

VICINITY MAP
N.T.S.

Site Coordinates (Lat/Long): 38.76473, -104.61765

Address: 11295 Bradley Rd, El Paso County, CO

Rolling Meadows Substation
Construction of a New Electrical Substation
including Grading, Drainage, and Surface Improvements
El Paso County, Colorado

PCD FILE NO. TBD

Construction Plans prepared in cooperation with:



DEL-MONT CONSULTANTS, INC.
ENGINEERING ▼ SURVEYING
125 Colorado Ave. ▼ Montrose, CO 81401 ▼ (970) 249-2251
www.del-mont.com ▼ service@del-mont.com

ENGINEER'S STATEMENT:

This grading and erosion control plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. said plan has been prepared according to the criteria established by the County for grading and erosion control plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this plan.

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 Director's discretion.

H. Steven Gray, Vice President
Tri-State Generation and Transmission Association, Inc.
1100 W. 116th Ave, Westminster, CO 80234

Date _____

David Schieldt, P.E. #47195

04-27-2026
Date

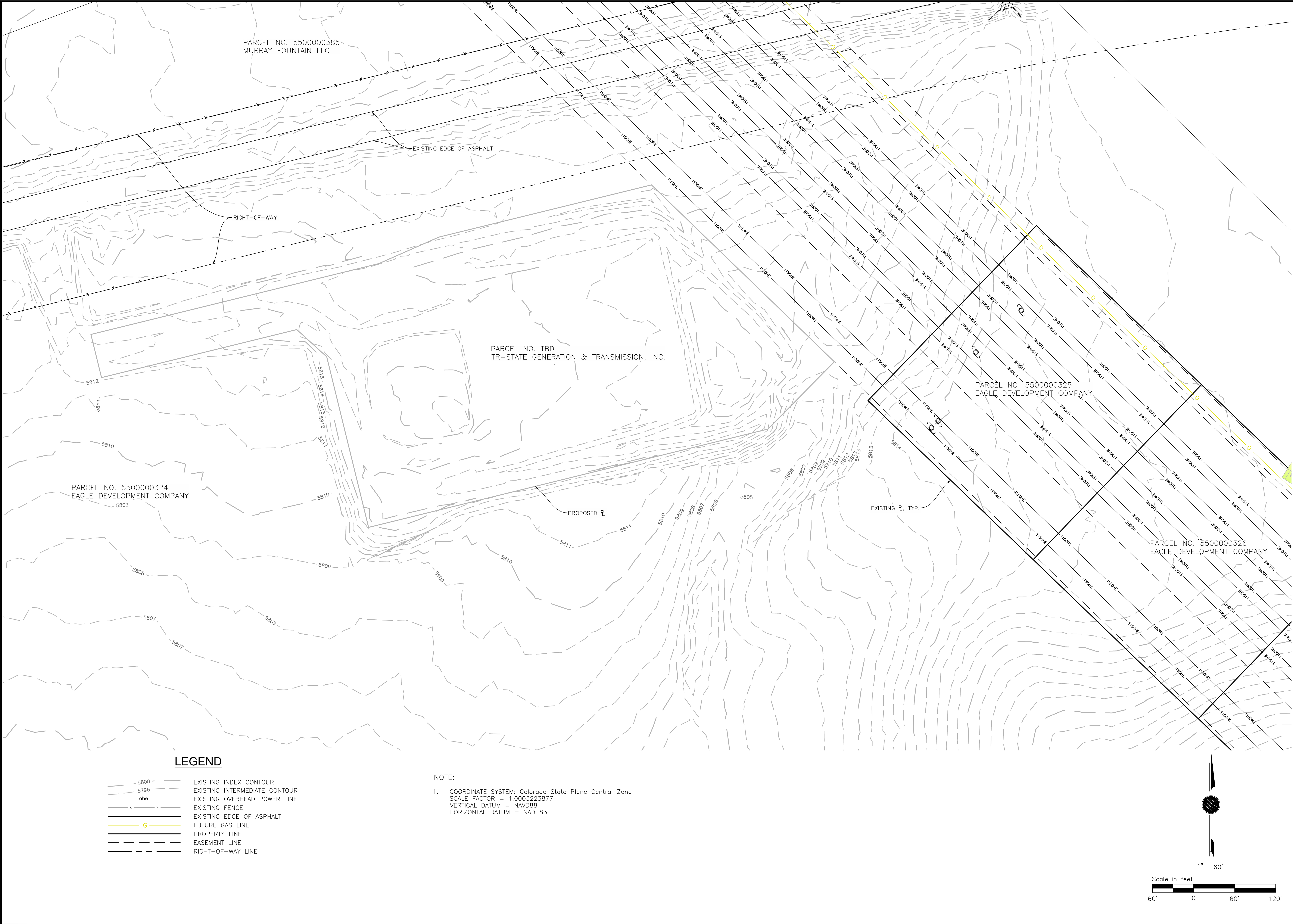
Joshua J. Palmer, P.E.
County Engineer Signature/ECM Administrator

Date _____

DATE	06/22/26										
DATE	06/22/26										
 TRI-STATE Generation and Transmission A Touchstone Energy Cooperative 1100 W. 116th Ave. Boonville, MO 64608 Denver, Colorado 80233 303-452-6111											
1100 W. 116th Ave.											
TRI-STATE GENERATION & TRANSMISSION											
ASSOCIATION, INCORPORATED											
ROLLING HILLS SUBSTATION											
COVER SHEET											
115/12.4KV											
No.	6										
Date	5/15/2026										
Contract	47713										
Updated by	WLDGRATE										
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by											
Revision											
Drawn											
Aspd.											
No.	7										
Date											
Contract											
Updated by										</	

S1183-A-01-001

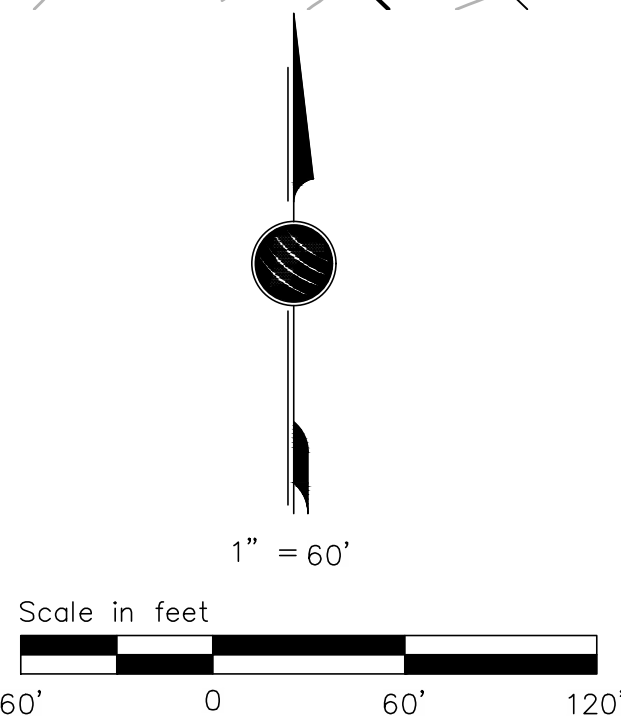
[illegible]



LEGEND

- 5800- EXISTING INDEX CONTOUR
- 5796- EXISTING INTERMEDIATE CONTOUR
- oh- EXISTING OVERHEAD POWER LINE
- x-x- EXISTING FENCE
- x-x- EXISTING EDGE OF ASPHALT
- G- FUTURE GAS LINE
- - - PROPERTY LINE
- - - EASEMENT LINE
- - - RIGHT-OF-WAY LINE

NOTE:
1. COORDINATE SYSTEM: Colorado State Plane Central Zone
SCALE FACTOR = 1,0003223877
VERTICAL DATUM = NAVD88
HORIZONTAL DATUM = NAD 83



7

6

5

4

3

2

1

No.

Date

Appd.

Revision

M.F.

Dwg. No.

Mfr.

Drawing Title

Reference Drawings

ROLLING MEADOWS SUBSTATION

115/12.4KV

EXISTING CONDITIONS

TRI-STATE GENERATION & TRANSMISSION ASSOCIATION, INCORPORATED

1100 W. 116th Ave.

P.O. Box 33695

Denver, Colorado 80233

303-452-6111

Updated By: WLDGATE

6/19/2026 9:37 AM

Contract: 4713

Path: \\DWS1\Projects\Active Projects\2024\2026-TSG Rolling Meadows Substation\Facility Civil\Sheets\S1183-A-01-SHEETS.dwg

