



HIDALGO COUNTY PLANNING DEPARTMENT

T.J. Arredondo, CFM
Director of Planning

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

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 3-24-2020

PROPOSED HIGHLAND MANOR SUBDIVISION PRECINCT No. 1

ENGINEER: RIO DELTA ENGINEERING DEVELOPER: CRISELDA HINOJOSA

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE

NUMBER OF LOTS: 11 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INDUSTRIAL

ESTIMATED NUMBER OF STREETLIGHTS: N/A

FILLING STATIONS: 3

LOCATION DESCRIPTION: NORTH WEST OF MILE 11 NORTH ROAD AND MILE 5 ½ WEST ROAD.

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

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 1-30-2020 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY NATURAL PERCULATION AND SURFACE RUNOFF WILL DRAIN INTO MILE 11 NORTH ROAD.

ROAD R.O.W. DEDICATION: 40.00 FEET ONTO MILE 11 NORTH ROAD & 25.00 FEET ONTO MILE 5 ½ WEST ROAD.

H.C.R.O.W. PRELIMINARY APPROVAL DATE: 3-09-2020 BY, DANNY GUZMAN, PCT. 1 R.O.W. AGENT

H.C.H.D. PRELIMINARY APPROVAL DATE: 3-05-20 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM: OSSF'S

WATER SERVICE PROVIDER: N.A.W.S.C. EXISTING LINE SIZE: 6" LOCATION: MILE 11 NORTH ROAD.

H.C.E.O.C. PRELIMINARY APPROVAL DATE: 3-06-2020 : 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 WESLACO.

Final Approval subject to recommendations other departments

Final Approval with financial guarantee.

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.*

HIGHLAND MANOR SUBDIVISION

DASC INVESTMENTS LLC.
35.73 ACRES
DOC#2258166, M.R.H.C.

