

GRADING & EROSION CONTROL PLANS

TRIVIEW METROPOLITAN DISTRICT NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION

EL PASO COUNTY MAY 2023



VICINITY MAP
N.T.S

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PARTICIPANTS	
<p>OWNER TRIVIEW METROPOLITAN DISTRICT 16055 OLD FOREST POINT, STE 302 MONUMENT, CO 80132 CONTACT: JIM MCGRADY PHONE: (719) 488-6868</p>	
<p>CONSULTING/DESIGN ENGINEER 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

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 ON MY PART IN PREPARING THIS PLAN.

RICHARD GALLEGOS, P.E. #36427

5-24-2023
 DATE:

224.29
 PROJECT NO.

OWNER/DEVELOPER'S STATEMENT:
I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

JIM MCGRADY, CONTACT
 TRIVIEW METROPOLITAN DISTRICT
 16055 OLD FOREST POINT, STE 302
 MONUMENT, CO 80132

5-26-23
 DATE:

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 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:



PRE-EXCAVATION CHECKLIST	COLOR CODE FOR MARKING UNDERGROUND UTILITY LINES
<input type="checkbox"/> Gas and Other Utility Lines Shown on Construction Plans	WHITE PROPOSED EXCAVATION
<input type="checkbox"/> Utility Notification Center of Colorado (UNCC)-Call at Least Two (2) Business Days Ahead-1-800-922-1987	MAGENTA TEMPORARY SURVEY MARKINGS
<input type="checkbox"/> Utilities Located & Marked on the Ground	RED ELECTRIC
<input type="checkbox"/> Employees Briefed on Marking and Color Codes*	YELLOW GAS, OIL, STEAM
<input type="checkbox"/> Employees Trained on Excavation and Safety Procedures for Natural Gas Lines	ORANGE COMMUNICATION, CATV
<input type="checkbox"/> When Excavation Approaches Gas Lines, Employees Must Expose Lines by Careful Probing and Hand-Digging	BLUE POTABLE WATER
	PURPLE IRRIGATION RECLAIMED WATER, SLURRY LINES
	GREEN SEWER

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:

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 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

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.

Rev #	Date	Description	By	Chk'd

5-24-2023
 Designed By: DW

Drawn By: DW

Checked By: RGG

Project No: 224.29

Date: 2023-05-24

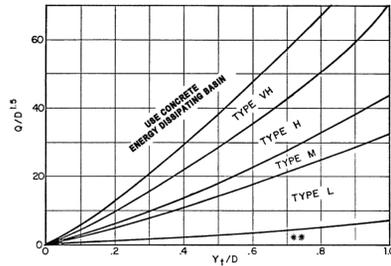
Sheet: 1 OF 8

121 SOUTH TEJON ST, SUITE 1110
 COLORADO SPRINGS, CO. 80903
 WWW.RESPEC.COM (719) 266-5212

$$H_s = \frac{(H + Y_c)}{2} \quad \text{Equation 9-19}$$

Where the maximum value of H_s shall not exceed H_c and:

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



Use D_0 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 $Q/D2.5 \leq 6.0$)

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 - 116 CY
 FILL - 501 (*1.15) = 576 CY
 NET - 460 CY FILL

ACCESS DRIVE & PUMP STATION SITE DISTURBED AREA - 37,554 SF, 0.86 AC
 SECONDARY ACCESS DRIVE DISTURBED AREA - 5,041, 0.12 AC
 TOTAL DISTURBANCE AREA - 42,595 SF, 0.98 AC

EROSION CONTROL FACILITIES:

SECONDARY ACCESS DRIVE SILT FENCE (SF) - 372 LF VEHICLE TRACKING PAD (VT) - 0 INLET PROTECTIONS - 0 CHECK DAMS - 0 STABILIZED STAGING AREA - 0 STOCKPILE PROTECTION - 0 PORTABLE TOILET - 0	PUMP STATION ACCESS DRIVE SILT FENCE (SF) - 771 LF VEHICLE TRACKING PAD (VT) - 1 INLET PROTECTIONS - 0 CHECK DAMS - 0 STABILIZED STAGING AREA - 0 STOCKPILE PROTECTION - 0 PORTABLE TOILET - 0	PUMP STATION SITE SILT FENCE (SF) - 273 LF VEHICLE TRACKING PAD (VT) - 1 INLET PROTECTIONS - 1 CHECK DAMS - 2 STABILIZED STAGING AREA - 1 STOCKPILE PROTECTION - 1 PORTABLE TOILET - 1
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EROSION CONTROL NOTES:

- 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.
- 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.
- 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.
- 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 GEC. 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.
- 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.
- 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.
- 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.
- 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.
- ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 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.
- 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).
- 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.
- 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.
- 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.
- EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 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.
- 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.
- TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 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.
- 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.
- 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.
- 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.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 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.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO CONSTRUCTION, THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 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.
- 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
- 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
 WQCD - 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.
- EXISTING VEGETATION IS NOT NOTABLE, ONLY GRASSES/WEEDS ARE WITHIN THE LIMITS OF CONSTRUCTION.
- THERE ARE NO BATCH PLANTS/ASPHALT PLANTS EXISTING OR PROPOSED FOR THIS SITE.
- RECEIVING WATERS: TRIBUTARY OF BLACK SQUIRREL CREEK
- 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.

