

# GRADING & EROSION CONTROL PLANS

## TRIVIEW METROPOLITAN DISTRICT NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION

### EL PASO COUNTY NOVEMBER 2022



**VICINITY MAP**  
N.T.S

SHEET LIST TABLE	
SHEET NO.	SHEET TITLE
1	COVER SHEET
2	GENERAL GRADING NOTES
3	OVERALL SITE PLAN
4	SECONDARY GATE ACCESS GRADING PLAN
5	PUMP STATION GRADING PLAN
6	PUMP STATION ACCESS ROAD PLAN & PROFILE
7	GRADING DETAILS

**FLOODPLAIN STATEMENT**

THIS ENTIRE PROPERTY IS NOT LOCATED WITHIN THE FLOODPLAIN OR FLOODWAY PER FIRM PANEL: 08041C0295G - EFFECTIVE ON, 12-07-2018

THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATION AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY THE CITY OF FOUNTAIN DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY OTHER FEDERAL OR STATE ACCESSIBILITY LAWS OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

Provide the following signature blocks for EPC:

Design 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.

[Name, P.E. # \_\_\_\_\_] Date \_\_\_\_\_

Owner/Developer's Statement:

I, the owner/developer have read and will comply with the requirements of the grading and erosion control plan.

[Name, Title] Date \_\_\_\_\_

[Business Name] \_\_\_\_\_

[Address] \_\_\_\_\_

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

PARTICIPANTS	
<p><b>OWNER</b> TRIVIEW METROPOLITAN DISTRICT 16055 OLD FOREST POINT, STE 302 MONUMENT, CO 80132 CONTACT: JIM MCGRADY PHONE: (719) 488-6868</p> <p><b>CONSULTING/DESIGN ENGINEER</b> JDS-HYDRO CONSULTANTS, A DIVISION OF RESPEC 5540 TECH CENTER DR, STE 100 COLORADO SPRINGS, CO 80903 CONTACT: MARIO DIPASQUALE, PE (719) 227-0072</p>	
SIGNATURE BLOCKS	
<p><b>DISTRICT APPROVALS</b> EL PASO COUNTY RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE TOWN OF MONUMENT HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY.</p> <p>TOWN OF MONUMENT DESIGN APPROVAL</p> <p>BY: _____ DATE: _____</p> <p>IN CASE OF ERRORS OR OMISSIONS WITH THE WATER DESIGN AS SHOWN ON THIS DOCUMENT, THE STANDARDS AS DEFINED IN THE "RULES AND REGULATIONS FOR INSTALLATION OF WATER MAINS AND SERVICES" SHALL RULE. APPROVAL EXPIRES 180 DAYS FROM DESIGN APPROVAL.</p> <p><b>ENGINEER'S STATEMENT:</b> THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE APPLICABLE GOVERNING AGENCIES.</p> <p>MARIO L. DIPASQUALE, P.E. #41667 JDS-HYDRO CONSULTANTS, A DIVISION OF RESPEC</p> <p style="text-align: right;">DATE _____ 224.29 PROJECT NO.</p>	



PRE-EXCAVATION CHECKLIST	
<input type="checkbox"/>	Gas and Other Utility Lines Shown on Construction Plans
<input type="checkbox"/>	Utility Notification Center of Colorado (UNCC)-Call at Least Two (2) Business Days Ahead-1-800-922-1987
<input type="checkbox"/>	Utilities Located & Marked on the Ground
<input type="checkbox"/>	Employees Briefed on Marking and Color Codes*
<input type="checkbox"/>	Employees Trained on Excavation and Safety Procedures for Natural Gas Lines
<input type="checkbox"/>	When Excavation Approaches Gas Lines, Employees Must Expose Lines by Careful Probing and Hand-Digging

COLOR CODE FOR MARKING UNDERGROUND UTILITY LINES	
WHITE	PROPOSED EXCAVATION
MAGENTA	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC
YELLOW	GAS, OIL, STEAM
ORANGE	COMMUNICATION, CTV
BLUE	POTABLE WATER
PURPLE	IRRIGATION, RECLAIMED WATER, SLURRY LINES
GREEN	SEWER

**COLORADO 811**  
Always Call Before You Dig 811 or (800) 922-1987

**SURVEY DATA**

TOPOGRAPHY SURVEY CENTENNIAL LAND SURVEYING, LLC. SEE SURVEY FOR ESTABLISHED CONTROL. THE FOLLOWING COORDINATE SYSTEM AND DATUM RECORD IS AS FOLLOWS:

HORIZONTAL DATUM: HORIZONTAL COORDINATES ARE MODIFIED COLORADO STATE PLANE CENTRAL BASED UPON THE FOLLOWING: COORDINATES ARE SCALED FROM CONTROL POINT 5052 BEING A 2-INCH ALUMINUM CAP STAMPED AZTEC CP 52 SET AT THE TOP OF A DIRT BANK ALONG THE EAST SIDE OF GLEN EAGLE DR. APPROXIMATELY 380+ FEET NORTHERLY OF ST. LAWRENCE WAY. VALUES ARE BASED UPON A STATIC SURVEY SESSION WITH THE FOLLOWING RESULTS:

LATITUDE: 39-04-05916N; LONGITUDE: 104-49-24.82486 W  
STATE PLANE NORTHING: 1,450,401.759; STATE PLANE EASTING: 3,192,049.712  
SCALE FACTOR: 1.0004063250  
TRUNCATE NORTHING: 1,000,000.00; TRUNCATE EASTING: 3,000,000.00  
PROJECT NORTHING: 450,401.759; PROJECT EASTING: 192,049.712

VERTICAL DATUM: NAVD 88 WITH GEOID G18US; BENCHMARK: CP 5052 EL: 7213.70  
BENCHMARK: NGS CS110/DM9842 EL: 6843.25; BENCHMARK: NGS S294/KK0272 EL: 7116.72

Rev #	Date	Description	By	Chk'd

Designed By: <b>DW</b>	Drawn By: <b>DW</b>	Checked By: <b>RGG</b>	Project No. <b>224.29</b>	Date: <b>2022-11-04</b>	Sheet <b>1 OF 7</b>
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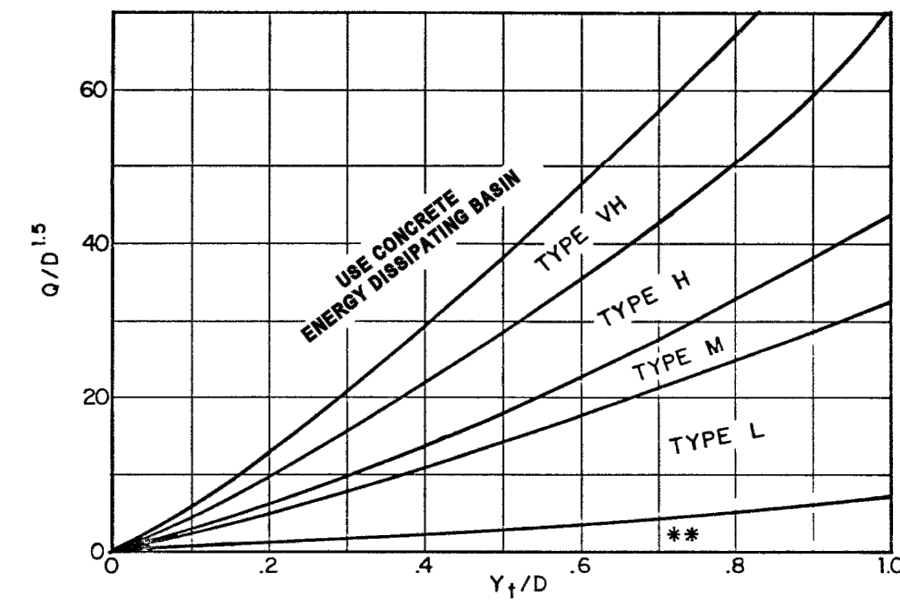
121 SOUTH TEJON ST, SUITE 1110  
COLORADO SPRINGS, CO. 80903  
WWW.RESPEC.COM (719) 266-5212

H\_s = (H + Y\_s) / 2

Equation 9-19

Where the maximum value of H\_s shall not exceed H\_s and:

- D\_s = parameter to use in place of D in Figure 9-38 when flow is supercritical (ft)
D\_c = diameter of circular culvert (ft)
H\_s = parameter to use in place of H in Figure 9-39 when flow is supercritical (ft)
H = height of rectangular culvert (ft)
Y\_s = normal depth of supercritical flow in the culvert (ft)



Use D\_s instead of D whenever flow is supercritical in the barrel.
\*\* Use Type L for a distance of 3D downstream.

