



Anthony Uresti,
Director of Planning

HIDALGO COUNTY PLANNING DEPARTMENT

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

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 9-29-2026

PROPOSED SERENITY OAKS SUBDIVISION PRECINCT No. 4

ENGINEER BENAVIDES ENGINEERING DEVELOPER: SERENITY OAKS DEVELOPMENT, LLC.

☐ PRELIMINARY APPROVAL ☒ FINAL APPROVAL ☐ FINAL APPROVAL WITH FINANCIAL GUARANTEE ☐ WITH VARIANCE

NUMBER OF LOTS: 24 ☒ *SINGLE FAMILY ☐ *MULTI-FAMILY ☐ COMMERCIAL ☐ INSTITUTIONAL

NUMBER OF STREETLIGHTS: 7

FILLING STATIONS: 5

LOCATION DESCRIPTION: WEST OF CESAR CHAVEZ ROAD APPROXIMATELY ¼ MILE SOUTH OF ALBERTA ROAD.

SUBDIVISION LIES WITHIN THE: ☒ RURAL AREA OF THE COUNTY.

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 09-03-2025 PROPERTY LIES WITHIN FLOOD ZONE: "B" AS PER FEMA.

DRAINAGE DESIGN: DRAINAGE WILL BE PROVIDED BY STORM SEWER SYSTEM AND DETENTION WILL BE PROVIDED BY ONSITE DETENTION WITH A DISCHARGE BLEEDER LINE TO THE DRAIN DITCH

SEWER SYSTEM: ☒ OSSF'S HAVE BEEN INSTALLED.

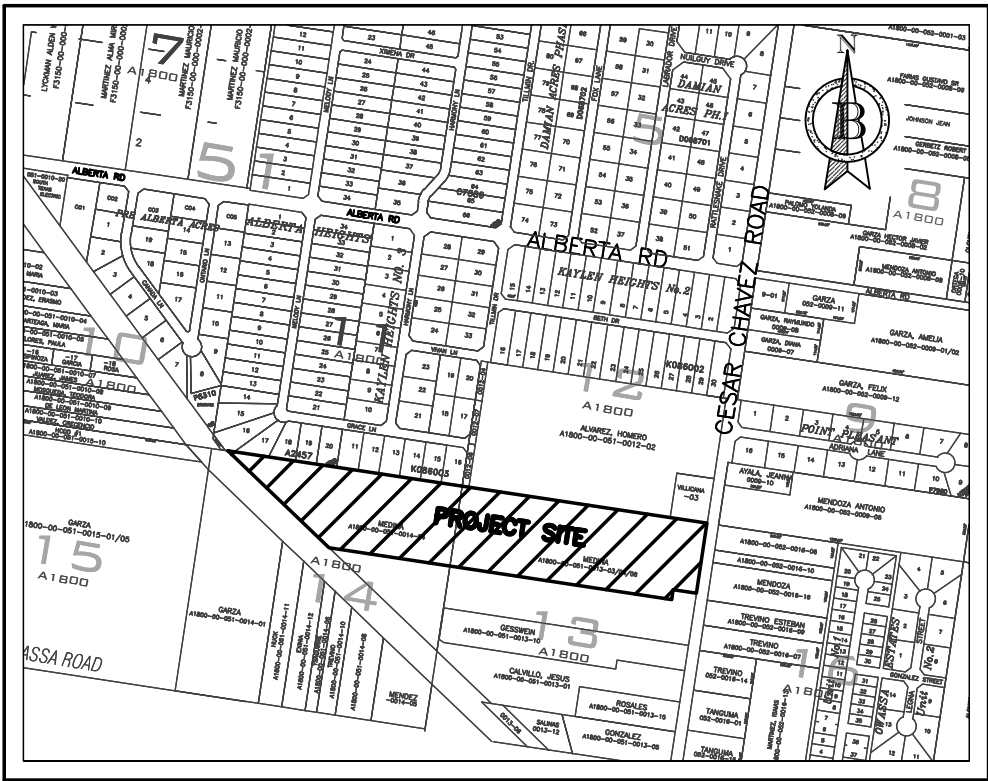
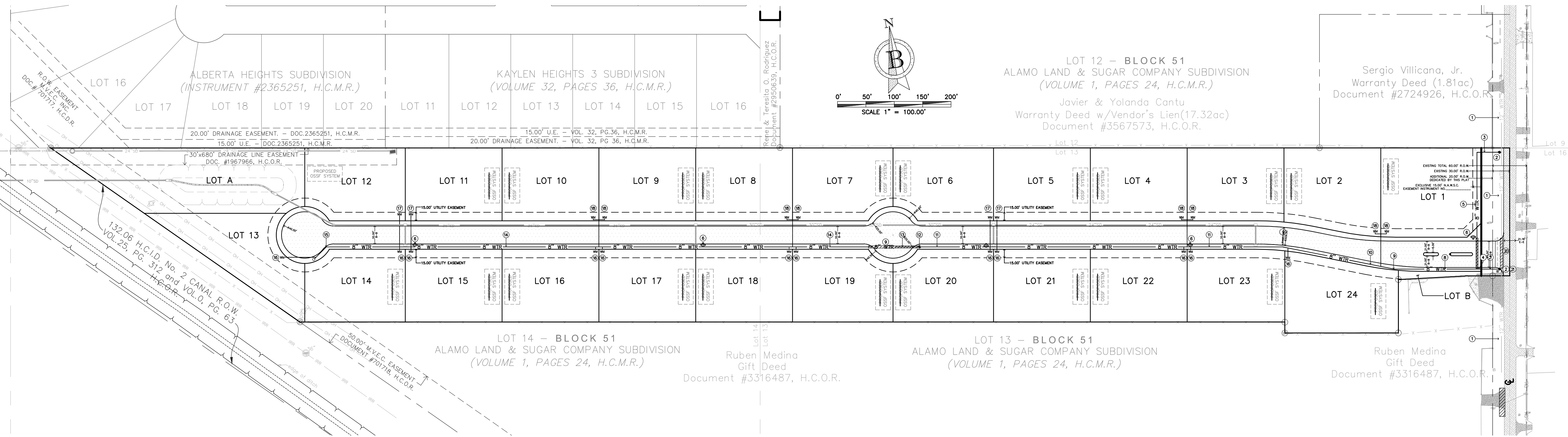
WATER SERVICE PROVIDER: N.A.W.S.C.

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

☒ 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.



LOCATION MAP
SCALE : 1" = 1000'
LOCATION OF SUBDIVISION WITH RESPECT TO THE EXTRATERRITORIAL JURISDICTION OF A MUNICIPALITY:
SERENITY OAKS SUBDIVISION IS LOCATED ON ALONG THE WEST RIGHT OF WAY OF CESAR CHAVEZ ROAD, APPROXIMATELY 1,200 LINEAR FEET NORTH OF OWASSA ROAD. THE ONLY NEARBY MUNICIPALITY IS THE CITY OF EDINBURG ACCORDING TO THE OFFICIAL MAP IN THE OFFICES OF THE SECRETARY OF THE CITY OF EDINBURG (POPULATION 78,000 – 2020 CENSUS) AND HIDALGO COUNTY PLANNING DEPARTMENT. THIS SUBDIVISION HAS BEEN REMOVED FROM THE 2 MILE ETJ OF THE CITY OF EDINBURG. THE SUBDIVISION NOW LIES IN THE COUNTY RURAL AREA, PRECINCT. NO. 4.

FINAL WATER AND SEWER ENGINEERING REPORT

WATER SUPPLY, DESCRIPTION, COST, AND OPERABILITY DATE:
SERENITY OAKS LANDING SUBDIVISION HAS BEEN PROVIDED WITH POTABLE WATER BY NORTH ALAMO WATER SUPPLY CORPORATION (N.A.W.S.C.). THE SUBDIVIDER AND N.A.W.S.C. HAVE ENTERED INTO A CONTRACT IN WHICH N.A.W.S.C. HAS PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND 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 ONE EXISTING 12" WATER LINE ALONG THE WEST SIDE OF CESAR CHAVEZ WITHIN THE PUBLIC RIGHT-OF-WAY. FROM THIS PREVIOUSLY MENTIONED 12" WATERLINE, ONE (1) PROPOSED 8" WATER LINE WILL BE INSTALLED VIA TWO (2) TAPS AND TEES, AND EXTENDED THROUGH OUT THE PROPOSED ROW OF PROPOSED PRIVATE STREET.

WATER DISTRIBUTION FOR THE SERENITY OAKS SUBDIVISION CONSISTS OF FOUR (4) 1" DIAMETER DUAL SERVICE LINES, TWELVE (12) 3/4" SINGLE SERVICE LINES (NEAR) AND FOUR (4) 3/4" SINGLE SERVICE LINES (FAR). THE 8" WATERLINE, THE DUAL SERVICE LINES, THE METER BOXES & LOOKS HAVE ALREADY BEEN INSTALLED, AT A TOTAL COST OF \$_____ OR \$_____ PER LOT. IN ADDITION, THE SUBDIVIDER HAS PAID N.A.W.S.C. THE SUM OF \$_____ WHICH COVERS THE \$_____ COST PER LOT AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUM REPRESENTS THE TOTAL COST OF WATER METER, METER ACQUISITION FEES, AND ALL OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO N.A.W.S.C. UPON REQUEST BY THE LOT OWNER, N.A.W.S.C. WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE SUBDIVIDER HAS INSTALLED 5 FIRE HYDRANTS AT A UNIT COST OF \$_____. FOR A TOTAL COST OF \$_____. THE ENTIRE WATER FACILITIES HAVE BEEN APPROVED AND ACCEPTED BY N.A.W.S.C. AND SAID DISTRIBUTION SYSTEM IS OPERABLE AS OF THE DATE OF THE RECORDING OF THE PLAT.

