ADDENDUM NO. 1

To: All Planholders
From: Carlos A. Luna Rios, P.E.
Subject: Donna Irrigation District
Construction of the Lateral 22 and
South Crossover Canal Piping Project
Date: June 12, 2026

The Contract Documents, Specifications & Plans are hereby modified as follows:

GENERAL CLARIFICATIONS

- Contractor shall call Texas811 (Dig TESS) to verify location of all utilities prior to construction.

- District Bypass Pump and Pipeline information is attached. Bypass Pump is a Gator Trailer Pump and Bypass Pipeline is 24" Dia. HDPE.

- "Addendum No.1 - Location Map" is attached which includes location of 48" and 60" Dia. PVC Pipes & Bypass Pipeline. Gates, PVC Fittings and Gator Pump will be delivered to District Office. Contractor is responsible for hauling materials to corresponding job site.

- Designated Haul Off Area for existing concrete canal rubble is included in "Addendum No.1 - Location Map".

- 3/8-inch Crushed Limestone may be used in lieu of pea gravel for PVC pipe backfill.

- Contractor is responsible for developing and complying with SWP3 requirements per Bid Item 44.

CONTRACT DOCUMENTS AND SPECIFICATIONS

I. <u>Invitation to Bidders</u>

- The Bid Opening date will be extended to **Thursday, June 25th, 2026 @ 3 p.m.** Replace the words "Tuesday, June 16th, 2026" with "Thursday, June 25th, 2026".

II. SECTION 00300-PROPOSAL

- Replace Bid Schedule Sheets “00300-2 through 00300-5” with the attached revised sheets “00300-2R through 00300-5R Addendum No.1” sheets.

III. SECTION 01010 – Summary of Work

- Add attached Boring Logs pages from Geotechnical Investiagation.

REFER TO CONTRACT PLANS

Plan Sheet 29
Replace Plan Sheet 29 with the attached Plan Sheet 29, 6-12-26 Addendum No. 1.

Record of Pre-Bid Conference and Attendance List are attached.

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

Carlos A. Luna Rios, P.E.
Project Engineer

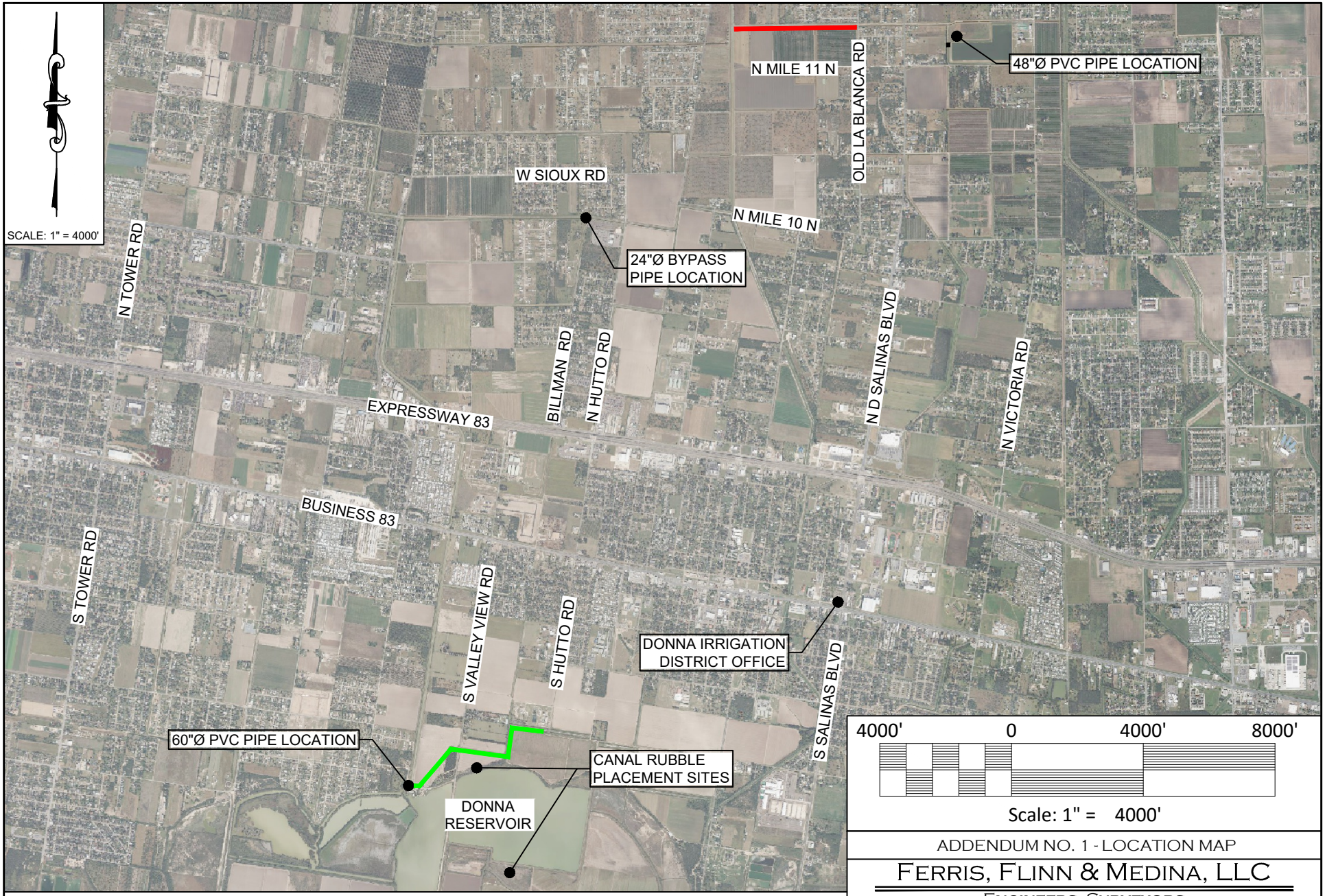
Attachments:
Revised Bid Proposal 00300-2 through 00300-5 Addendum No.1
Addendum No.1 - Location Map
Revised Plan Sheet 29, 6-12-26
Bypass Pump and Pipeline information
Record of Pre-Bid Conference & Attendance List
Boring Logs from Geotechnical Report

Bid Item No.	Description	Units	Approx. Quantity	Unit Price	Total Price
Lateral 22 Canal (West)					
1	Install Concrete Intake Headwall at Main Canal with Filter Screen and Min. 10' Cement Stabilized Backfill at Pipe Penetrations, including labor, backfill material, equipment and any other incidentals necessary, complete in place.	Ea.	1.00		
2	Install Owner Supplied 48” Diameter PVC Pipe, 80 psi (C900), including labor, pea gravel backfill material, equipment and any other incidentals necessary, complete in place.	L.F.	3,792.00		
3	Install Owner Supplied 15” Diameter PVC Pipe, 80 psi PIP Pipe including labor, pea gravel backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	L.F.	214.00		
4	Install Owner Supplied 8” Diameter PVC Pipe, 80 psi PIP Pipe including labor, pea gravel backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	L.F.	30.00		
5	Install Owner Supplied 15” Diameter, WYE PVC Fitting, G including labor, pea gravel backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	Ea.	1.00		
6	Install Owner Supplied 8" Gate Valve including labor, equipment and any other incidentals necessary, complete in place.	Ea.	1.00		
7	Furnish and Install Concrete Mitered Collar including labor, equipment and any other incidentals necessary, complete in place.	Ea.	5.00		
8	Install Owner Supplied 48" Fresno Series 8200, SS Slide Gate including labor, equipment and any other incidentals necessary, complete in place.	Ea.	1.00		
9	Install Owner Supplied 15" Fresno Series 8200, SS Slide Gate including labor, equipment and any other incidentals necessary, complete in place.	Ea.	7.00		
10	Furnish and Install 42" Saddle Outlet including labor, equipment and any other incidentals necessary, complete in place.	Ea.	5.00		
11	Install Owner Supplied Outlet Assembly including 60"Dia.x6"Thick Concrete Slab, labor, equipment and any other incidentals necessary, complete in place.	Ea.	4.00		
12	Furnish and Install 8'x8' Concrete Box Well with Concrete Slab including labor, equipment and any other incidentals necessary, complete in place.	Ea.	1.00		
13	Install Owner Supplied 18" Diameter PVC Pipe and Fittings, for Storm Drain RCP Crossing Syphon including labor, cement stabilized backfill material, equipment, backfilling and any other incidentals necessary, complete in place.	Ea.	1.00		

Bid Item No.	Description	Units	Approx. Quantity	Unit Price	Total Price
Lateral 22 Canal (East)					
14	Remove existing 54" Diameter Irrigation Well including grading, labor, haul off existing concrete rubble, backfill material, equipment and any other incidentals necessary, complete in place.	L.S.	1.00		
15	Install Owner Supplied 24” Diameter PVC Pipe, 80 psi PIP Pipe including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	L.F.	13.00		
16	Install Owner Supplied 36” Diameter PVC Pipe, 80 psi (C900), Pipe including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	L.F.	18.00		
17	Install Owner Supplied 24” Diameter, 22.50 Degree PVC Bend, G including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	Ea.	1.00		
18	Furnish and Install 8'x12' Concrete Box Well with Concrete Slab including labor, equipment and any other incidentals necessary, complete in place.	Ea.	1.00		
19	Furnish and Install Concrete Mitered Collar including labor, equipment and any other incidentals necessary, complete in place.	Ea.	2.00		
South Crossover Canal					
20	Remove existing Irrigation Concrete Headwall Structures at FM 1423 including grading, labor, backfill material, equipment and any other incidentals necessary, complete in place.	L.S.	1.00		
21	Install Flowable Fill at Existing 5'x5' Concrete Box at FM1423 Irrigation crossing including labor, equipment and any other incidentals necessary, complete in place.	C.Y.	35.00		
22	Install 6" Concrete Canasta at Main Canal w/ Huesker Liner (owner supplied) including labor, cement stabilized sand backfill material, equipment and any other incidentals necessary, complete in place.	S.Y.	45.00		
23	Install Owner Supplied 48" Diameter PVC Pipe, 80 psi (C900), including labor, backfill material, equipment and any other incidentals necessary, complete in place.	L.F.	118.00		
24	Install Owner Supplied 60" Diameter PVC Pipe, 80 psi (C900), including labor, backfill material, equipment and any other incidentals necessary, complete in place.	L.F.	5,041.00		
25	Install Owner Supplied 60" Diameter PVC Pipe through Exist. 72" Diameter RCP Casing w/ installation of Owner Supplied Ranger II Casing Spacers & sealing of casing ends with grout, including labor, equipment and any other incidentals necessary, complete in place.	L.F.	104.00		
26	Install Owner Supplied 8” Diameter PVC Pipe, 80 psi, PIP Pipe including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	L.F.	44.00		

