



# HIDALGO COUNTY PLANNING DEPARTMENT

T.J. Arredondo, CFM  
Director of Planning

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

## HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 4-27-2021

PROPOSED SAN RAFAEL SUBDIVISION PRECINCT No. 1.

ENGINEER: QUINTANILLA, HEADLEY & ASSOCIATES DEVELOPER: C & N FARMS, LLC.

PRELIMINARY APPROVAL     FINAL APPROVAL     FINAL APPROVAL WITH FINANCIAL GUARANTEE     WITH VARIANCE

NUMBER OF LOTS: 57  \*SINGLE FAMILY     \*MULTI-FAMILY     COMMERCIAL     INDUSTRIAL

NUMBER OF STREETLIGHTS: 12

FILLING STATIONS: 5

LOCATION DESCRIPTION: NORTHWEST CORNER OF TRENTON ROAD & DILLON ROAD.

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

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 6-24-2020 PROPERTY LIES WITHIN FLOOD ZONE: "C" AS PER FEMA.

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

ROAD R.O.W. DEDICATION: 40.00 FEET ONTO TRENTON ROAD & 20.00 FEET ONTO DILLON ROAD.

H.C.R.O.W. FINAL APPROVAL DATE: 04-12-2021 BY, DANNY GUZMAN, PCT. 1 R.O.W. AGENT

H.C.H.D. FINAL APPROVAL DATE: 04-20-2021 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM:  35 OSSF'S ARE INSTALLED AND 22 OSSF'S HAVE BEEN ESCROWED.

WATER SERVICE PROVIDER: N.A.W.S.C. EXISTING LINE SIZE: 8" LOCATION: DILLON ROAD.

H.C.E.O.C. FINAL APPROVAL DATE: 03-31-2021 : 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.

REQUEST FOR FINAL APPROVAL WITH:  **CASH DEPOSIT: Amount: \$ 33,000.00 For:  (22) OSSF'S**

PRELIMINARY APPROVAL FROM THE  
HIDALGO COUNTY COMMISSIONERS COURT ON: JULY 28, 2020

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

**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.*



# SAN RAFAEL SUBDIVISION

A 40.00 ACRE TRACT OF LAND BEING ALL OF BLOCK 70, HILL-HALBERT TRACT, HIDALGO COUNTY, TEXAS, ACCORDING TO THE PLAT OR MAP THEREOF RECORDED IN VOLUME 1, PAGE 35, MAP RECORDS HIDALGO COUNTY, TEXAS, AND ACCORDING TO GENERAL WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 3121199, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

REPORTE FINAL DE INGENIERIA PARA LA SUBDIVISION SAN RAFAEL SUBDIVISION POR MARCO A. GONZALEZ, P.E.

PROVISION DE AGUA: Descripción y Costos.

LA SUBDIVISION SAN RAFAEL SUBDIVISION HA SIDO PROVISTA DE AGUA POTABLE POR LA COMPANIA DE AGUA DE NORTH ALAMO (N.A.W.S.C.). EL DUEÑO DE LA SUBDIVISION Y LA COMPANIA DE AGUA N.A.W.S.C. SE HA COMPROMETIDO A PROVEER DE AGUA SUFICIENTE A LA SUBDIVISION POR UN PERIODO DE 30 AÑOS. LA COMPANIA DE AGUA N.A.W.S.C. HA PRESENTADO LA DOCUMENTACION DEMOSTRANDO LA DISPONIBILIDAD DE CANTIDAD Y CALIDAD DE AGUA A LARGO PLAZO QUE SERVIRA PARA EL FUTURO DESARROLLO DE LA SUBDIVISION. N.A.W.S.C. TIENE UNA LINEA DE AGUA DE 8" DE DIAMETRO QUE CORRE POR EL LADO ESTE DE LA CALLE DILLON ROAD.

EL SISTEMA DE PROVISION DE AGUA PARA LA SUBDIVISION CONSISTE DE UNA LINEA DE AGUA DE 8" DE DIAMETRO QUE SE CONECTA CON LA LINEA EXISTENTE DE AGUA DE 8" DE DIAMETRO EN LA CALLE DILLON ROAD Y CORRE A LO LARGO DEL LADO NORTE DE LA CALLE TRENTO ROAD (MILE 13 1/2 NORTH ROAD) Y TERMINA CON UNA VALVULA DE PURGA DE 2" PULGADAS, POR EL LADO NORTE DE LA CALLE OPALO DRIVE, POR EL LADO OESTE DE LA CALLE BERILO LANE, POR EL LADO SUR DE LA CALLE ZAFIRO DRIVE, POR EL LADO ESTE DE LA CALLE JASPE LANE, POR EL LADO NORTE DE LA CALLE MOONSTONE DRIVE, Y POR EL LADO OESTE DE LA CALLE DIAMANTE LANE.

DEL CONDUCTO DE AGUA DE 8 PULGADAS SE PRODUCEN VEINTICINCO (25) DOBLE-CONDUCTOS DE AGUA DE 1 PULGADA DE DIAMETRO PARA CADA DOS LOTES. ESTOS CONDUCTOS SE SEPARAN PARA PRODUCIR DOS CONDUCTOS DE AGUA DE 3/4" DE PULGADA DE DIAMETRO PARA CADA LOTE. ADICIONALMENTE HAY SIETE (7) CONDUCTOS INDIVIDUALES DE AGUA DE 3/4" DE PULGADA DE DIAMETRO PARA CADA LOTE.

LOS DOBLE-CONDUCTOS DE AGUA DE 1 PULGADA DE DIAMETRO, EL CONDUCTO DE 3/4" DE PULGADAS DE DIAMETRO, Y LOS MEDIDORES MECANICOS DE AGUA A UN COSTO TOTAL DE US\$ 1,462,820.00, US\$ 2,586.01 POR LOTE. EL DUEÑO DE LA SUBDIVISION TAMBIEN LE HA PAGADO A LA COMPANIA N.A.W.S.C. US\$ 49,645.00, QUE CUBRE EL COSTO DEL MEDIDOR MECANICO DE AGUA PARA CADA LOTE, US\$ 320.00. ESTE 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 COMPANIA N.A.W.S.C. LO INSTALARA SIN ALGUN GASTO AL DUEÑO. EL DUEÑO DE LA SUBDIVISION TAMBIEN HA INSTALADO CINCO (5) BOCAS DE RIEGO (FIRE HYDRANT) A UN COSTO DE \$ 3,195.00 POR CADA UNO CUAL GASTA UNA CANTIDAD TOTAL \$ 15,975.00. EL SISTEMA DE AGUA ESTARA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA, EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL CONDAO DE HIDALGO.

DRENAJE: Descripción y Costos.

SE INSTALARA UNA FOSA SEPTICA EN CADA SOLAR DE LA SUBDIVISION SAN RAFAEL SUBDIVISION. ESTA FOSA SEPTICA CONSISTE DE UN TANQUE SEPTICO DE MODELO DUAL Y DE UN CAMPO DE DRENAJE PARA EL SOLAR. EL EVALUADOR (LIC# OS 12258) AUTOR DE ESTE DOCUMENTO HA EVALUADO EL AREA DONDE SE ENCUENTRA LA SUBDIVISION Y HA PREPARADO UN REPORTE DE SALUBRIDAD DEL CONDAO DE HIDALGO PARA ESTAS FOSAS SEPTICAS (OSSF). EL REPORTE FUE APROBADO POR EL DEPARTAMENTO DE SALUBRIDAD DEL CONDAO DE HIDALGO (HIDALGO COUNTY HEALTH DEPARTMENT) SEGUN EL REPORTE.

CADA LOTE EN LA SUBDIVISION MIDE MEDIO ACRE. EL EVALUADOR (LIC# OS 12258) HIZO (8) PRUEBAS CON AGUJEROS EN EL CENTRO DE LOS LOTES 1, 11, 21, 25, 28, 40, 45 & 57 (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA AREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME FRUO AEROSO (CLASS II) 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 ENBAJO.

LOTES 1 AL 35 EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS POR SOLAR SON US\$ 1,500.00, 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. A UN COSTO TOTAL DE US\$ 52,500.00. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDAO DE HIDALGO HA INSPECCIONADO TODOS LAS FOSAS SEPTICAS Y AH APROBADO LA INSTALACION DE LAS FOSAS SEPTICAS DESDE EL 15 DE ABRIL DEL 2021.