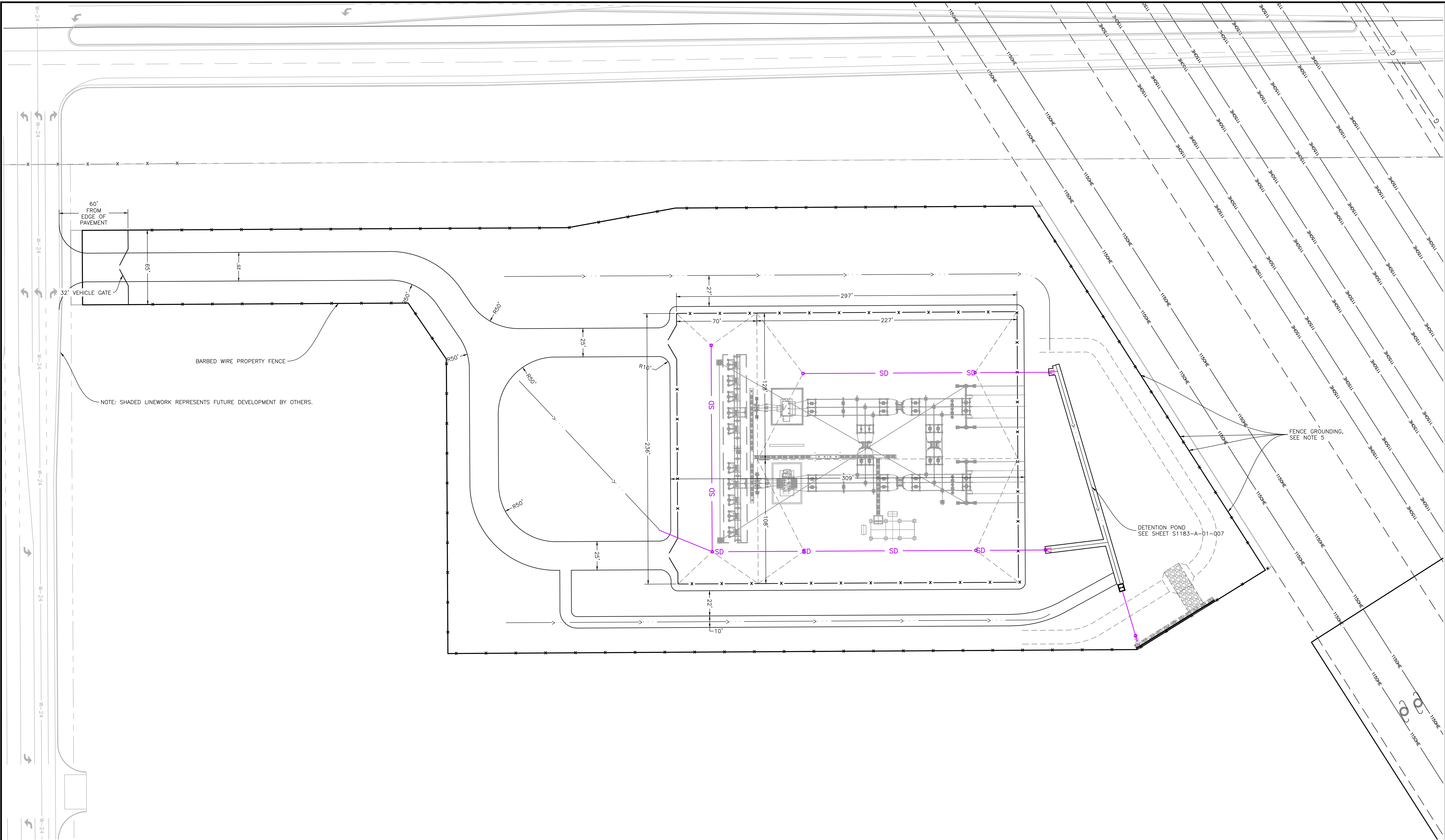
Dwn: TMC

Date: 06/22/26

Appd: DWS

Date: 06/22/26

S1183-A-01-003

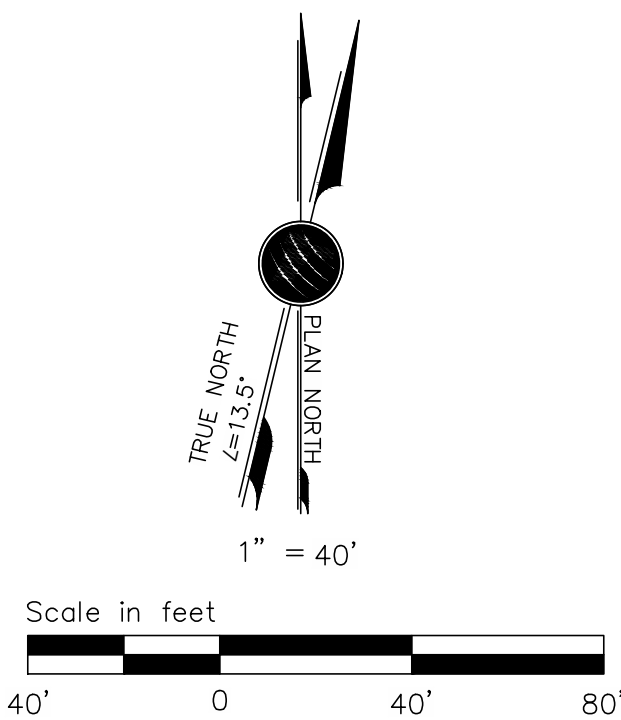


LEGEND

- EXISTING INDEX CONTOUR
EXISTING INTERMEDIATE CONTOUR
EXISTING OVERHEAD POWER LINE
EXISTING FENCE
BASELINE
PROPOSED INDEX CONTOUR
PROPOSED INTERMEDIATE CONTOUR
PROPOSED SUBDRAIN
PROPOSED GRADE BRAKE LINE
PROPOSED SUBSTATION FENCE
PROPOSED DRAINAGE FLOWLINE
PROPOSED RIPRAP
PROPOSED SUBDRAIN CLEANOUT

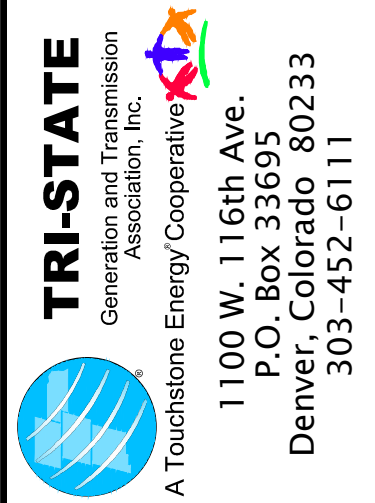
NOTE:

- THE HORIZONTAL LOCATION FOR THE CONTROL POINT AT THE INTERSECTION OF THE TWO BASELINES IS FIXED. LOCATIONS FOR OTHER CONTROL POINTS MAY BE ADJUSTED ALONG THE BASELINE AS NECESSARY TO PROVIDE FOR CLEAR LINES OF SIGHT AROUND EXISTING VEGETATION TO REMAIN.
- SURVEYOR SHALL SET THE CONTROL POINTS OUTSIDE THE SUBSTATION SECURITY FENCE IN-THE-FIELD, AND REPORT THE COORDINATES AND ELEVATIONS TO THE OWNER'S AUTHORIZED TECHNICAL REPRESENTATIVE (OATR).
- COORDINATE SYSTEM: COLORADO STATE PLANE CENTRAL ZONE
SCALE FACTOR = 1.0003223877
VERTICAL DATUM = NAVD88
HORIZONTAL DATUM = NAD 83
- SHADED LINEWORK REPRESENTS FUTURE DEVELOPMENT BY OTHERS.
- GROUND SUBSTATION FENCE 20' FROM OUTER OVERHEAD TRANSMISSION LINES, (4) LOCATIONS



ROLLING MEADOWS SUBSTATION
115/12.47KV
SITE LAYOUT

TRI-STATE GENERATION & TRANSMISSION
ASSOCIATION, INCORPORATED
1100 W. 116th Ave.
P.O. Box 33695
Denver, Colorado 80233
303-452-6111

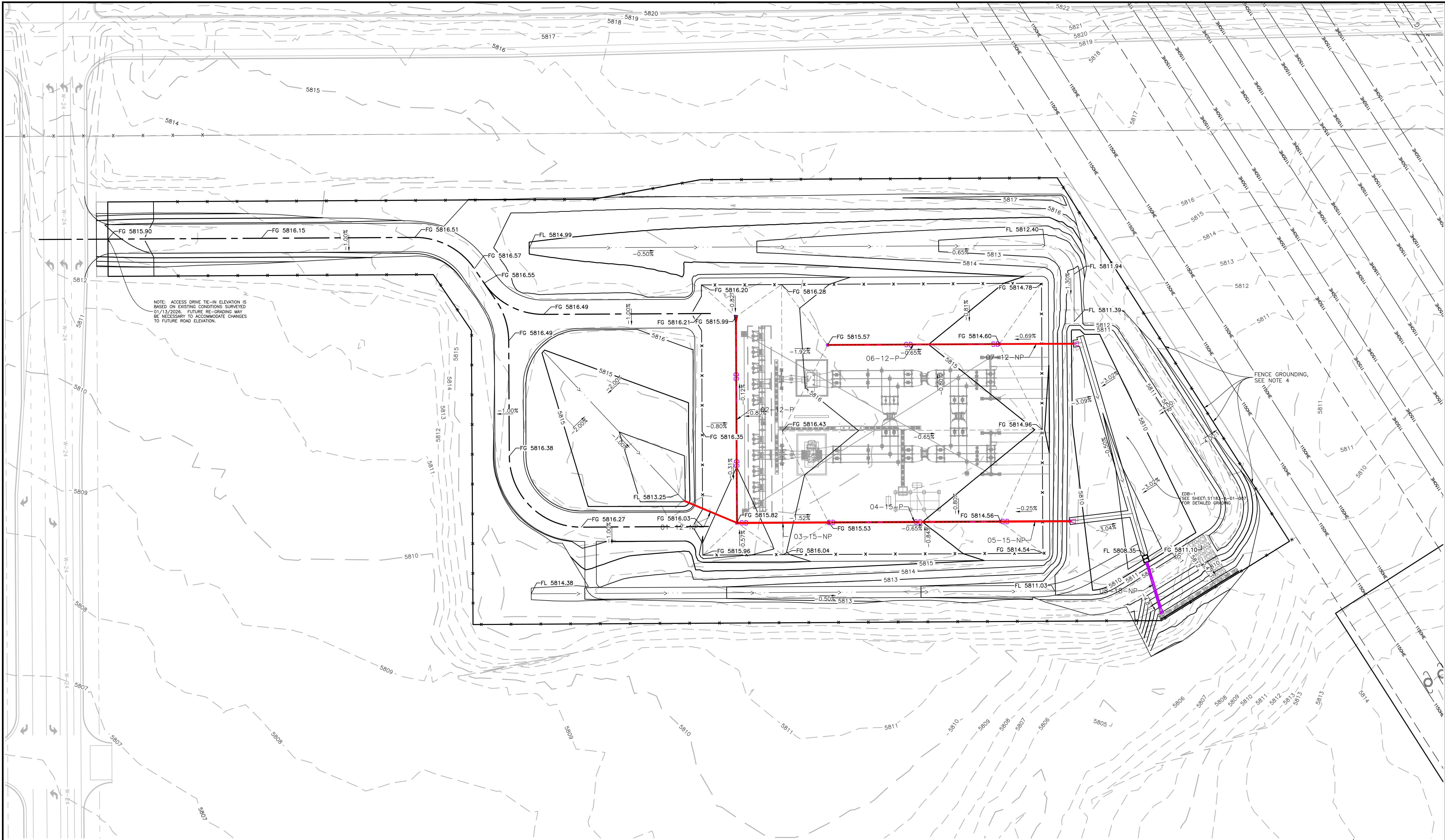


Dwn: TMC
Appd: DWS
Date: 06/22/26
Date: 06/22/26

S1183-A-01-004

No.	Date	Dwn.	Appd.	Revision	M.F.
7					
6					
5					
4					
3					
2					
1					

Dwg. No.	Mfr.	Drawing Title
		Reference Drawings



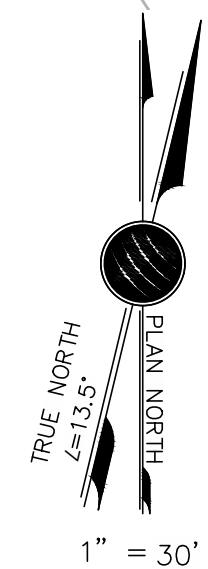
NOTE: ACCESS DRIVE TIE-IN ELEVATION IS BASED ON EXISTING CONDITIONS SURVEYED 07/13/2026. FUTURE RE-GRADING MAY BE NECESSARY TO ACCOMMODATE CHANGES TO FUTURE ROAD ELEVATION.

