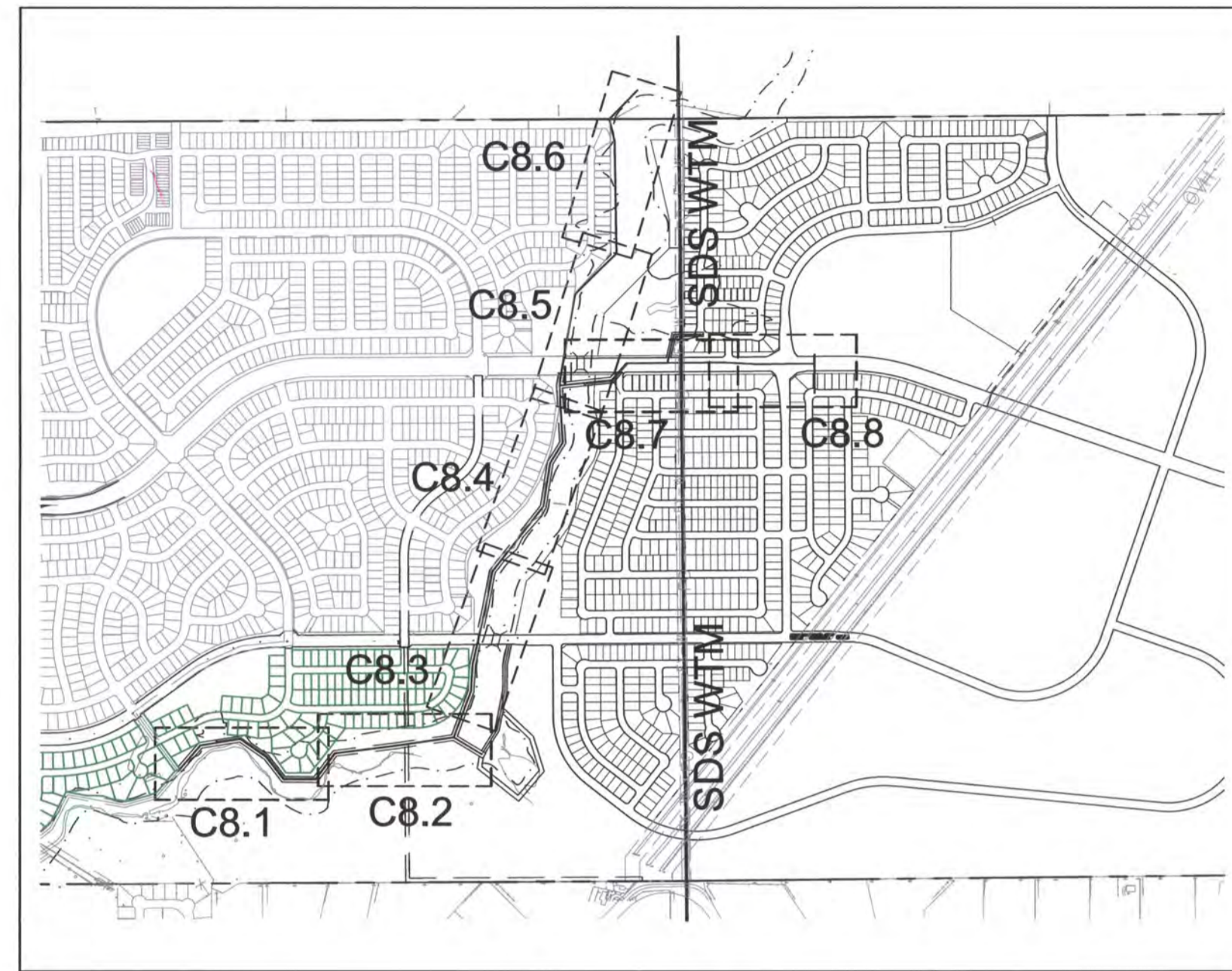


CONSTRUCTION PLANS
FOR
LORSON RANCH EAST
EAST JIMMY CAMP INTERCEPTOR
SANITARY SEWER CONSTRUCTION PLANS

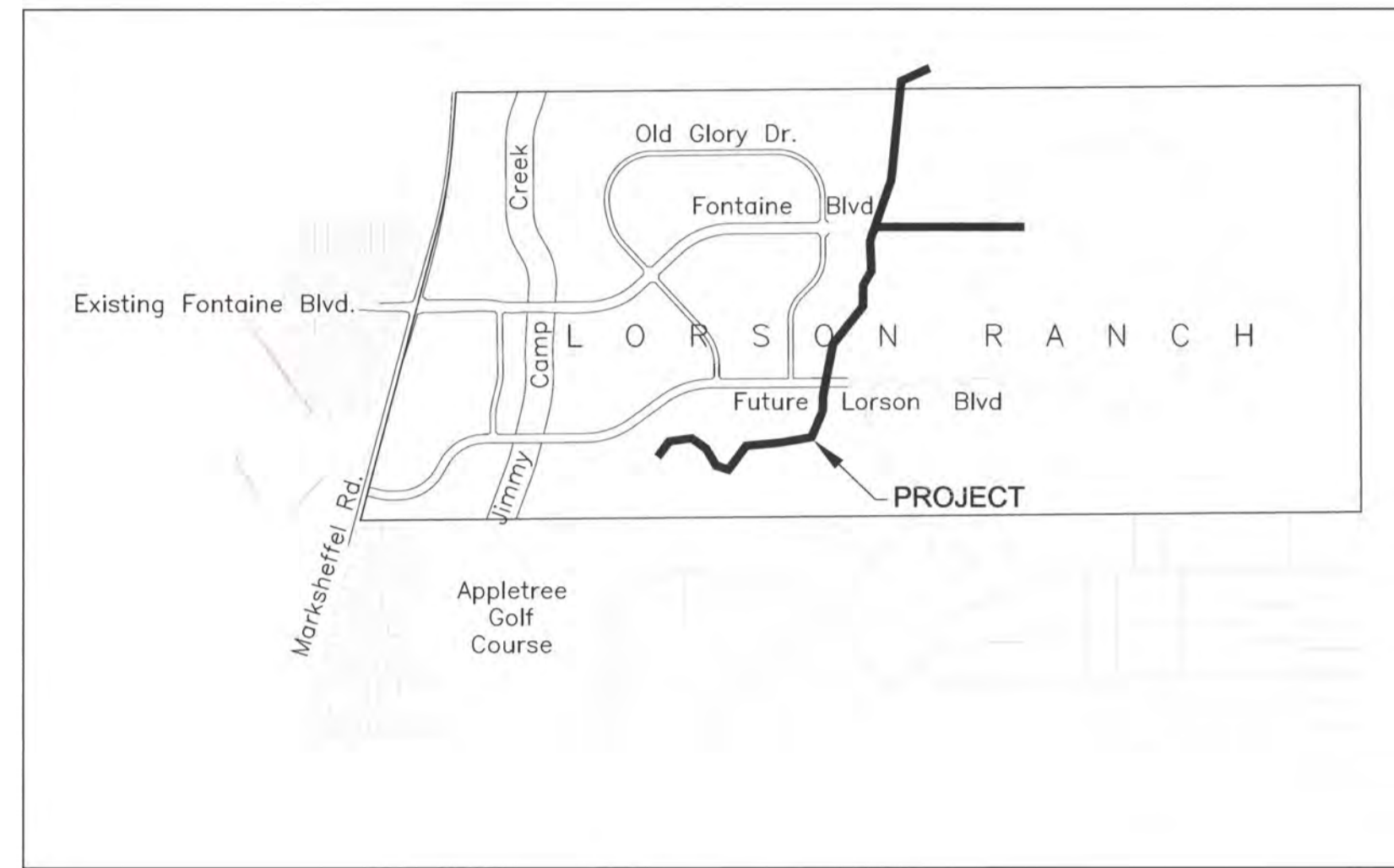


Know what's below.
Call before you dig.

CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR
EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES



KEY MAP
SCALE: 1"=1000'



VICINITY MAP
NO SCALE

SHEET INDEX	
SHEET NO.	SHEET DESCRIPTION
C1.1	COVER SHEET
C1.2	NOTES
C1.3	OVERALL LAYOUT
C4.1-C4.2	FUTURE DEVELOPMENT GRADING & EROSION CONTROL PLAN & DETAILS
C8.1-C8.8	SANITARY SEWER PLAN AND PROFILE
S1	CAISSON DETAILS
C12.1	UTILITY DETAILS

DEVELOPER'S STATEMENT

THE UNDERSIGNED OWNER/DEVELOPER HAS READ AND WILL COMPLY WITH ALL THE REQUIREMENTS SPECIFIED IN THESE CONSTRUCTION PLANS AND THE ACCOMPANYING DRAINAGE REPORT.

BUSINESS NAME LORSON, LLC

BY Jeff Mark DATE 12/5/17

TITLE Authorized Signing Agent

ADDRESS 212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, CO 80903

WATER / SANITARY
WIDEFIELD WATER AND SANITATION DISTRICT
8495 FONTAINE BLVD.
COLORADO SPRINGS, CO 80925
719-390-7111

CABLE
COMCAST
P.O. BOX 173838
DENVER, CO 80217
970-641-4774

ELECTRIC
MOUNTAIN VIEW ELECTRIC
11140 E. WOODMEN RD.
COLORADO SPRINGS, CO 80831
719-495-2283

SECURITY FIRE PROTECTION DISTRICT
400 SECURITY BOULEVARD
SECURITY, CO 80911
719-392-7121

TELEPHONE
CENTURYLINK
7925 INDUSTRY ROAD
COLORADO SPRINGS, CO 80939
719-278-4651

GAS
BLACK HILLS ENGERGY
7060 ALLEGRE ST.
FOUNTAIN, CO 80817
719-393-6639

EL PASO COUNTY
PLANNING AND COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE
COLORADO SPRINGS, CO 80910
719-520-6300

BASIS OF BEARING

BEARINGS ARE BASED ON THE SOUTH LINE OF THE NORTH HALF OF SECTION 23, TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN AS BEING SOUTH 89°15'2" WEST. THE EAST QUARTER CORNER OF SAID SECTION 23 IS A FOUND 3-1/2" ALUMINUM CAP MONUMENT AND THE WEST QUARTER CORNER OF SAID SECTION 23 IS A FOUND 2-1/2" ALUMINUM CAP MONUMENT

BENCHMARK

FIMS MONUMENT F204 LOCATED AT THE NORTHWEST CORNER OF FONTAINE BLVD AND COTTONWOOD GROVE DR. ELEVATION 5724.072 (N.G.V.D. 29)

TRAFFIC CONTROL NOTE

THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL DEVICES AND MONITORING NECESSARY TO SAFELY COMPLETE THE WORK SHOWN IN THESE CONSTRUCTION DOCUMENTS IN CONFORMANCE WITH M.U.T.C.D. GUIDELINES. THE CONTRACTOR SHALL COMPLETE ALL NECESSARY WORK FOR PLAN REVIEW, PERMITS AND PROCESSING. TRAFFIC CONTROL WILL NOT BE PAID SEPARATELY BUT IS INCLUDED IN THE COST OF THE PROJECT.

PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, CO 80903
719-635-3200
CONTACT: JEFF MARK

PREPARED BY:
CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
719-570-1100
CONTACT: RICHARD L. SCHINDLER P.E.

**COLORADO SPRINGS UTILITIES
WATER PLAN DESIGN APPROVAL**

APPROVED BY: Jennifer Irvine

DATE: 12/11/17

PROJECT NUMBER: 2017-S096

WORK ORDER NUMBER: 3232774

CSU SHEET 1 OF 3

*See sheets C8.7 and C8.8
APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

DISTRICT APPROVAL (WASTEWATER)

THE WIDEFIELD WATER AND SANITATION DISTRICT RECOGNIZES THE DESIGN ENGINEER AS HAVING RESPONSIBILITY FOR THE DESIGN. THE WIDEFIELD WATER AND SANITATION DISTRICT HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY.

WIDEFIELD WATER AND SANITATION DISTRICT
WASTEWATER DESIGN APPROVAL

DATE 12/08/17 BY John P. McMan

PROJECT NO. _____

IN CASE OF ERRORS OR OMISSIONS WITH THE WATER DESIGN AS SHOWN ON THIS DOCUMENT THE STANDARDS AS DEFINED IN THE "RULES AND REGULATIONS FOR INSTALLATION OF WATER MAINS AND SERVICES" SHALL RULE.

APPROVAL EXPIRES 180 DAYS FROM DESIGN APPROVAL

CONSTRUCTION APPROVAL

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.

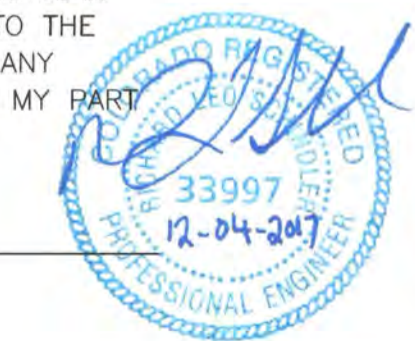
FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUALS VOLUME 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED. IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JENNIFER IRVINE, COUNTY ENGINEER/ECM ADMINISTRATOR DATE _____
CONDITIONS:

ENGINEER'S APPROVAL

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.

RICHARD L. SCHINDLER, P.E. # 33997
FOR AND ON BEHALF OF CORE ENGINEERING GROUP



DATE: _____
DESCRIPTION: _____
NO. 1. _____
PROJECT: EAST JCC INTERCEPTOR
EAST JIMMY CAMP CREEK INTERCEPTOR
FONTAINE BLVD. - LORSON BLVD.
EL PASO COUNTY, COLORADO
PREPARED FOR: LORSON, LLC
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com
CONTACT: JEFF MARK

DRAWN: LIA
DESIGNED: RLS
CHECKED: RLS

COVER SHEET
EAST JIMMY CAMP CREEK INTERCEPTOR
CONSTRUCTION PLANS

DATE
DECEMBER 4, 2017

PROJECT NO.
100.041

SHEET NUMBER
C1.1

TOTAL SHEETS: 15

CONSTRUCTION NOTES

- ALL WORK SHALL COMPLY WITH THE CODES AND POLICIES FOR EL PASO COUNTY.
- EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THIS GRADING PLAN WAS OBTAINED FROM DREXEL, BARRELL & CO., JULY, 2005. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXAMINE THE SITE AND BE FAMILIAR WITH THE EXISTING CONDITIONS.
- DEPTH OF MOISTURE-DENSITY CONTROL FOR THIS PROJECT SHALL BE AS FOLLOWS:
BASE OF ALL CUTS AND FILLS - 12 INCHES,
FULL DEPTH OF ALL EMBANKMENTS
- THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
- THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
- PRIOR TO PAVING OPERATIONS, THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED WITH A LOADED 988 FRONT-END LOADER OR SIMILAR HEAVY RUBBER TIRED VEHICLE (GVW OF 50,000 POUNDS WITH 18 KIP PER AXLE AT TIRE PRESSURES OF 90 PSI) TO DETECT ANY SOFT OR LOOSE AREAS. IN AREAS WHERE SOFT OR LOOSE SOILS, PUMPING OR EXCESSIVE MOVEMENT IS OBSERVED, THE EXPOSED MATERIALS SHALL BE OVER-EXCAVATED TO A MINIMUM DEPTH OF TWO FEET BELOW PROPOSED FINAL GRADE OR TO A DEPTH AT WHICH SOILS ARE STABLE. AFTER THIS HAS BEEN COMPLETED, THE EXPOSED MATERIALS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES AND MOISTURE CONDITIONED. THE SUBGRADE SHALL THEN BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) AT 0 TO +4.0% OF OPTIMUM MOISTURE CONTENT FOR A-6 AND A-7-6 SOILS ENCOUNTERED. OTHER SUBGRADE TYPES SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557) AT PLUS OR MINUS 2.0% OF OPTIMUM MOISTURE CONTENT. AREAS WHERE STABLE NATURAL SOILS ARE ENCOUNTERED AT PROPOSED SUBGRADE ELEVATION SHALL ALSO BE SCARIFIED (18 INCHES FOR A-7-6 SOILS BELOW FULL-DEPTH ASPHALT CONCRETE) AND COMPACTED AS OUTLINED ABOVE PRIOR TO PAVING OPERATIONS. SUBGRADE FILL SHALL BE PLACED IN SIX-INCH LIFTS AND UNIFORMLY COMPACTED, MEETING THE REQUIREMENTS AS PREVIOUSLY DESCRIBED.
- SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED, DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
- FILL SHALL BE PLACED IN 8-INCH MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED PRIOR TO SUCCESSIVE LIFTS.
- THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DURING CONSTRUCTION ACTIVITIES AT ALL TIMES DURING GRADING AND CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING EROSION AND SEDIMENT CONTROL MEASURES:
- HAY BALE BARRIERS WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
- SILT FENCE WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
- TEMPORARY SEDIMENTATION BASINS WHERE NEEDED AND/OR AS DIRECTED BY THE ENGINEER.
- MULCHING AND SEEDING OF EXCESSIVE SLOPED AREAS AS NEEDED OR AS DIRECTED BY THE ENGINEER.
- TEMPORARY VEHICLE TRACKING CONTROL AS NEEDED AND/OR DIRECTED BY THE ENGINEER.
- CONCRETE WASH AREAS.
- INLET PROTECTION.
THESE AND ALL EROSION CONTROL BEST MANAGEMENT PRACTICES AS SHOWN IN THE GRADING AND EROSION CONTROL PLANS SHALL BE STRICTLY ADHERED TO.
- FINISHED CONTOURS/SPOT ELEVATIONS SHOWN HEREON REPRESENT FINISHED GRADES. ALL PAVEMENT SUBGRADES ARE BASED ON THE COMPOSITE ASPHALT PAVEMENT RECOMMENDATIONS MADE IN THE "GEOTECHNICAL STUDY" FOR LORSON RANCH.