Figure 9-38. Riprap erosion protection at circular conduit outlet (valid for Q/D2.5 <= 6.0)

NOT TO SCALE

TIMING, CONSTRUCTION STAGING, AND SEQUENCING:

EXPECTED START DATE: JAN 2023
INSTALL TEMPORARY EROSION CONTROL - 2 DAYS
- PERIMETER SILT FENCING
- VEHICLE TRACKING CONTROL PAD

ROUGH GRADING - 5 DAYS
INSTALL FINAL SITE IMPROVEMENTS - 10 MONTHS
REMOVE TEMPORARY EROSION CONTROL - 5 DAYS

MINIMUM BEST MANAGEMENT PRACTICES ELEMENTS:

- STEP 1- EROSION AND SEDIMENT CONTROL
INSTALL SEDIMENT TRAPPING DEVICES (PERIMETER CONTROLS) PRIOR TO THE START OF CONSTRUCTION.
STEP 2- SPILL PREVENTION AND RESPONSE
STEP 3- MATERIAL MANAGEMENT
MATERIAL AND EQUIPMENT STORAGE AREAS SHALL BE SECURE AND CONTAINED TO PREVENT DISCHARGE OF ANY MATERIAL IN RUNOFF. WASTE SHALL BE CONTAINED AND DISPOSED OF PROPERLY. MAINTAIN BMP'S DURING BUILDING AND UTILITY CONSTRUCTION.
STEP 4- INSPECTION AND MAINTENANCE (SEE EROSION CONTROL NOTES).
STEP 5- INSTALL FINAL STABILIZATION - BASE COURSE, LANDSCAPING, EROSION CONTROL BLANKETS, AND SEEDING.
STEP 6- REMOVE TEMPORARY CONTROLS - SILT FENCING AFTER PERMANENT FEATURES ARE INSTALLED.

FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT:

FINAL STABILIZATION MEASURES INCLUDE BASE COURSE, PARTIAL LANDSCAPE, AND REVEGETATION

EARTHWORK SUMMARY:

PROPOSED SITE:
CUT - 93 CY
FILL - 186 (\*1.15) = 214 CY
NET - 122 CY CUT

ACCESS DRIVE & PUMP STATION SITE DISTURBED AREA - 34,124 SF, 0.78 AC
SECONDARY ACCESS DRIVE DISTURBED AREA - 4,260, 0.10 AC
SEED MIX AREA - 38,384 SF, 0.88 AC

EROSION CONTROL FACILITIES:

Table with 3 columns: Secondary Access Drive, Pump Station Access Drive, and Pump Station Site. Lists various erosion control measures like silt fence, tracking pads, inlets, dams, staging areas, and stockpile protection.

Add:
23. No person shall cause the impediment of stormwater flow in the curb and gutter or ditch except with approved sediment control measures.

is there a downstream sediment basin for this project?

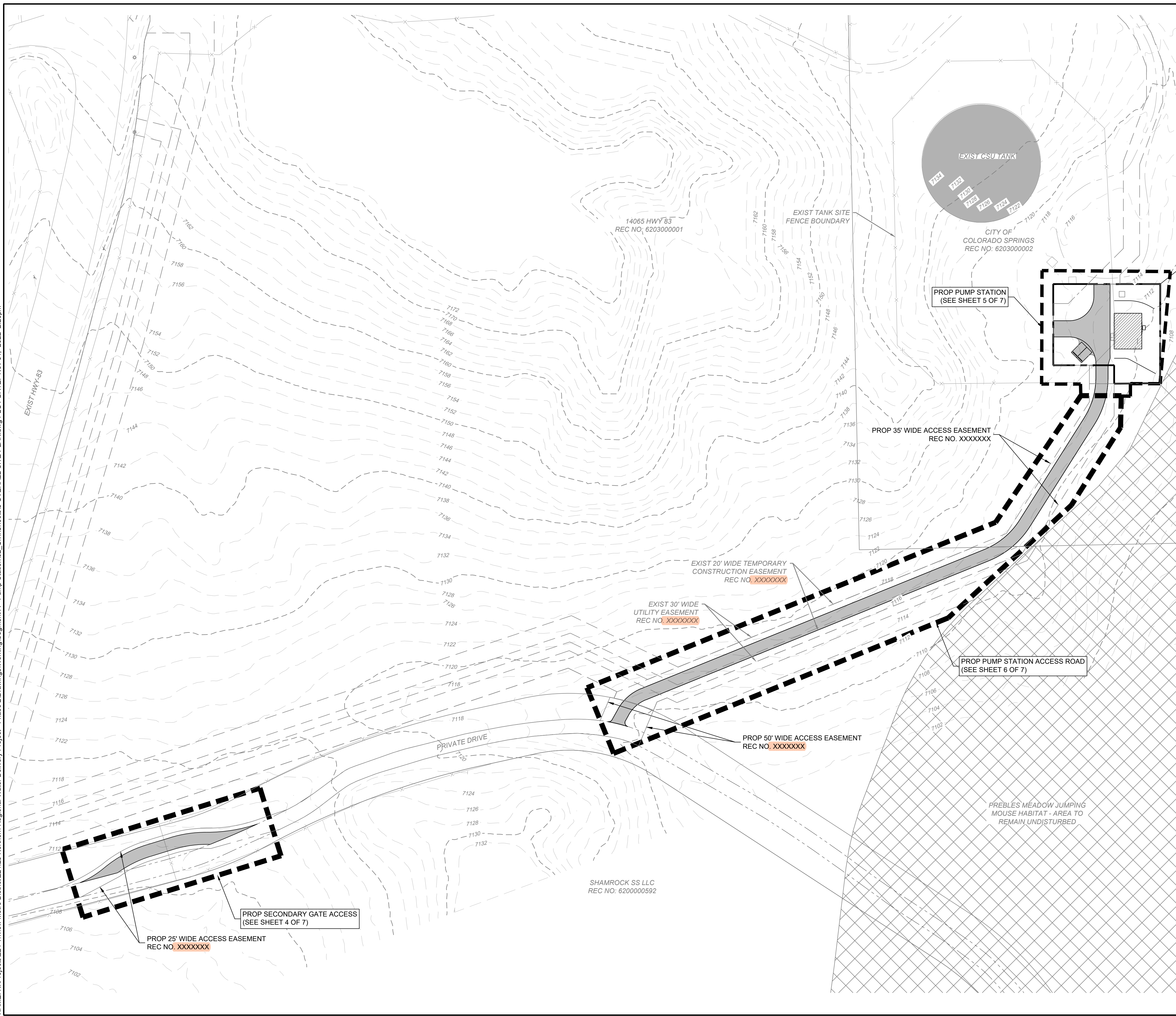
EROSION CONTROL NOTES:

- 1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS AND SENSITIVE ENVIRONMENTAL AREAS.
2. 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.
3. MANAGEMENT OF THE STORMWATER MANAGEMENT PLAN (SWMP) DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL MANAGER (ECM). THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED DEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND-DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND-DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGE TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL OCCUR AS SHOWN WITHIN THE PLANS.
14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, ORGANIC MATERIAL, BUILDING MATERIAL WASTES, OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS, AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, AND WITH ORIGINAL MANUFACTURER'S LABELS.
21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ON SITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ON SITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM, OR OTHER FACILITIES.
23. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS) AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.), IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
24. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
25. PRIOR TO CONSTRUCTION, THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
26. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
27. THE SOILS REPORT FOR THIS SITE WAS PREPARED BY VIVID ENGINEERING GROUP (DATED 8/12/22) AND SHALL BE CONSIDERED A PART OF THESE PLANS
28. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY RE-EXCAVATION OF SEDIMENT AND DEBRIS THAT COLLECTS IN THE DOWNSTREAM SEDIMENT BASIN DEPRESSION REQUIRED TO ENSURE THAT THE BASIN MEETS THE DESIGN GRADES FOLLOWING CONSTRUCTION. THE ROADSIDE DITCHES CONVEYING SITE RUNOFF TO THE BASIN SHALL ALSO BE CLEANED AND FREE OF SEDIMENT ONCE THE SITE BECOMES STABILIZED.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATIONS MATERIALS, CONTACT:
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WOOD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT
BASED ON THE DESIGN SHOWN THE DISTURBANCE IS LESS THAN ONE (1) ACRE.
30. EXISTING VEGETATION IS NOT NOTABLE, ONLY GRASSES/WEEDS ARE WITHIN THE LIMITS OF CONSTRUCTION.
31. THERE ARE NO BATCH PLANTS/ASPHALT PLANTS EXISTING OR PROPOSED FOR THIS SITE.
32. RECEIVING WATERS: TRIBUTARY OF BLACK SQUIRREL CREEK
33. THERE ARE NO SPRINGS, STREAMS, WETLANDS, OR OTHER SURFACE WATERS, INCLUDING AREAS THAT REQUIRE MAINTENANCE OF PRE-EXISTING VEGETATION WITHIN 50 FEET OF A RECEIVING WATER.

NAME: N:\Projects\224 Triview Metro District\224-28 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02\_Civil\Sheets\2 GENERAL GRADING NOTES.dwg PLOT DATE: Nov 04, 2022, 2:13pm

REVISION table, DESIGNED, DRAWN, CHECKED, DATE, RESPEC logo, STAMP, PRELIMINARY NOT FOR CONSTRUCTION 11/2022, 81 logo, PROJECT NAME: NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION, SHEET TITLE: GENERAL GRADING NOTES, SUBMITTED FOR: TRIVIEW METROPOLITAN DISTRICT, SHEET NUMBER: SHEET 2 OF 7

NAME: N:\Projects\224 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02\_Civil\Sheets\3 OVERALL SITE PLAN.dwg PLOT DATE: Nov 04, 2022 2:20pm



