

FERRIS, FLINN & MEDINA, LLC

E N G I N E E R S S U R V E Y O R S

ADDENDUM NO. 1

To: All Planholders
From: Antonio L. Reyna, PE
Subject: Harlingen Economic Development Corporation
The Park at Roosevelt – EDA Grant Project
Date: August 30, 2024

The Contract Documents & Plans are hereby modified as follows:

GENERAL CLARIFICATIONS

- Including Tensar TX-5 geogrid, an appropriate substitute is the Tensar HX-5.5 geogrid.

CONTRACT DOCUMENTS

- I. Attach the boring logs to the Contract Documents.

REFER TO CONTRACT PLANS

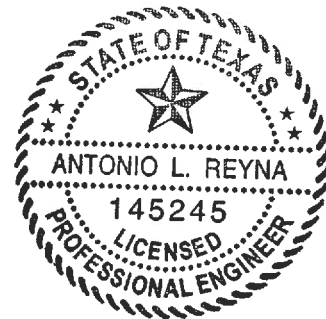
- I. Replace Plan Sheets 3, 9 and 10 with attached Revised Plan Sheets 3, 9 and 10, Addendum No. 1, dated 8/30/2024.

Addendum No.1 Issued by,
FERRIS, FLINN & MEDINA, LLC
TBPE Firm Reg. No. F-897



Antonio L. Reyna, PE
Project Engineer

8.30.2024



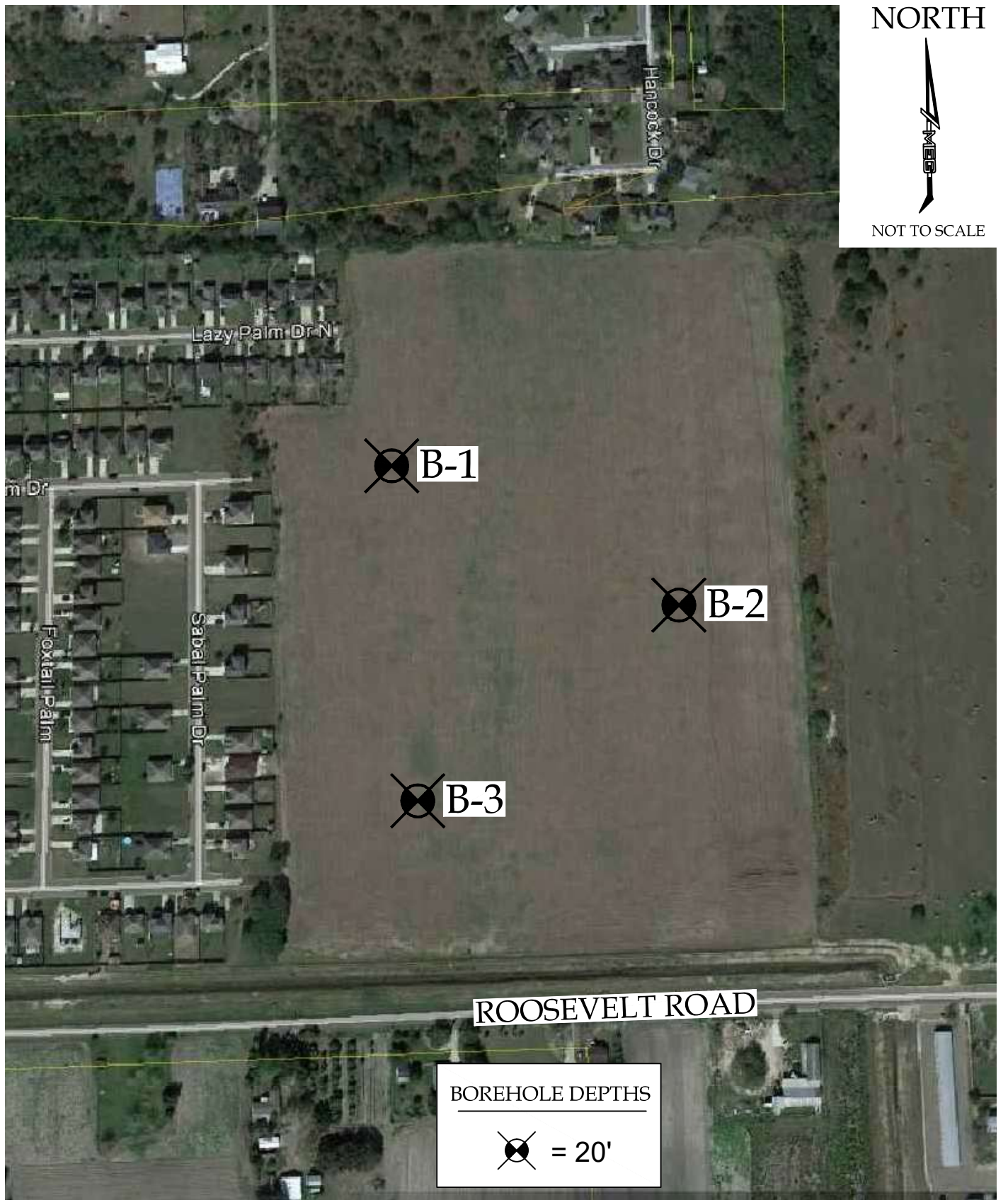
Attachments:

Addendum No. 1 Soil Bore Logs
Addendum No. 1 Plan Sheet 3, 9 and 10


NORTH



NOT TO SCALE



BOREHOLE DEPTHS

 = 20'

BORING LOCATION PLAN

PROPOSED PROJECT WILSON AT
ROOSEVELT ROAD

HARLINGEN, CAMERON COUNTY, TEXAS



MILLENNIUM ENGINEERS GROUP, INC.
5804 N. GUMWOOD AVENUE
PHARR, TEXAS 78577
WWW.MEGENGINEERS.COM
TEL: 956-702-8500
FAX: 956-702-8140

Project: Proposed Project Wilson at Roosevelt Road
Project Location: Harlingen, Cameron County, Texas
Project Number: 01-15-29217

Log of Boring B-1
 Sheet 1 of 1

Date(s) Drilled December 12, 2015	Logged By J.P. Palma	Checked By R. Palma
Drilling Method Straight Flight	Drill Bit Size/Type 4 in. soil bit	Total Depth of Borehole 20 feet bgs
Drill Rig Type CME 45	Drilling Contractor Southwest Drilling	Approximate Surface Elevation 40 feet Natural Ground (assumed)
Groundwater Level and Date Measured 14 feet ATD, 13 feet after 1 Hr.	Sampling Method(s) 2 in. Split Spoon	Hammer Data 140 lb., 30 in. drop, rope and cathead
Borehole Backfill Subgrade	Location See Boring Location Map	

Elevation, feet	Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	Relative Consistency	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Moisture Content, %	Dry Unit Weight, pcf	Percent Fines	LL, %	PI, %	Shear Strength (tsf)	REMARKS AND OTHER TESTS
40	0		1	7		CL		sandy lean CLAY, dk. brown, moist, med. stiff to stiff	19		51	32	19		
			2	11					15						
35	5		3	9		CL		lean CLAY w/ sand, brown, stiff, w/ traces of white nodules	14			45	32		
			4	13					22						
30	10		5	14		CL		sandy lean CLAY, brown, moist to wet (med. stiff to stiff)	30			27	12		
25	15		6	17		SP-SC		SAND w/ clay, brown, wet, med. dense	21		7				
20	20		7	18					20						
								Bottom of Boring at 20 feet bgs							
15	25														
10	30														
5	35														
0	40														
-5	45														
-10	50														
-15	55														
-20	60														
-25	65														
-30	70														
-35	75														
-40	80														

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Figure

Project: Proposed Project Wilson at Roosevelt Road
Project Location: Harlingen, Cameron County, Texas
Project Number: 01-15-29217

Log of Boring B-2
 Sheet 1 of 1

Date(s) Drilled: December 12, 2015	Logged By: J.P. Palma	Checked By: R. Palma
Drilling Method: Straight Flight	Drill Bit Size/Type: 4 in. soil bit	Total Depth of Borehole: 20 feet bgs
Drill Rig Type: CME 45	Drilling Contractor: Southwest Drilling	Approximate Surface Elevation: 40 feet Natural Ground (assumed)
Groundwater Level and Date Measured: 14 feet ATD, 13 feet after 1 Hr.	Sampling Method(s): 2 in. Split Spoon	Hammer Data: 140 lb., 30 in. drop, rope and cathead
Borehole Backfill: Subgrade	Location: See Boring Location Map	

Elevation, feet	Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	Relative Consistency	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Moisture Content, %	Dry Unit Weight, pcf	Percent Fines	LL, %	PI, %	Shear Strength (tsf)	REMARKS AND OTHER TESTS
40	0		1	8		CL		sandy lean CLAY, dk. brown, moist, med. stiff to stiff	19		52	30	14		
			2	11					16						
35	5		3	10		CL		lean CLAY w/ sand, brown, stiff, w/ traces of white nodules	16		71				
			4	9					18						
30	10		5	12		CL		sandy lean CLAY, brown, moist to wet (med. stiff to stiff) (ATD)	23			28	15		
25	15		6	16		SP-SC		SAND w/ clay, brown, wet, med. dense	23						
20	20		7	16					24		7				
								Bottom of Boring at 20 feet bgs							
15	25														
10	30														
5	35														
0	40														
-5	45														
-10	50														
-15	55														
-20	60														
-25	65														
-30	70														
-35	75														
-40	80														

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Figure

Project: Proposed Project Wilson at Roosevelt Road
Project Location: Harlingen, Cameron County, Texas
Project Number: 01-15-29217