LOTES 35 AL 57 EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS POR SOLAR SON US\$ 1,500.00, INCLUYENDO EL COSTO DEL PERMISO REQUERIDO Y LICENCIA. EN ESTOS MOMENTOS NINGUNA FOSA SEPTICA HAN SIDO INSTALADAS EN LOS LOTES 35 AL 57. EL DUEÑO DE LA SUBDIVISION HA PROVEIDO GARANTIA FINANCIERA EN LA FORMA DE UN CHEQUE DE COMPANIA QUE REPRESENTA "DEPOSITO EN EFECTIVO" JUNTO CON EL PLANO ORIGINAL AL CONDAO DE HIDALGO PARA CUBRIR EL COSTO TOTAL DE US\$ 33,000.00 PARA LA INSTALACION DE TODAS LAS FOSAS SEPTICAS. EL DUEÑO DE LA SUBDIVISION INCLUIRA EL COSTO DE UN SISTEMA DE FOSAS SEPTICAS EN LA VENTA DEL SOLAR.

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 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 ESTA TOTALMENTE CONSTRUIDO, CON LA INSTALACION DE LOS MEDIDORES DE AGUA. EL GRAN COSTO TOTAL ES DE US\$ 1,462,820.00 CUAL EQUIVALE A US\$ 3,436.97 POR LOTE.

DRENAJE: SE ESTIMA QUE LA FOSA SEPTICA COSTARA \$ 1,500.00 A UN COSTO TOTAL DE \$ 52,500.00 PARA LOS LOTES 1 AL 35. PARA LOS LOTES 36 AL 57 EL DUEÑO DE LA SUBDIVISION HA PROVEIDO GARANTIA FINANCIERA EN LA FORMA DE UN CHEQUE DE COMPANIA QUE REPRESENTA "DEPOSITO EN EFECTIVO" JUNTO CON EL PLANO ORIGINAL AL CONDAO DE HIDALGO PARA CUBRIR EL COSTO TOTAL DE US\$ 33,000.00 PARA LAS FOSAS SEPTICAS NO INSTALADAS.

## COST ESTIMATE

WATER DISTRIBUTION:	\$ 1,462,820.00
DRAINAGE IMPROVEMENTS:	\$ 186,583.00
PAVING IMPROVEMENTS:	\$ 412,440.00
SEPTIC TANK (OSSF):	\$ 52,500.00
SEPTIC TANK (OSSF): (ESCROWED)	\$ 33,000.00



4-16-21  
 MARCO A. GONZALEZ  
 P.E. 120016  
 DATE

## FINAL ENGINEERING REPORT FOR SAN RAFAEL SUBDIVISION

BY MARCO A. GONZALEZ, P.E.  
 WATER SUPPLY: Description and Costs.  
 SAN RAFAEL SUBDIVISION WILL BE PROVIDED WITH POTABLE WATER BY THE 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 SUPPORT 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 8" DIAMETER WATERLINE RUNNING ALONG THE EAST SIDE OF DILLON ROAD.

WATER SYSTEM FOR SAN RAFAEL SUBDIVISION CONSISTS OF AN 8" DIAMETER WATERLINE THAT TAPS INTO THE EXISTING 8" DIAMETER WATERLINE ON THE EAST SIDE OF DILLON ROAD AND RUNS WEST ALONG THE NORTH SIDE OF TRENTO ROAD (MILE 13 1/2 NORTH ROAD) AND WILL END WITH A 2" FLUSH VALVE AT THE SOUTHWEST CORNER OF THE SUBDIVISION. ANOTHER 8" DIAMETER WATERLINE WILL RUN WEST ALONG THE NORTH SIDE OF OPALO DRIVE, THE WEST SIDE OF BERILO LANE, THE SOUTH SIDE OF ZAFIRO DRIVE, THE EAST SIDE OF JASPE LANE, THE NORTH SIDE OF MOONSTONE DRIVE, AND THE WEST SIDE OF DIAMANTE LANE FOR A COMPLETE LOOP.

FROM THE 8" DIAMETER WATERLINE TWENTY-FIVE (25) 1" DUAL SERVICE LINES RUNNING TO PAIR OF LOTS BEFORE SPLITTING INTO TWO 3/4" DIAMETER SINGLE SERVICE LINES THAT RUN INTO THE WATER METER BOXES FOR EACH LOT. THERE ARE SEVEN (7) 3/4" SINGLE SERVICE LINES THAT RUN TO THE METER BOXES OF THE LOTS.

THE 8" WATERLINE, THE 1" DUAL SERVICE LINES, THE 3/4" SINGLE SERVICE LINES AND THE METER BOXES WILL BE INSTALLED, AT A TOTAL COST OF \$ 1,462,820.00, OR \$ 2,586.01 PER LOT. THE SUBDIVIDER HAS IN ADDITION PAID N.A.W.S.C. THE SUM OF \$ 49,645.00, OR \$ 870.98 PER LOT, WHICH REPRESENTS THE TOTAL COST OF WATER METERS AND ALL MEMBERSHIPS OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO THE N.A.W.S.C. SYSTEM. THE SUBDIVIDER WILL INSTALL FIVE (5) FIRE HYDRANTS AT A UNIT COST OF \$ 3,195.00 FOR A TOTAL COST OF \$ 15,975.00. THE ENTIRE WATER FACILITIES WILL BE 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 and Costs.

SEWAGE FROM THE SAN RAFAEL SUBDIVISION, IS TREATED BY INDIVIDUAL ON-SITE SEWAGE FACILITIES ("OSSF") CONSISTING OF A STANDARD DESIGN DUAL COMPARTMENT SEPTIC TANK AND A DRAINFIELD ON EACH LOT. THE SITE EVALUATOR (LICENSE NUMBER OS 12258) 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. EACH LOT HAS ADEQUATE AREA FOR A REPLACEMENT DRAIN FIELD.

EACH LOT IN THE EXISTING SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE. THE NATURAL RESOURCE CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A SANDY CLAY LOAM, AND CLAY LOAM SOIL FOR THE AREA. THE SITE EVALUATOR (LICENSE NUMBER OS 12258) HAS EVALUATED THE SUITABILITY OF THE SUBDIVISION SITE FOR OSSF AND SUBMITTED A REPORT CONCLUDING THAT THE SOIL IS A UNIFORM SANDY LOAM (CLASS II) EXTENDING UP TO 36" BELOW THE BOTTOM OF ANY EXISTING EXCAVATIONS. THERE IS NO INDICATION OF GROUNDWATER OR A RESTRICTIVE LAYER WITHIN 24" OF BOTTOM OF THE EXISTING EXCAVATIONS. THE SUBDIVISION DRAINS WELL.

FOR LOTS 1 THROUGH 35 THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ 1,500.00, INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. NO OSSFS FOR LOTS 36 THROUGH 57 HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST OF \$ 52,500.00. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF ON APRIL 15, 2021.

FOR LOTS 36 THROUGH 57, THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ 1,500.00 INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. NO OSSFS FOR LOTS 36 THROUGH 57 HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL WITH THE FILING OF THIS FINAL PLAT. THE SUBDIVIDER IS PROVIDING ADEQUATE FINANCIAL GUARANTEES OF PERFORMANCE IN THE FORM OF A PERSONAL CHECK REPRESENTING A CASH DEPOSIT TO BE HELD BY THE COUNTY OF HIDALGO IN ESCROW IN THE AMOUNT OF \$ 33,000.00, WHICH IS THE ESTIMATED TOTAL COST TO INSTALL A SEPTIC TANK SYSTEM ON EACH LOT. THE SUBDIVIDER WILL INCLUDE THE COST OF A SEPTIC TANK SYSTEM IN THE SALE PRICE OF THE LOT.

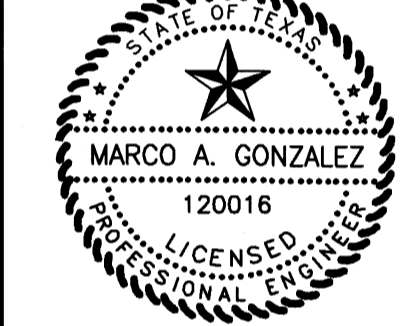
CERTIFICATION:

BY MY SIGNATURE BELOW, I CERTIFY THAT THE WATER AND SEWAGE SERVICE FACILITIES DESCRIBED ABOVE ARE IN COMPLIANCE WITH THE MODEL RULES ADOPTED UNDER SECTION 16.343, WATER CODE. I CERTIFY THAT THE COSTS TO INSTALL THE CONSTRUCTED WATER AND ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

