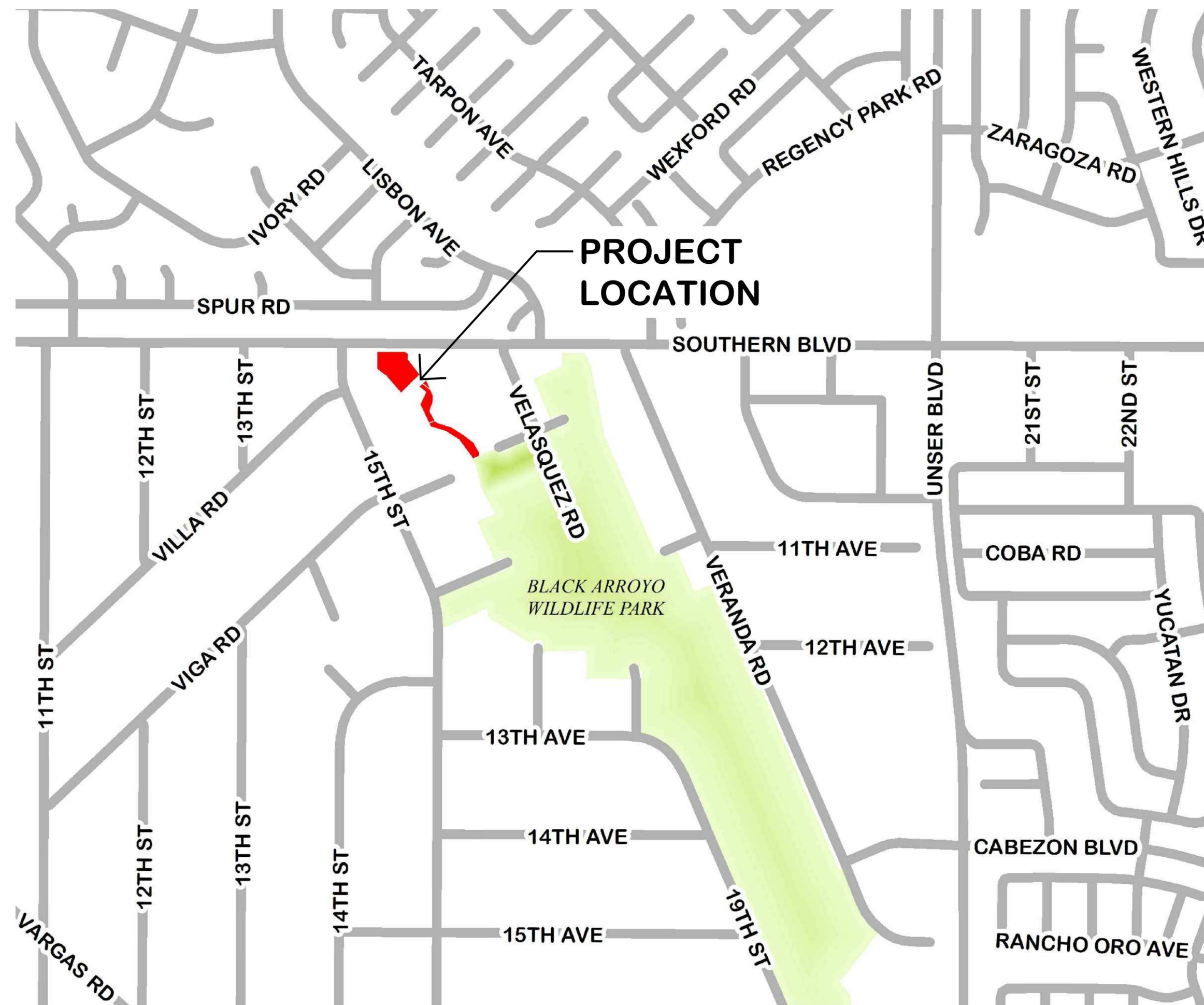


# SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY

# LOWER IVORY CHANNEL IMPROVEMENTS

## SSCAFCA Project No. BL\_P0014-02 BLACK ARROYO WATERSHED



**VICINITY MAP**

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### APPROVALS

SSCAFCA: David Gatterman Digitally signed by David Gatterman  
DN: cn=David Gatterman, o=SSCAFCA, ou=Field  
Operations, email=dgatterman@sscafca.com, c=US  
Date: 2022.08.24 07:56:19 -0500 EXECUTIVE ENGINEER DATE: 8/24/2022



**Southern Sandoval  
County  
Arroyo Flood Control  
Authority**

1041 Commercial Dr. S.E.  
Rio Rancho, New Mexico 87124  
505-892-RAIN (7246)  
505-892-7241 (Fax)  
[www.sscafca.com](http://www.sscafca.com)



LOWER IVORY CHANNEL  
IMPROVEMENTS

COVER SHEET

REVISIONS & CHANGE NOTICES		
MARK	DESCRIPTION	DATE

PROJECT NO: BL\_P0014-02  
DESIGNED BY: JN  
DRAWN BY: KLF  
CHECKED BY: AES  
DATE: 8/23/2022



GENERAL NOTES

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH 1) THE PROJECT CONSTRUCTION PLANS, 2) THE PROJECT SPECIFICATIONS, AND 3) NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, APWA NM CHARTER, LATEST EDITION, IN THAT ORDER OF PRECEDENCE AT THE TIME OF CONSTRUCTION BID.
- THE CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- NO MODIFICATIONS TO THESE PLANS SHALL BE MADE WITHOUT THE WRITTEN CONSENT OF THE OWNER, ENGINEER AND ALL APPROVAL SIGNATORIES. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION METHODS OR TECHNIQUES OR FOR THE PROSECUTION OF THE WORK AS SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS OR OTHER PERSONS PERFORMING ANY WORK, AS SHOWN IN THE PROJECT CONTRACT DOCUMENTS.
- UNLESS OTHERWISE PROVIDED AS PART OF THE CONSTRUCTION PLANS, A COMPLETE TRAFFIC CONTROL PLAN SHALL BE PREPARED BY THE CONTRACTOR WHEN ANY PORTION OF THE WORK IMPACTS THE TRAVELING PUBLIC, EITHER VEHICULAR OR PEDESTRIAN. ALL CONSTRUCTION SIGNING, BARRICADING AND CHANNELIZATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD), LATEST EDITION. THE PLAN SHALL BE SUBMITTED TO THE APPROPRIATE JURISDICTIONAL AUTHORITY FOR APPROVAL AT LEAST 7 DAYS PRIOR TO THE DESIRED START OF CONSTRUCTION. THE CONTRACTOR SHALL NOT IMPLEMENT THE TRAFFIC CONTROL PLAN UNTIL APPROVAL OF THE PLAN HAS BEEN RECEIVED.
- THE CONTRACTOR SHALL DESIGNATE AT LEAST ONE EMERGENCY CONTACT PERSON, AND SHALL PROVIDE TELEPHONE NUMBERS WHERE THIS PERSON CAN BE CONTACTED AT ANY TIME. THIS INFORMATION SHALL BE PROVIDED TO THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL JURISDICTIONAL AUTHORITIES PRIOR TO START OF CONSTRUCTION.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY, HEALTH, AND ENVIRONMENTAL PROTECTION.
- EXISTING SITE IMPROVEMENTS WHICH ARE DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. THE WORK SHALL BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION OF THE REPAIRS. REPAIRS MUST BE ACCEPTED BY THE OWNER PRIOR TO FINAL PAYMENT.
- THE CONTRACTOR SHALL ONLY UTILIZE THE DESIGNATED STAGING AREAS FOR STORAGE OF ALL EQUIPMENT AND MATERIALS. THE OWNER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR CONTRACTOR'S EQUIPMENT AND MATERIAL IN THE STAGING AREA. SECURITY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. IF NO STAGING AREA IS DESIGNATED ON THESE PLANS, AN OFF-SITE STAGING AREA SHALL BE PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, OR THE CONTRACTOR MAY NEGOTIATE WITH THE OWNER TO USE AN ON-SITE AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING, IN ADVANCE OF HIS/HER CONSTRUCTION OPERATIONS, IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC., ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION IS EVIDENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY OWNER TO REMOVE OR SUPPORT THE UTILITY OBSTRUCTION. ANY COSTS ASSOCIATED WITH THIS EFFORT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- FACILITIES WHICH ARE NOT SPECIFICALLY LOCATED WITH ACTUAL VERTICAL AND HORIZONTAL CONTROLS ON THE CONSTRUCTION DOCUMENTS, ARE SHOWN APPROXIMATE AND IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION PROVIDED BY VARIOUS OWNERS OF THE FACILITIES, AND SUPPLEMENTED BY VISUAL SURFACE INFORMATION WHERE APPROPRIATE. ACCURACY, LOCATION, AND COMPLETENESS OF THIS INFORMATION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHOULD BE VERIFIED, BY ANY MEANS NECESSARY, PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE OWNER AT 505-892-7246 IMMEDIATELY.
- IT IS MANDATORY THAT A PRE-CONSTRUCTION MEETING BE HELD PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE OWNER AT 505-892-7246 TO DETERMINE THE TIME AND LOCATION OF THE PRE-CONSTRUCTION MEETING.
- AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SCHEDULE TO THE OWNER.
- ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE OWNER AND/OR ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS FOR CLEANING TRUCKS AND/OR OTHER EQUIPMENT OF MUD PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN STREETS AND TAKE WHATEVER MEASURES ARE NECESSARY TO ENSURE THAT ALL ROADS ARE MAINTAINED IN A CLEAN, MUD AND DUST-FREE CONDITION AT ALL TIMES.
- THE CONTRACTOR SHALL CONTACT NEW MEXICO ONE CALL AT 811 OR 1-800-321-2537, FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION FOR UTILITY SPOTS IN ACCORDANCE WITH APPLICABLE STATE LAW.
- CONTRACTOR WILL NOTIFY THE OWNER AT 505-892-7246 A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL CONFINED HIS WORK TO WITHIN THE CONSTRUCTION LIMITS AND/OR PUBLIC RIGHTS-OF-WAY TO PRESERVE EXISTING VEGETATION, LANDSCAPING, AND PRIVATE PROPERTY. APPROVAL OF THESE PLANS DOES NOT GIVE OR IMPLY ANY PERMISSION TO TRESPASS OR WORK ON PRIVATE PROPERTY. PERMISSION MUST BE GRANTED IN WRITING BY THE OWNER OF THAT PROPERTY.
- IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO KEEP THE JOB SITE FREE FROM TRASH ON A DAILY BASIS, AND ALL MATERIALS WILL BE NEATLY ORGANIZED. TRASH AND/OR NON-USED MATERIALS SHALL NOT BE BURIED ON-SITE.
- CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES SO AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.

GENERAL NOTES (CONTINUED)

- CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING UTILIZING APPROVED CONSTRUCTION PLANS. THE APPROPRIATE RIGHT-OF-WAY MAPS AND RECORDED PLATS, EACH REVISION TO THE PLANS SHALL BE RECORDED IN THE PLAN REVISION BLOCK. PLANS SHALL INCLUDE LOCATION MAP WITH LEGAL DESCRIPTION AND LOCATION GRID.
- THE CONTRACTOR SHALL MAINTAIN AN UP TO DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THE FINAL AS-BUILT PLANS, REFLECTING ANY AND ALL CHANGES TO THE ORIGINAL PLAN, SHALL BE SUBMITTED TO THE OWNER PRIOR TO FINAL PAYMENT.
- THE CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION ACTIVITIES, PERMITTING, AND SUBMITTALS ARE IN ACCORDANCE WITH THE SSCAFCA AND/OR JURISDICTIONAL AUTHORITY ORDINANCES.
- NO WORK SHALL BE PERFORMED IN A FEMA FLOODPLAIN WITHOUT WRITTEN AUTHORIZATION FROM THE LOCAL FLOODPLAIN MANAGER.
- CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF HIS WORK FROM STORMWATER FLOWS AS OUTLINED IN THE SUPPLEMENTAL TECHNICAL SPECIFICATIONS PROVIDED IN THE CONTRACT DOCUMENTS.
- UNLESS OTHERWISE SPECIFIED, ALL CONCRETE SHALL BE A MINIMUM OF 3,000 PSI.
- IF APPLICABLE, THE CONTRACTOR SHALL COMPLY WITH ALL CONSTRUCTION RELATED REQUIREMENTS OF THE PROJECT'S CORP OF ENGINEERS 404 PERMIT. COPIES OF THE PERMIT TERMS MAY BE OBTAINED FROM THE OWNER.

EROSION CONTROL / ENVIRONMENTAL PROTECTION / STORMWATER POLLUTION PREVENTION PLAN

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULFILLING ALL NECESSARY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, PREPARING A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), OBTAINING AN NPDES PERMIT PRIOR TO CONSTRUCTION, FILLING OUT THE NOTICE OF INTENT (NOI) APPLICATION, AND FILLING OUT THE NOTICE OF TERMINATION (NOT) APPLICATION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE IMPLEMENTATION OF AND INSPECTION REPORTS FOR THE SWPPP.
- THE CONTRACTOR SHALL SUBMIT THE SWPPP WITH THE PROPOSED CONSTRUCTION STAGING AREA AND TEMPORARY SANITARY FACILITIES CLEARLY SHOWN. ANY CHECK DAMS, SILT FENCES, OR OTHER BEST MANAGEMENT PRACTICES (BMPs) THAT ARE REQUIRED IN THE APPROVED SWPPP SHALL BE INCLUDED IN, AND ARE INCIDENTAL TO, THE NPDES/SWPPP BID ITEM.
- THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED SWPPP ON-SITE AT ALL TIMES AND SHALL COMPLY WITH THE REQUIREMENTS INDICATED ON THAT PLAN AND SHALL PROVIDE AN ADDITIONAL FULLY EXECUTED COPY TO THE OWNER.
- THE CONTRACTOR SHALL EITHER PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR INSTALL BMPs IDENTIFIED IN THE APPROVED SWPPP TO PREVENT DISCHARGE OF EXCAVATED MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY DURING A RAIN OR WIND EVENT.
- THE CONTRACTOR SHALL IMPLEMENT THE APPROVED SWPPP, IF APPLICABLE, AND ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
- THE CONTRACTOR SHALL MITIGATE EROSION OF TEMPORARY OR PERMANENT DIRT SWALES BY INSTALLING BMPs IDENTIFIED IN THE APPROVED SWPPP IN THE SWALES PERPENDICULAR TO THE DIRECTION OF FLOW, AND AT INTERVALS AS SPECIFIED IN THE SWPPP.
- CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED. WATERING, AS REQUIRED FOR CONSTRUCTION AND DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFOR.
- ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY AN IMPERVIOUS SURFACE SHALL BE REVEGETATED WITH NATIVE GRASS SEEDING. WHEN CONSTRUCTION ACTIVITIES CEASE AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME WITHIN 14 DAYS, STABILIZATION MEASURES MUST BE INITIATED.
- ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNATED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.) GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC. SHALL BE APPROPRIATELY DISPOSED OF OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMITS REQUIRED TO HAUL OR DISPOSE OF WASTE PRODUCTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINTS, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE TEAM AT 505-827-9329.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.
- WHERE STORM INLETS ARE SUSCEPTIBLE TO INFLOW OF SILT OR DEBRIS FROM CONSTRUCTION ACTIVITIES, PROTECTION SHALL BE PROVIDED ON THEIR UPSTREAM SIDE UTILIZING BMPs IDENTIFIED IN THE APPROVED SWPPP.

SOILS

- UNLESS OTHERWISE SPECIFIED SUBGRADE SOILS AND STRUCTURAL FILL MATERIALS SHALL BE COMPACTED TO THE FOLLOWING PERCENTAGES OF THE ASTM D-1567 MAXIMUM DENSITY.

MATERIALS	PERCENT (%) COMPACTION
STRUCTURAL FILL IN THE BUILDING AREA	95
SUB BASE FOR SLAB SUPPORT	95
MISCELLANEOUS BACKFILL BELOW STRUCTURAL FILL OR ROAD	95
MISCELLANEOUS BACKFILL BELOW UNPAVED, NON-BUILDING AREAS	90
ROAD SUB GRADE	95
SIDEWALK / TRAIL SUB GRADE	95
CURB AND GUTTER SUBGRADE	95
- AT ALL FINAL GRADES, WITH THE EXCEPTION OF AREAS WITH IMPROVEMENTS, SHALL BE DISKED OR RIPPED TO A DEPTH OF 12" TO FACILITATE PLANT GROWTH.

UTILITY COMPANY CONTACTS

**CITY OF RIO RANCHO UTILITIES DEPARTMENT**  
 STEVE GALLEGOS  
 DEPUTY DIRECTOR OF UTILITIES  
 3200 CIVIC CENTER CIRCLE NE, SUITE 250  
 RIO RANCHO, NEW MEXICO 87124 896-8715  
 SGALLEGOS@RN.M.GOV

**PNM-ELECTRIC**  
 PAUL DUNAGAN  
 ENGINEERING REPRESENTATIVE  
 4201 EDITH BLVD, NEW MS-ES10  
 ALBUQUERQUE, NEW MEXICO 87107  
 (505) 241-3629

**CENTURY LINK**  
 DON DAVALOS ENGINEER II  
 4301 BOGAN AVE NE  
 ALBUQUERQUE, NEW MEXICO 87109  
 (505) 245-8967

**CENTURY LINK NATIONAL**  
 LARRY KELLY  
 SENIOR OPERATIONS TECHNICIAN  
 400 TIJERAS AVE NW SUITE 570  
 ALBUQUERQUE, NEW MEXICO 87102  
 (505) 246-0501

**COMCAST CABLE**  
 MIKE MORTUS  
 PLANNING AND DESIGN SUPERVISOR  
 8440 WASHINGTON ST NE  
 ALBUQUERQUE, NEW MEXICO 87107  
 (505) 271-3644  
 mike\_mortus@cable.comcast.com

**AT&T**  
 SEAN KELLY  
 GNFO - MANAGER - NEW MEXICO  
 111 THIRD ST NW  
 ALBUQUERQUE, NEW MEXICO 87102  
 (505) 217-0038

**WINDSTREAM**  
 RICHARD MUELLER  
 SUPERVISOR AT OUTSIDE TECHS  
 505 MARQUETTE AVE NW SUITE 1600  
 ALBUQUERQUE, NEW MEXICO 87102

**LEVEL 3 COMMUNICATIONS LLC**  
 ALAN SMITH  
 RESOURCE SUPERVISOR  
 1025 ELDORADO BLVD  
 BROOMFIELD, COLORADO 80021  
 (918) 547-0050  
 centurylinknationalosp@centurylink.com

**VERIZON/MCI WORLDCOM**  
 MATT STURGIS  
 ADVANCED TELECOM TECHNICIAN  
 6001 MIDWAY PARK BLVD NE  
 ALBUQUERQUE, NEW MEXICO 87109  
 (505) 348-8613

**NM GAS COMPANY**  
 CHRIS MONETTE  
 AREA MANGER  
 RUBEN SOSA SUPERVISOR  
 7120 WYOMING BLVD NE #20  
 ALBUQUERQUE, NEW MEXICO 87109  
 (505) 697-3188

ABBREVIATIONS

AP	ANALYSIS POINT
@	AT
BC	BEGIN CURVE
BCR	BEGIN CURB RETURN
BK	BOOK
BLDG	BUILDING
BM	BENCH MARK
BOA	BEGINNING OF ALIGNMENT
BOP	BEGINNING OF PROJECT
BVC	BEGIN VERTICAL CURVE
BW	BASE OF WALL
CATV	CABLE TV LINE
CB	CATCH BASIN
CF	CURB FACE
CFS	CUBIC FEET PER SECOND
CG	CURB AND GUTTER
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CONC	CONCRETE
CORR	CITY OF RIO RANCHO
CY	CUBIC YARDS
DUE	DRAINAGE UTILITY EASEMENT
DI	DROP INLET
DIA	DIAMETER
Δ	DELTA
EA	EACH
EC	END CURVE
ECR	END CURB RETURN
ELEV	ELEVATION
EOA	END OF ALIGNMENT
EOP	END OF PROJECT
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EST	ESTIMATE
EVC	END VERTICAL CURVE
EW	EACH WAY
EXIST	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FOC	FACE OF CURB
FP	FINISHED PAD
FPS	FEET PER SECOND
G	GAS
GM	GAS METER
GV	GATE VALVE
HORIZ	HORIZONTAL
INT	INTERSECTION
INV	INVERT
INV EL	INVERT ELEVATION
LF	LINEAR FEET
LP	LIGHT POLE
LT	LEFT
MH	MANHOLE
MID	MID-POINT
NG	NATURAL GROUND
OC	ON CENTER
OHE	OVER HEAD ELECTRIC
PB	PULL BOX
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PG	PAGE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
Q	100 YEAR PEAK DISCHARGE QUANTITY
QTY	QUANTITY
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REF	REFERENCE
RP	RADIUS POINT
RT	RIGHT
R/W, ROW	RIGHT-OF-WAY
S	SLOPE
SAS, SS	SANITARY SEWER LINE
SD	STORM DRAIN
SF	SQUARE FEET
STA	STATION
STD	STANDARD
SW	SIDEWALK
SY	SQUARE YARDS
T	TANGENT
TA	TOP OF ASPHALT
TAC	TOP OF ASPHALT CURB
TBC	TOP BACK OF CURB
TC	TOP OF CONCRETE
TEL	TELEPHONE LINE, RISER OR BOX
TP	TOP OF PIPE
TRANS	TRANSVERSE
TW	TOP OF WALL
TYP	TYPICAL
UE	UNDERGROUND ELECTRICAL LINE
UT	UNDERGROUND TELEPHONE LINE
V	VELOCITY
VC	VERTICAL CURVE
VERT	VERTICAL
VPI	VERTICAL POINT OF INTERSECTION
W	WATER LINE
WM	WATER METER
WQ	WATER QUALITY
WSEL	WATER SURFACE ELEVATION
WW	WATER VALVE



**Southern Sandoval County Arroyo Flood Control Authority**  
 1041 Commercial Dr. S.E.  
 Rio Rancho, New Mexico 87124  
 505-892-RAIN (7246)  
 505-892-7241 (Fax)  
[www.sscafca.com](http://www.sscafca.com)



LOWER IVORY CHANNEL IMPROVEMENTS

GENERAL NOTES

MARK	REVISIONS & CHANGE NOTICES	
	DESCRIPTION	DATE

PROJECT NO: BL\_P0014-02  
 DESIGNED BY: JN  
 DRAWN BY: ALE  
 CHECKED BY: AES  
 DATE: 8/15/2022

# TOPOGRAPHIC SURVEY

## SURVEY LEGAL DESCRIPTION:

A portion of land located within the City of Rio Rancho, Sandoval County, New Mexico, being just south of Southern Boulevard, S.E., and west of Velasquez Road, S.E., and more particularly identified as the Ivory Channel.

## FLOOD INFORMATION:

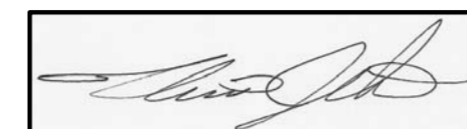
THIS PROPERTY DOES LIE IN AN AREA COVERED BY A FORMAL F.E.M.A. FLOOD STUDY. PROPERTY LIES WITHIN ZONE "AE" (BASE ELEVATIONS 5395.05 TO 5465.25) AND IS SUBJECT TO 100-YEAR FLOOD HAZARDS. REFERENCE: FLOOD INSURANCE RATE MAP, SANDOVAL COUNTY, NEW MEXICO PANEL 350146 2102 D; EFFECTIVE DATE: MARCH 18, 2008.

△ POINT NUMBER  
ELEVATION  
DESCRIPTION  
NORTHING  
EASTING

All control points shown hereon are in modified ground State Plane Coordinates (NAD 83 / NAVD 88), based upon an OPUS solution derived from static GPS observations. To translate any given point to grid coordinates, apply a scale factor of 0.99966456, centered at CP-1.

