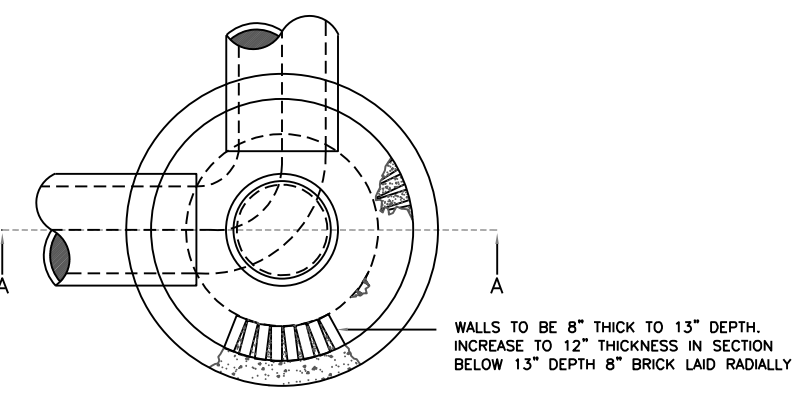


GENERAL NOTES

- IN LIEU OF THE ABOVE BASE DESIGN, AN ALTERNATE BASE MAY BE USED THAT USES 5" OF TYPE "A" (CRUSHED LIMESTONE) COMPACTED TO STANDARD PROCTOR > OPTIMUM MOISTURE AS PER ITEM 247 1993 TX DOT SPEC BOOK.
 - SUBGRADE IMPROVEMENT METHODS:
 - MECHANICAL STABILIZATION—AN APPROVED GEOGRID PLACED UNDERNEATH THE BASE COURSE PER COUNTY SPECIFICATIONS.
 - CHEMICAL STABILIZATION—MODIFY SUBBASE COURSE THICKNESS AS FOLLOWS:
 - 20-P.I. < 40 3% LIME BY WEIGHT COMPACTED TO 95% STANDARD PROCTOR > OPTIMUM MOISTURE
 - P.I. > 40 6% LIME BY WEIGHT COMPACTED TO 95% STANDARD PROCTOR > OPTIMUM MOISTURE
 - OVER EXCAVATION & REPLACEMENT—A MINIMUM OF 18" OF SELECT FILL WITH A P.I. < 20 COMPACTED TO 95% STANDARD PROCTOR > OPTIMUM MOISTURE
- DESIGN ENGINEER MAY SPECIFY A DIFFERENT PAVEMENT SECTION TO ADDRESS FIELD AND TRAFFIC CONDITIONS. THESE SPECIFICATIONS OUTLINE THE MINIMUM REQUIREMENTS FOR THE COUNTY OF HIDALGO. WHERE FURTHER GUIDANCE FOR CONSTRUCTION SPECIFICATIONS IS NEEDED, THE COUNTY PLANNING DEPARTMENT MAY REQUIRE CONSTRUCTION IN ACCORDANCE WITH THE 1993 TX DOT STANDARD SPECIFICATIONS BOOK.

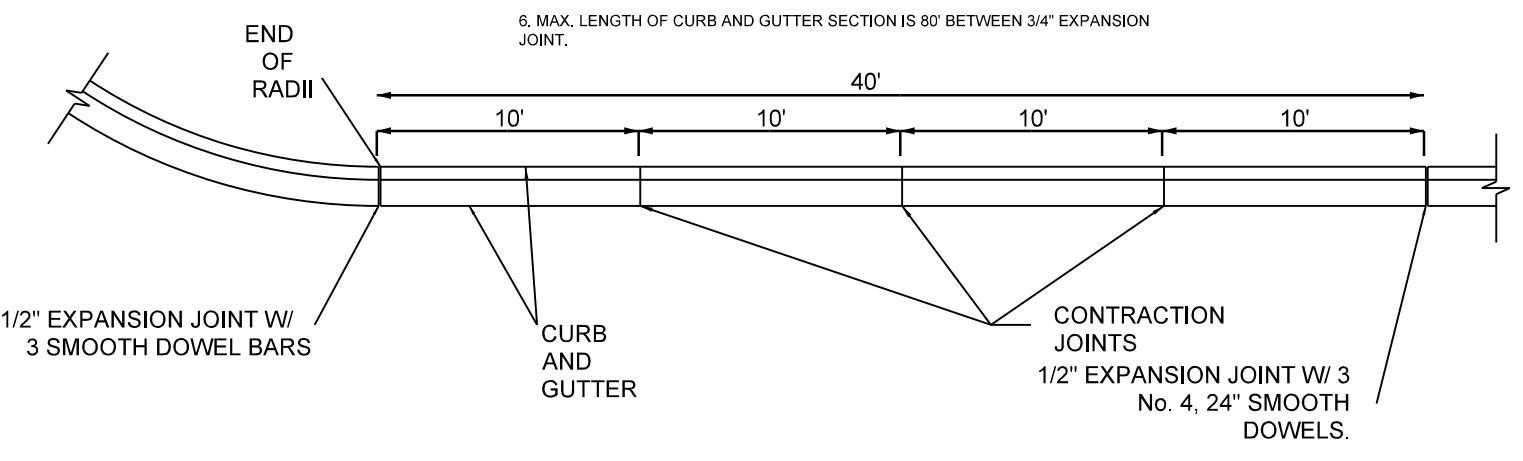


DRAINAGE MANHOLE DETAILS



P-2 TYPICAL CURB AND GUTTER DETAIL N.T.S.

- ALL HONEYCOMBING SHALL BE GROUTED TO PROVIDE A UNIFORM SURFACE.
- WHEN HONEYCOMBING IS EXCESSIVE AS DETERMINED BY THE COUNTY OF HIDALGO DESIGNATED REPRESENTATIVE, CURB AND GUTTER SHALL BE REPLACED.
- BACKFILL BEHIND CURBS SHALL BE ACCOMPLISHED WITHIN 24 HOURS AFTER BACK FORM IS REMOVED OR 48 HOURS AFTER SLIP FORMING.
- CURB AND GUTTER CONCRETE SHALL BE CLASS "A" (3000 PSI).
- REINFORCING STEEL AS SHOWN.
- MAX. LENGTH OF CURB AND GUTTER SECTION IS 80' BETWEEN 34" EXPANSION JOINT.

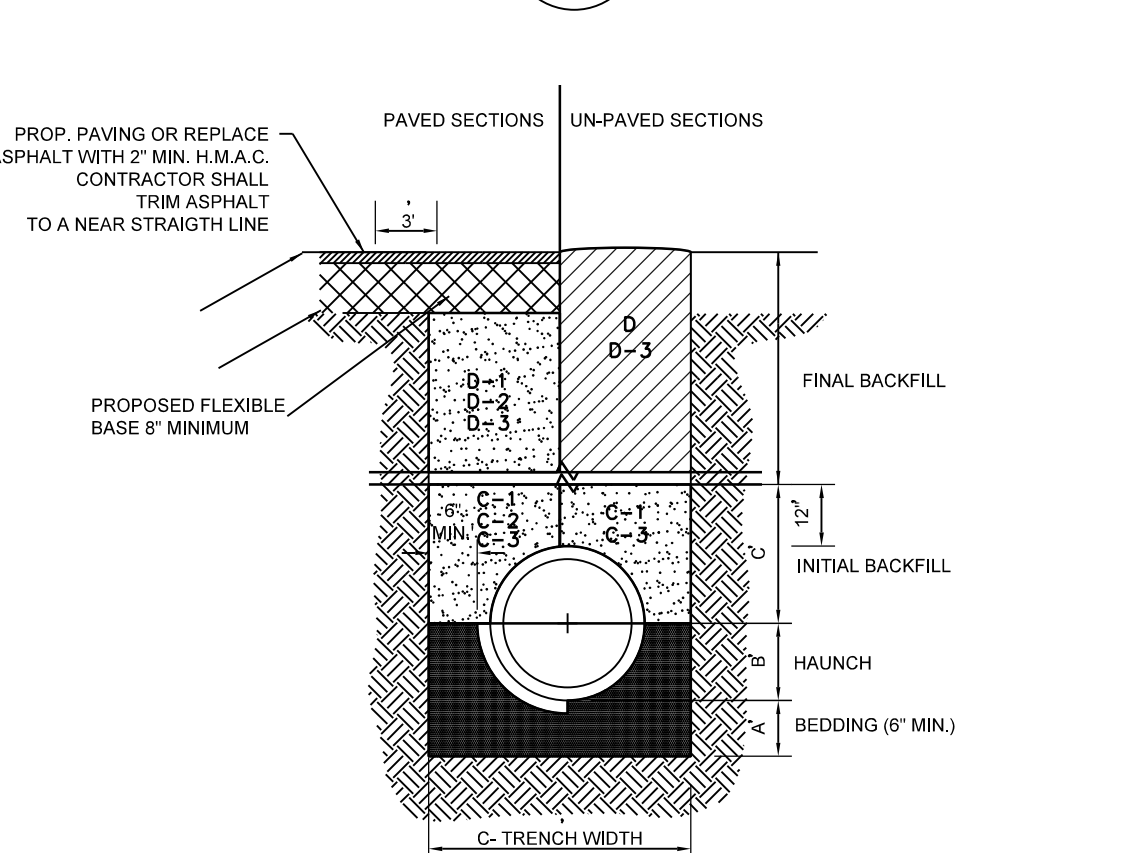


P-3 TYPICAL JOINTS N.T.S.