LEGEND

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING OVERHEAD POWER LINE
- EXISTING FENCE
- BASELINE
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED SUBDRAIN
- PROPOSED GRADE BRAKE LINE
- PROPOSED SUBSTATION FENCE
- PROPOSED DRAINAGE FLOWLINE
- PROPOSED RIPRAP
- PROPOSED SUBDRAIN CLEANOUT

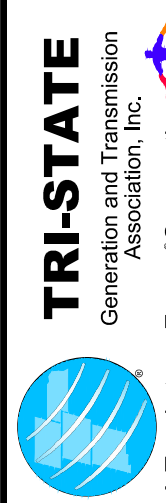
NOTE:

- THE HORIZONTAL LOCATION FOR THE CONTROL POINT AT THE INTERSECTION OF THE TWO BASELINES IS FIXED. LOCATIONS FOR OTHER CONTROL POINTS MAY BE ADJUSTED ALONG THE BASELINE AS NECESSARY TO PROVIDE FOR CLEAR LINES OF SIGHT AROUND EXISTING VEGETATION TO REMAIN.
- SURVEYOR SHALL SET THE CONTROL POINTS OUTSIDE THE SUBSTATION SECURITY FENCE IN-THE-FIELD, AND REPORT THE COORDINATES AND ELEVATIONS TO THE OWNER'S AUTHORIZED TECHNICAL REPRESENTATIVE (OATR).
- COORDINATE SYSTEM: COLORADO STATE PLANE CENTRAL ZONE
SCALE FACTOR = 1.0003223877
VERTICAL DATUM = NAVD88
HORIZONTAL DATUM = NAD 83
- GROUND SUBSTATION FENCE 20' FROM OUTER OVERHEAD TRANSMISSION LINES, (4) LOCATIONS



ROLLING MEADOWS SUBSTATION 115/12.47KV GRADING PLAN

TRI-STATE GENERATION & TRANSMISSION
ASSOCIATION, INCORPORATED



1100 W. 116th Ave.
P.O. Box 33695
Denver, Colorado 80233
303-452-6111

Dwn: TMC
Appd: DWS
Date: 06/22/26
Date: 06/22/26

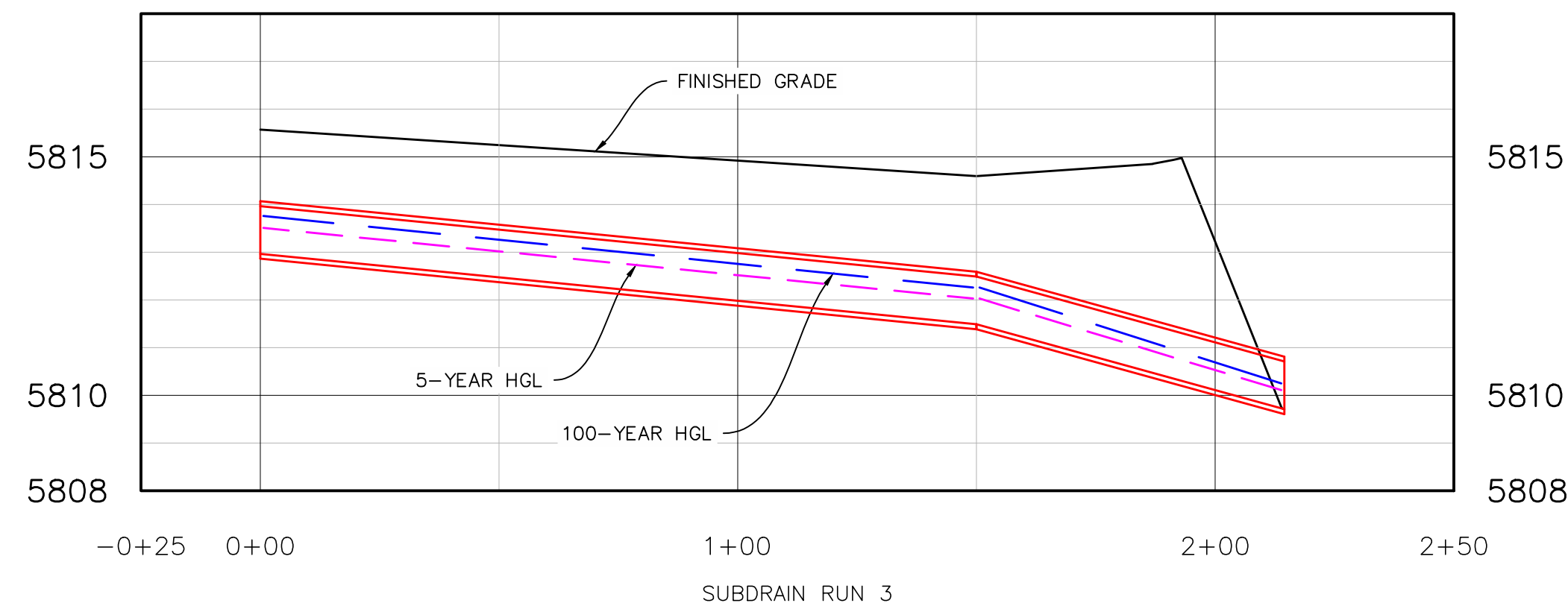
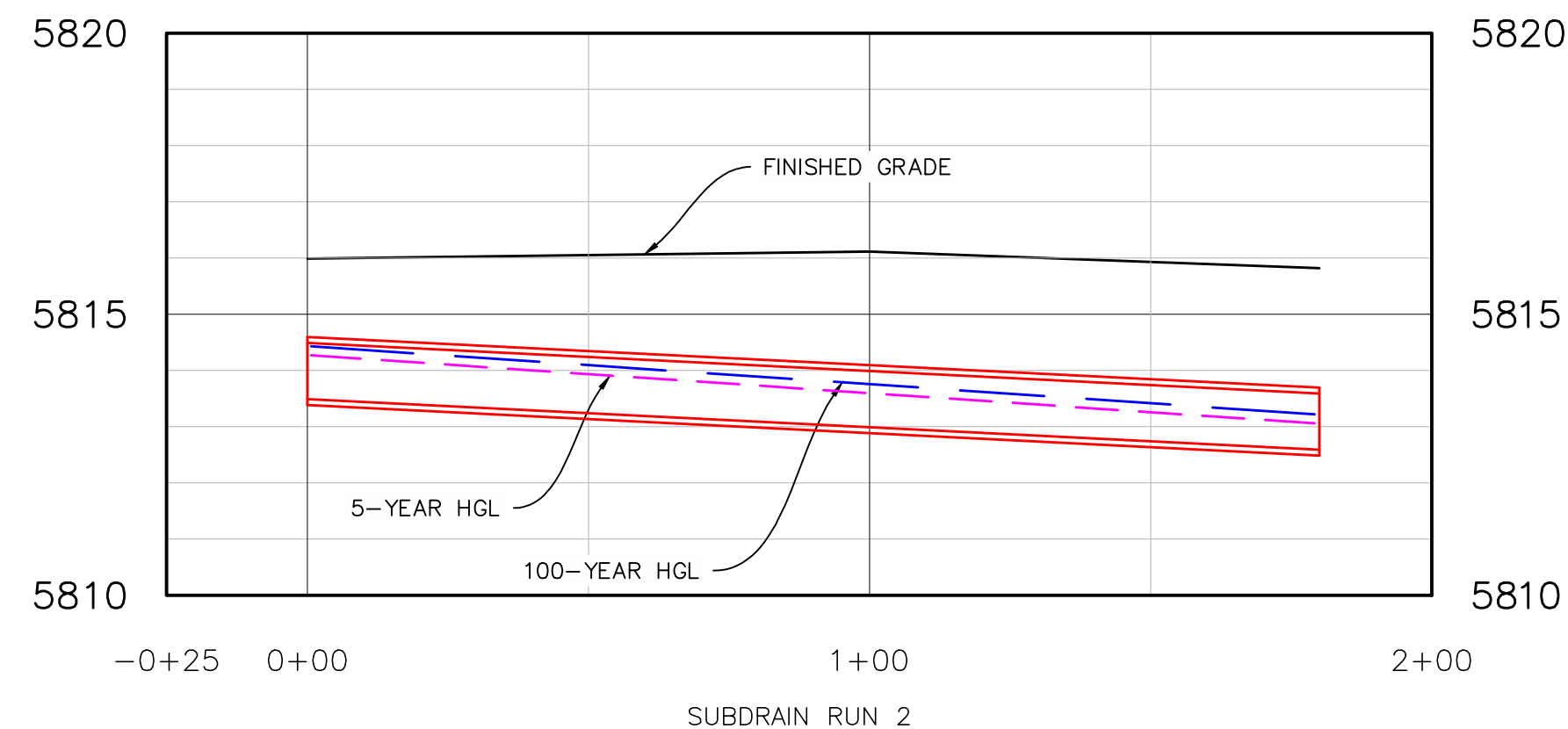
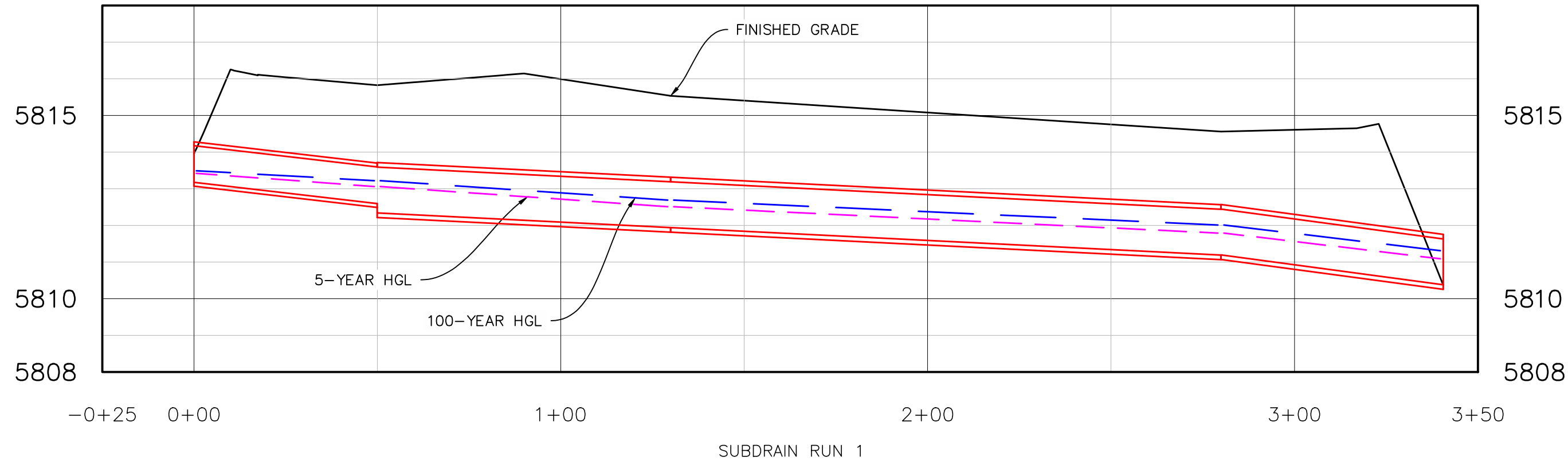
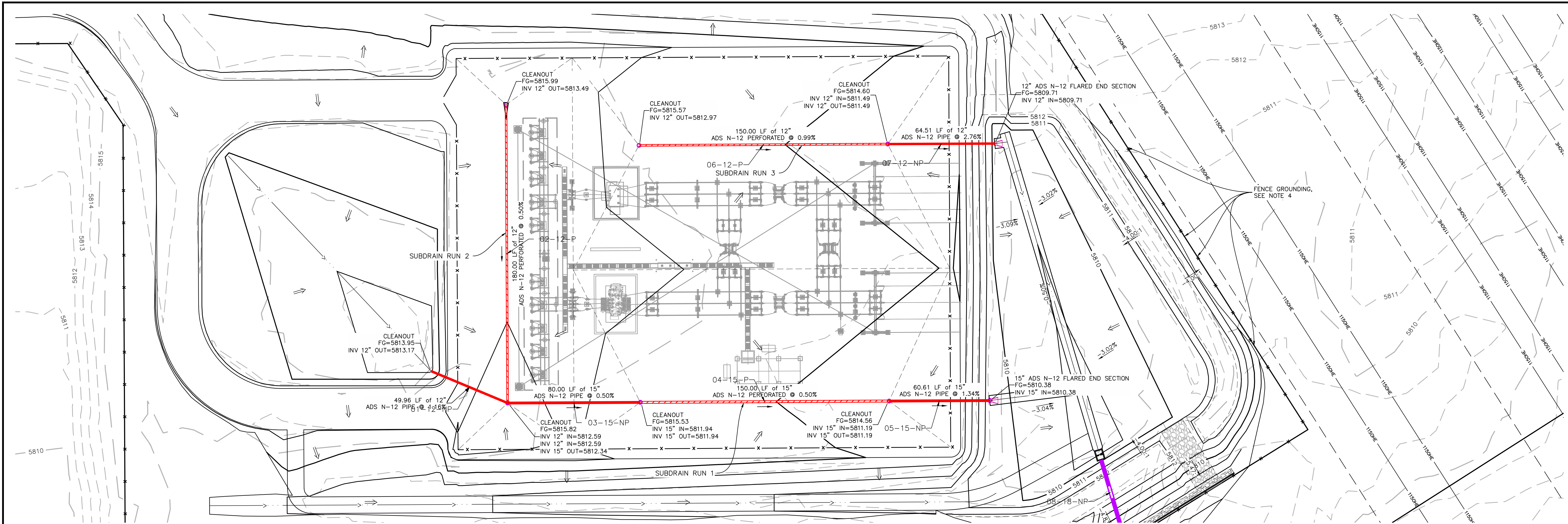
S1183-A-01-005