## SURVEYOR'S CERTIFICATION

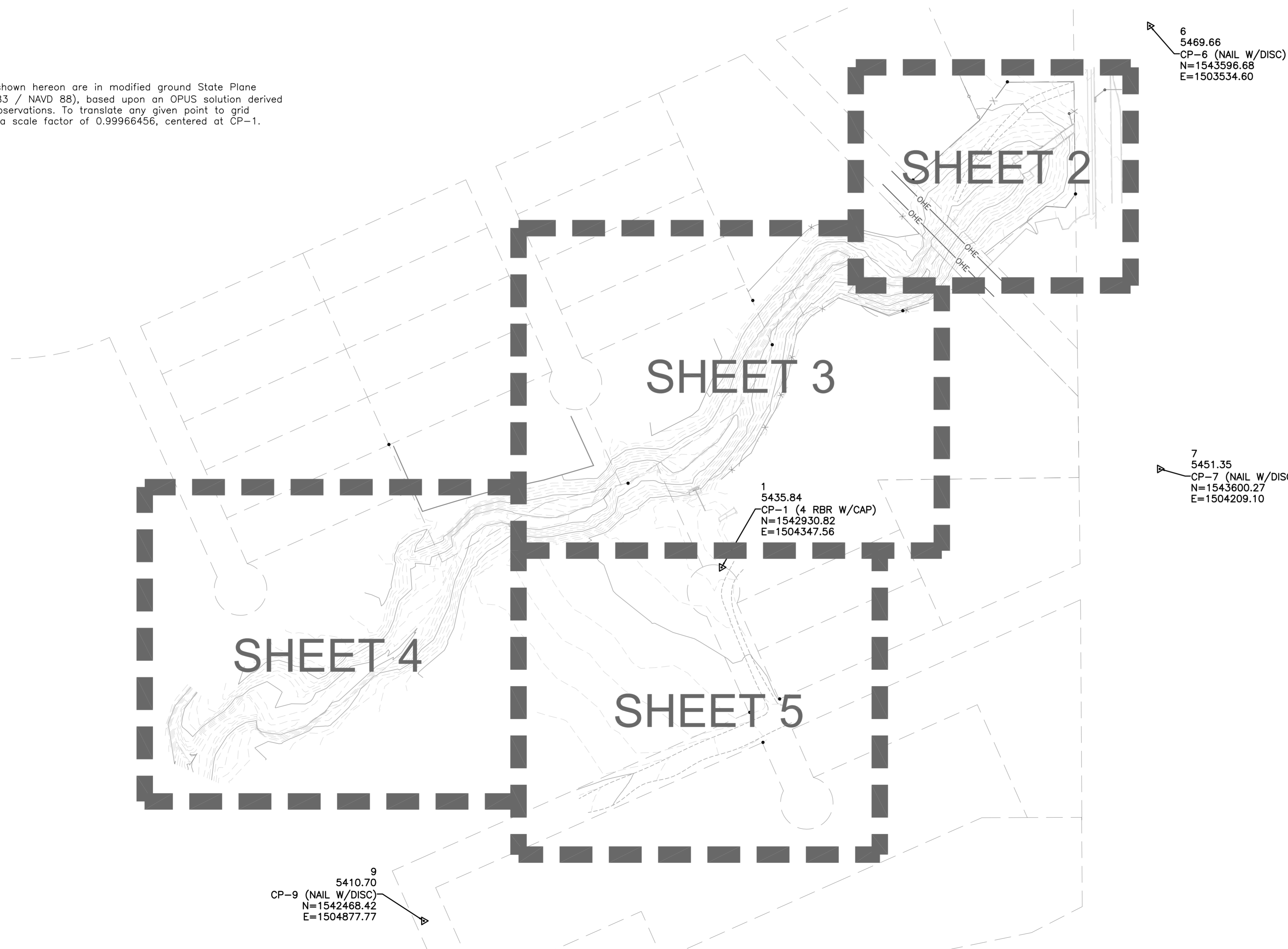
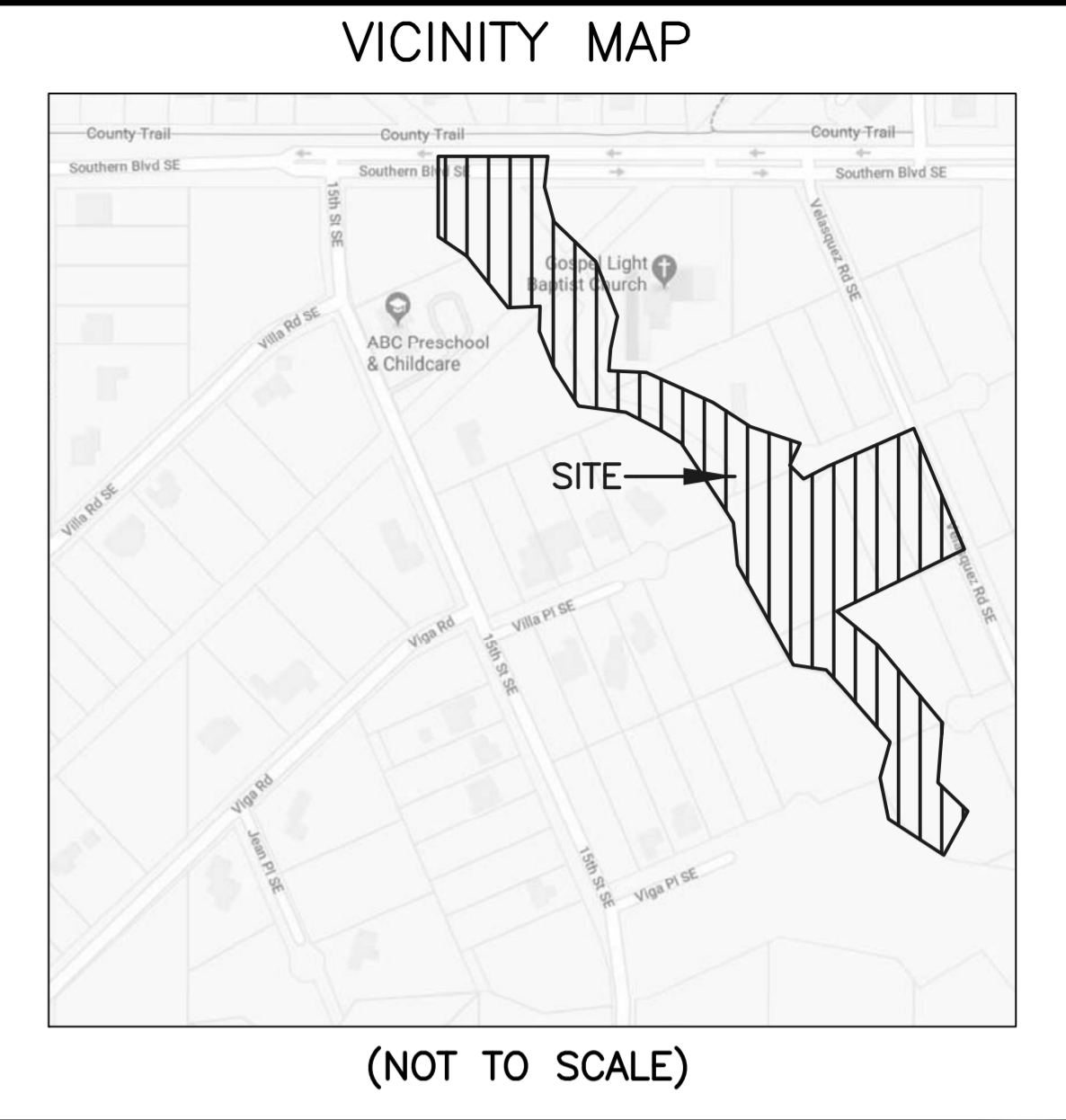
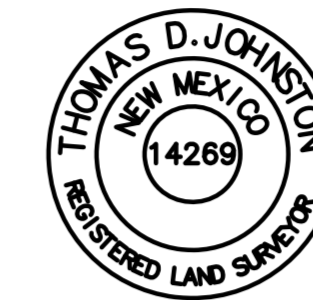
This is to certify that a topographic site survey on the above referenced property was performed by me or under my supervision and that the information contained herein is true and correct to the best of my belief and knowledge. This does not constitute a corner or boundary survey.



Thomas D. Johnston, PS 14269

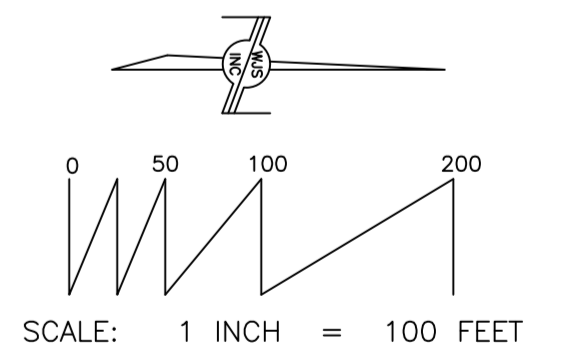
1-14-2020

Date



### LEGEND:

- EXISTING CONTOURS @10 FT. INTERVALS
- 5430 INDEX CONTOURS @2 FT. INTERVALS
- FL FLOWLINE
- INV INVERT
- RIM RIM COVER
- TA TOP OF ASPHALT
- TBC TOP BACK OF CURB
- TBM TEMPORARY BENCHMARK
- TC TOP OF CONCRETE
- TW TOP OF WALL
- SPOT ELEVATION ELEVATIONS ARE TO ANNOTATED SPOTS
- CHAIN LINK FENCE
- WOOD FENCE
- WIRE FENCE
- OHE OVERHEAD ELECTRIC LINES
- MH MANHOLE (TYPE)
- = FOUND BOUNDARY CORNER



330 Louisiana Blvd, N.E. Albuquerque, NM 87108  
Phone: (505) 255-2052 Fax: (505) 255-2887

Date of Survey: DEC. 2019      Draftsman: T R J  
Date of Last Revision: NA      Job No.: EL-11-02-2019

## SHEET 1 OF 5









# TOPOGRAPHIC SURVEY



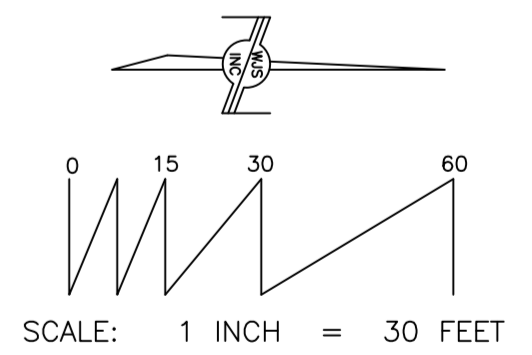
## VICINITY MAP



(NOT TO SCALE)

### LEGEND:

- EXISTING CONTOURS @10 FT. INTERVALS
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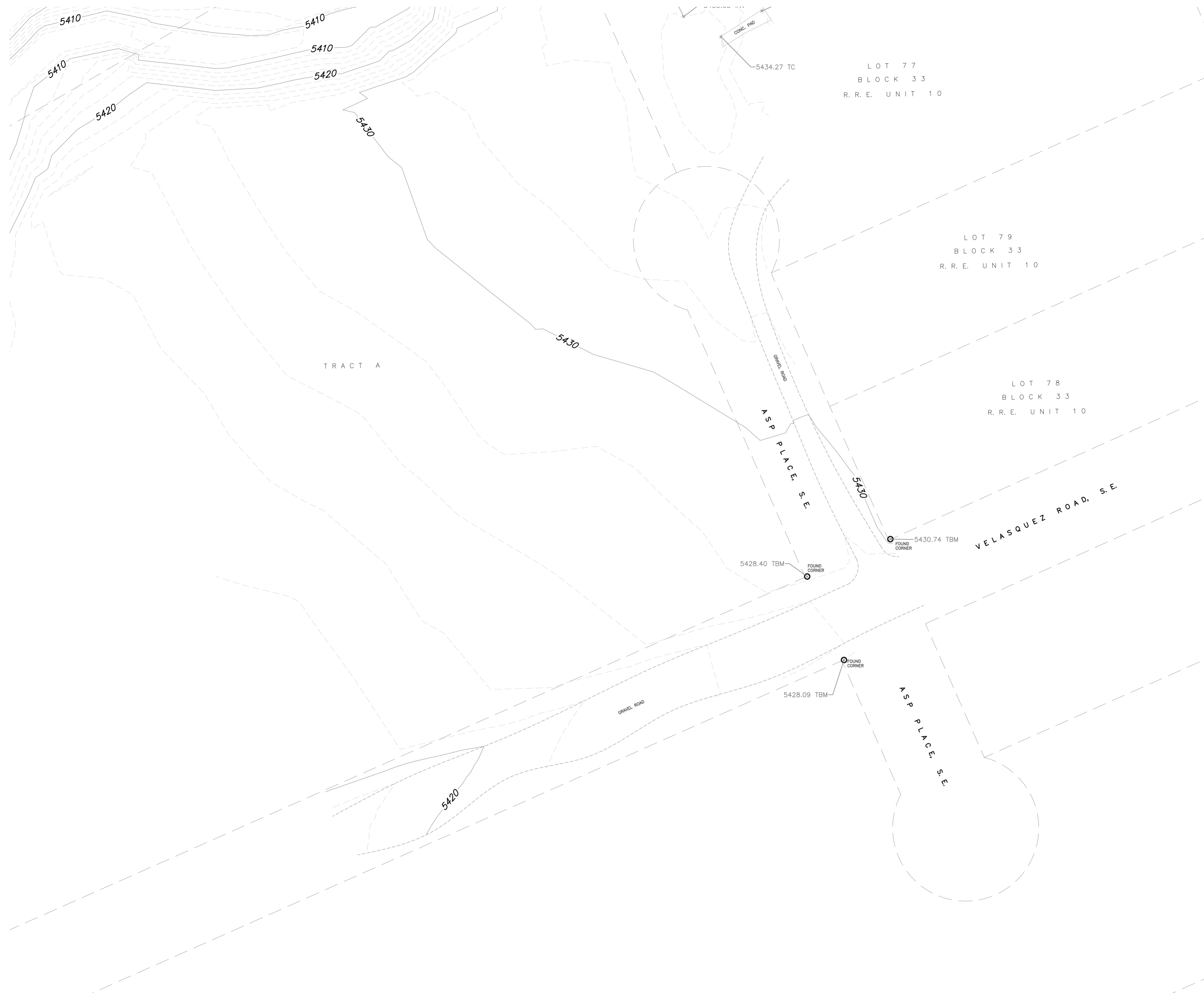
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Date of Survey: DEC. 2019      Draftsman: T R J  
 Date of Last Revision: NA      Job No.: EL-11-02-2019

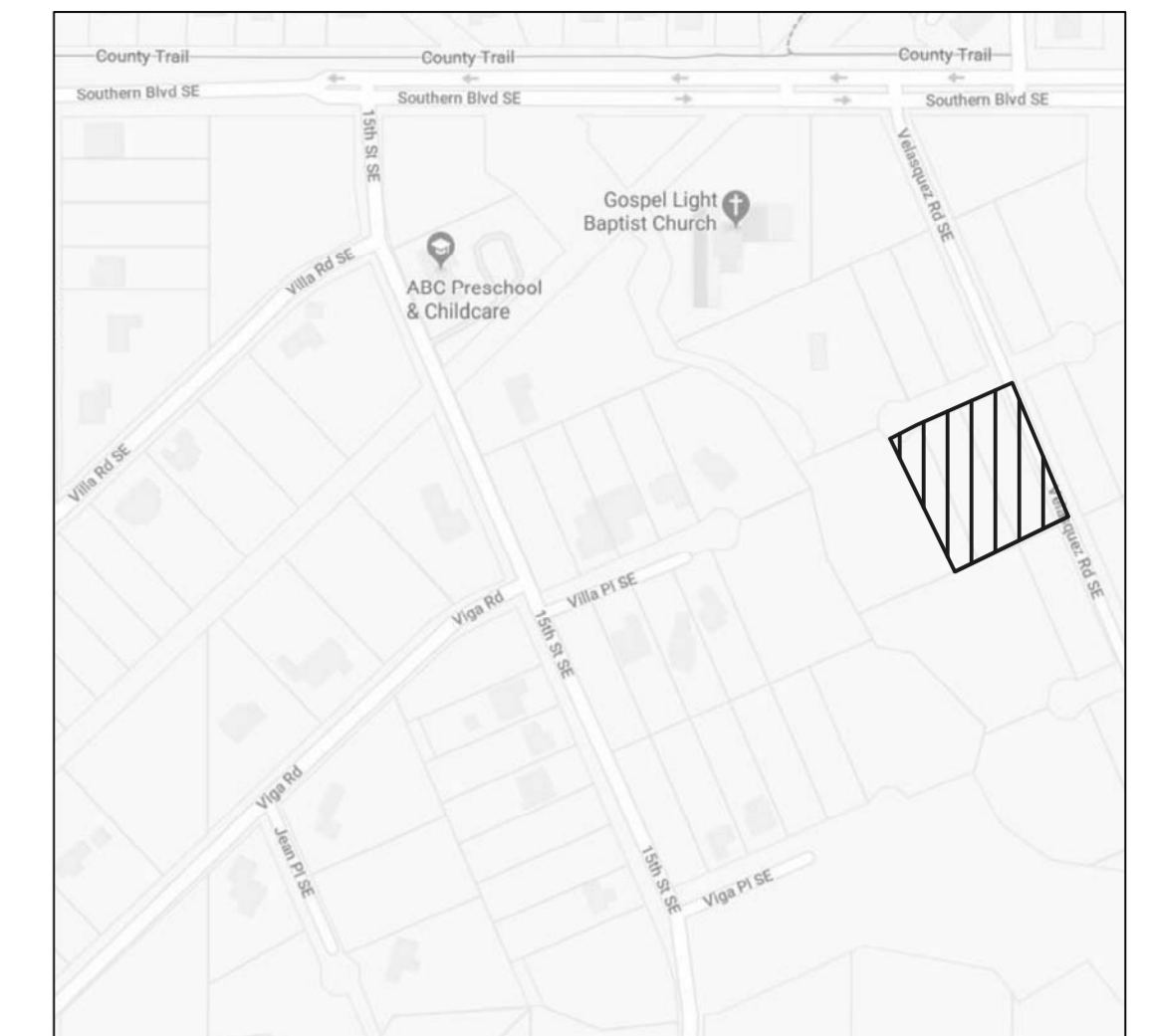
**SHEET 4 OF 5**



# TOPOGRAPHIC SURVEY



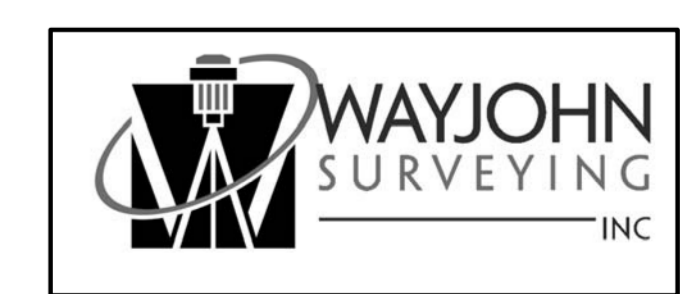
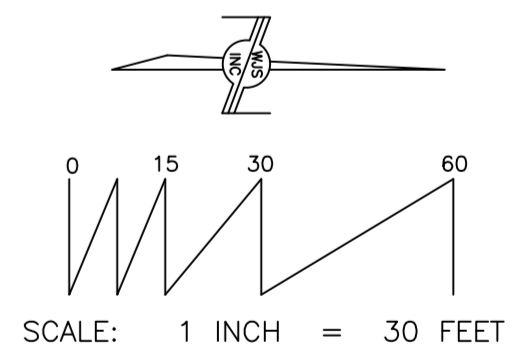
## VICINITY MAP



(NOT TO SCALE)

### LEGEND:

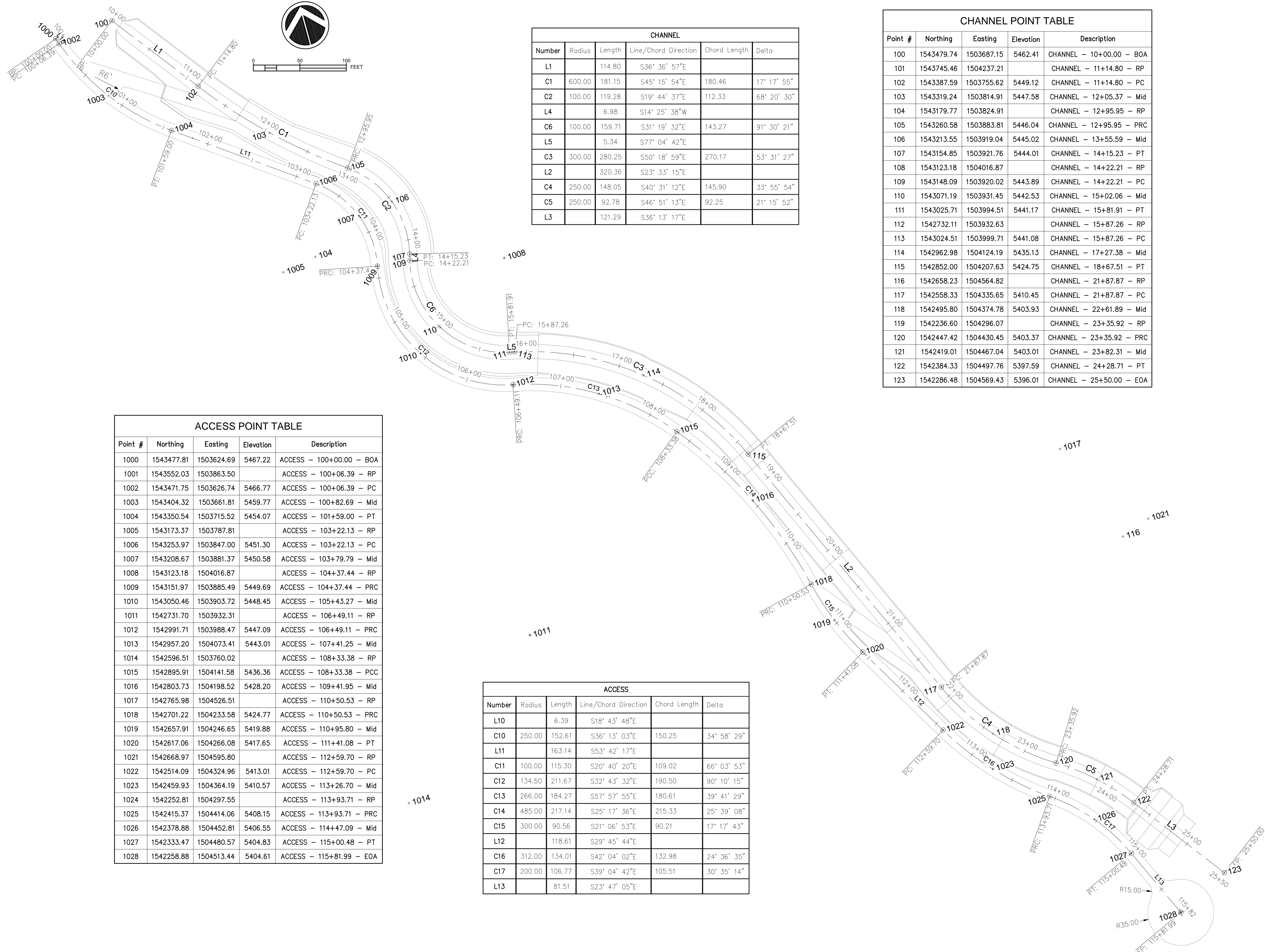
- EXISTING CONTOURS @10 FT. INTERVALS
- INDEX CONTOURS @2 FT. INTERVALS
- 5430
- FL FLOWLINE
- INV INVERT
- RIM RIM COVER
- TA TOP OF ASPHALT
- TBC TOP BACK OF CURB
- TBM TEMPORARY BENCHMARK
- TC TOP OF CONCRETE
- TW TOP OF WALL
- SPOT ELEVATION ELEVATIONS ARE TO ANNOTATED SPOTS
- CHAIN LINK FENCE
- WOOD FENCE
- WIRE FENCE
- OHE OVERHEAD ELECTRIC LINES
- MH MANHOLE (TYPE)
- = FOUND BOUNDARY CORNER



330 Louisiana Blvd, N.E. Albuquerque, NM 87108  
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Date of Survey: DEC. 2019      Draftsman: T R J  
 Date of Last Revision: NA      Job No.: EL-11-02-2019

**SHEET 5 OF 5**



CHANNEL					
Number	Radius	Length	Line/Chord Direction	Chord Length	Delta
		114.80	S36° 36' 57"E		
L1	600.00	181.15	S45° 15' 54"E	180.46	17° 17' 55"
C2	100.00	119.28	S19° 44' 37"E	112.33	68° 20' 30"
L4		6.98	S14° 25' 38"W		
C6	100.00	159.71	S31° 19' 32"E	143.27	91° 30' 21"
L5		5.34	S77° 04' 42"E		
C3	300.00	280.25	S50° 18' 59"E	270.17	53° 31' 27"
L2		320.36	S23° 33' 15"E		
C4	250.00	148.05	S40° 31' 12"E	145.90	33° 55' 54"
C5	250.00	92.78	S46° 51' 13"E	92.25	21° 15' 52"
L3		121.29	S36° 13' 17"E		

CHANNEL POINT TABLE				
Point #	Northing	Easting	Elevation	Description
100	1543479.74	1503687.15	5462.41	CHANNEL - 10+00.00 - BOA
101	1543745.46	1504237.21		CHANNEL - 11+14.80 - RP
102	1543387.59	1503755.62	5449.12	CHANNEL - 11+14.80 - PC
103	1543319.24	1503814.91	5447.58	CHANNEL - 12+05.37 - Mid
104	1543179.77	1503824.91		CHANNEL - 12+95.95 - RP
105	1543260.58	1503883.81	5446.04	CHANNEL - 12+95.95 - PRC
106	1543213.55	1503919.04	5445.02	CHANNEL - 13+55.59 - Mid
107	1543154.85	1503921.76	5444.01	CHANNEL - 14+15.23 - PT
108	1543123.18	1504016.87		CHANNEL - 14+22.21 - RP
109	1543148.09	1503920.02	5443.89	CHANNEL - 14+22.21 - PC
110	1543071.19	1503931.45	5442.53	CHANNEL - 15+02.06 - Mid
111	1543025.71	1503994.51	5441.17	CHANNEL - 15+81.91 - PT
112	1542732.11	1503932.63		CHANNEL - 15+87.26 - RP
113	1543024.51	1503999.71	5441.08	CHANNEL - 15+87.26 - PC
114	1542962.98	1504124.19	5435.13	CHANNEL - 17+27.38 - Mid
115	1542852.00	1504207.63	5424.75	CHANNEL - 18+67.51 - PT
116	1542658.23	1504564.82		CHANNEL - 21+87.87 - RP
117	1542558.33	1504335.65	5410.45	CHANNEL - 21+87.87 - PC
118	1542495.80	1504374.78	5403.93	CHANNEL - 22+61.89 - Mid
119	1542236.60	1504296.07		CHANNEL - 23+35.92 - RP
120	1542447.42	1504430.45	5403.37	CHANNEL - 23+35.92 - PRC
121	1542419.01	1504467.04	5403.01	CHANNEL - 23+82.31 - Mid
122	1542384.33	1504497.76	5397.59	CHANNEL - 24+28.71 - PT
123	1542286.48	1504569.43	5396.01	CHANNEL - 25+50.00 - EOA

ACCESS POINT TABLE				
Point #	Northing	Easting	Elevation	Description
1000	1543477.81	1503624.69	5467.22	ACCESS - 100+00.00 - BOA
1001	1543552.03	1503863.50		ACCESS - 100+06.39 - RP
1002	1543471.75	1503626.74	5466.77	ACCESS - 100+06.39 - PC
1003	1543404.32	1503661.81	5459.77	ACCESS - 100+82.69 - Mid
1004	1543350.54	1503715.52	5454.07	ACCESS - 101+59.00 - PT
1005	1543173.37	1503787.81		ACCESS - 103+22.13 - RP
1006	1543253.97	1503847.00	5451.30	ACCESS - 103+22.13 - PC
1007	1543208.67	1503881.37	5450.58	ACCESS - 103+79.79 - Mid
1008	1543123.18	1504016.87		ACCESS - 104+37.44 - RP
1009	1543151.97	1503885.49	5449.69	ACCESS - 104+37.44 - PRC
1010	1543050.46	1503903.72	5448.45	ACCESS - 105+43.27 - Mid
1011	1542731.70	1503932.31		ACCESS - 106+49.11 - RP
1012	1542991.71	1503988.47	5447.09	ACCESS - 106+49.11 - PRC
1013	1542957.20	1504073.41	5443.01	ACCESS - 107+41.25 - Mid
1014	1542596.51	1503760.02		ACCESS - 108+33.38 - RP
1015	1542895.91	1504141.58	5436.36	ACCESS - 108+33.38 - PCC
1016	1542803.73	1504198.52	5428.20	ACCESS - 109+41.95 - Mid
1017	1542765.98	1504526.51		ACCESS - 110+50.53 - RP
1018	1542701.22	1504233.58	5424.77	ACCESS - 110+50.53 - PRC
1019	1542657.91	1504246.65	5419.88	ACCESS - 110+95.80 - Mid
1020	1542617.06	1504266.08	5417.65	ACCESS - 111+41.08 - PT
1021	1542668.97	1504595.80		ACCESS - 112+59.70 - RP
1022	1542514.09	1504324.96	5413.01	ACCESS - 112+59.70 - PC
1023	1542459.93	1504364.19	5410.57	ACCESS - 113+26.70 - Mid
1024	1542252.81	1504297.55		ACCESS - 113+93.71 - RP
1025	1542415.37	1504414.06	5408.15	ACCESS - 113+93.71 - PRC
1026	1542378.88	1504452.81	5406.55	ACCESS - 114+47.09 - Mid
1027	1542333.47	1504480.57	5404.83	ACCESS - 115+00.48 - PT
1028	1542258.88	1504513.44	5404.61	ACCESS - 115+81.99 - EOA

ACCESS					
Number	Radius	Length	Line/Chord Direction	Chord Length	Delta
L10		6.39	S18° 43' 48"E		
C10	250.00	152.61	S36° 13' 03"E	150.25	34° 58' 29"
L11		163.14	S53° 42' 17"E		
C11	100.00	115.30	S20° 40' 20"E	109.02	66° 03' 53"
C12	134.50	211.67	S32° 43' 32"E	190.50	90° 10' 15"
C13	266.00	184.27	S57° 57' 55"E	180.61	39° 41' 29"
C14	485.00	217.14	S25° 17' 36"E	215.33	25° 39' 08"
C15	300.00	90.56	S21° 06' 53"E	90.21	17° 17' 43"
L12		118.61	S29° 45' 44"E		
C16	312.00	134.01	S42° 04' 02"E	132.98	24° 36' 35"
C17	200.00	106.77	S39° 04' 42"E	105.51	30° 35' 14"
L13		81.51	S23° 47' 05"E		