GENERAL NOTES

- THE GUIDELINES SHOW HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

D-2 STORM DISCHARGE STRUCTURE



D-3 STORM TRENCH BEDDING AND BACKFILL DETAILS N.T.S.

- FINAL BACKFILL FOR CLASS III HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE UNDER UNPAVED SECTIONS - SHALL BE CLASS II, III OR IV, COMPACTED TO 92% S.P.D. (12" LOOSE LIFT, MECHANICAL COMPACTION).
- FINAL BACKFILL FOR CLASS III HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS AND CITY COUNTY ROADS - SHALL BE SOIL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (ASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.
- FINAL BACKFILL FOR CLASS III HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
- FINAL BACKFILL FOR STRUCTURES (INLETS, MANHOLES, ETC.) - STRUCTURES UNDER THE ROADWAY AND UP TO 5 FT. BEYOND THE EDGE OF PAVEMENT/BACK OF CURB SHALL HAVE CLASS I, II, III, OR IV (ASTM D2321) OR SOIL TYPE A1, A2, OR A3 (ASHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL. FOUNDATION PREPARATION (WELLPONTS, MIN. 4" GRAVEL OR CEMENTS STABILIZATION OR APPROVED SUBSTITUTE) SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% S.P.D. USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698. THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 8".

- NOTE:
- MINIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
 - FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 95% S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.
 - FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF THE TRENCH WIDTH IS WITHIN 5 FT. FROM THE E.O.P./R.O.C.
 - THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.

REVISION NOTES				
NO.	SHEET	REVISION	DATE	APPROVED

PRINCIPAL CONTACTS					
NAME	ADDRESS	CITY & ZIP	PHONE	FAX	
OWNER:	PENA CHAPA DEVELOPMENT	P.O. BOX 1658	MISSION, TEXAS 78572	(956) 581-2918	
ENGINEER:	VICTOR H. TREVINO, P.E.	800 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	JOSE MARIO GONZALEZ, R.P.L.S.	24593 FM 88	MONTE ALTO, TEXAS 78538	(956) 380-6154	(956) 380-6156

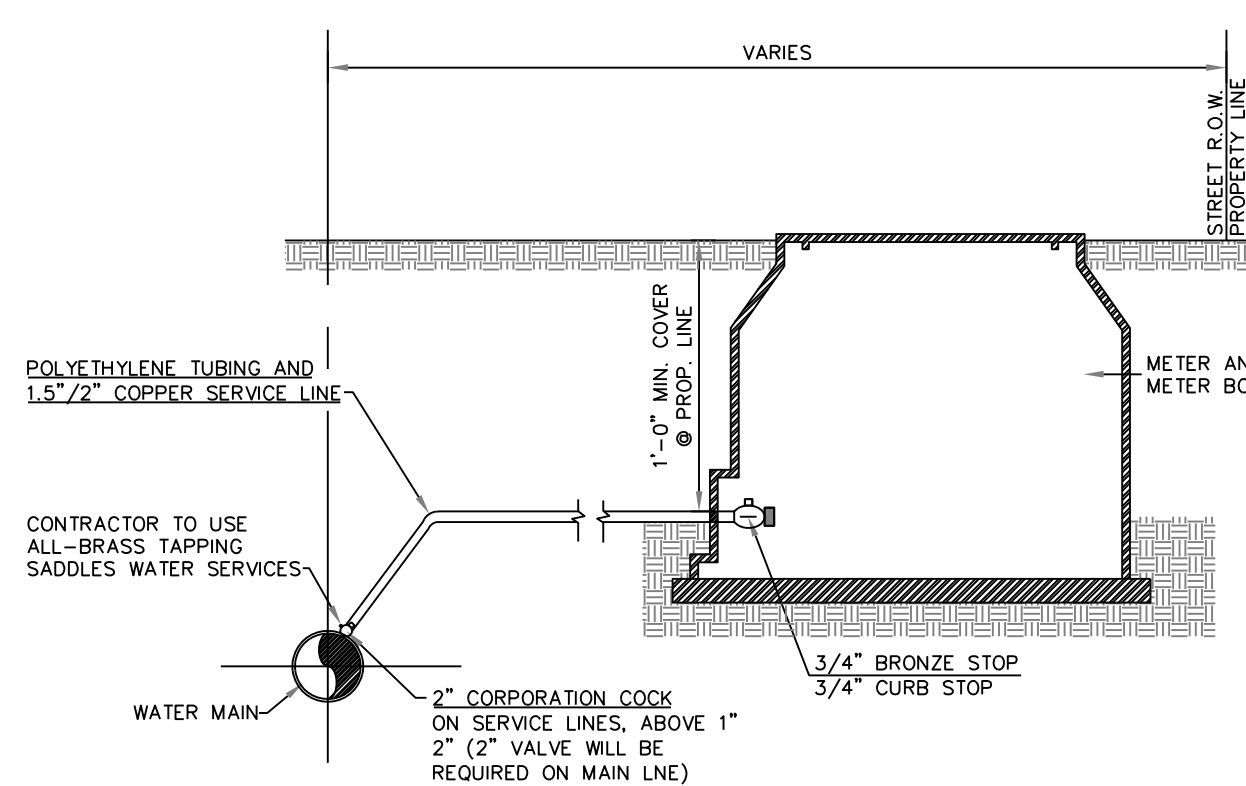
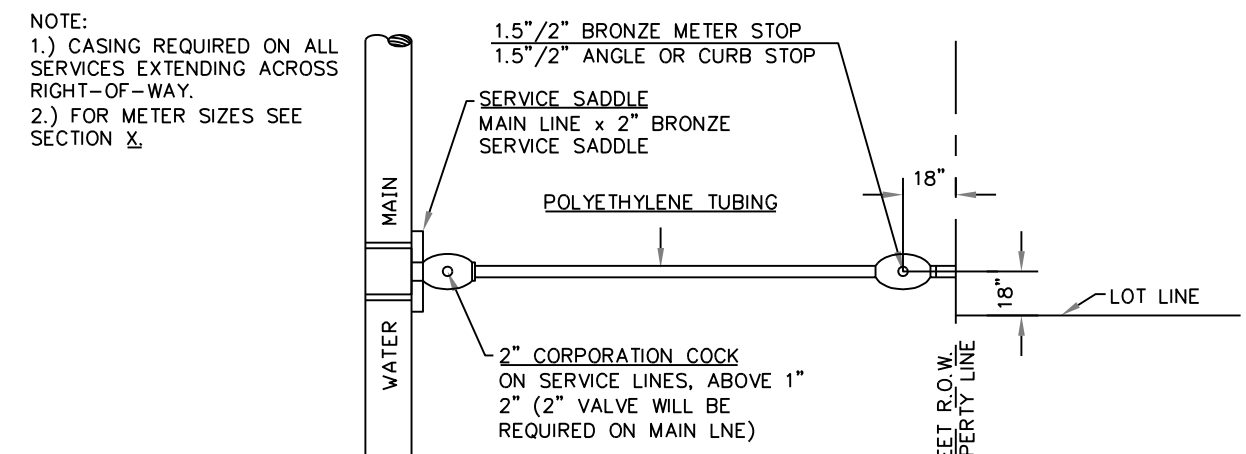
SOUTH TEXAS INFRASTRUCTURE GROUP
 900 S. STEWART, SUITE 13
 MISSION, TEXAS 78572
 PH: (956) 424-3335
 FAX: (956) 424-3132
 TBP REG # 1500