DESIGNED BY: _____
 DRAWN BY: _____
 CHECKED BY: _____
 DATE: 5.24.2023

REVISION



5-24-2023

THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED



PROJECT NAME:
NORTHERN DELIVERY SERVICE BOOSTER PUMP STATION

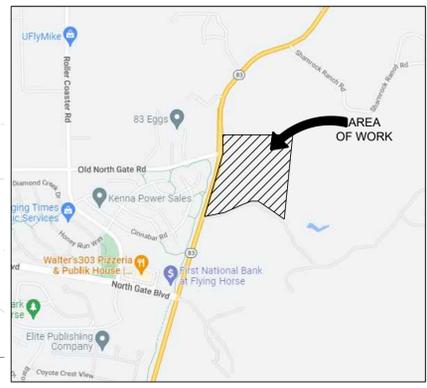
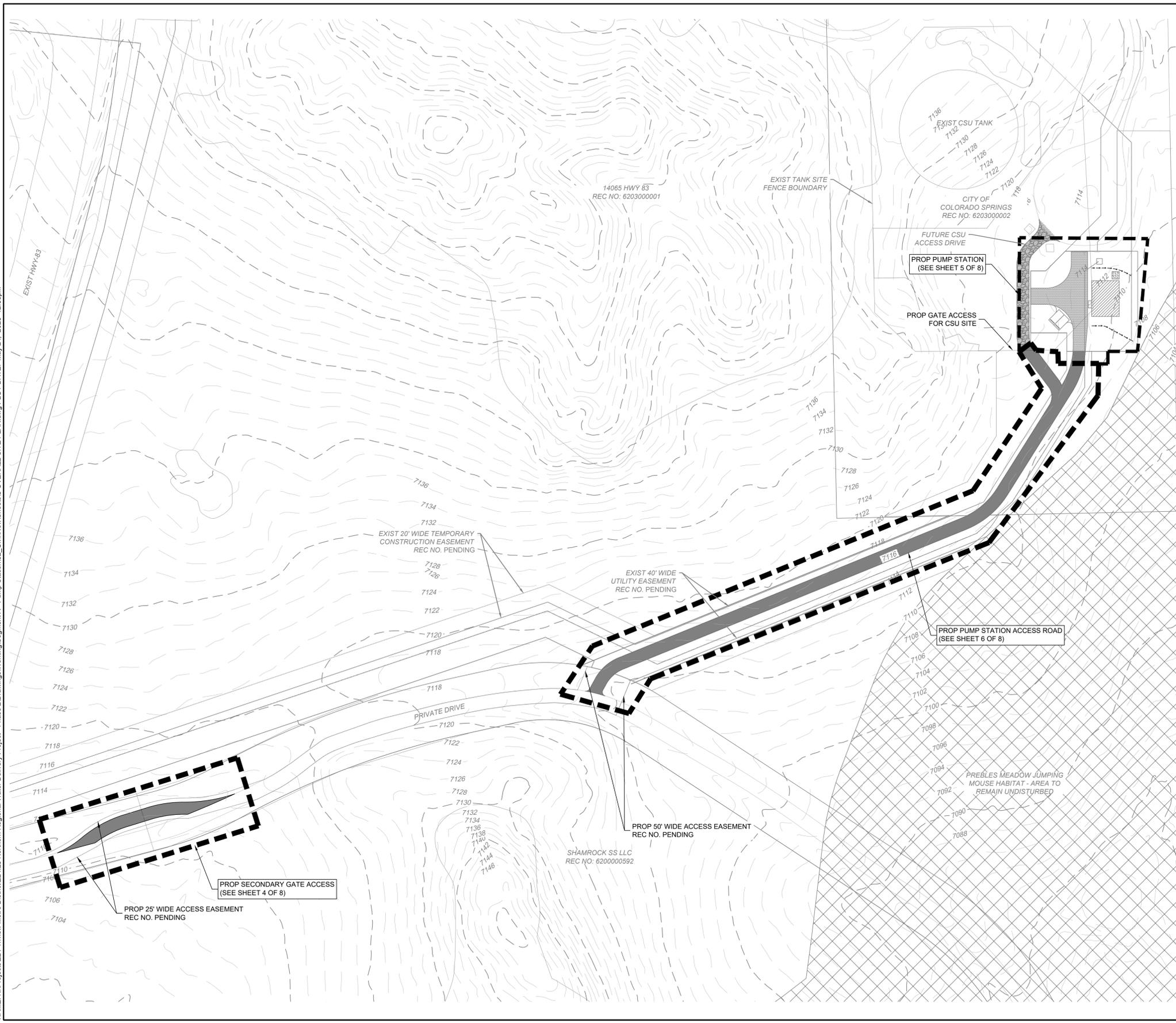
SHEET TITLE:
GENERAL GRADING NOTES

SUBMITTED FOR:
TRIVIEW METROPOLITAN DISTRICT

SHEET NUMBER:
SHEET 2 OF 8

NAME: N:\Projects\2024 Triview Metro District\224-28 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02_Civil\New\Sheets\2_GENERAL GRADING NOTES.dwg PLOT DATE: May 24, 2023 12:31pm

NAME: N:\Projects\224 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02_Civil\New\Sheets\3 OVERALL SITE PLAN.dwg PLOT DATE: May 24, 2023 12:33pm



VICINITY MAP TRIVEW METRO DISTRICT NTS

BENCHMARK

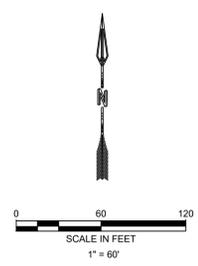
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LEGEND