**Southern Sandoval  
County  
Arroyo Flood Control  
Authority**

1041 Commercial Dr. S.E.  
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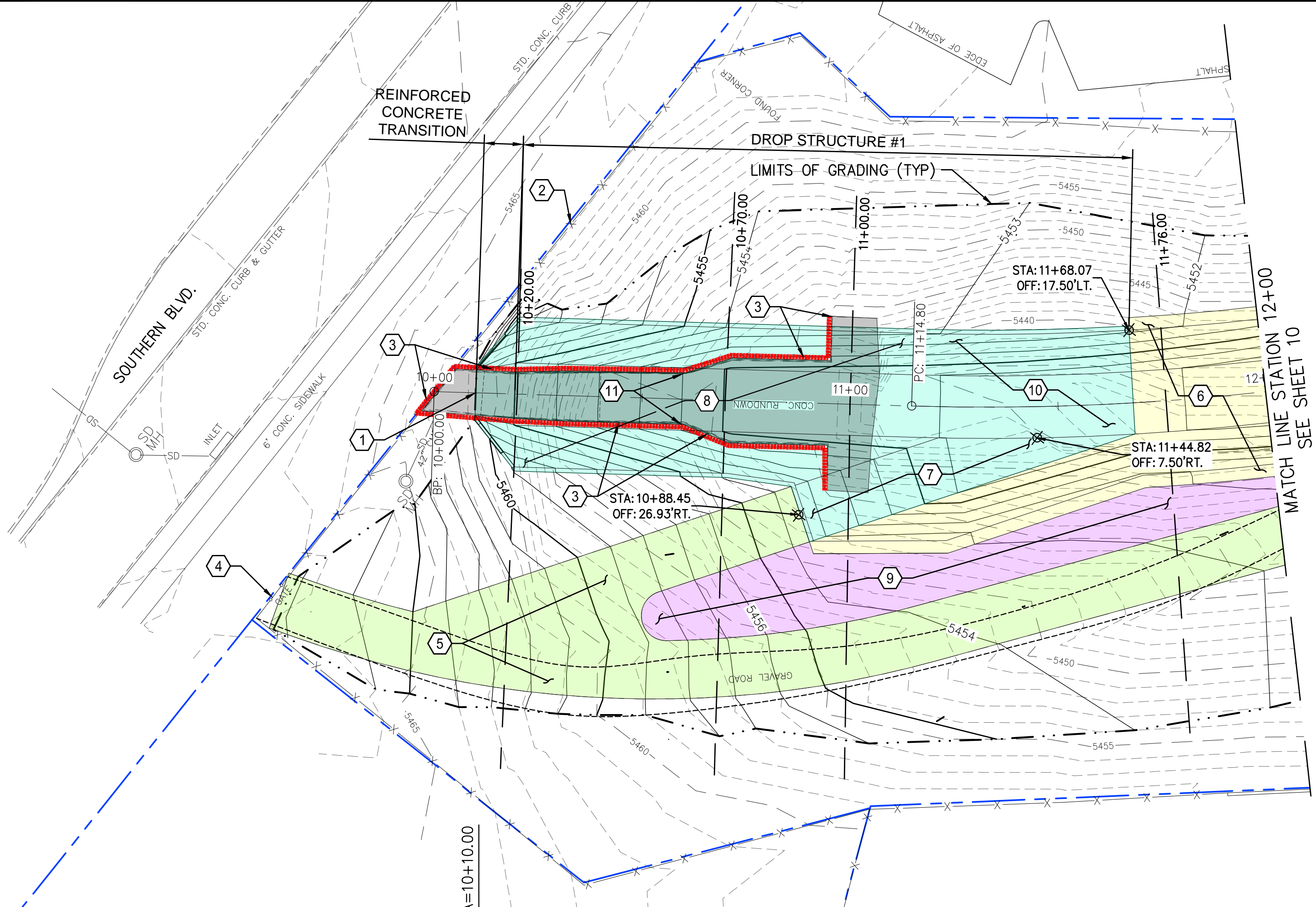
LOWER IVORY CHANNEL  
IMPROVEMENTS

DESIGN CONTROL PLAN

REVISIONS & CHANGE NOTICES		
MARK	DESCRIPTION	DATE

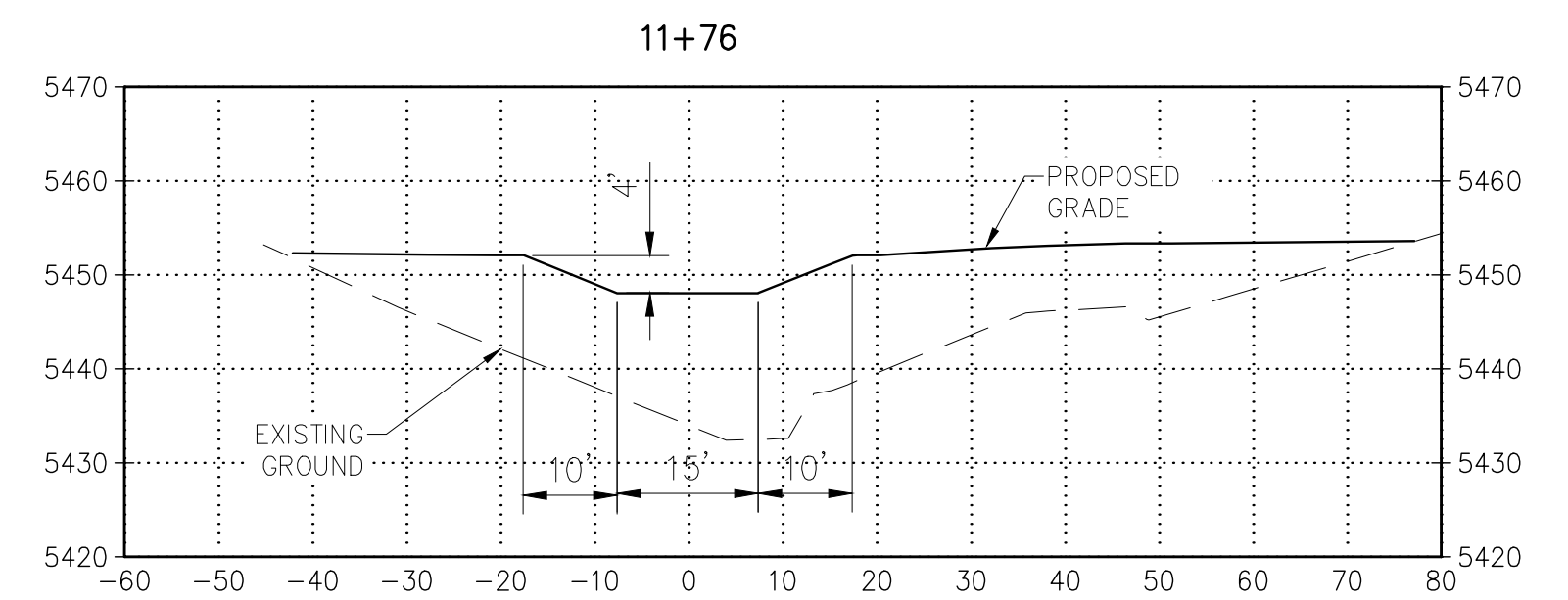
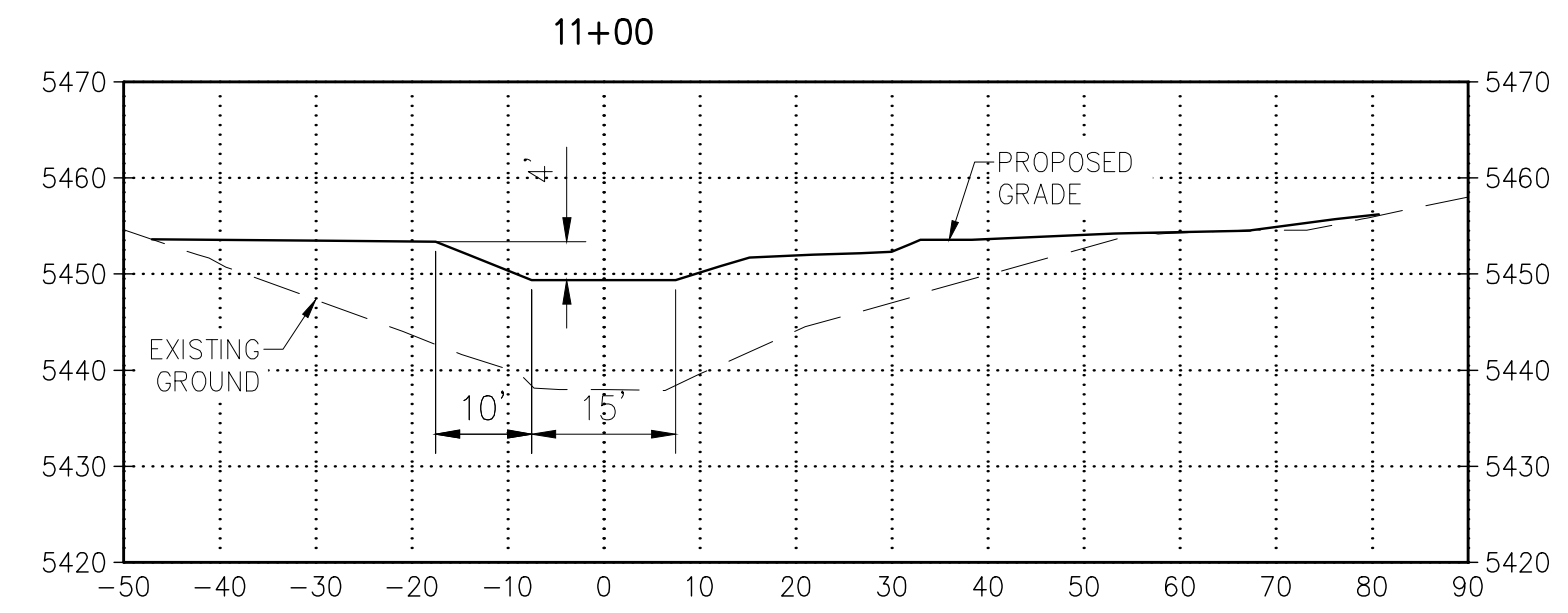
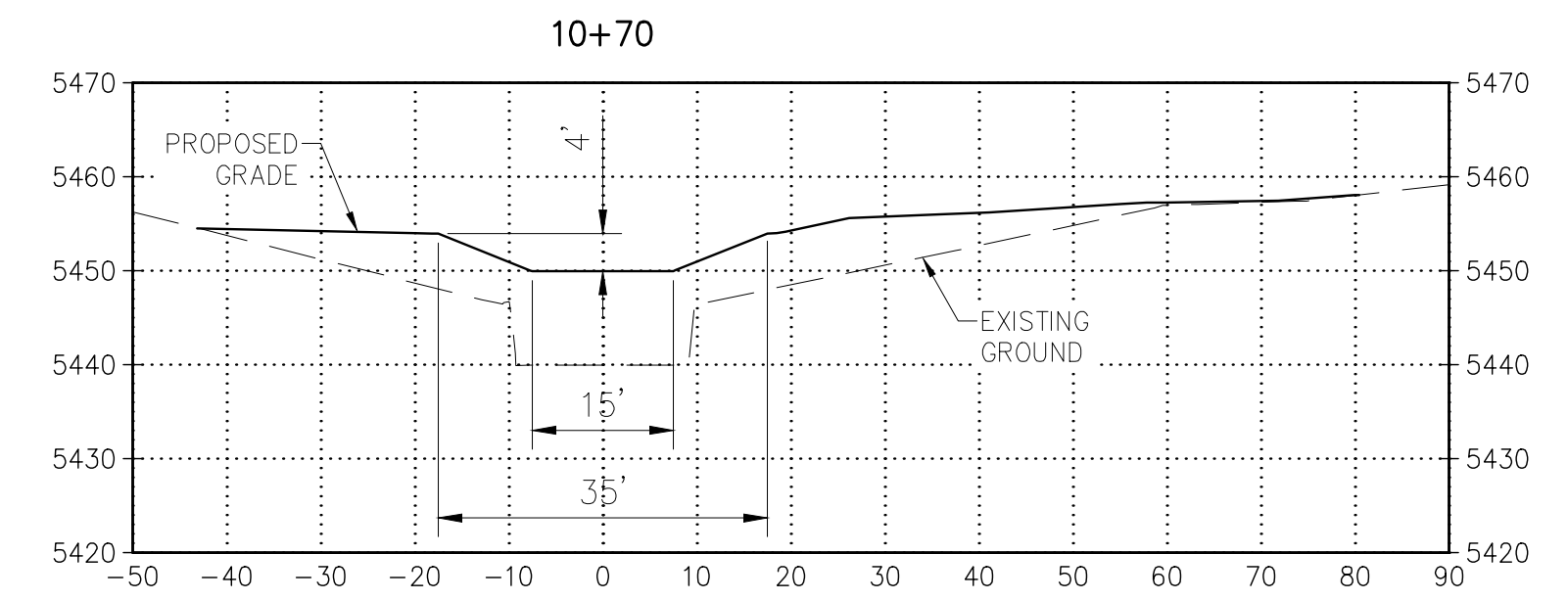
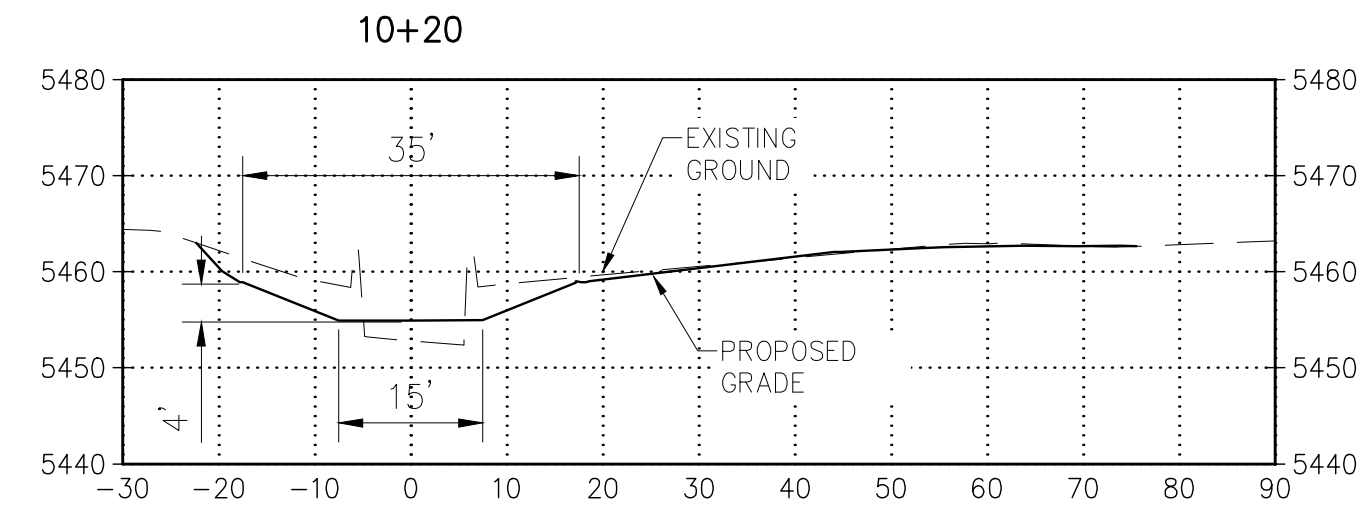
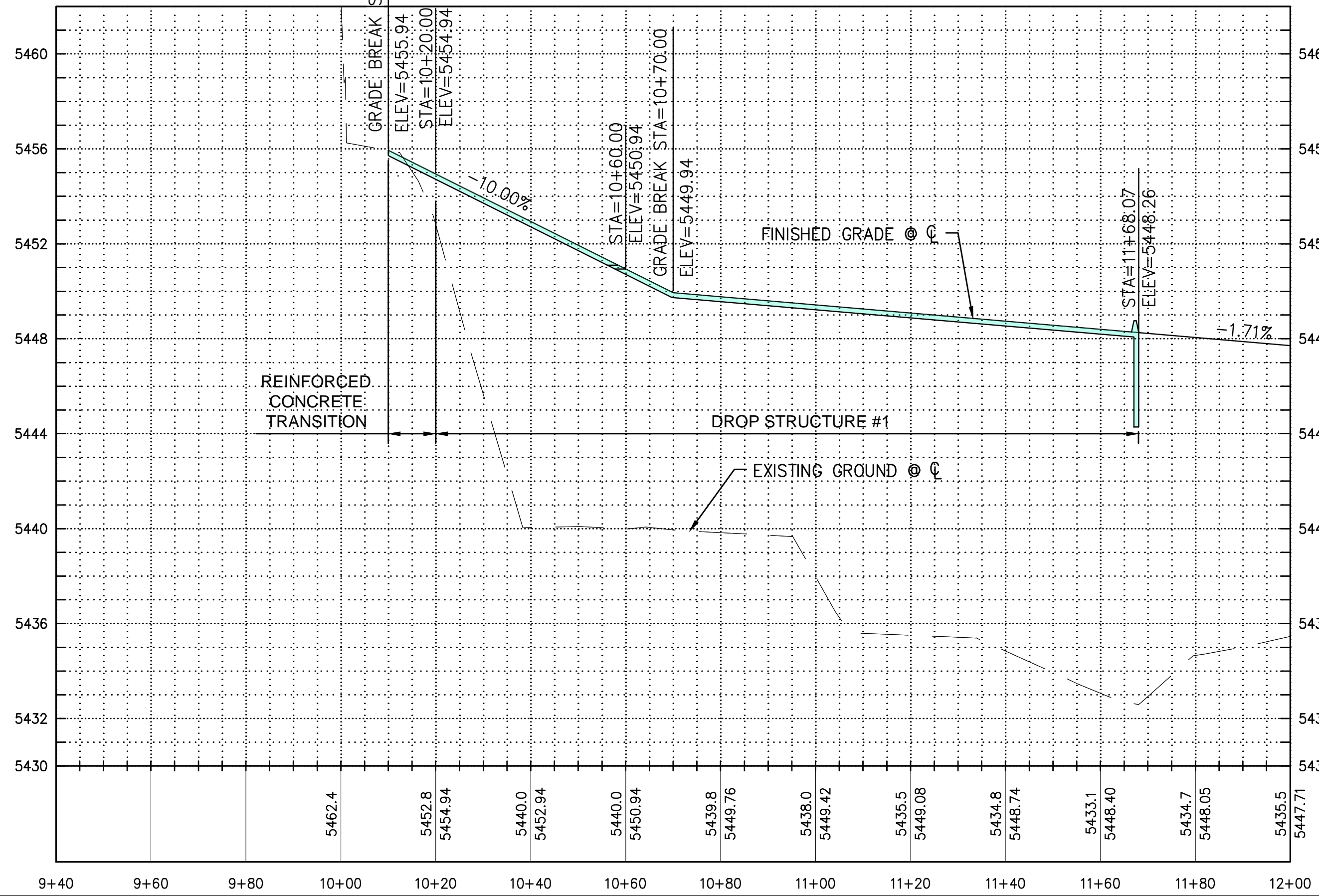
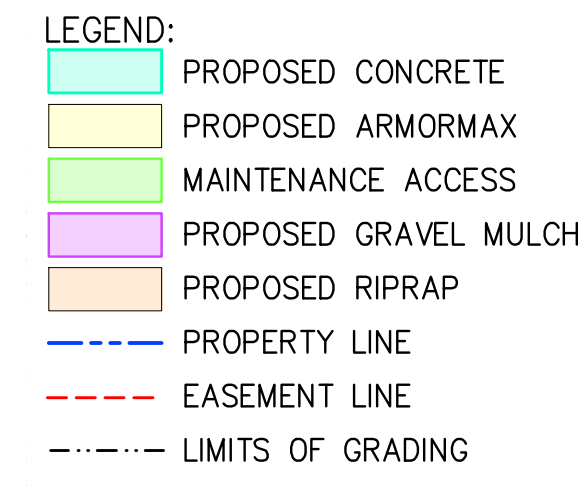
PROJECT NO: BL\_P0014-02  
DESIGNED BY: JN  
DRAWN BY: KLF  
CHECKED BY: AES  
DATE: 8/15/2022





**KEYED NOTES:**

1. STA. 10+10 SAW CUT EXISTING REINFORCED CONCRETE STRUCTURE REMOVE AS NEEDED AND DISPOSE. BEGIN REINFORCED CONCRETE TRANSITION. SEE DETAIL ON SHEET 15.
2. PROTECT EXISTING FENCE IN PLACE.
3. DISASSEMBLE, REMOVE AND SALVAGE EXISTING PIPE/CHAIN LINK FENCE, INCLUDING WALL PLATES. REPLACE AS NEEDED AROUND VERTICAL DROP AND WINGWALLS. ~55 L.F. IF REQUIRED, CUT EXISTING PIPE FENCE AT ANGLE POINTS INTO LENGTHS 20 L.F. OR LESS.
4. PROTECT EXISTING GATE IN PLACE.
5. CONSTRUCT MAINTENANCE ACCESS ROAD PER SSSCAFCA STD. DWG. M102 ON SHEET 14.
6. STA. 11+68.07 TO 12+00 CONSTRUCT "ARMORMAX 75"(OR APPROVED EQUAL) CHANNEL LINING PER DETAILS ON SHEET 17.
7. STA. 10+88.45, 26.93' RT. TO STA. 11+44.82, 7.50' RT. CONSTRUCT CONCRETE RAMP PER DETAILS ON SHEET 16.
8. STA. 10+20 TO 11+21.29 CONSTRUCT REINFORCED CONCRETE DROP STRUCTURE SEE TYP. SECTIONS AND DETAILS ON SHEET 15.
9. GRAVEL MULCH AFTER SEEDING, 2"-4" CRUSHED GRAVEL, 4" THICK, NO GEOTEXTILE.
10. STA. 11+21.29 TO 11+68.07 CONSTRUCT CONCRETE LINED CHANNEL WITH TINED FINISH PER DETAIL ON SHEET 15.(BOTTOM AND LEFT SIDE ONLY)
11. STA. 10+60.00, 6.5' LT. AND 6.5' RT. CONSTRUCT WEEP DRAINS, (2) PLACED AT 13' O.C. HORIZONTALLY PER DETAILS ON SHEET 15.



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LOWER IVORY CHANNEL IMPROVEMENTS

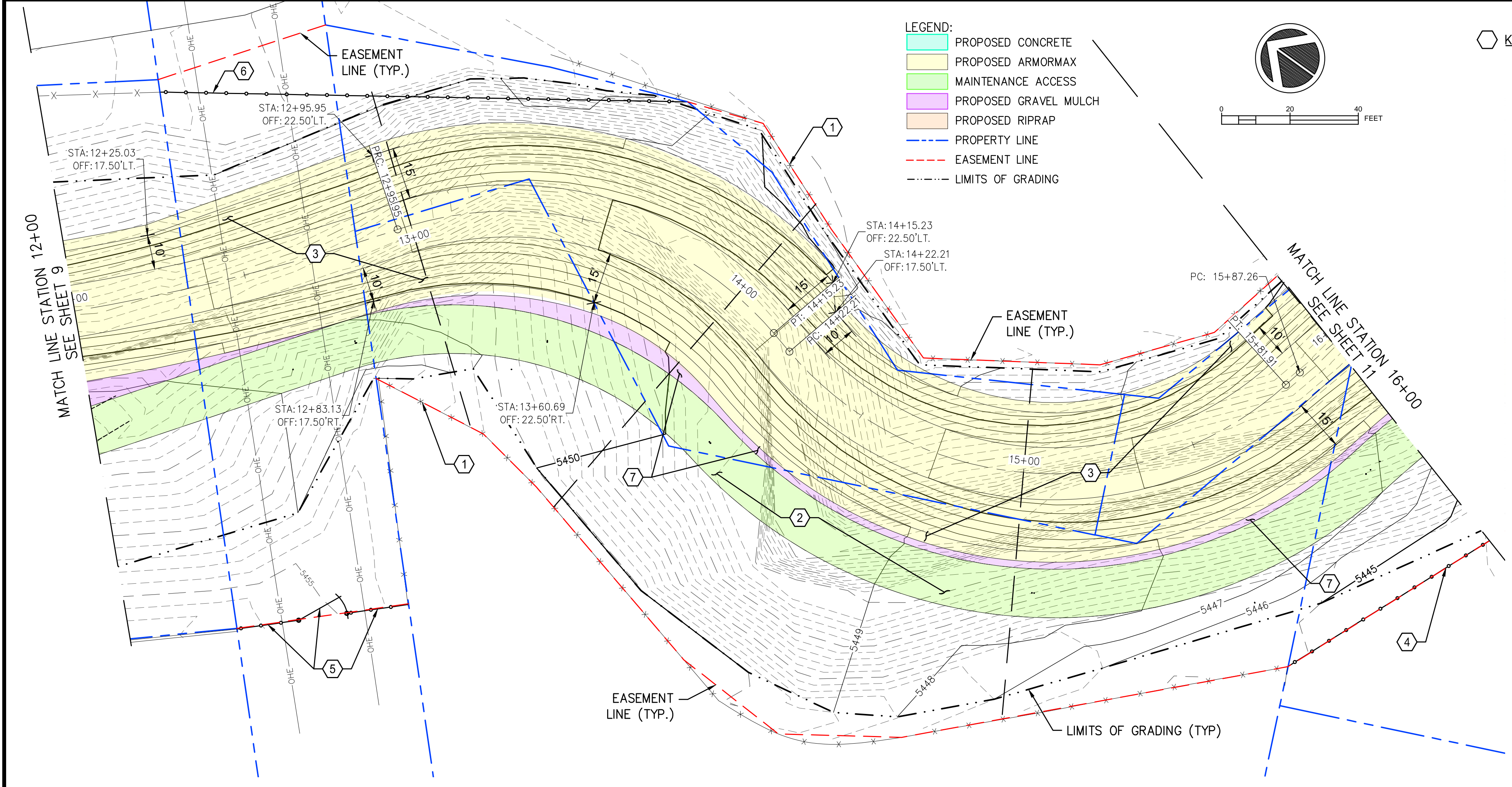
PLAN & PROFILE STA. 10+00 TO 12+00

REVISIONS & CHANGE NOTICES		
MARK	DESCRIPTION	DATE

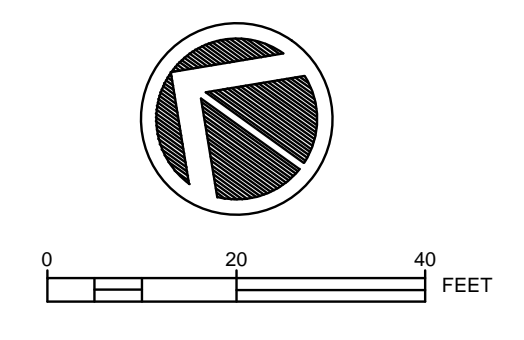
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 DESIGNED BY: JN  
 DRAWN BY: KLF  
 CHECKED BY: AES  
 DATE: 8/16/2022

