



HIDALGO COUNTY PLANNING DEPARTMENT

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

T.J. Arredondo, CFM
Director of Planning

HIDALGO COUNTY COMMISSIONERS COURT MEETING

DATE: 8-23-2016

PROPOSED SAN JACINTO ESTATES NO. 9 SUBDIVISION, PRECINCT No. 1.

ENGINEER: QUINTANILLA, HEADLEY & ASSOCIATES DEVELOPER: JACINTO GARZA

PRELIMINARY APPROVAL FINAL APPROVAL FINAL APPROVAL WITH FINANCIAL GUARANTEE WITH VARIANCE
NUMBER OF LOTS: 28 *SINGLE FAMILY *MULTI-FAMILY COMMERCIAL INSTITUTIONAL

LOCATION DESCRIPTION: NORTH OF MILE 12 ½ NORTH ROAD APPROXIMATELY ¼ MILE EAST OF F.M. 88.

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 4-30-2015 PROPERTY LIES WITHIN FLOOD ZONE: "X" AS PER FEMA.

DRAINAGE DESIGN: STORM DRAINAGE PIPE SYSTEM AND DETENTION WILL BE ACCOMPLISHED BY WIDENING THE EXISTING DRAIN DITCH ON THE WEST SIDE OF THE PROPOSED SUBDIVISION.

ROAD R.O.W. DEDICATION: 35 FEET DEDICATION ONTO MILE 12 ½ NORTH ROAD.

H.C.R.O.W. FINAL APPROVAL DATE: 04-20-2016 By, ROY GONZALEZ, PCT. 1 R.O.W. AGENT

H.C.H.D. FINAL APPROVAL DATE: 08-09-2016 By, ELIZARDO "CHARDO" RAMOS Environmental Health Division Manager

SEWER SYSTEM: OSSF HAVE BEEN INSTALLED AND INSPECTED BY HCHD

WATER SERVICE PROVIDER: NAWSC LINE SIZE: 8" LOCATION: SOUTH OF MILE 12 ½ NORTH ROAD.

H.C.O.E.C. FINAL APPROVAL DATE: 07-13-2016 : By MARTIN RAMIREZ 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: \$ _____ For: OSSF(S) PAVING DRAINAGE STREET SIGNS
 A Letter of Credit Financial Institution: _____ L.O.C No. _____
Amount: \$ _____ For: OSSF(S) PAVING DRAINAGE STREET SIGNS

PRELIMINARY APPROVAL FROM THE
HIDALGO COUNTY COMMISSIONERS COURT ON: 06-02-2015

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

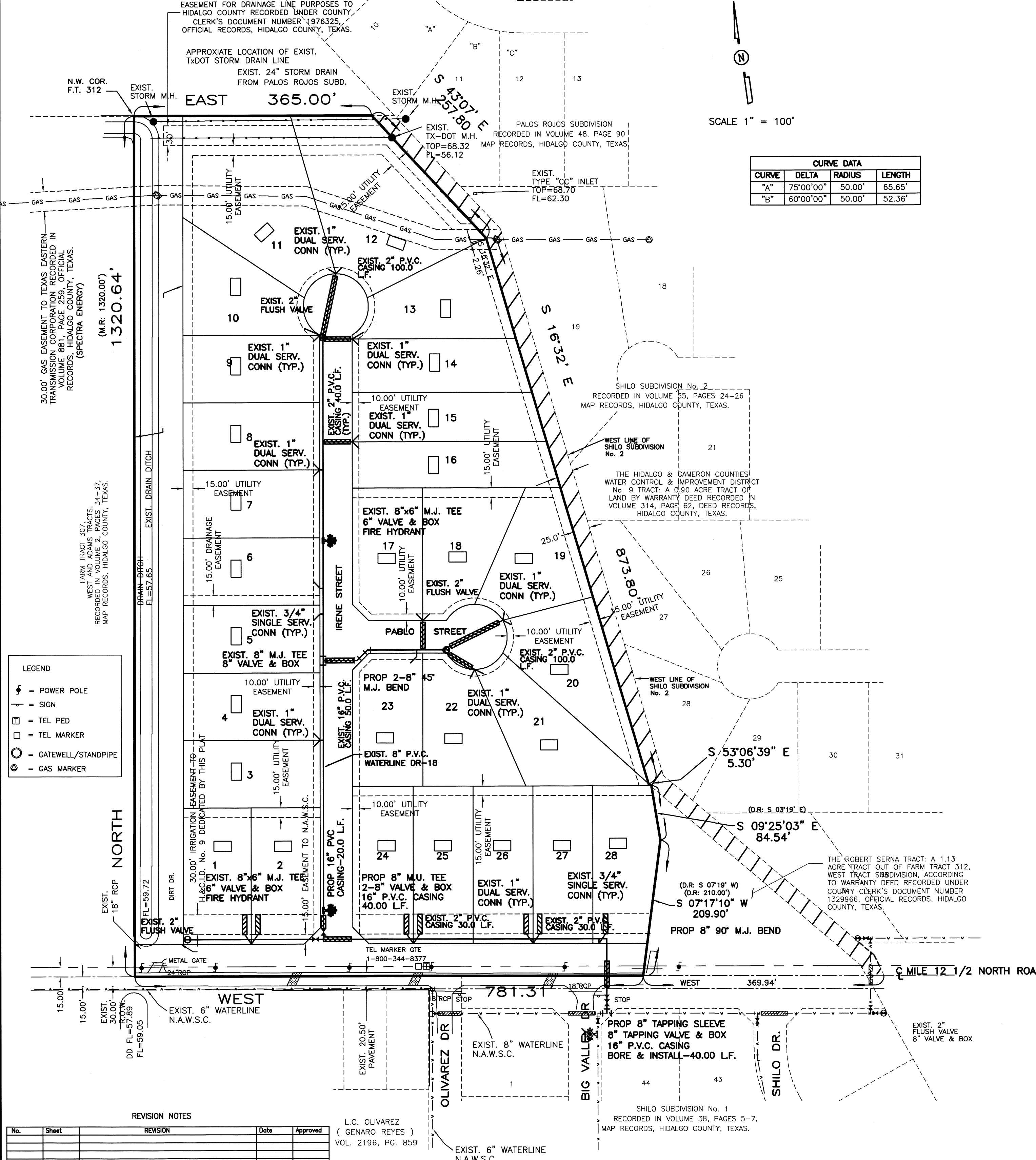
Final Approval subject to recommendations other departments

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.