Revision		M.F.	
7			
6			
5			
4			
3			
2			
1			

Revision		M.F.	
7			
6			
5			
4			
3			
2			
1			

Revision		M.F.	
7			
6			
5			
4			
3			
2			
1			

Revision		M.F.	
7			
6			
5			
4			
3			
2			
1			

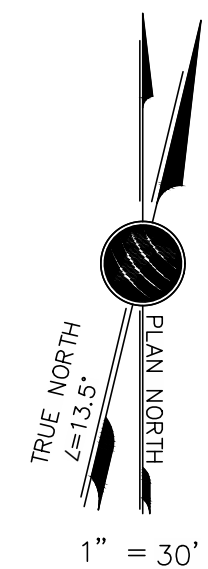


LEGEND

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING OVERHEAD POWER LINE
- EXISTING FENCE
- BASELINE
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED SUBDRAIN
- PROPOSED GRADE BRAKE LINE
- PROPOSED SUBSTATION FENCE
- PROPOSED DRAINAGE FLOWLINE
- PROPOSED RIPRAP
- PROPOSED SUBDRAIN CLEANOUT
- PROPOSED 5-YEAR HGL
- PROPOSED 100-YEAR HGL

NOTE:

- THE HORIZONTAL LOCATION FOR THE CONTROL POINT AT THE INTERSECTION OF THE TWO BASELINES IS FIXED. LOCATIONS FOR OTHER CONTROL POINTS MAY BE ADJUSTED ALONG THE BASELINE AS NECESSARY TO PROVIDE FOR CLEAR LINES OF SIGHT AROUND EXISTING VEGETATION TO REMAIN.
- SURVEYOR SHALL SET THE CONTROL POINTS OUTSIDE THE SUBSTATION SECURITY FENCE IN-THE-FIELD, AND REPORT THE COORDINATES AND ELEVATIONS TO THE OWNER'S AUTHORIZED TECHNICAL REPRESENTATIVE (OATR).
- COORDINATE SYSTEM: COLORADO STATE PLANE CENTRAL ZONE
SCALE FACTOR = 1.0003223877
VERTICAL DATUM = NAVD88
HORIZONTAL DATUM = NAD 83
- GROUND SUBSTATION FENCE 20' FROM OUTER OVERHEAD TRANSMISSION LINES, (4) LOCATIONS



ROLLING MEADOWS SUBSTATION
115/12.47KV
SUBDRAIN PLANS

TRI-STATE
Generation and Transmission
Association, Inc.

1100 W. 116th Ave.
P.O. Box 33695
Denver, Colorado 80233
303-452-6111

115/12.47KV
SUBDRAIN PLANS

DATE: 06/22/26
DWN: TMC

DATE: 06/22/26
APPD: DWS

PATH: \\QMS1\Projects\Active Projects\2024\2028-1567 Rolling Meadows Substation\Facility Civil\Sheets\1183-A-01-SHEETS.dwg

6/19/2028 9:37 AM
WUDGATE
4713
Contract

1183-A-01-SHEETS.dwg

7
6
5
4
3
2
1

No.

Date

Dwn.

Appd.

Revision

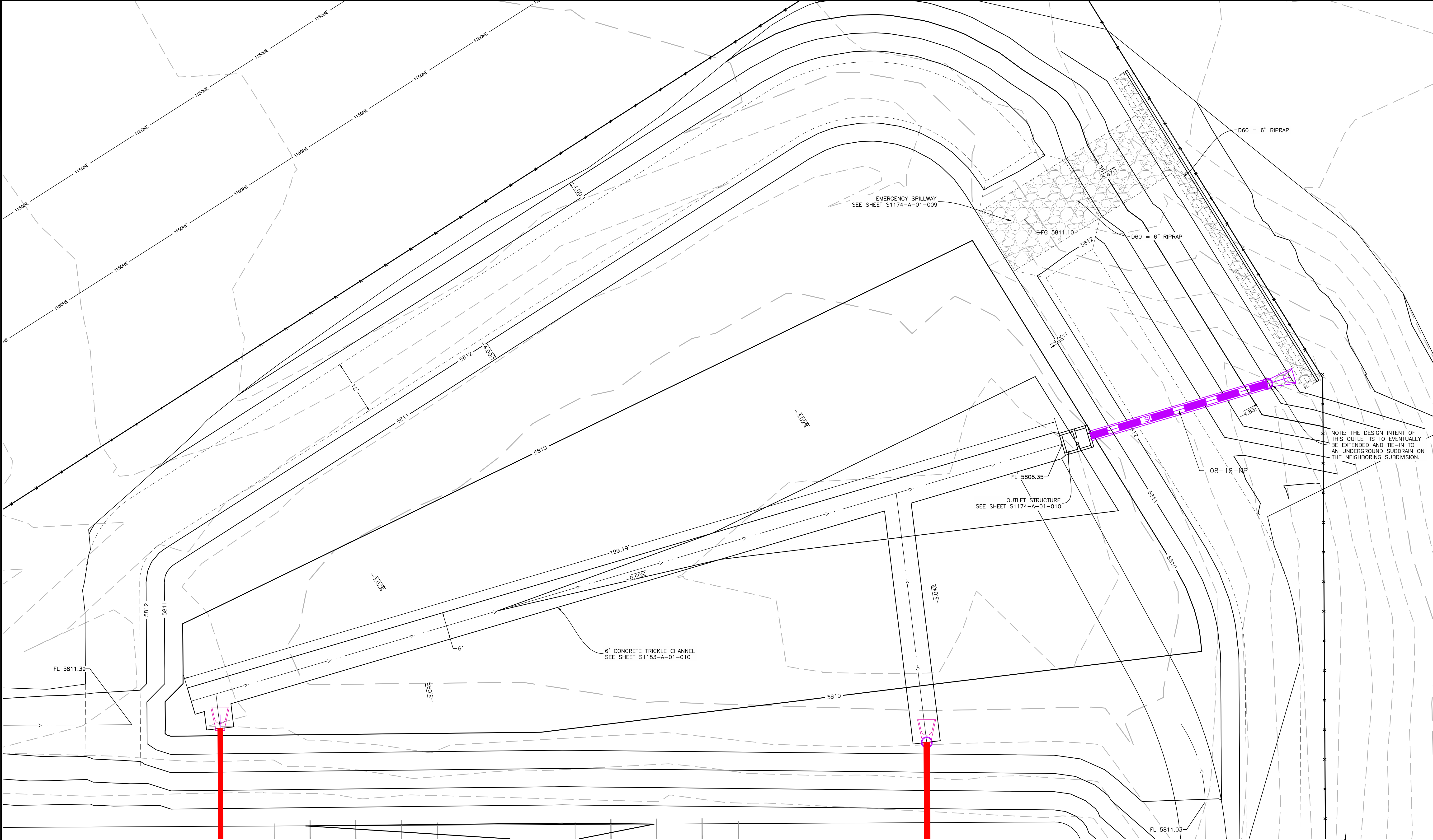
M.F.

Dwg. No.

Mfr.

Drawing Title

S1183-A-01-006

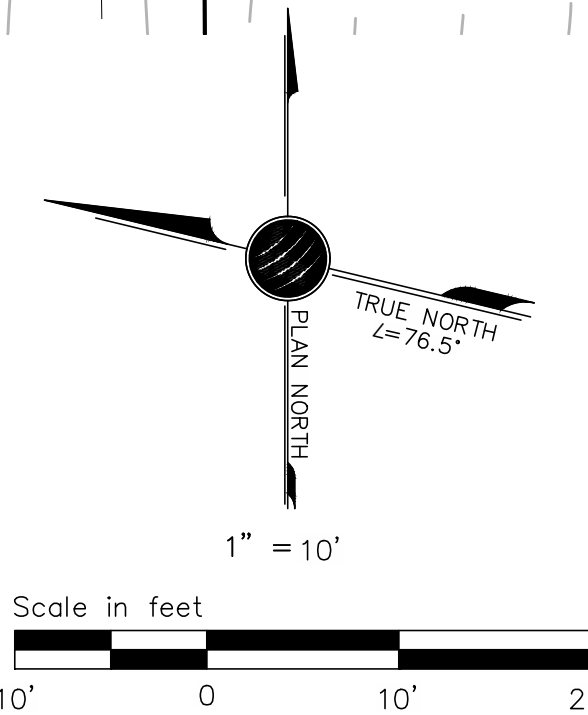


LEGEND

- 5800- EXISTING INDEX CONTOUR
- 5796- EXISTING INTERMEDIATE CONTOUR
- one- EXISTING OVERHEAD POWER LINE
- - - - - EXISTING FENCE
- - - - - BASELINE
- 5800- PROPOSED INDEX CONTOUR
- 5796- PROPOSED INTERMEDIATE CONTOUR
- SD- PROPOSED SUBDRAIN
- - - - - PROPOSED GRADE BRAKE LINE
- x-x-x- PROPOSED SUBSTATION FENCE
- - - - - PROPOSED DRAINAGE FLOWLINE
- [Pattern] PROPOSED RIPRAP
- PROPOSED SUBDRAIN CLEANOUT

NOTE:

1. THE HORIZONTAL LOCATION FOR THE CONTROL POINT AT THE INTERSECTION OF THE TWO BASELINES IS FIXED. LOCATIONS FOR OTHER CONTROL POINTS MAY BE ADJUSTED ALONG THE BASELINE AS NECESSARY TO PROVIDE FOR CLEAR LINES OF SIGHT AROUND EXISTING VEGETATION TO REMAIN.
2. SURVEYOR SHALL SET THE CONTROL POINTS OUTSIDE THE SUBSTATION SECURITY FENCE IN-THE-FIELD, AND REPORT THE COORDINATES AND ELEVATIONS TO THE OWNER'S AUTHORIZED TECHNICAL REPRESENTATIVE (OATR).
3. COORDINATE SYSTEM: COLORADO STATE PLANE CENTRAL ZONE
SCALE FACTOR = 1.0003223877
VERTICAL DATUM = NAVD89
HORIZONTAL DATUM = NAD 83



NOTE: THE DESIGN INTENT OF THIS OUTLET IS TO EVENTUALLY BE EXTENDED AND TIE-IN TO AN UNDERGROUND SUBDRAIN ON THE NEIGHBORING SUBDIVISION.

ROLLING MEADOWS SUBSTATION

115/12.47KV

EDB-1 GRADING

TRI-STATE GENERATION & TRANSMISSION ASSOCIATION, INCORPORATED

1100 W. 116th Ave.
P.O. Box 33895
Denver, Colorado 80233
303-452-6111

Generation and Transmission Association, Inc.