Log of Boring B-3
 Sheet 1 of 1

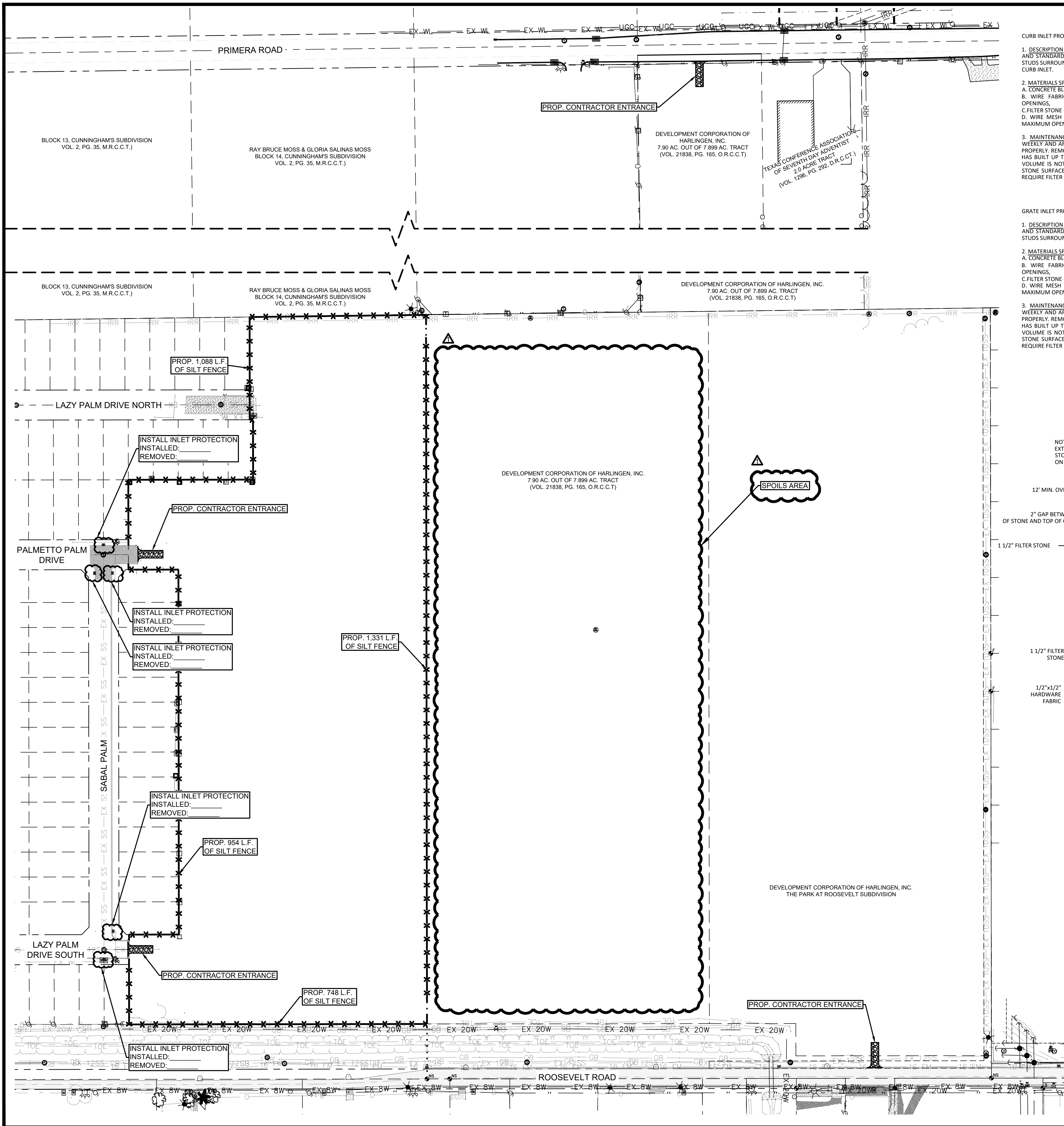
Date(s) Drilled December 12, 2015	Logged By J.P. Palma	Checked By R. Palma
Drilling Method Straight Flight	Drill Bit Size/Type 4 in. soil bit	Total Depth of Borehole 20 feet bgs
Drill Rig Type CME 45	Drilling Contractor Southwest Drilling	Approximate Surface Elevation 40 feet Natural Ground (assumed)
Groundwater Level and Date Measured 14 feet ATD, 13 feet after 1 Hr.	Sampling Method(s) 2 in. Split Spoon	Hammer Data 140 lb., 30 in. drop, rope and cathead
Borehole Backfill Subgrade	Location See Boring Location Map	

Elevation, feet	Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	Relative Consistency	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	Moisture Content, %	Dry Unit Weight, pcf	Percent Fines	LL, %	PI, %	Shear Strength (tsf)	REMARKS AND OTHER TESTS
40	0		1	8		CL		sandy lean CLAY, dk. brown, moist, med. stiff to stiff	16			38	22		
			2	12					14						
35	5		3	14		CL		lean CLAY w/ sand, brown, stiff, w/ traces of white nodules	13			39	25		
			4	11					19						
30	10		5	8		CL		sandy lean CLAY, brown, moist to wet (med. stiff to stiff) (ATD)	21		50				
25	15		6	14		SP-SC		SAND w/ clay, brown, wet, med. dense	22		8				
20	20		7	20					23						
								Bottom of Boring at 20 feet bgs							
15	25														
10	30														
5	35														
0	40														
-5	45														
-10	50														
-15	55														
-20	60														
-25	65														
-30	70														
-35	75														
-40	80														

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Figure



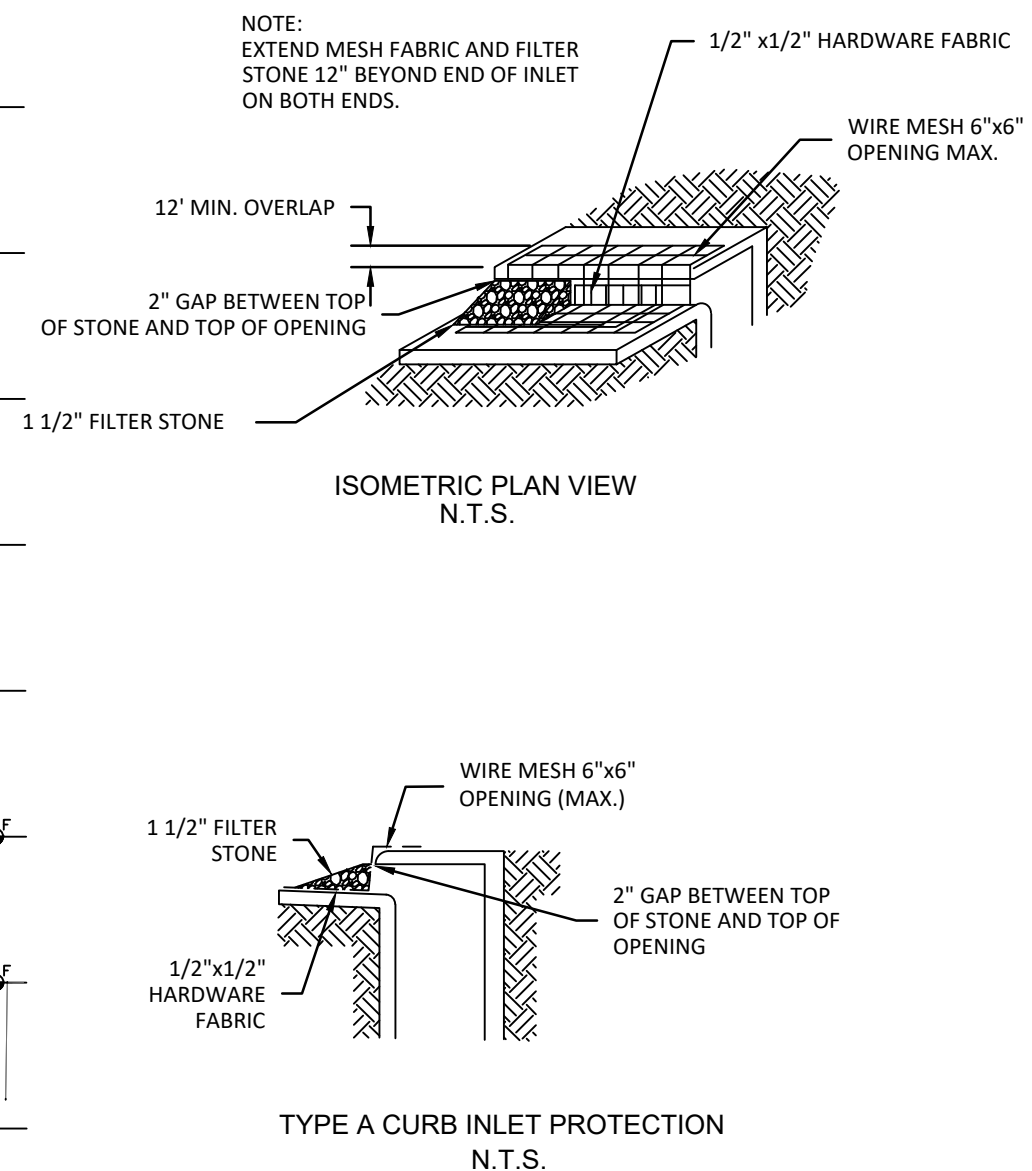
CURB INLET PROTECTION

- DESCRIPTION - A TEMPORARY SEDIMENT CONTROL BARRIER MADE OF FILTER STONE AND STANDARD CONCRETE BLOCK, WELDED WIRE FABRIC, HARDWARE FABRIC OR 2 X 4 STUDS SURROUNDING A STORM DRAIN CURB INLET.
- MATERIALS SPECIFICATION -
 - CONCRETE BLOCK - ASTM C 139, CONCRETE MASONRY UNIT FOR CONSTRUCTION.
 - WIRE FABRIC - STANDARD GALVANIZED HARDWARE FABRIC WITH 1/2" BY 1/2" OPENINGS.
 - FILTER STONE - NCTCOG SPECIFICATION 2.18 (a)
 - WIRE MESH - WELDED WIRE FABRIC CONFORMING TO NCTCOG SPECIFICATIONS 2.7 MAXIMUM OPENING 8"x6"
- MAINTENANCE REQUIREMENTS - CURB INLET PROTECTION SHOULD BE INSPECTED WEEKLY AND AFTER MAJOR RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY. REMOVE SEDIMENT FROM THE STORAGE AREA WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-HALF OF THE STORAGE DEPTH IF DE-WATERING OF THE STORAGE VOLUME IS NOT OCCURRING, CLEAN OR REPLACE THE FILTER STONE, CLEAN THE FILTER STONE SURFACE THE FIRST FEW TIMES BY RAKING. REPEATED SEDIMENT BUILD-UP WILL REQUIRE FILTER STONE REPLACEMENT.

GRATE INLET PROTECTION

- DESCRIPTION - A TEMPORARY SEDIMENT CONTROL BARRIER MADE OF FILTER STONE AND STANDARD CONCRETE BLOCK, WELDED WIRE FABRIC, HARDWARE FABRIC OR 2 X 4 STUDS SURROUNDING A STORM DRAIN GRATE INLET.
- MATERIALS SPECIFICATION -
 - CONCRETE BLOCK - ASTM C 139, CONCRETE MASONRY UNIT FOR CONSTRUCTION.
 - WIRE FABRIC - STANDARD GALVANIZED HARDWARE FABRIC WITH 1/2" BY 1/2" OPENINGS.
 - FILTER STONE - NCTCOG SPECIFICATION 2.18 (a)
 - WIRE MESH - WELDED WIRE FABRIC CONFORMING TO NCTCOG SPECIFICATIONS 2.7 MAXIMUM OPENING 8"x6"
- MAINTENANCE REQUIREMENTS - GRATE INLET PROTECTION SHOULD BE INSPECTED WEEKLY AND AFTER MAJOR RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY. REMOVE SEDIMENT FROM THE STORAGE AREA WHEN THE DEPTH OF SEDIMENT HAS BUILT UP TO ONE-HALF OF THE STORAGE DEPTH IF DE-WATERING OF THE STORAGE VOLUME IS NOT OCCURRING, CLEAN OR REPLACE THE FILTER STONE, CLEAN THE FILTER STONE SURFACE THE FIRST FEW TIMES BY RAKING. REPEATED SEDIMENT BUILD-UP WILL REQUIRE FILTER STONE REPLACEMENT.

NOTE: EXTEND MESH FABRIC AND FILTER STONE 12" BEYOND END OF INLET ON BOTH ENDS.