THE RICK, JASON, AND ARRON ALANIZ TRACT: A 15.673 ACRE TRACT OUT OF FARM TRACT 306, WEST TRACT SUBDIVISION, ACCORDING TO GENERAL WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 1736465, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

SAN JACINTO ESTATES No. 9

A 20.15 ACRE TRACT OF LAND OUT OF FARM TRACT 312, WEST AND ADAMS TRACTS SUBDIVISION, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 2, PAGES 34-37, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND ACCORDING TO WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2165769, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.



SCALE 1" = 100'

CURVE DATA			
CURVE	DELTA	RADIUS	LENGTH
"A"	75°00'00"	50.00'	65.65'
"B"	60°00'00"	50.00'	52.36'

PRELIMINARY ENGINEERING REPORT FOR SAN JACINTO ESTATES No. 9:

BY ALFONSO QUINTANILLA, P.E.

WATER SUPPLY: Description and Costs.

SAN JACINTO ESTATES No. 9 WILL BE 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. PROMISED TO PROVIDE SUFFICIENT WATER TO THE SUBDIVISION FOR AT LEAST 30 YEARS AND N.A.W.S.C. HAVE PROVIDED DOCUMENTATION TO SUFFICIENTLY ESTABLISH THE LONG TERM QUANTITY AND QUALITY OF THE AVAILABLE WATER SUPPLIES TO SERVE THE FULL DEVELOPMENT OF THE SUBDIVISION. N.A.W.S.C. HAS AN EXISTING 8" DIAMETER WATERLINE RUNNING ALONG THE SOUTH SIDE OF MILE 12 1/2 NORTH ROAD AND AN EXISTING 6" DIAMETER WATERLINE RUNNING ON THE SOUTH SIDE OF MILE 12 1/2 NORTH ROAD.

THE WATER SYSTEM FOR SAN JACINTO ESTATES No. 9 CONSIST OF AN 8" DIAMETER WATERLINE THAT CONNECTS TO THE SAID 8" WATERLINE ON MILE 12 1/2 NORTH ROAD AND RUNS NORTH ACROSS MILE 12 1/2 NORTH ROAD. THE 8" DIAMETER WATERLINE TURNS WEST AND RUNS ON THE NORTH SIDE OF MILE 12 1/2 MILE ROAD INSIDE A 15.0' N.A.W.S.C. EASEMENT, ENDING WITH A 2" FLUSH VALVE NEAR THE SOUTHWEST CORNER OF LOT 1. ON THE SOUTH EAST CORNER OF LOT 2, AN 8" DIAMETER WATER LINE RUNS NORTH ALONG THE WEST SIDE OF IRENE STREET, ENDING WITH 2" FLUSH VALVE ON THE NORTHEAST CORNER OF LOT 9. IN FRONT OF LOT 5, ANOTHER 8" DIAMETER WATERLINE RUNS EAST ALONG THE SOUTH SIDE OF PABLO STREET AND ENDS WITH A 2" FLUSH VALVE LOCATED IN FRONT OF LOT 22.

FROM THE 8" WATERLINE, TWELVE (12) 1" DUAL WATER SERVICES RUN TO PAIRS OF LOTS BEFORE SPLITTING INTO TWO (2) 3/4" DIAMETER SINGLE SERVICES AND FOUR (4) 3/4" DIAMETER SINGLE SERVICES GOING TO THE METER BOXES FOR EACH LOT.

THE 8" DIAMETER WATERLINE, THE 1" DUAL SERVICE LINES, THE 3/4" SINGLE SERVICE LINES, AND THE WATER METER BOXES WILL BE INSTALLED AT A TOTAL COST OF \$ 59,090.00 OR \$ 2,110.36 PER LOT. IN ADDITION, THE SUBDIVIDER WILL PAY N.A.W.S.C. THE SUM OF \$ 25,300.00 OR \$ 903.57 PER LOT AS STATED IN THE 30 YEAR WATER SERVICE AGREEMENT WHICH SUM REPRESENTS THE TOTAL COST OF WATER METER, RIGHTS ACQUISITION FEES AND ALL MEMBERSHIPS OR OTHER FEES ASSOCIATED WITH CONNECTING THE INDIVIDUAL LOTS IN THE SUBDIVISION TO N.A.W.S.C. UPON REQUEST BY THE LOT OWNER OF A LOT, N.A.W.S.C. WILL PROMPTLY INSTALL AT NO CHARGE THE WATER METER FOR THAT LOT. THE SUBDIVIDER WILL BE INSTALLED TWO (2) FIRE HYDRANTS AT A UNIT COST OF \$ 2,700.00 FOR A TOTAL COST OF \$ 5,400.00. 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 and Costs.

SEWAGE FROM SAN JACINTO ESTATES No. 9, 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. HIGHLIGHTS OF THE REPORT ARE AS FOLLOWS: AND THE DRAINAGE EASEMENTS.

EACH LOT IN THE SUBDIVISION IS AT LEAST 1/2 ACRE IN SIZE THE UNITED STATES OF AGRICULTURE SOIL CONSERVATION SERVICE SOIL SURVEY BOOK INDICATED A FINE SANDY LOAM. THE SITE EVALUATOR (LICENSE NUMBER OS 12258) HAD SIX TEST BORINGS MADE AT OPPOSITE AREAS OF THE SUBDIVISION AT THE CENTERS OF LOTS 2, 6, 10, 15, 18, AND 26 (ADDITIONAL BORINGS WERE UNNECESSARY BECAUSE THE SOILS ARE VERY UNIFORM WITHIN THIS LIMITED AREA). THE SOIL REPORT AS PREPARED BY THE SITE EVALUATOR (LICENSE NUMBER OS 12258) INDICATES A UNIFORM SANDY CLAY LOAM (WITH TEXTURE CLASS III) EXTENDING MORE THAN 24" BELOW THE BOTTOM OF ANY EXIST. EXCAVATIONS. THE SUBDIVISION DRAINS WELL.

THE COST TO INSTALL A SEPTIC SYSTEM ON AN INDIVIDUAL LOT IS \$ 1,200.00, INCLUDING THE COST FOR THE REQUIRED PERMIT AND LICENSE. ALL OSSF'S HAVE BEEN INSTALLED AS OF THE TIME OF APPLICATION FOR FINAL PLAT APPROVAL AT A TOTAL COST OF \$ 33,600.00. THE HIDALGO COUNTY HEALTH DEPARTMENT HAS INSPECTED AND APPROVED THE INSTALLATION OF ALL OSSF ON JULY 2016.

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 16.543, WATER CODE. I CERTIFY THAT THE ESTIMATED COSTS TO INSTALL UNCONSTRUCTED WATER AND ON-SITE SEWAGE FACILITIES, DISCUSSED ABOVE, ARE AS FOLLOWS:

WATER FACILITIES- THESE FACILITIES ARE FULLY CONSTRUCTED, WITH INSTALLATION OF WATER METERS, AT A TOTAL COST OF \$ 84,390.00 OR \$ 3,013.93 PER LOT.