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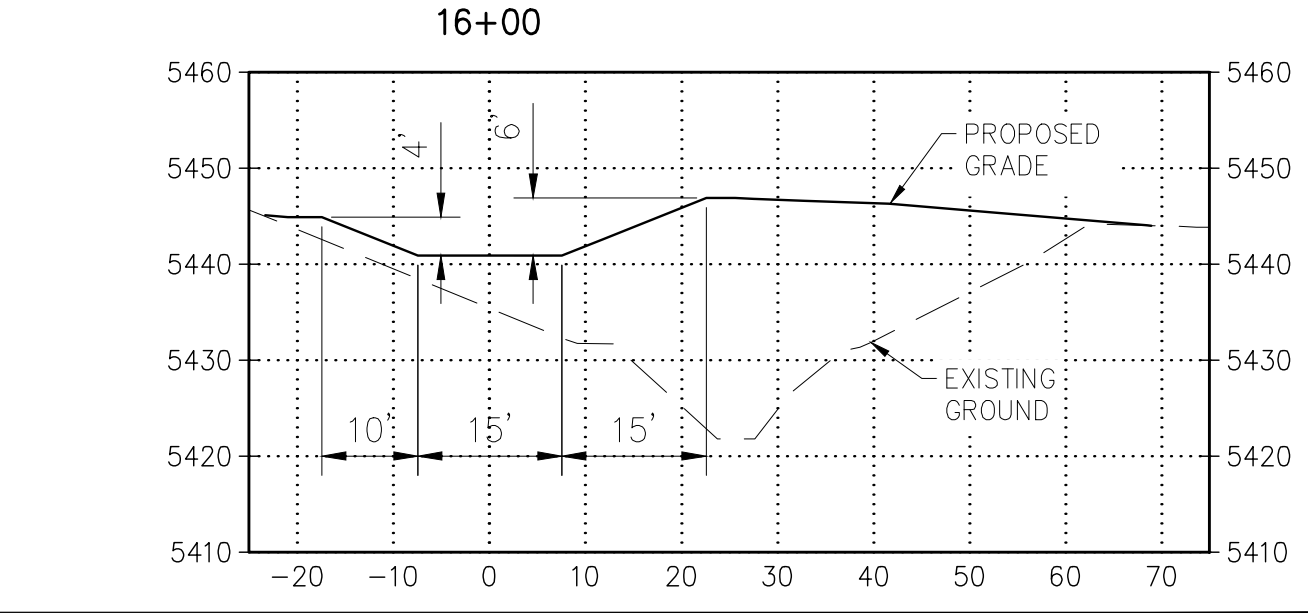
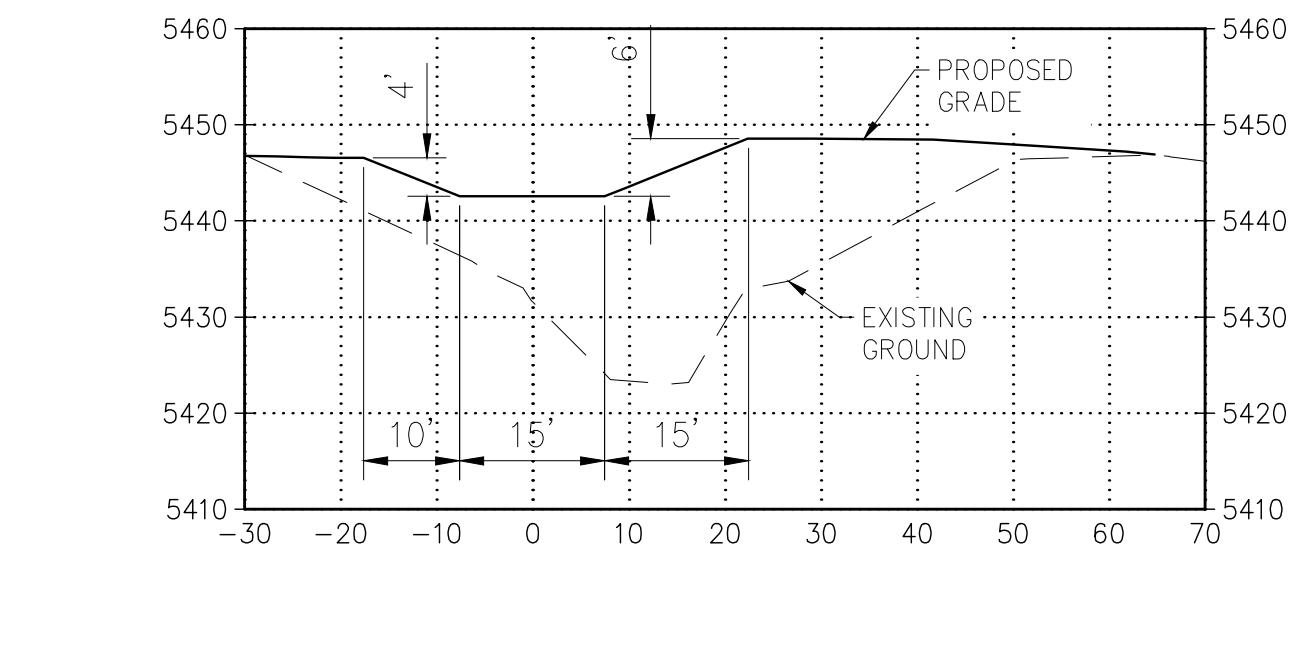
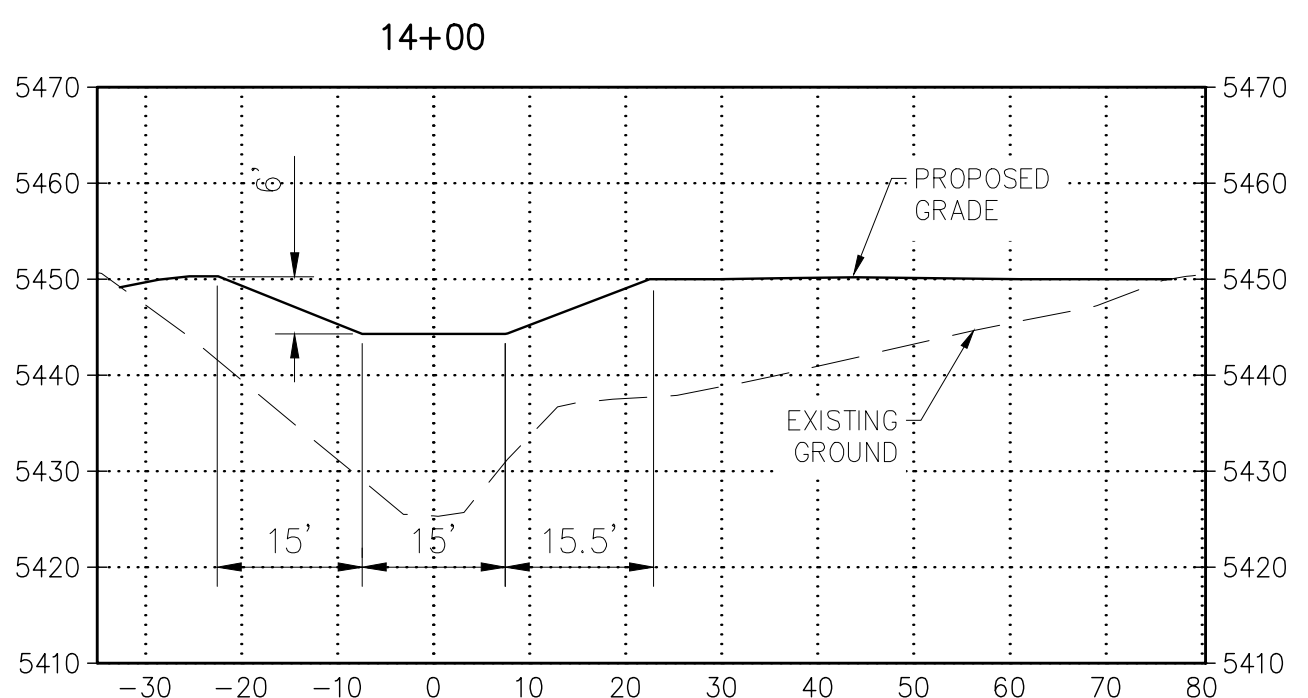
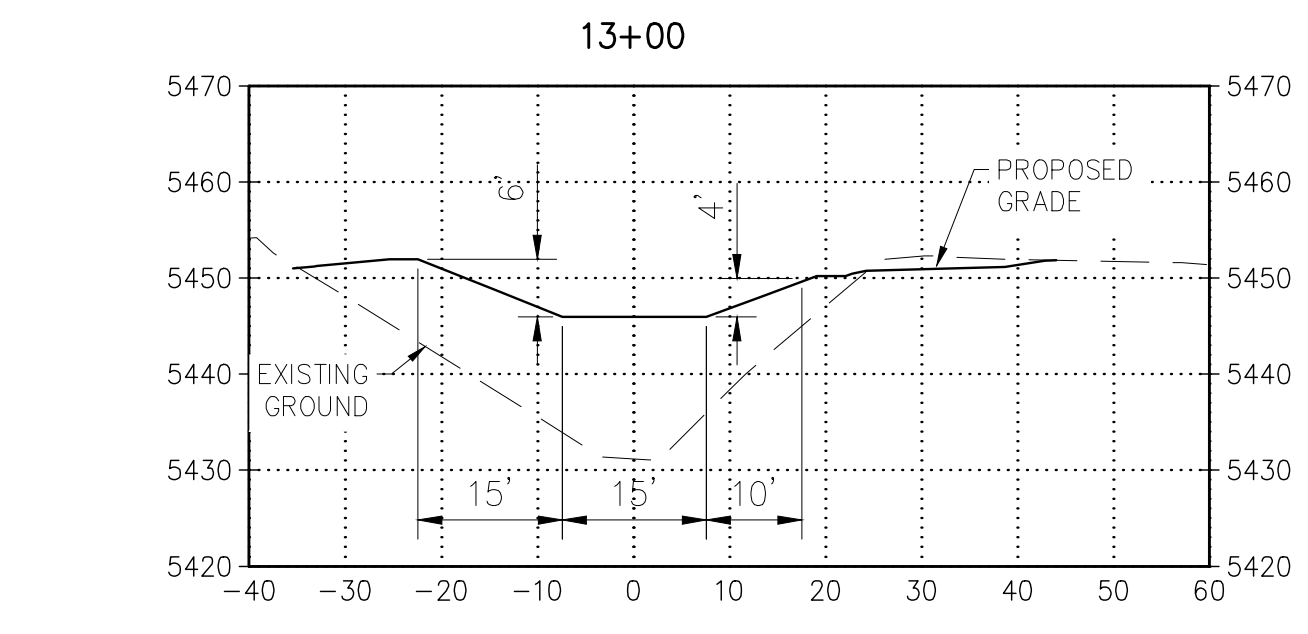
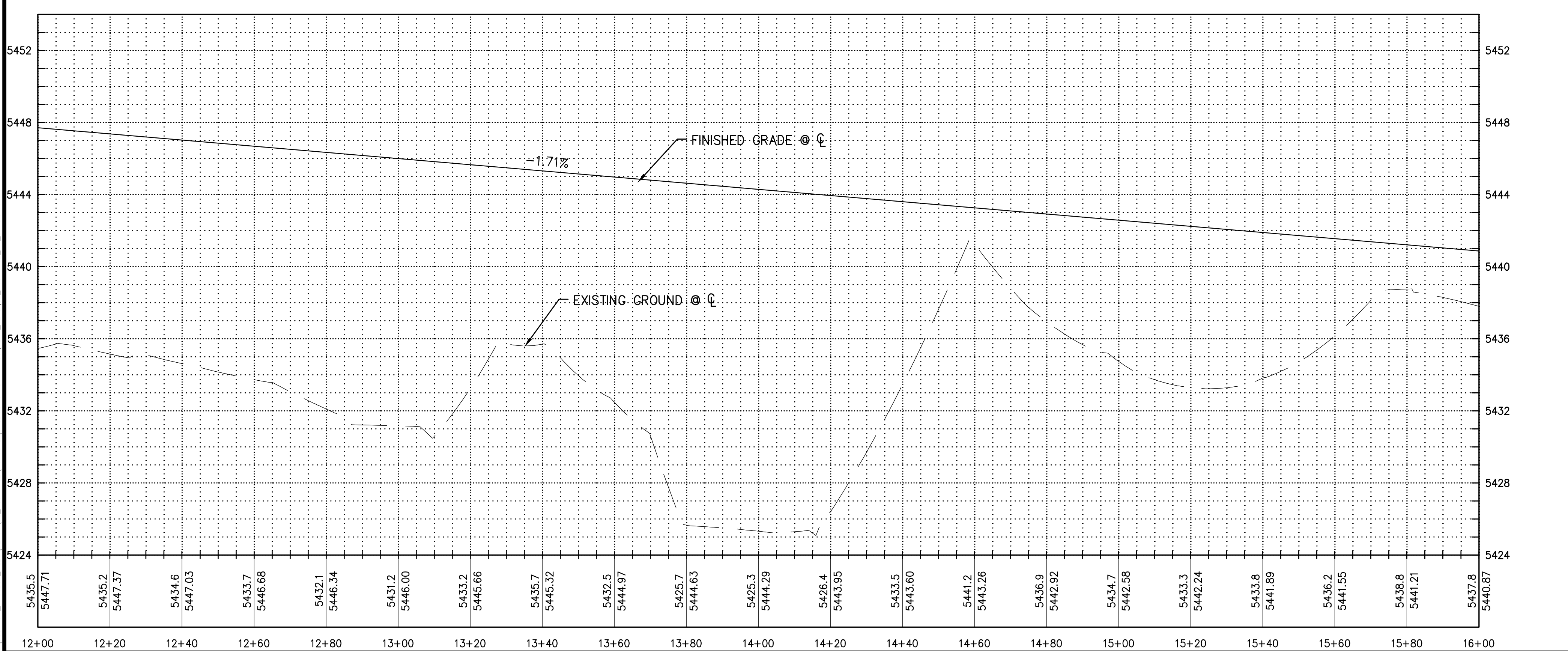


- LEGEND:**
- PROPOSED CONCRETE
  - PROPOSED ARMORMAX
  - MAINTENANCE ACCESS
  - PROPOSED GRAVEL MULCH
  - PROPOSED RIPRAP
  - PROPERTY LINE
  - EASEMENT LINE
  - LIMITS OF GRADING



- KEYED NOTES:**
1. PROTECT EXISTING FENCE IN PLACE.
  2. CONSTRUCT MAINTENANCE ACCESS ROAD PER SCAFCFA STD. DWG. M102 ON SHEET 14.
  3. STA. 12+00 TO 16+00 CONSTRUCT "ARMORMAX 75"(OR APPROVED EQUAL) CHANNEL LINING PER DETAILS ON SHEET 17.
  4. STA. 15+44, 76.0' RT. TO 16+00 79.6' RT. CONSTRUCT 56' FENCING PER SCAFCFA STD. DWG. M100 ON SHEET 14.
  5. STA. 12+26.5, 98.6' RT. TO STA. 12+68.7, 104.5' CONSTRUCT 34' FENCING PER SCAFCFA STD. DWG. M100 ON SHEET 14 AND MAINTENANCE ACCESS GATE PER SCAFCFA STD. DWG. M101 ON SHEET 14 CENTER IN THE EASEMENT.
  6. STA. 12+38.7, 56.9' LT. TO STA. 13+66, 41.1' LT. CONSTRUCT 152± FENCING PER SCAFCFA STD. DWG. M100 ON SHEET 14. TIE TO EXISTING FENCING AT PROPERTY LINE.
  7. GRAVEL MULCH AFTER SEEDING, 2"-4" CRUSHED GRAVEL, 4" THICK, NO GEOTEXTILE. ALL AREAS BETWEEN MAINTENANCE ACCESS ROAD AND "ARMORMAX 75"(OR APPROVED EQUAL) CHANNEL LINING.

**Southern Sandoval County Arroyo Flood Control Authority**  
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**LOWER IVORY CHANNEL IMPROVEMENTS**  
**PLAN & PROFILE**  
**STA. 12+00 TO 16+00**

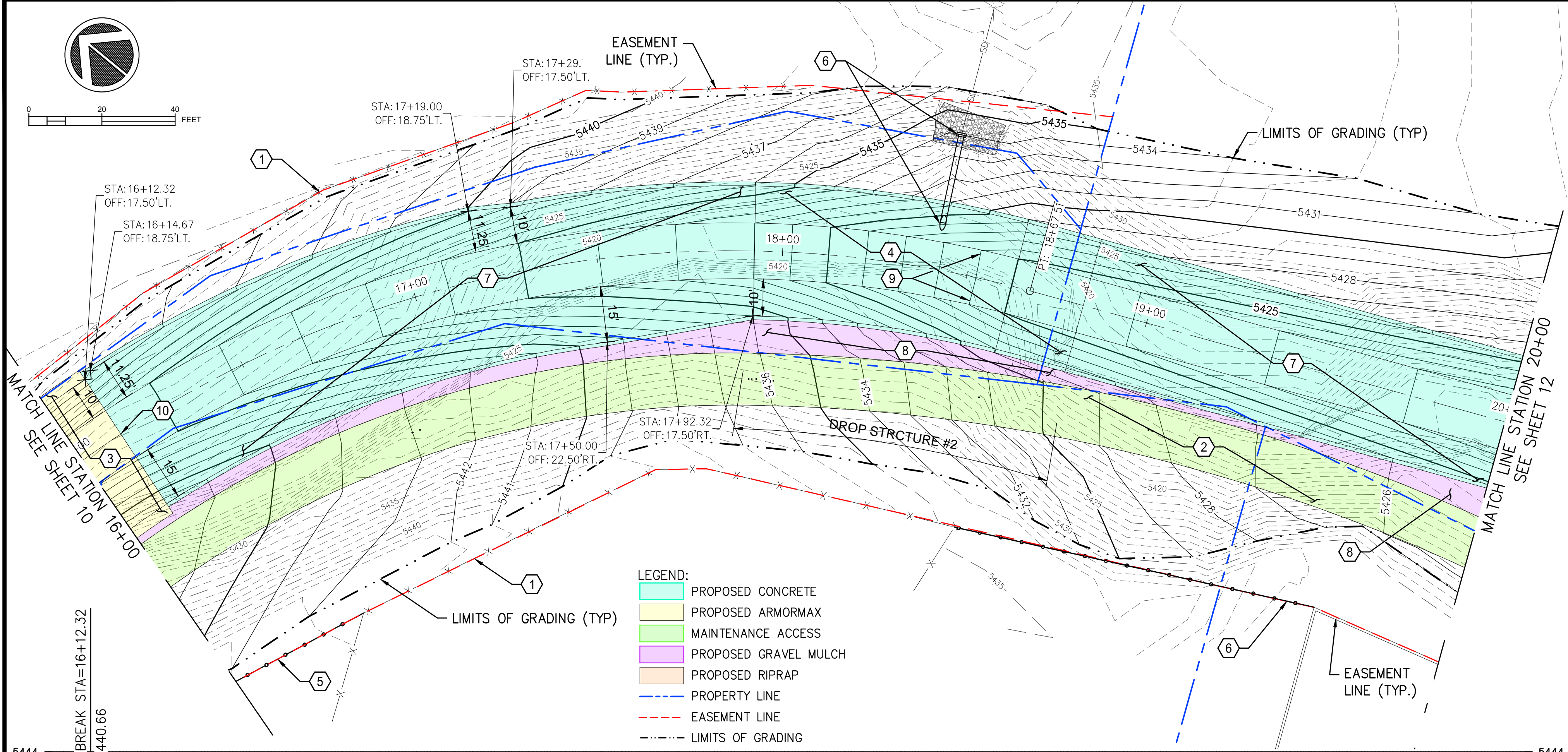
REVISIONS & CHANGE NOTICES

MARK	DESCRIPTION	DATE

PROJECT NO: BL\_P0014-02  
 DESIGNED BY: JN  
 DRAWN BY: KLF  
 CHECKED BY: AES  
 DATE: 8/16/2022

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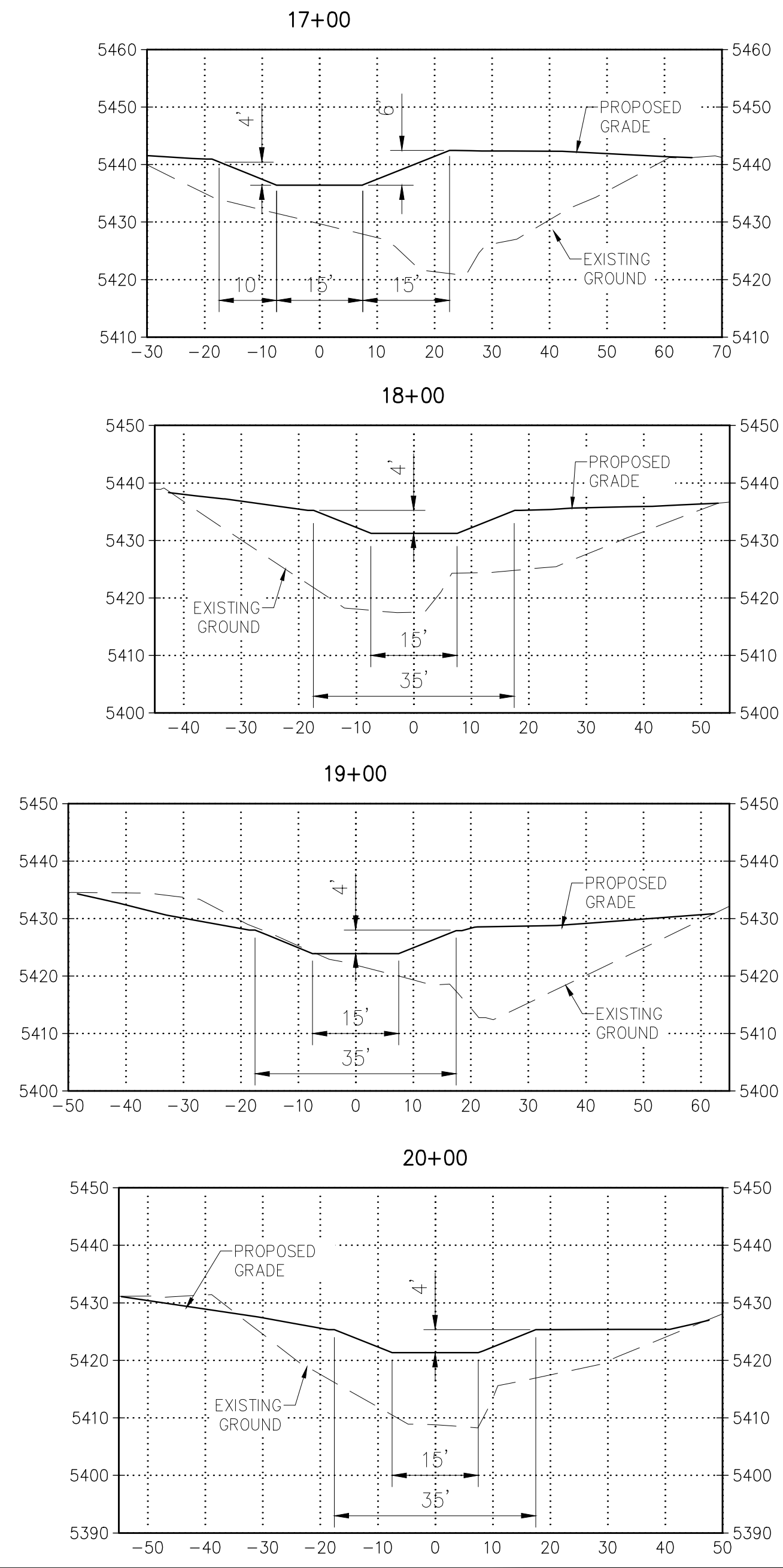
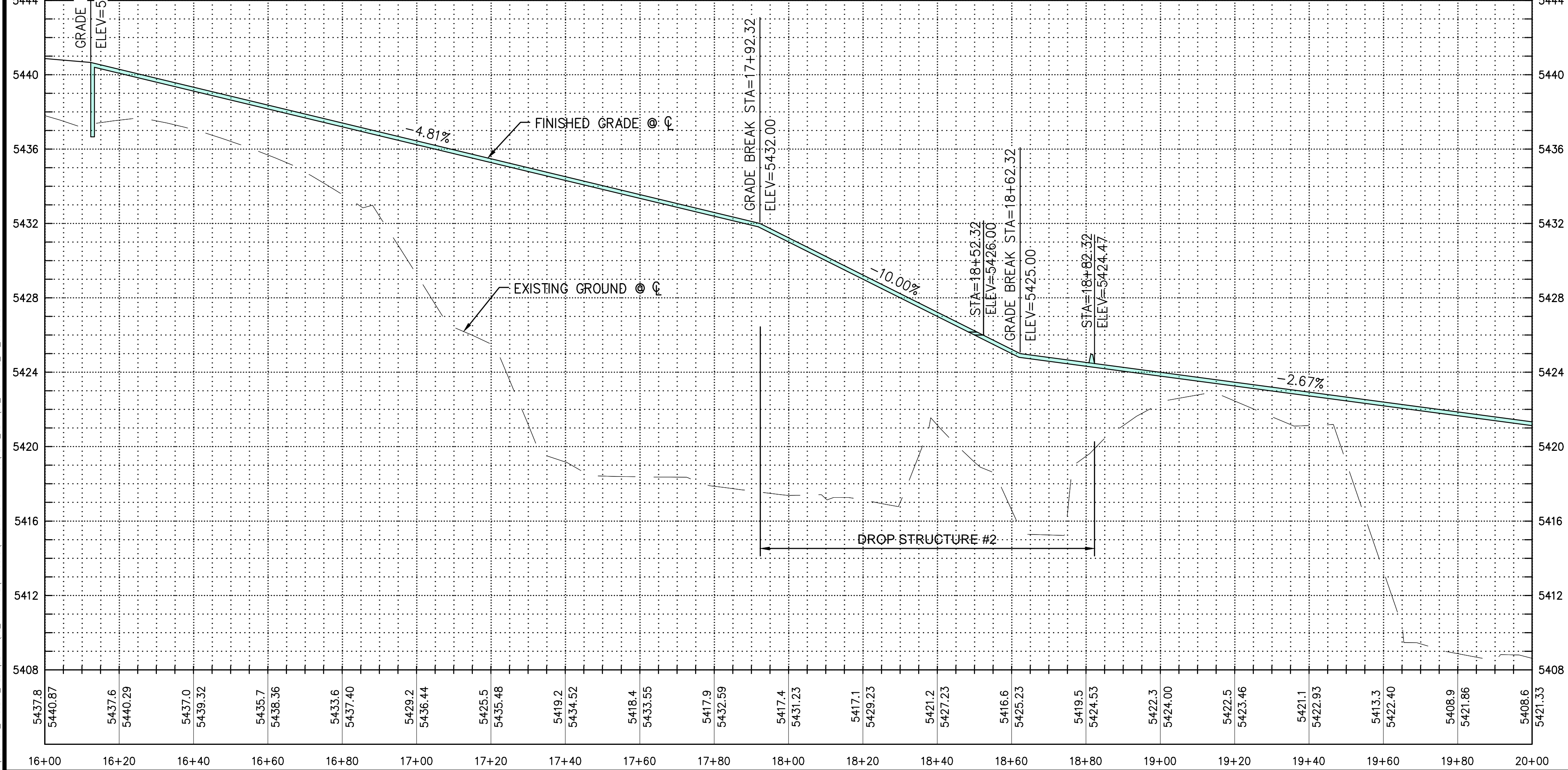


**KEYED NOTES:**

1. PROTECT EXISTING FENCE IN PLACE.
2. CONSTRUCT MAINTENANCE ACCESS ROAD PER SCAFCFA STD. DWG. M102 ON SHEET 14.
3. STA. 16+00 TO 16+12.32 CONSTRUCT "ARMORMAX 75"(OR APPROVED EQUAL) CHANNEL PER DETAILS ON SHEET 17.
4. STA. 17+92.32 TO 18+82.32 CONSTRUCT REINFORCED CONCRETE DROP STRUCTURE PER DETAILS ON SHEET 15.
5. STA. 16+00, 79.6' RT. TO 16+46, 80.0' RT. CONSTRUCT 46' FENCING AND STA. 18+61, 66.5' RT. TO 19+60, 61.5' RT. CONSTRUCT 99' FENCING PER SCAFCFA STD. DWG. M100 ON SHEET 14.
6. STA. 18+37±, 36.2'± LT. EXTEND EXISTING 18" CMP THRU DROP STRUCTURE #2 PER AMAFCA STD. DWG. NO. 106 ON SHEET 14.
7. STA. 16+12.32 TO 17+92.32 AND STA. 18+82.32 TO 20+00 CONSTRUCT CONCRETE LINED CHANNEL WITH TINED FINISH PER DETAIL ON SHEET 15.
8. GRAVEL MULCH AFTER SEEDING, 2"-4" CRUSHED GRAVEL, 4" THICK, NO GEOTEXTILE. ALL AREAS BETWEEN MAINTENANCE ACCESS ROAD AND "ARMORMAX 75"(OR APPROVED EQUAL) CHANNEL LINING AND CONCRETE LINED CHANNEL.
9. STA. 18+52.32, 6.5' LT. AND 6.5' RT. CONSTRUCT WEEP DRAINS, (2) PLACED AT 13' O.C. HORIZONTALLY PER DETAILS ON SHEET 15.
10. STA. 16+12.32 CONSTRUCT A 4' DEEP 10" THICK REINFORCED CONCRETE CUT-OFF WALL ALONG THE EDGE OF CONCRETE LINING, AS SHOWN IN THE PROFILE OF THIS SHEET.

