

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

**OWNER:**  
STEEL STRUCTURES AMERICA INC.  
3635 E. COVINGTON AVE.  
POST FALLS, ID 83854  
866.290.3471

EL PASO COUNTY  
2880 INTERNATIONAL CIRCLE, SUITE 110  
COLORADO SPRINGS, CO 80910  
719.520.6300

**TERRA FORMA SOLUTIONS**  
CONTACT: TODD JOHNSON, PE  
9994 QUINTERO STREET  
COMMERCE CITY, CO 80022  
303.257.7653

CTL THOMPSON INC.  
5170 MARK DABLING BLVD  
COLORADO SPRINGS, CO 80918  
719.528.8300

**TIM DUNN DESIGN**  
LANDSCAPE ARCHITECTURE  
6948 DAVENTY PLACE  
CASTLE PINES, CO 80108  
720.350.2411

TRI-LAKES MONUMENT FIRE PROTECTION DISTRICT  
16055 OLD FOREST POINT, SUITE 103  
MONUMENT, CO 80132  
719.484.0911

**AZTEC CONSULTANTS, INC.**  
300 E. MINERAL AVE. SUITE 1  
LITTLETON, CO 80122  
303.713.1898

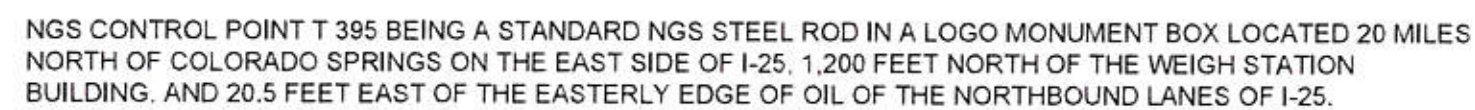
WOODMOOR WATER AND SANITATION DISTRICT  
1845 WOODMOOR DRIVE  
MONUMENT, CO 80132  
719.488.2525

BLACK HILLS ENERGY  
1515 WYNKOOP ST #500  
DENVER, CO 80202  
888.890.5554

**MOUNTAIN VIEW ELECTRIC ASSOCIATION, INC.**  
11140 E. WOODMEN ROAD  
FALCON, CO 80831  
719.495.2283

CENTURY LINK  
9 SUNCREST ROAD  
PALMER LAKE, CO 80133  
719.270.1653

STEEL STRUCTURES AMERICA INC.  
3635 E. COVINGTON AVE.  
POST FALLS, ID 83854  
866.290.3471



ELEVATION = 7111.32 (NAVD88)

PER LAND TITLE GUARANTEE COMPANY COMMITMENT ORDER NO. SC55073096-3, WITH AN EFFECTIVE DATE OF OCTOBER 2, 2018 AT 5:00 P.M.:

LOT 2, GREATER EUROPE MISSION SUBDIVISION FILING NO. 1, COUNTY OF EL PASO, STATE OF COLORADO

THE WESTERLY BOUNDARY LINE OF LOT 2, GREATER EUROPE MISSION SUBDIVISION FILING NO. 1, BEING MONUMENTED AT BOTH ENDS BY A NO. 5 REBAR WITH A RED PLASTIC CAP STAMPED "AZTEC PLS 38256", ASSUMED TO BEAR NORTH 05°26'25" WEST.

THE SUBJECT PROPERTY SHOWN HEREIN LIES WITHIN OTHER AREAS - ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP INDEX NO. 08041C0276G, MAP REVISED DECEMBER 7, 2018.

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

  
TODD JOHNSON, P.E. #37660

08/17/2019  
DATE

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

~~JUSTIN STERNBERG, PRESIDENT  
STEEL STRUCTURES AMERICA INC.  
3635 E. COVINGTON AVENUE  
POST FALLS, ID 83854~~

8-19-19

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 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.

COUNTY \_\_\_\_\_ ENGINEER SIGNATURE \_\_\_\_\_

**Approved**  
by Elizabeth Nijkamp  
El Paso County Planning and Community Development  
on behalf of Jennifer Irvine, County Engineer, ECM Administrator

10/15/2019 9:36:34 AM

1	CS	COVER SHEET
2	GN	GENERAL NOTES
3	SU	SITE AND UTILITY PLAN
4	GR	GRADING PLAN
5	EC	GRADING AND EROSION CONTROL PLAN
6	SD1	STORM PLAN AND PROFILES
7	PD	EXTENDED DETENTION BASIN PLAN
8	OS	OUTLET STRUCTURE DETAILS
9	DT1	EROSION CONTROL DETAILS
10	DT2	EROSION CONTROL DETAILS
11	DT3	SITE AND STORM DRAIN DETAILS
12	DT4	SITE AND STORM DRAIN DETAILS
13	DT5	WATER AND SANITARY DETAILS

UNCC  
CALL BEFORE  
YOU DIG  
**811**  
OR

1-800-922-1987  
UTILITY NOTIFICATION  
CENTER OF COLORADO



PCD FILE NO. PPR1919



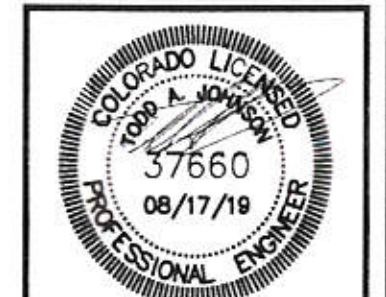
**TERRA FORMA**  
SOLUTIONS

[illegible]

CONSTRUCTION DOCUMENTS  
MONUMENT STEEL STRUCTURES

COVER SHEET

18910 BASE CAMP ROAD  
MONUMENT, COLORADO



PROJ NO SSA  
ENG  
CHKD  
DATE 08/17/2019

SHEET NUMBER

CS

1 OF 13



- POLLUTION 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.
2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
3. 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.
4. 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.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE 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.
14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.

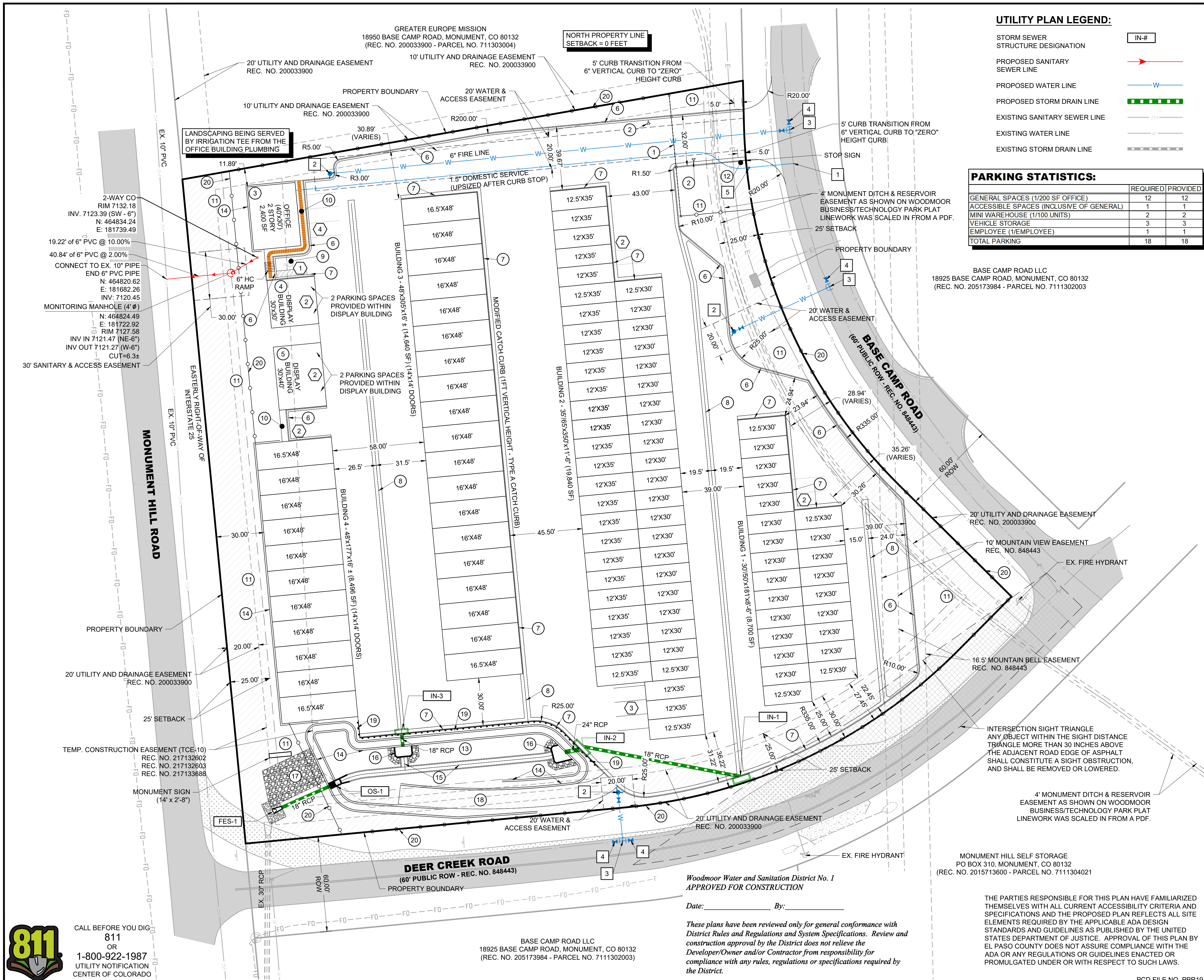
20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
24. 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.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. 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.
28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY CTL THOMPSON AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR 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

1. LOCATION (HORIZONTAL AND VERTICAL) OF ALL EXISTING UTILITIES (PRIVATE OR PUBLIC) SHALL BE IDENTIFIED OR VERIFIED BY CONTRACTOR PRIOR TO MOBILIZATION, CONSTRUCTION, OR ORDERING OF MATERIALS. FOR INFORMATION CONTACT: DENVER INTER-UTILITY GROUP, 1-800-922-1987 OR LOCAL AGENCY, PRIVATE ENTITY, OR OTHER ASSOCIATED ENTITIES WITHIN THE LIMITS OF CONSTRUCTION. THE CONTRACTOR SHALL BEAR THE FULL COST OF REMOVAL, REPLACEMENT, AND DELAY RELATED TO UNVERIFIED EXISTING CONDITIONS. WHERE THE CONTRACTOR FINDS CONFLICTS OR DISCREPANCIES THEY SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
2. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THE WORK SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIFICATIONS IN A SATISFACTORY MANNER, UNLESS OTHERWISE PROVIDED, THE CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, TOOLS, LABOR, AND INCIDENTALS TO COMPLETE THE WORK.
3. IN SOME CASES THERE ARE AREAS OF THE SITE DEPICTED ON MORE THAN ONE PAGE OF THE PLANS, HOWEVER, ALL IMPROVEMENTS ARE NOT DEPICTED DEPICTED ON EVERY PAGE. THE CONTRACTOR SHALL REVIEW EACH PAGE OF THE PLANS AND DETAILS AND SHALL CONSTRUCT ALL IMPROVEMENTS REGARDLESS OF WHETHER THEY ARE SHOWN ON EVERY PAGE. WHERE DISCREPANCIES ARE FOUND ON PLANS OR DETAILS SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO BEGINNING CONSTRUCTIONS. THE CONTRACTOR SHALL BEAR THE FULL COST OF REMOVAL, REPLACEMENT, DELAY, AND MOBILIZATION RELATED TO FAILURE TO REVIEW ALL PLANS.
4. THE MANUFACTURER/SUPPLIER SHALL DETERMINE PIPE CLASS BASED ON THE MAXIMUM COVER AND BEDDING SHOWN ON THE PLANS AND SOIL TYPE SHOWN IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL PROVIDE PIPE D-LOAD CALCULATIONS STAMPED BY A REGISTERED ENGINEER. IN NO CASE SHALL RCP PIPE CLASS BE LESS THAN CLASS III.

