



T.J. Arredondo, CFM  
Director of Planning

# HIDALGO COUNTY PLANNING DEPARTMENT

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

## HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 3-23-2021

PROPOSED 2812 ESTATES SUBDIVISION PRECINCT No. 4.

ENGINEER: QUINTANILLA HEADLEY & ASSOCIATES DEVELOPER: DANIEC DEVELOPMENT, INC.

PRELIMINARY APPROVAL     FINAL APPROVAL     FINAL APPROVAL WITH FINANCIAL GUARANTEE     WITH VARIANCE

NUMBER OF LOTS: 44  \*SINGLE FAMILY     \*MULTI-FAMILY    4  COMMERCIAL     INDUSTRIAL

ESTIMATED NUMBER OF STREETLIGHTS: 6

FILLING STATIONS: 6

LOCATION DESCRIPTION: NORTH EAST CORNER OF F.M. 2812 APPROXIMATELY 520.00 FEET WEST OF CARMEN AVILA ROAD.

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

DRAINAGE REPORT WAS APPROVED BY HCDD#1: ON 2-18-2021 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 DISCHARGING ONTO A PROPOSED DRAIN DITCH.

ROAD R.O.W. DEDICATION: RIGHT OF WAY DEDICATION VARIES ON F.M. 2812.

H.C.R.O.W. PRELIMINARY APPROVAL DATE: 1-31-2020 BY, JOE OCHOA, PCT. 4 R.O.W. AGENT

H.C.H.D. PRELIMINARY APPROVAL DATE: 2-3-2020 BY, ENVIRONMENTAL HEALTH DIVISION

SEWER SYSTEM:  OSSP'S

WATER SERVICE PROVIDER: NAWSC EXISTING LINE SIZE: 12" LOCATION: F.M. 2812.

H.C.E.O.C. PRELIMINARY APPROVAL DATE: 1-31-2020: 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 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.

\*



# 2812 ESTATES

A 31.18 ACRE TRACT OF LAND BEING OUT OF LOT 6, 7, AND 8, BLOCK 6, SANTA CRUZ GARDENS UNIT NO. 2, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 8, PAGES 28-29, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED IN VOLUME 2766, PAGE 155, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

### 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.

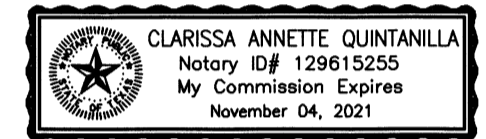
### SUBDIVIDER STATEMENT:

I, (WE) VICTOR DANIEC, MANAGER OF JEFFERSON ROAD PROPERTY INVESTMENTS, LLC SUBDIVIDERS OF 2812 ESTATES 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 LAWS OF THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

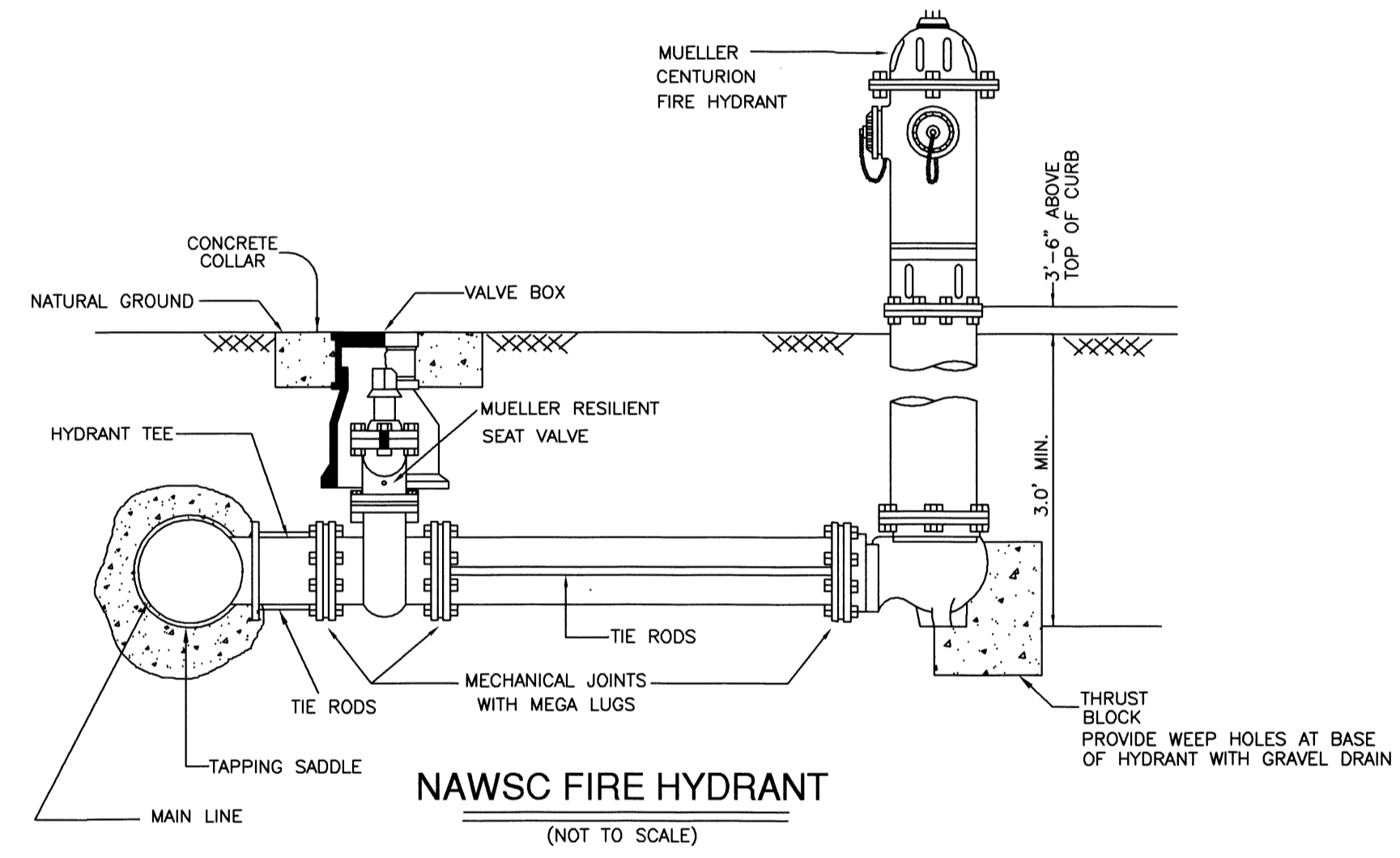
JEFFERSON ROAD PROPERTY INVESTMENTS, LLC  
 VICTOR DANIEC, MANAGER  
 P.O. BOX 2804  
 EDINBURG, TEXAS 78540

STATE OF TEXAS  
 COUNTY OF HIDALGO  
 BEFORE ME, the undersigned notary public, on this day personally appeared VICTOR DANIEC, MANAGER OF JEFFERSON ROAD PROPERTY INVESTMENTS, 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 \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.



