

# THE ROCK COMMERCE CENTER GRADING AND EROSION CONTROL PLANS

LOCATED IN THE SOUTHWEST QUARTER OF THE  
NORTHWEST QUARTER OF SECTION 11, TOWNSHIP 11 SOUTH, RANGE 67 WEST OF THE SIXTH PRINCIPAL MERIDIAN,  
EL PASO COUNTY, STATE OF COLORADO.

EPC STORMWATER REVIEW COMMENTS  
IN ORANGE BOXES WITH BLACK TEXT

## PROJECT TEAM

### OWNER / DEVELOPER

CENTRAL DEVELOPMENT, LLC  
1600 S. ALBION ST., #200  
DENVER, CO 80222  
303.628.0200 voice  
CONTACT: JEREMY RECORDS

### CIVIL ENGINEER

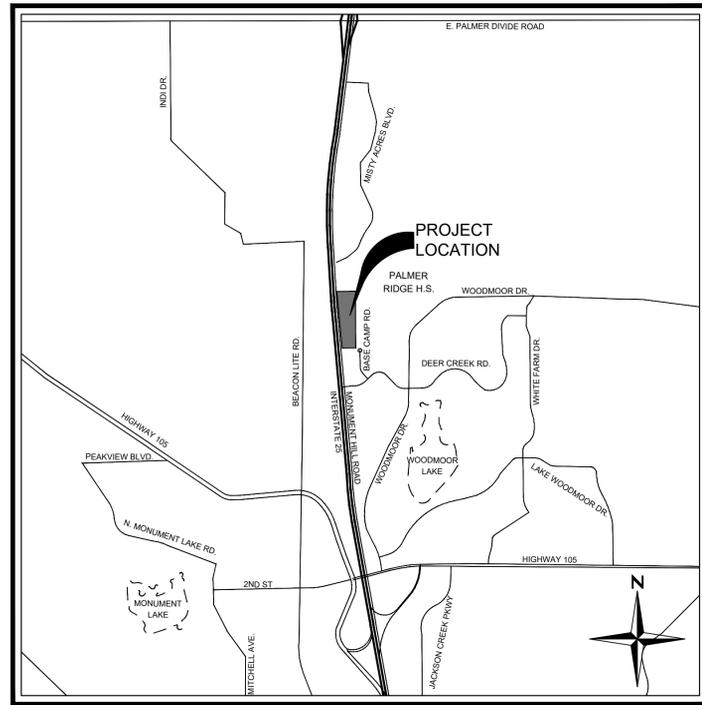
REDLAND  
1500 W. CANAL CT.  
LITTLETON, CO 80120  
720.283.6783 voice  
CONTACT: MARK CEVAAL, P.E.  
EMAIL: mcevaal@redland.com

### ARCHITECT

INTERGROUP ARCHITECTS  
2000 W. LITTLETON BLVD.  
LITTLETON, CO 80120  
303.407.1157 voice  
CONTACT: BILL SMITH, AIA

### LANDSCAPE ARCHITECT

STACKLOT  
5366 S. CURTICE ST.  
LITTLETON, CO 80120  
303.808.4523 voice  
CONTACT: STEVE WIENS  
EMAIL: steve@stacklot.com



VICINITY MAP  
SCALE: 1" = 2000'

## LEGAL DESCRIPTION:

### PARCEL B:

THAT PORTION OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 11, TOWNSHIP 11 SOUTH, RANGE 67 WEST OF THE 6TH P.M. LYING EAST OF THE EAST LINE OF THAT TRACT CONVEYED TO THE STATE HIGHWAY DEPARTMENT BY QUITCLAIM DEED RECORDED SEPTEMBER 8, 1948 IN BOOK 1185, PAGE 458, ALSO DESCRIBED AS: THAT PART OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 11, TOWNSHIP 11 SOUTH, RANGE 67 WEST OF THE P.M., COUNTY OF EL PASO, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
COMMENCING AT THE SOUTHWEST CORNER OF SAID NORTHWEST QUARTER; THENCE EASTERLY ALONG THE SOUTHERLY LINE OF SAID NORTHWEST QUARTER A DISTANCE OF 996.04 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY OF INTERSTATE HIGHWAY 25 DESCRIBED IN THAT DEED TO THE STATE HIGHWAY DEPARTMENT RECORDED SEPTEMBER 8, 1948 IN BOOK 1185 AT PAGE 458, WHICH POINT IS THE TRUE POINT OF THE BEGINNING OF THE PARCEL TO BE DESCRIBED; THENCE ON A DEFLECTION ANGLE TO THE LEFT 95°08'20" AND ALONG SAID EASTERLY RIGHT OF WAY LINE A DISTANCE OF 1334.24 FEET TO A POINT ON THE NORTHERLY LINE OF SAID SOUTHWEST QUARTER OF THE NORTHWEST QUARTER; THENCE ON A DEFLECTION ANGLE TO THE RIGHT 95°00'36" AND ALONG SAID NORTHERLY LINE 441.95 FEET TO THE NORTHEAST CORNER OF SAID SOUTHWEST QUARTER OF THE NORTHWEST QUARTER; THENCE ON A DEFLECTION ANGLE TO THE RIGHT 90°16'15" AND ALONG THE EASTERLY LINE OF SAID SOUTHWEST QUARTER OF THE NORTHWEST QUARTER A DISTANCE OF 1329.88 FEET TO THE SOUTHEAST CORNER OF SAID SOUTHWEST QUARTER OF THE NORTHWEST QUARTER; THENCE ON A DEFLECTION ANGLE TO THE RIGHT 89°51'29" AND ALONG THE SOUTHERLY LINE OF SAID SOUTHWEST QUARTER OF THE NORTHWEST QUARTER A DISTANCE OF 319.15 FEET TO THE POINT OF BEGINNING.

## 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 PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS

MARK D. CEVAAL, P.E. #33123

DATE

## OWNER/DEVELOPER'S STATEMENT

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

JEREMY RECORDS  
CENTRAL DEVELOPMENT, LLC  
1600 S. ALBION ST #200,  
DENVER, CO 80222

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 WITH 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.

FIELD IN ACCORDANCE WITH 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 EGM 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.

JOSH PALMER, P.E.  
COUNTY ENGINEER/ECM ADMINISTRATOR

DATE

## BENCHMARK

NGS CONTROL POINT T 395 BEING A STANDARD NGS STEEL ROD IN A LOGO MONUMENT BOX LOCATED 20 MILES NORTH OF COLORADO SPRINGS ON THE EAST SIDE OF I-25, 1,200 FEET NORTH OF THE WEIGH STATION BUILDING, AND 20.5 FEET EAST OF THE EASTERLY EDGE OF OIL OF THE NORTHBOUND LANES OF I-25.

NAVD88. ELEV = 7111.32'

## BASIS OF BEARINGS

BEARINGS SHOWN HEREON ARE REFERENCED TO THE SOUTHERLY BOUNDARY OF LOT 1, GREATER EUROPE MISSION SUBDIVISION FILING NO. 1, BEING MONUMENTED AS SHOWN HEREON, ASSUMED TO BEAR SOUTH 80°00'37" WEST, A DISTANCE OF 358.79 FEET.

## Sheet List Table

Sheet Number	Sheet Title
EC1.0	COVER SHEET
EC1.1	REDLAND GENERAL NOTES
EC2.1	GRADING PLAN
EC2.2	GRADING PLAN
EC3.1	INITIAL EROSION CONTROL PLAN
EC3.2	INITIAL EROSION CONTROL PLAN
EC3.3	INTERIM EROSION CONTROL PLAN
EC3.4	INTERIM EROSION CONTROL PLAN
EC3.5	FINAL EROSION CONTROL PLAN
EC3.6	FINAL EROSION CONTROL PLAN
EC4.1	GEC DETAILS
EC4.2	GEC DETAILS
EC4.3	POND DETAILS

## EL PASO COUNTY GRADING AND EROSION CONTROL PLAN 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.
- NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS 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.
- A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. 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 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 AND 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 MEASURES(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 DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- DURING DEWATERING OPERATIONS, UNCONTAMINATED GROUNDWATER 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, TREE SLASH, 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, 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 1. 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 HAS BEEN PREPARED BY [GROUND ENGINEERING, 03-29-2023] 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 APPLICATION 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

**15 Redland**  
YEARS  
WHERE GREAT PLACES BEGIN

720.283.6783  
REDLAND.CO.VM  
• Land Planning  
• Landscape Architecture  
• Civil Engineering  
• Construction Management

NOT FOR  
CONSTRUCTION

PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

THE ROCK COMMERCE CENTER  
GRADING AND EROSION CONTROL PLANS  
COVER SHEET

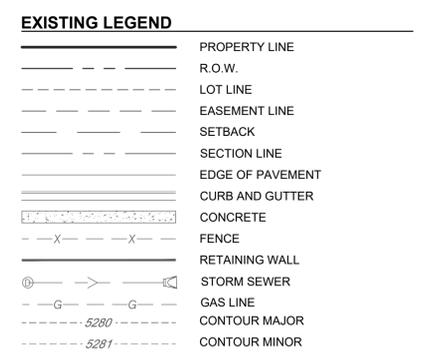
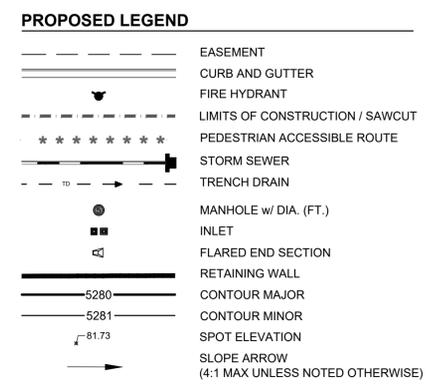
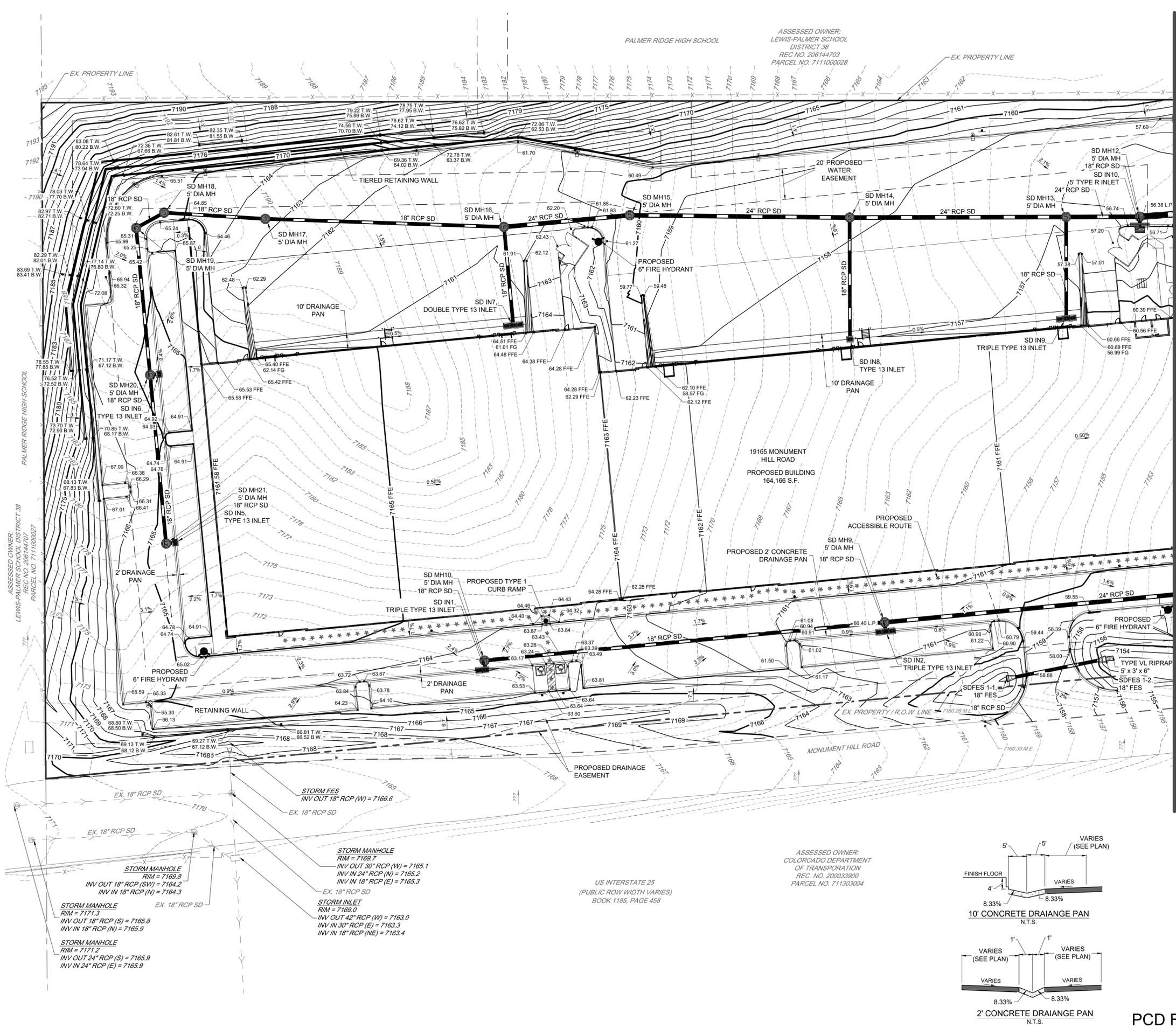
SHEET