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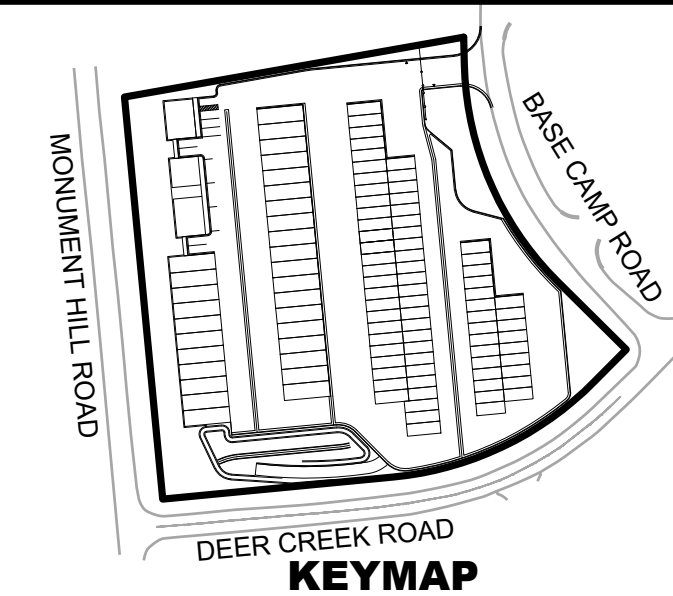


<b>PARKING STATISTICS:</b>		
	REQUIRED	PROVIDED
GENERAL SPACES (1/200 SF OFFICE)	12	12
ACCESSIBLE SPACES (INCLUSIVE OF GENERAL)	1	1
MINI WAREHOUSE (1/100 UNITS)	2	2
VEHICLE STORAGE	3	3
EMPLOYEE (1/EMPLOYEE)	1	1
<b>TOTAL PARKING</b>	<b>18</b>	<b>18</b>

BASE CAMP ROAD LLC  
18925 BASE CAMP ROAD, MONUMENT, CO 80132  
(REC. NO. 205173984 - PARCEL NO. 7111302003)

MONUMENT HILL SELF STORAGE  
PO BOX 310, MONUMENT, CO 80132  
(REC. NO. 2015713600 - PARCEL NO. 7111304021)

THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS 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 OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.



## KEYNOTES:

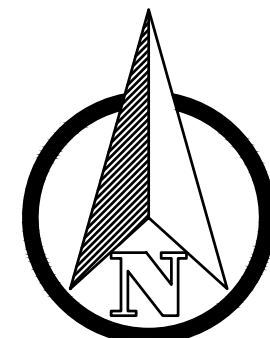
- 1 ENTRY GATE
- 2 ENTRY GATE KEY PAD
- 3 2 STORY OFFICE
- 4 DISPLAY BUILDING (30'X30') W/ 2 PARKING SPACES
- 5 DISPLAY BUILDING (30'X40') W/ 2 PARKING SPACES
- 6 6" CURB AND GUTTER (SPILL)
- 7 6" CURB AND GUTTER (CATCH)
- 8 4' CROSSPAN
- 9 9'X19' ADA PARKING STALL
- 10 5' SIDEWALK
- 11 LANDSCAPE AREA
- 12 STOP SIGN
- 13 DETENTION POND
- 14 RETAINING WALLS
- 15 4' TRICKLE CHANNEL
- 16 POND FOREBAY
- 17 TYPE M - BURIED RIP RAP
- 18 POND MAINTENANCE ACCESS
- 19 CDOT - TYPE 3 W-BEAM GUARDRAIL
- 20 6 FOOT CHAIN LINK FENCE
- # PARKING COUNT
- 1 1" SADDLE TAP & CORP. STOP
- 2 PROPOSED FIRE HYDRANT
- 3 8"X6" TEE (FIRE HYDRANT ASSEMBLY)
- 4 8" GATE VALVE
- 5 CURB STOP  
12"x12"x2" PRECAST CONC BLOCK & VALVE CAN

### SITE PLAN NOTES:

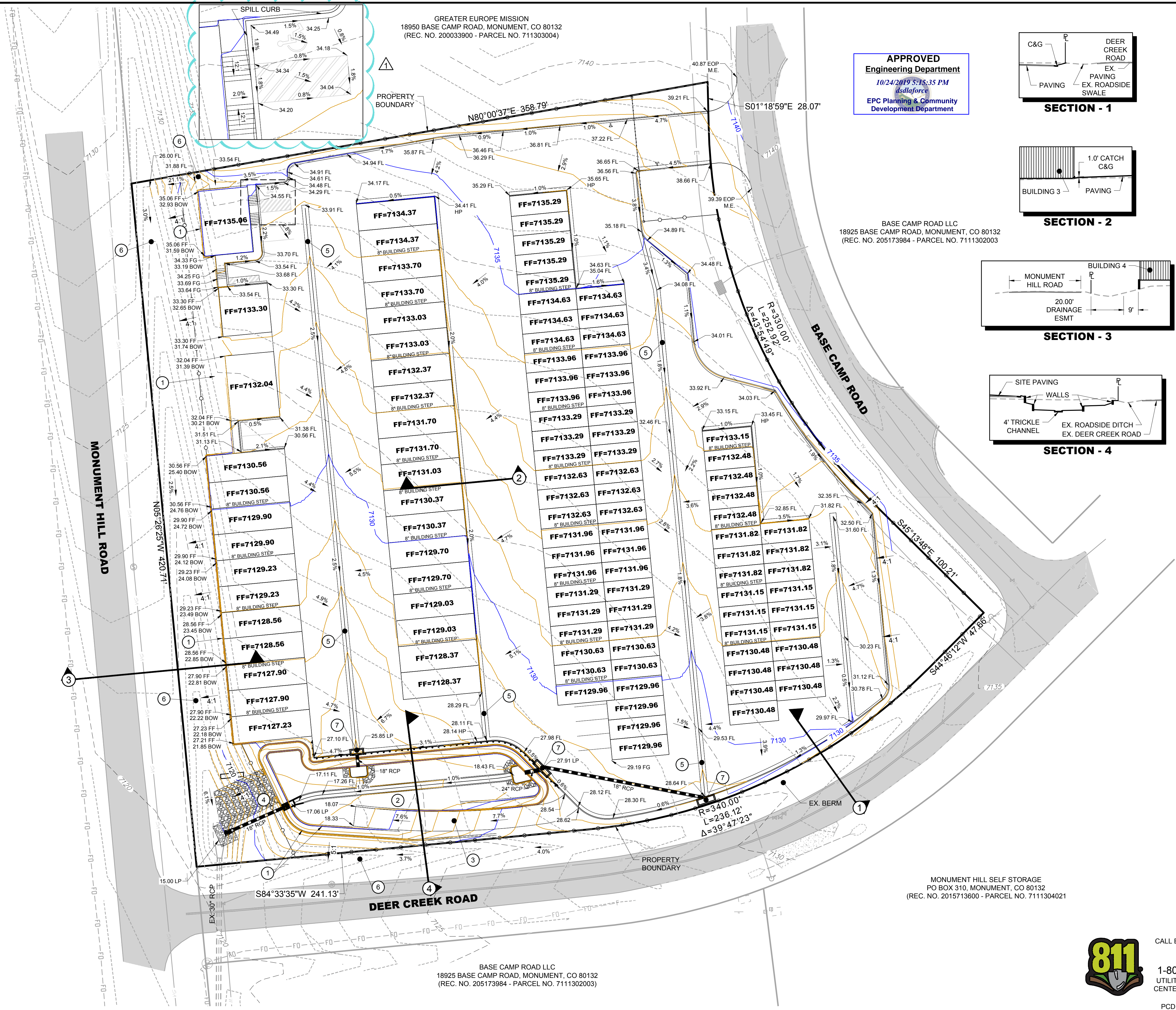
1. ALL RADIAL DIMENSIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED
  2. ALL HORIZONTAL DIMENSIONS ARE TO FLOWLINE AND BUILDING EDGE UNLESS OTHERWISE NOTED
- UTILITY PLAN NOTES:**
1. ALL 6" WATER TO BE PVC UNLESS OTHERWISE NOTED
  2. ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED.
  3. ALL FIRE HYDRANT LATERALS SHALL BE DIP.

**UTILITY PLAN NOTES:**

1. ALL 6" WATER TO BE PVC UNLESS OTHERWISE NOTED
2. ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED.
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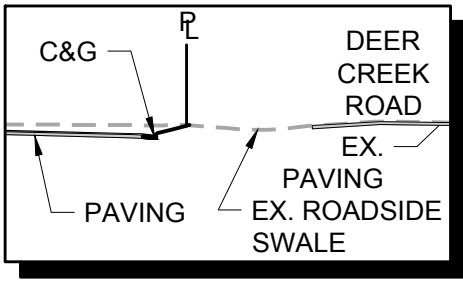


APPROVED  
Engineering Department  
10/24/2019 5:15:35 PM  
dsdlaforce  
EPC Planning & Community  
Development Department

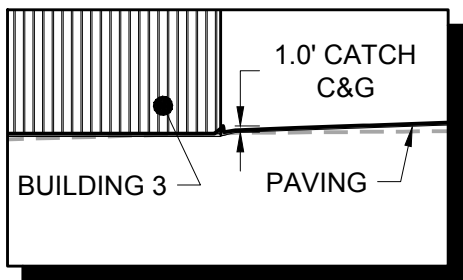
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(REC. NO. 205173984 - PARCEL NO. 7111302003)

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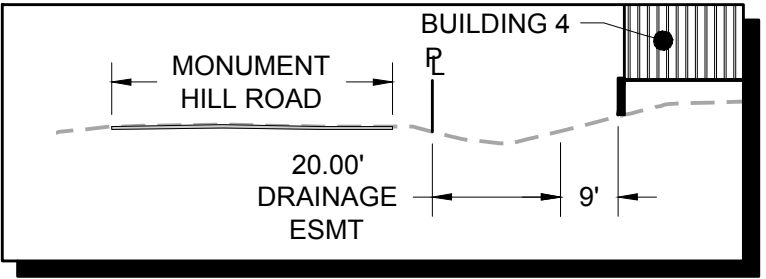
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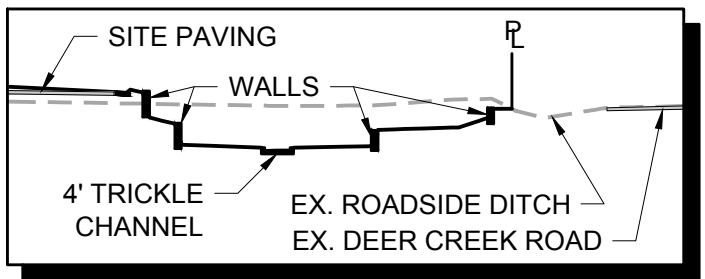
SECTION - 1



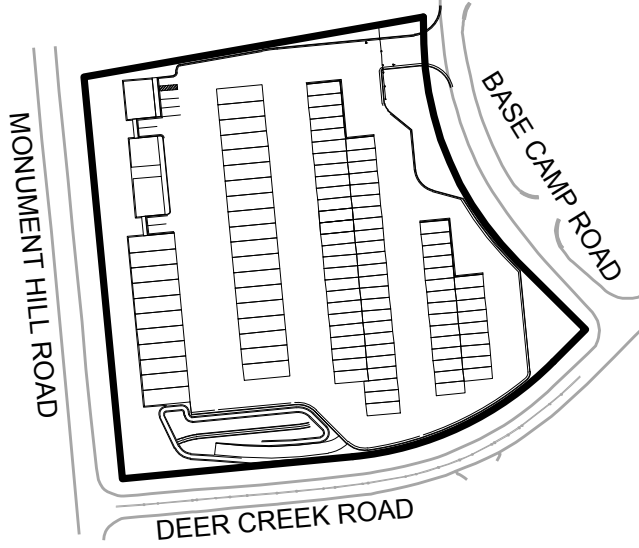
SECTION - 2



SECTION - 3



SECTION - 4



KEYMAP

KEYNOTES:

- 1 RETAINING WALLS
- 2 DETENTION POND
- 3 DETENTION POND MAINTENANCE ACCESS
- 4 OUTLET STRUCTURE
- 5 4' DRAINAGE PAN
- 6 DRAINAGE SWALE
- 7 STORM INLET

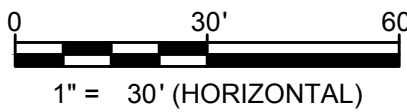
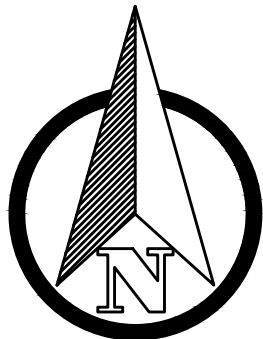
LEGEND:

- LP = LOW POINT
- HP = HIGH POINT
- FL = FLOW LINE
- TOW = TOP OF WALL
- BOW = FINISHED GRADE AT BOTTOM FACE OF WALL
- FF = FINISHED FLOOR
- FG = FINISHED GROUND

- 100 PROPOSED MAJOR CONTOUR
- 100 PROPOSED MINOR CONTOUR
- 100 EXISTING MAJOR CONTOUR
- 100 EXISTING MINOR CONTOUR

GRADING PLAN NOTES:

- CONTRACTOR TO REFER TO THE GEOTECHNICAL REPORT TO ENSURE ALL SUBGRADE PREPARATION REQUIREMENTS, PAVEMENT RECOMMENDATIONS, MINIMUM SLOPE REQUIREMENTS, AND ALL OTHER APPLICABLE REQUIREMENTS ARE MET.
- THE MAXIMUM SIDEWALK CROSS SLOPE SHALL BE 2.00%.
- THE MAXIMUM LONGITUDINAL SLOPE OF ANY ADA RAMP SHALL BE 8.33%.
- RETAINING WALL DESIGN BY OTHERS.



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OR  
1-800-922-1987  
UTILITY NOTIFICATION  
CENTER OF COLORADO

PCD FILE NO. PPR1919



REV. NO.	DESCRIPTION	DATE
1	REVISION	10/24/2019

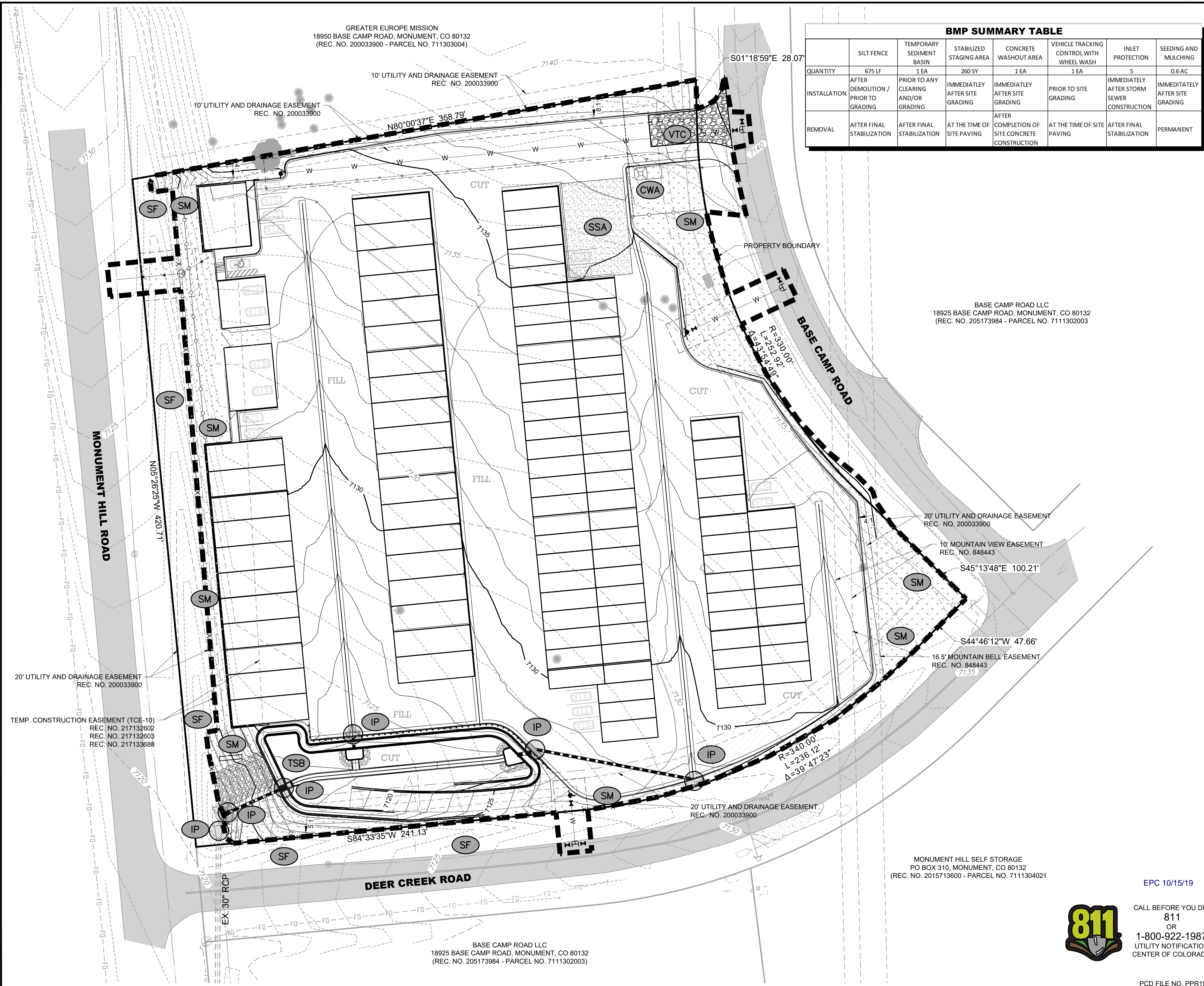
CONSTRUCTION DOCUMENTS  
MONUMENT STEEL STRUCTURES  
GRADING PLAN  
18910 BASE CAMP ROAD  
MONUMENT, COLORADO



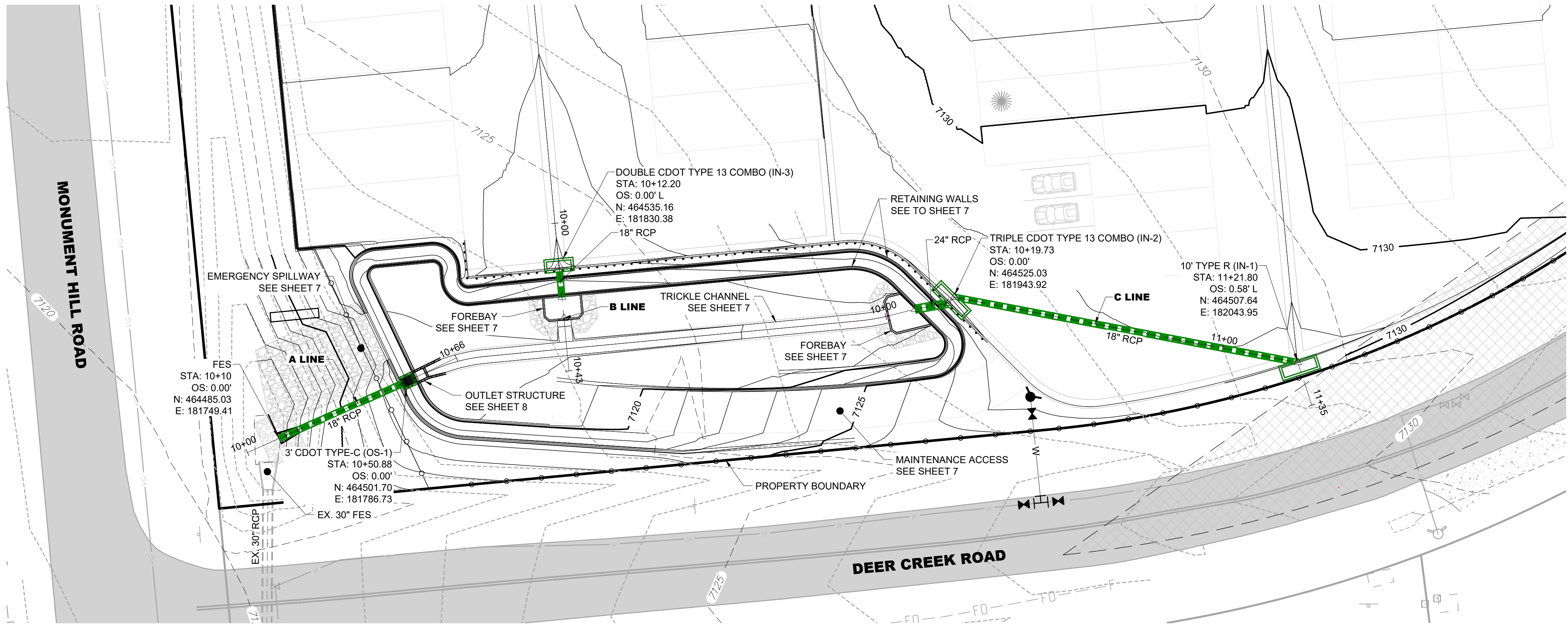
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SHEET NUMBER  
GR  
4 OF 13