**LEGEND:**

- PROPOSED CONCRETE
- PROPOSED ARMORMAX
- MAINTENANCE ACCESS
- PROPOSED GRAVEL MULCH
- PROPOSED RIPRAP
- PROPERTY LINE
- EASEMENT LINE
- LIMITS OF GRADING



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**LOWER IVORY CHANNEL IMPROVEMENTS**

**PLAN & PROFILE STA. 16+00 TO 20+00**

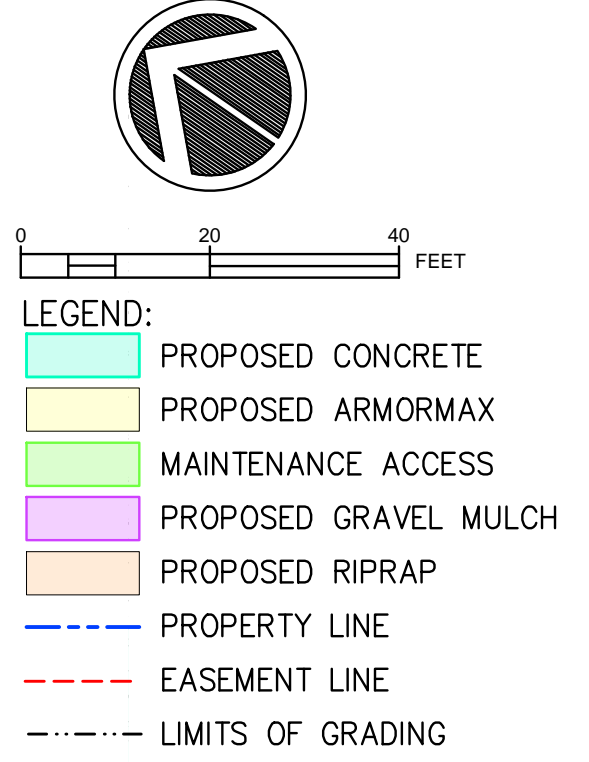
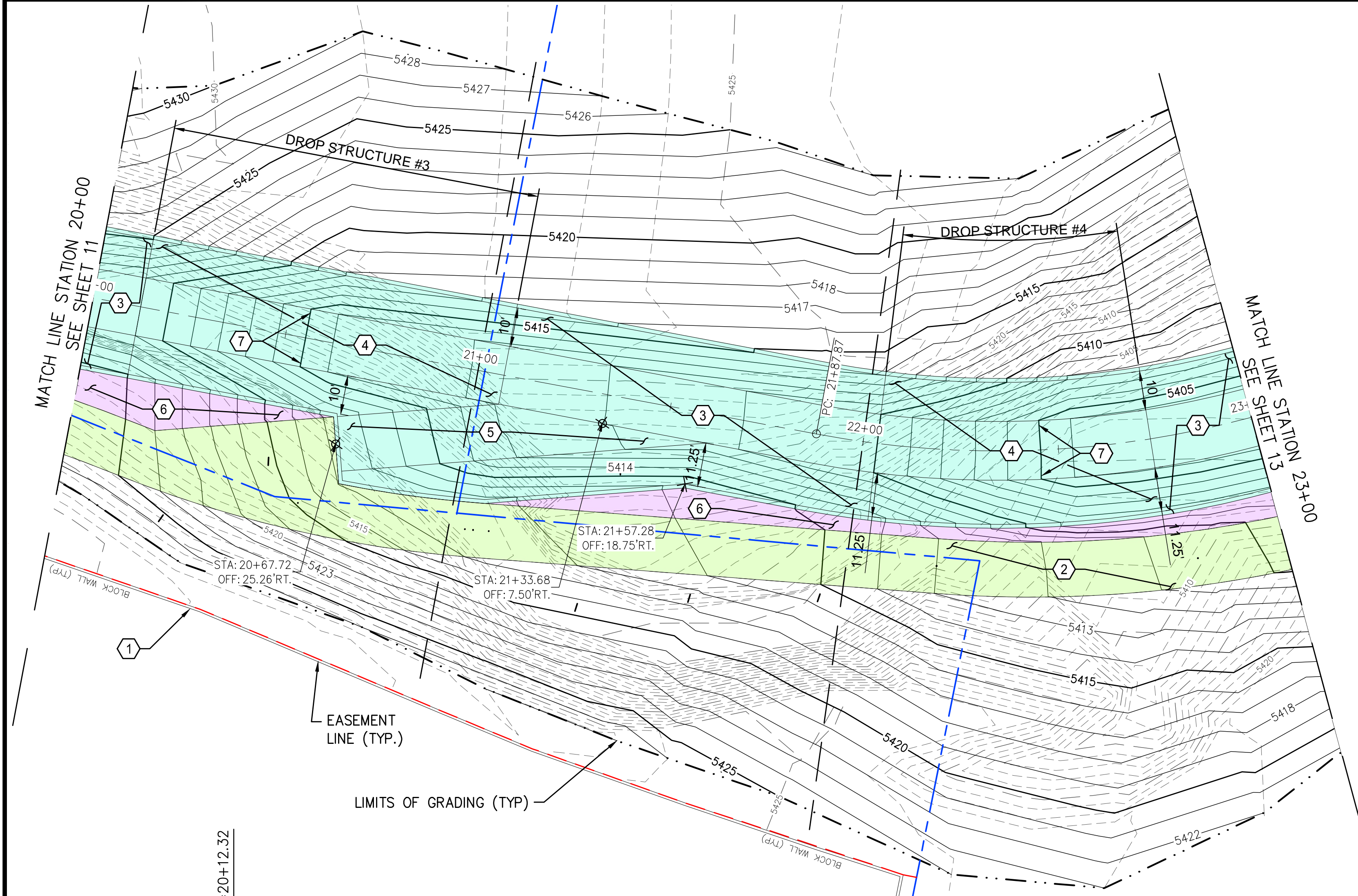
**REVISIONS & CHANGE NOTICES**

MARK	DESCRIPTION	DATE

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 DESIGNED BY: JN  
 DRAWN BY: KLF  
 CHECKED BY: AES  
 DATE: 8/23/2022

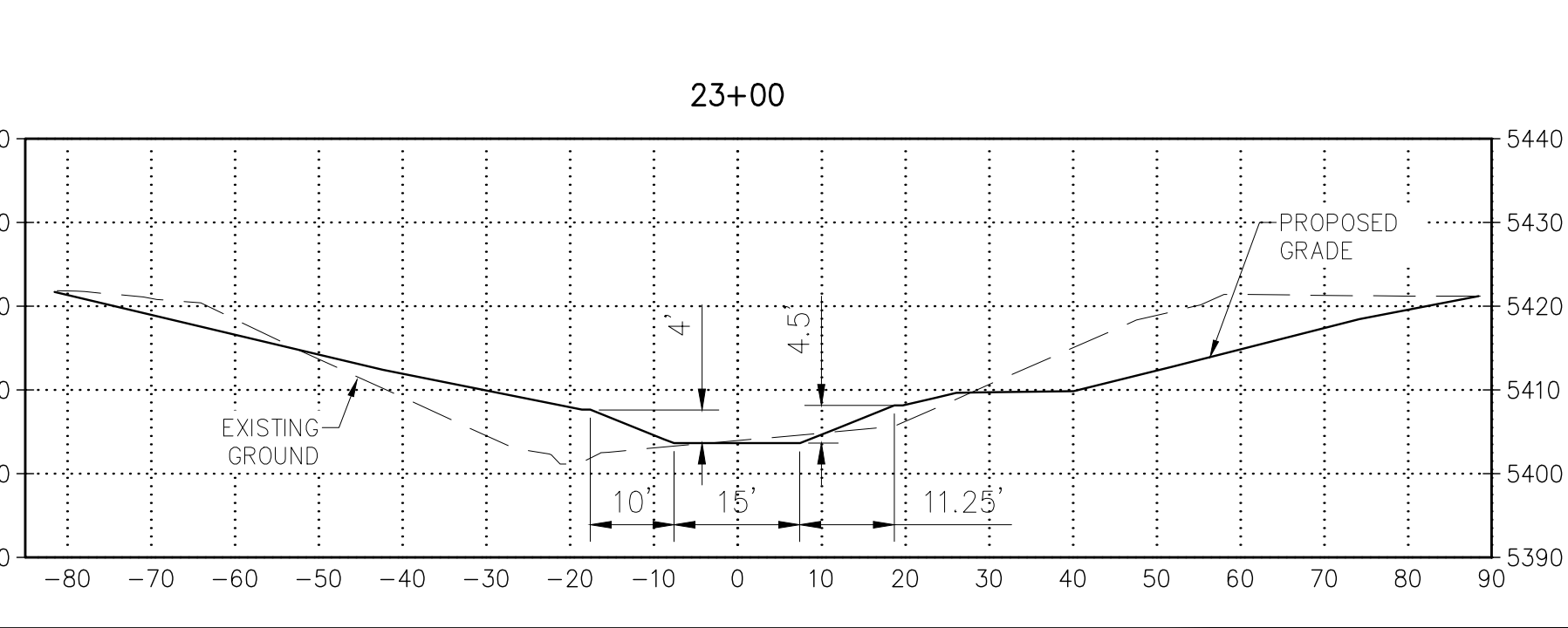
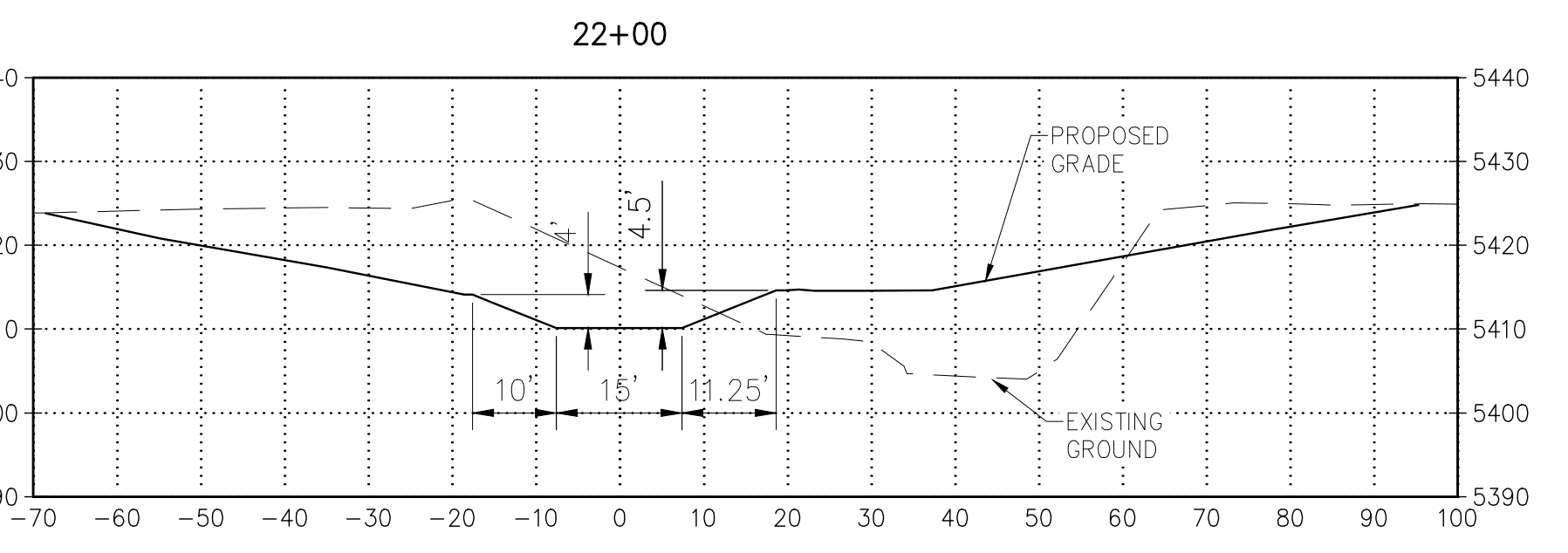
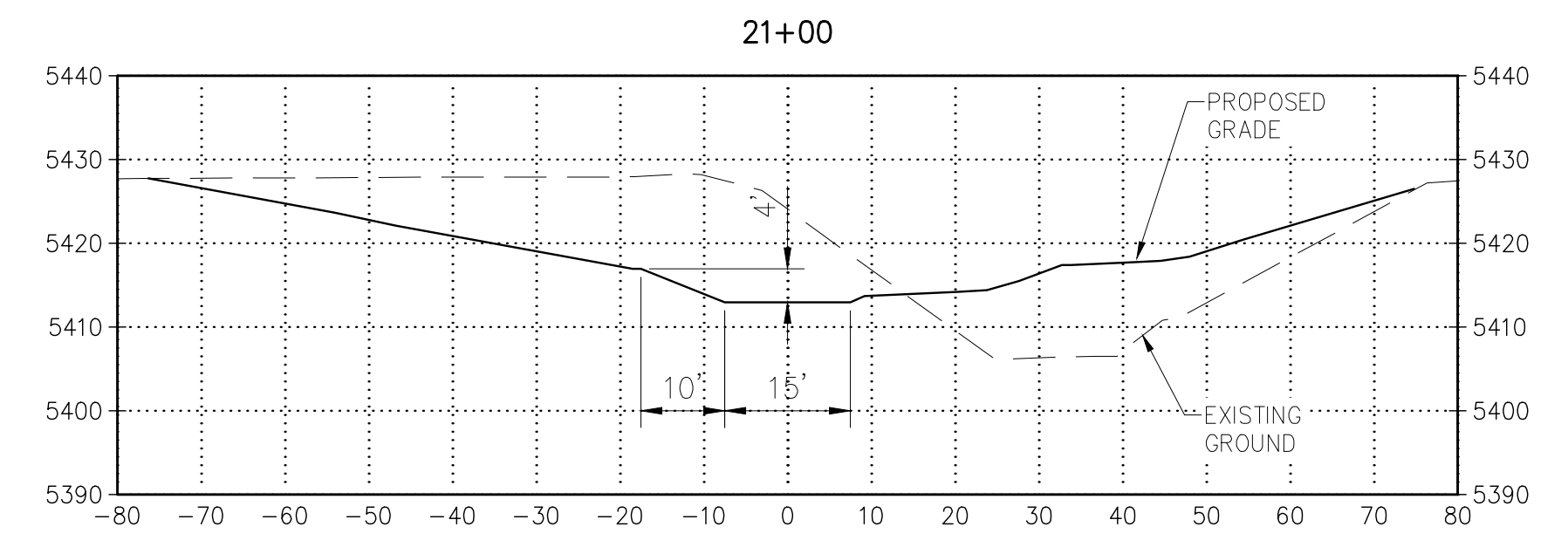
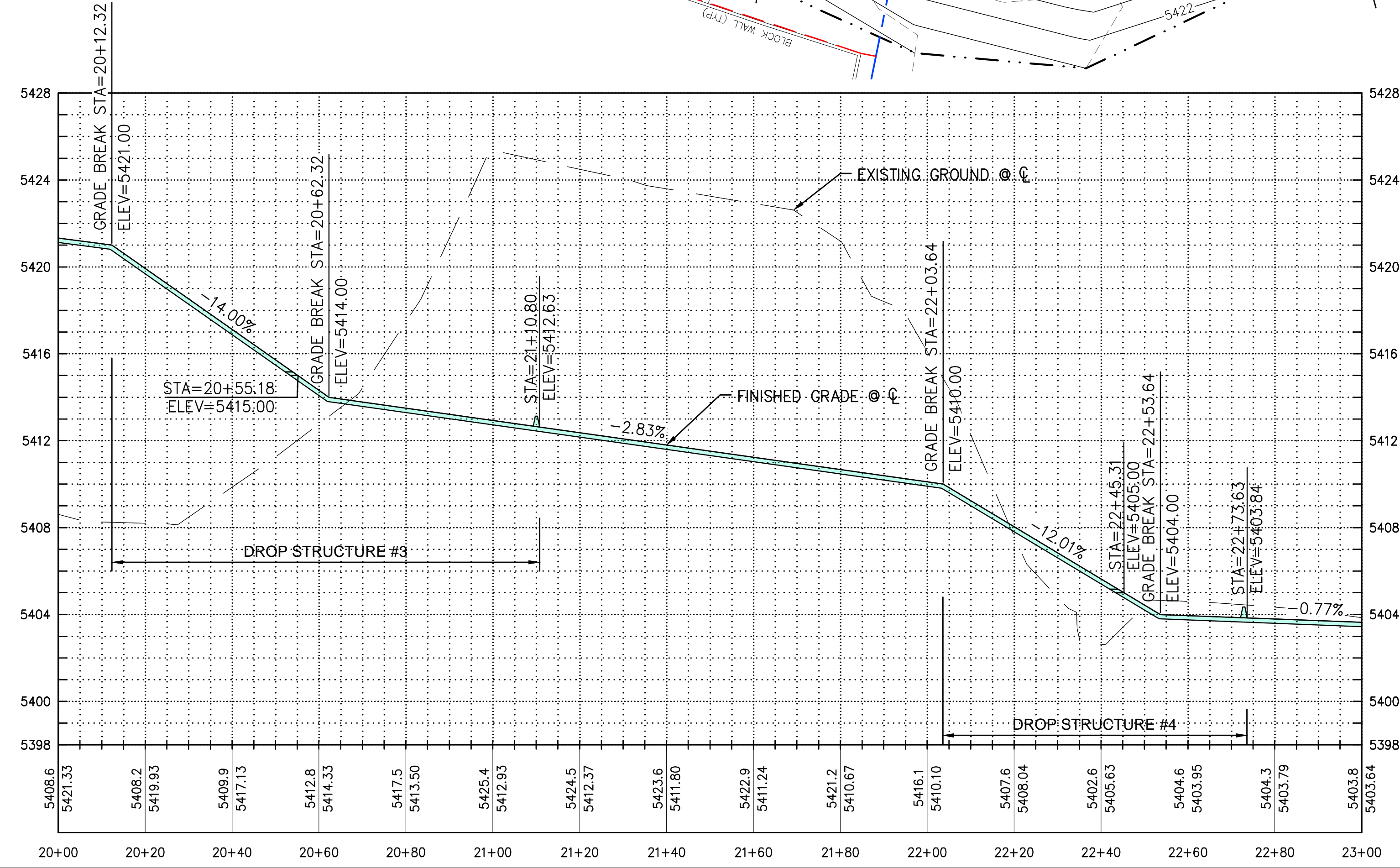
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- KEYED NOTES:**
1. PROTECT EXISTING BLOCK WALL IN PLACE.
  2. CONSTRUCT MAINTENANCE ACCESS ROAD PER SSSAFCA STD. DWG. M102 ON SHEET 14.
  3. STA. 20+00 TO 20+12.32, STA. 21+10.80 TO 22+03.64 AND STA. 22+73.64 TO 23+00 CONSTRUCT CONCRETE LINED CHANNEL WITH TINED FINISH PER DETAIL ON SHEET 15.
  4. STA. 20+12.32 TO 21+10.80 AND STA. 22+03.64 TO 22+73.64 CONSTRUCT REINFORCED CONCRETE DROP STRUCTURES PER DETAILS ON SHEET 15.
  5. STA. 20+67.72, 25.26' RT. TO STA. 21+33.68, 7.50' RT. CONSTRUCT CONCRETE RAMP PER DETAILS ON SHEET 16.
  6. GRAVEL MULCH AFTER SEEDING, 2"-4" CRUSHED GRAVEL, 4" THICK, NO GEOTEXTILE. ALL AREAS BETWEEN MAINTENANCE ACCESS ROAD AND "ARMORMAX 75"(OR APPROVED EQUAL) CHANNEL LINING.
  7. STA. 20+55.18 AND STA. 22+45.31, 6.5' LT. AND 6.5' RT. CONSTRUCT WEEP DRAINS, (2) PLACED AT 13' O.C. HORIZONTALLY PER DETAILS ON SHEET 15.

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**LOWER IVORY CHANNEL IMPROVEMENTS**  
**PLAN & PROFILE**  
**STA. 20+00 TO 23+00**

REVISIONS & CHANGE NOTICES

MARK	DESCRIPTION	DATE

PROJECT NO: BL\_P0014-02  
 DESIGNED BY: JN  
 DRAWN BY: KLF  
 CHECKED BY: AES  
 DATE: 8/16/2022

Tuesday, August 16, 2022 8:19:05 AM - KFOURNER  
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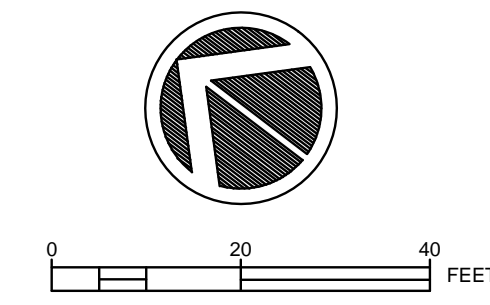
**Southern Sandoval  
County  
Arroyo Flood Control  
Authority**