WIDEFIELD WATER AND SANITATION DISTRICT GENERAL NOTES

- ALL UTILITY CONSTRUCTION TO BE CONDUCTED IN CONFORMANCE WITH THE CURRENT WIDEFIELD WATER AND SANITATION DISTRICT SPECIFICATIONS. COMPACTION REQUIREMENTS SHALL BE 95% STANDARD PROCTOR AS DETERMINED BY ASTM D698, UNLESS OTHERWISE APPROVED BY THE WIDEFIELD WATER AND SANITATION DISTRICT OR A HIGHER STANDARD IS IMPOSED BY ANOTHER AGENCY HAVING RIGHT-OF-WAY JURISDICTION.
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE WIDEFIELD WATER AND SANITATION DISTRICT. THE WIDEFIELD WATER AND SANITATION DISTRICT RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
- THE DEVELOPER OR HIS ENGINEER HAS LOCATED ALL FIRE HYDRANTS AND FUTURE SERVICE STUBS. ANY REQUIRED REALIGNMENT, EITHER HORIZONTAL OR VERTICAL, SHALL BE AT THE EXPENSE OF THE DEVELOPER.
- ALL DUCTILE IRON PIPE, TO INCLUDE FITTINGS, VALVES AND FIRE HYDRANTS WILL BE WRAPPED WITH POLYETHYLENE TUBING, BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED.
- ALL DUCTILE IRON PIPE SHALL BE DOUBLE BONDED. DIP SHALL HAVE CATHODIC PROTECTION USING NO. 6 WIRE WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET.
- PVC MAIN LINES SHALL BE INSTALLED WITH COATED NO. 12 TRACER WIRE.
- ALL FITTINGS SHALL BE DUCTILE IRON -MECHANICAL JOINT AND HAVE 1 LB. MAGNESIUM ANODES AT EVERY FITTING.
- THE CONTRACTOR IS REQUIRED TO NOTIFY THE WIDEFIELD WATER AND SANITATION DISTRICT (390-7111) A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO NOTIFY AFFECTED UTILITY COMPANIES 48 HOURS PRIOR TO CONSTRUCTION ADJACENT TO THE KNOWN UTILITY LINES.
- THE LOCATION OF ALL UTILITIES AS SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY. THE LOCATION OF ALL UTILITIES SHALL BE VERIFIED PRIOR TO CONSTRUCTION BY THE CONTRACTOR.
- THE CONTRACTOR SHALL FIELD EXCAVATE AND VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF ALL TIE-INS. CONTRACTOR SHALL NOTIFY THE WIDEFIELD WATER AND SANITATION DISTRICT AND THE ENGINEER OF THE FIELD VERIFIED INFORMATION PRIOR TO CONSTRUCTION.
- ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION.
- ANY WATER UTILITY MATERIAL REMOVED AND NOT REUSED SHALL BE RETURNED TO THE WIDEFIELD WATER AND SANITATION DISTRICT IF THE DISTRICT SO REQUESTS.
- THE CONTRACTOR SHALL AT HIS EXPENSE SUPPORT AND PROTECT ALL UTILITY MAINS SO THAT THEY WILL FUNCTION CONTINUOUSLY DURING CONSTRUCTION. SHOULD A UTILITY MAIN FAIL AS A RESULT OF THE CONTRACTOR'S OPERATION, IT WILL BE REPLACED IMMEDIATELY BY EITHER THE CONTRACTOR OR THE WIDEFIELD WATER AND SANITATION DISTRICT AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR.
- ANY PUMPING OR BYPASS OPERATIONS MUST BE REVIEWED AND APPROVED PRIOR TO EXECUTION BY BOTH THE WIDEFIELD WATER AND SANITATION DISTRICT AND THE ENGINEER.
- DISINFECTION SHALL BE ACCOMPLISHED BY GLUING TABLETS TO THE TOP OF THE LINE. POWDER OR GRANULER HTH SHALL NOT BE USED. SEE WIDEFIELD SPECS FOR FURTHER DEFINITION OF DISINFECTION TECHNIQUES.
- CONTRACTOR MUST REPLACE OR REPAIR ANY DAMAGE TO ALL SURFACE IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, CURB AND GUTTER AND/OR ASPHALT THAT MAY BE CAUSED DURING CONSTRUCTION.
- ALL WATER LINES 6" AND LARGER, AND ALL SEWER LINES 8" AND LARGER, SHALL HAVE AS "AS-BUILT" PLANS PREPARED AND APPROVED PRIOR TO FINAL ACCEPTANCE BY THE WIDEFIELD WATER AND SANITATION DISTRICT.
- PRIOR TO CONSTRUCTION, A PRE-CONSTRUCTION CONFERENCE IS REQUIRED A MINIMUM OF 72 HOURS IN ADVANCE OF COMMENCEMENT OF WORK. TO SET THE PRE-CONSTRUCTION CONFERENCE, CONTACT BRANDON BERNARD-WATER SUPERINTENDENT (464-2051) AND/OR MARK MCCORMICK, WASTEWATER SUPERINTENDENT OF THE WIDEFIELD WATER AND SANITATION DISTRICT FOR A TIME. NO PRE-CONSTRUCTION CONFERENCE TIMES WILL BE SET UNTIL 4 SETS OF SIGNED DRAWINGS ARE RECEIVED BY THE WIDEFIELD W & S DISTRICT. PRE-CONSTRUCTION DATE /INITIALS_____.

WIDEFIELD WATER AND SANITATION DISTRICT UTILITY CONSTRUCTION NOTES

- ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE CATHODIC PROTECTION AND 1 LB MAGNESIUM ANODES AT EVERY FITTING.
- ALL FIRE HYDRANTS SHALL BE MUELLER SUPER CENTURION 200 OR AMERICAN AVK SERIES 2700, (MODERN)

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

- CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PCD AND A PRECONSTRUCTION CONFERENCE IS HELD WITH PCD INSPECTIONS.
- 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 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.
- 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. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPS AS INDICATED ON THE 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 PCD INSPECTIONS STAFF.
- SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
- TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX I.
- ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPS IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
- ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPS AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
- ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE 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.
- ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
- CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- EROSION CONTROL BLANKETING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER 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. BMP'S MAY BE REQUIRED BY EL PASO COUNTY PCD IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 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.
- THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM 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 CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
- INDIVIDUALS 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 INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY RMG AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 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 MATERIAL

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WOOD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT



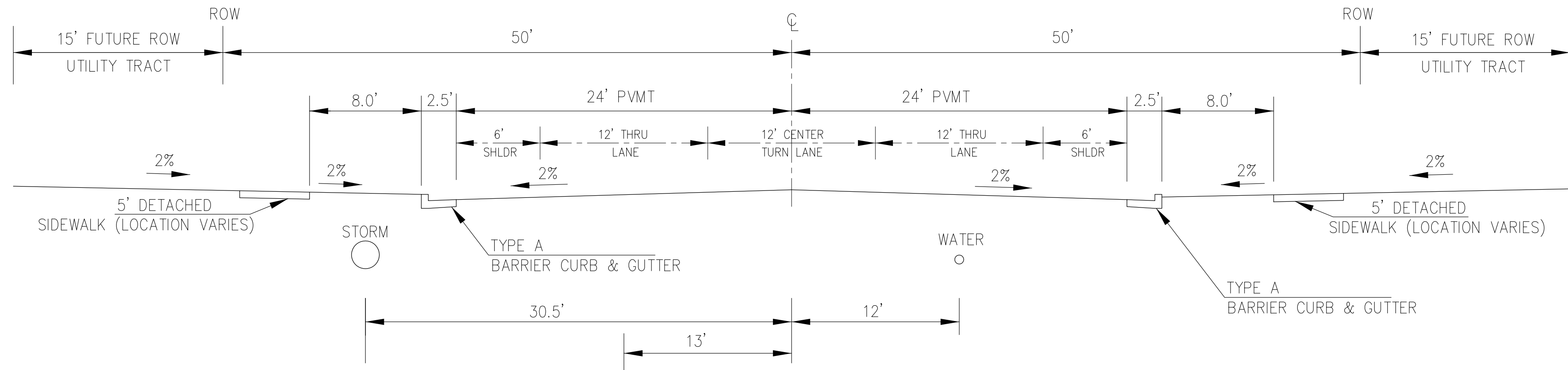
CORE ENGINEERING GROUP
1500 15TH AVENUE, SUITE 500
DENVER, CO 80202
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceng1.com

DATE: X
DESCRIPTION: X
NO: 1
PROJECT: EAST JCC INTERCEPTOR
PREPARED FOR: LORSON, LLC
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 636-3200
CONTACT: JEFF MARK

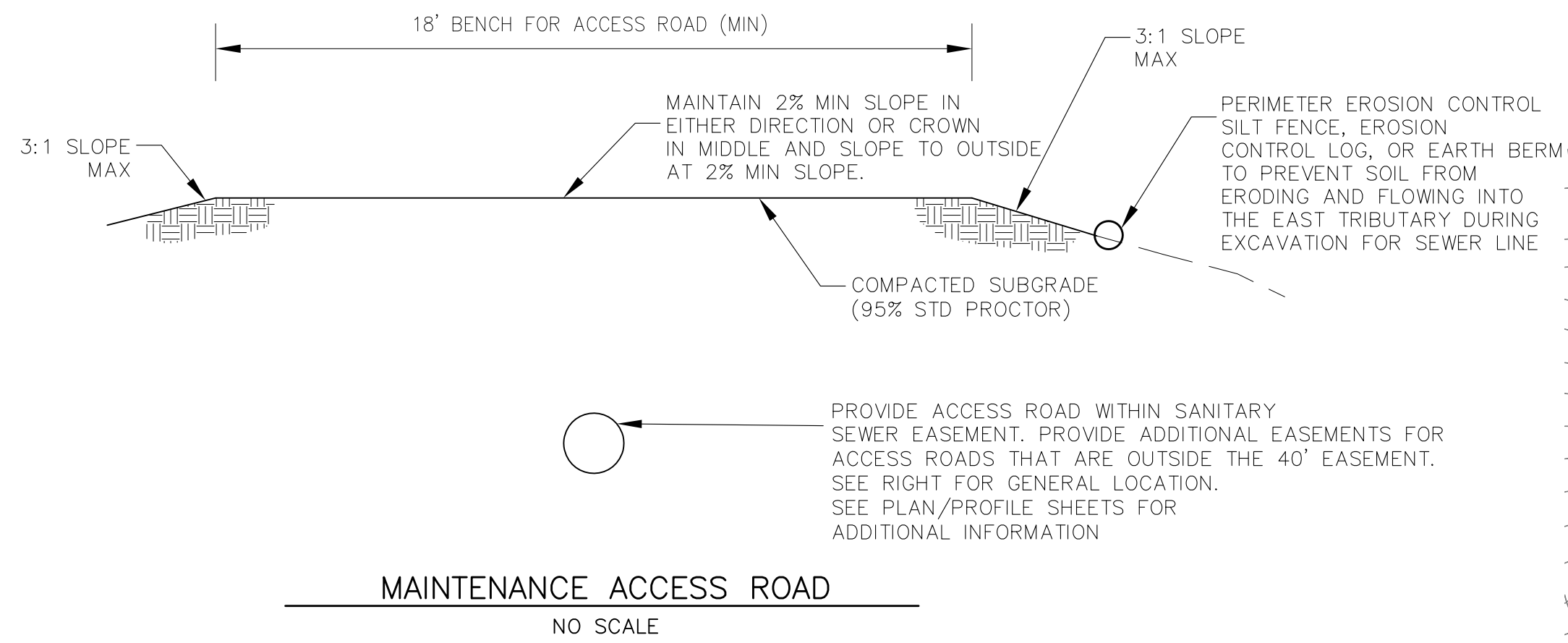
DRAWN: LJA
DESIGNED: RLS
CHECKED: RLS

NOTES
EAST JIMMY CAMP CREEK INTERCEPTOR

DATE: **DECEMBER 4, 2017**
PROJECT NO: **100.041**
SHEET NUMBER: **C1.2**
TOTAL SHEETS: **15**



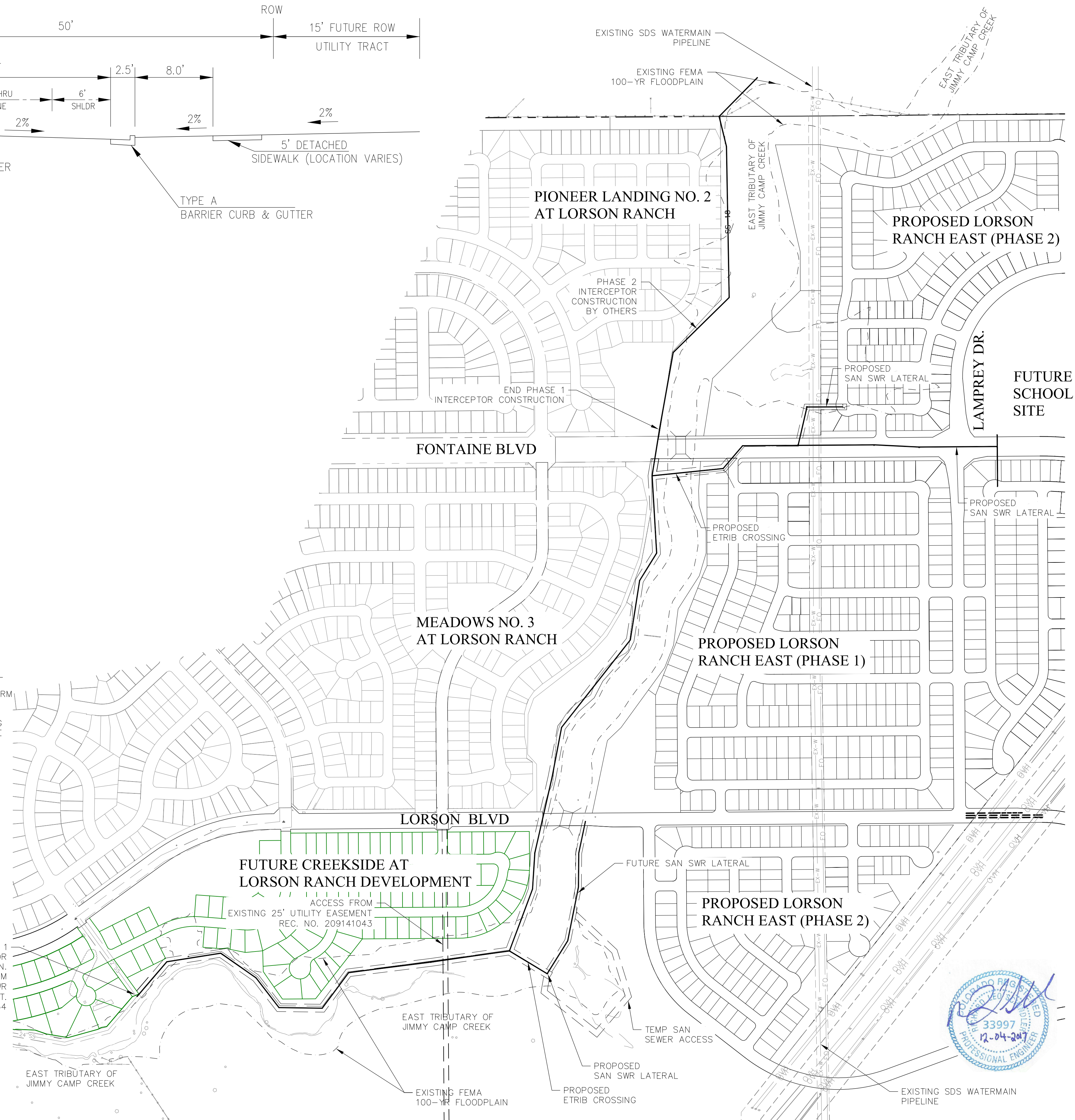
TYPICAL SECTION 100' R.O.W.
PROPOSED FONTAINE BLVD
NOT TO SCALE



WORK WITHIN CSU SOUTHERN DELIVERY SYSTEM EASEMENT CONSTRUCTION NOTES

1. CONTRACTOR SHALL COMPLY WITH CSU LESS 2.6.H.8 "CROSSING RAW WATER TRANSMISSION MAINS" FOR ALL WORK WITHIN THE CSU WATERMAIN EASEMENT
2. UTILITIES CROSSING OVER THE SDS WATERMAIN MUST BE POTHOLED WITH HYDRO-VAC AT EVERY CROSSING TO OBTAIN VISUAL VERIFICATION OF THE WATERMAIN ELEVATION.
3. A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4658, AND PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT
4. CONTACT WAYNE RUST, 719-668-3996, COLORADO SPRINGS UTILITIES, FOR ADDITIONAL INFORMATION REGARDING THE SDS FIBER LINE.
5. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 5' OF COVER OVER THE SDS WATERMAIN.
6. CONTRACTOR SHALL SALVAGE AND REPLACE ALL CARSONITE WATER MARKERS OVER THE WATERMAIN AFTER CONSTRUCTION.