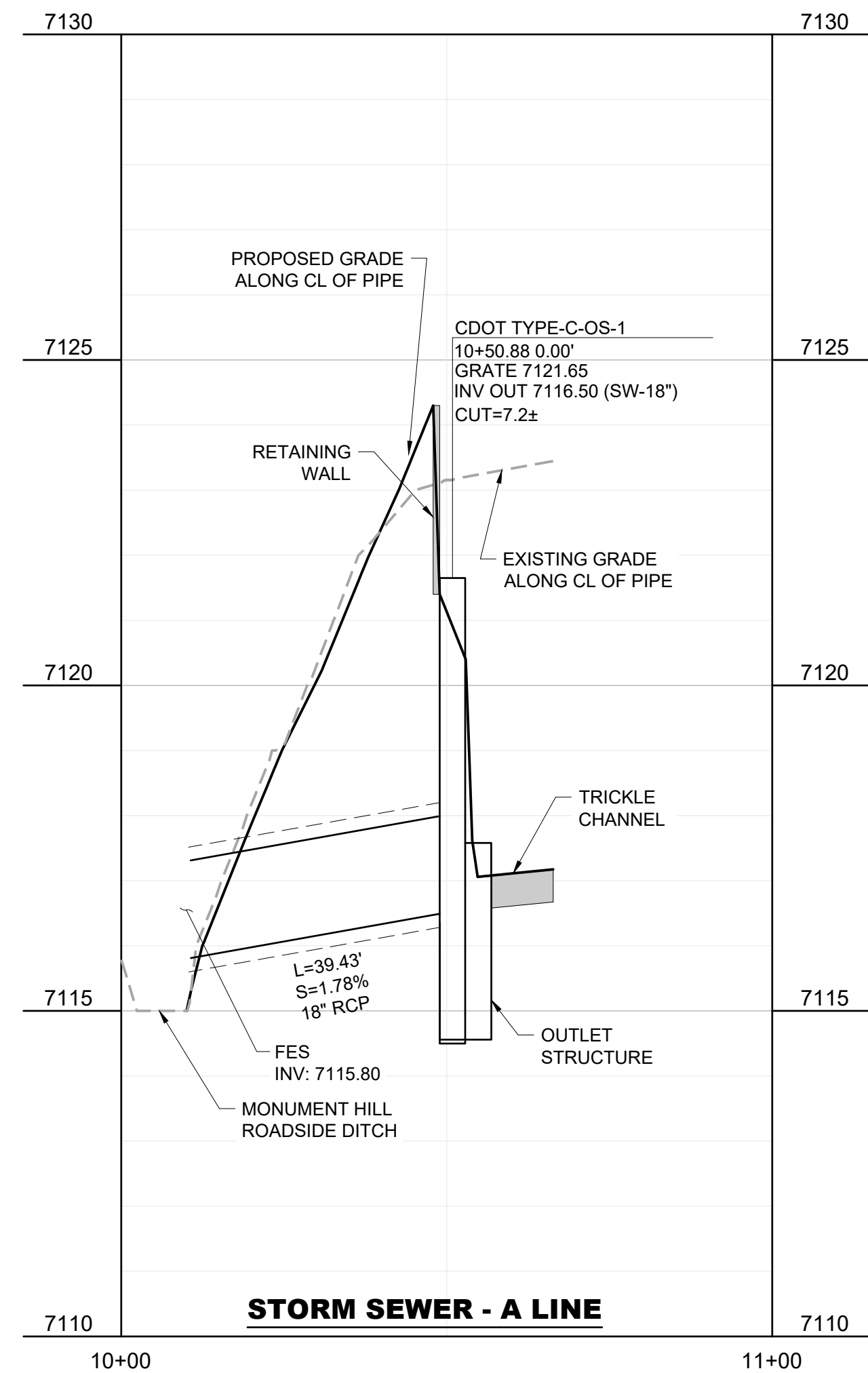




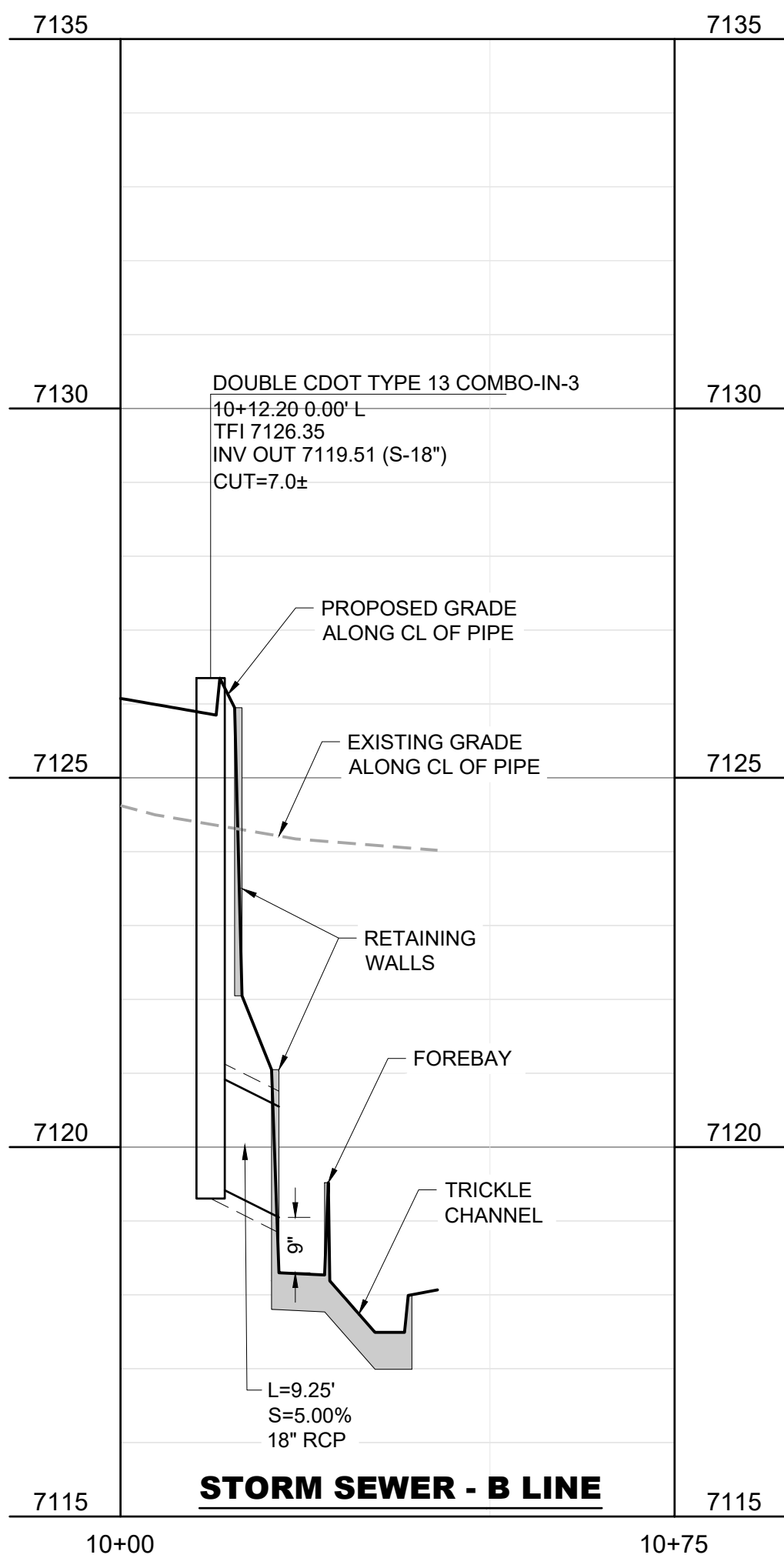




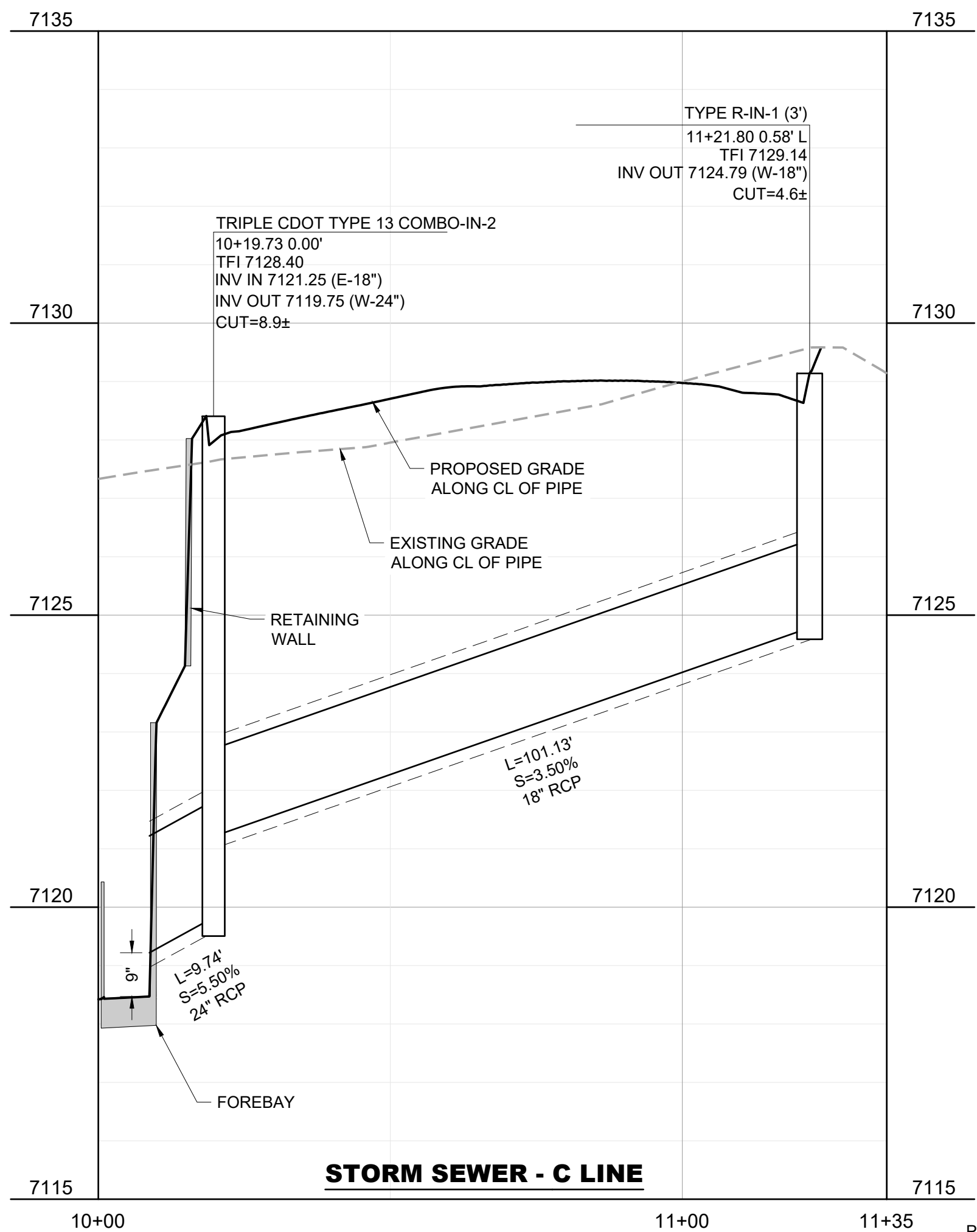
STORM SEWER - PLAN VIEW



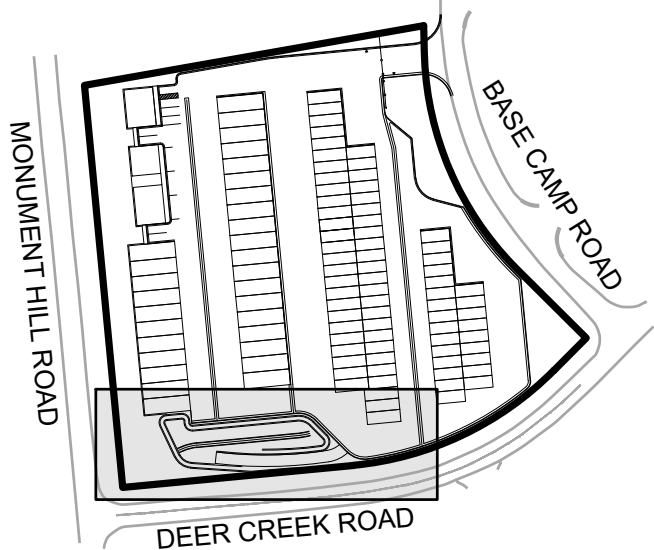
STORM SEWER - A LINE



STORM SEWER - B LINE



STORM SEWER - C LINE



KEYMAP

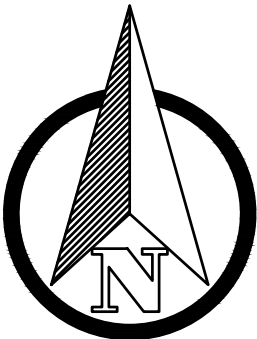
STORM SEWER NOTES:

- 1. WHERE CONSTRUCTION DETAILS AND SPECIFICATIONS ARE NOTED ON THESE PLANS, USE EL PASO COUNTY STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION.
- 2. ALL DIMENSIONS ARE TO FLOWLINE, EXCEPT PROFILES WHICH ARE CENTERLINE DIMENSIONS, OR UNLESS OTHERWISE NOTED.
- 3. ALL STORM SEWER IS PRIVATE UNLESS OTHERWISE NOTED.
- 4. ALL INLETS SHALL HAVE A MINIMUM OF 3" FROM OUTSIDE OF PIPE TO INSIDE FACE OF INLET WHICH MAY REQUIRE MODIFIED DIMENSIONS TO THE STANDARD PRECAST BOX. CONTRACTOR TO COORDINATE MODIFIED BOX DIMENSIONS WITH MANUFACTURER.
- 5. ALL INLET ELEVATIONS ARE TOP OF FACE OF INLET (TFI) ELEVATIONS. SUMP INLET TFI'S ARE BASED OFF OF THE TYPICAL SECTION, UNLESS OTHERWISE SHOWN, AND SHOULD BE CONSTRUCTED AS FLAT, UNLESS OTHERWISE NOTED. ALL ON-GRADE INLETS HAVE THE TFI INDICATED FOR THE CENTER OF THE INLET. INLET SHALL MATCH STREET GRADE.