PAVING & DRAINAGE DETAILS
EL CORDERO SUBDIVISION

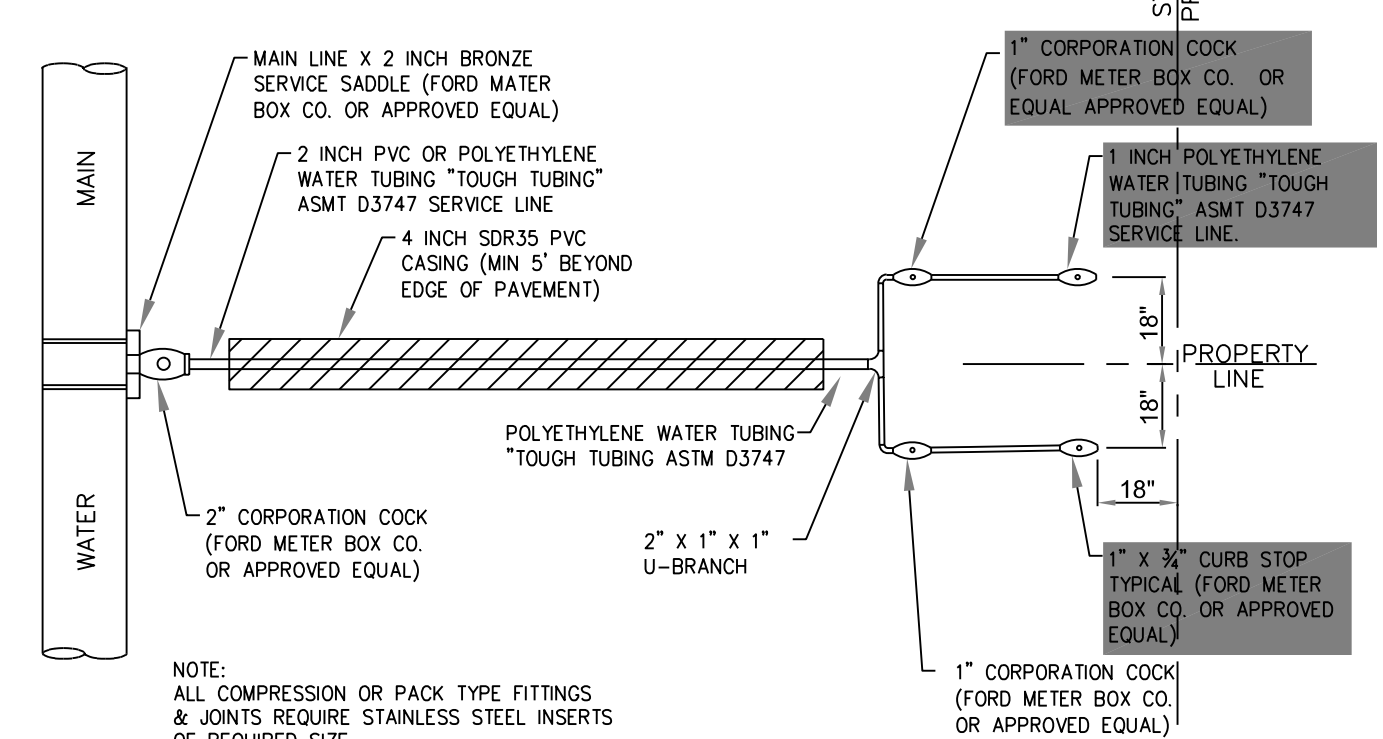
BENING A 20.0 ACRE TRACT SITUATED IN VOELFONSON RAMIREZ SURVEY, ABSTRACT 584, PORTION 7N, AND THE MARIA DE LUVA SURVEY, ABSTRACT 570, PORTION 8N, HIDALGO COUNTY, TEXAS, BEING LOT 25 AND 26, BLOCK 15, TEXAN GARDENS SUBDIVISION, AS PER MAP OR PLAT THERE OF RECORDED IN VOLUME 8, PAGES 57-58, MAP RECORDS, HIDALGO COUNTY, TEXAS.

SOUTH TEXAS INFRASTRUCTURE GROUP

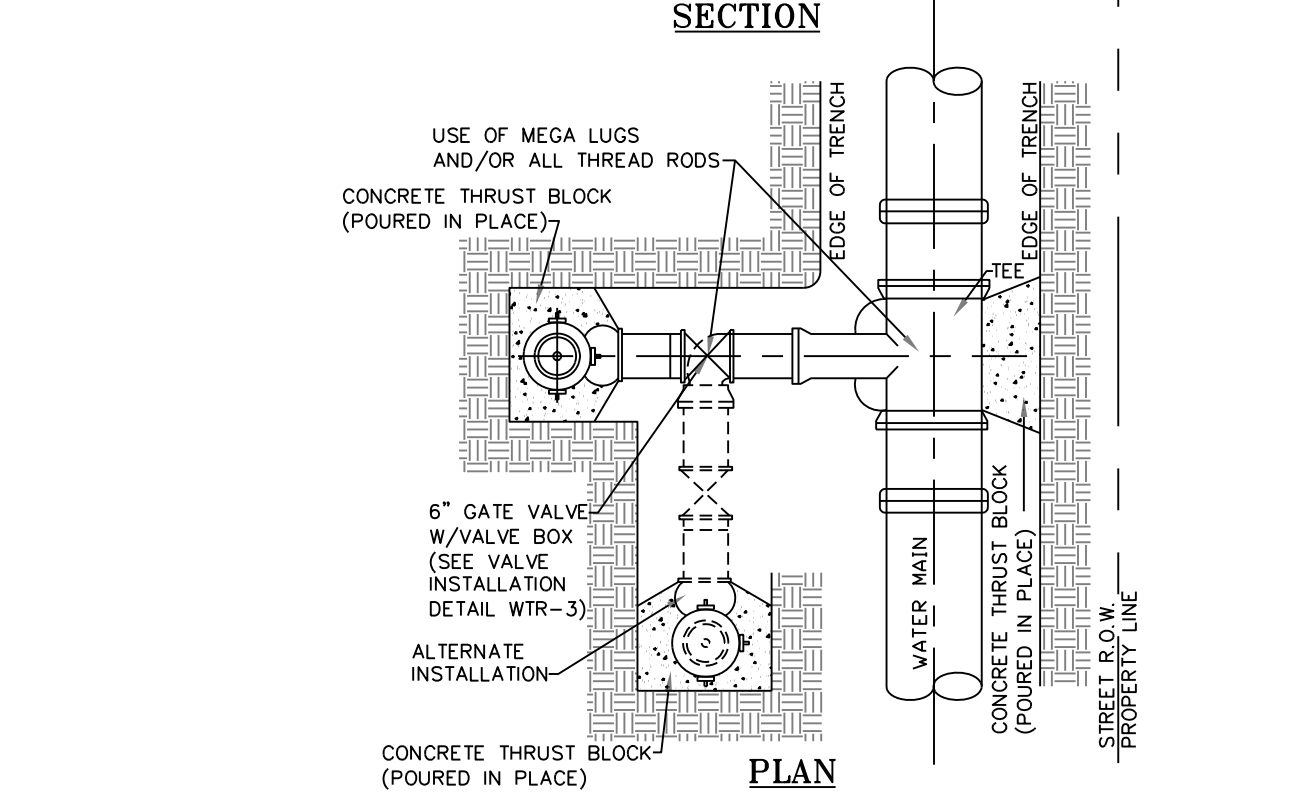
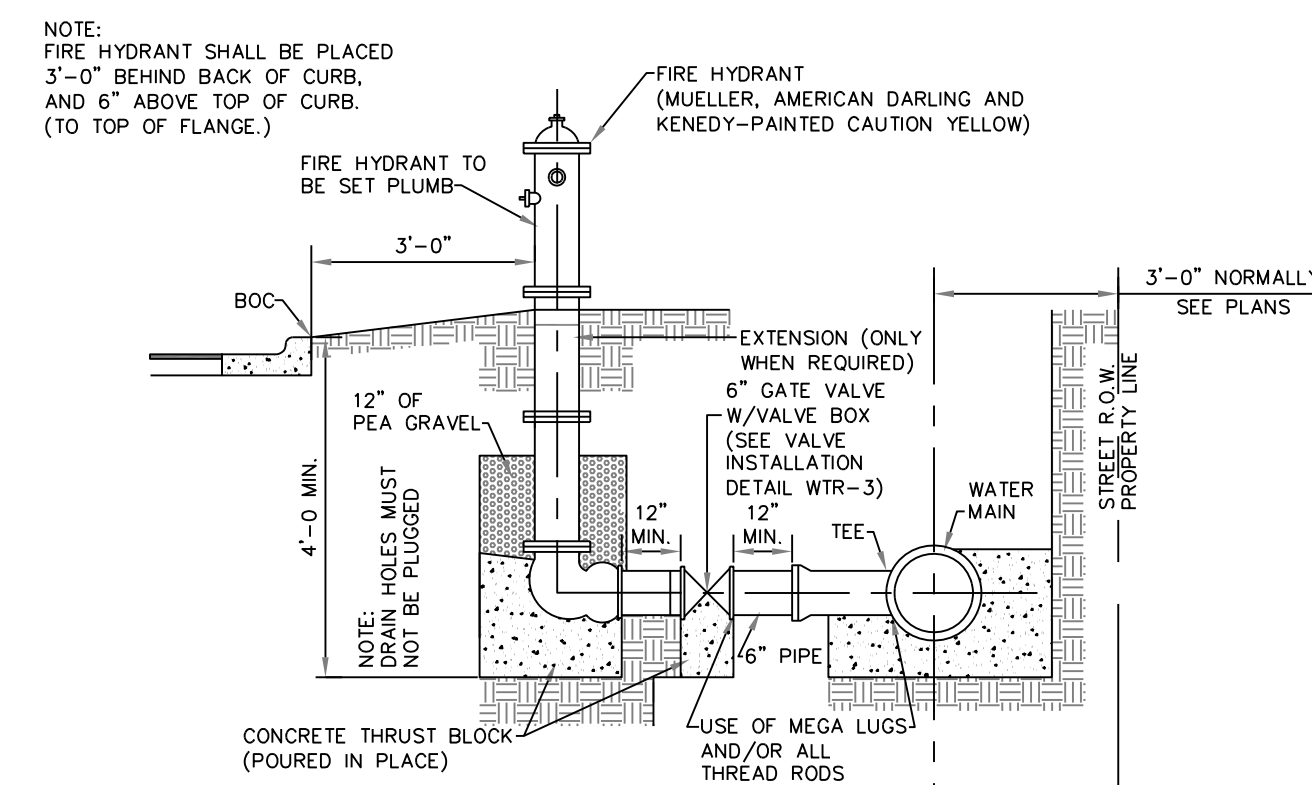
SHEET 4