EROSION CONTROL NOTE:

- Prior to commencing construction operations, erosion control devices shall be installed as indicated on this erosion control plan or other areas as may be directed by the Owner's Representative or City Inspector.
 - Site entry and exit locations shall be maintained in a condition which will prevent tracking or flowing of sediment onto public roadways. All sediment spilled, dropped, washed or tracked on a public roadway must be removed immediately. When washing is required to remove sediment prior to entrance to a public roadway, it shall be done on an area stabilized with crushed stone which drains into an approved sediment basin. All fines imposed for tracking onto public roads shall be paid by the Contractor.
 - Erosion control devices and temporary seeding may be added or reduced in the field as directed by the Owners representative.
 - Maintenance - Erosion controls shall be repaired or replaced as inspection deemed necessary or as directed by the Owner's representative. Accumulated silt at any erosion control device shall be removed when it reaches a depth of 6 inches, and shall be distributed on site in a manner not contributing to additional silt.
 - The Contractor is responsible for reestablishing any erosion control device which he disturbs. Each contractor shall notify the Owner's representative of any deficiencies in the established erosion control measures which may lead to unauthorized discharge or storm water pollution, sedimentation to other pollutants. Unauthorized pollutants include, but are not limited to, excess concrete dumping or concrete residue, paints, solvents, greases, fuel and lube oil pesticides, any solid waste materials.
 - Utility Contractor to be responsible for placement of erosion control devices around inlets as shown on this plan.
 - Storm Water Permit Pollution Prevention Plan - In accordance with the final TPDES General Permits for discharge waste from construction sites as issued by the TCEQ, March 5, 2003, the Contractor shall prepare a storm water pollution prevention plan (SWPPP), prepare and submit a notice of intent (TCEQ Form 20022 (5/03)) and implement the plan during construction.
- The Notice of Intent (NOI) must be submitted at least 48 hours prior to beginning construction. The NOI should be sent to: TCEQ Storm Water & General Permits Team; MC-228 P.O. Box 13087 Austin, TX. 78711-3087 and one copy each to the Owner/Engineer.
- The SWPPP must be prepared prior to the submittal of the NOI. The SWPPP must be submitted for review by the Engineer and kept on file at the construction site. The Contractor shall be responsible for implementing, updating and modifying per regulatory agency requirements, inspection, and monitoring the SWPPP.
- The Contractor shall retain records or copies of all reports for this permit for a period of at least three (3) years from date of final completion. Forms for the NOI and a SWPPP check list may be found at www.tceq.state.tx.us

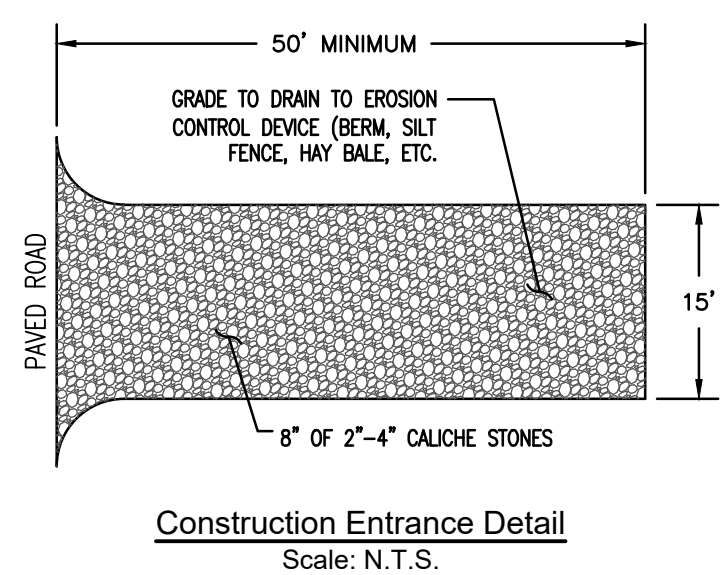
ENVIRONMENTAL REVIEW:

Per the review done by TWDB, the site was deemed "Determination of No Effect".

Environmental impacts should be similar to a minor upgrade or expansion of system capacity and rehabilitation of existing facilities. Proposed improvements within the existing golf course ditch easement are not expected to impact previously recorded significant or potentially significant sites or protected areas surrounding a historic cemetery, structure, or district, as identified in the Texas Historical Commission's Archeological Sites Atlas.

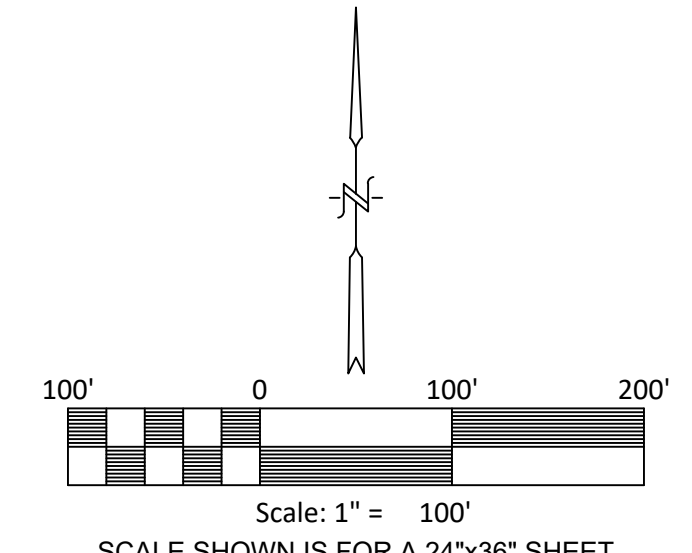
Likewise, the proposed project is not expected to impact threatened or endangered species or habitat. The proposed project will not adversely impact potential waters of the United States.

The decision to grant a Determination of No Effect is allowed because the specified project elements should not cause significant adverse impacts to the quality of the environment. Documentation supporting this determination is on file at the TWDB.



LEGEND

G = PROP. GUTTER	EXIST. H.M.A.C.
FL = PROP. FLOWLINE	PROP. H.M.A.C.
TOC = PROP. TOP OF CURB	
TOG = PROP. TOP OF GRATE	
TOP = PROP. TOP OF PAVEMENT	
EOP = PROP. EDGE OF PAVEMENT	
EXIST. SIGN	EXIST. FIRE HYDRANT
EXIST. POST	EXIST. SECURITY LIGHT
EXIST. ANCHOR	EXIST. STREET LIGHT POST
EXIST. MAILBOX	EXIST. TRANSMISSION POLE
EXIST. MANHOLE	
EXIST. POWER POLE	PROP. TYPE C-C INLET
EXIST. WATER VALVE	PROP. TYPE C INLET
EXIST. WATER METER	
TOE	EXIST. TOE
30.00	EXIST. FENCE
WL	EXIST. CONTOURS
EX 8W	EXIST. WATERLINE
EX 20W	EXIST. 8" WATERLINE
GB	EXIST. 20" WATERLINE
EX 12FM	EXIST. TOP OF BANK
EX SS - EX SS	EXIST. GRADE BREAK
EX 10SS	EXIST. 12" FORCE MAIN
SD-EX12	EXIST. SANITARY SEWER
SD-EX24	EXIST. 10" SANITARY SEWER
SD-EX30	EXIST. 12" STORM SEWER
SD-EX36	EXIST. 24" STORM SEWER
IR	EXIST. 30" STORM SEWER
SD-18-SD-18	EXIST. IRRIGATION LINE
SD-24-SD-24	PROP. 18" STORM DRAIN
V-V	PROP. 24" STORM DRAIN
GB	PROP. VALLEY GUTTER
TOE	PROP. GRADE BREAK
	PROP. TOP OF BANK
	PROP. TOE
	PROP. SILT FENCE



- NOTES:**
- CONTRACTOR SHALL FIELD VERIFY HORIZONTAL & VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

FERRIS, FLINN & MEDINA, LLC
 ENGINEERS SURVEYORS
 1405 N. STUART PLACE ROAD
 PALM VALLEY, TEXAS 78552
 PHONE: 361-603-1000
 TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS
 FIRM REGISTRATION NO.: F-897
 FIRM REGISTRATION NO.: 100370-00

SEAL: ANTONIO L. REYNA, LICENSED PROFESSIONAL ENGINEER, 145245, 8-30-2024

REVISIONS:
08/30/2024
ADDENDUM NO. 1
ADD SPOILS AREA

HARLINGEN ECONOMIC DEVELOPMENT CORPORATION
 THE PARK AT ROOSEVELT - EDA GRANT PROJECT
 CONSTRUCTION PLANS
 STORM WATER POLLUTION PROTECTION PLAN

