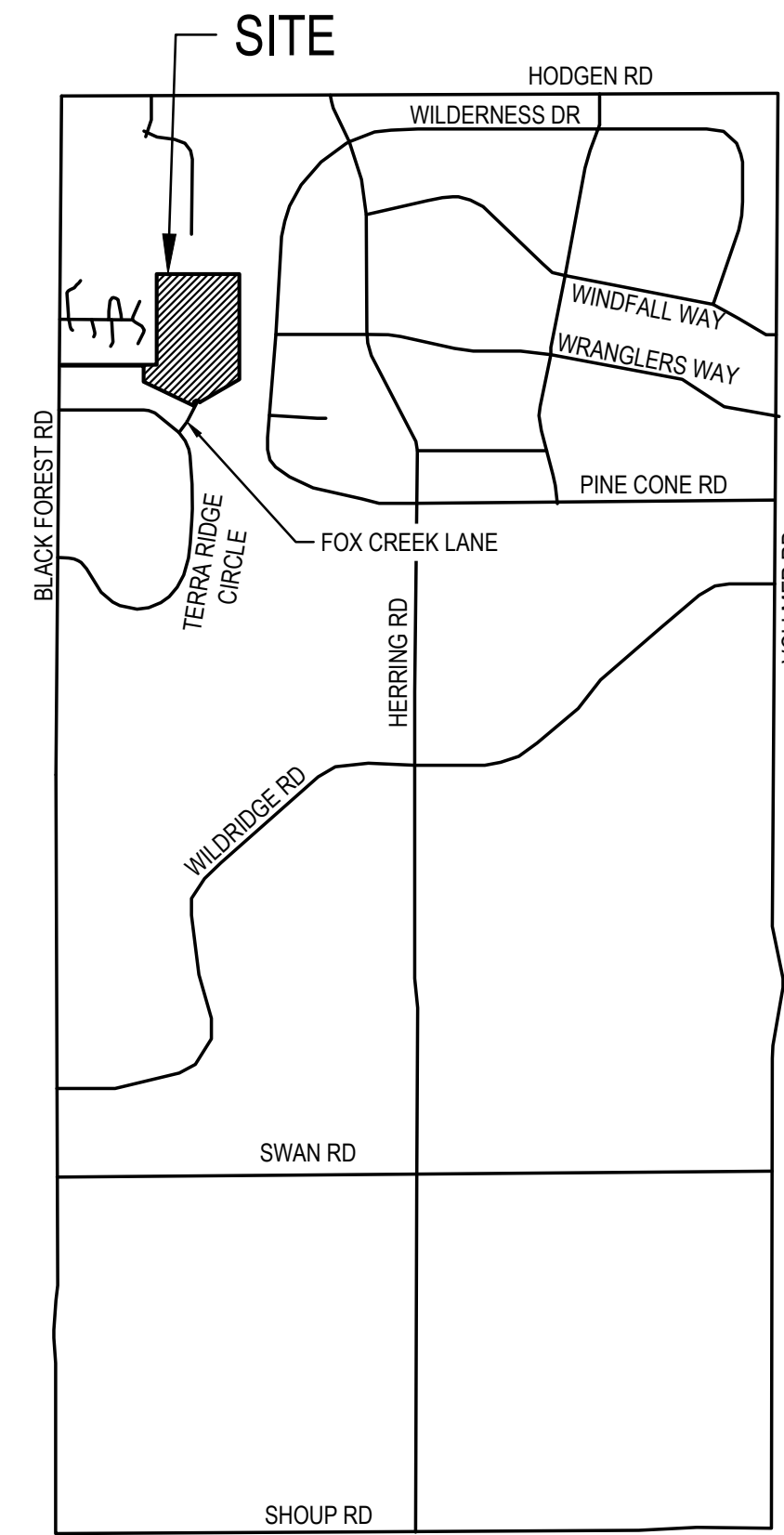


TERRA RIDGE NORTH CIVIL CONSTRUCTION PLANS El Paso County, Colorado



VICINITY MAP
SCALE 1"=1/2 MILE



Prepared For:
Phillip S. & Jennifer Miles
15630 Fox Creek Lane
Colorado Springs, CO 80908

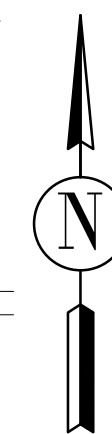
Prepared By:
Lodestar Engineering, LLC
P.O. Box 88461
Colorado Springs, CO 80908
FEBRUARY, 2023

Legal Description:
Portion of the Southwest Quarter of Section 29, Township 11 South, Range 65 West of the 6th P.M., County of El Paso, State of Colorado, more particularly described as follows:

Beginning at the Northwest corner of the Southwest Quarter of said Southwest Quarter; thence S89°46'29"E along the South line of Whispering Hills Estates as recorded in Plat Book Z-2 at Page 2 of said county records, 1407.75 feet to the Southeast corner thereof; thence N00°58'34"E, 1327.96 feet to the Northeast corner thereof; thence S89°47'26"E, 1245.16 feet to the Northeast corner of said Southwest Quarter, said Northeast corner also being on the West line of Wildwood Village Unit 3 as recorded in Plat Book H-3 at Page 57 of said county records; thence S00°59'16"W along the East line of said Southwest Quarter and the West Line of said Wildwood Village Unit 3 and Wildwood Village Unit 4 as recorded in Plat Book M-3 at Page 46 of said county records, 1366.91 feet; thence N89°46'29"W, 945.48 feet; thence N00°58'34"E, 8.50 feet; thence N89°46'29"W, 1708.14 feet to a point on the west line of said Southwest Quarter; thence N00°58'34"E, 30.00 feet to the point of beginning, County of El Paso, State of Colorado., said described tract contains 39.72 Acres +/-



KEYMAP
SCALE NTS



AGENCIES/CONTACTS

DEVELOPER:	SHAY MILES 15630 FOX CREEK LANE COLORADO SPRINGS, CO 80908 (719) 352-8886	GAS DEPARTMENT:	BLACK HILLS ENERGY MR. SEBASTIAN SCHWENDER (719) 359-3716
SURVEYOR:	JOHN KEILERS & ASSOCIATES, LLC 9920 OTERO AVENUE COLORADO SPRINGS, CO 80920 (719) 649-9243	ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC ASSOCIATION' 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908MR. DAVE WALDNER (719) 495-2283
CIVIL ENGINEER:	LODESTAR ENGINEERING, LLC P.O. BOX 88461 COLORADO SPRINGS, CO 80908 (719) 352-8886	TELEPHONE COMPANY:	N/A
LOCAL ROADS & DRAINAGE:	EL PASO COUNTY PCD 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 LUPE PACKMAN, E.I. (719) 520-7945	FIRE DEPARTMENT:	BLACK FOREST FIRE PROTECTION DISTRICT (719) 650-2276

INDEX OF SHEETS	
SHEET NUMBER	SHEET DESCRIPTION
C1	COVER
C2	NOTES
C3	ROADWAY SECTIONS
C4	ROADWAY KEY MAP SHEET
C5	PLAN AND PROFILE
C6	STORM PLAN AND PROFILE
C7	STORM PLAN AND PROFILE - PIPE CULVERTS
C8	DETENTION POND AND EMERGENCY OVERFLOW SECTION
C9	DETENTION POND OUTLET STRUCTURE DETAILS

CONSTRUCTION DRAWINGS

DESIGN ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

PHILLIP SHAY MILES, P.E. #40462 DATE

OWNER/DEVELOPER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

SHAY MILES DATE
15630 FOX CREEK LANE
COLORADO SPRINGS, CO 80908

EL PASO COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JOSHUA PALMER, P.E. DATE
COUNTY ENGINEER / ECM
ADMINISTRATOR

NOTE: NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED AND APPROVED IN WRITING TO BE ACCEPTABLE.

BASIS OF BEARINGS:
AS MONUMENTED AND SHOWN, AND WAS ASSUMED 500°12'10"E.

BENCHMARK:
THE MONUMENT AT THE NORTHWEST PROPERTY CORNER, HAVING AN ELEVATION OF 7441.73'. DATUM IS NAVD '88



ISSUED	REVISIONS

TERRA RIDGE NORTH
15630 FOX CREEK LANE
COLORADO SPRINGS, COLORADO

EL PASO COUNTY DEVELOPMENT
REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
TERRA RIDGE NORTH
COVER SHEET

C1
SHEET NO.

PROJECT GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL, REVISED 12-13-2016 AND CDOT STANDARD SPECIFICATIONS, LATEST REVISION.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH APPLICABLE STANDARDS AND REGULATIONS AS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
3. NO FIELD CHANGES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE FIELD ENGINEER.
4. UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION AND PROTECTION OF ALL UTILITIES IN PLACE.
5. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 3 BUSINESS DAYS IN ADVANCE OF ANY EXCAVATION OR GRADING.
6. ALL WORK SHALL BE DONE TO THE LINES, GRADES, SECTIONS, AND ELEVATIONS SHOWN ON THE PLANS UNLESS OTHERWISE NOTED OR APPROVED BY THE FIELD ENGINEER.
7. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY EL PASO COUNTY AND THE FIELD ENGINEER.
8. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TO OF SLOPE AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS BY THE CONTRACTOR AT HIS SLASH HER OWN EXPENSE.
9. WHERE PAVEMENT IS TO ABUT EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE REMOVED TO A NEAT VERTICAL LINE BY FULL DEPTH SAWING. SAWING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCIDENTAL TO PAVING OPERATION. THE CONTRACTOR WILL BE REQUIRED TO PAINT THE EDGE OF CUT PAVEMENT WITH DILUTED EMULSIFIED ASPHALT (SLOW SETTING) PRIOR TO PAVING OPERATIONS. VERTICAL EDGES SHALL NOT REMAIN OVERNIGHT. DILUTED EMULSIFIED ASPHALT FOUR TACK COAT SHALL CONSIST OF ONE PART EMULSIFIED ASPHALT AND ONE PART WATER.
10. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED. THE COST OF WATER SHALL BE INCIDENTAL TO OTHER BID ITEMS.
11. THE CONTRACTOR SHALL HAVE A COPY OF ALL APPLICABLE STANDARDS AND PLANS ON SITE FOR THE DURATION OF THE PROJECT.
12. ANY LAYER OF BITUMINISED PAVEMENT THAT IS TO HAVE SUCCEEDING LAYER PLACED THERE ON SHALL BE COMPLETED FULL WIDTH BEFORE SUCCEEDING LAYER IS PLACED.
13. BEFORE PLACEMENT OF THE TACK COAT, THE CONTRACTOR SHALL CLEAN THE PRESENT ROADWAY AS DIRECTED. CLEANING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROJECT.
14. A TACK COAT OF EMULSIFIED ASPHALT (SLOW SETTING) IS TO BE APPLIED BETWEEN PAVEMENT COURSES TO IMPROVE BOND. DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF 1 PART EMULSIFIED ASPHALT AND 1 PART WATER.
15. EXISTING CONTOUR DATA PROVIDED BY OWNER CONSISTS OF AERIAL TOPOGRAPHIC SURVEY DATA PROVIDED BY LODESTAR ENGINEERING, LLC.
16. STATIONING IS AT CENTER LINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE AT EDGE OF ASPHALT (EOA) UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM EDGE OF ASPHALT TO EDGE OF ASPHALT UNLESS OTHERWISE NOTED.
17. PROPOSED CONTOURS SHOWN ARE TO FINISH GRADE.
18. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
19. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.
20. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 60 DAYS AFTER FINE GRADING IS COMPLETE.
21. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND HAY BALES AS SHOWN ON THE DRAWING AND TOPSOIL WAS GRASS SEED, WHICH SHALL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.
22. THE EROSION CONTROL MEASURES OUTLINED ON THIS PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER TO MONITOR AN REPLACE, RE GRADE, AND REBUILD AS NECESSARY UNTIL VEGETATION IS REESTABLISHED.
23. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT ADJACENT PROPERTIES IN PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENT AS A RESULT OF CONSTRUCTION IN EARTHWORK ACTIVITIES WITHIN THE PROJECT SITE.
24. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.
25. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
26. ALL BACKFILL, SUBBASE, AND OR BASE COURSE MATERIALS SHALL BE COMPACTED PER EL PASO COUNTY AND CDOT STANDARDS AND SPECIFICATIONS.
27. ALL FINISHED GRADES SHALL HAVE A MINIMUM OF 1.0% SLOPE TO PROVIDE POSITIVE DRAINAGE.
28. WHERE PROPOSED SLOPES CONFLICT WITH PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.
29. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.
30. ELECTRONIC FILE OF SITE DRAWING IS AVAILABLE FROM ENGINEER FOR CONSTRUCTION STAKING PURPOSES.

BENCHMARK AND SURVEY CONTROL

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKING OF BOTH HORIZONTAL AND VERTICAL LAYOUT ON THIS PROJECT. COORDINATES ARE REFERENCED IN THE COORDINATE LIST SHOWN ON THESE PLANS THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ENGINEER FOR INTERPRETATION AND INFORMATION IN STAKING OF THE PROJECT BEFORE CONSTRUCTION.

CONSTRUCTION NOTES

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS SLASH EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WEATHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN, THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
 - a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - b. EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - c. COLORADO DEPARTMENT OF TRANSPORTATION STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - d. CDOT M&S STANDARDS
4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC PRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME TO. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVE, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER THE FACT WILL BE ENTIRELY TO THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMITS, REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS NWP 29 RESIDENTIAL DEVELOPMENTS PERMIT, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
8. CONTRACTORS SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASSED III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAYMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF ASPHALT.
11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
12. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA.
13. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
14. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENT, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING OR CONSTRUCTION.