SEWAGE FACILITIES DESCRIPTION: COST AND OPERABILITY DATES
SEWAGE FROM SERENITY OAKS 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 EACH LOT. DUAL COMPARTMENTS SEPTIC TANK AND A DRAIN FIELD ON EACH LOT. 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. EACH LOT HAS ADEQUATE AREA FOR A REPLACEMENTS DRAIN FIELD.

EACH LOT IN THE PROPOSED SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOUL SURVEY BOOK INDICATED A SANDY CLAY LOAM SOIL FOR THE AREA. THE SOIL IS A UNIFORM (28) SANDY CLAY LOAM EXTENDING UP TO 36" 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 OF THE INSTALLATION OF THE SEPTIC SYSTEM ON AN INDIVIDUAL LOT WAS \$_____ INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSF'S HAVE BEEN INSTALLED AND FINALIZED AT THIS TIME AT A TOTAL COST OF \$_____ THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF.

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 COST TO INSTALL THE WATER DISTRIBUTION SYSTEM AND ONSITE 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 \$_____ WHICH EQUALS TO \$_____ PER LOT.

SEWAGE FACILITIES – SEPTIC SYSTEM HAS BEEN INSTALLED AT A TOTAL COST OF \$_____ PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$_____ FOR THE ENTIRE SUBDIVISION.

GERARDO BENAVIDES, P.E.
LICENSED PROFESSIONAL ENGINEER
No.140950 STATE OF TEXAS

DATE _____

PROVISIÓN DE AGUA: DESCRIPCIÓN, GASTOS Y FECHAS DE INICIO

SERENITY OAKS SUBDIVISION HA SIDO PROVEIDA DE AGUA POTABLE POR NORTH ALAMO WATER SUPPLY CORP. (N.A.W.S.C.). EL DUEÑO Y N.A.W.S.C. HAN HECHO UN CONTRATO EN CUAL N.A.W.S.C. HA PROMETIDO PROPORCIONAR SUFFICIENTE AGUA A LA SUBDIVISION DURANTE AL MENOS 30 AÑOS Y N.A.W.S.C. HA PROPORCIONADO LA DOCUMENTACIÓN PARA ESTABLECER SUFFICIENTEMENTE LA CANTIDAD Y LA CALIDAD DE LOS ABASTECIMIENTOS DE AGUA DISPONIBLES PARA SERVIR EL DESARROLLO LLENO DE ESTA SUBDIVISION. N.A.W.S.C. TIENE UNA LINEA DE AGUA DE 12 PULGADAS DE DIAMETRO A LADO OESTE DE LA CALLE CESAR CHAVEZ POR LA VIA PUBLICA. UNA (1) LINEA DE 8 PULGADAS SERA INSTALADAS POR LAS CALLES PROPUESTAS DE LA PROPUESTA SUBDIVISION CONECTANDOCSE A LA LINEA EXISTENTE DE 12 PULGADAS DE DIAMETRO EN LA CALLE CESAR CHAVEZ.

DISTRIBUCIÓN DE AGUA PARA SERENITY OAKS SUBDIVISION CONSISTE EN CUATRO (4) LINEAS DE 1" DIAMETRO DE SERVICIO DUAL, DOCE (12) LINEAS DE 3/4" DIAMETRO DE SERVICIO SENCILLO (CORTAS) Y CUATRO (4) LINEAS DE 3/4" DIAMETRO DE SERVICIO SENCILLO (LARGAS) CUALES TERMINAN EN LAS CAJA DEL MEDIDOR CON CANDADOS DE CADA SOLAR. LAS LINEAS DE SERVICIO DUALES Y SENCILLAS DE 3/4" Y LAS CAJAS DEL MEDIDOR HAN SIDO INSTALADAS A UN COSTO TOTAL DE \$_____ O \$_____ POR LOTE. EL DUEÑO DE LA SUBDIVISION TAMBIEN LE HA PAGADO A LA COMPAÑIA N.E.W.S.C. \$_____ DE ACUERDO AL CONTRATO DE LA CARTA DE 30 AÑOS LA CUAL CUBRE EL COSTO DEL MEDIDOR MECANICO DE AGUA PARA CADA LOTE, EL PRECIO INCLUYE EL COSTO DE LA INSTALACION DE CADA MEDIDOR Y LOS GASTOS DE CONEXION. CUANDO EL DUEÑO DE CADA LOTE SOLICITE UN MEDIDOR DE AGUA, LA COMPAÑIA N.E.W.S.C. LO INSTALARA SIN ALGON GASTO AL DUEÑO. EL DUEÑO DE LA SUBDIVISION TAMBIEN HA INSTALADO 5 BOCAS DE RIEGO (FIRE HYDRANT) A UN COSTO INDIVIDUAL DE \$_____. A UN COSTO TOTAL DE \$_____. EL SISTEMA DE AGUA ESTARA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA, EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL CONDADO DE HIDALGO.

DRENAJE: DESCRIPCIÓN, GASTOS Y FECHA DE INICIO PARA FACILITAR EL DRENAJE PARA LA SUBDIVISION
SE INSTALARA UNA FOSA SEPTICA EN CADA SOLAR. ESTA FOSA SETICA CONSISTE DE UN TANQUE SEPTICO DE MODELO DUAL Y DE UN CAMPO DE DRENAJE PARA EL SOLLAJADOR DE SUELOS REG.# _____. EL 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) SEGON EL REPORTE.

CADA LOTE EN LA SUBDIVISION MIDE MEDIO ACRE. SE HICIERON XX EXCAVACIONES DE EVALUACION DE SUELO EN LUGARES OPUESTOS EN LA SUBDIVISION (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA AREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME (TERRENO ARCILLOSO Y SUELO FRANCO) Y SE EXTIENDE A 36 PULGADAS BAJO TODAS LAS EXCAVACIONES PROPUESTAS. NO EXISTE EVIDENCIA DE AGUA 24 PULGADAS MAS ARRIBA DE LO MAS BAJO DE LAS EXCAVACIONES PROPUESTAS. EL AGUA EN ESTA AREA FLUYE BIEN.

EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS POR SOLAR SON \$_____ DOLARES, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS TODAS LAS FOSA 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 TODOS LAS FOSAS SEPTICAS Y AH APROBADO LA INSTALACION DEL SISTEMA DE FOSAS SEPTICAS.

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 (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 SERA INSTALADO Y COMPLETAMENTE CONSTRUINDO MENOS EL MEDIDOR MECANICO DE AGUA QUE COSTARA UN TOTAL DE \$_____ O \$_____ POR LOTE

DRENAJE: SE ESTIMA QUE LA FOSA SEPTICA COSTARA \$_____ POR SISTEMA A UN COSTO TOTAL DE \$_____ TODA LA SUBDIVISION.

GERARDO BENAVIDES, P.E.
LICENSED PROFESSIONAL ENGINEER
No.140950 STATE OF TEXAS

DATE _____

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 JULIO CARRANZA SUBDIVIDER OF SERENITY OAKS SUBDIVISION HEREBY CERTIFY SEWER PERMITS HAVE BEEN PAID AND ARE ON FILE WITH 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 TO HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE REQUIRED BY STATE AND COUNTY REGULATIONS.

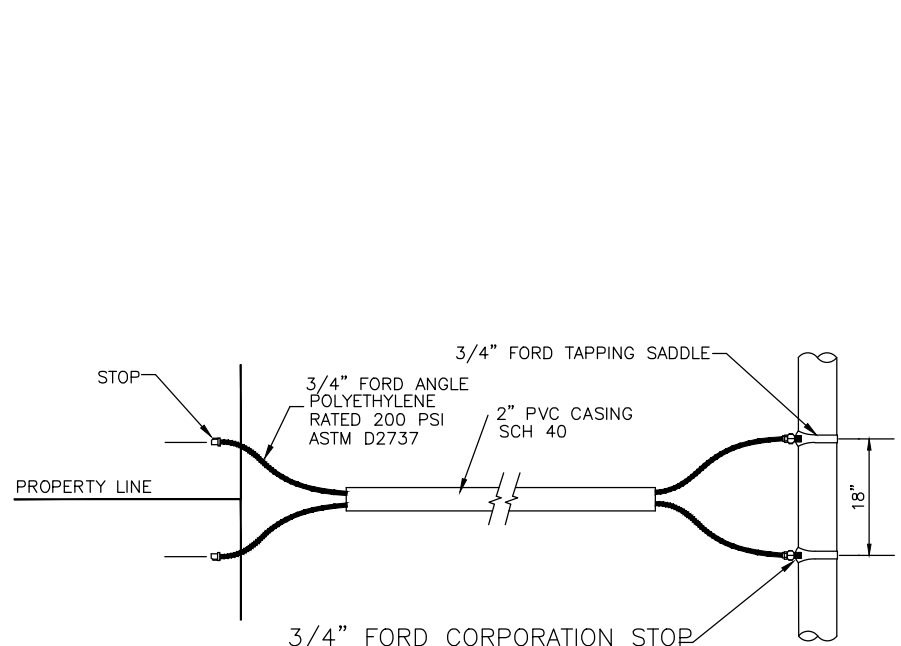
SERENITY OAKS DEVELOPMENT, LLC.
JULIO CARRANZA, MANAGING MEMBER
4119 CROSSPOINT BLVD, EDINBURG TX

DATE _____

STATE OF TEXAS
COUNTY OF HIDALGO

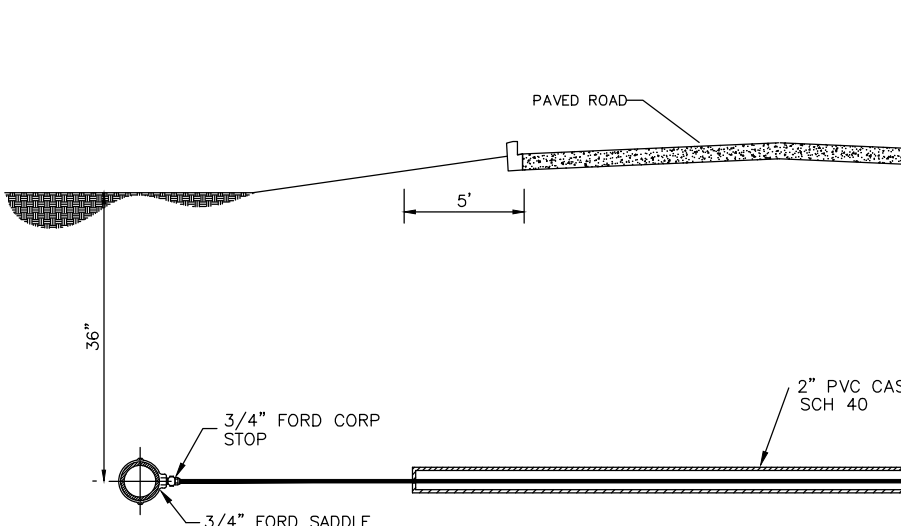
REFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED JULIO CARRANZA, KNOWN TO MY BY THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR PURPOSED AND CONSIDERATION THEREIN STATED, GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS TIME _____ DAY OF _____ 20____.