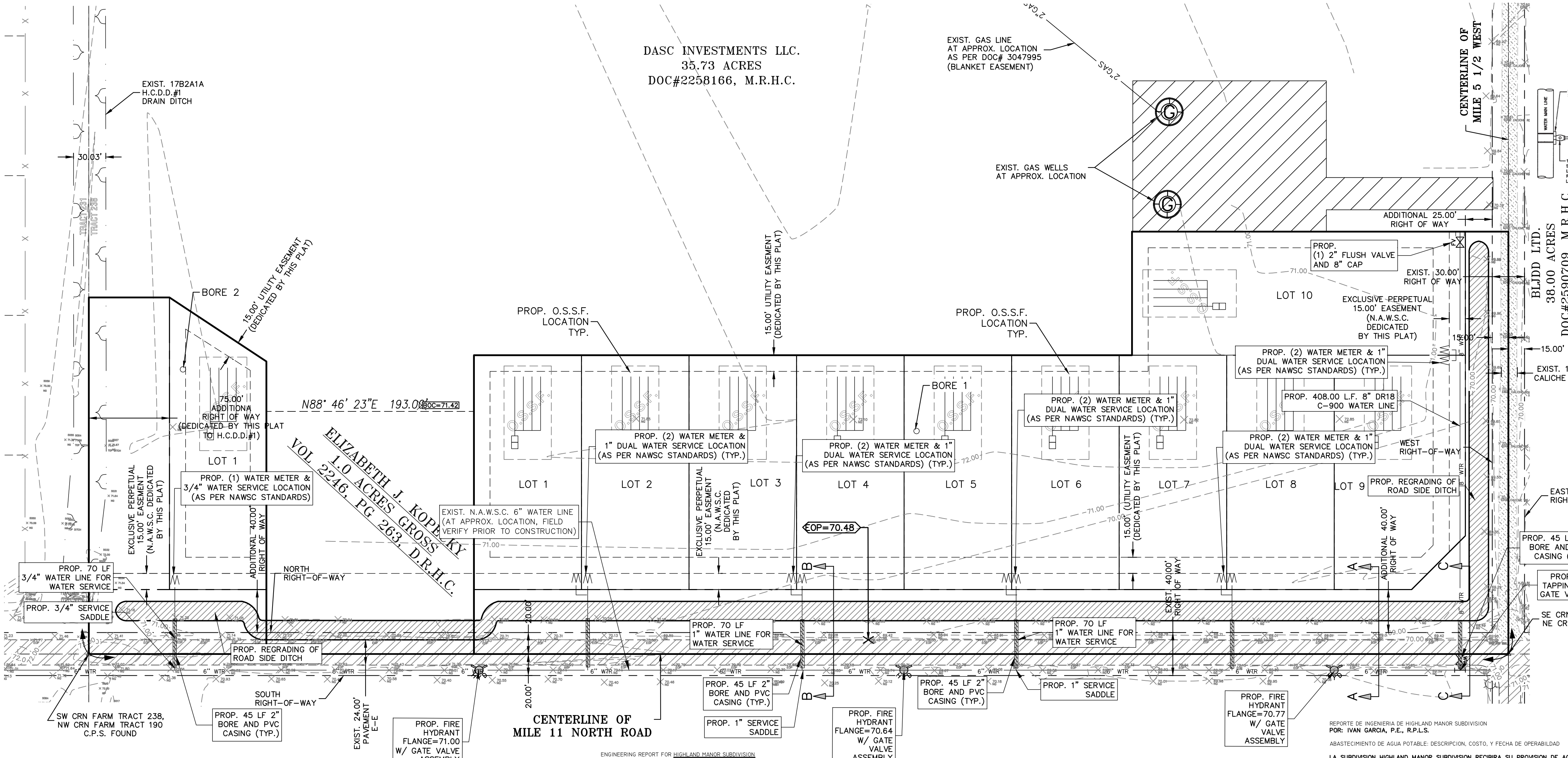
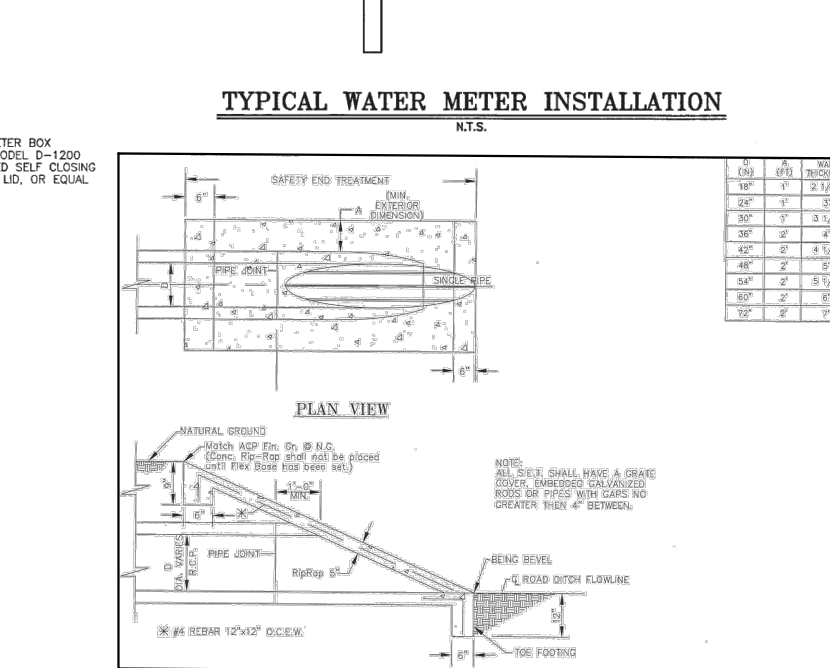
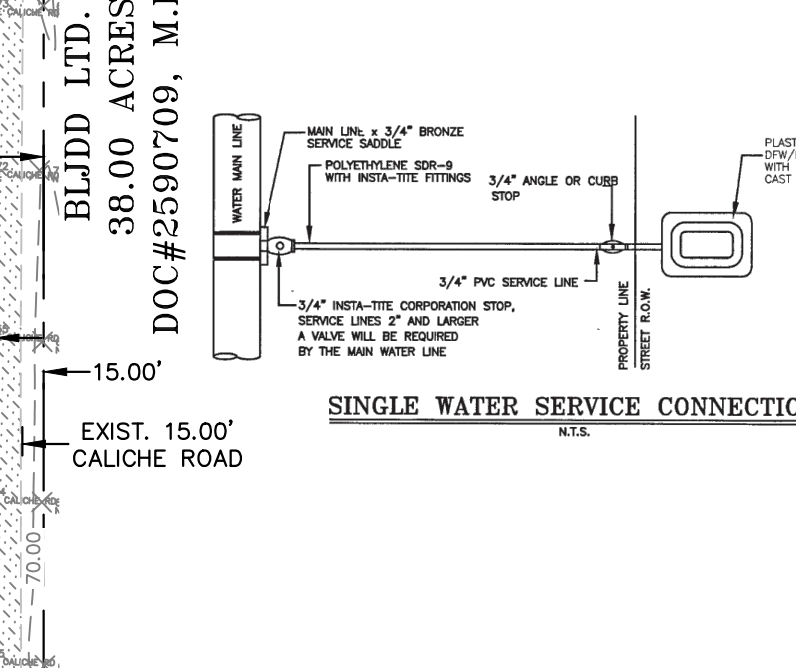
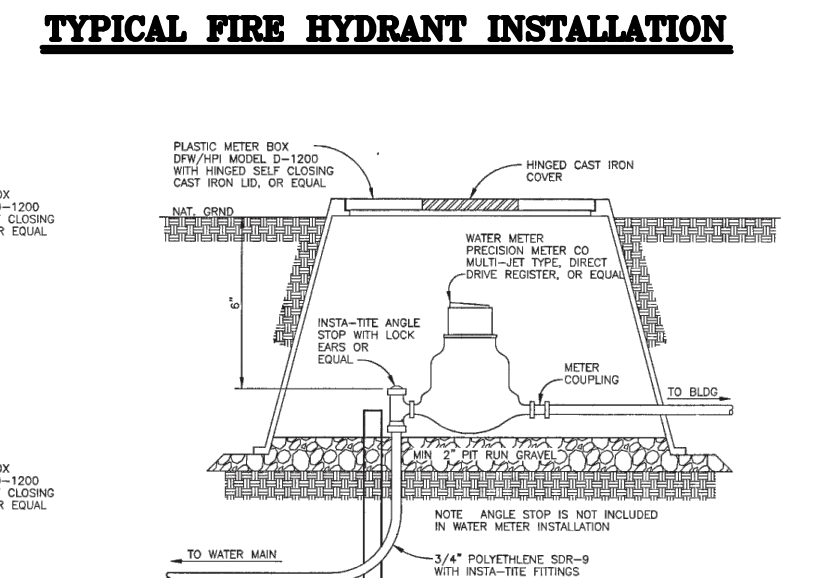
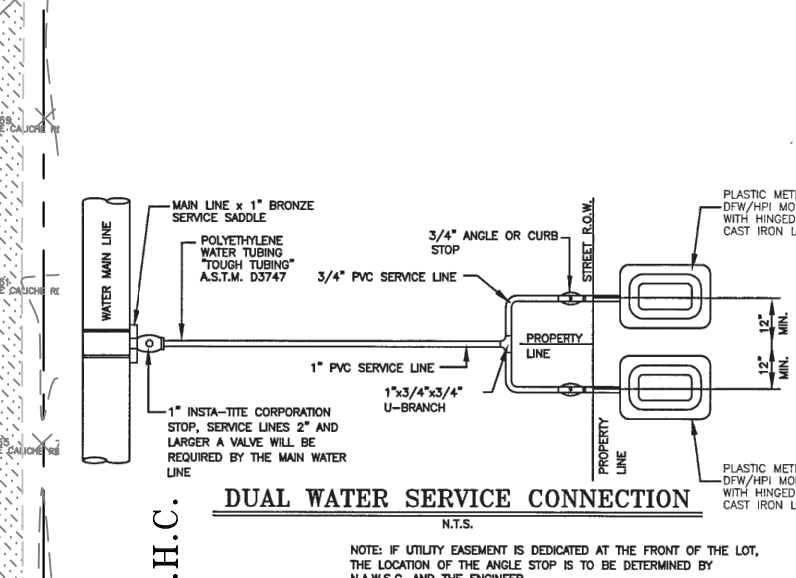
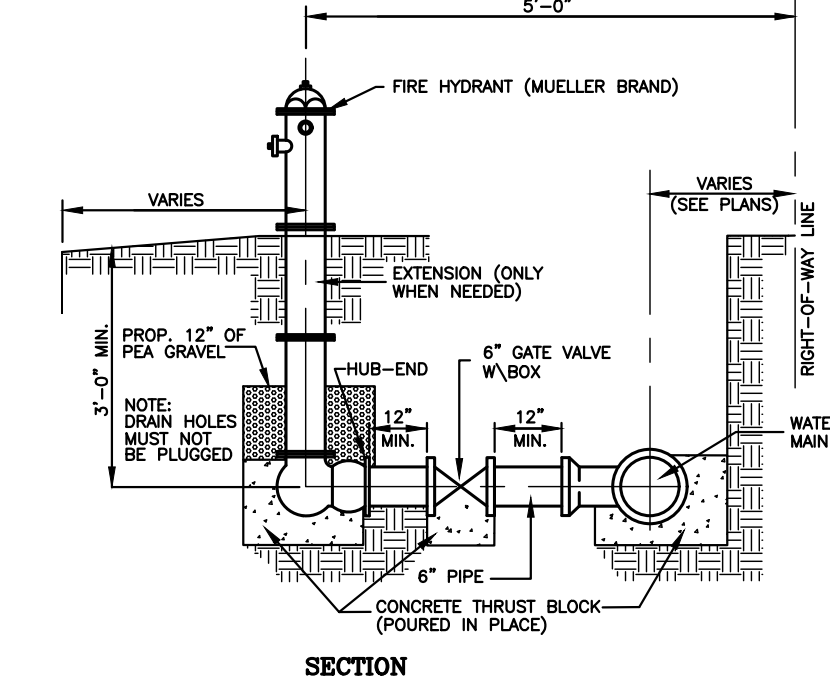
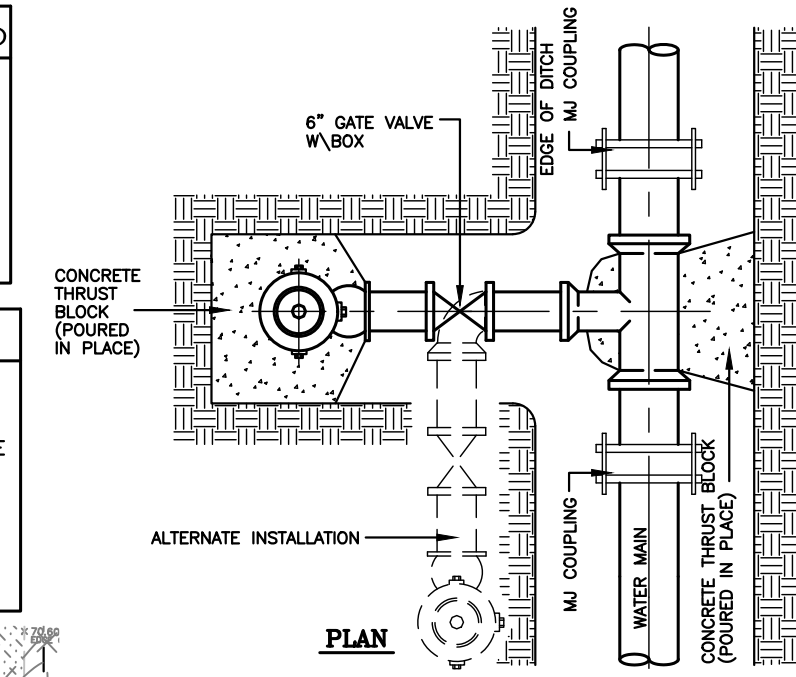
EXIST. GAS LINE
AT APPROX. LOCATION
AS PER DOC# 3047995
(BLANKET EASEMENT)