SEWAGE FACILITIES- THESE FACILITIES FULLY CONSTRUCTED WILL COST A GRAND TOTAL OF \$ 33,600.00 WHICH EQUALS TO \$ 1,200.00 PER LOT.



Alfonso Quintanilla P.E.
 ALFONSO QUINTANILLA
 P.E. 95534
 7-25-16
 DATE



Alfonso Quintanilla P.E.
 ALFONSO QUINTANILLA
 P.E. 95534
 7-25-16
 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 BY STATE AND COUNTY REGULATIONS.

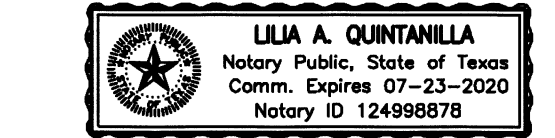
SUBDIVIDER STATEMENT:

1.- I (WE), JACINTO GARZA SUBDIVIDER (S) OF SAN JACINTO ESTATES No. 9 HEREBY CERTIFY SEWER PERMITS, AS APPLICABLE, HAVE BEEN PAID AND COPIES OF RECEIPTS ARE ON FILE WITH THE HIDALGO COUNTY PLANNING DEPARTMENT. THAT ANY 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 TO THE STATE AS REQUIRED BY STATE AND COUNTY REGULATIONS.

STATE OF TEXAS COUNTY OF HIDALGO

BEFORE ME, the undersigned notary public, on this day personally appeared JACINTO GARZA. 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.

Given under my hand and seal of office this 25th day of July, 2016.



Lilia A. Quintanilla
 LILIA A. QUINTANILLA - NOTARY PUBLIC

Jacinto Garza
 SAN JACINTO ENTERPRISES, L.L.C.
 JACINTO GARZA, PRESIDENT
 2100 W. EXPRESSWAY 83
 MERCEDES, TEXAS 78570

7-25-16
 DATE

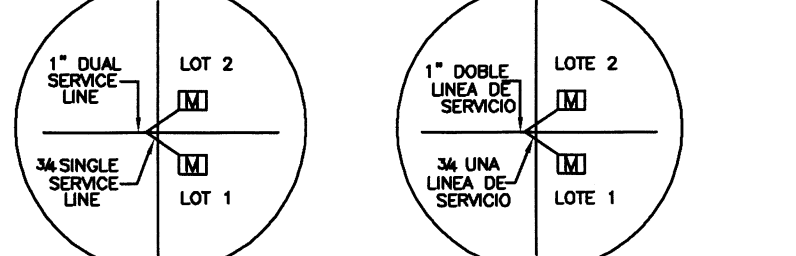
No.	Sheet	REVISION	Date	Approved

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

COST ESTIMATE

WATER DISTRIBUTION:	\$ 59,090.00
DRAINAGE IMPROVEMENTS:	\$ 122,150.00
PAVING IMPROVEMENTS:	\$ 77,218.00
SEPTIC TANK (OSSF):	\$ 33,600.00

□ WATER METER BOX
 □ CAJA DE MEDIDOR DE AGUA
 — 8" WATER SUPPLY LINE
 — 8" LINEA DE AGUA
 — SERVICE LINES
 — LINEAS DE SERVICIOS



QUINTANILLA, HEADLEY AND ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 124 E. STUBBS ST. EDINBURG, TEXAS 78539
 PHONE 956-381-6480 FAX 956-381-0527
 REGISTRATION NUMBER F-1513 QuintanillaHeadley@sbcglobal.net

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

SHEET NO.	FILENAME: F:\DATA\SUBDIVISIONS\SAN JACINTO ESTATES No. 9\B-PLATS
2 of 3	DATE PREPARED: MAY 12, 2010 PREPARED BY: M. GONZALEZ DATE REVISED: _____ REVISED BY: _____

MAP OF TOPOGRAPHY AND DRAINAGE / MAPA DE TOPOGRAFIA Y DRENAJE

SAN JACINTO ESTATES No. 9

A 20.15 ACRE TRACT OF LAND OUT OF FARM TRACT 312, WEST AND ADAMS TRACTS SUBDIVISION, HIDALGO COUNTY, TEXAS, ACCORDING TO THE MAP OR PLAT THEREOF RECORDED IN VOLUME 2, PAGES 34-37, MAP RECORDS, HIDALGO COUNTY, TEXAS, AND ACCORDING TO WARRANTY DEED RECORDED UNDER COUNTY CLERK'S DOCUMENT NUMBER 2165769, OFFICIAL RECORDS, HIDALGO COUNTY, TEXAS.

DRAINAGE REPORT
SAN JACINTO No. 9 SUBDIVISION

San Jacinto No. 9 Subdivision is a 20.15 acre tract of land out of Farm Tract 312, West and Adams Tracts Subdivision, Hidalgo County, Texas, according to the map or plat thereof recorded in Volume 2, Pages 34-37, map records, Hidalgo County, Texas, and according to warranty deed recorded under County Clerk's document number 2165769, official records, Hidalgo County, Texas. This subdivision is located on the North side of Mile 12 1/2 North Road and East of F.M. 88. The site is agriculture. The proposed subdivision will consist of 28 residential lots.

The tract is Zone "X" as per FEMA Flood Insurance Rate Map, Community Panel No. 480334 0450 C, dated on June 6, 2000, revised to reflect LOMR 5/30/2002.

The majority of the soil is sandy clay loam, clay loam, fine sandy loam, and sandy clay loam. This soil is well drained. Permeability is moderate. Plasticity index has a range of 5-23. See attached Soil Survey of Hidalgo County, Texas tables.

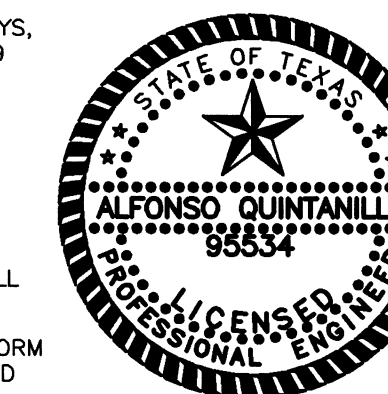
Presently, the site has very minimal runoff. The existing runoff for the proposed subdivision is Q = 6.28 cubic feet per second based on a 10-year storm.

After development the runoff will be Q = 18.94 cubic feet per second for an increase of Q = 12.66 cubic feet per second. Detention will be 47,459.82 cubic feet (1.09 acre feet) or 1,694.99 cubic feet (0.039 acre feet) per lot. Drainage will be detained onsite and by excavating the existing drainage ditch by the amount of detention required. Any excess runoff will flow into a proposed storm sewer system consisting of type "A" inlets that connect to a proposed storm line that drains west into an existing H.C.C.I.D. No.9 drainage ditch which ultimately drains into the Mercedes Lateral.

