

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT AND FAMILIARIZE HIMSELF/HERSELF WITH THE PROJECT SITE PRIOR TO SUBMITTING BIDS.
2. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AUTOMOBILE AND PEDESTRIAN ACCESS AT ALL TIMES, INCLUDING SATURDAY, SUNDAYS AND HOLIDAYS TO EL PASO COUNTY PERSONNEL. THIS INCLUDES, BUT IS NOT LIMITED TO DRIVEWAYS AND ACCESS ROADS. THIS REQUIREMENT IS SUBSIDIARY TO THE VARIOUS BID ITEMS. CONTRACTOR SHALL MAINTAIN DUST CONTROL PREVENTIVE MEASURES THROUGHOUT CONSTRUCTION.
3. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE AND PERFORM HIS/HER WORK SO AS TO PROVIDE PROPER PASSAGE OF ANY STORM WATER DURING THE COURSE OF HIS/HER OPERATIONS. ALL LABOR, TOOLS, EQUIPMENT AND SUPERVISION REQUIRED TO ASSURE SUCH PROPER PASSAGE OF RUNOFF WATER AND ANY REMOVAL OR HANDLING OF WATER IN ORDER TO MAINTAIN DRY CONDITIONS SHALL BE CONSIDERED AS INCIDENTAL TO THE REMAINDER OF THE WORK AND SHALL BE AT THE EXPENSE OF THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR THE FULL PROJECT SITE ONCE THE NOTICE TO PROCEED IS ISSUED. CONTRACTOR IS RESPONSIBLE FOR THE PROPER PASSAGE RUNOFF FOR THE FULL PROJECT SITE.
4. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH ALL UTILITIES AND ALL OTHER AFFECTED AGENCIES.
5. THE CONTRACTOR SHALL COMPLY WITH ALL THE STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, PERTAINING TO THE LOCATION OF THESE UTILITY FACILITIES. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY HIS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES IN THE PLANNING AND CONDUCTING OF EXCAVATION. THE COUNTY OF EL PASO MAKES NO REPRESENTATION PERTAINING THERE TO AND ASSUMES NO RESPONSIBILITY OF LIABILITY. THEREFORE, IF THE UTILITY FACILITIES ARE DAMAGED DURING CONSTRUCTION ALL PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC. DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY TO ORIGINAL OR BETTER CONDITION. UNDERGROUND/OVERHEAD UTILITY FACILITIES SHOWN ON THESE DRAWINGS ARE FOR PLANNING DESIGN PURPOSES ONLY. OTHER UTILITY FACILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE DRAWINGS. THE LOCATION, DEPTH, AND SIZE OF THESE UTILITY FACILITIES SHOWN ARE FOR INFORMATION PURPOSES ONLY AND MUST BE VERIFIED BY THE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE FACILITY'S EXACT DEPTH AND LOCATION BY SAFE AND ACCEPTABLE MEANS WITHIN THE MARKED FACILITY AREA.
6. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND GRADES BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THEIR CORRECTNESS.
7. VERTICAL CONTROL FOR THIS PROJECT IS BASED UPON NAVD 88 DATUM. TOPOGRAPHIC SURVEY WAS PERFORMED BY BARRAGAN AND ASSOCIATES INC.
8. ALL CONCRETE SHALL COMPLY WITH THE STRENGTH SPECIFIED UNDER THE TECHNICAL SPECIFICATIONS.
9. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO BE TO THE CENTER OF BARS UNLESS OTHERWISE SHOWN ON THE PLANS.
10. COST OF FIELD CUTTING AND BENDING OF REINFORCING STEEL SHALL BE INCIDENTAL TO CONSTRUCTION AND NO ADDITIONAL PAYMENT WILL BE CONSIDERED.
11. VIBRATORY ROLLERS WILL NOT BE PERMITTED ON ANY PHASE OF THIS PROJECT.
12. THE CONTRACTOR SHALL CONTACT A NOTIFICATION CENTER OR THE PROPER UTILITY COMPANY 48 HRS. PRIOR TO PERFORMING ANY EXCAVATION.
13. CONTRACTOR IS EXPECTED TO MAINTAIN A MINIMUM CLEARANCE OF TWO FEET PLUS THE WIDTH OF THE LINE BETWEEN MARKED AND UNEXPOSED FACILITIES AND THE CUTTING EDGE OR POINT OF ANY POWER-OPERATED EXCAVATING OR EARTH-MOVING EQUIPMENT. EXCAVATION SHOULD BE PERFORMED VERY CAREFULLY WITH HAND TOOLS AND WITHOUT DAMAGE AND SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.

14. THE CONTRACTOR/EXCAVATOR IS CAUTIONED THAT EQUIPMENT MAY DISTURB/DAMAGE FACILITIES BY ITS WEIGHT AND/OR OTHER CHARACTERISTICS.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING PERMITS FROM THE COUNTY OF EL PASO PRIOR TO DEMOLITION AND NEW CONSTRUCTION. THE COST OF THE PERMIT WILL BE AT THE CONTRACTOR'S EXPENSE.
16. ALL EXISTING ROADWAYS, SIDEWALKS, SIGNS, LANDSCAPING, DRAINAGE STRUCTURES AND DRIVEWAYS NOT TO BE DISTURBED AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER BY CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
17. THE FOLLOWING LOCAL AGENCY PERSONNEL SHALL BE CONTACTED BY CONTRACTOR PRIOR TO COMMENCING WORK.

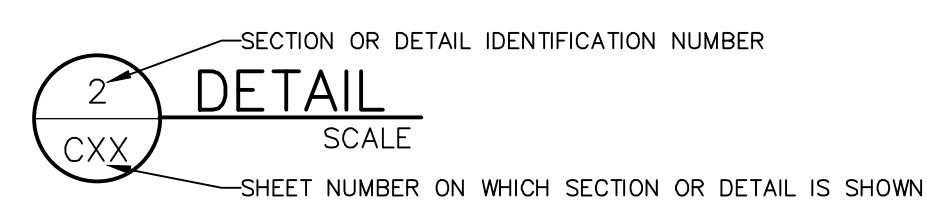
LIST OF UTILITIES AND AGENCIES		
COMPANY NAME	CONTACT PERSON	CONTACT INFORMATION
EL PASO COUNTY	FERNANDO HERNANDEZ	(915) 546-2015
EL PASO ELECTRIC COMPANY (DISTRIBUTION DEPT.)	MARGARET ONTIVEROS	(915) 543-2244
EL PASO ELECTRIC COMPANY (TRANSMISSION DEPT.)	RICHARD CARRILLO	(915) 351-4224
TEXAS GAS SERVICE	FRANCISCO CAMPA	(915) 680-7275
AT&T	CALVIN PEWITT	(254) 715-7869
SPECTRUM	NATE MONTGOMERY	(888) 519-9188
EL PASO WATER	AL QUIJANO	(915) 594-5536
EMERGENCIES AND HAZMAT	-	911
DIG TESS	-	(800) 344-8377
UTILITY LINE COORDINATION	-	LINESPOTS@ELPASOTEXAS.GOV

18. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY PUBLIC WORKS DEPT. IN WRITING, OF ANY PROPOSED DUMP SITE(S) FOR OVERBURDEN AND ANY CONSTRUCTION DEBRIS FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL OBTAIN APPROVAL OF IT'S TRUCK ROUTE TO THE DUMP SITE, AS WELL AS FOR THE MATERIALS IT SHALL BE HAULING BEFORE REMOVAL OF OVERBURDEN FROM PROJECT SITE.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING IT'S WORK AREAS TO PREVENT ANY UNAUTHORIZED ACCESS.
20. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED ACTIVITIES TO KEEP THE TOTAL PROJECT LIMITS IN A CLEAN AND SAFE CONDITION. SEQUENCING OF WORK DOES NOT RELIEVE THE CONTRACTOR OF HOUSE KEEPING THROUGHOUT THE COMPLETE PROJECT LIMITS, TO INCLUDE, BUT NOT LIMITED TO WATER EXTRACTION, STREET SWEEPING, DEBRIS, REMOVAL ETC.
21. CONTRACTOR SHALL COORDINATE WITH THE PUBLIC WORKS DEPT. THROUGH THE PROJECT MANAGER FOR REPLACEMENT AND/OR RELOCATION OF ANY EXISTING AND/OR PROPOSED SIGNS.
22. CONTRACTOR SHALL COORDINATE AND OBTAIN PERMIT APPROVALS FROM OWNER FOR THE REMOVAL/RELOCATION OF ALL ITEMS AS SHOWN ON DRAWINGS PRIOR TO COMMENCEMENT OF ANY DEMOLITION ACTIVITIES.
23. COORDINATE WITH THE PUBLIC WORKS COUNTY ENGINEER AT 915-546-2015 PRIOR TO REMOVAL/RELOCATION OF ANY EXISTING FIRE HYDRANTS, MONUMENTS, FENCES AND ROCKWALLS LOCATED WITHIN PROJECT LIMITS.
24. CONTRACTOR SHALL INSTALL TEMPORARY TRAFFIC CONTROL MEASURES AS REQUIRED ALONG SAN FELIPE ROAD DURING PROJECT DURATION AND SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO ADDITIONAL PAYMENT WILL BE CONSIDERED.
25. AN ELECTRONIC COPY OF THE GEOTECHNICAL REPORT IS AVAILABLE UPON REQUEST. THE GEOTECHNICAL REPORT IS NOT PART OF THE CONTRACT DOCUMENTS AND IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTACT FERNANDO SANCHEZ AT (915) 532-2091 OR EMAIL: fsanchez@morenocardenas.com TO REQUEST A COPY OF THE GEOTECHNICAL REPORT.

SPECIFICATION REFERENCE

XX XX XX SERIES OF NUMBERS ON PLANS USED TO CROSS-REFERENCE THE APPLICABLE TECHNICAL SPECIFICATION SECTION.

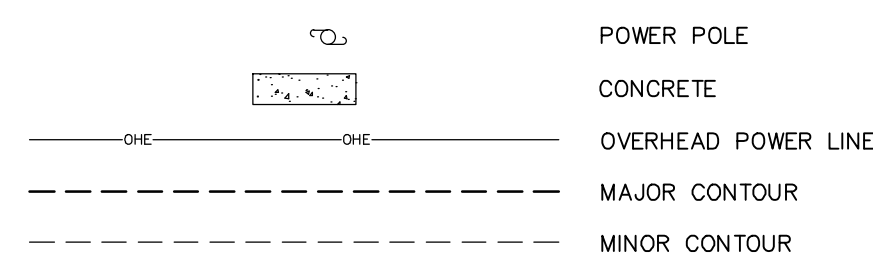
SECTION AND DETAIL REFERENCE



SURVEY ABBREVIATIONS

- AC ASBESTOS CEMENT
- ASV ANTI-SIPHON VALVE
- CATV CABLE TV PEDESTAL
- CBC CONCRETE BOX CULVERT
- CL CENTERLINE
- CMP CORRUGATED METAL PIPE
- CONC CONCRETE
- DIP DUCTILE IRON PIPE
- DIA DIAMETER
- EBX ELECTRIC BOX
- FH FIRE HYDRANT
- FM FORCE MAIN
- FOMKR FIBER OPTIC MARKER
- FT FEET
- GALV GALVANIZED
- GM GAS METER
- GV GAS VALVE
- GP GUARDPOST
- GR NATURAL GROUND
- GJ GUTTER
- GV GAS VALVE
- HMAC HOT MIXED ASPHALTIC CONCRETE
- INV INVERT
- IV IRRIGATION VALVE
- LP LIGHT POLE
- LT LEFT
- MAX MAXIMUM
- MBX MAILBOX
- MIN MINIMUM
- MH MANHOLE
- NOM NOMINAL
- OC OF CENTER
- OCEW OF CENTER EACH WAY
- OD OUTSIDE DIAMETER
- OFF OFFSET
- PCL PROFILE GRADE LINE
- PL PROPERTY LINE
- PP POWER POLE
- PVC POLYVINYL CHLORIDE
- RCP REINFORCED CONCRETE PIPE
- RT RIGHT
- ROW RIGHT OF WAY
- ROE RIGHT OF ENTRY
- SCO SEWER CLEANOUT
- SS SANITARY SEWER
- SSL STAINLESS STEEL
- SP 0.2% SIGNPOST
- STA STATION
- STD STANDARD
- STRM STORM SEWER
- TBM TEMPORARY BENCHMARK
- TBX TELEPHONE PEDESTAL
- TC TOP OF CURB
- TD TOP OF DRIVEWAY
- TG TOP OF GROUND
- TMH TELEPHONE MANHOLE
- TP TOP OF PAVEMENT
- TS TOP OF SIDEWALK
- TSBX TRAFFIC SIGNAL BOX
- TW TOP OF WALL
- TYP TYPICAL
- WV WATER VALVE
- WM WATER METER