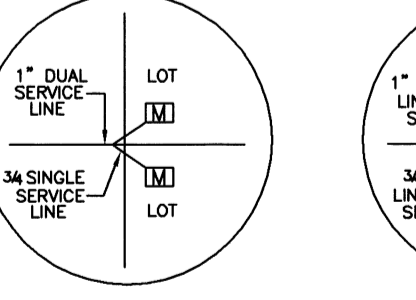
CLARISSA ANNETTE QUINTANILLA - NOTARY PUBLIC



- B-1 TEST BORINGS
- SEPTIC TANK (OSSF)

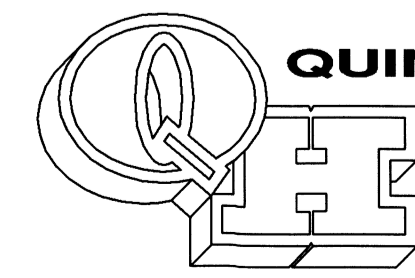
- COST ESTIMATE**
- WATER DISTRIBUTION: \_\_\_\_\_
  - DRAINAGE IMPROVEMENTS: \_\_\_\_\_
  - PAVING IMPROVEMENTS: \_\_\_\_\_
  - SEPTIC TANK (OSSF): \_\_\_\_\_

- WATER METER BOX
- WATER SUPPLY LINE
- SERVICE LINES
- CAJA DE MEDIDOR DE AGUA
- LINEA DE AGUA
- LINEAS DE SERVICIOS



### REVISION NOTES

No.	Sheet	REVISION	Date	Approved



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

### FINAL ENGINEERING REPORT FOR 2812 ESTATES:

BY MARCO A. GONZALEZ, P.E.

### WATER SUPPLY: Description and Costs.

2812 ESTATES 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 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 12" DIAMETER WATERLINE RUNNING ALONG THE NORTH SIDE OF F.M. 2812.

THE WATER SYSTEM FOR 2812 ESTATES CONSISTS OF AN 8" DIAMETER WATERLINE THAT TAPS INTO THE EXISTING 12" DIAMETER WATERLINE ON F.M. 2812. IT RUNS NORTH ALONG THE EAST SIDE OF QUENTIN AVENUE.

FROM THE 8" DIAMETER WATERLINE ALONG THE EAST SIDE OF QUENTIN AVENUE, THEN LOOPS AROUND THE NORTH SIDE OF FRANKLIN LANE, THE EAST SIDE OF MERCURY AVENUE, THE SOUTH SIDE OF VUELCAN LANE, THE WEST SIDE OF GERALD AVENUE AND BACK TO THE NORTH SIDE OF FRANKLIN LANE TO QUENTIN AVENUE.

FROM THE 8" AND 12" DIAMETER WATERLINES, TWENTY (20) 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 EIGHT (8) 3/4" SINGLE SERVICE LINES THAT RUN TO THE METER BOXES OF THE LOTS.

THE 8" WATERLINE, 12" WATERLINE, THE 1" DUAL SERVICE LINES, THE 3/4" SINGLE SERVICE LINES AND THE METER BOXES WILL BE INSTALLED, AT A TOTAL COST OF \$ \_\_\_\_\_ OR \$ \_\_\_\_\_ PER LOT. THE SUBDIVIDER HAS IN ADDITION PAID N.A.W.S.C. THE SUM OF \$ \_\_\_\_\_ 0.00 \$ \_\_\_\_\_ 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 SIX (6) FIRE HYDRANTS AT A UNIT COST OF \$ \_\_\_\_\_ FOR A TOTAL COST OF \$ \_\_\_\_\_ 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 2812 ESTATES, 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 FINE SANDY LOAM, SANDY CLAY LOAM AND CLAY LOAM SOIL FOR THE AREA. THE SITE EVALUATOR (LICENSE NUMBER OS 12258) HAD SIX (6) TEST BORINGS MADE AT OPPOSITE AREAS OF THE SUBDIVISION AT THE CENTERS OF LOTS 6, 11, 15, 24, 28 & 33. (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE VERY UNIFORM WITHIN THIS LIMITED AREA.) 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.

THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ \_\_\_\_\_ INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSFS HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST OF \$ \_\_\_\_\_. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF ON \_\_\_\_\_.

### 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 \$ \_\_\_\_\_ WHICH EQUALS TO \$ \_\_\_\_\_ PER LOT.

SEWAGE FACILITIES- SEPTIC SYSTEM IS ESTIMATED TO COST \$ \_\_\_\_\_ PER LOT (ALL INCLUSIVE), FOR A TOTAL OF \$ \_\_\_\_\_ FOR THE ENTIRE SUBDIVISION.



MARCO A. GONZALEZ  
 P.E. No. 120016  
 DATE 3-11-21

### REPORTE FINAL DE INGENIERIA PARA LA SUBDIVISION 2812 ESTATES:

POR MARCO A. GONZALEZ, P.E.

### PROVISION DE AGUA: Descripción y Costos.

LA SUBDIVISION 2812 ESTATES 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 12" DE DIAMETRO QUE CORRE POR EL LADO NORTE DE LA CALLE F.M. 2812.

EL SISTEMA DE PROVISION DE AGUA PARA LA SUBDIVISION CONSISTE DE UNA LINEA DE AGUA DE 8" DE DIAMETRO CONECTA CON LA LINEA DE AGUA DE 12" DE DIAMETRO EN F.M. 2812 ROAD. LA LINEA DE 8" DE DIAMETRO CORRE POR EL LADO ESTE DE LA CALLE QUENTIN AVENUE.

DE LA LINEA DE 8" DE DIAMETRO, OTRA LINEA DE AGUA DE 8" DE DIAMETRO CORRE POR EL LADO NORTE DE LA CALLE FRANKLIN LANE, POR EL LADO ESTE DE LA CALLE MERCURY AVENUE, POR EL LADO SUR DE LA CALLE VUELCAN LANE, POR EL LADO OESTE DE LA CALLE GERALD AVENUE Y POR EL LADO NORTE DE LA CALLE FRANKLIN LANE Y REGRESA A LA CALLE QUENTIN AVENUE.

DEL CONDUCTO DE AGUA DE 8 Y 12 PULGADAS SE PRODUCEN VEINTE (20) 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 OCHO (8) 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\$ \_\_\_\_\_ POR LOTE. EL DUEÑO DE LA SUBDIVISION TAMBIEN LE HA PAGADO A LA COMPANIA N.A.W.S.C. US\$ \_\_\_\_\_ QUE CUBRE EL COSTO DEL MEDIDOR MECANICO DE AGUA PARA CADA LOTE. US\$ \_\_\_\_\_ 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 ALCANZO AL DUEÑO. EL DUEÑO DE LA SUBDIVISION TAMBIEN HA INSTALADO SEIS (6) BOCAS DE REGO (FIRE HYDRANT) A UN COSTO DE \$ \_\_\_\_\_ POR CADA UNO CUAL GASTA UNA CANTIDAD TOTAL \$ \_\_\_\_\_. EL SISTEMA DE AGUA ESTARA EN FUNCIONAMIENTO COMPLETO ANTES O EN LA FECHA, EN LA CUAL LA SUBDIVISION SEA REGISTRADA EN EL CONDOMIO DE HIDALGO.

### DRENAJE: Descripción y Costos.

SE INSTALARA UNA FOSA SEPTICA EN CADA SOLAR DE LA SUBDIVISION 2812 ESTATES. ESTA FOSA SEPTICA CONSISTE DE UN TANQUE SEPTICO DE MODELO DUAL Y DE UN CAMPO DE DRENAJE AL SOLAR. EL EVALUADOR (LIC# OS 12258) 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.

CADA LOTE EN LA SUBDIVISION MIDE MEDIO ACRE. EL EVALUADOR (LIC# OS 12258) SEIS (6) PRUEBAS CON AGUJEROS EN EL CENTRO DE LOS LOTES 6, 11, 15, 24, 28 & 33 (EXCAVACIONES ADICIONALES NO FUERON NECESARIAS PORQUE EL TERRENO EN ESTA AREA ES SIGNIFICATIVAMENTE UNIFORME). EL TERRENO ES UNIFORME FRANCO ARENOSO (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 BIEN.