NOTARY PUBLIC IN AND FOR THE
STATE OF TEXAS
MY COMMISSION EXPIRES _____



LONG SERVICE CONNECTION

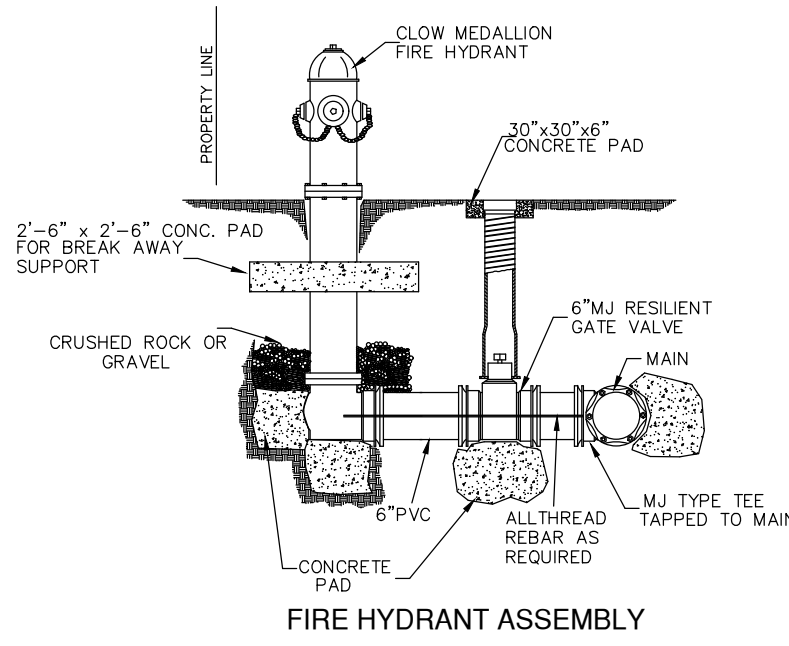
NOTE: MAGNETIC TAPE (CAUTION TAPE) BURIED 16" BELOW NATURAL GROUND



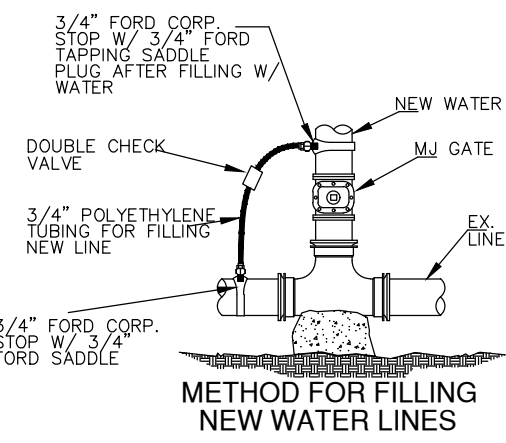
NOTE: PVC ENCASEMENT SHOULD EXTEND THE MINIMUM OF 5' OF EDGE OF PAVEMENT ON BOTH SIDES OF ROAD

PUBLIC WATER CONSTRUCTION KEYNOTES

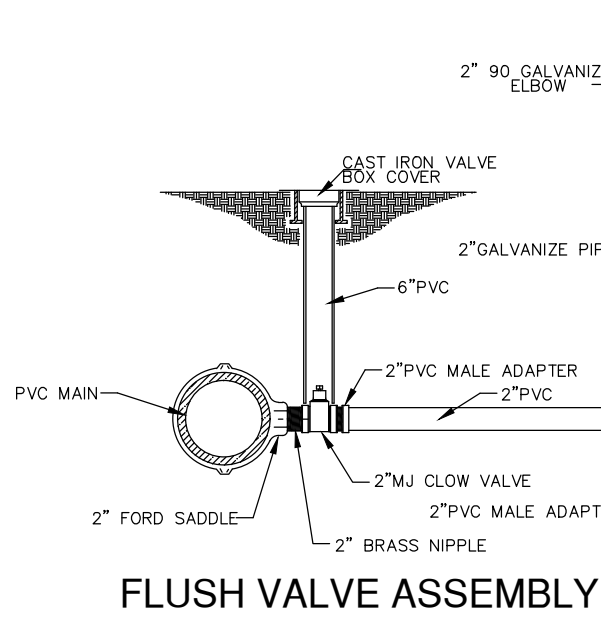
- APPROXIMATE LOCATION OF EXISTING 12" PUBLIC WATER MAIN (NORTH ALAMO WATER SUPPLY CORPORATION). GENERAL CONTRACTOR SHALL FIELD VERIFY SIZE AND LOCATION OF WATER MAIN AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.
- PROPOSED-12"x12"x8" WATER TAP W/ TWO (2)-8" VALVE AND BOX
- PROPOSED-APPROXIMATELY ~ 38 L.F. OF 8" C-900 WATER MAIN DISTRIBUTION LINE
- PROPOSED-8"x8"x8" TEE
- PROPOSED-APPROXIMATELY ~ 205.50 L.F. OF 8" C-900 WATER MAIN DISTRIBUTION LINE
- PROPOSED-8" x 6" M.J. TEE W/6" GATE AND VALVE BOX FOR COMPLETE FIRE HYDRANT ASSEMBLY. (TYPICAL WHERE FIRE HYDRANT SYMBOL IS SHOWN – 5 IN TOTAL). SEE SHEET CB FOR DETAILS AND SPECIFICATIONS. FIRE HYDRANT SHALL BE AT LEAST 10.00 L.F. OF ANY PUBLIC INFRASTRUCTURE AS SHOWN ON PLANS. FIRE HYDRANT SHALL HAVE A N.A.W.S.C. VALVE MARKER
- PROPOSED-500.00' FIRE HYDRANT SERVICE RADIUS (TYPICAL WHERE LINETYPE IS SHOWN).
- PROPOSED-APPROXIMATELY ~ 146.00 L.F. OF 8" C-900 WATER MAIN DISTRIBUTION LINE
- PROPOSED-8" – 11.25' BEND FOR C-900 WATER MAIN DISTRIBUTION LINE
- PROPOSED-APPROXIMATELY ~ 200.00 L.F. OF 8" C-900 WATER MAIN DISTRIBUTION LINE
- PROPOSED-APPROXIMATELY ~ 640.00 L.F. OF 8" C-900 WATER MAIN DISTRIBUTION LINE
- PROPOSED-8" GATE VALVE AND BOX WITH ABOVE GROUND VALVE MARKER
- PROPOSED-± 86.00 L.F. OF PVC CASING UNDER PAVEMENT TO EXTEND AT LEAST 5.0 FEET BEYOND BACK OF CURB
- PROPOSED-± 1,045.00 L.F. OF 8" C-900 WATER MAIN DISTRIBUTION LINE
- PROPOSED-1" 8" CAP ON WATER MAIN WITH APPROXIMATELY 40.00 L.F. OF 2" SERVICE EXTENSION BEHIND BACK OF CURB WITH A PROPOSED 2" FLUSH VALVE WITHIN R.O.W.
- PROPOSED-3/4" SINGLE SERVICE (TYPICAL WHERE SHOWN ON NEAR SIDE OF WATER MAIN)
- PROPOSED-3/4" SINGLE SERVICE (FAR) WITH 1" PVC CASING UNDER PROPOSED STREET (TYPICAL WHERE SHOWN ON FAR SIDE OF WATER MAIN)
- PROPOSED-1" SINGLE SERVICE (FAR) WITH 2" PVC CASING UNDER PROPOSED STREET (TYPICAL WHERE SHOWN ON FAR SIDE OF WATER MAIN)
- PROPOSED-8" GATE VALVE AND BOX
- PROPOSED-20" PVC ENCASEMENT ON EXISTING 12" N.A.W.S.C. WATER LINE UNDER PROPOSED NEW ASPHALT APRON
- PROPOSED-8" FLUSH VALVE AT THE NEW 8" WATER LINE MAIN