SURVEY LEGEND



SHEET INDEX

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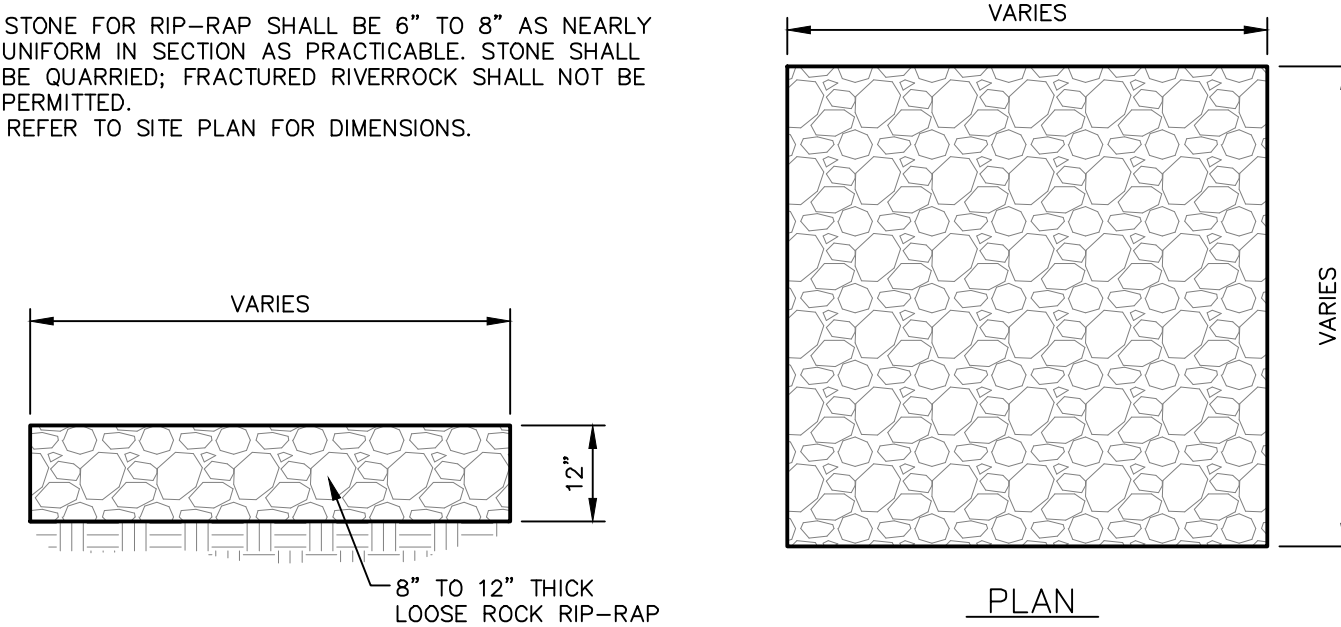
COVER SHEET.....	G0.0
GENERAL NOTES & LEGEND.....	G1.0
TOPOGRAPHIC SURVEY.....	
SITE PLAN AND HORIZONTAL CONTROL PLAN.....	C2.0-C2.2
OVERALL WATERSHED MAP.....	C3.0
GRADING PLAN.....	C4.0-C4.2
GRADING CROSS SECTIONS.....	C5.0
SW3P SITE PLAN & TYPICAL DETAILS.....	C6.0-C6.1
SW3P GENERAL NOTES	C7.0
SW3P DETAILS.....	C8.0

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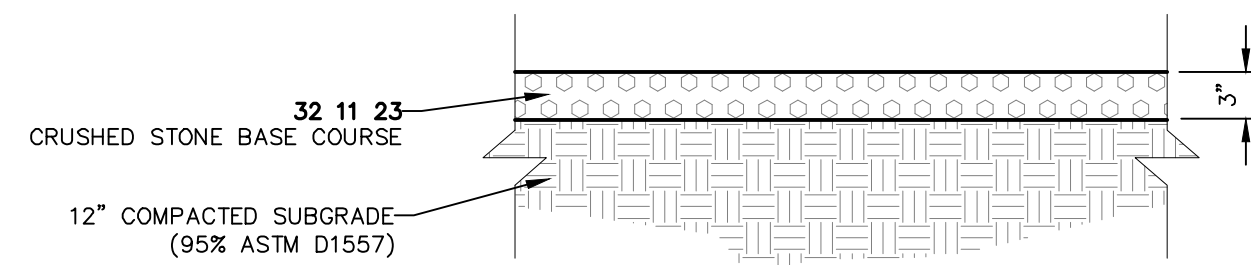
REVISION	DATE	NO.	BY	
ENGINEER'S SEAL FERNANDO SANCHEZ PROFESSIONAL ENGINEER STATE OF TEXAS LICENSE NO. 13285				
ENGINEER'S NOTE				
SCALE: N/A Horiz. N/A Vert. N/A Date: JULY 2022 Design by: M.M./F.S. Drawn by: E.C./E.C. Chkd. by: F.S. Appd. by: M.M. JOB No. 19-12L				
P R O J E C T N A M E FABENS DAM IMPROVEMENTS (TX01958) EL PASO COUNTY, TEXAS				
SHEET TITLE INDEX AND GENERAL NOTES				
SHEET G1.0				
1 OF 1				

GENERAL NOTE:

- STONE FOR RIP-RAP SHALL BE 6" TO 8" AS NEARLY UNIFORM IN SECTION AS PRACTICABLE. STONE SHALL BE QUARRIED; FRACTURED RIVERROCK SHALL NOT BE PERMITTED.
- REFER TO SITE PLAN FOR DIMENSIONS.



1 LOOSE ROCK RIP-RAP DETAIL
SCALE: 1/2"=1'



2 BASE COURSE
SCALE: 1"=1'-0"

HORIZONTAL CONTROL TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
1	NEW MAINTENANCE ROAD	10565818.50	492105.91
2	NEW MAINTENANCE ROAD	10565804.94	492094.08
3	NEW MAINTENANCE ROAD	10565758.44	492174.76
4	NEW MAINTENANCE ROAD	10565744.87	492162.93
5	TOP OF RIP RAP	10565733.32	492190.37
6	NEW MAINTENANCE ROAD	10565714.52	492200.92
7	NEW MAINTENANCE ROAD	10565734.04	492171.00
8	NEW MAINTENANCE ROAD	10565688.84	492232.02
9	NEW MAINTENANCE ROAD	10565672.84	492223.76
10	BOTTOM OF RIP RAP	10565743.99	492220.68
11	TOP OF RIP RAP	10565709.91	492149.48
12	BOTTOM OF RIP RAP	10565679.77	492142.43

EXISTING CONTROL DATA TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
EB-1	FOUND PK NAIL	10566226.24	491460.84
EB-2	SET 1/2" REBAR WITH CAP	10565709.32	492160.93
EB-3	FOUND BRASS CAP (TBM)	10565721.36	492038.41

CURVE DATA TABLE						
CURVE ID	LENGHT	RADIUS	TANGENT	DELTA	CHORD DIRECTION	CHORD LENGHT
C5	38.90	55.54	20.29	40.14	N42° 08' 28"W	38.11

NOTE:

- AFTER CLEARING OF GRASS AND SHRUBS FROM THE SPILLWAY, SEAL JOINTS WITH ELASTIC SEALANT AS NEEDED.
- REPAIR ANY SPALLING, CRACKED SLABS, AND RETAINING WALLS.
- EROSION SCARPS AND HOLES ALONG THE EDGE OF THE CREST AND UPSTREAM SLOPE SHOULD BE FILLED PRIOR TO THE PLACEMENT OF LOOSE ROCK RIP-RAP AND BASE COURSE.
- REPAIR ANY SPALLING AT THE SERVICE SPILLWAY INLET, OUTLET, DEBRIS GUARD, AND VALVE STRUCTURE.

KEYED LEGEND

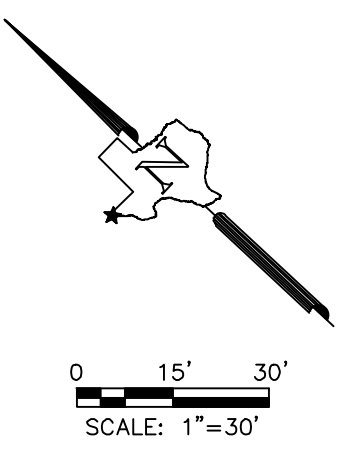
- EXISTING RIGHT-OF-WAY/PROPERTY LINE
- PROJECT LIMITS
- STREET CENTERLINE
- 3XXX PROPOSED MAJOR CONTOUR
- 3XXX PROPOSED MINOR CONTOUR
- EXISTING UTILITY LINE
- EXISTING UTILITY POLE
- △ EXISTING CONTROL POINT
- EXISTING TBM
- ① NEW CONTROL POINT
- C-1 CURVE DATA
- EB-1 EXISTING BENCHMARK

BENCHMARK

H-22 FOUND PK NAIL (T&DOT CONTROL)
 N: 1056386.01(GRID)
 E: 491347.34(GRID)
 ELEVATION: 3743.04 (NAVD 88 DATUM)
 (POINT #1000)

KEYED LEGEND

- A NEW 6" TO 8" LOOSE ROCK RIP RAP..... 1 C2.0
- B 3" BASE COURSE..... 2 C2.0



ENGINEER'S SEAL 	ENGINEER'S NOTE MATCHLINE "A" SEE SHEET C2.1	SCALE Horiz. 1" = 30' Vert. N/A	REVISION REMARKS NO. DATE
	PROJECT NAME FABENS DAM IMPROVEMENTS (TX01958) EL PASO COUNTY, TEXAS	SHEET TITLE SITE PLAN & HORIZONTAL CONTROL PLAN TYPICAL DETAILS SHEET C2.0 1 OF 2	DATE JULY 2022 Design by M.M./F.S. Drawn by E.C./E.C. Chkcd. by F.S. Appr. by M.M. JOB No. 19-121

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- NOTE:**
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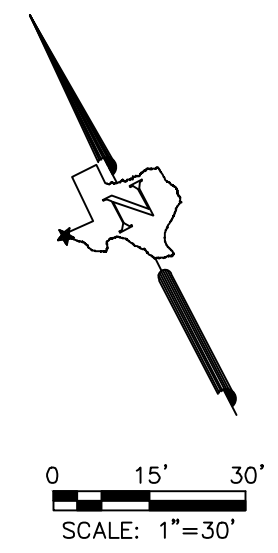
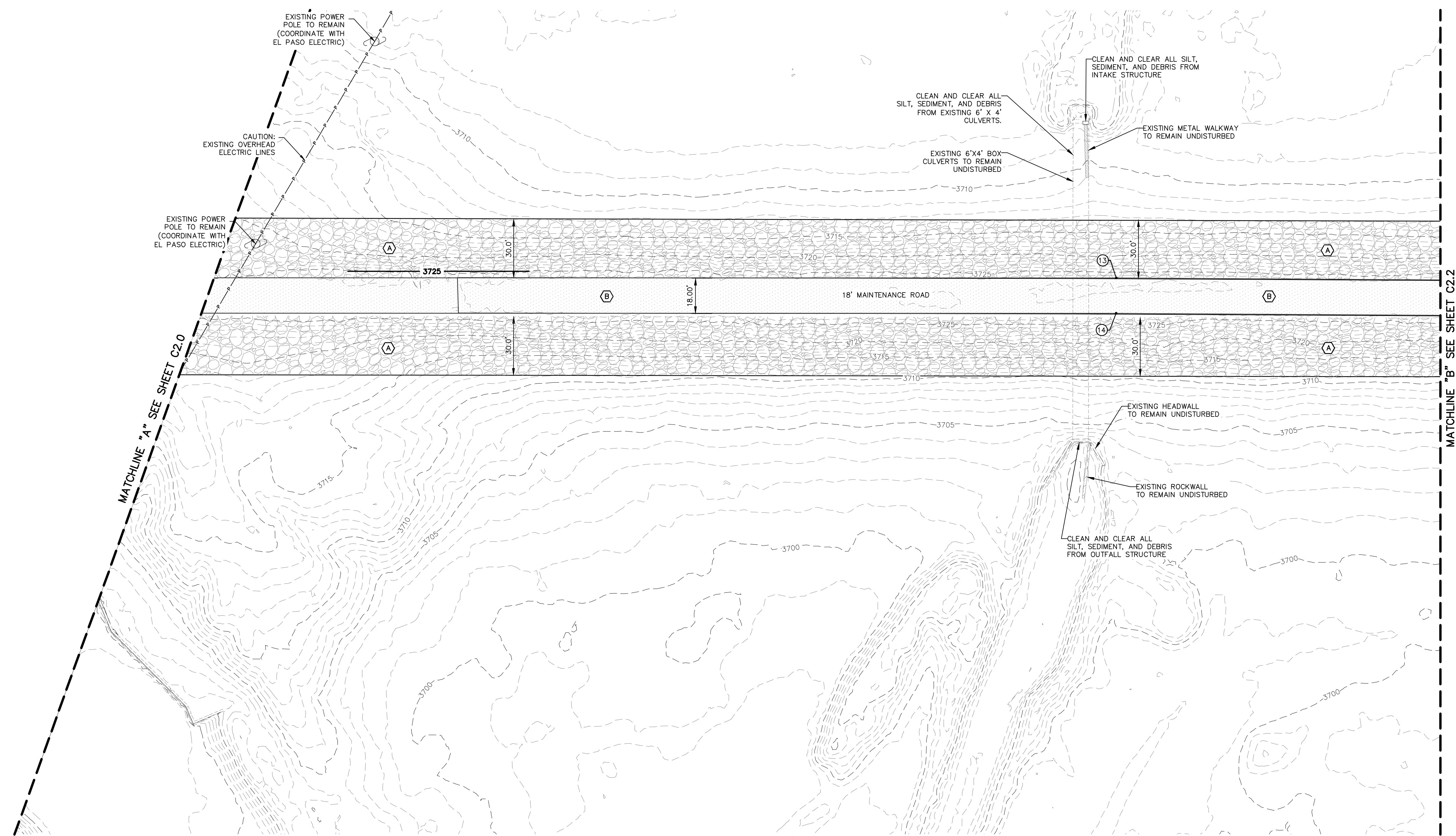
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	EXISTING UTILITY LINE
	EXISTING UTILITY POLE
	EXISTING CONTROL POINT
	EXISTING TBM
	NEW CONTROL POINT
	CURVE DATA
	EXISTING BENCHMARK

BENCHMARK

H-22 FOUND PK NAIL (TxDOT CONTROL)
 N: 1056386.01 (GRID)
 E: 491347.34 (GRID)
 ELEVATION: 3743.04 (NAVD 88 DATUM)
 (POINT #1000)

KEYED LEGEND	
	NEW 6" TO 8" LOOSE ROCK RIP RAP..... (1) C2.0
	3" BASE COURSE..... (2) C2.0

HORIZONTAL CONTROL TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
13	TOP OF RIP RAP	10565474.72	492646.89
14	TOP OF RIP RAP	10565458.75	492638.59