EXIST. GAS WELLS
AT APPROX. LOCATION

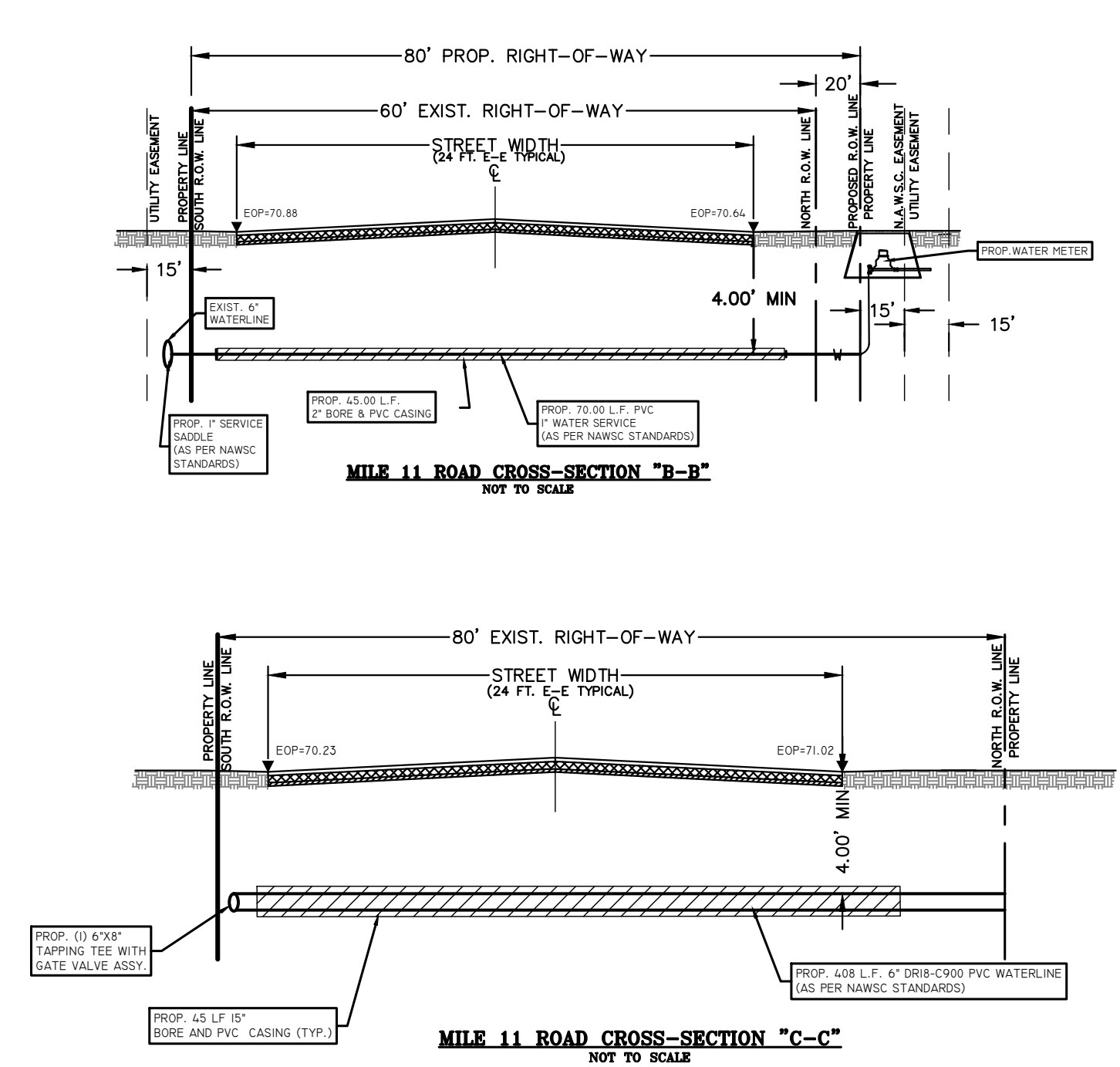
SCALE: 1" = 60'
BEARING OF BASIS
TEXAS STATE PLANE
COORDINATES NAD 83
TEXAS SOUTH ZONE (4205)
WESTERN DATA SYSTEMS NETWORK

ABBREVIATION LEGEND	
R.O.W.	RIGHT-OF-WAY
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
S.W.C.	SOUTHWEST CORNER
F.T.	FAR TRACT
F.M.	FARM-TO-MARKET
U.E.	UTILITY EASEMENT
C.L.	CENTER LINE
L.O.	LOT LINE

LEGEND	
○	SET 1/2 INCH IRON ROD
●	FOUND 1/2 INCH IRON ROD
△	FOUND COTTON PICKER SPINDLE
△	CALCULATED POINT
○	POWER POLE
(XXXX)	MAP RECORD
XXXX	NATURAL GROUND
○	CAPPED IRON ROD SET



- GENERAL NOTES:
- 1.) ALL WATERLINE IMPROVEMENTS AS PER NORTH ALAMO WATER SUPPLY CORPORATION CONSTRUCTION STANDARDS.
 - 2.) THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING WITH ALL APPROPRIATE UTILITY COMPANIES FOR THE LOCATION OF ALL UTILITIES WITHIN CONSTRUCTION AREA.
 - 3.) ALL EXIST. UTILITIES ARE AT APPROXIMATE LOCATIONS.
 - 4.) THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE BASED ON OBSERVATION OF ABOVEGROUND STRUCTURES, LINES SPOTTED BY THE OWNER, AND UTILITY SPOTTING. ACTUAL LOCATION OF THESE UTILITIES MAY VARY, AND ADDITIONAL BURIED UTILITIES MAY BE ENCOUNTERED UPON EXCAVATION.
 - 5.) BEFORE BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CALL FOR UTILITY SPOTTING BY THE APPROPRIATE AGENCY AND VERIFY THE LOCATION OF THESE UTILITIES.
 - 6.) ANY DAMAGE CAUSED TO EXISTING STRUCTURES AND/OR UTILITIES BY THE CONTRACTOR SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CORRECT AT HIS EXPENSE.
 - 7.) ANY DAMAGE TO PROPERTY, OUTSIDE THE CONSTRUCTION ZONE, CAUSED BY THE CONTRACTOR, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CORRECT AT HIS EXPENSE.



ENGINEERING REPORT FOR HIGHLAND MANOR SUBDIVISION
BY IVAN GARCIA, P.E., R.P.L.S.