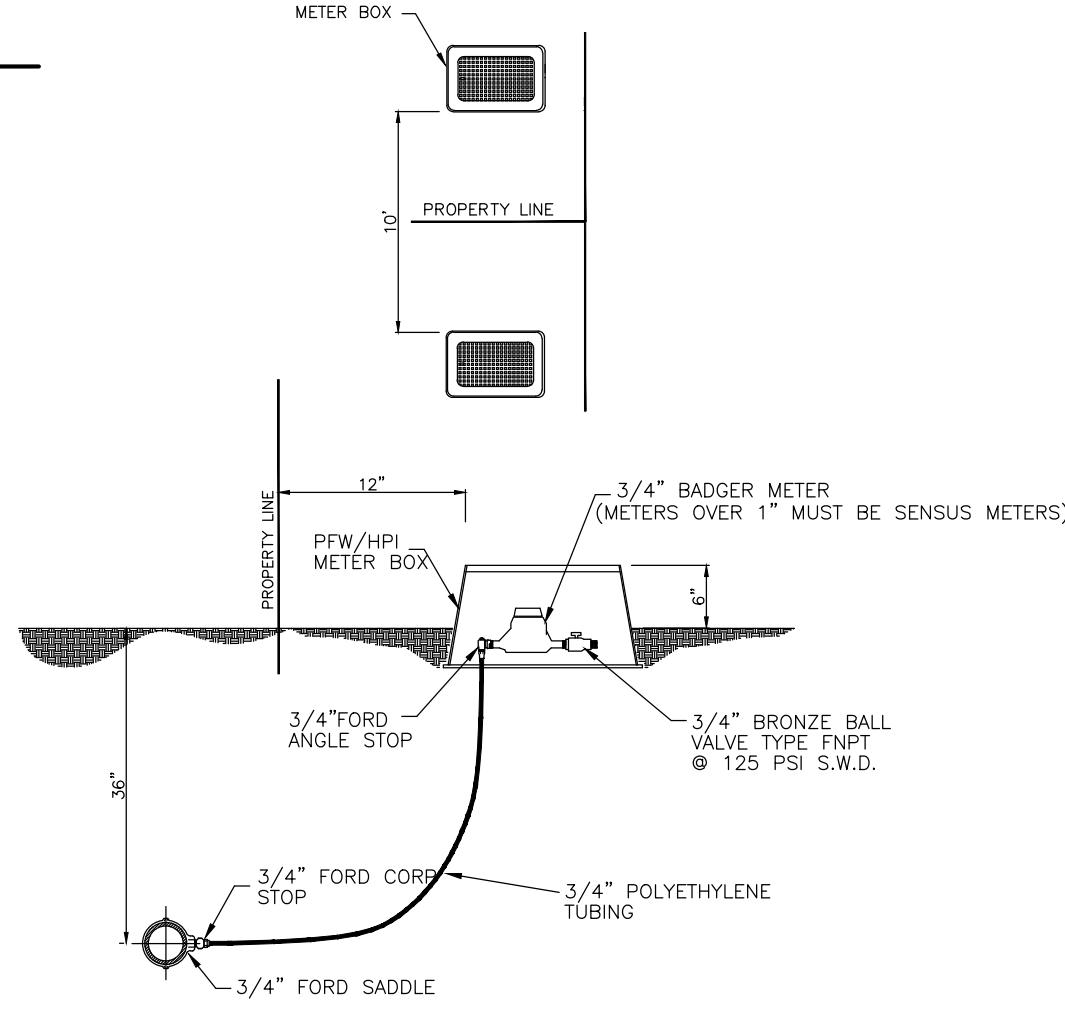
FIRE HYDRANT ASSEMBLY



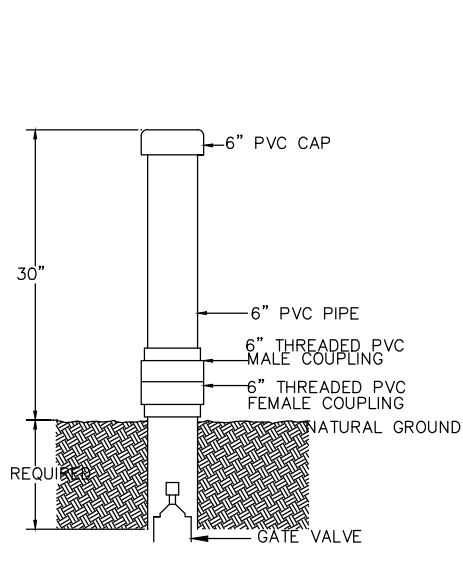
METHOD FOR FILLING NEW WATER LINES



FLUSH VALVE ASSEMBLY



SHORT SERVICE CONNECTION



STANDARD VALVE MARKER

PLAT OF
SERENITY OAKS
SUBDIVISION

A 16.249-ACRE TRACT OF LAND (SEE DOCUMENT NO. 855880, FILED FOR RECORD ON MARCH 16, 2000, HIDALGO COUNTY, TEXAS, COUNTY CLERK OFFICE) BEING OUT OF THE NORTHERN PORTION OF A 31.23-ACRE TRACT CONSISTING OF THE NORTH 20 ACRES OF LOT 13 AND 11.23 ACRES LYING NORTH AND EAST OF AN APPARENT EXISTING HIDALGO COUNTY IRRIGATION DISTRICT NO. 2 CANAL, RIGHT-OF-WAY (DOCUMENT NO. 722919, MAP RECORDS, HIDALGO COUNTY, TEXAS), BEING THAT NORTHERN PORTION OUT OF LOT 14, BOTH SAID LOTS OUT OF BLOCK 51, ALAMO LAND & SUGAR COMPANY SUBDIVISION, PORTION 72, LOS TORRISIOS SANTA ANA & EL GATO GRANTS, IN HIDALGO COUNTY, AS PER THE MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGES 24 - 26, MAP RECORDS IN THE OFFICE OF THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS.

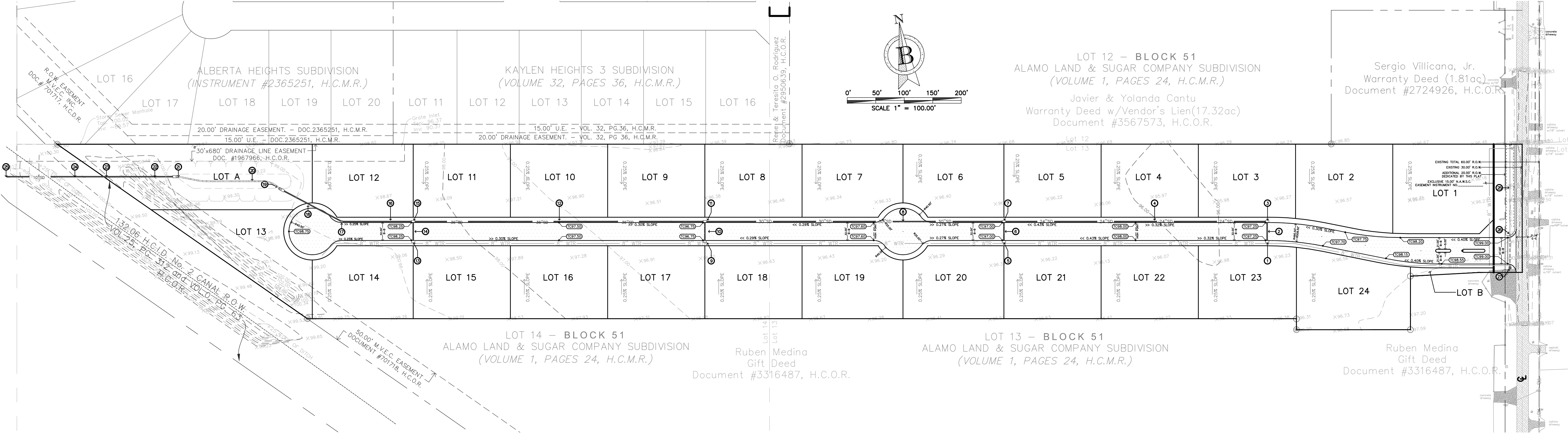
INDEX TO SHEETS OF SERENITY OAKS SUBDIVISION

SHEET 1	HEADING; INDEX; LOCATION MAP; AND ETJ; PRINCIPAL CONTACTS; PLAT WITH LOT, STREETS, AND EASEMENT DESIGNATIONS; LEGAL DESCRIPTION (METES AND BOUNDS); SURVEYOR'S AND ENGINEER'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY JUDGE CERTIFICATE OF PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION AND DESIGNATE THE PRECINCT THE PROJECT IS SITUATED; H.C.D.D. NO. 1 CERTIFICATION; HIDALGO COUNTY IRRIGATION DISTRICT No.2 REVISION NOTES.
SHEET 2	WATER DISTRIBUTION AND OSSF MAP; TYPICAL WATER SERVICE CONNECTION; REVISION NOTES; ENGINEERING REPORT (ENGLISH AND SPANISH VERSION), INCLUDING DESCRIPTION OF WATER AND OSSF AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH VERSION); OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; TYPICAL WATER SERVICE CONNECTION
SHEET 3	DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE AND HOW IT WILL SERVE THIS DEVELOPMENT; MAP OF TOPOGRAPHY AND DRAINAGE, AND ENGINEER'S CERTIFICATION; REVISION NOTES; & CONSTRUCTION DETAILS.
SHEET 4	HIDALGO COUNTY PAVING, GRADING and DRAINAGE CONSTRUCTION DETAILS

BENAVIDES ENGINEERING
TEXAS REGISTRATION P-22855
P.O. Box 832, Alamo, TX 78516
jerry@benauideseng.com
956.310.8373