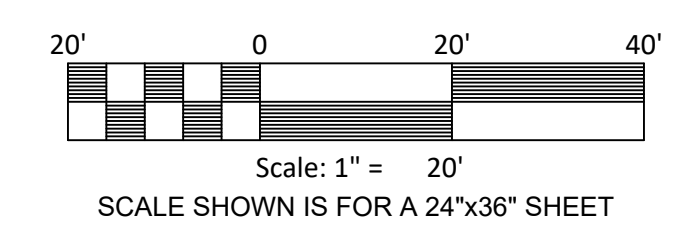
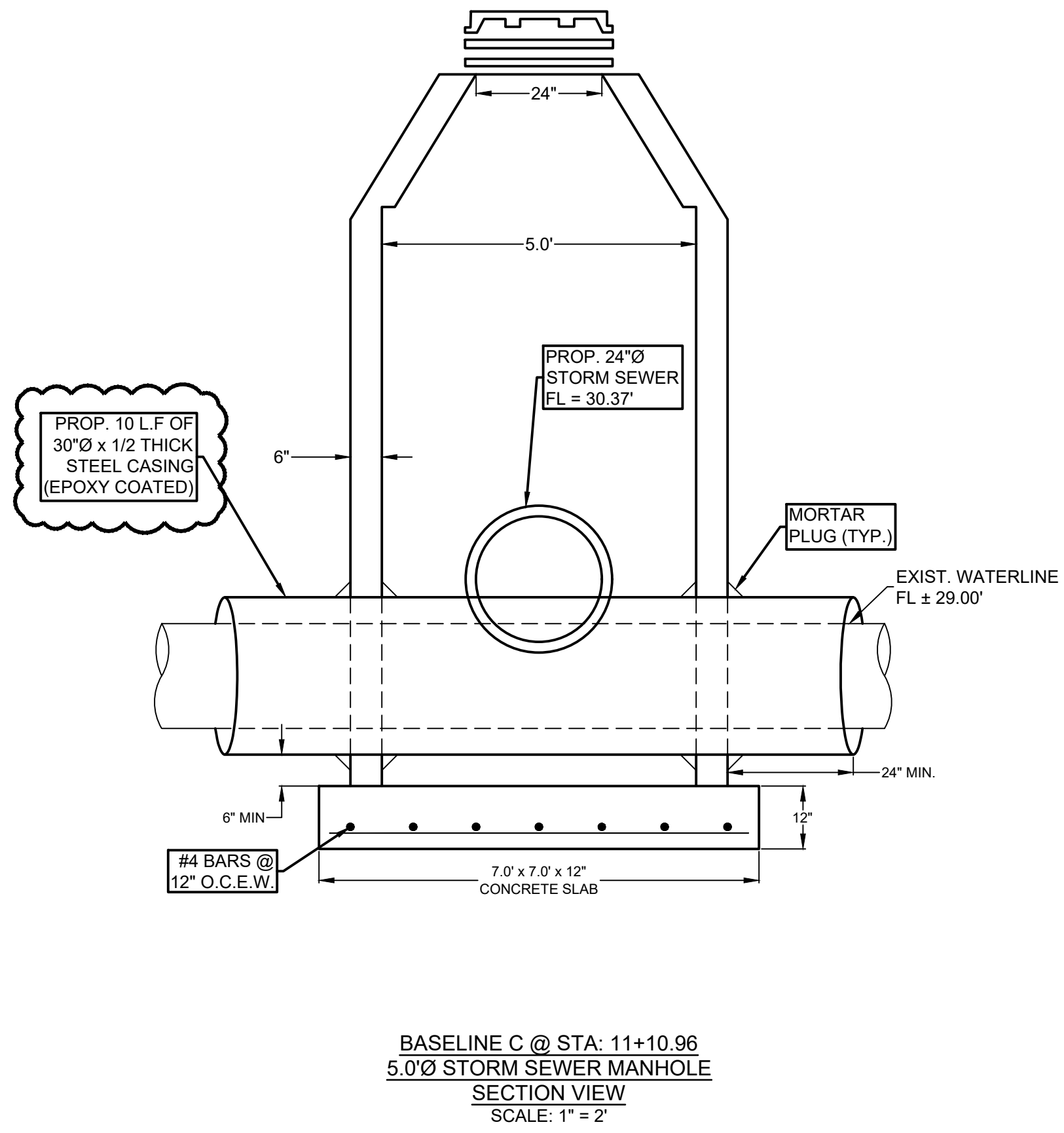
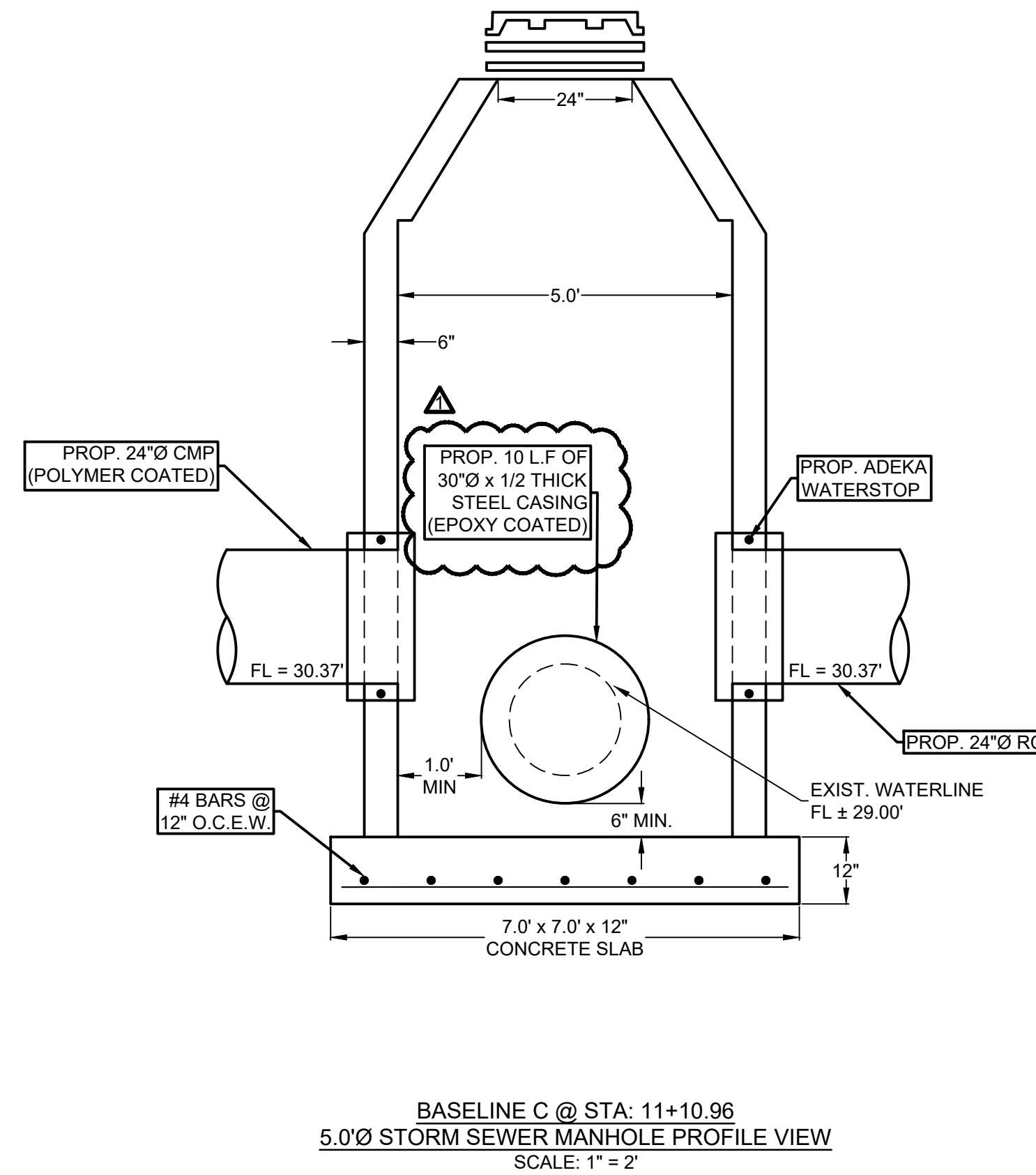
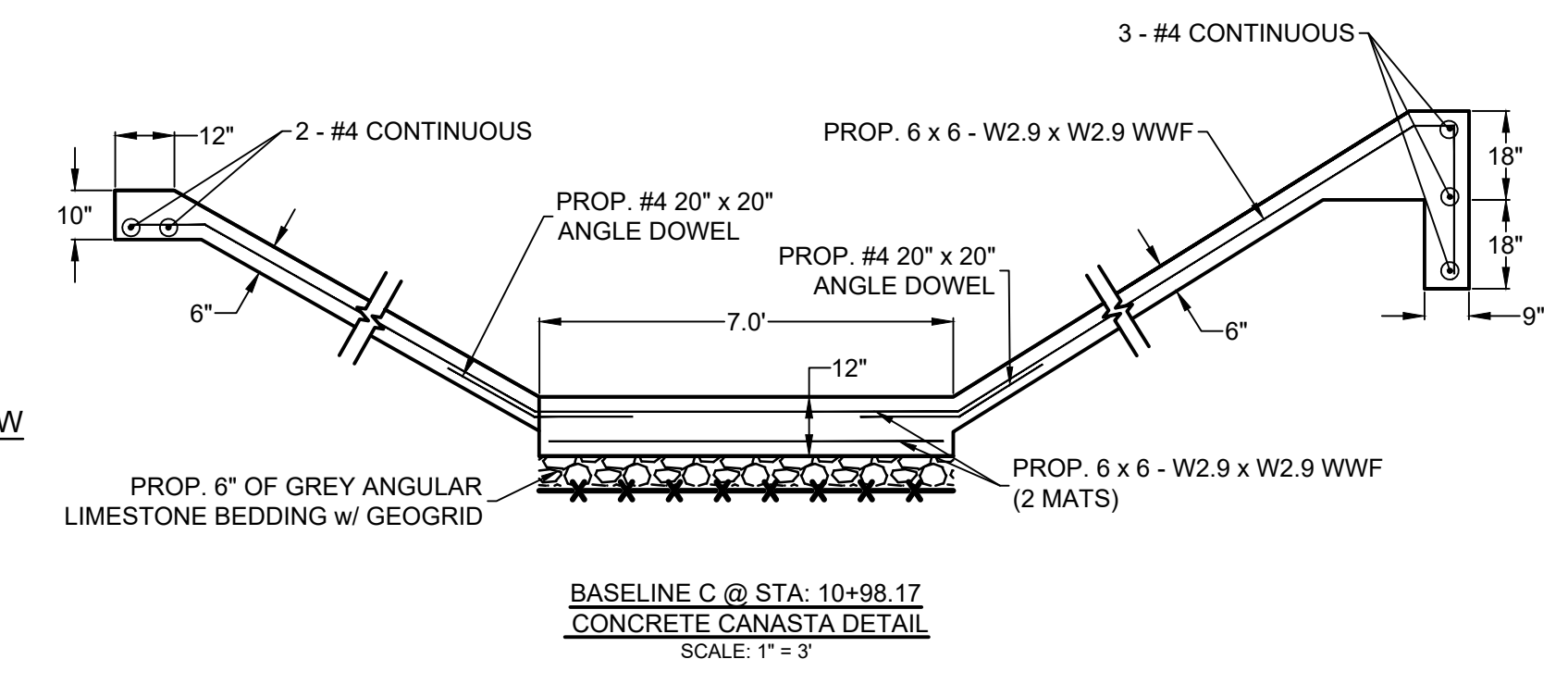
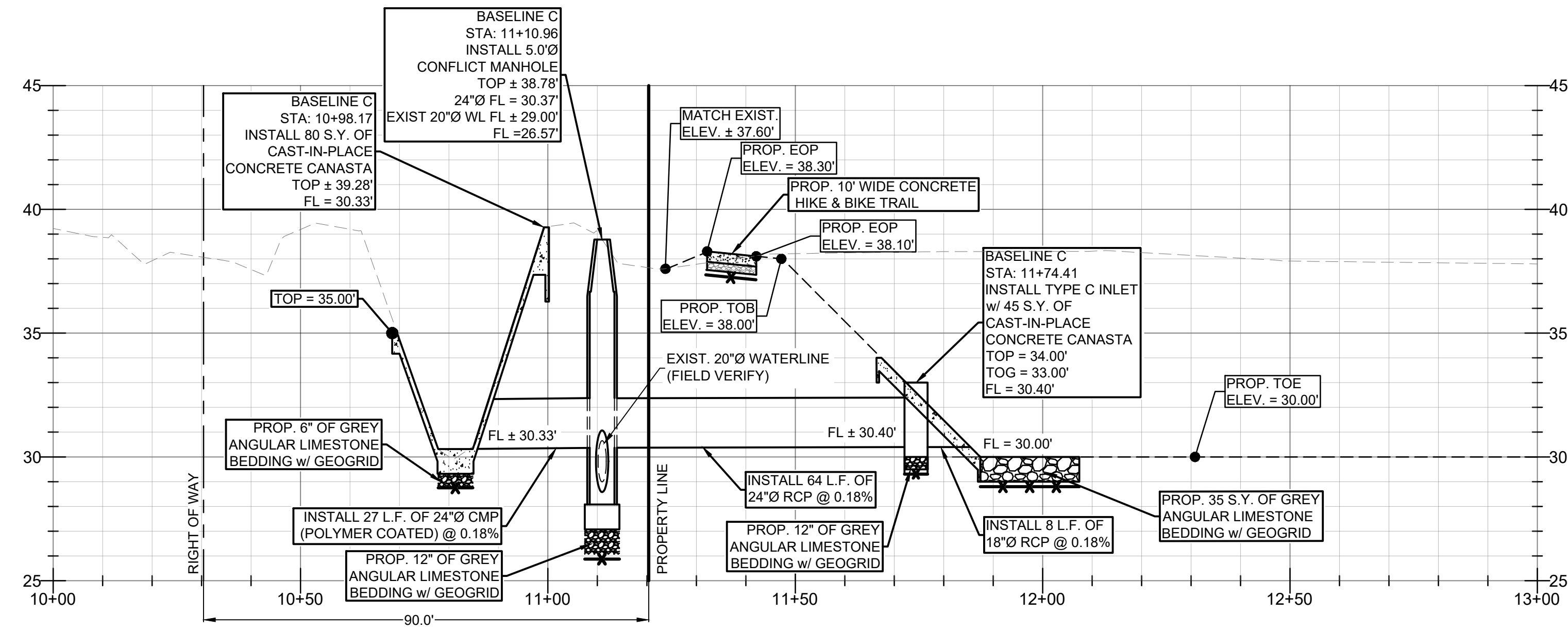
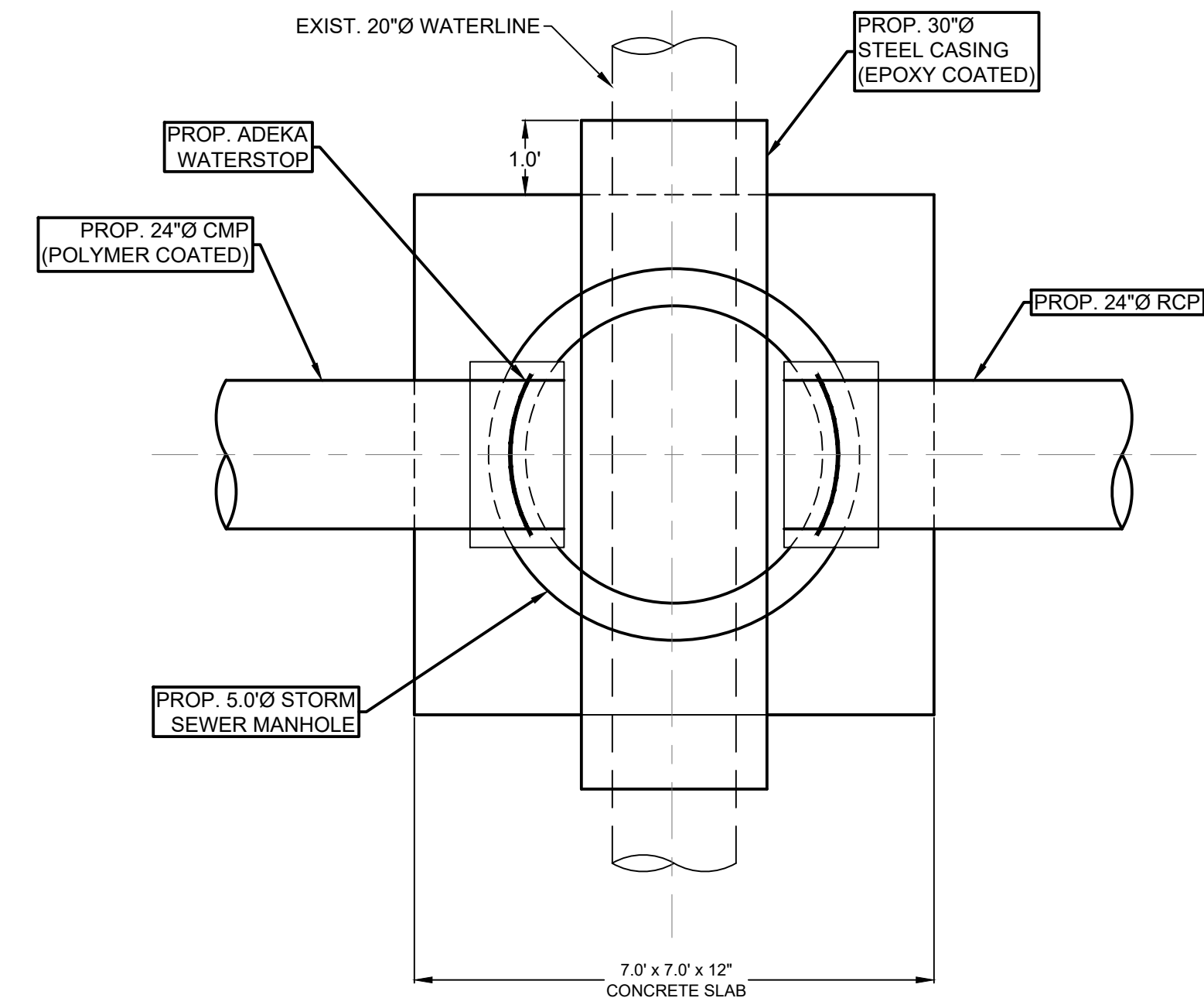
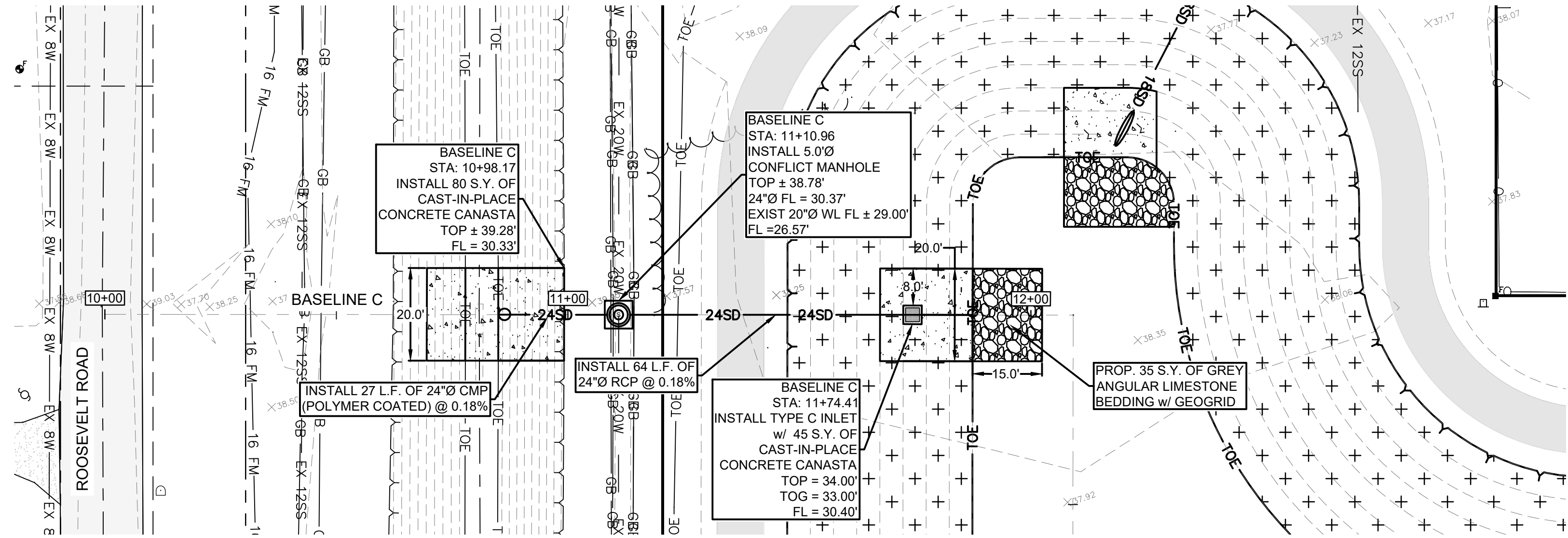
SCALE: AS SHOWN
DRAWN BY: S.M.
FILE: 544-021
DATE: 08/20/2024