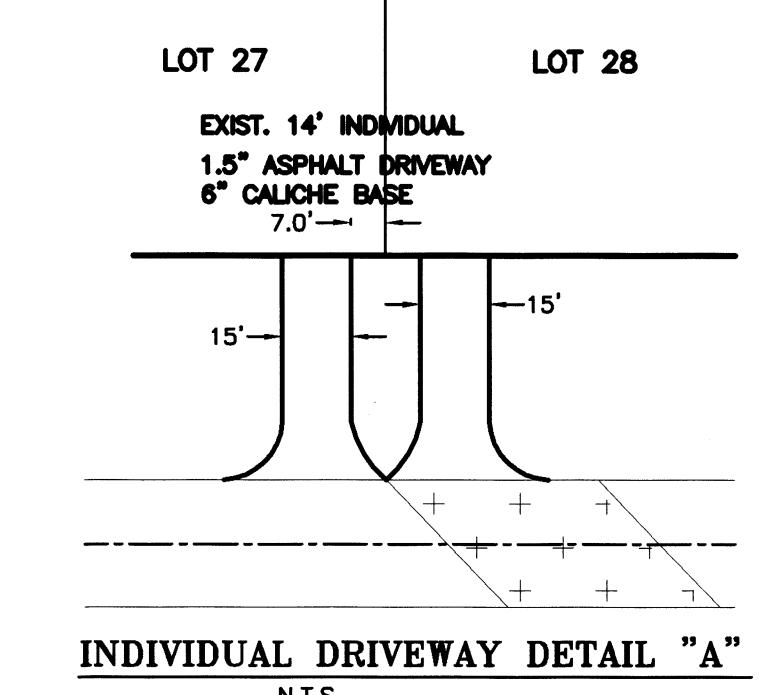
THE COUNTY DRAINAGE DITCH FLOWS NORTH THEN EAST. THE DRAINAGE DITCH CARRIES WATER EASTWARD WHERE IT EMPTIES INTO LAGUNA MADRE. THE 10 YEAR FLOOD IS CONTAINED WITHIN THE RIGHT-OF-WAY OF STREET AND WITHIN THE DRAINAGE SWALES OF THE SUBDIVISION AS SHOWN BELOW. A RESTRICTIVE COVENANT (SET OUT ON SHEET 1 UNDER PLAT NOTES AND RESTRICTIONS) PROHIBITS THE CONSTRUCTION OF RESIDENTIAL HOUSING IN ANY AREA OF THE SUBDIVISION THAT IS IN A FLOODPLAIN UNLESS THE HOUSING QUALIFIES FOR INSURANCE UNDER THE NATIONAL FLOOD INSURANCE ACT OF 1968. AS FURTHER NOTED ON SHEET 1, THE FINISHED FLOOR ELEVATION OF EACH HOUSE IS REQUIRED TO BE AT LEAST 18 INCHES ABOVE THE TOP OF THE AVERAGE HEIGHT OF THE CURB IN FRONT OF THE LOT. THESE MEASURES PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS, AVOID CONCENTRATING RUNOFF ONTO OTHER LOTS, AND COORDINATE INDIVIDUAL LOT DRAINAGE WITH THE GENERAL STORM DRAINAGE PATTERN FOR THE AREA. THE MAP BELOW ILLUSTRATES THE FLOW PATTERNS FOR THE RUNOFF.

CERTIFICATION:

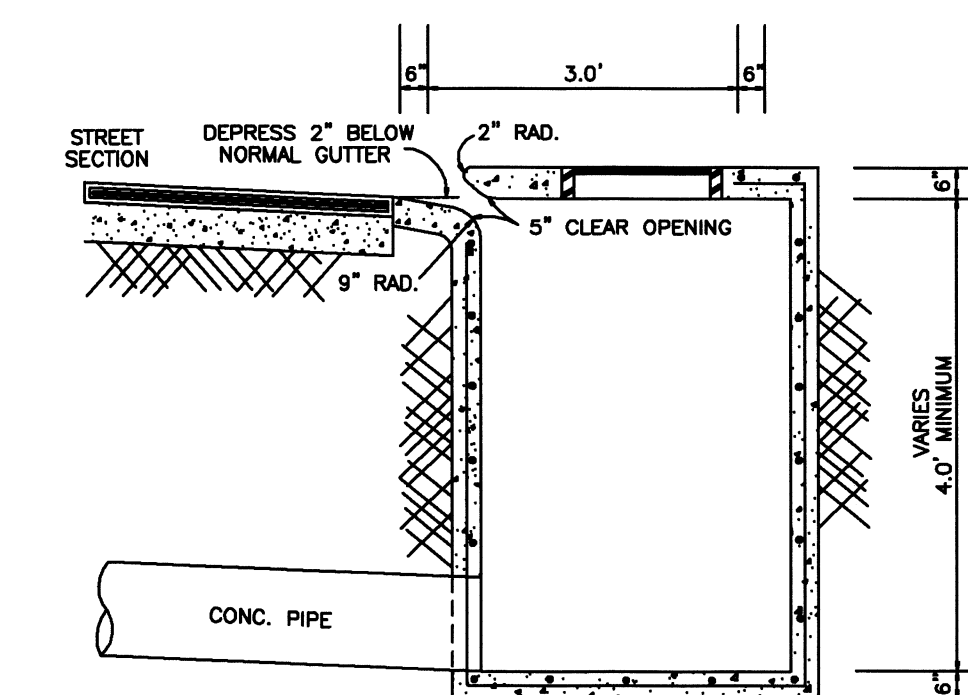
BY MY SIGNATURE BELOW, I CERTIFY THAT THE 100-YEAR FLOODPLAIN FOR ZONE "X"-NOT SHADED (AREAS DETERMINED TO BE OUTSIDE 500 YEAR FLOOD-PLAIN) AS DESCRIBED IN COMMUNITY PANEL NUMBER 480344 0450 C IS CONTAINED WITHIN THE RIGHT-OF-WAY OF STREET AND WITHIN THE DRAINAGE OF THE SUBDIVISION, AS SHOWN BELOW.



Alfonso Quintanilla
ALFONSO QUINTANILLA
P.E. 95534
DATE 7-25-16



INDIVIDUAL DRIVEWAY DETAIL "A"
N.T.S.