BEGIN PHASE 1 INTERCEPTOR CONSTRUCTION. ACCESS FROM EXISTING 35' SAN SWR EASEMENT. REC. NO. 208055334



CORE ENGINEERING GROUP
1500 15TH AVENUE, SUITE 301
BOULDER, CO 80502
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceng1.com

NO.	DESCRIPTION	DATE
1.	X	X

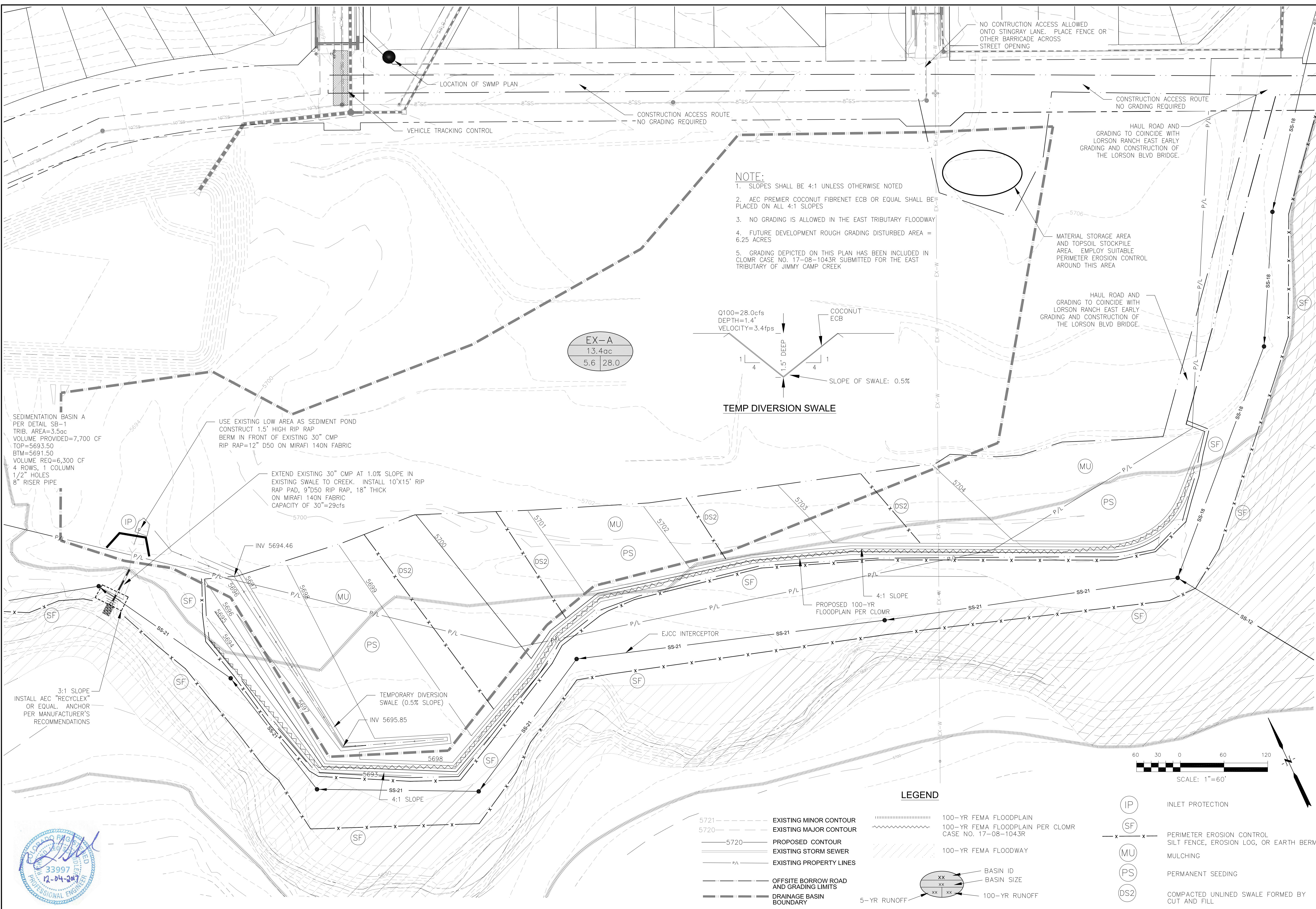
PREPARED FOR:
LORSON, LLC
212 N. WAHATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
EAST JCC INTERCEPTOR
FONTAINE BLVD. - LORSON BLVD.
EL PASO COUNTY, COLORADO

DRAWN:	LJA
DESIGNED:	RLS
CHECKED:	RLS

OVERALL SITE MAP
EAST JIMMY CAMP CREEK INTERCEPTOR

DATE	DECEMBER 4, 2017
PROJECT NO.	100.041
SHEET NUMBER	C1.3
TOTAL SHEETS:	15

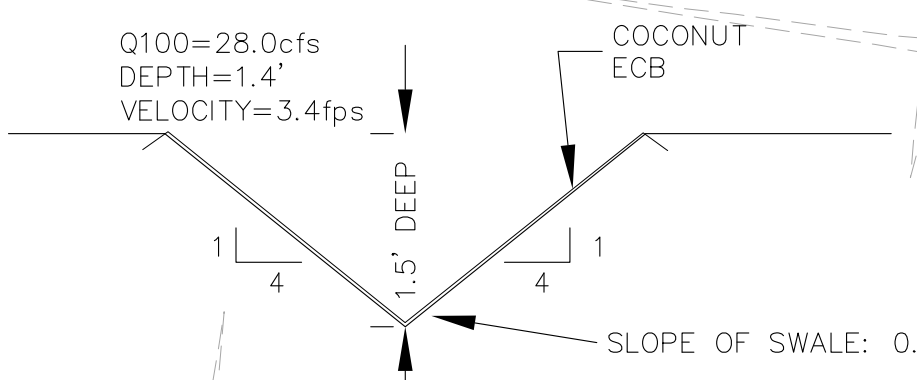


NOTE:

- SLOPES SHALL BE 4:1 UNLESS OTHERWISE NOTED
- AEC PREMIER COCONUT FIBRENET ECB OR EQUAL SHALL BE PLACED ON ALL 4:1 SLOPES
- NO GRADING IS ALLOWED IN THE EAST TRIBUTARY FLOODWAY
- FUTURE DEVELOPMENT ROUGH GRADING DISTURBED AREA = 6.25 ACRES
- GRADING DEPICTED ON THIS PLAN HAS BEEN INCLUDED IN CLOMR CASE NO. 17-08-1043R SUBMITTED FOR THE EAST TRIBUTARY OF JIMMY CAMP CREEK

EX-A
13.4ac
5.6 | 28.0

TEMP DIVERSION SWALE



SEDIMENTATION BASIN A
PER DETAIL SB-1
TRIB. AREA=3.5ac
VOLUME PROVIDED=7,700 CF
TOP=5693.50
BTM=5691.50
VOLUME REQ=6,300 CF
4 ROWS, 1 COLUMN
1/2" HOLES
8" RISER PIPE

USE EXISTING LOW AREA AS SEDIMENT POND
CONSTRUCT 1.5' HIGH RIP RAP
BERM IN FRONT OF EXISTING 30" CMP
RIP RAP=12" D50 ON MIRAFI 140N FABRIC

EXTEND EXISTING 30" CMP AT 1.0% SLOPE IN
EXISTING SWALE TO CREEK. INSTALL 10'X15' RIP
RAP PAD, 9"D50 RIP RAP, 18" THICK
ON MIRAFI 140N FABRIC
CAPACITY OF 30"=29cfs

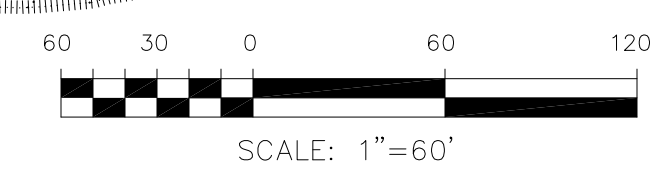
3:1 SLOPE
INSTALL AEC "RECYCLEX"
OR EQUAL ANCHOR
PER MANUFACTURER'S
RECOMMENDATIONS

TEMPORARY DIVERSION
SWALE (0.5% SLOPE)
INV 5695.85

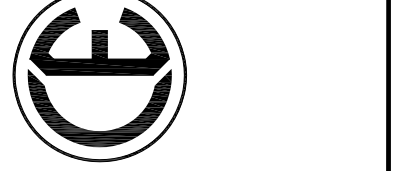
PROPOSED 100-YR
FLOODPLAIN PER CLOMR
4:1 SLOPE

LEGEND

- 5721 --- EXISTING MINOR CONTOUR
- 5720 --- EXISTING MAJOR CONTOUR
- 5720 --- PROPOSED CONTOUR
- EXISTING STORM SEWER
- P/L --- EXISTING PROPERTY LINES
- OFFSITE BORROW ROAD AND GRADING LIMITS
- DRAINAGE BASIN BOUNDARY
- 100-YR FEMA FLOODPLAIN
- 100-YR FEMA FLOODPLAIN PER CLOMR CASE NO. 17-08-1043R
- 100-YR FEMA FLOODWAY
- 5-YR RUNOFF
- 100-YR RUNOFF
- IP --- INLET PROTECTION
- SF --- PERIMETER EROSION CONTROL SILT FENCE, EROSION LOG, OR EARTH BERM
- MU --- MULCHING
- PS --- PERMANENT SEEDING
- DS2 --- COMPACTED UNLINED SWALE FORMED BY CUT AND FILL



CORE ENGINEERING GROUP
1500S 15TH AVENUE, SUITE 55506
DENVER, CO 80202
PHONE: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com



NO.	DESCRIPTION	DATE
1		X
X		X

PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
EAST JCC INTERCEPTOR
FONTANE BLVD., LORSON BLVD.
EL PASO COUNTY, COLORADO

DRAWN: LJA
DESIGNED: RLS
CHECKED: RLS

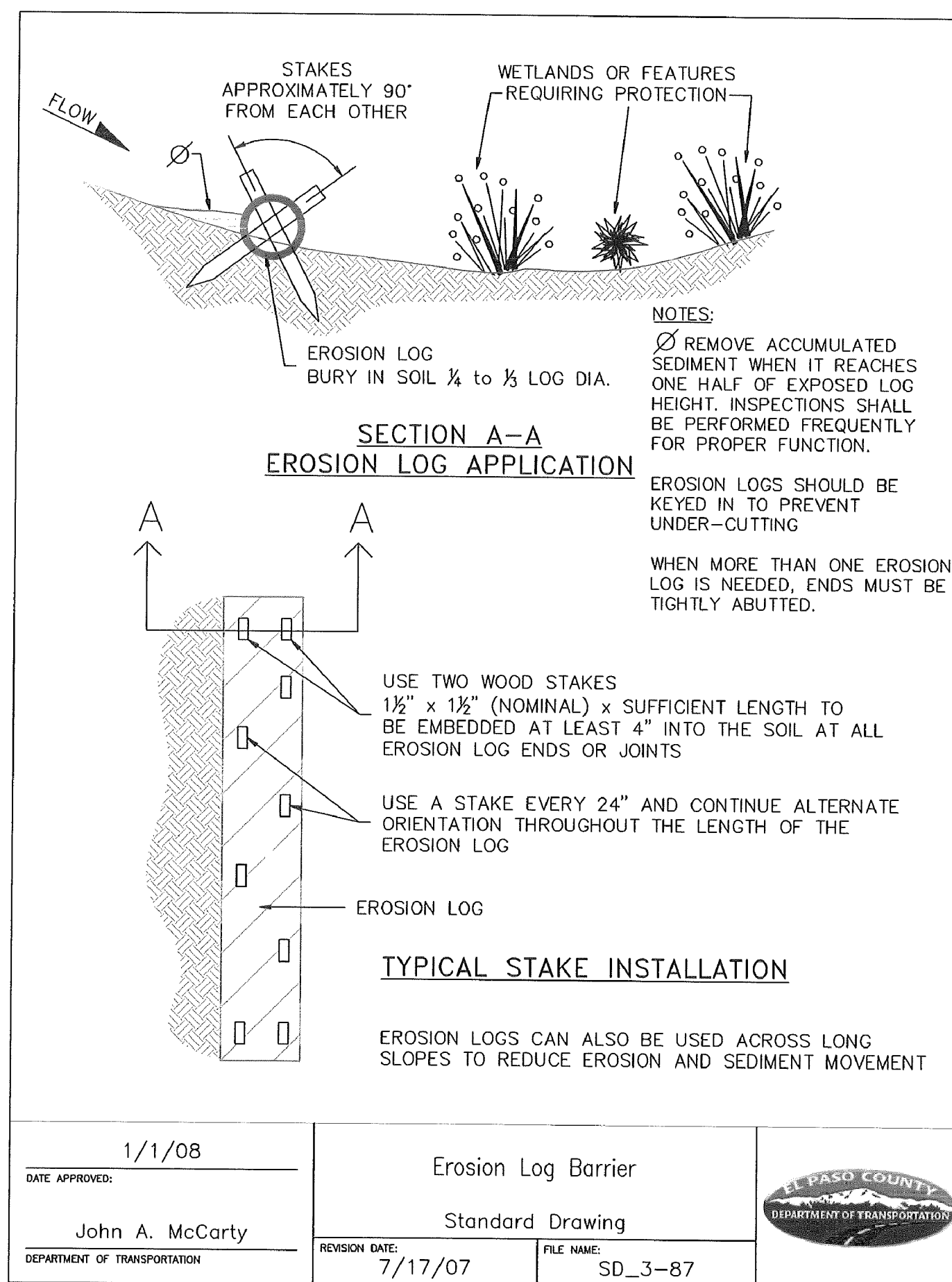
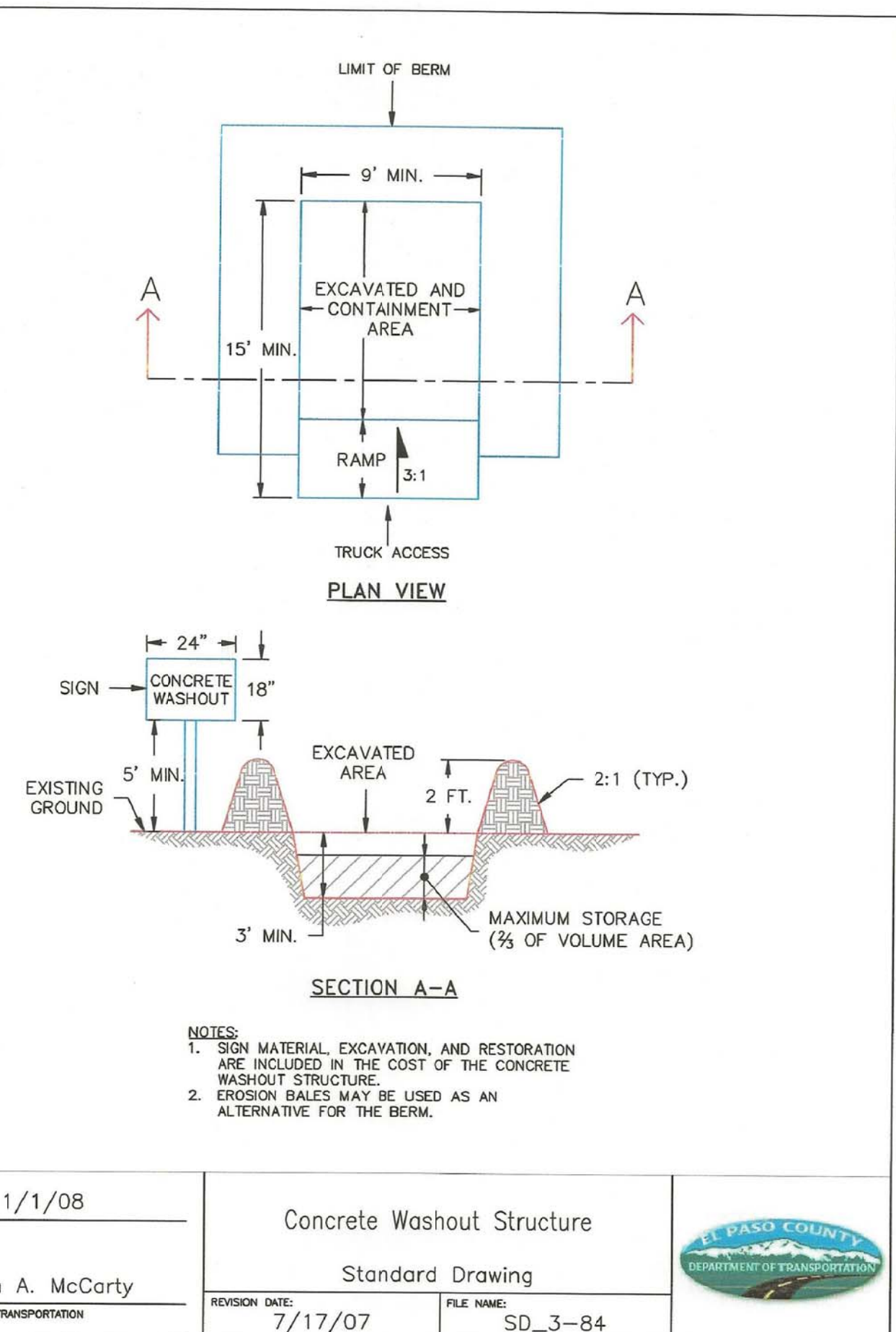
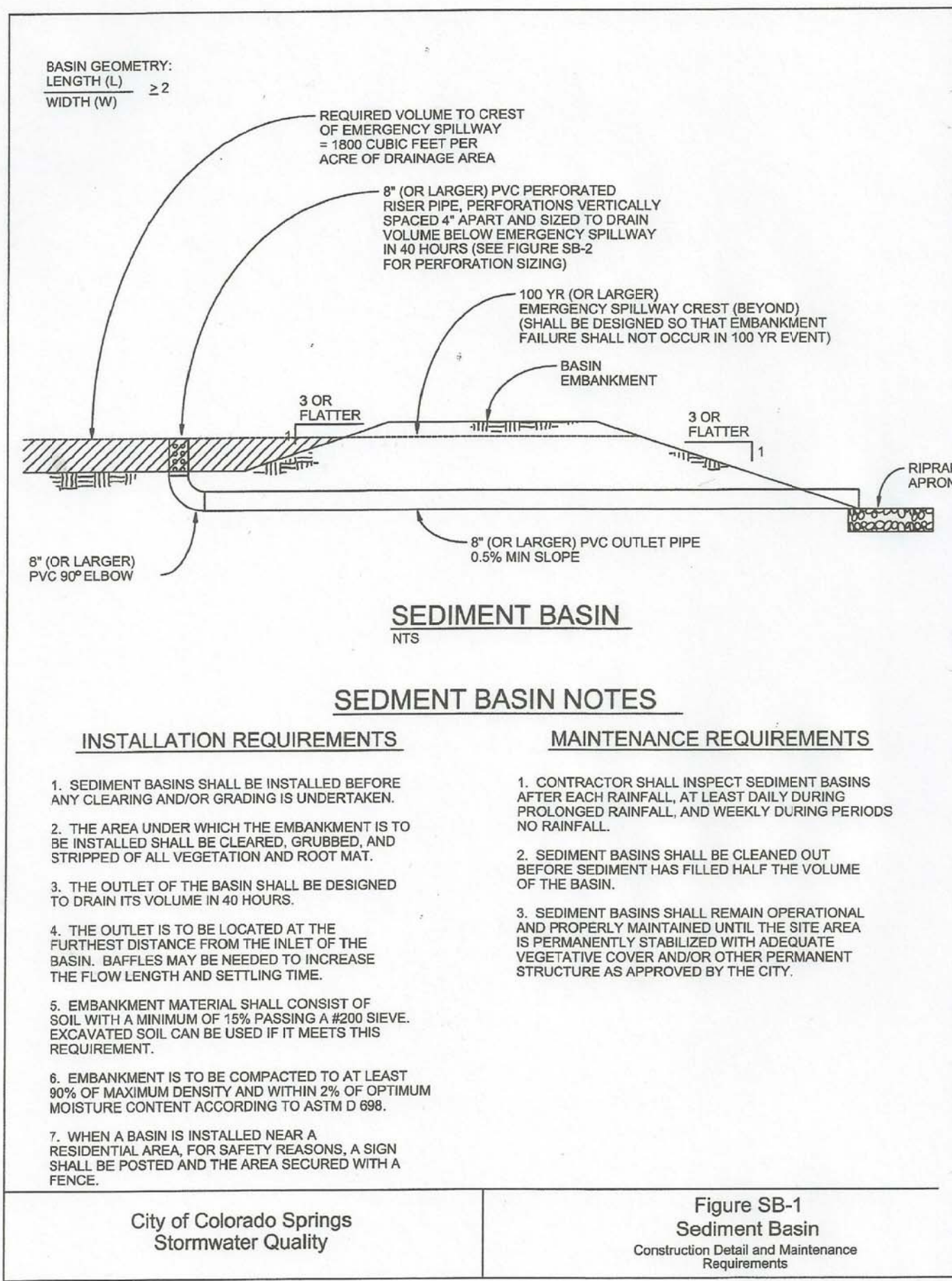
FUTURE DEVELOPMENT ROUGH GRADING AND EROSION CONTROL PLAN