Bid Item No.	Description	Units	Approx. Quantity	Unit Price	Total Price
27	Install Owner Supplied 15” Diameter PVC Pipe, 80 psi, PIP Pipe including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	L.F.	847.00		
28	Install Owner Supplied 24” Diameter PVC Pipe, 80 psi, PIP Pipe including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	L.F.	43.00		
29	Install Owner Supplied 15” Diameter, 45 Degree PVC Bend, G including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	Ea.	11.00		
30	Install Owner Supplied 24” Diameter, 45 Degree PVC Bend, G including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	Ea.	1.00		
31	Install Owner Supplied 48” Diameter, 45 Degree PVC Bend, G including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	Ea.	1.00		
32	Install Owner Supplied 60” Diameter, 45 Degree PVC Bend, G including labor, backfill material, equipment, backfill material and any other incidentals necessary, complete in place.	Ea.	1.00		
33	Furnish and Install 12'x12' Concrete Box Well with Concrete Slab including labor, equipment and any other incidentals necessary, complete in place.	Ea.	1.00		
34	Furnish and Install 9'x9' Concrete Box Well with Concrete Slab, Filter Screen at Pipe Penetrations including labor, equipment and any other incidentals necessary, complete in place.	Ea.	4.00		
35	Furnish and Install 42" Saddle Outlet for 60" Dia. PVC Pipeline including labor, equipment and any other incidentals necessary, complete in place.	Ea.	2.00		
36	Install Owner Supplied Outlet Assembly including 60"Dia.x6"Thick Concrete Slab, labor, equipment and any other incidentals necessary, complete in place.	Ea.	5.00		
37	Install Owner Supplied 8" Gate Valve including labor, equipment and any other incidentals necessary, complete in place.	Ea.	1.00		

Bid Item No.	Description	Units	Approx. Quantity	Unit Price	Total Price
38	Furnish and Install Concrete Mitered Collar including labor, equipment and any other incidentals necessary, complete in place.	Ea.	5.00		
39	Relocate Existing 48" Slide Gate including labor, equipment and any other incidentals necessary, complete in place.	Ea.	3.00		
40	Install Owner Supplied 60" Fresno Series 8200, SS Slide Gate including labor, equipment and any other incidentals necessary, complete in place.	Ea.	3.00		
41	Install Owner Supplied 15" Fresno Series 8200, SS Slide Gate including labor, equipment and any other incidentals necessary, complete in place.	Ea.	9.00		
42	Install Owner Supplied Bypass Pump and Pipeline including labor, equipment, relocation & removal and any other incidentals necessary, complete in place.	L.S.	1.00		
Miscellaneous					
43	Design and Furnish Trench Safety System and Provide Trench Excavation Protection.	L.F.	10,160.00		
44	Mobilization, development and compliance with Stormwater Pollution Prevention Plan (SWP3) requirements, traffic control, haul off existing concrete canal rubble, site clean up and any other work required by the Contract Documents, not covered by other bid items, for the DIDHC - Lateral 22 and South Crossover Canal Piping Project	L.S.	1.00		
	TOTAL BASE BID (Bid Items 1-44) =				



4000' 0 4000' 8000'

Scale: 1" = 4000'

NOTES:
GATES, FITTINGS AND BYPASS PUMP WILL BE LOCATED AT DONNA IRRIGATION DISTRICT OFFICE.

LATERAL 22 CANAL SITE

SOUTH CROSSOVER CANAL SITE

ADDENDUM NO. 1 - LOCATION MAP

FERRIS, FLINN & MEDINA, LLC
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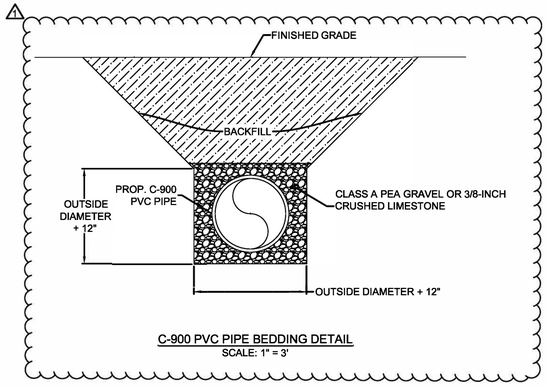
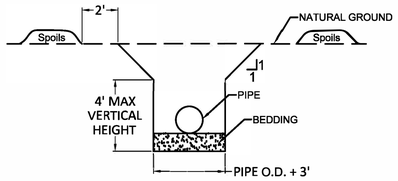
1405 N. STUART PLACE ROAD
PALM VALLEY, TEXAS 78552
PHONE (956) 364-2236 FAX (956) 364-1023
TEXAS BOARD OF PROFESSIONAL LAND SURVEYING FIRM REGISTRATION NO. 100370-00
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION NO. F-897

SCALE: 4000'	DRAWN BY: JM	6/11/2026	JOB NO:440-010

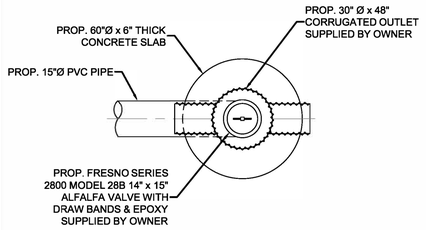
F:\0440 Donna Irrigation District\440-010 2022 Grants\010-Crossover Lateral\DWG\440-010-Crossover Construction drawing.dwg, PVC LOCATION MAP



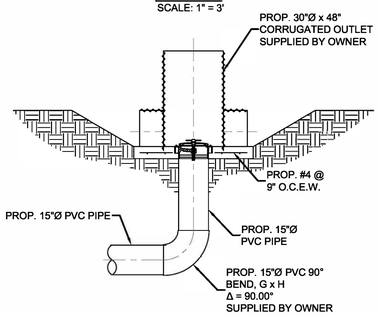
C-900 PVC PIPE BEDDING DETAIL
SCALE: 1" = 3'



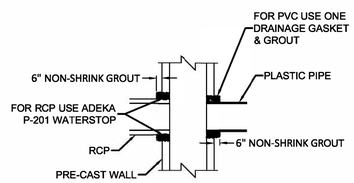
TRENCH SAFETY DETAIL
NOTE: TRENCHES SHALL BE SLOPED AS SHOWN
SCALE: N.T.S.



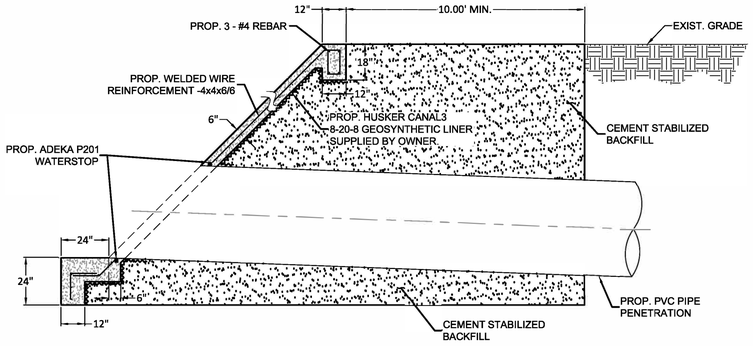
TYP. OUTLET ASSEMBLY W/ CONCRETE SLAB
PLAN VIEW
SCALE: 1" = 3'



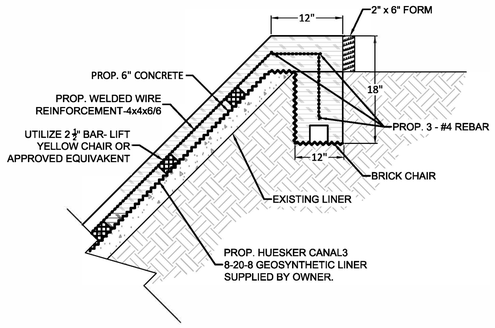
TYP. OUTLET ASSEMBLY W/ CONCRETE SLAB
PROFILE VIEW
SCALE: 1" = 3'



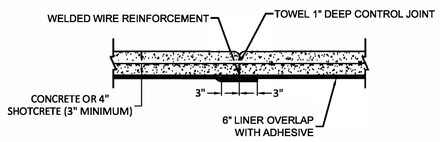
PIPE PENETRATION DETAIL
SCALE: N.T.S.



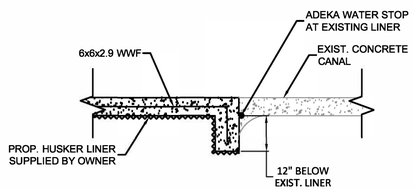
CANASTA CONCRETE RIP RAP DETAIL
SCALE: N.T.S.