GENERAL LOT DRAINAGE NOTES

1. FINAL LOT IN HOME SITE GRADING IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNERS AND BUILDERS.
2. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AN ACCOUNT FOR POTENTIAL CROSS LOT DRAINAGE IMPACTS WITHIN EACH LOT.
3. BUILDERS AND PROPERTY OWNERS SHALL IMPLEMENT AND MAINTAIN EROSION CONTROL BEST MANAGEMENT PRACTICES FOR PROTECTION OF DOWNSTREAM PROPERTIES AND FACILITIES INCLUDING PROTECTION OF EXISTING GRASS BUFFER STRIPS ALONG THE DOWNSTREAM PROPERTY BOUNDARIES.

COUNTY SIGNING AND STRIPING NOTES:

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES.
4. ALL SIGNS SHOWN ON THE SIDING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND IMMUNE TCD STANDARDS.
5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
7. ALL STREET NAME SIGN SHALL HAVE "D" SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4" UPPER-LOWER CASE LETTERING ON 8" BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6" LETTERING, UPPER-LOWER CASE ON 12" BLANK, WITH A WHITE BORDER THAT IS NOT RECESSED. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 40 MPH OR HIGHER SHALL HAVE 8 INCH UPPER-LOWER CASE LETTERING ON 18" BLANK WITH WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS."
8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
9. ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGNPOST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARDS S-614-8 REGARDING USE OF THE P2 TUBULAR STEEL POST SUBBASE DESIGN.
10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMAL PLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" WIDTH. CROSSWALK LINE SHALL BE 12" WIDE AND 8' LONG PER CDOT S-627-1.
12. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15 MIL THICKNESS EPOXY PAINT. ALL NON LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1 .
13. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT SERVICES (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
14. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF TRANSPORTATION PRIOR TO ANY SIGNAGE FOR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

DESIGN DATA

ROAD CLASSIFICATION:	RURAL LOCAL RESIDENTIAL
DESIGN SPEED:	30 MPH
POSTED SPEED:	30 MPH
ROADWAY WIDTH (ASPHALT):	28' EOA-EOA
MIN HORIZONTAL RADIUS:	300'
MIN GRADE:	1.0%
MAX GRADE:	5.96%
MIN K-VALUE (CREST):	19
MIN K-VALUE (SAG):	37



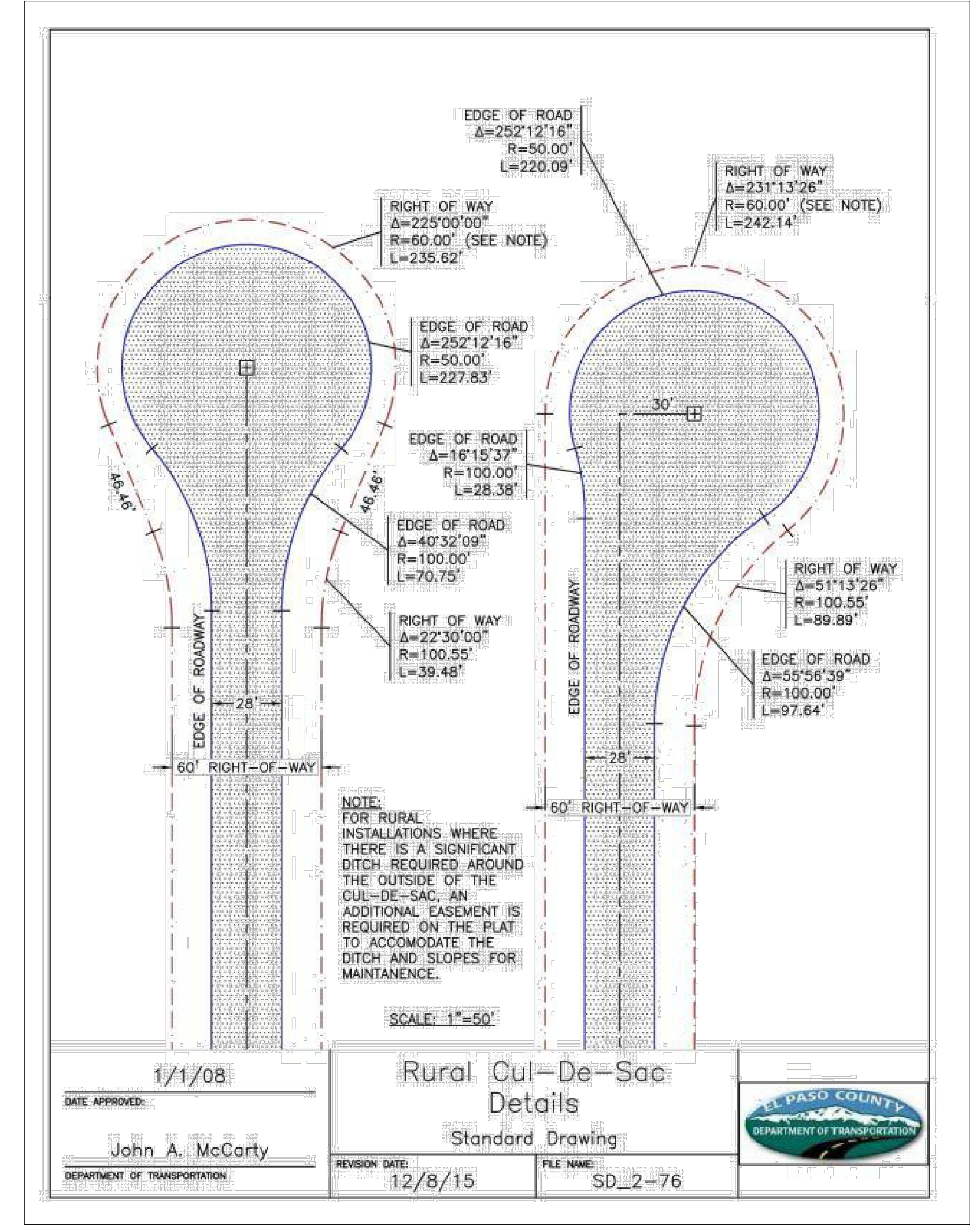
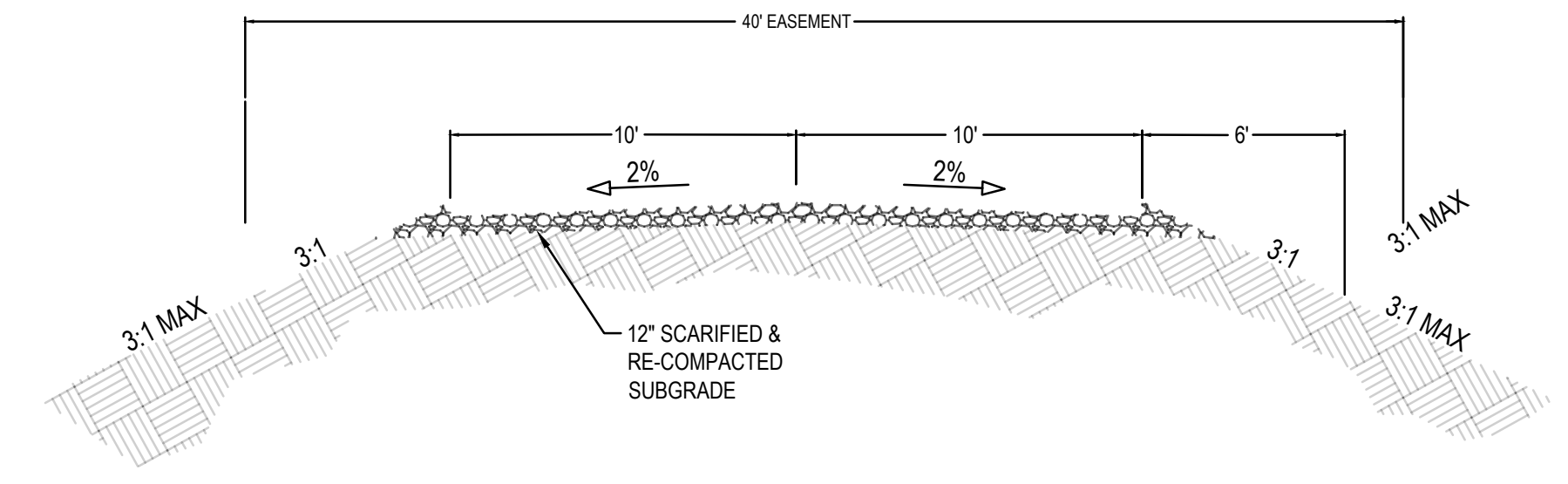
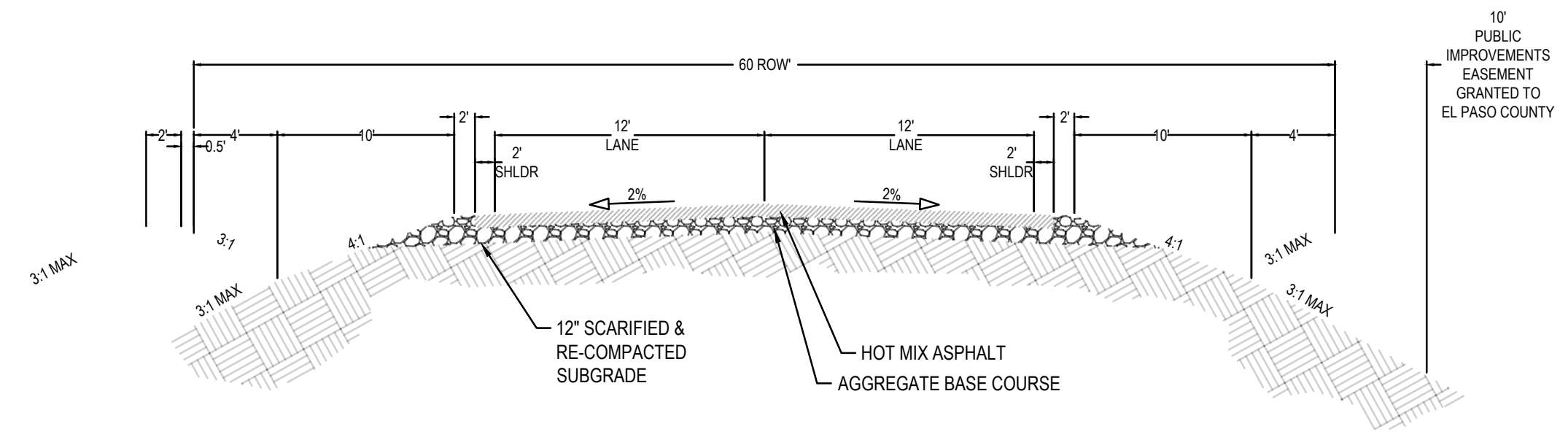
ISSUED	
REVISIONS	

TERRA RIDGE NORTH
 15630 FOX CREEK LANE
 COLORADO SPRINGS, COLORADO

EL PASO COUNTY DEVELOPMENT
 REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
 TERRA RIDGE NORTH

NOTES

C2
 SHEET NO.



ISSUED	REVISIONS

TERRA RIDGE NORTH
15630 FOX CREEK LANE
COLORADO SPRINGS, COLORADO

EL PASO COUNTY DEVELOPMENT
REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
TERRA RIDGE NORTH
NOTES AND SECTIONS

C3
SHEET NO.

