



T.J. Arredondo, CFM
Director of Planning

HIDALGO COUNTY PLANNING DEPARTMENT

1304 SOUTH 25TH STREET
EDINBURG TEXAS 78539
Tel. 956-318-2840 Fax. 956-318-2844

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 4-27-2021

PROPOSED EDUARDO'S NO. 24 SUBDIVISION PRECINCT No. 3.

ENGINEER: IZAGUIRRE ENGINEERING GROUP DEVELOPER: LAS DIANAS LAND DEVELOPMENT LLC.

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: 67 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INDUSTRIAL

ESTIMATED NUMBER OF STREETLIGHTS: 9

FILLING STATIONS: 4

LOCATION DESCRIPTION: INSPIRATION ROAD APPROXIMATELY ¼ MILE NORTH OF MILE 6 NORTH ROAD.

SUBDIVISION LIES WITHIN THE: ETJ OF ALTON AND WAS APPROVED BY THE P&Z AND CITY COMMISSION OF SAID CITY

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 04-14-2021 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 WIDENING THE EXISTING DRAIN DITCH.

ROAD R.O.W. DEDICATION: 30 FEET ONTO INSPIRATION ROAD.

H.C.R.O.W. PRELIMINARY APPROVAL DATE: 03-27-2020 BY, VICTOR GALLARDO, PCT. 3 R.O.W. AGENT

H.C.H.D. PRELIMINARY APPROVAL DATE: 03-27-2020 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM: SANITARY SEWER BY: CITY OF ALTON LINE SIZE: 10" LOCATION: INSPIRATION ROAD.

WATER SERVICE PROVIDER: SWSC EXISTING LINE SIZE: 6" LOCATION: INSPIRATION ROAD

H.C.E.O.C. PRELIMINARY APPROVAL DATE: 03-26-2020: 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: _____

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

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.

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SUBDIVISION PLAT OF EDUARDO'S SUBDIVISION No.24

A 16.92 ACRE TRACT OF LAND (DEED RECORD: 16.94 ACRES) OUT OF LOT 46-1, WEST ADDITION TO SHARYLAND SUBDIVISION, HIDALGO COUNTY, TEXAS, ACCORDING TO MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND ACCORDING TO ASSUMPTION WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2213222, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

METES AND BOUNDS

BEING A 16.92 ACRE TRACT OF LAND (DEED RECORD: 16.94 ACRES) OUT OF LOT 46-1, WEST ADDITION TO SHARYLAND SUBDIVISION, HIDALGO COUNTY, TEXAS, ACCORDING TO MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND ACCORDING TO ASSUMPTION WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2213222, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS. (REFERENCE TO WHICH IS HERE MADE FOR ALL PURPOSES), SAID 16.92-ACRE TRACT IS MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A COTTON PICKER SPINDLE SET ON THE NORTH WEST CORNER OF LOT 46-1 WEST ADDITION TO SHARYLAND SUBDIVISION ACCORDING TO MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND THE NORTH WEST CORNER OF SAID 16.92-ACRE TRACT HEREIN DESCRIBED;

THENCE, S 81°10'00" E, ALONG THE SOUTH LINE OF THE GAYTAN ANA HERNANDEZ TRACT PASSING A 1/2-INCH IRON ROD WITH CAP STAMPED RPLS 4856 SET AT 20.00 FEET FOR THE EAST RIGHT OF WAY OF INSPIRATION ROAD, A TOTAL DISTANCE OF 1116.05 FEET TO A 1/2-INCH IRON ROD WITH CAP STAMPED RPLS 4856 SET FOR NORTHEAST CORNER OF THIS TRACT.

THENCE, S 08°50'00" W, ALONG THE WEST LINE OF A UNITED IRRIGATION DISTRICT CANAL RIGHT OF WAY, A TOTAL DISTANCE OF 660.00 FEET TO A 1/2-INCH IRON ROD WITH CAP STAMPED RPLS 4856 SET FOR SOUTHEAST CORNER OF THIS TRACT.

THENCE, N 81°10'00" W, ALONG THE NORTH LINE OF THE JAMES R. ROBERT TRACT PASSING A 1/2-INCH IRON ROD WITH CAP STAMPED RPLS 4856 SET AT 1097.68 FEET FOR THE EAST RIGHT OF WAY OF INSPIRATION ROAD, A TOTAL DISTANCE OF 1117.68 FEET TO A 1/2-INCH IRON ROD WITH CAP STAMPED RPLS 4856 SET FOR THE SOUTH WEST CORNER OF THIS TRACT.

THENCE, N 08°58'30" E ALONG THE WEST LINE OF LOT 46-1 AND INSPIRATION ROAD, A TOTAL DISTANCE OF 660.00 FEET TO THE POINT OF BEGINNING AND CONTAINING 16.92 ACRES OF LAND MORE OR LESS.

BEARINGS ARE IN ACCORDANCE WITH INTERNATIONAL VILLAGE UNIT No. 2 RECORDED IN VOLUME 34, PAGE 100, MAP RECORDS, HIDALGO COUNTY, TEXAS.

STATE OF TEXAS COUNTY OF HIDALGO OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION

I, DIANA IZAGUIRRE, OWNER OF THE 16.92 ACRE TRACT OF LAND ENCOMPASSED WITHIN THE PROPOSED EDUARDO'S SUBDIVISION No.24, HEREBY SUBDIVIDE THE LAND AS DEPICTED IN THIS SUBDIVISION PLAT AND DEDICATE 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:

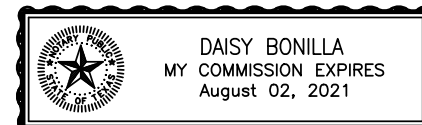
- (A) THE WATER QUALITY AND CONNECTIONS TO THE LOTS MEET, OR WILL MEET, THE MINIMUM STATE STANDARDS;
 - (B) SEWER CONNECTIONS TO THE LOTS OR SEPTIC TANKS MEET, OR WILL MEET, THE MINIMUM REQUIREMENTS OF STATE STANDARDS;
 - (C) ELECTRICAL CONNECTIONS PROVIDED TO THE LOTS MEET, OR WILL MEET, THE MINIMUM 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 PLAT ARE TRUE AND COMPLETE.

DIANA IZAGUIRRE - PRESIDENT
LAS DIANAS LAND DEVELOPMENT
7413 N. LA HOMA MISSION, TEXAS 78574

STATE OF TEXAS COUNTY OF HIDALGO

BEFORE ME, the undersigned notary public, on this day personally appeared DIANA IZAGUIRRE proved to me through her Texas Department of Public Safety Driver License to be the person whose name is subscribed to the foregoing instrument, who, being by me first duly sworn, declared that the statements therein are true and correct and acknowledged that she executed the same for the purposes and consideration thereby expressed.

Given under my hand and seal of office this _____ day of _____, 2021.



NOTARY PUBLIC - STATE OF TEXAS

BOARD MEMBER

HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL UNDER LOCAL GOVERNMENT CODE § 232.028(a)

WE THE UNDERSIGNED CERTIFY that this plat of the EDUARDO'S SUBDIVISION No.24 was reviewed and approved by the Hidalgo County Commissioners Court on _____.

Hidalgo County Judge _____ date _____

ATTEST: Hidalgo County Clerk _____ date _____

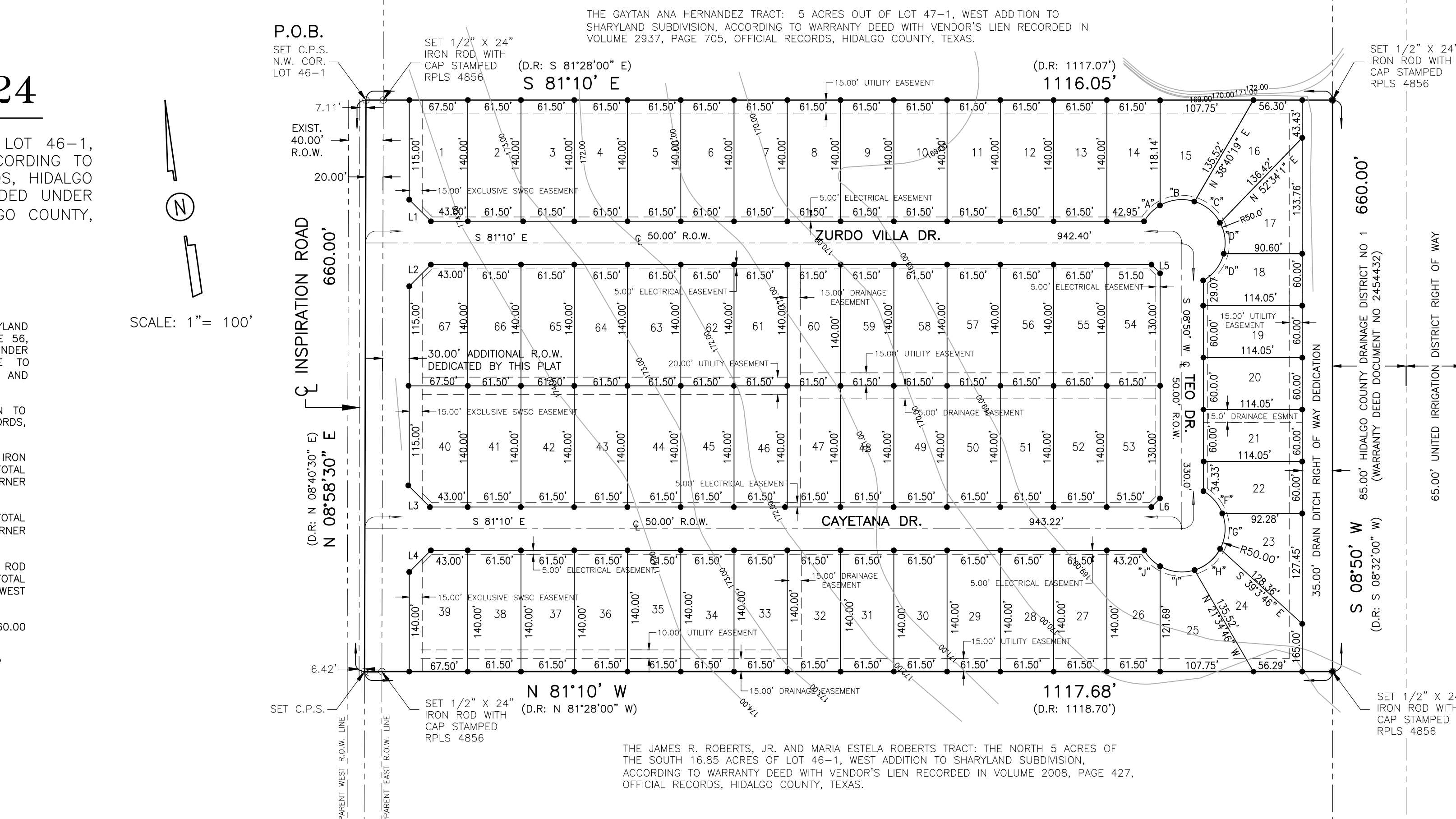


FILED FOR RECORD IN HIDALGO COUNTY ARTURO GUJARDO, JR. HIDALGO COUNTY CLERK

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

PRINCIPAL CONTACTS:

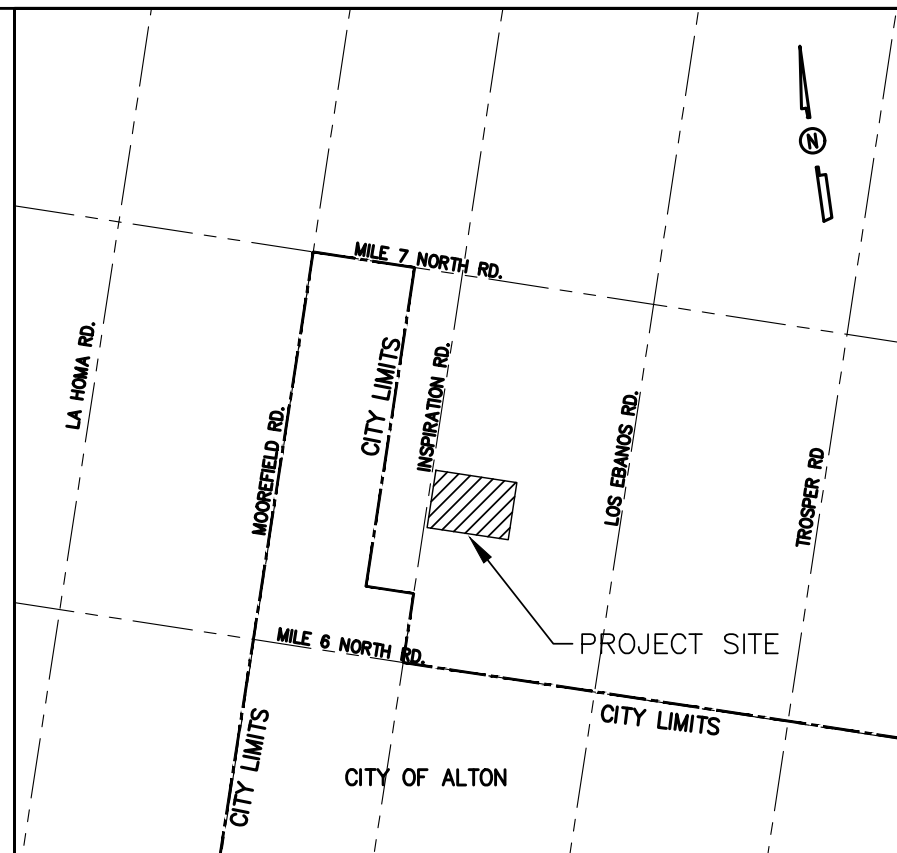
Name	Address	City & Zip	Phone	Fax
OWNER: DIANA IZAGUIRRE	7413 N. LA HOMA MISSION, TEXAS 78574	MISSION, TEXAS 78574	(956)240-3246	(956)585-0554
ENGINEER: GILBERTO A. GRACIA	7413 N. LA HOMA MISSION, TEXAS 78574	MISSION, TEXAS 78574	(956)584-0554	(956)584-0554
SURVEYOR: HOMERO LUIS GUTIERREZ	2600 SAN DIEGO ST. MISSION, TEXAS 78574	MISSION, TEXAS 78574	(956)369-0988	



CURVE DATA TABLE				
CURVE	DELTA	RADIUS	ARC LENGTH	CHORD LENGTH
"A"	28°53'29"	50.00'	26.18'	25.88'
"B"	47°8'14"	50.00'	41.14'	39.98'
"C"	44°4'31"	50.00'	39.34'	38.35'
"D"	42°4'41"	50.00'	36.72'	35.90'
"E"	45°40'28"	50.00'	39.86'	38.81'
"F"	39°21'20"	50.00'	34.34'	33.67'
"G"	48°24'5"	50.00'	42.23'	40.99'
"H"	45°6'21"	50.00'	39.36'	38.35'
"I"	47°8'14"	50.00'	41.14'	39.98'
"J"	30°0'0"	50.00'	26.18'	25.88'

LOT No.	AREA	
	(S.F.)	(AC)
1,39,40 & 67	9,137.41	0.210
2-13	8,610.00	0.198
14	8,413.03	0.193
15	8,617.80	0.198
16	8,516.92	0.196
17	7,873.86	0.181
18	6,376.10	0.146
19-21	6,842.97	0.157
22	6,497.33	0.149
23	7,807.70	0.179
24	9,068.60	0.209
25	8,621.01	0.197
26	8,413.03	0.193
27-38	8,610.00	0.198
41-52	8,610.00	0.198
53-54	8,560.00	0.197
55-66	8,610.00	0.198

LINE DATA TABLE		
DATA	BEARING	LENGTH
L1	S 36°22'58" E	35.31'
L2	S 53°37'02" W	35.39'
L3	S 36°22'58" E	35.31'
L4	N 53°37'02" E	35.39'
L5	N 36°27'13" W	14.14'
L6	N 53°32'47" E	14.14'



LOCATION MAP SCALE = 1":1000'

LOCATION OF SUBDIVISION WITH RESPECT TO THE EXTRATERRITORIAL JURISDICTION OF A MUNICIPALITY: EDUARDO'S SUBDIVISION No. 24 IS LOCATED IN WEST HIDALGO COUNTY, ON THE EAST SIDE OF INSPIRATION ROAD AND APPROXIMATELY 1,850 FEET NORTH OF MILE 6 NORTH ROAD. THE ONLY NEARBY MUNICIPALITY IS THE CITY OF ALTON ACCORDING TO THE OFFICIAL MAP IN THE OFFICE OF THE SECRETARY OF THE CITY OF ALTON (POPULATION 14,065). THIS SUBDIVISION LIES WITHIN THE CITY OF ALTON'S TWO-MILE EXTRATERRITORIAL JURISDICTION (ETJ) UNDER LOCAL GOVERNMENT CODE § 212.001 AND LIES IN PCT. NO. 3.