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F:\0544 Harlingen EDC\544-021 Roosevelt Park EDA Grant Project\DWG\544-021.dwg, 03_20V3

PLAN VIEW
SCALE: 1" = 20'



NOTES:
1. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL & VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.

LEGEND

G	= PROP. GUTTER	EXIST. HMAC
FL	= PROP. FLOWLINE	PROP. HMAC
TOC	= PROP. TOP OF CURB	
TOG	= PROP. TOP OF GRATE	
TOP	= PROP. TOP OF PAVEMENT	
EOP	= PROP. EDGE OF PAVEMENT	
EXIST. SIGN	EXIST. FIRE HYDRANT	
EXIST. POST	EXIST. SECURITY LIGHT	
EXIST. ANCHOR	EXIST. STREET LIGHT POST	
EXIST. MAILBOX	EXIST. TRANSMISSION POLE	
EXIST. MANHOLE	PROP. TYPE C-C INLET	
EXIST. POWER POLE	PROP. TYPE C INLET	
EXIST. WATER VALVE		
EXIST. WATER METER		
TOE	EXIST. TOE	
EXIST. FENCE	EXIST. FENCE	
EXIST. CONTOURS	EXIST. CONTOURS	
WL	EXIST. WATERLINE	
EX SW	EXIST. 8" Ø WATERLINE	
EX 20W	EXIST. 20" Ø WATERLINE	
GB	EXIST. TOP OF BANK	
EX 12FM	EXIST. GRADE BREAK	
EX SS - EX SS	EXIST. 12" Ø FORCE MAIN	
EX 10SS	EXIST. SANITARY SEWER	
SD-EX12	EXIST. 12" Ø SANITARY SEWER	
SD-EX24	EXIST. 24" Ø SANITARY SEWER	
SD-EX30	EXIST. 30" Ø SANITARY SEWER	
SD-EX36	EXIST. 36" Ø SANITARY SEWER	
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V	PROP. VALLEY GUTTER	
GB	PROP. GRADE BREAK	
TOE	PROP. TOP OF BANK	
PROP. SILT FENCE	PROP. SILT FENCE	

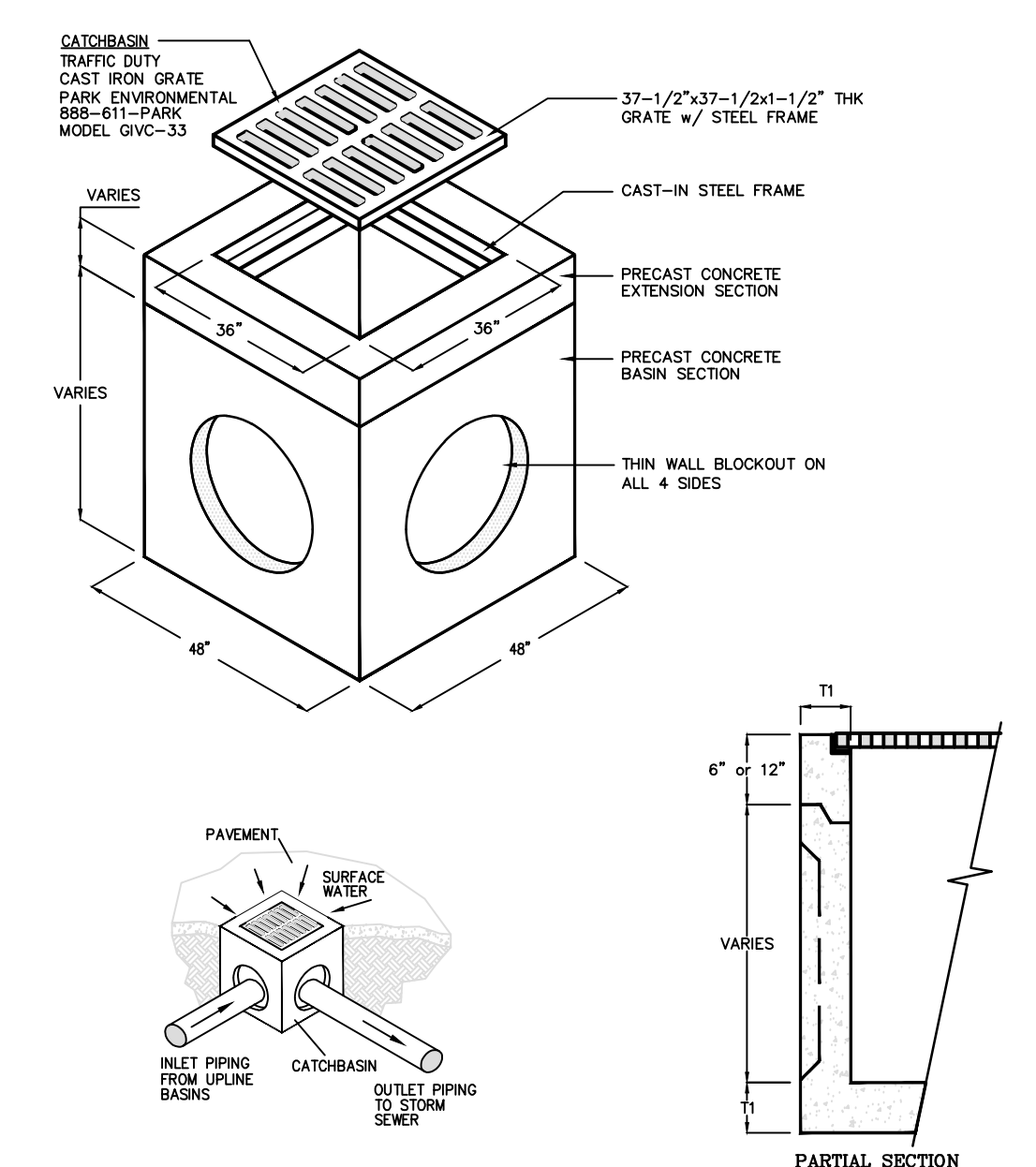
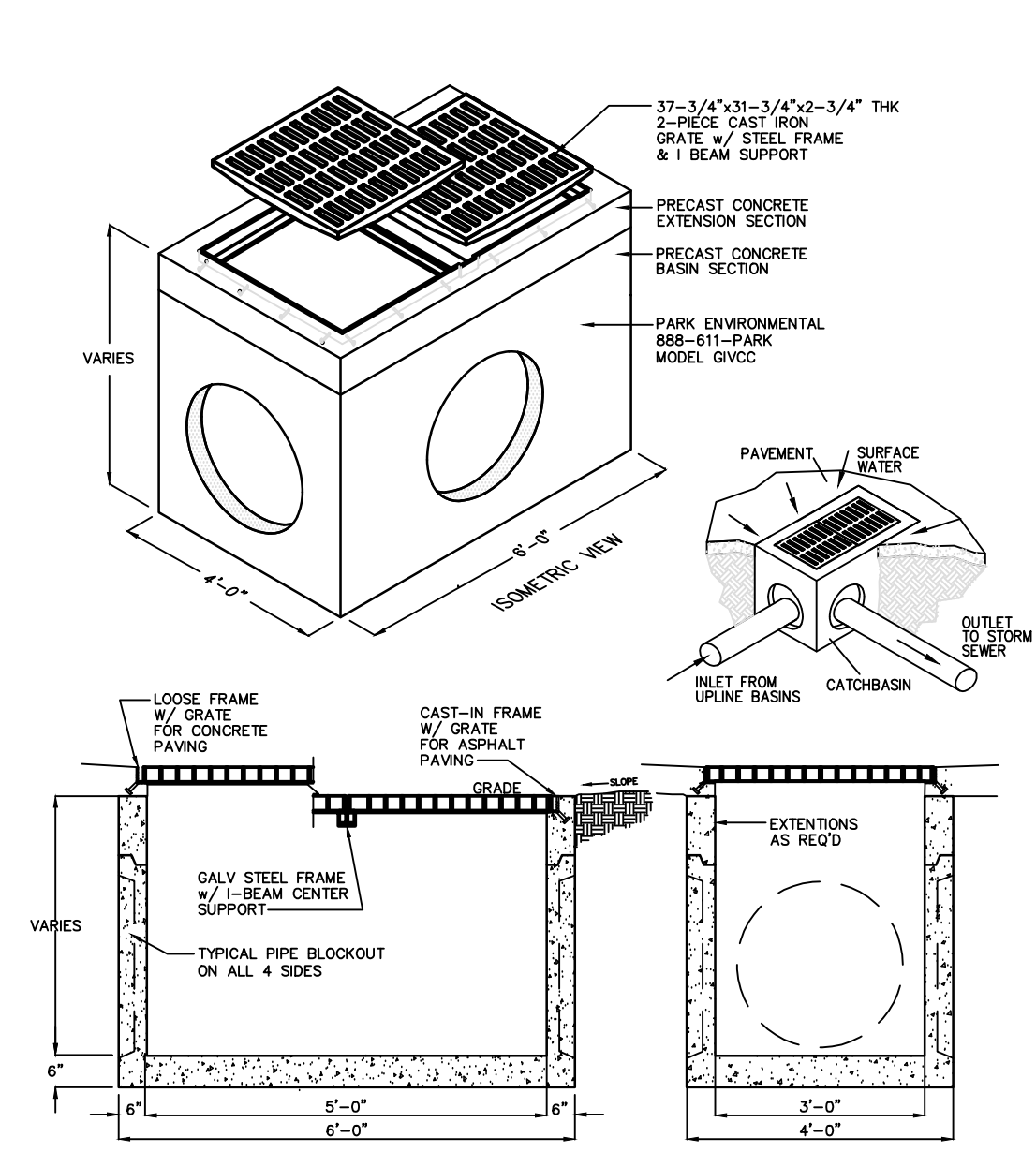
FERRIS, FLINN & MEDINA, LLC
ENGINEERS SURVEYORS
1405 N. STUART PLACE ROAD
PALM VALLEY, TEXAS 78552
PHONE: 817.608.1000
FAX: 817.608.1002
TELETYPE: 817.608.1003
FIRM REGISTRATION NO.: F-897