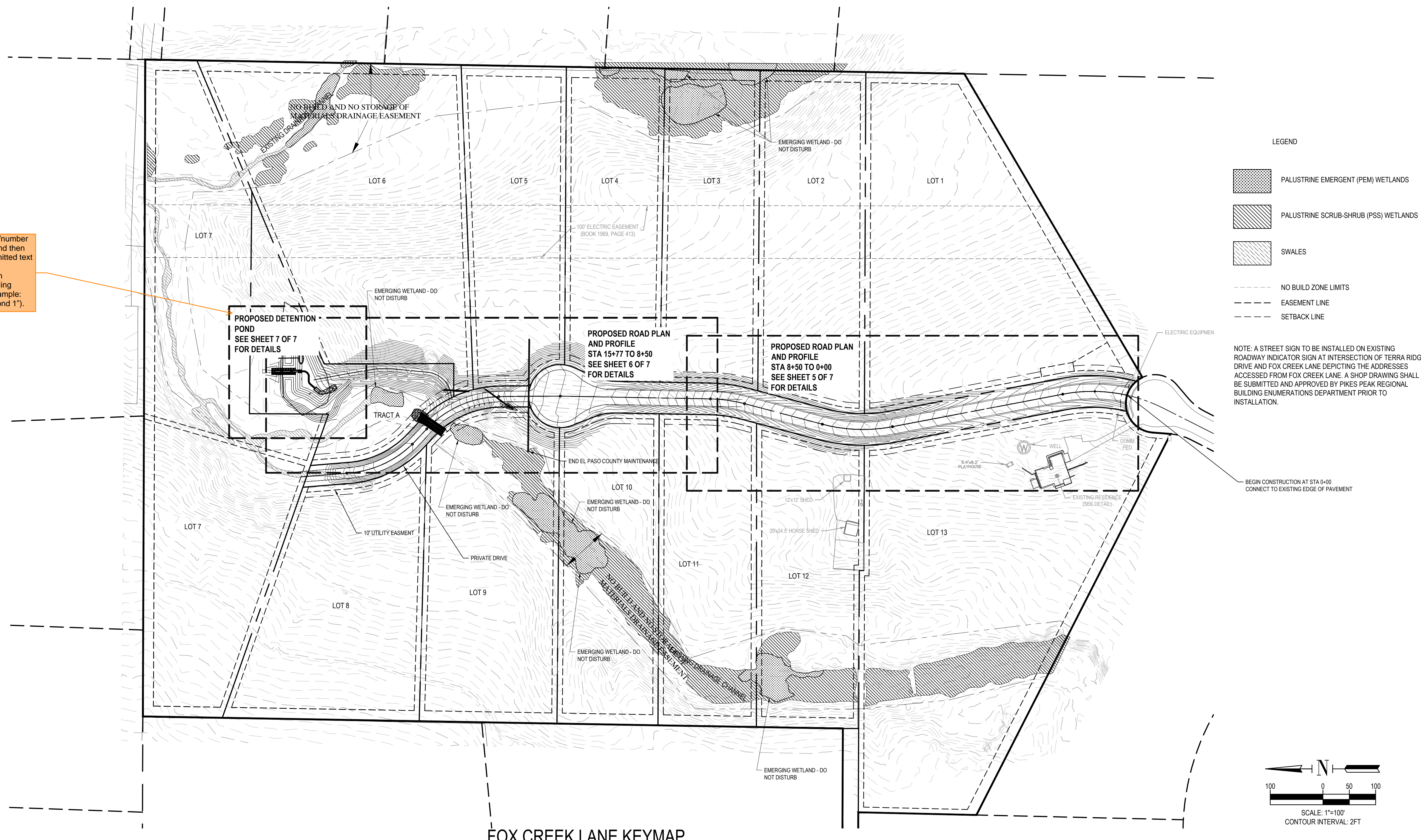


ISSUED
REVISIONS

TERRA RIDGE NORTH
 15630 FOX CREEK LANE
 COLORADO SPRINGS, COLORADO

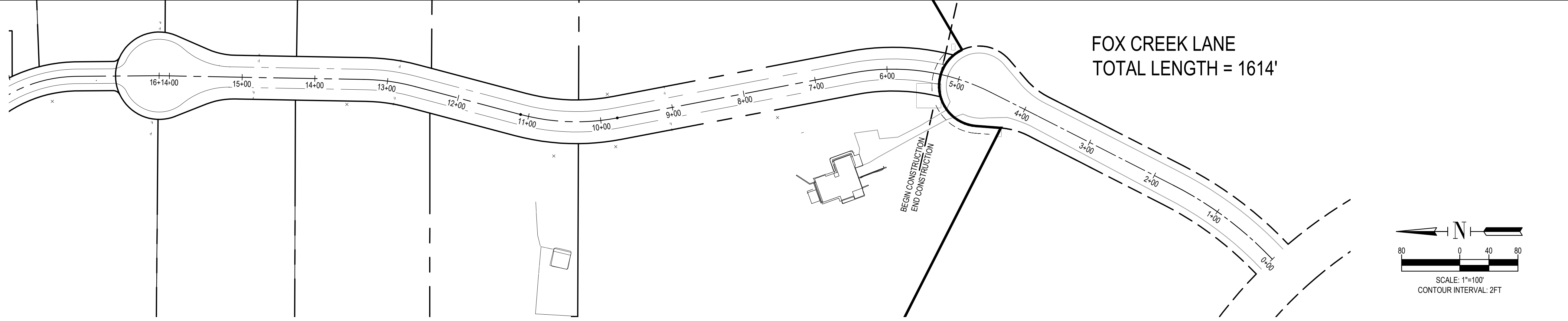
EL PASO COUNTY DEVELOPMENT
 REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
 TERRA RIDGE NORTH
 KEY MAP

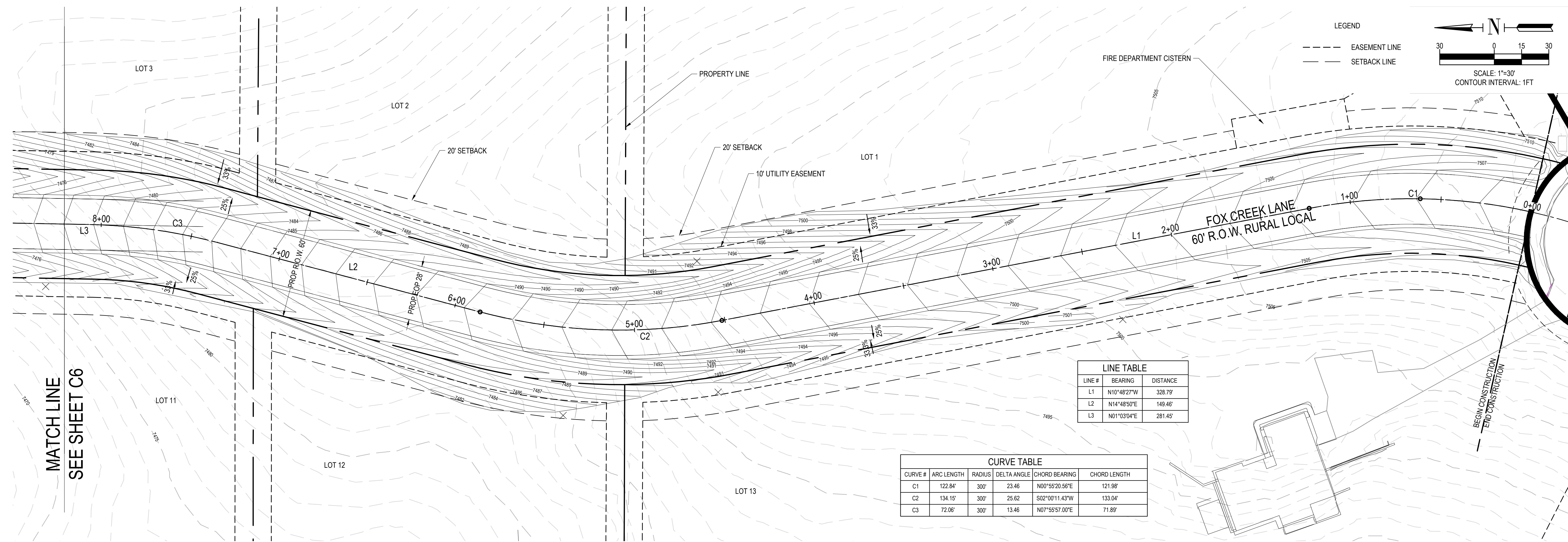
C4
 SHEET NO.



Assign a name/number to all PBMPs and then update all submitted text and drawings accordingly with consistent labeling throughout (example: "Pond A" or "Pond 1").

FOX CREEK LANE KEYMAP





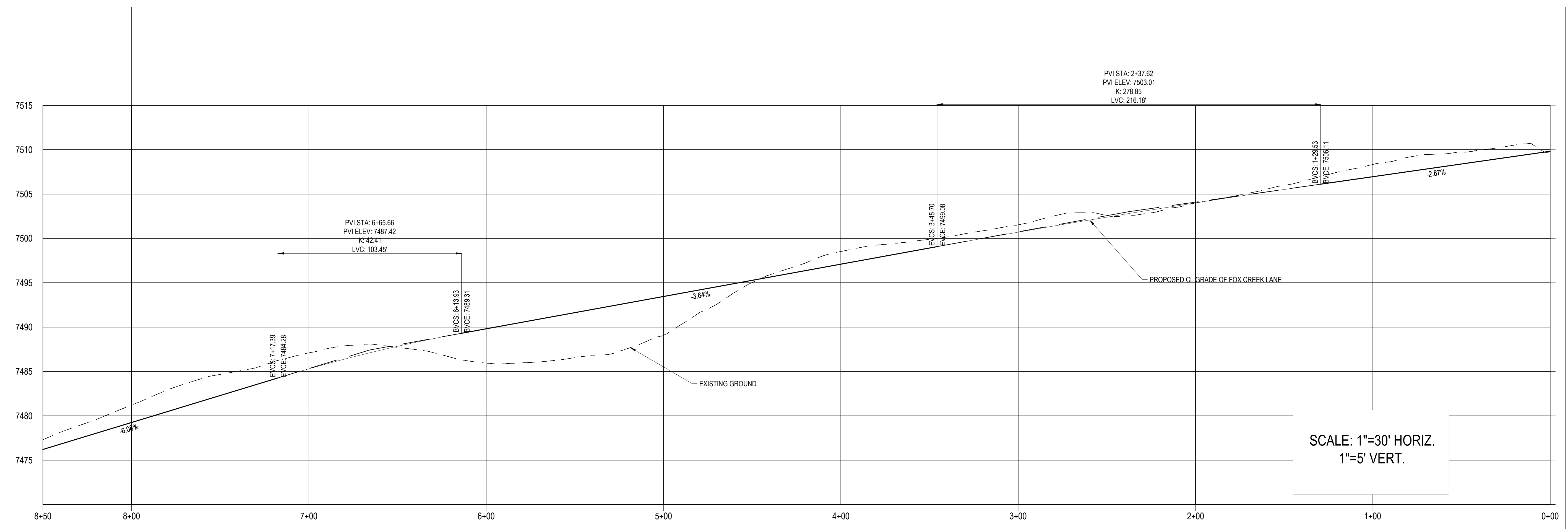
LINE TABLE

LINE #	BEARING	DISTANCE
L1	N10°48'27"W	328.79'
L2	N14°48'50"E	149.46'
L3	N01°03'04"E	281.45'

CURVE TABLE

CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	122.84'	300'	23.46°	N00°55'20.56"E	121.98'
C2	134.15'	300'	25.62°	S02°00'11.43"W	133.04'
C3	72.06'	300'	13.46°	N07°55'57.00"E	71.89'

FOX CREEK LANE STATION 0+00 TO 8+00



ISSUED

REVISIONS

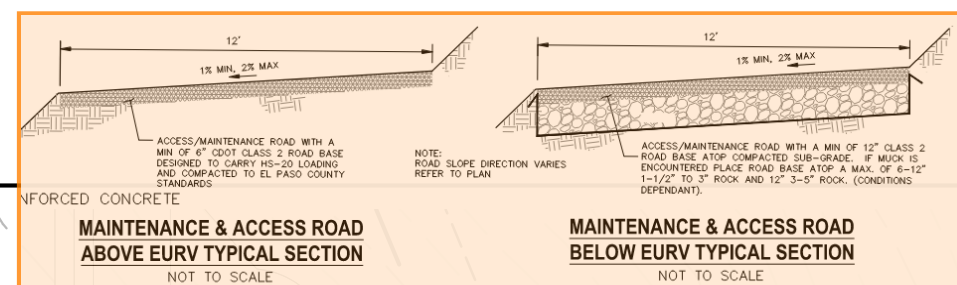
TERRA RIDGE NORTH
 15630 FOX CREEK LANE
 COLORADO SPRINGS, COLORADO

EL PASO COUNTY DEVELOPMENT
 REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
 TERRA RIDGE NORTH
 PLAN AND PROFILE

C5
 SHEET NO.

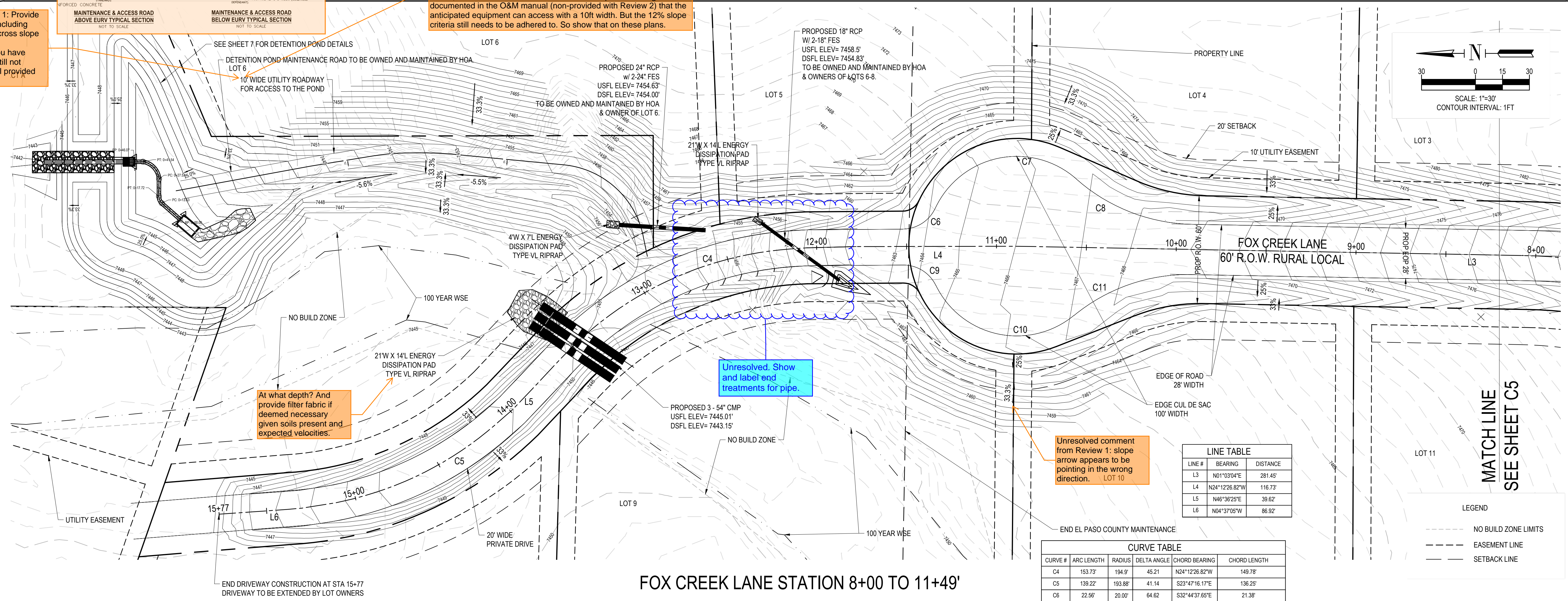
Unresolved comment from Review 1: Provide access road detail/cross section, including stone sizing and gradation. Show cross slope at 2%.

Review 2 clarification: I see that you have added 2% slope callouts. But I'm still not seeing a detail. See example detail provided above.