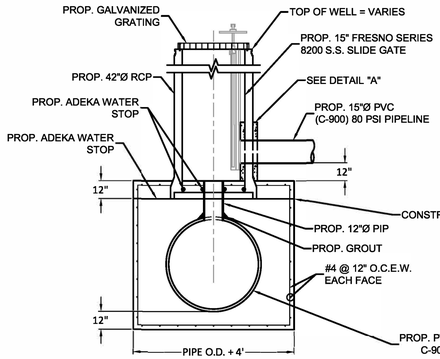
TYP. EXIST. CONCRETE CANAL
TRANSITION DETAIL
SCALE: 1" = 1'



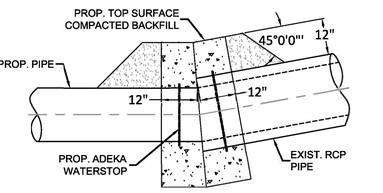
CONTROL JOINT DETAIL
SCALE: 1" = 1'



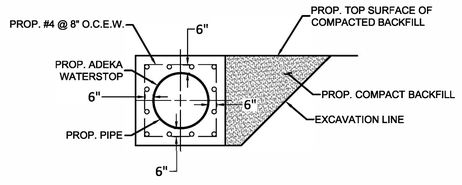
CUTOFF TRENCH DETAIL
SCALE: 1" = 2'



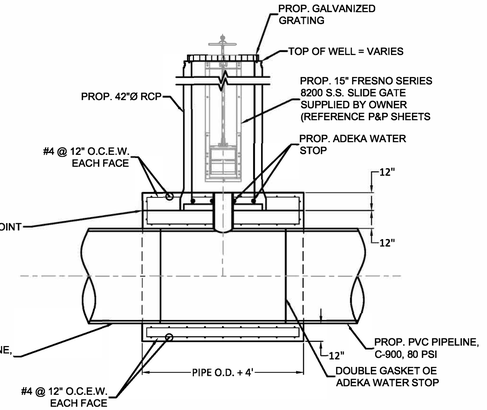
TYP. 42"Ø SADDLE OUTLET DETAIL
(B-B) SECTION VIEW
Horizontal: 1"=4'
Vertical: 1"=4'



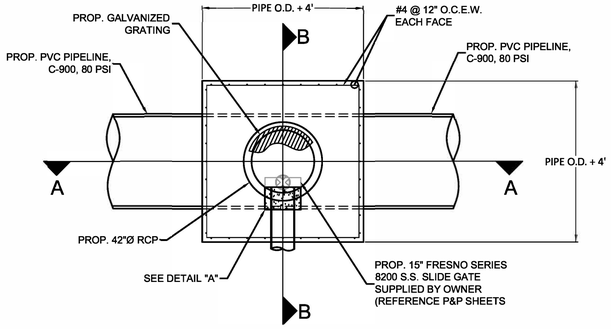
TYPICAL MITERED CONCRETE COLLAR DETAIL
PLAN VIEW
SCALE: 1" = 2'



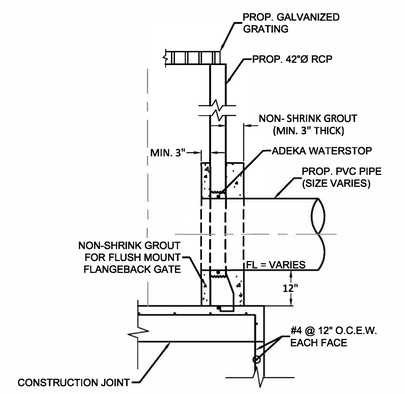
TYPICAL MITERED CONCRETE COLLAR DETAIL
SECTION VIEW
SCALE: 1" = 2'



TYP. 42"Ø SADDLE OUTLET DETAIL
(A-A) PROFILE VIEW
Horizontal: 1"=4'
Vertical: 1"=4'



TYP. 42"Ø SADDLE OUTLET DETAIL
PLAN VIEW
Horizontal: 1"=4'
Vertical: 1"=4'



DETAIL "A"
Horizontal: 1"=2'
Vertical: 1"=2'

FERRIS, FLINN & MEDINA, LLC
ENGINEERS SURVEYORS
1405 N. STUART PLACE ROAD
PALM VALLEY, TEXAS 78552
PHONE (956) 364-2236 FAX (956) 364-1023
TEXAS BOARD OF PROFESSIONAL ENGINEERS FIRM REGISTRATION ACT. F-997
TEXAS BOARD OF PROFESSIONAL LAND SURVEYORS FIRM REGISTRATION ACT. 100918-00

SEAL

STATE OF TEXAS
CARLOS A. LUNA RIOS
142162
LICENSED PROFESSIONAL ENGINEER
6/12/2026

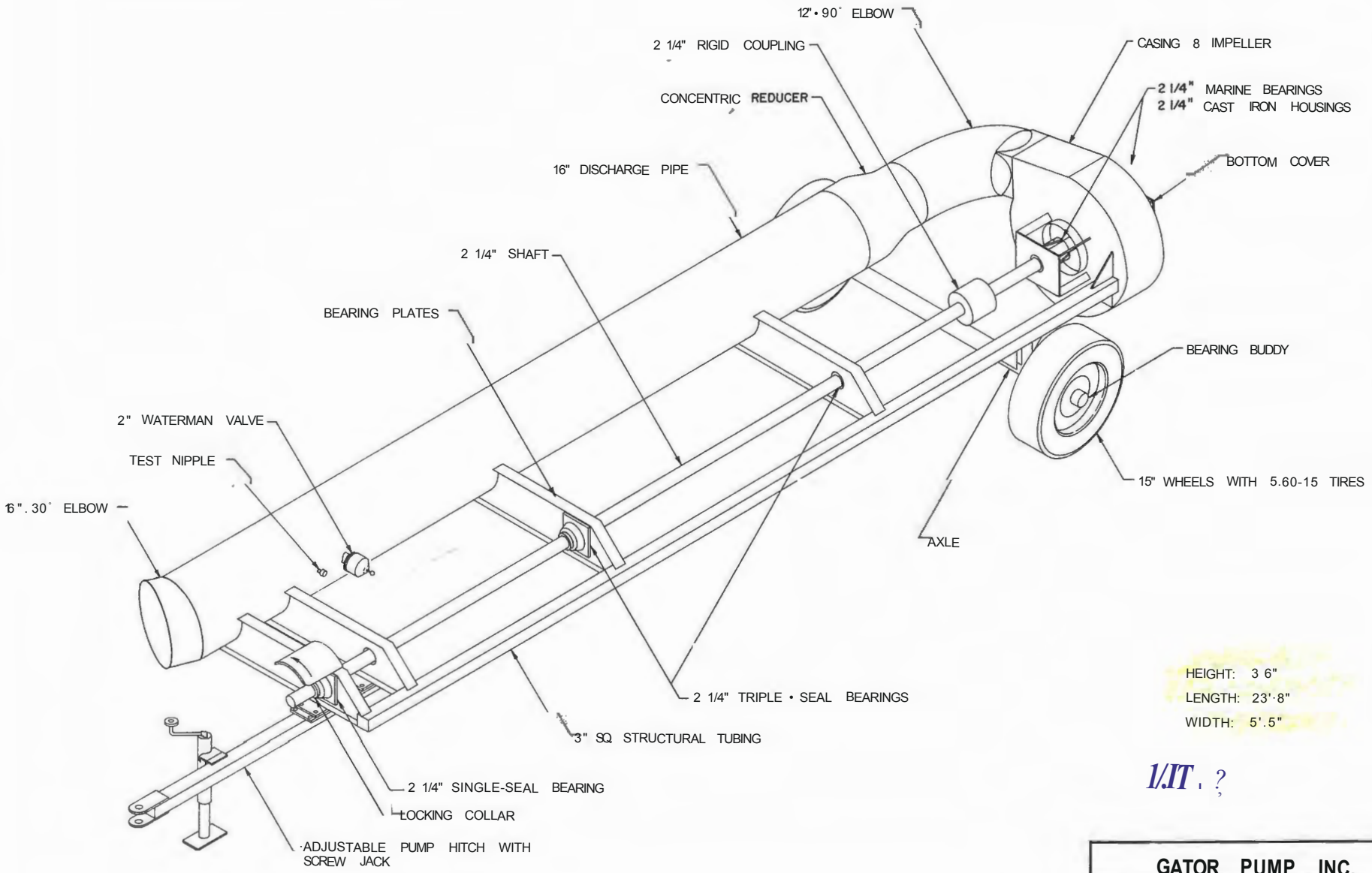
REVISIONS.
Addendum No.1 06/12/2026
⚠ UPDATE PVC BEDDING DETAIL

DONNA IRRIGATION DISTRICT
LATERAL 22 AND SOUTH CROSSOVER
CANAL PIPING PROJECT
SOUTH CROSSOVER CANAL
TYPICAL DETAILS

SCALE: N.T.S.
DRAWN BY: J.M.
FILE: 440-010
DATE: 6/12/2026

29
41

F:\0440 Donna Irrigation District\440-010 2022 Grants\01.0-Crossover Laterals\DWG\440-010-Crossover Construction drawing.dwg, 29_ TYP. DETAILS



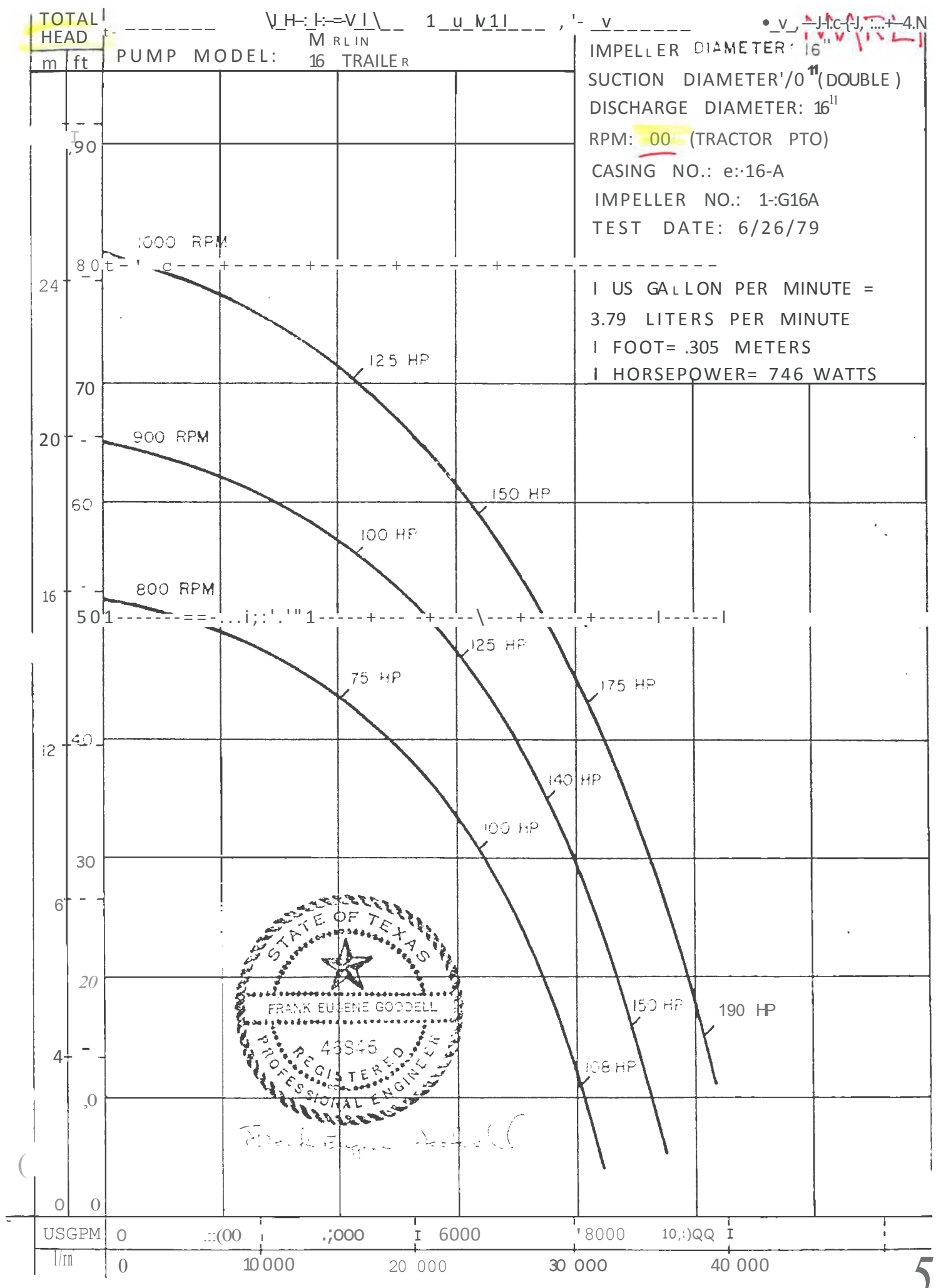
HEIGHT: 3 6"
LENGTH: 23'·8"
WIDTH: 5'.5"

GATOR PUMP INC.