1041 Commercial Dr. S.E.  
Rio Rancho, New Mexico 87124  
505-892-RAIN (7246)  
505-892-7241 (Fax)  
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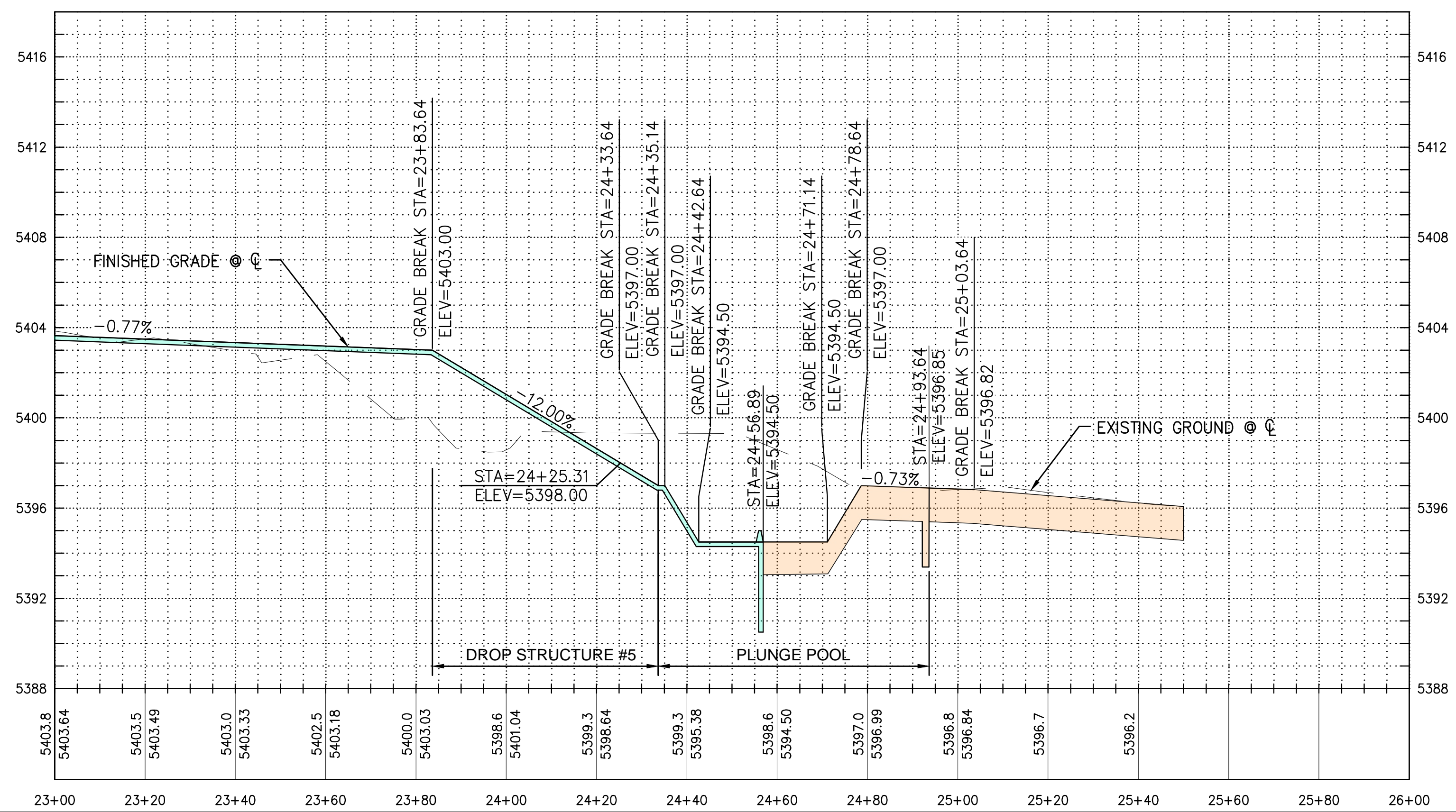
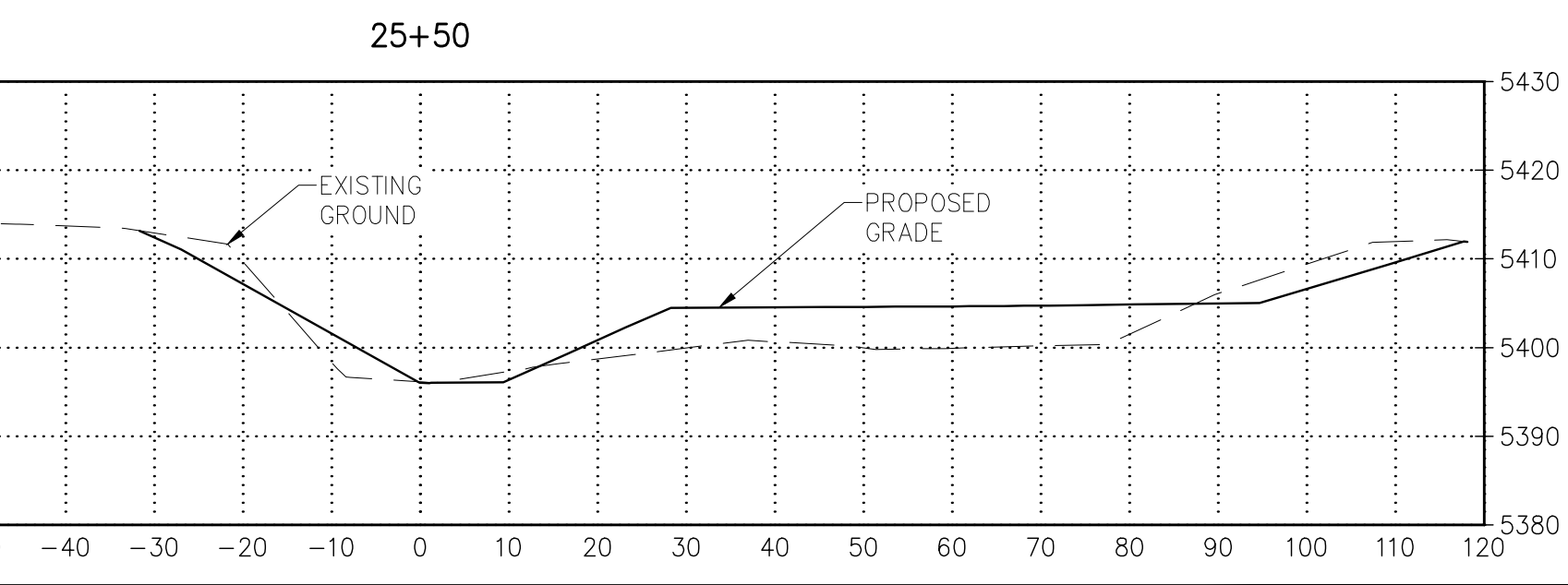
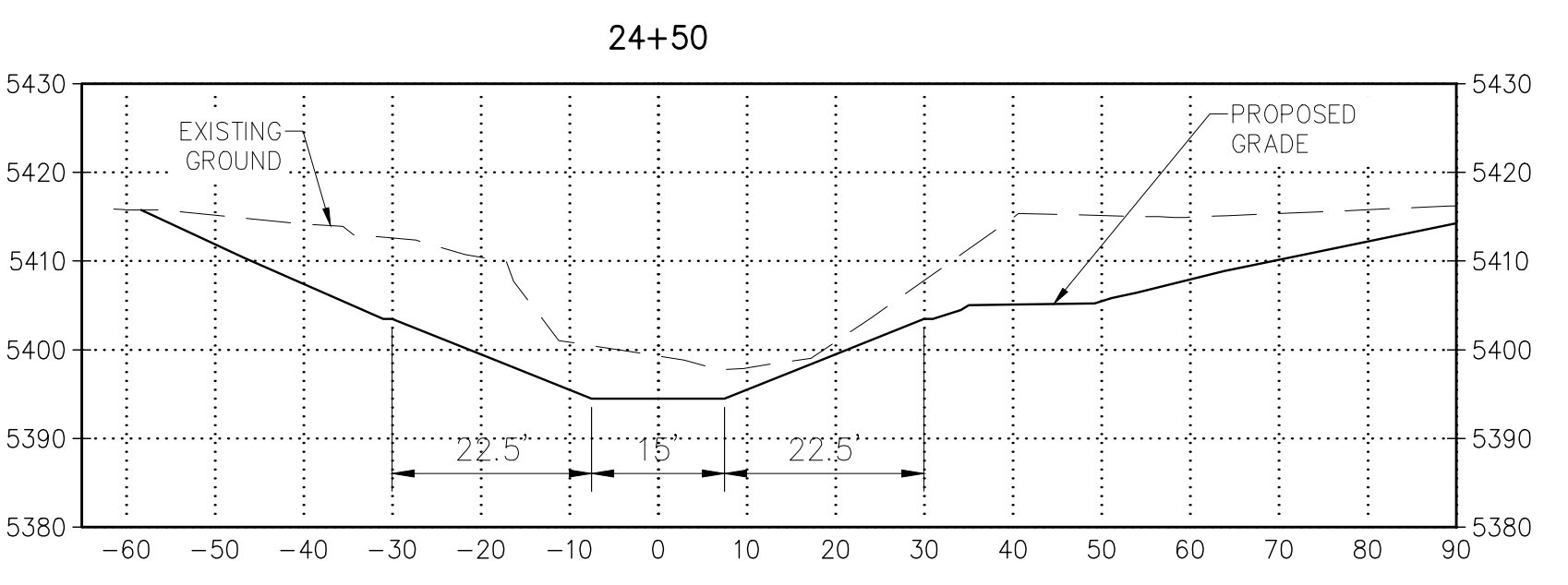
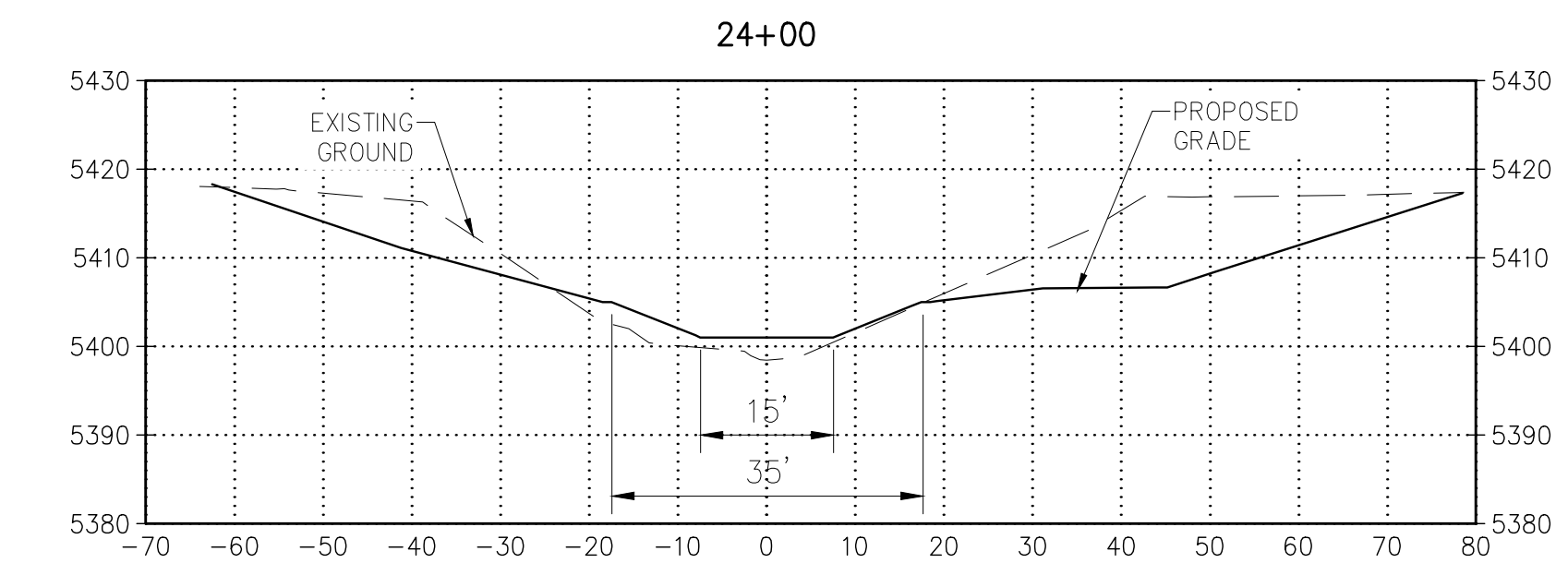
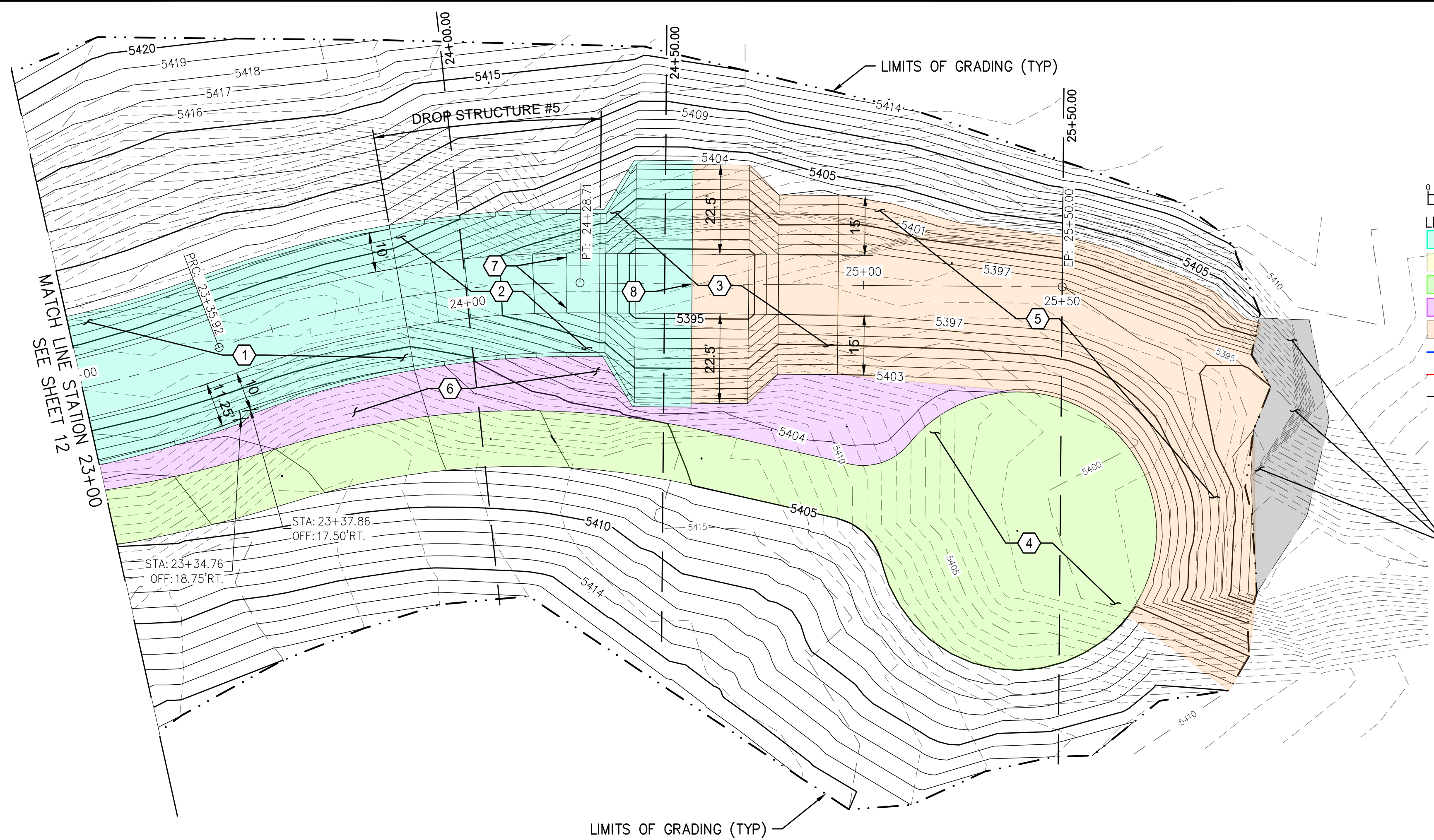
**KEYED NOTES:**

1. STA. 23+00 TO 23+83.64 CONSTRUCT "ARMORMAX 75"(OR APPROVED EQUAL) CHANNEL LINING PER DETAILS ON SHEET 17.
2. STA. 23+83.64 TO 24+33.64 CONSTRUCT REINFORCED CONCRETE DROP STRUCTURE PER DETAILS ON SHEET 15.
3. STA. 24+33.64 TO STA. 24+93.64 CONSTRUCT CONCRETE AND RIPRAP LINED PLUNGE POOL PER APWA SPECIFICATION 603, SEE DETAILS ON SHEET 16.
4. CONSTRUCT MAINTENANCE ACCESS ROAD PER SSCAFCA STD.DWG. M102 ON SHEET 14.
5. STA. 24+93.64 TO EXTENTS SHOWN ON PLAN CONSTRUCT DUMPED RIPRAP APWA TYPE L (D<sub>50</sub>=9"), 18" THICK PER APWA SPECIFICATION 603/109.
6. GRAVEL MULCH AFTER SEEDING, 2"-4" CRUSHED GRAVEL, 4" THICK, NO GEOTEXTILE. ALL AREAS BETWEEN MAINTENANCE ACCESS ROAD AND CHANNEL LINING.
7. STA. 24+25.31, 6.5' LT. AND 6.5' RT. CONSTRUCT WEEP DRAINS, (2) PLACED AT 13' O.C. HORIZONTALLY PER DETAILS ON SHEET 15.
8. STA. 24+56.89 CONSTRUCT A 4' DEEP 10" THICK REINFORCED CONCRETE CUT-OFF WALL ALONG THE EDGE OF CONCRETE LINING, AS SHOWN IN THE PROFILE OF THIS SHEET.



- LEGEND:**
- PROPOSED CONCRETE
  - PROPOSED ARMORMAX
  - MAINTENANCE ACCESS
  - PROPOSED GRAVEL MULCH
  - PROPOSED RIPRAP
  - PROPERTY LINE
  - EASEMENT LINE
  - LIMITS OF GRADING

CONTRACTOR MAY NEED TO REMOVE SOME OF THE EXISTING HILLSIDE FOR CONSTRUCTION ACCESS. COORDINATE WITH SSCAFCA FIELD STAFF AND WORK TO MINIMIZE DISTURBANCE.



LOWER IVORY CHANNEL  
IMPROVEMENTS

PLAN & PROFILE  
STA. 23+00 TO 25+50

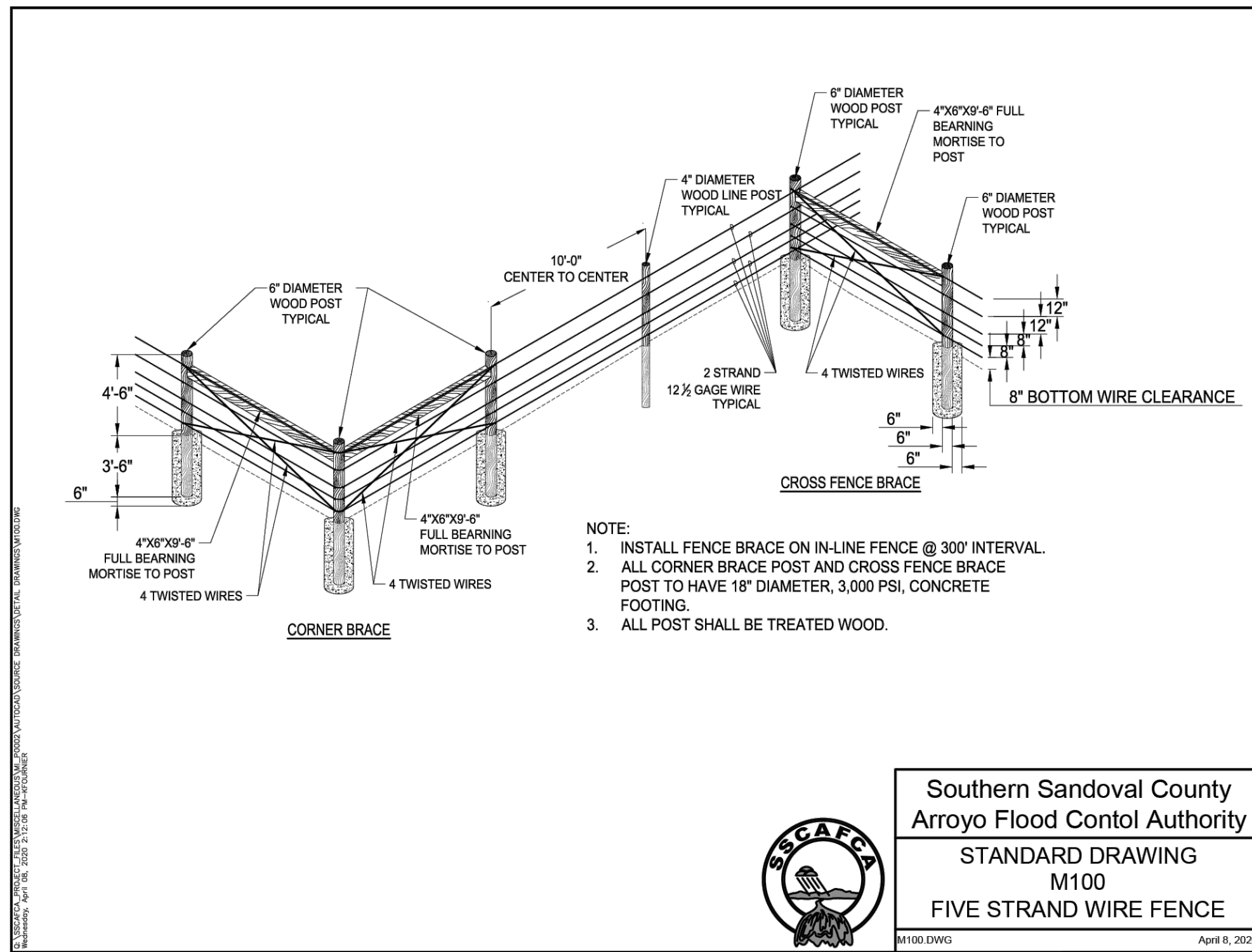
REVISIONS & CHANGE NOTICES

MARK	DESCRIPTION	DATE

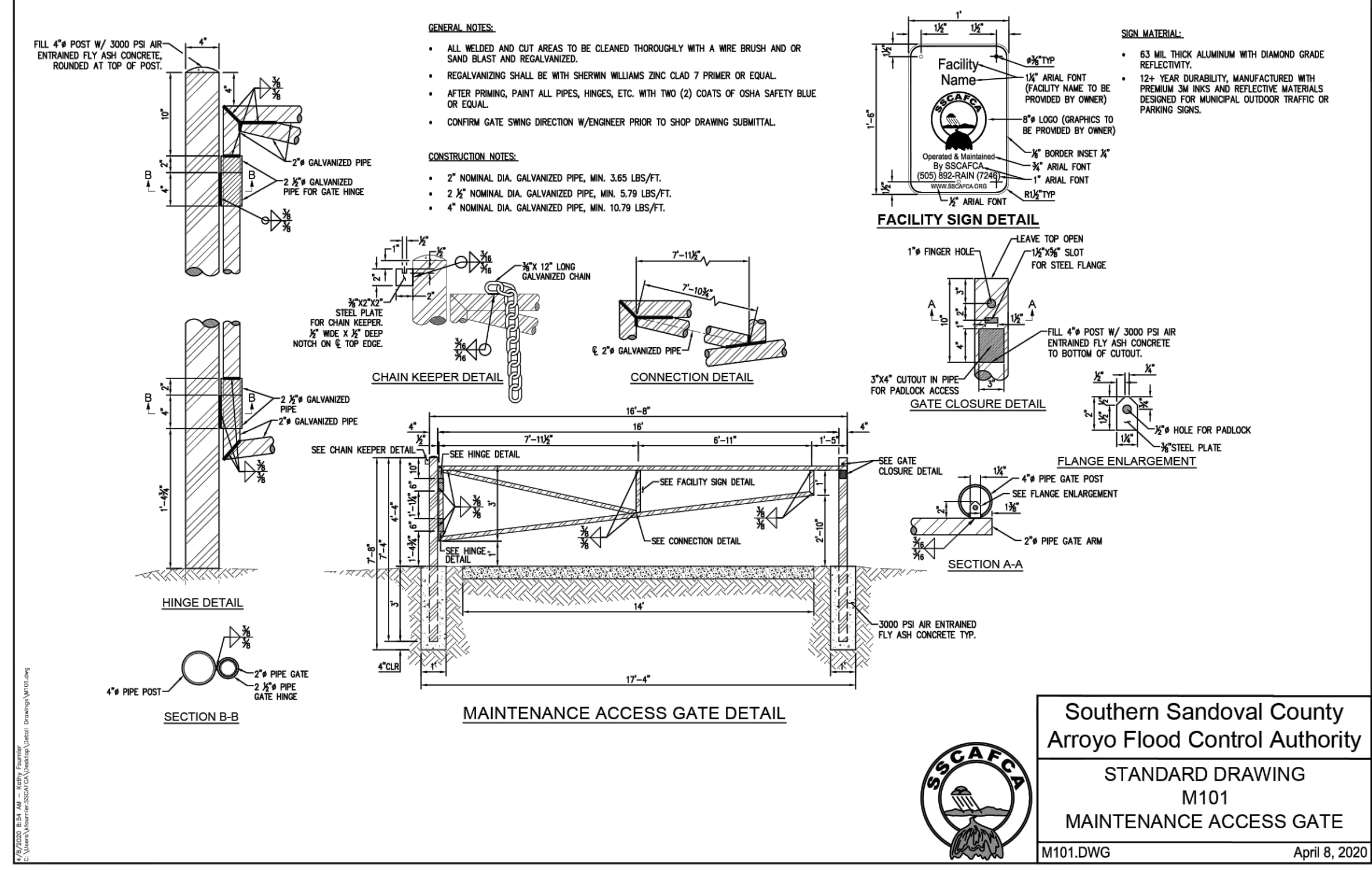
PROJECT NO: BL\_P0014-02  
DESIGNED BY: JN  
DRAWN BY: KLF  
CHECKED BY: AES  
DATE: 8/23/2022

Tuesday, August 23, 2022 8:42:22 AM - KOURNER  
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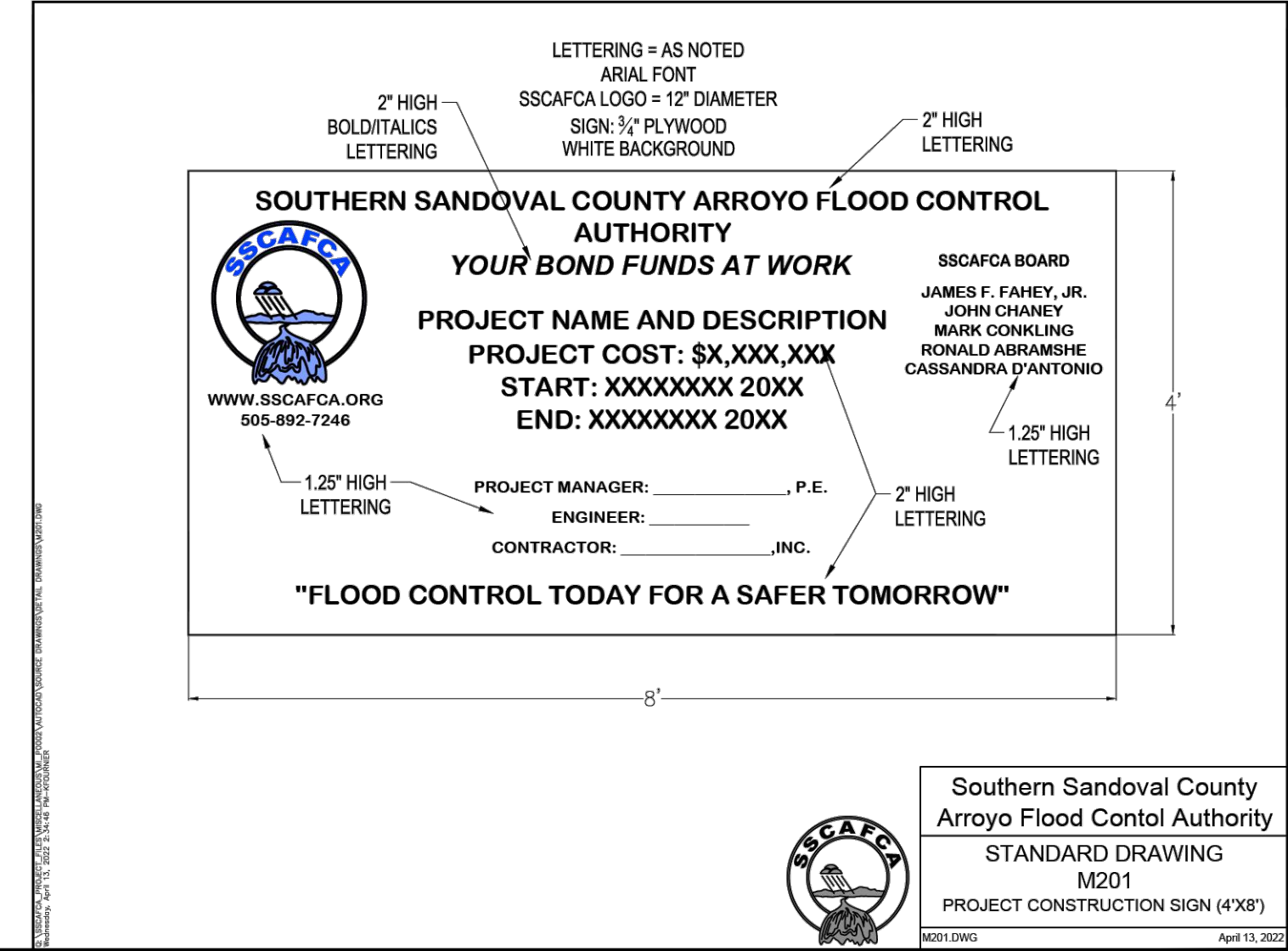
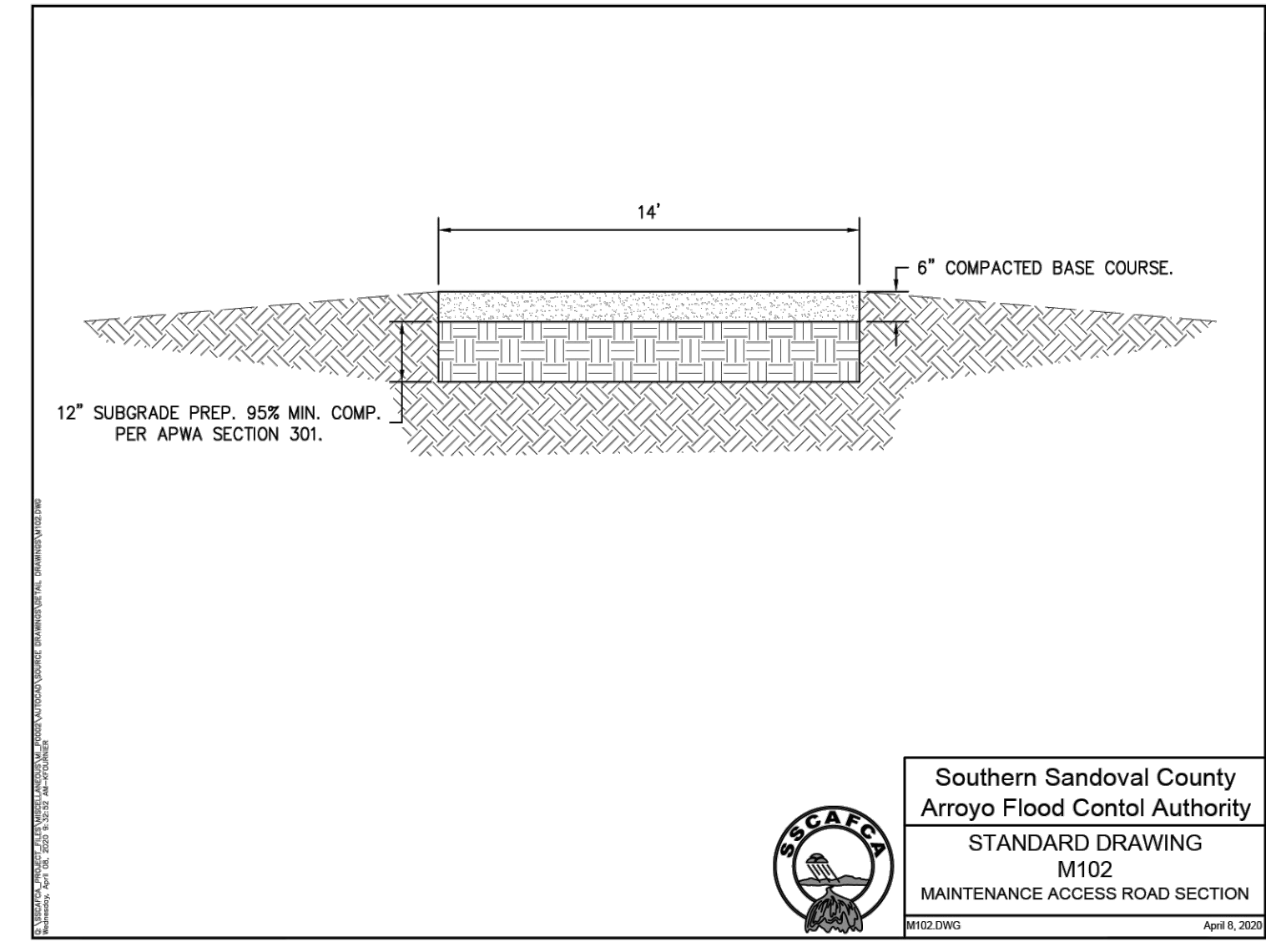
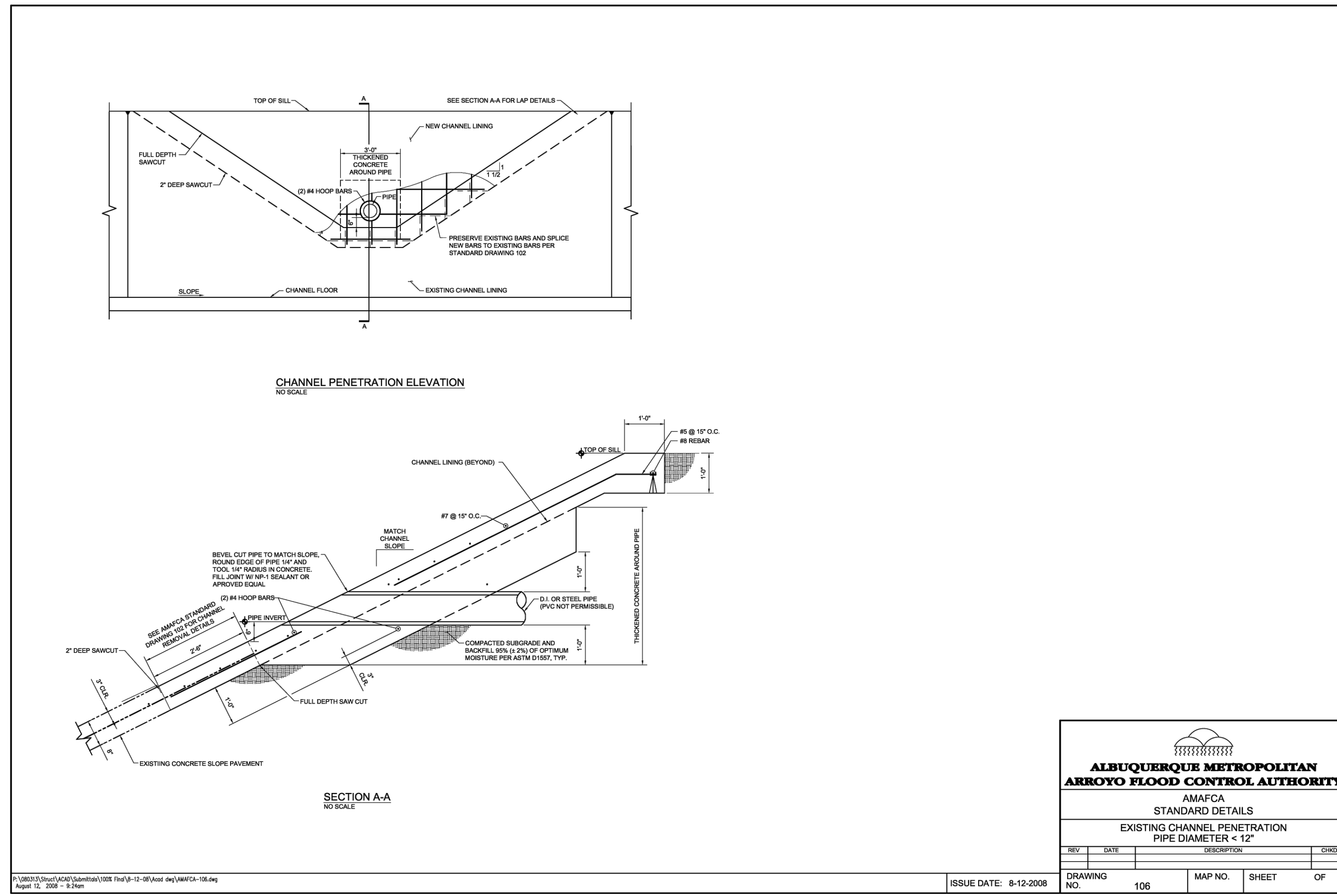
Southern Sandoval County  
 Arroyo Flood Control Authority  
 STANDARD DRAWING  
 M100  
 FIVE STRAND WIRE FENCE  
 M100.DWG April 8, 2020