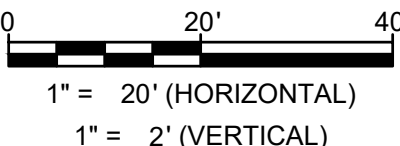
REV. NO.	DESCRIPTION	DATE



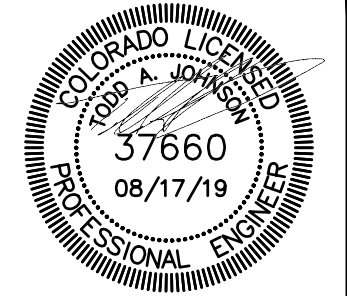
CALL BEFORE YOU DIG  
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CENTER OF COLORADO



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CONSTRUCTION DOCUMENTS  
**MONUMENT STEEL STRUCTURES**  
STORM SEWER PLAN AND PROFILE  
18910 BASE CAMP ROAD  
MONUMENT, COLORADO

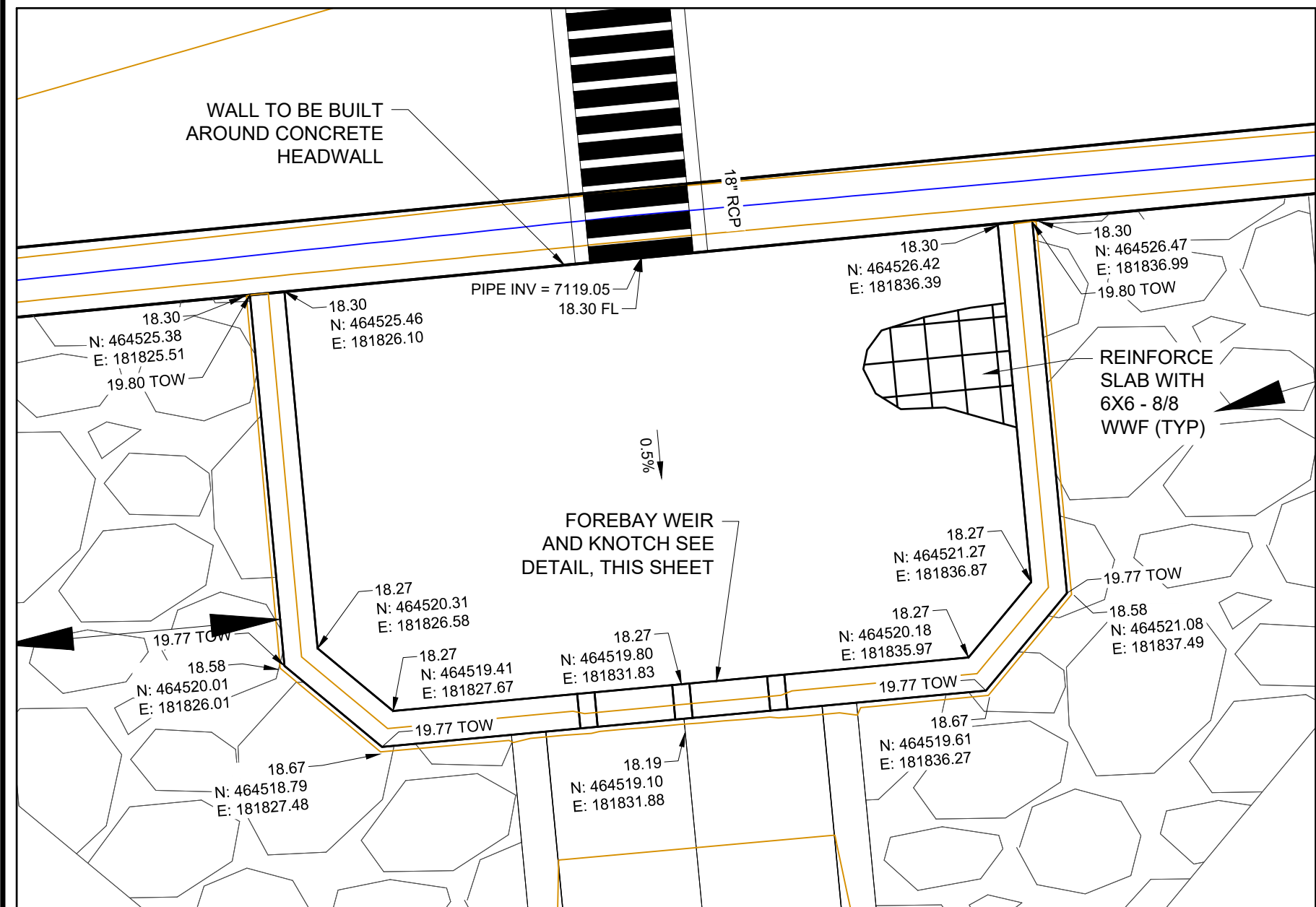
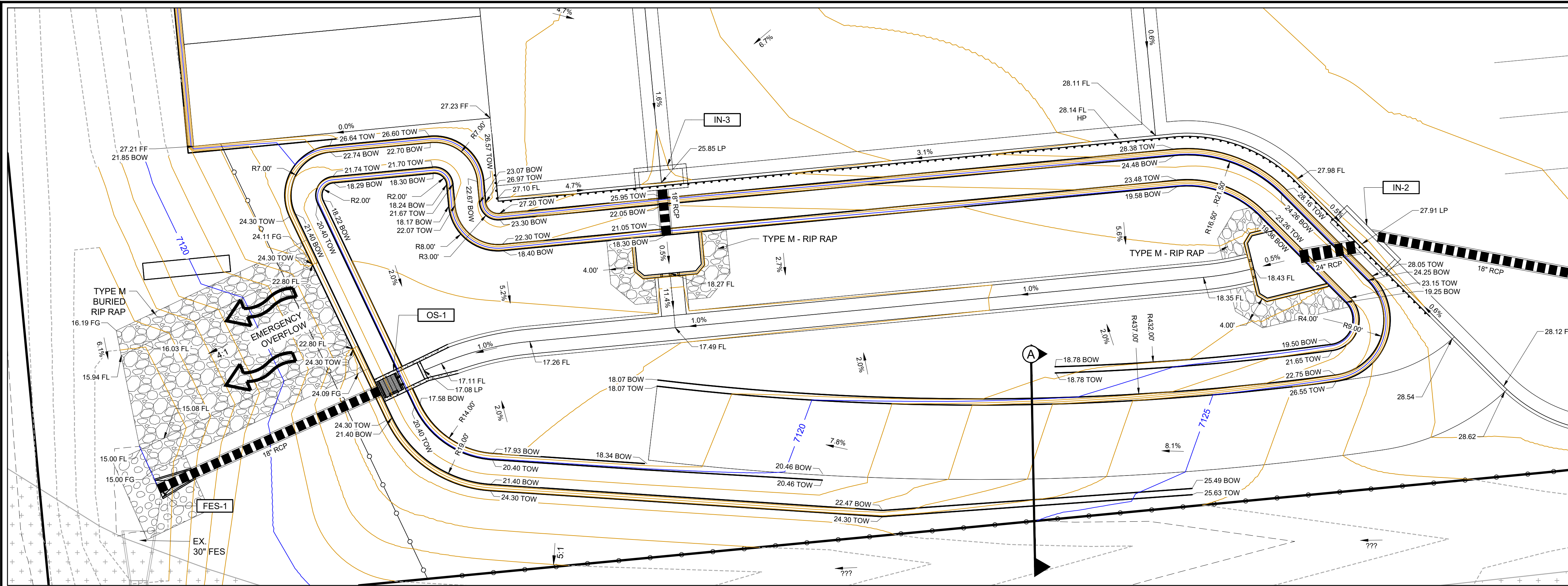


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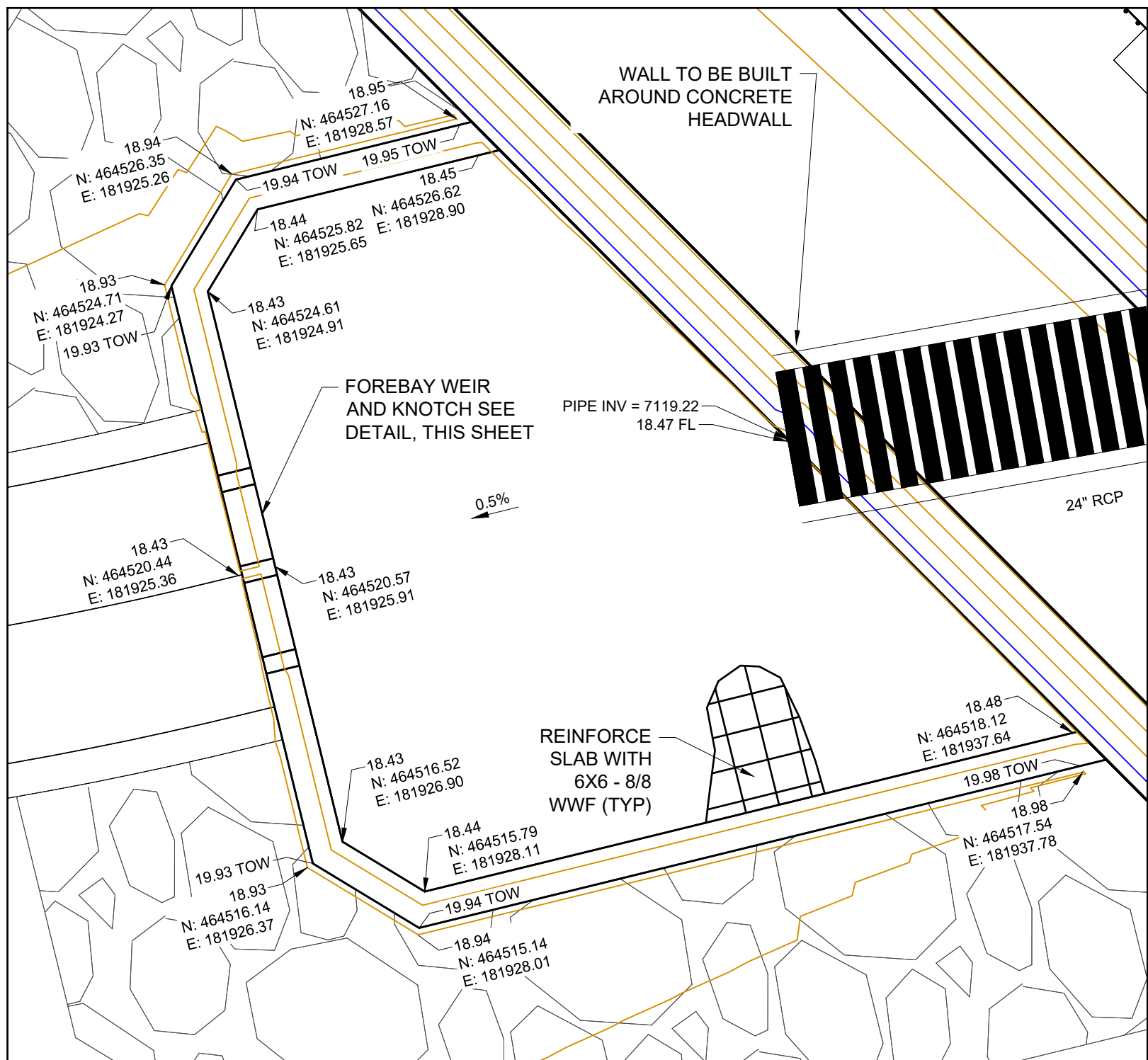
SHEET NUMBER  
**SD**  
6 OF 13