REVISIONS:
08/30/2024
ADDENDUM NO. 1
ADD CASING THICKNESS

HARLNGEN ECONOMIC DEVELOPMENT CORPORATION
THE PARK AT ROOSEVELT - EDA GRANT PROJECT
CONSTRUCTION PLANS
STORM SEWER PLAN AND PROFILE
BASELINE C - STA: 10+00 - 13+00

SCALE: AS SHOWN
DRAWN BY: S.M.
FILE: 544-021
DATE: 08/20/2024



MODEL #	DIMENSIONS						WEIGHT
CATCH BASIN	W1	W2	H1	H2	T1	KO	LB
888-811-PARK	48"	36"	42"	36"	6"	32"	38.125/42"

SPECIFICATIONS

CONCRETE : Class C concrete with of design strength of 3600 PSI at 28 days. Unit is of monolithic construction at floor and first stage of wall with sectional riser to required depth. Rated for HL-93 Loading.

REINFORCEMENT: Grade 60 reinforced with No. 4 steel rebar to conform to ASTM A615 on required centers or equal.

C.I. CASTINGS: Cast iron frames and grates are manufactured of grey cast iron conforming to ASTM A48-76 Class 30. Grate is traffic rated.

TYPE "C" PRECAST INLET DETAIL

SCALE: N.T.S.

SPECIFICATIONS

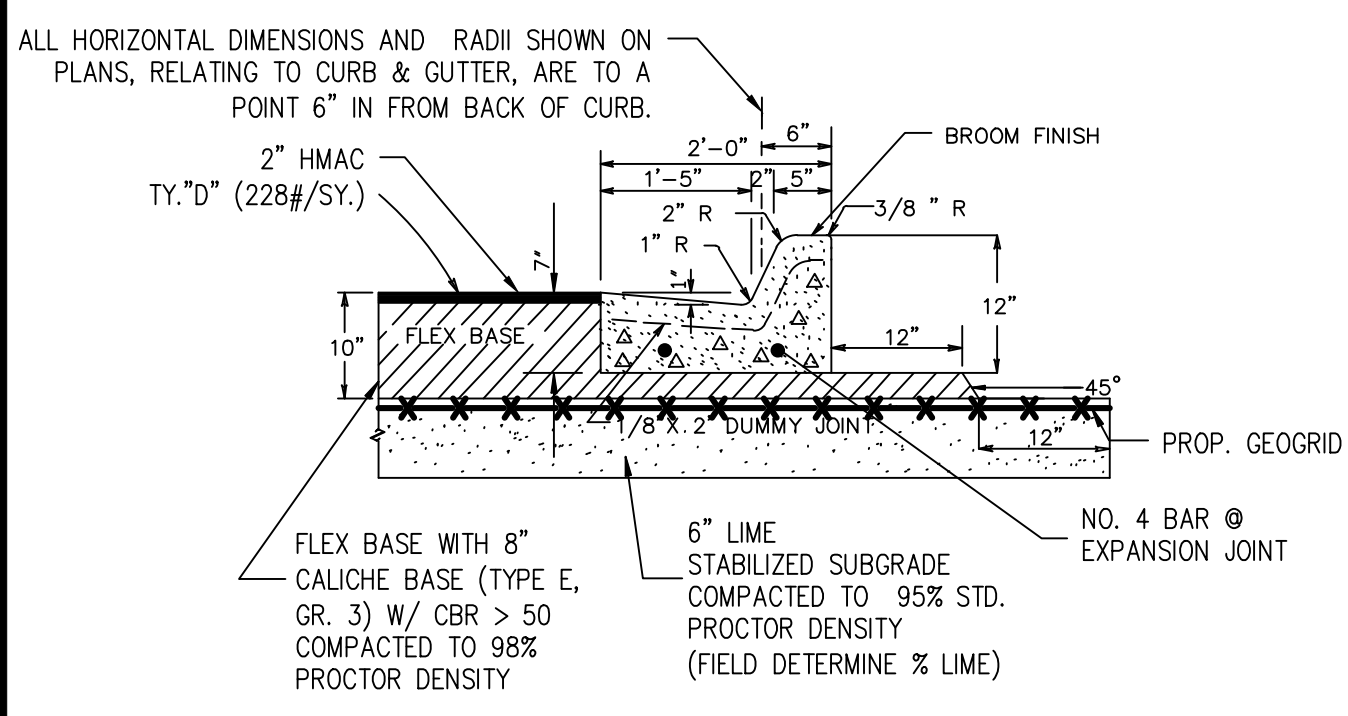
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TYPE "C-C" PRECAST INLET DETAIL

SCALE: N.T.S.



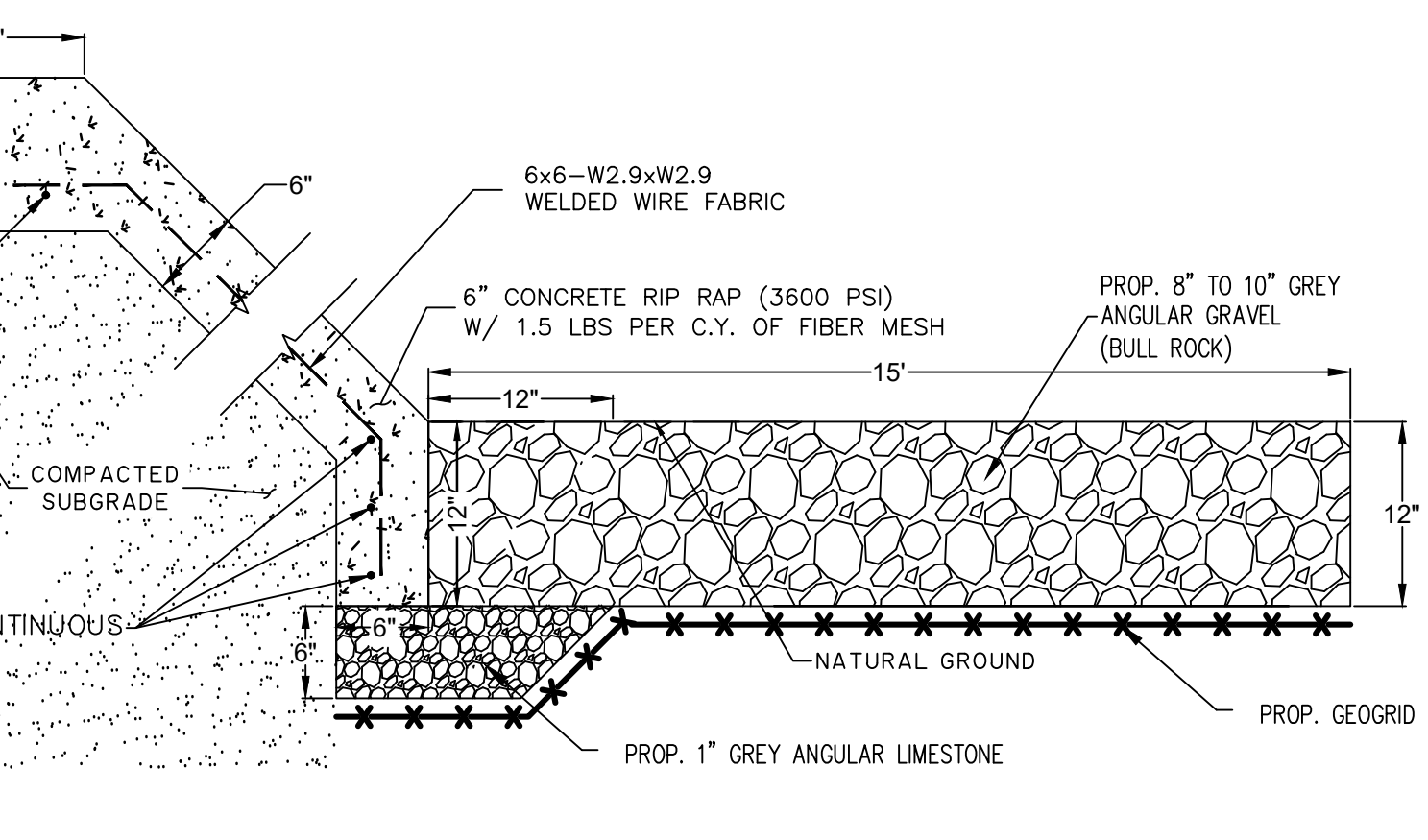
TYPICAL CONC. CURB & GUTTER TY "A" (BARRIER)

NOTE: EXPANSION JOINTS 1/2" PREMOLDED EXPANSION JOINT MATERIAL SHALL BE INSTALLED WHERE CONC. CURB & GUTTER ABUTS CONC. CURB, OR WHERE CONC. CURB & GUTTER OR CONC. CURB ABUT INLETS, BRIDGE WINGWALLS, BRIDGE ABUTMENTS AND/OR ANY OTHER LOCATIONS SPECIFIED BY THE ENGINEER. MAX. SPACING = 30' DUMMY JOINTS ARE AT EVERY 10 FT.