DATE
DECEMBER 4, 2017

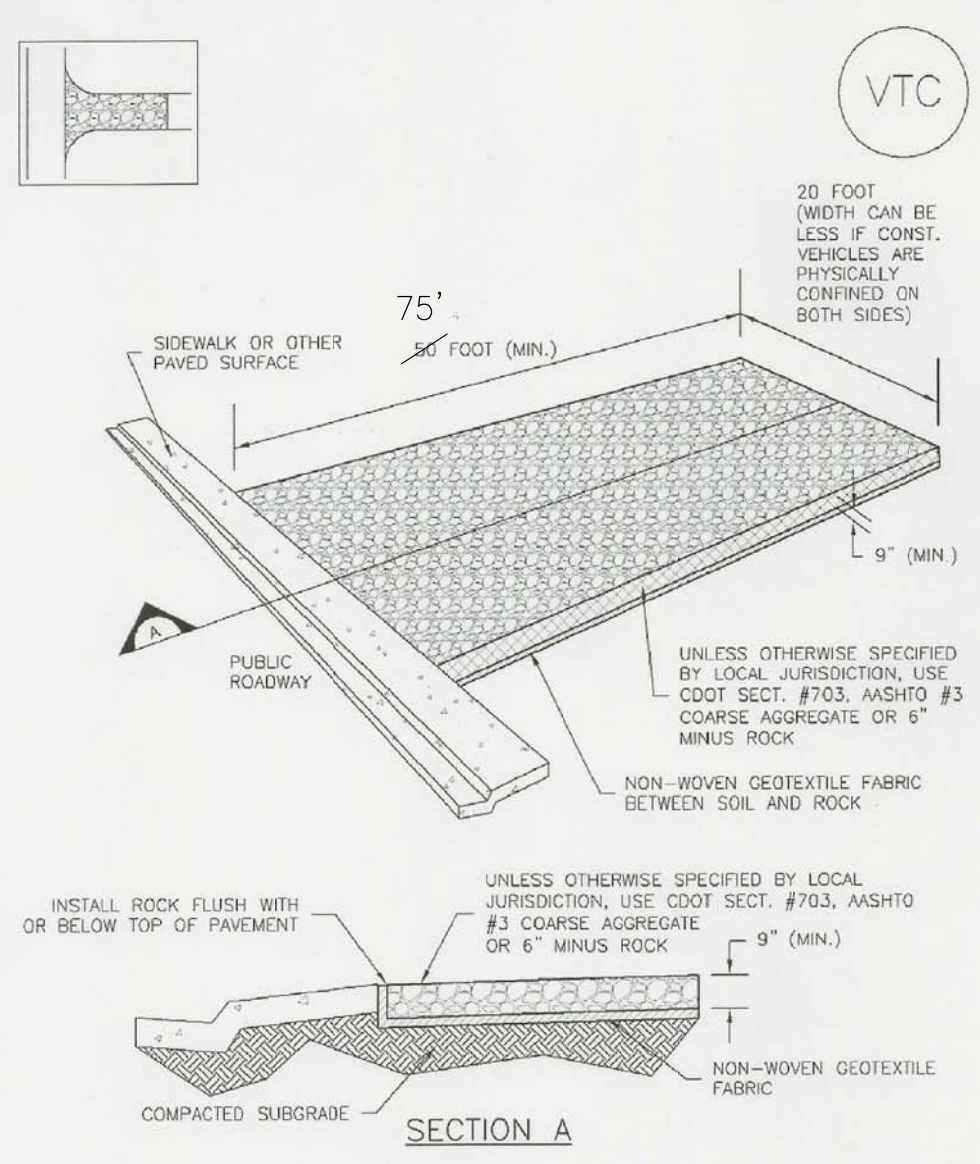
PROJECT NO.
100.041

SHEET NUMBER
C4.1

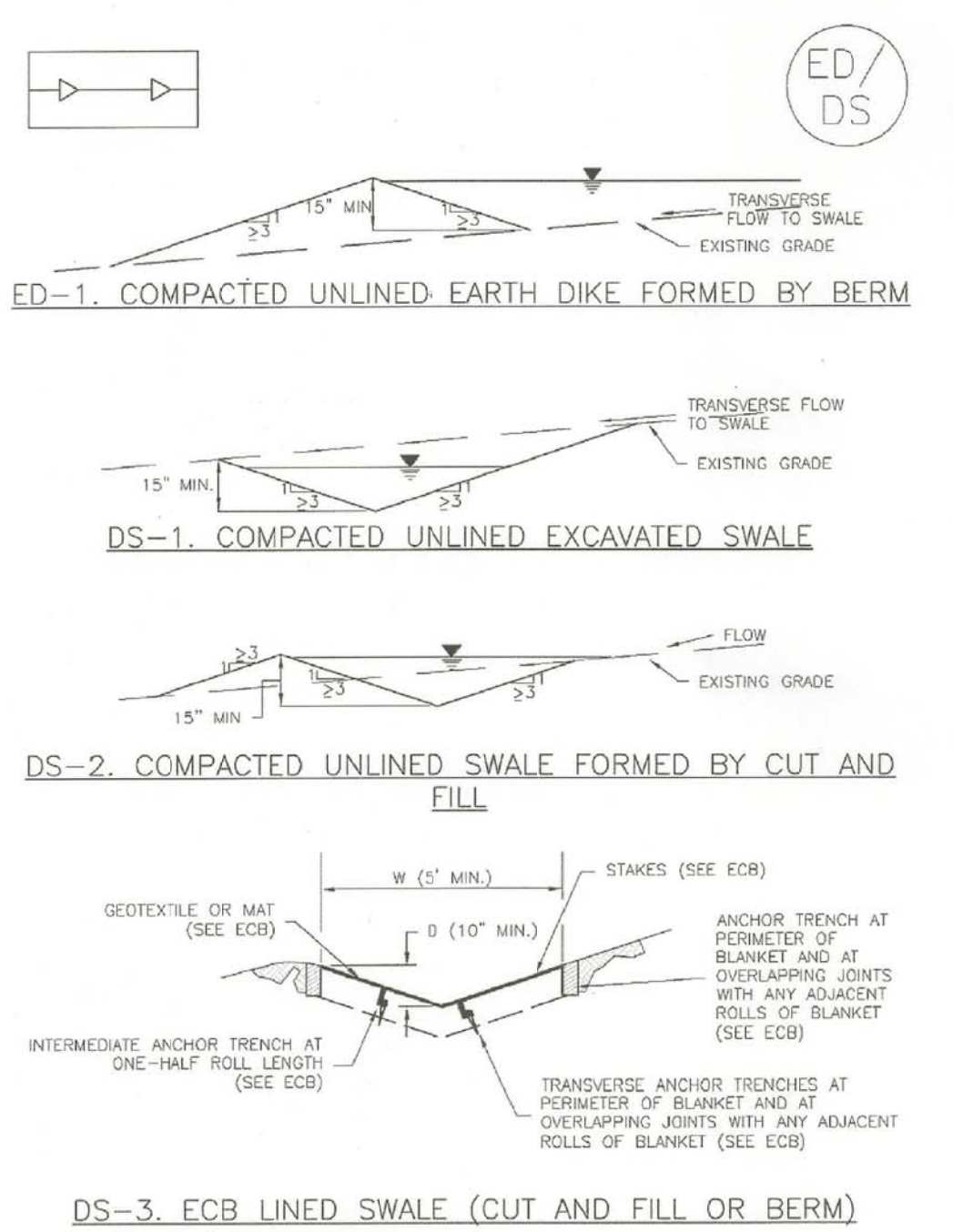
TOTAL SHEETS: **15**



Vehicle Tracking Control (VTC) SM-4



Earth Dikes and Drainage Swales (ED/DS) EC-10



CORE ENGINEERING GROUP
1500S AVENUE 15, SUITE 301
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE: X
DESCRIPTION: X
NO. 1. X

PREPARED FOR: **LORSON, LLC**
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 636-3200
CONTACT: JEFF MARK

PROJECT: **EAST JCC INTERCEPTOR**
FONTANE BLVD., LORSON BLVD.
EL PASO COUNTY, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

**EAST JIMMY CAMP CREEK INTERCEPTOR
EROSION CONTROL DETAILS**

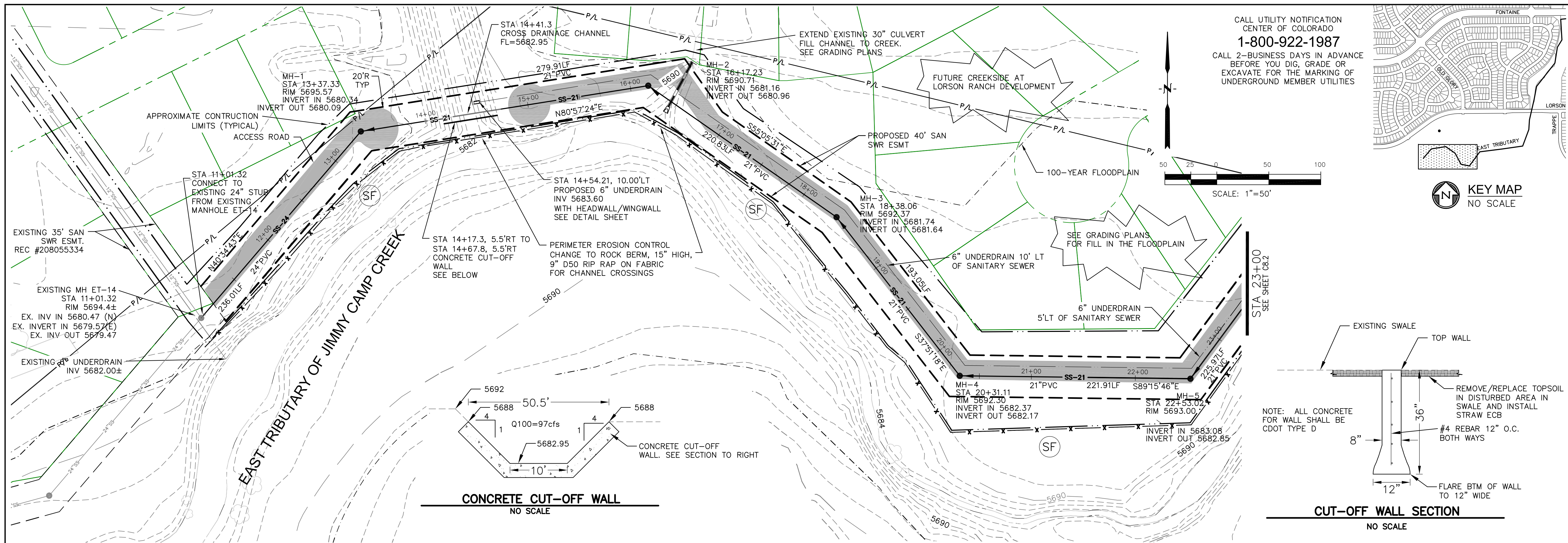
DATE: DECEMBER 4, 2017

PROJECT NO.: 100.041

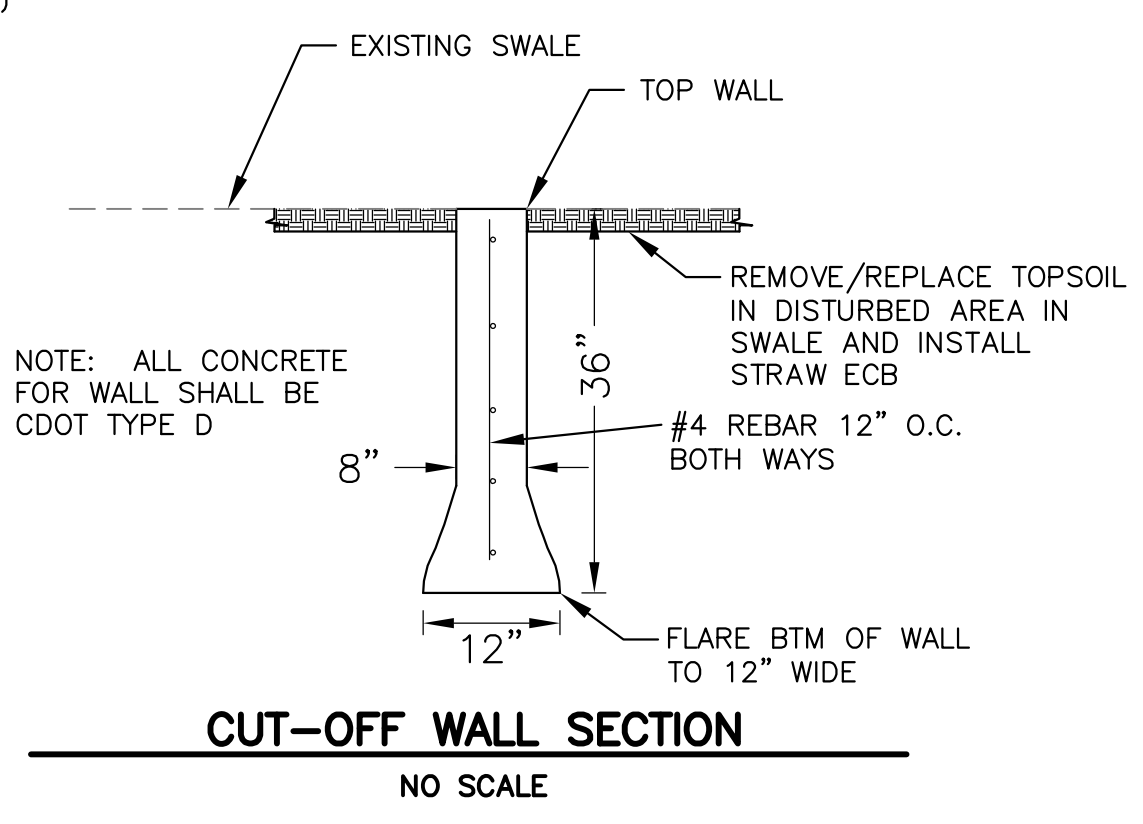
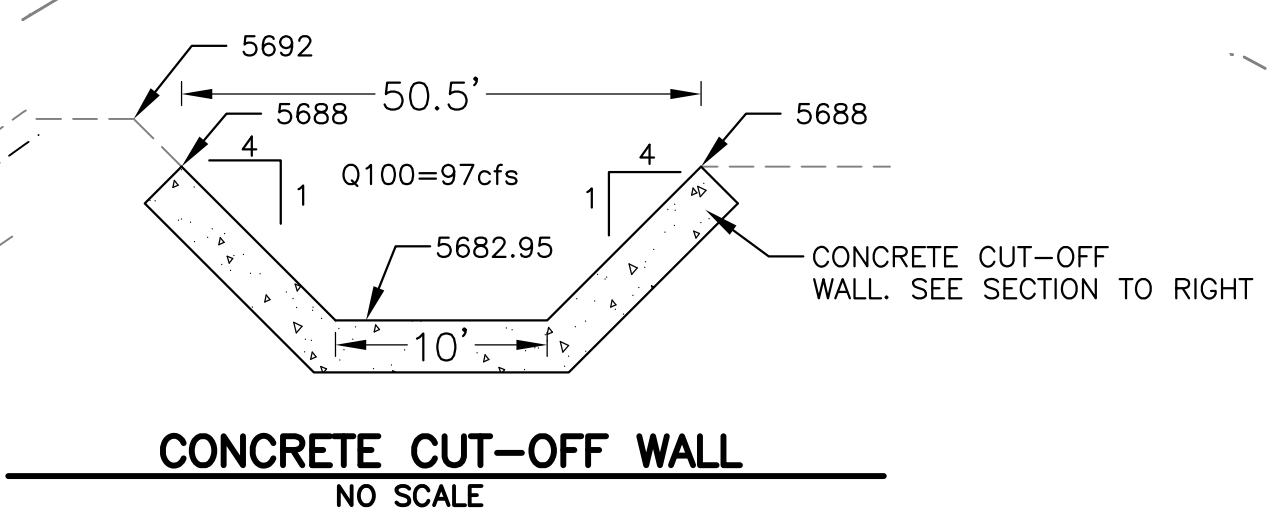
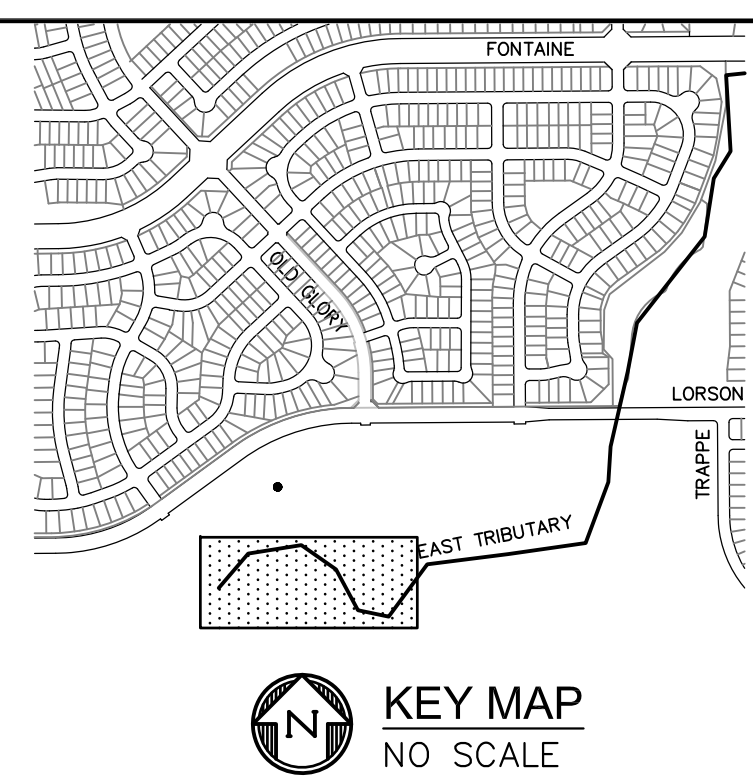
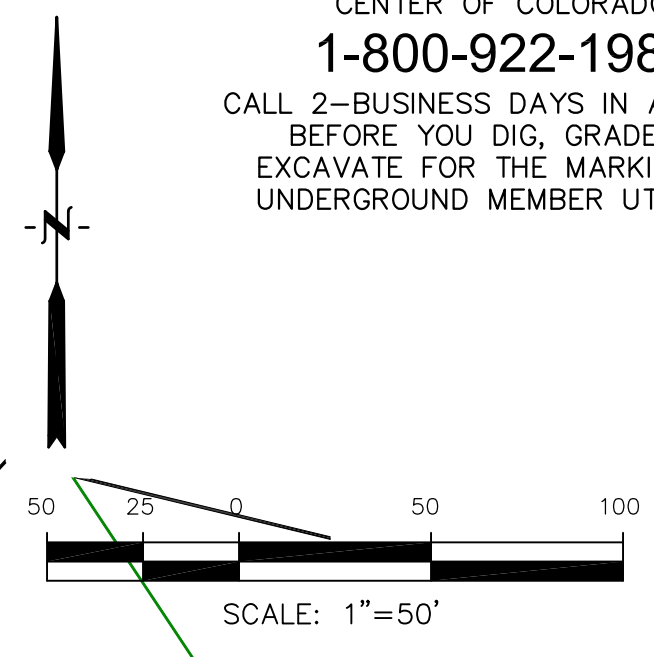
SHEET NUMBER: C4.2