EL COSTO TOTAL PARA LA INSTALACION DE UN SISTEMA INDIVIDUAL DE FOSAS SEPTICAS POR SOLAR SON US\$ \_\_\_\_\_ 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\$ \_\_\_\_\_. EL DEPARTAMENTO DE SALUBRIDAD DEL CONDADO DE HIDALGO HA INSPECIONADO TODOS LAS FOSAS SEPTICAS Y AH APROBADO LA INSTALACION DE LAS FOSAS SEPTICAS DESDE EL \_\_\_\_\_ DE 2020.

### CERTIFICACION

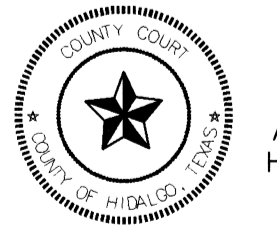
CON MI FIRMA, CERTIFICO QUE LOS SERVICIOS Y SISTEMAS DE AGUA Y DE DRENAJE, DESCRITOS EN ESTE DOCUMENTO, CUMPLEN CON LAS MODEL SUBDIVISION RULES (LAS REGLAS GOBERNANDO A LAS SUBDIVISIONES), ADOPTADAS EN LA SEC-00M 16.343 DEL TEXAS WATER CODE (CODIGO DE AGUA DE TEXAS). CERTIFICO QUE LOS GASTOS PARA INSTALAR 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\$ 327,154.00 O CUAL EQUIVALE A US\$ 3,176.25 POR LOTE.

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



MARCO A. GONZALEZ  
 P.E. No. 120016  
 DATE 3-11-21



FILED FOR RECORD IN HIDALGO COUNTY, TEXAS  
 ARTURO GUAJARDO, JR.  
 HIDALGO COUNTY CLERK

ON: \_\_\_\_\_ AT \_\_\_\_\_ AM/PM  
 INSTRUMENT NUMBER \_\_\_\_\_  
 OF THE MAP RECORDS OF HIDALGO COUNTY, TEXAS

BY: \_\_\_\_\_ DEPUTY

SHEET NO. 2 OF 3 SHEETS	FILENAME: F:\DATA\SUBDIVS\EDINBURG\2812 ESTATES\UTILITY	DATE PREPARED: 7-20-2020	PREPARED BY: M. GONZALEZ	CHECKED BY:	APPROVED BY:

# 2812 ESTATES

A 31.18 ACRE TRACT OF LAND BEING OUT OF LOT 6, 7, AND 8, BLOCK 6, SANTA CRUZ GARDENS UNIT NO. 2, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 8, PAGES 28-29, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND ACCORDING TO WARRANTY DEED WITH VENDOR'S LIEN RECORDED IN VOLUME 2766, PAGE 155, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

## DRAINAGE REPORT FOR

2812 ESTATES (31.18 acres), CARMEN AVILA SUBDIVISION PH III (39.28 acres) & CARMEN AVILA SUBDIVISION PH VI (38.91 acres) - MASTER PLAN

A 109.37 acre tract of land being a 78.19 acre tract of land out of Tract 156, San Salvador del Tule Grant, Hidalgo County, Texas, according to the map or plat thereof recorded in Volume 10, Pages 58-60, map records, Hidalgo County, Texas, and according to warranty deed with vendor's lien recorded under county clerk's document number 2764753, official records, Hidalgo County, Texas, and a 31.18 acre tract of land being out of Lot 6, 7, and 8, Block 6, Santa Cruz Gardens Unit No. 2, Hidalgo County, Texas, according to the map or plat thereof recorded in volume 8, pages 28-29, map records, Hidalgo County, Texas, and according to warranty deed with vendor's lien recorded in volume 2766, page 155 official records, Hidalgo County, Texas. These subdivisions are located along the north side of F.M. 2812 and the west side of Carmen Avila Road. The site is open land and is located in City of Edinburg ETJ. The proposed subdivisions will consist of 377 residential lots and 4 commercial lots (Lots 1-4 of 2812 Estates).

The project is Zone "X" (unshaded), areas determined to be outside 500-year floodplain, as per FEMA Flood Insurance Rate Map, Community Panel No. 480334 0325 D, dated on June 6, 2000 and L.O.M.R. May 17, 2001.

The majority of the soil is Brennan (3), Delfina (10), Hargill (16), Rio (58 and 60), and Willacy (70) and is in soil group "B" and "D". It is a mixture of Fine Sandy Loam (SM-SC), Clay Loam (CL), and sandy clay loam (SC). The soil is well drained. Surface runoff is slow. Permeability is moderate. Plasticity Index has a range of NP-35. See attached Soil Survey of Hidalgo County, Texas tables.

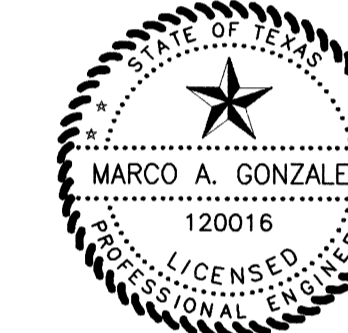
Presently, the site has very minimal runoff in an easterly direction with an approximate slope of 1%. Existing runoff is based on a 10-year storm and the runoff currently goes to a low area located on the east side of the Carmen Avila Subdivision Phase III. The existing low area located on 2812 Estates does not serve for drainage purposes. Txdot contains their runoff for FM 2812 in their right of way and all the adjoining properties have been developed. See FM 2812 Overall Drainage Layout.

The existing runoff for the 2812 Estates is Q = 13.06 cubic feet per second. After development of 2812 Estates, the runoff will be Q = 40.88 cubic feet per second for an increase of Q = 27.82 cubic feet per second. Detention for the residential area, based on an 8' release rate of Q = 1.50 CFS, will be 166,679.28 cubic feet (3.83 acres). After development for the 4 commercial lots, the runoff will be Q = 30.50 cubic feet per second for an increase of Q = 26.02 cubic feet per second. Detention will be 23,275.47 cubic feet (0.53 acre) based on a 50-year storm and will be provided by proposed detention areas to be located on the rear of the lots. At building permit stage, runoff created by this development will be collected by grading the proposed paving areas to the detention areas. A bleeder line will be installed from the detention areas to the storm system installed for 2812 Estates.