- 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 BY	DRAWN BY	CHECKED BY	DATE
RESPEC	RESPEC	RESPEC	5.24.2023



5-24-2023



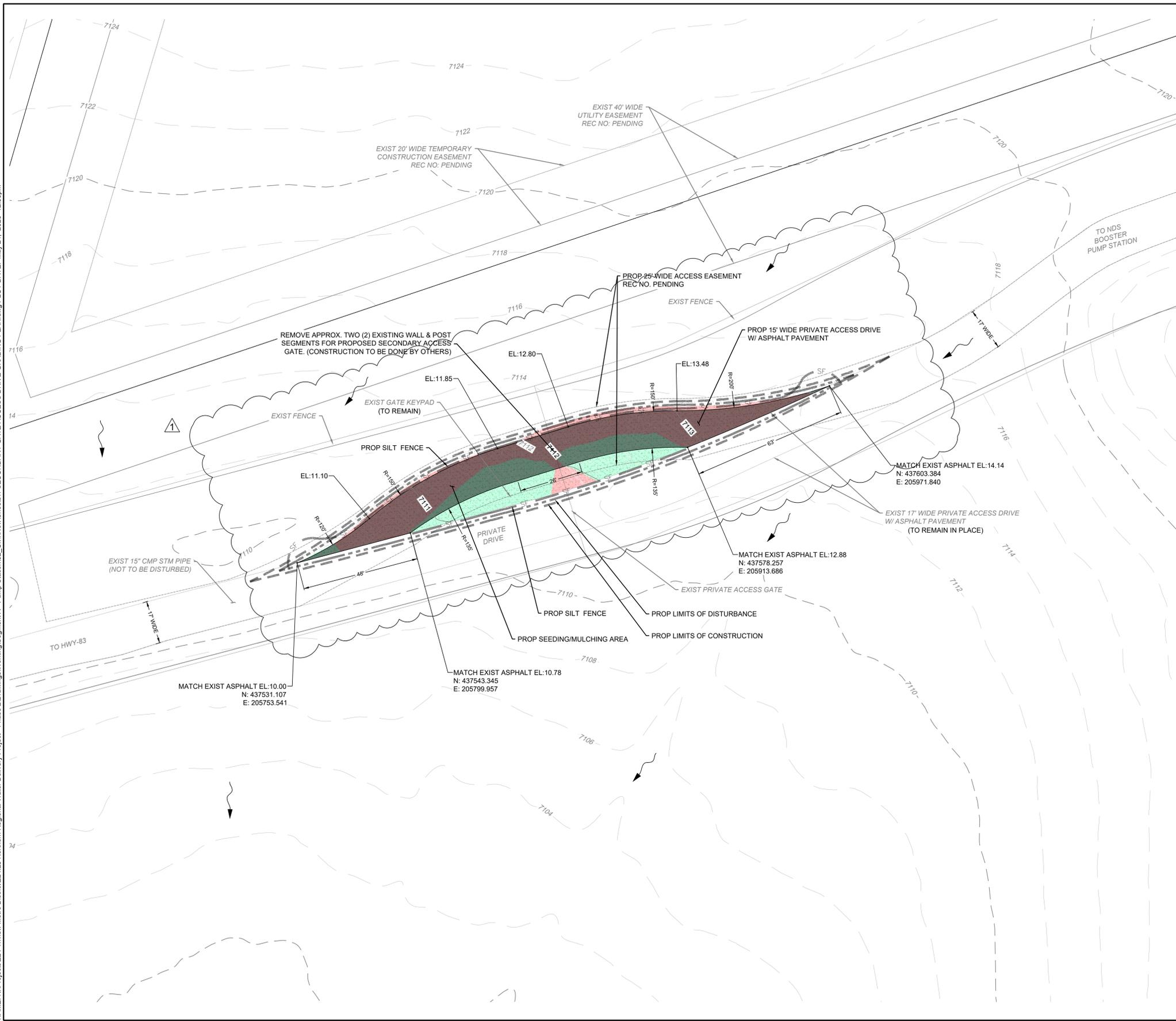
PROJECT NAME:
**NORTHERN DELIVERY SERVICE
BOOSTER PUMP STATION**

SHEET TITLE:
OVERALL SITE PLAN

SUBMITTED FOR:
**TRIVEW
METROPOLITAN
DISTRICT**

SHEET NUMBER:
SHEET 3 OF 8

NAME: N:\Projects\2024 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02_Civil\New\Sheets\4 SECONDARY GATE ACCESS DRIVE GRADING PLAN.dwg PLOT DATE: May 24, 2023 12:35pm



VICINITY MAP TRIVIEW METRO DISTRICT
NTS

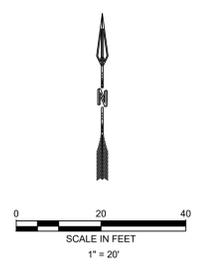
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LATITUDE: 39-04-05.916N; LONGITUDE: 104-49-24.82486 W
STATE PLANE NORTHING: 1,450,401.759; STATE PLANE EASTING: 3,192,049.712 SCALE FACTOR: 1.0004063250
TRUNCATE NORTHING: 1,000,000.00; TRUNCATE EASTING: 3,000,000.00 PROJECT NORTHING: 450,401.759; PROJECT EASTING: 192,049.712
VERTICAL DATUM: NAVD 88 WITH GEOID 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
■ ■ ■ ■ ■	PROPOSED PROJECT AREAS
— — — — —	PROPERTY LINE
- - - - -	LIMITS OF CONSTRUCTION
- - - - -	LIMITS OF DISTURBANCE
- - - SF - - -	PROPOSED INITIAL SILT FENCE
■ ■ ■ ■ ■	PROPOSED ASPHALT PAVEMENT
■ ■ ■ ■ ■	PROPOSED SEEDING/MULCHING AREA
■ ■ ■ ■ ■	PROPOSED CUT AREA
■ ■ ■ ■ ■	PROPOSED FILL AREA
- - - - -	EXISTING EDGE OF ASPHALT
- - - X - - -	EXISTING FENCE LINE
- - - - -	EXISTING EASEMENT