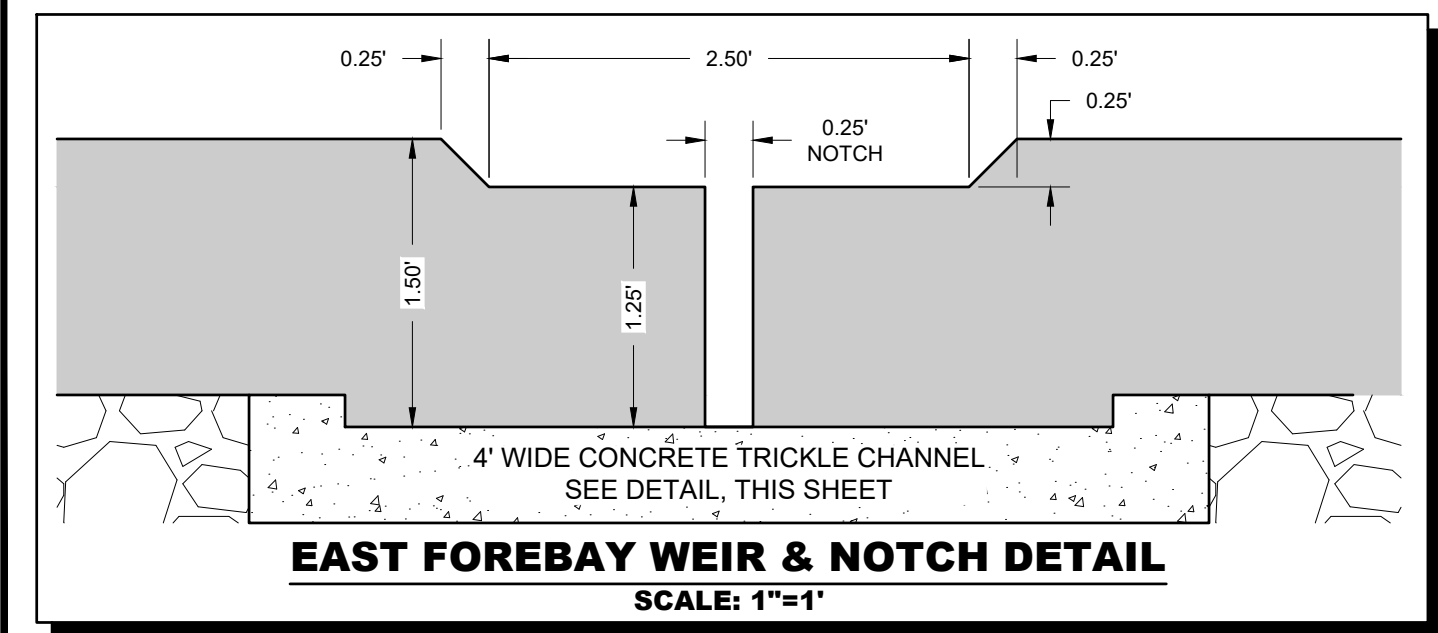




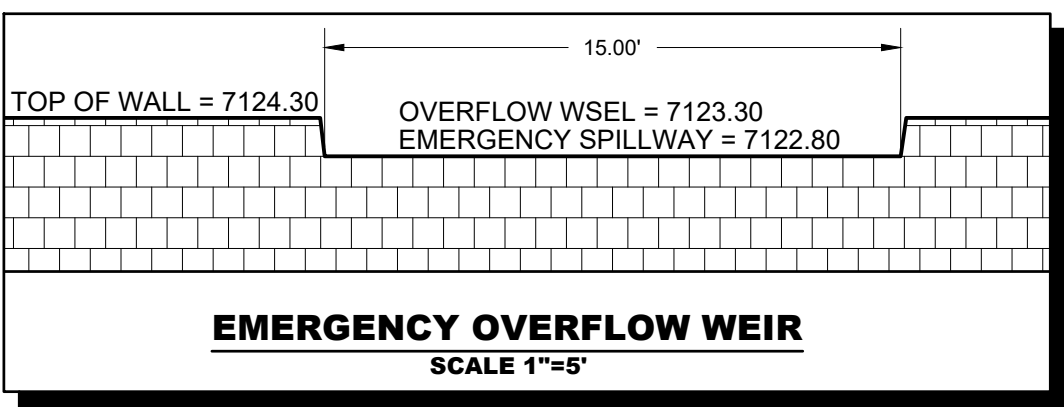
**NORTH FOREBAY DETAIL**  
SCALE 1"=5'



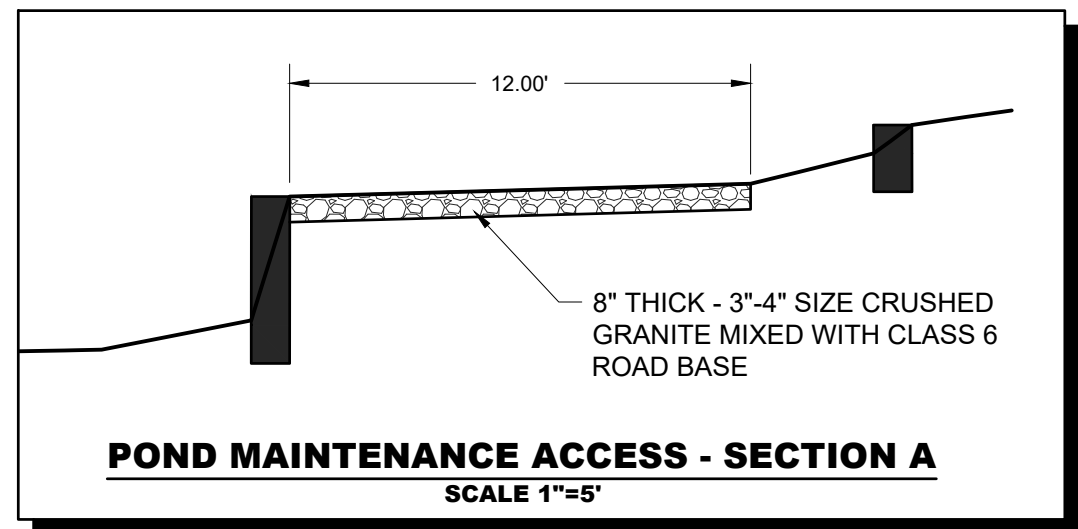
**EAST FOREBAY DETAIL**  
SCALE 1"=5'



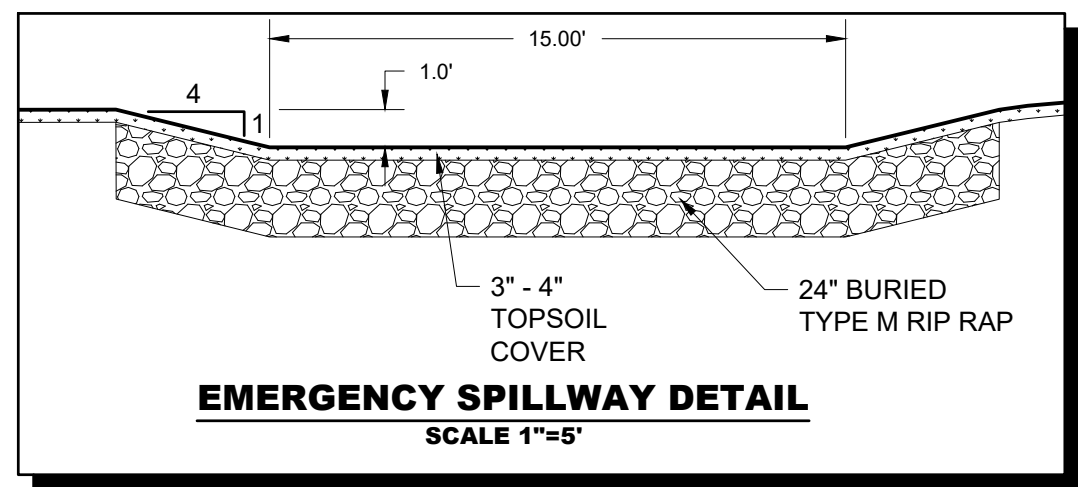
**EAST FOREBAY WEIR & NOTCH DETAIL**  
SCALE: 1"=1'



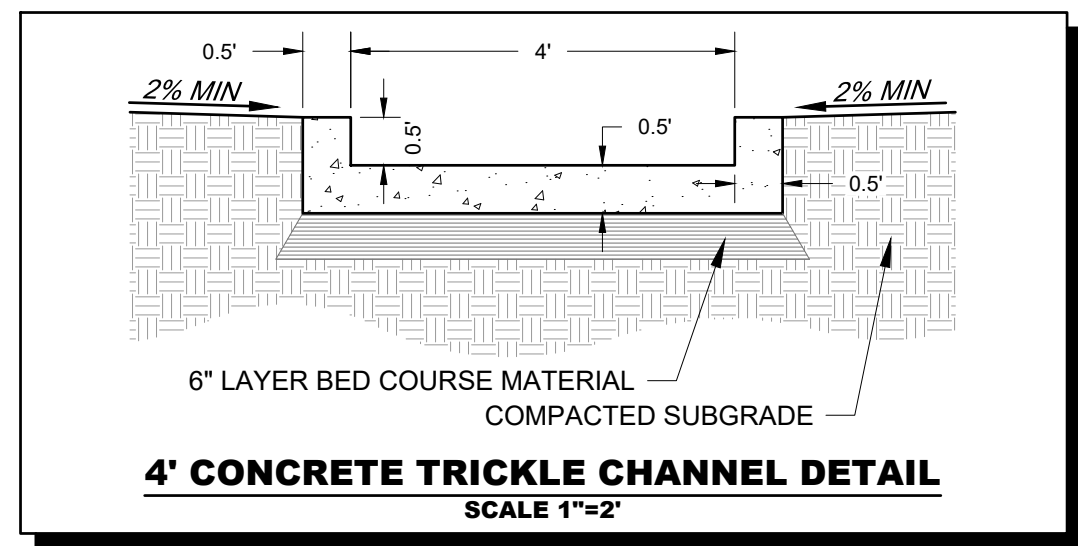
**EMERGENCY OVERFLOW WEIR**  
SCALE 1"=5'



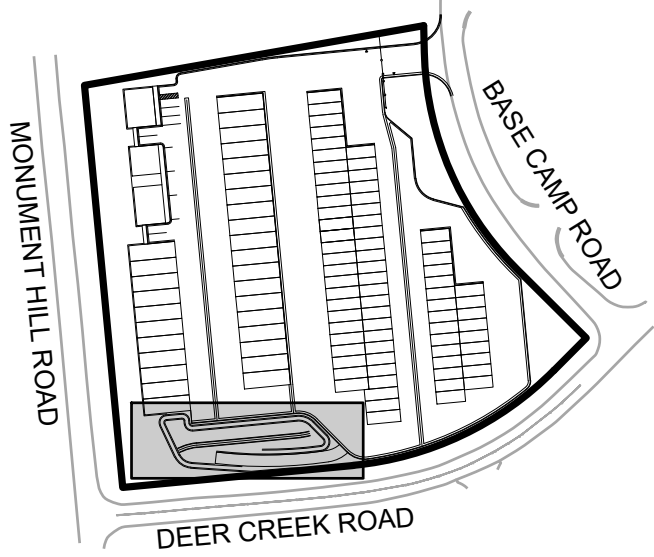
**POND MAINTENANCE ACCESS - SECTION A**  
SCALE 1"=5'