Southern Sandoval County  
 Arroyo Flood Control Authority  
 STANDARD DRAWING  
 M101  
 MAINTENANCE ACCESS GATE  
 M101.DWG April 8, 2020



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REVISIONS & CHANGE NOTICES

MARK	DESCRIPTION	DATE

PROJECT NO: BL\_P0014-02  
 DESIGNED BY: JN  
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 DATE: 8/15/2022

Monday, August 22, 2022 2:52:24 PM - Kathy Fournier  
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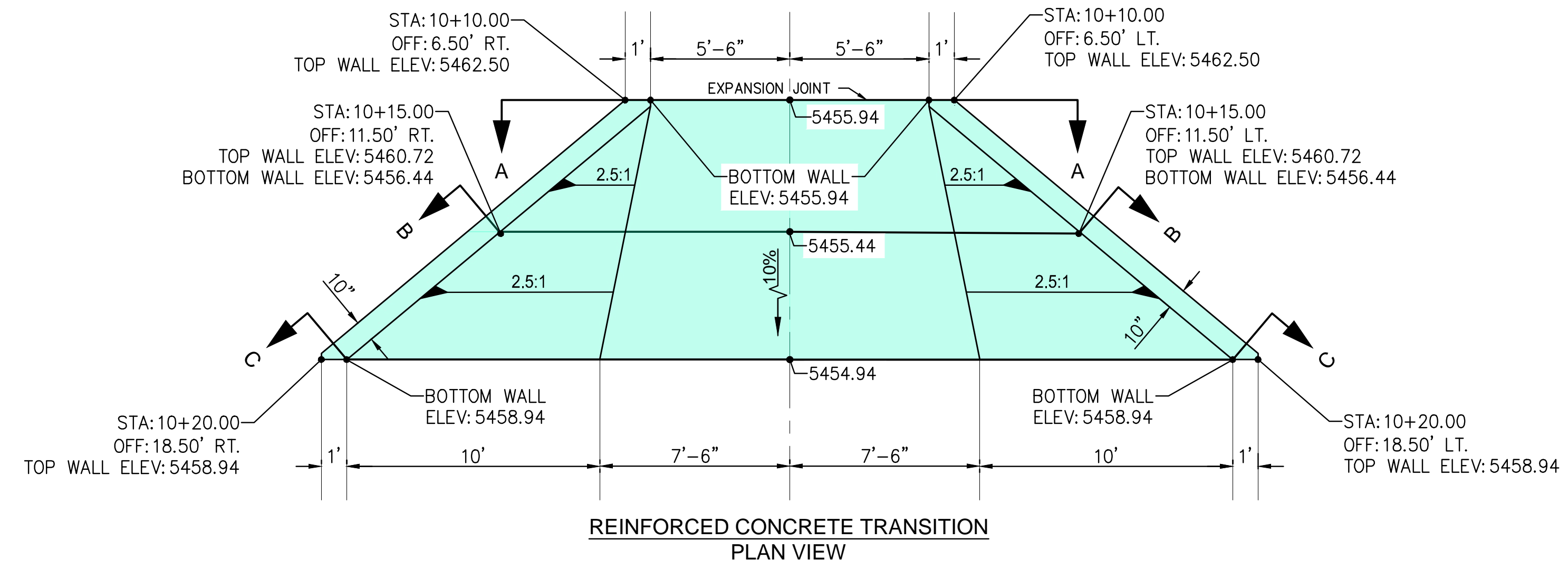
LOWER IVORY CHANNEL  
IMPROVEMENTS

CHANNEL DETAILS

REVISIONS & CHANGE NOTICES

MARK	DESCRIPTION	DATE

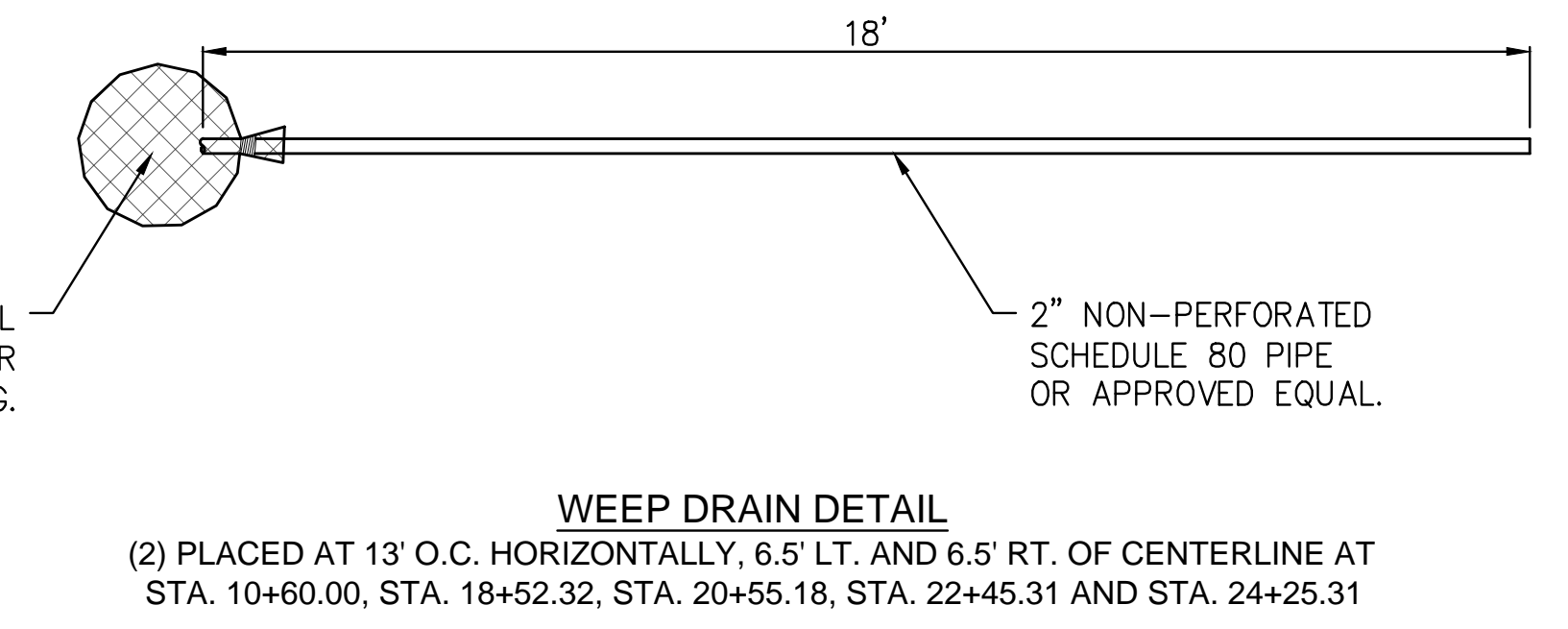
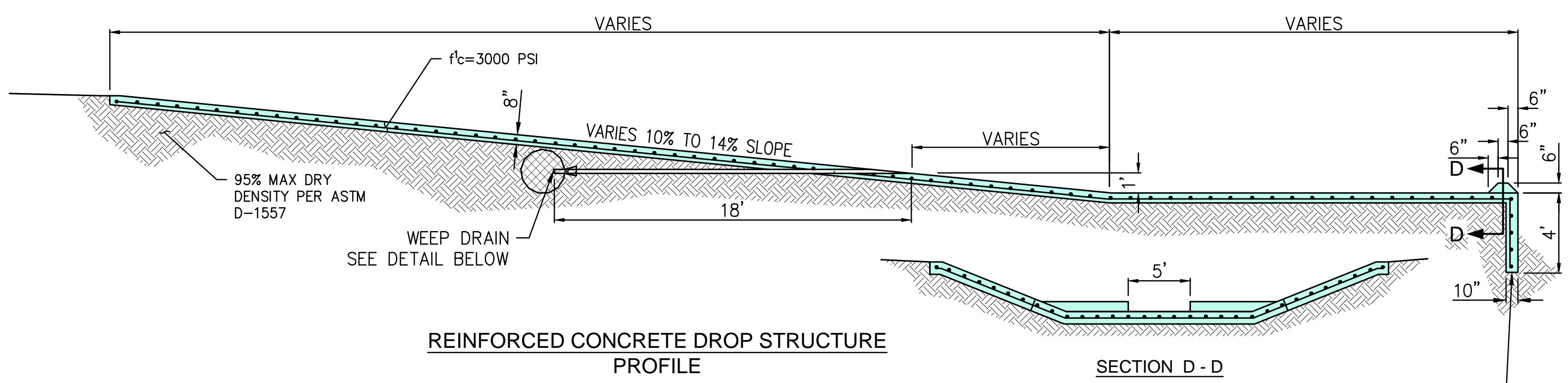
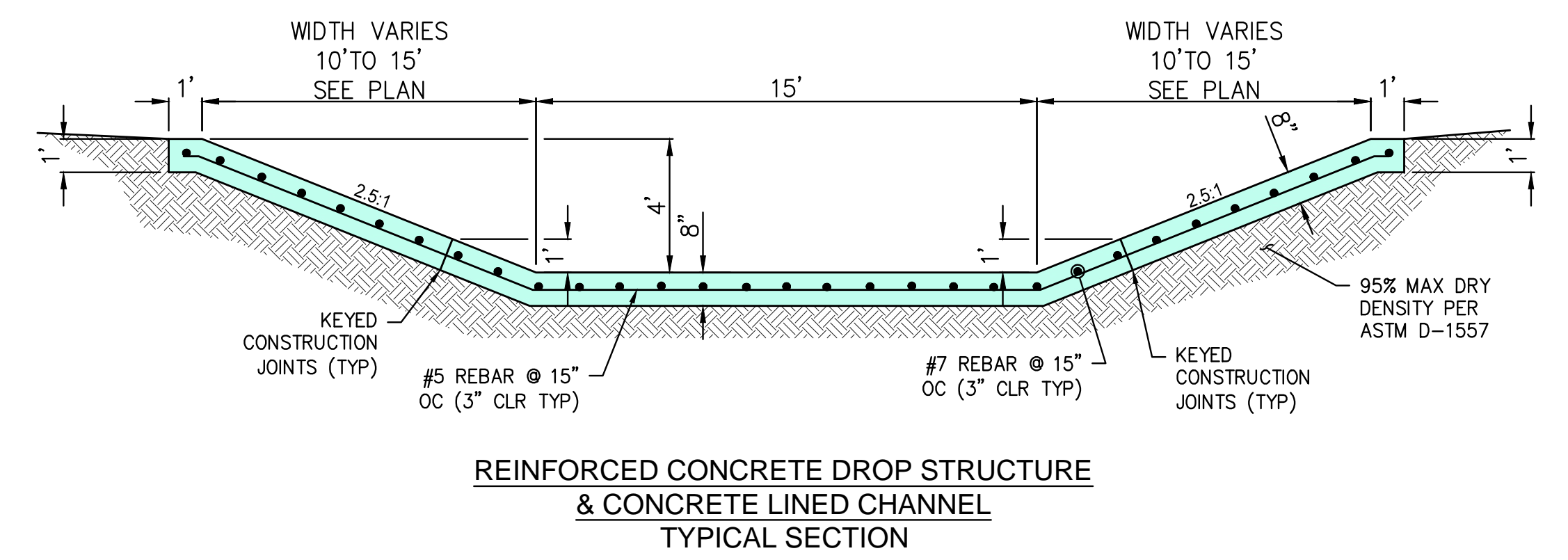
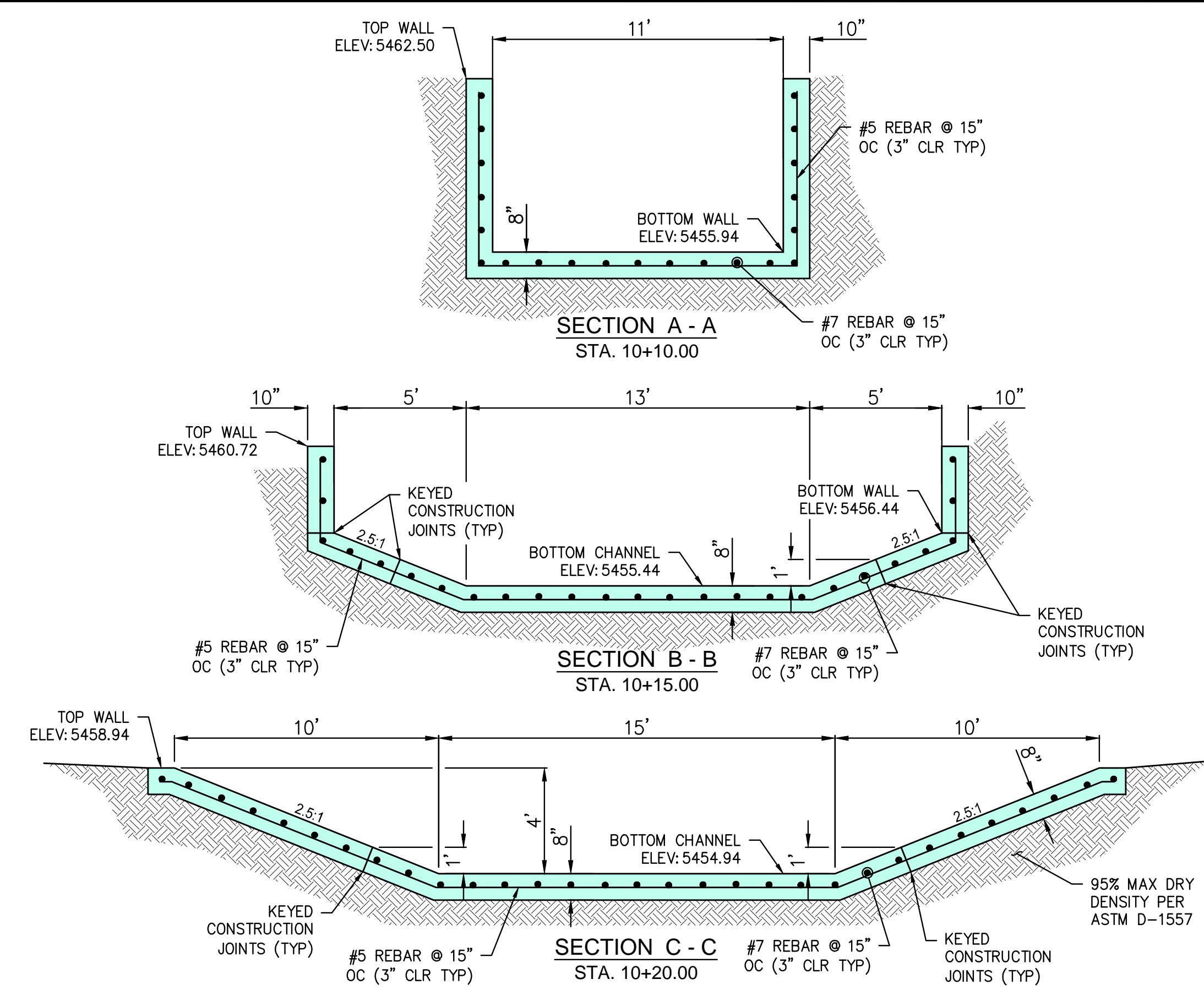
PROJECT NO: BL\_P0014-02  
DESIGNED BY: JN  
DRAWN BY: KLF  
CHECKED BY: AES  
DATE: 8/23/2022