TRI-STATE

1100 W. 116th Ave.
P.O. Box 33895
Denver, Colorado 80233
303-452-6111

Generation and Transmission Association, Inc.

Dwn: TMC

Appd: DWS

Date: 06/22/26

Date: 06/22/26

S1183-A-01-007

7

6

5

4

3

2

1

No.

Date

Dwn.

Appd.

Revision

M.F.

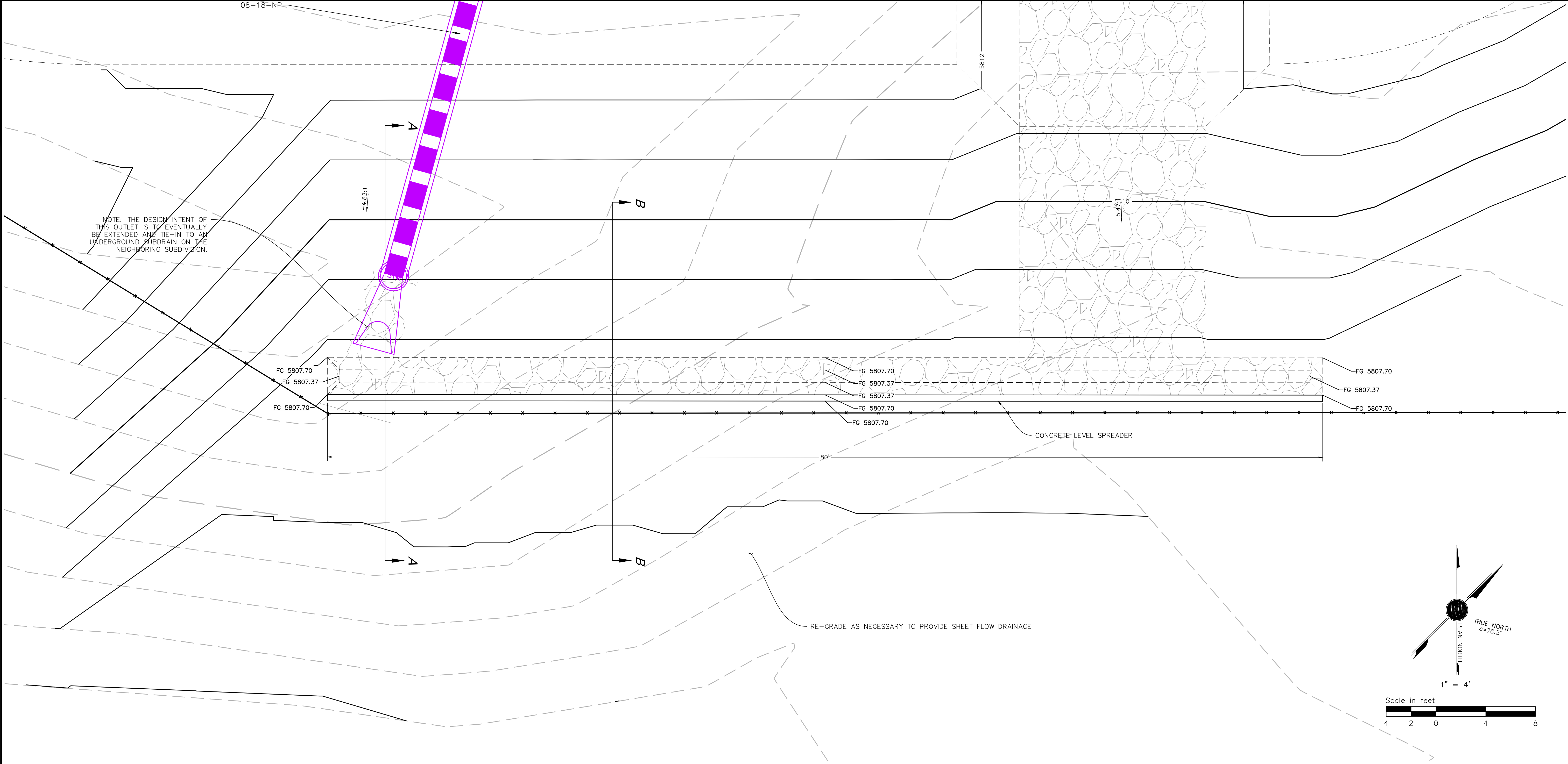
Dwg. No.

Mfr.

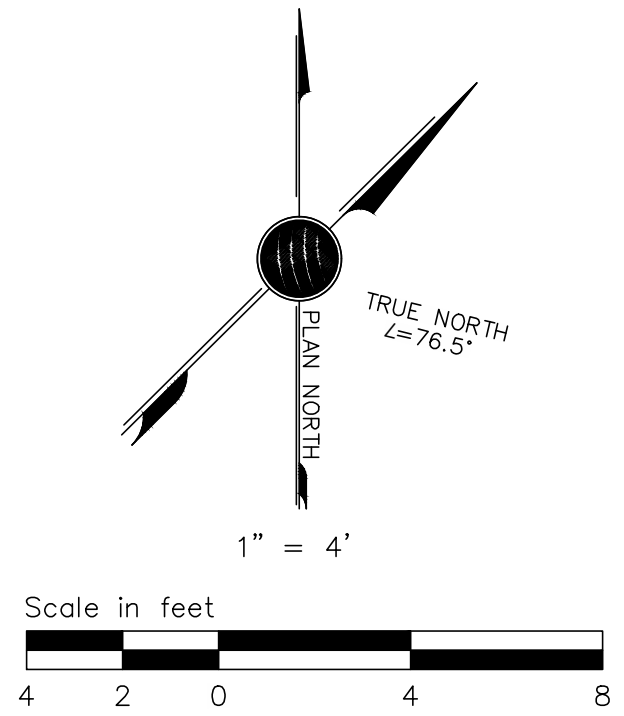
Reference Drawings

Drawing Title

PATH: \\DWS1\Projects\Active Projects\2024\2028-1557 Rolling Meadows Substation\Facility Civil\Sheets\S1183-A-01-Sheets.dwg



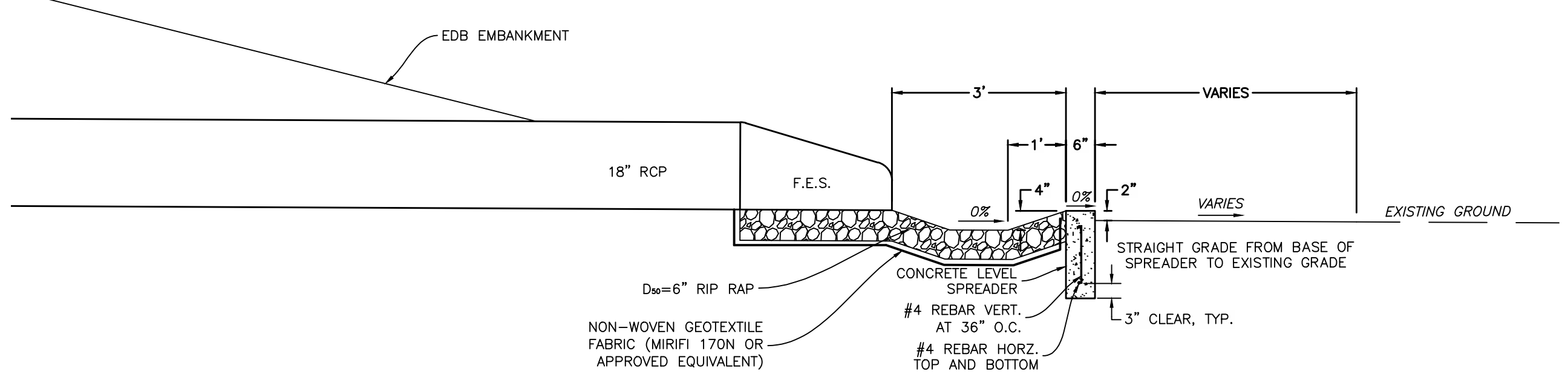
NOTE: THE DESIGN INTENT OF THIS OUTLET IS TO EVENTUALLY BE EXTENDED AND TIE-IN TO AN UNDERGROUND SUBDRAIN ON THE NEIGHBORING SUBDIVISION.



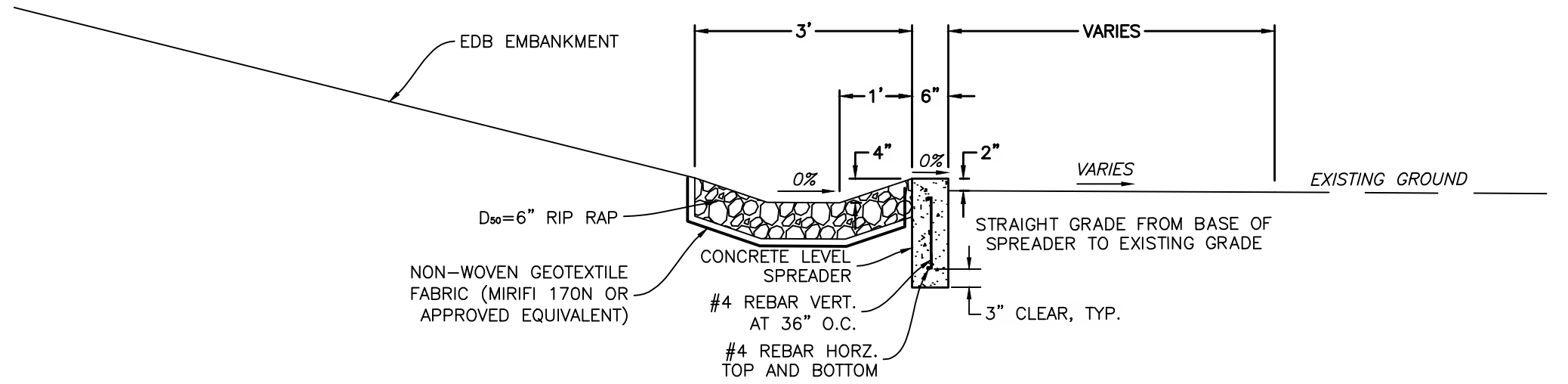
LEGEND

- 5800 — EXISTING INDEX CONTOUR
- 5796 — EXISTING INTERMEDIATE CONTOUR
- - - ohe - - - EXISTING OVERHEAD POWER LINE
- - - - - EXISTING FENCE
- — — BASELINE
- 5800 — PROPOSED INDEX CONTOUR
- 5796 — PROPOSED INTERMEDIATE CONTOUR
- SD — PROPOSED SUBDRAIN
- - - - - PROPOSED GRADE BRAKE LINE
- x - x - x - PROPOSED SUBSTATION FENCE
- - - - - PROPOSED DRAINAGE FLOWLINE
- [Pattern] PROPOSED RIPRAP
- PROPOSED SUBDRAIN CLEANOUT

- NOTE:
- THE HORIZONTAL LOCATION FOR THE CONTROL POINT AT THE INTERSECTION OF THE TWO BASELINES IS FIXED. LOCATIONS FOR OTHER CONTROL POINTS MAY BE ADJUSTED ALONG THE BASELINE AS NECESSARY TO PROVIDE FOR CLEAR LINES OF SIGHT AROUND EXISTING VEGETATION TO REMAIN.
 - SURVEYOR SHALL SET THE CONTROL POINTS OUTSIDE THE SUBSTATION SECURITY FENCE IN-THE-FIELD, AND REPORT THE COORDINATES AND ELEVATIONS TO THE OWNER'S AUTHORIZED TECHNICAL REPRESENTATIVE (OATR).
 - COORDINATE SYSTEM: COLORADO STATE PLANE CENTRAL ZONE
SCALE FACTOR = 1.0003223877
VERTICAL DATUM = NAVD88
HORIZONTAL DATUM = NAD 83



SECTION A-A
CONCRETE LEVEL SPREADER SECTION
N.T.S.