EC1.0

PCD FILE NO. PPR2329

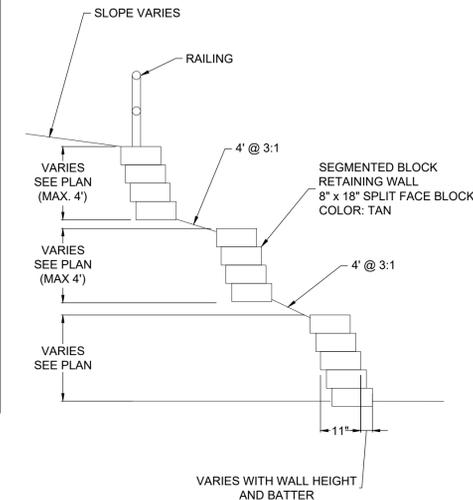


I:\2023\23009 - The Rock Commerce Center\CAADD\Sheet Sets\CECC\The Rock\23009\_Grading Plan.dwg Lab. 5 OF 23 GRADING PLAN Nov 20, 2023 - 7:34am ccsz

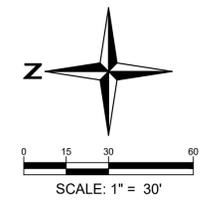
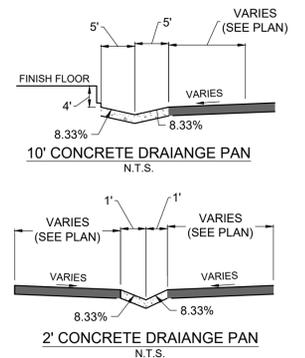


- NOTE:
- THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATION AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OF GUIDELINES ENACTED OF PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.
  - REGIONAL BUILDING DEPARTMENT PERMIT REQUIRED FOR ALL RETAINING WALLS GREATER THAN OR EQUAL TO 4 FT IN HEIGHT.
  - SEE SITE DEVELOPMENT PLAN FOR SCREENING WALL DETAILS BY ARCH.
  - NO BATCH PLANTS WILL BE UTILIZED ONSITE.

MATCHLINE - SEE SHEET NO. EC2.2



NOTE: RETAINING WALL WILL REQUIRE A SEPARATE BUILDING PERMIT



**15 Redland**  
WHERE GREAT PLACES BEGIN  
YEARS

720.283.6793  
REDLAND, CO  
Landscape Architecture  
Construction Management

**NOT FOR CONSTRUCTION**

PROJECT NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE	NO.
23009	07/28/2023	1	10/20/2023	2	11/17/2023	3						

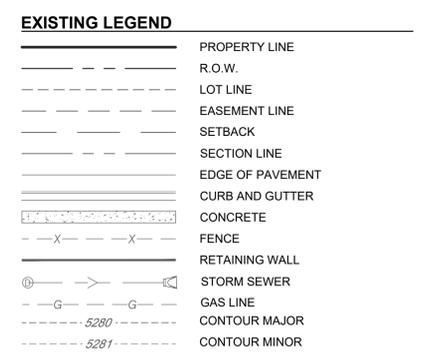
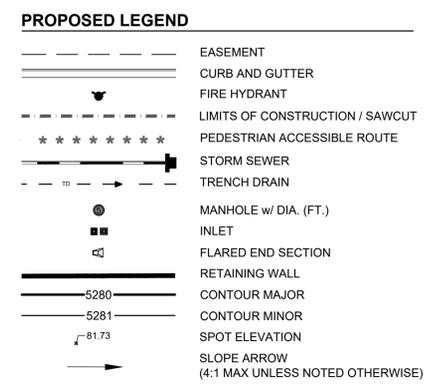
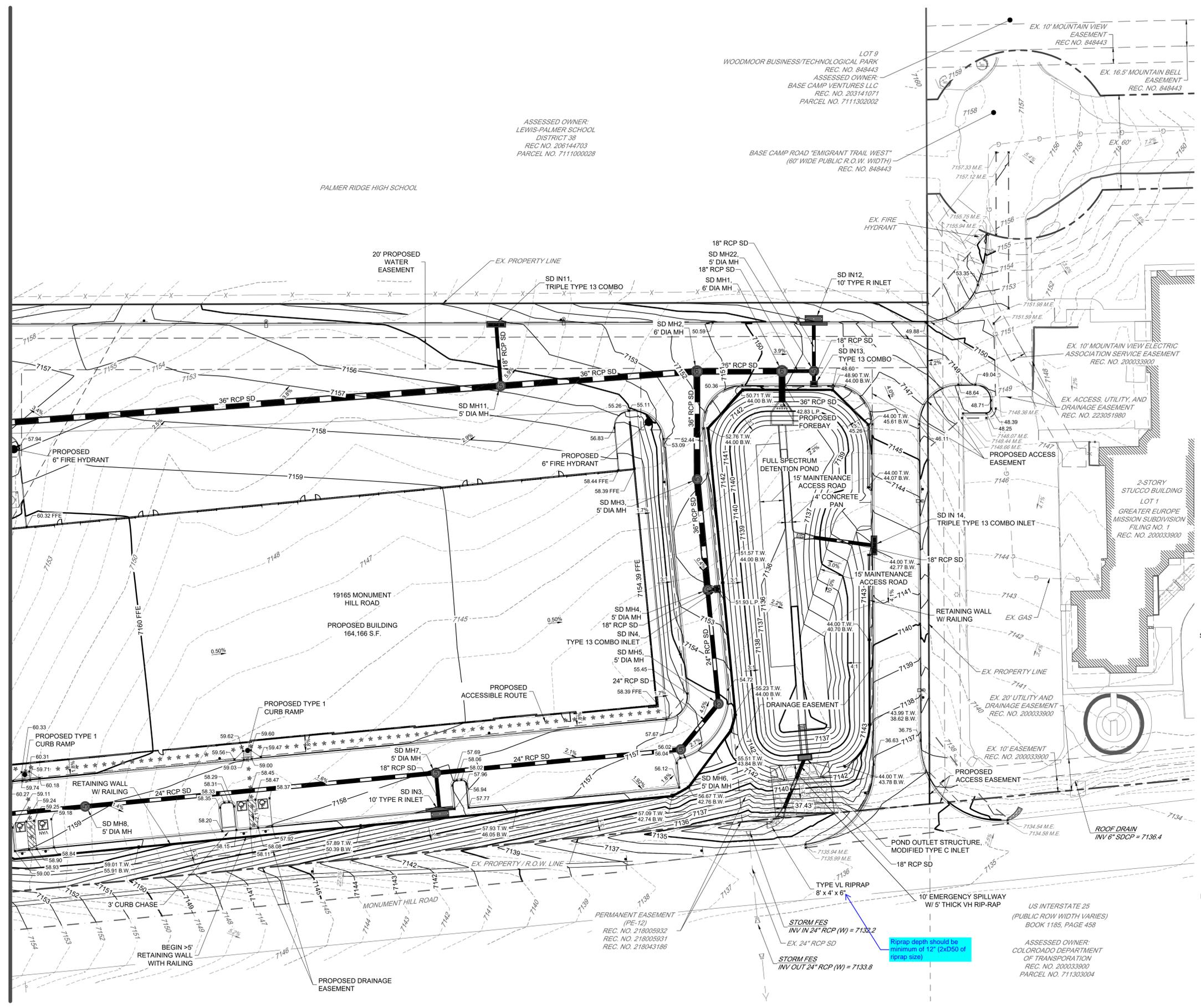
**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
GRADING PLAN

SHEET  
**EC2.1**

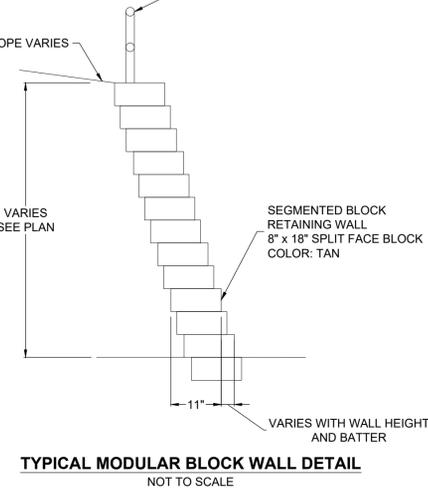
PCD FILE NO. PPR2329

I:\2023\23009 - The Rock Commerce Center\CADD\Sheet Sets\CECC\The Rock\23009\_Grading Plan.dwg Lab: 6 OF 22 GRADING PLAN Nov 20, 2023 - 7:35am ccsz

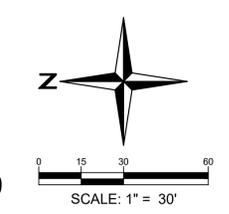
MATCHLINE - SEE SHEET NO. EC2.1



- NOTE:
1. 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 EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OF GUIDELINES ENACTED OF PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.
  2. REGIONAL BUILDING DEPARTMENT PERMIT REQUIRED FOR ALL RETAINING WALLS GREATER THAN OR EQUAL TO 4 FT IN HEIGHT.
  3. SEE SITE DEVELOPMENT PLAN FOR SCREENING WALL DETAILS BY ARCH.
  4. NO BATCH PLANTS WILL BE UTILIZED ONSITE.



NOTE: RETAINING WALL WILL REQUIRE A SEPARATE BUILDING PERMIT



PCD FILE NO. PPR2329

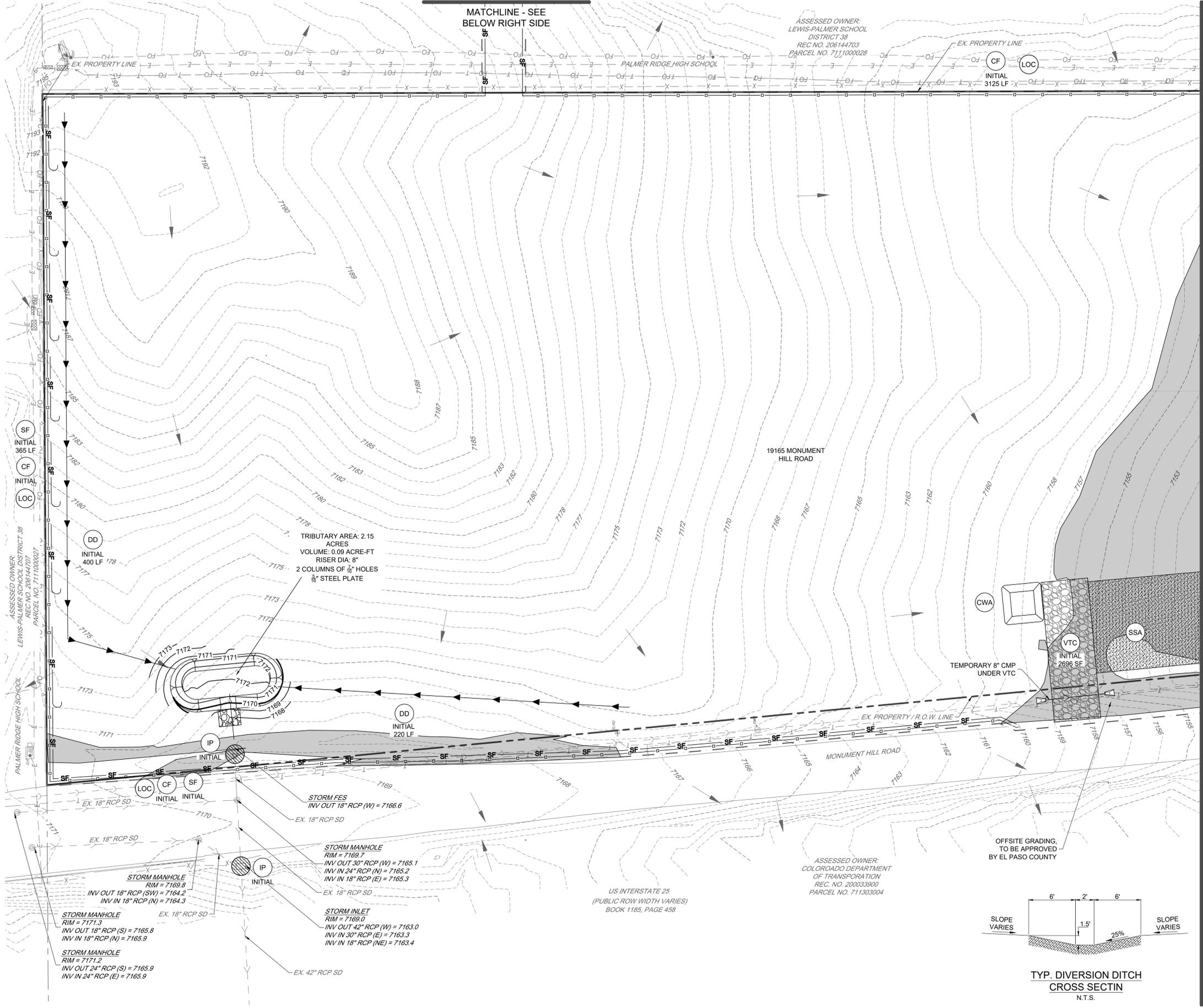
**15 Redland**  
 WHERE GREAT PLACES BEGIN  
 YEARS  
 720.283.6793  
 REDLAND, CO  
 • Land Planning  
 • Landscape Architecture  
 • Civil Engineering  
 • Construction Management