LEGAL DESCRIPTION:
BLOCK 1 - BEING A 7.06 ACRES TRACT OF LAND OUT OF FARM TRACTS 238, THE WEST AND ADAMS TRACT SUBDIVISION, HIDALGO COUNTY, TEXAS, AS PER MAP RECORDED IN VOLUME 2, PAGES 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS, AND SAID 7.06 ACRES TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:
BLOCK 2 - BEING A 1.19 ACRES TRACT OF LAND OUT OF FARM TRACTS 238, THE WEST AND ADAMS TRACT SUBDIVISION, HIDALGO COUNTY, TEXAS, AS PER MAP RECORDED IN VOLUME 2, PAGES 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS, AND SAID 1.19 ACRES TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

PROPOSED USE:
ALL LOTS ARE VACANT AND WILL BE USED FOR SINGLE FAMILY HOMES.

WATER SUPPLY AND DISTRIBUTION:
THIS SUBDIVISION WILL BE PROVIDED WATER SERVICE BY NORTH ALAMO WATER SUPPLY CORPORATION (N.A.W.S.C.). THE SUBDIVIDER AND N.A.W.S.C. HAVE ENTERED INTO A CONTRACT WHEREBY N.A.W.S.C. HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS. N.A.W.S.C. 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.

N.A.W.S.C. HAS AN EXISTING 6" DIAMETER WATER LINE RUNNING ALONG THE SOUTH SIDE OF MILE 11 NORTH ROAD RIGHT-OF-WAY. N.A.W.S.C. HAS THE WATER SYSTEM FOR HIGHLAND MANOR SUBDIVISION CONSISTS OF (5) 3/4" DIAMETER DUAL SERVICE LINE AND (3) 3/4" DIAMETER SINGLE SERVICE LINE THAT CONNECT INTO THE EXISTING 6" LINE FOR ALL LOTS SERVICES TERMINATE AT THE WATER METER BOX FOR ALL LOTS AND 3 FIRE HYDRANTS HAVE BEEN INSTALLED ON THE EXISTING 6" LINE ON THE SOUTH SIDE OF MILE 11 NORTH ROAD RIGHT-OF-WAY. THE (5) 3/4" DUAL SERVICE, (1) 3/4" SINGLE SERVICE AND THE METER BOXES HAVE ALREADY BEEN INSTALLED. IN ADDITION, THE SUBDIVIDER HAS INSTALLED 3 FIRE HYDRANTS AT A UNIT COST OF \$ THE COST FOR THE CONSTRUCTION OF THE WATER SYSTEM TO THIS SUBDIVISION IS ESTIMATED TO BE \$ THE OWNER OF THIS DEVELOPMENT HAS PAID WATER TAP FEES, WHICH INCLUDE THE WATER METER INSTALLATION AND INSPECTION FEES TO N.A.W.S.C. A TOTAL OF \$ AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUMS REPRESENT SAID INSTALLATIONS, ACQUISITION FEES, AND ALL OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOT IN THE SUBDIVISION TO N.A.W.S.C.

SEWAGE FACILITIES DESCRIPTION, COST AND OPERABILITY DATES:
SEWAGE FROM HIGHLAND MANOR SUBDIVISION WILL BE TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENTS SEPTIC TANK AND A DRAIN FIELD ON ALL LOTS. THE UNDERGROUND PROFESSIONAL ENGINEER HAS EVALUATED THE SUITABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THAT THE SITE IS SUITABLE FOR OSSF. THE REPORT WAS REVIEWED AND APPROVED BY THE HIDALGO COUNTY HEALTH DEPARTMENT. BOTH LOTS HAVE ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.

SOIL EVALUATION REPORT:
THE LOTS IN THE PROPOSED SUBDIVISION ARE AT LEAST 1/2 ACRE IN SIZE. ACCORDING TO THE SOIL SURVEY REPORT PREPARED FOR HIDALGO COUNTY BY THE U.S.D.A. SOIL CONSERVATION SERVICE, THE SITE CONSISTS OF 71.0% OF HIDALGO FINE SANDY LOAM (2S), WITH 0 TO 1% SLOPES. THE SOIL IS WELL DRAINED AND SURFACE RUNOFF IS NEGLECTABLE. PERMEABILITY IS MODERATELY HIGH TO HIGH AND THE WATER CAPACITY IS MODERATE. ADDITIONALLY, IT CONSISTS OF 29.0% OF HIDALGO SANDY CLAY LOAM (28), WITH 0 TO 1% SLOPES. THE SOIL IS WELL DRAINED AND SURFACE RUNOFF IS NEGLECTABLE. PERMEABILITY MODERATELY IS HIGH TO HIGH AND THE WATER CAPACITY IS MODERATE. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE PROPOSED EXCAVATIONS.

THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$1,500.00. FOR A TOTAL OF \$18,500.00 FOR THE LOTS, INCLUDING THE COSTS FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSF'S HAVE BEEN INSTALLED FOR THE LOTS AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF ON

ENGINEER CERTIFICATION:
I CERTIFY THAT THE WATER AND SANITARY SEWER SYSTEM FACILITIES DESCRIBED ABOVE ARE IN COMPLIANCE WITH THE MODEL SUBDIVISION RULES ADOPTED UNDER SECTION 16.343, WATER CODE.
I CERTIFY THAT THE COSTS FOR THE CONSTRUCTED WATER AND SANITARY SEWER FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES:
THESE FACILITIES WILL HAVE A TOTAL COST OF \$ THE OWNER OF THIS DEVELOPMENT WILL PAY WATER TAP FEES, WHICH INCLUDE THE WATER METER INSTALLATION AND INSPECTION FEES, TO N.A.W.S.C. A TOTAL OF \$ AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUMS REPRESENT SAID INSTALLATIONS, ACQUISITION FEES, AND ALL OTHER FEES ASSOCIATED WITH CONNECTING EACH ONE OF THE LOTS IN THE SUBDIVISION TO N.A.W.S.C.

SANITARY SEWER FACILITIES:
THE COST FOR THE CONSTRUCTION OF THE SEPTIC SYSTEM PER LOT WILL BE \$1,500.00.
SEWAGE FACILITIES - SEPTIC SYSTEM IS ESTIMATED FOR A TOTAL OF \$18,500.00 FOR THE ENTIRE SUBDIVISION.

REPORTE DE INGENIERIA DE HIGHLAND MANOR SUBDIVISION
POR: IVAN GARCIA, P.E., R.P.L.S.

ABASTECIMIENTO DE AGUA POTABLE: DESCRIPCION, COSTO, Y FECHA DE OPERABILIDAD

LA SUBDIVISION HIGHLAND MANOR SUBDIVISION RECIBIRA SU PROVISION DE AGUA DE NORTH ALAMO WATER SUPPLY CORPORATION, LA COMPANIA DE AGUA (N.A.W.S.C.), EL DUENO DE LA SUBDIVISION Y N.A.W.S.C. HAN FIRMADO UN CONTRATO POR EL CUAL LA SUBDIVISION RECIBIRA SU PROVISION DE AGUA POR LOS PROXIMOS 30 AÑOS. N.A.W.S.C. HA PRESENTADO DOCUMENTACION PARA DEMOSTRAR A LARGO PLAZO LA CANTIDAD Y CALIDAD DE AGUA ACCESIBLE PARA SERVIR EL FUTURO DESARROLLO DE LA SUBDIVISION.