PLANNING-ENGINEERING-PROJECT MANAGEMENT MCI Moreno Cardenas Inc. EL PASO SAN ANTONIO 2506 E. Monoran Ave. El Paso, TX 79907 (915) 832-3994 FAX 832-3995 4601 E. Monoran Ave. El Paso, TX 79907 (915) 832-3994 FAX 832-3995 Texas Board of Professional Engineers Registration No. F-000554	NO. _____ DATE _____ REVISION _____ REMARKS _____
	ENGINEER'S SEAL
ENGINEER'S NOTE SCALE: 1" = 30' Horiz. N/A Vert. N/A Date: JULY 2022 Design by: M.M./F.S. Drawn by: E.G./E.C. Chk. by: F.S. Appr. by: M.M. JOB No. 19-121	PROJECT NAME FABENS DAM IMPROVEMENTS (TX01958) EL PASO COUNTY, TEXAS
SHEET TITLE SITE PLAN & HORIZONTAL CONTROL PLAN TYPICAL DETAILS	SHEET C2.1
2 OF 3	

HORIZONTAL CONTROL TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
15	TOP OF RIP RAP	10565215.77	493140.82
16	TOP OF RIP RAP	10565199.11	493133.93
17	BOTTOM OF RIP RAP	10565247.65	493147.87
18	BOTTOM OF RIP RAP	10565238.53	493173.23
19	BOTTOM OF RIP RAP	10565217.85	493205.83
20	BOTTOM OF RIP RAP	10565129.11	493174.04
21	BOTTOM OF RIP RAP	10565125.15	493170.79
22	BOTTOM OF RIP RAP	10565127.26	493150.84
23	BOTTOM OF RIP RAP	10565131.15	493121.03
24	BOTTOM OF RIP RAP	10565165.69	493126.43
25	BOTTOM OF RIP RAP	10565177.04	493112.83
26	BOTTOM OF RIP RAP	10565332.92	493257.89
27	BOTTOM OF RIP RAP	10565354.89	493250.54
28	TOP OF RIP RAP	10565347.94	493278.59
29	TOP OF RIP RAP	10565179.49	493340.48
30	BOTTOM OF RIP RAP	10565189.12	493312.07
31	BOTTOM OF RIP RAP	10565009.28	493250.10
32	TOP OF RIP RAP	10565018.58	493285.07
33	TOP OF RIP RAP	10564985.32	493231.75
34	BOTTOM OF RIP RAP	10564999.52	493237.58

HORIZONTAL CONTROL TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
35	BOTTOM OF RIP RAP	10565023.64	493109.70
36	TOP OF RIP RAP	10565006.94	493116.75
37	TOP OF RIP RAP	10565004.88	493104.74
38	TOP OF RIP RAP	10565216.06	493155.31
39	TOP OF RIP RAP	10565224.97	493176.85
40	TOP OF RIP RAP	10565215.65	493189.11
41	TOP OF RIP RAP	10565187.43	493178.99
42	TOP OF RIP RAP	10565182.67	493172.59

EXISTING CONTROL DATA TABLE			
POINT NO.	DESCRIPTION	NORTHING	EASTING
EB-4	FOUND POINT	10565197.95	493153.95

CURVE DATA TABLE						
CURVE ID	LENGT	RADIUS	TANGENT	DELTA	CHORD DIRECTION	CHORD LENGT
C6	51.37	20.20	65.47	145.70	N57° 37' 42"W	38.61
C9	8.40	7.56	4.70	63.68	N53° 21' 01"E	7.98
C10	40.84	38.67	22.56	60.51	N26° 26' 40"W	38.97
C11	21.93	18.36	12.48	68.43	S26° 46' 30"E	20.65
C12	3.40	6.41	1.74	30.42	N78° 03' 36"E	3.36
C13	2.09	2.60	1.11	46.20	S59° 46' 26"E	2.04
C14	25.87	16.09	16.69	92.09	N18° 30' 08"W	23.17
C15	190.22	161.86	107.82	67.34	S20° 10' 27"E	179.47
C16	164.28	130.63	95.00	72.05	N20° 38' 35"W	153.67
C17	17.23	12.39	10.34	79.72	N52° 05' 15"E	15.88
C18	67.97	49.91	40.44	78.03	S58° 02' 59"W	62.84
C19	12.28	29.66	6.23	23.71	S80° 17' 48"W	12.19

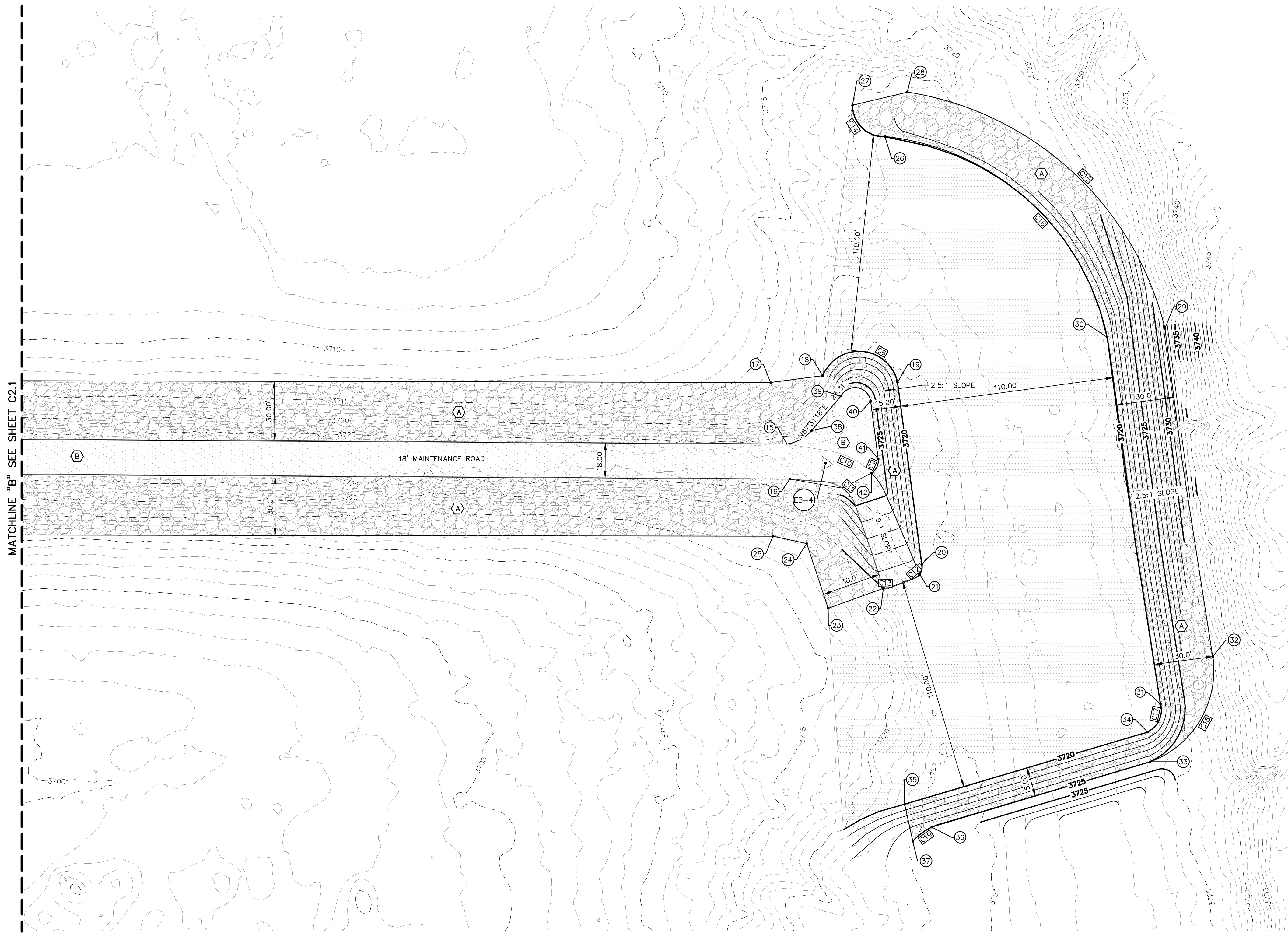
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KEYED LEGEND	
	EXISTING RIGHT-OF-WAY/PROPERTY LINE
	PROJECT LIMITS
	STREET CENTERLINE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING UTILITY LINE
	EXISTING UTILITY POLE
	EXISTING CONTROL POINT
	EXISTING TBM
	NEW CONTROL POINT
	CURVE DATA
	EXISTING BENCHMARK

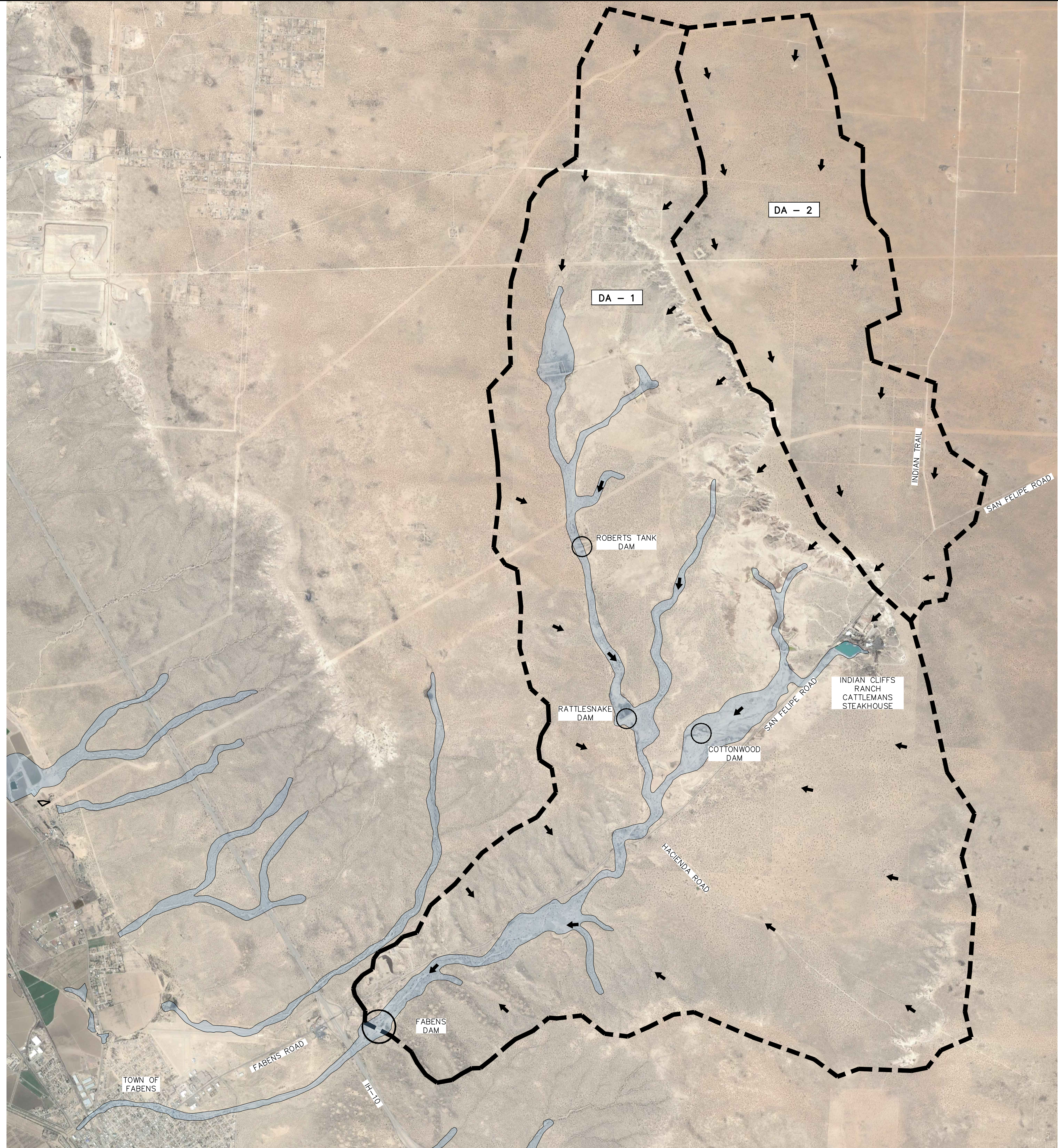
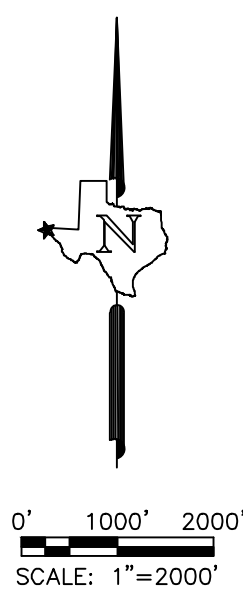
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	NEW 6" TO 8" LOOSE ROCK RIP RAP..... 1 C2.0
	3" BASE COURSE..... 2 C2.0



 MCI Cardenas Inc. SAN ANTONIO 2506 E. Monar Ave. El Paso, TX 79907 (915) 832-3091 4601 Texas Blvd of Professional Engineers Registration No. F4000454 EL PASO	PLANNING-ENGINEERING-PROJECT MANAGEMENT	NO.	DATE	REVISION	REMARKS
	ENGINEER'S SEAL 7/1/2022 FERNANDO SANCHEZ PROFESSIONAL ENGINEER 13268	ENGINEER'S NOTE	SCALE	Horiz. 1" = 30' Vert. N/A Date: JULY 2022 Design by M.M./F.S. Drawn by E.G./E.C. Chk'd. by F.S. Appl'd. by M.M. JOB No. 19-121	
PROJECT NAME FABENS DAM IMPROVEMENTS (TX01958)		SHEET TITLE SITE PLAN & HORIZONTAL CONTROL PLAN TYPICAL DETAILS			
EL PASO COUNTY, TEXAS 		SHEET C2.2			
3 OF 3					

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DA - X DRAINAGE AREA IDENTIFICATION
- - - - - DRAINAGE AREA BOUNDARY
→ FLOW DIRECTION
■ 100 YEAR FLOOD BOUNDARY

DRAINAGE AREA INFORMATION					
DRAINAGE AREA ID (1)	DRAINAGE AREA (SQMI) (2)	TIME OF CONCENTRATION (TC) (MIN) (3)	CURVE NUMBER (CN) (4)	100-YEAR PEAK DISCHARGE 100% PMF (CFS) (5)	100-YEAR PEAK DISCHARGE 75% PMF (CFS) (6)
DA-1	18.00	180	63	11,896.00	8,922.00
DA-2	5.00	503.72	77	2,344.00	1,758.00

FABENS DAM – EXISTING CONDITIONS								
DAM MAXIMUM CAPACITY (AC-FT)	EXPECTED PEAK RUNOFF (CFS)	BOTTOM ELEVATION (FT)	HIGH WATER SURFACE ELEVATION (FT)	FREE BOARD (FT)	PRIMARY SPILLWAY OUTFLOW (CFS)	SERVICE SPILLWAY (CULVERTS) OUTFLOW (CFS)	AUXILIARY SPILLWAY OUTFLOW (CFS)	PEAK DISCHARGE (CFS)
1,007.74	13,260.50	3700	3728.40	0	6,747.70	1,382.40	4,891.10	12,914.20

NOTE: EXISTING CONDITIONS REPRESENT THE MAXIMUM RESERVOIR LEVEL AS PER TCEQ REGULATIONS.