SECTION B-B
CONCRETE LEVEL SPREADER SECTION
N.T.S.

ROLLING MEADOWS SUBSTATION		115/12.47KV	
TRI-STATE GENERATION & TRANSMISSION ASSOCIATION, INCORPORATED		1100 W. 116th Ave. P.O. Box 33695 Denver, Colorado 80233 303-452-6111	
UPDATED BY: WLDGATE		6/19/2026 9:37 AM	
Contract: 4713		SHEET 5 OF 5	
Revision		M.F.	
Dwg. No.		M.F.	
Reference Drawings		M.F.	
Drawing Title		M.F.	
Dwn: TMC		Date: 06/22/26	
Appd: DWS		Date: 06/22/26	
S1183-A-01-008			

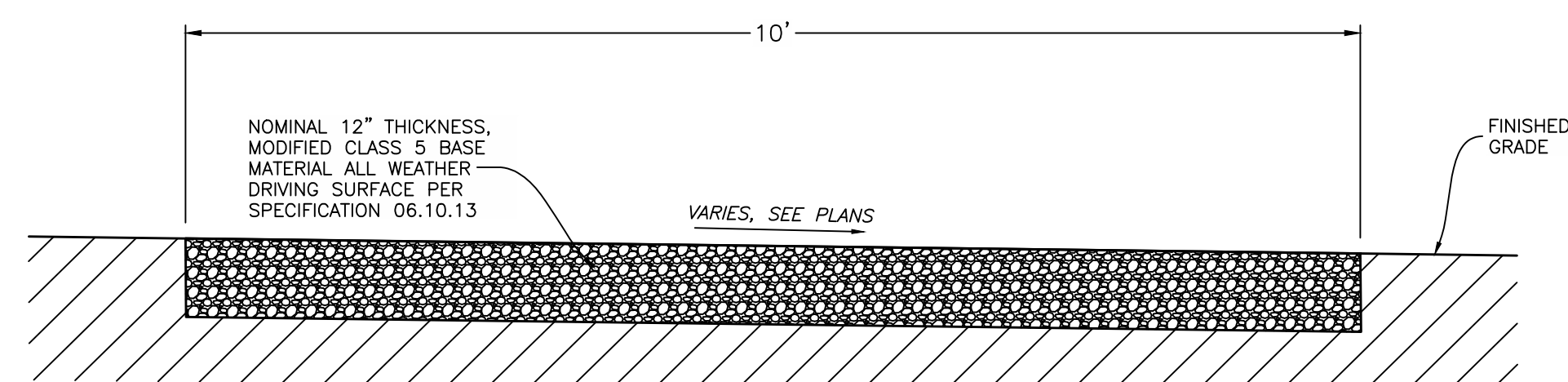
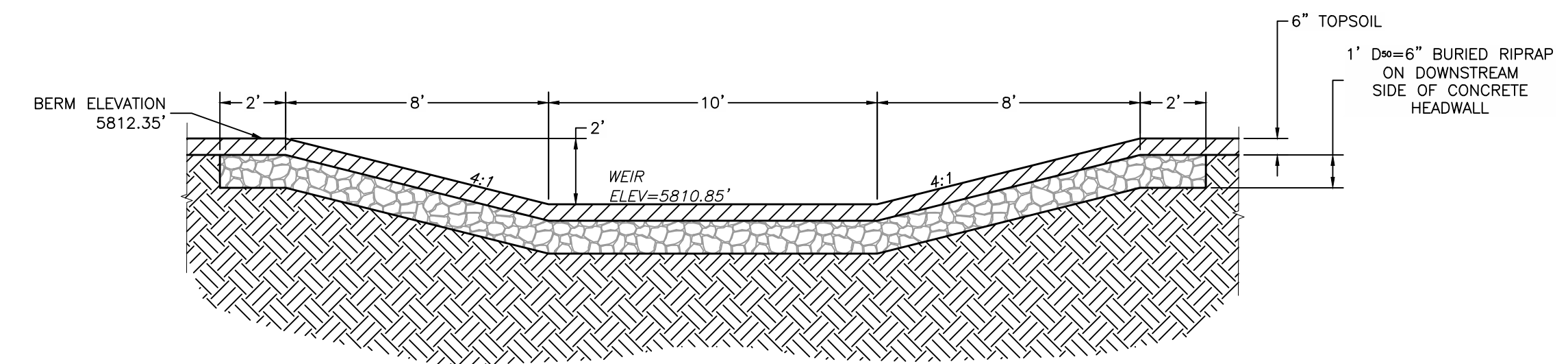
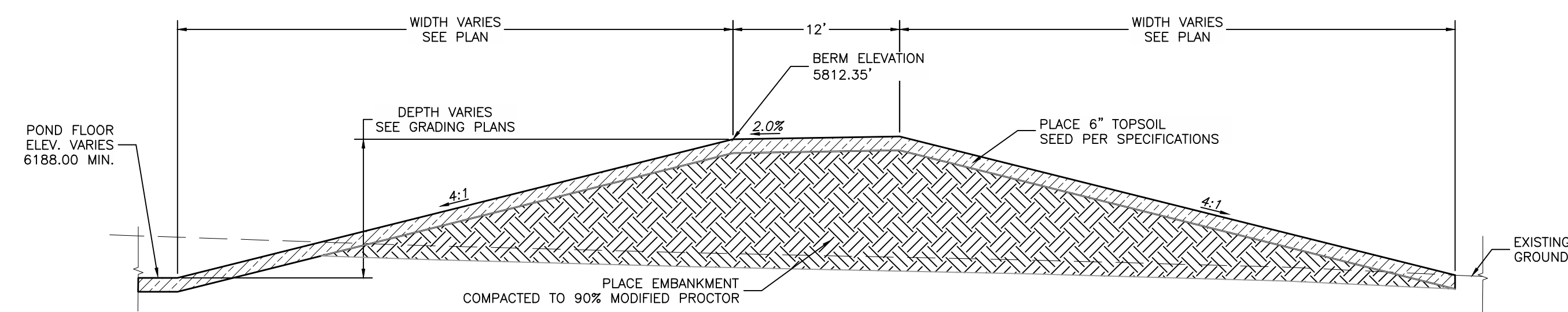
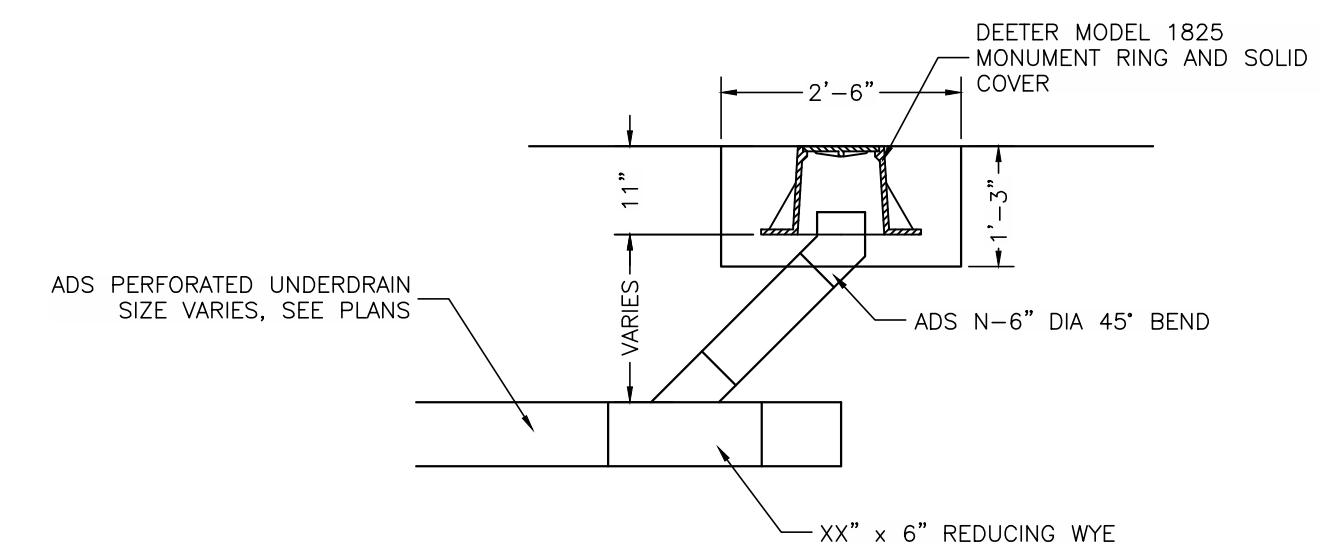
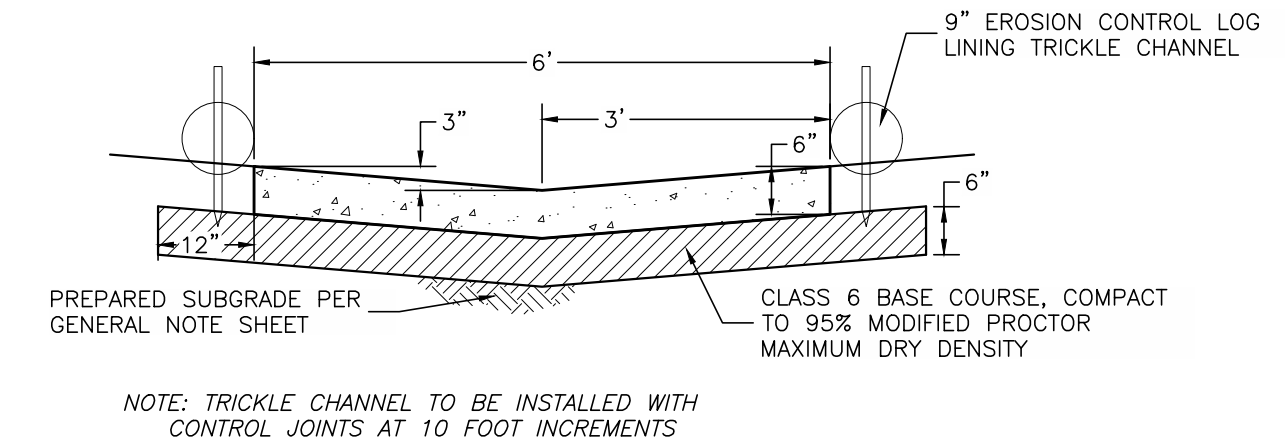
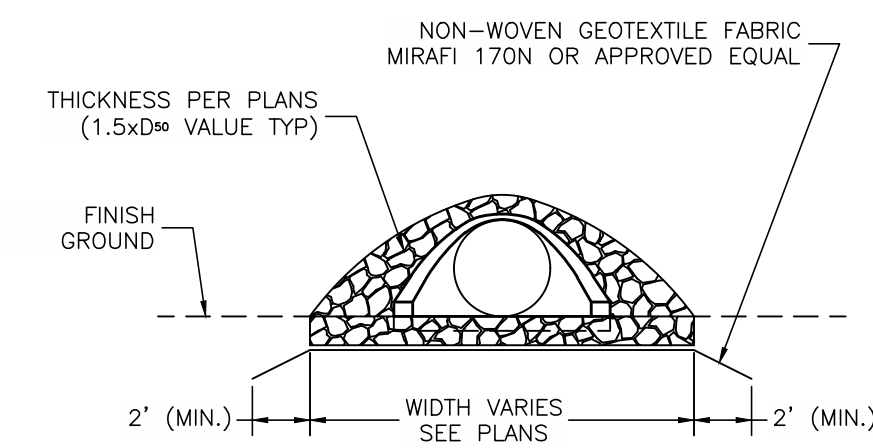
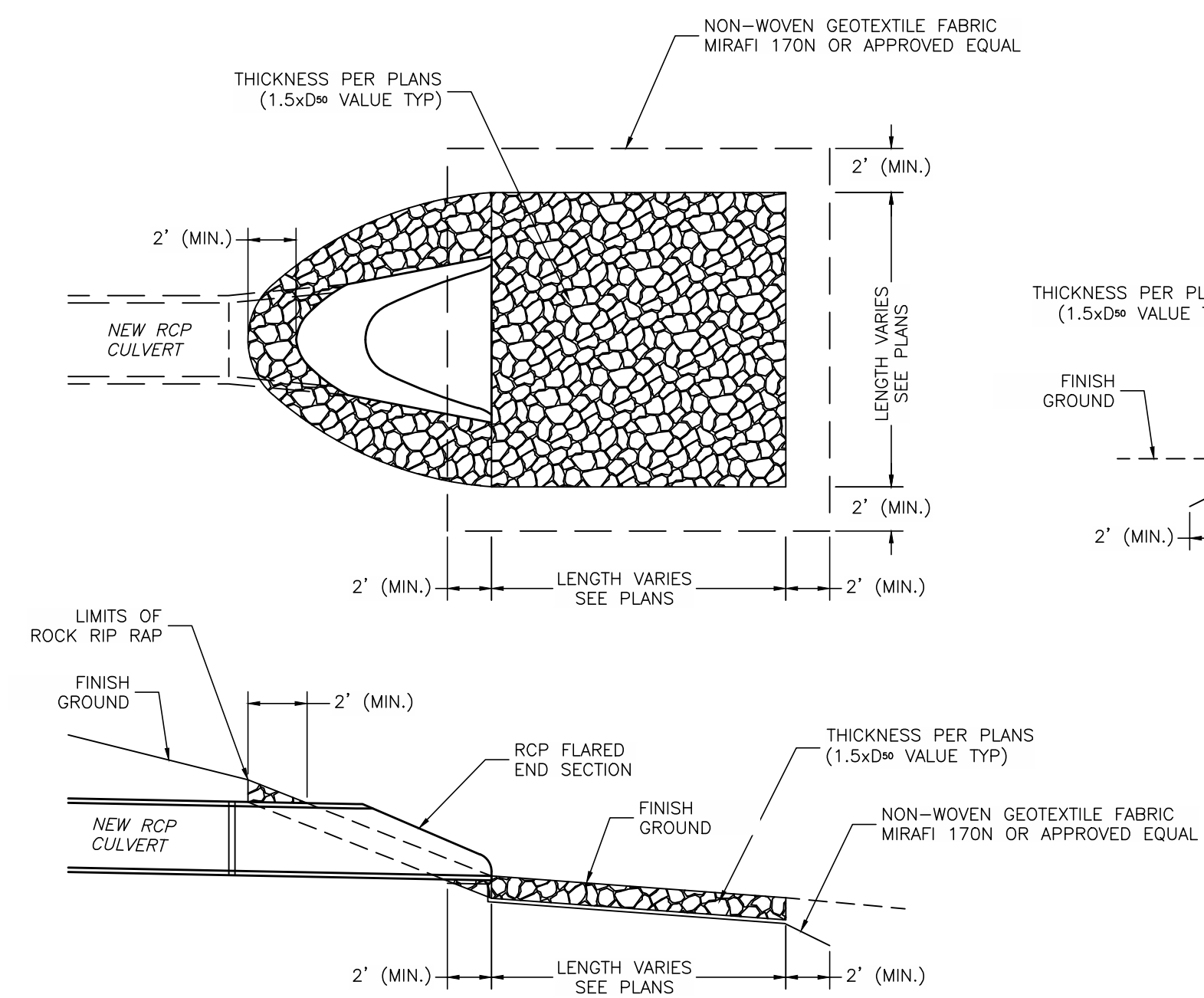