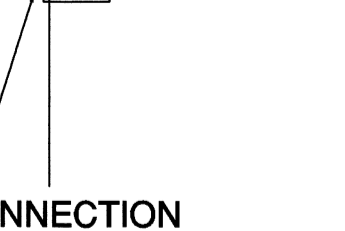
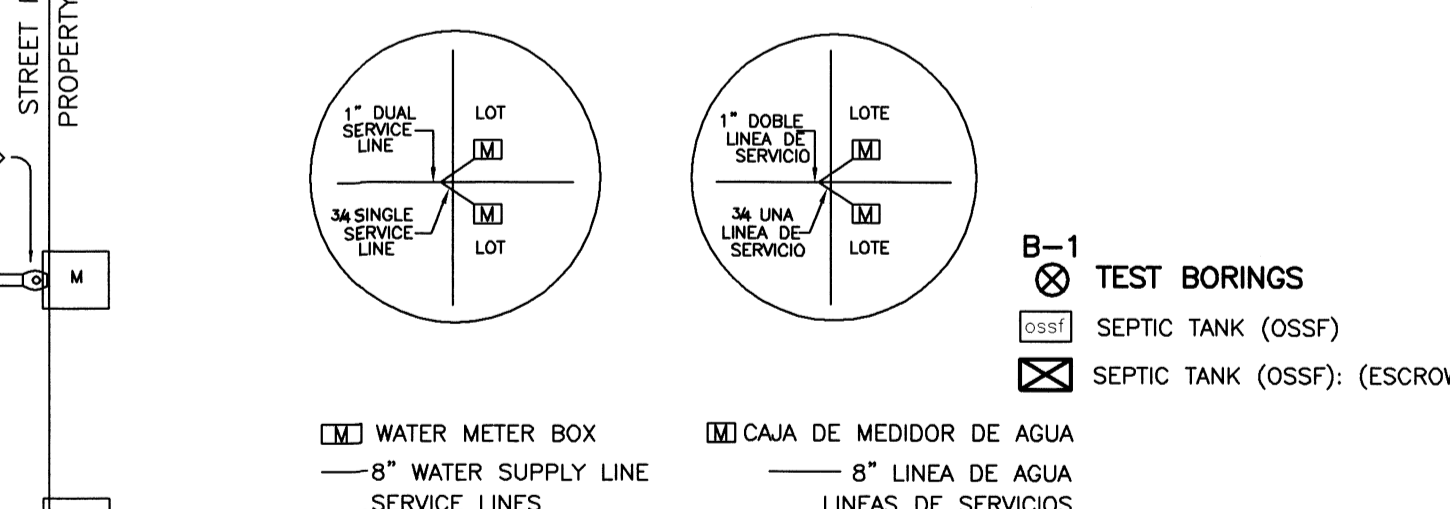
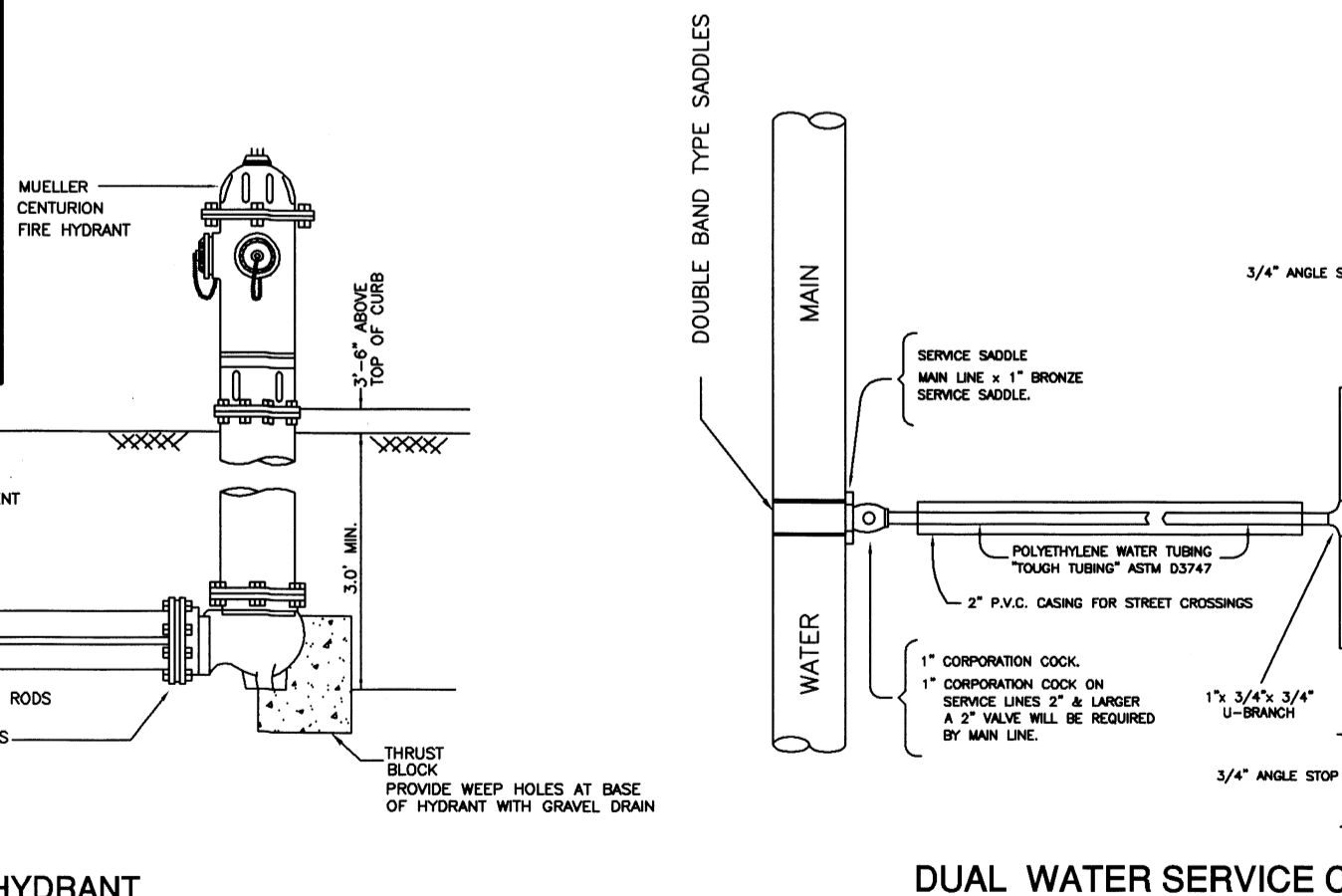
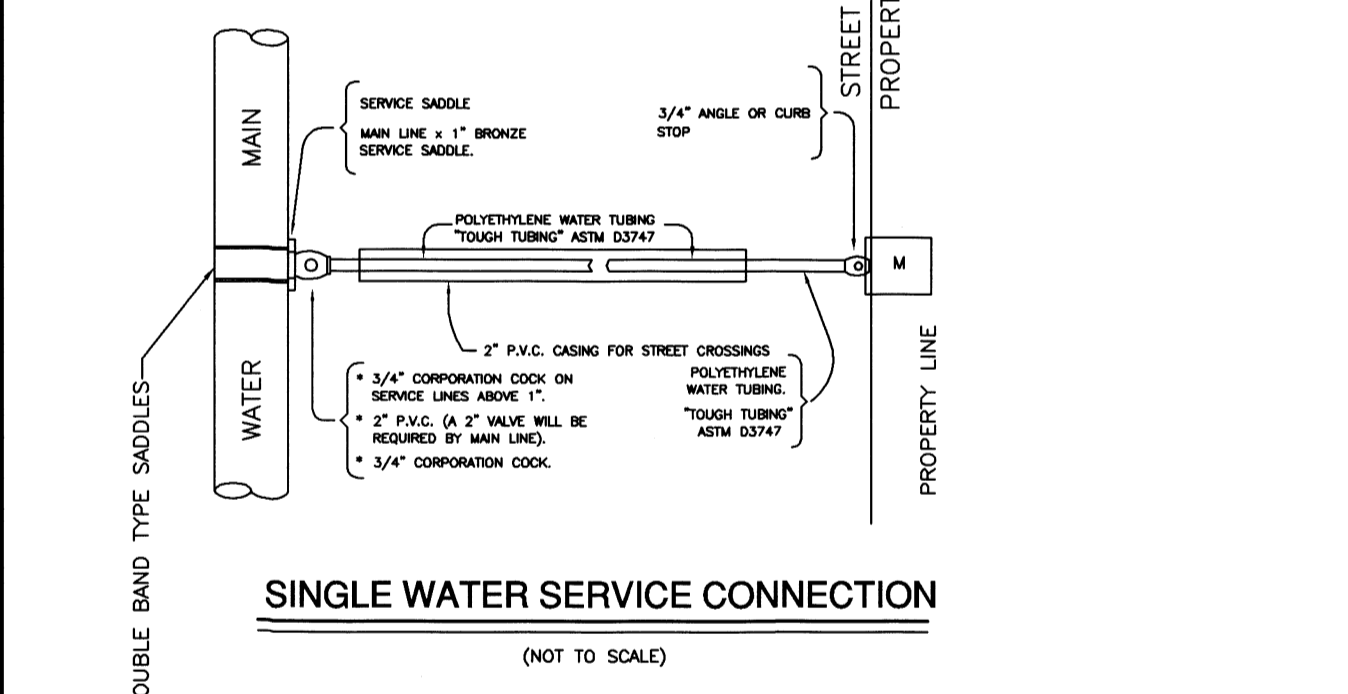
WATER FACILITIES- THESE FACILITIES WILL BE CONSTRUCTED, WITH THE INSTALLATION OF WATER METER BOXES, HAVE COST A GRAND TOTAL OF \$ 1,462,820.00 WHICH EQUALS TO \$ 3,436.97 PER LOT.