FABENS DAM – PROPOSED CONDITIONS								
DAM MAXIMUM CAPACITY (AC-FT)	EXPECTED PEAK RUNOFF (CFS)	BOTTOM ELEVATION (FT)	HIGH WATER SURFACE ELEVATION (FT)	FREE BOARD (FT)	PRIMARY SPILLWAY OUTFLOW (CFS)	SERVICE SPILLWAY (CULVERTS) OUTFLOW (CFS)	AUXILIARY SPILLWAY OUTFLOW (CFS)	PEAK OUTFLOW (CFS)
1,006.70	9,945.40	3700	3725	0	5,080.60	1,338.90	3,331.50	13,021.30

NOTE: PROPOSED CONDITIONS REPRESENT SAFELY PASSING 75% OF THE PMF AS PER TCEQ REGULATIONS.

NO.	DATE	REVISION	REMARKS

PLANNING-ENGINEERING-PROJECT MANAGEMENT
MCI Moreno Cardenas Inc.
 EL PASO SAN ANTONIO
 2506 E. Monnier Ave. El Paso, TX 79903 (951) 832-3091
 9601 E. Monnier Ave. El Paso, TX 79903 (951) 832-3091
 Texas Board of Professional Engineers Registration No. F-000654



ENGINEER'S NOTE

SCALE: 1" = 2000'
 Horiz. N/A
 Vert. N/A
 Date: JULY 2022
 Design by: M.M./F.S.
 Drawn by: E.G./E.C.
 Chkd. by: F.S.
 Appd. by: M.M.
 JOB No.: 19-12L

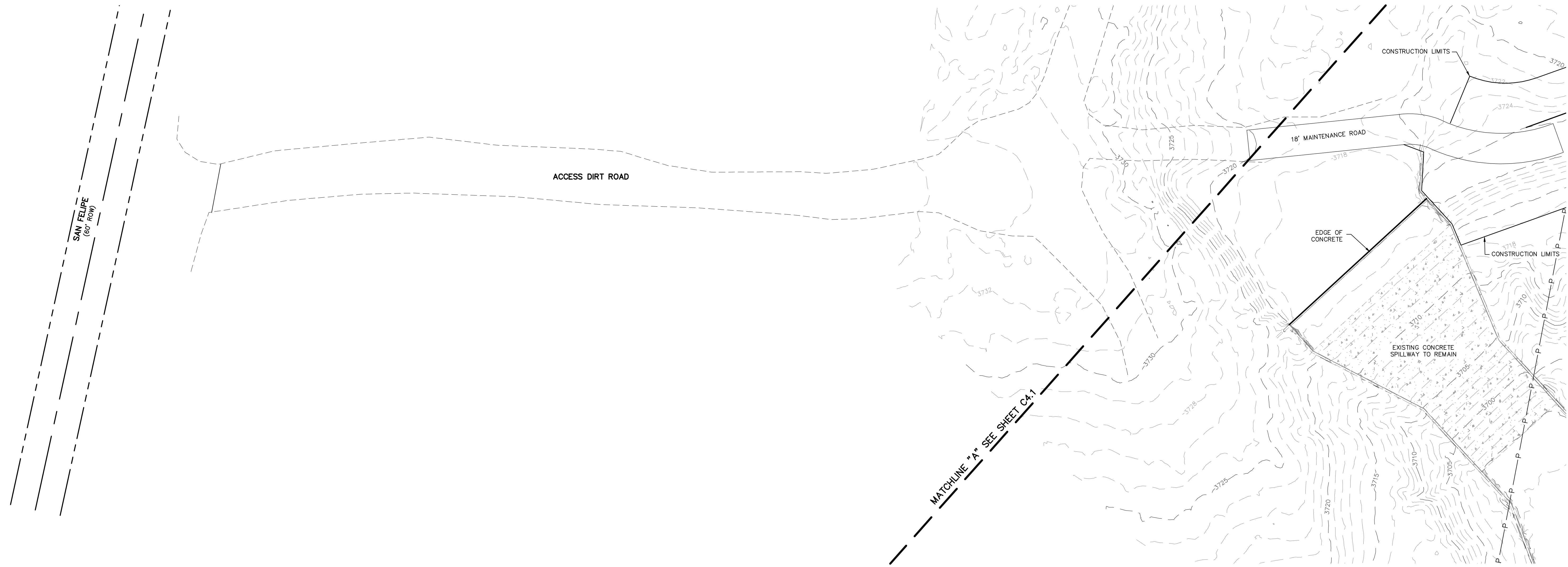
PROJECT NAME
FABENS DAM IMPROVEMENTS (TX01958)
 EL PASO COUNTY, TEXAS



SHEET TITLE
 OVERALL WATERSHED MAP
 SHEET
C3.0
 1 OF 1

FA10121A.DWG, 06-10-21, © 2020, DWG_OVERALL_WATERSHED.dwg, Times: 06/20/2022, 08:12:00, L:\m\m\m\m\m

FA:10121\DWG\06-10121 - C4.0_DWG_GRADING - Copy - Update V2 - Edgeworking Times: 2022-08-11 10:41:48 AM



NOTE:

1. AFTER CLEARING OF GRASS AND SHRUBS FROM THE SPILLWAY, SEAL JOINTS WITH ELASTIC SEALANT AS NEEDED.
2. REPAIR ANY SPALLING, CRACKED SLABS, AND RETAINING WALLS.
3. EROSION SCARPS AND HOLES ALONG THE EDGE OF THE CREST AND UPSTREAM SLOPE SHOULD BE FILLED PRIOR TO THE PLACEMENT OF LOOSE ROCK RIP-RAP AND BASE COURSE.
4. REPAIR ANY SPALLING AT THE SERVICE SPILLWAY INLET, OUTLET, DEBRIS GUARD, AND VALVE STRUCTURE.

KEYED LEGEND

	EXISTING RIGHT-OF-WAY/PROPERTY LINE
	PROJECT LIMITS LINE
	PROPERTY LINE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING UTILITY LINE
	SPOT ELEVATION
	CROSS SECTION
	EXISTING UTILITY POLE

BENCHMARK

H-22 FOUND PK NAIL (TxDOT CONTROL)
 N: 1056386.01 (GRID)
 E: 491347.34 (GRID)
 ELEVATION: 3743.04 (NAVD 88 DATUM)
 (POINT #1000)

ENGINEER'S SEAL



ENGINEER'S NOTE

SCALE

Horiz. 1" = 30'
 Vert. N/A
 Date: JULY 2022
 Design by: M.M./F.S.
 Drawn by: E.C./E.C.
 Check by: F.S.
 Appr. by: M.M.
 JOB No. 19-121

P R O J E C T N A M E

**FABENS DAM
 IMPROVEMENTS
 (TX01958)**

SHEET TITLE



GRADING PLAN

SHEET

C4.0

1 OF 3

NO.	DATE	REVISION	REMARKS	BY

PLANNING-ENGINEERING-PROJECT MANAGEMENT

MCI Moreno Cardenas Inc.

EL PASO SAN ANTONIO

2506 E. Mission Ave. El Paso, TX 79907 (915) 832-3994 FAX 832-3995

4601 West of Professional Engineers Registration No. F-0006554

FA101211.DWG, 06-10-21, C4.0, DWG, GRADING - Copy - Update V2 - Edgework, 7/1/2022, 08:14am, 1/1/2022

NOTE:

1. AFTER CLEARING OF GRASS AND SHRUBS FROM THE SPILLWAY, SEAL JOINTS WITH ELASTIC SEALANT AS NEEDED.
2. REPAIR ANY SPALLING, CRACKED SLABS, AND RETAINING WALLS.
3. EROSION SCARPS AND HOLES ALONG THE EDGE OF THE CREST AND UPSTREAM SLOPE SHOULD BE FILLED PRIOR TO THE PLACEMENT OF LOOSE ROCK RIP-RAP AND BASE COURSE.
4. REPAIR ANY SPALLING AT THE SERVICE SPILLWAY INLET, OUTLET, DEBRIS GUARD, AND VALVE STRUCTURE.

KEYED LEGEND

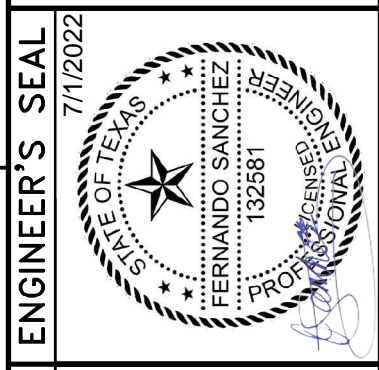
	EXISTING RIGHT-OF-WAY/PROPERTY LINE
	PROJECT LIMITS LINE
	PROPERTY LINE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING UTILITY LINE
	SPOT ELEVATION
	CROSS SECTION
	EXISTING UTILITY POLE

BENCHMARK

H-22 FOUND PK NAIL (TxDOT CONTROL)
 N: 1056386.01 (GRID)
 E: 491347.34 (GRID)
 ELEVATION: 3743.04 (NAVD 88 DATUM)
 (POINT #1000)

NO.	DATE	REVISION	REMARKS

PLANNING-ENGINEERING-PROJECT MANAGEMENT
MCI Moreno Cardenas Inc.
 EL PASO SAN ANTONIO
 2506 E. Mission Ave. El Paso, TX 79907 (915) 832-3994
 4601 S. Mountain Ave. El Paso, TX 79907 (915) 832-3994
 Texas Board of Professional Engineers Registration No. F-000554



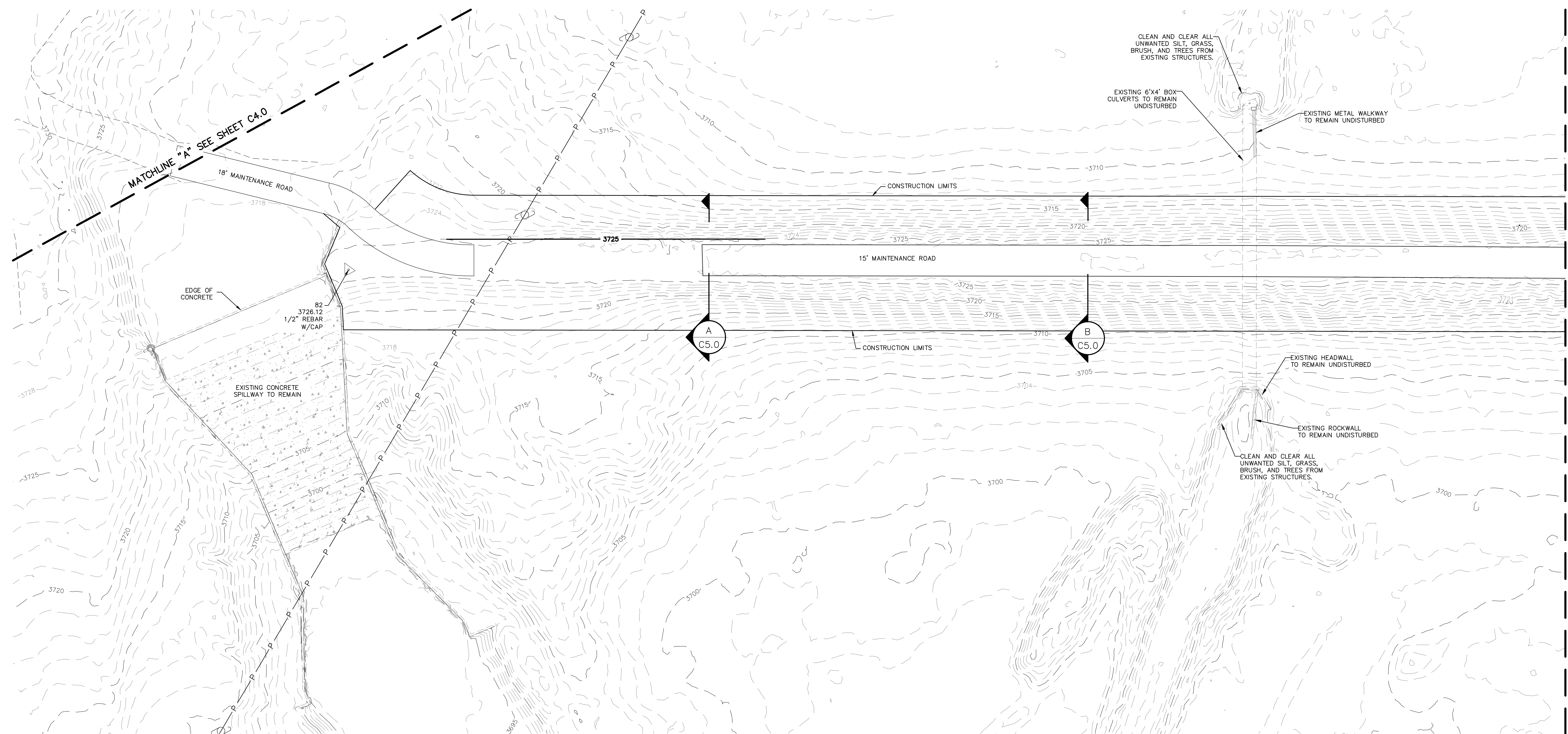
ENGINEER'S NOTE

SCALE	1" = 30'
Horiz.	1" = 30'
Vert.	N/A
Date	JULY 2022
Design by	M.M./F.S.
Drawn by	E.C./E.C.
Checked by	F.S.
Appr. by	M.M.
JOB No.	19-121