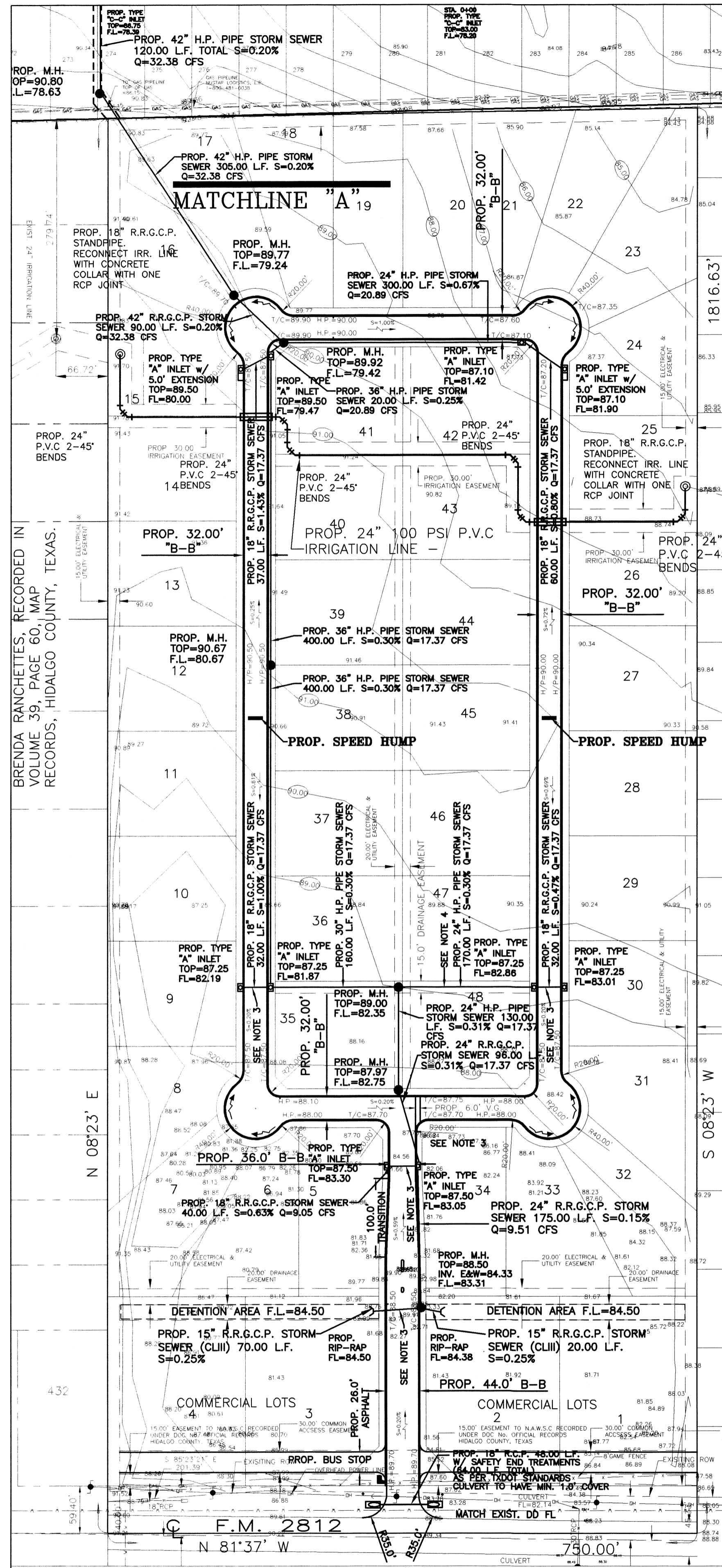
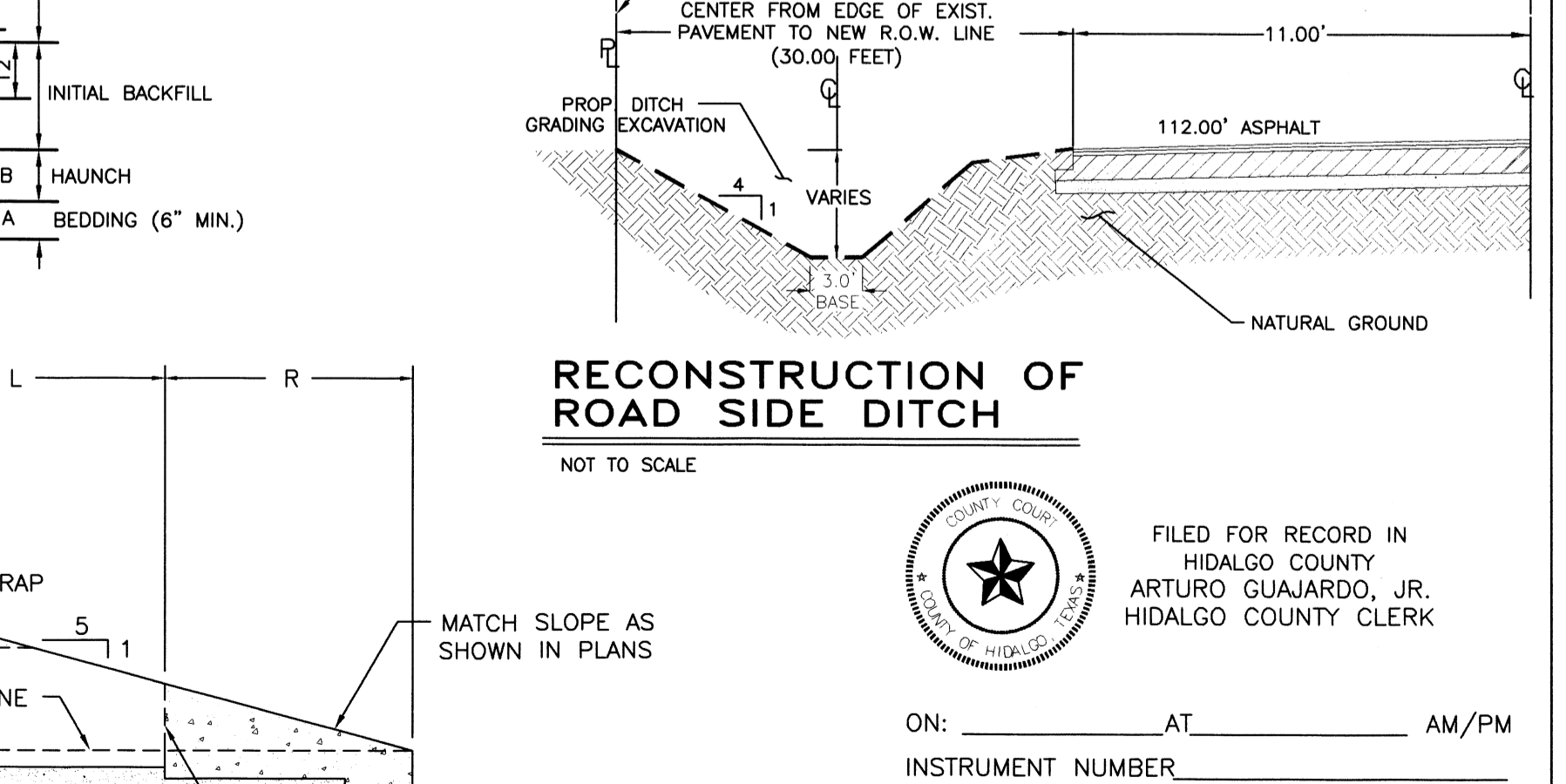
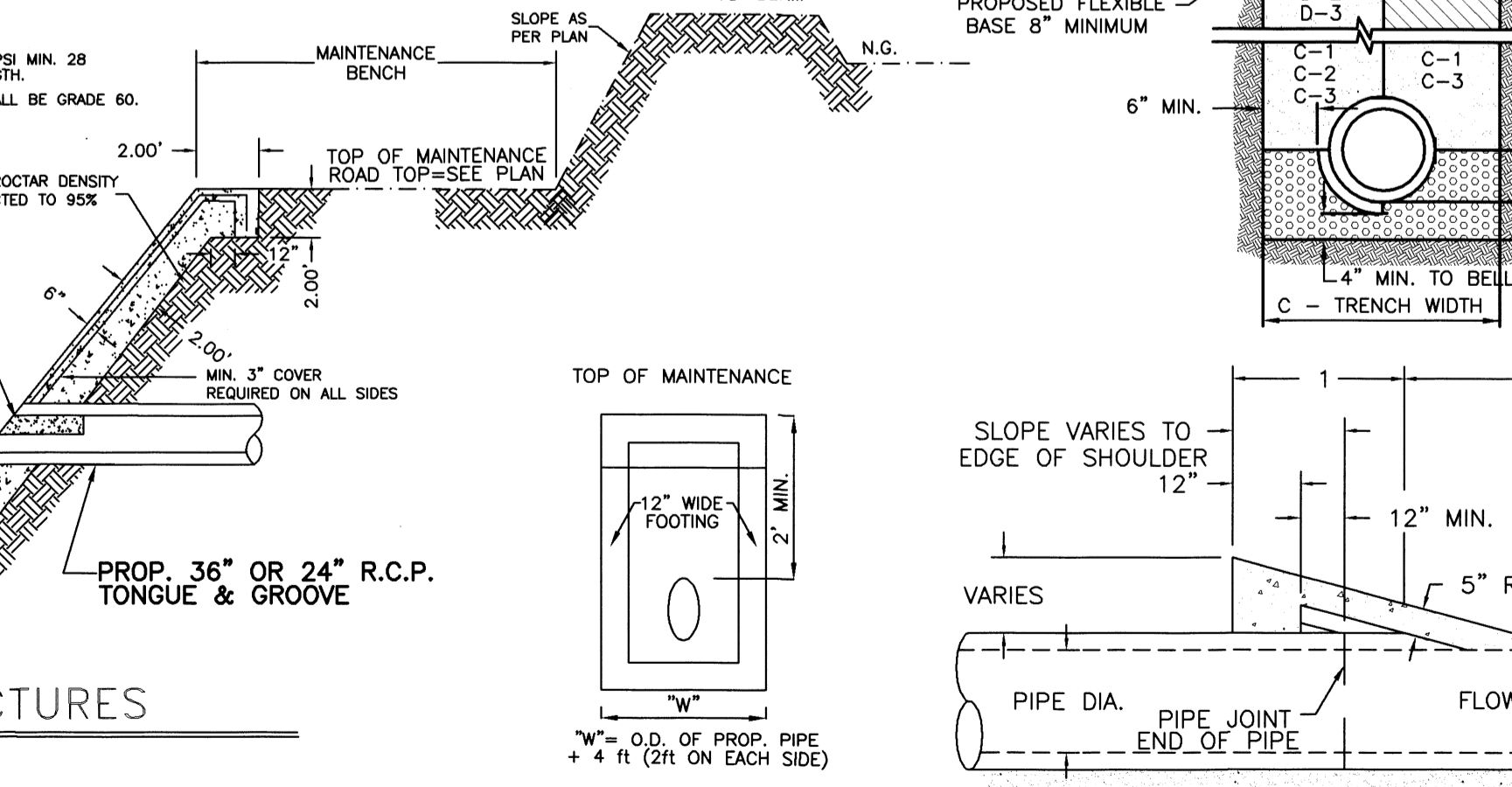
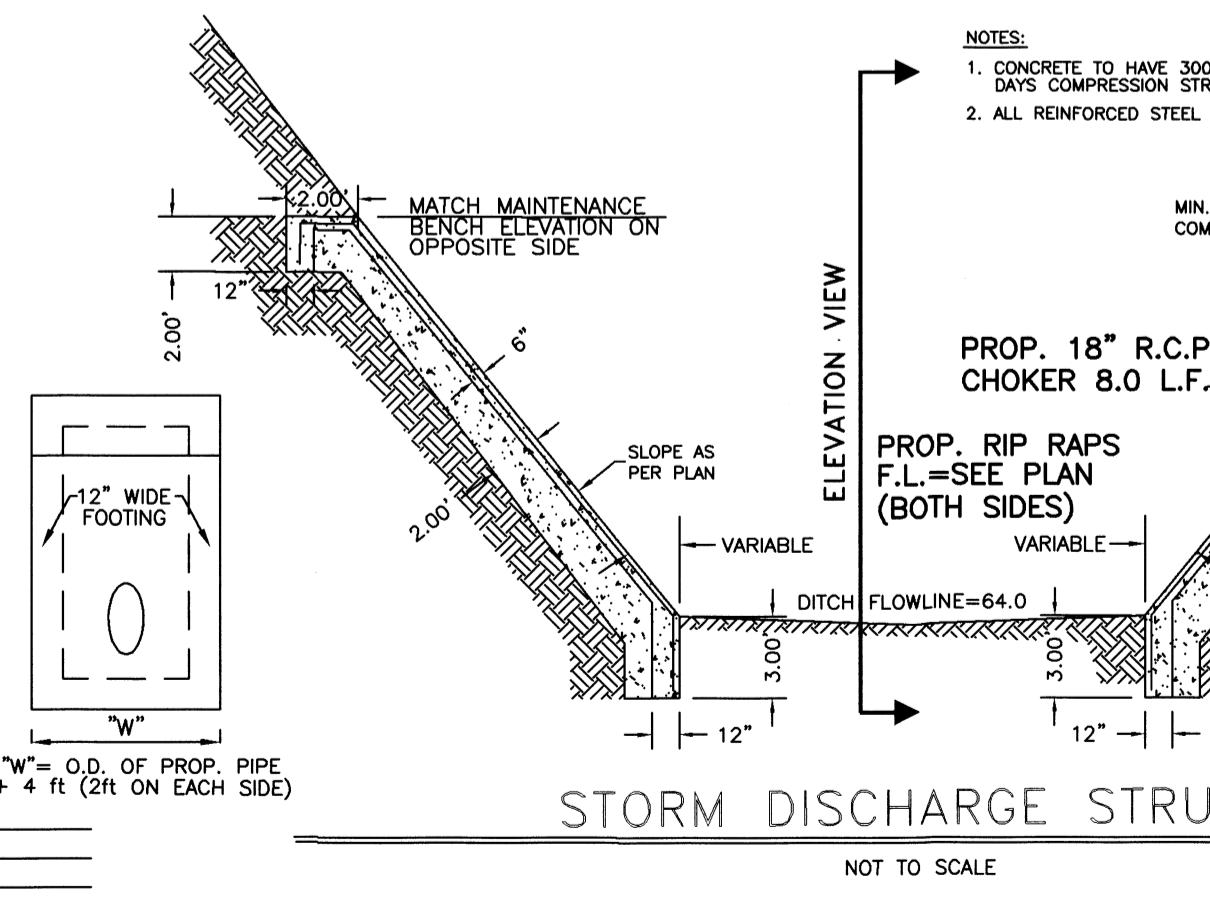
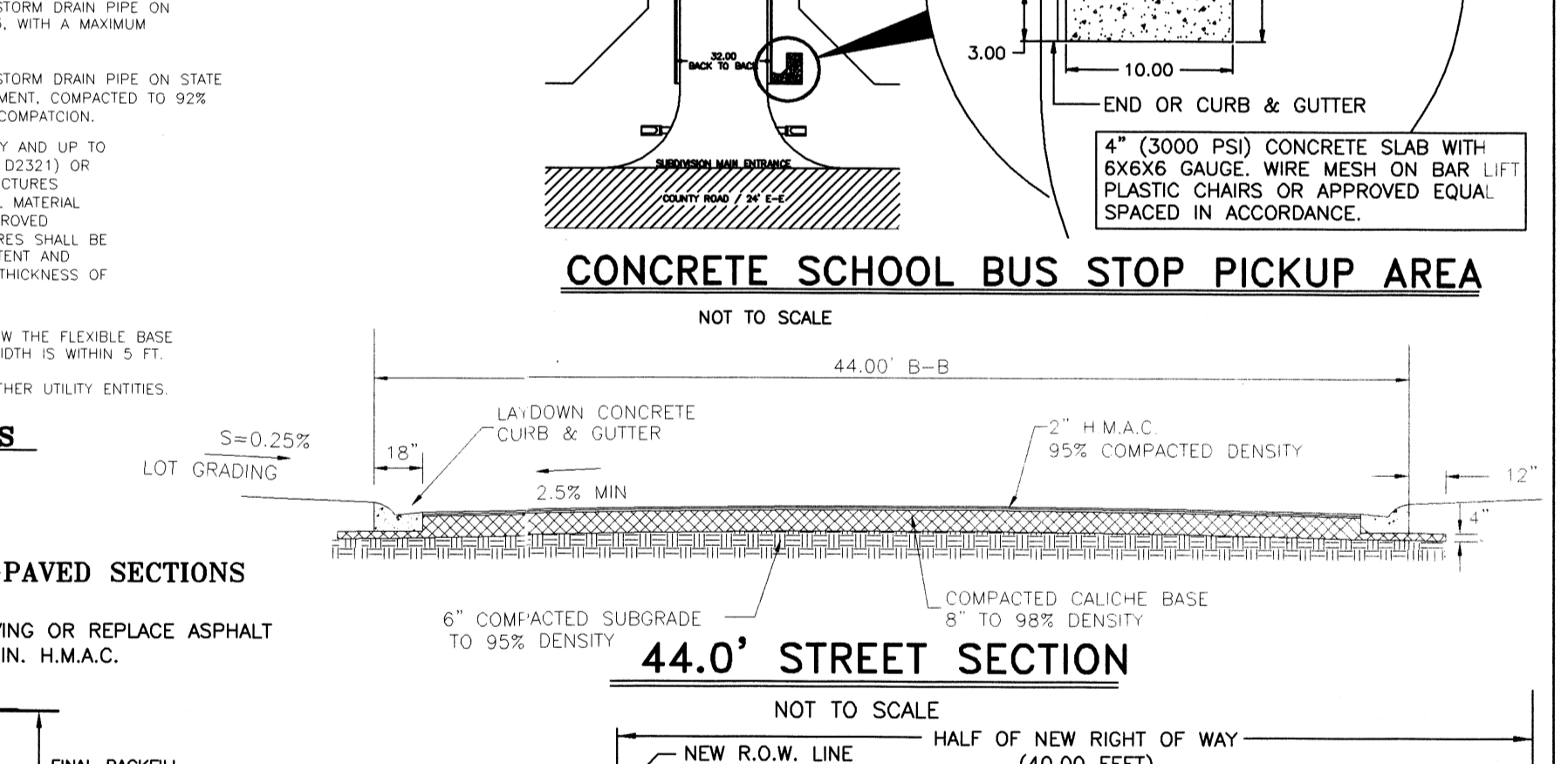
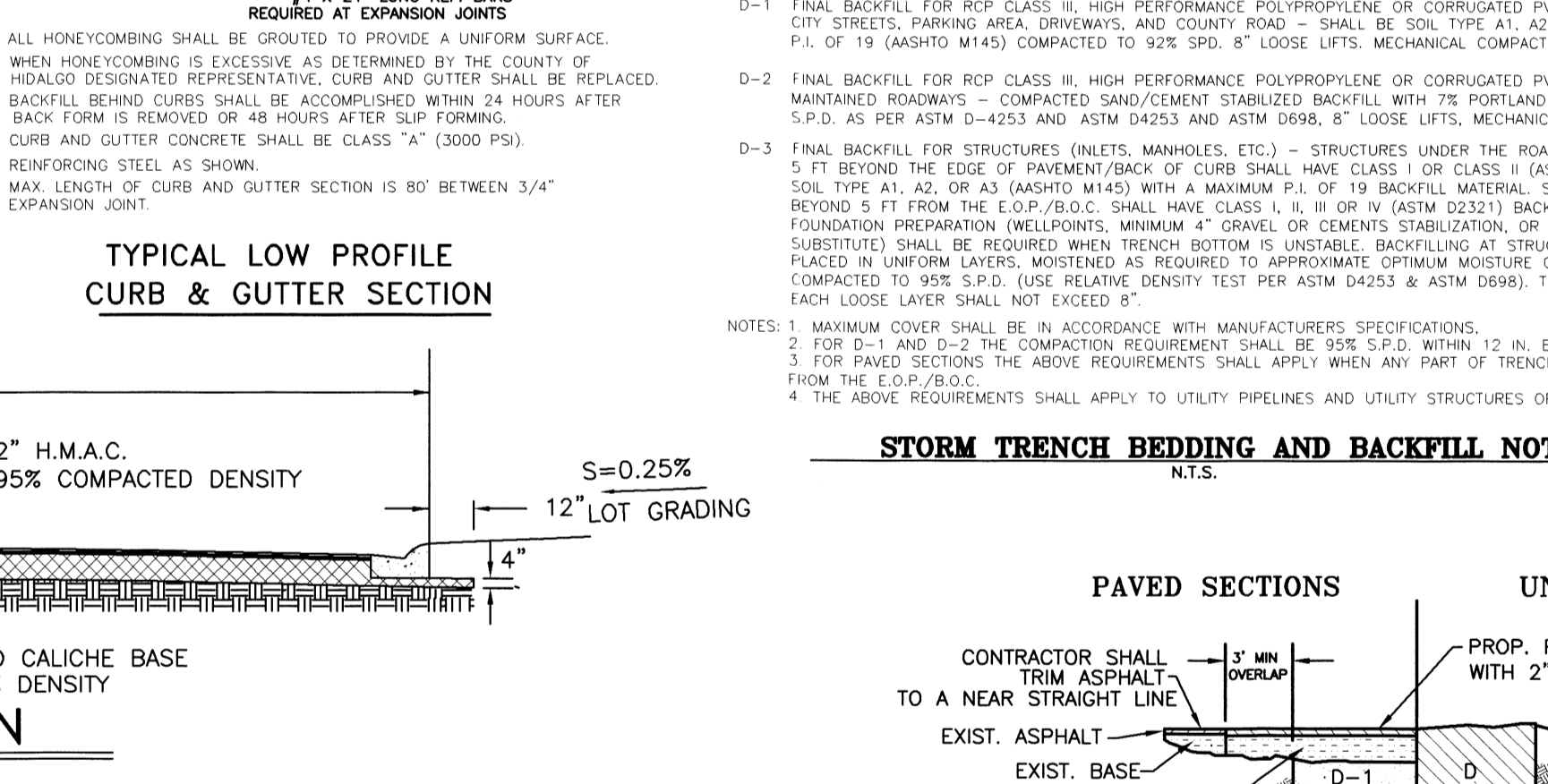
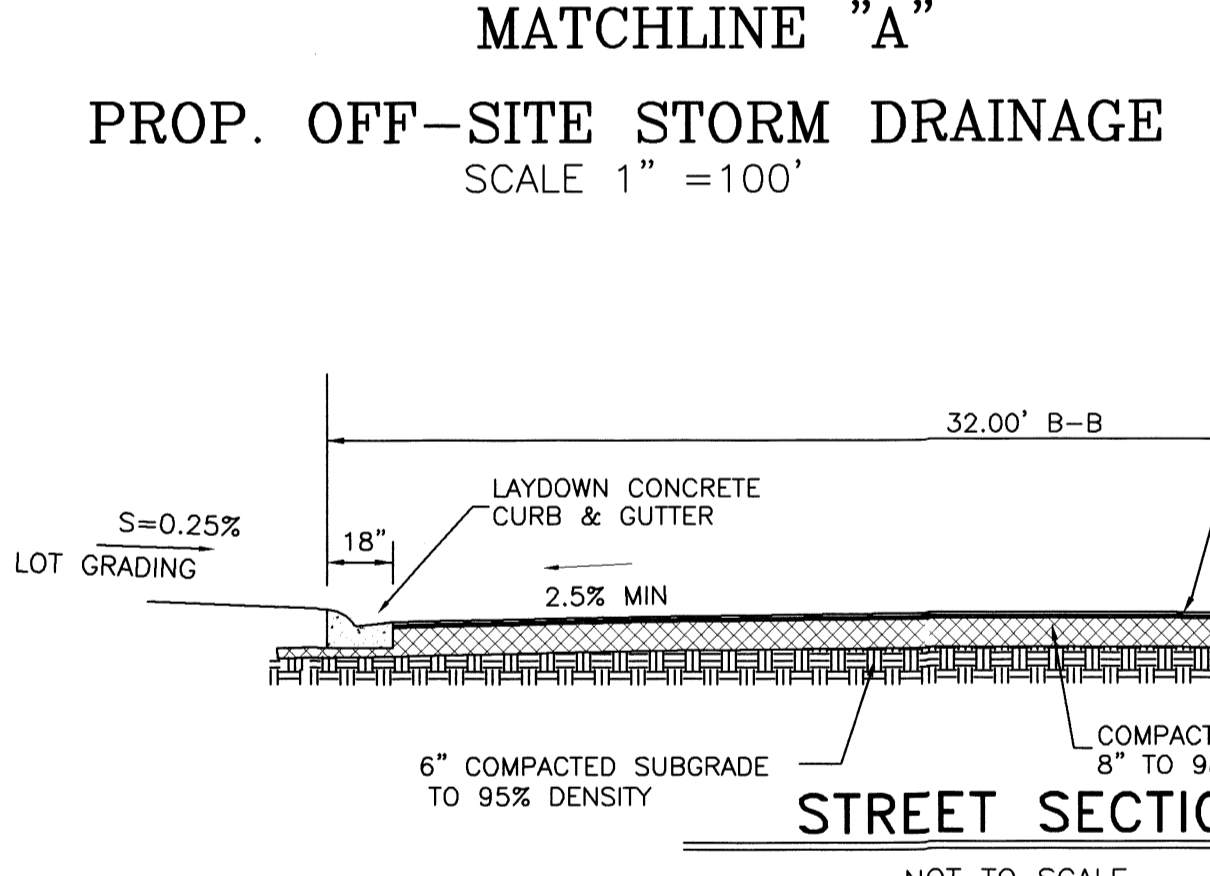
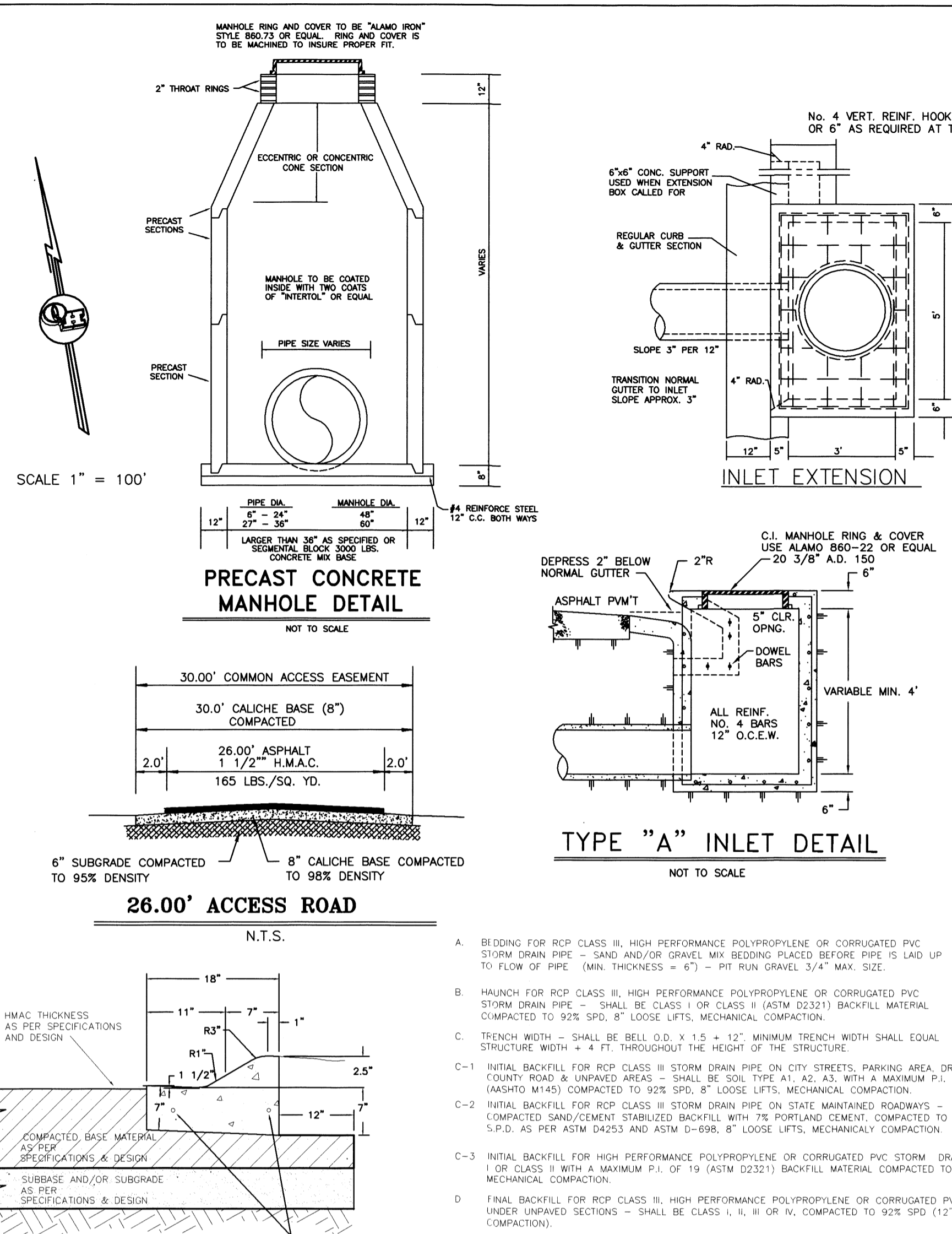
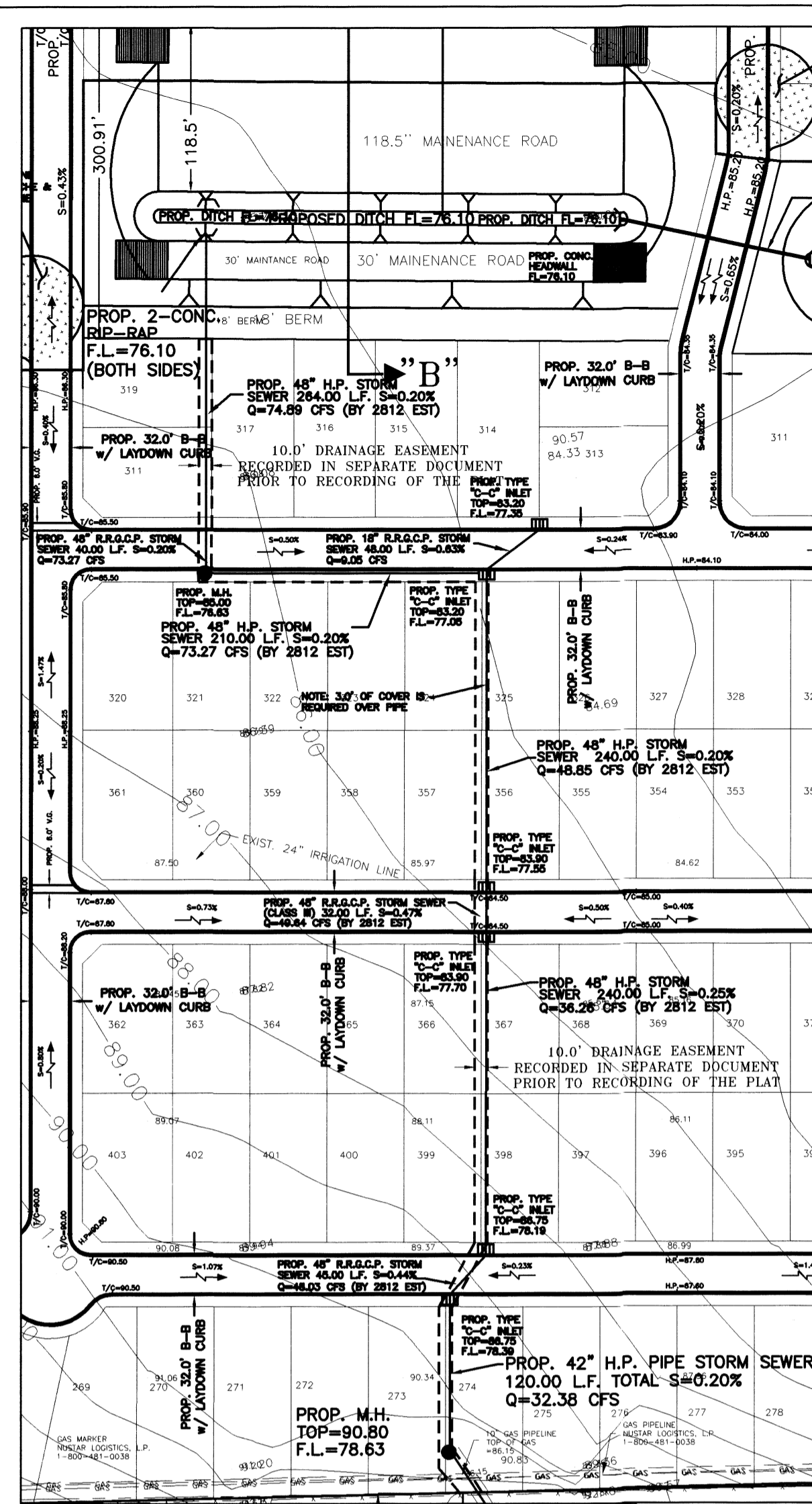