TOTAL SHEETS: 15

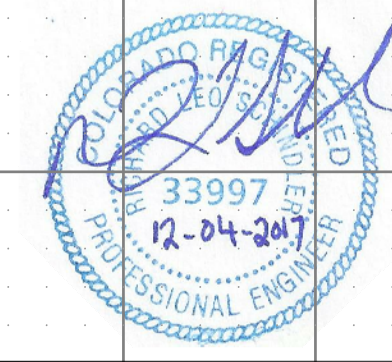
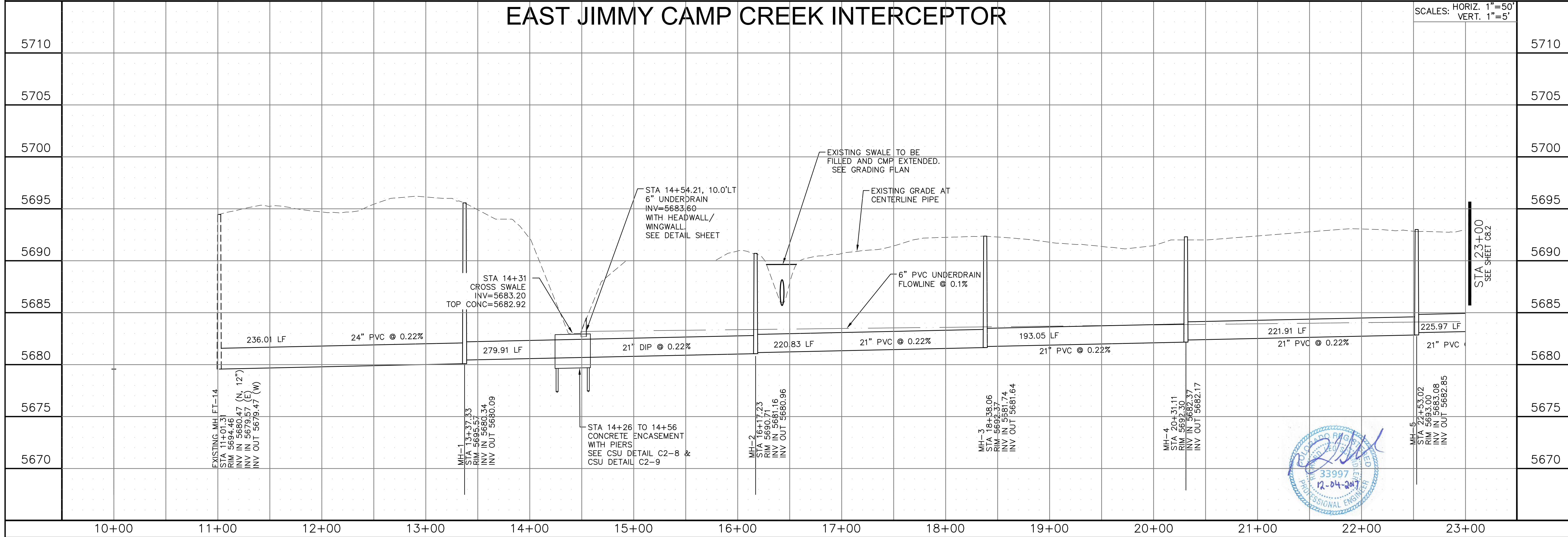




CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR
EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES



EAST JIMMY CAMP CREEK INTERCEPTOR

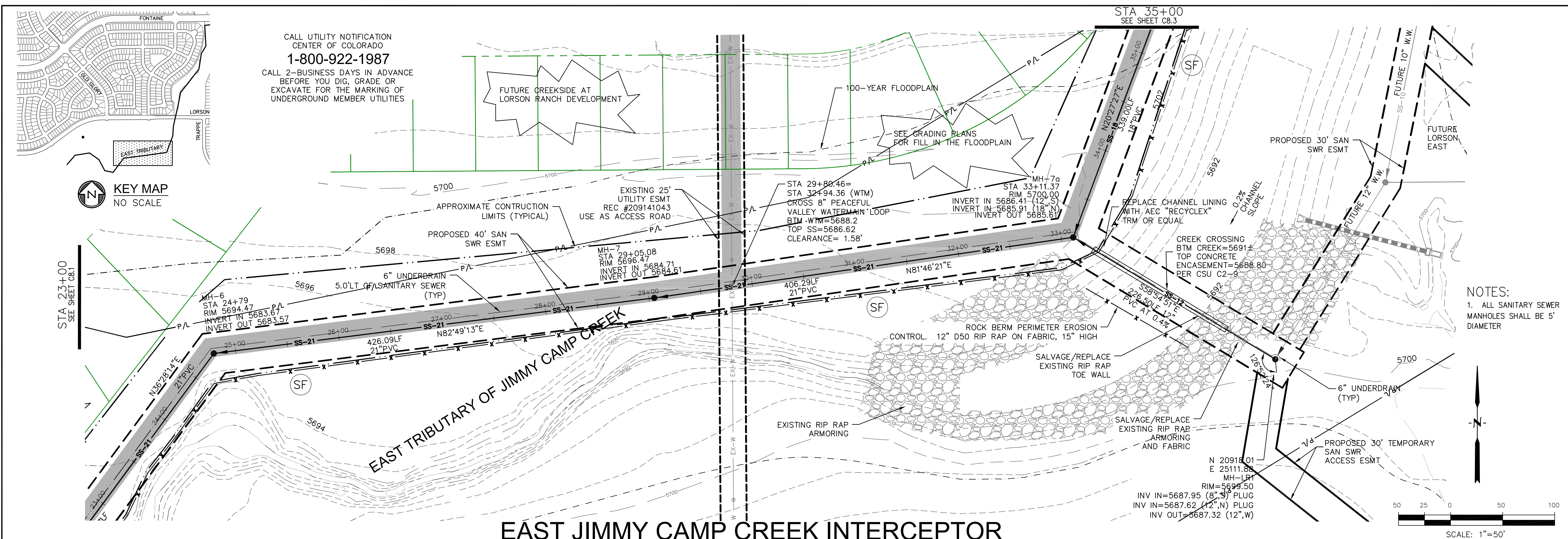


CORE ENGINEERING GROUP
1500 K 151 AVENUE, SUITE 5500
DENVER, CO 80202
PHONE: 719.656.7800
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: RICH@CEGI.COM

LOPSON, LLC
212 N. WAHSATCH AVENUE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

EAST JCC INTERCEPTOR AND EROSION CONTROL PLAN
STA 10+00 TO 23+00

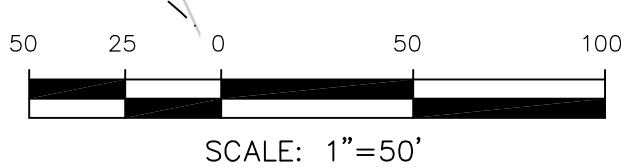
DATE: DECEMBER 4, 2017
PROJECT NO. 100.041
SHEET NUMBER **C8.1**
TOTAL SHEETS: 15



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR
EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES

KEY MAP
NO SCALE

NOTES:
1. ALL SANITARY SEWER
MANHOLES SHALL BE 5'
DIAMETER



EAST JIMMY CAMP CREEK INTERCEPTOR

Station	Vertical Elevation	Notes
5710	5710	
5705	5705	
5700	5700	
5695	5695	EXISTING GRADE AT CENTERLINE PIPE
5690	5690	FILL AREA BETWEEN EXISTING WATERMAIN AND SANITARY SEWER WITH PEA GRAVEL
5685	5685	6" PVC UNDERDRAIN FLOWLINE @ 0.1%
5680	5680	21" PVC @ 0.22%
5675	5675	406.29 LF
5670	5670	339.00 LF



CORE ENGINEERING GROUP
1500K 151ST AVENUE, SUITE 100
DENVER, CO 80202
PHONE: 303-750-7800
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: RICH@CEG1.COM

DATE: DECEMBER 4, 2017

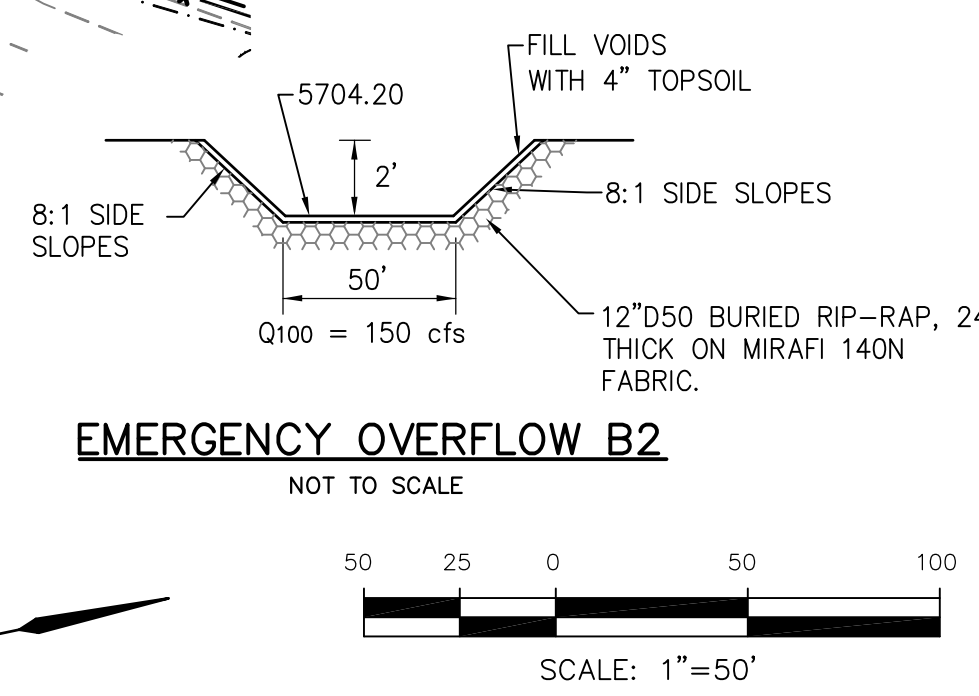
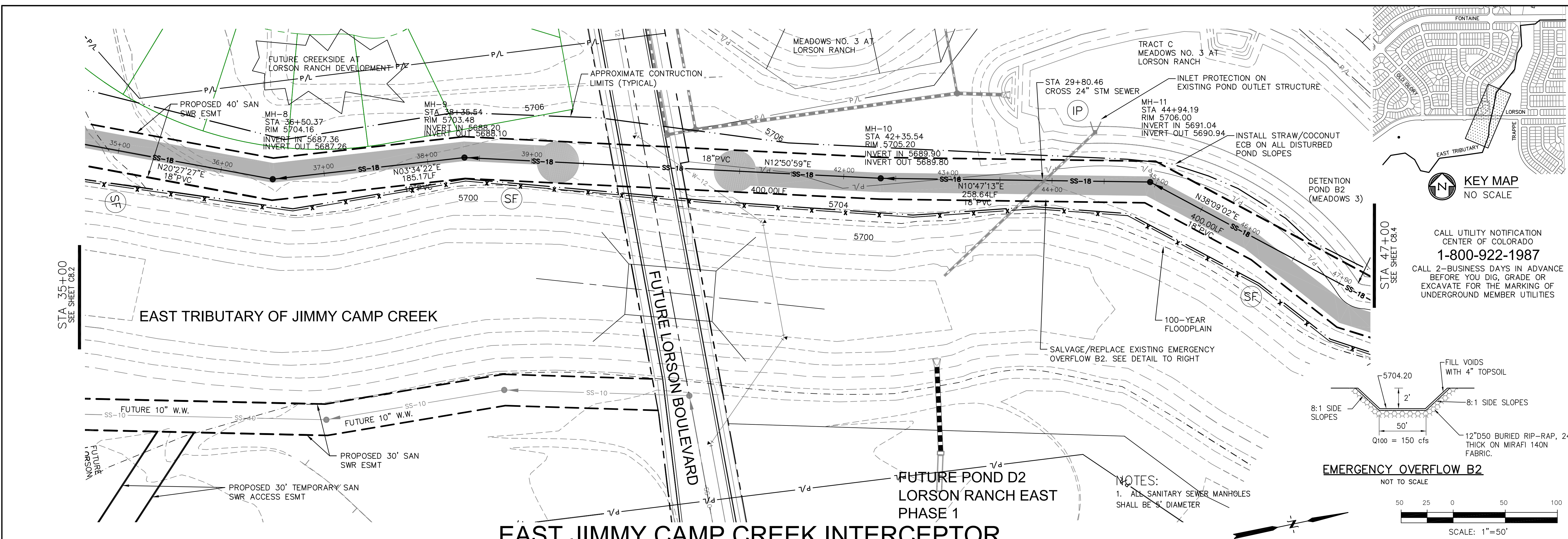
PROJECT NO.: 100.041

SHEET NUMBER: C8.2

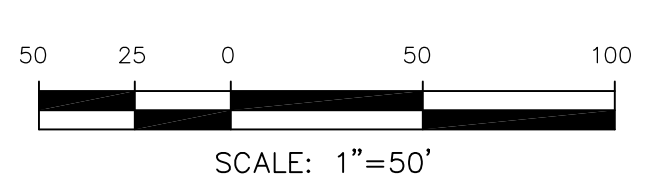
TOTAL SHEETS: 15

PREPARED FOR: EAST JCC INTERCEPTOR

PROJECT: LORSON, LLC
212 N. WAHSATCH AVENUE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
EL PASO COUNTY, COLORADO
CONTACT: JEFF MARK



NOTES:
1. ALL SANITARY SEWER MANHOLES SHALL BE 5' DIAMETER



EAST JIMMY CAMP CREEK INTERCEPTOR

Station	Notes	Station
5710		5710
5705		5705
5700		5700
5695		5695
5690	18" PVC @ 0.40%	5690
5685	185.17 LF 18" PVC @ 0.40%	5685
5680	MH-8 STA 36+50.37 RIM 5704.16 INV IN 5687.36 INV OUT 5687.26	5680
5675	MH-9 STA 38+35.54 RIM 5703.48 INV IN 5688.20 INV OUT 5688.10	5675
5670	MH-10 STA 42+35.54 RIM 5705.20 INV IN 5689.90 INV OUT 5689.80	5670
	MH-11 STA 44+94.19 RIM 5706.00 INV IN 5691.04 INV OUT 5690.94	
35+00		47+00