Unresolved comment from Review 1: -Stabilized access ramp shall be a minimum of 15ft wide and no greater than 12% slope, in accordance with DCMv1, Chap 11.2.2.

Review 2 clarification: per email discussion with Shay about this on 2/3/22, I had stated that a 10ft wide road is acceptable as long as it is documented in the O&M manual (non-provided with Review 2) that the anticipated equipment can access with a 10ft width. But the 12% slope criteria still needs to be adhered to. So show that on these plans.

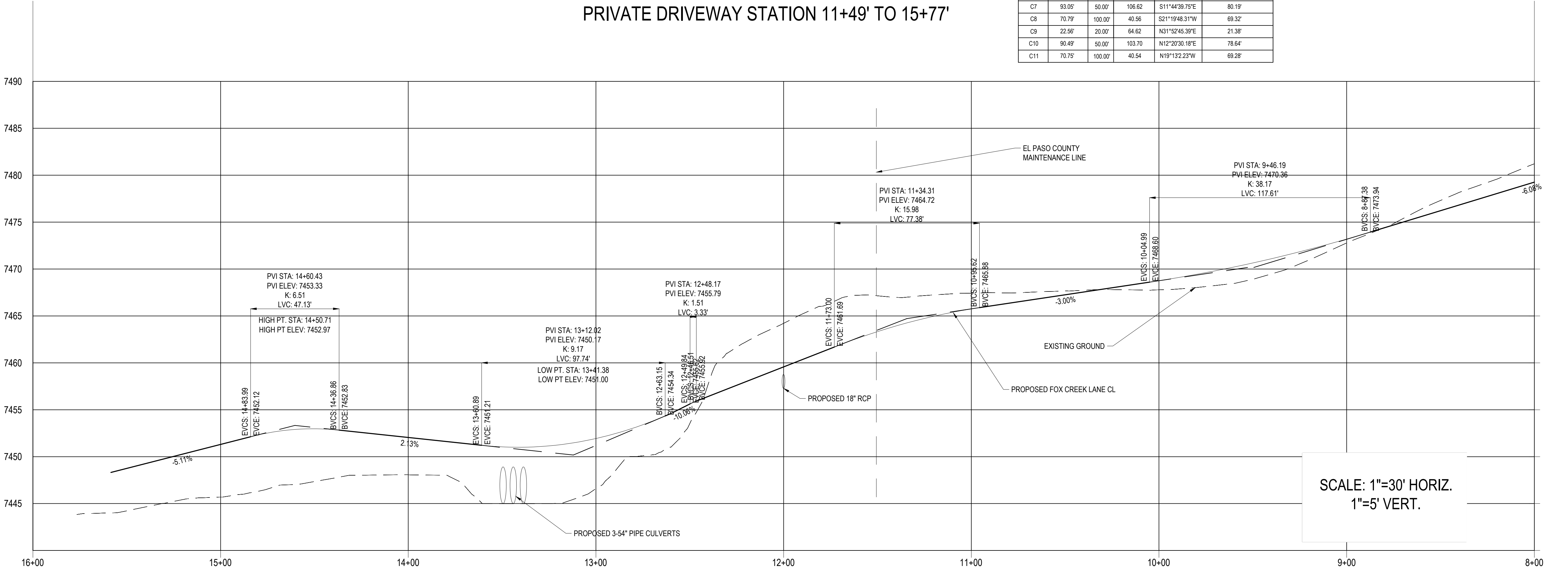


LINE TABLE

LINE #	BEARING	DISTANCE
L3	N01°03'04"E	281.45'
L4	N24°12'26.82"W	116.73'
L5	N46°36'25"E	39.62'
L6	N04°37'05"W	86.92'

CURVE TABLE

CURVE #	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C4	153.73'	194.9'	45.21°	N24°12'26.82"W	149.78'
C5	139.22'	193.88'	41.14°	S23°47'16.17"E	136.25'
C6	22.56'	20.00'	64.62°	S32°44'37.65"E	21.38'
C7	93.05'	50.00'	106.62°	S11°44'39.75"E	80.19'
C8	70.79'	100.00'	40.56°	S21°19'48.31"W	69.32'
C9	22.56'	20.00'	64.62°	N31°52'45.39"E	21.38'
C10	90.49'	50.00'	103.70°	N12°20'30.18"E	78.64'
C11	70.75'	100.00'	40.54°	N19°13'22.23"W	69.28'



SCALE: 1"=30' HORIZ.
1"=5' VERT.



ISSUED

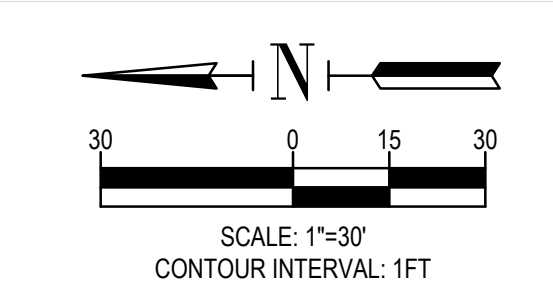
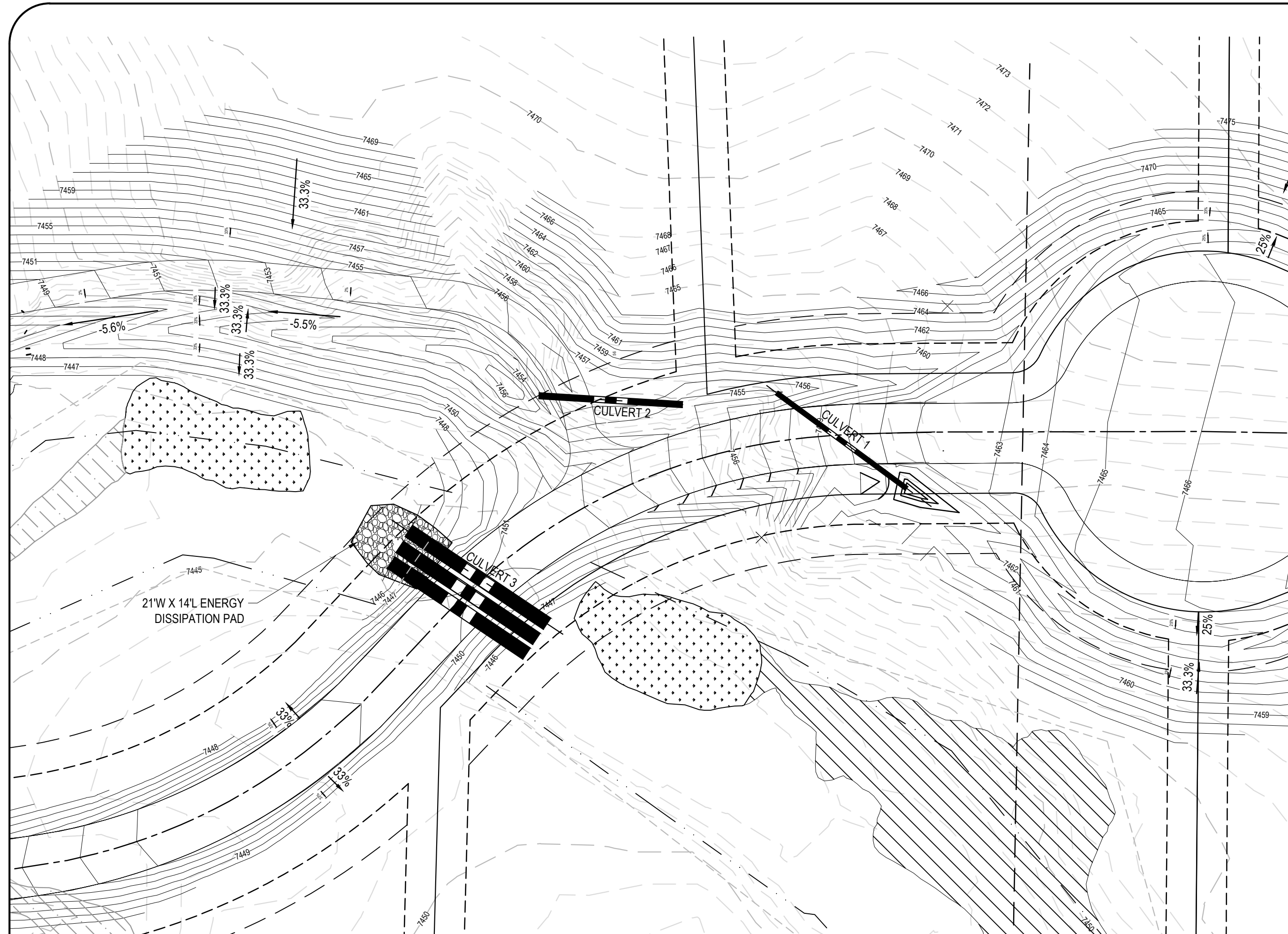
REVISIONS

NO.	DESCRIPTION

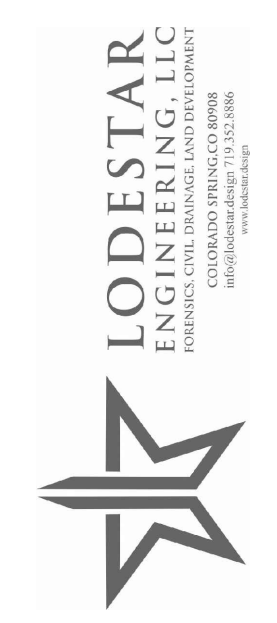
TERRA RIDGE NORTH
15630 FOX CREEK LANE
COLORADO SPRINGS, COLORADO

EL PASO COUNTY DEVELOPMENT
REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
TERRA RIDGE NORTH
PLAN AND PROFILE

C6
SHEET NO.