SHARYLAND WATER SUPPLY CORPORATION

I, SHERILYN DAHLBERG, HEREBY CERTIFY THAT SHARYLAND WATER SUPPLY CORPORATION HAS WATER INFRASTRUCTURE FOR THE EDUARDO'S SUBDIVISION No. 24 SUBDIVISION LOCATED AT CITY OF ALTON ETJ'S IN HIDALGO COUNTY, TEXAS, SUBJECT TO THE POTABLE WATER SYSTEM MEETING THE APPROVAL OF DESIGN ENGINEER, ALL APPLICABLE RULES AND REGULATIONS OF SHARYLAND WATER SUPPLY CORPORATION, AND LOCAL, STATE, AND FEDERAL AGENCIES.

DEVELOPER AND ITS DESIGN ENGINEER SHALL BEAR FULL RESPONSIBILITY TO ENSURE THAT THE ABOVE REFERENCED POTABLE WATER SYSTEM IS CONSTRUCTED WITHIN THE DESIGNATED SHARYLAND WATER SUPPLY CORPORATION EXCLUSIVE EASEMENT.

SHERILYN DAHLBERG
GENERAL MANAGER
SHARYLAND WATER SUPPLY CORPORATION

PLANNING & ZONING COMMISSION ACKNOWLEDGMENT

THIS PLAT OF EDUARDO'S SUBDIVISION No.24 HAS BEEN SUBMITTED TO AND CONSIDERED BY THE PLANNING AND ZONING COMMISSION OF THE CITY OF ALTON, TEXAS AND IS HEREBY APPROVED BY SUCH COMMISSION.

DATED THIS _____ DAY OF _____, 2020.

CHAIRMAN

CITY OF MISSION CERTIFICATE OF APPROVAL

UNDER LOCAL GOVERNMENT CODE 212.015(b) WE THE UNDERSIGNED CERTIFY THAT THIS PLAT OF EDUARDO'S SUBDIVISION No.24 WAS REVIEWED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF ALTON.

MAYOR OF CITY OF ALTON _____ DATE _____

ATTEST: CITY SECRETARY _____ DATE _____

PLAT NOTES AND RESTRICTIONS:

- 1.- FLOOD ZONE DESIGNATION: ZONE "X" (UNSHADED) AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD-PLAIN COMMUNITY-PANEL NUMBER 480334 0295 D, MAP REVISED: JUNE 6, 2000.
- 2.- GENERAL NOTE FOR SINGLE FAMILY RESIDENCES: NO MORE THAN ONE-SINGLE FAMILY DETACHED DWELLING SHALL BE LOCATED ON EACH LOT. THIS MUST BE STIPULATED ON ALL DEEDS AND CONTRACTS FOR DEEDS. (ANY OTHER USE SHALL REQUIRE PLANNING DEPARTMENT, OFFICE OF ENVIRONMENTAL COMPLIANCE, HEALTH DEPARTMENT AND FIRE MARSHALL APPROVAL). APPLICATIONS FOR CONSTRUCTION ARE REQUIRED PRIOR TO OCCUPANCY OF THE LOT.
- 3.- MINIMUM FINISH FLOOR NOTE: MINIMUM FINISH FLOOR ELEVATION SHALL BE 18" ABOVE CENTERLINE OF STREET OR 18" ABOVE NATURAL GROUND, WHICHEVER IS GREATER. ELEVATION CERTIFICATE MAY BE REQUIRED FOR LOTS LOCATED OUTSIDE A DESIGNATED FLOOD ZONE AT THE TIME FOR APPLICATION FOR CONSTRUCTION TO VERIFY PRE AND POST CONSTRUCTION FINISH FLOOR ELEVATIONS. AN ELEVATION CERTIFICATE SHALL BE REQUIRED FOR ALL LOTS WITHIN A DESIGNATED FLOOD ZONE AT THE TIME FOR A DEVELOPMENT PERMIT APPLICATION.
- 4.- LEGEND - ● DENOTES 1/2" IRON ROD SET UNLESS OTHERWISE NOTED.
- 5.- LOTS 1, 39, 40 & 67 SHALL HAVE NO ACCESS TO INSPIRATION ROAD.
- 6.- MINIMUM BUILDING SETBACK LINES:
FRONT25.00'
FRONT GARAGE.....18.00'
REAR.....15.00'
SIDE CORNER.....6.00'
SIDE.....10.00'/20.0' WHERE ROW IS GREATER THAN 50.0 FEET.
OR TO EASEMENT LINE WHICHEVER IS GREATER ON ALL CASES
- 7.- DRAINAGE: IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT No. 1 AND HIDALGO COUNTY REQUIREMENTS, THIS DEVELOPMENT WILL BE REQUIRED TO DETAIN A TOTAL OF 54,538 CUBIC FEET (1.25 ACRE FEET) OF STORM WATER RUNOFF. DRAINAGE RETENTION IN ACCORDANCE WITH THE LOCAL REQUIREMENTS WILL BE ACCOMPLISHED AS FOLLOWS: SEE DRAINAGE REPORT ON SHEET No. 5
- 8.- NO STRUCTURE SHALL BE PERMITTED OVER ANY EASEMENT. EASEMENTS SHALL BE KEPT CLEAR OF FENCES, BUILDINGS, SHEDS, SHRUBS TREES, AND OTHER PLANTINGS (EXCEPT LOW, LESS THAN 18 INCHES MATURE HEIGHT, GROUND COVER, GRASS, OR FLOWERS) AND OTHER OBSTRUCTIONS THAT WOULD INTERFERE WITH THE OPERATIONS AND MAINTENANCE OF THE EASEMENT.
- 9.- BENCHMARK NOTE: THE FOLLOWING BENCHMARK IS IDENTIFIED ON THE FACE OF THE PLAT AND ON THE ATTACHED ENGINEERING PLANS.
B.M. 1 ELEV. ----- N.A.V.D. 88 DATUM.
B.M. 2 ELEV. ----- N.A.V.D. 88 DATUM.
- 10.- 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.
- 11.- ALL IRRIGATION EASEMENTS ARE EXCLUSIVE TO UNITED IRRIGATION DISTRICT, AND THE DISTRICT ALLOWS NO OTHER UTILITIES OR USE WITHOUT ITS EXPRESS WRITTEN APPROVAL.
- 12.- NO UTILITY COMPANY, PUBLIC ENTITY, PARTY OR PERSON IS ALLOWED TO CROSS ABOVE OR BELOW GROUND ANY DISTRICT EASEMENT OR RIGHT OF WAY WITH LINES, POLES, OPEN DITCHES OR OTHER USE WITHOUT FIRST OBTAINING A CROSSING PERMIT FROM UNITED IRRIGATION DISTRICT.
- 13.- NO PERMANENT STRUCTURE, UTILITY POLE, HOLE, WALL, FENCE, DRIVEWAY OR ROAD WILL BE ALLOWED TO BE CONSTRUCTED OR EXIST ON ANY DISTRICT EASEMENT OR RIGHT OF WAY WITHOUT WRITTEN APPROVAL BY UNITED IRRIGATION DISTRICT. ANY UNAUTHORIZED STRUCTURE WITHIN THE EASEMENT BOUNDARY IS SUBJECT TO IMMEDIATE REMOVAL AT VIOLATOR'S EXPENSE..
- 14.- NO UTILITY COMPANY, PUBLIC ENTITY, PARTY OR PERSON IS ALLOWED TO CONNECT TO ANY DISTRICT FACILITY WITHOUT FIRST OBTAINING A PERMIT FROM UNITED IRRIGATION DISTRICT. ANY CONNECTION NOT AUTHORIZED BY THE DISTRICT IS SUBJECT TO IMMEDIATE REMOVAL AT VIOLATOR'S EXPENSE..
- 15.- AS PER LOCAL GOVERNMENT CODE REQUIREMENTS, SANITARY SEWER MUST BE CONNECTED TO RESIDENTIAL HOMES PRIOR TO RECEIVING A FINAL CLEARANCE FOR WATER METER. A SEWER TAP INSPECTION SHALL BE PROVIDED FROM THE ENTITY SERVICE PROVIDER PRIOR TO RECEIVING A CLEARANCE FOR WATER METER(S).

16.- THE RESIDENTIAL LOTS SHOULD REFLECT SERVICE BY A 3/4" METER.

17.- ALL PUBLIC UTILITIES 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 SIZE REQUIRED BY EACH UTILITY PROVIDER OCCUPANCY AN EASEMENT.

18.- 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.

INDEX OF SHEETS

- SHEET 1.- HEADING; INDEX; LOCATION MAP AND ETJ; PRINCIPAL CONTACTS; PLAT WITH LOTS, STREETS, AND EASEMENT DESIGNATIONS; LEGAL DESCRIPTION (METES AND BOUNDS); SURVEYOR'S AND ENGINEER'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNERS DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY CERTIFICATE OF PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION WITH RESPECT TO THE ETJ OF A MUNICIPALITY AND DESIGNATE THE PRECINCT THE PROJECT IS SITUATED; H.G.D.D. CERTIFICATION; IRRIGATION DISTRICT CERTIFICATE OF APPROVAL; SWSC CERTIFICATION; P&Z CITY CERTIFICATION; REVISION NOTES.
- SHEET 2.- WATER DISTRIBUTION MAP; ENGINEERING REPORT (ENGLISH AND SPANISH VERSION), INCLUDING DESCRIPTION OF WATER AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH VERSION); TYPICAL WATER SERVICE CONNECTION; SUBDIVIDER CERTIFICATE AND STATEMENT.
- SHEET 3.- DETAIL SHEET
- SHEET 4.- SANITARY SEWER DISTRIBUTION LAYOUT
- SHEET 5.- PAVING DISTRIBUTION AND DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE AND HOW IT WILL SERVE THIS DEVELOPMENT; MAP OF TOPOGRAPHY AND DRAINAGE, AND ENGINEER'S CERTIFICATION; REVISION NOTES; TYPICAL ROADWAY SECTION; CURB AND GUTTER SECTION; VALLEY GUTTER SECTION.

SHEET NO. 1 OF 5 SHEETS	FILENAME : K:\PROJECT\SUBDIVISIONS\EDUARDO'S No.24\EDUARDO'S 24-PLAT			
	DATE PREPARED	PREPARED BY	CHECKED BY	APPROVED BY
	JUN 15, 2020			
	DATE REVISED	REVISED BY	CHECKED BY	APPROVED BY

NO.	SHEET	REVISION	DATE	APPROVED



2121 E. GRIFFIN PARKWAY, STE 2, MISSION TX, 78574
TEL. (956) 584-0554
FAX. (956) 584-0554

ALL WATERLINE CONSTRUCTION SHALL REFERENCE SHARYLAND WATER SUPPLY COMPANY CONSTRUCTION STANDARDS. CONTRACTOR SHALL REFERENCE SHARYLAND WATER SUPPLY COMPANY STANDARD DETAILS WHENEVER CONFLICTS ARISE.

EDUARDO'S SUBDIVISION No.24 MAP OF WATER DISTRIBUTION

A 16.92 ACRE TRACT OF LAND (DEED RECORD: 16.94 ACRES) OUT OF LOT 46-1, WEST ADDITION TO SHARYLAND SUBDIVISION, HIDALGO COUNTY, TEXAS, ACCORDING TO MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS, HIDALGO COUNTY, TEXAS.



FINAL ENGINEERING REPORT FOR EDUARDO'S SUBDIVISION No. 24:
BY GILBERTO A. GRACIA, P.E.

WATER SUPPLY: Description and Costs.

WATER SUPPLY:
EDUARDO'S SUBDIVISION No. 24 HAS BEEN PROVIDED WITH POTABLE WATER BY THE WATER COMPANY OF SHARYLAND WATER SUPPLY COMPANY (S.W.S.C.). THE SUBDIVIDER AND COMPANY S.W.S.C. SIGNED A CONTRACT BY WHICH, THE SUBDIVISION WILL RECEIVE SUFFICIENT WATER PROVISION FOR AT LEAST 30 YEARS AND S.W.S.C. HAS PROVIDED SUFFICIENT DOCUMENTATION TO ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

S.W.S.C. HAS AN EXISTING 6" DIAMETER LINE RUNNING ALONG INSPIRATION RD.

THE WATER SYSTEM FOR EDUARDO'S SUBDIVISION No.24 CONSISTS OF A 8" DIAMETER WATER LINE THAT TAPS INTO THE EXISTING 6" DIAMETER WATER LINE THAT RUNS ALONG THE EAST SIDE OF INSPIRATION ROAD. THE PROPOSED 8" DIAMETER WATER LINE RUNS EAST FOR ALONG THE SOUTH SIDE OF _____ STREET, THE TURNS NORTH ALONG THE EAST SIDE OF _____ STREET, FINALLY TURNING EAST ALONG THE NORTH SIDE OF _____ STREET, TO LOOP BACK INTO THE EXISTING _____ WATERLINE ON INSPIRATION RD.

FROM THE PROPOSED 8" DIAMETER WATERLINE, THIRTY-TWO (32) DOUBLE SERVICES OF 1" OF DIAMETER AND ONE (1) SINGLE SERVICE ARE COMING OUT OF THIS LINE. SAID SERVICES TERMINATE AT THE WATER METERS OF EACH LOT. THE 8" DIAMETER LINE, THE WATER SERVICE LINES, AND THE WATER METER BOXES HAS BEEN INSTALLED AT A TOTAL COST OF \$ _____ OR \$ _____ PER LOT. IN ADDITION THE SUBDIVIDER HAS PAID PAY S.W.S.C. THE AMOUNT OF \$ _____ WHICH COVERS THE \$ _____ COST PER LOT STATED IN THE 30 YR 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 S.W.S.C. UPON REQUEST BY THE LOT OWNER, S.W.S.C. WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY S.W.S.C. AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

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 WATER AND SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES - THESE FACILITIES FULLY CONSTRUCTED HAS COST A GRAND TOTAL OF \$ _____ WHICH EQUALS TO \$ _____ PER LOT.



GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

EDUARDO'S SUBDIVISION No. 24.
POR: GILBERTO A. GRACIA, P.E.

PROVISIÓN DE AGUA: DESCRIPCIÓN, Y GASTOS.

EDUARDO'S SUBDIVISION No. 24 HA SIDO PROVISTA DE AGUA POTABLE POR LA COMPAÑIA DE AGUA SHARYLAND WATER SUPPLY COMPANY (S.W.S.C.). EL SUBDIVIDOR Y LA COMPAÑIA DE AGUA, S.W.S.C. FIRMARON UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRÁ PROVISIÓN DE AGUA SUFFICIENTE POR LOS PROXIMOS 30 AÑOS Y LA COMPAÑIA DE AGUA S.W.S.C. PRESENTÓ SUFICIENTE DOCUMENTACIÓN PARA ESTABLECER A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ABASTECIDA PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

S.W.S.C. TIENE UNA LINEA DE 6" DE DIÁMETRO EXISTENTE, CORRIENDO POR EL LADO ESTE DE LA CALLE INSPIRATION ROAD.

EL SISTEMA DE AGUA PARA EDUARDO'S No. 24 CONSISTE DE UNA LINEA DE AGUA DE 8" DE DIÁMETRO QUE SE CONECTA CON LA LINEA EXISTENTE DE 6" DE DIÁMETRO QUE CORRE EN EL LADO ESTE DE LA CALLE INSPIRATION ROAD. LA LINEA PROPUESTA DE 8" DE DIÁMETRO CORRE HACIA EL ESTE DEL LADO SUR DE LA CALLE _____ Y VOLTEA AL NORTE DE LADO ESTE DE LA CALLE _____ VOLTIANDO AL OESTE EN LA CALLE _____ Y FINALIZANDO EN LA LINEA EXISTENTE EN LA INSPIRATION ROAD.

DE LA LINEA DE 8" DE DIÁMETRO SE DESPRENDEN TREINTA Y DOS (32) SERVICIOS DOBLES DE 1" DE DIÁMETRO Y UNO (1) SERVICIOS DE AGUA SENCILLOS QUE VAN HACIA LOS MEDIDORES DE CADA LOTE. LAS LINEAS DE 8" DE DIÁMETRO, LAS LINEAS DE SERVICIOS DE AGUA, Y LAS CAJAS DE LOS MEDIDORES SE INSTALARON A UN COSTO TOTAL DE US \$ _____ DE LOS CUALES SE CUBRIÓ US \$ _____ POR LOTE. EL DUEÑO DE LA SUBDIVISION PAGO ADICIONALMENTE A S.W.S.C. LA CANTIDAD DE US \$ _____ O US \$ _____ POR LOTE DE ACUERDO AL CONTRATO Y DOCUMENTO DE SERVICIO DE AGUA POTABLE QUE CUBRE EL MEDIDOR DE AGUA. (INCLUYENDO COSTOS DE LA INSTALACIÓN DE CADA MEDIDOR, TARIFAS DE CONEXIÓN Y MEMBRERIAS), CUANDO EL DUEÑO DEL SOLAR SOLICITE UN MEDIDOR DE AGUA, LA COMPAÑIA AGUA SUD INSTALARA EL MEDIDOR SIN COSTO ALGUNO AL DUEÑO. EL SISTEMA DE AGUA ESTA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA, EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL CONDADO DE HIDALGO.