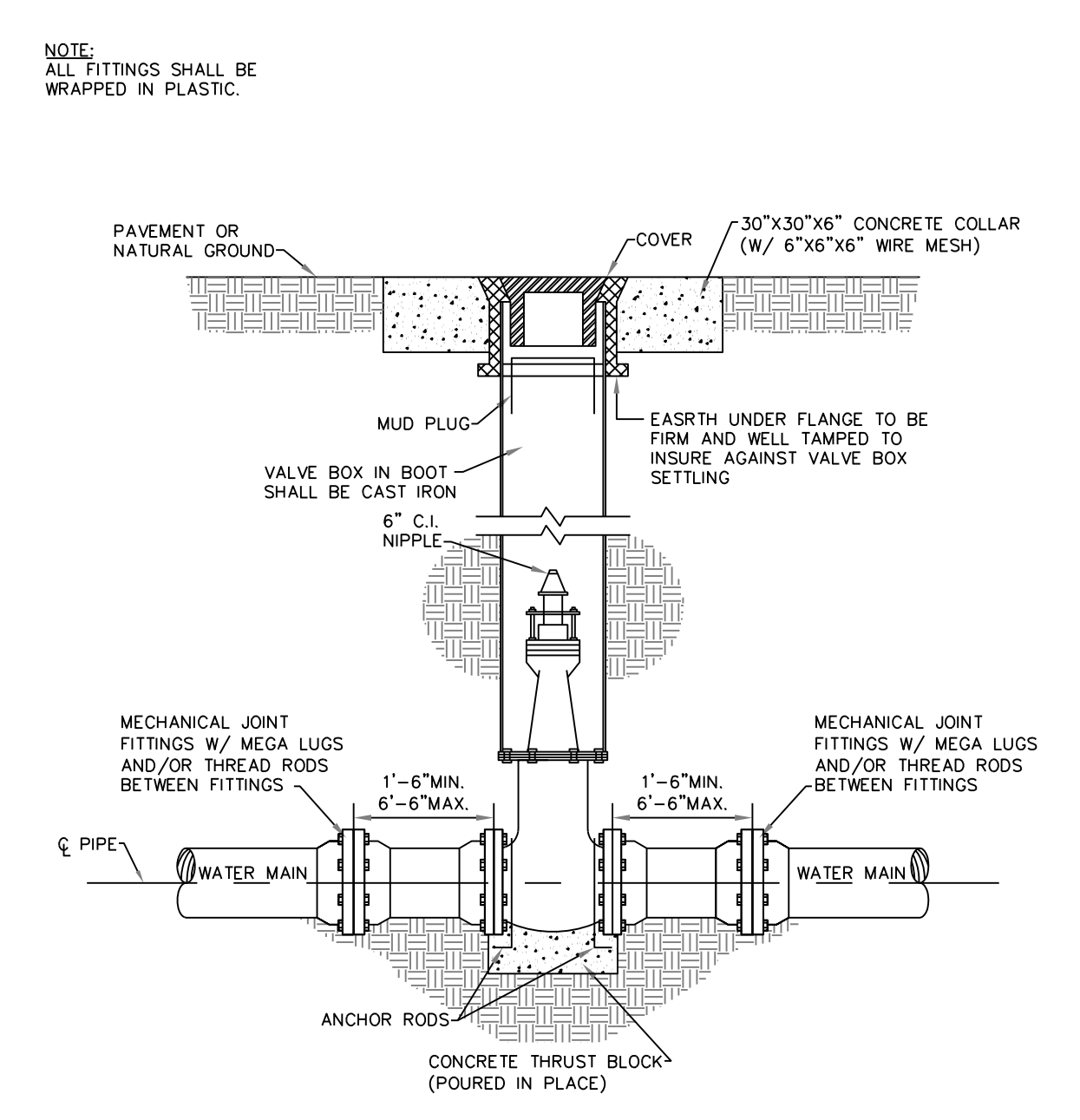
SINGLE WATER SERVICE CONNECTION



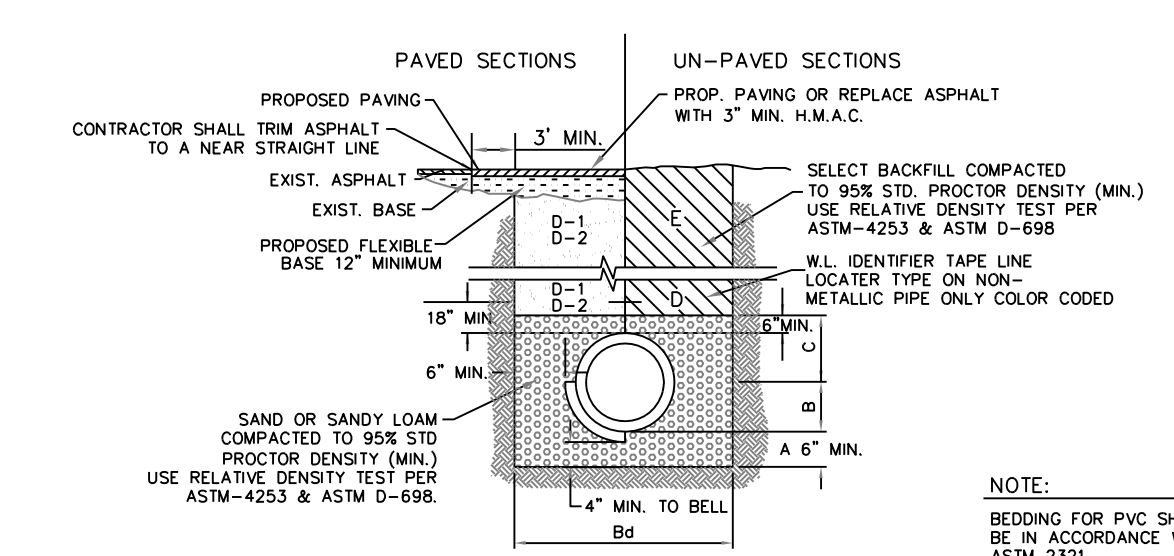
DUAL WATER SERVICE CONNECTION
N.T.S.



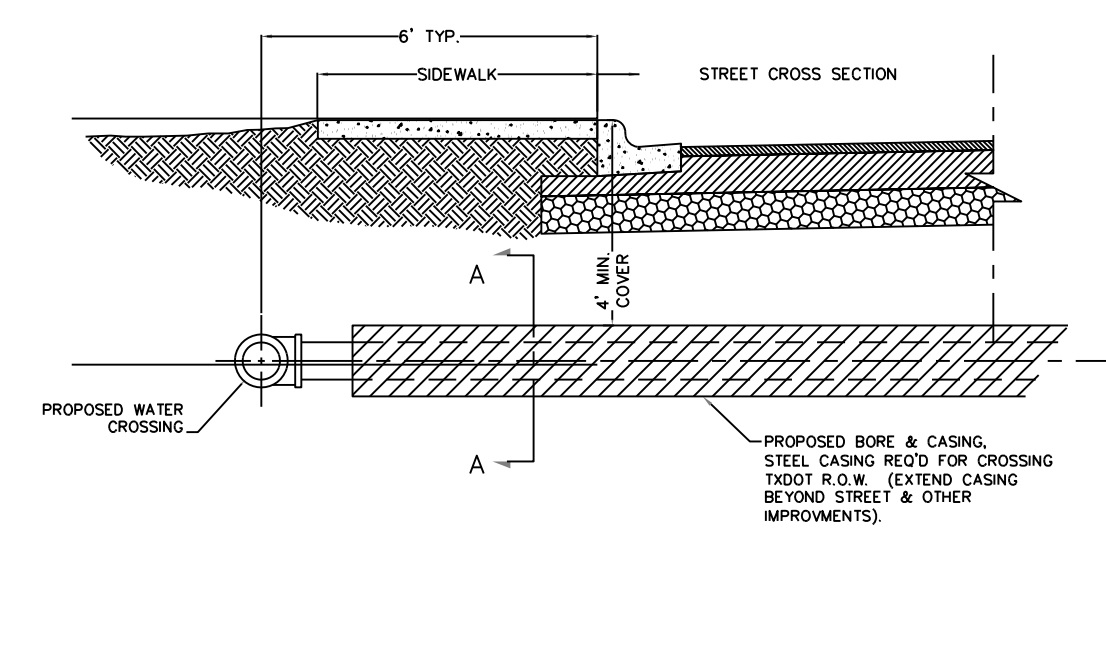
NOT TO SCALE
FIRE HYDRANT INSTALLATION DETAIL