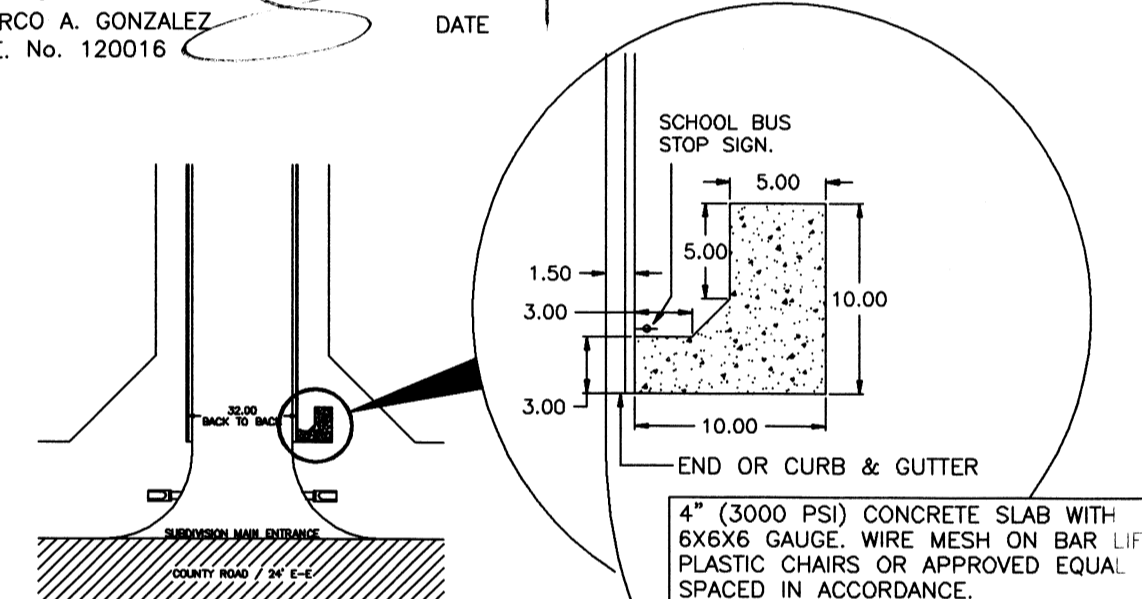
The existing runoff for the Carmen Avila Ph. III is Q = 12.88 cubic feet per second. After development of Carmen Avila Ph III the runoff will be Q = 58.02 cubic feet per second for an increase of Q = 45.14 cubic feet per second. Detention for the subdivision, based on an 8' release rate of Q = 1.50 CFS, will be 318,715.06 cubic feet (7.32 acres). The existing runoff for the Carmen Avila Ph VI is Q = 11.57 cubic feet per second. After development of Carmen Avila Ph VI the runoff will be Q = 52.68 cubic feet per second for an increase of Q = 41.11 cubic feet per second. Detention for the subdivision, based on an 8' release rate of Q = 1.50 CFS, will be 315,407.72 cubic feet (7.24 acres).