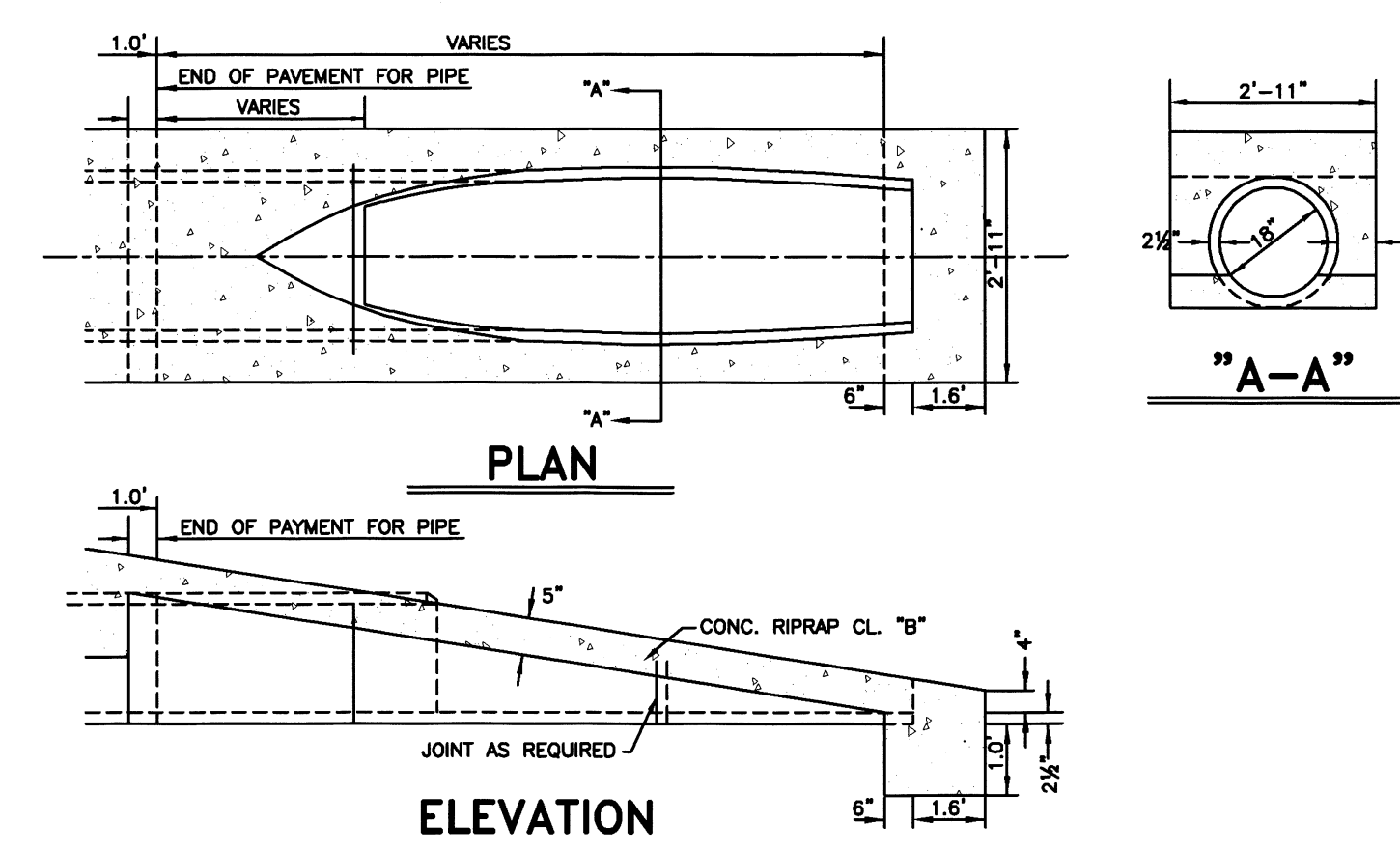
TYPE "A" INLET DETAIL (TYPICAL)
NOT TO SCALE