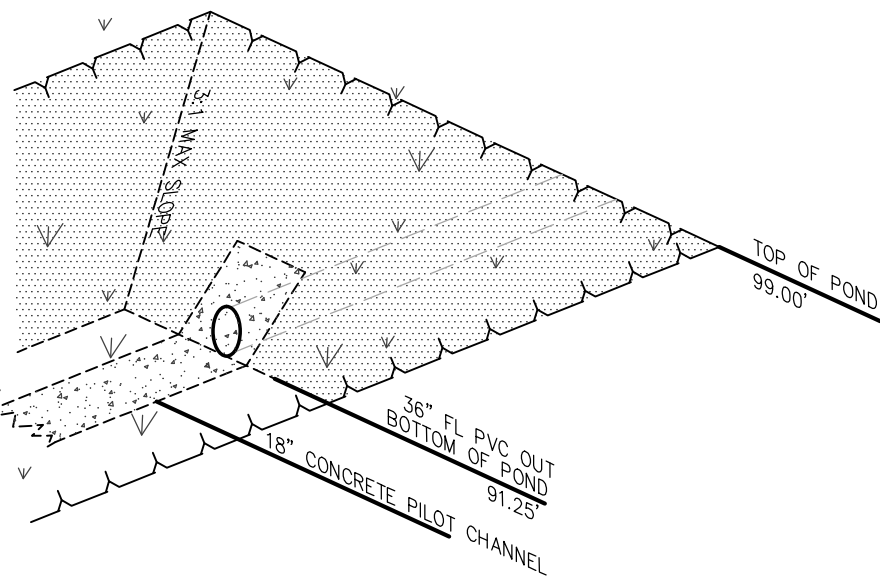
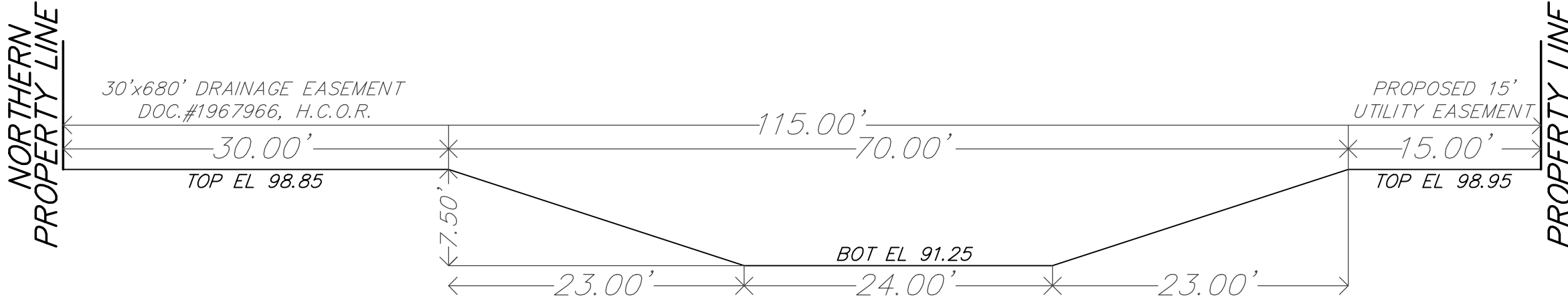
DATE PREPARED 02/06/2024 DATE REVISED 08/14/2026
4119 CROSSPOINT BLVD, EDINBURG TX 78539 956-207-0987
P.O. BOX 832, ALAMO TX 78516 956-310-8373
P.O. BOX 548., McALLEN TX 78505 956-369-0988

OWNER SERENITY OAKS DEVELOPMENT JULIO CARRANZA
ENGINEER BENAVIDES ENGINEERING, LLC GERARDO BENAVIDES, P.E., CFM
SURVEYOR HOMERO L. GUTIERREZ HOMERO L. GUTIERREZ, RPLS

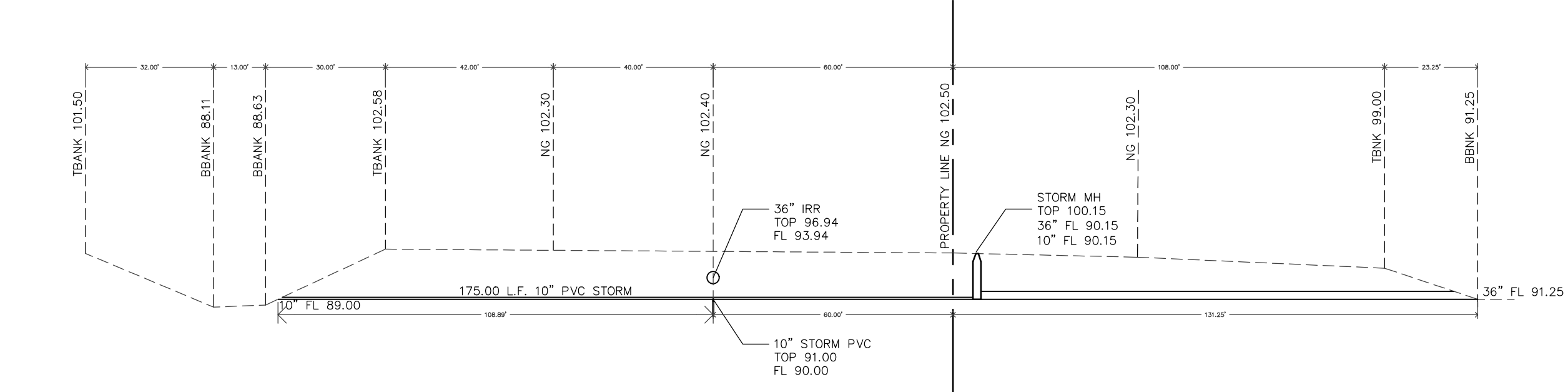


PAVING, GRADING, and DRAINAGE CONSTRUCTION KEYNOTES

- 1. PROPOSED 4' x 6' CURB INLET WITH 4' MANHOLE - INLET 1
TOP OF INLET = 97.25
TOP OF PAVEMENT = 96.75
18" FL = 93.64 (N)
- 2. PROPOSED 31.00 L.F. ~ 18" RCP @ 0.32%
TOP OF INLET = 97.25
TOP OF PAVEMENT = 96.75
24" FL = 93.75 (W)
18" FL = 93.75 (S)
- 3. PROPOSED 4' x 6' CURB INLET WITH 4' MANHOLE - INLET 2
TOP OF INLET = 97.25
TOP OF PAVEMENT = 96.75
24" FL = 93.75 (W)
18" FL = 93.75 (S)
- 4. PROPOSED 161.50 L.F. ~ 24" HPE @ 0.18%
TOP OF INLET = 97.00
TOP OF PAVEMENT = 96.50
18" FL = 93.02 (N)
- 5. PROPOSED 31.00 L.F. ~ 18" RCP @ 0.32%
TOP OF INLET = 97.00
TOP OF PAVEMENT = 96.50
18" FL = 93.02 (N)
- 6. PROPOSED 4' x 6' CURB INLET WITH 4' MANHOLE - INLET 3
TOP OF INLET = 97.00
TOP OF PAVEMENT = 96.50
18" FL = 93.02 (N)
- 7. PROPOSED 4' x 6' CURB INLET WITH 4' MANHOLE - INLET 4
TOP OF INLET = 97.00
TOP OF PAVEMENT = 96.50
18" FL = 92.91 (S)
24" FL = 92.91 (E)
30" FL = 92.91 (W)
- 8. PROPOSED 524.50 L.F. ~ 30" HPE @ 0.13%
TOP OF INLET = 96.75
TOP OF PAVEMENT = 96.25
18" FL = 92.35 (N)
- 9. PROPOSED 4' x 6' CURB INLET WITH 4' MANHOLE - INLET 5
TOP OF INLET = 96.75
TOP OF PAVEMENT = 96.25
18" FL = 92.35 (N)
- 10. PROPOSED 31.00 L.F. ~ 18" RCP @ 0.32%
TOP OF INLET = 96.75
TOP OF PAVEMENT = 96.25
18" FL = 92.35 (N)
- 11. PROPOSED 4' x 6' CURB INLET WITH 4' MANHOLE - INLET 6
TOP OF INLET = 96.75
TOP OF PAVEMENT = 96.25
36" FL = 92.25 (W)
30" FL = 92.25 (E)
18" FL = 92.25 (S)
- 12. PROPOSED 511.50 L.F. ~ 36" HPE @ 0.11%
TOP OF INLET = 98.25
TOP OF PAVEMENT = 97.75
18" FL = 91.80 (N)
- 13. PROPOSED 4' x 6' CURB INLET WITH 4' MANHOLE - INLET 7
TOP OF INLET = 98.25
TOP OF PAVEMENT = 97.75
18" FL = 91.80 (N)
- 14. PROPOSED 31.00 L.F. ~ 18" RCP @ 0.32%
TOP OF INLET = 98.25
TOP OF PAVEMENT = 97.75
18" FL = 91.70 (S)
36" FL = 91.70 (E,W)
- 15. PROPOSED 4' x 6' CURB INLET WITH 4' MANHOLE - INLET 8
TOP OF INLET = 98.25
TOP OF PAVEMENT = 97.75
18" FL = 91.70 (S)
36" FL = 91.70 (E,W)
- 16. PROPOSED 125.50 L.F. ~ 36" HPE @ 0.14%
TOP OF MH = 98.75
36" FL (E) = 91.54
36" FL (NW) = 91.54
- 17. PROPOSED 4' DIAMETER STORMWATER MANHOLE WITH 2' LID - MANHOLE #1
TOP OF MH = 98.75
36" FL (E) = 91.54
36" FL (NW) = 91.54
- 18. PROPOSED 124.00 L.F. ~ 36" RCP @ 0.12%
FL OF POND = 91.45
- 19. PROPOSED SAFETY END TREATMENT FOR SUBDIVISION OUTFALL ON PROPOSED DETENTION POND. SAFETY END TREATMENT AND DETENTION POND DETAILS AND SPECIFICATIONS SHALL FOLLOW HIDALGO COUNTY DRAINAGE DISTRICT NO.1 and HIDALGO COUNTY STANDARDS.
FL OF POND = 91.45
- 20. PROPOSED 2.0' WIDE CONCRETE PILOT CHANNEL BETWEEN OUTFALL STRUCTURES ALONG THE BOTTOM OF DETENTION POND.
TOP OF MH = 98.50
36" FL (E,W) = 90.15
- 21. PROPOSED SAFETY END TREATMENT. SAFETY END TREATMENT DETAILS AND SPECIFICATIONS SHALL FOLLOW HIDALGO COUNTY DRAINAGE DISTRICT NO.1 and HIDALGO COUNTY STANDARDS.
FL OF POND = 91.25
- 22. PROPOSED 125.00 L.F. ~ 36" HPE @ 0.86%
TOP OF MH = 100.15
36" FL (E,W) = 90.15
- 23. PROPOSED 4' DIAMETER STORMWATER MANHOLE WITH 2' LID - MANHOLE #2
TOP OF MH = 100.15
36" FL (E,W) = 90.15
- 24. PROPOSED 175.00 L.F. ~ 10" PVC @ 0.86% FOR STORMWATER DISCHARGE TO HIDALGO COUNTY IRRIGATION DISTRICT NO.2 DITCH. OUTFALL AT IRRIGATION DITCH SHALL HAVE CONCRETE RIP-RAP AT OUTFALL AND OPPOSITE END OF DITCH TO AVOID EROSION. SEE PAVING, GRADING AND DRAINAGE DETAILS FOR DETAILS AND SPECIFICATIONS.
- 25. GENERAL CONTRACTOR SHALL REGRADE EXISTING ROADSIDE DITCH AND MAKE PROPER CONNECTION TO NEIGHBORING PROPERTIES AND MATCH FLOWLINES.
- 26. PROPOSED 60 L.F. ~ 12" RCP FOR CROSSING UNDER NEW DRIVE AND CONNECTION OF ROAD SIDE DITCHES
FL = 96.75
- 27. PROPOSED TYPE 'C' GRATE INLET
TOP OF GRATE = 98.25
36" FL (E,W) = 97.00