N.A.W.S.C. TIENE UN CONDUCTO DE AGUA DE 6" PULGADAS DE DIAMETRO QUE PASA POR EL LADO SUR DEL DERECHO DE VIA (RIGHT-OF-WAY) DE LA CARRETERA MILE 11 NORTH. EL SISTEMA REQUERIDO PARA HIGHLAND MANOR SUBDIVISION CONSISTE EN (5) DOS LINEAS DE AGUA DE 3/4" DE DIAMETRO LA CUAL SERA CONECTADA Y (1) UNA LINEA DE AGUA DE 3/4" DE DIAMETRO LA CUAL ESTERA CONECTADA A LA LINEA DE 6" DE DIAMETRO PARA TODOS LOS LOTES, Y TERMINA EN LOS MEDIDORES DE AGUA. 3 HIDRANTES DE AGUA PARA EL DEPARTAMENTO DE BOMBEROS LA CUAL SE CONECTA A LA LINEA DE AGUA DE 6" PULGADAS QUE PASA POR EL LADO SUR DEL DERECHO DE VIA (RIGHT-OF-WAY) DE LA CARRETERA MILE 11 NORTH. EL COSTO DE INSTALACION DEL SISTEMA DE DISTRIBUCION DE AGUA POTABLE DE HIGHLAND MANOR SUBDIVISION SE ESTIMA DE \$ EL DUENO DE LA SUBDIVISION TAMBIEN HA INSTALADO 3 HIDRANTES DE AGUA (FIRE HYDRANT) A UN COSTO DE \$ EL DUENO DE LA SUBDIVISION VA PAGAR LOS CARGOS POR CONECCION DE AGUA, LOS CUALES INCLUYEN LA INSTALACION DEL MEDIDOR DE AGUA Y LAS TARRIFAS DE INSPECCION DE N.A.W.S.C., POR UN TOTAL DE \$ POR MUCHO LO ESTABLECIDO EN EL CONTRATO DE SERVICIO DE AGUA DE 30 AÑOS QUE IMPORTES REPRESENTAN DICHAS INSTALACIONES, HONORARIOS DE ADQUISICION Y TODOS LOS OTROS CARGOS RELACIONADOS CON CONECCION DE LOS LOTES INDIVIDUALES EN EL DESARROLLO DE N.A.W.S.C.

DESCRIPCION DE COSTOS Y FECHA DE INICIO PARA FACILITAR EL DISEÑO PARA LA SUBDIVISION:
SE INSTALARAN FOSAS SEPTICAS PARA HIGHLAND MANOR SUBDIVISION. LAS FOSAS SEPTICAS CONSISTEN DE UN TANQUE SEPTICO DE MODELO DOBLE Y DE UN CAMPO DE DRENAJE PARA TODOS LOS LOTES. EL INGENIERO AUTOR DE ESTE DOCUMENTO HA EVALUADO EL AREA DONDE SE ENCUENTRA 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.

EL LOTE EN LA SUBDIVISION MIDE MINIMO MEDIO ACRE, DE ACUERDO CON EL INFORME DE LA ENCUESTA DE SUELOS, PREPARADO PARA EL CONDADO DE HIDALGO POR LA U.S.D.A., SERVICIO DE CONSERVACION DE SUELOS, EL SITO CONSTA DE 71.0% DE HIDALGO MARGA ARENOSA FINA (2S), CON 0 A 1% DE PENDIENTE. ESTOS SUELOS SE CONSIDERAN BIEN DRENADOS EN LOS QUE LA ESCORRIDA SUPERFICIAL ES DESPRECIABLE, LA PERMEABILIDAD, ES MODERADAMENTE ALTA-ALTA Y LA CAPACIDAD DE AGUA ES MODERADA. EL SITO TAMBIEN CONSISTE DE 29.0% DE HIDALGO MARGA ARCILLOSA ARENOSA (28), CON 0 A 1% DE PENDIENTE. ESTOS SUELOS SE CONSIDERAN BIEN DRENADOS EN LOS QUE LA ESCORRIDA SUPERFICIAL ES DESPRECIABLE, LA PERMEABILIDAD, ES MODERADAMENTE ALTA-ALTA Y LA CAPACIDAD DE AGUA ES MODERADA.

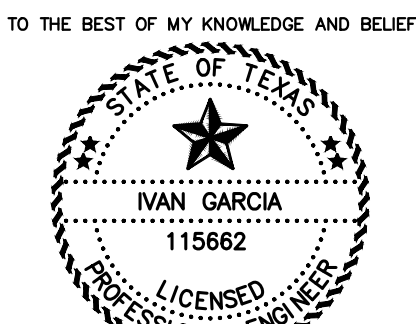
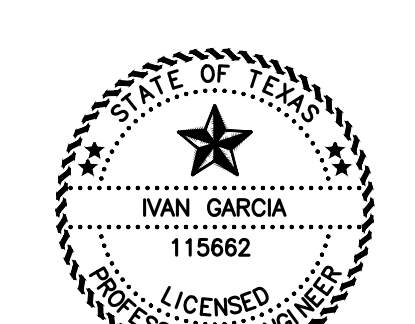
EL COSTO ESTIMADO PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS PARA EL LOTE ES \$1,500.00 DOLARES, EN UN COSTO TOTAL POR DOS FOSAS SEPTICAS DE \$18,500.00 INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS TODAS LAS FOSAS SEPTICAS HAN SIDO INSTALADAS EN EL PROCESO DE LA APROBACION FINAL. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECCIONADO TODAS LAS FOSAS SEPTICAS Y HA APROBADO LA INSTALACION DE LAS FOSAS SEPTICAS DESDE

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

AGUA:
EL SISTEMA/SERVICIO DE AGUA TENDRA UN COSTO DE \$ EL DUENO DE LA SUBDIVISION VA PAGAR LOS CARGOS POR CONECCION DE AGUA, LOS CUALES INCLUYEN LA INSTALACION DEL MEDIDOR DE AGUA Y LAS TARRIFAS DE INSPECCION DE N.A.W.S.C., POR UN TOTAL DE \$18,500.00 POR MUCHO LO ESTABLECIDO EN EL CONTRATO DE SERVICIO DE AGUA DE 30 AÑOS QUE IMPORTES REPRESENTAN DICHAS INSTALACIONES, HONORARIOS DE ADQUISICION Y TODOS LOS OTROS CARGOS RELACIONADOS CON CONECCION DE LOS LOTES INDIVIDUALES EN EL DESARROLLO DE N.A.W.S.C.

DRENAJE:
EL COSTO ESTIMADO PARA LA INSTALACION DE DOS SISTEMAS INDIVIDUALES DE FOSAS SEPTICAS PARA LOS LOTES SON \$1,500.00 DOLARES O \$18,500.00 POR LOTE, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA.

I, IVAN GARCIA, HEREBY ACKNOWLEDGE THAT THE ABOVE TRANSLATION FROM ENGLISH TO SPANISH, IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



RIO DELTA ENGINEERING
FIRM REGISTRATION No. F-7628
SURVEY FIRM No. 10194027
921 S. 10TH AVENUE EDINBURG, TEXAS 78539
(TEL) 956-380-5152 (FAX) 956-380-5083

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF IVAN GARCIA, P.E. 115662 ON JANUARY, 2020. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

ISSUED FOR:
PRELIMINARY

UTILITY AND DRAINAGE LAYOUT
HIGHLAND MANOR SUBDIVISION
WESLACO, TEXAS
HIDALGO COUNTY

ENGINEER:
IVAN GARCIA P.E., R.P.L.S.

SURVEYOR:
IVAN GARCIA P.E., R.P.L.S.

CHECKED:
IVAN GARCIA P.E., R.P.L.S.

DRAWN:
OSCAR ALARCON JR.