CERTIFICACIÓN:

CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DE DRENAJE, DESCRITOS EN ESTE DOCUMENTO CUMPLEN CON LAS MODEL SUBDIVISION RULES (LAS REGLAS GOBERNANDO A LAS SUBDIVISIONES), ADOPTADAS EN LA SECCION 16.343 DEL TEXAS WATER CODE (CÓDIGO DE AGUA DE TEXAS). CERTIFICO QUE LOS GASTOS PARA INSTALAR LOS SISTEMAS DE AGUA Y DE DRENAJE SON:

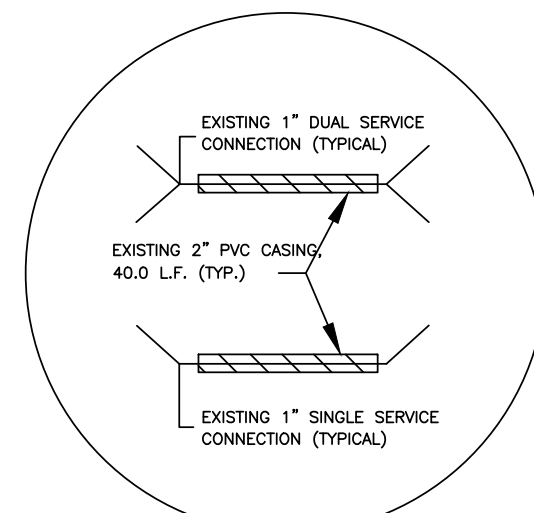
AGUA: EL SISTEMA/SERVICIO DE AGUA HA SIDO INSTALADO Y COMPLETAMENTE CONSTRUIDO A UN COSTO TOTAL DE US \$ _____ O US \$ _____ POR LOTE



GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

GENERAL CONSTRUCTION NOTES:

- ALL EXISTING WATER LINES TO BE C-900 DR-25.
- CONTRACTOR TO INSTALL 1" SERVICE CONNECTIONS TO EVERY LOT & ALL SERVICES TO BE LOCATED IN FRONT OF LOTS APPROXIMATELY 1.0 FOOT FROM LOT LINE. CONTRACTOR TO UTILIZE SINGLE & DOUBLE SERVICE CONNECTIONS AS NEEDED.
- CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES FOR VERIFICATION OF CONFLICTS PRIOR TO CONSTRUCTION ON SITE.
- SEE WATER DETAIL SHEET FOR MORE INFORMATION.
- ALL LOTS SHALL BE PROVIDED WITH SERVICE STUBOUTS AND SAID SERVICE LOCATIONS SHALL BE MARKED ON THE CURB AND GUTTER WITH A "W" NOT LESS THAN 1 1/2" IN SIZE OR IN A MANNER APPROVED BY THE CITY AND SHALL BE 12" BELOW FINISH GRADE ELEVATION.
- THE RESIDENTIAL LOTS SHOULD REFLECT SERVICE BY A 3/4" METER.

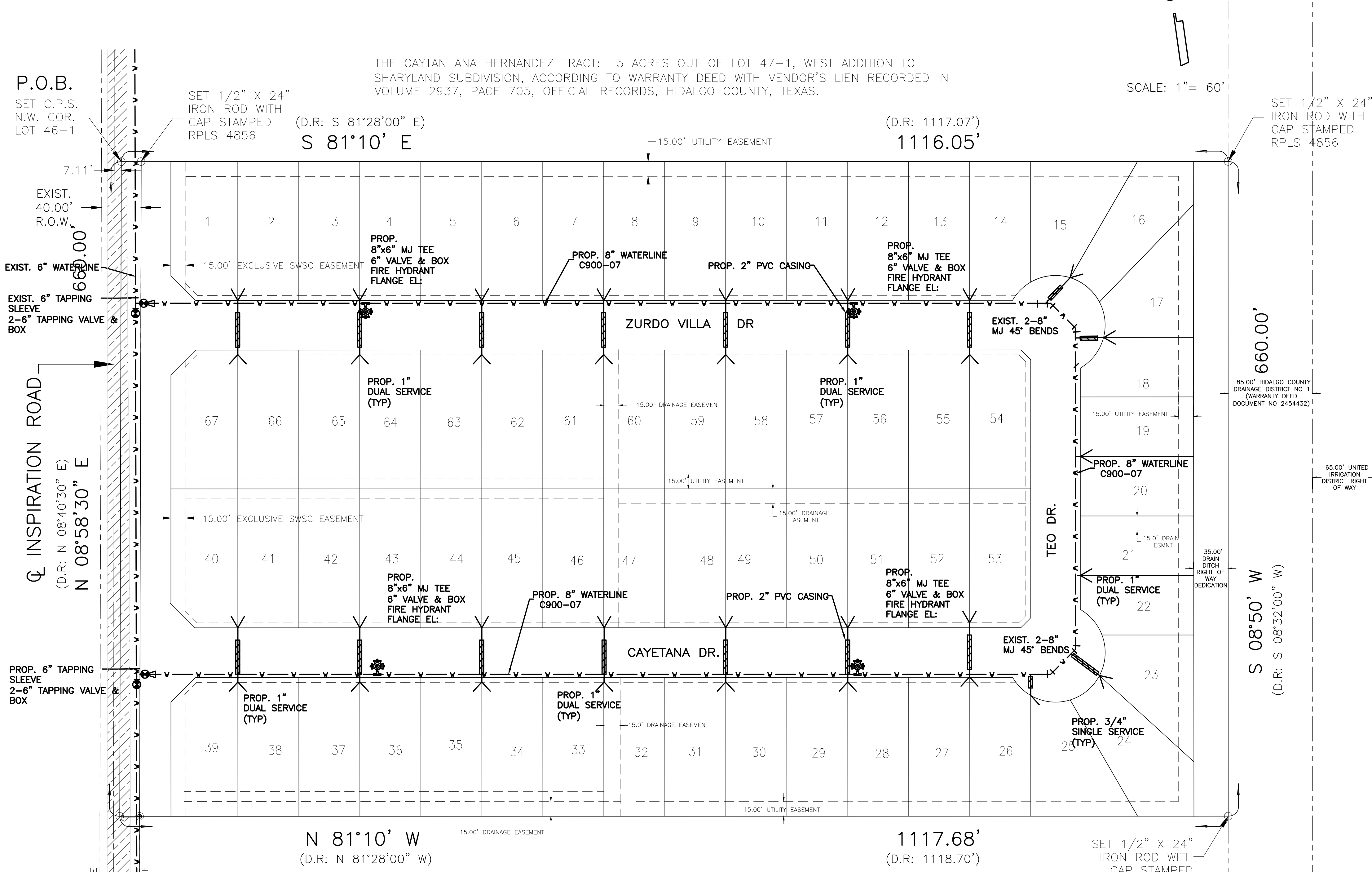


WATER SERVICE DETAIL
N.T.S.

COST ESTIMATE

WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
SANITARY SEWER IMPROVEMENTS:	\$
TOTAL:	\$

THE GAYTAN ANA HERNANDEZ TRACT: 5 ACRES OUT OF LOT 47-1, WEST ADDITION TO SHARYLAND SUBDIVISION, ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED IN VOLUME 2937, PAGE 705, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.



THE JAMES R. ROBERTS, JR. AND MARIA ESTELA ROBERTS TRACT: THE NORTH 5 ACRES OF THE SOUTH 16.85 ACRES OF LOT 46-1, WEST ADDITION TO SHARYLAND SUBDIVISION, ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED IN VOLUME 2008, PAGE 427, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

***NOTE: SEE CONSTRUCTION TYPICAL DETAILS AND SPECIFICATION ON PAGE 3**

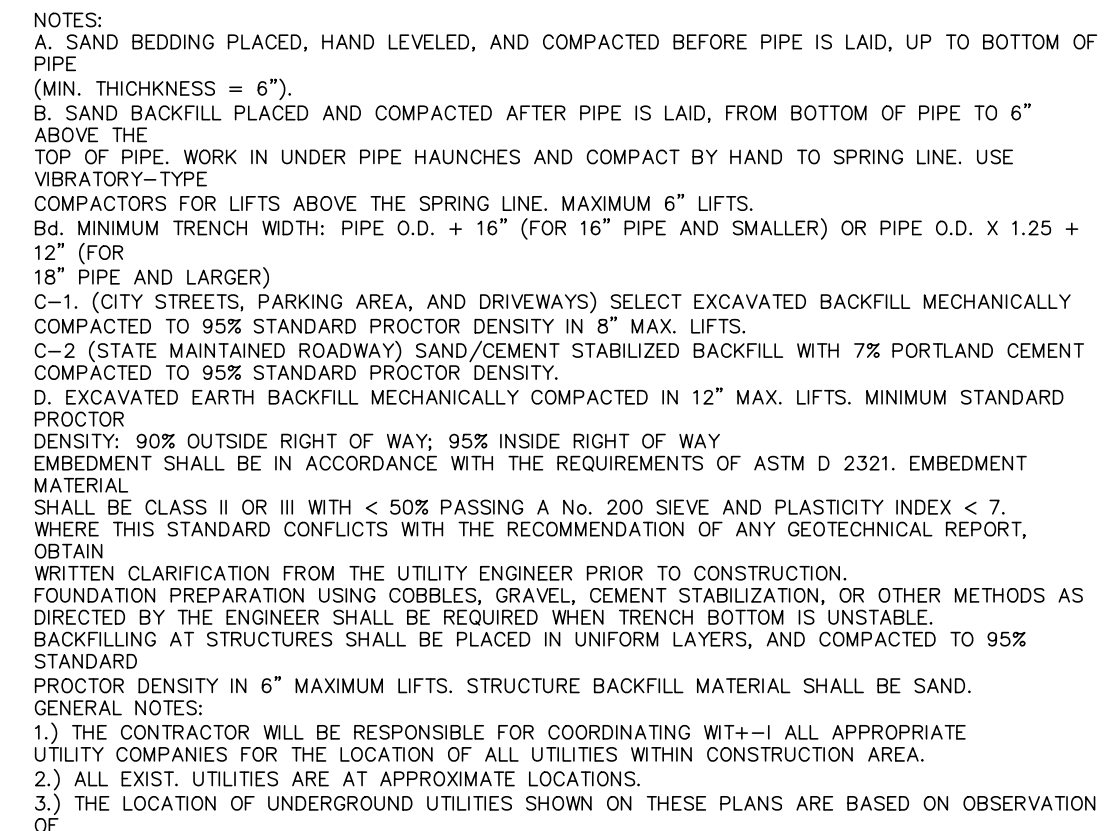
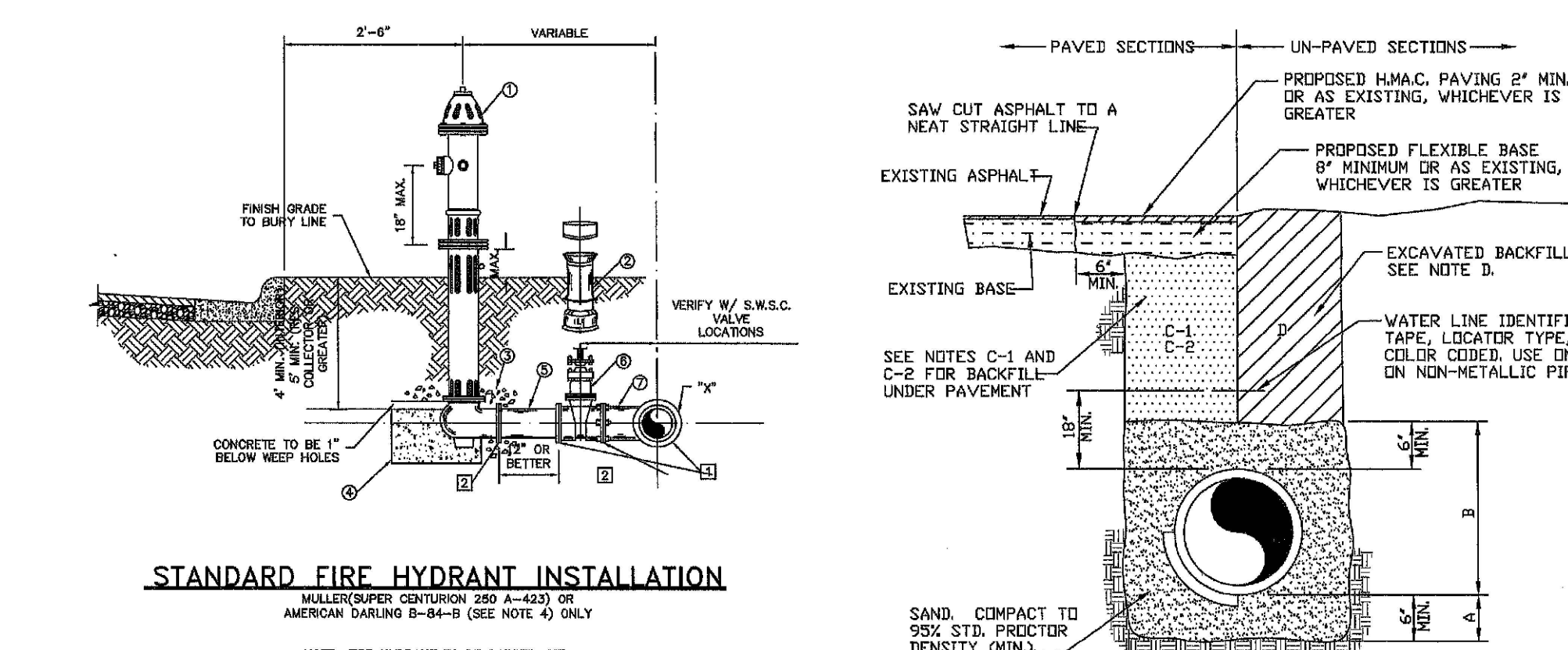
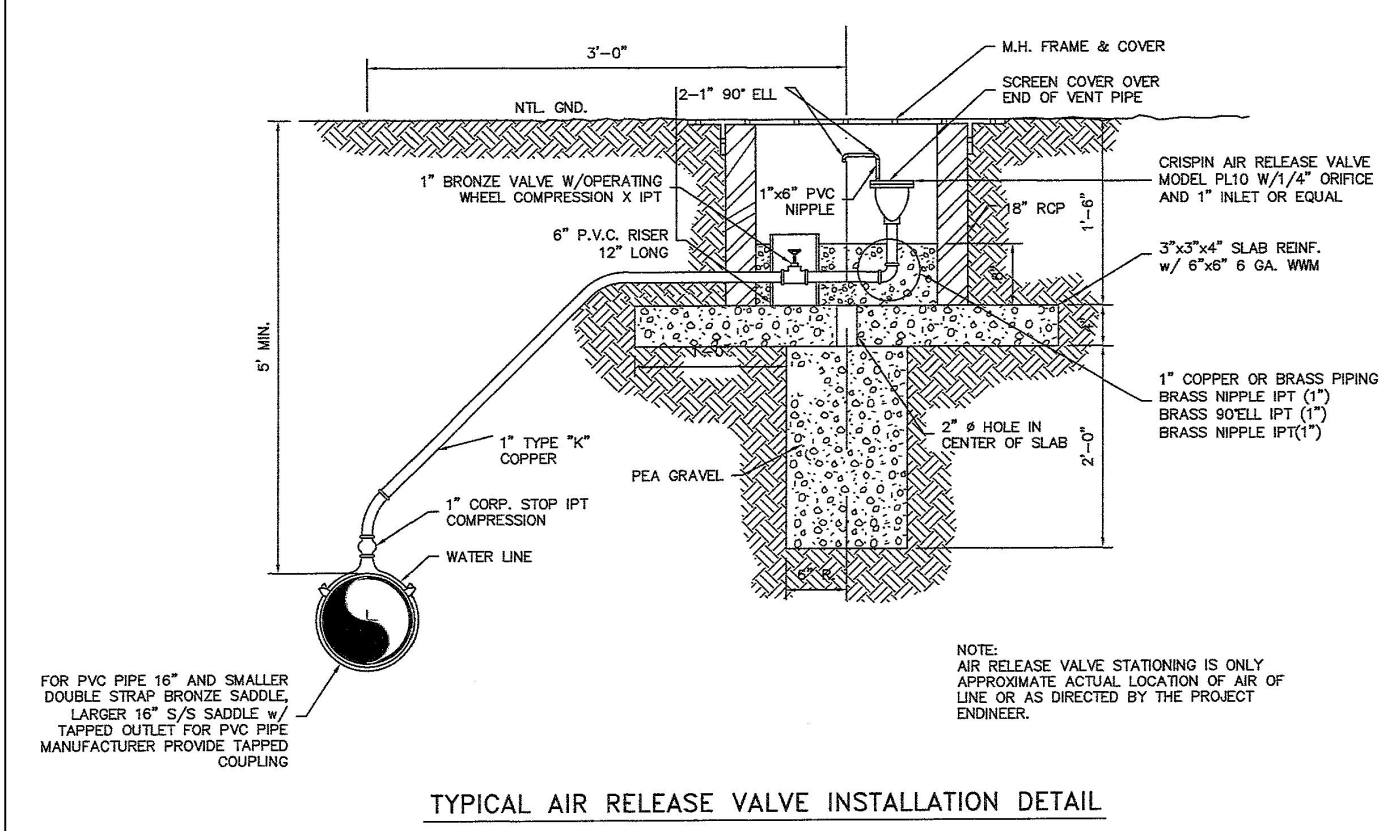
SCALE: 1" = 60'