36" OUTFALL DETAIL
NOT TO SCALE



OUTFALL CROSS-SECTION DETAIL

1" = 30.00 FEET

PROJECT DESCRIPTION AND LOCATION

SERENITY OAKS SUBDIVISION IS A PROPOSED 24 LOT, SINGLE FAMILY RESIDENTIAL SUBDIVISION, COMPOSED OF APPROXIMATELY 16.249 ACRES OUT OF BLOCK 51, ALAMO LAND AND SUGAR COMPANY SUBDIVISION OF PORTION 72, LOS TORRITOS SANTA ANA & EL GATO GRANTS, AS PER PLAT OF MAP THEREOF RECORDED IN VOLUME 1, PAGES 24-26, MAP RECORDS OF HIDALGO COUNTY, TEXAS.

THIS PROPOSED SUBDIVISION HAS BEEN RELEASED FROM THE CITY OF EDINBURG ETJ AND IS LOCATED ALONG THE WEST RIGHT OF WAY OF CESAR CHAVEZ APPROXIMATELY 1,100 FEET NORTH OF OWASSA ROAD. THE 16.249-ACRE SITE CURRENTLY HAS A SINGLE-FAMILY RESIDENTIAL HOME OF APPROXIMATELY 2,600 SQ.F.T. THAT WILL BE DEMOLISHED PRIOR RECORDING OF SUBDIVISION. THE REMAINDER OF THE PROPERTY AREA IS VACANT WITH GREEN AREAS AND A SMALL NUMBER OF TREES.

SOIL DESCRIPTION

THE SOILS IN THIS AREA ARE COMPOSED OF APPROXIMATELY 28.3% HIDALGO SANDY LOAM (SOIL 28) WITH 0 TO 1 PERCENT SLOPE AND 71.7% RAYMONDVILLE CLAY LOAM (SOIL 52) WITH 0 TO 1 PERCENT SLOPES. HIDALGO SANDY LOAM BELONGS TO HYDROLOGIC GROUP B WHICH HAVE A MODERATE INFILTRATION RATE WHEN THOROUGHLY WET WHILE RAYMONDVILLE CLAY LOAM BELONGS TO HYDROLOGIC GROUP C WHICH IS MODERATELY WELL DRAINED. (SEE USDA, NRCS WEB SOIL SURVEY REPORT ATTACHED AT THE END OF THIS REPORT FOR OTHER SITE SPECIFIC CHARACTERISTICS.)

FLOOD ZONE

AS PER FEDERAL EMERGENCY MANAGEMENT ACT (FEMA) FLOOD INSURANCE RATE MAP (FIRM) PANEL NO. 480334 0425 C, MAP REVISED ON NOVEMBER 16, 1982, THIS PROPERTY IS WITHIN FLOOD ZONE "B". AREAS ON FLOOD ZONE "B" ARE DESIGNATED AS AREAS TO BE OUTSIDE THE 100 AND 500-YEAR FLOOD PLAIN.

EXISTING CONDITIONS (PRE-DEVELOPMENT)

EXISTING SURFACE STORMWATER RUNOFF ON THIS TRACT FLOWS FROM THE WESTERN PROPERTY TO THE EASTERN PROPERTY LINE ALONG THE WEST RIGHT-OF-WAY OF CESAR CHAVEZ ROAD AT AN APPROXIMATE SLOPE OF 0.00%. THE PRE-DEVELOPMENT STORM RUNOFF IS APPROXIMATED TO BE 6.78 CUBIC FEET PER SECOND BASED ON THE 10-YEAR STORM FREQUENCY, AS PER ATTACHED CALCULATIONS.

POST-DEVELOPMENT CONDITIONS

THE POST-DEVELOPMENT SURFACE STORM RUNOFF IS APPROXIMATED TO BE 20.45 CUBIC FEET PER SECOND, BASED ON THE 50-YEAR STORM FREQUENCY, AS PER ATTACHED CALCULATIONS, WHICH IS AN INCREASE OF 13.67 CUBIC FEET PER SECOND.

PROPOSED DRAINAGE PLAN

IN ACCORDANCE WITH HIDALGO COUNTY AND HIDALGO COUNTY DRAINAGE DISTRICT NO. 1, DRAINAGE POLICIES, THE PROPOSED STORM DRAINAGE SYSTEM FOR THIS SUBDIVISION WILL CONSIST OF THE SURFACE STORMWATER RUNOFF FROM THE PROPOSED RESIDENTIAL LOTS, INTO THE PROPOSED STREETS THAT WILL COLLECT RUNOFF VIA CURB AND OUTTER AND CURB INLETS. SAID INLETS WILL CONVEY THE RUNOFF VIA A SERIES OF STORM PIPES UNDER GROUND TO A DISCHARGE INTO A PROPOSED ONSITE DETENTION POND THAT WILL ULTIMATELY HAVE AN OUTFALL LOCATION TO THE EXISTING HIDALGO COUNTY IRRIGATION DISTRICT NO.2 CANAL AT OUR WESTERN PROPERTY LINE. AS PER H.C.I.D. 2, THE ACCEPTABLE SIZE OF OUTFALL SHALL BE 10" IN DIAMETER AND CONSTRUCTION AND DETAIL SPECIFICATION OF CONSTRUCTION ON SAID IRRIGATION DITCH SHALL FOLLOW HIDALGO COUNTY DRAINAGE DISTRICT NO.1 DESIGN CRITERIA.

HIDALGO COUNTY IRRIGATION DISTRICT NO.2 WILL PROVIDE INSPECTIONS DURING AND AFTER CONSTRUCTION PHASE FOR ULTIMATE APPROVAL. DESIGN AND CROSSING PERMITS SHALL BE ACQUIRED WITH HIDALGO COUNTY IRRIGATION DISTRICT NO.2 PRIOR COMMENCEMENT OF WORK ON SAID IRRIGATION DITCH.

ENGINEERING CALCULATIONS

IN ACCORDANCE WITH THE HIDALGO COUNTY DRAINAGE DISTRICT POLICY, THE SITE WILL RETAIN THE DIFFERENCE IN VOLUME BETWEEN PRE-DEVELOPMENT AND POST-DEVELOPMENT CONDITIONS BASED ON A 10-YEAR PRE-DEVELOPMENT AND A 50-YEAR POST DEVELOPMENT. THEREFORE, AS PER THE ATTACHED CALCULATIONS, THE REQUIRED DETENTION OF 67,242 CUBIC FEET (1.54 ACRE-Feet) OF STORM RUNOFF SHALL BE STORED WITHIN ONSITE DETENTION POND PRIOR DISCHARGING INTO THE EXISTING HIDALGO COUNTY IRRIGATION DISTRICT NO.2 IRRIGATION DITCH AT OUR WESTERN PROPERTY LINE. PROPOSED ONSITE DETENTION POND SHALL HAVE APPROXIMATELY 76,430 CUBIC FEET OF STORMWATER STORAGE.

PRE-DEVELOPMENT CALCULATIONS (10-YEAR)

Q= 6.78 CFS
t= 1.62 IN/HOUR
TC= 158.24 MINUTES

POST-DEVELOPMENT CALCULATIONS (50-YEAR)

Q= 20.45 CFS
t= 3.63 IN/HOUR
TC= 73.45 MINUTES



GERARDO BENAVIDES, P.E.
LICENSED PROFESSIONAL ENGINEER
NO.140950 STATE OF TEXAS

PLAT OF
SERENITY OAKS
SUBDIVISION

A 16.249-ACRE TRACT OF LAND (AS PER DOCUMENT NO. 855080, FILED FOR RECORD ON MARCH 16, 2000, HIDALGO COUNTY, TEXAS, COUNTY CLERK OFFICE) BEING OUT OF THE NORTHERN PORTION OF A 31.23-ACRE TRACT CONSISTING OF THE NORTH 20 ACRES OF LOT 13 AND 11.23 ACRES LYING NORTH AND EAST OF AN APPARENT EXISTING HIDALGO COUNTY IRRIGATION DISTRICT NO. 2 CANAL, RIGHT-OF-WAY (DOCUMENT NO. 722919, MAP RECORDS, HIDALGO COUNTY, TEXAS), BEING THAT NORTHERN PORTION OUT OF LOT 14, BOTH SAID LOTS OUT OF BLOCK 51, ALAMO LAND AND SUGAR COMPANY'S SUBDIVISION OF PORTION 72, LOS TORRITOS SANTA ANA & EL GATO GRANTS, IN HIDALGO COUNTY, AS PER THE MAP OR PLAT THEREOF RECORDED IN VOLUME 1, PAGES 24 - 26, MAP RECORDS IN THE OFFICE OF THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS.