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NTS

**BENCHMARK**

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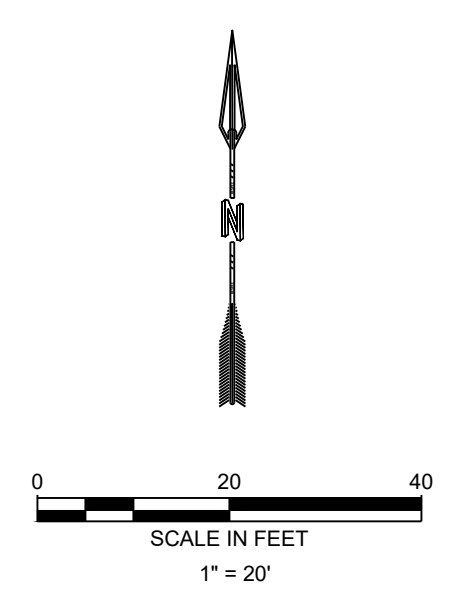
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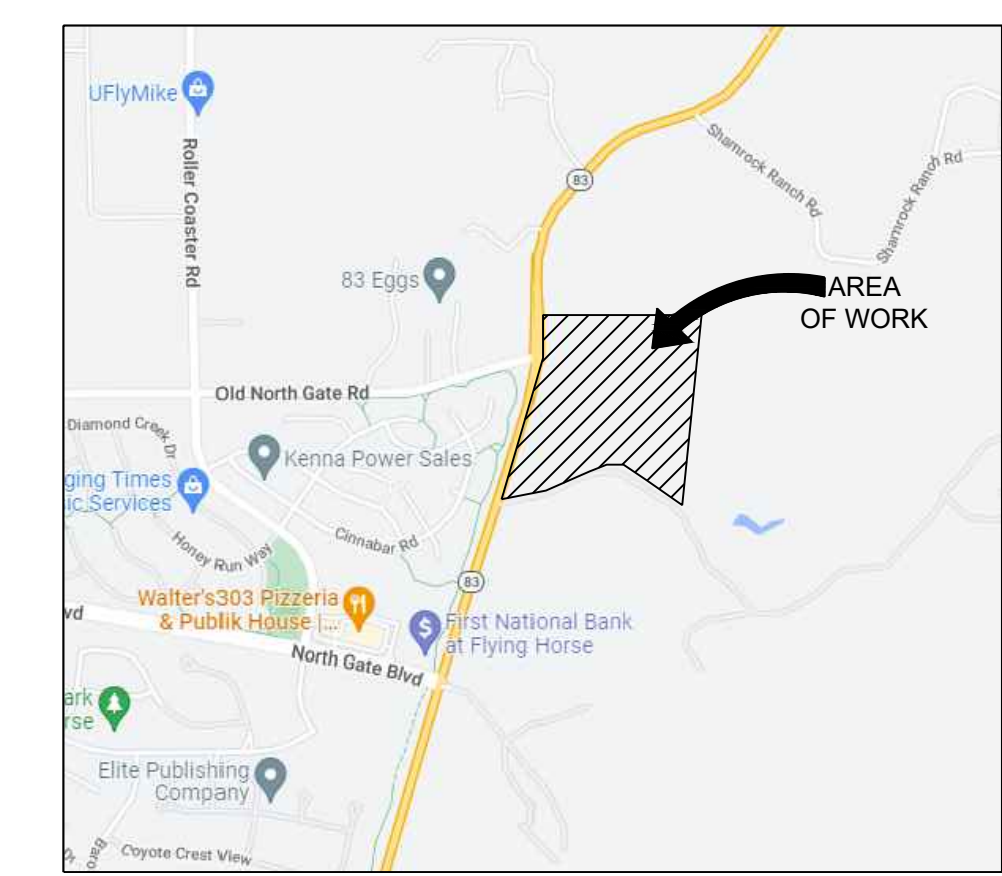
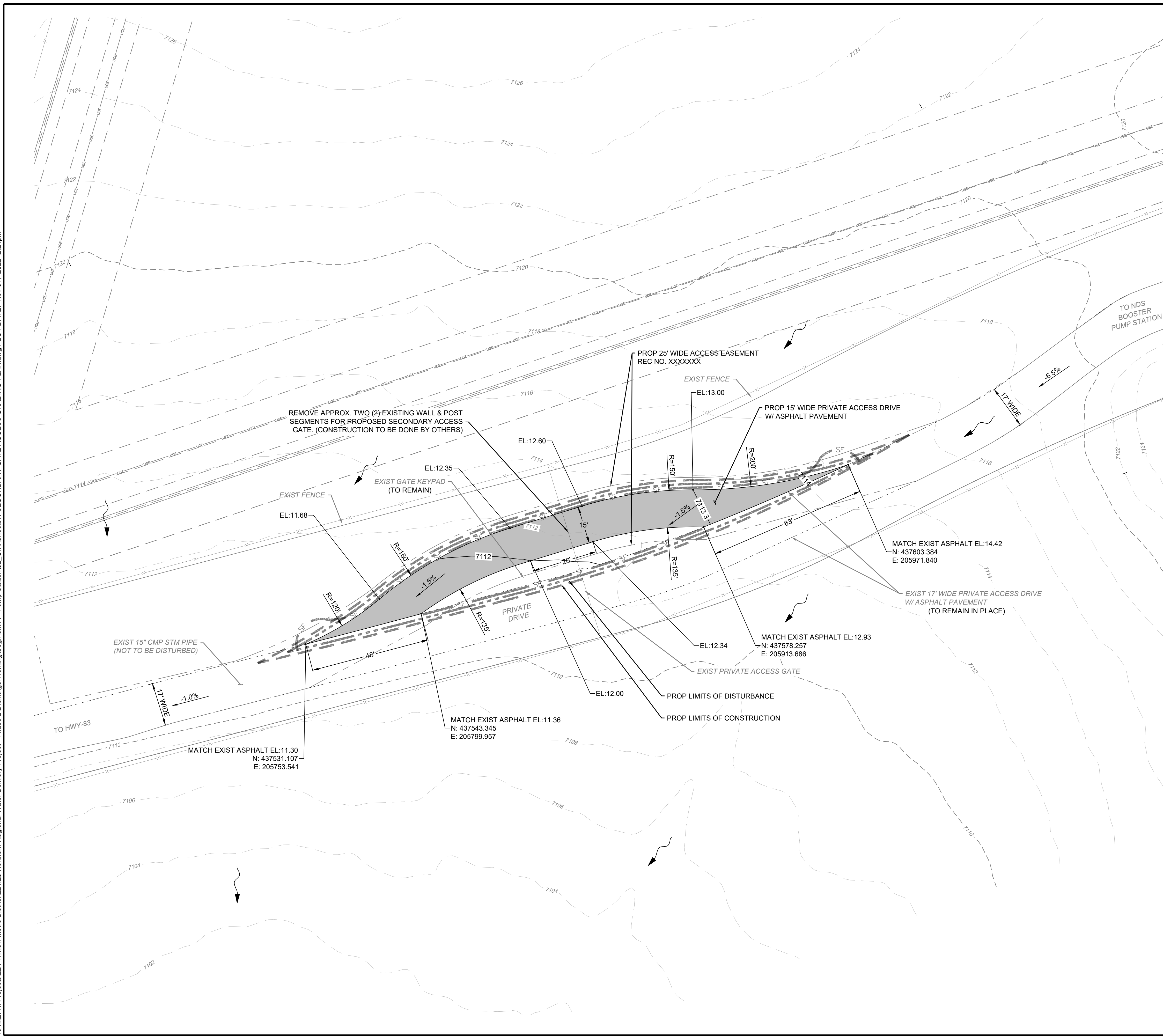
**LEGEND**

- 7290 — PROPOSED MAJOR CONTOUR
- 7291 — PROPOSED MINOR CONTOUR
- - - 7290 - - - EXISTING MAJOR CONTOUR
- - - 7291 - - - EXISTING MINOR CONTOUR
- ▬▬▬ PROPOSED PROJECT AREAS
- ▬▬▬ PROPERTY LINE
- ▬▬▬ LIMITS OF CONSTRUCTION
- ▬▬▬ LIMITS OF DISTURBANCE
- SCL — PROPOSED SEDIMENT CONTROL LOG
- ▬▬▬ PROPOSED ASPHALT PAVEMENT
- - - EXISTING EDGE OF ASPHALT
- x - x - EXISTING FENCE LINE
- - - EXISTING EASEMENT



	DESIGNED DRAWN CHECKED DATE 11.04.2022		REVISION
<p>RESPEC COMMUNITY DESIGN SOLUTIONS 121 SOUTH GLEN STREET SUITE 110 NORTH GATE, CO 80921 WWW.RESPEC.COM PHONE: (719) 966-8212</p>		<p>STAMP</p>	
<p><b>PRELIMINARY</b> NOT FOR CONSTRUCTION 11/2022</p> <p>THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED</p>			
<p>Know what's below. Call before you dig.</p>			
PROJECT NAME:		NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION	
SHEET TITLE:		OVERALL SITE PLAN	
SUBMITTED FOR:		TRIVIEW METROPOLITAN DISTRICT	
SHEET NUMBER:		SHEET 3 OF 7	

NAME: N:\Projects\2024 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02\_Civil\Sheets\4 SECONDARY GATE ACCESS GRADING PLAN.dwg PLOT DATE: Nov 04, 2022 2:24pm



VICINITY MAP TRIVIEW METRO DISTRICT  
NTS

**BENCHMARK**

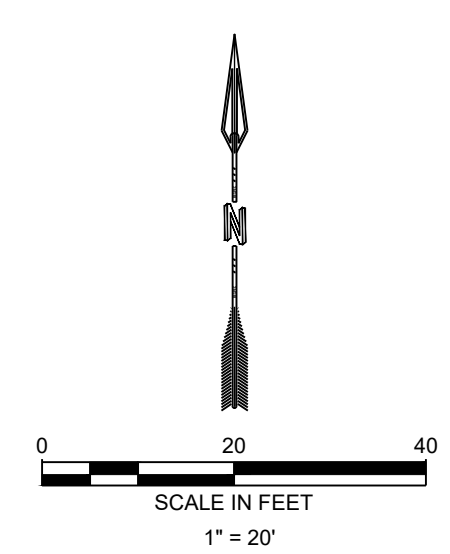
TOPOGRAPHY SURVEY CENTENNIAL LAND SURVEYING, LLC. SEE SURVEY FOR ESTABLISHED CONTROL. THE FOLLOWING COORDINATE SYSTEM AND DATUM RECORD IS AS FOLLOWS:

HORIZONTAL DATUM: HORIZONTAL COORDINATES ARE MODIFIED COLORADO STATE PLANE CENTRAL BASED UPON THE FOLLOWING: COORDINATES ARE SCALED FROM CONTROL POINT 5052 BEING A 2-INCH ALUMINUM CAP STAMPED AZTEC CP 52 SET AT THE TOP OF A DIRT BANK ALONG THE EAST SIDE OF GLEN EAGLE DR. APPROXIMATELY 380+ FEET NORTHERLY OF ST. LAWRENCE WAY. VALUES ARE BASED UPON A STATIC SURVEY SESSION WITH THE FOLLOWING RESULTS:

LATITUDE: 39-04-05.916N; LONGITUDE: 104-49-24.82486 W  
STATE PLANE NORTHING: 1,450,401.759; STATE PLANE EASTING: 3,192,049.712 SCALE FACTOR: 1.0004063250  
TRUNCATE NORTHING: 1,000,000.00; TRUNCATE EASTING: 3,000,000.00 PROJECT NORTHING: 450,401.759; PROJECT EASTING: 192,049.712  
VERTICAL DATUM: NAVD 88 WITH GEOD G18US  
BENCHMARK: CP 5052 EL: 7213.70  
BENCHMARK: NGS CS110/DM9842 EL: 6843.25;  
BENCHMARK: NGS S294/KK0272 EL: 7116.72

**LEGEND**

- 7290 PROPOSED MAJOR CONTOUR
- 7291 PROPOSED MINOR CONTOUR
- 7290- EXISTING MAJOR CONTOUR
- 7291- EXISTING MINOR CONTOUR
- PROPERTY LINE
- LIMITS OF CONSTRUCTION
- LIMITS OF DISTURBANCE
- SCL PROPOSED SEDIMENT CONTROL LOG
- PROPOSED ASPHALT PAVEMENT
- EXISTING EDGE OF ASPHALT
- X X EXISTING FENCE LINE
- EXISTING EASEMENT
- EXISTING STORM SEWER
- EXISTING UNDERGROUND ELECTRIC
- EXISTING WATER LINE



DESIGNED		DRAWN		CHECKED		DATE	

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COMMUNITY DESIGN SOLUTIONS  
121 SOUTH ELSON STREET SUITE 110  
DENVER, CO 80202  
WWW.RESPEC.COM PHONE: (719) 966-5212

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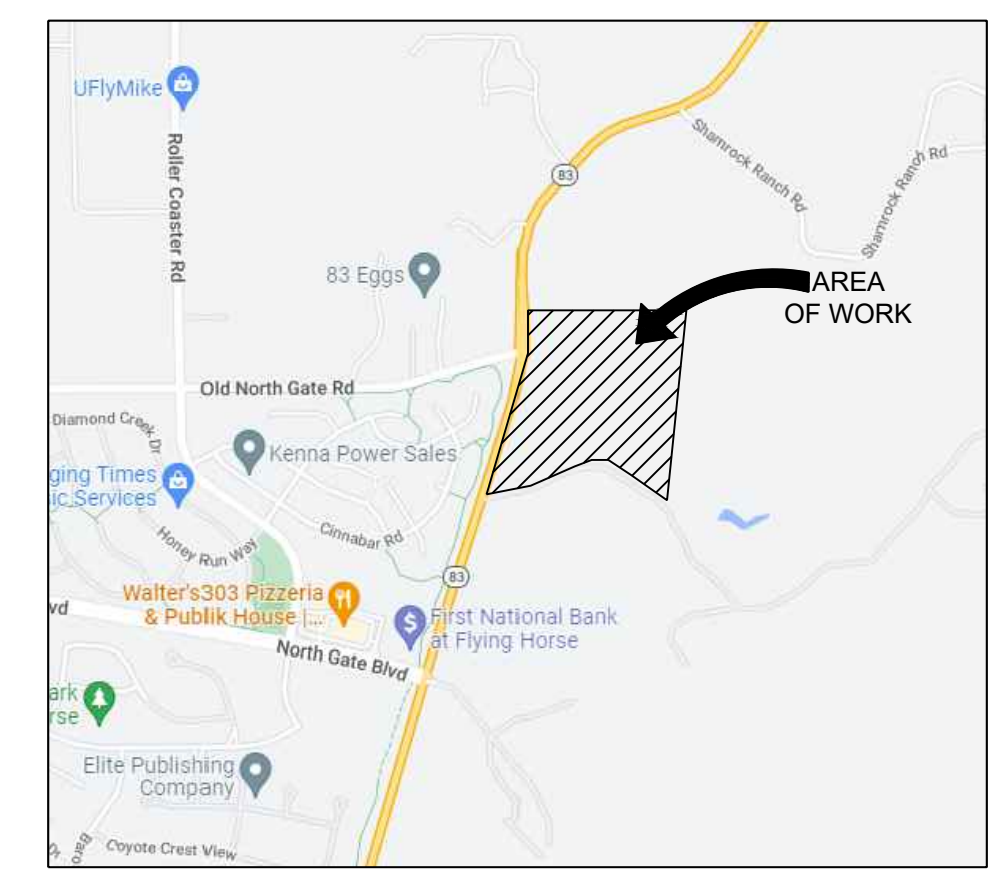
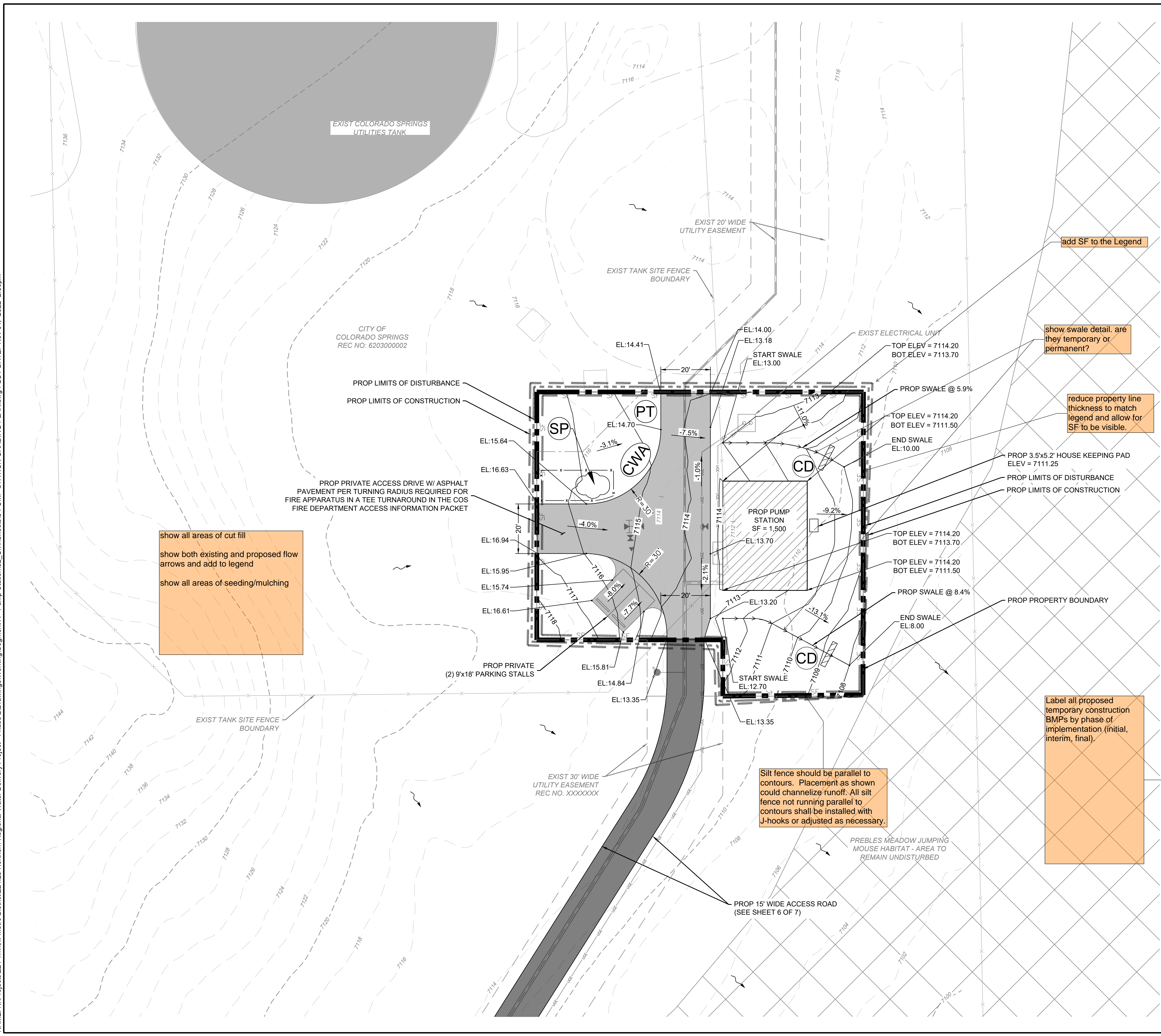
PROJECT NAME:  
**NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION**