SEWAGE FACILITIES- SEPTIC SYSTEM IS ESTIMATED TO COST \$1,500.00 PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$52,000.00 FOR LOTS 1 THROUGH 35.

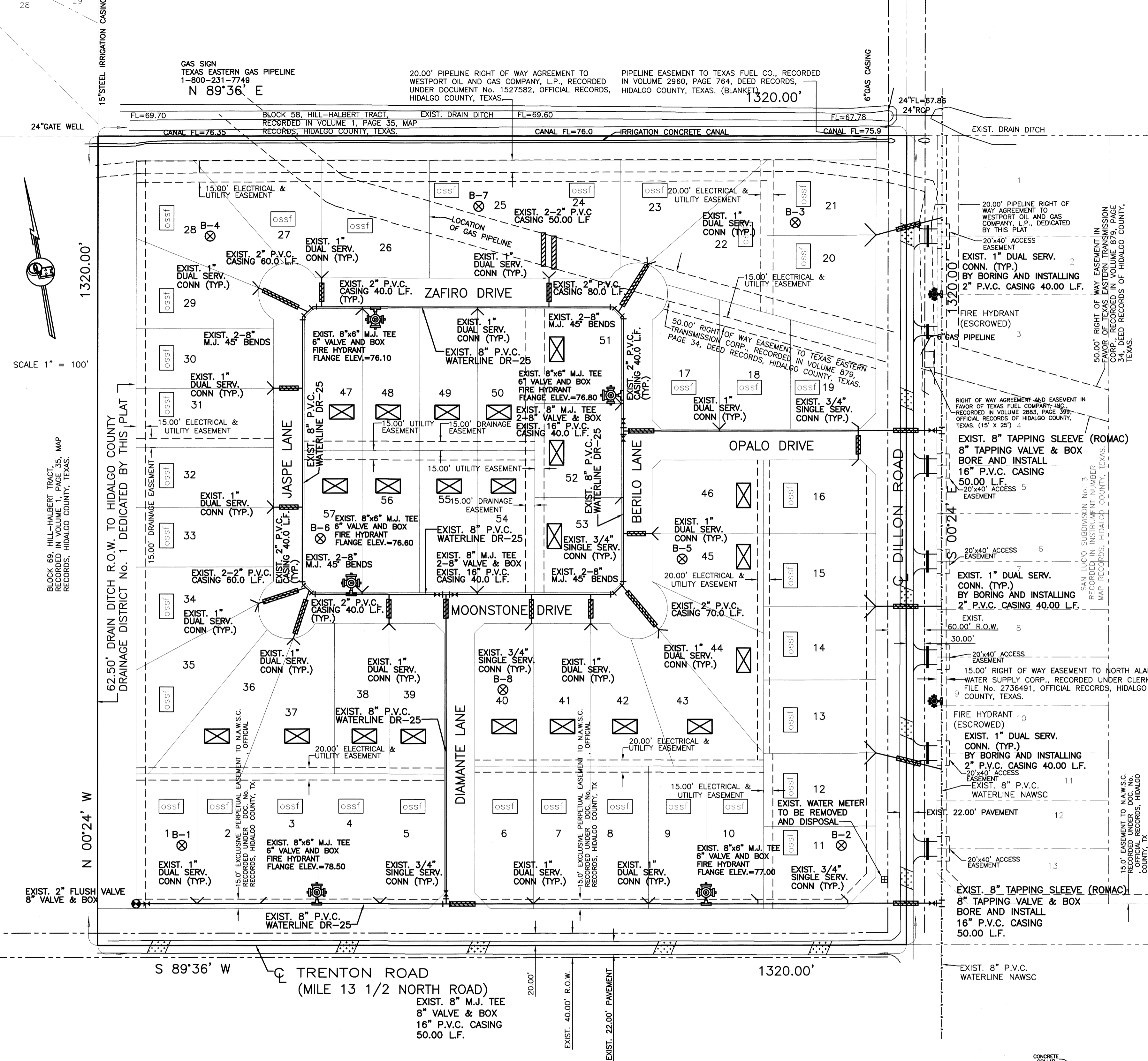
LOTS 36 THROUGH 57 THE SUBDIVIDER IS PROVIDING ADEQUATE FINANCIAL GUARANTEES OF PERFORMANCE IN THE FORM OF A PERSONAL CHECK REPRESENTING A CASH DEPOSIT TO BE HELD BY THE COUNTY OF HIDALGO IN ESCROW IN THE AMOUNT OF \$ 33,000.00.



4-16-21  
 MARCO A. GONZALEZ  
 P.E. 120016  
 DATE



4-16-21  
 MARCO A. GONZALEZ  
 P.E. 120016  
 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 (WE), TILLMIN WELCH, MANAGER OF C AND N FARMS, LLC. SUBDIVIDERS OF SAN RAFAEL SUBDIVISION HEREBY CERTIFY SEWER PERMITS, AS APPLICABLE, HAVE BEEN PAID AND COPIES OF RECEIPTS ARE ON FILE WITH THE HIDALGO COUNTY HEALTH DEPARTMENT AND THAT AN ADEQUATE DRINKING WATER SOURCE IS IMMEDIATELY AVAILABLE TO EACH LOT OF THE TYPE, QUALITY & QUANTITY TO ENABLE EACH PERSON PURCHASING A LOT HAVE ADEQUATE WATER TO COMPLY WITH THE REGULATIONS AND THE LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

4-16-21  
 DATE

STATE OF TEXAS  
 COUNTY OF HIDALGO  
 BEFORE ME, the undersigned notary public, on this day personally appeared  
 TILLMIN WELCH, MANAGER OF C AND N FARMS, LLC,  
 proved to me through his 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 he executed the same for the purposes and consideration thereby expressed.

Given under my hand and seal of office this 16th day of April, 2021.

CLARISSA ANNETTE QUINTANILLA  
 Notary ID# 129615255  
 My Commission Expires November 04, 2021

CLARISSA ANNETTE QUINTANILLA - NOTARY PUBLIC

C AND N FARMS, LLC.  
 TILLMIN WELCH, MANAGER  
 902 BIGHORN DRIVE  
 EDINBURG TX, 78542

**QUINTANILLA, HEADLEY AND ASSOCIATES, INC.**  
 CONSULTING ENGINEERS • LAND SURVEYORS  
 124 E. STUBBS ST. EDINBURG, TEXAS 78539  
 REGISTRATION NUMBER F-1513 SURVEYING REGISTRATION NUMBER 100411-00  
 PHONE 956-381-6480 FAX 956-381-0527  
 ALFONSO@QHA-ENG.COM

REVISION NOTES

No.	Sheet	REVISION	Date	Approved

SHEET NO. 2 OF 3 SHEETS

FILENAME	DATE PREPARED	PREPARED BY	CHECKED BY	APPROVED BY
F:\MCA\SUBD\CONNA\SAN RAFAEL SUBDIVISION\WATER PLAT	05-19-2020	G.CANTU	G.CANTU	M.G.
	04-16-2021	ALUIS OYER	ALUIS OYER	ALUIS OYER

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

# SAN RAFAEL SUBDIVISION

A 40.00 ACRE TRACT OF LAND BEING ALL OF BLOCK 70, HILL-HALBERT TRACT, HIDALGO COUNTY, TEXAS, ACCORDING TO THE PLAT OR MAP THEREOF RECORDED IN VOLUME 1, PAGE 35, MAP RECORDS HIDALGO COUNTY, TEXAS, AND ACCORDING TO GENERAL WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 3121199, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

## DRAINAGE REPORT

FOR  
SAN RAFAEL SUBDIVISION  
A 40.00 acre tract of land being all of block 70, Hill-Halbert Tract, Hidalgo County, Texas, according to the plat or map thereof recorded in volume 1, page 35, map records Hidalgo County, Texas, and according to general warranty deed recorded under county clerk's document number 3121199, official records, Hidalgo County, Texas. It is located at the northwest corner of Trenton Road (Mile 13 1/2 North Road) and Dillon Road in the City of Donna ETJ. The proposed subdivision will consist of 57 residential lots.