**NOT FOR CONSTRUCTION**

PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
 GRADING PLAN  
 SHEET  
**EC2.2**

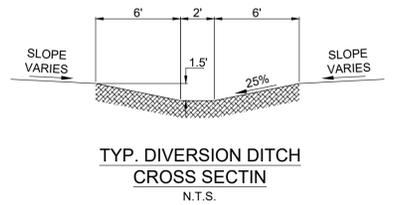
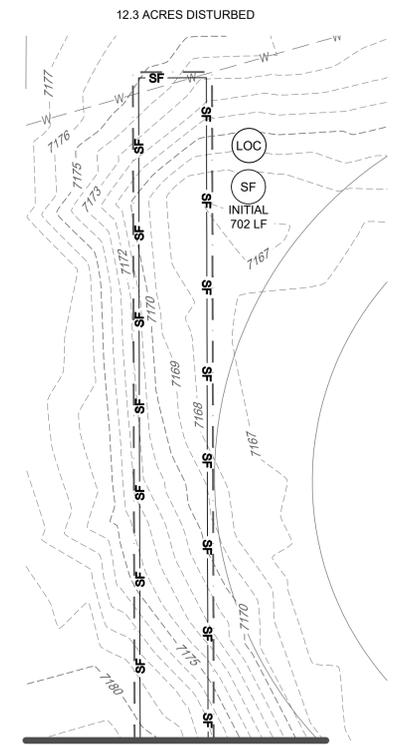
I:\2023\23009 - The Rock Commerce Center\Sheet Sets\CECC\The Rock\23009\_Initial Erosion Control Plan.dwg tab: 7 OF 24 INITIAL EROSION CONTROL PLAN Nov. 20, 2023 - 7:35am csalz



### LEGEND

	(CWA)	CONCRETE WASHOUT AREA
	(CF)	CONSTRUCTION FENCE
	(DD)	DIVERSION DITCH
	(IP)	INLET PROTECTION
	(OP)	OUTLET PROTECTION
	(SB)	SEDIMENT BASIN
	(SF)	SILT FENCE
	(SCL)	SEDIMENT CONTROL LOG
	(SSA)	STABILIZED STAGING AREA
	(VTC)	VEHICLE TRACKING CONTROL
	(ECB)	EROSION CONTROL BLANKET
	(LOC)	LIMITS OF CONSTRUCTION
	(ST)	SEDIMENT TRAP
		FLOW ARROW
	(CS)	CURB SOCK
	(SM)	SEEDING AND MULCHING
	(X)	REMOVE INDICATED BMP
		AREA OF CUT
		AREA OF FILL

MATCHLINE - SEE SHEET NO. EC3.2



MATCHLINE - SEE ABOVE EAST SIDE OF SITE

SCALE: 1" = 30'

**15 Redland**  
 YEARS WHERE GREAT PLACES BEGIN

720.283.6793  
 REDLAND.CO.VA • Landscape Architecture  
 • Land Planning • Civil Engineering • Construction Management

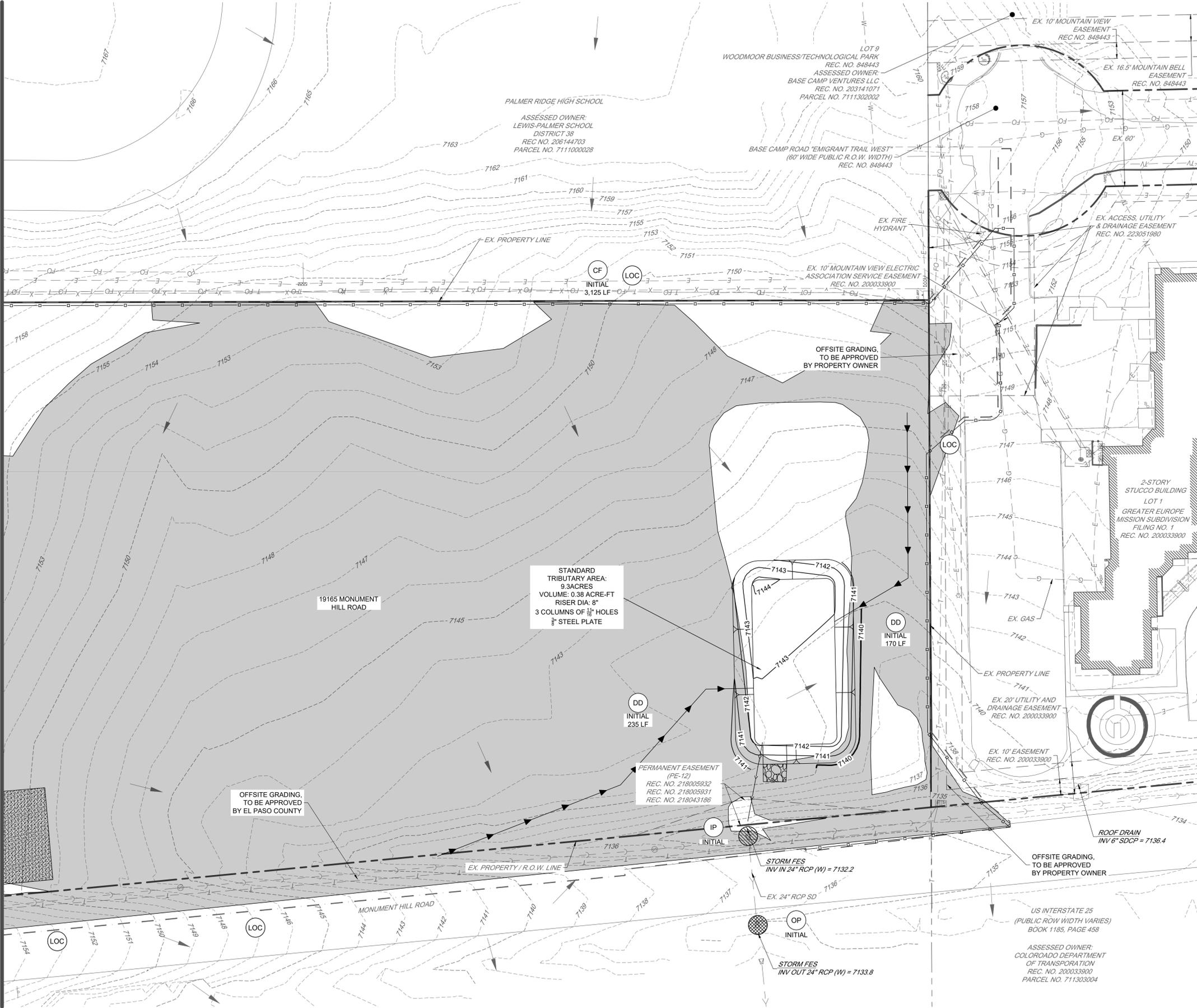
**NOT FOR CONSTRUCTION**

PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
 INITIAL EROSION CONTROL PLAN

I:\2023\23009 - The Rock Commerce Center\CADD\Sheet Sets\GEC\The Rock\23009\_Initial Erosion Control Plan.dwg tab: 8 OF 24 INITIAL EROSION CONTROL PLAN Nov. 20, 2023 - 7:35am csalz

MATCHLINE - SEE SHEET NO. EC3.1



**LEGEND**

	(CWA)	CONCRETE WASHOUT AREA
	(CF)	CONSTRUCTION FENCE
	(DD)	DIVERSION DITCH
	(IP)	INLET PROTECTION
	(OP)	OUTLET PROTECTION
	(SB)	SEDIMENT BASIN
	(SF)	SILT FENCE
	(SCL)	SEDIMENT CONTROL LOG
	(SSA)	STABILIZED STAGING AREA
	(VTC)	VEHICLE TRACKING CONTROL
	(ECB)	EROSION CONTROL BLANKET
	(LOC)	LIMITS OF CONSTRUCTION
	(ST)	SEDIMENT TRAP
		FLOW ARROW
	(CS)	CURB SOCK
	(SM)	SEEDING AND MULCHING
	(X)	REMOVE INDICATED BMP
		AREA OF CUT
		AREA OF FILL
		12.3 ACRES DISTURBED

**TYP. DIVERSION DITCH CROSS SECTION**  
N.T.S.

**15 Redland**  
YEARS WHERE GREAT PLACES BEGIN

720.283.6793  
REDLAND.CO.VA

• Land Planning  
• Landscape Architecture  
• Civil Engineering  
• Construction Management

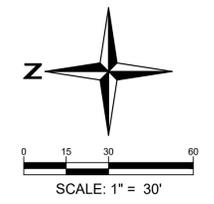
**NOT FOR CONSTRUCTION**

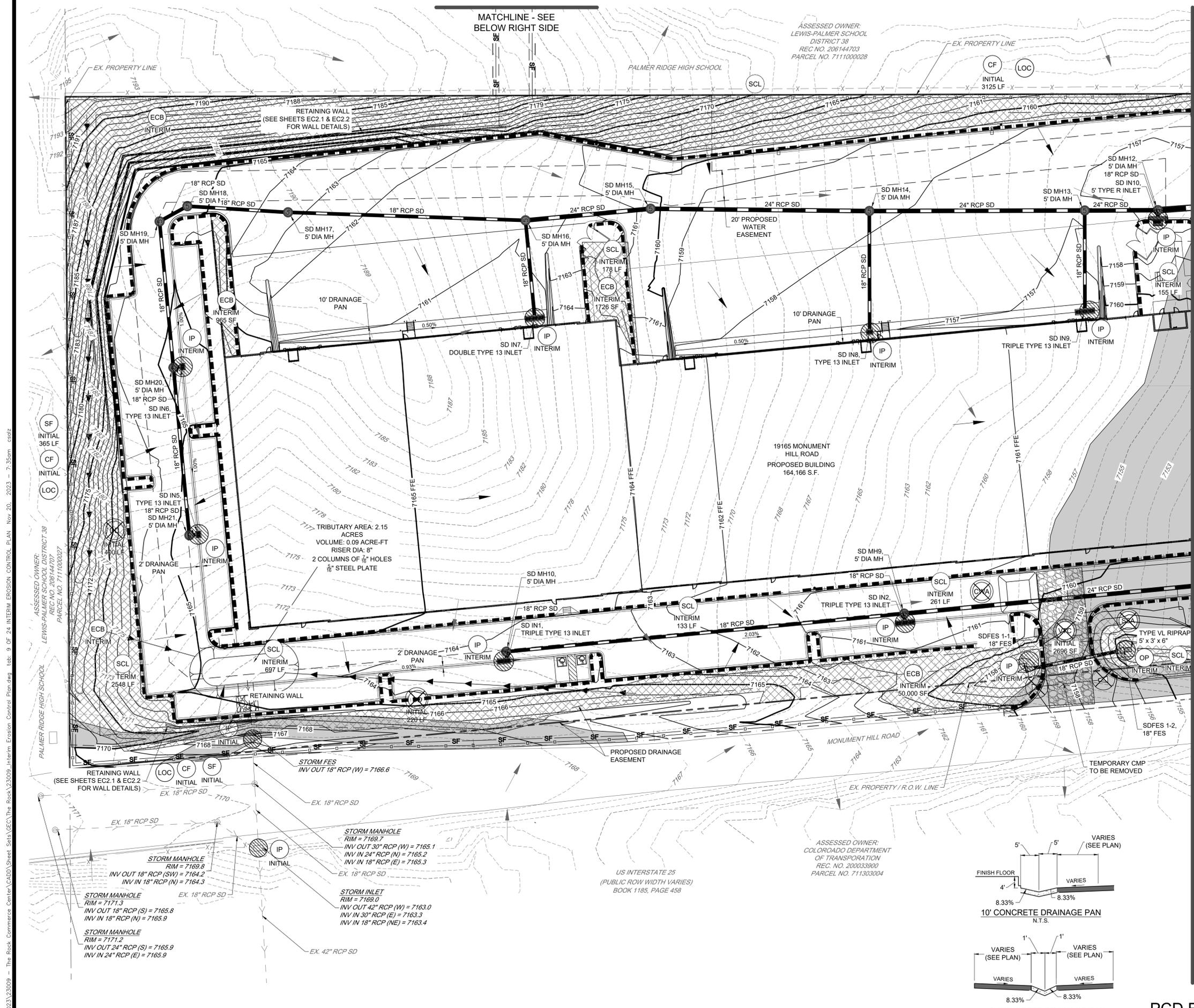
PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
INITIAL EROSION CONTROL PLAN