SHEET TITLE:  
**SECONDARY GATE ACCESS GRADING PLAN**

SUBMITTED FOR:  
**TRIVIEW METROPOLITAN DISTRICT**

SHEET NUMBER:  
**SHEET 4 OF 7**

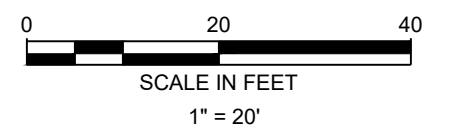
NAME: N:\Projects\224 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\Grading\PLAN.dwg PLOT DATE: Nov 04, 2022 2:30pm



**BENCHMARK**  
TOPOGRAPHY SURVEY CENTENNIAL LAND SURVEYING, LLC. SEE SURVEY FOR ESTABLISHED CONTROL. THE FOLLOWING COORDINATE SYSTEM AND DATUM RECORD IS AS FOLLOWS:  
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BENCHMARK: CP 5052 EL: 7213.70  
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BENCHMARK: NGS S294/KK0272 EL: 7116.72

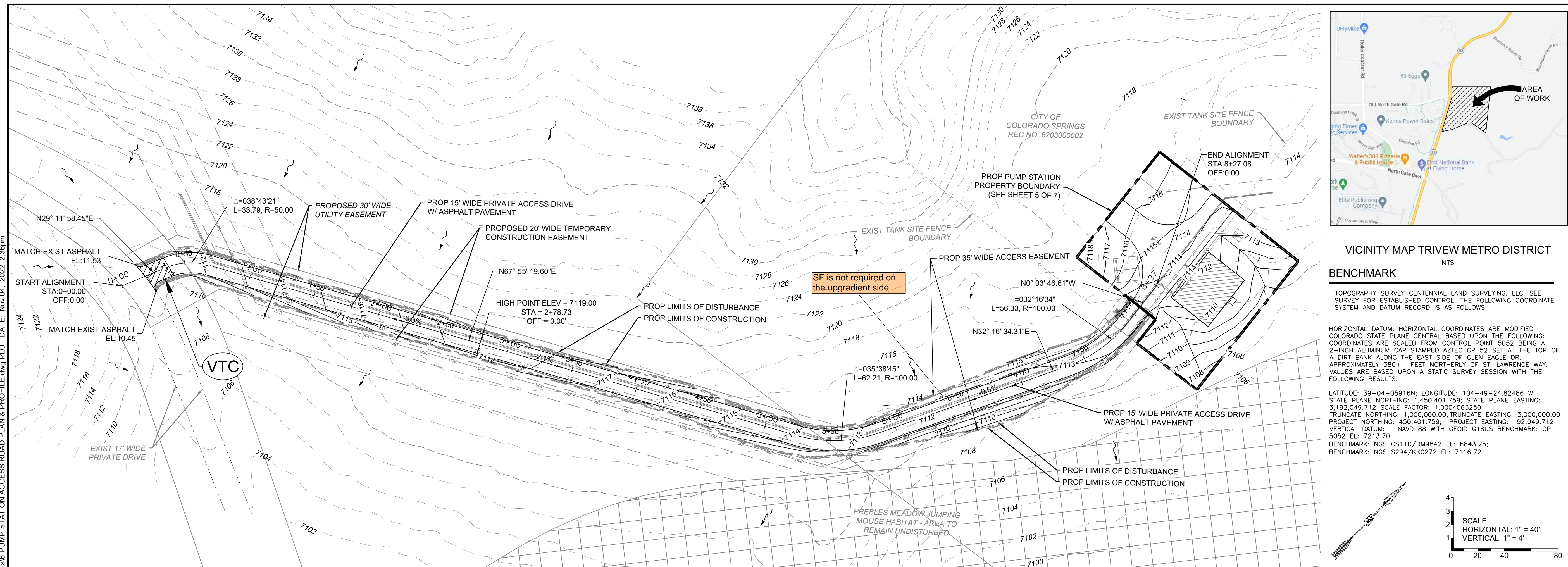
**LEGEND**

	7290	PROPOSED MAJOR CONTOUR
	7291	PROPOSED MINOR CONTOUR
	7290	EXISTING MAJOR CONTOUR
	7291	EXISTING MINOR CONTOUR
		PROPERTY LINE
		LIMITS OF CONSTRUCTION
		LIMITS OF DISTURBANCE
		PROPOSED SEDIMENT CONTROL LOG
		PROPOSED SWALE FLOW LINE
		PROPOSED ASPHALT PAVEMENT
		EXISTING EDGE OF ASPHALT
		EXISTING FENCE LINE
		EXISTING EASEMENT
		EXISTING WATER LINE
		EXISTING UNDERGROUND ELECTRIC
		PROP VEHICLE TRACKING CONTROL
		PROP CONCRETE WASHOUT AREA
		PROP STABILIZED STAGING AREA
		PROP STOCKPILE PROTECTION
		PROP PORTABLE TOILET
		PROP CHECK DAM



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DRAWN	
CHECKED	
DATE	11.04.2022
 <b>RESPEC</b> COMMUNITY DESIGN SOLUTIONS 131 SOUTH ELAN STREET SUITE 1110 DENVER, CO 80202 WWW.RESPEC.COM PHONE: (719) 966-5212	
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PROJECT NAME:	NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION
SHEET TITLE:	PUMP STATION GRADING PLAN
SUBMITTED FOR:	TRIVIEW METROPOLITAN DISTRICT
SHEET NUMBER:	SHEET 5 OF 7

NAME: N:\Projects\224 Triview Metro District\224\_29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02\_Civil\Sheets\6 PUMP STATION ACCESS ROAD PLAN & PROFILE.dwg PLOT DATE: Nov 04, 2022 2:36pm

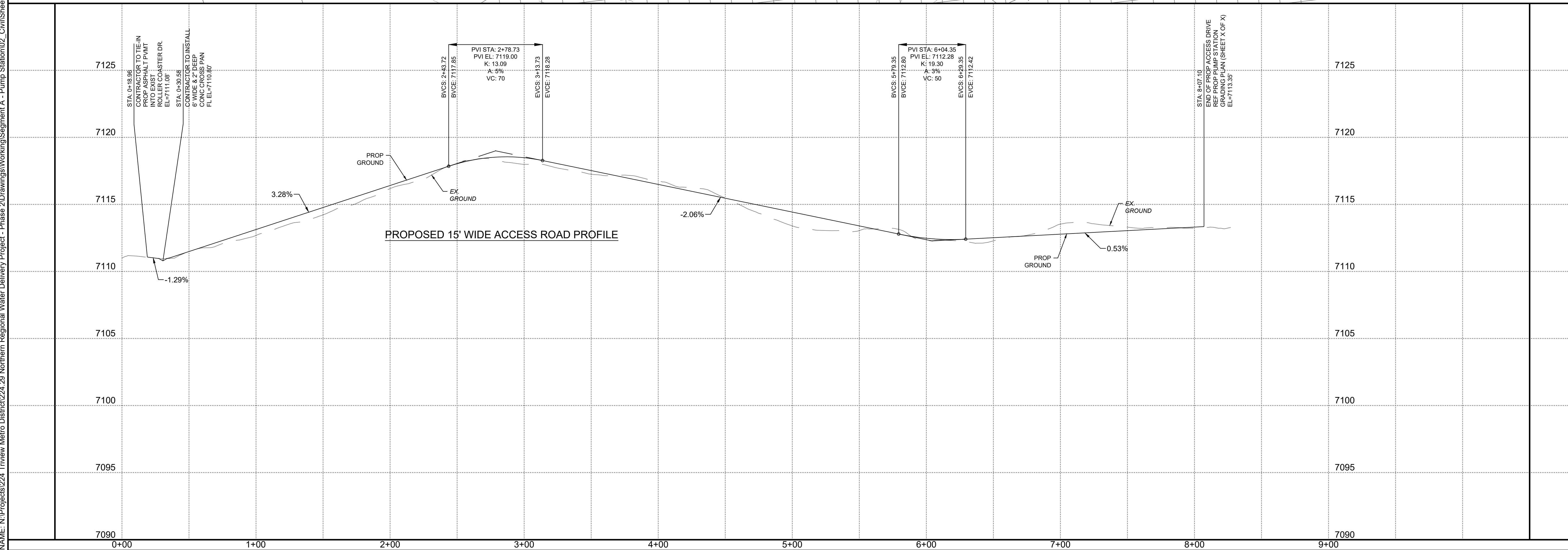


**VICINITY MAP TRIVEW METRO DISTRICT**  
NTS

**BENCHMARK**  
TOPOGRAPHY SURVEY CENTENNIAL LAND SURVEYING, LLC. SEE SURVEY FOR ESTABLISHED CONTROL. THE FOLLOWING COORDINATE SYSTEM AND DATUM RECORD IS AS FOLLOWS:

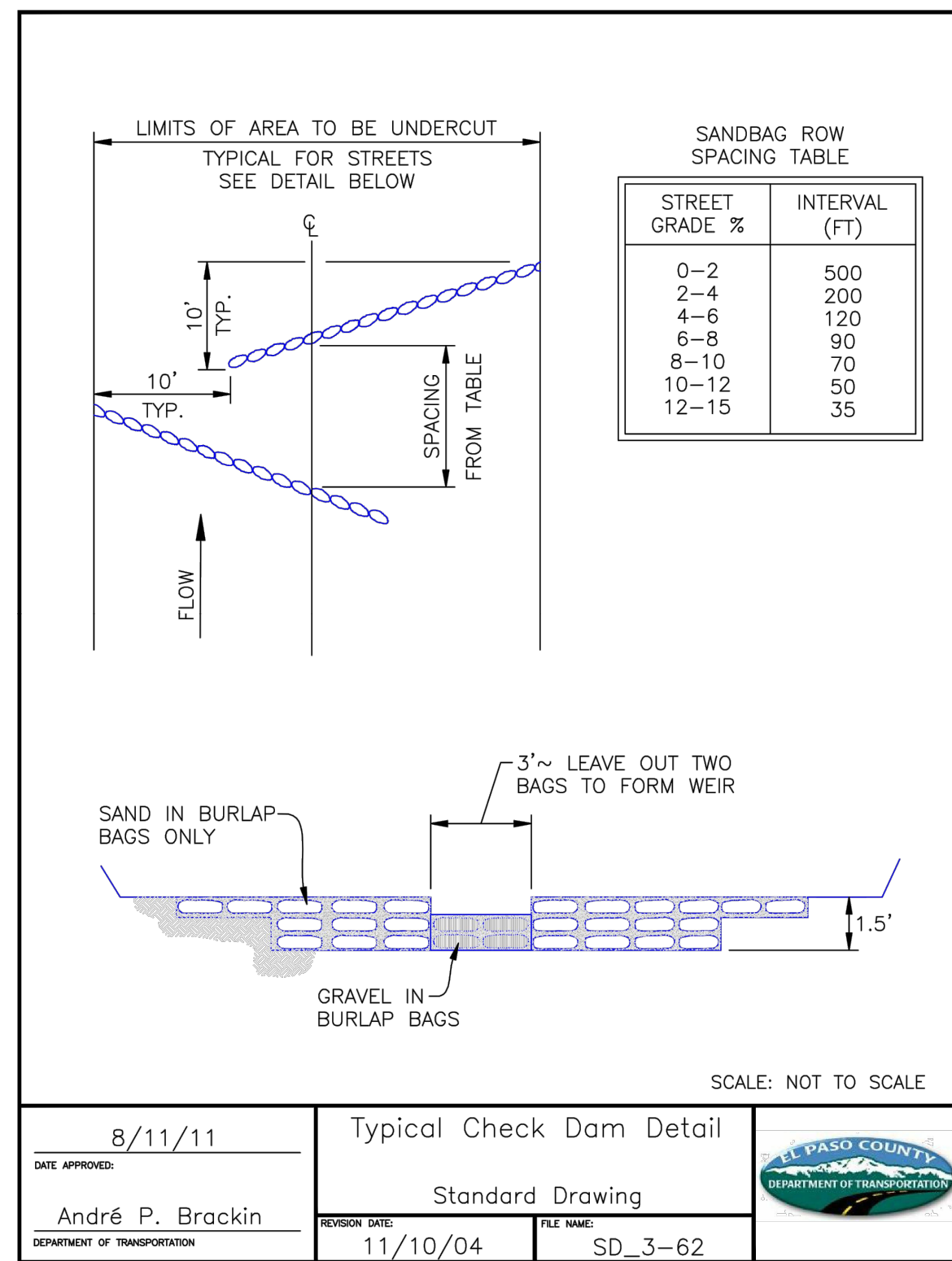
HORIZONTAL DATUM: HORIZONTAL COORDINATES ARE MODIFIED COLORADO STATE PLANE CENTRAL BASED UPON THE FOLLOWING: COORDINATES ARE SCALED FROM CONTROL POINT 5052 BEING A 2-INCH ALUMINUM CAP STAMPED AZTEC CP 52 SET AT THE TOP OF A DIRT BANK ALONG THE EAST SIDE OF GLEN EAGLE DR. APPROXIMATELY 380+ FEET NORTHERLY OF ST. LAWRENCE WAY. VALUES ARE BASED UPON A STATIC SURVEY SESSION WITH THE FOLLOWING RESULTS:

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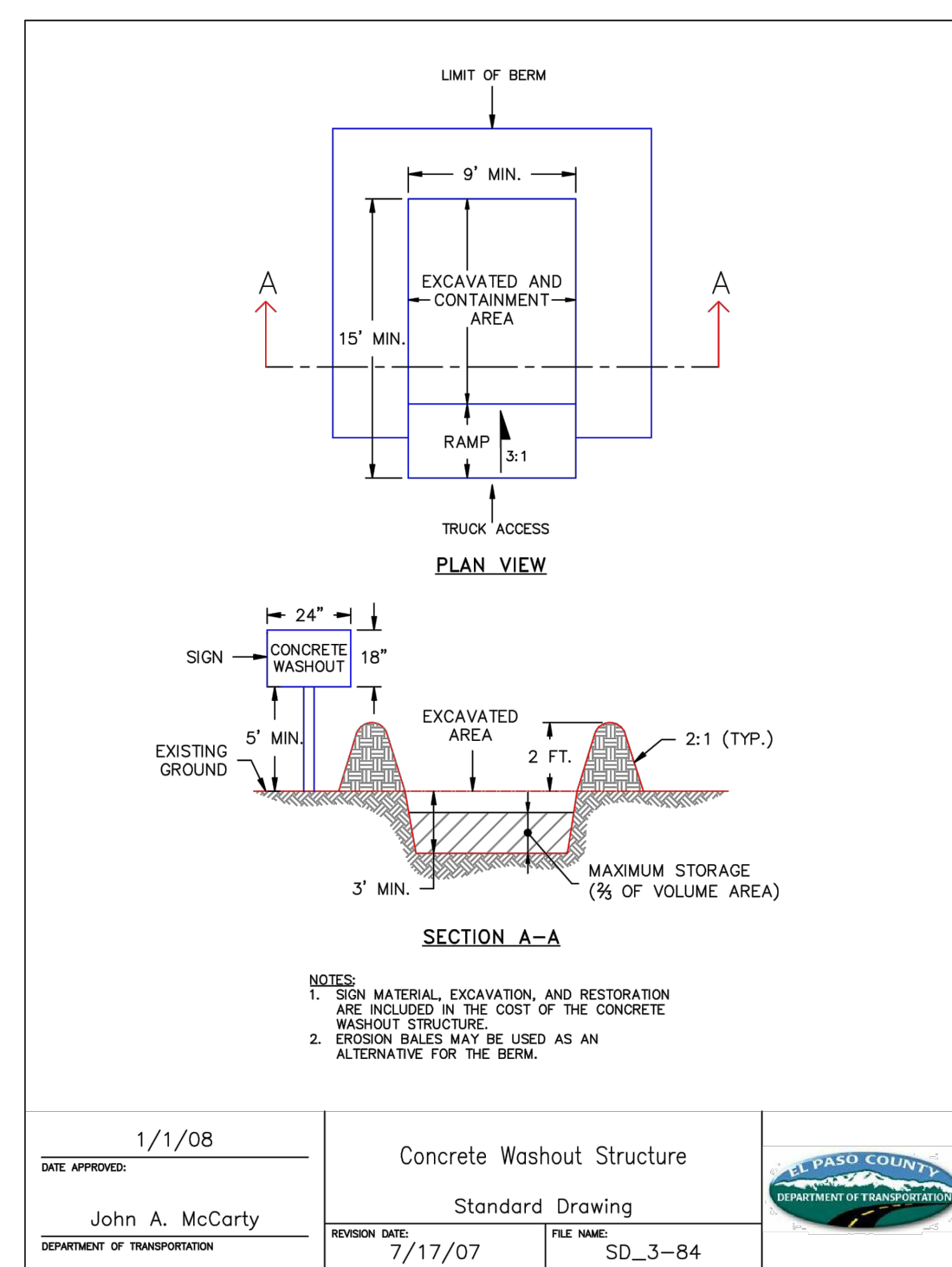


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<b>RESPEC</b>		
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<b>811</b> Know what's below. Call before you dig.		
PROJECT NAME: <b>NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION</b>		
SHEET TITLE: <b>PUMP STATION ACCESS ROAD PLAN &amp; PROFILE</b>		
SUBMITTED FOR: <b>TRIVEW METROPOLITAN DISTRICT</b>		
SHEET NUMBER: <b>SHEET 6 OF 7</b>		