The tract is Zone "C" (no shading shading), areas of minimal flooding, as per FEMA Flood Insurance Rate Map, Community Panel No. 480334 0425 C, dated on November 16, 1982.

The majority of the soil is Hidalgo (28) and Raymondville (52) and is in soil group "B" & "D". It is sandy clay loam (SC), clay loam (CL), and clay (CH). This soil is well drained. Permeability is moderate. Plasticity Index has a range of 11-35. See attached Soil Survey of Hidalgo County, Texas tables.

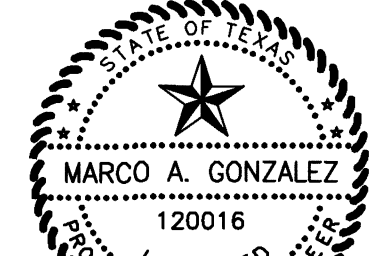
Presently, the site has very minimal runoff in an easterly direction with an approximate 0.5% slope. The proposed subdivision is Q=13.70 cubic feet per second based on a 10-year storm.

After development the runoff will be Q=52.60 cubic feet per second based on a 50-year storm for an increase of Q=38.90 cubic feet per second. Detention will be 131,543.99 cubic feet (3.02 acre feet). It will be accomplished by regrading the roadside ditch along Trenton Road and Dillon Road and excavating the 62.50' Hidalgo County Drainage District No. 1 Drain Ditch Right of Way that is being dedicated by this plat along the west side of this subdivision. This drain ditch will outfall into an existing Donna Irrigation District Drain Ditch along the north side of this subdivision. The street runoff will be collected by a storm sewer system consisting of 18", 24", 30", and 36" pipes and Type "A" Inlets that will discharge into the new drain ditch.

The drainage calculations are attached.

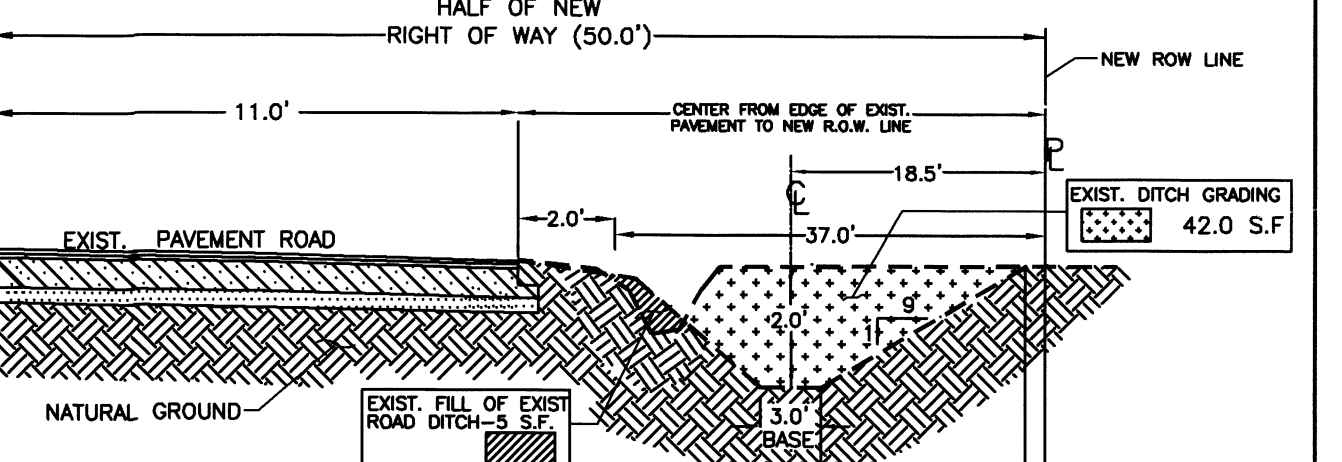
## CERTIFICATION:

BY MY SIGNATURE BELOW, I CERTIFY THAT THE 100-YEAR FLOODPLAIN FOR ZONE "C", AREAS OF MINIMAL FLOODING AS DESCRIBED IN COMMUNITY PANEL NUMBER 480334 0425 C, DATED ON NOVEMBER 16, 1982 IS CONTAINED WITHIN THE DRAINAGE OF THE SUBDIVISION, AS SHOWN.

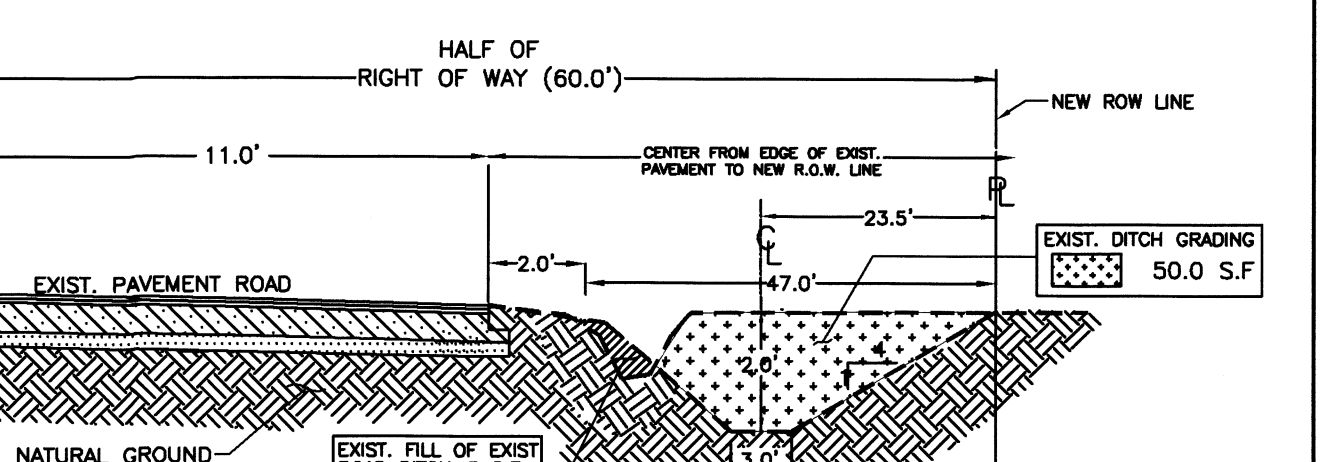


*M. A. Gonzalez*  
4-16-21  
MARCO A. GONZALEZ  
P.E. 120016

COST ESTIMATE	
WATER DISTRIBUTION:	\$ 146,262.80
DRAINAGE IMPROVEMENTS:	\$ 186,583.00
PAVING IMPROVEMENTS:	\$ 412,440.00
SEPTIC TANK (OSSP):	\$ 52,500.00
SEPTIC TANK (OSSP): (ESCROWED)	\$ 33,000.00



RECONSTRUCTION OF ROAD SIDE DITCH ALONG DILLON ROAD (1,100 LF)  
ADDITIONAL DETENTION = 40,700.00 C.F. (37 S.F. X 1,100 LF)  
TO BE USED FOR DETENTION  
N.T.S.



RECONSTRUCTION OF ROAD SIDE DITCH ALONG TRENTON ROAD (1,200 LF)  
DETENTION = 54,000 C.F. (45 S.F. X 1,200 LF)  
TO BE USED FOR DETENTION  
N.T.S.