EDUARDO'S SUBDIVISION No.24 WATER DISTRIBUTION LAYOUT

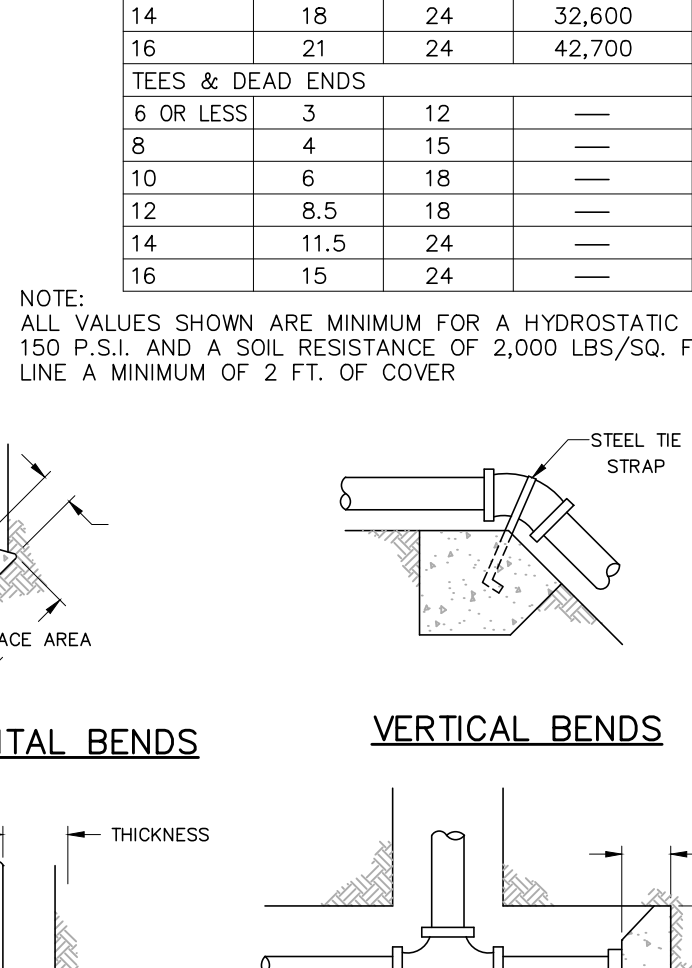
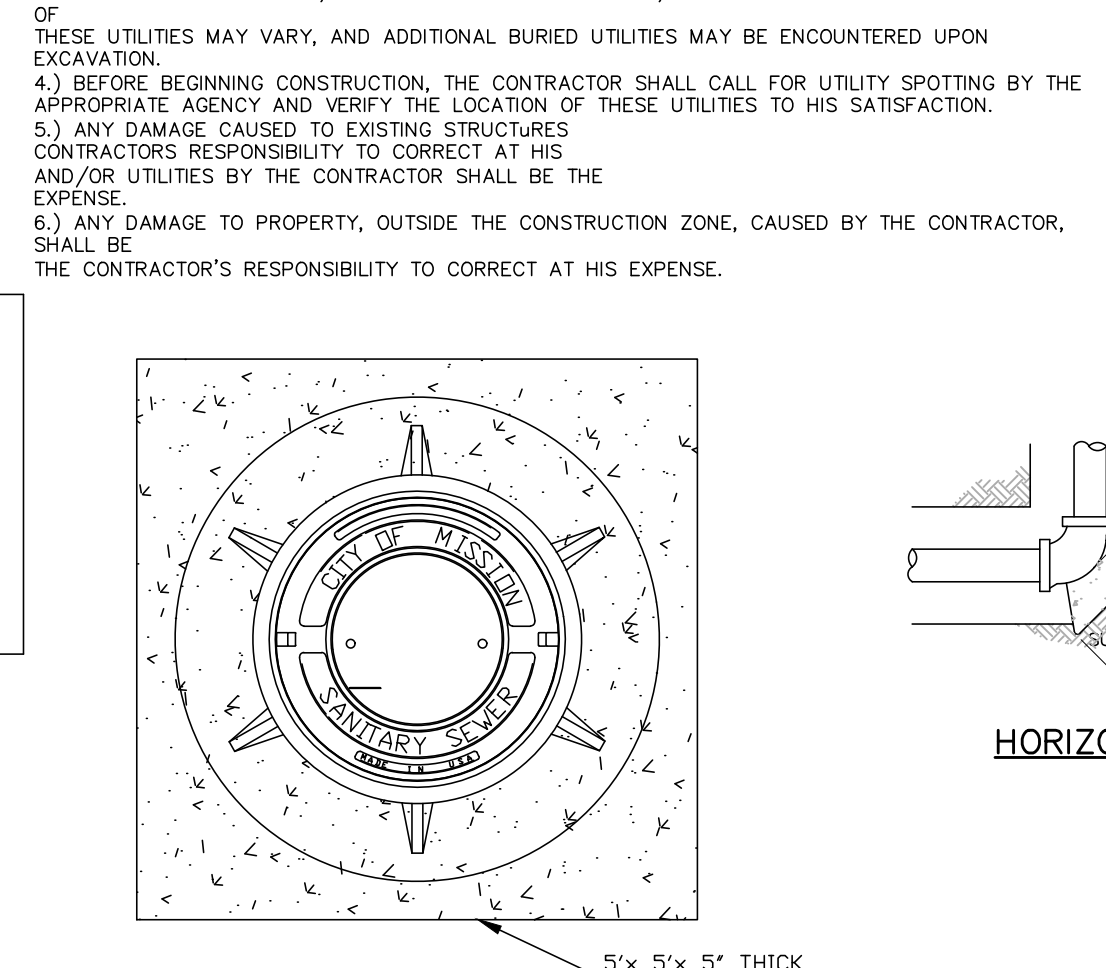
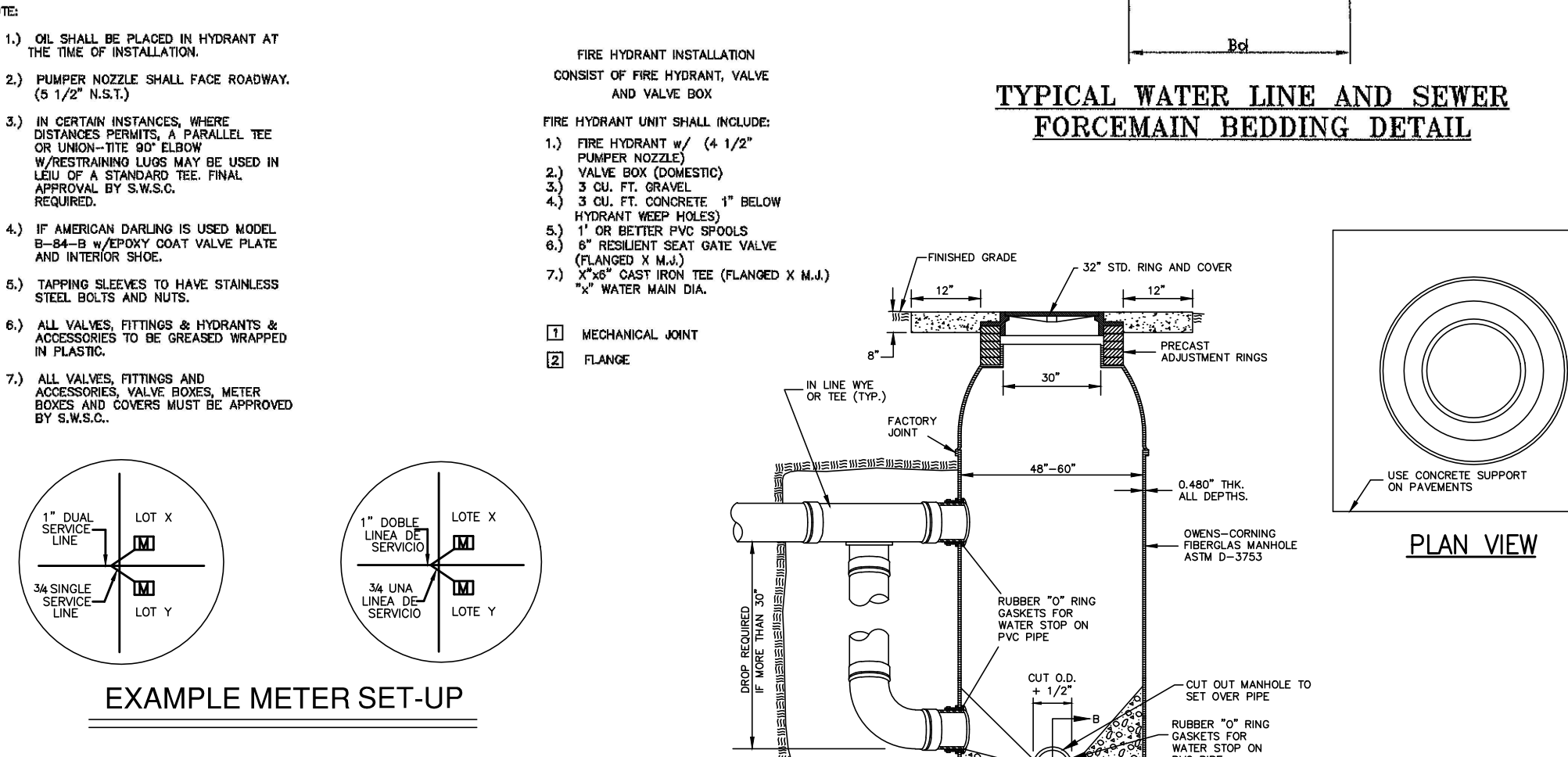
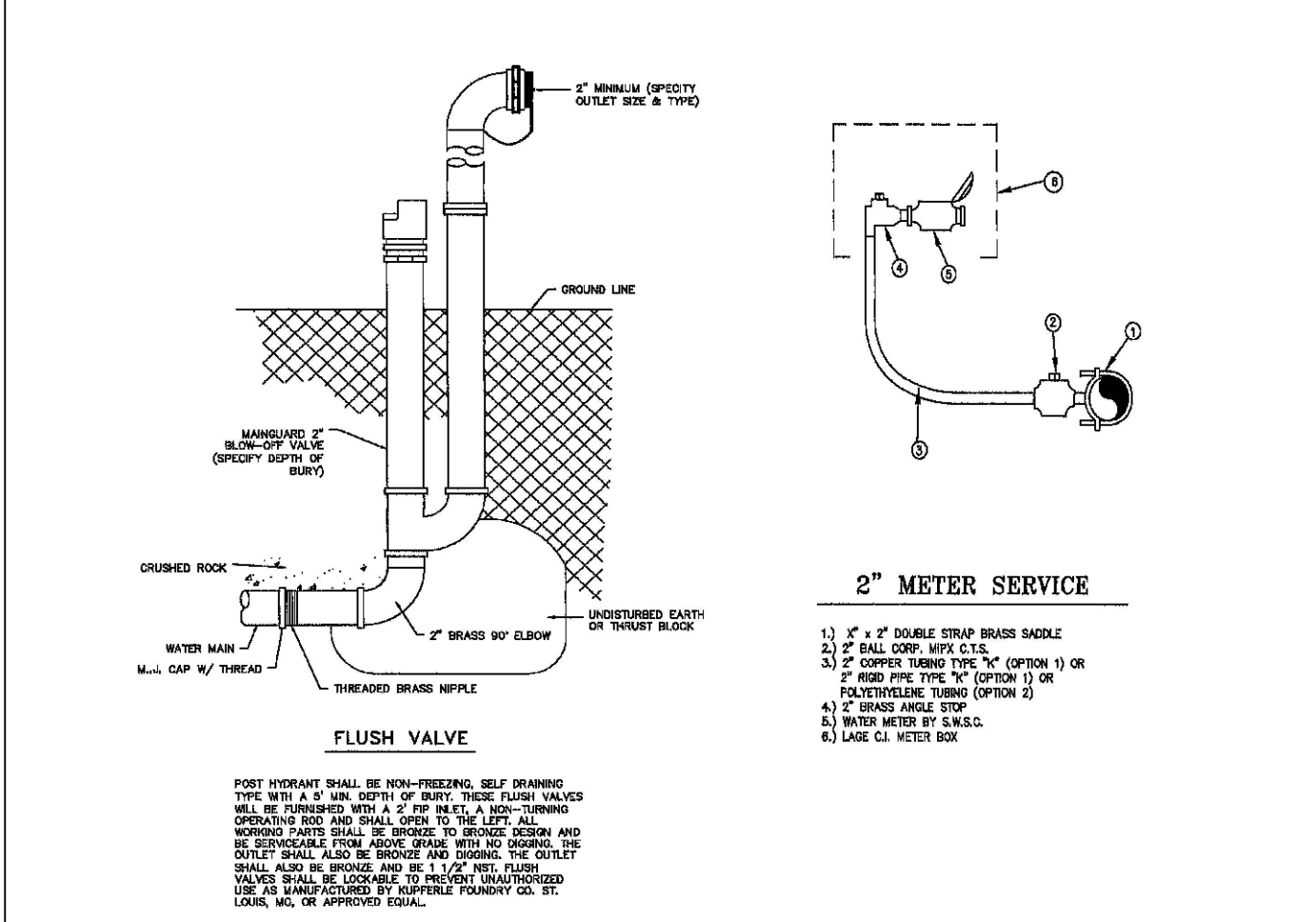
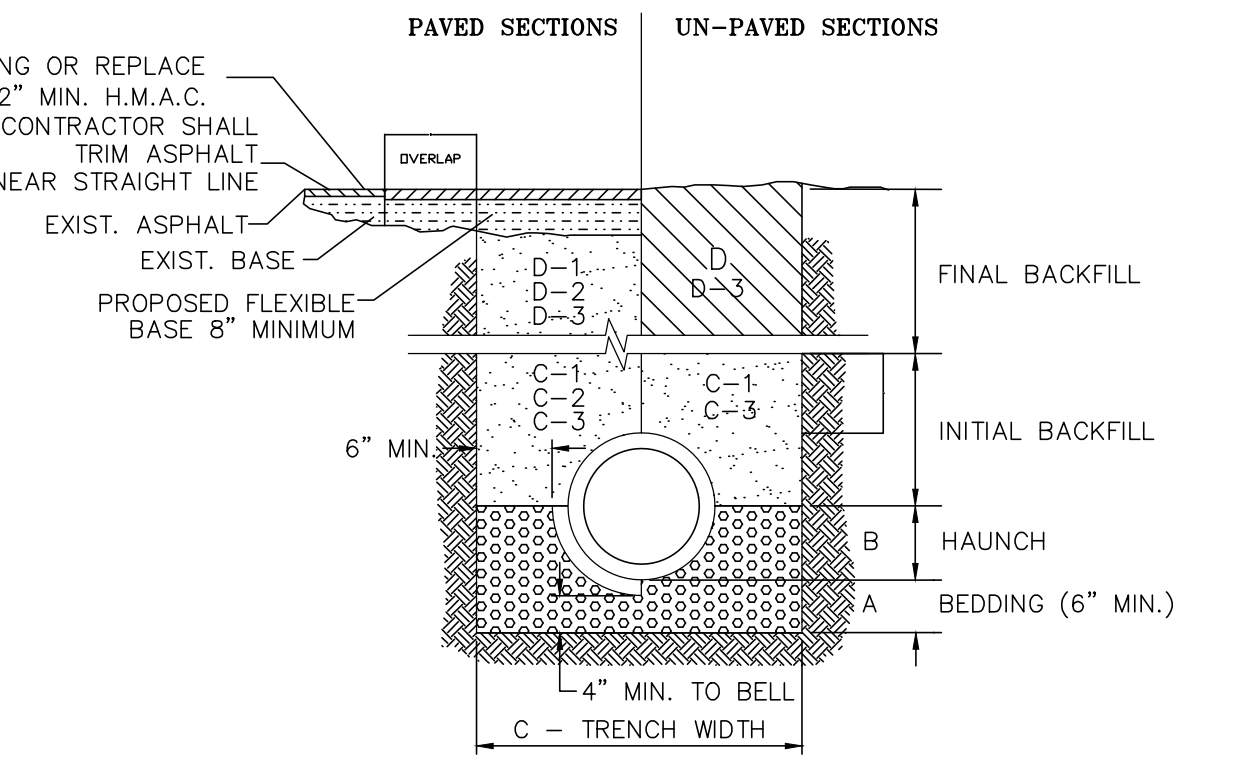
IZAGUIRRE
Engineering Group LLC.
2121 E. GRIFFIN PARKWAY,
STE 2, MISSION TX, 78574
TEL: (956) 584-0554
FAX: (956) 584-0554

EDUARDO'S SUBDIVISION No.24

DETAIL SHEET



THRUST BLOCK SIZE			
DIAMETER OF PIPE INCHES	SURFACE AREA SQ. FT.	THICKNESS INCHES	WEIGHT AT VERTICAL BENDS - LBS
22-1/2" BENDS			
6 OR LESS	2	8	1,700
8	3	12	3,000
10	3.5	12	4,500
12	4	14	6,600
14	5	18	9,000
16	6	18	11,800
45" BENDS			
6 OR LESS	4	12	3,200
8	5	14	5,800
10	6	18	9,000
12	7	18	13,000
14	8	24	17,000
16	11.5	24	23,200
TEES & DEAD ENDS			
6 OR LESS	3	12	—
8	4	15	—
10	6	18	—
12	8.5	18	—
14	11.5	24	—
16	15	24	—



STORM TRENCH BEDDING AND BACKFILL DETAILS

N.T.S

A. BEDDING FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SAND AND/OR GRAVEL MIX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. COMPACTED THICKNESS = 6") - PIT RUN GRAVEL 2" MAX. SIZE.

B. HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

C. TRENCH WIDTH - SHALL BE BELL O.D. X 1.5 + 12" MINIMUM TRENCH WIDTH SHALL EQUAL STRUCTURE WIDTH + 4 FT. THROUGHOUT THE HEIGHT OF THE STRUCTURE.

D-1 INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS, COUNTY ROADS & UNPAVED AREAS - SHALL BE SOL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (ASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-2 INITIAL BACKFILL FOR RCP CLASS III 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.

D-3 INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-4 FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREAS, DRIVEWAYS AND COUNTY ROADS - SHALL BE SOL TYPE A1, A2, A3 WITH A MAXIMUM P.I. OF 19 (ASHTO M145) COMPACTED TO 92% S.P.D., 8" LOOSE LIFTS, MECHANICAL COMPACTION.

D-5 FINAL BACKFILL FOR RCP 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.

D-6 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 OR CLASS II (ASTM D2321) OR SOL TYPE A1, A2, OR A3 (ASHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL STRUCTURES BEYOND 5 FT. FROM THE E.O.P./B.O.C. SHALL HAVE CLASS I, II, III OR IV (ASTM D2321) BACKFILL MATERIAL. FOUNDATION PREPARATION (WELPPROTS, MINIMUM 4" GRAVEL OR CEMENT STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOSTENAS 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".

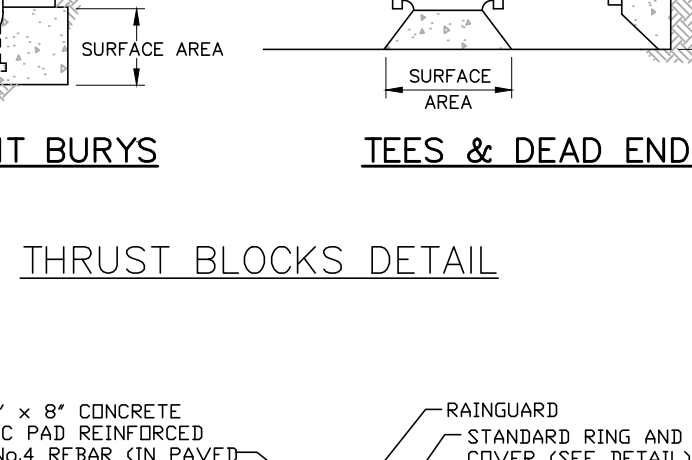
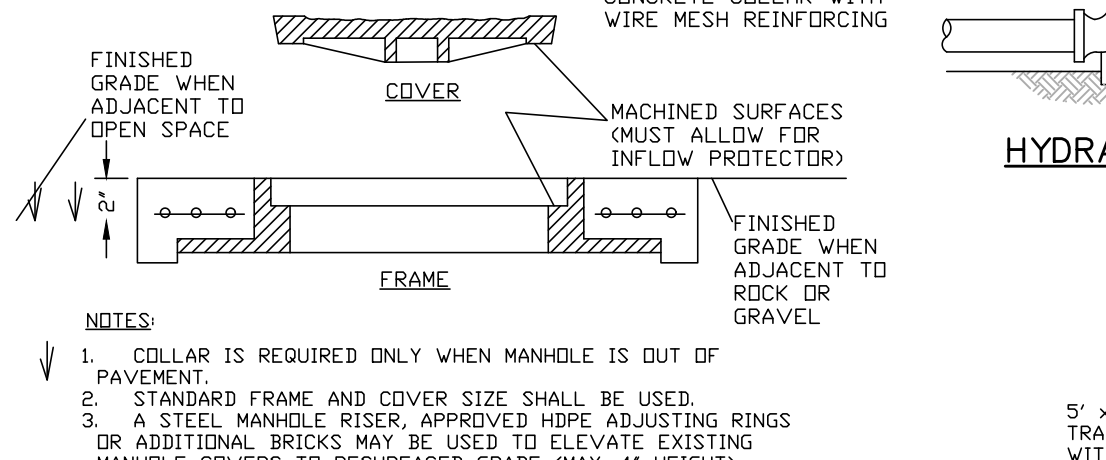
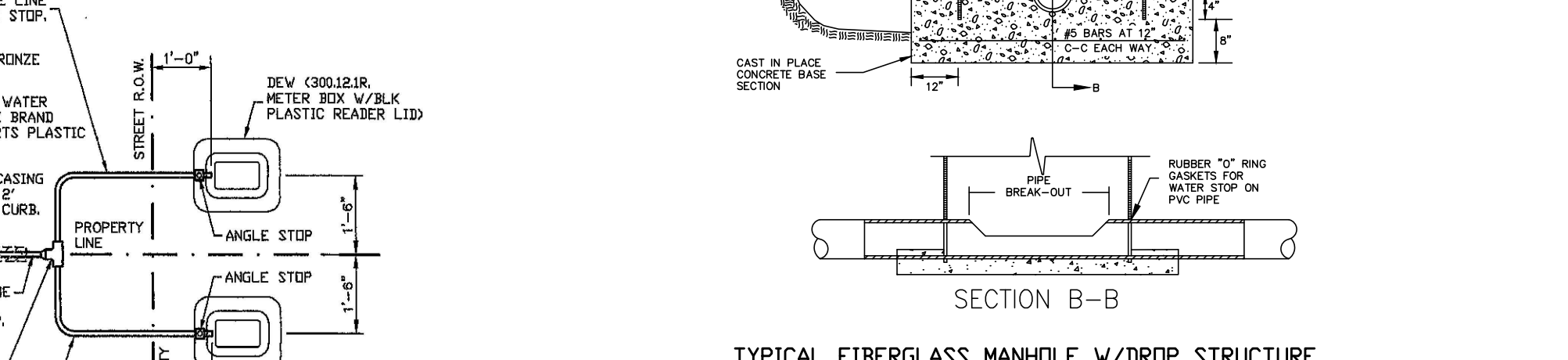
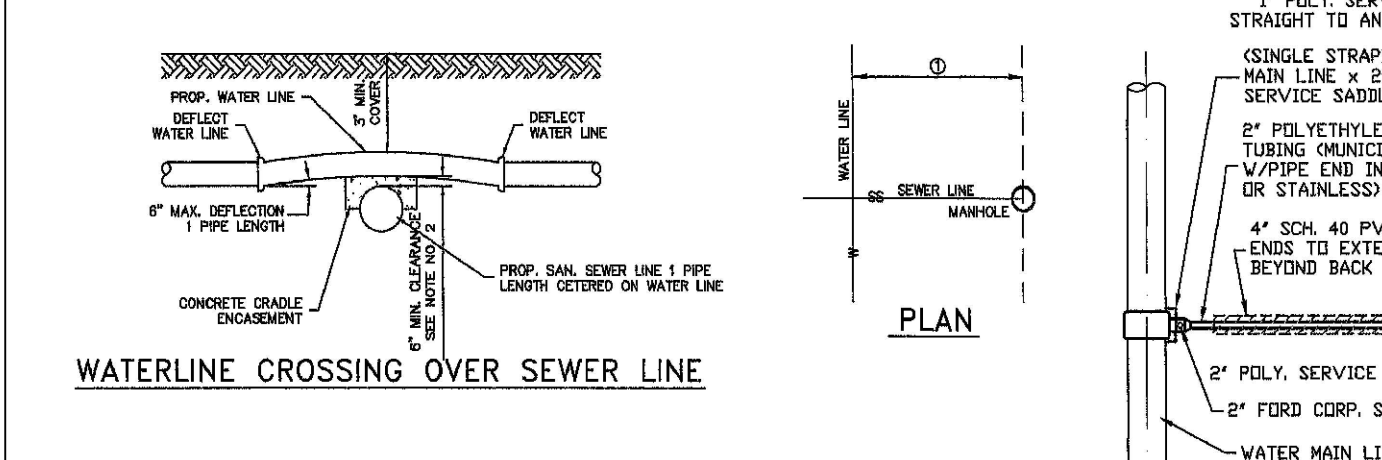
GENERAL NOTES:

1. MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

2. FOR D-1 AND D-2 THE COMPACTED REQUIREMENT SHALL BE 95% S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.

3. FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF THE TRENCH WIDTH IS WITHIN 5 FT. FROM THE E.O.P./B.O.C.

4. THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.



THRUST BLOCKS DETAIL

NOTES:

1. COLLAR IS REQUIRED ONLY WHEN MANHOLE IS OUT OF PAVEMENT.

2. STANDARD FRAME AND COVER SIZE SHALL BE USED.

3. A STEEL MANHOLE RISER, APPROVED HOPE ADJUSTING RINGS OR ADDITIONAL BRICKS MAY BE USED TO ELEVATE EXISTING MANHOLE COVERS TO RESURFACED GRADE (MAX. 4" HEIGHT).

4. COVER SHALL FIT FLUSH WITH THE FRAME WITH THE INFLUW PROTECTOR INSTALLED.

THRUST BLOCKS DETAIL

5' x 5' x 8" CONCRETE TRAFFIC PAD REINFORCED WITH #4 REBAR (IN PAVED AREAS OR WHERE INDICATED).

RAINGUARD
STANDARD RING AND COVER (SEE DETAIL)
FINISHED GRADE
HOPE GRADE RINGS, (1 RING MIN. 12" TOTAL MAX.) 1/2" BUTYL SEALANT BETWEEN ALL SEATING SURFACES.
FACTORY JOINT
FIBERGLASS MANHOLE
STUBOUT LENGTH EQUAL TO ONE PIPE DIAMETER OR ONE FOOT, WHICHEVER IS GREATER.
PVC FACTORY STUBOUTS (TYP.)
12" MIN. (SEE NOTE 3)
No.4 BARS @ 12" O.C.E.V. (TYP.)
FOUNDATION SLAB TO EXTEND TO COMPLETELY UNDER DRIP FITTINGS
INTEGRAL FIBERGLASS BENCH, INVERT AND BOTTOM
PLACE SLAB IN 6" CRUSHED ROCK BEDDING OR DRY UNDISTURBED SOIL

NOTES:

1. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

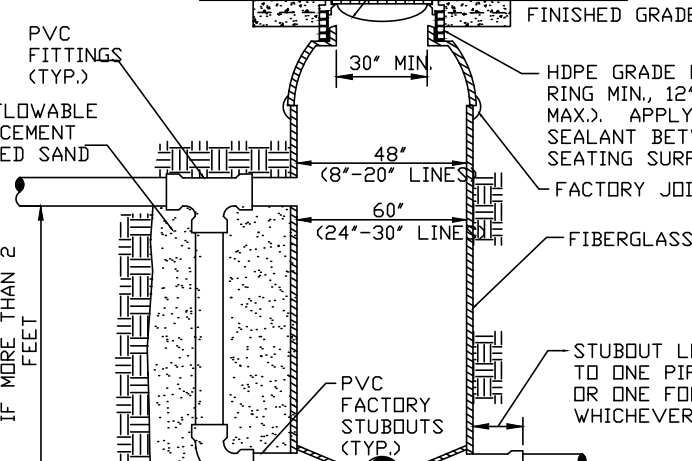
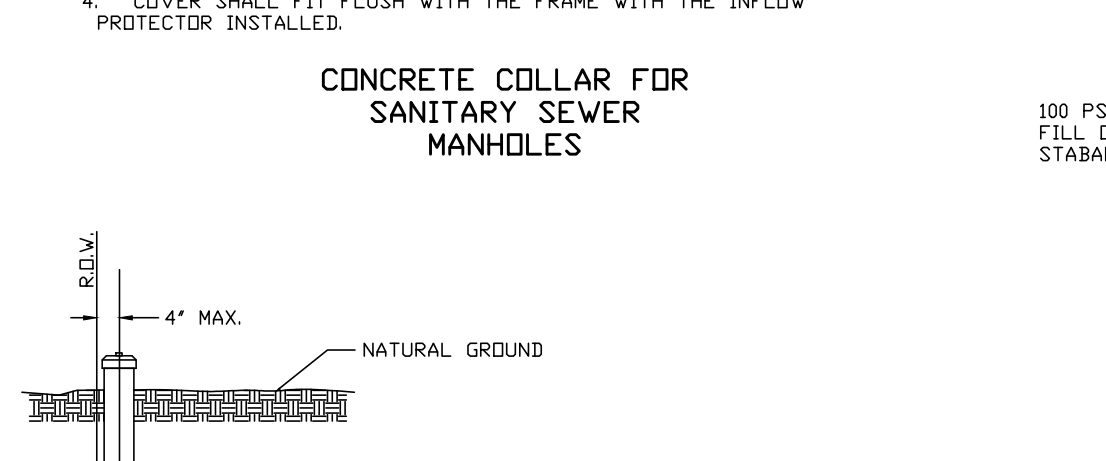
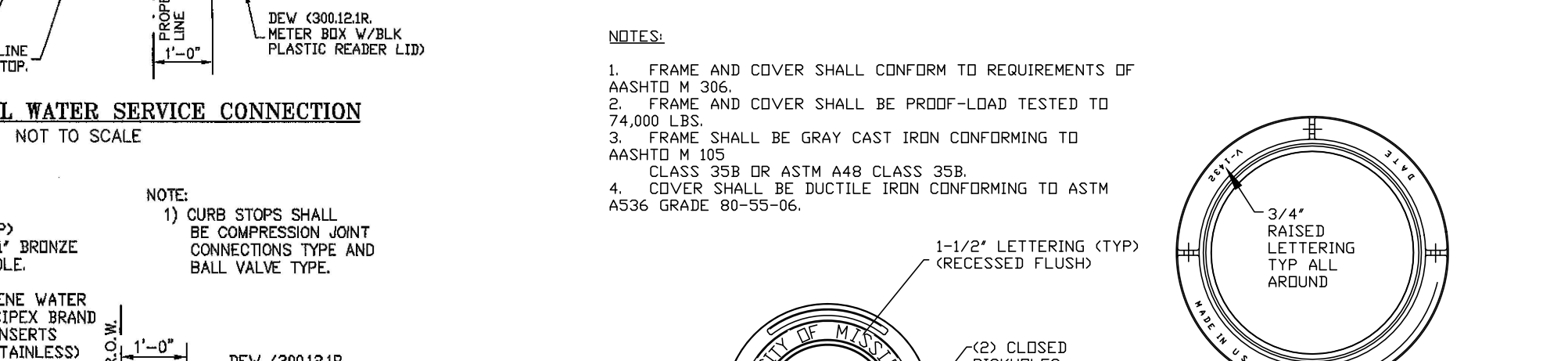
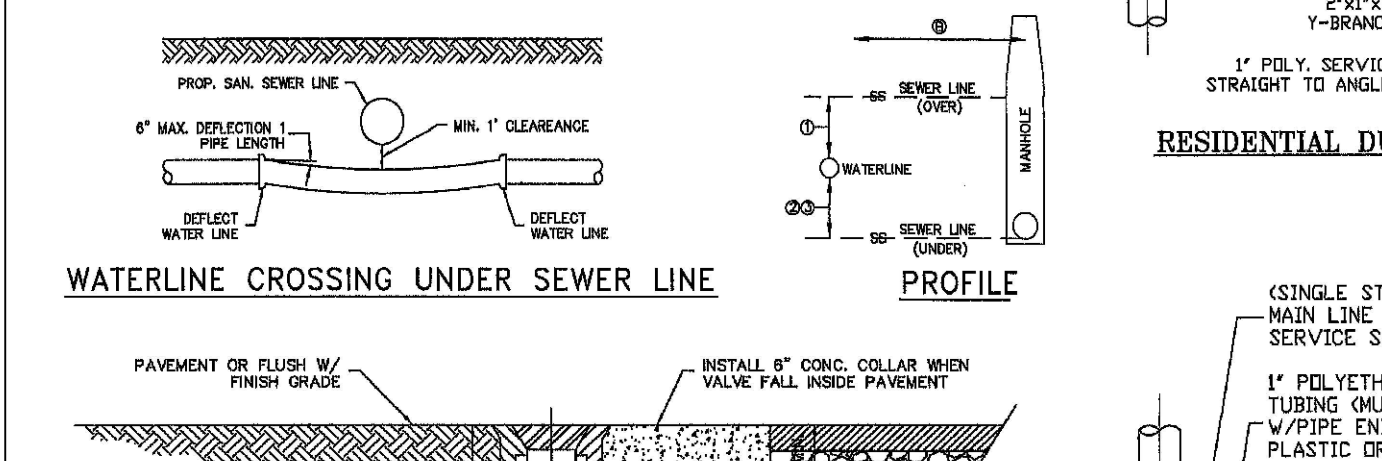
2. BACKFILL SHALL BE SAND COMPACTED TO 95% STANDARD PROCTOR.