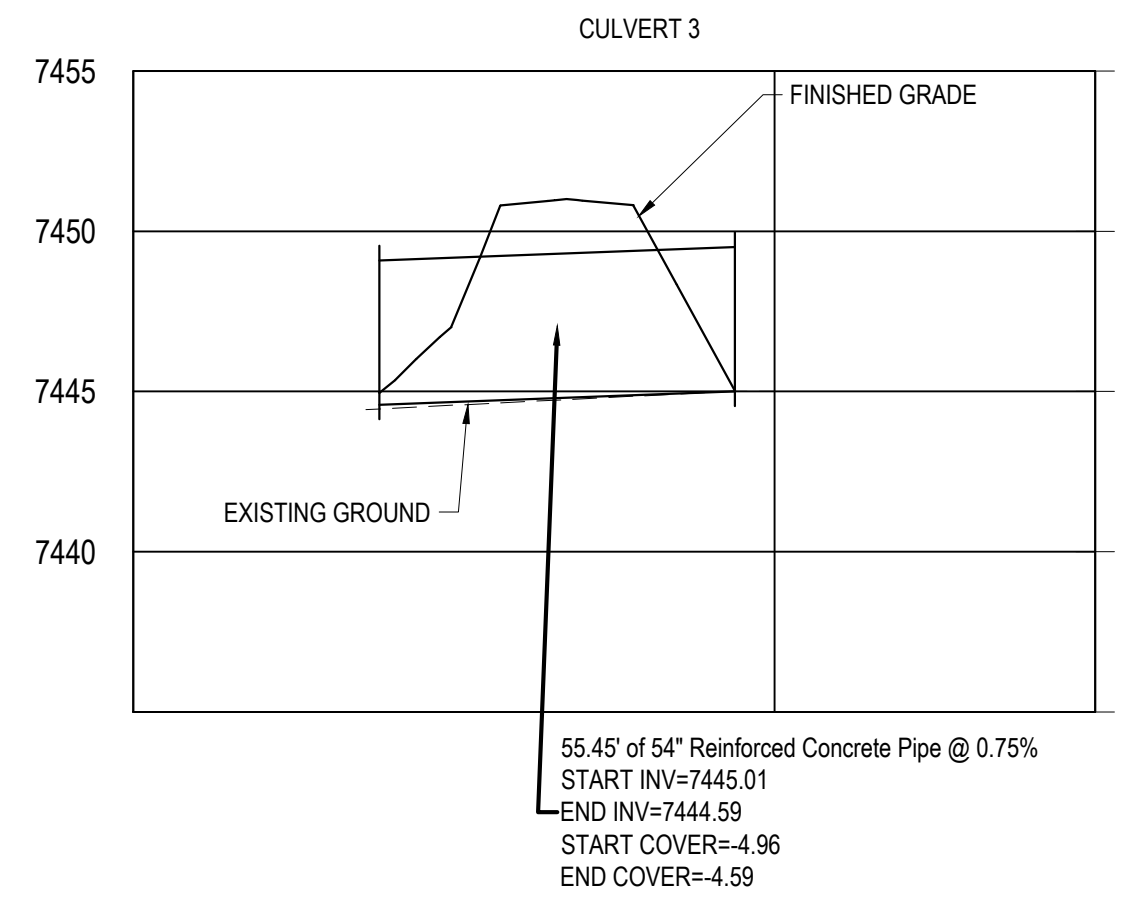
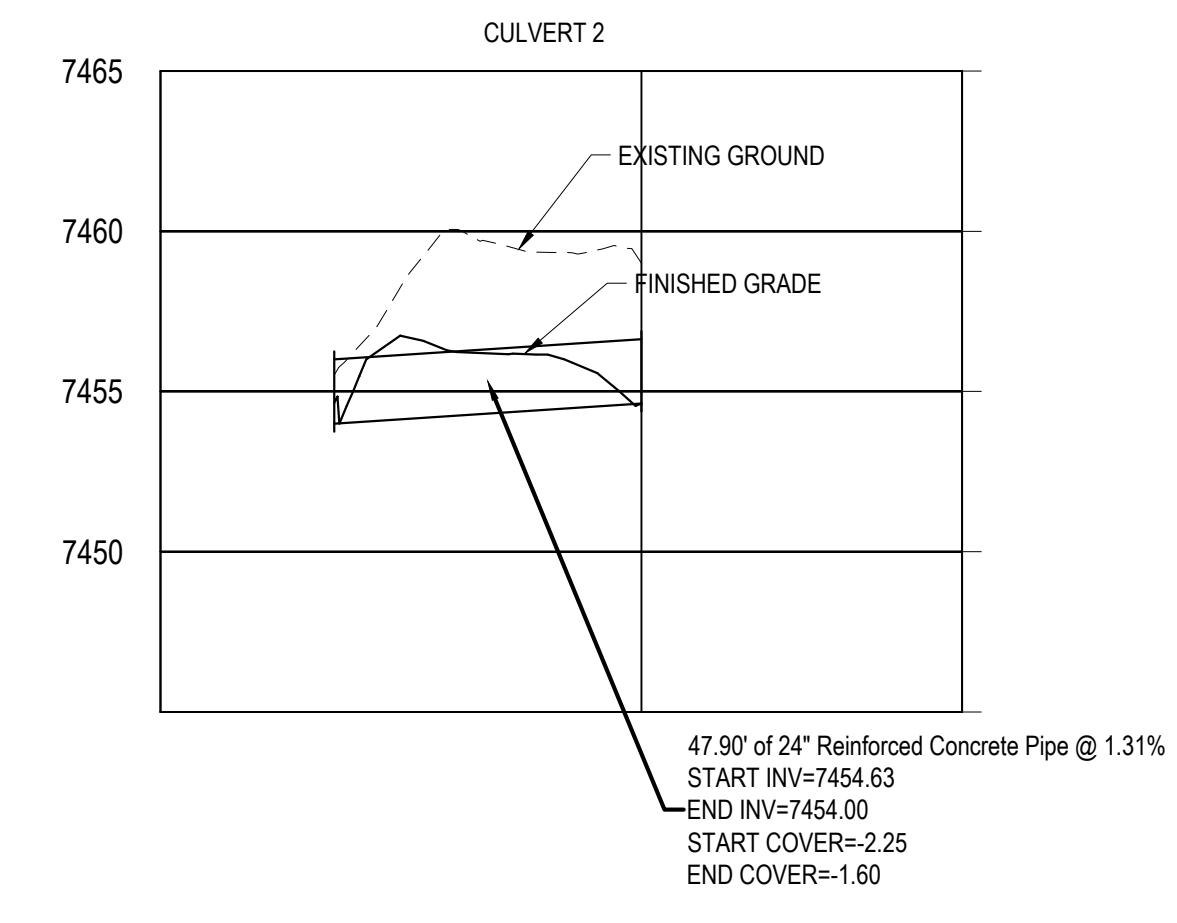
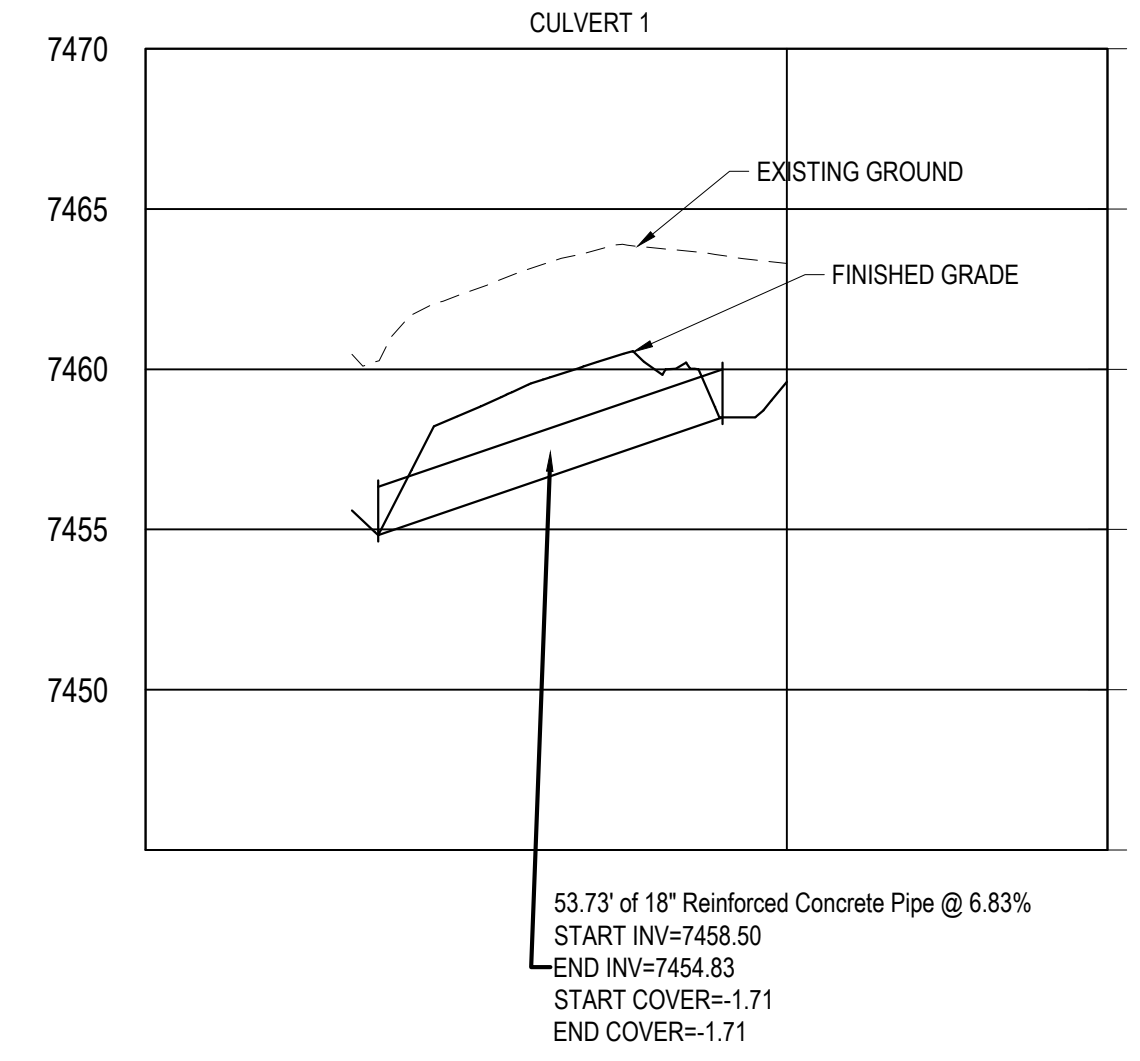


LEGEND	
- - - - -	NO BUILD ZONE LIMITS
- - - - -	EASEMENT LINE
- - - - -	SETBACK LINE



ISSUED

CULVERT PROFILES



SCALE: 1"=30' HORIZ.
 1"=5' VERT.

TERRA RIDGE NORTH
 15630 FOX CREEK LANE
 COLORADO SPRINGS, COLORADO

EL PASO COUNTY DEVELOPMENT
 REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
 TERRA RIDGE NORTH
**PLAN AND PROFILE
 PIPE CULVERTS**

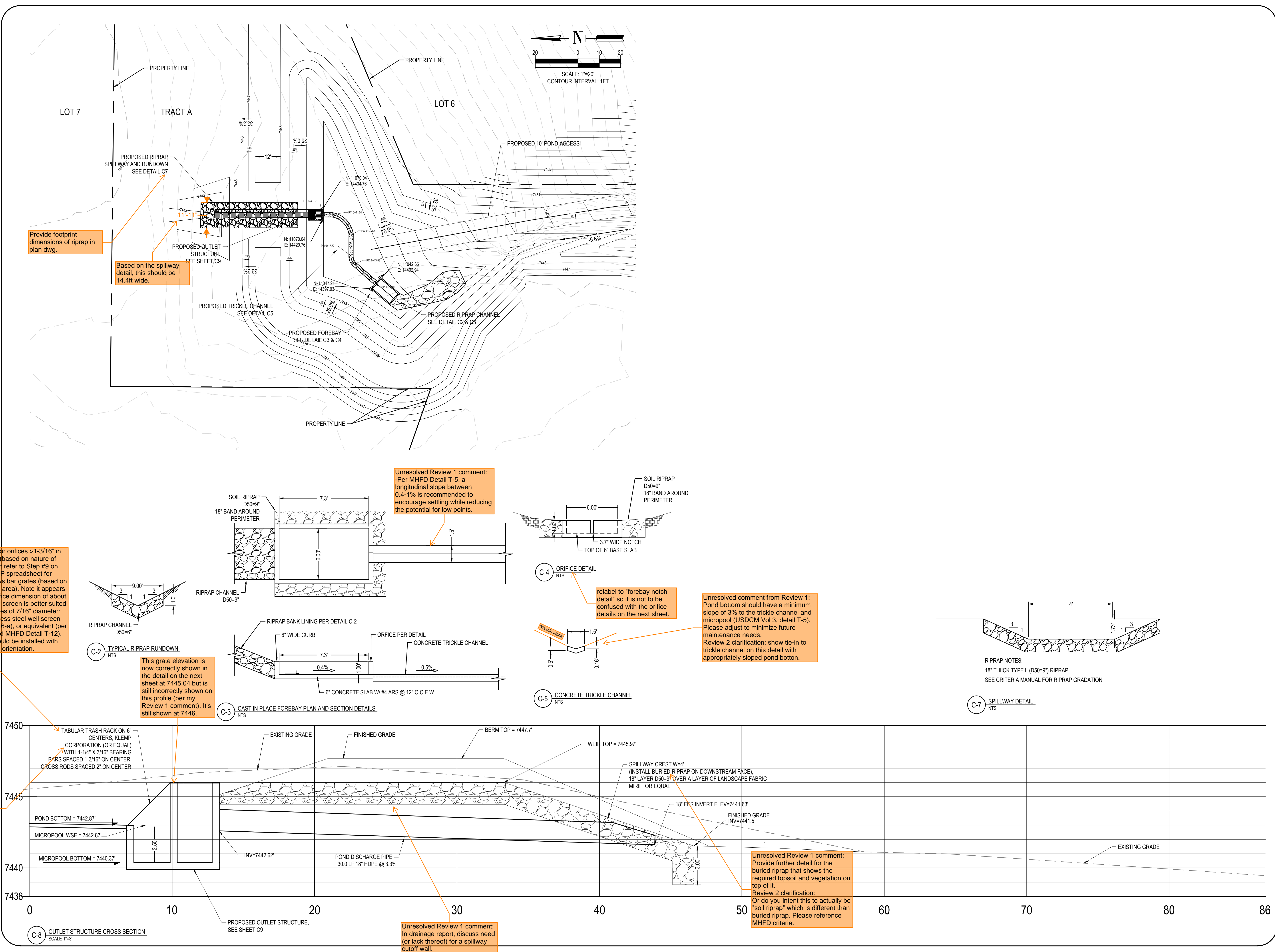


ISSUED	REVISIONS

TERRA RIDGE NORTH
15630 FOX CREEK LANE
COLORADO SPRINGS, COLORADO

EL PASO COUNTY DEVELOPMENT
REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
TERRA RIDGE NORTH
DETENTION POND DETAILS

C8
SHEET NO.



Generally, bar grates are for orifices >1-3/16" in largest length or diameter (based on nature of min bar grate spacing). But refer to Step #9 on the EDB tab of the UD-BMP spreadsheet for when to use well screens vs bar grates (based on R-value, i.e., percent open area). Note it appears the cutoff is at smallest orifice dimension of about 1-1/4", meaning that a well screen is better suited for this pond that has orifices of 7/16" diameter. US Filter or Johnson stainless steel well screen with #93 VEE wire (Figure 6-a), or equivalent (per EPC DCMv2, Chap 4.3 and MHFD Detail T-12). Johnson vee wire type should be installed with exterior bars in the vertical orientation.

Unresolved Review 1 comment: Trash rack to be Amico Klemp KRP Series aluminum bar grate (Figure 6-b), US Filter or Johnson stainless steel well screen with #93 VEE wire (Figure 6-a), or equivalent (per EPC DCMv2, Chap 4.3 and MHFD Detail T-12).

Provide footprint dimensions of riprap in plan dwg.
 Based on the spillway detail, this should be 14.4ft wide.

Unresolved Review 1 comment: -Per MHFD Detail T-5, a longitudinal slope between 0.4-1% is recommended to encourage settling while reducing the potential for low points.

relabel to "forebay notch detail" so it is not to be confused with the orifice details on the next sheet.