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

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

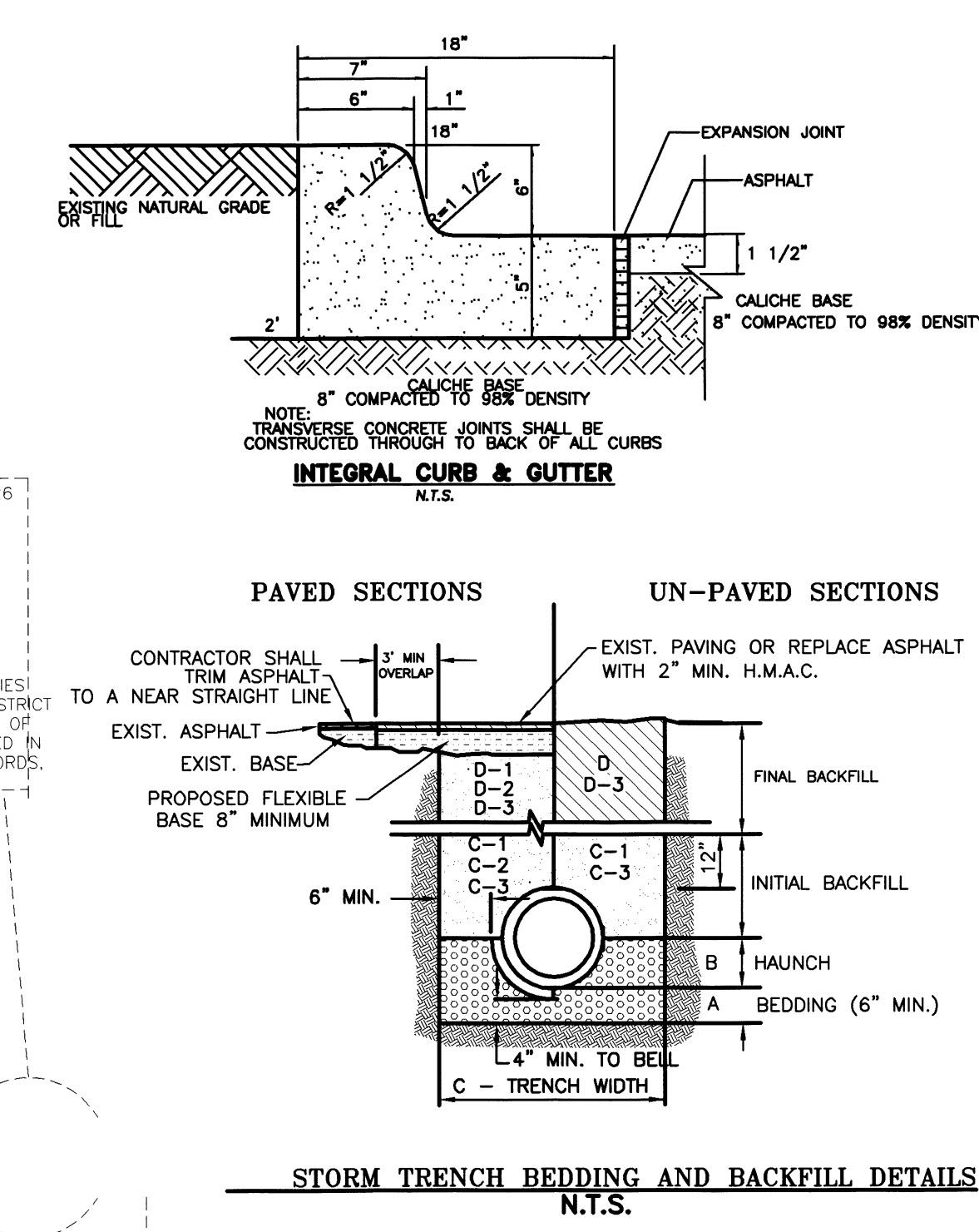
BY: _____ DEPUTY

SHEET NO.	FILENAME: F:\DATA\SUBDIVISION\SAN JACINTO ESTATES No. 9\B-PLAT
3 OF 3	DATE PREPARED: MAY 12, 2010
	PREPARED BY: M. GONZALEZ
	DATE REVISION: _____
	CHECKED BY: _____
	APPROVED BY: _____



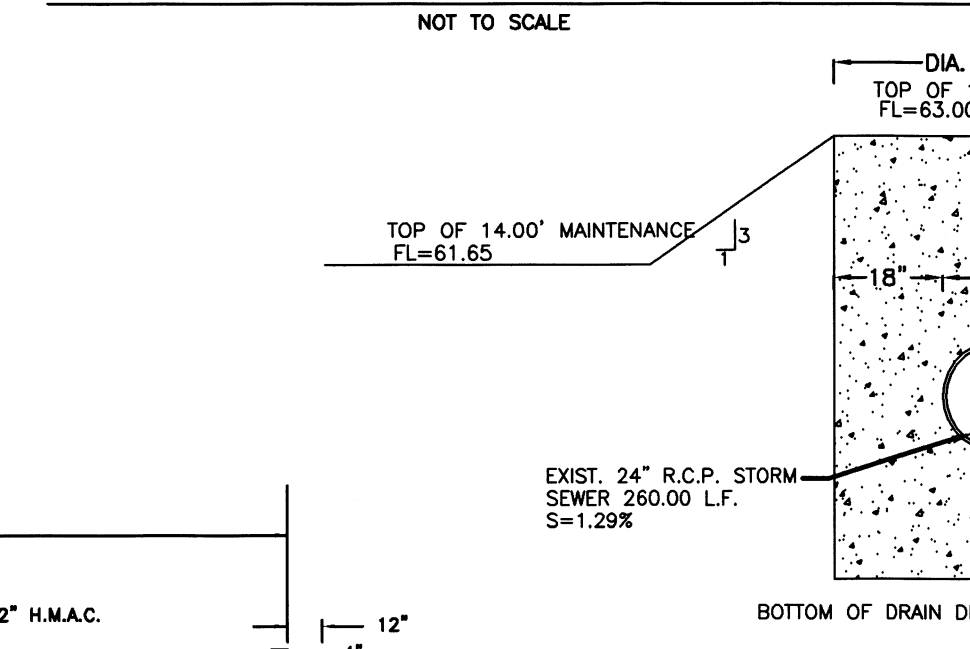
SAFETY END TREATMENT

- NOT TO SCALE
- BEDDING FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SAND AND/OR GRAVEL MIX BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW OF PIPE (MIN. THICKNESS = 6") - PIT RUN GRAVEL 3/4" MAX. SIZE.
 - HAUNCH FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% SPD, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
 - TRENCH WIDTH - SHALL BE BELL O.D. X 1.5 + 12", MINIMUM TRENCH WIDTH SHALL EQUAL STRUCTURE WIDTH + 4 FT. THROUGHOUT THE HEIGHT OF THE STRUCTURE.
 - INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON CITY STREETS, PARKING AREA, DRIVEWAYS, COUNTY ROAD & UNPAVED AREAS - SHALL BE SOIL TYPE A1, A2, A3, WITH A MAXIMUM P.I. OF 19 (ASHTO M145) COMPACTED TO 92% SPD, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
 - INITIAL BACKFILL FOR RCP CLASS III STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D4253 AND ASTM D-698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
 - INITIAL BACKFILL FOR HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE - SHALL BE CLASS I OR CLASS II WITH A MAXIMUM P.I. OF 19 (ASTM D2321) BACKFILL MATERIAL COMPACTED TO 92% SPD, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
 - FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE UNDER UNPAVED SECTIONS - SHALL BE CLASS I, II, III OR IV, COMPACTED TO 92% SPD (12" LOOSE LIFTS, MECHANICAL COMPACTION).
 - FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON CITY STREETS, PARKING AREA, DRIVEWAYS, AND COUNTY ROAD - SHALL BE SOIL TYPE A1, A2, A3, WITH A MAXIMUM P.I. OF 19 (ASHTO M145) COMPACTED TO 92% SPD, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
 - FINAL BACKFILL FOR RCP CLASS III, HIGH PERFORMANCE POLYPROPYLENE OR CORRUGATED PVC STORM DRAIN PIPE ON STATE MAINTAINED ROADWAYS - COMPACTED SAND/CEMENT STABILIZED BACKFILL WITH 7% PORTLAND CEMENT, COMPACTED TO 92% S.P.D. AS PER ASTM D-4253 AND ASTM D698, 8" LOOSE LIFTS, MECHANICAL COMPACTION.
 - FINAL BACKFILL FOR STRUCTURES (INLETS, MANHOLES, ETC.) - STRUCTURES UNDER THE ROADWAY AND UP TO 5 FT BEYOND THE EDGE OF PAVEMENT/BACK OF CURB SHALL HAVE CLASS I OR CLASS II (ASTM D2321) OR SOIL TYPE A1, A2, OR A3 (ASHTO M145) WITH A MAXIMUM P.I. OF 19 BACKFILL MATERIAL. STRUCTURES BEYOND 5 FT FROM THE E.O.P./B.O.C. SHALL HAVE CLASS I, II, III OR IV (ASTM D2321) BACKFILL MATERIAL. FOUNDATION PREPARATION (WELLPOINTS, MINIMUM 4" GRAVEL OR CEMENTS STABILIZATION, OR APPROVED SUBSTITUTE) SHALL BE REQUIRED WHEN TRENCH BOTTOM IS UNSTABLE. BACKFILLING AT STRUCTURES SHALL BE PLACED IN UNIFORM LAYERS, MOISTENED AS REQUIRED TO APPROXIMATE OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% S.P.D. (USE RELATIVE DENSITY TEST PER ASTM D4253 & ASTM D698). THE THICKNESS OF EACH LOOSE LAYER SHALL NOT EXCEED 8".
- NOTES: 1. MAXIMUM COVER SHALL BE IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. FOR D-1 AND D-2 THE COMPACTION REQUIREMENT SHALL BE 95% S.P.D. WITHIN 12 IN. BELOW THE FLEXIBLE BASE.
3. FOR PAVED SECTIONS THE ABOVE REQUIREMENTS SHALL APPLY WHEN ANY PART OF TRENCH WIDTH IS WITHIN 5 FT. FROM THE E.O.P./B.O.C.
4. THE ABOVE REQUIREMENTS SHALL APPLY TO UTILITY PIPELINES AND UTILITY STRUCTURES OF OTHER UTILITY ENTITIES.