31(• I-0"	APPROVED BY:	DRAWN BY
DATE:		REVISED

16' TRAILER PUMP, "MARLIN"

16T-A


TOTAL HEAD
m ft
PUMP MODEL: MARLIN 16 TRAILER
IMPELLER DIAMETER: 16"
SUCTION DIAMETER: 10" (DOUBLE)
DISCHARGE DIAMETER: 16"
RPM: 1000 (TRACTOR PTO)
CASING NO.: 16-A
IMPELLER NO.: 16A
TEST DATE: 6/26/79
1 US GALLON PER MINUTE = 3.79 LITERS PER MINUTE
1 FOOT = .305 METERS
1 HORSEPOWER = 746 WATTS
1000 RPM
900 RPM
800 RPM
125 HP
150 HP
100 HP
125 HP
75 HP
175 HP
140 HP
100 HP
150 HP
190 HP
108 HP
USGPM
l/m
0
2000
4000
6000
8000
10000
0
10 000
20 000
30 000
40 000

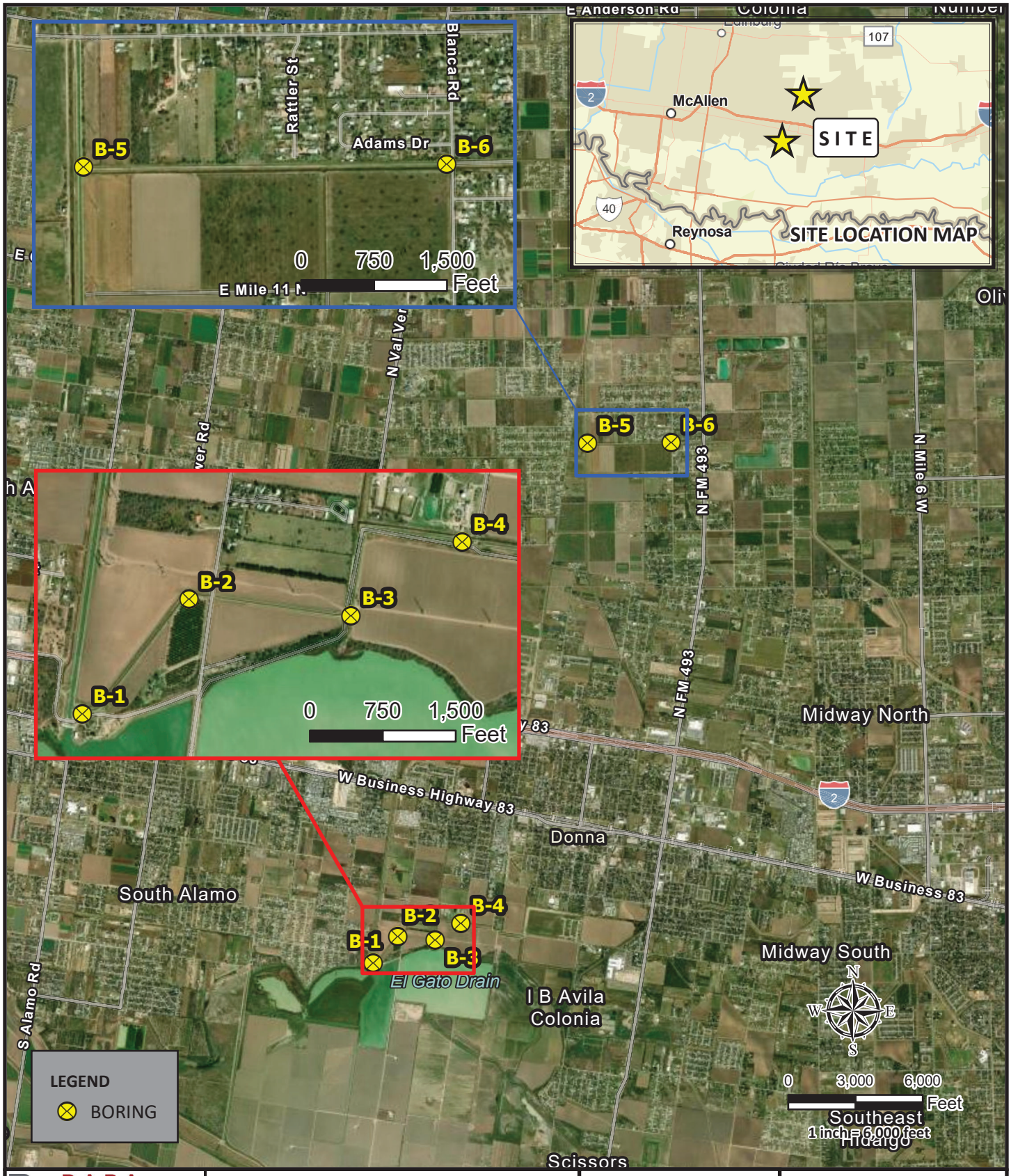
STATE OF TEXAS
FRANK EUGENE GOODELL
43845
REGISTERED
PROFESSIONAL ENGINEER

Addendum No.1
Gator Trailer Bypass Pump

Addendum No.1
24" Dia. Bypass Pipeline

Addendum No.1
24" Dia. Bypass Pipeline

Boring Logs



RABA KISTNER
a kiwa company
800 E. Hackberry
McAllen, Texas 78501
(956)682-5332 TEL
(956)682-5487 FAX
www.rkci.com
TBPE Firm Number 3257

World Imagery: Vantor
World Imagery: Earthstar Geographics
World Street Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

BORING LOCATION MAP

PROPOSED DONNA IRRIGATION DISTRICT STRUCTURE ADDITIONS
DONNA, HIDALGO COUNTY, TEXAS

PROJECT No.:	AMA25-023-00
ISSUE DATE:	9/25/2025
DRAWN BY:	BM
CHECKED BY:	JO
REVIEWED BY:	ATD

FIGURE 1

NOTE: This Drawing is Provided for Illustration Only, May Not be to Scale and is Not Suitable for Design or Construction Purposes

LOG OF BORING NO. B-1

Prop. Donna Irrigation District Structure Additions

Donna, Hidalgo County, Texas

RABA KISTNER

TBPE Firm Registration No. F-3257

DRILLING METHOD: Straight Flight Auger

LOCATION: See Figure 1

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WEIGHT, pcf	SHEAR STRENGTH, TONS/FT^2	PLASTICITY INDEX	% -200
			SURFACE ELEVATION: Existing Grade, ft			0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 (PLASTIC LIMIT, WATER CONTENT, LIQUID LIMIT) 10 20 30 40 50 60 70 80		
			SANDY LEAN CLAY (CL) very stiff to firm, brown	16			15	
			- with calcareous nodules below a depth of about 2.5 ft	6				53
5			- becomes very stiff below a depth of about 5 ft	16			11	
				20				
10								
15			- becomes stiff below a depth of about 15 ft	12				
20			- becomes very stiff below a depth of about 20 ft	16				
			- becomes stiff below a depth of about 23.5 ft	15				
25			Boring terminated at a depth of about 25 ft.					
			NOTES: Upon completion of the drilling operations, the boring was observed dry.					

DEPTH DRILLED:	25.0 ft	**DEPTH TO WATER:**	DRY	**PROJ. No.:**	AMA25-023-00
DATE DRILLED:	9/15/2025	**DATE MEASURED:**	9/15/2025	**FIGURE:**	2

NOTE: THESE LOGS SHOULD NOT BE USED SEPARATELY FROM THE PROJECT REPORT

LOG OF BORING NO. B-2

Prop. Donna Irrigation District Structure Additions

Donna, Hidalgo County, Texas

RABA KISTNER

TBPE Firm Registration No. F-3257

DRILLING METHOD: Straight Flight Auger

LOCATION: See Figure 1

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WEIGHT, pcf	SHEAR STRENGTH, TONS/FT^2	PLASTICITY INDEX	% -200
			SURFACE ELEVATION: Existing Grade, ft			0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0		
						PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT		
						10 20 30 40 50 60 70 80		
			CLAYEY SAND (SC) loose to very loose, brown	5				42
				5			13	
5				2				
			SANDY LEAN CLAY (CL) stiff to very stiff, brown					
			During the drilling operations, groundwater was encountered at a depth of about 6.5 ft. Upon completion of the drilling operations, groundwater was measured at a depth of about 7 ft.	12			24	
10								
15				12				
20				23				
				26				
25			Boring terminated at a depth of about 25 ft.					