DESIGNED BY	UFLYMIKE
DRAWN BY	RESPEC
CHECKED BY	RESPEC
DATE	5.24.2023
REVISION	



5-24-2023
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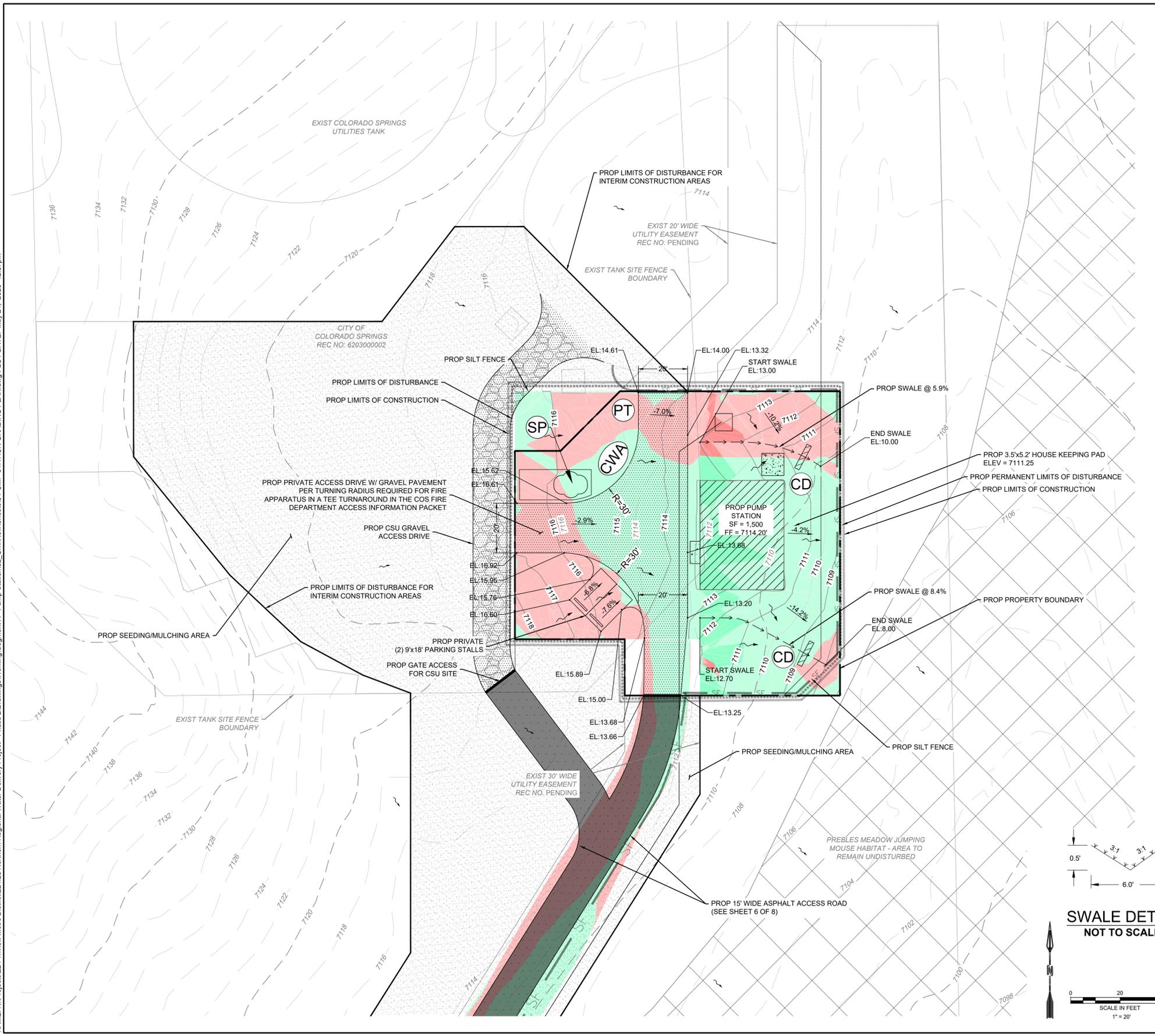
PROJECT NAME:
NORTHERN DELIVERY SERVICE
BOOSTER PUMP STATION

SHEET TITLE:
SECONDARY GATE
ACCESS DRIVE
GRADING PLAN

SUBMITTED FOR:
TRIVIEW
METROPOLITAN
DISTRICT

SHEET NUMBER:
SHEET 4 OF 8

NAME: N:\Projects\224 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02_Civil\NewSheets\B Pump Station Grading Plan.dwg PLOT DATE: May 24, 2023 12:37pm



VICINITY MAP TRIVIEW METRO DISTRICT

BENCHMARK
NTS

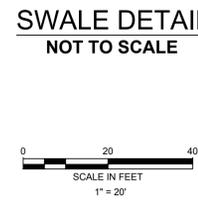
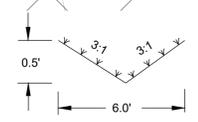
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LATITUDE: 39-04-05916N; LONGITUDE: 104-49-24.82486 W
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 VERTICAL DATUM: NAVD 88 WITH GEOID G18US
 BENCHMARK: CP 5052 EL: 7213.70
 BENCHMARK: NGS CS110/DM9842 EL: 6843.25;
 BENCHMARK: NGS S294/KK0272 EL: 7116.72

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 INITIAL SEDIMENT CONTROL LOG
— SF — SF —	PROPOSED INITIAL SILT FENCE
→ → → →	PROPOSED SWALE FLOW LINE
▒	PROPOSED ASPHALT PAVEMENT
▒	PROPOSED SEEDING/MULCHING AREA
▒	PROPOSED CUT AREA
▒	PROPOSED FILL AREA
- - - - -	EXISTING EDGE OF ASPHALT
X X X X	EXISTING FENCE LINE
- - - - -	EXISTING EASEMENT
— USE — USE — USE —	EXISTING UNDERGROUND ELECTRIC
(VTC)	PROP INITIAL VEHICLE TRACKING CONTROL
(CWA)	PROP INITIAL CONCRETE WASHOUT AREA
(SSA)	PROP INITIAL STABILIZED STAGING AREA
(SP)	PROP INITIAL STOCKPILE PROTECTION
(PT)	PROP INITIAL PORTABLE TOILET
(CD)	PROP INITIAL CHECK DAM
→	PROP FLOW ARROW
→	EXIST FLOW ARROW