The Total Detention for all three subdivisions will be 898,802.06 cubic feet [166,679.28 + 318,715.06 + 315,407.72] (18.56 acre feet) in accordance with the County's drainage requirements. Drainage will be detained by excavating a 150.00' x 300.00' Hidalgo County Drainage District No. 1 Drain Ditch right of way being dedicated by the plat of this subdivision. The proposed drainage system consists of type "A" inlets and storm pipes of 18", 24", 30", 36", 42", and 48" that will outfall into the drainage ditch to be excavated for this subdivision. A 24" bleeder line will run to the north along Carmen Avila Road for approximately 1,100 feet and along Mile 22 1/2 Road for 600 feet. It will have an 8' cover that discharges at a Q = 1.50 cfs and outfalls into the Hidalgo County Drainage District No.1 Drain Ditch that was dedicated in Carmen Avila Subdivision Phase I (Recorded under Document No. 2998724, map records, Hidalgo County, Texas).

**CERTIFICATION:**  
BY MY SIGNATURE BELOW, I CERTIFY THAT THE FLOODPLAIN FOR ZONE "X" (AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOOD PLAN) AS DESCRIBED IN COMMUNITY PANEL NUMBER 480334 0325 C, DATED ON JUNE 6, 2000 (REVISED MAY 17, 2001 TO REFLECT LORW) IS CONTAINED WITHIN THE DRAINAGE OF THE SUBDIVISION, AS SHOWN BELOW.