**EMERGENCY SPILLWAY DETAIL**  
SCALE 1"=5'



**4' CONCRETE TRICKLE CHANNEL DETAIL**  
SCALE 1"=2'



**KEYMAP**

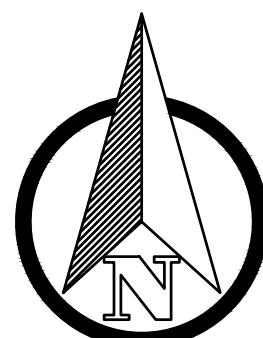
**KEYNOTES:**

- 1 RETAINING WALLS
- 2 DETENTION POND
- 3 DETENTION POND MAINTENANCE ACCESS
- 4 OUTLET STRUCTURE
- 5 4' DRAINAGE PAN
- 6 DRAINAGE SWALE
- 7 STORM INLET

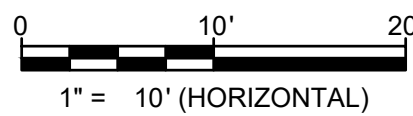
**LEGEND:**

- LP = LOW POINT  
HP = HIGH POINT  
FL = FLOW LINE  
TOW = TOP OF WALL  
BOW = FINISHED GRADE AT BOTTOM FACE OF WALL  
FF = FINISHED FLOOR  
FG = FINISHED GROUND

- 100' PROPOSED MAJOR CONTOUR  
100' PROPOSED MINOR CONTOUR  
100' EXISTING MAJOR CONTOUR  
100' EXISTING MINOR CONTOUR



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CONSTRUCTION DOCUMENTS  
**MONUMENT STEEL STRUCTURES**

EXTENDED DETENTION BASIN PLAN

18910 BASE CAMP ROAD  
MONUMENT, COLORADO



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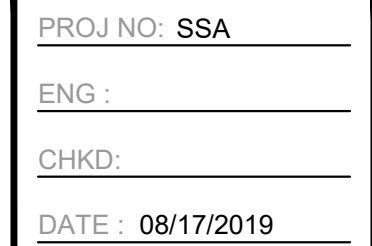
CONTRACTOR MUST COMPLETE DETENTION POND GRADING AND PROVIDE DETENTION POND CERTIFICATION TO ENGINEER PRIOR TO CONSTRUCTING ANY OUTFALL STRUCTURE (WATER QUALITY PLATE, BOX INLET, WEIR, ETC). DETENTION POND CERTIFICATION NEEDS TO BE DONE AFTER THE SOD IS IN PLACE.

[illegible]

CONSTRUCTION DOCUMENTS  
**MONUMENT STEEL STRUCTURES**

## OUTLET STRUCTURE

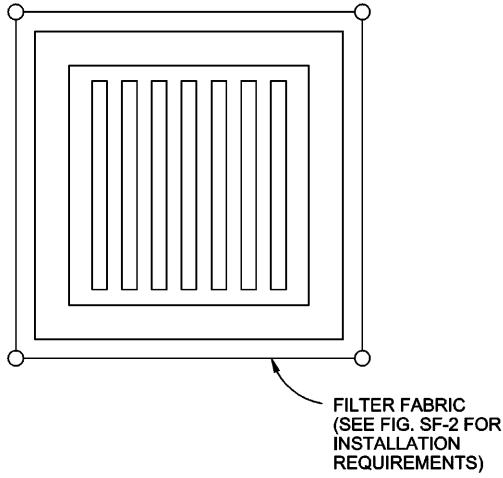
18910 BASE CAMP ROAD  
MONUMENT, COLORADO



SHEET NUMBER

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**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 SILT FENCE FIGURE SF-2 FOR INSTALLATION REQUIREMENTS.
3. POSTS ARE TO BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

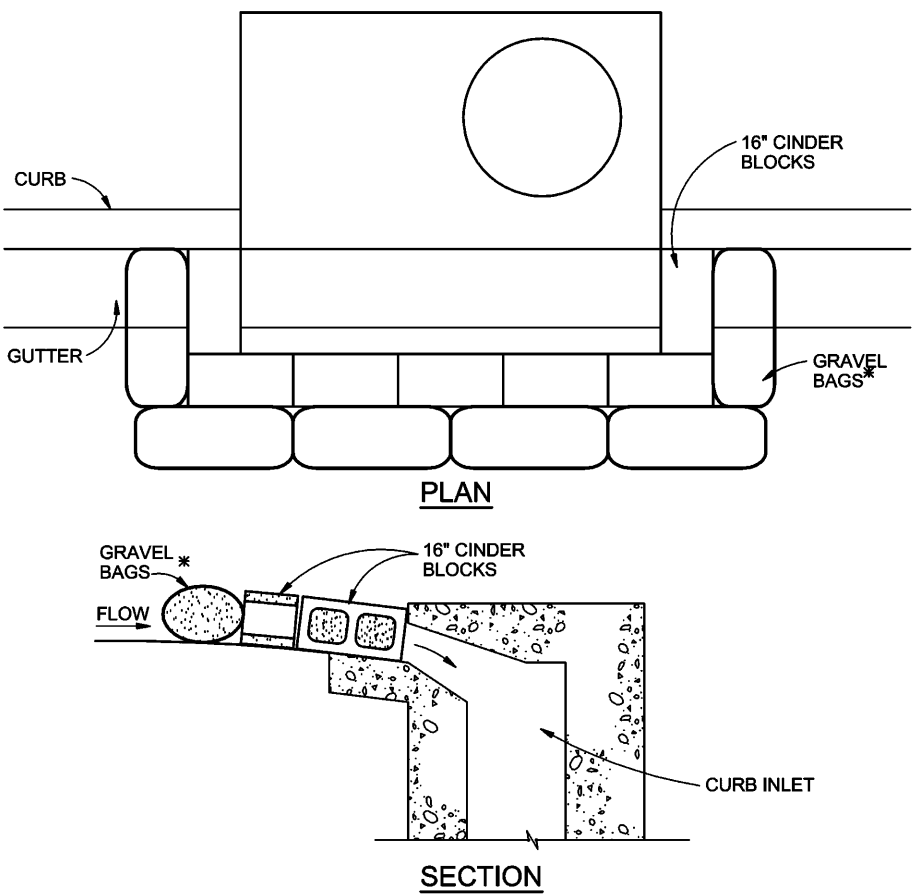
**MAINTENANCE REQUIREMENTS**

1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED, COLLAPSED, UNTRENCHED OR INEFFECTIVE 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

3-25



**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 ENDS 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**

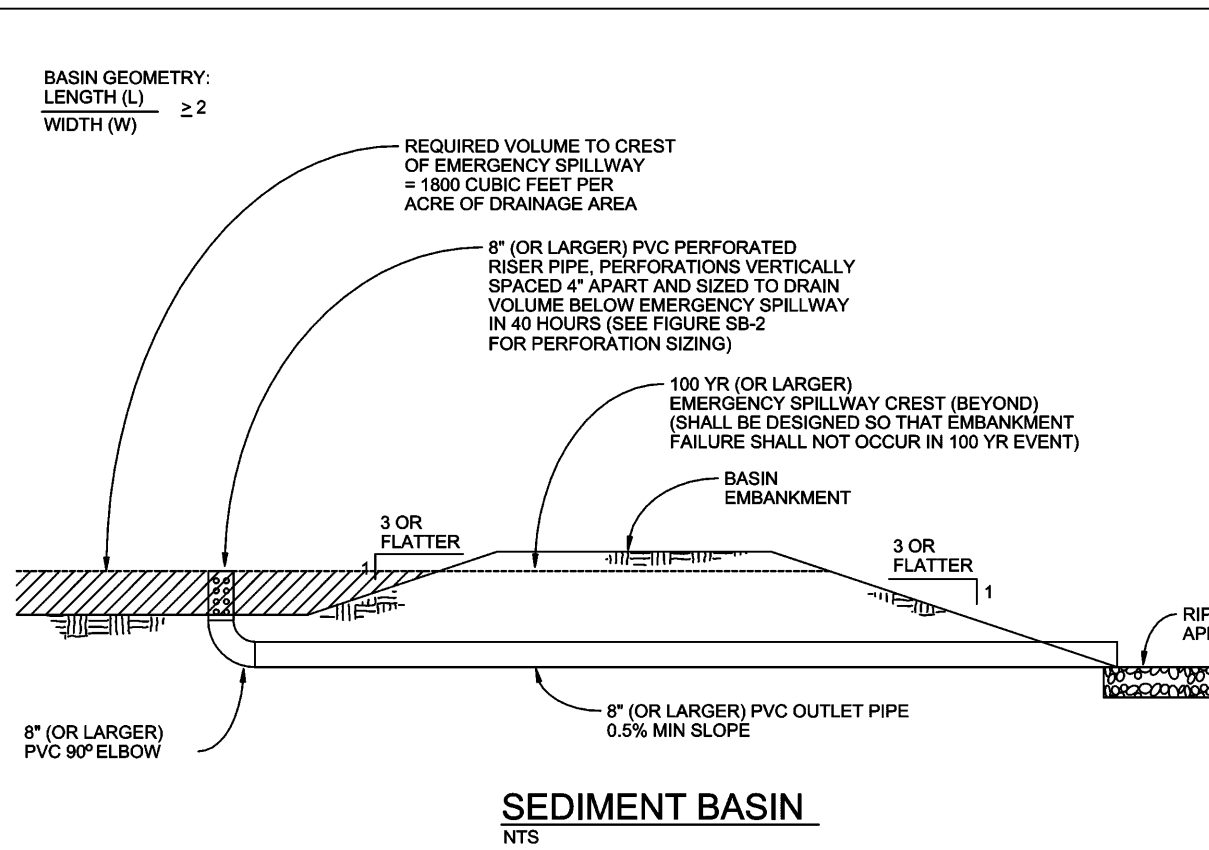
1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.
3. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DESIGN 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

3-27



**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 90% 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

3-32

REQ VOL = 1,800cf \* 4.67ac  
REQ VOL = 8,406cf = 0.2ac-ft  
Depth of 3.5 feet

Required Area per Row (in <sup>2</sup> )	Depth at Outlet (ft)							
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5
Design Volume (acre-ft)	2	15.04	7.71	5.10	3.76	2.95	2.41	2.02
1	7.52	3.86	2.55	1.88	1.48	1.21	1.01	0.87
0.8	4.51	2.31	1.53	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	0.15	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**

Circular Perforation Sizing		Area per Row (in <sup>2</sup> )			
Hole Diameter (in)	Hole Diameter (in)	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	2.76	5.52	8.28	
2	2.000	3.14	6.28	9.42	
Minimum steel plate thickness		1/4"	5/16"	3/8"	