SHEET  
**EC3.2**

PCD FILE NO. PPR2329

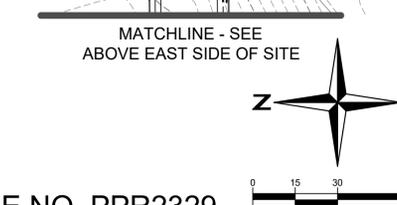
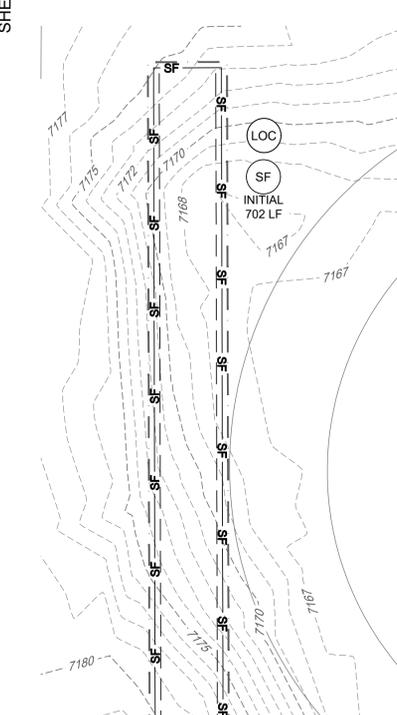




**LEGEND**

- CWA CONCRETE WASHOUT AREA
- CF CONSTRUCTION FENCE
- DD DIVERSION DITCH
- IP INLET PROTECTION
- OP OUTLET PROTECTION
- SB SEDIMENT BASIN
- SF SILT FENCE
- SCL SEDIMENT CONTROL LOG
- SSA STABILIZED STAGING AREA
- VTC VEHICLE TRACKING CONTROL
- ECB EROSION CONTROL BLANKET
- LOC LIMITS OF CONSTRUCTION
- ST SEDIMENT TRAP
- FLOW ARROW
- CS CURB SOCK
- SM SEEDING AND MULCHING
- REMOVE INDICATED BMP
- AREA OF CUT
- AREA OF FILL

MATCHLINE - SEE SHEET NO. EC3.4



PCD FILE NO. PPR2329

**15 Redland**  
 YEARS WHERE GREAT PLACES BEGIN

720.283.6793  
 LANDSCAPE ARCHITECTURE  
 REDLAND, CO • CIVIL ENGINEERING • CONSTRUCTION MANAGEMENT

**NOT FOR CONSTRUCTION**

PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

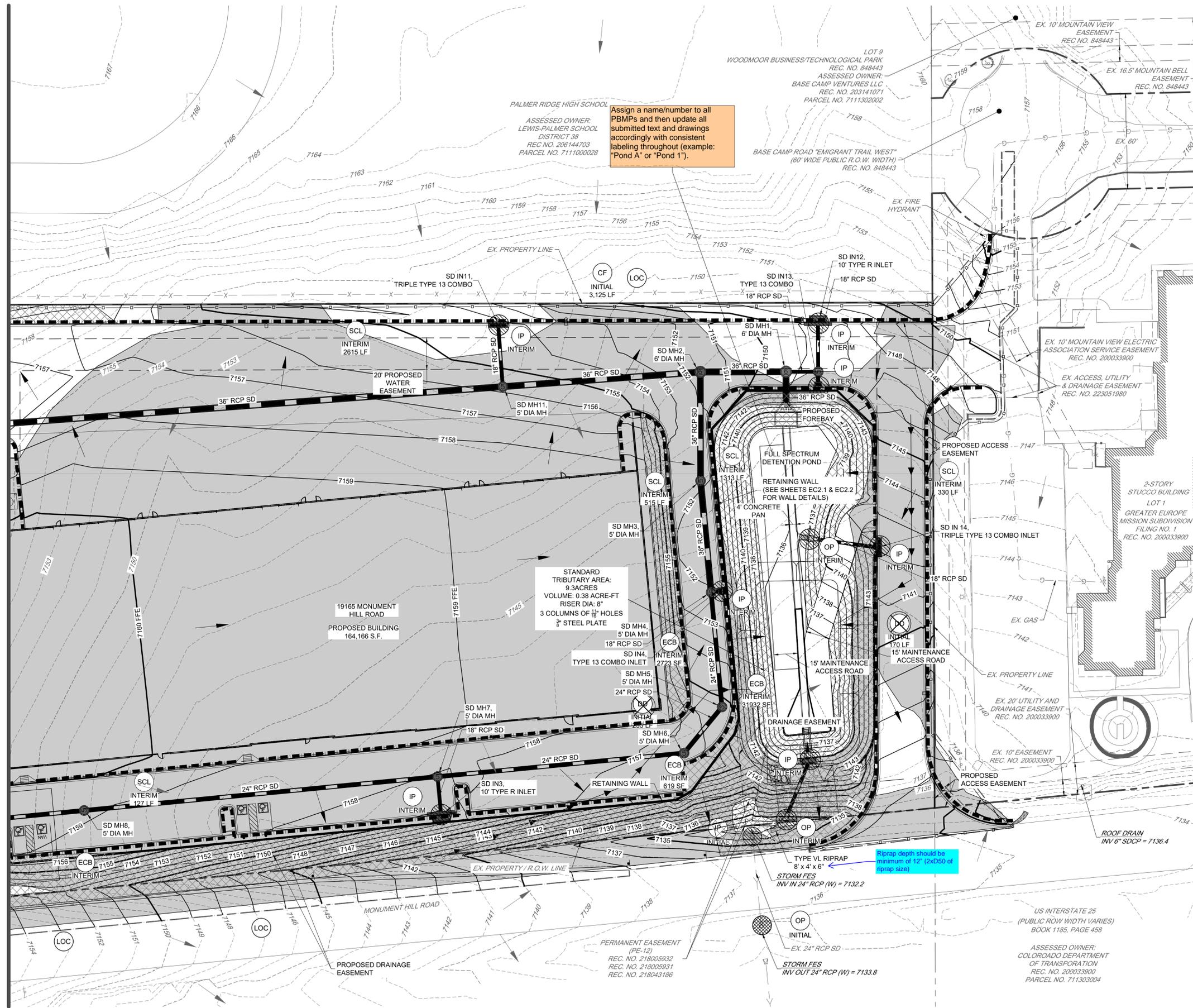
**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
 INTERIM EROSION CONTROL PLAN

SHEET  
**EC3.3**

I:\2023\23009 - The Rock Commerce Center\CAD\Sheet Sets\GECC\The Rock\23009\_Interim Erosion Control Plan.dwg Tab: 9 OF 24 INTERIM EROSION CONTROL PLAN Nov 20, 2023 - 7:35am csolz

I:\2023\23009 - The Rock Commerce Center\CADD\Sheet Sets\GECC\The Rock\23009\_Interim Erosion Control Plan.dwg Tab: 10 OF 24 INTERIM EROSION CONTROL PLAN Nov 20, 2023 - 7:36am caabz

MATCHLINE - SEE SHEET NO. EC3.3

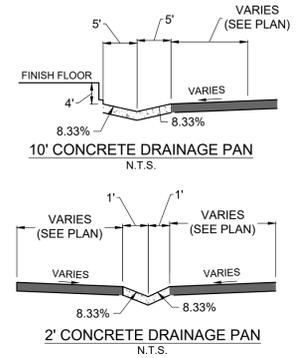


Assign a name/number to all PBMPs and then update all submitted text and drawings accordingly with consistent labeling throughout (example: "Pond A" or "Pond 1").

**LEGEND**

- CWA CONCRETE WASHOUT AREA
- CF CONSTRUCTION FENCE
- DD DIVERSION DITCH
- IP INLET PROTECTION
- OP OUTLET PROTECTION
- SB SEDIMENT BASIN
- SF SILT FENCE
- SCL SEDIMENT CONTROL LOG
- SSA STABILIZED STAGING AREA
- VTC VEHICLE TRACKING CONTROL
- ECB EROSION CONTROL BLANKET
- LOC LIMITS OF CONSTRUCTION
- ST SEDIMENT TRAP
- FLOW ARROW
- CS CURB SOCK
- SM SEEDING AND MULCHING
- REMOVE INDICATED BMP
- AREA OF CUT
- AREA OF FILL

FULL SPECTRUM POND SUMMARY		
ZONE	VOLUME (AC-FT)	WATER ELEV.
WQCV	0.294	7137.55
EURV	0.675	7140.11
100-YEAR	0.518	7141.64



Riprap depth should be minimum of 12" (2xD50 of riprap size)

**15 Redland**  
 YEARS WHERE GREAT PLACES BEGIN  
 720.283.6793  
 REDLAND.CO  
 Land Planning • Landscape Architecture  
 Civil Engineering • Construction Management