3. BASE SLAB SHALL BE 4 FT. LARGER THAN MANHOLE DIAMETER WHERE SOIL BEARING CAPACITY < 2000 P.S.F., WATER TABLE < 5 FT., OR DEPTH > 20 FT. SLAB SHALL BE DESIGNED TO PREVENT FLUTATION OF MANHOLE.

4. COAT ALL INTERNAL CEMENTITIOUS AND METALLIC SURFACES WITH COAL TAR EPOXY.

5. OUTLET STUBOUT SHALL BE SPLIT END. INLET STUBOUTS SHALL BE BELL END EXCEPT FOR DRIP CONNECTIONS.

TYPICAL FIBERGLASS MANHOLE



BORING INSTALLATION

CARRIER PIPE SIZE	PIPE CASING SIZE	MIN. WALL THICKNESS
14"	16"	0.3125"
16"	18"	0.3125"
18"	21"	0.3750"
24"	24"	0.4375"
24"	26"	0.4375"
24"	30"	0.5000"
24"	36"	0.5625"
36"	48"	0.6250"

GENERAL NOTES:

1. ALL STEEL CASING SHALL BE WELDED.

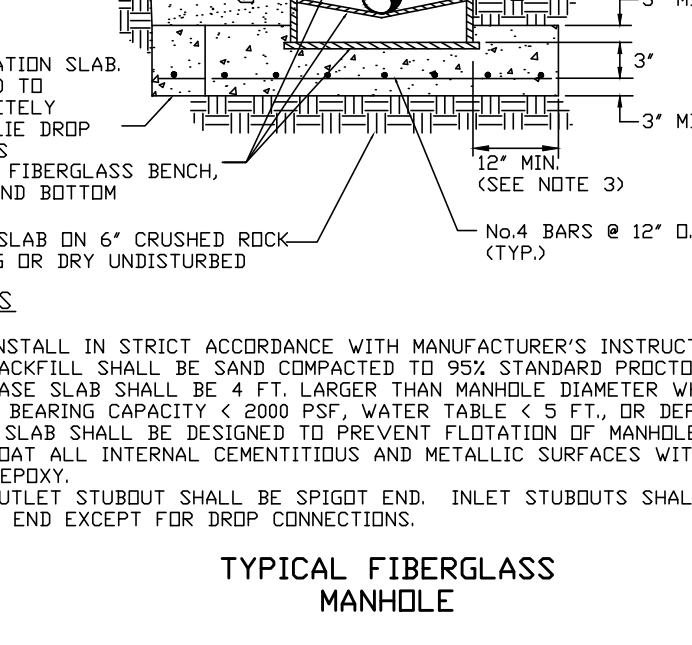
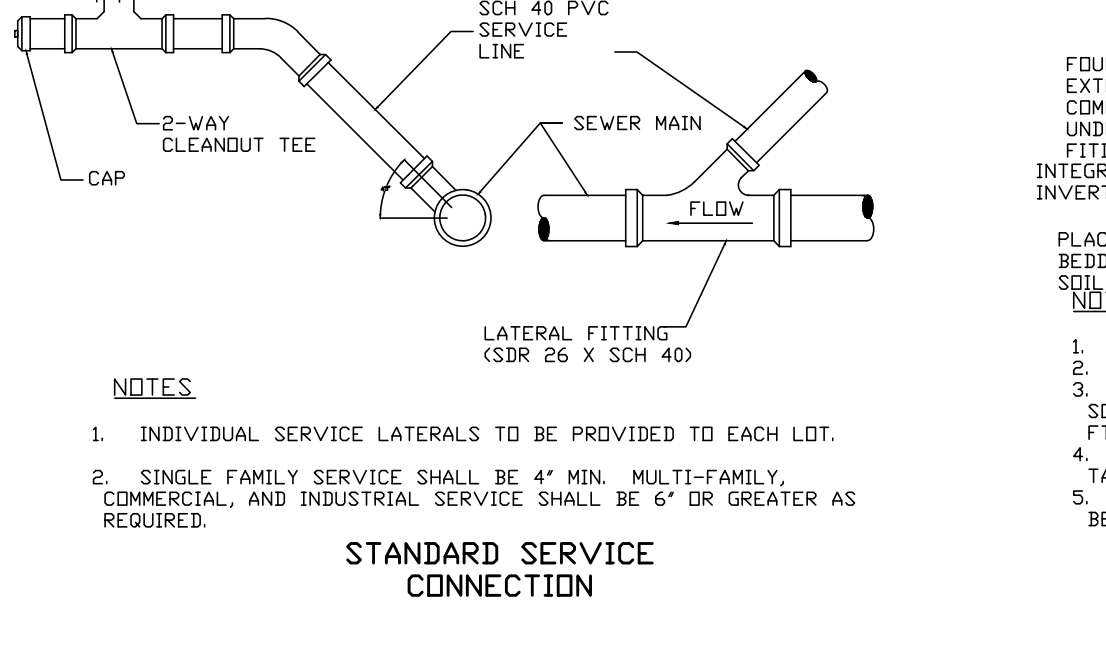
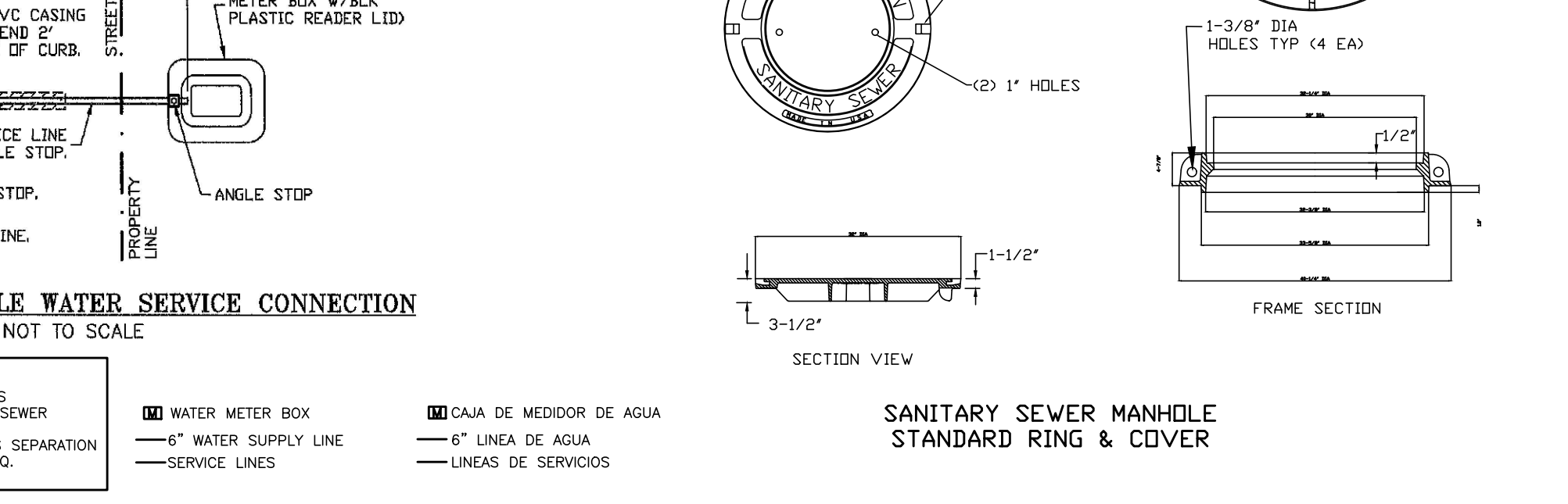
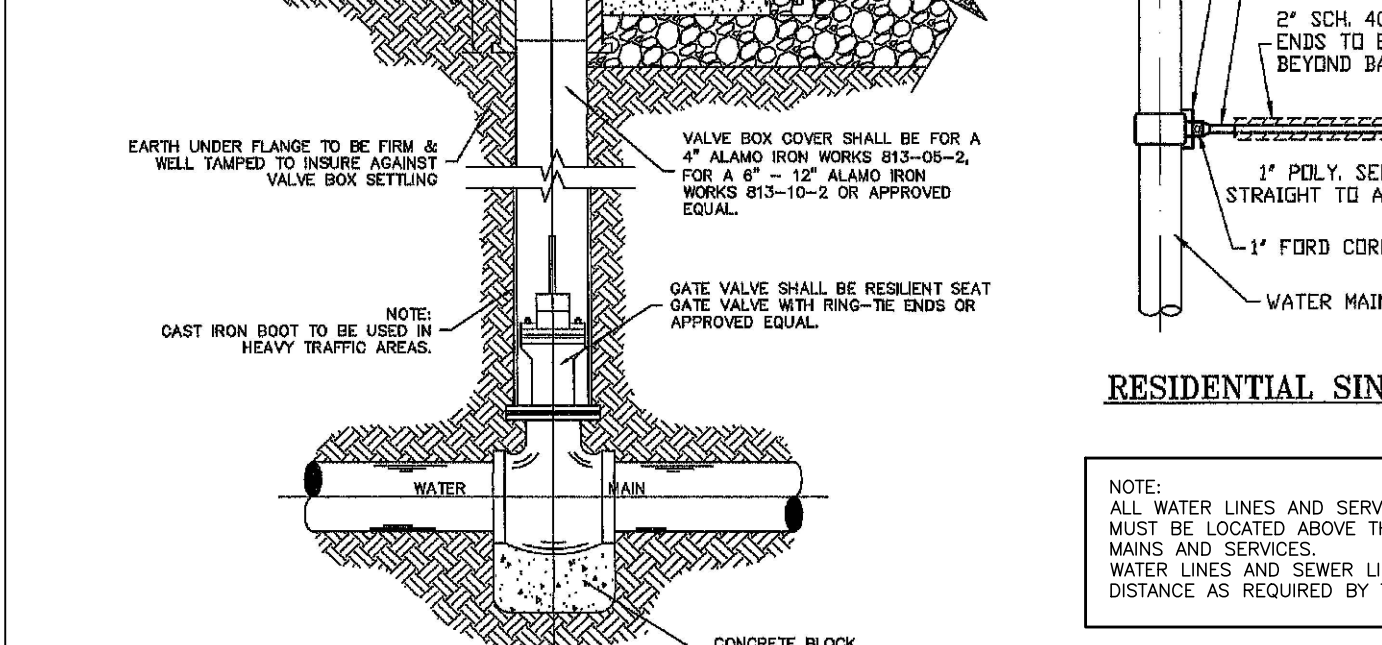
2. STEEL CASING SHALL BE CLOUSED AT EACH END USING SYNTHETIC RUBBER END SEALS.

3. CASING SPACERS SHALL BE USED TO INSTALL THE CARRIER PIPE INSIDE THE ENCASEMENT PIPE. CASING SPACERS SHALL FASTEN TIGHTLY IN THE CARRIER PIPE TO PREVENT RELATIVE MOVEMENT ON PIPE DURING INSTALLATION. CASING SPACERS SHALL BE DOUBLED ON EACH END OF THE ENCASEMENT.

4. PROJECTION TYPE CASING SPACERS SHALL BE CONSTRUCTED SECTIONS OF HIGH DENSITY POLYETHYLENE.

5. INSTALLATION AND SIZE OF SPACERS SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.

UTILITY LINE BORE DETAIL



UTILITY LINE BORE DETAIL

1. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

2. BACKFILL SHALL BE SAND COMPACTED TO 95% STANDARD PROCTOR.

3. BASE SLAB SHALL BE 4 FT. LARGER THAN MANHOLE DIAMETER WHERE SOIL BEARING CAPACITY < 2000 P.S.F., WATER TABLE < 5 FT., OR DEPTH > 20 FT. SLAB SHALL BE DESIGNED TO PREVENT FLUTATION OF MANHOLE.

4. COAT ALL INTERNAL CEMENTITIOUS AND METALLIC SURFACES WITH COAL TAR EPOXY.

5. OUTLET STUBOUT SHALL BE SPLIT END. INLET STUBOUTS SHALL BE BELL END EXCEPT FOR DRIP CONNECTIONS.

TYPICAL FIBERGLASS MANHOLE

EDUARDO'S SUBDIVISION No.24 MAP OF SANITARY SEWER DISTRIBUTION

A 16.92 ACRE TRACT OF LAND (DEED RECORD: 16.94 ACRES) OUT OF LOT 46-1, WEST ADDITION TO SHARYLAND SUBDIVISION, HIDALGO COUNTY, TEXAS, ACCORDING TO MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS, HIDALGO COUNTY, TEXAS.

FINAL ENGINEERING REPORT FOR EDUARDO'S SUBDIVISION No. 24:
BY GILBERTO A. GRACIA, P.E.
SEWER SUPPLY: Description and Costs.

SANITARY SEWAGE DESCRIPTION AND EXPENSES:

EDUARDO'S SUBDIVISION No.24 SUBDIVISION HAS BEEN TREATED BY WASTEWATER SERVICE FROM CITY OF ALTON. THE SUBDIVIDER AND CITY OF ALTON HAVE ENTERED INTO A CONTRACT IN WHICH CITY OF ALTON HAS PROMISED TO TREAT THE SUFFICIENT WASTEWATER FOR AT LEAST 30 YEARS AND CITY OF ALTON HAS PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WASTEWATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THIS SUBDIVISION.

THE SANITARY SEWAGE SYSTEM OF EDUARDO'S SUBDIVISION No.24 CONSISTS OF A PROPOSED 10" DIAMETER SEWER LINE THAT TAPS INTO THE EXISTING MANHOLE LOCATED APPROXIMATELY 1/4 OF MILE SOUTH ALONG THE WEST SIDE OF INSPIRATION ROAD. SAID PROP. 8" DIAMETER SEWER LINE RUNS NORTH ALONG THE WEST SIDE OF INSPIRATION RD. THEN AT A PROPOSED MANHOLE LOCATED ON THE WEST SIDE OF INSPIRATION RD. CONTINUES EAST RUNNING ALONG THE NORTH SIDE OF _____ STREET. THEN TURNING NORTH ALONG THE WEST SIDE OF _____ STREET, CONTINUING EAST ALONG THE SOUTH SIDE OF _____ STREET. LOOPING CONNECTION WITH A MANHOLE ON INSPIRATION RD.

SANITARY SERVICES TERMINATE AT THE SEWER METERS OF EACH LOT FOR A TOTAL OF SIXTY-SEVEN (67) SANITARY SEWER SERVICES.

THE 10" SEWER LINES, THE 4" SERVICE LINES, THE SIX (6) SANITARY SEWER MANHOLES HAS BEEN INSTALLED, AT A TOTAL COST OF \$ _____ OR \$ _____ PER LOT. IN ADDITION, THE ENTIRE WASTEWATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY CITY OF ALTON AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

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 WATER AND SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

SEWAGE FACILITIES - THESE FACILITIES FULLY CONSTRUCTED HAS COST A GRAND TOTAL OF \$ _____ WHICH EQUALS TO \$ _____ PER LOT.



GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

EDUARDO'S SUBDIVISION No. 24.
POR: GILBERTO A. GRACIA, P.E.