NOTE: THESE LOGS SHOULD NOT BE USED SEPARATELY FROM THE PROJECT REPORT

DEPTH DRILLED:	25.0 ft	**DEPTH TO WATER:**	7 ft	**PROJ. No.:**	AMA25-023-00
DATE DRILLED:	9/15/2025	**DATE MEASURED:**	9/15/2025	**FIGURE:**	3

LOG OF BORING NO. B-3

Prop. Donna Irrigation District Structure Additions

Donna, Hidalgo County, Texas

RABA KISTNER
TBPE Firm Registration No. F-3257

DRILLING METHOD: Straight Flight Auger

LOCATION: See Figure 1

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WEIGHT, pcf	SHEAR STRENGTH, TONS/FT^2	PLASTICITY INDEX	% -200
			SURFACE ELEVATION: Existing Grade, ft			0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0		
						PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT		
						10 20 30 40 50 60 70 80		
			SANDY LEAN CLAY (CL) very stiff to firm, brown	16			15	
				6				50
5			- becomes stiff to hard below a depth of about 5 ft	9			15	
			- becomes hard below a depth of about 7.5 ft	33				
10			- becomes very stiff below a depth of about 10 ft	27				
15			During the drilling operations, groundwater was encountered at a depth of about 20 ft. Upon completion of the drilling operations, groundwater was measured at a depth of about 16 ft.					
20			- becomes stiff below a depth of about 20 ft	10				
			- becomes very stiff below a depth of about 23.5 ft	18				
25			Boring terminated at a depth of about 25 ft.					

NOTE: THESE LOGS SHOULD NOT BE USED SEPARATELY FROM THE PROJECT REPORT

DEPTH DRILLED:	25.0 ft	**DEPTH TO WATER:**	16 ft	**PROJ. No.:**	AMA25-023-00
DATE DRILLED:	9/15/2025	**DATE MEASURED:**	9/15/2025	**FIGURE:**	4

LOG OF BORING NO. B-4

Prop. Donna Irrigation District Structure Additions

Donna, Hidalgo County, Texas

RABA KISTNER
TBPE Firm Registration No. F-3257

DRILLING METHOD: Straight Flight Auger

LOCATION: See Figure 1

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WEIGHT, pcf	SHEAR STRENGTH, TONS/FT^2	PLASTICITY INDEX	% -200
			SURFACE ELEVATION: Existing Grade, ft			0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0		
						PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT		
						10 20 30 40 50 60 70 80		
			SANDY LEAN CLAY (CL) firm to stiff, brown	6				56
				9			21	
5								
			SANDY FAT CLAY (CH) stiff to very stiff, brown					
			During the drilling operations, groundwater was encountered at a depth of about 13.5 ft. Upon completion of the drilling operations, groundwater was measured at a depth of about 7 ft.	14			30	
10				9				
15								
20				22				
				28				
25			Boring terminated at a depth of about 25 ft.					

NOTE: THESE LOGS SHOULD NOT BE USED SEPARATELY FROM THE PROJECT REPORT

DEPTH DRILLED:	25.0 ft	**DEPTH TO WATER:**	7 ft	**PROJ. No.:**	AMA25-023-00
DATE DRILLED:	9/15/2025	**DATE MEASURED:**	9/15/2025	**FIGURE:**	5

LOG OF BORING NO. B-5

Prop. Donna Irrigation District Structure Additions

Donna, Hidalgo County, Texas

RABA KISTNER

TBPE Firm Registration No. F-3257

DRILLING METHOD: Straight Flight Auger

LOCATION: See Figure 1

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WEIGHT, pcf	SHEAR STRENGTH, TONS/FT^2 (0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0) / PLASTIC LIMIT / WATER CONTENT / LIQUID LIMIT (10 20 30 40 50 60 70 80)	PLASTICITY INDEX	% -200
			SURFACE ELEVATION: Existing Grade, ft					
			SANDY LEAN CLAY (CL) stiff, brown, with calcareous nodules	11			30	
								70
5				12			25	
				14				
10								
			During the drilling operations, groundwater was encountered at a depth of about 18 ft. Upon completion of the drilling operations, groundwater was measured at a depth of about 14 ft.					
15				11				
20			**CLAYEY SAND (SC)** very loose to medium dense, brown	8				19
				13				
25			Boring terminated at a depth of about 25 ft.					

DEPTH DRILLED:	25.0 ft	**DEPTH TO WATER:**	14 ft	**PROJ. No.:**	AMA25-023-00
DATE DRILLED:	10/17/2025	**DATE MEASURED:**	10/17/2025	**FIGURE:**	6

NOTE: THESE LOGS SHOULD NOT BE USED SEPARATELY FROM THE PROJECT REPORT

LOG OF BORING NO. B-6

Prop. Donna Irrigation District Structure Additions

Donna, Hidalgo County, Texas

RABA KISTNER

TBPE Firm Registration No. F-3257

DRILLING METHOD: Straight Flight Auger

LOCATION: See Figure 1

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WEIGHT, pcf	SHEAR STRENGTH, TONS/FT^2 (0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0) / PLASTIC LIMIT, WATER CONTENT, LIQUID LIMIT (10 20 30 40 50 60 70 80)	PLASTICITY INDEX	% -200
			SURFACE ELEVATION: Existing Grade, ft					
			SANDY LEAN CLAY (CL) firm to soft, brown, with calcareous nodules	9				68
				3			27	
5								
			- becomes firm below a depth of about 7.5 ft	8			27	
10								
			During the drilling operations, groundwater was encountered at a depth of about 17.5 ft. Upon completion of the drilling operations, groundwater was measured at a depth of about 15 ft.	19				
15			- becomes very stiff below a depth of about 15 ft					
20			- becomes stiff below a depth of about 20 ft	12				
			- becomes very stiff below a depth of about 23.5 ft	18				
25			Boring terminated at a depth of about 25 ft.					

NOTE: THESE LOGS SHOULD NOT BE USED SEPARATELY FROM THE PROJECT REPORT

DEPTH DRILLED:	25.0 ft	**DEPTH TO WATER:**	15 ft	**PROJ. No.:**	AMA25-023-00
DATE DRILLED:	10/17/2025	**DATE MEASURED:**	10/17/2025	**FIGURE:**	7

KEY TO TERMS AND SYMBOLS

MATERIAL TYPES

SOIL TERMS


CALCAREOUS


CALICHE


CLAY


CLAYEY


GRAVEL


GRAVELLY


PEAT


SAND


SANDY


SILT


SILTY


FILL

ROCK TERMS


CHALK


CLAYSTONE


CLAY-SHALE


CONGLOMERATE


DOLOMITE


IGNEOUS


LIMESTONE


MARL


METAMORPHIC


SANDSTONE


SHALE


SILTSTONE

OTHER


ASPHALT


BASE


CONCRETE/CEMENT


BRICKS / PAVERS


WASTE


NO INFORMATION

WELL CONSTRUCTION AND PLUGGING MATERIALS


BLANK PIPE


SCREEN


BENTONITE


CEMENT GROUT


BENTONITE & CUTTINGS


CONCRETE/CEMENT


CUTTINGS


GRAVEL


SAND


VOLCLAY

SAMPLE TYPES


AIR ROTARY


GRAB SAMPLE


CORE


GEOPROBE SAMPLER


ROTOSONIC -DAMAGED


MUD ROTARY


NO RECOVERY


NX CORE


PITCHER


ROTOSONIC -INTACT


SHELBY TUBE


SPLIT BARREL


SPLIT SPOON


TEXAS CONE PENETROMETER


DISTURBED

STRENGTH TEST TYPES


POCKET PENETROMETER


TORVANE


UNCONFINED COMPRESSION


TRIAXIAL COMPRESSION UNCONSOLIDATED-UNDRAINED


TRIAXIAL COMPRESSION CONSOLIDATED-UNDRAINED

NOTE: VALUES SYMBOLIZED ON BORING LOGS REPRESENT SHEAR STRENGTHS UNLESS OTHERWISE NOTED

PROJECT NO. AMA25-023-00

RABAKISTNER

REVISED 04/2012

FIGURE 8a

KEY TO TERMS AND SYMBOLS (CONT'D)

TERMINOLOGY

Terms used in this report to describe soils with regard to their consistency or conditions are in general accordance with the discussion presented in Article 45 of SOILS MECHANICS IN ENGINEERING PRACTICE, Terzaghi and Peck, John Wiley & Sons, Inc., 1967, using the most reliable information available from the field and laboratory investigations. Terms used for describing soils according to their texture or grain size distribution are in accordance with the UNIFIED SOIL CLASSIFICATION SYSTEM, as described in American Society for Testing and Materials D2487-06 and D2488-00, Volume 04.08, Soil and Rock; Dimension Stone; Geosynthetics; 2005.

The depths shown on the boring logs are not exact, and have been estimated to the nearest half-foot. Depth measurements may be presented in a manner that implies greater precision in depth measurement, i.e 6.71 meters. The reader should understand and interpret this information only within the stated half-foot tolerance on depth measurements.

RELATIVE DENSITY

Penetration Resistance Blows per ft	Relative Density
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
> 50	Very Dense

COHESIVE STRENGTH

Resistance Blows per ft	Consistency	Cohesion TSF
0 - 2	Very Soft	0 - 0.125
2 - 4	Soft	0.125 - 0.25
4 - 8	Firm	0.25 - 0.5
8 - 15	Stiff	0.5 - 1.0
15 - 30	Very Stiff	1.0 - 2.0
> 30	Hard	> 2.0

PLASTICITY

Plasticity Index	Degree of Plasticity
0 - 5	None
5 - 10	Low
10 - 20	Moderate
20 - 40	Plastic
> 40	Highly Plastic

ABBREVIATIONS

B = Benzene
T = Toluene
E = Ethylbenzene
X = Total Xylenes
BTEX = Total BTEX
TPH = Total Petroleum Hydrocarbons
ND = Not Detected
NA = Not Analyzed
NR = Not Recorded/No Recovery
OVA = Organic Vapor Analyzer
ppm = Parts Per Million

Qam, Qas, Qal = Quaternary Alluvium
Qat = Low Terrace Deposits
Qbc = Beaumont Formation
Qt = Fluviatile Terrace Deposits
Qao = Seymour Formation
Qle = Leona Formation
Q-Tu = Uvalde Gravel
Ewi = Wilcox Formation
Emi = Midway Group
Mc = Catahoula Formation
El = Laredo Formation
Kknm = Navarro Group and Marlbrook Marl
Kpg = Pecan Gap Chalk
Kau = Austin Chalk

Kef = Eagle Ford Shale
Kbu = Buda Limestone
Kdr = Del Rio Clay
Kft = Fort Terrett Member
Kgt = Georgetown Formation
Kep = Person Formation
Kek = Kainer Formation
Kes = Escondido Formation
Kew = Walnut Formation
Kgr = Glen Rose Formation
Kgru = Upper Glen Rose Formation
Kgrl = Lower Glen Rose Formation
Kh = Hensell Sand

KEY TO TERMS AND SYMBOLS (CONT'D)

TERMINOLOGY

SOIL STRUCTURE

Slickensided	Having planes of weakness that appear slick and glossy.
Fissured	Containing shrinkage or relief cracks, often filled with fine sand or silt; usually more or less vertical.
Pocket	Inclusion of material of different texture that is smaller than the diameter of the sample.
Parting	Inclusion less than 1/8 inch thick extending through the sample.
Seam	Inclusion 1/8 inch to 3 inches thick extending through the sample.
Layer	Inclusion greater than 3 inches thick extending through the sample.
Laminated	Soil sample composed of alternating partings or seams of different soil type.
Interlayered	Soil sample composed of alternating layers of different soil type.
Intermixed	Soil sample composed of pockets of different soil type and layered or laminated structure is not evident.
Calcareous	Having appreciable quantities of carbonate.
Carbonate	Having more than 50% carbonate content.