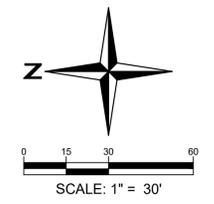
**NOT FOR CONSTRUCTION**

PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

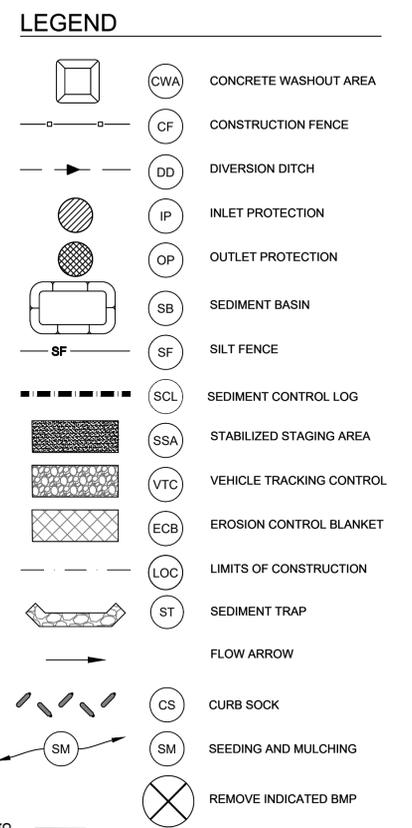
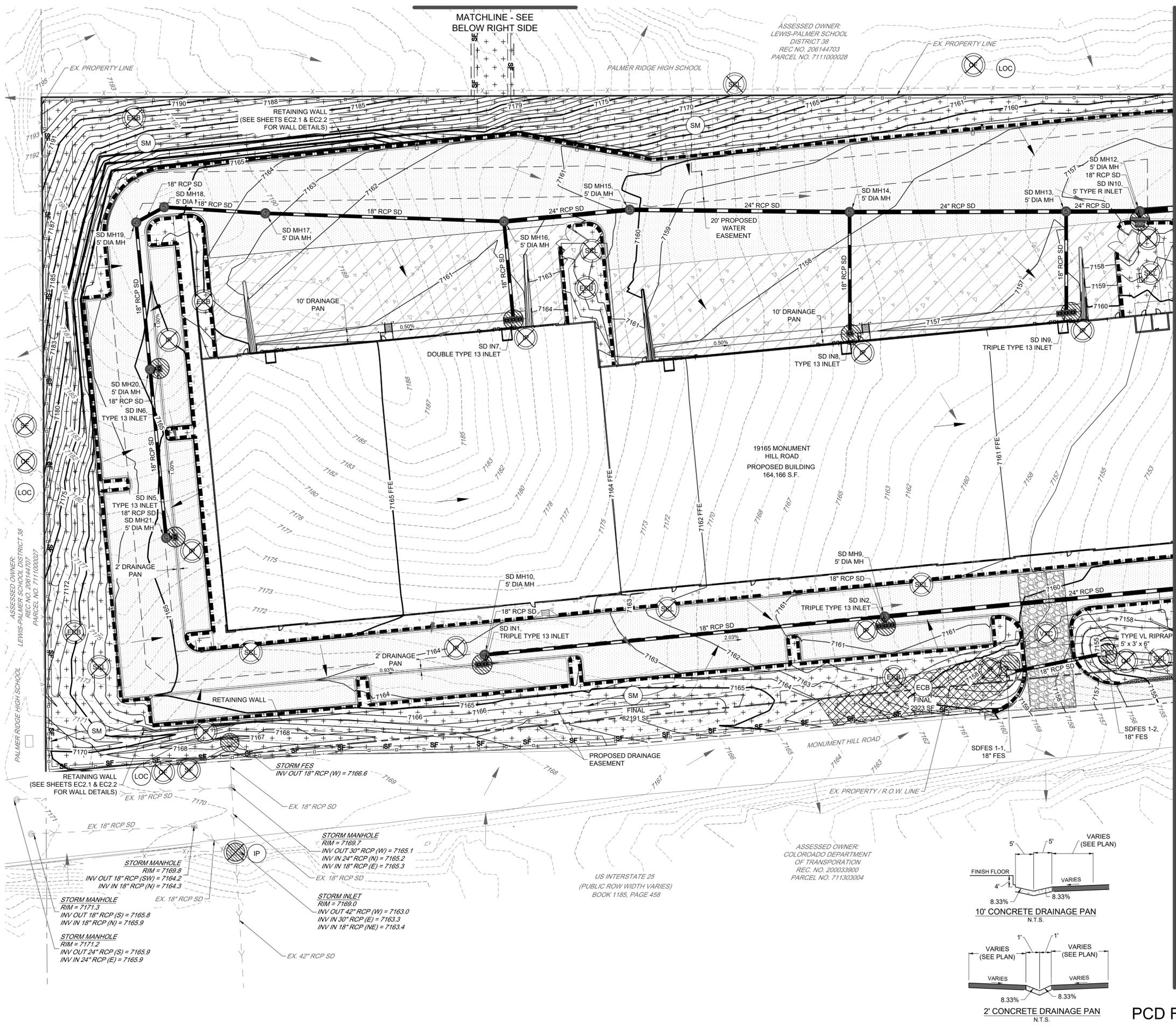
**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
 INTERIM EROSION CONTROL PLAN

SHEET  
**EC3.4**

PCD FILE NO. PPR2329

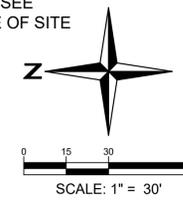
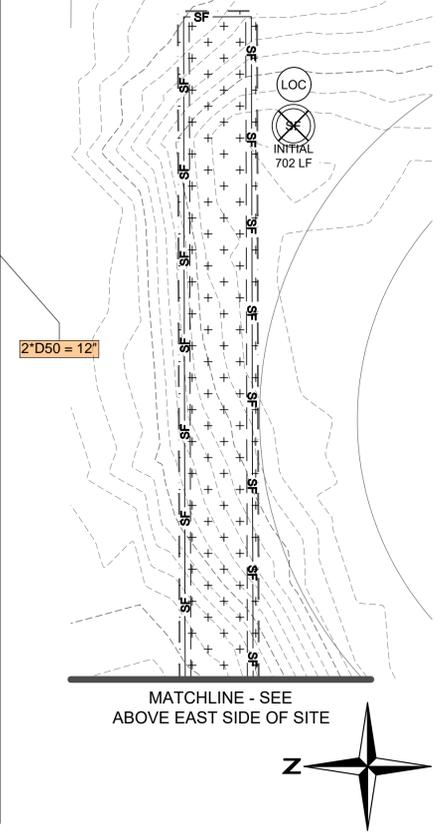


I:\2023\23009 - The Rock Commerce Center\Sheet Sets\GECC\The Rock\23009\_Final Erosion Control Plan.dwg tab: 9 OF 24 FINAL EROSION CONTROL PLAN Nov 20, 2023 - 7:36am esatz



SEEDING AND MULCHING = 124,089 SF  
 PERMANENT EROSION CONTROL BLANKET = 16,058 SF

MATCHLINE - SEE SHEET NO. EC3.6



**15 Redland**  
 YEARS WHERE GREAT PLACES BEGIN

720.283.6793  
 LANDSCAPE ARCHITECTURE  
 REDLAND, CO • Civil Engineering • Construction Management

**NOT FOR CONSTRUCTION**

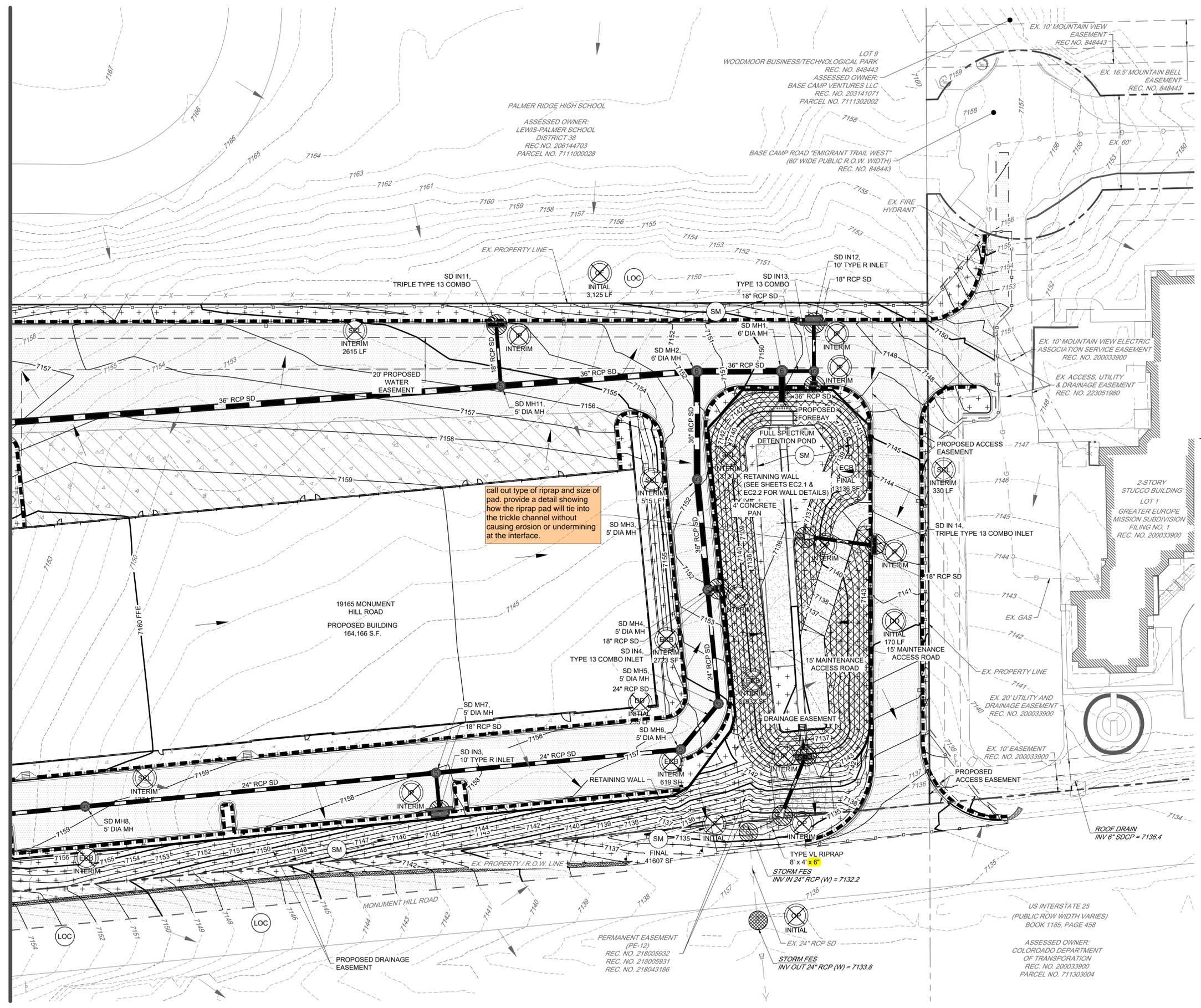
PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
 FINAL EROSION CONTROL PLAN

SHEET  
**EC3.5**

PCD FILE NO. PPR2329

I:\2023\23009 - The Rock Commerce Center\CADD\Sheet Sets\EC3\The Rock Commerce Center\_Final Erosion Control Plan.dwg tab: 10 OF 24 FINAL EROSION CONTROL PLAN Nov 20, 2023 - 7:36am ccsz  
 MATCHLINE - SEE SHEET NO. EC3.5

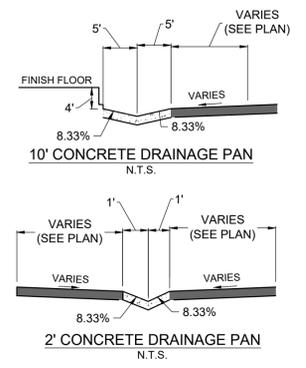


call out type of riprap and size of pad, provide a detail showing how the riprap pad will tie into the trickle channel without causing erosion or undermining at the interface.

### LEGEND

	(CWA)	CONCRETE WASHOUT AREA
	(CF)	CONSTRUCTION FENCE
	(DD)	DIVERSION DITCH
	(IP)	INLET PROTECTION
	(OP)	OUTLET PROTECTION
	(SB)	SEDIMENT BASIN
	(SF)	SILT FENCE
	(SCL)	SEDIMENT CONTROL LOG
	(SSA)	STABILIZED STAGING AREA
	(VTC)	VEHICLE TRACKING CONTROL
	(ECB)	EROSION CONTROL BLANKET
	(LOC)	LIMITS OF CONSTRUCTION
	(ST)	SEDIMENT TRAP
		FLOW ARROW
	(CS)	CURB SOCK
	(SM)	SEEDING AND MULCHING
	(X)	REMOVE INDICATED BMP

FULL SPECTRUM POND SUMMARY		
ZONE	VOLUME (AC-FT)	WATER ELEV.
WQCV	0.294	7137.55
EURV	0.675	7140.11
100-YEAR	0.518	7141.64



**15 Redland**  
 YEARS WHERE GREAT PLACES BEGIN  
 720.283.6793  
 REDLAND.CO  
 • Land Planning • Landscape Architecture  
 • Civil Engineering • Construction Management

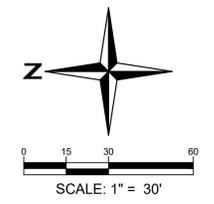
**NOT FOR CONSTRUCTION**

PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
 FINAL EROSION CONTROL PLAN

SHEET  
**EC3.6**

PCD FILE NO. PPR2329



**Shallow Slope**  
On shallow slopes, strips of netting may be applied across the slope.

Where there is a berm at the top of the slope, bring the netting over the berm and anchor it behind the berm.

**Steep Slope**  
On steep slopes, apply strips of netting parallel to the direction of flow and anchor securely.

Bring netting down to a level area before terminating the installation. Turn the end under 6" and staple at 12" intervals.

**Ditch**  
In ditches, apply netting parallel to the direction of flow. Use check slots every 15 feet. Do not join strips in the center of the ditch.

City of Colorado Springs Storm Water Quality  
Figure ECB-1 Erosion Control Blanket Application Examples

**Anchor Slot**: Bury the up-channel end of the net in a 6" deep trench. Tamp the soil firmly. Staple at 12" intervals across the net.

**Overlap**: Overlap edges of the strips at least 4". Staple every 3 feet down the center of the strip.

**Joining Strips**: Insert the new roll of net in a trench, as with the Anchor Slot. Overlap the up-channel end of the previous roll 18" and turn the end under 6". Staple the end of the previous roll just below the anchor slot and at the end at 12" intervals.

**Check Slots**: On erodible soils or steep slopes, check slots should be made every 15 feet. Insert a fold of the net into a 6" trench and tamp firmly. Roll the net up the channel. Place staples at 12" intervals along the anchor end of the net.