DRENAJE: DESCRIPCION, GASTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISION

LA SUBDIVISION DE EDUARDO'S SUBDIVISION No. 24 RECIBE SU PROVISION DE DRENAJE SANITARIO DE LA CIUDAD DE ALTON. EL DUEÑO DE LA SUBDIVISION Y LA CIUDAD DE ALTON HAN FIRMADO UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRA SU PROVISION DE DRENAJE SANITARIO POR LOS PROXIMOS 30 AÑOS. LA CIUDAD DE ALTON HA PRESENTADO DOCUMENTACION PARA DEMOSTRAR A LARGO PLAZO LA CANTIDAD Y CALIDAD DE DRENAJE SANITARIO ACCESIBLE PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

EL DRENAJE SANITARIO DE EDUARDO'S SUBDIVISION No.24 CONSISTE DE UNA LINEA DE DRENAJE SANITARIO EXISTENTE DE 10" DE DIAMETRO QUE SE CONECTARA A UN POZO DE VISITA LOCALIZADO AL SUR DE LA CALLE INSPIRATION APPROXIMADAMENTE 1/4 DE MILLA DE LADO OESTE. ESTA LINEA PROPUESTA DE 10" DE DIAMETRO CORRE HACIA EL NORTE POR LADO OESTE DE LA CALLE INSPIRATION RD. Y CONTINUA AL ESTE POR EL LADO NORTE DE LA CALLE _____ VOLTANDO HACIA EL NORTE POR EL LADO OESTE DE LA CALLE _____ CONTINUA VOLTANDO HACIA EL OESTE POR EL LADO SUR DE AL CALLE _____ PARA FINALIZAR EN CONTINUIDAD EN UN POZO DE VISITA EN LA CALLE INSPIRATION ROAD.

LOS SERVICIOS DE DRENAJE SANITARIO TERMINAN EN LOS MEDIDORES DE DRENAJE SANITARIO DE CADA LOTE PARA DAR UN TOTAL DE SESENTA Y SIETE (67) SERVICIOS.

LAS LINEAS DE DRENAJE SANITARIO DE 10 PULGADAS, LOS SERVICIOS DE 4 PULGADAS, Y LOS SEIS (6) POZOS DE VISITA HAN SIDO INSTALADAS, A UN COSTO TOTAL DE US \$ _____ O US \$ _____ POR LOTE. EL SISTEMA DE DRENAJE SANITARIO ESTA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA, EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL CONDADO DE HIDALGO.

CERTIFICACION:

CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DE DRENAJE, DESCRITOS EN ESTE DOCUMENTO CUMPLEN CON LAS MODEL SUBDIVISION RULES (LAS REGLAS GOBIERNANDO A 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 DE DRENAJE SON:

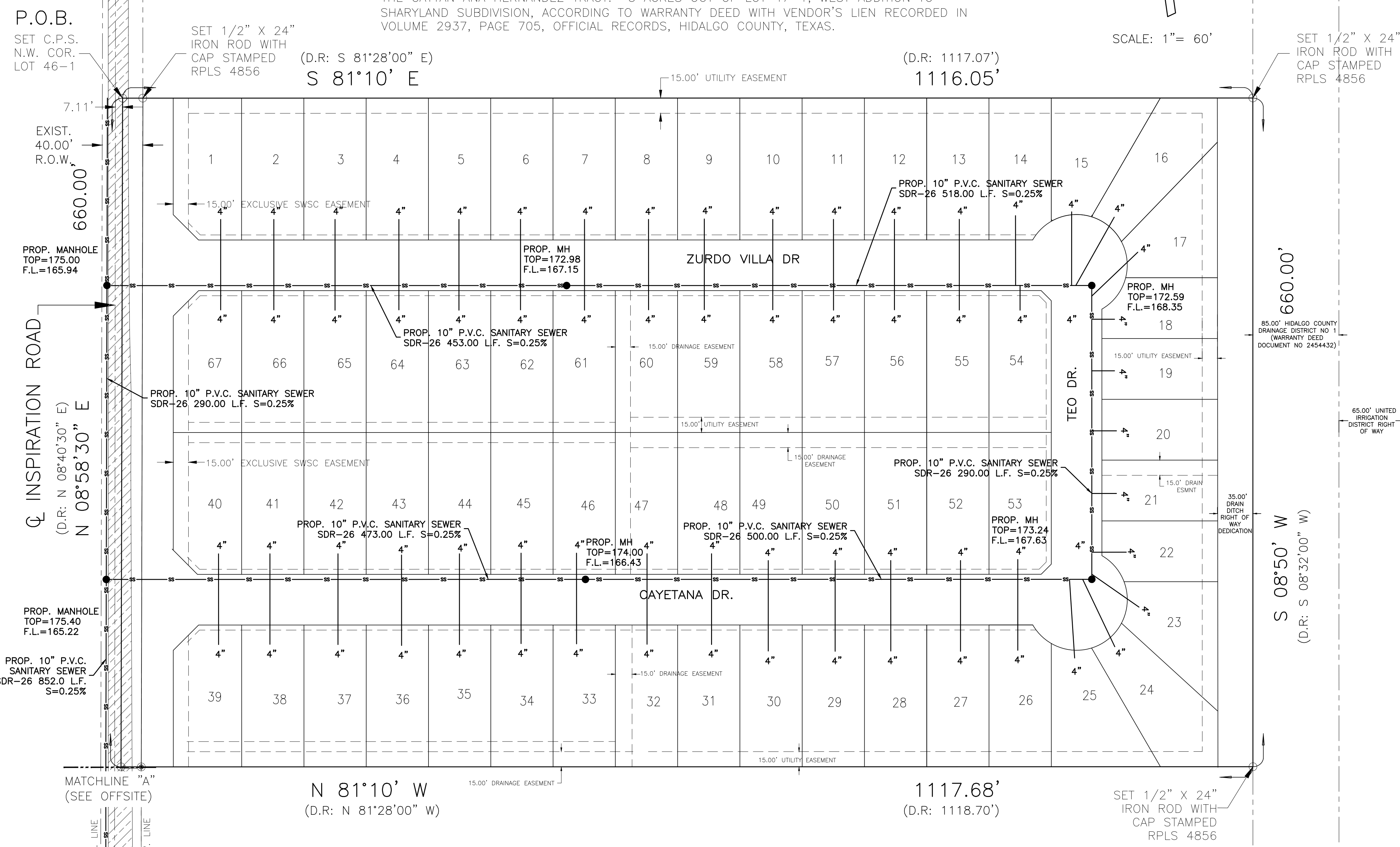
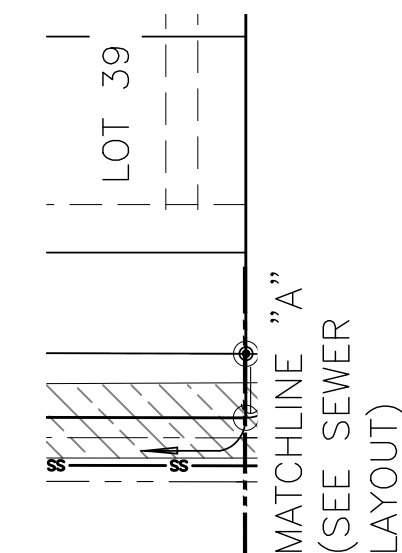
DRENAJE: SE ESTIMA QUE EL DRENAJE COSTO EN TOTAL US \$ _____ O US \$ _____ POR LOTE.



GILBERTO A. GRACIA-P.E. No. 62477
This seal appearing on this document was authorized by Gilberto A. Gracia, P.E. No. 62477 on the above designated date.

COST ESTIMATE

WATER DISTRIBUTION:	\$ _____
PAVING IMPROVEMENTS:	\$ _____
DRAINAGE IMPROVEMENTS:	\$ _____
SANITARY SEWER IMPROVEMENTS:	\$ _____
TOTAL:	\$ _____



THE GAYTAN ANA HERNANDEZ TRACT: 5 ACRES OUT OF LOT 47-1, WEST ADDITION TO SHARYLAND SUBDIVISION, ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED IN VOLUME 2937, PAGE 705, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

THE JAMES R. ROBERTS, JR. AND MARIA ESTELA ROBERTS TRACT: THE NORTH 5 ACRES OF THE SOUTH 16.85 ACRES OF LOT 46-1, WEST ADDITION TO SHARYLAND SUBDIVISION, ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED IN VOLUME 2008, PAGE 427, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

*NOTE: SEE CONSTRUCTION TYPICAL DETAILS AND SPECIFICATION ON PAGE 3



**EDUARDO'S SUBDIVISION No.24
SANITARY SEWER LAYOUT & OFFSITE**

IZAGUIRRE
Engineering Group LLC.
2121 E. GRIFFIN PARKWAY,
SITE 2, MISSION TX, 78574
TEL: (956) 584-0554
FAX: (956) 584-0554

EDUARDO'S SUBDIVISION No.24 MAP OF PAVING AND DRAINAGE

A 16.92 ACRE TRACT OF LAND (DEED RECORD: 16.94 ACRES) OUT OF LOT 46-1, WEST ADDITION TO SHARYLAND SUBDIVISION, HIDALGO COUNTY, TEXAS, ACCORDING TO MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGE 56, MAP RECORDS, HIDALGO COUNTY, TEXAS.

DRAINAGE STATEMENT FOR EDUARDO'S SUBDIVISION NO.24

I. PROJECT LOCATION
This subdivision consists of 64 residential lots located on Inspiration Rd & 6 1/4-mile east side of Inspiration Rd. Said subdivision, located within the City of Mission's 5-Mile ETJ is a 16.92 acre tract out of lot 46-1, West Addition to Sharyland Subdivision, Hidalgo County, Texas, as per map thereof recorded in Volume 1, Pages 56, of the Hidalgo County Map Records.

II. FLOOD PLAIN
The subject tract is located within Flood Zone "X" (unshaded) indicates areas to be outside 500-year floodplains. In accordance with the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Community Panel No. 480334 0295 D, map revised June 6, 2000.

III. SOIL CONDITIONS
A review of the U.S. Soil Conservation Survey of Hidalgo County indicates that the predominant soil of the subject site is classified as Hidalgo-25 (fine sandy loam) & Hidalgo-30 (sandy clay loam).

Hidalgo-25 fine sandy loam typically consists of a surface layer of dark grayish brown fine sandy loam about 15 inches thick. The next soil layer down, from 15 to 30 inches, is brown sandy clay loam. The next soil layer down, from 30 to 39 inches, is pale brown sandy clay loam. The soil down thereafter to approximately 72 inches is a very pale brown sandy clay loam. This soil: a) is calcareous throughout, b) is well drained, c) has medium available water capacity, d) has slow surface runoff, e) has moderate permeability, f) has an overall moderate shrink-swell potential, g) has a moderate hazard of soil blowing, and h) has a slight hazard of water erosion. See attached Soil Survey of Hidalgo County, Texas.

Hidalgo-30 sandy clay loam typically consists of a surface layer saline, dark grayish brown sandy loam about 15 inches thick. The next soil layer down, from 15 to 25 inches, is saline, brown sandy clay loam. The next soil layer down, from 25 to 36 inches, is saline, pale brown sandy clay loam. The soil down thereafter to approximately 72 inches is a very pale brown sandy clay loam. This soil: a) is calcareous throughout, b) is well drained, c) has medium available water capacity, d) has slow surface runoff, e) has moderate permeability, f) has an overall moderate shrink-swell potential, g) has a moderate hazard of soil blowing, and h) has a slight hazard of water erosion. See attached Soil Survey of Hidalgo County, Texas.

IV. EXISTING CONDITIONS
The subject tract is currently undeveloped land used for grazing with moderate brush-land at the east portion of the site. Topographic elevations obtained from the site indicate that the existing terrain has a slight grade to the east approximately (0.35%).

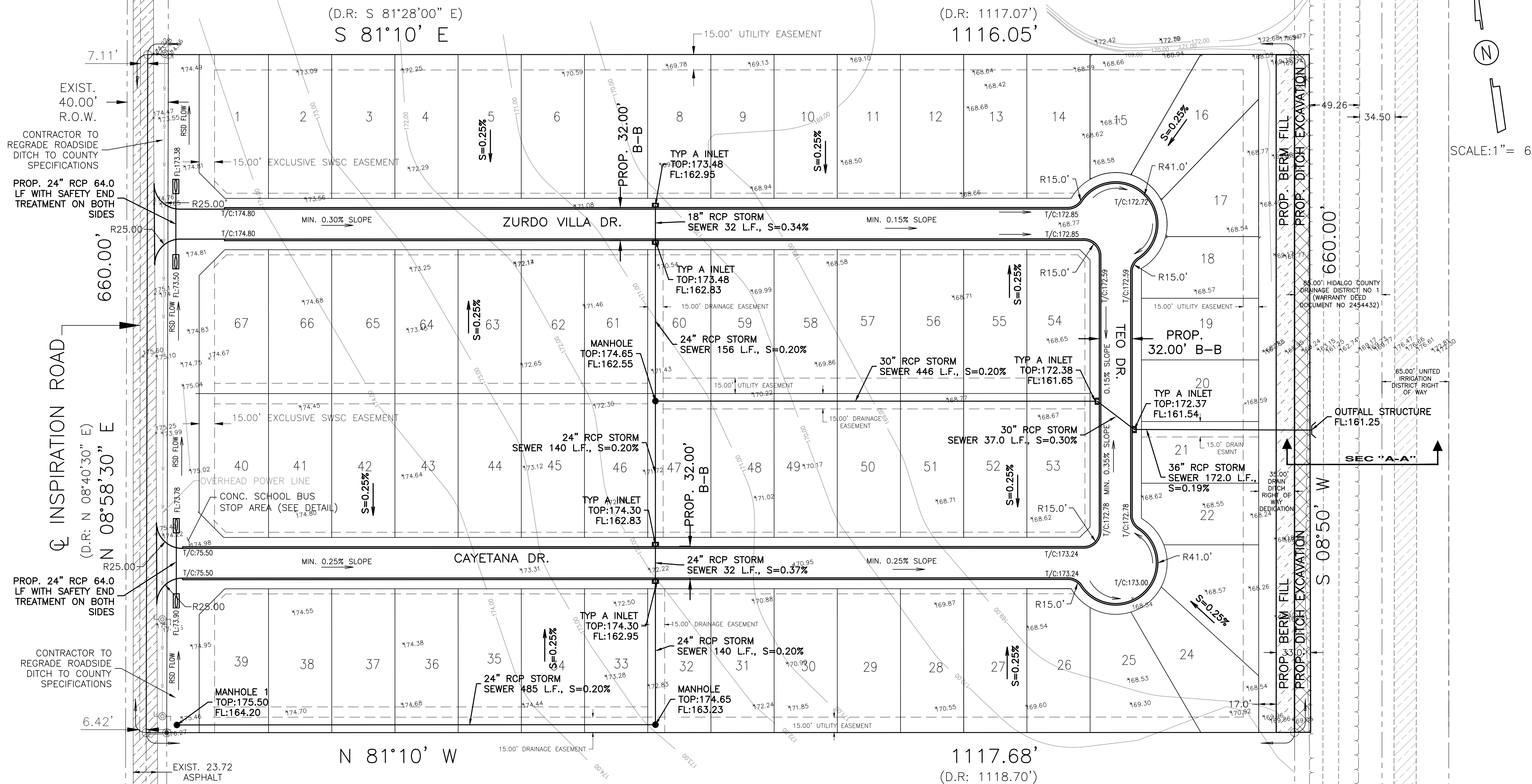
Existing runoff from the subject site is by form of sheet runoff flowing overland towards the east where it is intercepted by down drains which outfall into the Hidalgo County Drainage District No.1 FM 681 Outfall drainage ditch located on the east perimeter of the property. Said drain ditch is part of the Hidalgo County Drainage District No.1 drainage network that ultimately outfalls into the Arroyo Colorado.

The Rational Method was utilized to determine the existing 10-year frequency event storm water runoff (Q_{exist} = 8.38 cfs) for this site.