INDEX TO SHEETS OF SERENITY OAKS SUBDIVISION

SHEET	DESCRIPTION
1	HEADING; INDEX; LOCATION MAP; AND ETJ; PRINCIPAL CONTACTS; PLAT WITH LOT, STREETS, AND EASEMENT DESIGNATIONS; LEGAL DESCRIPTION (METES AND BOUNDS); SURVEYOR'S AND ENGINEER'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY JUDGE CERTIFICATE OF PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION AND DESIGNATE THE PRECINCT THE PROJECT IS SITUATED; H.C.D.D. NO. 1 CERTIFICATION; HIDALGO COUNTY IRRIGATION DISTRICT NO.2 REVISION NOTES.
2	WATER DISTRIBUTION AND OSSF MAP; TYPICAL WATER SERVICE CONNECTION; REVISION NOTES; ENGINEERING REPORT (ENGLISH AND SPANISH VERSION), INCLUDING DESCRIPTION OF WATER AND OSSF AND ENGINEER'S CERTIFICATION (ENGLISH AND SPANISH VERSION); OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; TYPICAL WATER SERVICE CONNECTION
3	DRAINAGE REPORT INCLUDING DESCRIPTION OF DRAINAGE AND HOW IT WILL SERVE THIS DEVELOPMENT; MAP OF TOPOGRAPHY AND DRAINAGE, AND ENGINEER'S CERTIFICATION; REVISION NOTES; & CONSTRUCTION DETAILS.
4	HIDALGO COUNTY PAVING, GRADING and DRAINAGE CONSTRUCTION DETAILS

BENAVIDES
ENGINEERING

TEXAS REGISTRATION P-22855
P.O. Box 832 Alamo, TX 78516
jerry@benavideseng.com
956.310.8373

DATE PREPARED 02/06/2024 DATE REVISED 08/14/2026
4119 CROSSPOINT BLVD, EDINBURG TX 78539 956-207-0987
P.O. BOX 832, ALAMO TX 78516 956-310-8373
P.O. BOX 548., McALLEN TX 78505 956-369-0988

OWNER SERENITY OAKS DEVELOPMENT JULIO CARRANZA
ENGINEER BENAVIDES ENGINEERING, LLC GERARDO BENAVIDES, P.E., CFM
SURVEYOR HOMERO L. GUTIERREZ HOMERO L. GUTIERREZ, RPLS

[illegible]

REQUIRED MINIMUM FOR ALL MINOR STREETS (EXCEPT AS NOTED)

- 2" AC TYPE "D", (228 lbs. Per Sq. Yd.) SPECIFICATIONS TO ADHERE TO, 1993 TX-DOT SPEC BOOK ITEM 340
- TACK COAT AC-10; 0.05 TO 0.10 G/S.Y.
- PRIME COAT SPECIFICATIONS TO ADHERE TO, 1993 TX-DOT SPEC BOOK, ITEM 310
- BASE COURSE
8" TYPE "D" GRADE 6, CALICHE BASE
COMPACTED TO 98% STANDARD PROCTOR
≥ OPTIMUM MOISTURE SPECIFICATIONS TO
ADHERE TO, COUNTY SPECIFICATIONS OR
ITEM 247 TX-DOT 1993 SPEC BOOK
- SUB - BASE COURSE
6" COMPACTED THICKNESS PREPARED SUBGRADE

P.I. ≤ 20 COMPACT TO 95% STANDARD PROCTOR
≥ OPTIMUM MOISTURE

P.I. > 20 USE SUBGRADE IMPROVEMENT METHODS

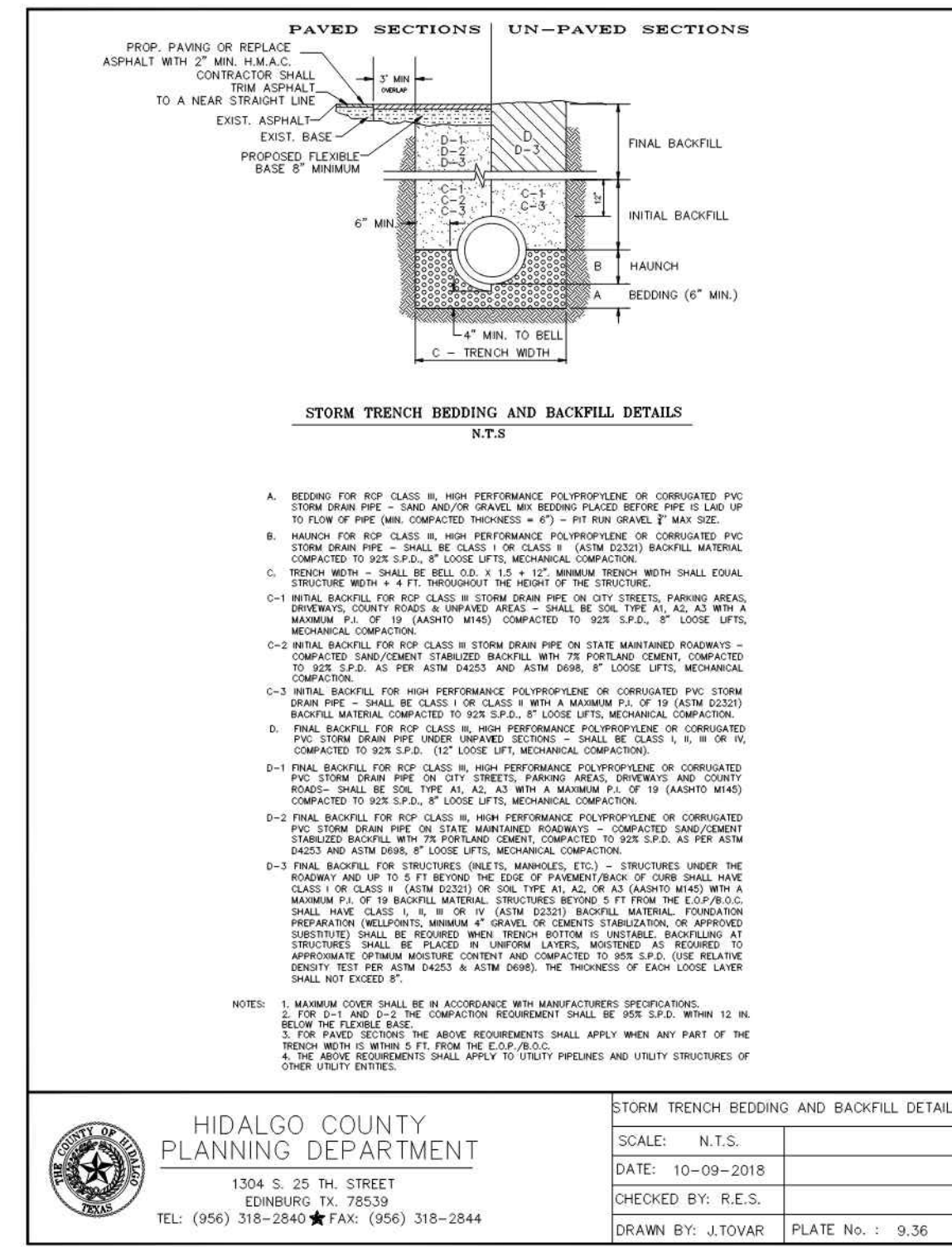
GENERAL NOTES:

1. IN LIEU OF THE ABOVE BASE DESIGN, AN ALTERNATE BASE MAY BE USED THAT USES 5" OF TYPE "A" GRADE 1 (CRUSHED LIMESTONE) COMPACTED TO STANDARD PROCTOR $\geq$ OPTIMUM MOISTURE AS PER ITEM 247-1393 TC DOT SPEC BOOK.

SUBGRADE IMPROVEMENT METHODS:

1. MECHANICAL STABILIZATION ---- AN APPROVED GEOGRID PLACED UNDERNEATH THE BASE COURSE PER COUNTY SPECIFICATIONS
2. CHEMICAL STABILIZATION ---- MODIFY SUBBASE COURSE THICKNESS AS FOLLOWS:
 $20 < P.L. \leq 40$ 3% LIME BY WEIGHT COMPACTED TO 95% STANDARD PROCTOR $\geq$ OPTIMUM MOISTURE
 $P.L. > 40$ 6% LIME BY WEIGHT COMPACTED TO 95% STANDARD PROCTOR $\geq$ OPTIMUM MOISTURE
3. OVER EXCAVATION & REPLACEMENT ---- A MINIMUM OF 18" OF SELECT FILL WITH A $P.L. < 20$ COMPACTED TO 95% STANDARD PROCTOR $\geq$ OPTIMUM MOISTURE

	HIDALGO COUNTY PLANNING DEPARTMENT	
	1304 S. 25 TH. STREET EDINBURG TX. 78539	
	TEL: (956) 318-2840 ★ FAX: (956) 318-2844	
CLASS "D" PAVEMENT		
SCALE: N.T.S.		
DATE: 10-08-2018		
CHECKED BY: R.E.S.		
DRAWN BY: J.TOVAR		PLATE No. : 9.4

[illegible]

HIDALGO COUNTY PLANNING DEPARTMENT 1304 S. 25 TH STREET EDINBURG TX. 78539 TEL: (956) 318-2840 ★ FAX: (956) 318-2844	STANDARD CURB INLET SECTION	
	SCALE: N.T.S.	
	DATE: 10-09-2018	
	CHECKED BY: R.E.S.	
	DRAWN BY: J.TOVAR	PLATE No. : 9.23

MANHOLE COVER

4'-0"

6"

2'-3" MIN.