*Marco A. Gonzalez*  
MARCO A. GONZALEZ  
P.E. No. 120016  
DATE 3-11-21



NOTE: EXIST. IRRIGATION LINE TO BE REMOVED AND DISPOSED OFFSITE-800.00 L.F.

**LEGEND**

TOTAL DETENTION REQUIRED - 98,185.00 C.F.

TOTAL DETENTION PROVIDED - 414,078.00 C.F.  
(930 L.F. X 260.90 S.F.) + (430 L.F. X 398.7 S.F.)

TOTAL EXCAVATION NEEDED - 616,911.00 C.F.  
(930 L.F. X 337.7 S.F.) + (430 L.F. X 695.0 S.F.)

DETENTION AVAILABLE - 315,893.00 C.F.  
(414,078.00 C.F. - 98,185.00 C.F.)

**COST ESTIMATE**

WATER DISTRIBUTION:	\$
DRAINAGE IMPROVEMENTS:	\$
PAVING IMPROVEMENTS:	\$
SEPTIC TANK (OSSF):	\$

**REVISION NOTES**

No.	Sheet	REVISION	Date	Approved

**QUINTANILLA, HEADLEY AND ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
124 E. STUBBS ST.  
EDINBURG, TEXAS 78539  
REGISTRATION NUMBER F-1513  
SURVEYING REGISTRATION NUMBER 100411-00

**LAND SURVEYORS**  
PHONE 956-381-6480  
FAX 956-381-0527  
ALFONSO@QQA-ENG.COM

## ELEVATION SAFETY END TREATMENT (TYPE "P OR C")

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

FILENAME: F:\ADMIN\SUBDIVISIONS\CARMEN AVILA\DRAWING	DATE PREPARED: 1-30-20	PREPARED BY: M. GONZALEZ	CHECKED BY:	APPROVED BY:

SHEET NO. 3 OF 3 SHEETS