CORE ENGINEERING GROUP

1500K 1ST AVENUE, SUITE 300
DENVER, CO 80202
PHONE: 303-733-7800
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: RICH@CEGI.COM

KEY MAP
NO SCALE

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVENUE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

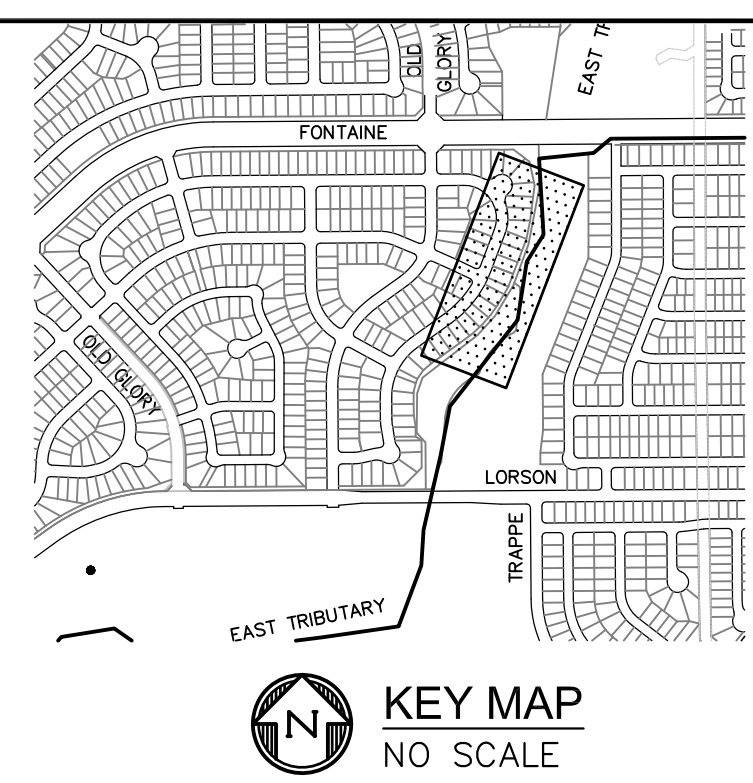
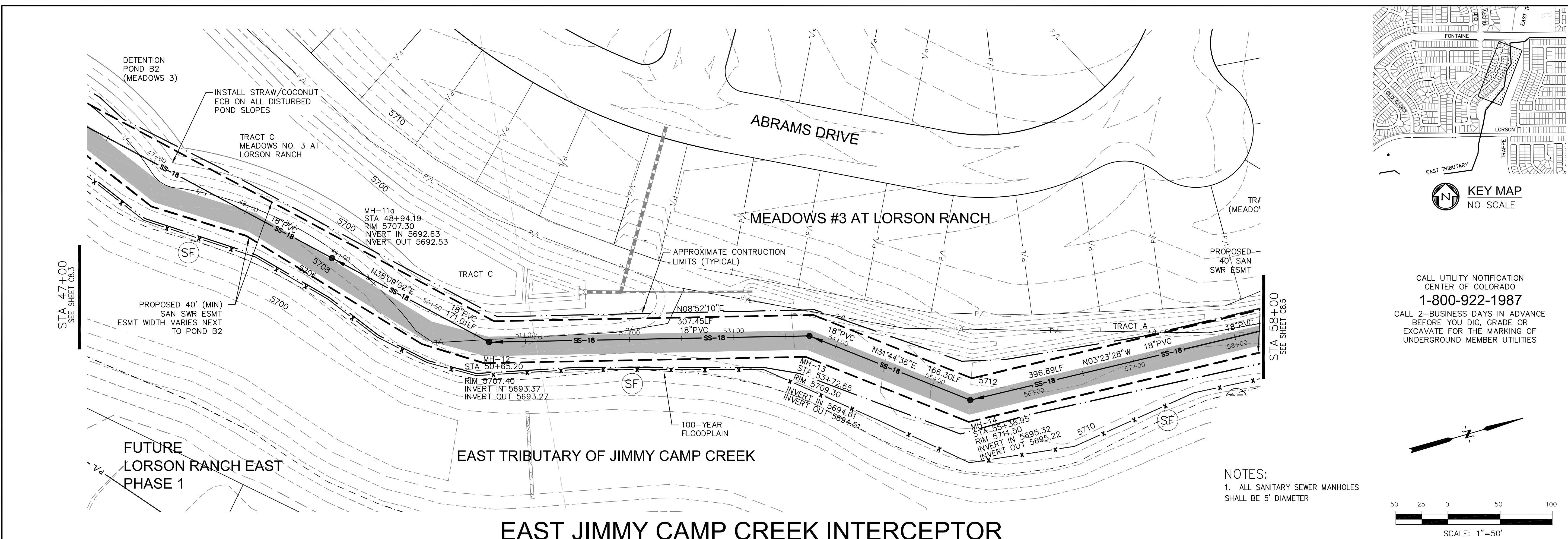
PROJECT:
EAST JCC INTERCEPTOR
LORSON BLVD-EAST TRIBUTARY
EL PASO COUNTY, COLORADO

DATE:
DECEMBER 4, 2017

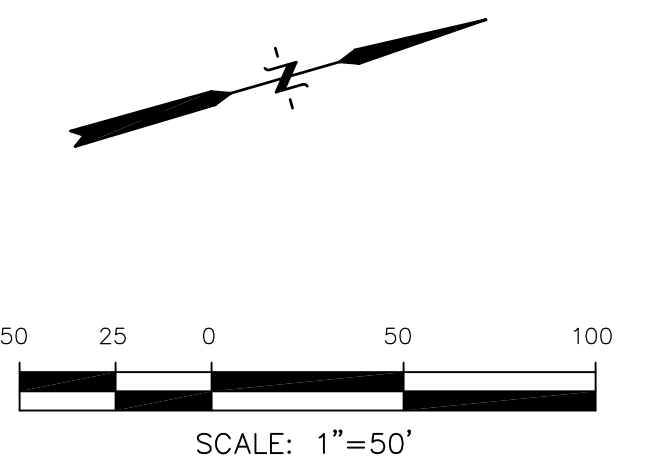
PROJECT NO.
100.041

SHEET NUMBER
C8.3

TOTAL SHEETS: 15



CALL UTILITY NOTIFICATION
 CENTER OF COLORADO
1-800-922-1987
 CALL 2-BUSINESS DAYS IN ADVANCE
 BEFORE YOU DIG, GRADE OR
 EXCAVATE FOR THE MARKING OF
 UNDERGROUND MEMBER UTILITIES



NOTES:
 1. ALL SANITARY SEWER MANHOLES
 SHALL BE 5' DIAMETER

EAST JIMMY CAMP CREEK INTERCEPTOR

Station	Vertical Curve Data	Station	Vertical Curve Data
5725		5725	
5720		5720	
5715		5715	
5710		5710	
5705		5705	
5700		5700	
5695	171.01 LF 18" PVC @ 0.37%	5695	307.46 LF 18" PVC @ 0.37%
5690		5690	166.30 LF 18" PVC @ 0.35%
5685		5685	396.89 LF 18" PVC @ 0.37%

SCALES: HORIZ. 1"=50'
 VERT. 1"=5'

CORE ENGINEERING GROUP
 1500K 1ST AVENUE, S.S.
 P.O. BOX 100
 P.O. BOX 719 656-7800
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: RICH@CEG1.COM

DATE: _____

DESCRIPTION: _____

NO. _____

PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVENUE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

PROJECT: **EAST JCC INTERCEPTOR**
 LORSON BLVD-EAST TRIBUTARY
 EL PASO COUNTY, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

EAST JCC INTERCEPTOR AND EROSION CONTROL PLAN
STA 47+00 TO 58+00

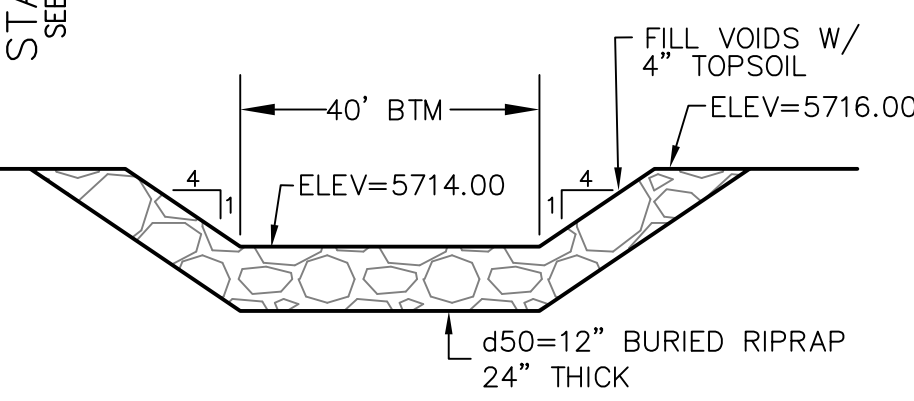
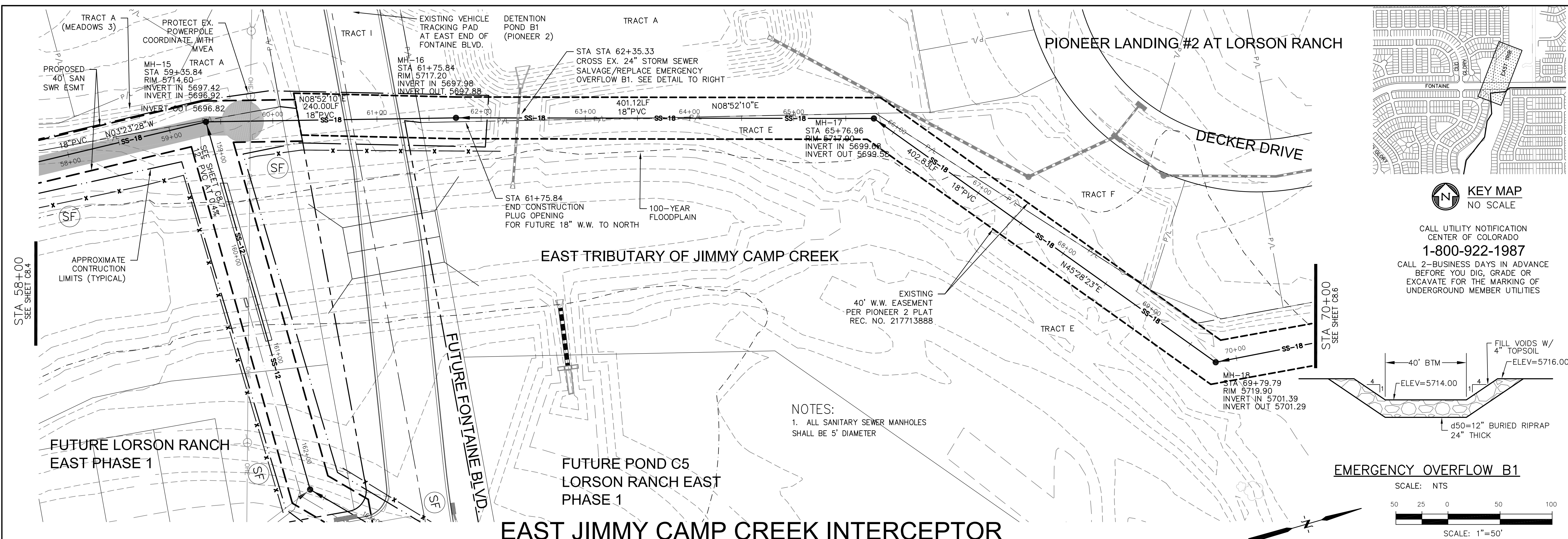
DATE: **DECEMBER 4, 2017**

PROJECT NO. **100.041**

SHEET NUMBER **C8.4**

TOTAL SHEETS: 15



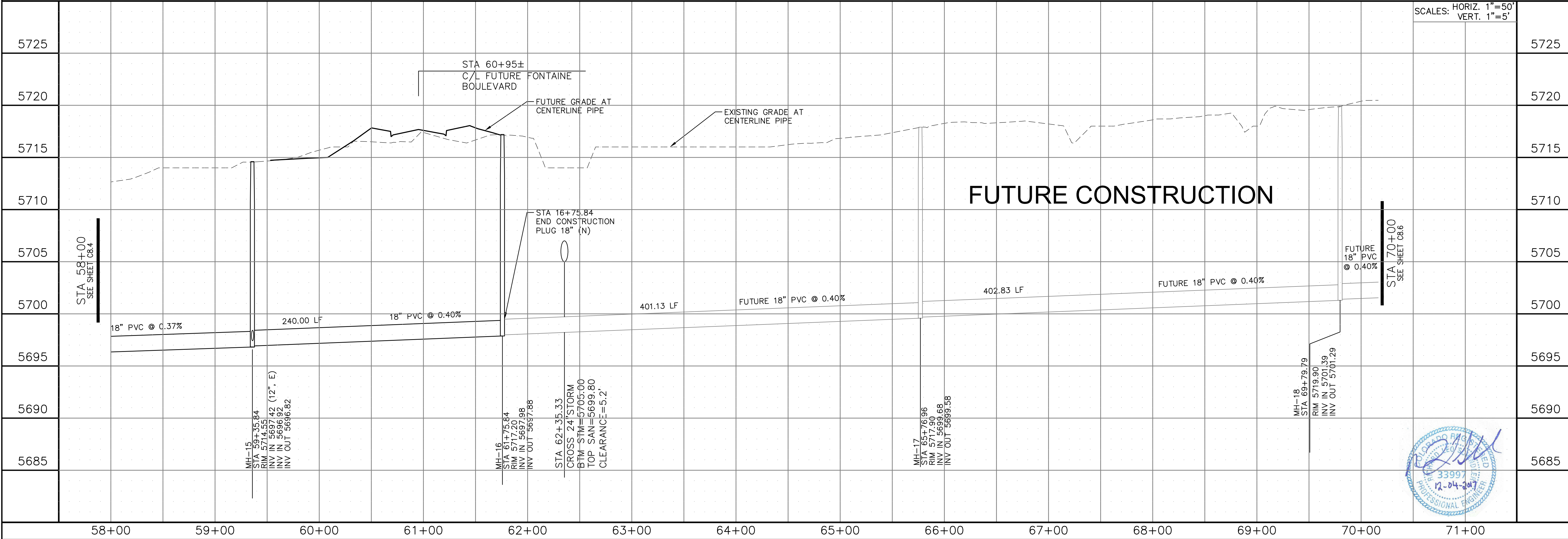


NOTES:
1. ALL SANITARY SEWER MANHOLES SHALL BE 5' DIAMETER

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

CORE ENGINEERING GROUP
1500 K 151ST AVENUE, SUITE 300
P.O. BOX 719
COLORADO SPRINGS, COLORADO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: RICH@CEG1.COM

DATE: _____
DESCRIPTION: _____
NO. _____
PROJECT: **EAST JCC INTERCEPTOR**
PREPARED FOR: **LORSON, LLC**
212 N. WAHSATCH AVENUE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK



SCALES: HORIZ. 1"=50'
VERT. 1"=5'

EAST JCC INTERCEPTOR AND EROSION CONTROL PLAN
STA 58+00 TO 70+00

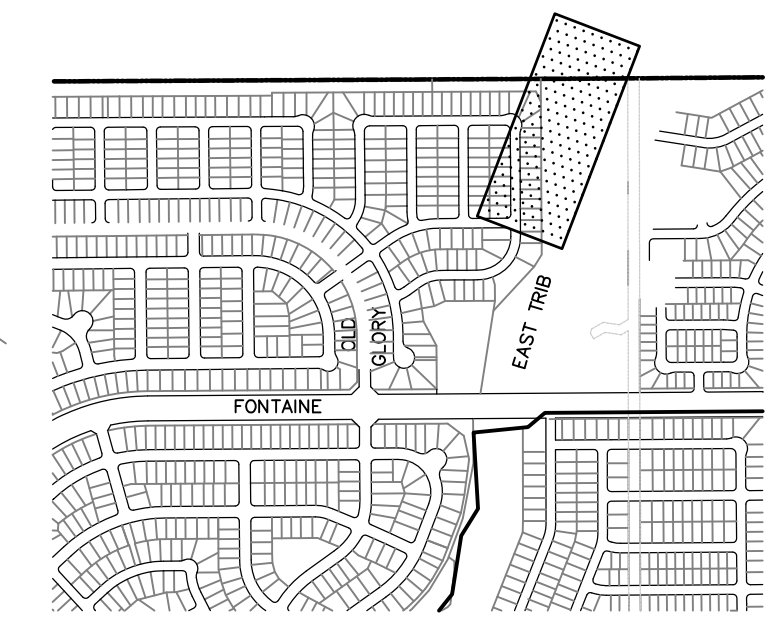
DATE: **DECEMBER 4, 2017**
PROJECT NO. **100.041**
SHEET NUMBER **C8.5**
TOTAL SHEETS: 15



PIONEER LANDING #2 AT LORSON RANCH

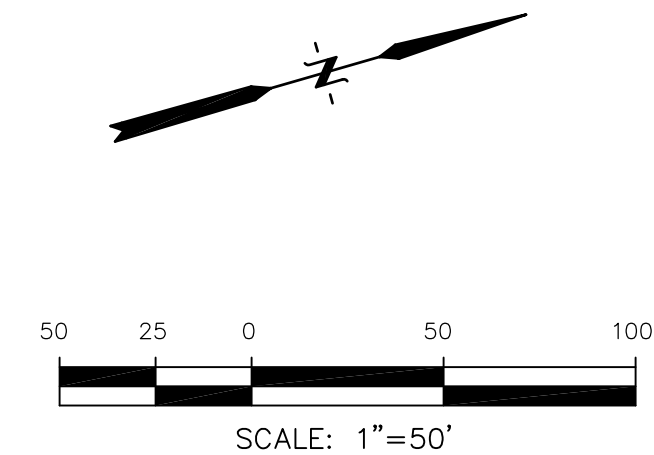
CITY OF COLORADO SPRINGS

DECKER DRIVE



KEY MAP
NO SCALE

CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE OR
EXCAVATE FOR THE MARKING OF
UNDERGROUND MEMBER UTILITIES



CORE
ENGINEERING GROUP
1500K 1ST AVENUE, SUITE 5506
P.O. BOX 5506
COLORADO SPRINGS, CO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: RICH@CEG1.COM