SAMPLING METHODS

RELATIVELY UNDISTURBED SAMPLING

Cohesive soil samples are to be collected using three-inch thin-walled tubes in general accordance with the Standard Practice for Thin-Walled Tube Sampling of Soils (ASTM D1587) and granular soil samples are to be collected using two-inch split-barrel samplers in general accordance with the Standard Method for Penetration Test and Split-Barrel Sampling of Soils (ASTM D1586). Cohesive soil samples may be extruded on-site when appropriate handling and storage techniques maintain sample integrity and moisture content.

STANDARD PENETRATION TEST (SPT)

A 2-in.-OD, 1-3/8-in.-ID split spoon sampler is driven 1.5 ft into undisturbed soil with a 140-pound hammer free falling 30 in. After the sampler is seated 6 in. into undisturbed soil, the number of blows required to drive the sampler the last 12 in. is the Standard Penetration Resistance or "N" value, which is recorded as blows per foot as described below.

SPLIT-BARREL SAMPLER DRIVING RECORD

Blows Per Foot	Description
25	25 blows drove sampler 12 inches, after initial 6 inches of seating.
50/7"	50 blows drove sampler 7 inches, after initial 6 inches of seating.
Ref/3"	50 blows drove sampler 3 inches during initial 6-inch seating interval.

NOTE: To avoid damage to sampling tools, driving is limited to 50 blows during or after seating interval.

RESULTS OF SOIL SAMPLE ANALYSES

PROJECT NAME: Prop. Donna Irrigation District Structure Additions
Donna, Hidalgo County, Texas

FILE NAME: AMA25-023-00.GPJ 12/5/2025

Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-1	0.0 to 1.5	16	9	32	17	15	CL				
	2.5 to 4.0	6	10						53		
	5.0 to 6.5	16	10	30	19	11	CL				
	7.5 to 9.0	20	17								
	10.0 to 12.0		20							2.25	PP
	15.0 to 16.5	12	23								
	20.0 to 21.5	16	22								
	23.5 to 25.0	15	21								
B-2	0.0 to 1.5	5	16						42		
	2.5 to 4.0	5	18	30	17	13	SC				
	5.0 to 6.5	2	22								
	7.5 to 9.0	12	22	46	22	24	CL				
	10.0 to 12.0		22							2.00	PP
	15.0 to 16.5	12	22								
	20.0 to 21.5	23	21								
	23.5 to 25.0	26	20								
B-3	0.0 to 1.5	16	10	32	17	15	CL				
	2.5 to 4.0	6	12						50		
	5.0 to 6.5	9	17	37	22	15	CL				
	7.5 to 9.0	33	15								
	10.0 to 11.5	27	20								
	15.0 to 17.0		21							2.25	PP
	20.0 to 21.5	10	23								
	23.5 to 25.0	18	24								
B-4	0.0 to 1.5	6	13						56		
	2.5 to 4.0	9	23	43	22	21	CL				
	5.0 to 7.0		19							2.25	PP
	7.5 to 9.0	14	25	50	20	30	CH				
	10.0 to 11.5	9	24								
	15.0 to 17.0		19							2.25	PP
	20.0 to 21.5	22	20								
	23.5 to 25.0	28	21								
B-5	0.0 to 1.5	11	17	49	19	30	CL				
	2.0 to 4.0		15						70	2.25	PP
	5.0 to 6.5	12	15	43	18	25	CL				
	7.5 to 9.0	14	20								
	10.0 to 12.0		22							1.00	PP
	15.0 to 16.5	11	20								
	20.0 to 21.5	8	25						19		

PP = Pocket Penetrometer TV = Torvane UC = Unconfined Compression FV = Field Vane UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial CNBD = Cound Not Be Determined

PROJECT NO. AMA25-023-00

RESULTS OF SOIL SAMPLE ANALYSES

PROJECT NAME: Prop. Donna Irrigation District Structure Additions
Donna, Hidalgo County, Texas

FILE NAME: AMA25-023-00.GPJ 12/5/2025

Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-5	23.5 to 25.0	13	26								
B-6	0.0 to 1.5	9	14						68		
	2.5 to 4.0	3	20	44	17	27	CL				
	5.0 to 7.0		23							0.75	PP
	7.5 to 9.0	8	25	43	16	27	CL				
	10.0 to 12.0		18							2.00	PP
	15.0 to 16.5	19	19								
	20.0 to 21.5	12	23								
	23.5 to 25.0	18	24								

PP = Pocket Penetrometer TV = Torvane UC = Unconfined Compression FV = Field Vane UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial CNBD = Cound Not Be Determined

PROJECT NO. AMA25-023-00

RABAKISTNER

FIGURE 9b

RABA KISTNER
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www.rkci.com
TBPE Firm Number 3257

Hybrid Reference Layer: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
World Imagery: Microsoft, Vantor
World Street Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors,

BORING LOCATION MAP

PROPOSED REINFORCED CONCRETE BOX ADDITION
ABOUT 1,500 FT NORTHEAST CORNER OF
N. FARM TO MARKET 493 AND E. MILE 11 N
DONNA, HIDALGO COUNTY, TEXAS

PROJECT No.:	AMA26-022-00
ISSUE DATE:	6/4/2026
DRAWN BY:	BM
CHECKED BY:	CG
REVIEWED BY:	SC

FIGURE
1

NOTE: This Drawing is Provided for Illustration Only, May Not be to Scale and is Not Suitable for Design or Construction Purposes

LOG OF BORING NO. B-7

Reinforced Concrete Box Structure Addition
Northeast of the Intersection of F.M. Road 493 & Mile 11 N.
Donna, HIdalgo County, Texas

RABA KISTNER
TBPE Firm Registration No. F-3257

DRILLING METHOD: Straight Flight Auger

LOCATION: See Figure 1

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WEIGHT, pcf	SHEAR STRENGTH, TONS/FT^2 (0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0) / PLASTIC LIMIT, WATER CONTENT, LIQUID LIMIT (10 20 30 40 50 60 70 80)	PLASTICITY INDEX	% -200
0			**SANDY LEAN CLAY (CL)** firm to soft, dark brown to brown	5			24	
				4				55
5							23	
			CLAYEY SAND (SC) medium dense, brown	12				49
10				11				
15			**LEAN CLAY with SAND (CL)** firm to stiff, brown to light brown	8				
20				8				
25			Boring terminated at a depth of about 25 ft.	10				
30								

NOTE: THESE LOGS SHOULD NOT BE USED SEPARATELY FROM THE PROJECT REPORT

DEPTH DRILLED:	25.0 ft	**DEPTH TO WATER:**	6.5 ft	**PROJ. No.:**	AMA26-022-00
DATE DRILLED:	5/19/2026	**DATE MEASURED:**	5/19/2026		

KEY TO TERMS AND SYMBOLS

MATERIAL TYPES

SOIL TERMS


CALCAREOUS


CALICHE


CLAY


CLAYEY


GRAVEL


GRAVELLY


PEAT


SAND


SANDY


SILT


SILTY


FILL

ROCK TERMS


CHALK


CLAYSTONE


CLAY-SHALE


CONGLOMERATE


DOLOMITE


IGNEOUS


LIMESTONE


MARL


METAMORPHIC


SANDSTONE


SHALE


SILTSTONE

OTHER


ASPHALT


BASE


CONCRETE/CEMENT


BRICKS / PAVERS


WASTE


NO INFORMATION

WELL CONSTRUCTION AND PLUGGING MATERIALS


BLANK PIPE


SCREEN


BENTONITE


CEMENT GROUT


BENTONITE & CUTTINGS


CONCRETE/CEMENT


CUTTINGS


GRAVEL


SAND


VOLCLAY

SAMPLE TYPES


AIR ROTARY


GRAB SAMPLE


CORE


GEOPROBE SAMPLER


ROTOSONIC -DAMAGED


MUD ROTARY


NO RECOVERY


NX CORE


PITCHER


ROTOSONIC -INTACT


SHELBY TUBE


SPLIT BARREL


SPLIT SPOON


TEXAS CONE PENETROMETER


DISTURBED

STRENGTH TEST TYPES


POCKET PENETROMETER


TORVANE


UNCONFINED COMPRESSION


TRIAXIAL COMPRESSION UNCONSOLIDATED-UNDRAINED


TRIAXIAL COMPRESSION CONSOLIDATED-UNDRAINED

NOTE: VALUES SYMBOLIZED ON BORING LOGS REPRESENT SHEAR STRENGTHS UNLESS OTHERWISE NOTED

PROJECT NO. AMA26-022-00

KEY TO TERMS AND SYMBOLS (CONT'D)

TERMINOLOGY

Terms used in this report to describe soils with regard to their consistency or conditions are in general accordance with the discussion presented in Article 45 of SOILS MECHANICS IN ENGINEERING PRACTICE, Terzaghi and Peck, John Wiley & Sons, Inc., 1967, using the most reliable information available from the field and laboratory investigations. Terms used for describing soils according to their texture or grain size distribution are in accordance with the UNIFIED SOIL CLASSIFICATION SYSTEM, as described in American Society for Testing and Materials D2487-06 and D2488-00, Volume 04.08, Soil and Rock; Dimension Stone; Geosynthetics; 2005.

The depths shown on the boring logs are not exact, and have been estimated to the nearest half-foot. Depth measurements may be presented in a manner that implies greater precision in depth measurement, i.e 6.71 meters. The reader should understand and interpret this information only within the stated half-foot tolerance on depth measurements.