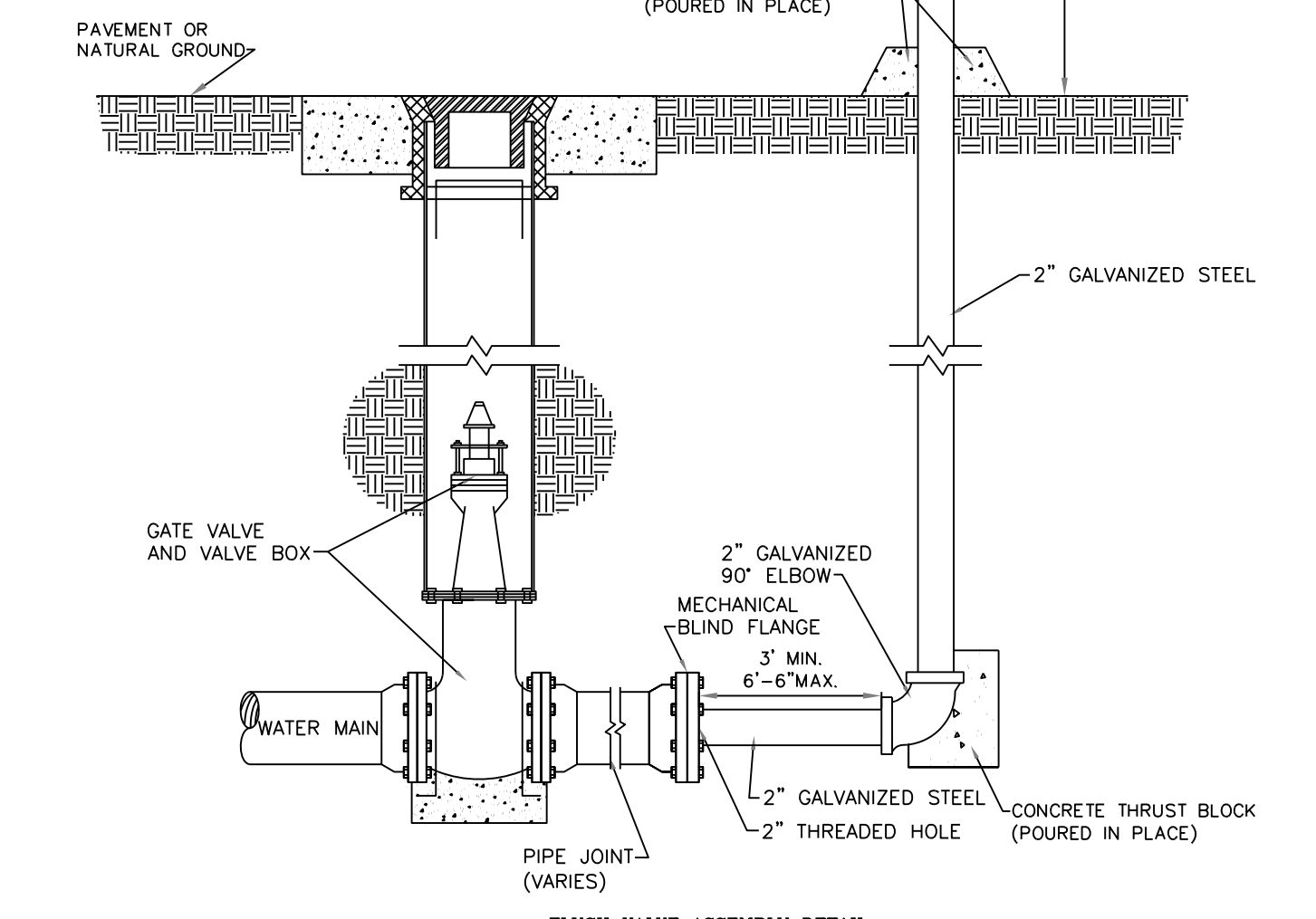
VALVE & VALVE BOX INSTALLATION DETAIL



TRENCH BEDDING (WATER) DETAIL

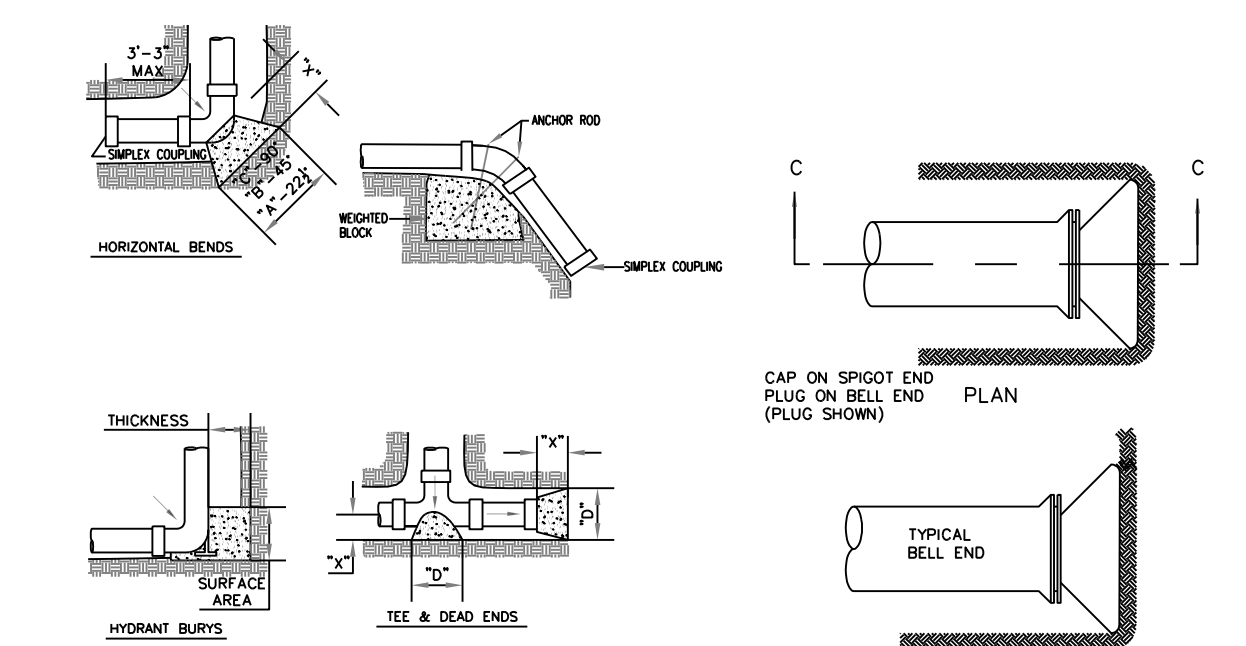


BORE & CASING DETAIL



FLUSH VALVE ASSEMBLY DETAIL

- GENERAL NOTES:**
- 1.) THE LOCATION OF THRUST BLOCKS DEPENDS UPON THE DIRECTION OF THRUST AND TYPE OF FITTINGS.
 - 2.) THRUST BLOCK CALCULATIONS ARE BASED ON A WATER LINE PRESSURE OF 150 P.S.I. AND AN ALLOWABLE SOIL BEARING VALUE OF 2,500 POUNDS PER SQUARE FOOT.
 - 3.) "C" DIMENSIONS SHALL BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO LARGER THAN 45°.
 - 4.) ANGLE θ SHALL BE EQUAL TO OR LARGER THAN 45°.
 - 5.) ALL FITTINGS TO BE WRAPPED IN PLASTIC.