DATE: _____
DESCRIPTION: _____
NO. _____
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVENUE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

PROJECT:
**EAST JCC
INTERCEPTOR**
LORSON BLVD-EAST TRIBUTARY
EL PASO COUNTY, COLORADO

STA 70+00
SEE SHEET C8.4

MH-18
STA 69+79.79
RIM 5719.90
INVERT IN 5701.39
INVERT OUT 5701.29

TRACT E
EXISTING
40' W.W. EASEMENT
PER PIONEER 2 PLAT
REC. NO. 217713888

MH-18a
STA 73+79.79
RIM 5724.80
INVERT IN 5703.09
INVERT OUT 5702.99

MH-19
STA 77+54.55
RIM 5727.50
INVERT IN 5704.69
INVERT OUT 5704.59

MH-20
STA 79+12.60
RIM 5730.30
INVERT IN 5705.42
INVERT OUT 5705.32

MH-21
STA 81+93.12
RIM 5731.00
INVERT IN 5706.65
INVERT OUT 5706.55

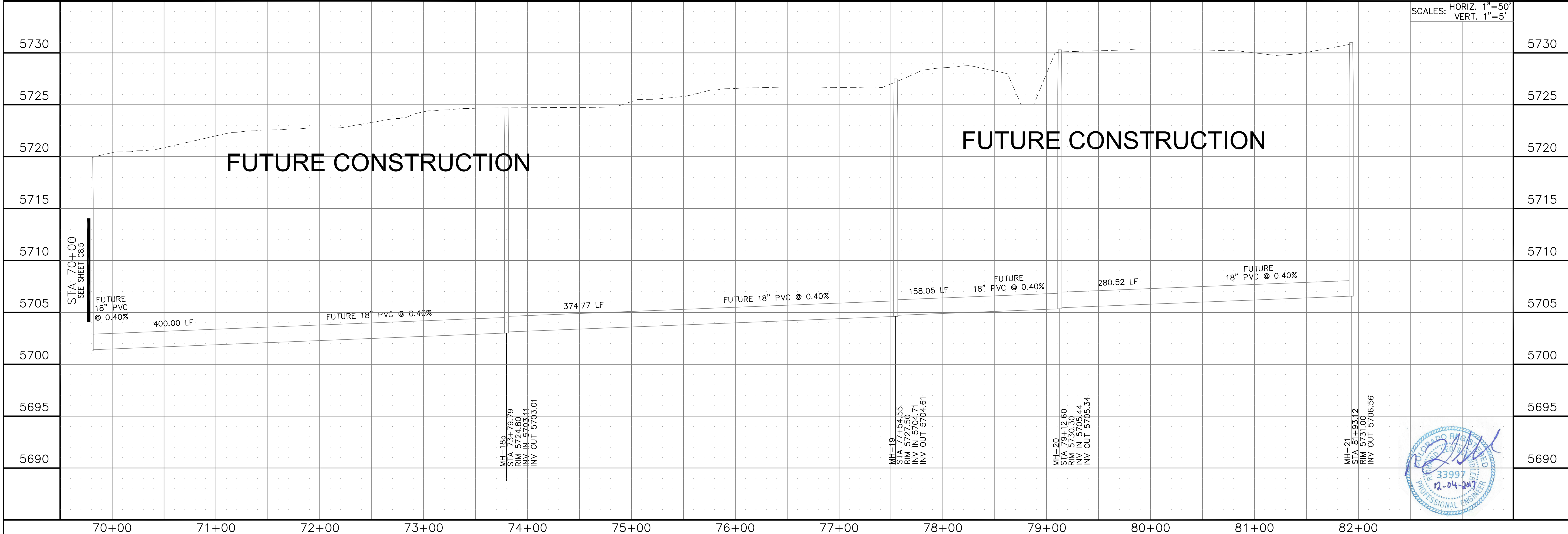
EAST JIMMY CAMP CREEK INTERCEPTOR

EAST TRIBUTARY OF JIMMY CAMP CREEK

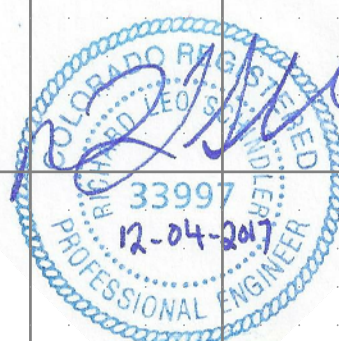
FUTURE CONSTRUCTION

FUTURE CONSTRUCTION

SCALES: HORIZ. 1"=50'
VERT. 1"=5'



**EAST JCC INTERCEPTOR
AND EROSION CONTROL PLAN
STA 70+00 TO 82+00**

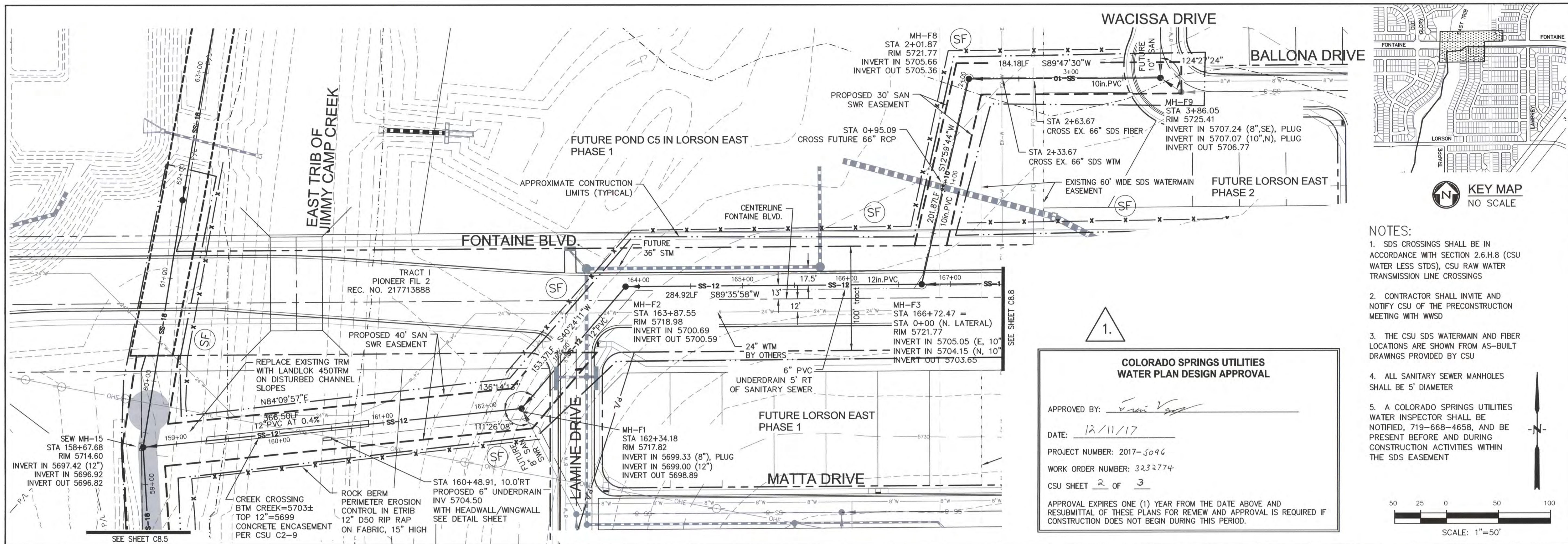


DATE:
DECEMBER 4, 2017

PROJECT NO.
100.041

SHEET NUMBER
C8.6

TOTAL SHEETS: 15



NOTES:

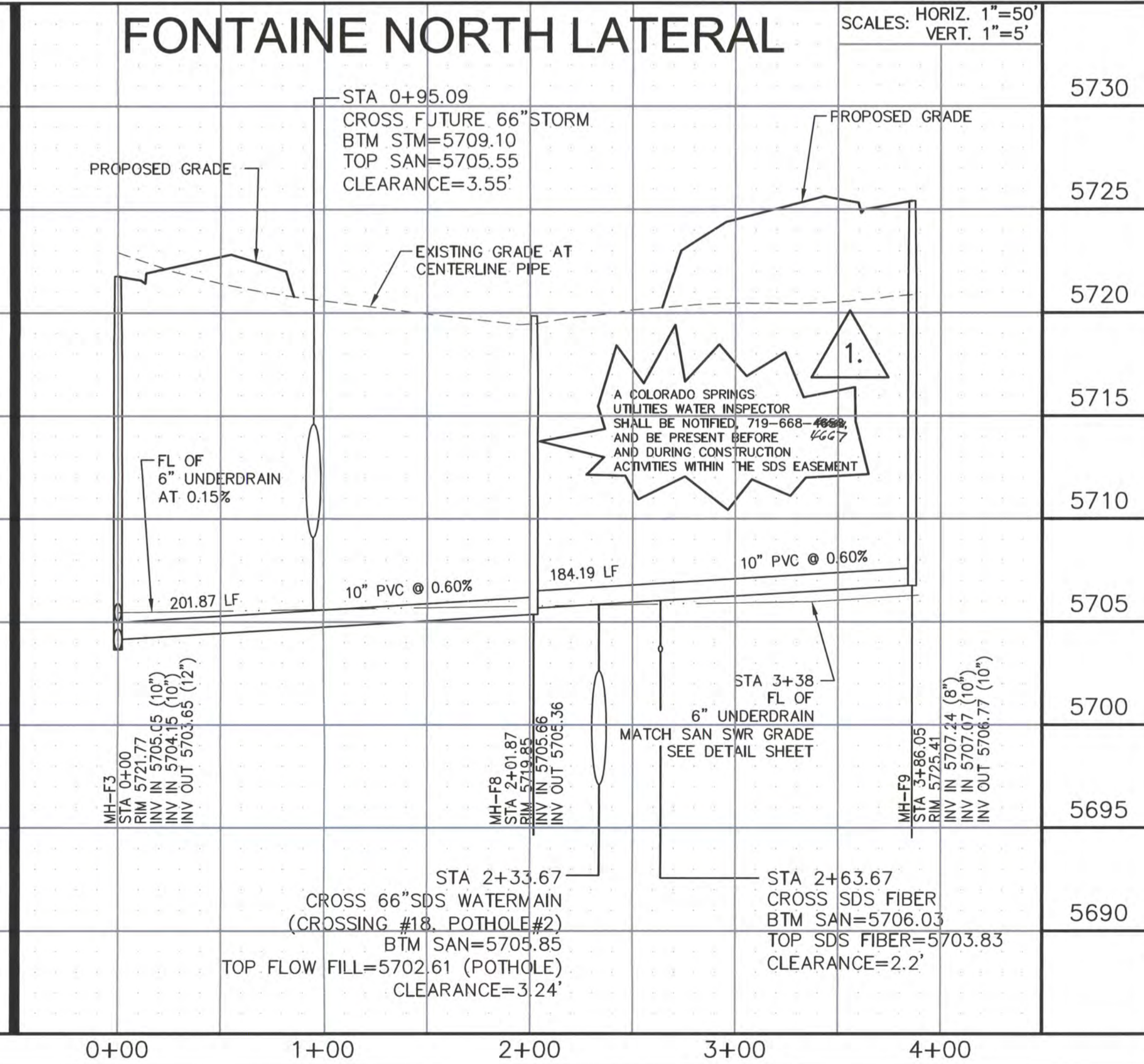
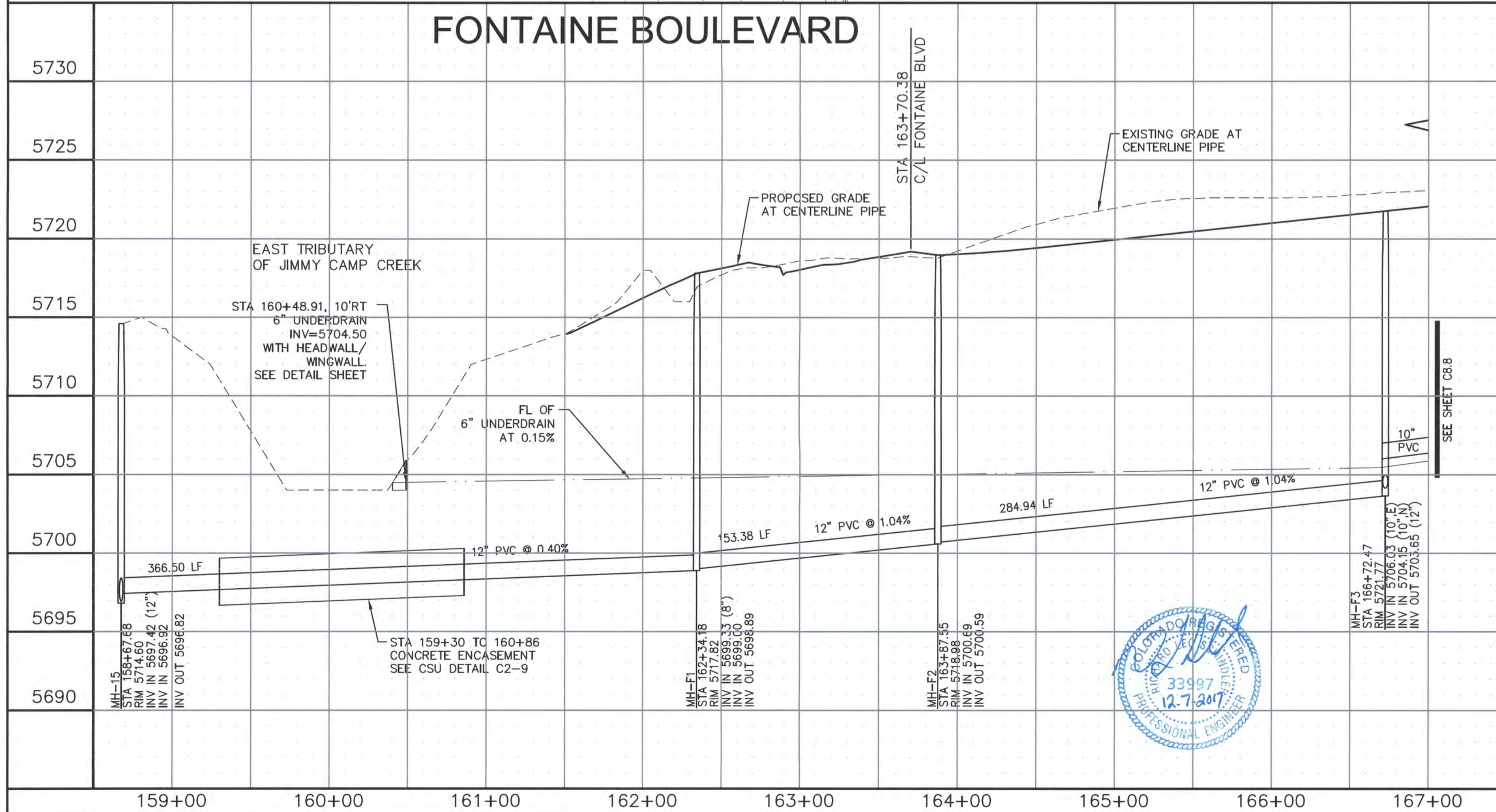
- SDS CROSSINGS SHALL BE IN ACCORDANCE WITH SECTION 2.6.H.8 (CSU WATER LESS STDs), CSU RAW WATER TRANSMISSION LINE CROSSINGS
- CONTRACTOR SHALL INVITE AND NOTIFY CSU OF THE PRECONSTRUCTION MEETING WITH WWS
- THE CSU SDS WATERMAIN AND FIBER LOCATIONS ARE SHOWN FROM AS-BUILT DRAWINGS PROVIDED BY CSU
- ALL SANITARY SEWER MANHOLES SHALL BE 5' DIAMETER
- A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4658, AND BE PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT

SCALE: 1"=50'

COLORADO SPRINGS UTILITIES WATER PLAN DESIGN APPROVAL

APPROVED BY: *[Signature]*
 DATE: 12/11/17
 PROJECT NUMBER: 2017-5096
 WORK ORDER NUMBER: 3232774
 CSU SHEET 2 OF 3

APPROVAL EXPIRES ONE (1) YEAR FROM THE DATE ABOVE AND RESUBMITAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.