V. PROPOSED CONDITIONS
Utilizing the 50-year frequency storm event, after development of this subdivision storm water runoff will be 36.99 cfs with an increased 28.61 cfs the total proposed detention volume, in accordance with the County of Hidalgo's drainage requirements, is 63,057 cubic feet (1,4476 acre-feet) (Refer to attached Drainage Calculations). Detention of 63,100 cubic feet will be provided by the widening of the previously described Hidalgo County Drainage District No.1 FM 681 Outfall drain ditch located at the east perimeter of this site. (See attached Linear Detention Excavation)

The proposed development site surface storm water runoff will be intercepted by proposed Type "A" inlets installed at appropriate locations. Said inlets will drain into proposed storm sewer lines of appropriate capacity which will flow east into said existing drain ditch. Required detention volume per Hidalgo County Drainage District No.1 policies concerning increased storm water runoff will be added to said FM 681 Outfall drain ditch

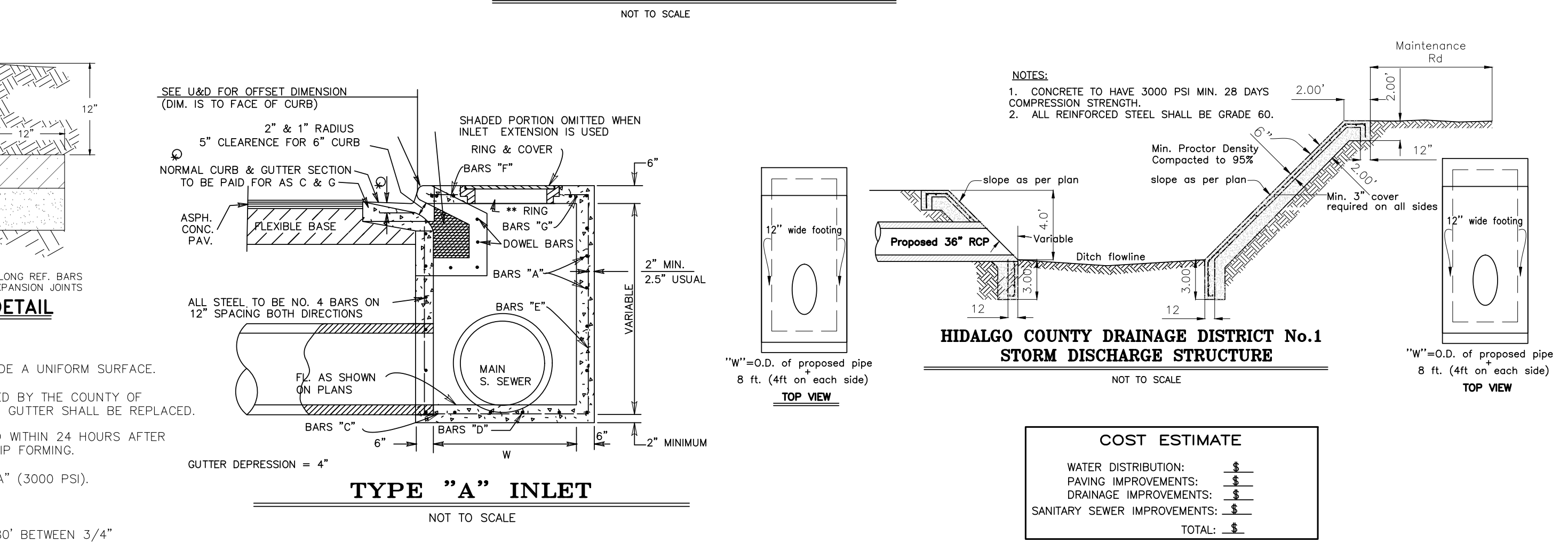
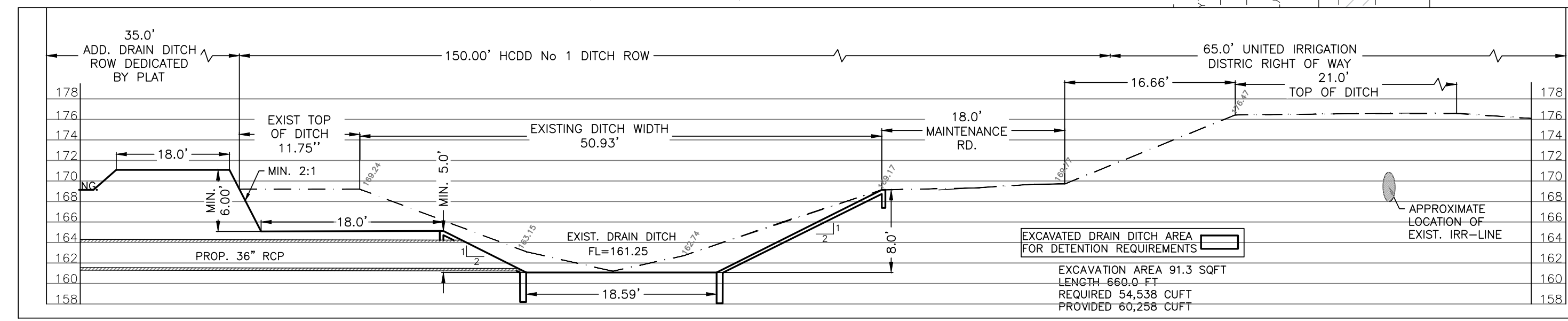
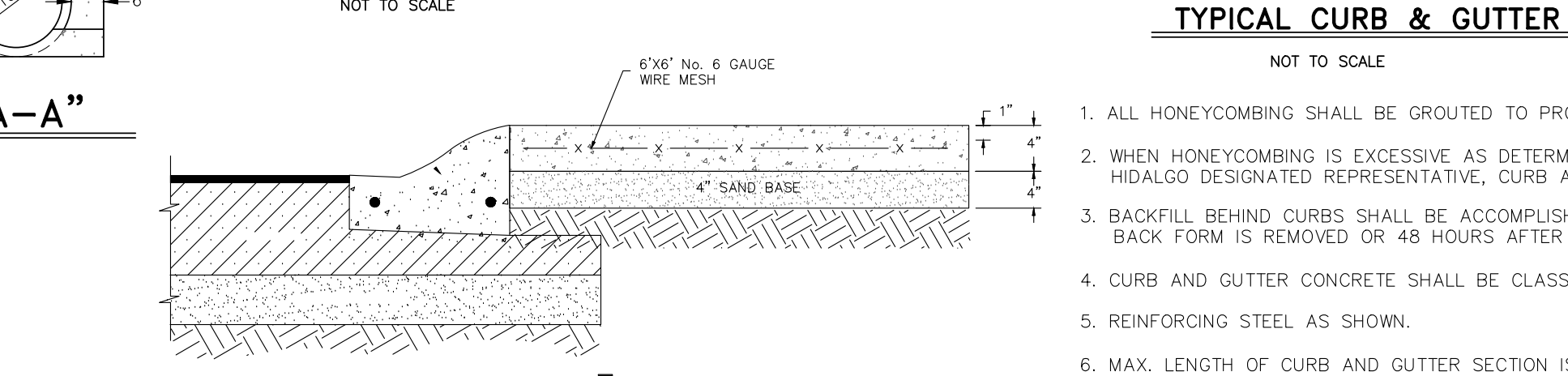
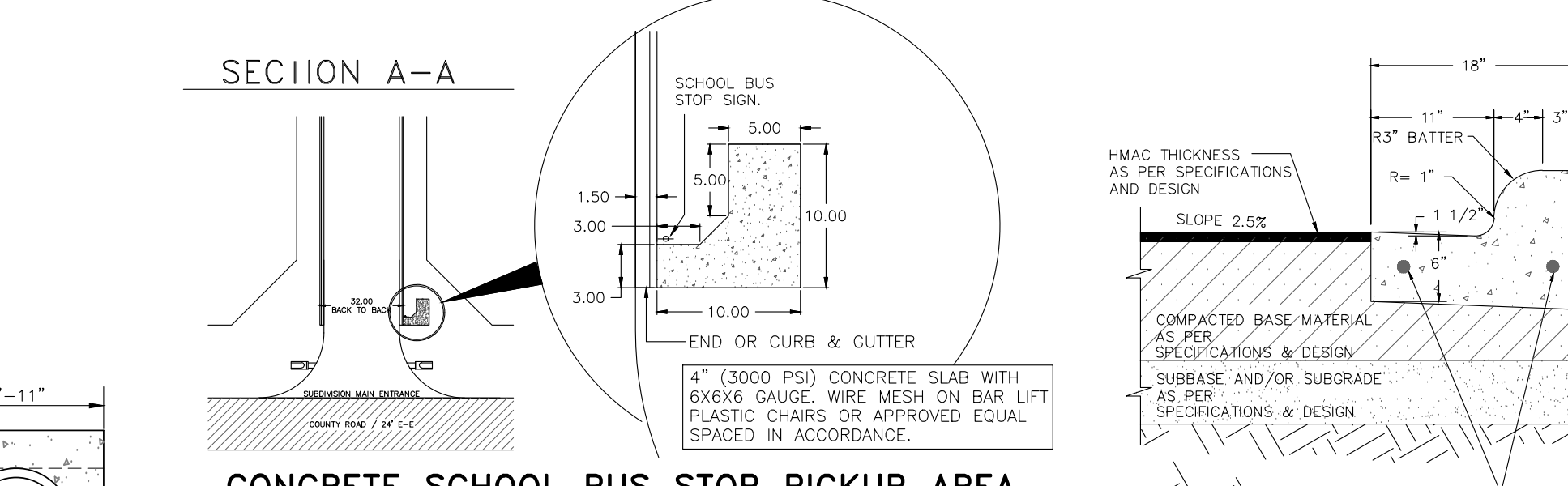
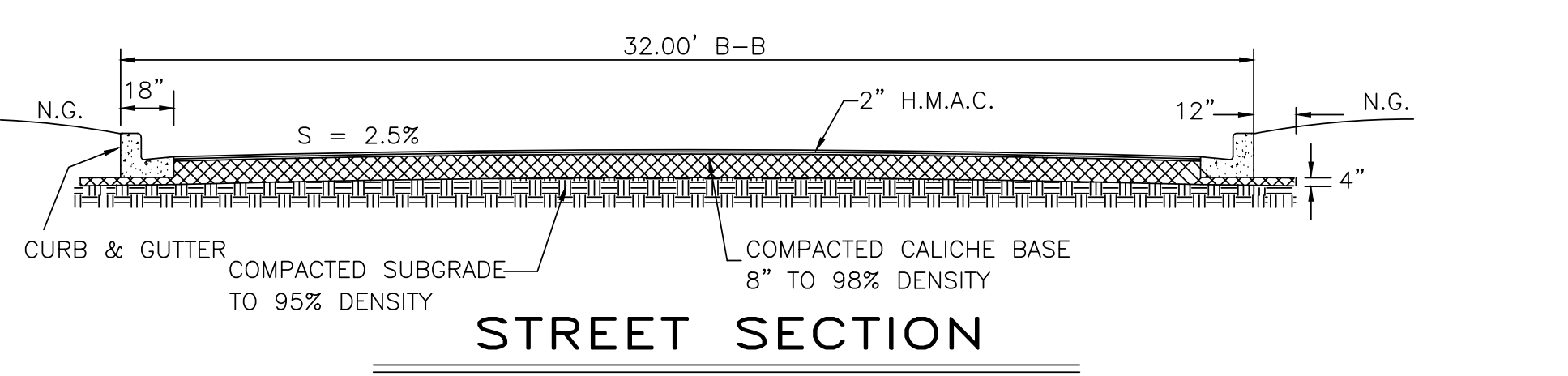
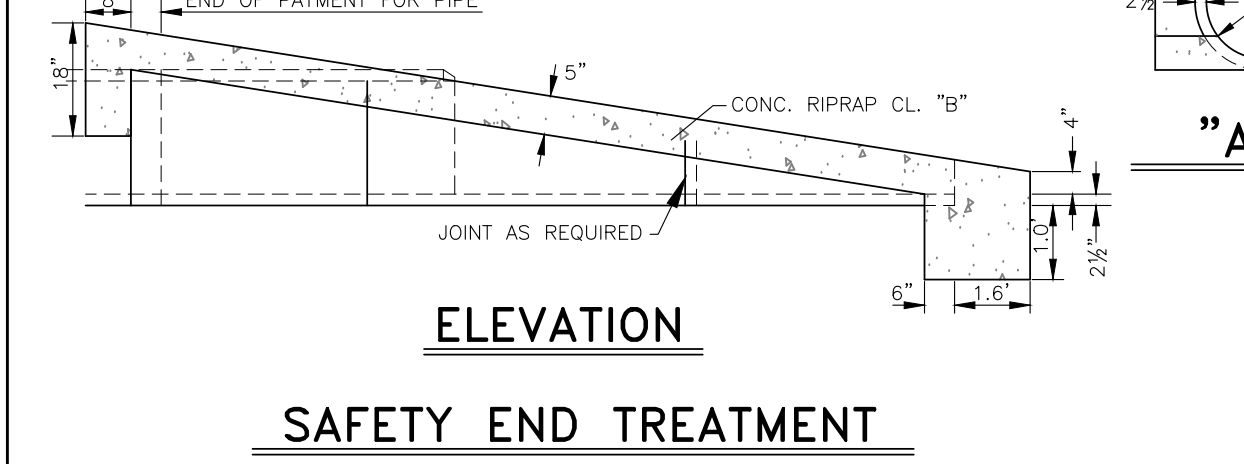
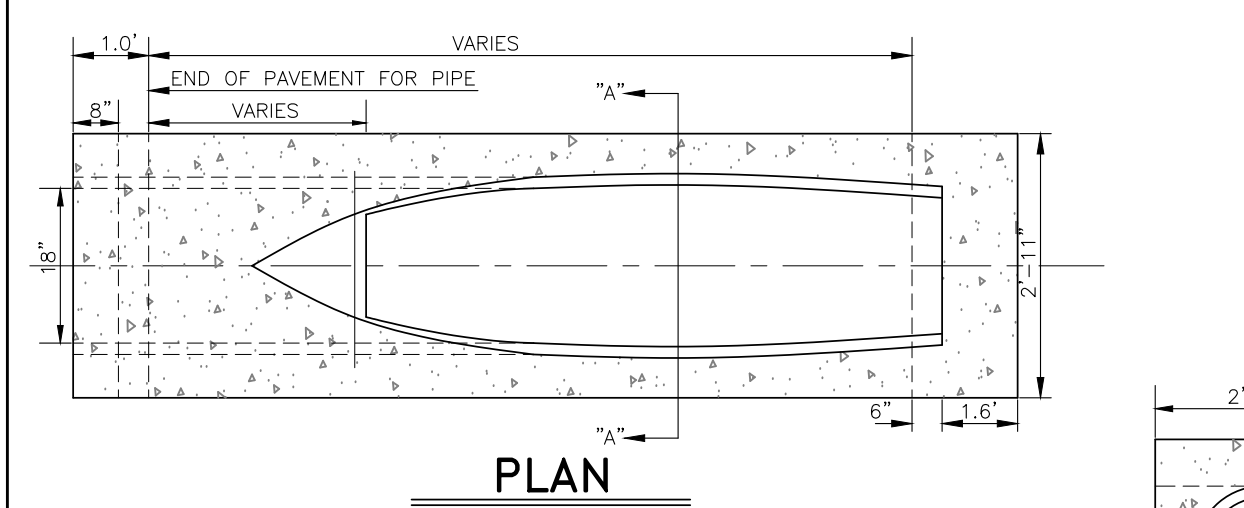
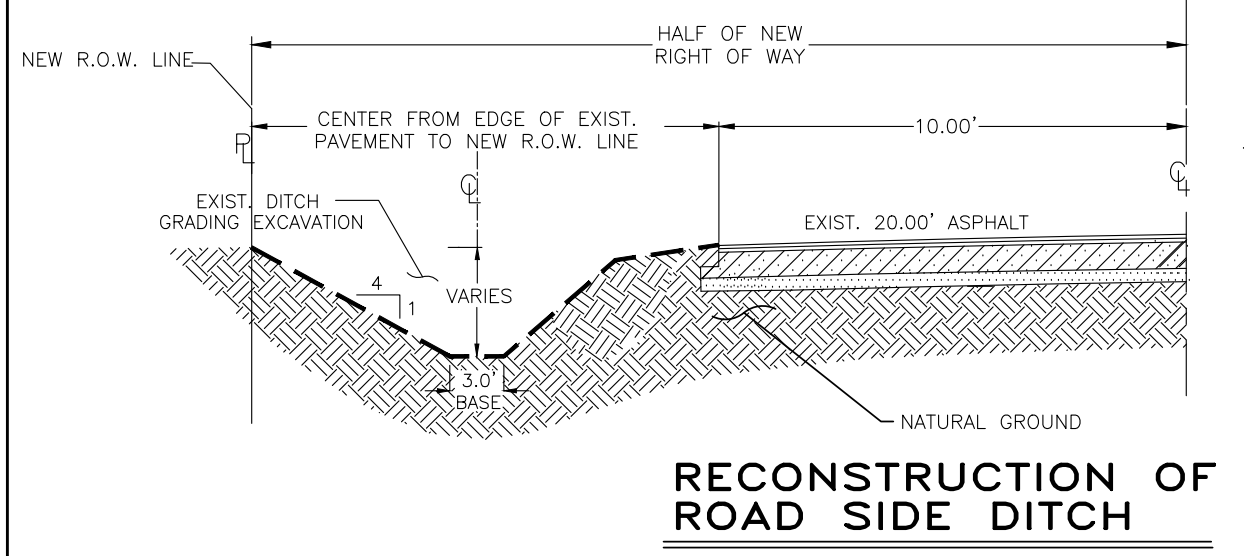
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EDUARDO'S SUBDIVISION No.24
PAVING AND DRAINAGE LAYOUT



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COST ESTIMATE	
WATER DISTRIBUTION:	\$
PAVING IMPROVEMENTS:	\$
DRAINAGE IMPROVEMENTS:	\$
SANITARY SEWER IMPROVEMENTS:	\$
TOTAL:	\$

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