PROJECT NAME
FABENS DAM IMPROVEMENTS
 (TX01958)
EL PASO COUNTY, TEXAS



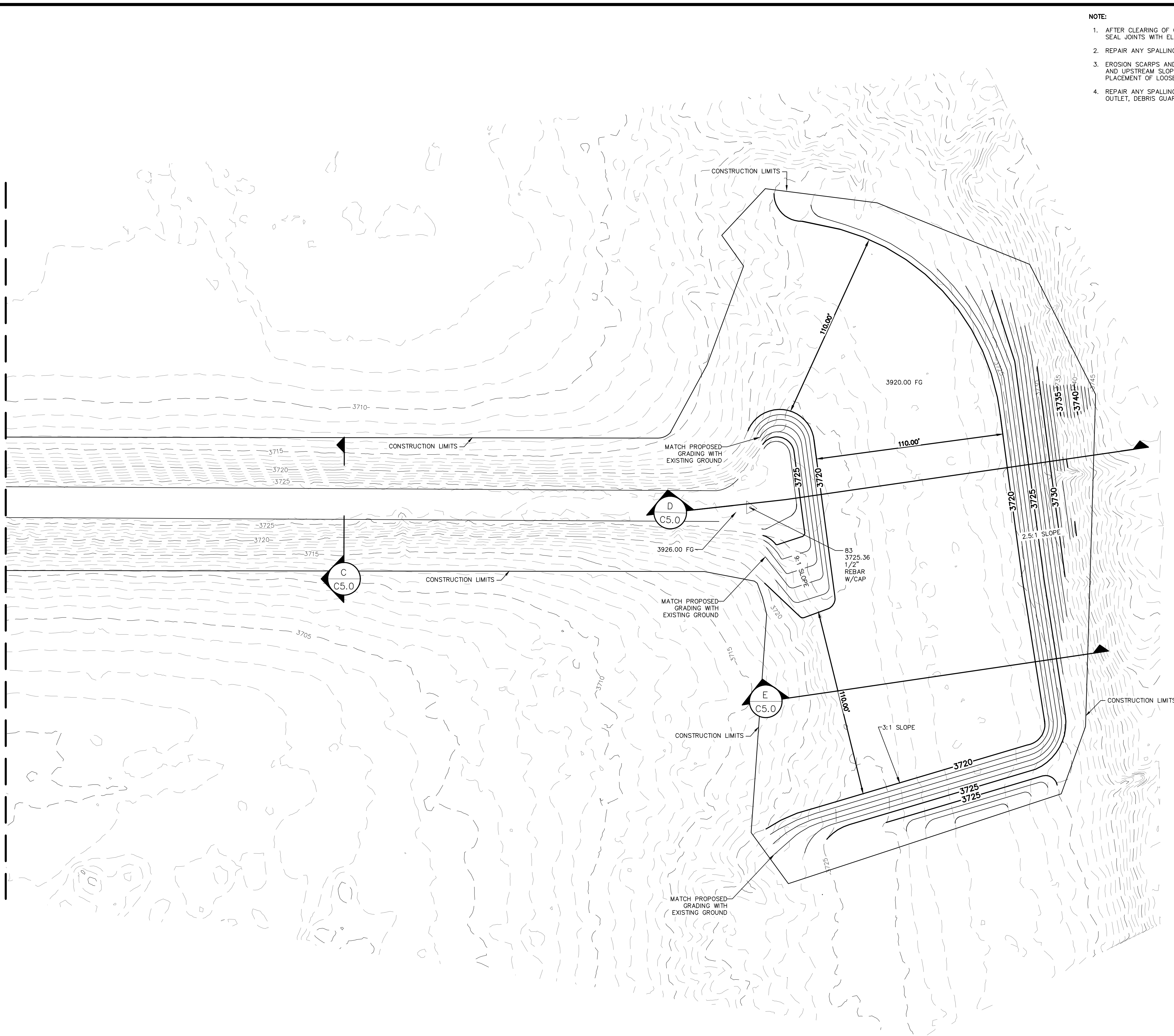
SHEET TITLE	GRADING PLAN
SHEET	C4.1
2 OF 3	



SCALE: 1"=30'

FA:10121\DWG\06-10121 - C4.0_DWG_GRADING - Copy - Update V2 - Edgeworking Times: 2022-08-15am - Lp: m...d...d...

MATCHLINE "B" SEE SHEET C4.1



- NOTE:**
1. AFTER CLEARING OF GRASS AND SHRUBS FROM THE SPILLWAY, SEAL JOINTS WITH ELASTIC SEALANT AS NEEDED.
 2. REPAIR ANY SPALLING, CRACKED SLABS, AND RETAINING WALLS.
 3. EROSION SCARPS AND HOLES ALONG THE EDGE OF THE CREST AND UPSTREAM SLOPE SHOULD BE FILLED PRIOR TO THE PLACEMENT OF LOOSE ROCK RIP-RAP AND BASE COURSE.
 4. REPAIR ANY SPALLING AT THE SERVICE SPILLWAY INLET, OUTLET, DEBRIS GUARD, AND VALVE STRUCTURE.

KEYED LEGEND	
	EXISTING RIGHT-OF-WAY/PROPERTY LINE
	PROJECT LIMITS LINE
	PROPERTY LINE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING UTILITY LINE
	SPOT ELEVATION
	CROSS SECTION
	EXISTING UTILITY POLE

BENCHMARK

H-22 FOUND PK NAIL (TxDOT CONTROL)
 N: 1056386.01 (GRID)
 E: 491347.34 (GRID)
 ELEVATION: 3743.04 (NAVD 88 DATUM)
 (POINT #1000)

NO.	DATE	REVISION	REMARKS	BY

PLANNING-ENGINEERING-PROJECT MANAGEMENT

McI Cardenas Inc.
 EL PASO SAN ANTONIO
 2506 E. Monnier Ave. El Paso, TX 79907 (915) 832-3991
 4601 E. Monnier Ave. El Paso, TX 79907 (915) 832-3991
 Texas Board of Professional Engineers Registration No. F-0005154

7/1/2022

ENGINEER'S SEAL
 FERNANDO SANCHEZ
 PROFESSIONAL ENGINEER
 132618

ENGINEER'S NOTE

SCALE
Horiz. 1" = 30'
Vert. N/A
Date: JULY 2022
Design by: M.M./F.S.
Drawn by: E.C./E.C.
Chkcd. by: F.S.
Appr. by: M.M.
JOB No. 19-121

P R O J E C T N A M E

FABENS DAM IMPROVEMENTS (TX01958)

EL PASO COUNTY, TEXAS



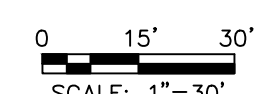
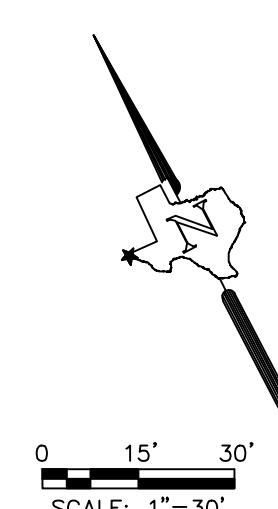
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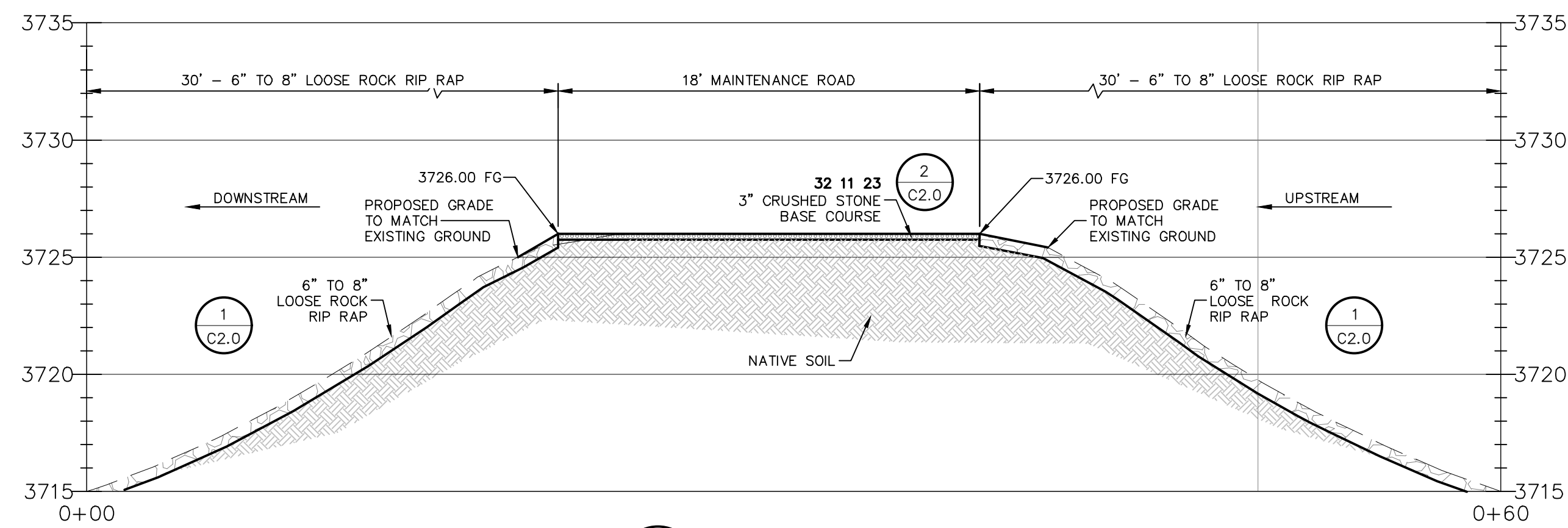
GRADING PLAN