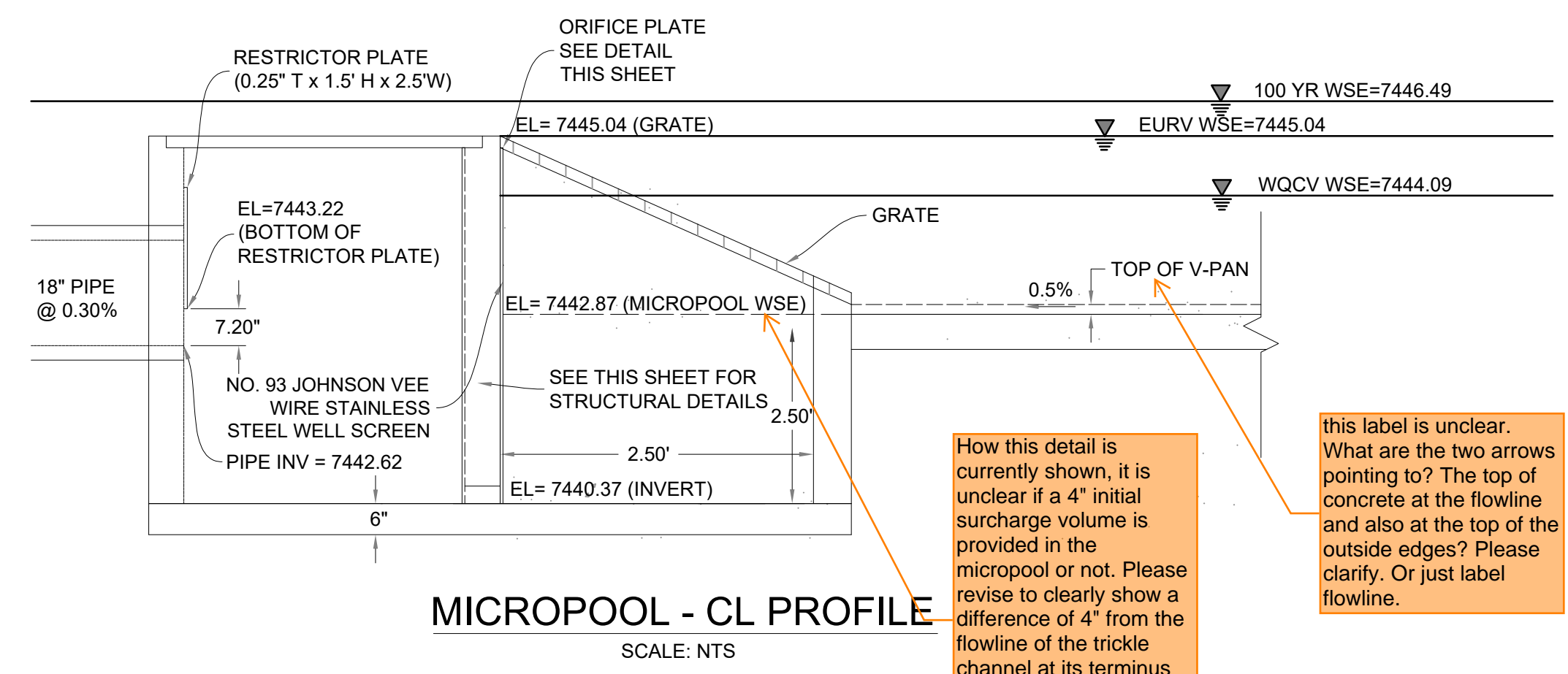
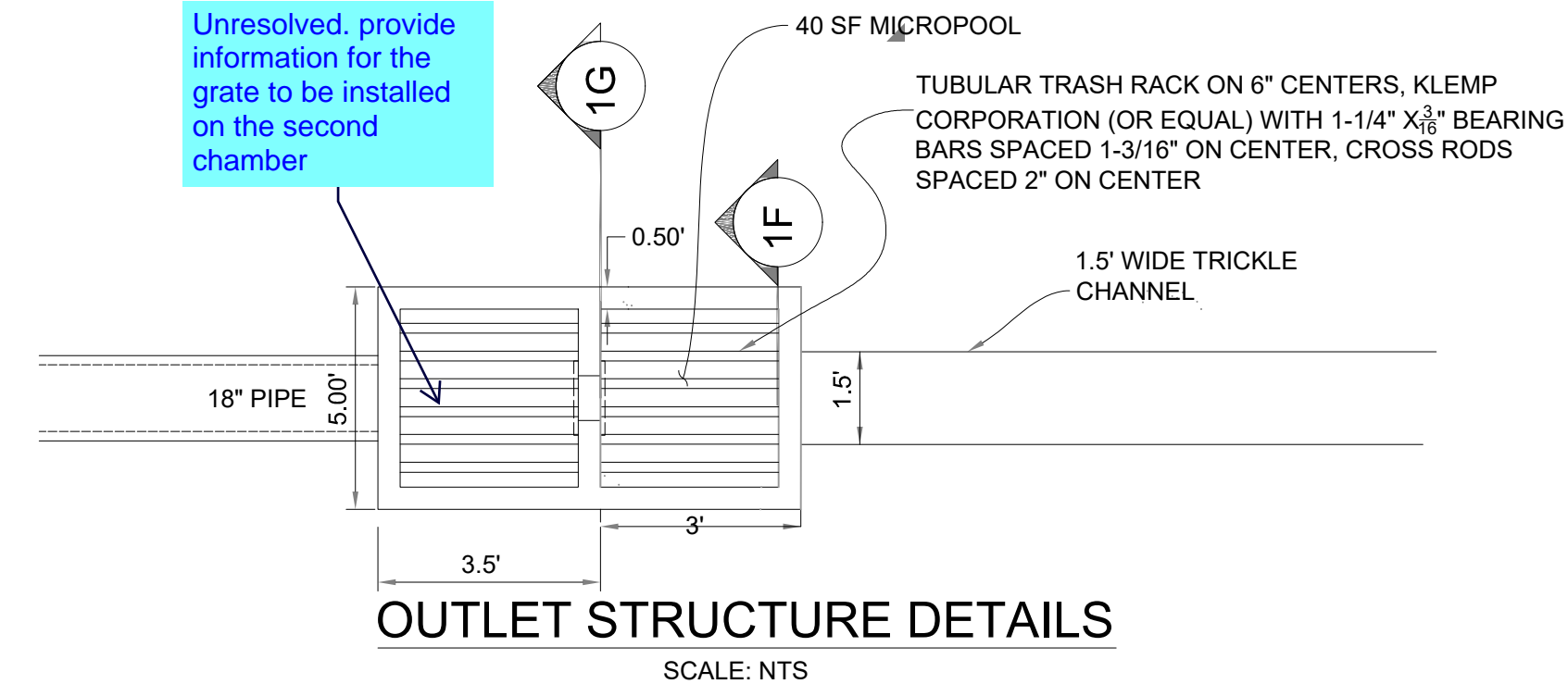
Unresolved comment from Review 1: Pond bottom should have a minimum slope of 3% to the trickle channel and micropool (USDCM Vol 3, detail T-5). Please adjust to minimize future maintenance needs.
 Review 2 clarification: show tie-in to trickle channel on this detail with appropriately sloped pond bottom.

Unresolved Review 1 comment: Provide further detail for the buried riprap that shows the required topsoil and vegetation on top of it.
 Review 2 clarification: Or do you intend this to actually be "soil riprap" which is different than buried riprap. Please reference MHFD criteria.