Diagram illustrating the cross-section of a trench installation for a corrugated pipe, showing the following components and dimensions:

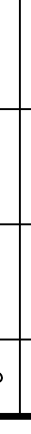
- SUBSTATION YARD SURFACE SECTION**: SEE DETAILS THESE PLANS
- NON-WOVEN GEOTEXTILE FABRIC ENVELOPE** (MIRIFI 170N OR APPROVED EQUIVALENT) SEE INSTALLATION NOTES.
- PERFORATED ADS N-12** CORRUGATED EXTERIOR AND SMOOTH INTERIOR. ROTATE PIPE IN TRENCH SUCH THAT THE MIDLINE BETWEEN THE ROWS OF PERFORATIONS IS AT THE BOTTOM. (SEE PLANS FOR PIPE SIZE)
- BACKFILL TRENCH WITH 1-1/2" CRUSHED, WASHED AGGREGATE**
- PIN FABRIC TO NATIVE MATERIAL** NO JOINT OVERLAP
- VARIABLES**: 1'-6" MIN.
- 6"** (Dimension for fabric envelope thickness)
- PIPE DIAMETER + 1"** (Dimension for trench width)
- 1' MIN.** (Dimension for trench depth)

TYPICAL PERFORATED SUBDRAIN DETAIL
N.T.S.





WS	Date	06/22/26
pt	Date	06/22/26
nc	Date	06/22/26
g	Date	06/22/26
11813-A-01-010		



TRI-STATE
Generation and Transmission
A Touchstone Energy Cooperative

ROLLING HILLS WADUGATE SUBSTATION
115112.4KV
DRAINAGE DETAILS

TRI-STATE GENERATION & TRANSMISSION ASSOCIATION, INCORPORATED
1100 W. 116th Ave.
Boonville, MO 64608
Denver, CO 80233
303-452-6111

UPDATED BY: WADUGATE		6/19/2026 9:37 AM		Contract: 4713	
No.	Date	Drawn	Aspld.	Revision	M.F.
7					
2					
3					
4					
5					
6					

Dwg. No.	Mfr.	Reference Drawings

PATH: \\DMS14\Projects\Active Projects\2024\24028-TSGT Rolling Meadows Substation\Facility\Civil\Sheets\S1183-A-01-SHEETS.dwg

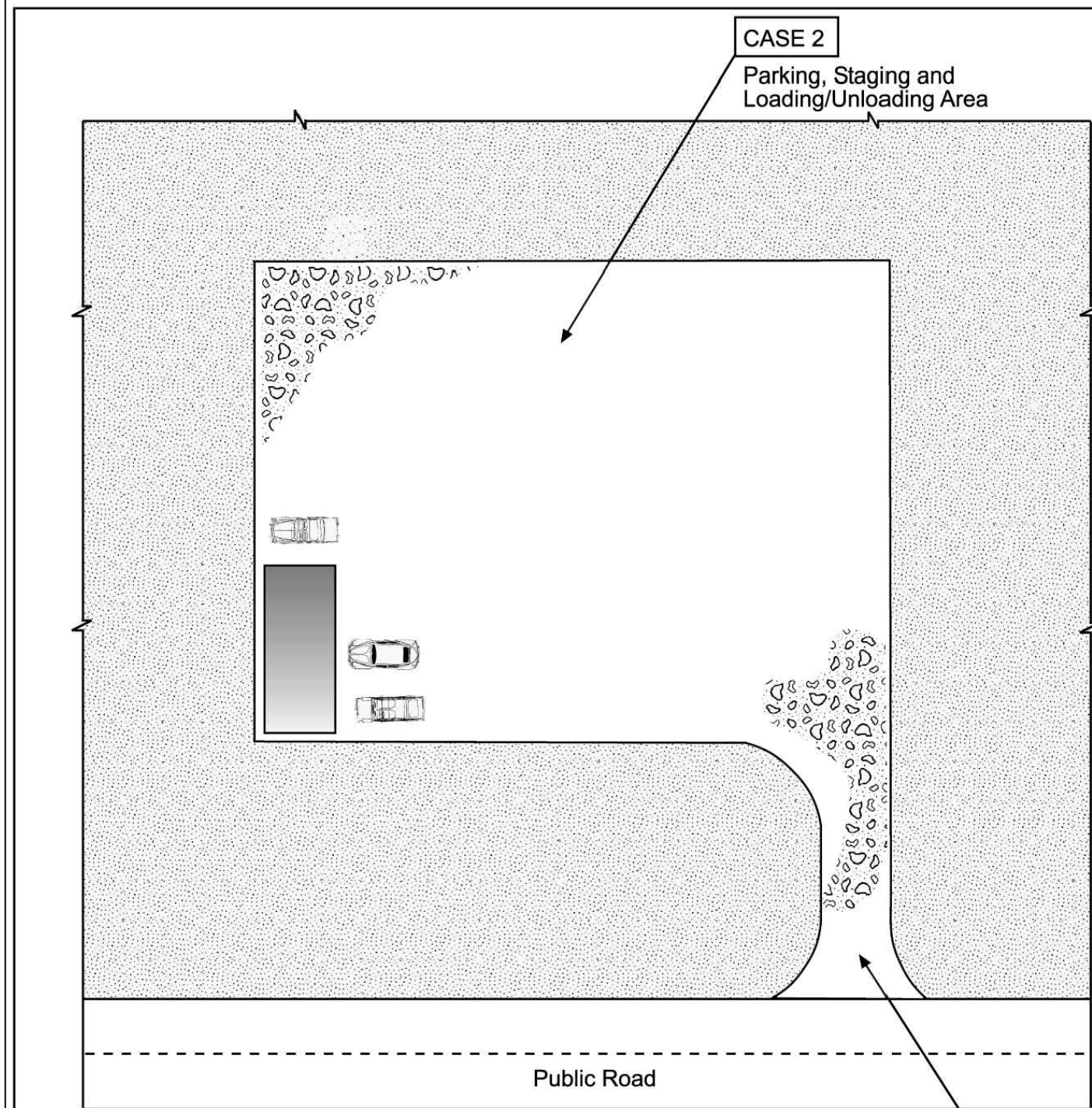
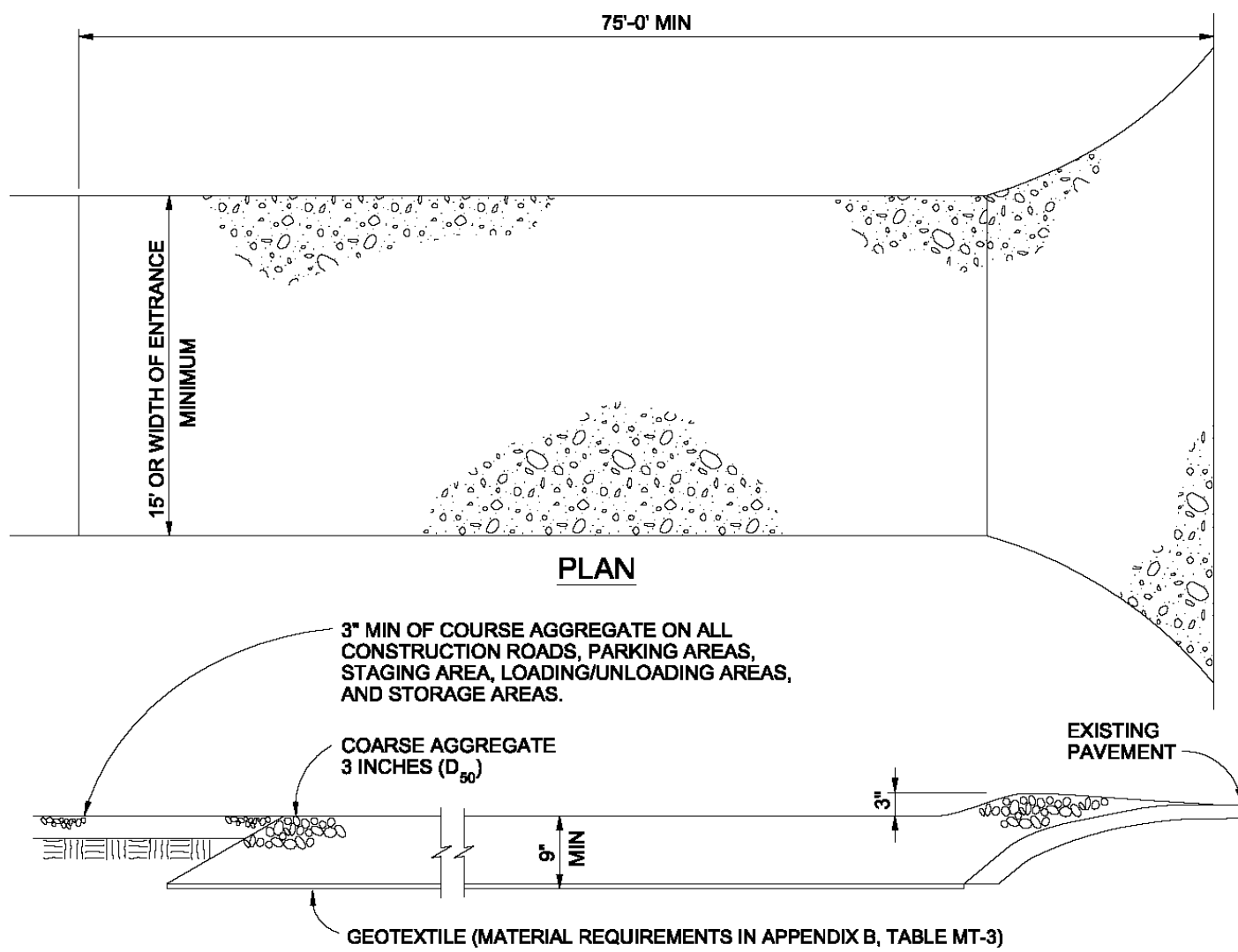