SHEET

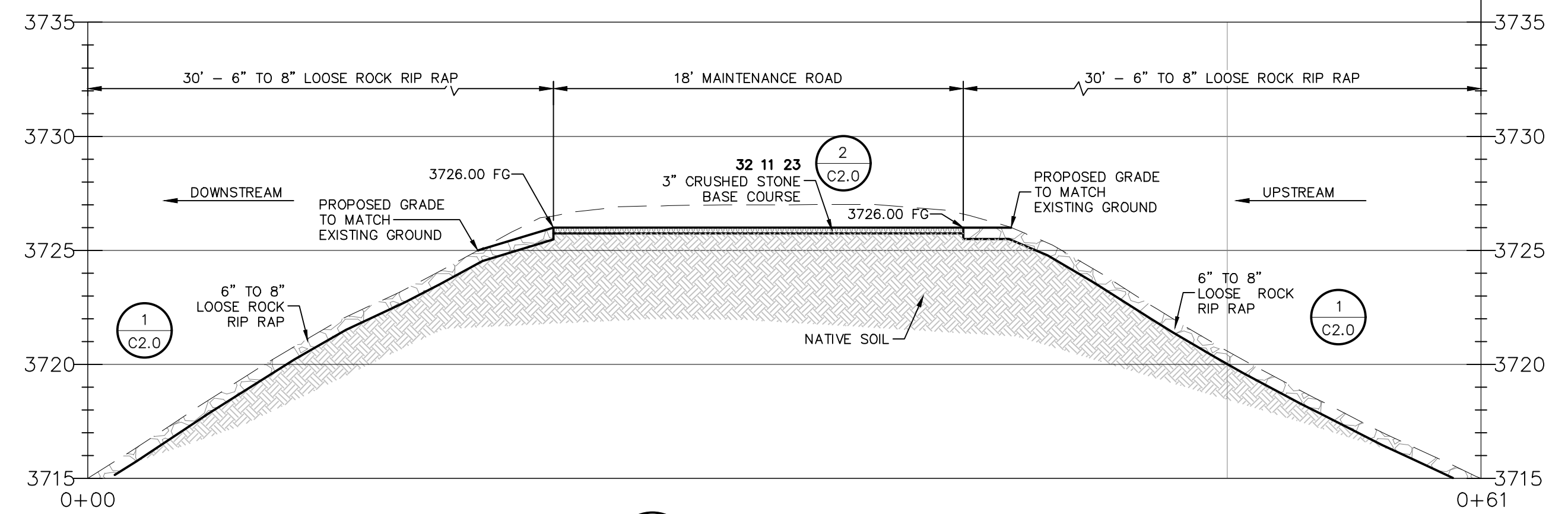
C4.2

3 OF 3



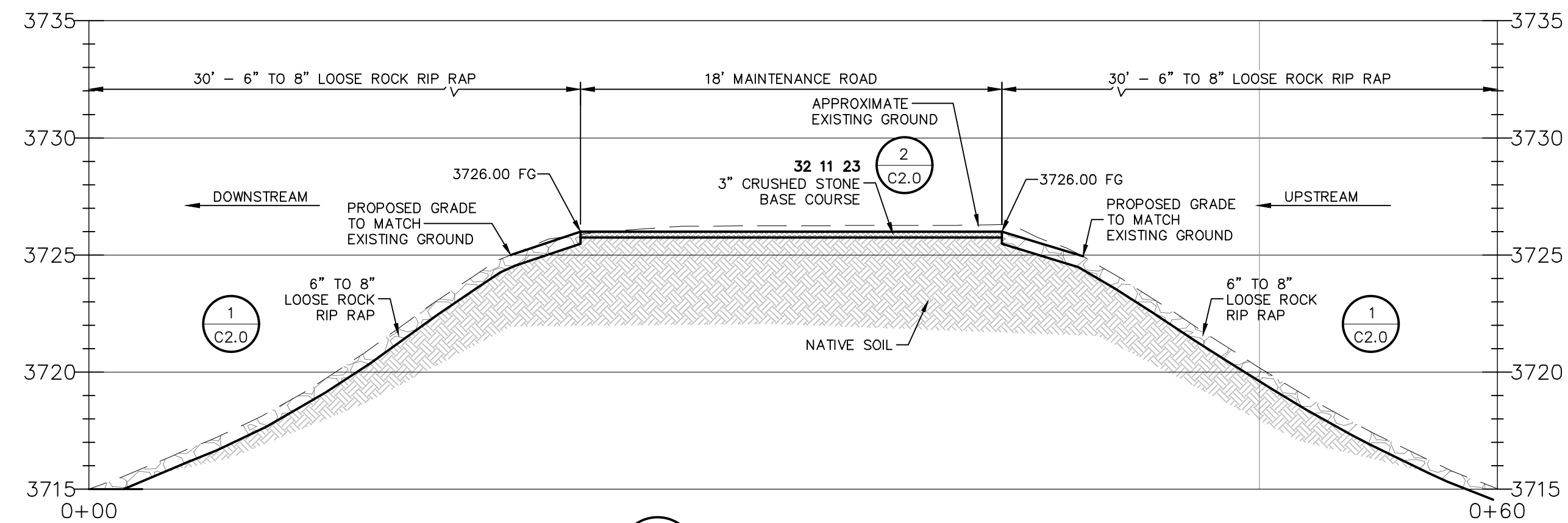


A
SECTION
SCALE: HORIZONTAL 1"=5'
VERTICAL 1"=5'

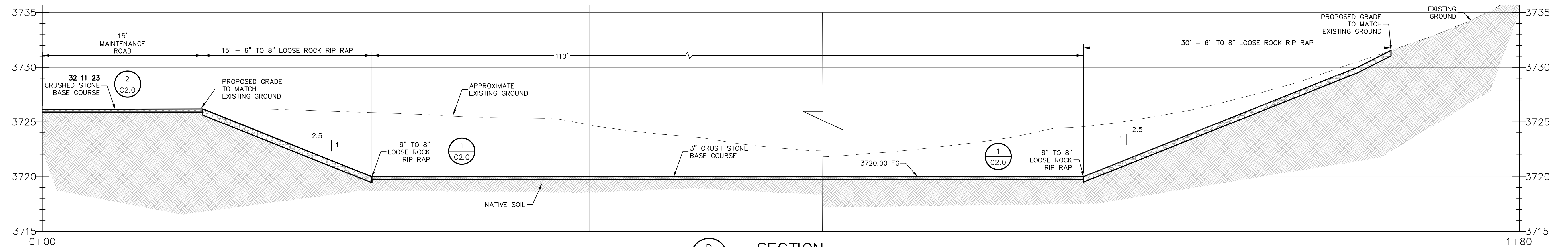


B
SECTION
SCALE: HORIZONTAL 1"=5'
VERTICAL 1"=5'

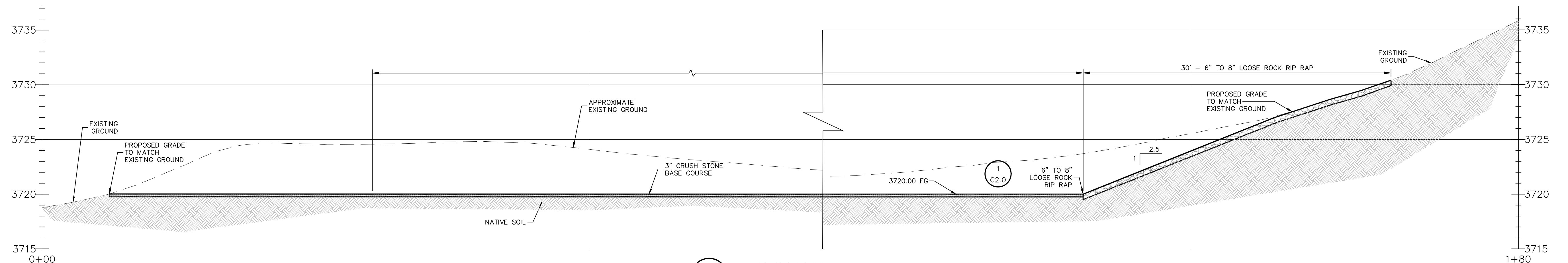
NOTE:
EROSION SCARPS AND HOLES ALONG THE EDGE OF THE CREST AND UPSTREAM SLOPE SHOULD BE FILLED PRIOR TO THE PLACEMENT OF LOOSE ROCK RIP RAP AND BASE COURSE.



C
SECTION
SCALE: HORIZONTAL 1"=5'
VERTICAL 1"=5'



D
SECTION
SCALE: HORIZONTAL 1"=5'
VERTICAL 1"=5'

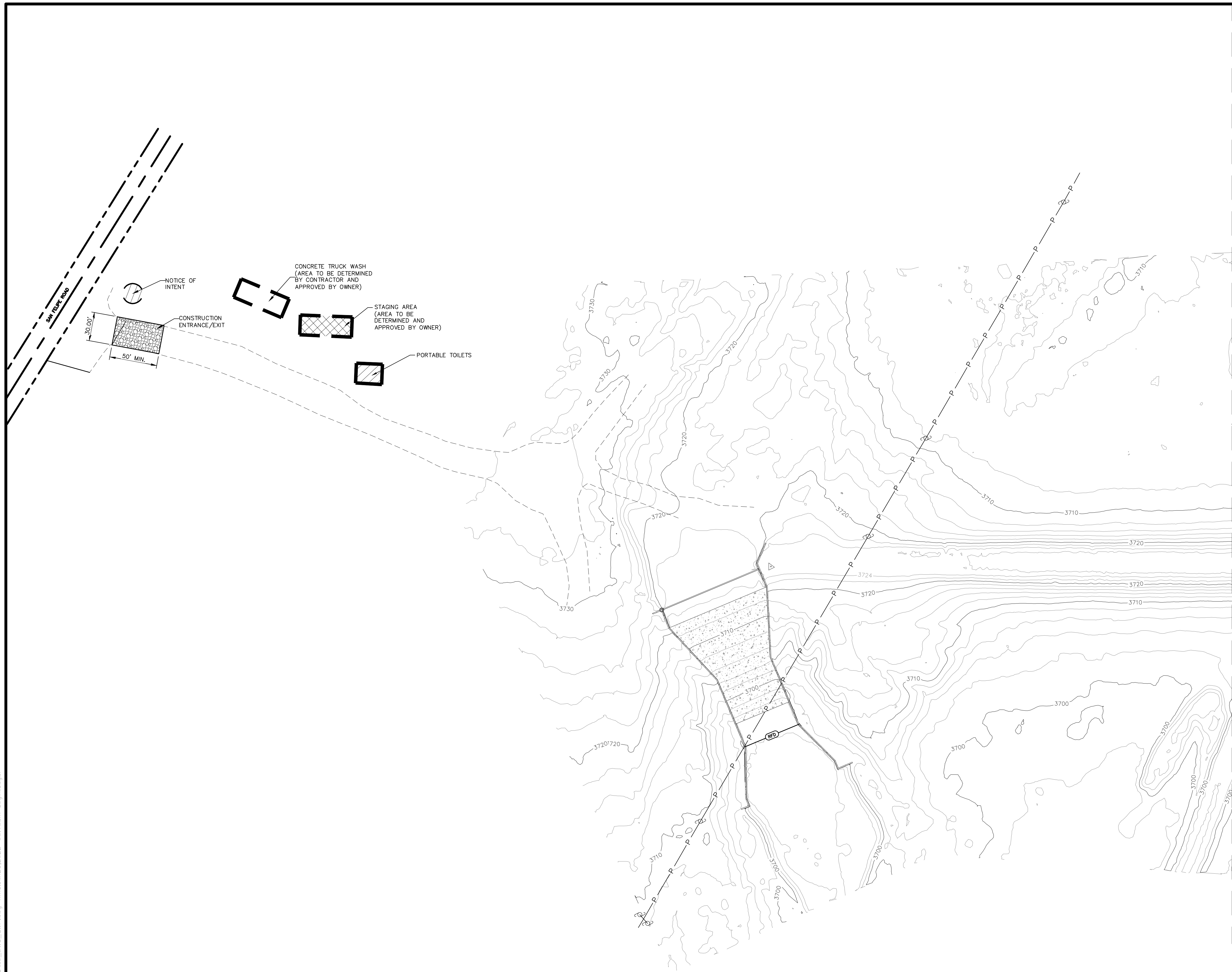


E
SECTION
SCALE: HORIZONTAL 1"=5'
VERTICAL 1"=5'

FA101211.DWG(07-10-21) - C5.0 - DWG - SECTIONS - Copyrighted Time June 20, 2022, 08:14:04m - Login: mofar

NO.	DATE	REVISION	REMARKS				
ENGINEER'S SEAL 							
ENGINEER'S NOTE 							
SCALE 							
P R O J E C T N A M E FABENS DAM IMPROVEMENTS (TX01958)							
EL PASO COUNTY, TEXAS							
SHEET TITLE GRADING SECTIONS							
SHEET C5.0							
1 OF 1							

F:\10121\DWG\10_10121 - C6.0_DWG_SWP.dwg Time: 6/20/2022 08:18am Login: edgar



FLOOD ZONE "A-1"
 AREAS OF MINIMAL FLOODING
 FIRM - FLOOD INSURANCE RATE MAP FOR EL PASO COUNTY, TX.
 PANEL 39 OF 52, COMMUNITY - PANEL NUMBER 480214 0039 B
 MAP REVISED: OCTOBER 15, 1982

LEGEND

- (RFD) ROCK FILTER DAM
- FLOW DIRECTION
- [Hatched Box] STABILIZED CONSTRUCTION ENTRANCE/ EXIT
- [Square with X] CONCRETE TRUCK WASH OUT
- [Circle with X] NOTICE OF INTENT
- [Square with Diagonal Lines] PORTABLE TOILETS
- [Square with Dotted Pattern] STAGING AREA

STAGING AREA
 CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN AREA TO BE USED FOR STAGING.

NOTES

1. STABILIZED CONSTRUCTION EXITS TO BE PLACED AT ACCESS POINTS COORDINATED WITH AND APPROVED BY THE STREET DEPARTMENT.
2. SW3P SIGN SHALL BE LOCATED WITHIN ON-SITE OFFICE.
3. CONTRACTOR TO POST T.C.E.Q. CONSTRUCTION SITE NOTICE ON THE JOB SITE.
4. SEDIMENT CONTROL FENCE AND ROCK FILTER DAMS TO BE LOCATED DOWNSTREAM ROW LINE OR AT PROPOSED GRADING LIMITS OR AS PER DIRECTION OF THE ENGINEER.
5. LOCATION OF CONSTRUCTION EXITS ARE PRELIMINARY AND ARE TO BE LOCATED AS PER DIRECTION OF THE ENGINEER.
6. CONTRACTOR SHALL PROTECT EXISTING TELECOMMUNICATION, GAS AND ELECTRICAL UTILITIES DURING TRENCH EXCAVATION ACTIVITIES.