HORIZONTAL BLOCKING TABLE

PIPE SIZE	DWA FT.	22 1/2 DEGREES		45 DEGREES		90 DEGREES		TEE & PLUG	
		"A"	MIN. AREA	"B"	MIN. AREA	"C"	MIN. AREA	"D"	MIN. AREA
4"	1.50	1.00	1.00	1.00	1.00	1.06	1.00	1.06	
6"	1.50	1.00	1.00	1.14	1.30	1.55	2.40	1.30	1.70
8"	1.50	1.08	1.18	1.52	2.31	2.07	4.27	1.74	3.02
10"	1.50	1.35	1.84	1.90	3.61	2.58	6.66	2.17	4.71
12"	1.50	1.63	2.65	1.86	5.19	3.10	9.60	2.61	6.79

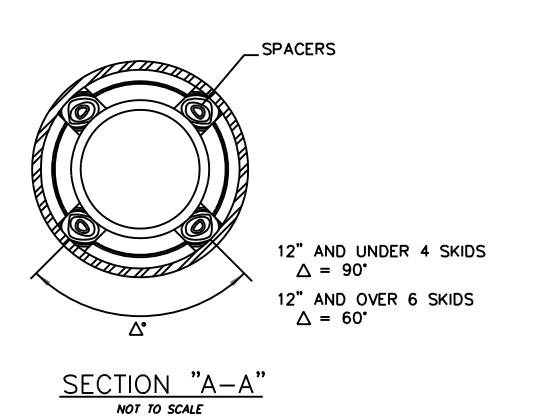
TABLE OF CASING SIZES

NOMINAL PIPE SIZE	CASING SIZE (INSIDE DIA.)	CASING MINIMUM WALL THICKNESS
16"	24"	0.25"

TABLE OF CASING SIZES

NOMINAL PIPE SIZE	CASING SIZE (INSIDE DIA.)	CASING MINIMUM WALL THICKNESS
4"	3"-10"	0.25"
6"	10"-12"	0.25"
8"	14"-16"	0.25"
12"	20"	0.25"

CARRIER PIPE - P.V.C. C900 DR-18



SECTION "A-A"
NOT TO SCALE

NOTE:
WATERLINE TO BE SLOPED DOWN OR UP @ CROSSING IF IT CONFLICTS W/ EXISTING SEWER LINE OR OTHER P.E. STRUCTURES.
01/03/2023
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195
BORR & CASING DETAIL

01/03/2023
VICTOR H. TREVINO, P.E.
LICENSED PROFESSIONAL ENGINEER, TEXAS LIC. NO. 128195

REVISION NOTES

No.	SHEET	REVISION	DATE	APPROVED

PRINCIPAL CONTACTS

NAME	ADDRESS	CITY & ZIP	PHONE	FAX
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ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335 (956) 424-3132
SURVEYOR:	JOSE MARIO GONZALEZ, R.P.L.S.	24593 FM 88	MONTE ALTO, TEXAS 78538	(956) 380-6154 (956) 380-6156

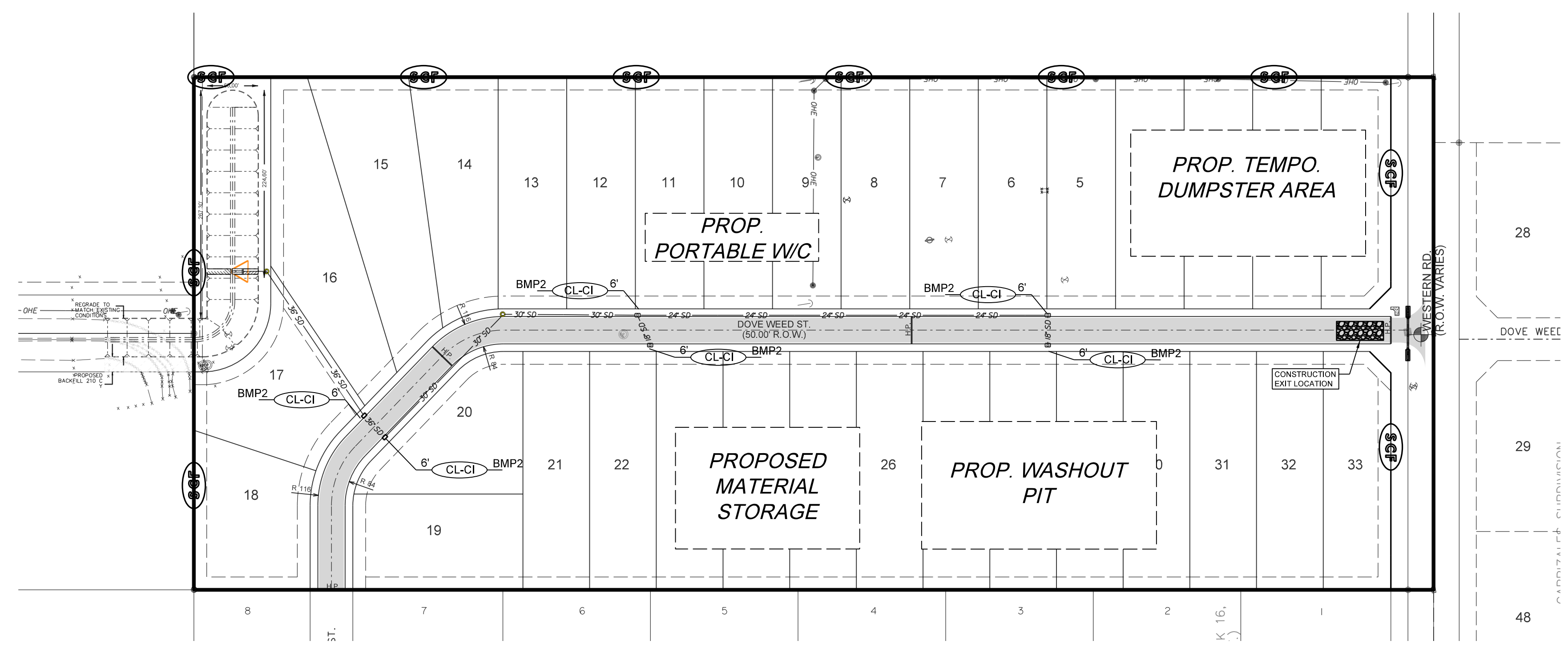
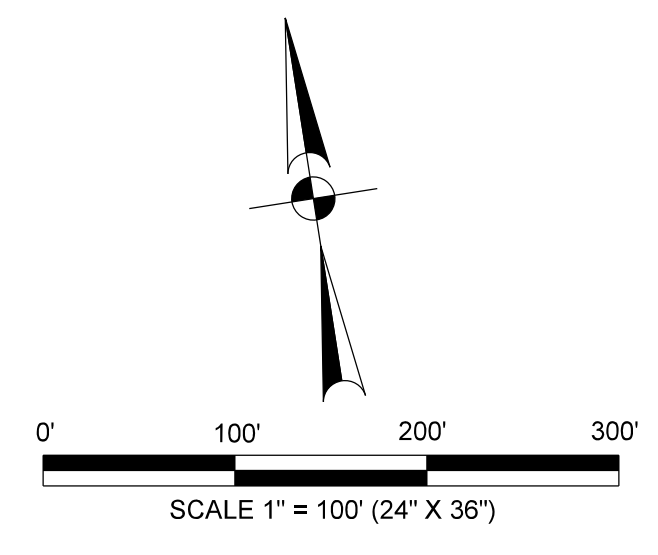
SOUTH TEXAS INFRASTRUCTURE GROUP
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FAX: (956) 424-3132
TBPE REG # 1500



WATER STANDARD DETAILS
EL CORDERO SUBDIVISION
BEING A 20.0 ACRE TRACT SITUATED IN YOLLEFONSON RAMIREZ SURVEY, ABSTRACT 384, PORCION 7B, AND THE MARIA DE LUCA SURVEY, ABSTRACT 570, PORCION 8D, HIDALGO COUNTY, TEXAS, BEING LOT 25 AND 26, BLOCK 15, TEXAN GARDENS SUBDIVISION, AS PER MAP OR PLAT THERE OF RECORDED IN VOLUME 8, PAGES 57-58, MAP RECORDS, HIDALGO COUNTY, TEXAS.

LEGEND

- PROP. CONSTRUCTION EXIT (TY 1)
- PROP. EROSION CONTROL LOG AT CURB INLET AND LENGTH (LF)
- PROP. SEEDING AREA
- SEDIMENT CONTROL FENCE



SITE DESCRIPTION

PROJECT LOCATION: 2,400 FT NORTH FROM 6 MILE RD AND WESTERN RD, INTERSECTION

PROJECT SITE MAPS: PROJECT LOCATION MAP, TITLE SHEET AND PROJECT LIMIT SHEET, APPROX. SLOPES ANTICIPATED AFTER MAJOR GRADINGS AND AREAS OF SOIL DISTURBANCE, PAVING LAYOUT AND DRAINAGE DESIGN, MAJOR CONTROLS AND LOCATIONS OF STABILIZATION PRACTICES, STORM WATER POLLUTION PREVENTION PLAN, SURFACE WATERS AND DISCHARGE LOCATIONS, PAVING LAYOUT AND DRAINAGE DESIGN

PROJECT DESCRIPTION: EL CORDERO SUBDIVISION IS A PROPOSED 33 LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION LOCATED WITHIN THE CITY OF MISSION 3 1/2 MILE EXTRAJURISDICTIONAL JURISDICTION (E.J.).

MAJOR SOIL DISTURBING ACTIVITIES: SOIL DISTURBING ACTIVITIES WILL INCLUDE PREPARING THE RIGHT OF WAY, EXCAVATION AND EMBANKMENT FOR THE ROADWAY INSTALLATION OF PROPOSED STORM SEWER SYSTEM AND ESTABLISHMENT OF FINAL SEEDING.

DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED TEMPORARILY OR PERMANENTLY SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITIES ARE SCHEDULED TO RESUME AND DO WITHIN 30 DAYS. FINAL SEEDING SHOULD BE ACCOMPLISHED ON ALL AREAS AS SOON AS CONSTRUCTION STAGE IS COMPLETE.