Table VT-1

	Case 1	Case 2
Gravel Thickness	9"	3"
Filter Fabric	YES	NO

City of Colorado Springs
Storm Water Quality

Figure VT-1
Vehicle Tracking
Application Examples



VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

MAINTENANCE REQUIREMENTS

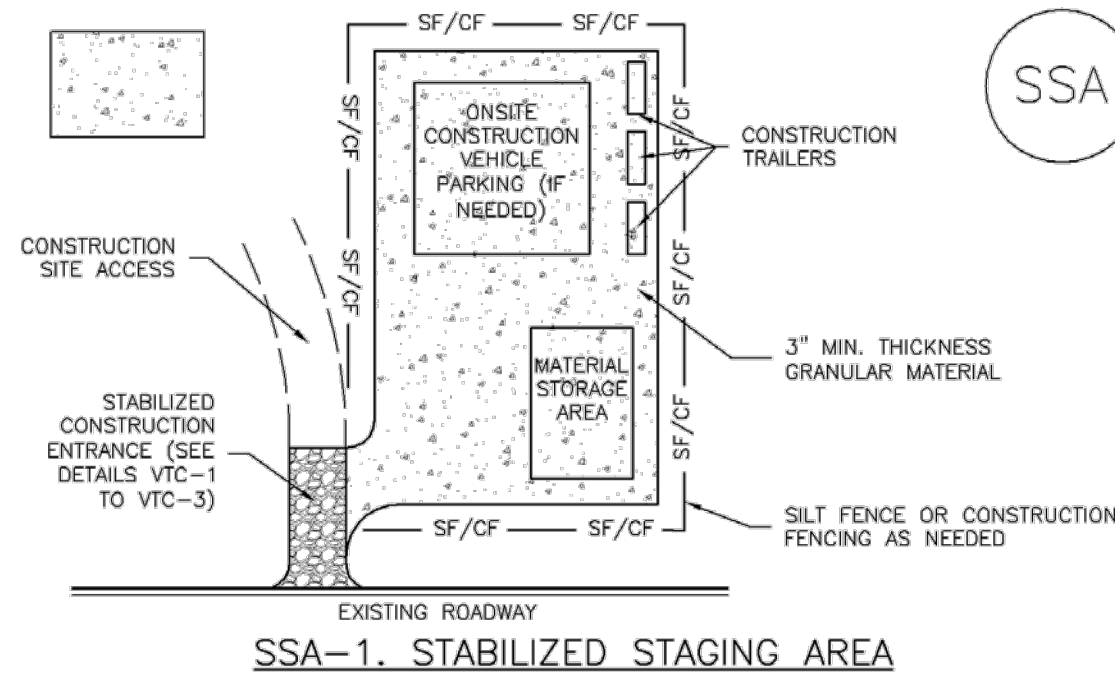
1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

City of Colorado Springs
Stormwater Quality

Figure VT-2
Vehicle Tracking
Application Examples

Stabilized Staging Area (SSA)

SM-6



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 - LOCATION OF STAGING AREA(S).
 - CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

November 2010

Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

SSA-3

SM-6

Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
 6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.
- NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: FOR RE-SEEDING, CONTRACTOR SHALL UTILIZE EL PASO COUNTY CONSERVATION DISTRICT'S NATIVE SHOTGUN MIX. CONTRACTOR SHALL UTILIZE BELOW TABLE FOR APPLICATION RATES.

DISTURBED AREAS SHALL BE MULCHED AFTER SEEDING WITH WEED-FREE HAY MULCH AT 5,000 LBS PER ACRE WHEN DISTRIBUTED UNIFORMLY.

Chapter 5
Native Vegetation Requirements and Guidelines

Table 5-1. El Paso County Conservation District All-Purpose Mix for Upland, Transition and Permanent Control Measure Areas

Common Name	Scientific Name	Growth Season / Form	% of Mix	Pounds PLS		
				Irrigated broadcast Irrigated hydroseeded 80 seeds/sq ft	Non-irrigated broadcast Non-irrigated hydroseeded Irrigated drilled 40 seeds/sq ft	Non-irrigated drilled 20 seeds/sq ft
Bluestem, big	<i>Andropogon gerardii</i>	Warm, sod	20	4.4	2.2	1.1
Gramma, blue	<i>Bouteloua gracilis</i>	Warm, bunch	10	0.5	0.25	0.13
Green needlegrass ²	<i>Nassella viridula</i>	Cool, bunch	10	2	1	0.5
Wheatgrass, western ²	<i>Pascopyrum smithii</i>	Cool, sod	20	6.4	3.2	1.6
Gramma, sideoats	<i>Bouteloua curtipendula</i>	Warm, bunch	10	2	1	0.5
Switchgrass ²	<i>Panicum virgatum</i>	Warm, bunch/sod	10	0.8	0.4	0.2
Prairie sandreed	<i>Calamovilfa longifolia</i>	Warm, sod	10	1.2	0.6	0.3
Yellow indiangrass ²	<i>Sorghastrum nutans</i>	Warm, sod	10	2	1	0.5
Seed rate (lbs PLS/acre)				19.3	9.7	4.8

¹For portions of facilities located near or on the bottom or where wet soil conditions occur. Planting of potted nursery stock wetland plants 2-foot on-center is recommended for sites with wetland hydrology.

²Species that will do well in the bottom of pond areas.

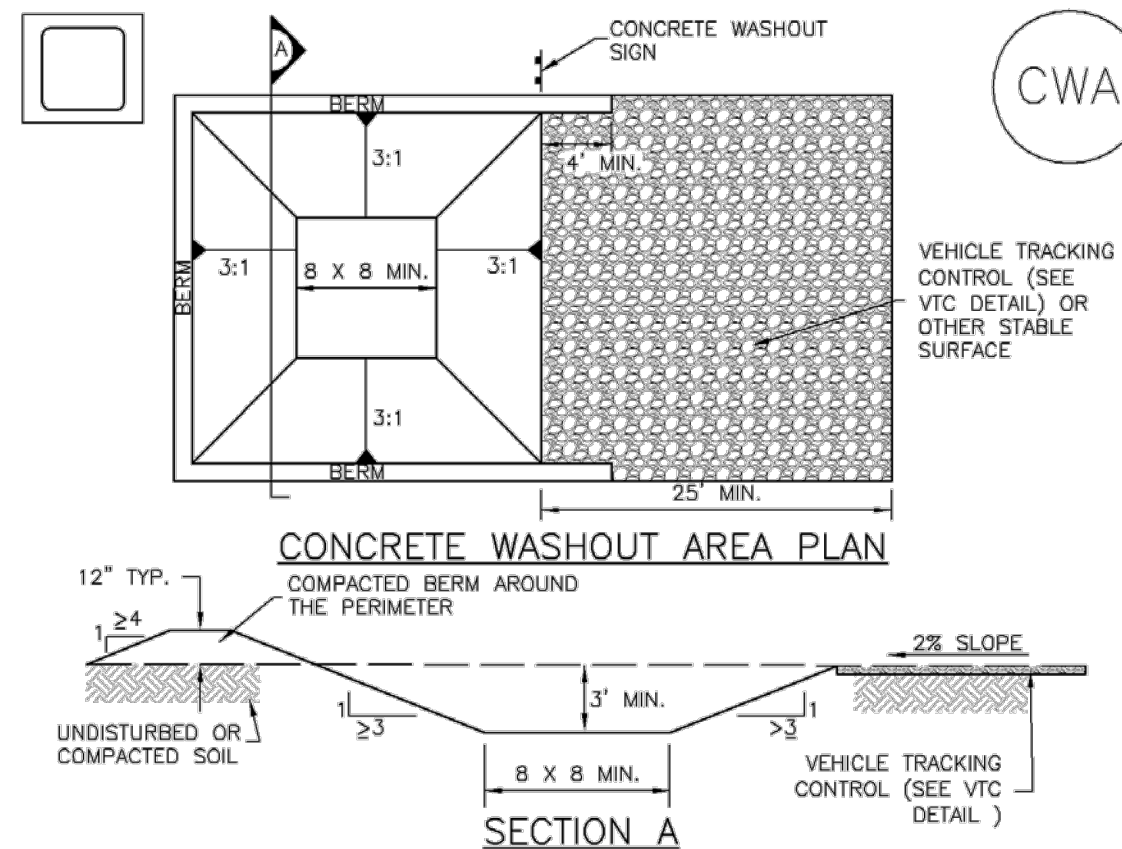
City of Colorado Springs
Stormwater Enterprise



Stormwater Construction Manual
December 2020

Concrete Washout Area (CWA)

MM-1



CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 - CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

SSA-4

Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

November 2010

November 2010

Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

CWA-3

ROLLING MEADOWS SUBSTATION

EROSION CONTROL DETAILS

TRI-STATE
Generation and Transmission
Association, Inc.

1100 W. 116th Ave.
P.O. Box 33695
Denver, Colorado 80233

303-452-6111

S1183-A-01-013