NO.	DATE	REVISION	REMARKS

PLANNING ENGINEERING PROJECT MANAGEMENT
MCI Cardenas Inc.
 EL PASO SAN ANTONIO
 2506 E. Missouri Ave. El Paso, TX 79903 (915) 832-3094 FAX 835-9603
 Texas Board of Professional Engineers Registration No. F-000554

ENGINEER'S SEAL
 FERNANDO SANCHEZ
 132858
 7/1/2022

ENGINEER'S NOTE

SCALE
 Horiz. 1" = 50'
 Vert. N/A

Date: JULY 2022
 Design by: M.M./F.S.
 Drawn by: E.G./E.C.
 Chkd. by: F.S.
 Appd. by: M.M.
 JOB No. 19-12L

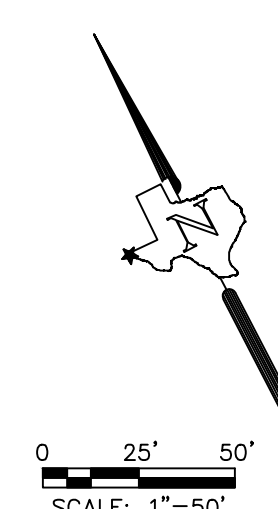
PROJECT NAME
FABENS DAM IMPROVEMENTS (TX01958)

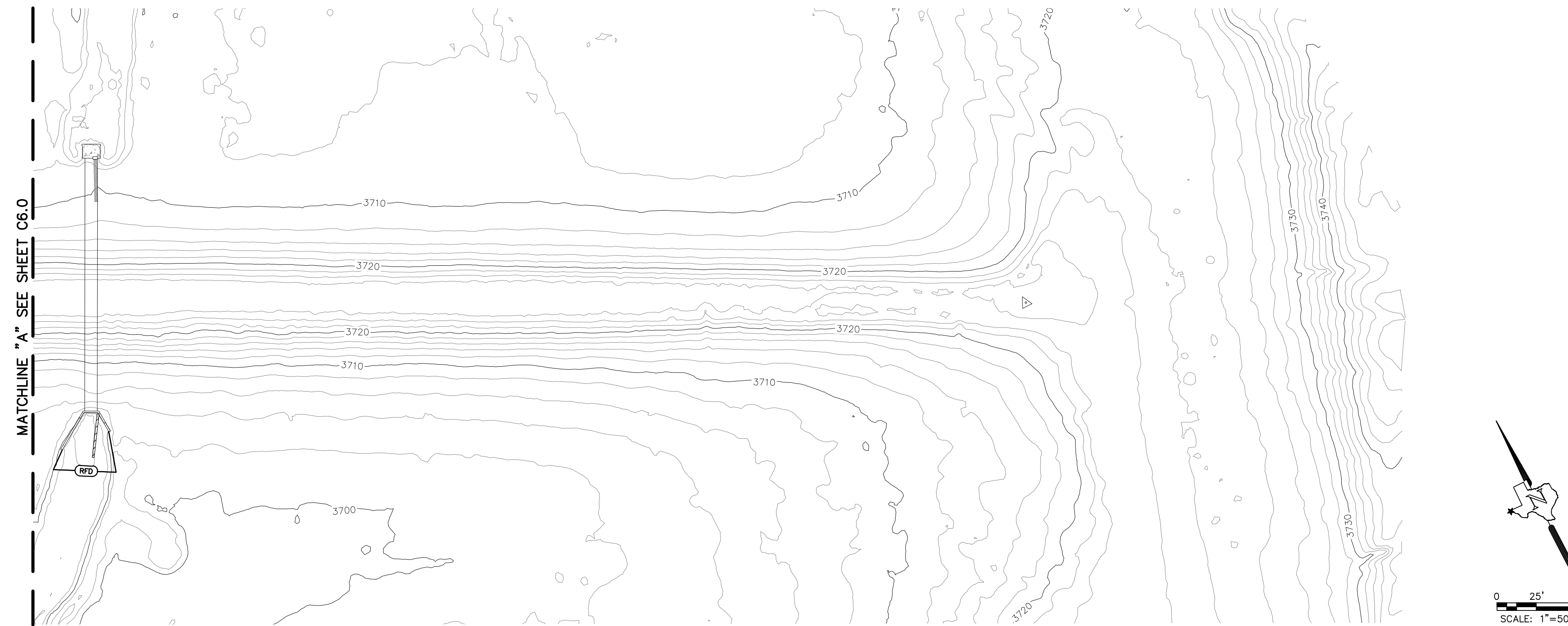
EL PASO COUNTY, TEXAS

SHEET TITLE
 SWPPP SITE PLAN

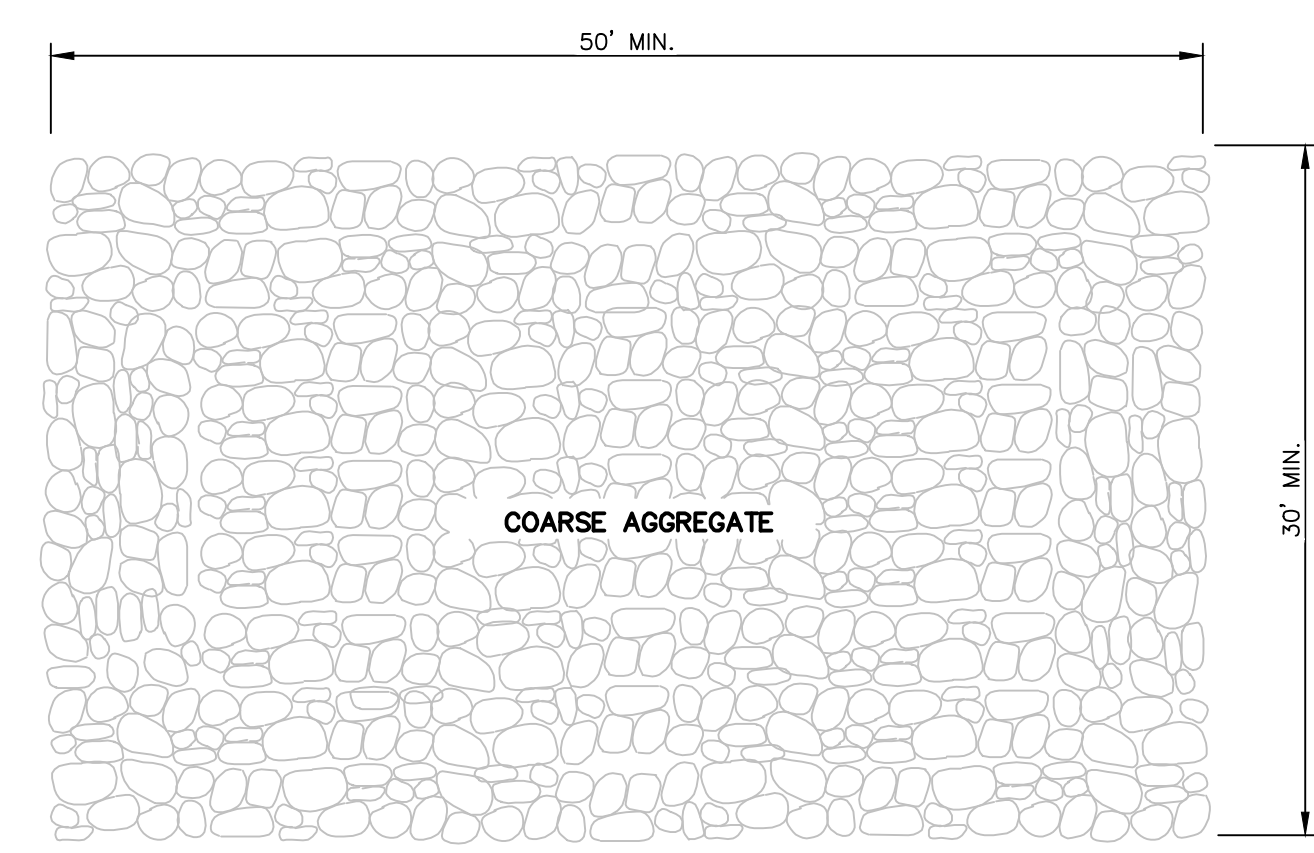
SHEET
 C6.0

1 OF 2

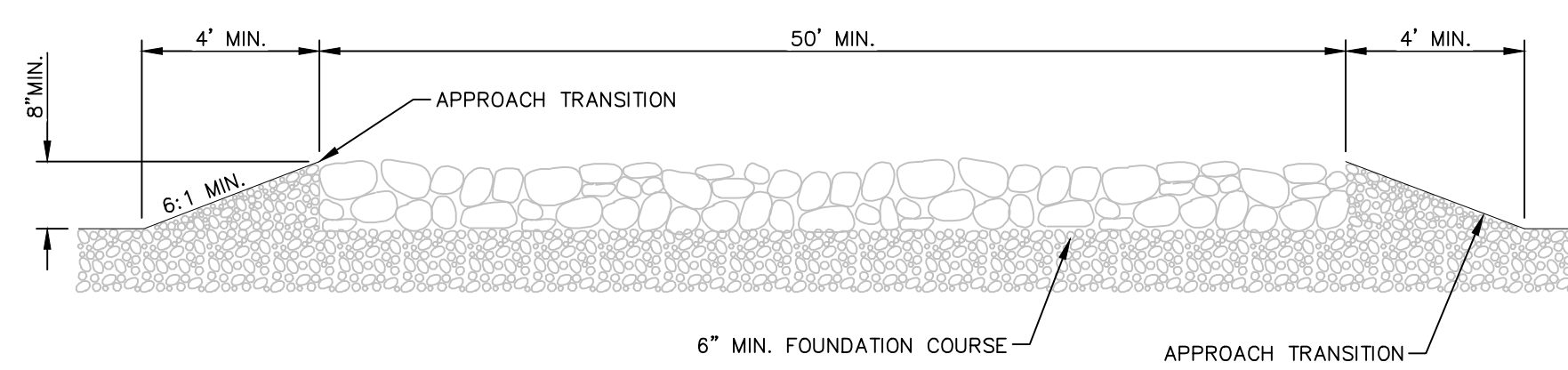




MATCHLINE "A" SEE SHEET C6.0



PLAN

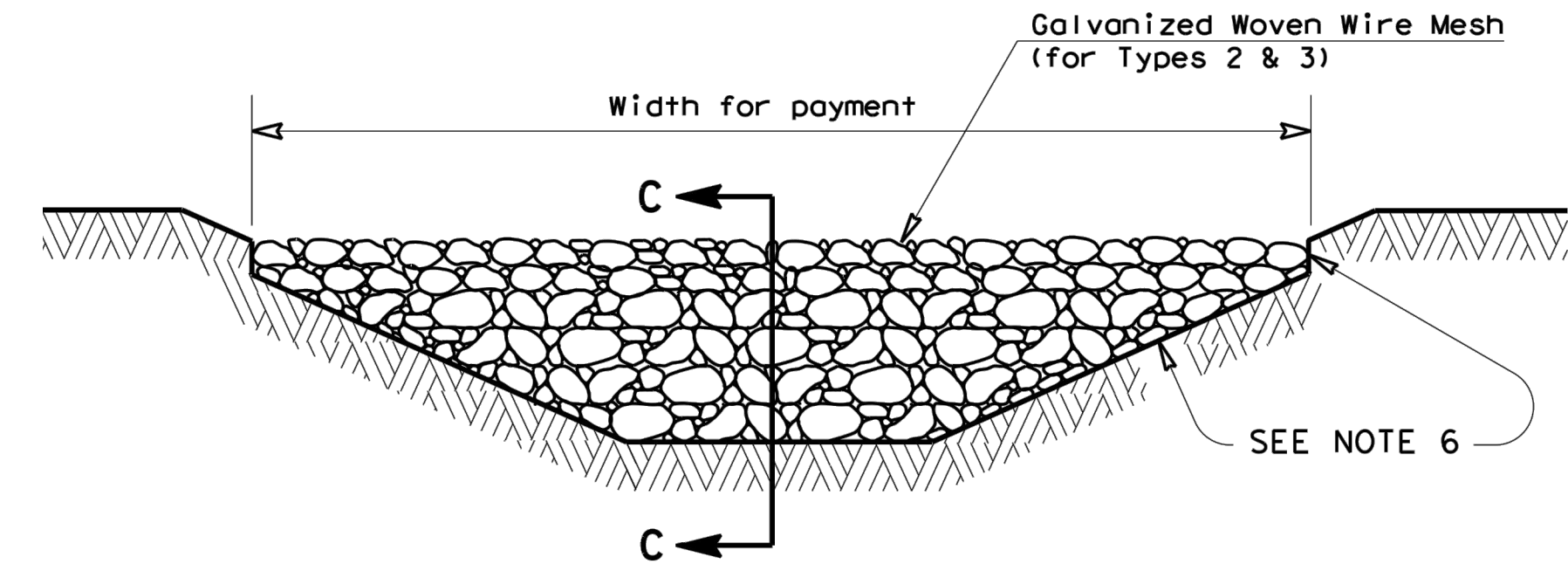


PROFILE

GENERAL NOTES:

1. THE LENGTH OF THE TYPE 1 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
2. THE COARSE AGGREGATE SHOULD BE OPEN GRADED WITH A SIZE OF 4" TO 8".
3. THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6:1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
4. THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.
5. THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

1 CONSTRUCTION EXIT (TYPE 1)
C6.1



FILTER DAM AT CHANNEL SECTIONS

RFD1 OR RFD2 OR RFD3

GENERAL NOTES

1. If shown on the plans or directed by the Engineer, filter dams should be placed near the toe of slopes where erosion is anticipated, upstream and/or downstream at drainage structures, and in roadway ditches and channels to collect sediment.
2. Materials (aggregate, wire mesh, sandbags, etc.) shall be as indicated by the specification for "Rock Filter Dams for Erosion and Sedimentation Control".
3. The rock filter dam dimensions shall be as indicated on the SW3P plans.
4. Side slopes should be 2:1 or flatter. Dams within the safety zone shall have sideslopes of 6:1 or flatter.
5. Maintain a minimum of 1' between top of rock filter dam weir and top of embankment for filter dams at sediment traps.
6. Filter dams should be embedded a minimum of 4" into existing ground.
7. The sediment trap for ponding of sediment laden runoff shall be of the dimensions shown on the plans.
8. Rock filter dam types 2 & 3 shall be secured with 20 gauge galvanized woven wire mesh with 1" diameter hexagonal openings. The aggregate shall be placed on the mesh to the height & slopes specified. The mesh shall be folded at the upstream side over the aggregate and tightly secured to itself on the downstream side using wire ties or hog rings. For in stream use, the mesh should be secured or staked to the stream bed prior to aggregate placement.
9. Sack Gabions should be staked down with 3/4" dia. rebar stakes, and have a double-twisted hexagonal weave with a nominal mesh opening of 2 1/2" x 3 1/4"
10. Flow outlet should be onto a stabilized area (vegetation, rock, etc.).
11. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

2 FILTER DAM
C6.1

FLOOD ZONE "A-1"

AREAS OF MINIMAL FLOODING
FIRM - FLOOD INSURANCE RATE MAP FOR EL PASO COUNTY, TX.
PANEL 39 OF 52, COMMUNITY - PANEL NUMBER 480214 0039 B
MAP REVISED: OCTOBER 15, 1982

LEGEND

	ROCK FILTER DAM
	FLOW DIRECTION
	STABILIZED CONSTRUCTION ENTRANCE/ EXIT
	CONCRETE TRUCK WASH OUT
	NOTICE OF INTENT
	PORTABLE TOILETS
	STAGING AREA

STAGING AREA

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN AREA TO BE USED FOR STAGING.