TOTAL PROJECT AREA: 20.0 ACRES

TOTAL AREA TO BE DISTURBED: 20.00 ACRES (100%)

WEIGHTED RUNOFF COEFFICIENT: BEFORE CONSTRUCTION = 0.56 CFS AFTER CONSTRUCTION = 72.66 CFS

EXISTING CONDITION OF SOIL & VEGETATION: EXISTING SOIL CONDITIONS ARE: ACCORDING TO THE SOIL SURVEY REPORT, PREPARED FOR HIDALGO COUNTY BY THE U.S.D.A. SOIL CONSERVATION SERVICE, THE SITE CONSISTS OF 65% OF MIDLAND FINE SAND (SM, WITH 0 TO 1 PERCENT SLOPES, 3.17% OF RAMADERO SAND CLAY LOAM, AND 6.6% MIDLAND FINE SAND (LM, POOLED, 1 TO 3 PERCENT SLOPES)

NAME OF RECEIVING WATERS: ALL RUNOFF DRAINS INTO AN EXISTING STORM SEWER SYSTEM WHICH GOES INTO HIDALGO COUNTY'S EXISTING DETENTION POND WHICH IS RELEASED AT A CONTROLLED RATE BY THE COUNTY.

ENDANGERED SPECIES, DESIGNATED CRITICAL HABITAT AND HISTORICAL PROPERTY: NO DESIGNATED CRITICAL HABITAT OR HISTORICAL PROPERTIES HAVE BEEN FOUND ON THIS PROJECT SITE, NO IMPACTS TO THE SPECIES IS ANTICIPATED.

THE DOCUMENTATION SATISFYING THE CONSTRUCTION GENERAL PERMIT ELIGIBILITY PERTAINING TO THE EXISTENCE OR OF ANY PROTECTIVE ACTION TAKEN WITH REGARD TO ENDANGERED SPECIES OR DESIGNATED CRITICAL HABITAT OR HISTORICAL PROPERTY IN THIS PROJECT AREA IS CONTAINED IN THE PROJECT'S PHASE I ENVIRONMENTAL SITE ASSESSMENT AND CAN BE VIEWED AT THE ADDRESS SHOWN BELOW:

HIDALGO COUNTY PRECINCT 14
101 N. DODDVILLE RD.
EDINBURG, TX 78842
PHONE: 956-383-3302

EROSION AND SEDIMENT CONTROLS

- SOIL STABILIZATION PRACTICES (SELECT T = TEMPORARY OR P = PERMANENT, AS APPLICABLE)**
- TEMPORARY SEEDING
 - MULCHING (Hay or Straw)
 - BUFFER ZONES
 - PLANTING
 - P. SEEDING
 - SOODING
 - OTHER (Specify Practice)

- STRUCTURAL PRACTICES (SELECT T = TEMPORARY OR P = PERMANENT, AS APPLICABLE)**
- T. SILT FENCES
 - T. BIODEGRADABLE EROSION CONTROL SOCKS
 - HAY BALES
 - ROCK FILTER DAMS
 - DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
 - DIVERSION DIKE AND SWALE COMBINATIONS
 - PIPE SLOPE DRAINS
 - PAVED FLUMES
 - ROCK BEDDING AT CONSTRUCTION EXIT
 - TIMBER MATTING AT CONSTRUCTION EXIT
 - CHANNEL LINERS
 - SEDIMENT BASINS
 - T. STORM INLET SEDIMENT TRAP
 - P. CURBS AND GUTTERS
 - P. STORM SEWERS
 - VELOCITY CONTROL DEVICES
 - OTHER (Specify Practice)

STORM WATER MANAGEMENT: STORM WATER DRAINAGE WILL BE PROVIDED BY A PROPOSED STORM DRAIN SYSTEM OUTFALLING INTO A HIDALGO COUNTY DRAINAGE DISTRICT NO. 10 RETENTION BASIN.

STORM WATER MANAGEMENT ACTIVITIES (SEQUENCE OF CONSTRUCTION):

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. INSTALL PERIMETER CONTROLS, CLEAR P.D.W. WHERE CONSTRUCTION WILL TAKE PLACE.
2. INSTALL PROPOSED INLETS, PIPES, AND INITIAL BIODEGRADABLE EROSION CONTROL LOGS ALONG PROJECT.
3. CONSTRUCT PROPOSED ROADWAY AS SHOWN ON TOP, PLAN AND PROFILE SHEETS, AND PROPOSED TYPICAL SECTIONS.
4. ONCE ALL CONSTRUCTION ACTIVITY IS COMPLETE, PERMANENT SEEDING ON PROPOSED AREAS SHALL BE DONE ACCORDING TO PLANS OR AS INSTRUCTED BY THE ENGINEER.

NON-STORM WATER MANAGEMENT DISCHARGES: NON-STORM WATER DISCHARGES SHOULD BE FILTERED, OR HELD IN RETENTION BASINS, BEFORE BEING ALLOWED TO MIX WITH STORM WATER. THESE DISCHARGES CONSIST OF UNQUALIFIED GROUND WATER, SPRING WATER, FOUNDATION AND/OR FLOORING DRAIN WATER, AND WATER USED FOR DUST CONTROL, PAINTING, WASHING, AND VEHICLE MAINTENANCE CONTAINING NO DETERGENTS.

OTHER REQUIREMENTS & PRACTICES

MAINTENANCE: ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BUT NO LATER THAN 7 CALENDAR DAYS AFTER THE SURROUNDING EXPOSED GROUND HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT. THE AREAS ADJACENT TO CHECKS AND DRAINAGE WELLS SHALL HAVE PRIORITY PAVED BY DEVICES PROTECTING STORM SEWER INLETS.

INSPECTION: AN INSPECTION WILL BE PERFORMED BY A COUNTY REPRESENTATIVE EVERY 14 CALENDAR DAYS AS WELL AS AFTER EVERY HALF INCH OF RAIN HAS ACCUMULATED ON A NON-FREEZING RAIN GAUGE TO BE LOCATED AT THE PROJECT SITE. AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE PER EACH INSPECTION. BASED ON THE INSPECTION RESULTS, THE CONTROLS SHALL BE REVISITED PER THE INSPECTION REPORT.

WASTE MATERIALS: ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LOCKED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL STATE AND LOCAL SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION AND THE TRASH WILL BE HAULED TO A LOCAL DUMP. NO CONSTRUCTION WASTE MATERIAL WILL BE BURIED ON SITE.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING): AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES TO BE HAZARDOUS: PAINTS, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION, OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE SPILL COORDINATOR SHALL BE CONTACTED IMMEDIATELY. EMPTYING OF EXCESS CONCRETE SHOULD NOT BE ALLOWED ON SITE. HAZARDOUS WASHOUT OF CONCRETE TRUCKS SHOULD NOT BE PERFORMED ON SITE. THESE DISCHARGES ARE CONSIDERED NON-ALLOWABLE NON-STORM WATER DISCHARGES. CONCRETE TRUCKS SHOULD NEVER BE ALLOWED TO DUMP INTO STORM DRAINS OR SANITARY SEWERS.