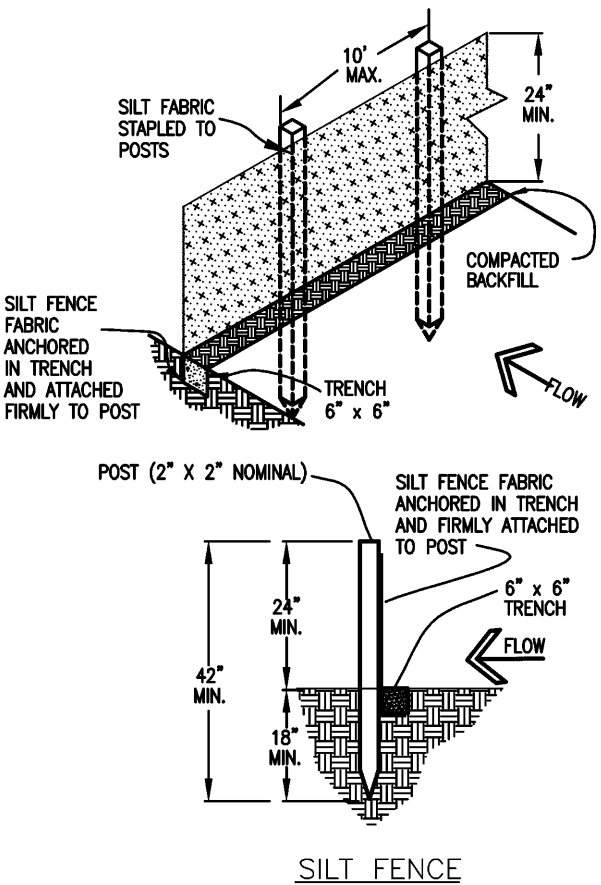
**TABLE SB-2**

6 ROWS of 1/8" Holes (1 Column of Perforations)

City of Colorado Springs  
Stormwater Quality

Figure SB-2  
Outlet Sizing  
Application Techniques and Maintenance  
Requirements

3-33



**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 SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
3. METAL POSTS SHALL BE "STUDDED TEE" OR "I" 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 3/4" LONG #9 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 HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3" 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 INPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

**MAINTENANCE REQUIREMENTS**

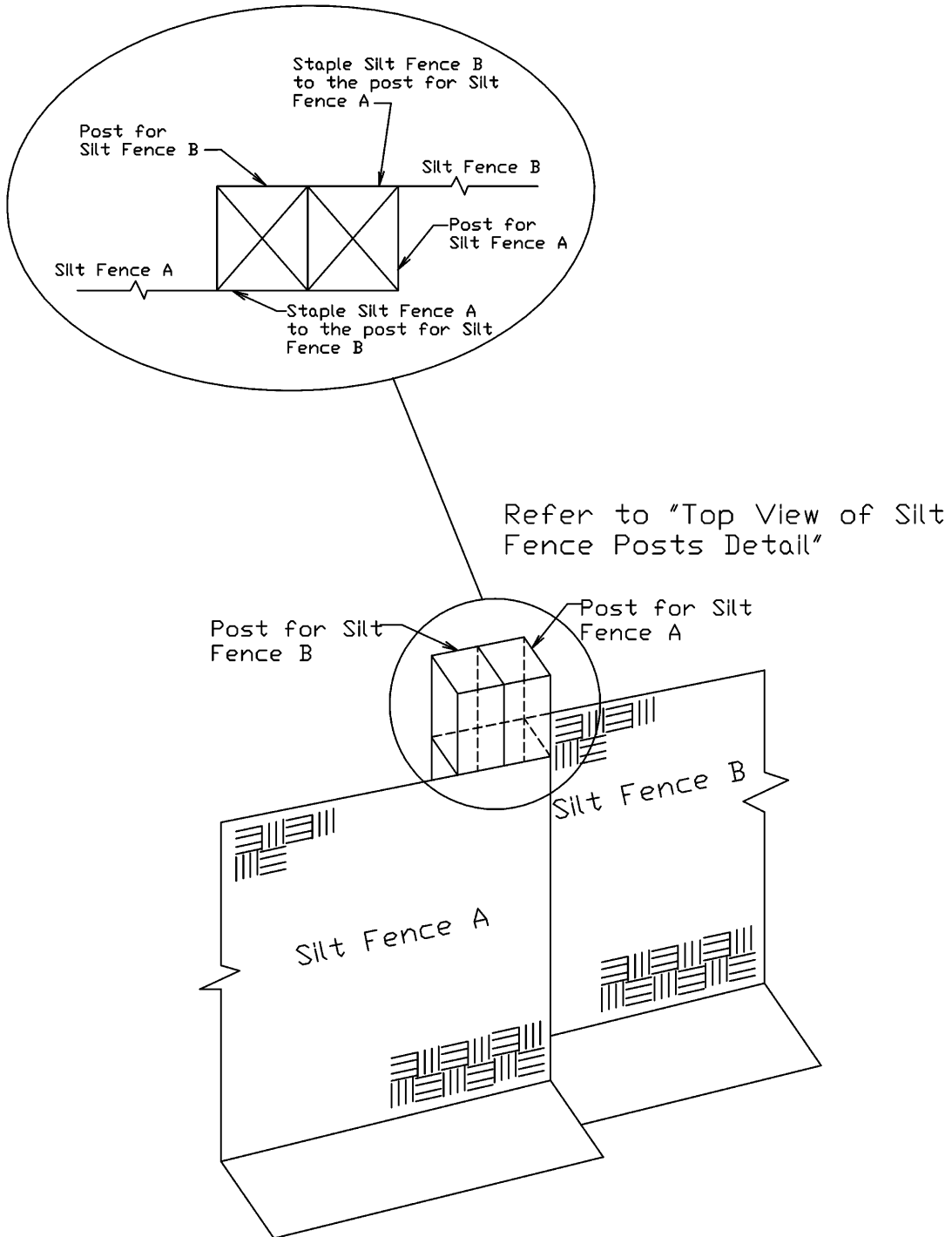
1. CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL.
2. DAMAGED, COLLAPSED, UNTRENCHED OR INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT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

City of Colorado Springs  
Stormwater Quality

Figure SF-2  
Silt Fence  
Construction Detail and Maintenance  
Requirements

3-36

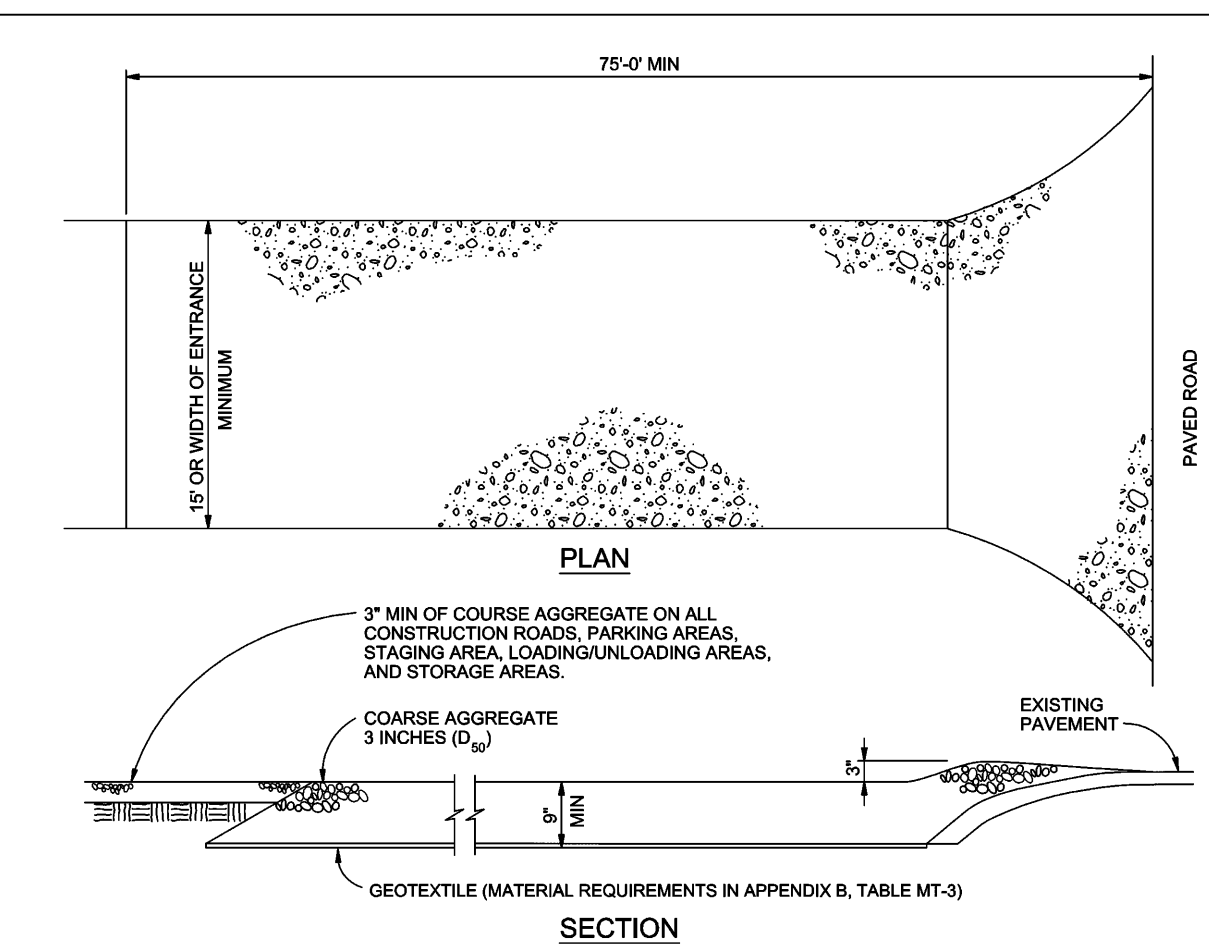
**Top View of Silt Fence Posts Detail**



City of Colorado Springs  
Stormwater Quality

Figure SF-3  
Silt Fence Joint Tying  
Construction Detail and Maintenance  
Requirements

3-37



**VEHICLE TRACKING**  
NTS

**VEHICLE TRACKING NOTES**

**INSTALLATION REQUIREMENTS**

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

**MAINTENANCE REQUIREMENTS**

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

City of Colorado Springs  
Stormwater Quality

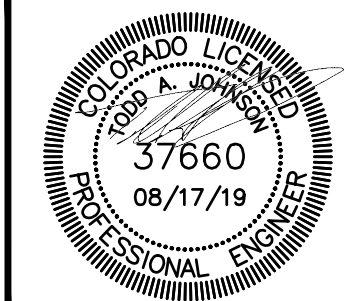
Figure VT-2  
Vehicle Tracking  
Application Examples

3-54

CONSTRUCTION DOCUMENTS  
**MONUMENT STEEL STRUCTURES**

EROSION CONTROL DETAILS

18910 BASE CAMP ROAD  
MONUMENT, COLORADO



PROJ NO: SSA

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**DT1**

9 OF 13



**TERRA FORMA**  
SOLUTIONS



## MM-1



## CWA INSTALLATION NOTES

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

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### Concrete Washout Area (CWA)

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE WATER TO BE OBSERVED ON THE ROADWAY.
2. FREQUENT OPERATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTES, CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIAL HAS REACHED A DEPTH OF 2'.
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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### STABILIZED STAGING AREA INSTALLATION NOTES

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

STABILIZED STAGING AREA MAINTENANCE NOTE:

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

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### Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

**NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.**

**NOTE:** MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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

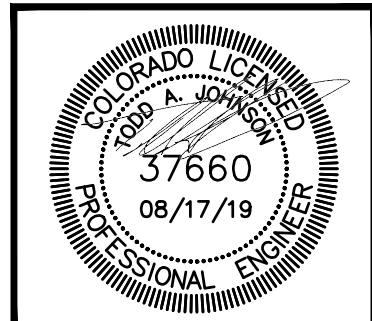
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CONSTRUCTION DOCUMENTS  
MONUMENT STEEL STRUCTURES  
EROSION CONTROL DETAILS  
18910 BASE CAMP ROAD  
MONUMENT, COLORADO



PROJ NO: SSA  
ENG :  
CHKD:  
DATE : 08/17/2019

SHEET NUMBER

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