SCALE:
1"=60'

DATE:
JANUARY, 2020

PROJECT:
SUB 19 027

REVISIONS:

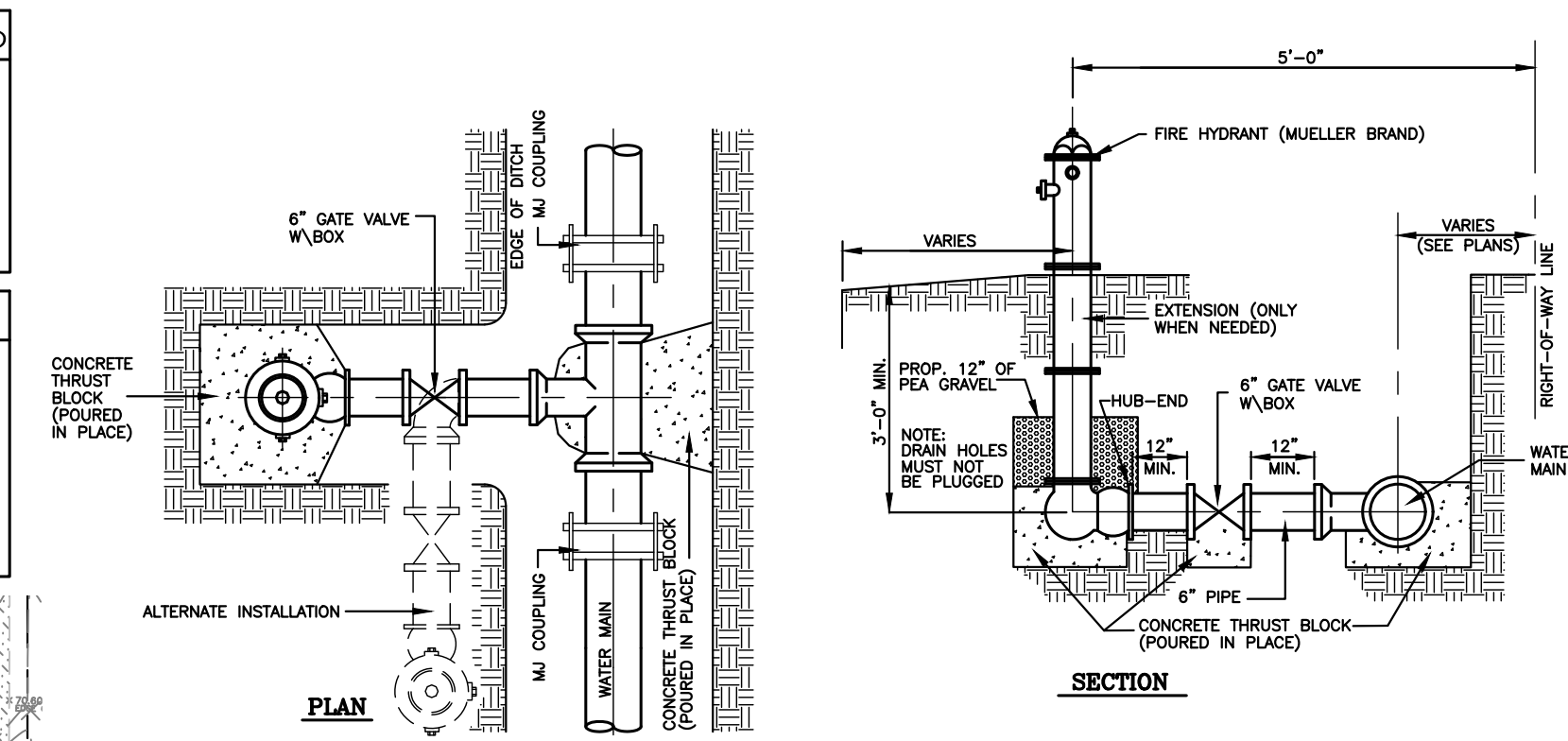
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3 OF 3