SANITARY WASTE: ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

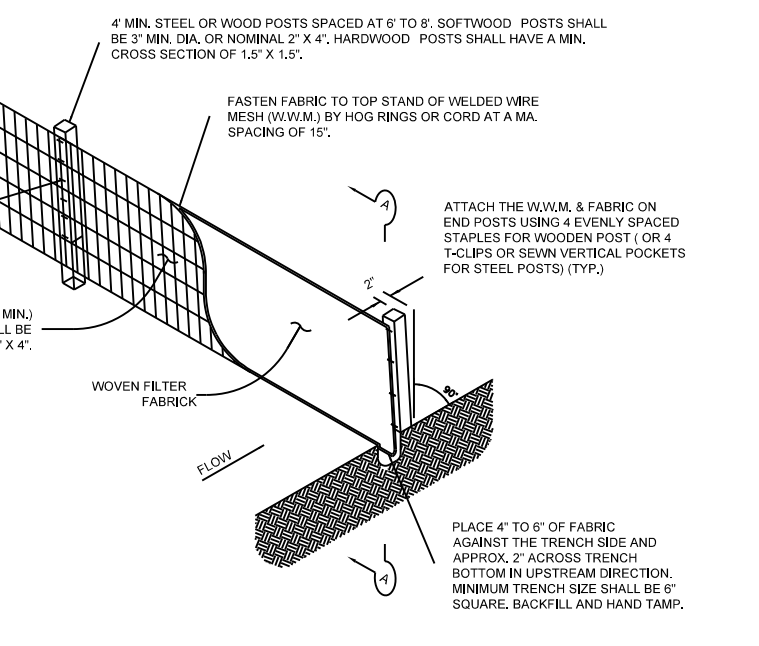
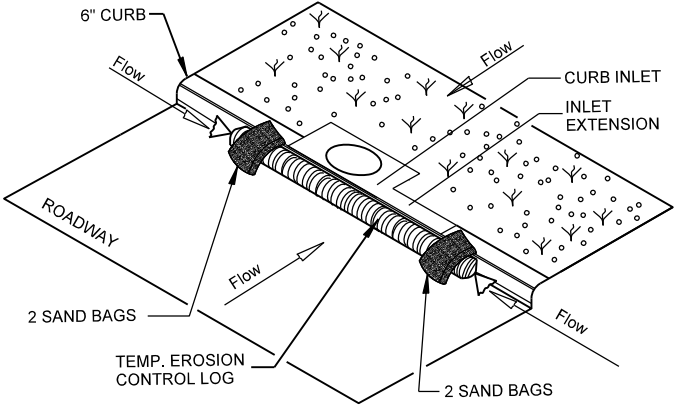
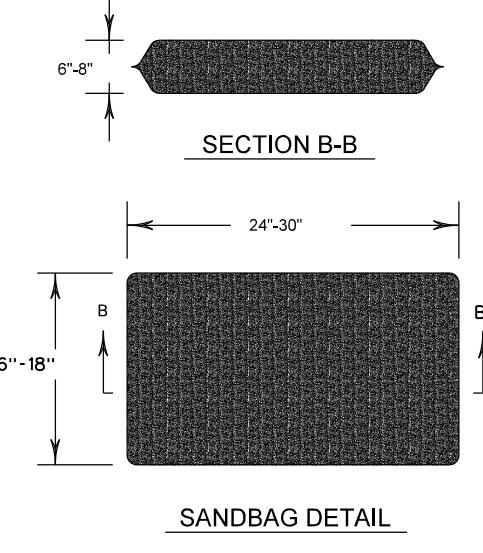
OFF-SITE VEHICLE TRACKING: THE CONTRACTOR SHALL BE REQUIRED, ON A REGULAR BASIS, TO AS WELL AS BE DIRECTED BY THE ENGINEER, TO DUMP AND RINSE TIRES FOR DUST CONTROL, STABILIZE CONSTRUCTION ENTRANCES, AND TO REMOVE EXCESS DIRT FROM THE ROADWAY.

MANAGEMENT PRACTICES:

1. DISPOSAL AREAS, STOCKPILES, AND PAUL RAILS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY RET. LAND, WATER BODY, OR STREAM BED.
2. CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RISK OF POLLUTION.
3. ALL WATERWAYS SHALL BE CLEARED, AS SOON AS PRACTICAL, OF TEMPORARY EMBANKMENT, TEMPORARY BRIDGES, MATTING, FALSE WORK, PILING, OR DEBRIS OR OTHER OBSTRUCTIONS CAUSED DURING CONSTRUCTION OPERATIONS THAT ARE NOT A PART OF THE FINISHED WORK.
4. THIS PLAN IS A WORKING DOCUMENT AND MUST BE KEPT CURRENT IN ORDER TO COMPLY WITH EPA STANDARDS.

OTHER:

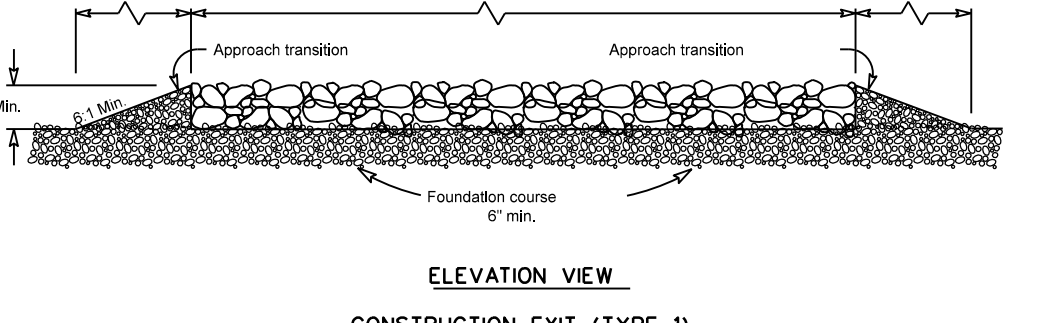
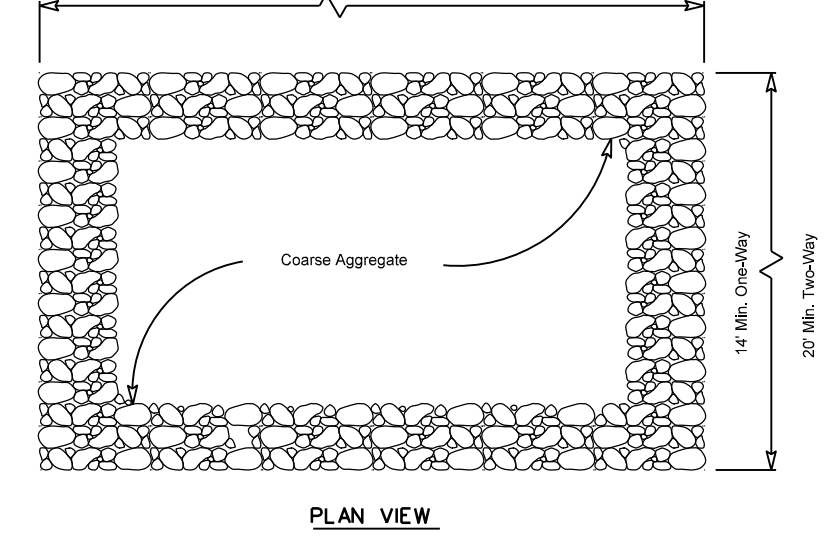
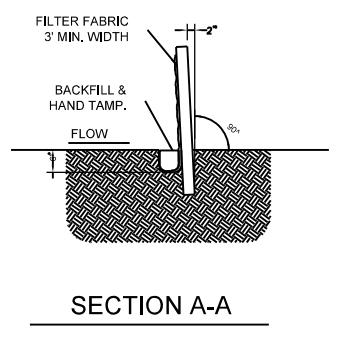
1. CONSTRUCTION MATERIALS STORED ON SITE TO BE PROVIDED BY PROJECT FIELD OFFICE.
2. THE PROJECT SWP FILE LOCATED AT THE COUNTY OFFICE SHALL CONTAIN THE A.U.I., CSP COVERAGE NOTICE, EPA WORKS FORM, SIGNATURE AUTHORIZATION, CERTIFICATION/QUALIFICATION STATEMENTS, INSPECTION REPORTS, REQUIRED MAPS, AND THE NPDES PERMIT, PART II.



SEDIMENT CONTROL FENCE USAGE GUIDELINES

A SEDIMENT CONTROL FENCE MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PORTION OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF. A 2-YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED.

SEDIMENT CONTROL FENCE SHOULD BE SIZED TO FILTER A MAX FLOW THROUGH RATE OF 10 CFS/FT. SEDIMENT CONTROL FENCE IS NOT RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE AREA LARGER THAN 2 ACRES.



GENERAL NOTES (TYPE 1)

1. The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50'.
2. The coarse aggregate should be open graded with a size of 4" to 6".
3. The approach transitions should be no steeper than 8:1 and constructed as directed by the Engineer.
4. The construction exit foundation course shall be flexible base bituminous concrete, portland cement concrete or other materials approved by the Engineer.
5. The construction exit shall be graded to allow drainage to a sediment trapping basin.
6. The guidelines shown herein are suggestions only and may be modified by the Engineer.
7. Construct walls with a width of at least 14 ft. for onway and 20 ft. for onway traffic for the full width of the wall or as directed by the engineer.

PRINCIPAL CONTACTS

	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	PENA CHAPA DEVELOPMENT	P.O. BOX 1658	MISSION, TEXAS 78572	(956) 581-2918	
ENGINEER:	VICTOR H. TREVINO, P.E.	900 S. STEWART RD., STE. 13	MISSION, TEXAS 78572	(956) 424-3335	(956) 424-3132
SURVEYOR:	JOSE MARIO GONZALEZ, R.P.L.S.	24593 FM 88	MONTE ALTO, TEXAS 78538	(956) 380-6154	(956) 380-6156

SOUTH TEXAS INFRASTRUCTURE GROUP

900 S. STEWART, SUITE 13
MISSION, TEXAS 78572
PH: (956) 424-3335
FAX: (956) 424-3132
TBPB REG # 1500

SHEET 6

SWPPP
EL CORDERO SUBDIVISION

BEING A 20.0 ACRE TRACT SITUATED IN YOELLINSON RAMIREZ SURVEY, ABSTRACT 584, PORTION 7N, AND THE MARIA DE LUVA SURVEY, ABSTRACT 570, PORTION 8N, HIDALGO COUNTY, TEXAS, BEING LOT 25 AND 26, BLOCK 15, TEXAN GARDENS SUBDIVISION, AS PER MAP OR PLAT THERE OF RECORDED IN VOLUME 8, PAGES 97-98, MAP RECORDS, HIDALGO COUNTY, TEXAS.