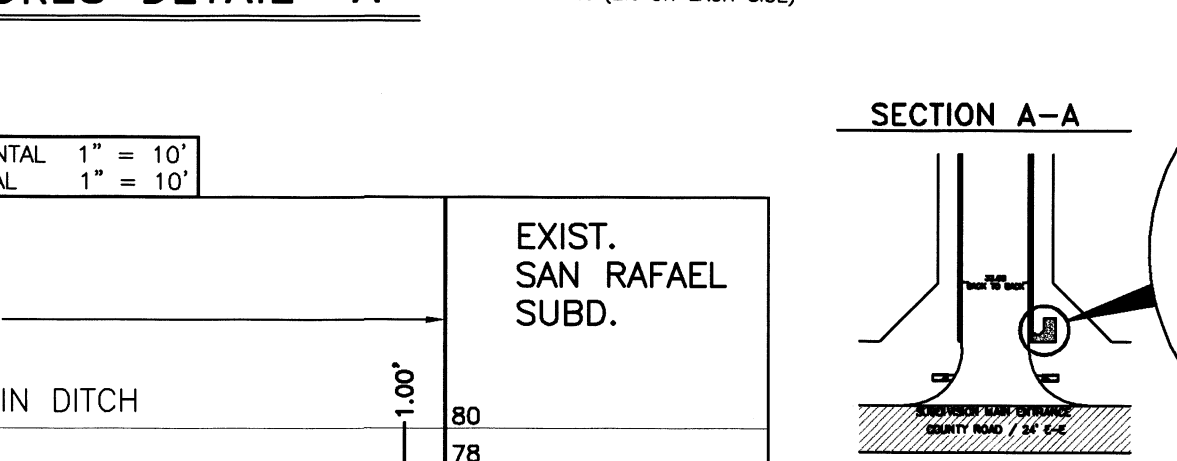
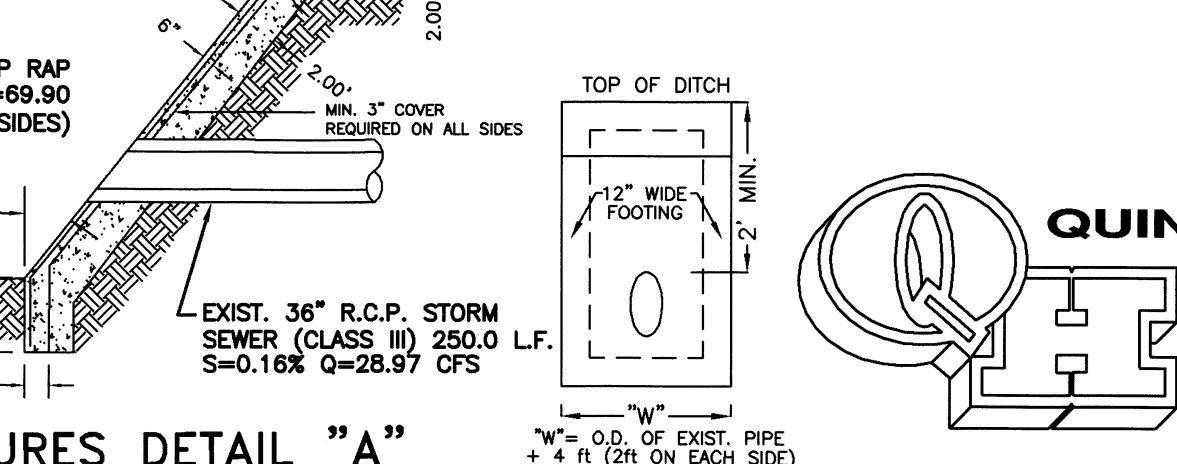
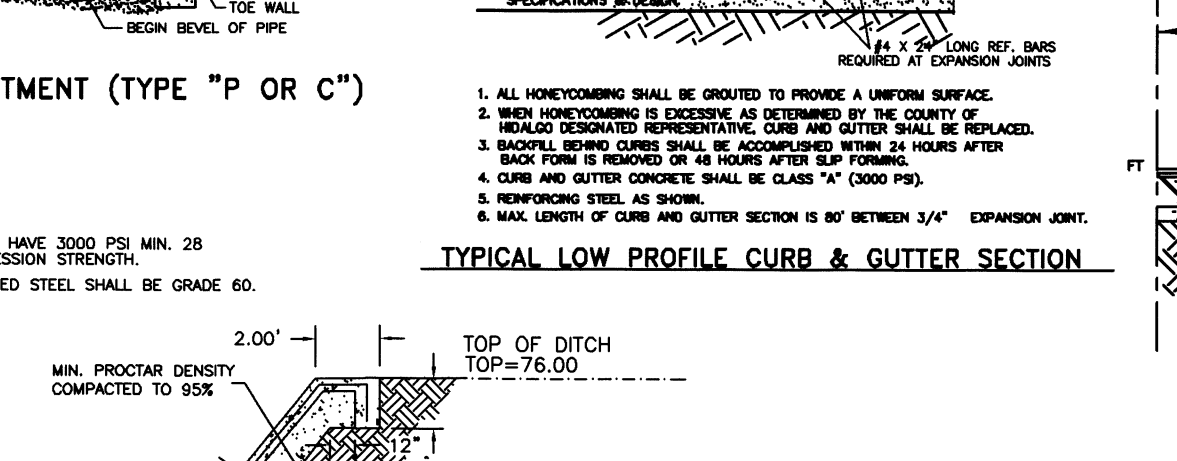
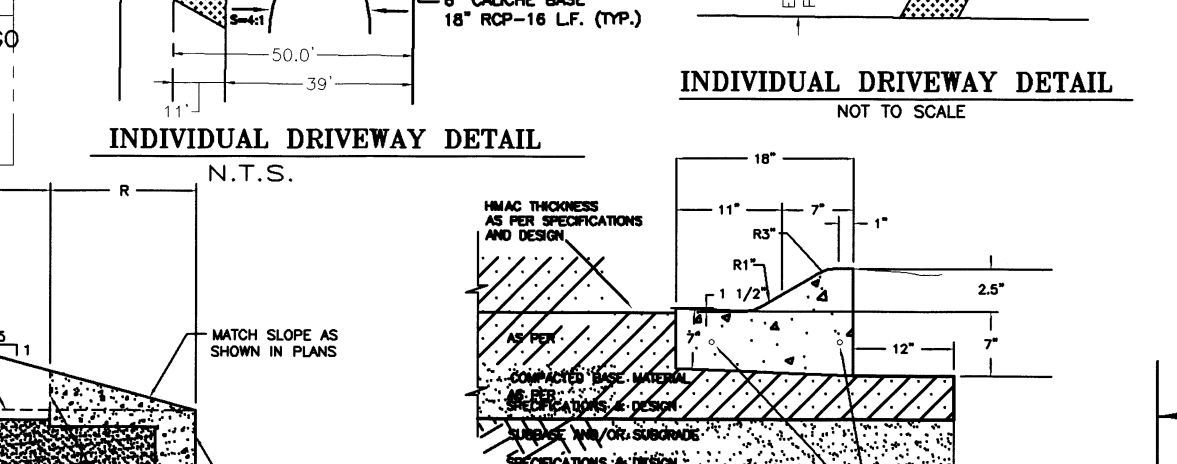
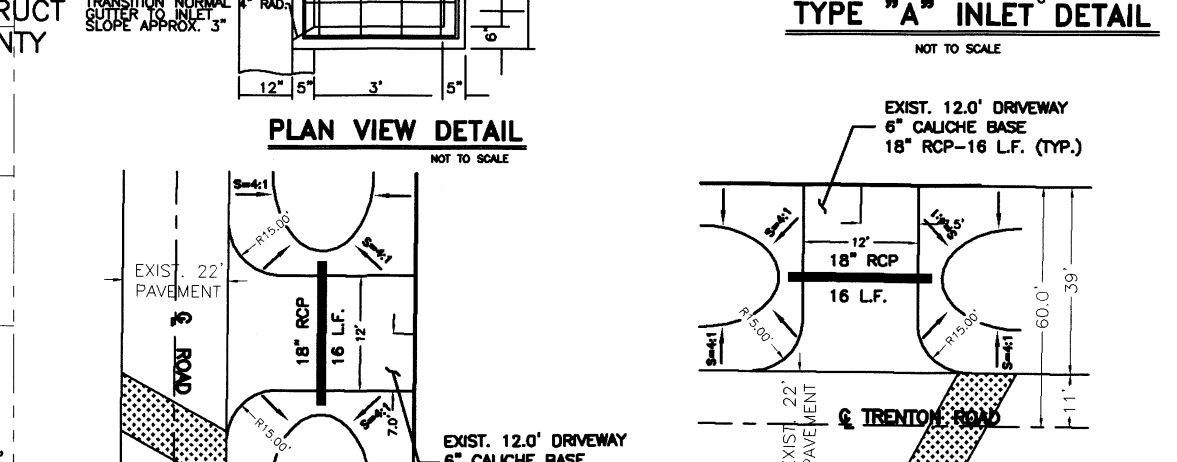