**Anchoring Ends At Structures**: Place the end of the net in a 6" slot on the up-channel side of the structure. Fill the trench and tamp firmly. Roll the net up the channel. Place staples at 12" intervals along the anchor end of the net.

City of Colorado Springs Storm Water Quality  
Figure ECB-2 Erosion Control Blanket Installation Requirements

**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 Storm Water Quality  
Figure VT-2 Vehicle Tracking Application Examples

**Table SF-1**

Silt Fence Used as Perimeter Control	Case 1		Case 2
	DA < 0.25 AC	0.25 < DA < 1 AC	DA > 1.0 AC
Continuous Grade	OK <sup>(1)</sup>	OK <sup>(1)</sup>	OK <sup>(1)</sup>
Area of Concentrated Flow	OK	NO <sup>(2)</sup>	NO <sup>(3)</sup>

(1) Temporary Stone or Straw Bale Barrier may be used as alternative to a Silt Fence.  
(2) Check Dam may also be used as alternative to Silt Fence at low point.  
(3) Sediment Basin is required for concentrated flow from drainage areas > 1.0 AC.

City of Colorado Springs Storm Water Quality  
Figure SF-1 Silt Fence Application Examples

**Top View of Silt Fence Posts Detail**

Refer to 'Top View of Silt Fence Posts Detail'

City of Colorado Springs Storm Water Quality  
Figure SF-3 Silt Fence Joint Tying Construction Detail and Maintenance Requirements

**SILT FENCE NOTES**

**INSTALLATION REQUIREMENTS**

1. SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
2. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
3. METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
4. THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/16" LONG #8 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
5. WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG. THE WIRES OR HOOD RINGS, THE WIRES SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 7" ABOVE THE ORIGINAL GROUND SURFACE.
6. ALONG THE TOE OF FILLS, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOE OF THE FILL IS RECOMMENDED.
7. THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES. HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

**MAINTENANCE REQUIREMENTS**

1. CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL. DAMAGED, COLLAPSED, UNENTRENCHED OR INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
2. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
3. SILT FENCES SHALL BE REMOVED WHEN APPROPRIATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

City of Colorado Springs Storm Water Quality  
Figure SF-2 Silt Fence Construction Detail and Maintenance Requirements

**MULCHING NOTES**

**INSTALLATION REQUIREMENTS**

1. ALL DISTURBED AREAS MUST BE MULCHED WITHIN 21 DAYS AFTER FINAL GRADE AND SEEDING AREAS ARE TO BE MULCHED WITHIN 24 HOURS AFTER SEEDING.
2. MATERIAL USED FOR MULCH CAN BE CERTIFIED CLEAN, WEED- AND SEED-FREE LONG STEMMED FIELD OR MARSH HAY, OR STRAW OF OATS, BARLEY, WHEAT, RYE, OR TRITICALE CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE WEED FREE FORAGE CERTIFICATION PROGRAM.
3. HYDRALIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBER MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL. GRAVEL CAN ALSO BE USED.
4. MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.
5. MULCH IS TO BE ANCHORED EITHER BY CRIMPING/TUCKING MULCH FIBERS 4 INCHES INTO THE SOIL, USING NETTING (USED ON SMALL AREAS WITH STEEP SLOPES), OR WITH A TACKIFIER.
6. HYDRALIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN THE PRESENCE OF FRESH SURFACE WATER.

**MAINTENANCE REQUIREMENTS**

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED AREAS.
2. MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE RESEED.

City of Colorado Springs Storm Water Quality  
Figure MU-1 Mulching Construction Detail and Maintenance Requirements

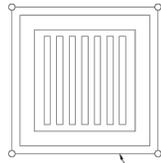
**15 Redland YEARS**  
WHERE GREAT PLACES BEGIN  
720.283.6793  
REDLAND.CO.VO • Land Planning • Landscape Architecture • Civil Engineering • Construction Management

**NOT FOR CONSTRUCTION**

PROJECT NO.: 23009  
DATE: 07/28/2023  
NO. 1  
DATE: 10/20/2023  
NO. 2  
DATE: 11/17/2023  
NO. 3

THE ROCK COMMERCE CENTER  
GRADING AND EROSION CONTROL PLANS  
GEC DETAILS

PCD FILE NO. PPR2329  
EC4.1



**FILTER FABRIC INLET PROTECTION**  
NTS

**FILTER FABRIC INLET PROTECTION NOTES**

**INSTALLATION REQUIREMENTS**

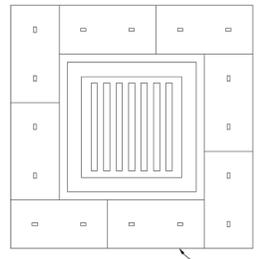
1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
2. SEE S&T FIGURE SB-2 FOR INSTALLATION REQUIREMENTS.
3. PORTS ARE TO BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

**MAINTENANCE REQUIREMENTS**

1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED OR COLLAPSED UNFENCED OR UNSUPPORTED INLET PROTECTION SHALL BE PROMPTLY REPAIRED OR REPLACED.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND FILTER FABRIC WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
4. FILTER FABRIC PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED IN THE DRAINAGE AREA AS APPROVED BY THE CITY.

City of Colorado Springs  
Stormwater Quality

**Figure IP-1**  
Filter Fabric Inlet Protection  
Construction Detail and Maintenance Requirements



**STRAW BALE INLET PROTECTION**  
NTS

**STRAW BALE INLET PROTECTION NOTES**

**INSTALLATION REQUIREMENTS**

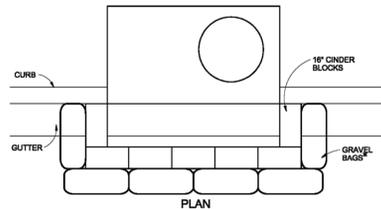
1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
2. BALES ARE TO BE PLACED IN A SINGLE ROW AROUND THE INLET WITH THE END OF THE BALES TIGHTLY ABUTTING ONE ANOTHER.
3. SEE STRAW BALE BARRIER FIGURE SB8-2 FOR INSTALLATION REQUIREMENTS.

**MAINTENANCE REQUIREMENTS**

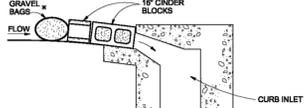
1. CONTRACTOR SHALL INSPECT STRAW BALE INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED. REPLACING BALES IF NECESSARY, AND UNFENCED BALES NEED TO BE REPAIRED WITH COMPACTED BACKFILL MATERIAL.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND STRAW BALES WHEN IT ACCUMULATES TO APPROXIMATELY 1/2 THE HEIGHT OF THE BARRIER.
4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.

City of Colorado Springs  
Stormwater Quality

**Figure IP-2**  
Straw Bale Inlet Protection  
Construction Detail and Maintenance Requirements



PLAN



SECTION

**BLOCK AND GRAVEL BAG CURB INLET PROTECTION**  
NTS

**BLOCK AND GRAVEL BAG CURB INLET PROTECTION NOTES**

**INSTALLATION REQUIREMENTS**

1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
2. CONCRETE BLOCKS ARE TO BE LAID AROUND THE INLET IN A SINGLE ROW ON THEIR SIDES, ABUTTING ONE ANOTHER WITH THE OPEN END OF THE BLOCK FACING OUTWARD.
3. GRAVEL BAGS ARE TO BE PLACED AROUND THE CONCRETE BLOCKS CLOSELY ABUTTING ONE ANOTHER SO THERE ARE NO GAPS.
4. GRAVEL BAGS ARE TO CONTAIN WASHED SAND OR GRAVEL, APPROXIMATELY 3/4 INCH IN DIAMETER.
5. BAGS ARE TO BE MADE OF 1/4" INCH WIRE MESH (USED WITH GRAVEL ONLY) OR GEOTEXTILE.

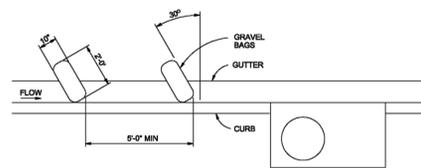
**MAINTENANCE REQUIREMENTS**

1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.
3. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DEPTH OF THE TRAP.
4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.

\* AN ALTERNATE 3/4" TO 1" GRAVEL FILTER OVER A WIRE SCREEN MAY BE USED IN PLACE OF GRAVEL BAGS. THE WIRE MESH SHALL EXTEND ABOVE THE TOP OF THE CONCRETE BLOCKS AND THE GRAVEL PLACED OVER THE WIRE SCREEN TO THE TOP OF THE CONCRETE BLOCKS.

City of Colorado Springs  
Stormwater Quality

**Figure IP-3**  
Block & Gravel Bag Curb Inlet Protection  
Construction Detail and Maintenance Requirements



**CURB SOCK INLET PROTECTION**  
NTS

**CURB SOCK INLET PROTECTION NOTES**

**INSTALLATION REQUIREMENTS**

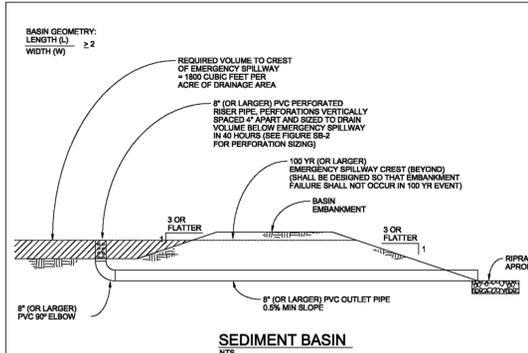
1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
2. SOCK IS TO BE MADE OF 1/4 INCH WIRE MESH (USED WITH GRAVEL ONLY) OR GEOTEXTILE.
3. WASHED SAND OR GRAVEL 3/4 INCH TO 4 INCHES IN DIAMETER IS PLACED INSIDE THE SOCK.
4. PLACEMENT OF THE SOCK IS TO BE 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
5. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED AT A MINIMUM 3 FEET APART.
6. AT LEAST 2 CURB SOCKS IN SERIES IS REQUIRED.

**MAINTENANCE REQUIREMENTS**

1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SOCK WHEN GUTTER WIDTH IS FILLED.
4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.

City of Colorado Springs  
Stormwater Quality

**Figure IP-4**  
Curb Sock Inlet Protection  
Construction Detail and Maintenance Requirements



**SEDIMENT BASIN**  
NTS

**SEDIMENT BASIN NOTES**

**INSTALLATION REQUIREMENTS**

1. SEDIMENT BASINS SHALL BE INSTALLED BEFORE ANY CLEARING AND/OR GRADING IS UNDERTAKEN.
2. THE AREA UNDER WHICH THE EMBANKMENT IS TO BE INSTALLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ALL VEGETATION AND ROOT MAT.
3. THE OUTLET OF THE BASIN SHALL BE DESIGNED TO DRAIN ITS VOLUME IN 40 HOURS.
4. THE OUTLET IS TO BE LOCATED AT THE FURTHEST DISTANCE FROM THE INLET OF THE BASIN. Baffles MAY BE NEEDED TO INCREASE THE FLOW LENGTH AND SETTLING TIME.
5. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL WITH A MINIMUM OF 15% PASSING A #200 SIEVE. EXCAVATED SOIL CAN BE USED IF IT MEETS THIS REQUIREMENT.
6. EMBANKMENT IS TO BE COMPACTED TO AT LEAST 80% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.
7. WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A FENCE.

**MAINTENANCE REQUIREMENTS**

1. CONTRACTOR SHALL INSPECT SEDIMENT BASINS AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. SEDIMENT BASINS SHALL BE CLEANED OUT BEFORE SEDIMENT HAS FILLED HALF THE VOLUME OF THE BASIN.
3. SEDIMENT BASINS SHALL REMAIN OPERATIONAL AND PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED WITH ADEQUATE VEGETATIVE COVER AND/OR OTHER PERMANENT STRUCTURE AS APPROVED BY THE CITY.