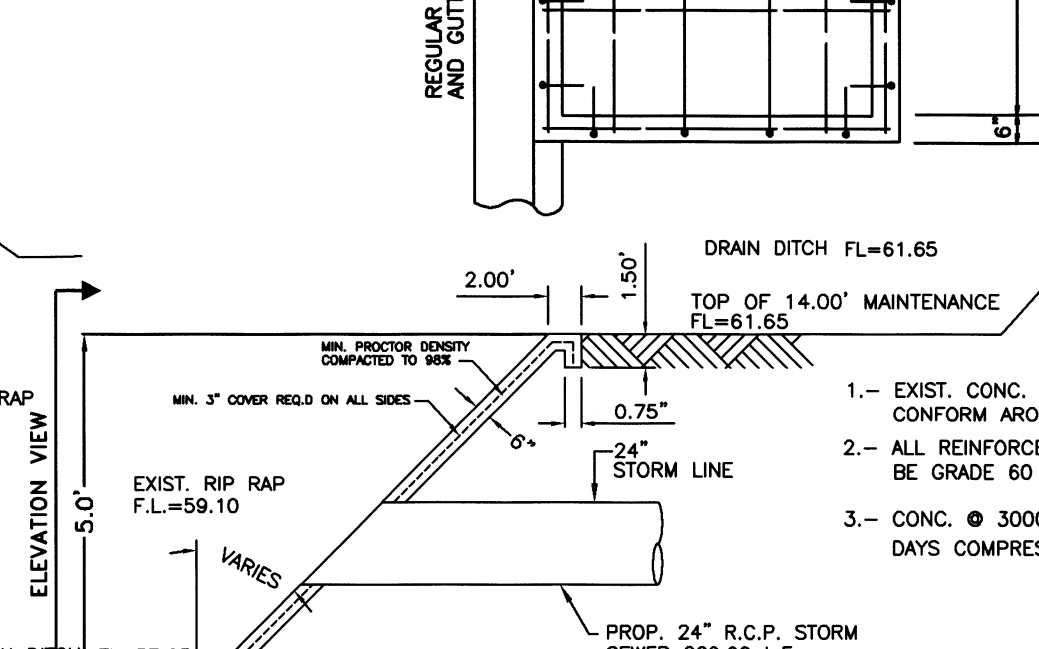


STORM TRENCH BEDDING AND BACKFILL DETAILS
N.T.S.

SECTION B-B
STORM DISCHARGE STRUCTURE



SECTION B-B
NOT TO SCALE



ELEVATION VIEW
NOT TO SCALE

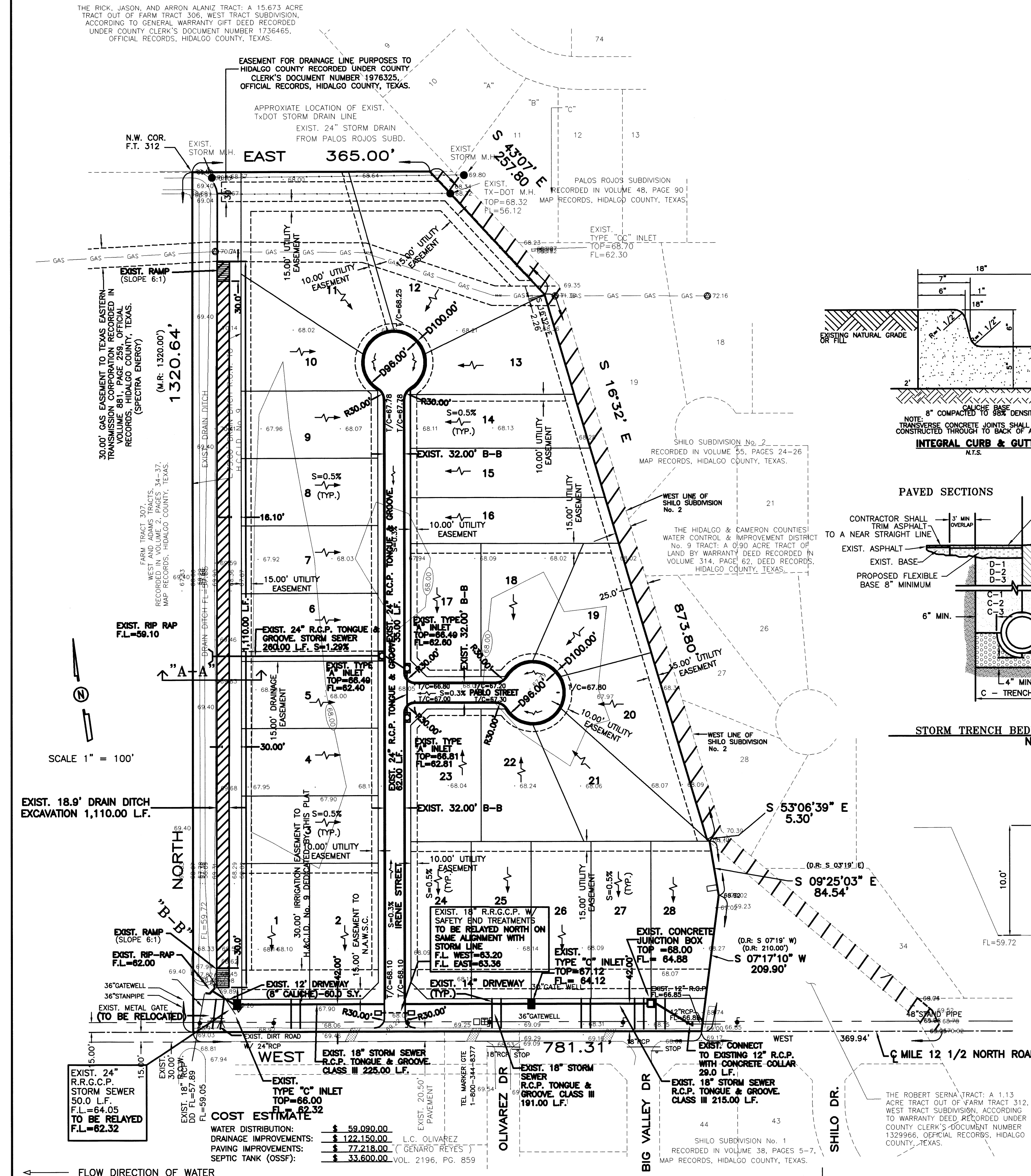
STORM DISCHARGE STRUCTURE

NOT TO SCALE

STREET SECTION

NOT TO SCALE

LEGEND
REQUIRED DETENTION - 59,053.16 C.F.
TOTAL DETENTION - 76,064.40 C.F.
(70.43 S.F. X 1,080.00 L.F.)