RELATIVE DENSITY

Penetration Resistance Blows per ft	Relative Density
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
> 50	Very Dense

COHESIVE STRENGTH

Resistance Blows per ft	Consistency	Cohesion TSF
0 - 2	Very Soft	0 - 0.125
2 - 4	Soft	0.125 - 0.25
4 - 8	Firm	0.25 - 0.5
8 - 15	Stiff	0.5 - 1.0
15 - 30	Very Stiff	1.0 - 2.0
> 30	Hard	> 2.0

PLASTICITY

Plasticity Index	Degree of Plasticity
0 - 5	None
5 - 10	Low
10 - 20	Moderate
20 - 40	Plastic
> 40	Highly Plastic

ABBREVIATIONS

B = Benzene
T = Toluene
E = Ethylbenzene
X = Total Xylenes
BTEX = Total BTEX
TPH = Total Petroleum Hydrocarbons
ND = Not Detected
NA = Not Analyzed
NR = Not Recorded/No Recovery
OVA = Organic Vapor Analyzer
ppm = Parts Per Million

Qam, Qas, Qal = Quaternary Alluvium
Qat = Low Terrace Deposits
Qbc = Beaumont Formation
Qt = Fluviatile Terrace Deposits
Qao = Seymour Formation
Qle = Leona Formation
Q-Tu = Uvalde Gravel
Ewi = Wilcox Formation
Emi = Midway Group
Mc = Catahoula Formation
El = Laredo Formation
Kknm = Navarro Group and Marlbrook Marl
Kpg = Pecan Gap Chalk
Kau = Austin Chalk

Kef = Eagle Ford Shale
Kbu = Buda Limestone
Kdr = Del Rio Clay
Kft = Fort Terrett Member
Kgt = Georgetown Formation
Kep = Person Formation
Kek = Kainer Formation
Kes = Escondido Formation
Kew = Walnut Formation
Kgr = Glen Rose Formation
Kgru = Upper Glen Rose Formation
Kgrl = Lower Glen Rose Formation
Kh = Hensell Sand

KEY TO TERMS AND SYMBOLS (CONT'D)

TERMINOLOGY

SOIL STRUCTURE

Slickensided	Having planes of weakness that appear slick and glossy.
Fissured	Containing shrinkage or relief cracks, often filled with fine sand or silt; usually more or less vertical.
Pocket	Inclusion of material of different texture that is smaller than the diameter of the sample.
Parting	Inclusion less than 1/8 inch thick extending through the sample.
Seam	Inclusion 1/8 inch to 3 inches thick extending through the sample.
Layer	Inclusion greater than 3 inches thick extending through the sample.
Laminated	Soil sample composed of alternating partings or seams of different soil type.
Interlayered	Soil sample composed of alternating layers of different soil type.
Intermixed	Soil sample composed of pockets of different soil type and layered or laminated structure is not evident.
Calcareous	Having appreciable quantities of carbonate.
Carbonate	Having more than 50% carbonate content.

SAMPLING METHODS

RELATIVELY UNDISTURBED SAMPLING

Cohesive soil samples are to be collected using three-inch thin-walled tubes in general accordance with the Standard Practice for Thin-Walled Tube Sampling of Soils (ASTM D1587) and granular soil samples are to be collected using two-inch split-barrel samplers in general accordance with the Standard Method for Penetration Test and Split-Barrel Sampling of Soils (ASTM D1586). Cohesive soil samples may be extruded on-site when appropriate handling and storage techniques maintain sample integrity and moisture content.

STANDARD PENETRATION TEST (SPT)

A 2-in.-OD, 1-3/8-in.-ID split spoon sampler is driven 1.5 ft into undisturbed soil with a 140-pound hammer free falling 30 in. After the sampler is seated 6 in. into undisturbed soil, the number of blows required to drive the sampler the last 12 in. is the Standard Penetration Resistance or "N" value, which is recorded as blows per foot as described below.

SPLIT-BARREL SAMPLER DRIVING RECORD

Blows Per Foot	Description
25	25 blows drove sampler 12 inches, after initial 6 inches of seating.
50/7"	50 blows drove sampler 7 inches, after initial 6 inches of seating.
Ref/3"	50 blows drove sampler 3 inches during initial 6-inch seating interval.

NOTE: To avoid damage to sampling tools, driving is limited to 50 blows during or after seating interval.

RESULTS OF SOIL SAMPLE ANALYSES

PROJECT NAME: Reinforced Concrete Box Structure Addition
Northeast of the Intersection of F.M. Road 493 & Mile 11 N.
Donna, HIdalgo County, Texas

FILE NAME: AMA26-022-00.GPJ 6/9/2026

Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-7	0.0 to 1.5	5	15	42	18	24	CL				
	2.5 to 4.0	4	22						55		
	5.0 to 7.0		26	39	16	23	CL			0.25	PP
	7.5 to 9.0	12	26						49		
	10.0 to 11.5	11	22								
	15.0 to 16.5	8	21								
	20.0 to 21.5	8	23								
	23.5 to 25.0	10	20								

PP = Pocket Penetrometer TV = Torvane UC = Unconfined Compression FV = Field Vane UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial CNBD = Cound Not Be Determined NP = Non-Plastic

RABA KISTNER
a kiwa company
800 E. Hackberry
McAllen, Texas 78501
(956)682-5332 TEL
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www.rkci.com
TBPE Firm Number 3257

Hybrid Reference Layer: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
World Imagery: Microsoft, Vantor
World Street Map: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors,

BORING LOCATION MAP

PROPOSED REINFORCED CONCRETE BOX ADDITION
ABOUT 1,500 FT NORTHEAST CORNER OF
N. FARM TO MARKET 493 AND E. MILE 11 N
DONNA, HIDALGO COUNTY, TEXAS

PROJECT No.:	AMA26-022-00
ISSUE DATE:	6/4/2026
DRAWN BY:	BM
CHECKED BY:	CG
REVIEWED BY:	SC

FIGURE
1

NOTE: This Drawing is Provided for Illustration Only, May Not be to Scale and is Not Suitable for Design or Construction Purposes

LOG OF BORING NO. B-7

Reinforced Concrete Box Structure Addition
Northeast of the Intersection of F.M. Road 493 & Mile 11 N.
Donna, HIdalgo County, Texas

RABA KISTNER
TBPE Firm Registration No. F-3257

DRILLING METHOD: Straight Flight Auger

LOCATION: See Figure 1

DEPTH, FT	SYMBOL	SAMPLES	DESCRIPTION OF MATERIAL	BLOWS PER FT	UNIT DRY WEIGHT, pcf	SHEAR STRENGTH, TONS/FT^2 (0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0) / PLASTIC LIMIT, WATER CONTENT, LIQUID LIMIT (10 20 30 40 50 60 70 80)	PLASTICITY INDEX	% -200
0			**SANDY LEAN CLAY (CL)** firm to soft, dark brown to brown	5			24	
				4				55
5							23	
			CLAYEY SAND (SC) medium dense, brown	12				49
10				11				
15			**LEAN CLAY with SAND (CL)** firm to stiff, brown to light brown	8				
20				8				
25			Boring terminated at a depth of about 25 ft.	10				
30								

NOTE: THESE LOGS SHOULD NOT BE USED SEPARATELY FROM THE PROJECT REPORT

DEPTH DRILLED:	25.0 ft	**DEPTH TO WATER:**	6.5 ft	**PROJ. No.:**	AMA26-022-00
DATE DRILLED:	5/19/2026	**DATE MEASURED:**	5/19/2026		

KEY TO TERMS AND SYMBOLS

MATERIAL TYPES

SOIL TERMS


CALCAREOUS


CALICHE


CLAY


CLAYEY


GRAVEL


GRAVELLY


PEAT


SAND


SANDY


SILT


SILTY


FILL

ROCK TERMS


CHALK


CLAYSTONE


CLAY-SHALE


CONGLOMERATE


DOLOMITE


IGNEOUS


LIMESTONE


MARL


METAMORPHIC


SANDSTONE


SHALE


SILTSTONE

OTHER


ASPHALT


BASE


CONCRETE/CEMENT


BRICKS / PAVERS


WASTE


NO INFORMATION

WELL CONSTRUCTION AND PLUGGING MATERIALS


BLANK PIPE


SCREEN


BENTONITE


CEMENT GROUT


BENTONITE & CUTTINGS


CONCRETE/CEMENT


CUTTINGS


GRAVEL


SAND


VOLCLAY

SAMPLE TYPES


AIR ROTARY


GRAB SAMPLE


CORE


GEOPROBE SAMPLER


ROTOSONIC -DAMAGED


MUD ROTARY


NO RECOVERY


NX CORE


PITCHER


ROTOSONIC -INTACT


SHELBY TUBE


SPLIT BARREL


SPLIT SPOON


TEXAS CONE PENETROMETER


DISTURBED

STRENGTH TEST TYPES


POCKET PENETROMETER


TORVANE


UNCONFINED COMPRESSION


TRIAXIAL COMPRESSION UNCONSOLIDATED-UNDRAINED


TRIAXIAL COMPRESSION CONSOLIDATED-UNDRAINED

NOTE: VALUES SYMBOLIZED ON BORING LOGS REPRESENT SHEAR STRENGTHS UNLESS OTHERWISE NOTED

PROJECT NO. AMA26-022-00

KEY TO TERMS AND SYMBOLS (CONT'D)

TERMINOLOGY

Terms used in this report to describe soils with regard to their consistency or conditions are in general accordance with the discussion presented in Article 45 of SOILS MECHANICS IN ENGINEERING PRACTICE, Terzaghi and Peck, John Wiley & Sons, Inc., 1967, using the most reliable information available from the field and laboratory investigations. Terms used for describing soils according to their texture or grain size distribution are in accordance with the UNIFIED SOIL CLASSIFICATION SYSTEM, as described in American Society for Testing and Materials D2487-06 and D2488-00, Volume 04.08, Soil and Rock; Dimension Stone; Geosynthetics; 2005.

The depths shown on the boring logs are not exact, and have been estimated to the nearest half-foot. Depth measurements may be presented in a manner that implies greater precision in depth measurement, i.e 6.71 meters. The reader should understand and interpret this information only within the stated half-foot tolerance on depth measurements.