City of Colorado Springs  
Stormwater Quality

**Figure SB-1**  
Sediment Basin  
Construction Detail and Maintenance Requirements

Design Volume (cubic feet)	Required Area per Row (ft <sup>2</sup> )								
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
2	15.04	17.71	5.10	3.76	2.95	2.41	2.02	1.73	
1	7.52	3.86	2.55	1.88	1.48	1.21	1.01	0.87	
0.8	4.81	2.31	1.63	1.13	0.89	0.72	0.61	0.52	
0.4	3.01	1.54	1.02	0.75	0.59	0.48	0.40	0.35	
0.2	1.50	0.77	0.51	0.38	0.30	0.24	0.20	0.17	
0.1	0.75	0.39	0.26	0.19	0.15	0.12	0.10	0.09	
0.08	0.45	0.23	0.15	0.11	0.09	0.07	0.06	0.05	
0.04	0.30	0.16	0.10	0.08	0.06	0.05	0.04	0.03	
0.02	0.15	0.08	0.05	0.04	0.03	0.02	0.02	0.02	
0.01	0.08	0.04	0.03	0.02	0.01	0.01	0.01	0.01	

**TABLE SB-1**

Hole Diameter (in)	Hole Diameter (in)	Area per Row (ft <sup>2</sup> )		
		n = 1	n = 2	n = 3
1/4	0.250	0.05	0.10	0.15
5/16	0.313	0.08	0.15	0.23
3/8	0.375	0.11	0.22	0.33
7/16	0.438	0.15	0.30	0.45
1/2	0.500	0.20	0.39	0.59
9/16	0.563	0.25	0.50	0.75
5/8	0.625	0.31	0.61	0.92
11/16	0.688	0.37	0.74	1.11
3/4	0.750	0.44	0.88	1.33
7/8	0.875	0.60	1.20	1.80
1	1.000	0.79	1.57	2.36
1 1/8	1.125	0.99	1.99	2.98
1 1/4	1.250	1.23	2.45	3.68
1 3/8	1.375	1.48	2.97	4.45
1 1/2	1.500	1.77	3.53	5.30
1 5/8	1.625	2.07	4.15	6.22
1 3/4	1.750	2.41	4.81	7.22
1 7/8	1.875	2.78	5.52	8.28
2	2.000	3.14	6.28	9.42

**TABLE SB-2**

City of Colorado Springs  
Stormwater Quality

**Figure SB-2**  
Outlet Sizing  
Application Techniques and Maintenance Requirements

**RECOMMENDED ANNUAL GRASSES**

SPECIES (COMMON NAME)	GROWTH SEASON	SEEDING DATE	POUNDS OF PURE LIVE SEED (PLS) (PL/SQYD)	PLANTING DEPTH (INCHES)
1. OATS	COOL	MARCH 16 - APRIL 30	35-50	1-2
2. SPRING WHEAT	COOL	MARCH 16 - APRIL 30	25-35	1-2
3. SPRING BARLEY	COOL	MARCH 16 - APRIL 30	25-35	1-2
4. ANNUAL KYRGASS	COOL	MARCH 16 - JUNE 30	10-15	1/2
5. MILLET	WARM	MAY 16 - JULY 15	3-15	1/2-3/4
6. BLUINGRASS	WARM	MAY 16 - JULY 15	5-10	1/2-3/4
7. SORGHAM	WARM	MAY 16 - JULY 15	5-10	1/2-3/4
8. WINTER WHEAT	COOL	SEPTEMBER 1 - 30	20-35	1-2
9. WINTER BARLEY	COOL	SEPTEMBER 1 - 30	20-35	1-2
10. WINTER RYE	COOL	SEPTEMBER 1 - 30	20-35	1-2
11. TRITICALE	COOL	SEPTEMBER 1 - 30	25-40	1-2

THIS TABLE WAS TAKEN FROM UDFOR FOR RECOMMENDED ANNUAL GRASSES FOR THE DENVER METROPOLITAN AREA. THIS TABLE MAY BE USED UNLESS A SITE-SPECIFIC SEED MIX IS REQUESTED AND APPROVED.

**TABLE TS-1**

**TEMPORARY SEEDING NOTES**

**INSTALLATION REQUIREMENTS**

1. DISTURBED AREAS ARE TO BE SEEDS WITHIN 21 DAYS AFTER CONSTRUCTION ACTIVITY OR GRADING ENDS IF SEASON ALLOWS.
2. IF NECESSARY, SOIL IS TO BE CONDITIONED FOR PLANT GROWTH BY APPLYING TOPSOIL, FERTILIZER, OR LIMES.
3. SOIL IS TO BE TILLED IMMEDIATELY PRIOR TO APPLYING SEEDS. CONTACT SOILS ESPECIALLY NEED TO BE LOOSENED.
4. SEEDBED DEPTH IS TO BE 4 INCHES FOR SLOPES FLATTER THAN 2:1, AND 1 INCH FOR SLOPES STEEPER THAN 2:1.
5. ANNUAL GRASSES LISTED IN TABLE TS-1 ARE TO BE USED FOR TEMPORARY SEEDING. SEED MIXES ARE NOT TO CONTAIN ANY NOXIOUS WEED SEEDS INCLUDING RUSSIAN OR CANADIAN THISTLE, KNAPWEED, PURPLE LOOSESTRIKE, EUROPEAN BIRNWEED, JOHNSON GRASS, AND LEAFY SPURGE.
6. TABLE TS-1 ALSO PROVIDES REQUIREMENTS FOR SEEDING RATES, SEEDING DATES, AND PLANTING DEPTHS FOR THE APPROVED TYPES OF ANNUAL GRASSES.
7. SEEDING IS TO BE APPLIED USING MECHANICAL TYPE DRILLS EXCEPT WHERE SLOPES ARE STEEP OR ACCESS IS LIMITED THEN HYDRAULIC SEEDING MAY BE USED.
8. ALL SEEDS ARE TO BE MULCHED (SEE FACTSHEET ON MULCHING).
9. IF HYDRAULIC SEEDING IS USED THEN HYDRAULIC MULCHING SHALL BE DONE SEPARATELY TO AVOID SEEDS BECOMING ENCAPSULATED IN THE MULCH.

**MAINTENANCE REQUIREMENTS**

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL SEEDS AREAS TO ENSURE GROWTH.
2. AREAS WHERE GROWTH IS NOT OCCURRING QUICKLY OR THE MULCH HAS BEEN REMOVED SHALL BE RE-SEEDS AS SOON AS POSSIBLE AND RE-MULCHED IF NEEDED.
3. SEEDS AREAS ARE NOT TO BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR VEHICLES.

City of Colorado Springs  
Stormwater Quality

**Figure TS-1**  
Temporary Seeding  
Construction Detail and Maintenance Requirements

**15 Redland YEARS**  
WHERE GREAT PLACES BEGIN

720.283.6793  
REDLAND.CO.VO • Land Planning • Landscape Architecture • Civil Engineering • Construction Management

**NOT FOR CONSTRUCTION**

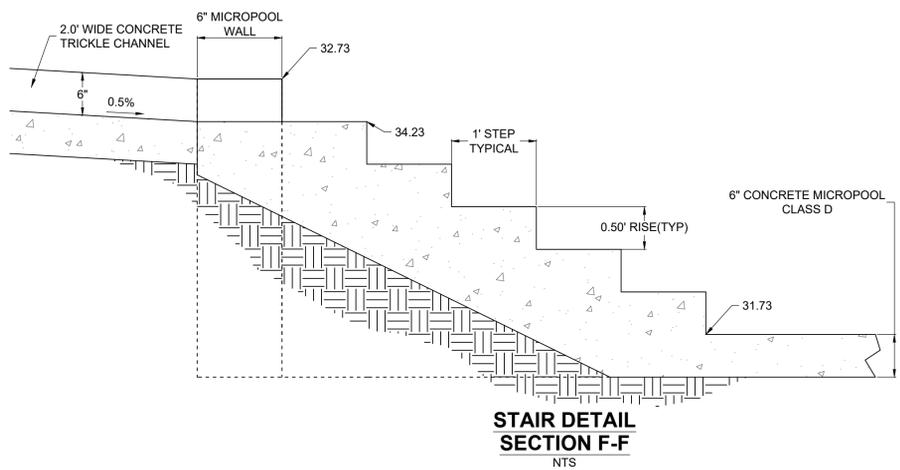
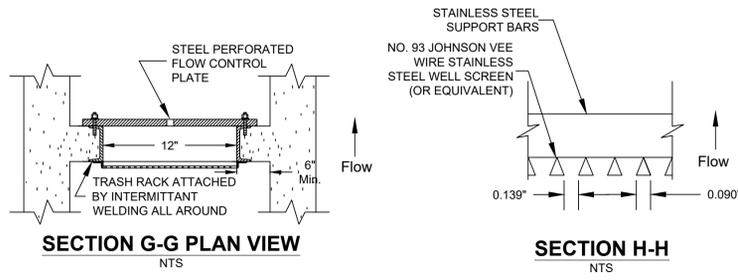
PROJECT NO.	DATE	NO.	NOTES
23009	07/28/2023	1	1ST SUBMITTAL
	10/20/2023	2	2ND SUBMITTAL
	11/17/2023	3	3RD SUBMITTAL

**THE ROCK COMMERCE CENTER**  
**GRADING AND EROSION CONTROL PLANS**  
GEC DETAILS

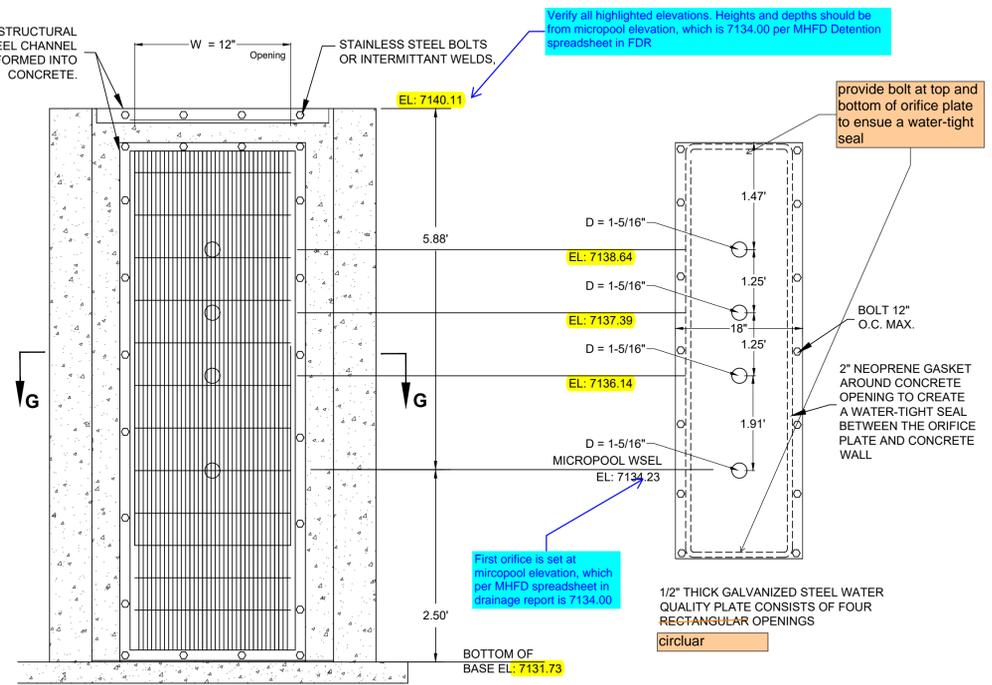
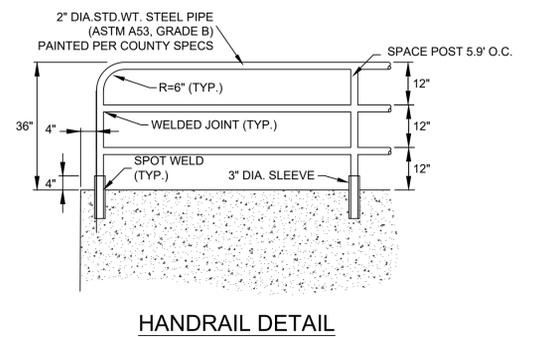
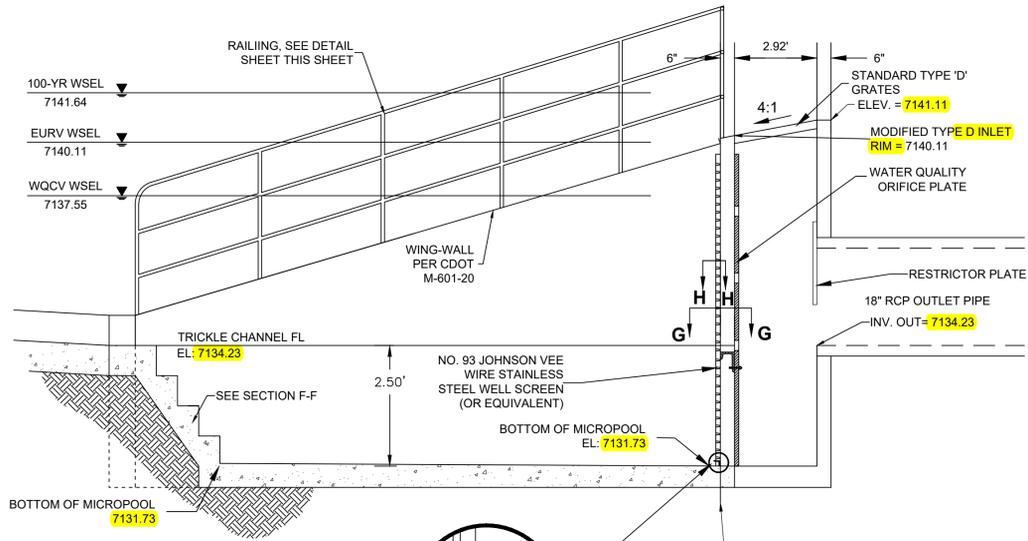
SHEET

Please submit a State Non-Jurisdictional Water Impoundment Structure Application for this pond

NOTES:  
 1) ALL STRUCTURES SHALL CONSIST OF CDOT CLASS D CONCRETE.  
 2) CONTRACTOR TO SUPPLY STRUCTURAL SHOP DRAWINGS FOR ALL STRUCTURES PRIOR TO CONSTRUCTION.