ISSUED	REVISIONS

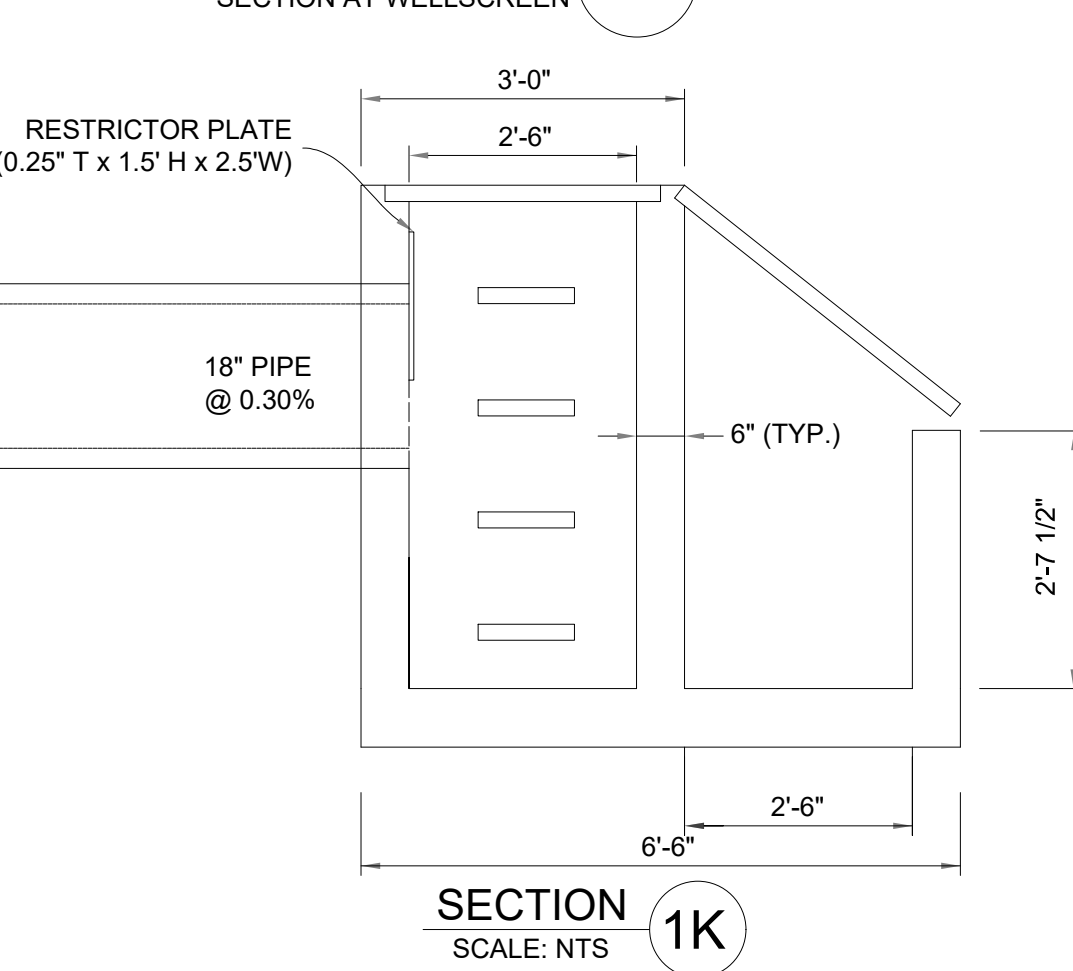
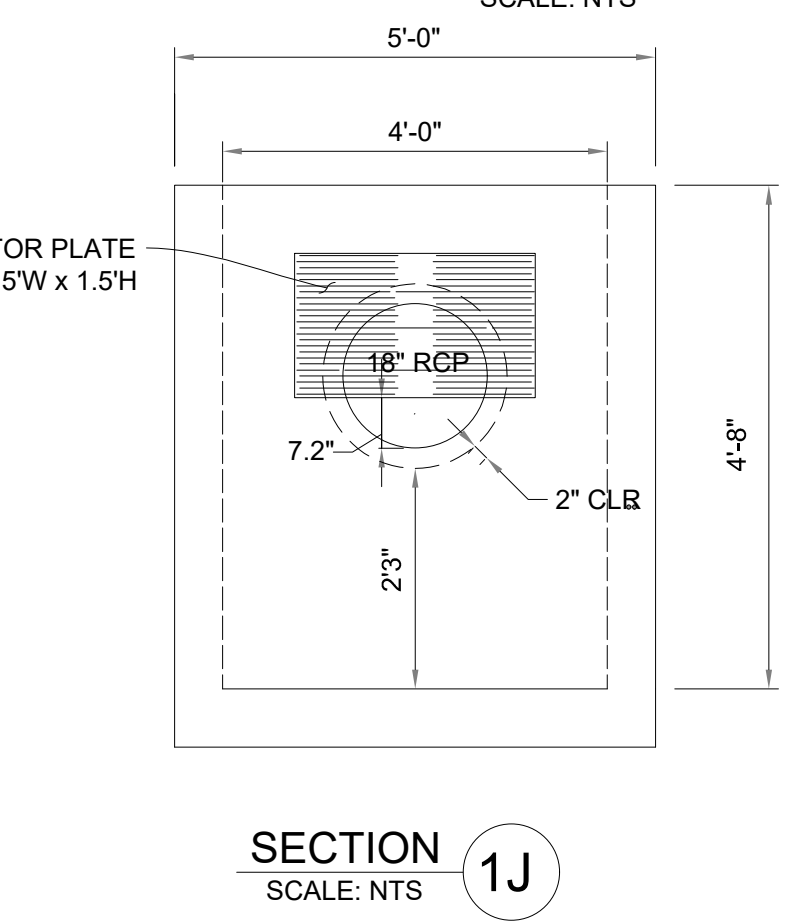
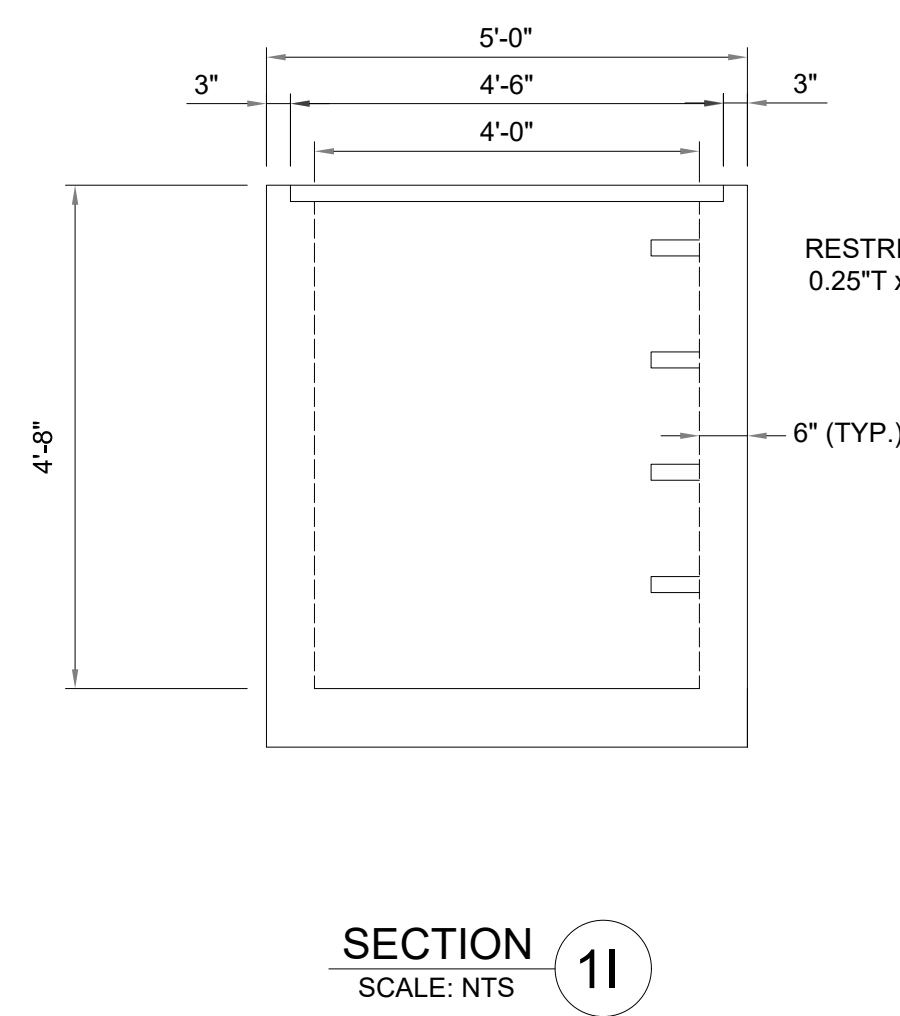
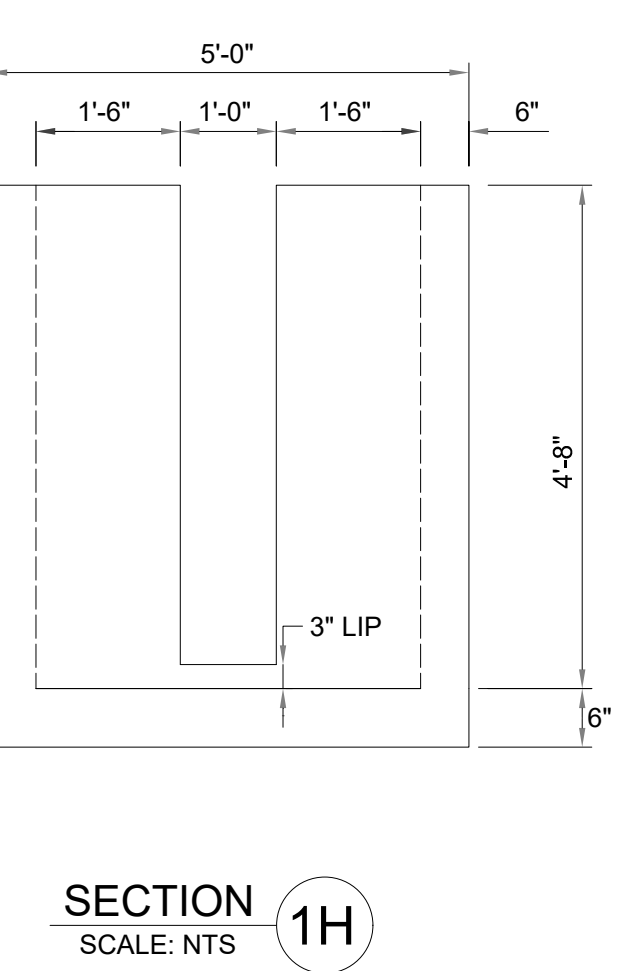
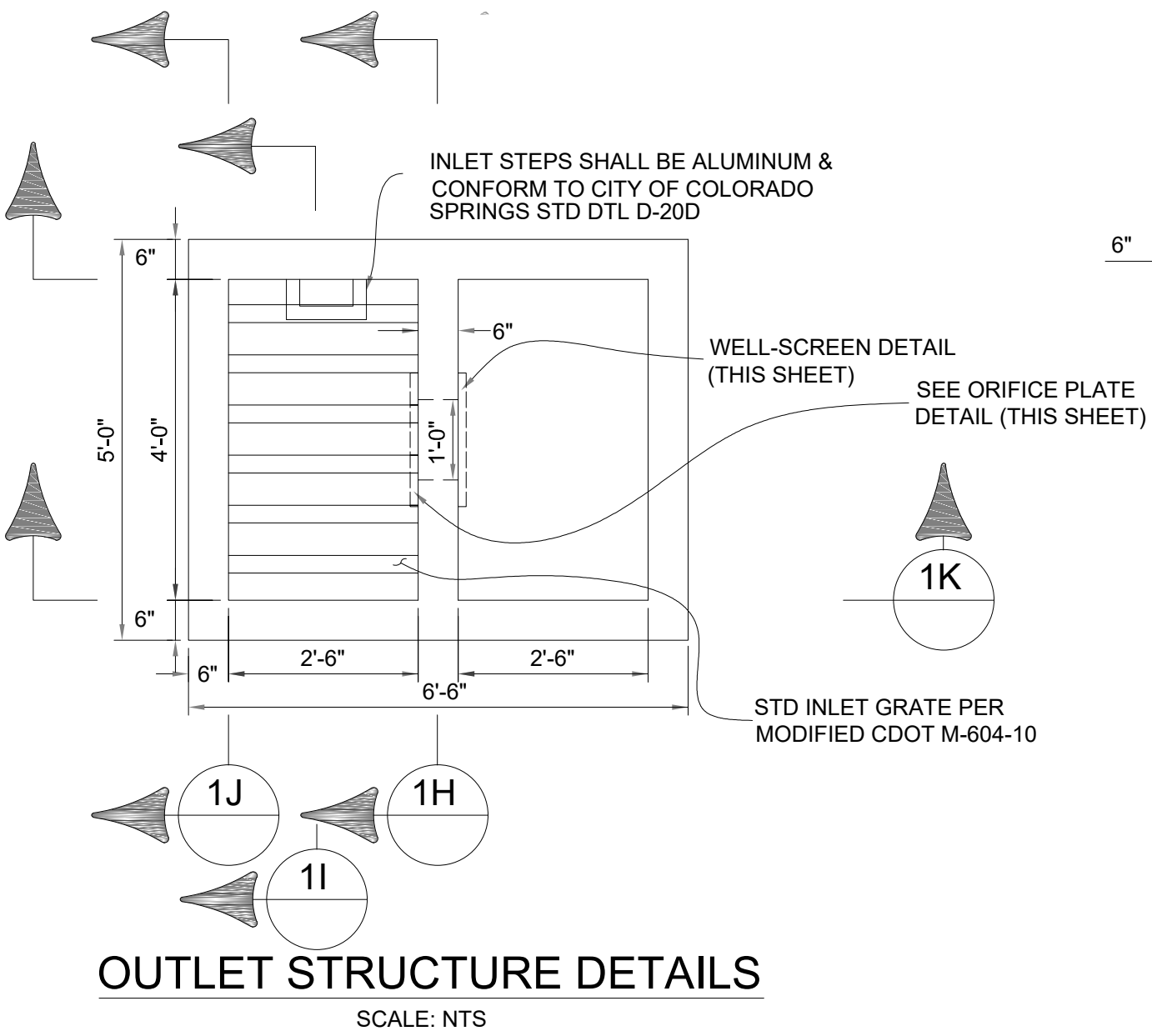
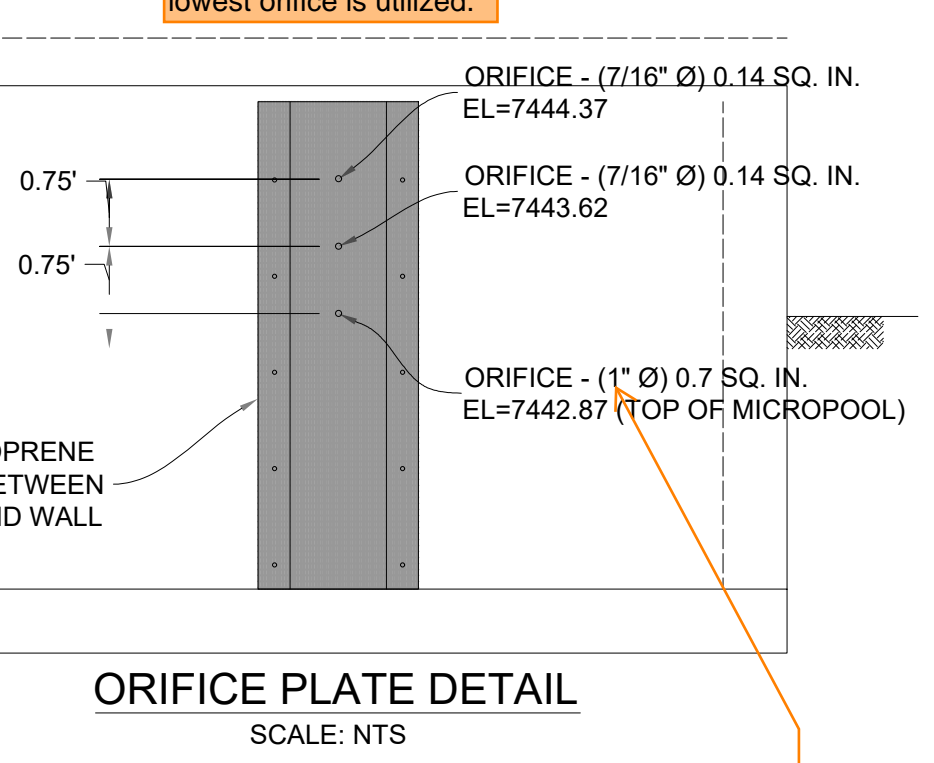
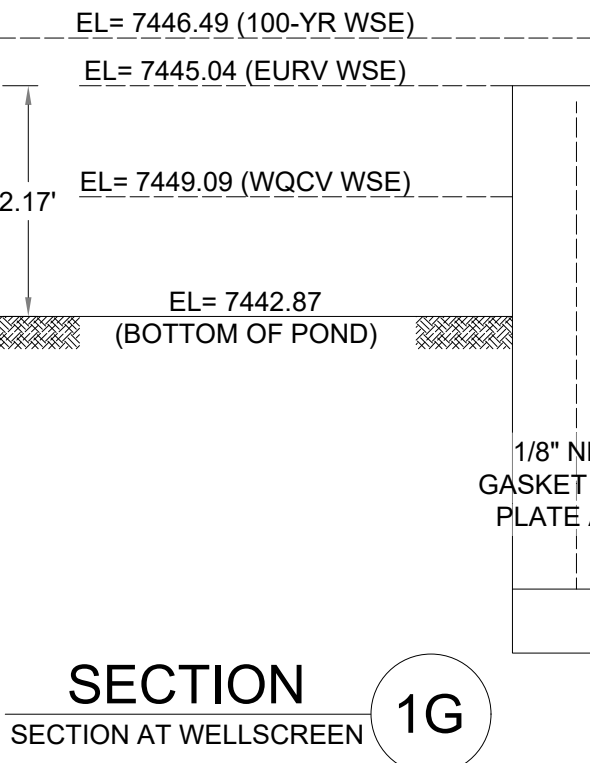
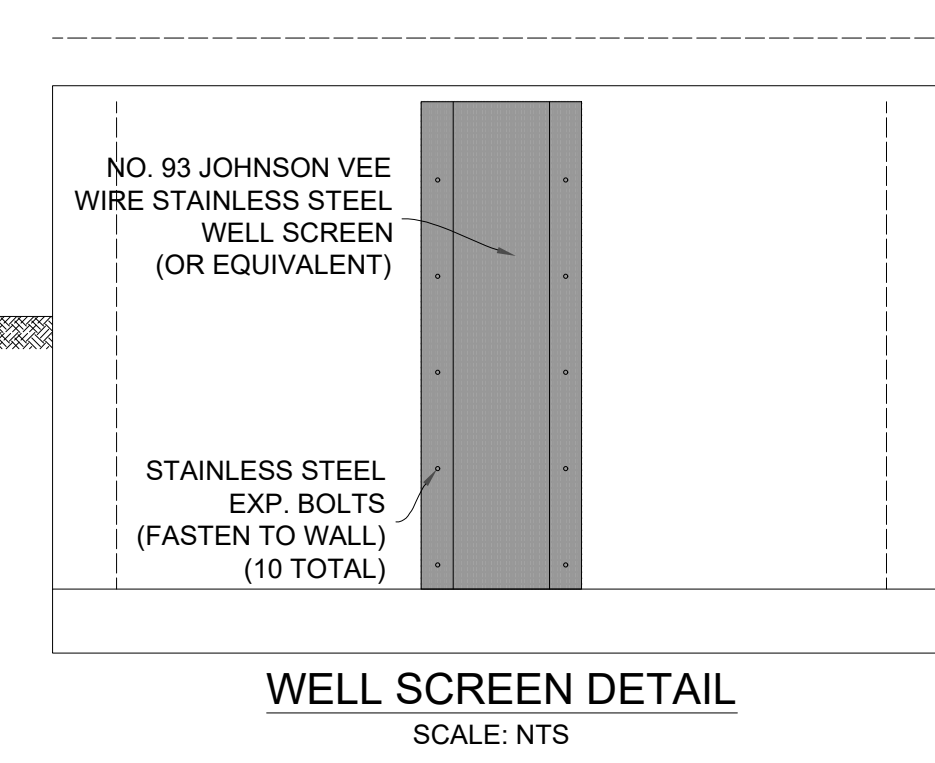
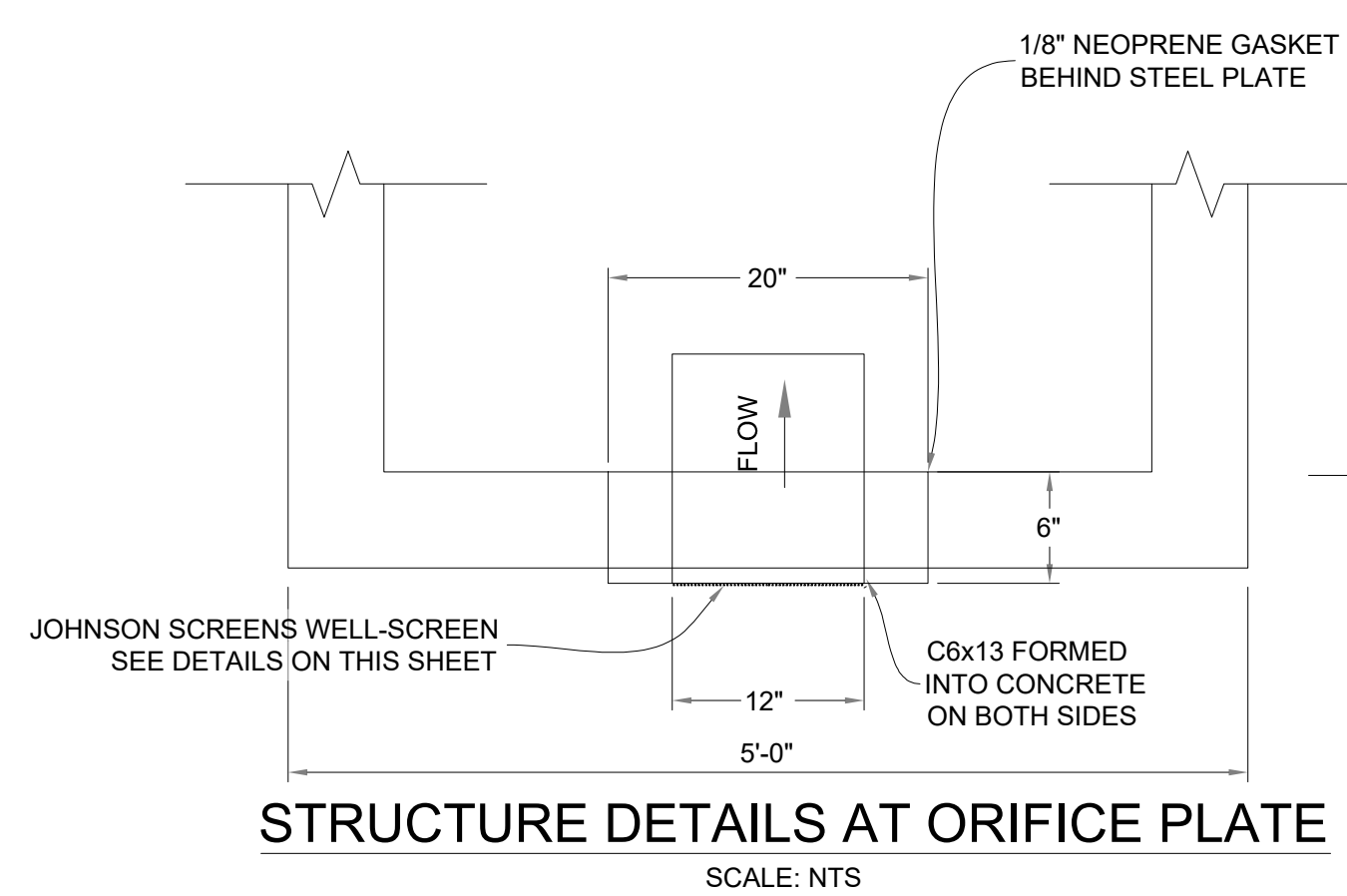
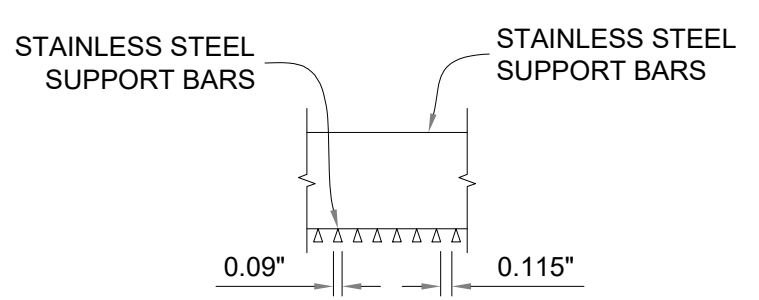
TERRA RIDGE NORTH
15630 FOX CREEK LANE
COLORADO SPRINGS, COLORADO