6"

1'-6"

2'-0"

4'-0"

1'-0"

5/8" PER 1'-0"

3/8" PER 1'-0"

INLET GUTTER

ADDITIONAL REINFORCING STEEL

MATCH LINE FOR EXTENSION

EXTENSION

STREET SURFACE SLOPE TO @ 4'-0" FROM BACK OF CURB

MIDLAND COUNTY
PLANNING DEPARTMENT
 1304 S. 25 TH. STREET
 EDINBURG TX. 78539
 TEL: (956) 318-2840 ★ FAX: (956) 318-2844

SCALE: N.T.S.	
DATE: 10-09-2018	
CHECKED BY: R.E.S	
DRAWN BY: J.TOVAR	PLATE No. : 9.22

Technical drawing of a curb and gutter cross-section. The drawing shows a curb on the left, a gutter in the center, and a sloped area on the right. Key dimensions include a curb height of 11", a gutter width of 18", a gutter depth of 4", and a sloped area width of 3". The gutter has a 3:5 batter and a radius R=11". The sloped area has a 1:1/2 slope. The drawing also shows a 12" high section on the right. Material layers are indicated as follows:

- HMAC THICKNESS AS PER SPECIFICATIONS AND DESIGN
- SLOPE 0.5%
- COMPACTED BASE MATERIAL AS PER SPECIFICATIONS & DESIGN
- SUBBASE AND/OR SUBGRADE AS PER SPECIFICATIONS & DESIGN
- 24 X 24" LONG REB. BARS REQUIRED AT EXPANSION JOINTS

1. ALL HONEYCOMBING SHALL BE GROUTED TO PROVIDE A UNIFORM SURFACE.
2. WHEN HONEYCOMBING IS EXCESSIVE AS DETERMINED BY THE COUNTY OF HAWAII DESIGNATED REPRESENTATIVE, CURB AND GUTTER SHALL BE REPLACED.
3. BACKFILL BEHIND CURBS SHALL BE ACCOMPLISHED WITHIN 24 HOURS AFTER BACKFILL IS REMOVED OR 48 HOURS AFTER SLIP FORMING.
4. CURB AND GUTTER CONCRETE SHALL BE CLASS "A" (3000 PSI).
5. REINFORCING STEEL AS SHOWN.
6. MAX. LENGTH OF CURB AND GUTTER SECTION IS 80' BETWEEN 3/4" EXPANSION JOINT.

HIDALGO COUNTY PLANNING DEPARTMENT 1304 S. 25 TH. STREET EDINBURG TX. 78539 TEL: (956) 318-2840 ★ FAX: (956) 318-2844	TYPICAL CURB & GUTTER DETAIL	
	SCALE: N.T.S.	
	DATE: 10-09-2018	
	DRAWN BY: J.TOVAR	PLATE No. : 9.14

The drawing consists of two parts: a cross-section view at the top and a plan view at the bottom.

Cross-Section View: This view shows the gutter installed within a concrete curb. The gutter has a 6-inch depth. The width of the gutter opening is labeled as "VARIES". The gutter is supported by a 6-inch wide base. The gutter is filled with a material indicated by a cross-hatch pattern. The gutter is reinforced with steel bars and welded wire fabric. The gutter is shown with a 1/2 inch wide base and a 1/2 inch wide top flange. The gutter is shown with a 6-inch depth and a 6-inch wide base. The gutter is shown with a 1/2 inch wide base and a 1/2 inch wide top flange. The gutter is shown with a 6-inch depth and a 6-inch wide base. The gutter is shown with a 1/2 inch wide base and a 1/2 inch wide top flange.

Plan View: This view shows the gutter from above, showing its position relative to the street pavement and the curb. The gutter is shown with a 6-inch depth and a 6-inch wide base. The gutter is shown with a 1/2 inch wide base and a 1/2 inch wide top flange. The gutter is shown with a 6-inch depth and a 6-inch wide base. The gutter is shown with a 1/2 inch wide base and a 1/2 inch wide top flange. The gutter is shown with a 6-inch depth and a 6-inch wide base. The gutter is shown with a 1/2 inch wide base and a 1/2 inch wide top flange.

Legend:

- REINFORCING STEEL
No. 3 ϕ BARS
2'-0" O.C.
BOTHWAYS
OR
6X6 No. 8 Ga.
WELDED WIRE FABRIC

PLAN VIEW

NOTE: EXPANSION AND CONTROL JOINTS REQUIRED
SAME AS FOR CONCRETE PAVING

HIDALGO COUNTY PLANNING DEPARTMENT 1304 S. 25 TH. STREET EDINBURG TX. 78539 TEL: (956) 318-2840 ★ FAX: (956) 318-2844	CONCRETE DRAINAGE FLUME	
	SCALE: N.T.S.	
	DATE: 10-09-2018	
	CHECKED BY: R.E.S.	
	DRAWN BY: J.TOVAR	PLATE No. : 9.31

TO BE APPROVED BRICK,
PRE-CAST OR CAST, IN
APPROVED

WALLS TO BE 8" THICK TO 13" DEPTH.
INCREASE TO 12" THICKNESS IN SECTION
BELOW 13" DEPTH 8" BRICK LAID RADIIALLY

300 lb. MANHOLE COVER & FRAME
MARKED "STORM SEWER" SHALL BE
TRINITY VALLEY PATTERN No. 4067
OR APPROVED EQUAL.

NO

1" CEMENT MORTAR
PLASTER

5'-0"

3'-0"

VARIABLES

CEMENT GROUT BOUND
RUBBLE COVERED WITH
2" MIN. GROUT

CONCRETE BASE

7'-4"

30"

9"

HIDALGO COUNTY PLANNING DEPARTMENT 1304 S. 25 TH. STREET EDINBURG TX. 78539 TEL: (956) 318-2840 ★ FAX: (956) 318-2844	DRAINAGE MANHOLE DETAIL	
	SCALE: N.T.S.	
	DATE: 10-09-2018	
	CHECKED BY: R.E.S.	
	DRAWN BY: J.TOVAR	PLATE No. : 9.21

[illegible]

	Hidalgo County Drainage District No. 1 902 N. Doolittle Edinburg, Texas 78542 Off: (956)292-7080 Fax: (956)292-7089	Discharge Structure Detail	
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;">Reviewed By: J.N.S.</td> <td style="width: 50%; padding: 5px;">Date: January 2016</td> </tr> </table>		Reviewed By: J.N.S.
Reviewed By: J.N.S.	Date: January 2016		

A 16.249-ACRE TRACT, LAND (AS PER DOCUMENT NO. 855580, FILED FOR RECORD ON MARCH 16, 2001) IN HIDALGO COUNTY, TEXAS, BEING THE NORTH 1/2 OF SECTION 10, TOWNSHIP 1N, RANGE 1E, 31.23-ACRE TRACT CONSISTING OF THE NORTH 20 ACRES OF LOT 18 AND 11.23 ACRES LYING NORTH AND EAST OF AN APPARENT EXISTING HIDALGO COUNTY IRRIGATION DISTRICT NO. 2 CANAL, RIGHT-OF-WAY (DOCUMENT NO. 722919, MAP RECORDS, HIDALGO COUNTY, TEXAS), BEING THAT NORTHERN PORTION OUT OF LOT 14, BOTH SAID LOTS OUT OF BLOCK #1, ALAMO LAND AND SUGAR COMPANIES SUBDIVISION OF PORTION 72, LOS TORRITOS SALES AND A E L & T TRACT GRANTS, IN HIDALGO COUNTY, AS PER THE MAP OR PLAT THEREOF RECORDED VOLUME 2, PAGE 1, AND BEING THE SAME AS SHOWN IN THE OFFICE OF THE COUNTY CLERK OF HIDALGO COUNTY, TEXAS.

SHEET 1	HEADING, INDEX, LOCATION MAP, AND ET-3; PRINCIPAL CONTACTS, PLAT WITH LOT, STREETS, AND EASEMENT DESIGNATIONS; DETAILED DESCRIPTION (METES AND BOUNDS); SURVEYOR'S AND ENGINEER'S CERTIFICATION; PLAT NOTES AND RESTRICTIONS; OWNER'S DEDICATION, CERTIFICATION, AND ATTESTATION; COUNTY CLERK'S RECORDING CERTIFICATE; HIDALGO COUNTY JUDICIAL CLERK'S PLAT APPROVAL; DESCRIPTION OF LOCATION OF SUBDIVISION AND DESIGNATE THE PRECINCT THE PROJECT IS SITUATED. H.C.D.D. NO. 1, CERTIFICATION; HIDALGO COUNTY IRRIGATION DISTRICT NO.2 IRRIGATION NOTES.
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SHEET 4	HIDALGO COUNTY PAVING, GRADING and DRAINAGE CONSTRUCTION DETAILS

BENAVIDES ENGINEERING

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P.O. Box 832 Alamo, TX 78516
jerry@benavideseng.com
956.310.8373

DATE PREPARED 02/06/2024	DATE REVISED 08/14/2026
4119 CROSSPOINT BLVD, EDINBURG TX 78539	956-207-0987
P.O. BOX 832, ALAMO TX 78516	956-310-8373
P.O. BOX 548., McALLEN TX 78505	956-369-0988

OWNER	SERENITY OAKS DEVELOPMENT	JULIO CARRANZA
ENGINEER	BENAVIDES ENGINEERING, LLC	GERARDO BENAVIDES, P.E., CFM
SURVEYOR	HOMERO L. GUTIERREZ	HOMERO L. GUTIERREZ, RPLS