Provide details for:  
 - Outlet Structure  
 - Forebay  
 - Trickle Channel

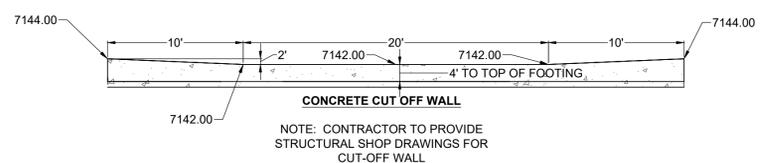
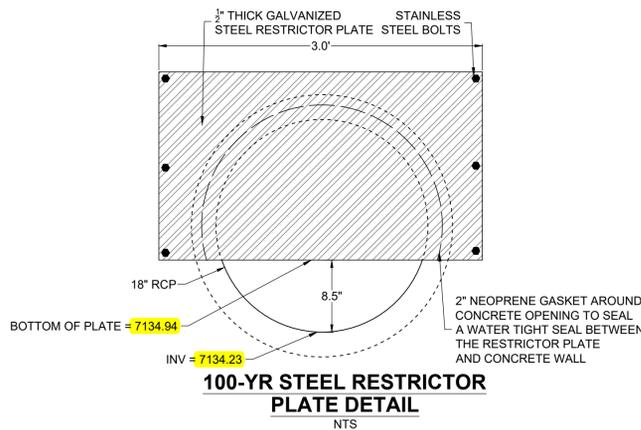
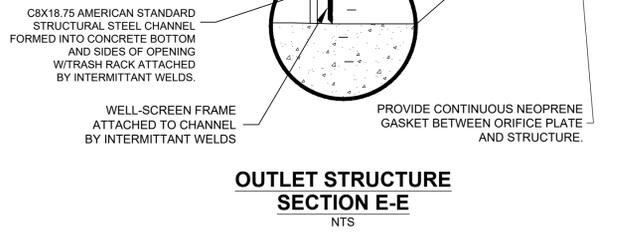


Verify all highlighted elevations. Heights and depths should be from micropool elevation, which is 7134.00 per MHFD Detention spreadsheet in FDR.

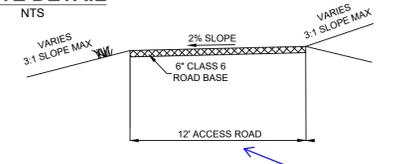
provide bolt at top and bottom of orifice plate to ensure a water-tight seal

First orifice is set at micropool elevation, which per MHFD spreadsheet in drainage report is 7134.00

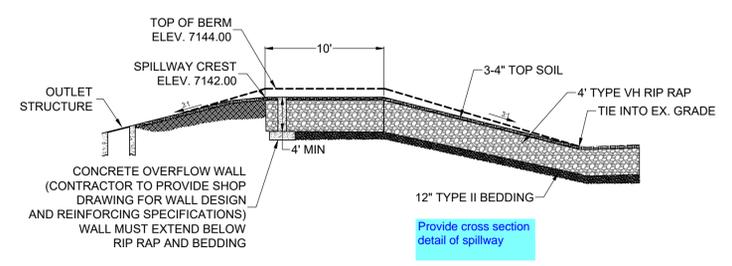
1/2" THICK GALVANIZED STEEL WATER QUALITY PLATE CONSISTS OF FOUR RECTANGULAR OPENINGS circular



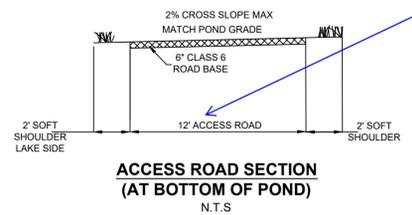
NOTE: CONTRACTOR TO PROVIDE STRUCTURAL SHOP DRAWINGS FOR CUT-OFF WALL



Please revise the minimum access road width is 15'.



Provide cross section detail of spillway



Please label detail

**15 Redland YEARS**  
 WHERE GREAT PLACES BEGIN  
 720.283.6783  
 REDLAND.CO.VA • Land Planning • Landscape Architecture • Civil Engineering • Construction Management

**NOT FOR CONSTRUCTION**

PROJECT NO.	NO.	DATE	NOTES
23009	1	07/28/2023	1ST SUBMITTAL
	2	10/20/2023	2ND SUBMITTAL
	3	11/17/2023	3RD SUBMITTAL

**THE ROCK COMMERCE CENTER GRADING AND EROSION CONTROL PLANS**  
 POND DETAILS



Know what's below. Call before you dig.

PCD FILE NO. PPR2329

EC4.3

I:\2023\23009 - The Rock Commerce Center\CADD\Sheet Sets\GECC\The Rock\23009\_POND\_Details.dwg Lab: POND DETAILS Nov 20, 2023 - 7:36am casal

# V3\_Grading and Erosion Control Plan.pdf Markup Summary

Carlos (2)



**Subject:** Callout  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** Carlos  
**Date:** 11/29/2023 11:31:02 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Please revise the minimum access road width is 15'.

Please label detail

**Subject:** Text Box  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** Carlos  
**Date:** 11/29/2023 11:32:51 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

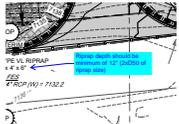
Please label detail

CDurham (20)



**Subject:** Callout  
**Page Label:** [4] EC2.2 GRADING PLAN  
**Author:** CDurham  
**Date:** 12/5/2023 1:34:50 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Riprap depth should be minimum of 12" (2xD50 of riprap size)



**Subject:** Callout  
**Page Label:** [8] EC3.4 INTERIM EROSION CONTROL PLAN  
**Author:** CDurham  
**Date:** 12/5/2023 1:37:00 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Riprap depth should be minimum of 12" (2xD50 of riprap size)

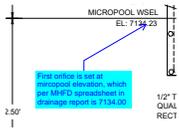
PE VL RIF  
4' x 6"  
ECS

**Subject:** Highlight  
**Page Label:** [10] EC3.6 FINAL EROSION CONTROL PLAN x 6"  
**Author:** CDurham  
**Date:** 12/5/2023 3:45:24 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide details for:  
- Outlet Structure  
- Forebay  
- Trickle Channel

**Subject:** Text Box  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:22:19 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide details for:  
- Outlet Structure  
- Forebay  
- Trickle Channel



**Subject:** Callout  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:23:02 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

First orifice is set at micropool elevation, which per MHFD spreadsheet in drainage report is 7134.00

D = 1-5/16"  
**EL: 7136.14**

**Subject:** Highlight  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:23:08 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

EL: 7136.14

D = 1-5/16"  
**EL: 7137.39**

**Subject:** Highlight  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:23:11 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

EL: 7137.39

D = 1-5/16"  
**EL: 7138.64**  
 D = 1-5/16"

**Subject:** Highlight  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:23:13 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

EL: 7138.64

7131.73  
**EL: 7131.73**

**Subject:** Highlight  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:23:18 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

: 7131.73

7140.11  
**EL: 7140.11**

**Subject:** Highlight  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:23:30 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

EL: 7140.11

Subject: Highlight  
Page Label: [13] EC4.3 POND DETAILS 7134.94  
E = 7134.94  
Author: CDurham  
Date: 12/5/2023 4:25:37 PM  
Status:  
Color:   
Layer:  
Space:

Subject: Highlight  
Page Label: [13] EC4.3 POND DETAILS 7134.23  
IV = 7134.23  
Author: CDurham  
Date: 12/5/2023 4:25:38 PM  
**100-YI**  
Status:  
Color:   
Layer:  
Space:

Subject: Highlight  
Page Label: [13] EC4.3 POND DETAILS 7134.23  
TRICKLE CHAN  
EL: 7134.23  
Author: CDurham  
Date: 12/5/2023 4:25:46 PM  
1  
Status:  
Color:   
Layer:  
Space:

Subject: Highlight  
Page Label: [13] EC4.3 POND DETAILS 7131.73  
ICROPOOL  
7131.73  
Author: CDurham  
Date: 12/5/2023 4:25:50 PM  
Status:  
Color:   
Layer:  
Space:

Subject: Highlight  
Page Label: [13] EC4.3 POND DETAILS 7131.73  
ICROPOOL  
EL: 7131.73  
Author: CDurham  
Date: 12/5/2023 4:25:53 PM  
Status:  
Color:   
Layer:  
Space:

Subject: Highlight  
Page Label: [13] EC4.3 POND DETAILS 7141.11  
DARD TYPE D  
ES  
7141.11  
Author: CDurham  
Date: 12/5/2023 4:26:05 PM  
MODIFIED TYPE I  
Status:  
Color:   
Layer:  
Space:

- STANDARD TYPE 'D' GRATES
- ELEV. = 7141.11
- MODIFIED TYPE 'D' INLET RIM = 7140.11
- WATER QUALITY ORIFICE PLATE

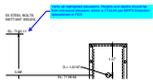
**Subject:** Highlight  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:26:08 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

E D INLET  
RIM =

' OUTLET PIPE  
JT= 7134.23

**Subject:** Highlight  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:26:14 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

7134.23



**Subject:** Callout  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:27:14 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Verify all highlighted elevations. Heights and depths should be from micropool elevation, which is 7134.00 per MHFD Detention spreadsheet in FDR

12" TYPE II BEDDING  
Provide cross section detail of spillway

**Subject:** Text Box  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** CDurham  
**Date:** 12/5/2023 4:27:48 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide cross section detail of spillway

Christina Prete (8)

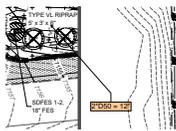


**Subject:** Stormwater Comments Color  
**Page Label:** [1] EC1.0 COVER SHEET  
**Author:** Christina Prete  
**Date:** 12/6/2023 5:24:45 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**



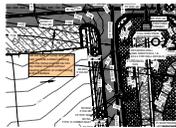
**Subject:** Contractor  
**Page Label:** [8] EC3.4 INTERIM EROSION CONTROL PLAN  
**Author:** Christina Prete  
**Date:** 12/6/2023 4:24:13 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

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



---

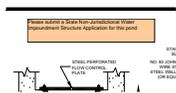
**Subject:** Contractor  
**Page Label:** [9] EC3.5 FINAL EROSION CONTROL PLAN 2\*D50 = 12"  
**Author:** Christina Prete  
**Date:** 12/6/2023 5:06:49 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**



---

**Subject:** Contractor  
**Page Label:** [10] EC3.6 FINAL EROSION CONTROL PLAN  
**Author:** Christina Prete  
**Date:** 12/6/2023 5:03:41 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

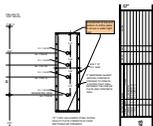
call out type of riprap and size of pad. provide a detail showing how the riprap pad will tie into the trickle channel without causing erosion or undermining at the interface.



---

**Subject:** Contractor  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** Christina Prete  
**Date:** 12/6/2023 4:26:03 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

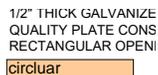
Please submit a State Non-Jurisdictional Water Impoundment Structure Application for this pond



---

**Subject:** Contractor  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** Christina Prete  
**Date:** 12/6/2023 4:31:35 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

provide bolt at top and bottom of orifice plate to ensure a water-tight seal



---

**Subject:** Contractor  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** Christina Prete  
**Date:** 12/6/2023 4:32:09 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

1/2" THICK GALVANIZE QUALITY PLATE CONS RECTANGULAR OPENING  
circular

circular



---

**Subject:** Line  
**Page Label:** [13] EC4.3 POND DETAILS  
**Author:** Christina Prete  
**Date:** 12/6/2023 4:32:12 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

1/2" THICK GALVANIZED QUALITY PLATE CONS RECTANGULAR OPENING