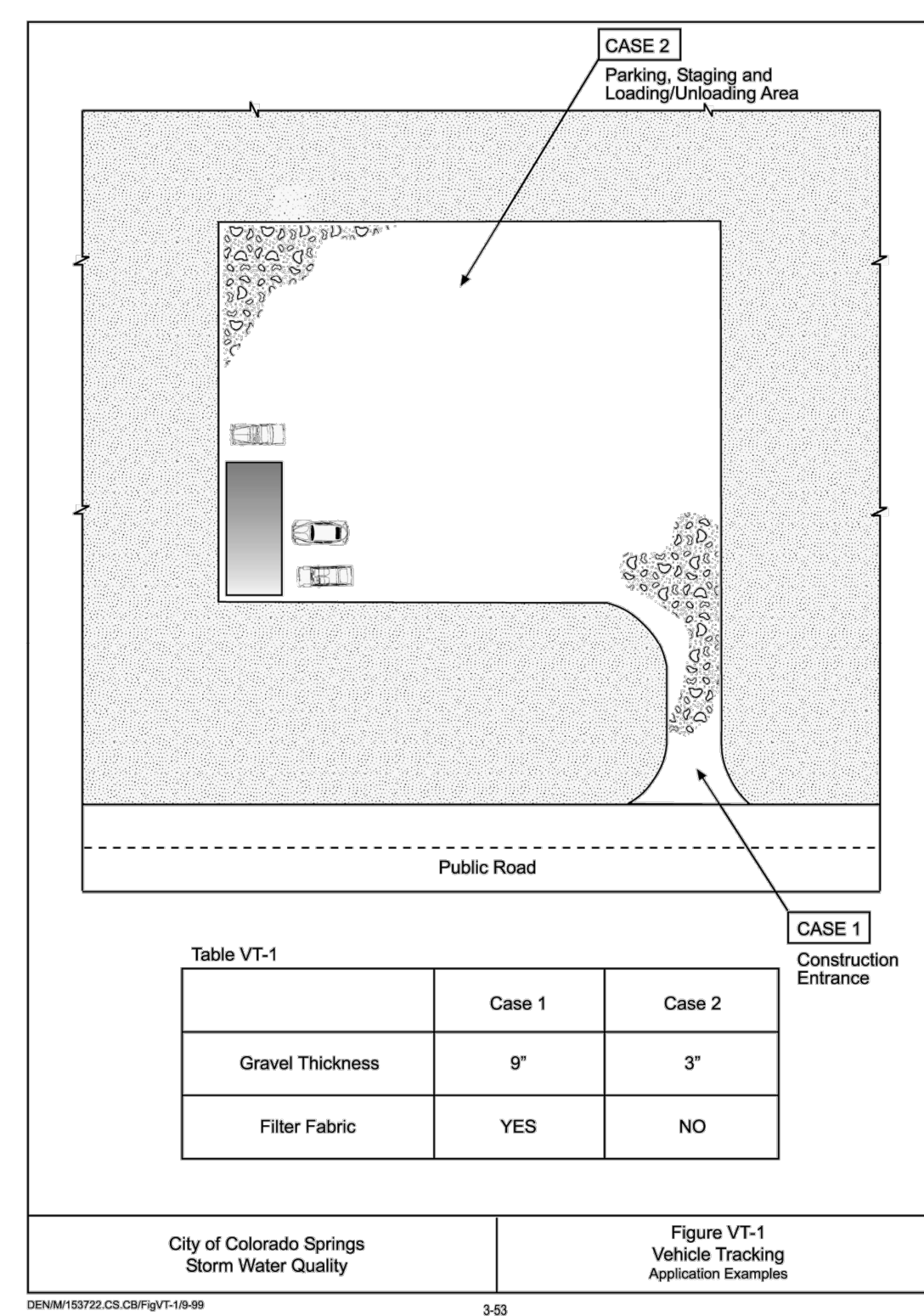
provide details for sediment control logs



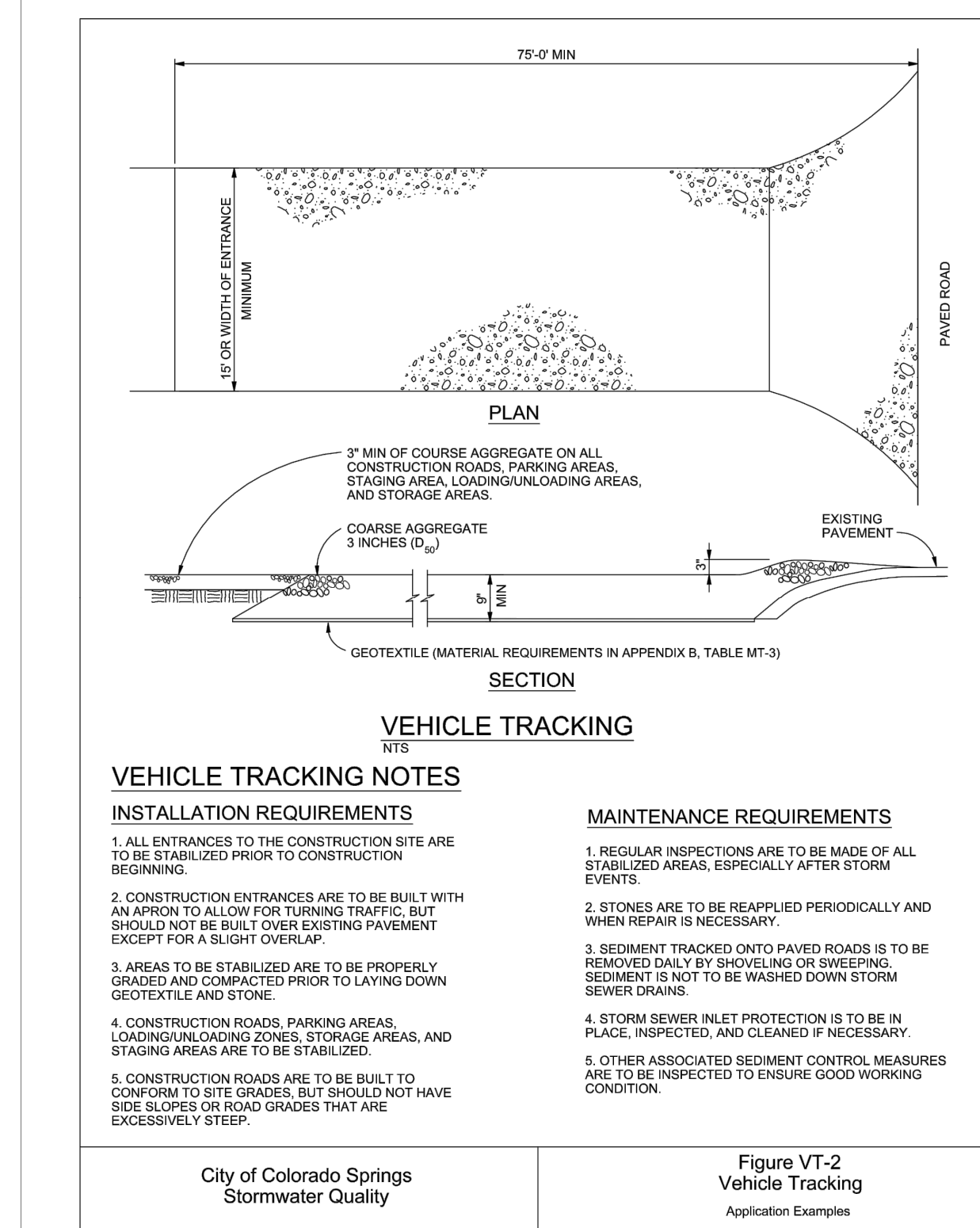
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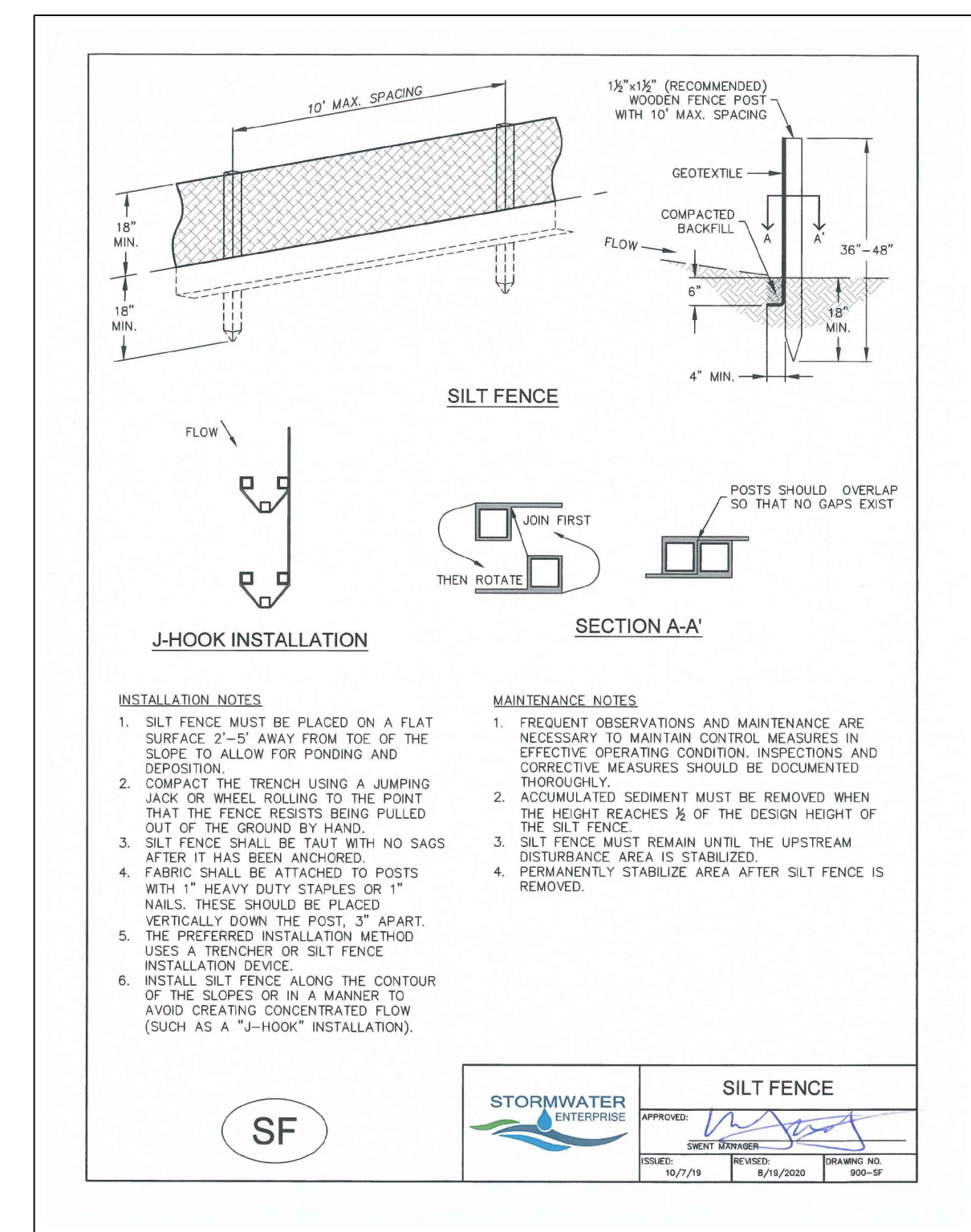