NOTES FOR CURB DETAILS:

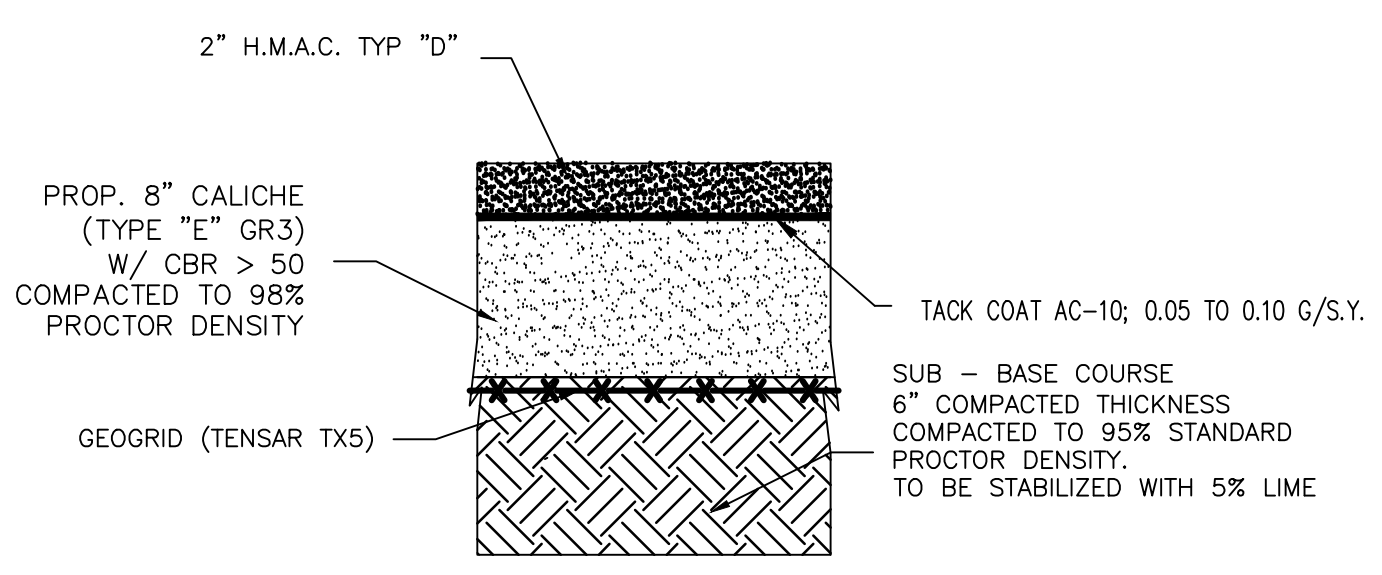
- EXPANSION JOINTS AT MAX. SPACING OF 30'C/C AND AT END OF CURB RETURNS AND CURB INLETS TO BE "WORK PAK" AS MANUFACTURED BY SEAL CURB PRODUCT CORP. OR EQUAL. EXPANSION JOINTS W/ A MINIMUM OF 1/2" X 1/2" ASPHALTIC SEALER
- 1/2" PRE MOLDED EXPANSION JOINT MATERIAL SHALL BE INSTALLED WHERE CONCRETE CURB AND GUTTER ABUTS CONCRETE CURB OR WHERE CONCRETE CURB AND GUTTER OR CONCRETE CURB ABUT INLETS, SIDEWALK AND/OR OTHER LOCATIONS SPECIFIED BY THE ENGINEER. MAX. SPACING = 30'. USE APPROVED POLYURETHANE SEALER BETWEEN SIDEWALK AND CURB.
- DUMMY JOINTS AND TRANSVERSE MARKINGS MADE WITH 1/8" RADIUS GROOVING TOOL SHALL BE PROVIDED ON 10' CENTERS.
- PROVIDE TWO NO 4 X 3" DOWELS AT EACH EXPANSION JOINT. ONE END SHALL BE GREASED AND WRAPPED WITH FELT. LAY DOWELS PARALLEL WITH CURB.
- TERMINATE ASPHALT 1/2" ABOVE TOP OF CURB AT BOTTOM OF SLOPE AND FLUSH AT TOP OF SLOPE
- CURB DUMMY JOINTS AND EXPANSION JOINTS SHALL COINCIDE WITH SIDEWALK JOINTS WHERE CURB IS ADJACENT TO SIDEWALK.

STANDARD CURB AND GUTTER SECTION



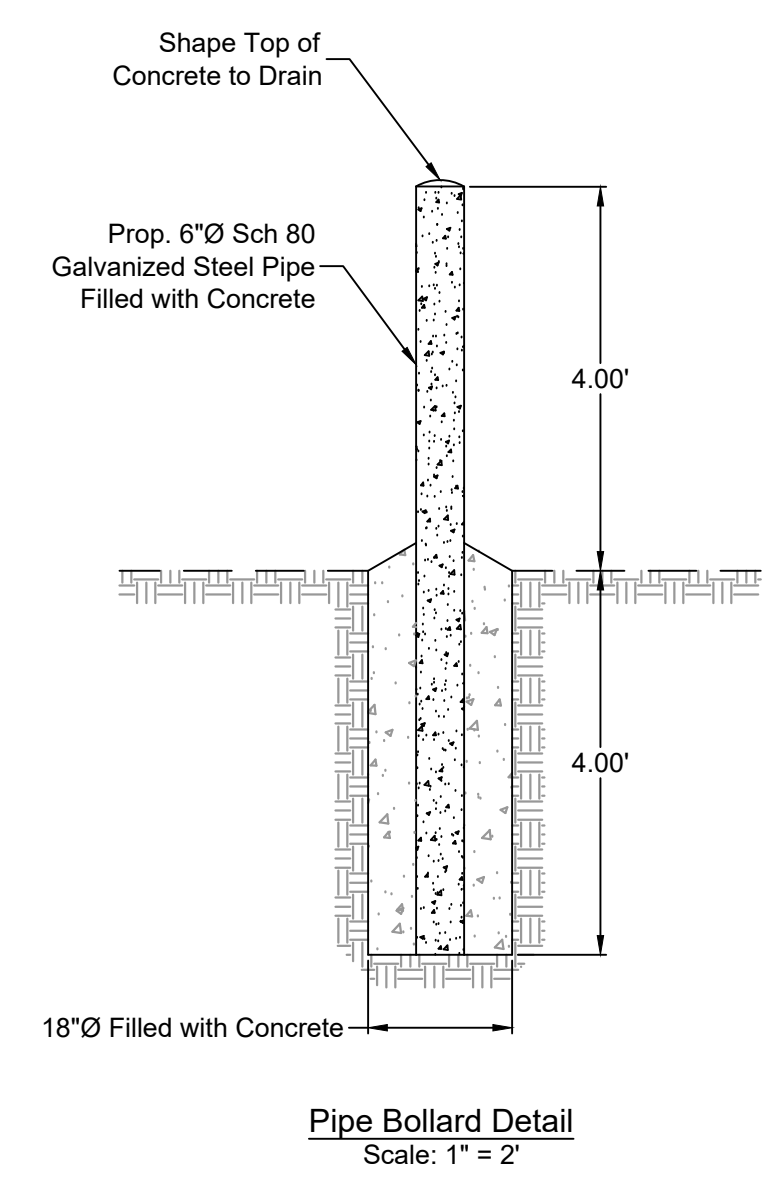
CONCRETE RIP RAP & TOE WALL DETAIL

N.T.S.



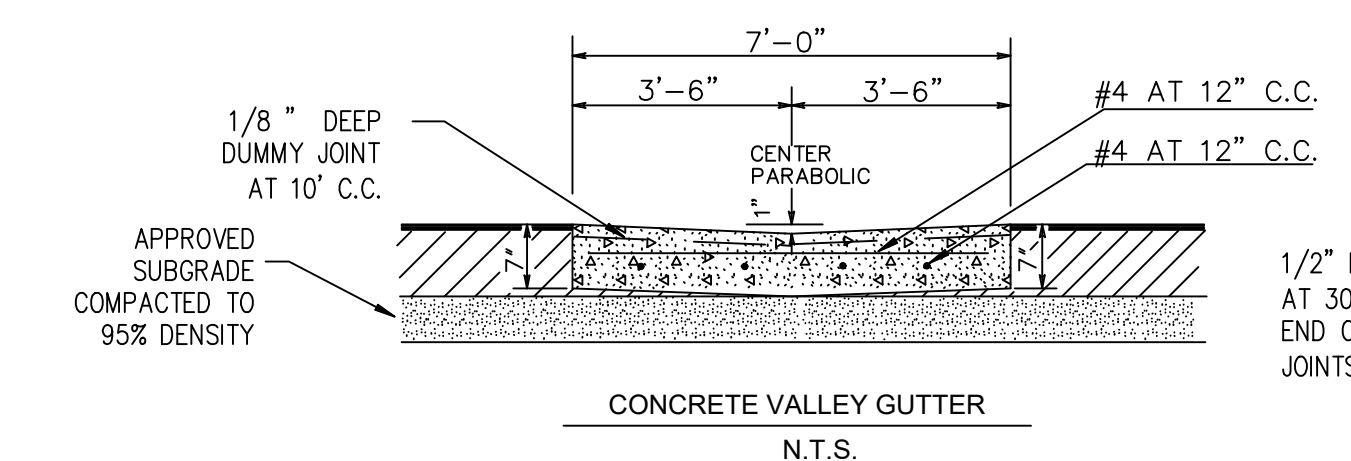
ASPHALT PAVEMENT DETAIL

N.T.S.



Pipe Bollard Detail

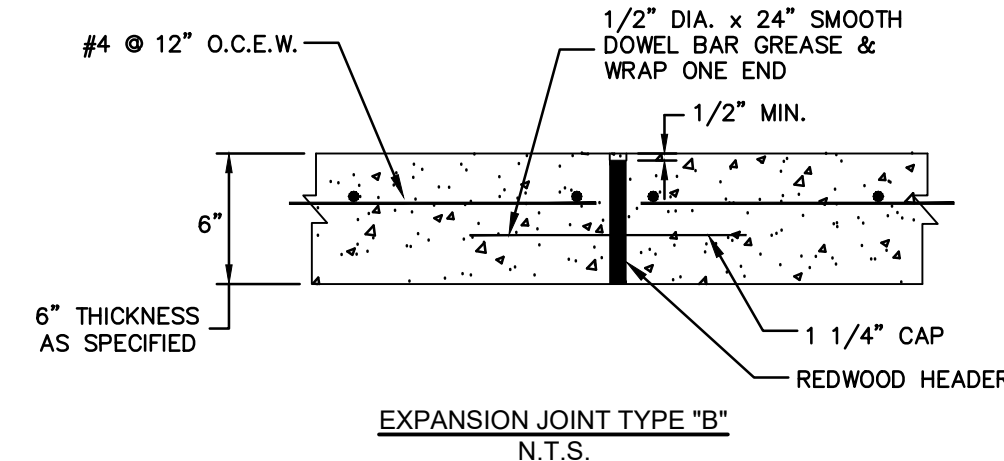
Scale: 1" = 2'



CONCRETE VALLEY GUTTER

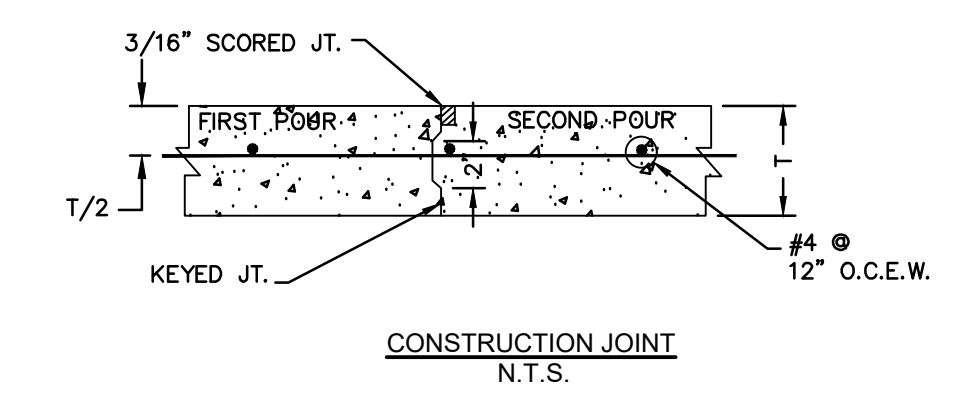
N.T.S.