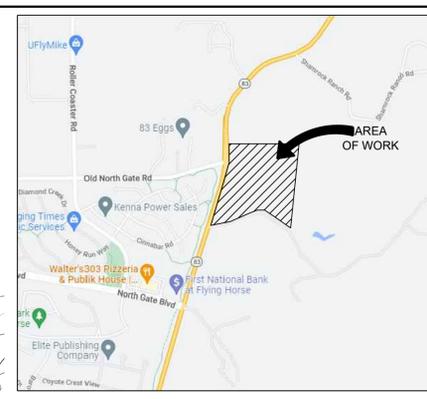
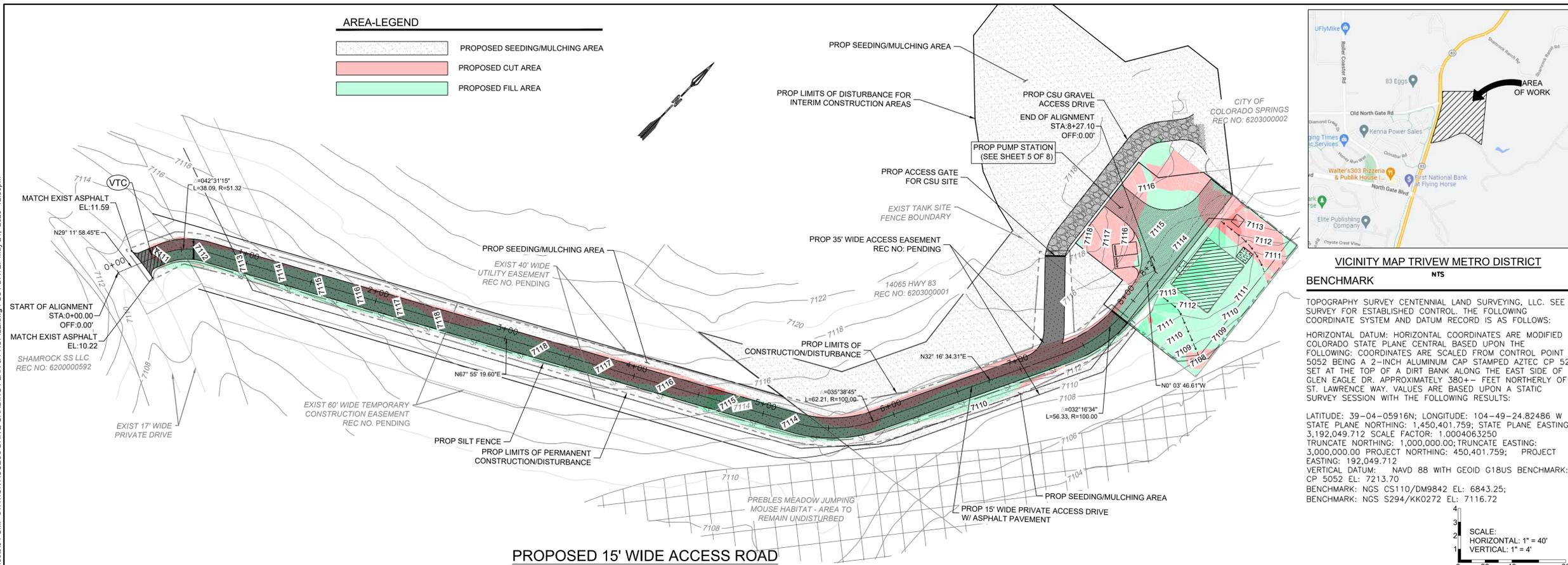


DESIGNED BY: DRAWN BY: CHECKED BY: DATE: 5.24.2023	REVISION
RESPEC COMMUNITY DESIGN SOLUTIONS 1500 NORTH GATE BLVD SUITE 1000 COLORADO SPRINGS, CO 80905 WWW.RESPEC.COM PHONE: (719) 266-3212	
SDP SUBMITTAL	
STAMP: PROFESSIONAL ENGINEER 36247	
5-24-2023	
THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED	
PROJECT NAME: NORTHERN DELIVERY SERVICE BOOSTER PUMP STATION	
SHEET TITLE: PUMP STATION GRADING PLAN	
SUBMITTED FOR: TRIVIEW METROPOLITAN DISTRICT	
SHEET NUMBER: SHEET 5 OF 8	

NAME: N:\Projects\224 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02_Civil\New\Sheets\6 Pump Station Access Drive Grading Plan & Profile.dwg PLOT DATE: May 24, 2023 12:39pm

AREA-LEGEND

- PROPOSED SEEDING/MULCHING AREA
- PROPOSED CUT AREA
- PROPOSED FILL AREA

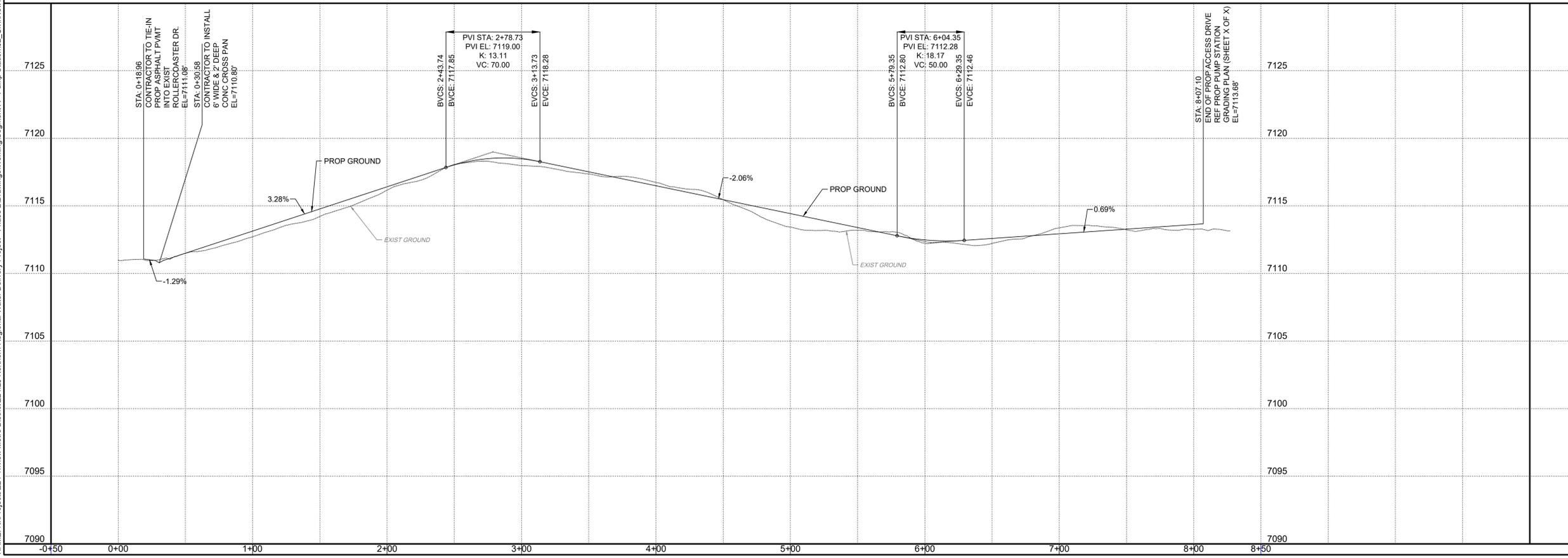
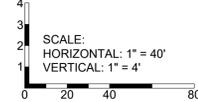