NOTES

1. STABILIZED CONSTRUCTION EXITS TO BE PLACED AT ACCESS POINTS COORDINATED WITH AND APPROVED BY THE STREET DEPARTMENT.
2. SW3P SIGN SHALL BE LOCATED WITHIN ON-SITE OFFICE.
3. CONTRACTOR TO POST T.C.E.Q. CONSTRUCTION SITE NOTICE ON THE JOB SITE.
4. SEDIMENT CONTROL FENCE AND ROCK FILTER DAMS TO BE LOCATED DOWNSTREAM ROW LINE OR AT PROPOSED GRADING LIMITS OR AS PER DIRECTION OF THE ENGINEER.
5. LOCATION OF CONSTRUCTION EXITS ARE PRELIMINARY AND ARE TO BE LOCATED AS PER DIRECTION OF THE ENGINEER.
6. CONTRACTOR SHALL PROTECT EXISTING TELECOMMUNICATION, GAS AND ELECTRICAL UTILITIES DURING TRENCH EXCAVATION ACTIVITIES.

NO.	DATE	REVISION	REMARKS

ENGINEER'S SEAL

7/1/2022

E.C. OF TEXAS
FERNANDO SANCHEZ
132858
PROF.

ENGINEER'S NOTE

SCALE

Horiz. 1" = 50'
Vert. N/A

Date: JULY 2022
Design by: M.M./F.S.
Drawn by: E.G./E.C.
Chkd. by: F.S.
Appd. by: M.M.
JOB No. 19-12L

P R O J E C T N A M E

FABENS DAM IMPROVEMENTS (TX01958)

EL PASO COUNTY, TEXAS

EL PASO COUNTY TEXAS

SHEET TITLE

SWPPP SITE PLAN

SHEET

C6.1

2 OF 2

FA 101213.DWG(1.0 - 10.121 - C6.0 - DWG - SWPPP - 10/2022 - 10.25am - Ldghm)dwg

SITE DESCRIPTION

PROJECT NAME AND LIMITS: FABENS DAM IMPROVEMENTS
THE PROJECT LIES NORTH OF THE TOWN OF FABENS AND JUST UPSTREAM OF INTERSTATE HIGHWAY 10
(IH-10). THE EXISTING DAM IS LOCATED AT THE BASE OF SAN FELIPE ARROYO.

PROJECT DESCRIPTION: THE PROPOSED IMPROVEMENTS CONSIST OF THE REPAIR OF EROSION AREAS ON BOTH
THE UPSTREAM AND DOWNSTREAM SIDE SLOPES, REMOVAL OF VEGETATION GROWTH, SILT REMOVAL, WIDENING
AND LOWERING THE EXISTING EARTHEN EMERGENCY AUXILIARY SPILLWAY ELEVATION. LOCATED ON THE
EASTSIDE OF THE DAM.

EXISTING CONDITIONS: THE FABENS DAM IS AN EXISTING INTERMEDIATE SIZED DAM WITH AN APPROXIMATE
HEIGHT OF 40- FEET. THE EARTHEN DAM WAS CONSTRUCTED IN 1938 AS A FLOOD CONTROL MEASURE FOR
EL PASO COUNTY. IT IS 1,200 FEET IN LENGTH WITH 2 TO 1 (H:V) SIDE SLOPES. THERE IS A 100-FOOT
WIDE CONCRETE SPILLWAY STRUCTURE ON THE WEST SIDE OF THE DAM AND A SECONDARY EARTHEN SPILLWAY
APPROXIMATELY 50- FEET WIDE TO THE EAST OF THE DAM. A SERVICE SPILLWAY LOCATED AT THE BOTTOM
CENTER OF THE DAM CONSISTS OF TWO (2) 6-FOOT BY 4-FOOT CONCRETE BOX CULVERTS WHICH DISCHARGES
RUNOFF THROUGH THE DAM STRUCTURE DOWNSTREAM.

MAJOR SOIL DISTURBING ACTIVITIES: MAJOR SOIL DISTURBING ACTIVITIES WILL CONSIST OF EXCAVATION FOR
THE NEW CONCRETE WALL FOOTING AND GRADING ACTIVITIES FOR THE EXISTING EARTHEN EMERGENCY
SPILLWAY EXPANSION.

TOTAL PROJECT AREA: 9.50± ACRES

TOTAL AREA TO BE DISTURBED: 5.00± ACRES

WEIGHTED RUNOFF COEFFICIENT
(AFTER CONSTRUCTION): 0.33

EXISTING CONDITION OF SOIL AND VEGETATIVE
COVER AND % OF EXISTING VEGETATIVE COVER: THE FABENS DAM LIES AT THE BASE OF THE SAN FELIPE ARROYO IN FAR EAST EL PASO COUNTY. THE SOILS
IN THIS AREA BELONG TO THE BLUEPOINT ASSOCIATION WHICH IS DEFINED AS DEEP, GENTLY SLOPING
TO STRONGLY SLOPING SOILS THAT HAVE LOAMY SAND UNDERLYING MATERIAL, JUST ABOVE THE RIO GRANDE
FLOOD PLAIN. THERE IS MINIMAL VISIBLE UNWANTED VEGETATION GROWTH. THE FABENS DAM IS MAINTAINED
ANNUALLY BY THE EL PASO COUNTY ROADS AND BRIDGE DEPARTMENT. ANNUAL MAINTENANCE INCLUDES:
VEGETATION REMOVAL, AND BLADING/GRADING OF BOTH THE UPSTREAM AND DOWNSTREAM NATURAL ARROYOS.

NAME OF RECEIVING WATERS: THE EXISTING DAM CAPTURES STORM WATER RUNOFF FROM THE MAIN STEM OF THE SAN FELIPE ARROYO
AND CONTRIBUTING TRIBUTARIES IMMEDIATELY UPSTREAM OF FABENS. RUNOFF DISCHARGING FROM THE DAM
RUNS DOWNSTREAM PAST IH-10 AND THROUGH THE TOWN OF FABENS VIA AN APPROXIMATE 15-FOOT WIDE
NATURAL ARROYO WHICH ULTIMATELY DISCHARGES INTO EXISTING IRRIGATION CANALS SOUTH OF THE TOWN.

EROSION AND SEDIMENT CONTROL

SOIL STABILIZATION PRACTICES

- TEMPORARY SEEDING
- PERMANENT PLANTING, SODDING, OR SEEDING
- MULCHING
- SOIL RETENTION BLANKET
- BUFFER ZONES
- PRESERVATION OF NATURAL RESOURCES

OTHER: _____

STRUCTURAL PRACTICES:

- SILT FENCES
- HAY BALES
- ROCK BERMS
- DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- DIVERSION DIKE AND SWALE COMBINATION
- PIPE SLOPE DRAINS
- CONCRETE FLUMES
- ROCK BEDDING AT CONSTRUCTION EXIT (TEMPORARY)
- TIMBER MATTING AT CONSTRUCTION EXIT
- CHANNEL LINERS
- SEDIMENT TRAPS
- SEDIMENT BASINS
- STORM INLET SEDIMENT TRAP
- STONE OUTLET STRUCTURES
- CURBS AND GUTTERS
- STORM DRAINS
- VELOCITY CONTROL DEVICES
- VEGETATED SWALES & NATURAL DEPRESSIONS

OTHER: _____

NARRATIVE – SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROLS (e.g. SILT FENCE AND/OR STABILIZED CONSTRUCTION ENTRANCE);
 2. CLEARING, DEMOLITION AND EXCAVATION OF PROJECT AREA;
 3. SUBGRADE PREPARATION, CONSTRUCTION OF PROPOSED IMPROVEMENTS;
 4. WHEN ALL CONSTRUCTION ACTIVITY RELATED IN DEVELOPMENT OF THE SITE IS COMPLETE, REMOVE TEMPORARY CONTROLS IN #1 ABOVE
- BEGIN DATE: AUGUST 2022 (APPROXIMATE)**
END DATE: JANUARY 2023 (APPROXIMATE)

BEST MANAGEMENT PRACTICES CONTROLS

- I. **WASTE MATERIALS:**
ALL WASTE MATERIALS, INCLUDING CONSTRUCTION DEBRIS, SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. NO CONSTRUCTION WASTE MATERIAL SHALL BE BURIED ON SITE. THE TRANSIT DUMPSTER SHALL COMPLY WITH ORDINANCE 18.52.010 (ENCLOSURE AND REMOVAL OF WASTE MATERIALS DURING CONSTRUCTION). THE DUMPSTER SHALL BE EMPTIED AS NECESSARY OR AS REQUIRED BY ORDINANCE 9.04 (SOLID WASTE MANAGEMENT) AND THE TRASH SHALL BE HAULED TO A LICENSED LANDFILL.
- II. **HAZARDOUS WASTE:**
AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES SHALL BE CONSIDERED HAZARDOUS: PAINT, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SPILL STABILIZATION, CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION AND CONTACT THE FIRE DEPT. AND TNRC.
- III. **SANITARY WASTE:**
ALL SANITARY WASTE SHALL BE COLLECTED FROM THE CONSTRUCTION PORTABLE UNITS AS NECESSARY OR AS REQUIRED, CHAPTER 18.08 (BUILDING CODE), BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- IV. **SPILL PREVENTION:**
THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURES OF MATERIALS TO STORM WATER RUNOFF.
- V. **GOOD HOUSEKEEPING:**
 - A. STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB
 - B. NEATLY STORE MATERIALS ON-SITE IN AN ORDERLY MANNER
 - C. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER
 - D. DO NOT MIX SUBSTANCES WITH ONE ANOTHER, UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER
 - E. USE ENTIRE CONTENTS OF A PRODUCT BEFORE DISPOSING THE CONTAINER
 - F. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL

VI. **HAZARDOUS PRODUCTS:**

- PRACTICES USED TO REDUCE RISKS:
- A. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER IF AT ALL POSSIBLE
 - B. RETAIN ORIGINAL LABELS, PRODUCT INFORMATION AND MATERIAL SAFETY DATA SHEETS (MSDS)
 - C. DISPOSE SURPLUS PRODUCT IN ACCORDANCE WITH MANUFACTURER'S OR LOCAL & STATE RECOMMENDED METHODS

VII. **PETROLEUM PRODUCTS:**

ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.

VIII. **SPILL CONTROL PRACTICES:**

- A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES;
- B. MATERIALS AND EQUIPMENT NECESSARY FOR CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE;
- C. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY
- D. SPILL AREA SHALL BE WELL VENTILATED AND APPROPRIATE CLOTHING WILL BE WORN;
- E. ANY SPILL SHALL BE REPORTED TO THE APPROPRIATE GOVERNMENTAL AGENCY
- F. MEASURES SHALL BE TAKEN TO PREVENT A SPILL FROM REOCCURRING

IX. **MAINTENANCE AND INSPECTION PROCEDURES:**

ALL POLLUTION PREVENTION MEASURES SHALL BE INSPECTED AT LEAST ONCE A MONTH OR WITHIN 24-HOURS PRIOR TO ANTICIPATED STORM EVENT AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR MORE. INSPECTION IN FINAL STABILIZED AREAS OR DURING ARID PERIODS WILL BE CONDUCTED MONTHLY. BEST MANAGEMENT PRACTICES AND POLLUTION CONTROL PROCEDURES SHALL BE INSPECTED FOR ADEQUACY.

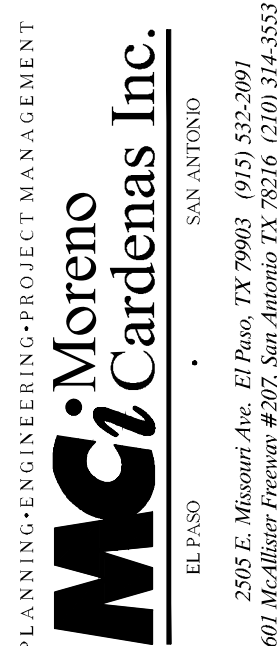


X. **REMARKS:**

DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, WATERBODY OR STREAMBED. CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEANED AS SOON AS PRACTICABLE OF TEMPORARY EMBANKMENT, TEMPORARY BRIDGES, MATTING, FALSEWORK, PILING DEBRIS OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT A PART OF THE FINISHED WORK.

XI. **OFFSITE VEHICLE TRACKING:**

IN ADDITION TO THE STABILIZED CONSTRUCTION ENTRANCES, THE FOLLOWING MEASURES SHALL BE OBSERVED DURING CONSTRUCTION:

- HAUL ROADS SHALL BE DAMPENED FOR DUST CONTROL
- LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPULIN
- EXCESS DIRT ON ROAD SHALL BE REMOVED IMMEDIATELY
- STABILIZED CONSTRUCTION ENTRANCE
- OTHER: _____

NO.	DATE	REVISION	REMARKS						
									
PLANNING-ENGINEERING-PROJECT MANAGEMENT MCI Moreno Cardenas Inc. EL PASO SAN ANTONIO 2506 E. Monoran Ave. El Paso, TX 79903 (915) 832-3091 9601 Texas Blvd of Professional Engineers Registration No. F-000554				ENGINEER'S SEAL 7/1/2022 E.C.P. TEXAS HERNANDO SANCHEZ 132618 PROFESSIONAL ENGINEER CIVIL STATE OF TEXAS				P R O J E C T N A M E FABENS DAM IMPROVEMENTS (TX01958) EL PASO COUNTY, TEXAS	
ENGINEER'S NOTE				SCALE Horiz. _____ Vert. _____ Date: JULY 2022 Design by M.M./F.S. Drawn by E.C./E.C. Chkd. by F.S. Appl. by M.M. JOB No. 19-12L				SHEET TITLE SWPPP GENERAL NOTES	
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