NOTE: ALL CONCRETE WORK SHALL BE TREATED WITH MEMBRANE CURING COMPOUND TYPE 2 WHITE PIGMENTED IN ACCORDANCE W/THD 1972 SPECIFICATIONS ITEM 531.



EXPANSION JOINT TYPE "B"

N.T.S.



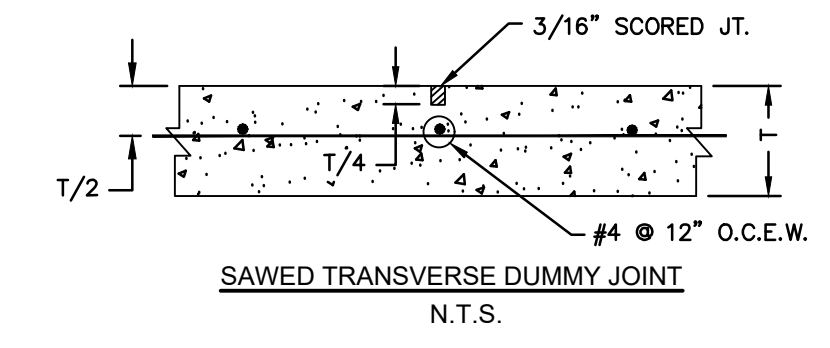
CONSTRUCTION JOINT

N.T.S.

CONCRETE SHALL BE CLASS "C" W/ 1.5 LBS PER C.Y. OF FIBER MESH W/ A 3600 P.S.I. MIN. COMPRESSIVE STRENGTH @ 28 DAYS. CURBS SHALL BE BACK FILLED IMMEDIATELY AFTER REMOVAL OF FORMS TO PREVENT TILTING. 2" DUMMY JOINTS @ 10' O.C. MAX.

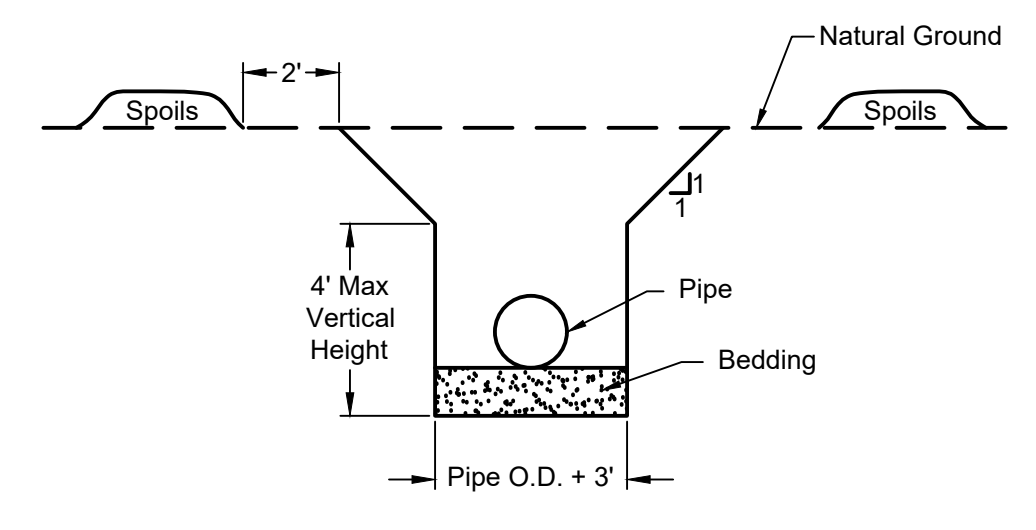
EXPANSION JOINTS

EXPANSION JOINTS WILL BE PLACED @ CURB RETURNS, INLETS & AT THE END OF EACH POUR W/ INTERVALS NOT TO EXCEED 30' C-C. JOINTS WILL CONSIST OF 1/2" PRE-MOLDED BITUMINOUS EXPANSION JOINT MATERIAL W/ 3-36" X 1/2" DOWELS, ONE END GREASED & WRAPPED. CARE MUST BE TAKEN THAT THE DOWELS ARE STRAIGHT AND LAID PARALLEL W/ CURB & NO CONCRETE "PLUGS" OR OTHER MATERIAL BE ALLOWED THROUGH THE DOWEL HOLES OR EXPANSION MATERIAL THAT WOULD PREVENT JOINT FROM OPERATING AS AN EXPANSION JOINT.



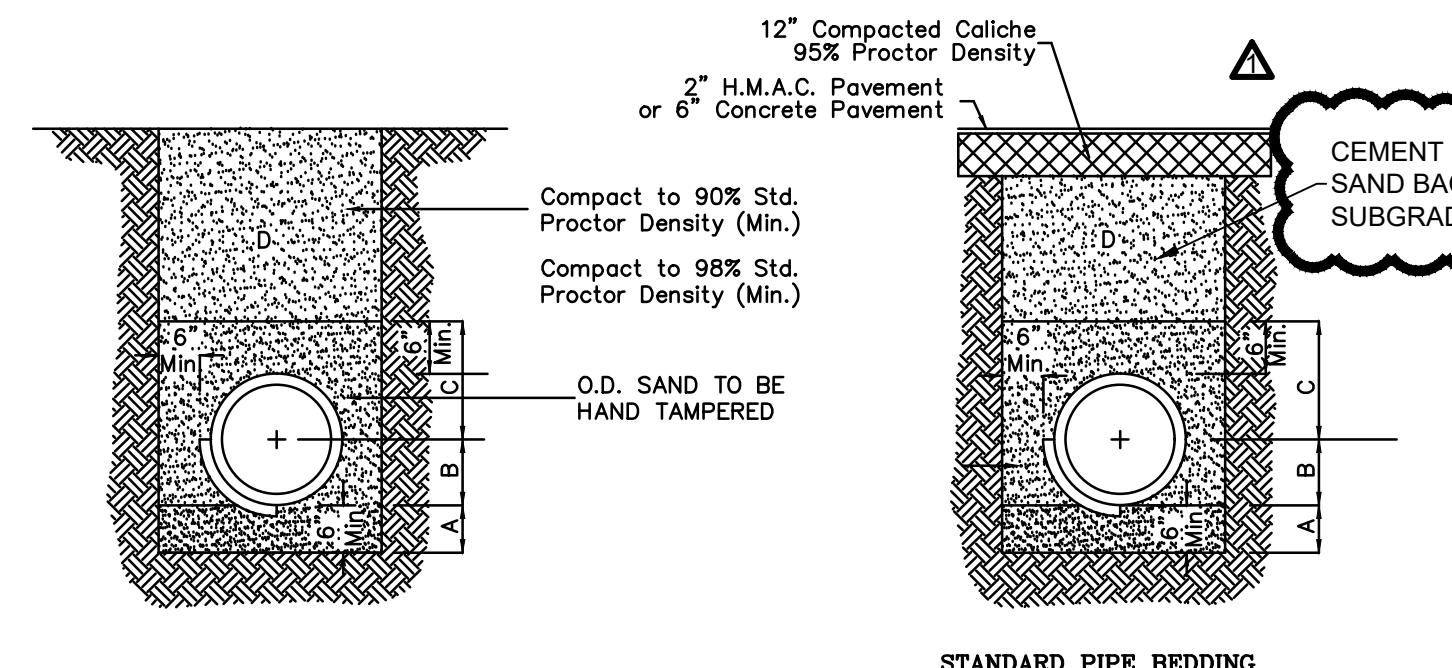
SAWED TRANSVERSE DUMMY JOINT

N.T.S.



Trench Safety Detail

Note: Trenches shall be sloped as shown Scale: N.T.S.



STANDARD PIPE BEDDING

STANDARD PIPE BEDDING UNDER EXISTING PAVEMENT OR PROP. PAVEMENT

- SAND BEDDING TO BE PLACED BEFORE PIPE IS LAID UP TO FLOW LINE OF PIPE (MIN. THICKNESS = 6")
- SAND BACKFILL PLACED AFTER PIPE IS LAID FROM BOTTOM OF PIPE TO SPRING LINE OF PIPE. (4" LIFTS, CAPS, HAND TAMPED)
- SAND BACKFILL PLACED FROM SPRING LINE OF PIPE TO 6" ABOVE TOP OF PIPE. (6" LIFTS, HAND TAMPED)
- FILL TRENCH W/ SELECT BACKFILL, W/ 8" LIFTS COMPACT TO 90% STD. PROCTOR

FOUNDATION PREPARATION (WELLPOINTS, GRAVEL OR CEMENT 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 CONTENTS AND COMPACTED TO 90% STANDARD PROCTOR DENSITY. THE THICKNESS OF EACH LOOSE LAYER SHALL BE SAND, APPROVED SITE SOIL OR OTHER APPROVED SUBSTITUTE.

WATER LINE - BACKFILL A,B,D
SEWER LINE - BACKFILL A,B,C,D
SAND TO BE ARROYO SAND W/ PI <15

- SAND BEDDING PLACED BEFORE PIPE IS LAID UP TO FLOW LINE OF PIPE. (MIN. THICKNESS = 6")
- SAND BACKFILL PLACED AFTER PIPE IS LAID FROM BOTTOM OF PIPE TO SPRING LINE OF PIPE. (4" LIFTS, WATER JET, HAND TAMPED)
- SAND BACKFILL PLACED FROM SPRING LINE OF PIPE TO 6" ABOVE TOP OF PIPE. (6" LIFTS, HAND TAMPED)
- FILL TRENCH W/ SAND, W/ 8" LIFTS COMPACT TO 98% STD. PROCTOR

FOUNDATION PREPARATION (WELLPOINTS, GRAVEL OR CEMENT 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 CONTENTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY. THE THICKNESS OF EACH LOOSE LAYER SHALL BE SAND, APPROVED SITE SOIL OR OTHER APPROVED SUBSTITUTE.

STORM SEWER LINE - BACKFILL A,B,C,D
SAND TO BE ARROYO SAND W/ PI <15

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FIRM REGISTRATION NO.: F-897
REGISTRATION NO.: 100370-00



REVISIONS:
08/30/2024
ADDENDUM NO. 1
ADD STABILIZED SAND BACKFILL NOTE

HARLINGEN ECONOMIC DEVELOPMENT CORPORATION
THE PARK AT ROOSEVELT - EDA GRANT PROJECT
CONSTRUCTION PLANS
GENERAL DETAILS

SCALE: AS SHOWN
DRAWN BY: S.M.
FILE: 544-021
DATE: 08/20/2024