BENCHMARK

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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 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



DESIGNED BY	DRAWN BY	CHECKED BY	DATE
RESPEC			5.24.2023



5-24-2023

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811
Know what's below. Call before you dig.

PROJECT No. W0008.0010

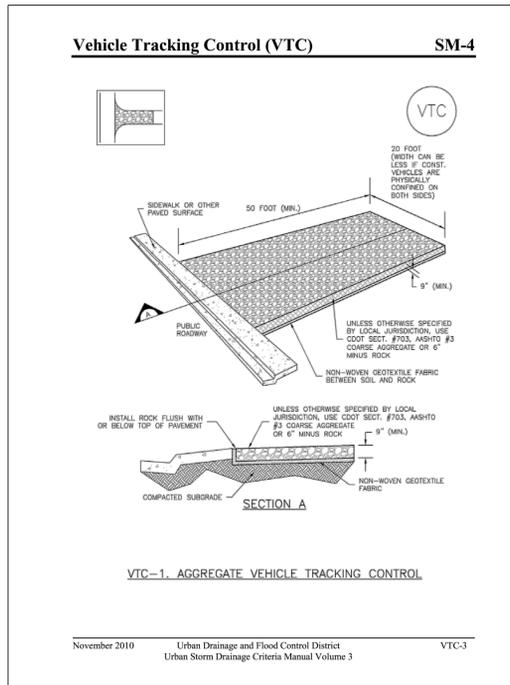
PROJECT NAME:
NORTHERN DELIVERY SERVICE BOOSTER PUMP STATION

SHEET TITLE:
PUMP STATION ACCESS DRIVE PLAN & PROFILE

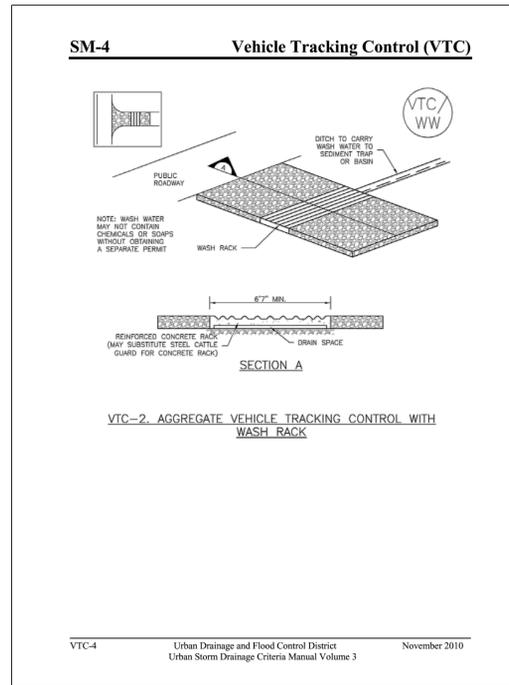
SUBMITTED FOR:
TRIVEW METROPOLITAN DISTRICT

SHEET NUMBER:
SHEET 6 OF 8

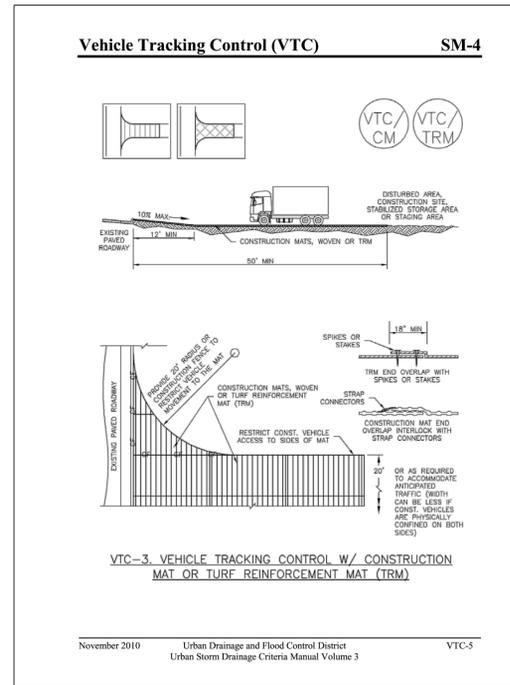
NAME: N:\Projects\224 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02_Civil\New\Sheets\7 GRADING DETAILS 1 of 2.dwg PLOT DATE: May 24, 2023 12:40pm