**REINFORCED CONCRETE NOTES:**

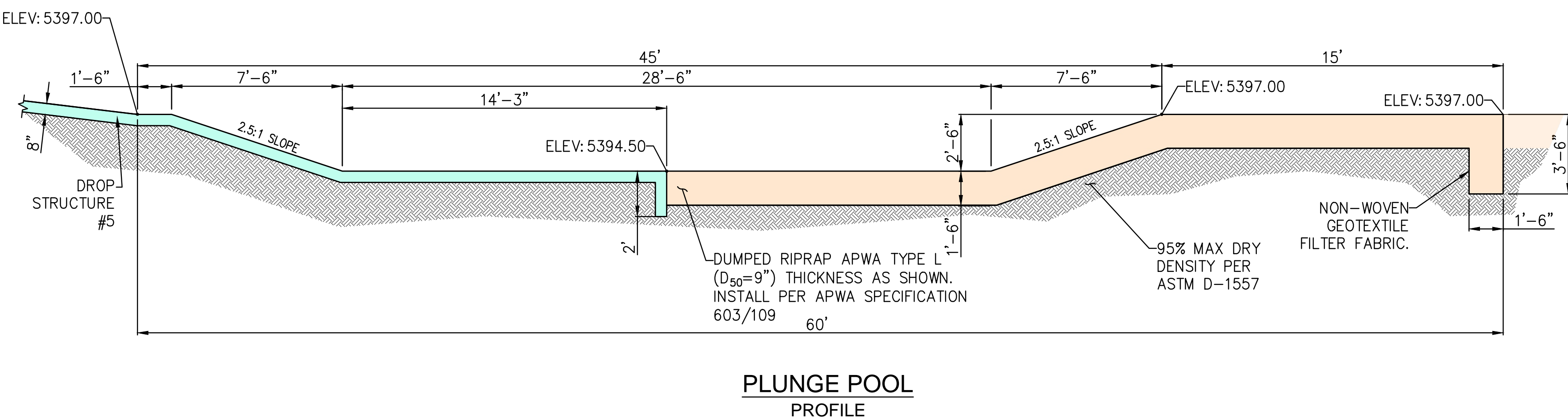
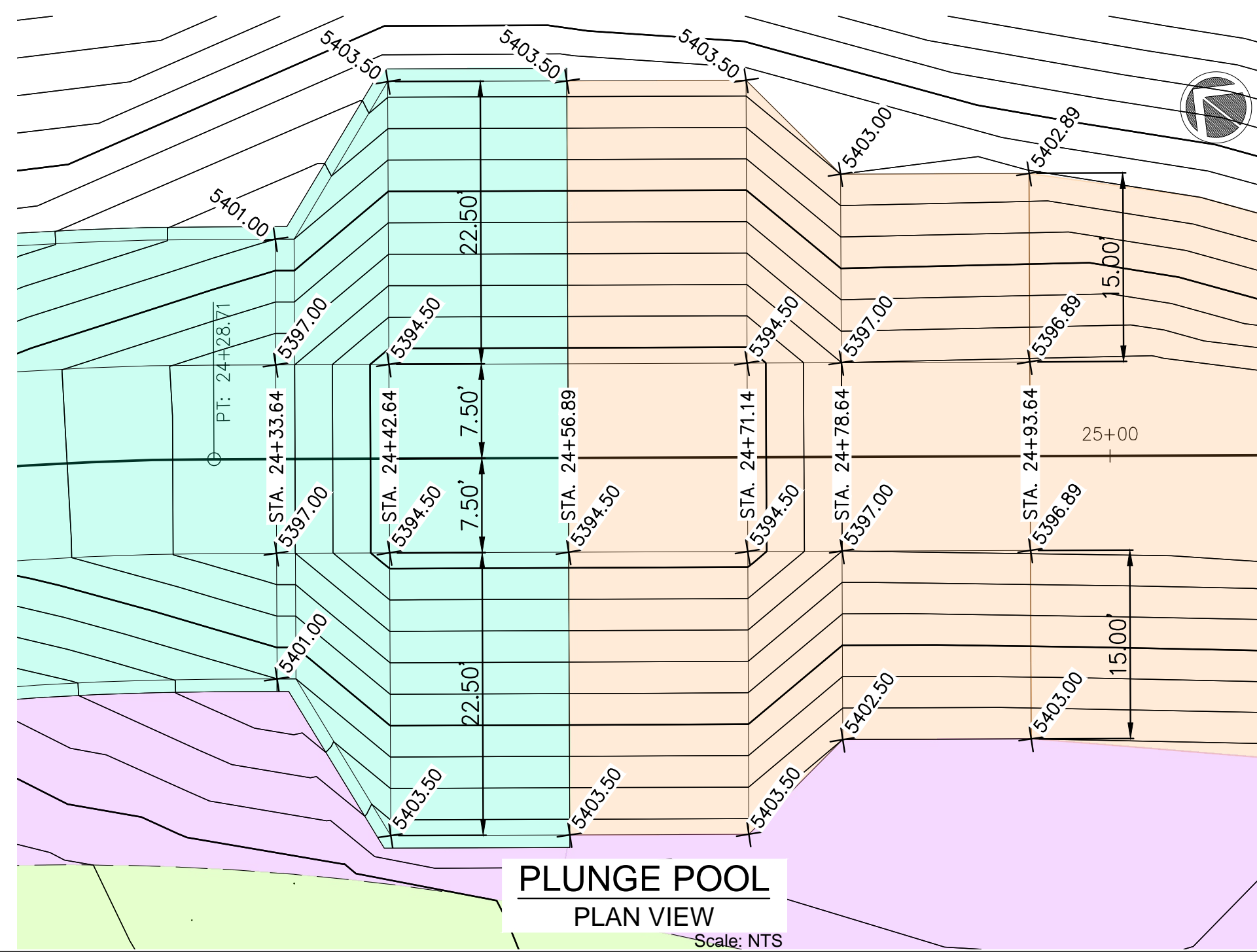
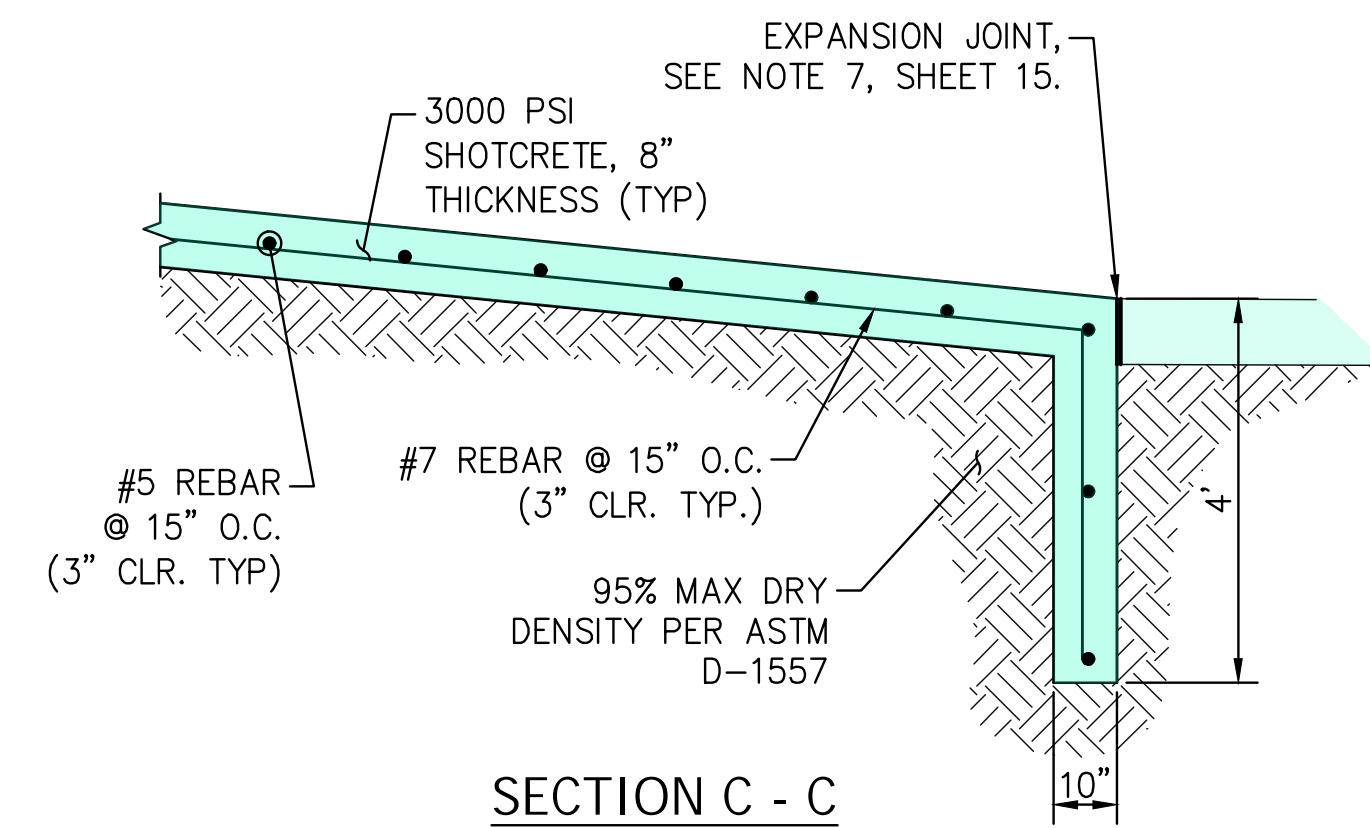
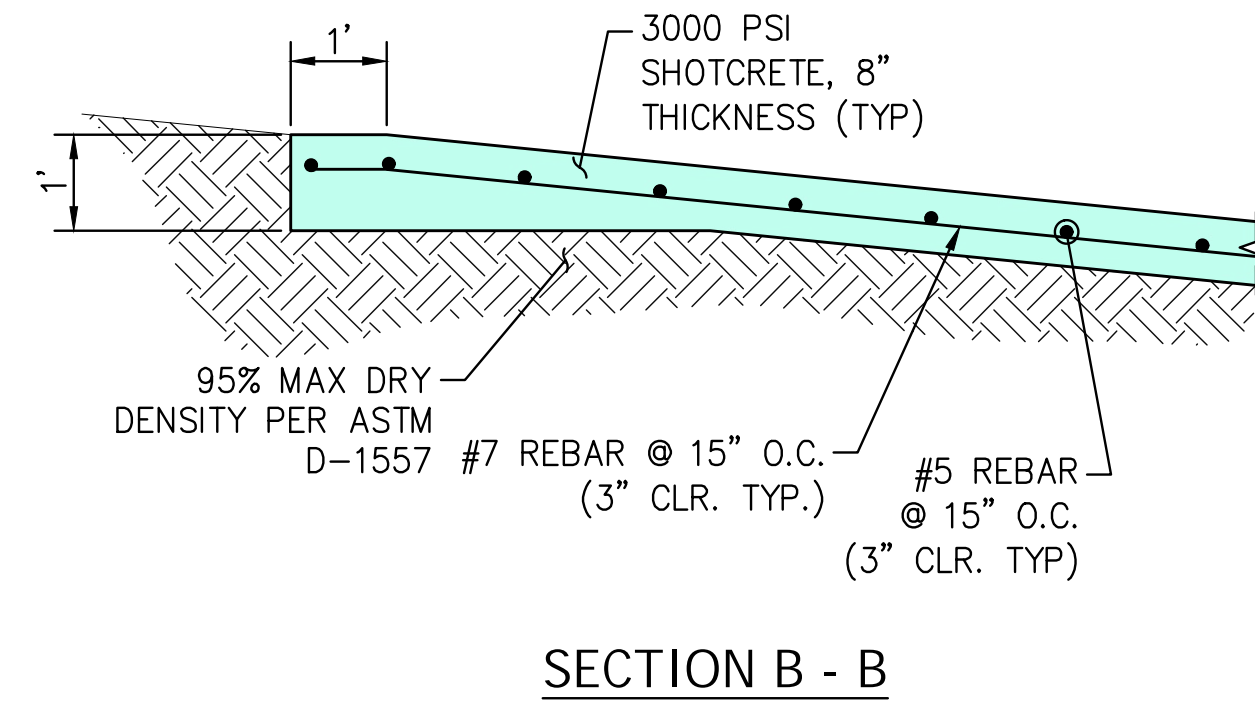
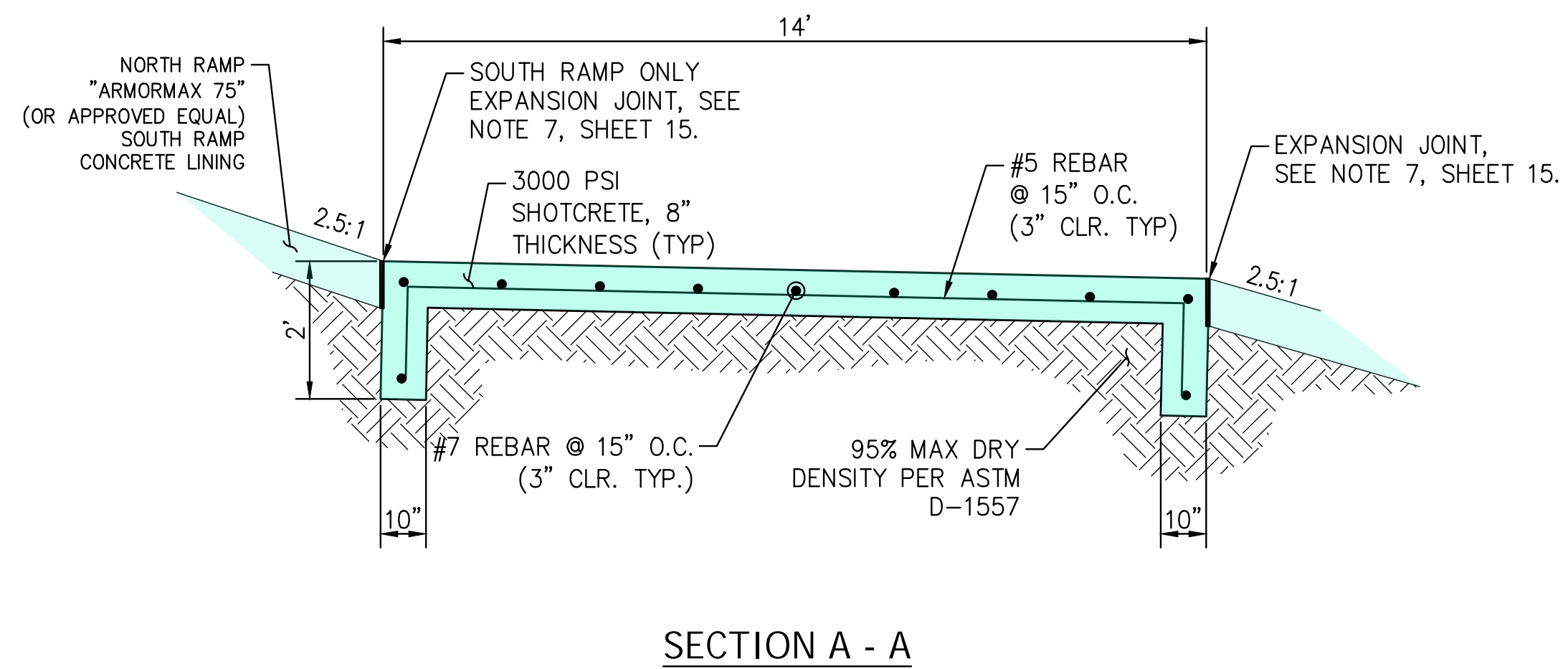
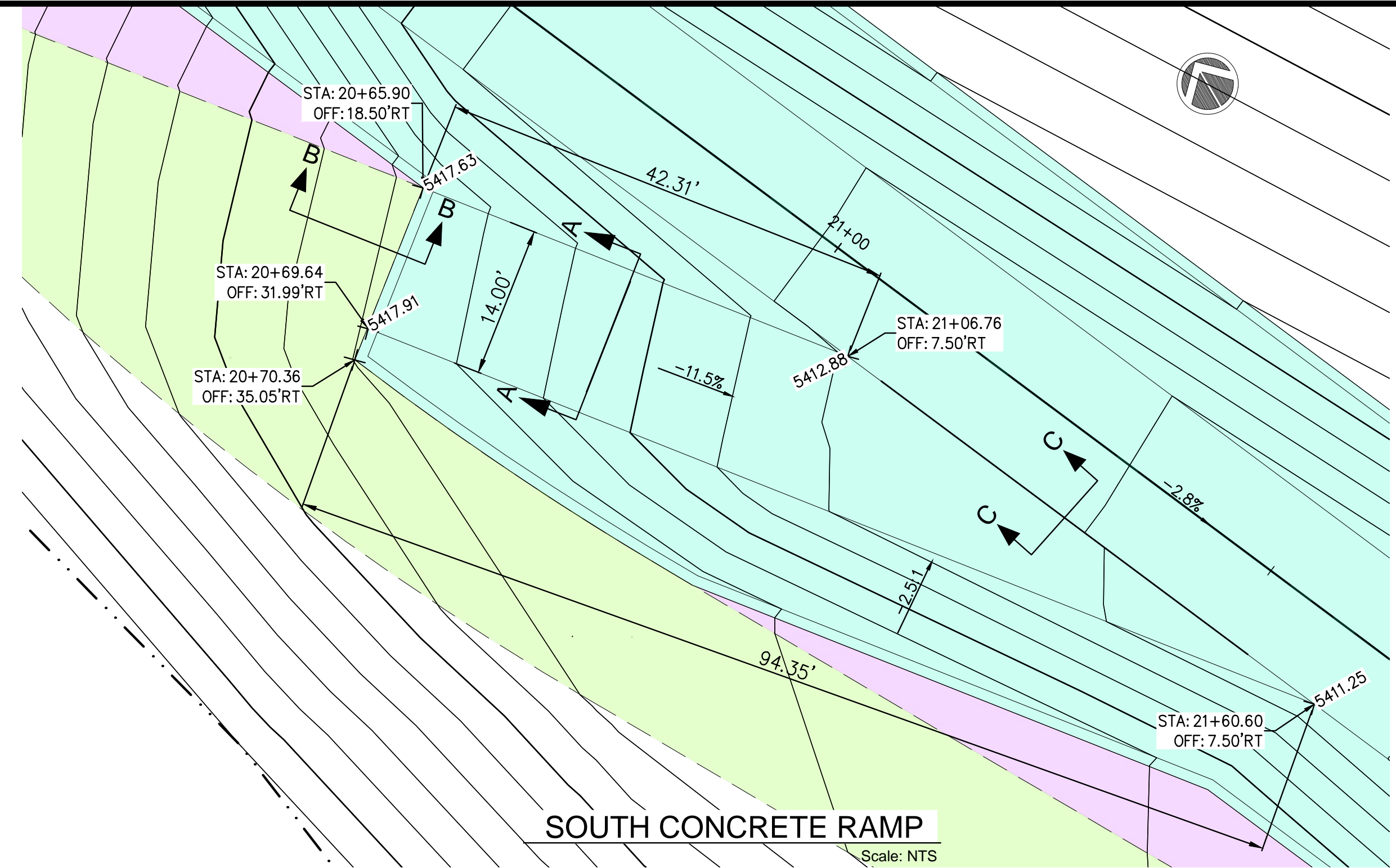
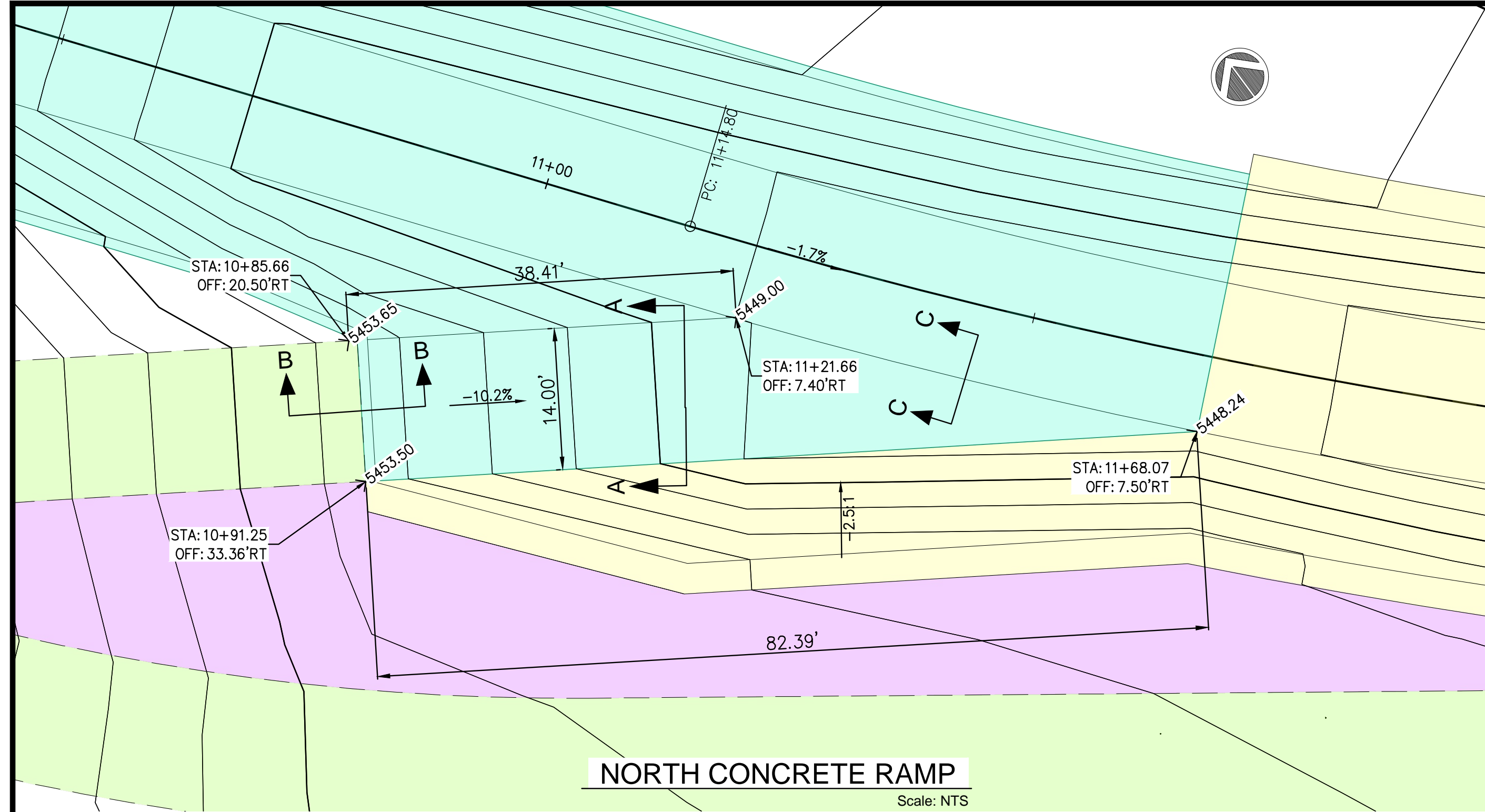
- CAST-IN-PLACE CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH  $f'_c=3000$  PSI MINIMUM.
- ALL EXPOSED FORMED EDGES SHALL HAVE  $\frac{3}{8}$ " CHANFER UNLESS OTHERWISE NOTED.
- CHANNEL SUBGRADE PREPARATION TO A DEPTH OF 12", MUST ACHIEVE MAX. DRY DENSITY OF 95% PER ASTM D-1557
- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. MINIMUM LAP LENGTHS FOR #5 AND #7 REBAR SHALL BE 30" AND 43", RESPECTIVELY.
- EXPOSED CHANNEL CONCRETE SHALL HAVE A TINED FINISH, TINING SHALL BE APPLIED TRANSVERSE TO FLOW.
- CONTROL CONTRACTION JOINTS SHALL BE PLACED TO PROVIDE A STONE W/LENGTH NOT TO EXCEED 20'.
- ALL EXPOSED EXPANSION JOINTS & CONTROL JOINTS SHALL BE SEALED WITH NP1 ( OR APPROVED EQUAL) ELASTOMERIC POLYURETHANE SEALANT.

BAR SIZE	LAP SPLICE LENGTHS (IN.)					
	LENGTHS (IN.)					
	3000 PSI		4000 PSI		5000 PSI	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	28	21	24	18	22	17
#4	37	28	32	25	29	22
#5	46	36	40	31	36	28
#6	56	43	48	37	43	33
#7	81	62	70	54	63	48
#8	93	71	80	62	72	55
#9	104	80	90	70	81	62
#10	118	90	102	78	91	70
#11	131	100	113	87	101	78



Tuesday, August 23, 2022 12:44:27 PM - Kathy Fountain  
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LOWER IVORY CHANNEL  
IMPROVEMENTS  
RAMP & PLUNGE POOL DETAILS

REVISIONS & CHANGE NOTICES		
MARK	DESCRIPTION	DATE

PROJECT NO: BL\_P0014-02  
DESIGNED BY: JN  
DRAWN BY: KLF  
CHECKED BY: AES  
DATE: 8/22/2022

Monday, August 22, 2022, 3:37:55 PM - Kathy Fournier  
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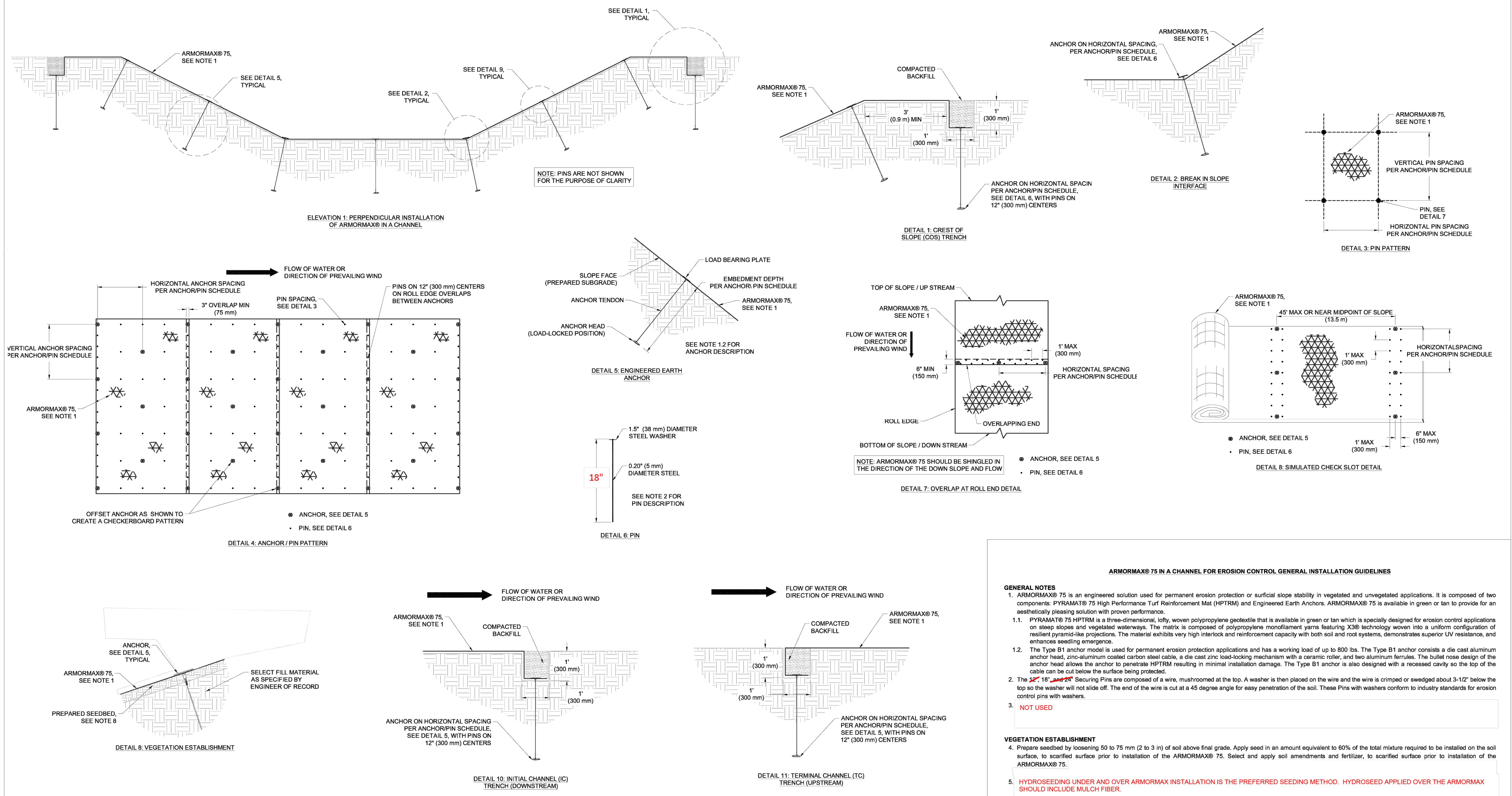
LOWER IVORY CHANNEL  
IMPROVEMENTS

ARMORMAX DETAILS

**REVISIONS &  
CHANGE NOTICES**

MARK	DESCRIPTION	DATE

PROJECT NO: BL\_P0014-02  
DESIGNED BY: JN  
DRAWN BY: KLF  
CHECKED BY: AES  
DATE: 5/3/2022



**ARMORMAX® 75 IN A CHANNEL FOR EROSION CONTROL GENERAL INSTALLATION GUIDELINES**

**GENERAL NOTES**

- ARMORMAX® 75 is an engineered solution used for permanent erosion protection or surficial slope stability in vegetated and unvegetated applications. It is composed of two components: PYRAMAT® 75 High Performance Turf Reinforcement Mat (HPTRM) and Engineered Earth Anchors. ARMORMAX® 75 is available in green or tan to provide for an aesthetically pleasing solution with proven performance.
  - PYRAMAT® 75 HPTRM is a three-dimensional, lofty, woven polypropylene geotextile that is available in green or tan which is specially designed for erosion control applications on steep slopes and vegetated waterways. The matrix is composed of polypropylene monofilament yarns woven into a uniform configuration of resilient pyramid-like projections. The material exhibits very high interlock and reinforcement capacity with both soil and root systems, demonstrates superior UV resistance, and enhances seedling emergence.
  - The Type B1 anchor model is used for permanent erosion protection applications and has a working load of up to 800 lbs. The Type B1 anchor consists of a die cast aluminum anchor head, zinc-aluminum coated carbon steel cable, a die cast zinc load-locking mechanism with a ceramic roller, and two aluminum ferrules. The bullet nose design of the anchor head allows the anchor to penetrate HPTRM resulting in minimal installation damage. The Type B1 anchor is also designed with a recessed cavity so the top of the cable can be cut below the surface being protected.
- The 12", 18", and 24" Securing Pins are composed of a wire, mushroomed at the top. A washer is then placed on the wire and the wire is crimped or swaged about 3-1/2" below the top so the washer will not slide off. The end of the wire is cut at a 45 degree angle for easy penetration of the soil. These Pins with washers conform to industry standards for erosion control pins with washers.
- NOT USED**

**VEGETATION ESTABLISHMENT**

- Prepare seedbed by loosening 50 to 75 mm (2 to 3 in) of soil above final grade. Apply seed in an amount equivalent to 60% of the total mixture required to be installed on the soil surface, to scarified surface prior to installation of the ARMORMAX® 75. Select and apply soil amendments and fertilizer, to scarified surface prior to installation of the ARMORMAX® 75.
- HYDROSEEDING UNDER AND OVER ARMORMAX INSTALLATION IS THE PREFERRED SEEDING METHOD. HYDROSEED APPLIED OVER THE ARMORMAX SHOULD INCLUDE MULCH FIBER.**
- NOT USED**

**BEFORE INSTALLATION BEGINS**

- Coordinate with a Propex Representative: A pre-construction meeting is suggested with the construction team and a representative from Propex. This meeting should be scheduled by the contractor with at least a two week notice.
- Gather the Tools Needed: Tools that you will need to install ARMORMAX® 75 include a pair of industrial shears to cut PYRAMAT® 75, tape measure, percussion hammer (sized appropriately for the anchors), ground rod driver compatible with the percussion hammer, drive steel compatible with the anchor, setting tool to set and load-lock the anchor, and wire cutters to cut the cable tendon of the anchor. If anchors will be load tested during construction, additional testing equipment may be necessary. Consult the 'Anchor Load Test Manual' from Propex for further guidance. Available for purchase from Propex are drive steel, setting tools, and wire cutters.
- Determine how to Establish Vegetation: The method of vegetation establishment should be determined prior to the start of installation. Different vegetation establishment methods require different orders of installation. Refer to Establish Vegetation for further guidance.
- Please consult the Propex Website for the most up to date installation guidelines.

ANCHOR/PIN SCHEDULE		
SECURING DEVICE	ANCHOR	PIN
HORIZONTAL ANCHOR SPACING	5-FT	2-FT
VERTICAL ANCHOR SPACING	4-FT	1.25-FT
EMBEDMENT DEPTH	3-FT	1.5-FT

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## EROSION CONTROL INSTALLATION DETAILS

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**ARMORMAX® 75 INSTALLATION  
DETAILS FOR CHANNELS**

Date: 04/10/2017  
Drawn By: J.HILL  
Scale: NTS

\*ALL DIMENSIONS ARE TO BE VERIFIED BY ENGINEER OF RECORD

Thursday, June 2, 2022 2:46:36 PM - Kathy Fountain  
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Point Table			
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2	5297.739	1538402.7539	1506593.6705
3	5298.342	1538451.1497	1506581.1638
4	5301.824	1538500.1800	1506571.3642
5	5303.868	1538548.6874	1506559.3136
6	5305.381	1538598.2174	1506552.5025
7	5306.980	1538647.8442	1506546.4863
8	5308.245	1538697.4706	1506540.7721
9	5309.404	1538747.1332	1506535.7421
10	5310.426	1538797.0833	1506533.5097
11	5311.478	1538847.0494	1506533.8424
12	5312.906	1538897.0234	1506535.4534
13	5313.928	1538946.9975	1506537.0645
14	5314.666	1538996.7371	1506541.9530
15	5313.766	1539045.7993	1506551.4707
16	5310.000	1539125.3000	1506572.0348
17	5287.016	1538325.7255	1506646.9633
18	5288.068	1538364.3231	1506636.4669
19	5289.390	1538412.8299	1506624.3433
20	5290.703	1538461.6015	1506613.3333
21	5292.036	1538510.6124	1506603.4425
22	5293.342	1538559.8368	1506594.6763
23	5294.640	1538609.2490	1506587.0391
24	5295.952	1538658.8231	1506580.5350
25	5297.267	1538708.5330	1506575.1674
26	5298.581	1538758.4884	1506573.0911
27	5299.902	1538808.4734	1506571.8925
28	5301.213	1538858.4716	1506571.5436
29	5302.526	1538908.4685	1506572.0446
30	5303.834	1538957.2173	1506573.3518

Point Table			
Point #	Elevation	Northing	Easting
31	5305.153	1539008.4006	1506575.5953
32	5306.486	1539058.3070	1506578.6440
33	5307.000	1539078.6562	1506580.1318
34	5308.000	1539120.5861	1506577.9537
35	5290.000	1538315.0011	1506679.4310
36	5291.009	1538334.3881	1506708.6090
37	5292.000	1538381.9910	1506740.3826
38	5293.000	1538448.1095	1506753.1613
39	5294.000	1538515.7523	1506722.8196
40	5294.969	1538581.0915	1506707.1147
41	5296.000	1538640.5134	1506718.0759
42	5299.000	1538724.1555	1506765.5157
43	5300.000	1538781.7901	1506773.6793
44	5303.000	1538902.4994	1506681.1122

CONTROL POINTS			
SSCAFCA POINT #	NORTHING	EASTING	ELEVATION
SSCAFCA 253	1541632	1505745	5383.788
SSCAFCA 256	1539242	1506483	5320.180

This sheet was appended to the construction plan set with Addenda #1 - 09/14/2022

Contractor to install Temporary Plastic Barrier Fence approximately 20' offset top of borrow excavation slope. A new Bid Item 22 has been added to the Unit Price Bid Proposal, see specification STS 1501.

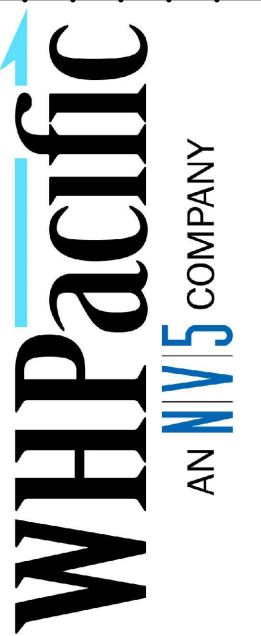
BUILD RAMP TO ACCESS 19th St SE

19th Street SE

28540 CY OF CUT  
2.71 ac

PROJECT DEVELOPED BY: ###

NO.	DESCRIPTION	DATE	BY
7			
6			
5			
4			
3			
2			
1			



Issued with Addenda #1  
09/14/2022

BORROW EXHIBIT FOR IVORY PROJECT.



PROJECT NO: CN5101460  
DESIGNED BY: SKJ/AJS  
DRAWN BY: AJS  
CHECKED BY: ###  
DATE: 8-31-22  
DPI CHK:

SHEET NO.  
NA