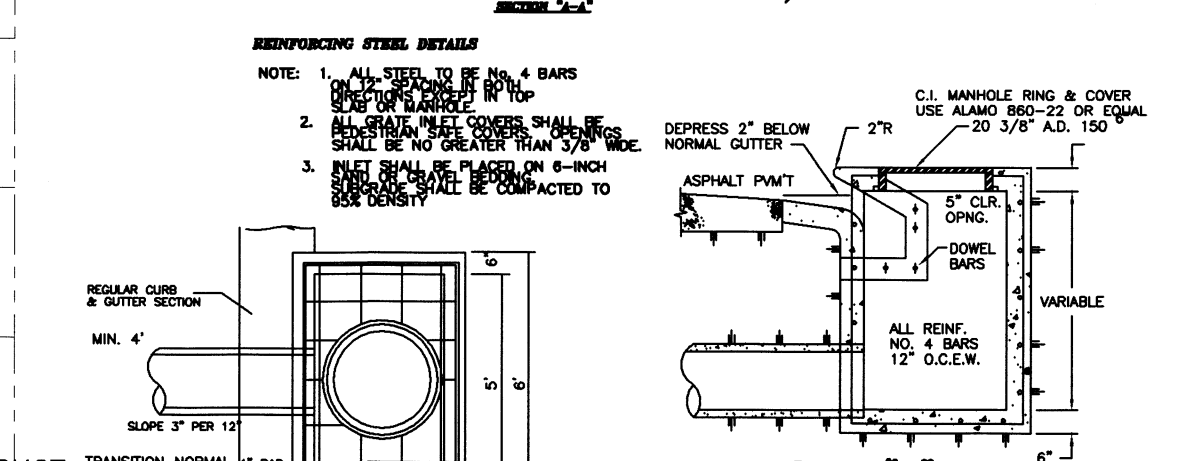
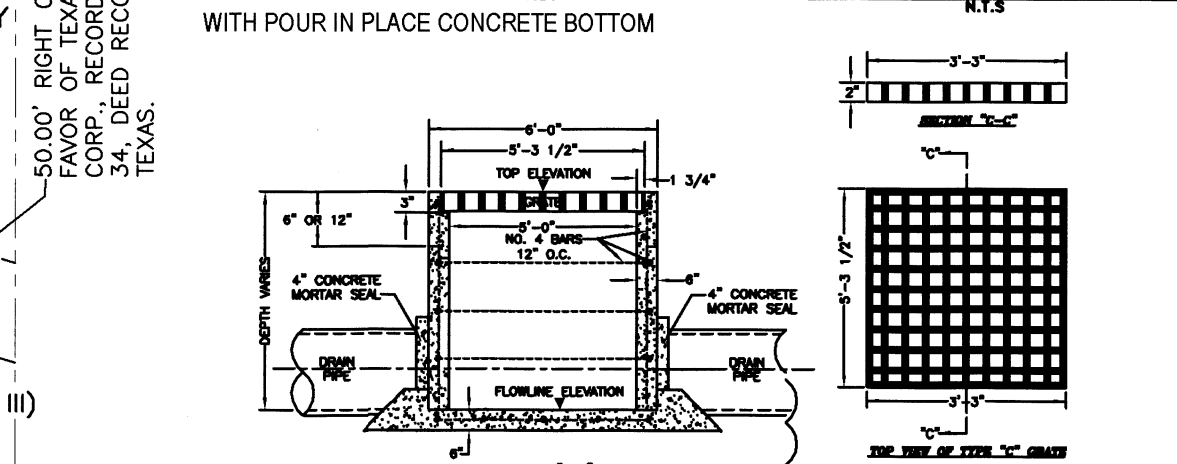
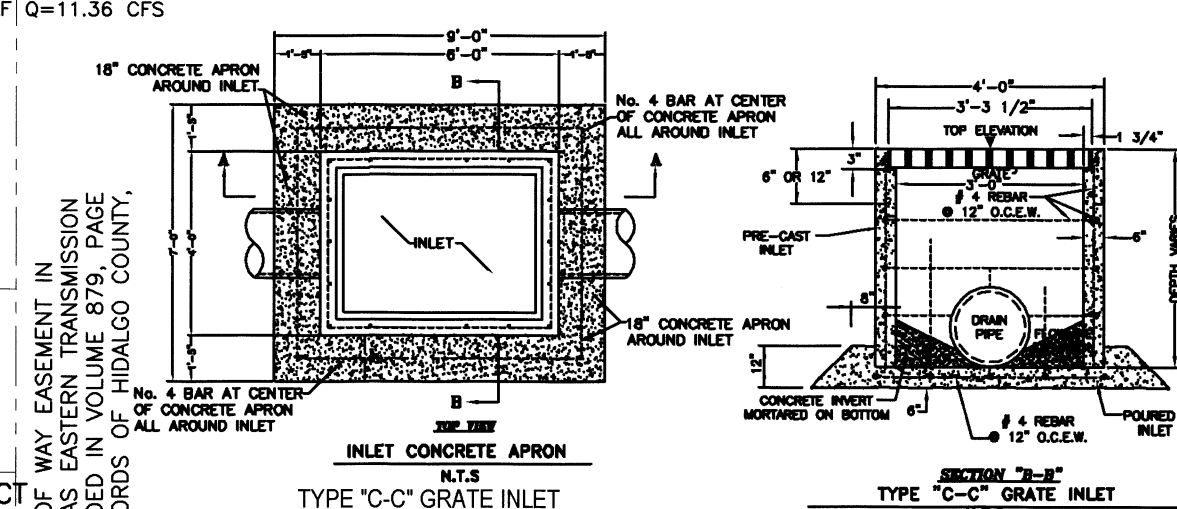
## QUINTANILLA, HEADLEY AND ASSOCIATES, INC.