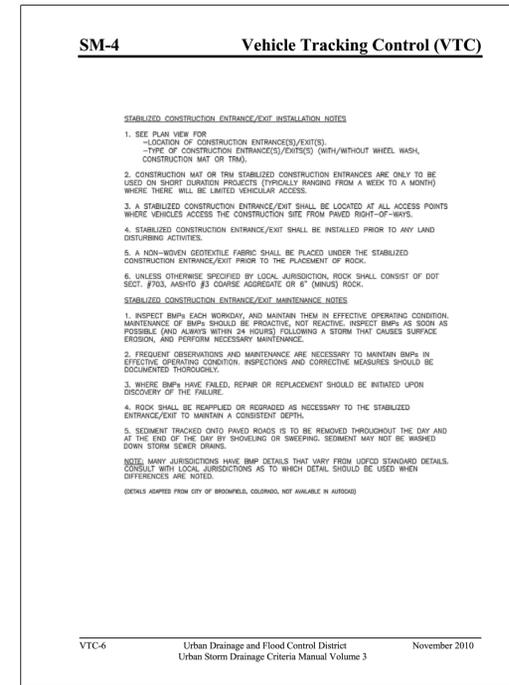
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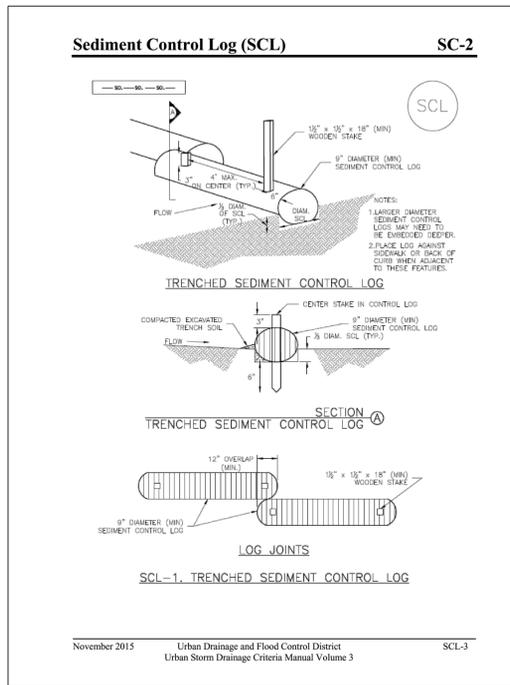
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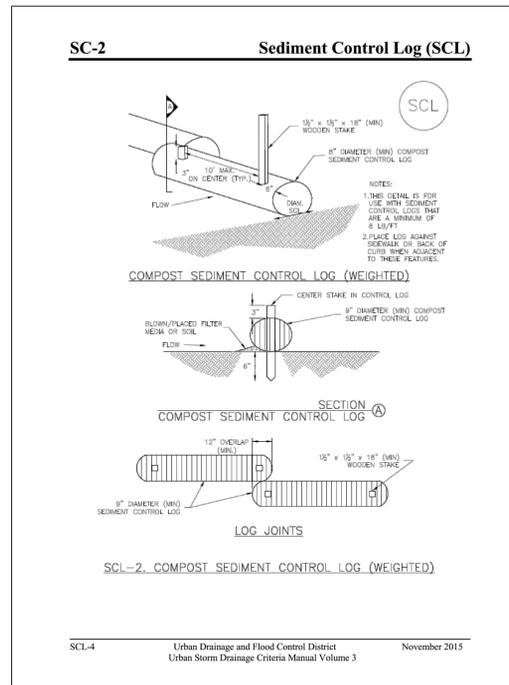
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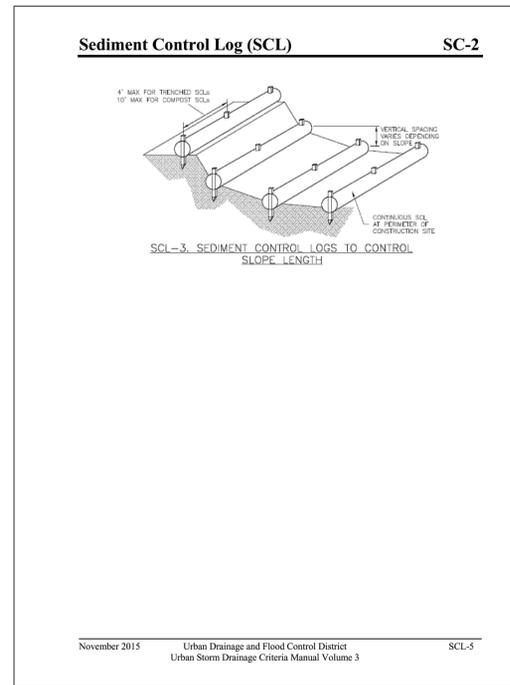
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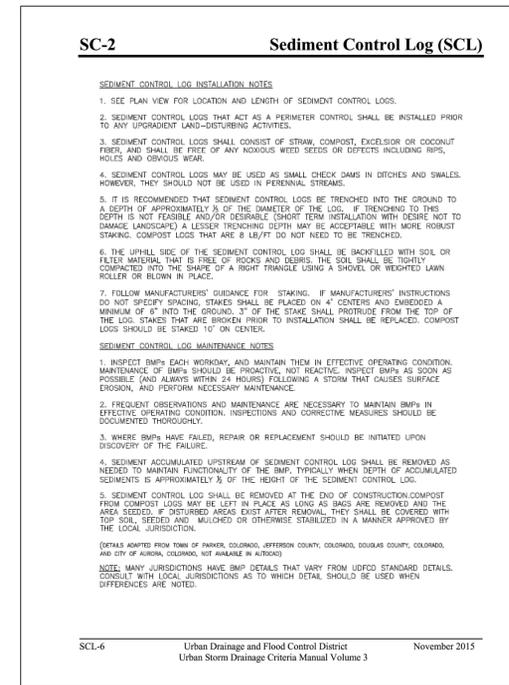
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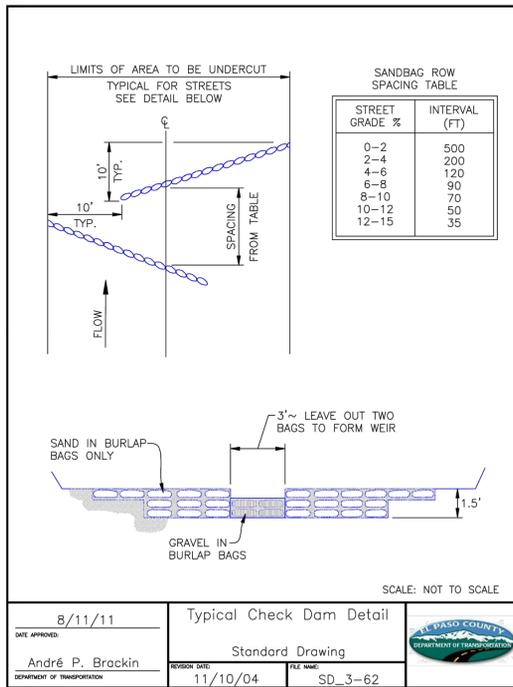
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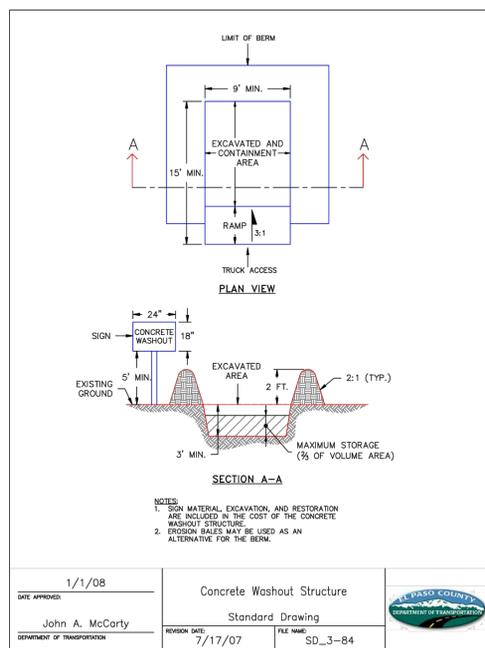
NOT TO SCALE