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NAME: N:\Projects\224 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02\_Civil\Sheets\7 GRADING DETAILS.dwg PLOT DATE: Nov 04, 2022 2:23:pm



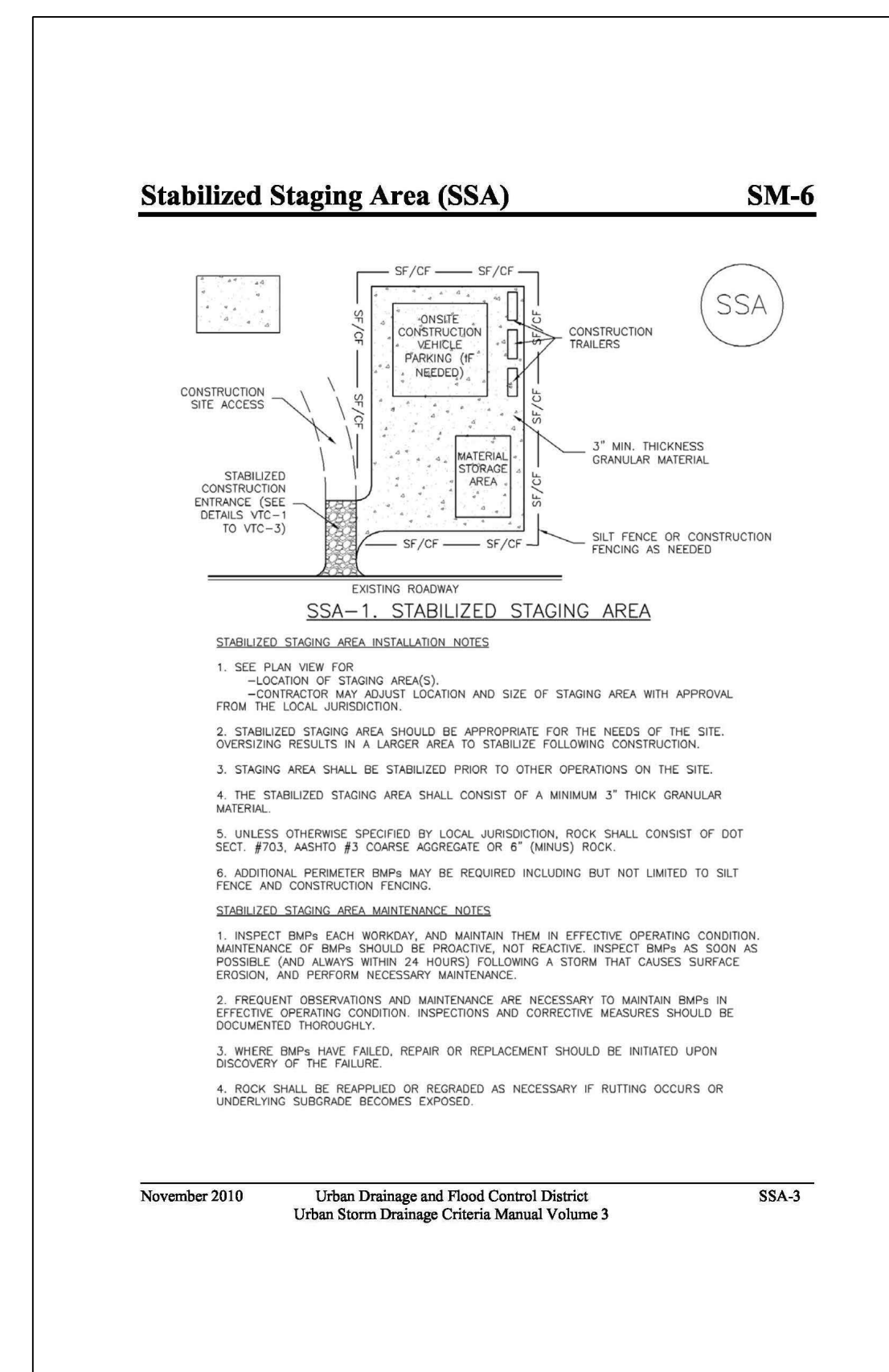
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**El Paso County Conservation District Shotgun Mix**

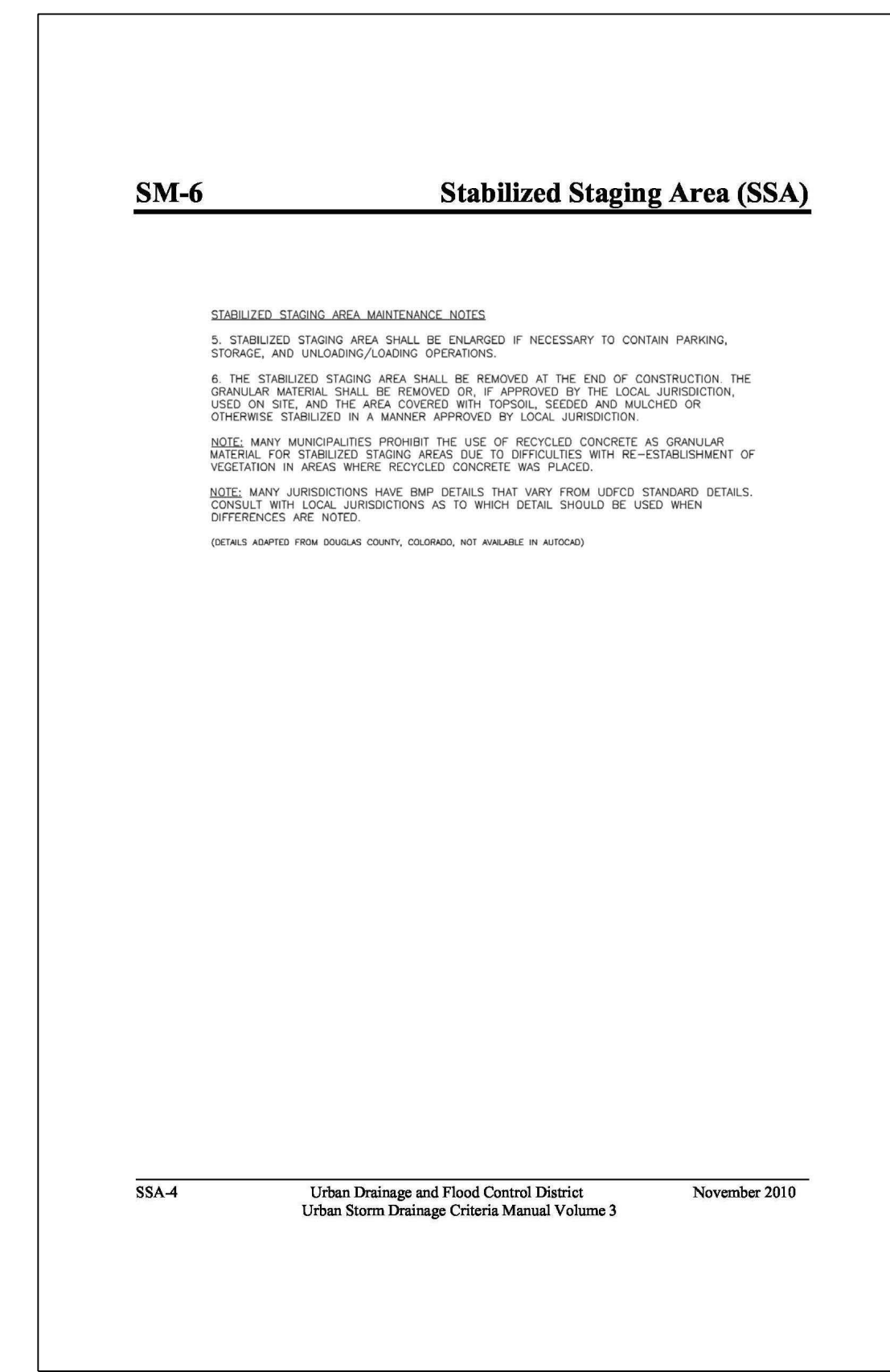
Common Name (All Native)	Recommended Variety	Percent of Seed Mix	Non Irrigated PLS Rate Per Acre (Drilled)
Bluestem, Big	Kaw, Bison, Champ	20.0%	1.08
Grama, Blue	Lovington, Hachita, Alma	10.0%	0.12
Green Needlegrass	Lodorn	10.0%	0.48
Wheatgrass, Western	Arriba, Barton	20.0%	1.60
Grama, Sideoats	Vaughn, Butte, El Reno, Niner	10.0%	0.46
Switchgrass	Glackwell, Greenville	10.0%	0.20
Prairie Sandreed	Goshen, Pronghorn	10.0%	0.32
Yellow Indiangrass	Cheyenne, Holt, Llano	10.0%	0.51

Note: The above listed PLS rate per acre is for drilled application. If seeding is completed using broadcasting methods, the PLS rate shall be doubled.

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NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION

GRADING DETAILS

TRIVIEW METROPOLITAN DISTRICT

SHEET NUMBER: SHEET 7 OF 7