CONSULTING ENGINEERS • LAND SURVEYORS  
124 E. STUBBS ST. EDINBURG, TEXAS 77839  
REGISTRATION NUMBER F-1513 SURVEYING REGISTRATION NUMBER 100411-00  
PHONE 956-381-6480 FAX 956-381-0527  
ALFONSO@QHA-ENG.COM

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

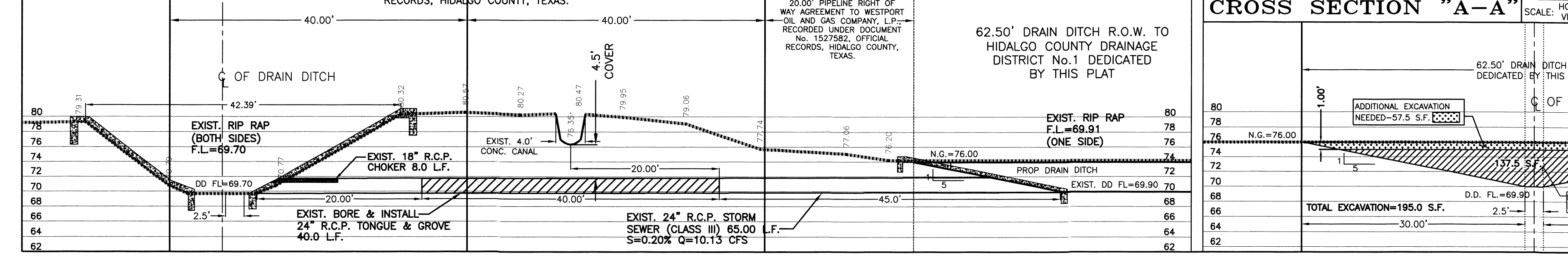
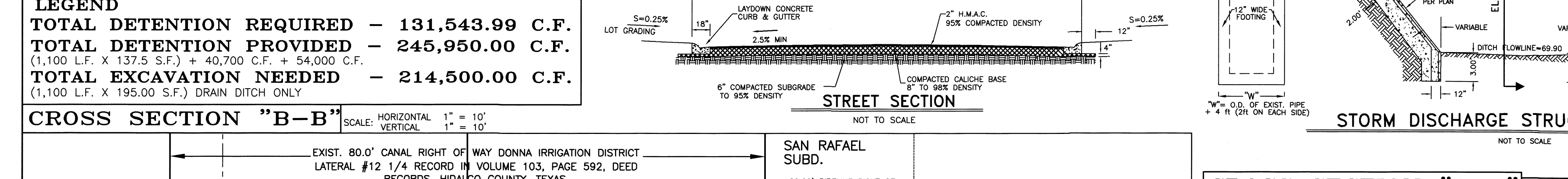
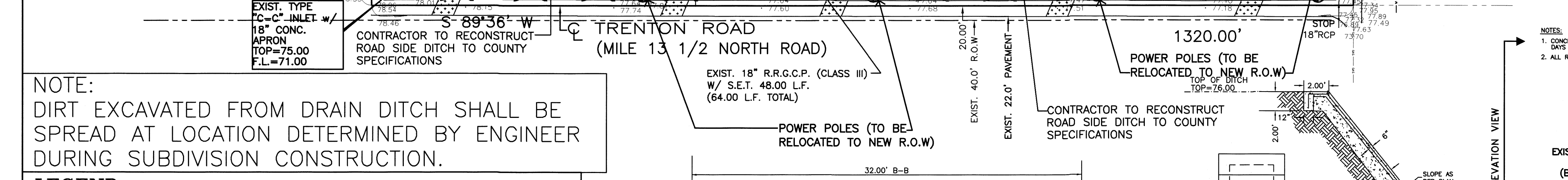
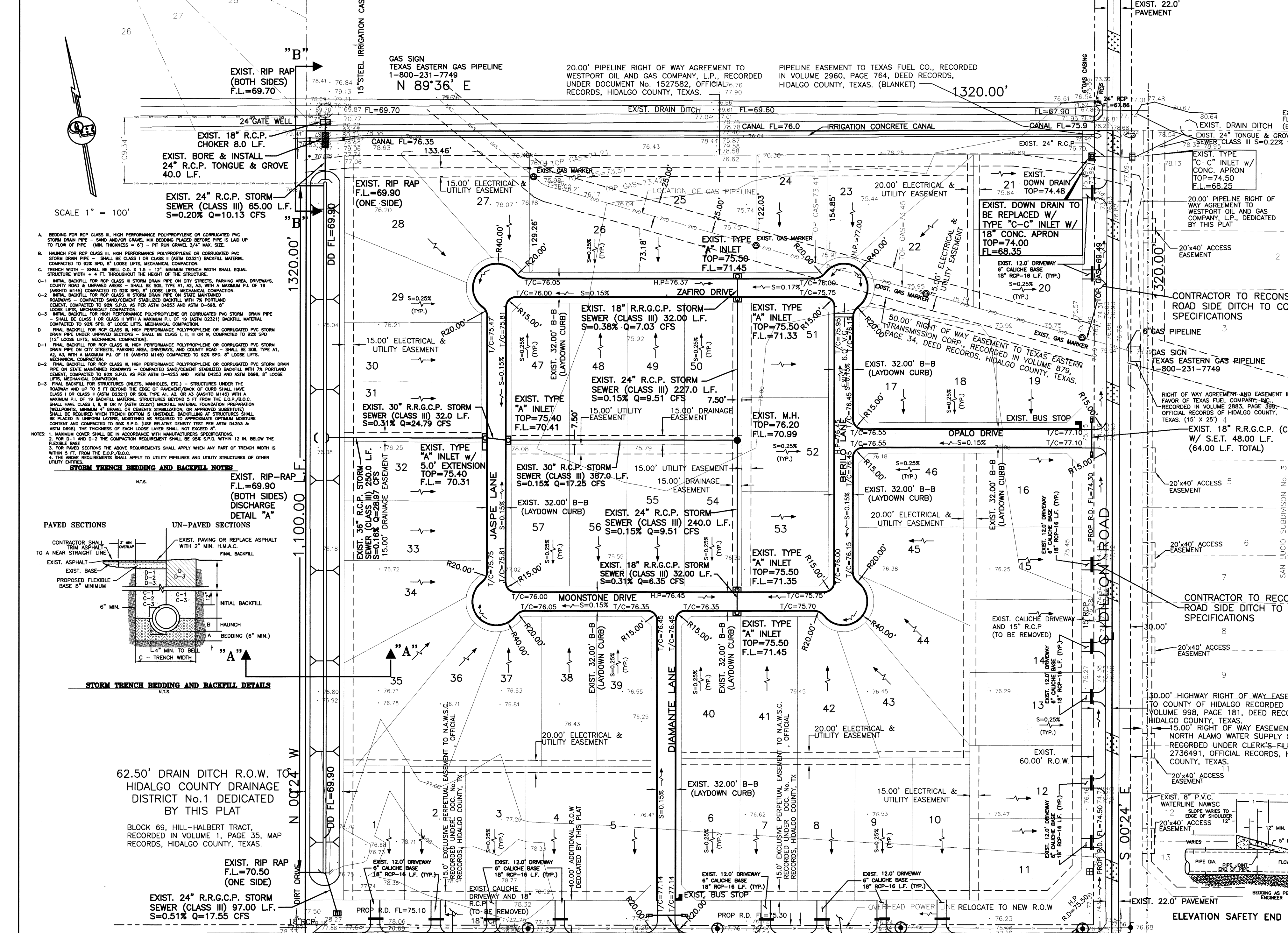
No.	REVISION	Date	Approved

SHEET NO. 3 OF 3 SHEETS  
FILENAME: F:\DATA\SUB\DONNA\SAN RAFAEL SUBDIVISION\PAVING\PLAT  
DATE PREPARED: 06-29-2020 PREPARED BY: ALJUS CAVAZOS  
DATE REVISION: 07-08-2020 REVISION BY: G. CANTU



No.	REVISION	Date	Approved

TOTAL EXCAVATION=195.0 S.F.  
EXCAVATED DRAIN DITCH AREA FOR DETENTION REQUIREMENTS

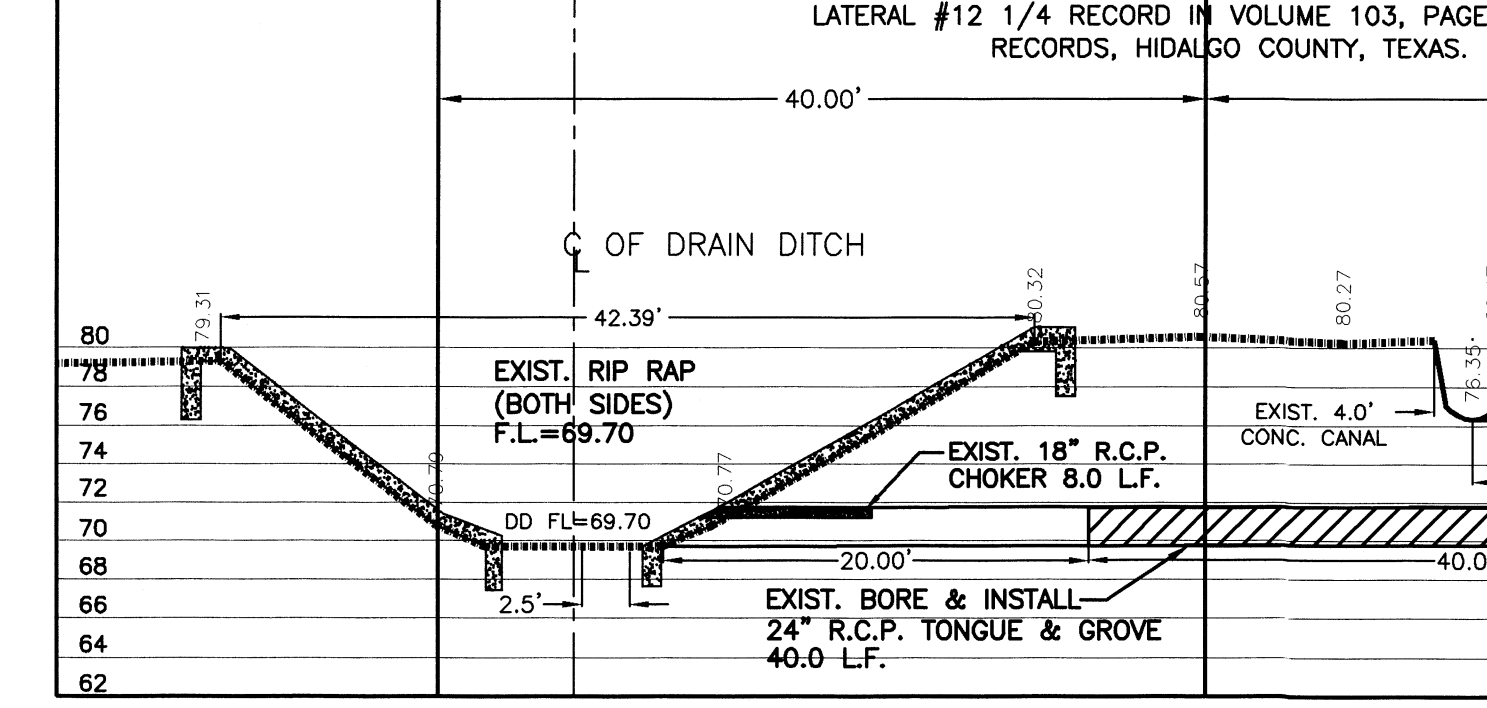


NOTE:  
DIRT EXCAVATED FROM DRAIN DITCH SHALL BE SPREAD AT LOCATION DETERMINED BY ENGINEER DURING SUBDIVISION CONSTRUCTION.

LEGEND  
TOTAL DETENTION REQUIRED - 131,543.99 C.F.  
TOTAL DETENTION PROVIDED - 245,950.00 C.F.  
(1,100 L.F. X 137.5 S.F.) + 40,700 C.F. + 54,000 C.F.  
TOTAL EXCAVATION NEEDED - 214,500.00 C.F.  
(1,100 L.F. X 195.0 S.F.) DRAIN DITCH ONLY

CROSS SECTION "B-B" SCALE: HORIZONTAL 1" = 10' VERTICAL 1" = 10'

CROSS SECTION "A-A" SCALE: HORIZONTAL 1" = 10' VERTICAL 1" = 10'



STORM TRENCH BEDDING AND BACKFILL DETAILS  
STORM DISCHARGE STRUCTURE DETAIL "A"