HIGHLAND MANOR SUBDIVISION

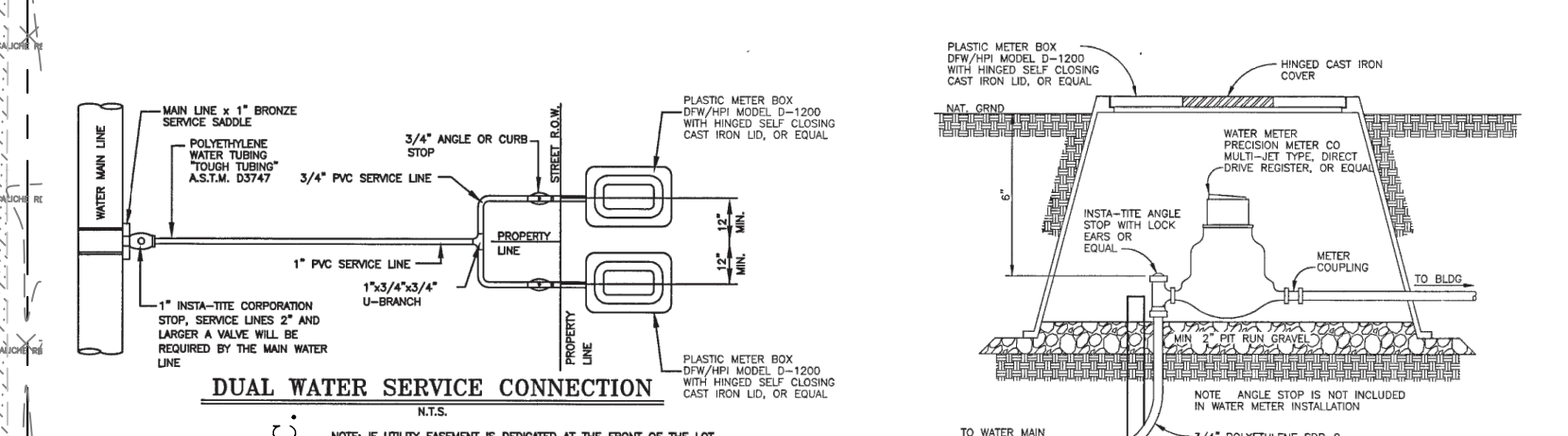
SCALE: 1" = 60'
 BEARING OF BASIS
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ABBREVIATION LEGEND	
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P.O.B.	POINT OF BEGINNING
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U.E.	UTILITY EASEMENT
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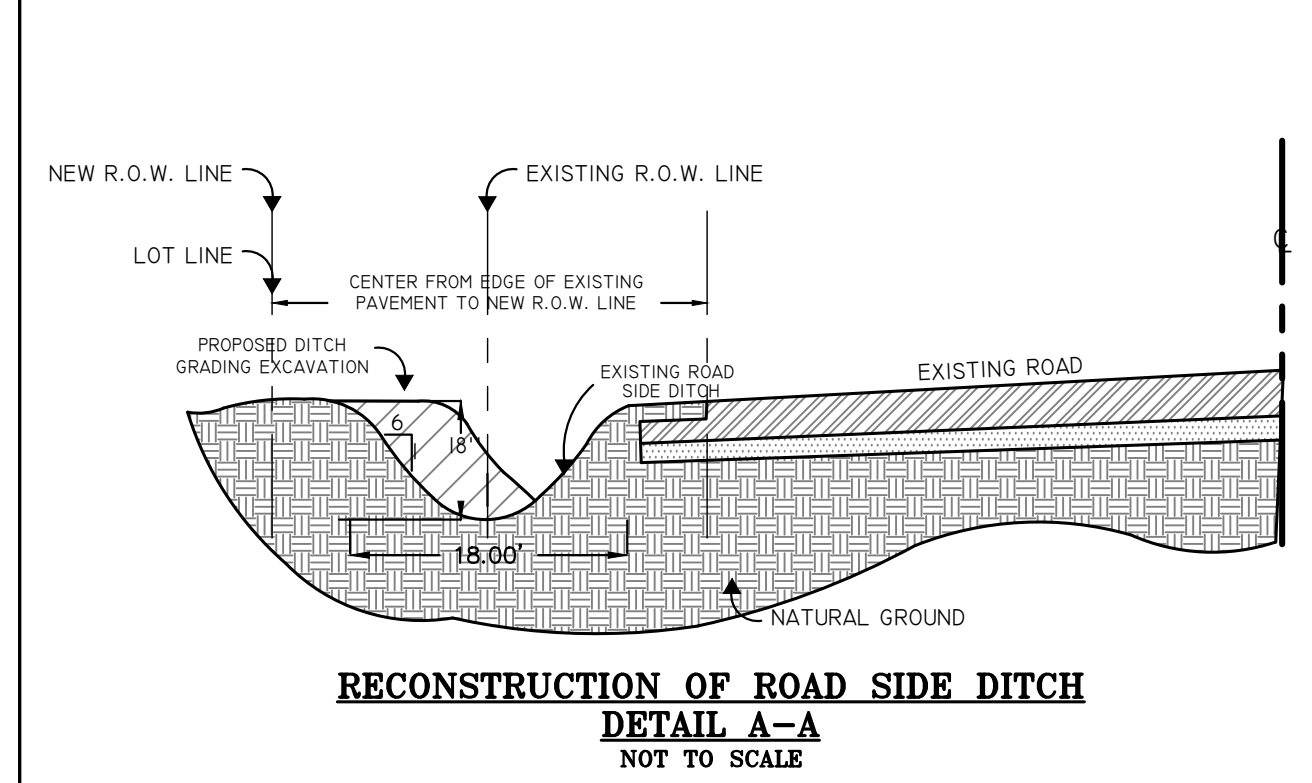
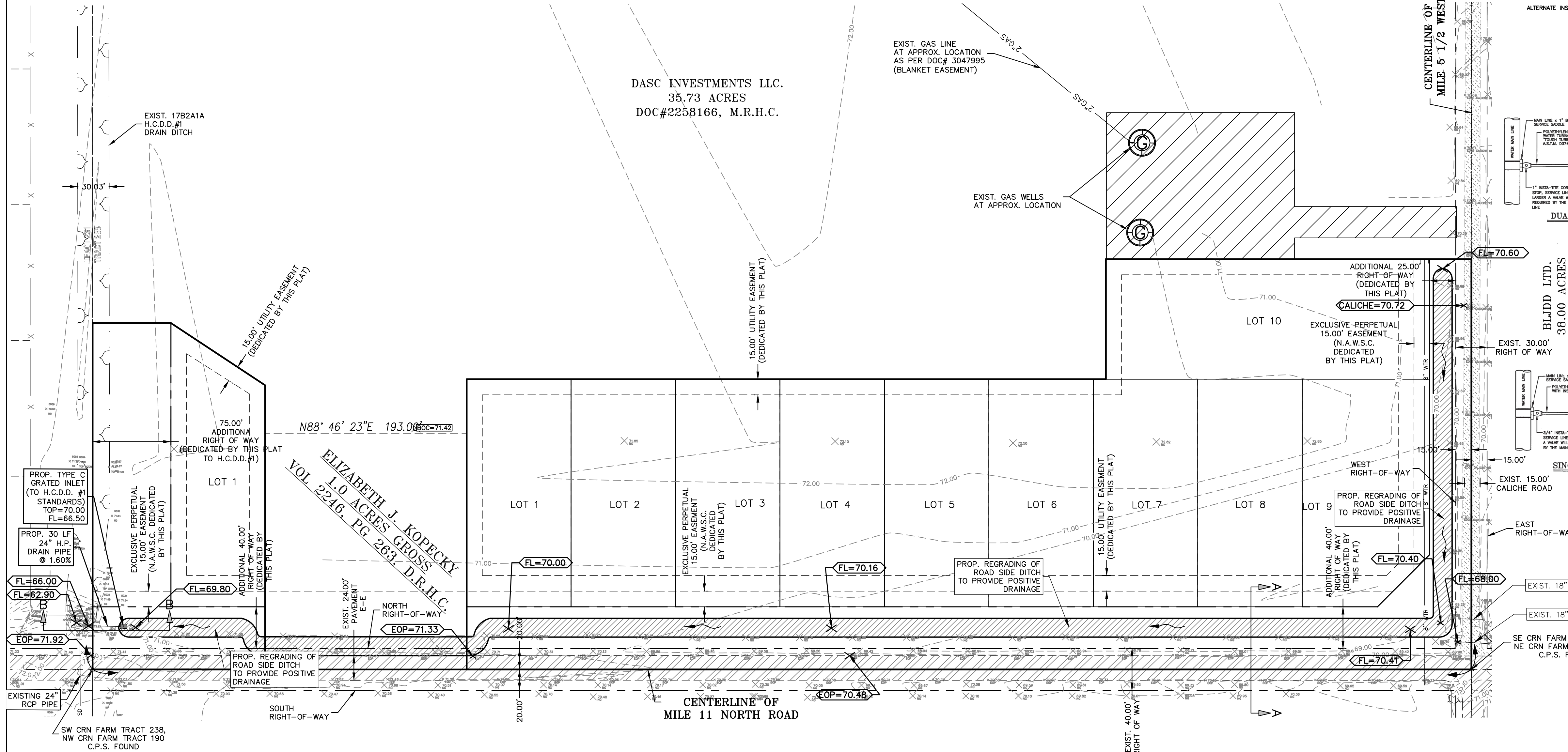
LEGEND	
○	SET 1/2 INCH IRON ROD
●	FOUND 1/2 INCH IRON ROD
○	FOUND COTTON PICKER SPINDLE
△	CALCULATED POINT
75	POWER POLE
(XXXX)	MAP RECORD
XXXXX	NATURAL GROUND
○	CAPPED IRON ROD SET