EL PASO COUNTY DEVELOPMENT
REPLAT TERRA RIDGE LOTS 5 & 6 W/ 11 LOTS IN
TERRA RIDGE NORTH
OUTLET STRUCTURE DETAILS



JOHNSON SCREENS STAINLESS STEEL VEE WIRE FILTERS WELL-SCREEN (OR EQUAL)

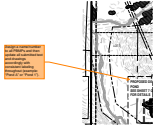
STRUCTURE	SCREEN #93 VEE WIRE SLOT OPENING	SUPPORT ROD TYPE & SPACING	TOTAL SCREEN THICKNESS	CARBON STEEL FRAME TYPE
OUTLET STRUCTURE	0.139	#156 VEE @ 3/4" O.C.	0.31"	3/8" x 1" BAR



Text on pdf page 9 of FDR states that this is 15/16" diameter. Revise to remove discrepancy.

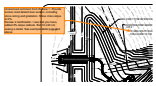
V2_Construction Drawings Redlines.pdf Markup Summary 3-20-2023

Glenn Reese - EPC Stormwater (23)



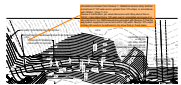
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 4
Date: 3/15/2023 4:18:21 PM
Status:
Color: ■
Layer:
Space:

Assign a name/number to all PBMPs and then update all submitted text and drawings accordingly with consistent labeling throughout (example: "Pond A" or "Pond 1").



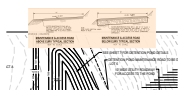
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 6
Date: 3/14/2023 5:38:27 PM
Status:
Color: ■
Layer:
Space:

Unresolved comment from Review 1: Provide access road detail/cross section, including stone sizing and gradation. Show cross slope at 2%. Review 2 clarification: I see that you have added 2% slope callouts. But I'm still not seeing a detail. See example detail provided above.

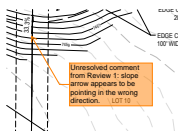


Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 6
Date: 3/14/2023 5:38:37 PM
Status:
Color: ■
Layer:
Space:

Unresolved comment from Review 1: -Stabilized access ramp shall be a minimum of 15ft wide and no greater than 12% slope, in accordance with DCMv1, Chap 11.2.2. Review 2 clarification: per email discussion with Shay about this on 2/3/22, I had stated that a 10ft wide road is acceptable as long as it is documented in the O&M manual (non-provided with Review 2) that the anticipated equipment can access with a 10ft width. But the 12% slope criteria still needs to be adhered to. So show that on these plans.

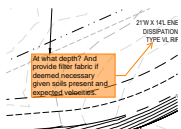


Author: Glenn Reese - EPC Stormwater
Subject: Image
Page Label: [1] 6
Date: 3/14/2023 5:38:20 PM
Status:
Color: ■
Layer:
Space:



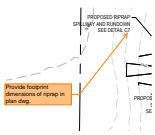
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 6
Date: 3/15/2023 4:03:37 PM
Status:
Color: ■
Layer:
Space:

Unresolved comment from Review 1: slope arrow appears to be pointing in the wrong direction.



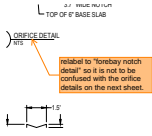
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 6
Date: 3/15/2023 4:25:46 PM
Status:
Color: ■
Layer:
Space:

At what depth? And provide filter fabric if deemed necessary given soils present and expected velocities.



Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/14/2023 5:44:19 PM
Status:
Color: ■
Layer:
Space:

Provide footprint dimensions of riprap in plan dwg.



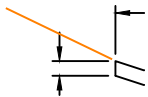
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/14/2023 5:45:16 PM
Status:
Color: ■
Layer:
Space:

relate to "forebay notch detail" so it is not to be confused with the orifice details on the next sheet.



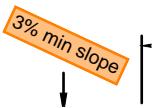
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/14/2023 5:50:38 PM
Status:
Color: ■
Layer:
Space:

Unresolved comment from Review 1:
Pond bottom should have a minimum slope of 3% to the trickle channel and micropool (USDCM Vol 3, detail T-5). Please adjust to minimize future maintenance needs.
Review 2 clarification: show tie-in to trickle channel on this detail with appropriately sloped pond bottom.



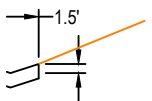
Author: Glenn Reese - EPC Stormwater
Subject: Line
Page Label: [1] 8
Date: 3/14/2023 5:46:56 PM
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Color: ■
Layer:
Space:

3% min slope

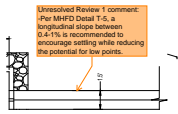


Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox
Page Label: [1] 8
Date: 3/14/2023 5:47:32 PM
Status:
Color: ■
Layer:
Space:

3% min slope

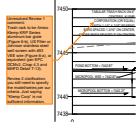


Author: Glenn Reese - EPC Stormwater
Subject: Line
Page Label: [1] 8
Date: 3/14/2023 5:47:45 PM
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Color: ■
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Space:



Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/14/2023 5:50:06 PM
Status:
Color: ■
Layer:
Space:

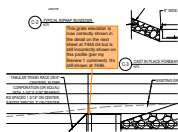
Unresolved Review 1 comment:
-Per MHFD Detail T-5, a longitudinal slope between 0.4-1% is recommended to encourage settling while reducing the potential for low points.



Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/15/2023 3:51:46 PM
Status:
Color: ■
Layer:
Space:

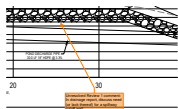
Unresolved Review 1 comment:
Trash rack to be Amico Klemp KRP Series aluminum bar grate (Figure 6-b), US Filter or Johnson stainless steel well screen with #93 VEE wire (Figure 6-a), or equivalent (per EPC DCMv2, Chap 4.3 and MHFD Detail T-12).

Review 2 clarification: you still need to specify the model/series per our criteria. Just saying "Klemp Corp" is not sufficient information.



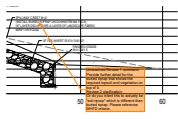
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/15/2023 3:28:10 PM
Status:
Color: ■
Layer:
Space:

This grate elevation is now correctly shown in the detail on the next sheet at 7445.04 but is still incorrectly shown on this profile (per my Review 1 comment). It's still shown at 7446.



Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/15/2023 3:32:00 PM
Status:
Color: ■
Layer:
Space:

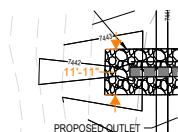
Unresolved Review 1 comment:
In drainage report, discuss need (or lack thereof) for a spillway cutoff wall.



Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/15/2023 3:35:24 PM
Status:
Color: ■
Layer:
Space:

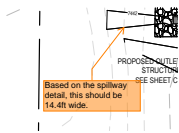
Unresolved Review 1 comment:
Provide further detail for the buried riprap that shows the required topsoil and vegetation on top of it.

Review 2 clarification:
Or do you intent this to actually be "soil riprap" which is different than buried riprap. Please reference MHFD criteria.



Author: Glenn Reese - EPC Stormwater
Subject: SW - Length Measurement
Page Label: [1] 8
Date: 3/15/2023 3:37:22 PM
Status:
Color: ■
Layer:
Space:

11'-11"



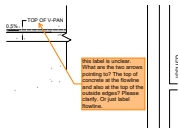
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/15/2023 3:49:54 PM
Status:
Color: ■
Layer:
Space:

Based on the spillway detail, this should be 14.4ft wide.



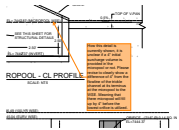
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 8
Date: 3/15/2023 3:55:39 PM
Status:
Color: ■
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Space:

Generally, bar grates are for orifices $>1\text{-}3/16"$ in largest length or diameter (based on nature of min bar grate spacing). But refer to Step #9 on the EDB tab of the UD-BMP spreadsheet for when to use well screens vs bar grates (based on R-value, i.e., percent open area). Note it appears the cutoff is at smallest orifice dimension of about $1\text{-}1/4"$, meaning that a well screen is better suited for this pond that has orifices of $7/16"$ diameter: US Filter or Johnson stainless steel well screen with #93 VEE wire (Figure 6-a), or equivalent (per EPC DCMv2, Chap 4.3 and MHFD Detail T-12). Johnson vee wire type should be installed with exterior bars in the vertical orientation.



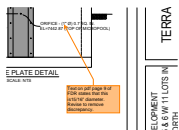
Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 9
Date: 3/14/2023 6:06:31 PM
Status:
Color: ■
Layer:
Space:

this label is unclear. What are the two arrows pointing to? The top of concrete at the flowline and also at the top of the outside edges? Please clarify. Or just label flowline.



Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 9
Date: 3/14/2023 6:08:49 PM
Status:
Color: ■
Layer:
Space:

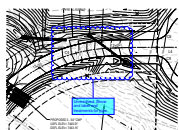
How this detail is currently shown, it is unclear if a 4" initial surcharge volume is provided in the micropool or not. Please revise to clearly show a difference of 4" from the flowline of the trickle channel at its terminus at the micropool to the WSE. Meaning that there micropool will fill up by 4" before the lowest orifice is utilized.



Author: Glenn Reese - EPC Stormwater
Subject: SW - Textbox with Arrow
Page Label: [1] 9
Date: 3/15/2023 4:22:32 PM
Status:
Color: ■
Layer:
Space:

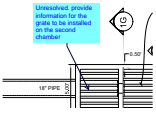
Text on pdf page 9 of FDR states that this is $15/16"$ diameter. Revise to remove discrepancy.

lpackman (2)



Author: lpackman
Subject: Cloud+
Page Label: [1] 6
Date: 3/20/2023 2:47:29 PM
Status:
Color: ■
Layer:
Space:

Unresolved. Show and label end treatments for pipe.



Author: lpackman
Subject: Callout
Page Label: [1] 9
Date: 3/20/2023 1:46:49 PM
Status:
Color: ■
Layer:
Space:

Unresolved. provide information for the grate to be installed on the second chamber