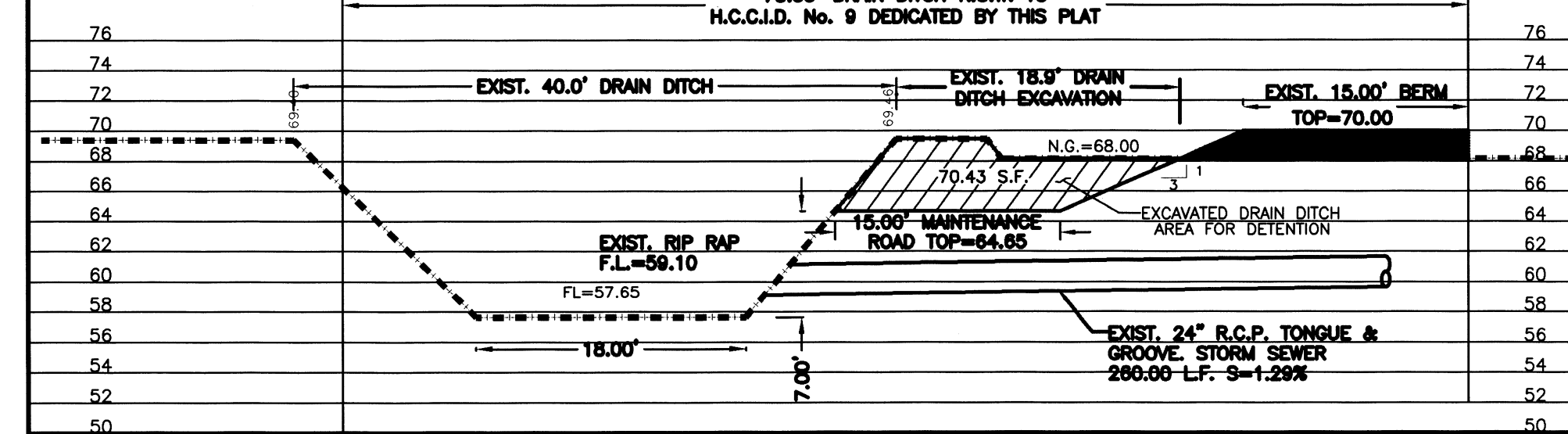


CROSS SECTION "A-A" SCALE 1" = 10'

76	75.00' DRAIN DITCH R.O.W. TO H.C.C.I.D. No. 9 DEDICATED BY THIS PLAT	76
74		74
72		72
70	EXIST. 40.0' DRAIN DITCH	70
68		68
66	EXIST. 18.9' DRAIN DITCH EXCAVATION	66
64		64
62	EXIST. 15.00' BERM TOP=70.00	62
60		60
58	EXIST. RIP RAP F.L.=59.10	58
56		56
54	EXIST. 24" R.C.P. TONGUE & GROOVE STORM SEWER 260.00 L.F. S=1.29%	54
52		52
50		50

FLOW DIRECTION OF WATER

CROSS SECTION "A-A" SCALE 1" = 10'

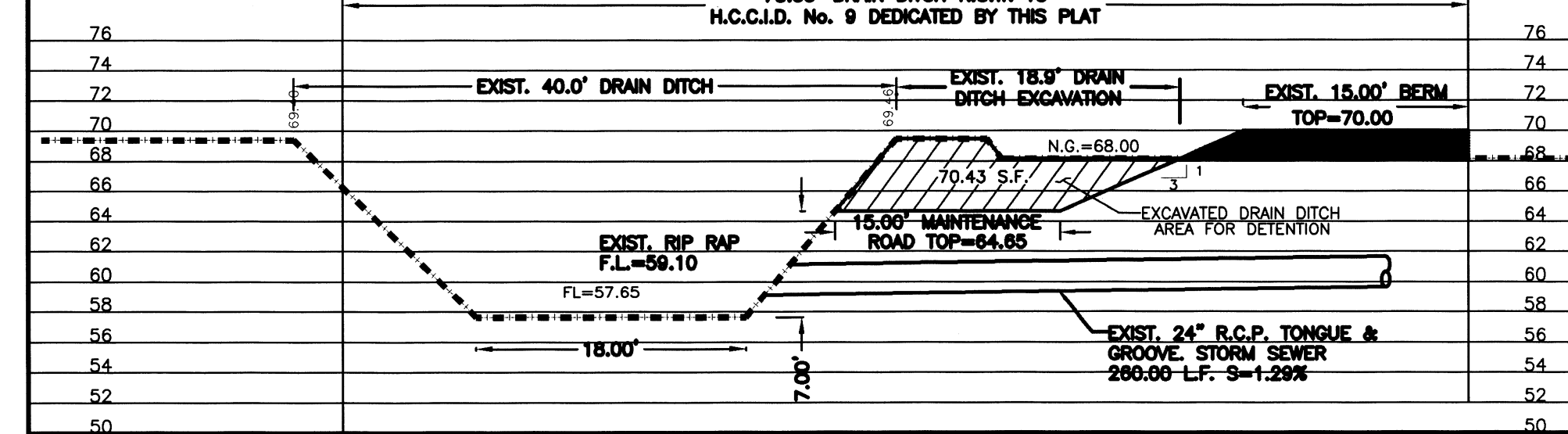


CROSS SECTION "A-A" SCALE 1" = 10'

COST ESTIMATE
WATER DISTRIBUTION: \$ 59,053.16
DRAINAGE IMPROVEMENTS: \$ 122,150.00
PAVING IMPROVEMENTS: \$ 77,218.00
SEPTIC TANK (OSSP): \$ 33,600.00
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FLOW DIRECTION OF WATER

CROSS SECTION "A-A" SCALE 1" = 10'



CROSS SECTION "A-A" SCALE 1" = 10'