DESIGNED	REVISION
DRAWN	
CHECKED	
DATE	5.24.2023
COMMUNITY DESIGN SOLUTIONS 15 SOUTH WILSON STREET, SUITE 1000 COLO SPRING, CO 80903 WWW.RESPEC.COM PHONE: (719) 266-3212	
5-24-2023 THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED	
Know what's below. Call before you dig.	
PROJECT NAME:	NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION
SHEET TITLE:	GRADING DETAILS 1 OF 2
SUBMITTED FOR:	TRIVIEW METROPOLITAN DISTRICT
SHEET NUMBER:	SHEET 7 OF 8

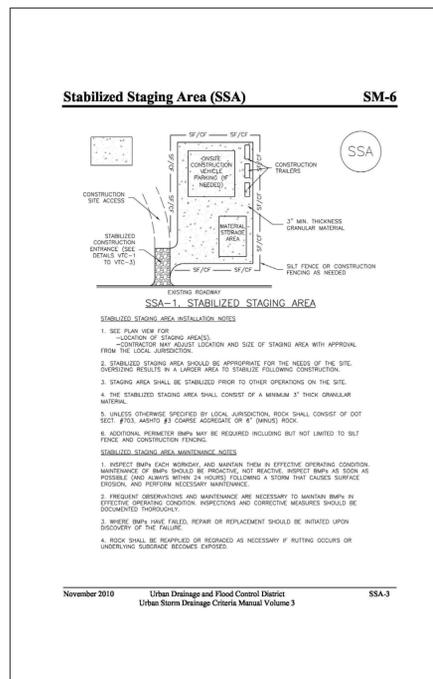
NAME: N:\Projects\224 Triview Metro District\224-29 Northern Regional Water Delivery Project - Phase 2\Drawings\Working\Segment A - Pump Station\02_Civil\New\Streets\6 GRADING DETAILS 2 OF 2.dwg PLOT DATE: May 24, 2023 12:41pm



NOT TO SCALE



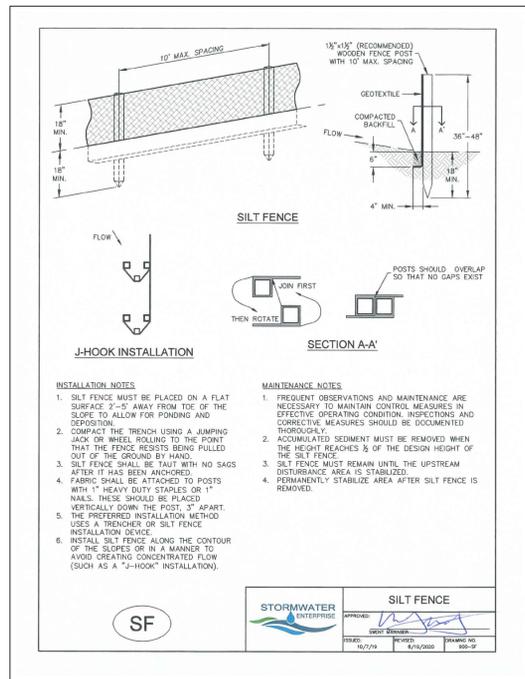
NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE

DESIGNED	REVISION
DRAWN	
CHECKED	
DATE	5.24.2023
 COMMUNITY DESIGN SOLUTIONS 15 SOUTH WILSON STREET, SUITE 100 COLORED SPRING, TEXAS 78003 WWW.RESPEC.COM PHONE: (719) 266-3212	
5-24-2023 THIS DRAWING IS INCOMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED	
 Know what's below. Call before you dig.	
PROJECT NAME:	NORTHERN DELIVERY SYSTEM BOOSTER PUMP STATION
SHEET TITLE:	GRADING DETAILS 2 OF 2
SUBMITTED FOR:	TRIVIEW METROPOLITAN DISTRICT
SHEET NUMBER:	SHEET 8 OF 8