RELATIVE DENSITY

Penetration Resistance Blows per ft	Relative Density
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
> 50	Very Dense

COHESIVE STRENGTH

Resistance Blows per ft	Consistency	Cohesion TSF
0 - 2	Very Soft	0 - 0.125
2 - 4	Soft	0.125 - 0.25
4 - 8	Firm	0.25 - 0.5
8 - 15	Stiff	0.5 - 1.0
15 - 30	Very Stiff	1.0 - 2.0
> 30	Hard	> 2.0

PLASTICITY

Plasticity Index	Degree of Plasticity
0 - 5	None
5 - 10	Low
10 - 20	Moderate
20 - 40	Plastic
> 40	Highly Plastic

ABBREVIATIONS

B = Benzene
T = Toluene
E = Ethylbenzene
X = Total Xylenes
BTEX = Total BTEX
TPH = Total Petroleum Hydrocarbons
ND = Not Detected
NA = Not Analyzed
NR = Not Recorded/No Recovery
OVA = Organic Vapor Analyzer
ppm = Parts Per Million

Qam, Qas, Qal = Quaternary Alluvium
Qat = Low Terrace Deposits
Qbc = Beaumont Formation
Qt = Fluviatile Terrace Deposits
Qao = Seymour Formation
Qle = Leona Formation
Q-Tu = Uvalde Gravel
Ewi = Wilcox Formation
Emi = Midway Group
Mc = Catahoula Formation
El = Laredo Formation
Kknm = Navarro Group and Marlbrook Marl
Kpg = Pecan Gap Chalk
Kau = Austin Chalk

Kef = Eagle Ford Shale
Kbu = Buda Limestone
Kdr = Del Rio Clay
Kft = Fort Terrett Member
Kgt = Georgetown Formation
Kep = Person Formation
Kek = Kainer Formation
Kes = Escondido Formation
Kew = Walnut Formation
Kgr = Glen Rose Formation
Kgru = Upper Glen Rose Formation
Kgrl = Lower Glen Rose Formation
Kh = Hensell Sand

KEY TO TERMS AND SYMBOLS (CONT'D)

TERMINOLOGY

SOIL STRUCTURE

Slickensided	Having planes of weakness that appear slick and glossy.
Fissured	Containing shrinkage or relief cracks, often filled with fine sand or silt; usually more or less vertical.
Pocket	Inclusion of material of different texture that is smaller than the diameter of the sample.
Parting	Inclusion less than 1/8 inch thick extending through the sample.
Seam	Inclusion 1/8 inch to 3 inches thick extending through the sample.
Layer	Inclusion greater than 3 inches thick extending through the sample.
Laminated	Soil sample composed of alternating partings or seams of different soil type.
Interlayered	Soil sample composed of alternating layers of different soil type.
Intermixed	Soil sample composed of pockets of different soil type and layered or laminated structure is not evident.
Calcareous	Having appreciable quantities of carbonate.
Carbonate	Having more than 50% carbonate content.

SAMPLING METHODS

RELATIVELY UNDISTURBED SAMPLING

Cohesive soil samples are to be collected using three-inch thin-walled tubes in general accordance with the Standard Practice for Thin-Walled Tube Sampling of Soils (ASTM D1587) and granular soil samples are to be collected using two-inch split-barrel samplers in general accordance with the Standard Method for Penetration Test and Split-Barrel Sampling of Soils (ASTM D1586). Cohesive soil samples may be extruded on-site when appropriate handling and storage techniques maintain sample integrity and moisture content.

STANDARD PENETRATION TEST (SPT)

A 2-in.-OD, 1-3/8-in.-ID split spoon sampler is driven 1.5 ft into undisturbed soil with a 140-pound hammer free falling 30 in. After the sampler is seated 6 in. into undisturbed soil, the number of blows required to drive the sampler the last 12 in. is the Standard Penetration Resistance or "N" value, which is recorded as blows per foot as described below.

SPLIT-BARREL SAMPLER DRIVING RECORD

Blows Per Foot	Description
25	25 blows drove sampler 12 inches, after initial 6 inches of seating.
50/7"	50 blows drove sampler 7 inches, after initial 6 inches of seating.
Ref/3"	50 blows drove sampler 3 inches during initial 6-inch seating interval.

NOTE: To avoid damage to sampling tools, driving is limited to 50 blows during or after seating interval.

RESULTS OF SOIL SAMPLE ANALYSES

PROJECT NAME: Reinforced Concrete Box Structure Addition
Northeast of the Intersection of F.M. Road 493 & Mile 11 N.
Donna, HIdalgo County, Texas

FILE NAME: AMA26-022-00.GPJ 6/9/2026

Boring No.	Sample Depth (ft)	Blows per ft	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	USCS	Dry Unit Weight (pcf)	% -200 Sieve	Shear Strength (tsf)	Strength Test
B-7	0.0 to 1.5	5	15	42	18	24	CL				
	2.5 to 4.0	4	22						55		
	5.0 to 7.0		26	39	16	23	CL			0.25	PP
	7.5 to 9.0	12	26						49		
	10.0 to 11.5	11	22								
	15.0 to 16.5	8	21								
	20.0 to 21.5	8	23								
	23.5 to 25.0	10	20								

PP = Pocket Penetrometer TV = Torvane UC = Unconfined Compression FV = Field Vane UU = Unconsolidated Undrained Triaxial

CU = Consolidated Undrained Triaxial CNBD = Cound Not Be Determined NP = Non-Plastic

Record of Pre-Bid Conference for
Donna Irrigation District
CONSTRUCTION OF THE LATERAL 22 AND SOUTH CROSSOVER
CANAL PIPING PROJECT
Tuesday, June 10, 2026 @ 10:30A
Bid Date: June 25, 2026 – 3:00 pm @ District Office
(Updated per Addendum No.1)

*Note: Bidders must be on the Planholders/Bidders List to bid. Bidders must call office, or email Julie at j.alejandro@ferrisandflinn.com, to be added to the list. Original Bid Date will be extended.

1. Contract Schedule:
   - Time for completion: 240 Calendar Days.

2. Contact Information:

Owner:	Donna Irrigation District	
	Michael Kent (makent@surfacewater.us)	(956) 464-3641 Office (956) 250-8275 Cell
Engineer:	Ferris, Flinn & Medina, LLC	
	Carlos A. Luna Rios, PE (c.luna@ferrisandflinn.com)	(956) 364-2236 Office

3. Bid Requirements
   Sealed bids must be delivered to the District office on time. Will be read aloud (total bid amount). Bid bond is required amounting to 5% of total bid. Submit a statement of qualifications relative to job. No addenda to date. Bid Schedule:

4. Liquidated Damages: $2,500 per day.

5. Performance & Payment Bonds are required.

6. Owner will provide construction staking once. Restaking will be done by the Contractor.

7. Trench safety is required. See Bid Schedule.

8. Coordination.

   Contractor will need to coordinate with DID for any shutdowns required to construct intake structure, wells and South Crossover pipeline. Lateral 22 includes a 10-day shutdown. coordinate all shutdown requests with the Owner a minimum of forty-eight (48) hours in advance.

9. Payments

   - 10% retainage for this project. Submit Pay Requests by the first of the month and the District will pay by the second Thursday of the month. Late submittals will delay payment and may not be paid until the last Thursday of the month.

10. Submittals Required
    - Mix Designs
    - Reinforcing Steel
    - Waterstops
    - Trench Safety

11. Site areas available for material & equipment storage, etc can be on site. Location of PVC Pipe and Bypass Pipe is provided in Location Map, see Addendum No.1.

    Contractor is responsible for security of storage areas. Contractor is responsible for care and storage of materials whether such materials are furnished by the Contractor or by the Owner.

12. The Contract is the basis of the agreement and all questions, concerns or conflicts will be handled in accordance with the Contract. (see Division 0800.20 page 0800-3)

13. Testing
    Owner pays for testing. The lab will be Raba Kistner Consultants, Inc. The Contractor shall coordinate all testing, which will include: Concrete Cylinders, Compaction Tests of Earth Materials.

14. Sales Tax
    The Contractor shall pay all sales tax in accordance with state law. The District will provide an exemption certificate for items to become District Property in accordance with the law.

15. Safety
    The Contractor is solely responsible for safety in accordance with Contract Division 00800.30 on page 0800-7.

16. Coordinate with the Owner regarding canal shutdowns. Shutdowns will be limited to District Irrigation Demand and water delivery to Water Treatment Plants.

17. Official Notices shall be hand delivered, sent via Certified Mail or Courier with tracking.

18. Substitution of "or equal" items are subject to the judgment of the Engineer. The burden of proof is the responsibility of the Contractor (see Division 0800.20 page 0800-3).

19. Contractor may be granted an extension of time due to Acts of God, Acts of War, Strikes, or non- delivery of materials provided Contractor submits a request in writing to the Engineer no later than ten (10) days from the date of occurrence. A separate request must be made for each occurrence. Time Extension requests shall be submitted together with all pay requests.

20. Discussion / Questions:
    - Contractor is responsible for complying with SWP3; see bid item 44.
    - Stockpile of canal rubble is required, see Location Map for designated area.
    - Gator Pump and Bypass Pump Information provided, photos to be included in Addendum No.1 .
    - Crushed Limestone can be used as backfill material for PVC pipe, see Addendum No.1.
    - Geotechnical Report boring logs to be included in Addendum No.1

Pre-Bid Conference Attendance List is attached.

Record Prepared by:
FERRIS, FLINN & MEDINA, LLC

Carlos A. Luna Rios, PE

Pre-Bid Conference

Donna Irrigation District

Construction of the Lateral 22 and South Crossover Canal Piping Project

Wednesday, June 10, 2026, 10:30 AM

	NAME	COMPANY	PHONE #(s)	EMAIL
1	Carlos Lum	FFM	(956) 364-2236	c.lum@ferrisandflinn.com
2	Jorge Mendoza	FFM	(956)-587-1991	J.Mendoza@ferrisandflinn.com
3	Will Bectwith	B$B Farms	(956) 373-4984	Will@bectwithproduce.com
4	Eder Espinoza	The 5125 Company	(956) 583-5125	pes125@aol.com
5	JEFF HUGHESON	R.M. WALSDORF, INC.	(956) 543-9018	JEFF@RMWALSDORF.COM
6	Joe Olivares	Go underground	956-358-9368	goexcavate@yahoo.com
7	Abel Morales	Rovan Texas	956-265-1642	amorales@rovantexas.com.
8	Michael Kent	Donna ID	956-250-8275	clonnaid747@hotmail.com
9	Mike Estrada	Donna Irrigation Dist	956-373-1100	" "
10				
11				
12				
13				