TYPICAL FIRE HYDRANT INSTALLATION

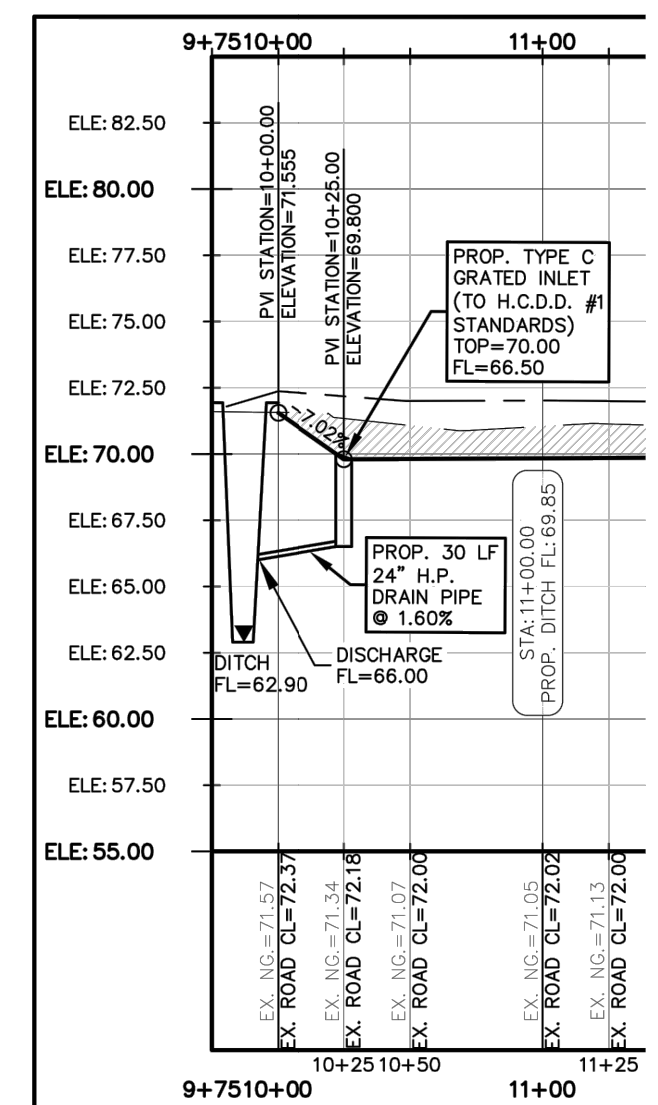


TYPICAL WATER METER INSTALLATION



DRAINAGE VOLUME LEGEND

VOLUME REQUIRED = 12,160 CF
 VOLUME PROVIDED = 13.50 SF X 1590 FT = 21,465 CF (177% OF REQUIRED) FOR SUBDIVISION



DRAINAGE CROSS-SECTION "B-B"
 NOT TO SCALE

DRAINAGE REPORT

HIGHLAND MANOR SUBDIVISION IS A PROPOSED 11 LOT RESIDENTIAL SUBDIVISION, SAME BEING A 8.25 ACRES OUT OF FARM TRACTS 238 OF THE WEST AND ADAMS TRACT SUBDIVISION, HIDALGO COUNTY, TEXAS, VOLUME 2, PAGE 34-37, MAP RECORDS OF HIDALGO COUNTY, TEXAS. THESE LOTS WILL BE USED FOR SINGLE-FAMILY HOMES.

THE SUBDIVISION IS IN ZONE "X" OF THE FLOOD INSURANCE RATE. AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN ACCORDING TO THE FEMA'S FLOOD INSURANCE RATE MAP COMMUNITY PANELS NO. 480334 0450 C DATED: JUNE 6, 2000

ACCORDING TO THE SOIL SURVEY REPORT PREPARED FOR HIDALGO COUNTY BY THE U.S.D.A. SOIL CONSERVATION SERVICE, THE SITE CONSISTS OF 71.0% OF HIDALGO FINE SANDY LOAM (S), WITH 0 TO 1% SLOPES. THE SOIL IS WELL DRAINED AND SURFACE RUNOFF IS NEGLIGIBLE. PERMEABILITY IS MODERATELY HIGH TO HIGH AND THE WATER CAPACITY IS MODERATE. ADDITIONALLY, IT CONSISTS OF 29.0% OF HIDALGO SANDY CLAY LOAM (S), WITH 0 TO 1% SLOPES. THE SOIL IS WELL DRAINED AND SURFACE RUNOFF IS NEGLIGIBLE. PERMEABILITY MODERATELY IS HIGH TO HIGH AND THE WATER CAPACITY IS MODERATE. THESE SOILS ARE CLASSIFIED AS GROUP (B). PLEASE SEE THE ATTACHED TABLES FOR THE ENGINEERING, PHYSICAL AND CHEMICAL PROPERTIES OF THESE SOILS.

EXISTING RUNOFF SHEET FLOWS OVERLAND IN A SOUTHEASTERLY DIRECTION AND OVERFLOWS TO THE EXISTING ROAD SIDE DITCH ON THE NORTH RIGHT OF WAY OF MILE 11 NORTH IN FRONT OF THIS SUBDIVISION. TO FOLLOW THE DRAINAGE PATTERNS OF THE AREA IN AN EASTERLY DIRECTION WITH OUTFALL TO THE 70' DRAIN DITCH, THEN CONVEYED TO THE EAST LATERAL DRAIN, THEN CONVEYED TO THE MAIN FLOOD WATER CHANNEL, AND FINAL OUTFALL TO THE LAGUNA MADRE. USING THE RATIONAL METHOD, WE HAVE DETERMINED THAT A 10-YR RAINFALL EVENT WILL GENERATE APPROXIMATELY 419 CFS OF STORM RUNOFF. WE HAVE ALSO USED THE RATIONAL METHOD TO DETERMINE THAT THE IMPROVED SITE WILL GENERATE AN ESTIMATED 5.68 CFS OF RUNOFF 50-YR RAINFALL EVENTS RESPECTIVELY. THE IMPROVED SITE WILL HAVE AN APPROXIMATE INCREASE OF 1.49 CFS OF STORM RUNOFF.

IN ACCORDANCE WITH THE CITY OF WESLACO AND COUNTY'S DRAINAGE REQUIREMENTS, WE HAVE CALCULATED THAT APPROXIMATELY A TOTAL OF 12,160 CF OR 0.279 AC-FT, WILL NEED TO BE DETAINED FOR THE COMPLETE DEVELOPMENT OF THE SUBDIVISION FOR A 50-YR RAINFALL EVENT. STORM WATER WILL BE DETAINED IN THE GREEN AREAS OF THE PROPOSED LOTS AND BY RE-GRADING AND EXCAVATING THE EXISTING ROADSIDE DITCH ALONG THE FRONTAGE OF THE PROPERTY ALONG MILE 11 NORTH, TO FLOW IN AN WESTERLY DIRECTION WITH OUTFALL TO THE 1782AIA DRAIN DITCH (WHICH BELONGS TO HIDALGO AND CAMERON COUNTIES IRRIGATION DISTRICT 9, AND MAINTAINED BY HIDALGO COUNTY DRAINAGE DISTRICT 1), THEN CONVEYED TO THE EAST LATERAL DRAIN, THEN CONVEYED TO THE MAIN FLOOD WATER CHANNEL, AND FINAL OUTFALL TO THE LAGUNA MADRE. TABLES AND CALCULATIONS, ARE ATTACHED.

SUBDIVIDER CERTIFICATION

I, 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:

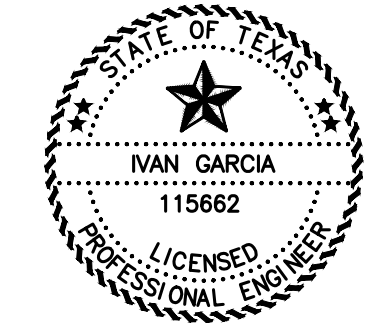
I, DAVID GARCIA, SUBDIVIDER OF HIGHLAND MANOR SUBDIVISION HEREBY CERTIFY SEWER PERMITS ARE REQUIRED PRIOR TO BUILDING ON ANY LOT AND THAT AN ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUALITY & QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT TO HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

DAVID GARCIA
 DASC INVESTMENTS, L.L.C.
 OWNER

STATE OF TEXAS
 COUNTY OF HIDALGO:

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED _____, KNOWN TO ME BY THE PERSON (S) WHOSE NAME (S) IS (ARE) _____, SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR PURPOSES AND CONSIDERATION THEREIN STATED, GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS _____ DAY OF _____, 20____.

NOTARY PUBLIC
 MY COMSTUARY EXPIRES: _____



IVAN GARCIA, P.E., R.P.L.S.

DATE

RIO DELTA ENGINEERING
 FIRM REGISTRATION No. F-7628
 SURVEY FIRM No. 10194027
 921 S. 10TH AVENUE EDINBURG, TEXAS 78539
 (TEL) 956-380-5152 (FAX) 956-380-5083

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF IVAN GARCIA, P.E. 115662 ON JANUARY, 2020. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

ISSUED FOR: **PRELIMINARY**

DRAINAGE LAYOUT
 HIGHLAND MANOR SUBDIVISION
 WESLACO, TEXAS
 HIDALGO COUNTY

ENGINEER: IVAN GARCIA P.E., R.P.L.S.
 SURVEYOR: IVAN GARCIA P.E., R.P.L.S.
 ONE-DRAWN: IVAN GARCIA P.E., R.P.L.S.
 DRAWN: OSCAR ALARCON JR.
 SCALE: 1"=60'
 DATE: JANUARY, 2020
 PROJECT: SUB 19 027
 REVISIONS:
 PAGE NO. SHT 4