CORE ENGINEERING GROUP
 15004 1ST AVENUE S., #3006
 BLDG 19, FLOOR 7800
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: RICH@CEG.COM

DATE: 12/7/2017

DESCRIPTION: ADD CSU SIGNATURE BLOCK AND NOTE

PREPARED FOR: LORSON, LLC
 212 N. WAHSAATCH AVENUE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

PROJECT: EAST JCC INTERCEPTOR LORSON BLVD--EAST TRIBUTARY EL PASO COUNTY, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

DATE: DECEMBER 7, 2017

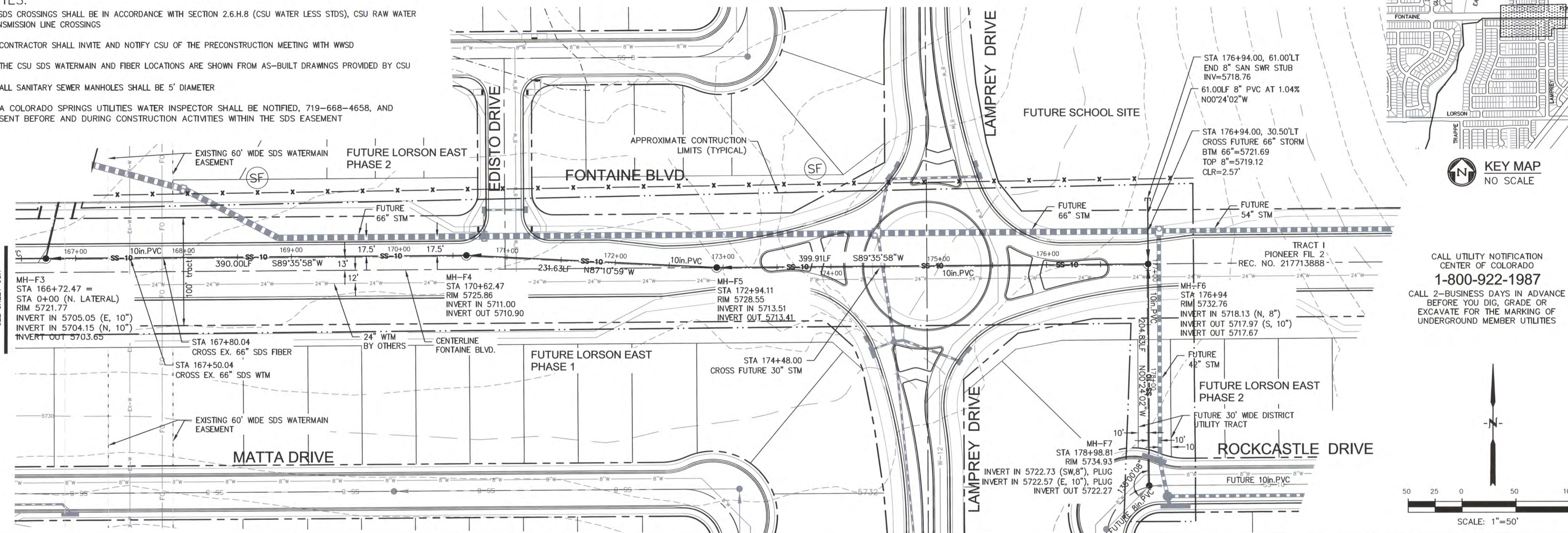
PROJECT NO.: 100.041

SHEET NUMBER: C8.7

TOTAL SHEETS: 15

NOTES:

1. SDS CROSSINGS SHALL BE IN ACCORDANCE WITH SECTION 2.6.H.8 (CSU WATER LESS STDS), CSU RAW WATER TRANSMISSION LINE CROSSINGS
2. CONTRACTOR SHALL INVITE AND NOTIFY CSU OF THE PRECONSTRUCTION MEETING WITH WWSO
3. THE CSU SDS WATERMAIN AND FIBER LOCATIONS ARE SHOWN FROM AS-BUILT DRAWINGS PROVIDED BY CSU
4. ALL SANITARY SEWER MANHOLES SHALL BE 5' DIAMETER
5. A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4658, AND PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT

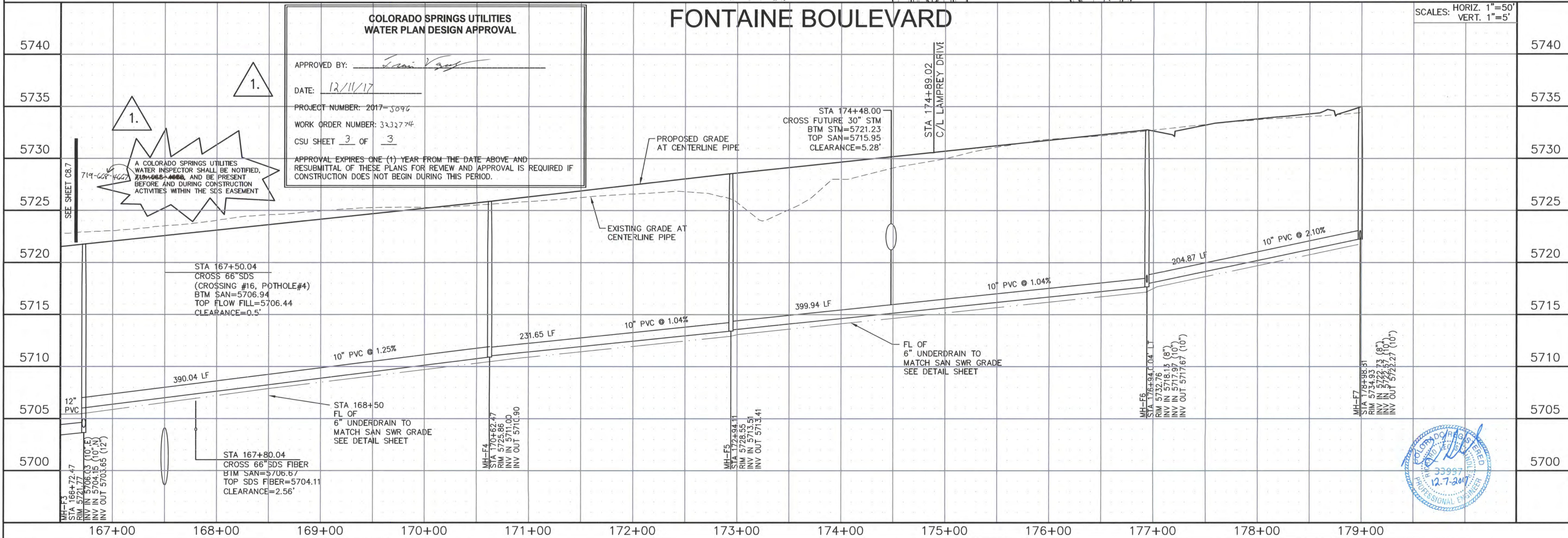


CORE ENGINEERING GROUP
 15004 1ST AVENUE S.
 BLDG 700, SUITE 6506
 BLDG 700, SUITE 7800
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: RICHCE@CEG.COM

KEY MAP
 NO SCALE

CALL UTILITY NOTIFICATION
 CENTER OF COLORADO
1-800-922-1987
 CALL 2-BUSINESS DAYS IN ADVANCE
 BEFORE YOU DIG, GRADE OR
 EXCAVATE FOR THE MARKING OF
 UNDERGROUND MEMBER UTILITIES

SCALE: 1"=50'



DATE: 12/7/2017

DESCRIPTION: ADD CSU SIGNATURE BLOCK AND NOTE

NO. 1

PREPARED FOR: **EAST JCC INTERCEPTOR**
 LORSON BLVD--EAST TRIBUTARY
 EL PASO COUNTY, COLORADO

PROJECT: **LORSON, LLC**
 212 N. WAHSATCH AVENUE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

FONTAINE BOULEVARD SANITARY SEWER AND EROSION CONTROL PLAN
 STA 166+72 TO 179+00

DATE: DECEMBER 7, 2017

PROJECT NO. 100.041

SHEET NUMBER **C8.8**

TOTAL SHEETS: 15

GENERAL STRUCTURAL NOTES

1. APPLICABLE CODES:

A. These general notes apply to all structural drawings. This project is designed in accordance with the International Building Code (IBC), 2009 Edition, and the Minimum Design Loads for Buildings and Other Structures (ASCE 7-05) and The Pitkin Peak Regional Building Code (2011 Edition).

B. All material and workmanship shall be in accordance with applicable provisions of the codes specified above.

2. CONCRETE:

A. Concrete has been designed and shall be constructed in accordance with the American Concrete Institute "Building Code Requirement Reinforced Concrete" and "Specifications for Structural Concrete for Buildings" (ACI 308 and ACI 308.1) latest editions. Section 13 "Inspection" of ACI 308 is deleted in its entirety, see "Field Observations" paragraph. All concrete shall be of stone aggregate, unless noted otherwise.

B. **Concrete mixes:**
See specifications for any additional durability requirements.

Mix A: For drilled piers

3200 psi minimum compressive strength at age of 28 days.
Type I/II Cement, minimum of 412 pounds per cubic yard.
Fly ash not allowed.

3/4" maximum aggregate size.

6" minimum - 8" maximum slump.

Mix B: For footings, grade beams, and miscellaneous concrete

4000 psi minimum compressive strength at age of 28 days.

Type I/II Cement, minimum of 564 pounds per cubic yard.

3/4" maximum aggregate size.

6 1/2" (5% Extra) slump.

4" (5" with superplasticizer) maximum slump.

C. Reinforcing is to be new billet steel ASTM A63, Grade-60, except ties and bars to be welded shall be Grade-40. Provide not less than (2) #5 around all sides of all openings in concrete and extend 2'-0" past edges of openings. No splices of reinforcement are permitted except as detailed or authorized by structural engineer. Where permitted, use contact lap splices, (36) bar diameters minimum. Welded Wire Fabric (WWF) shall be in accordance with ASTM A185. Lap (1) full mesh minimum at splices. No welding of reinforcement permitted unless detailed.

D. Placing of Reinforcement: Provide chairs, bolsters, additional reinforcement, and accessories necessary to support reinforcement at position shown or detailed. Support of reinforcement on form ties, wood, brick, brickbat or other unacceptable material will not be permitted.

E. Reinforcement shall be placed so that the following minimum concrete protection is provided, unless noted otherwise:

- 1) Concrete surfaces poured against ground ... 3" Clear
- 2) Formed surfaces exposed to ground or weather:
 - a) Bars #6 and larger 2" Clear
 - b) Bars #3 and smaller 1/2" Clear
- 3) Slabs at center (top)
- 4) Concrete not exposed to earth or weather ... 3/4"
- 5) Beams, Columns, Ties, Stumps or spirals around primary reinforcement, or primary reinforcement with no ties, stumps or spirals 1 1/2"

F. The contractor is responsible for determining when it is safe to remove forms and/or shoring. Forms and shoring must not be removed until the walls are strong enough to carry their own weight and any anticipated superimposed loads. For foundation walls, this typically requires at least 48 hours of cumulative curing time at a temperature of 50°F or more. Concrete must be adequately covered during cold periods to maintain its surface temperature. Due to varying weather conditions, alternative curing processes, and the use of Type I/II cement, Rocky Mountain Group suggests forms remain in place a minimum of 3 days to ensure the performance specification has been met. When forms are stripped there must be no excessive deflection or distortion or discoloration and no evidence of damage to the concrete. Adequate thermal protection of the concrete shall be continued after stripping for a cumulative period of 48 hours at 50°F, or more, after the initial pour. See applicable notes for specifications on when to backfill foundation walls.

G. Field Quality Control:

- 1) Reference standards: ACI 308 Chapters 16 and 17, latest edition.
- 2) Slump tests: The general contractor shall provide necessary equipment and shall make test in conformity with ASTM C143. The contractor shall make slump tests on the first truck of each pour and as often as deemed necessary by the contractor to maintain the required slump tests when directed by the Architect or Engineer.
- 3) Control tests:

a. Control tests of concrete work shall be made on every 50 cubic yards or fraction thereof of concrete placed and, in any case, minimum of once during each day's pour.

b. Each test shall consist of four standard 6" test cylinders cast and cured in accordance with ASTM C31 and ASTM C172.

c. Sample concrete at point of placement.

d. One cylinder shall be broken at end of seven days after placing, two cylinders shall be broken at end of 28 days after placing, and remaining cylinder shall be stored until its disposition is determined by Architect.

e. In general, remaining cylinder will be broken only when previous test reports indicated unsatisfactory results.

f. Tests on remaining cylinder shall be at expense of the contractor.

g. Architect and/or Engineer reserves right to stop future concrete work when seven or 28 day tests indicate unsatisfactory results until, in the opinion of the Architect and/or the Engineer of Record, proper corrective measures have been taken to insure quality concrete in future work and corrections deemed necessary have been made.

h. Tests shall be made at time control tests are taken and so stated in reports to determine slump, air content, unit weight and temperature of concrete.

i. All tests shall be made in accordance with ASTM C318 or ASTM C319.

4) Slab tolerance: Maintain surface flatness with maximum variation of 1/8 inch in 20 feet.

3. DRILLED PIER FOUNDATIONS:

A. The foundation design has been completed in accordance with pertinent standards, recommended design soil parameters, accepted engineering design procedures, and is based on the best information available at the time of completion. The design is intended to minimize differential movement as described in the reference Geotechnical Report. It must be recognized that foundation components will undergo movement. It shall be the responsibility of the contractor and/or present owner to inform any subsequent owners of the soil condition and advised to maintain good practices in the future with regard to surface and subsurface drainage, framing of partitions above floor slabs, and finish work above the floor slabs, etc.

B. Foundation design is based on soil report No. 1596-05 prepared by RMG Engineers dated 11/17/11. The Contractor shall thoroughly review and understand all pertinent construction aspects of this report before beginning any work.

C. The structure is to be founded on concrete grade beams bearing on drilled piers. Design of drilled piers is based on the following criteria:

- Maximum allowable end bearing pressure 35,000 psf
- Maximum allowable side shear 3,200 psf

(For the portion of the pier in bedrock and at least 12" below bottom of grade beam)

- Maximum penetration into bedrock 8'-0"
- Minimum total length 40'-0"
- Minimum spacing 3 PIER DIA.

D. The maximum variation of the center of any drilled pier at its top from the required location shall not be more than 5% of its diameter, and no pier shall be out of plumb more than 1% of its overall length.

E. A representative of the Geotechnical engineer shall provide full time observation of the drilling operation and reinforcement concrete placement to verify that the soil types and conditions are consistent with design criteria of the soil report. If the soil properties are found to be different from this criteria, the foundation engineer shall be promptly notified so that the foundation design may be reviewed.

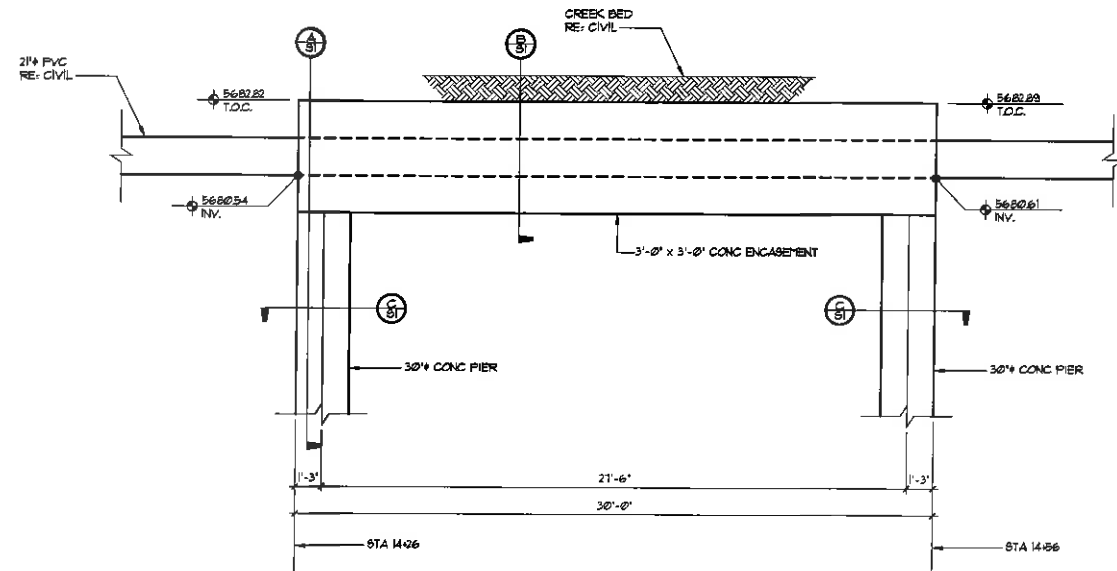
F. The bottom of all piers shall be thoroughly cleaned and dewatered prior to concrete placement.

G. Continuous horizontal bars and corner bars in grade beams supported on piers shall be spliced only where necessary for purposes of handling and bar length. Bar splices shall be placed in accordance with the following requirements:

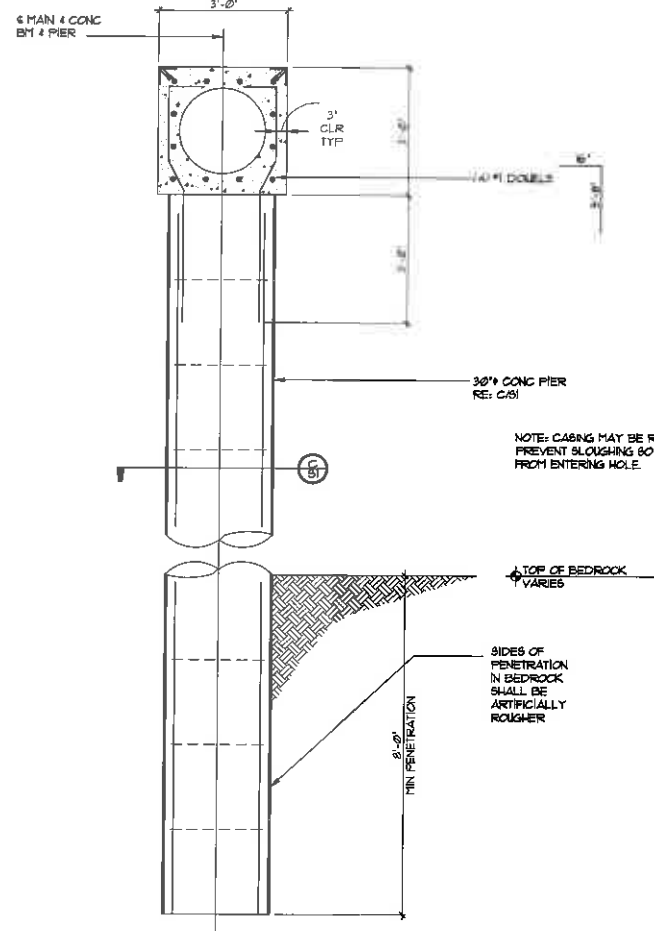
Bar Location	Splice Location	Minimum Lap
Bottom bars	at support	(36) bar diameters
Top bars	at mid-span	(42) bar diameters
Corner lap bars	at corner	(42) bar diameters
Other bars	staggered	(36) bar diameters

4. FIELD OBSERVATIONS:

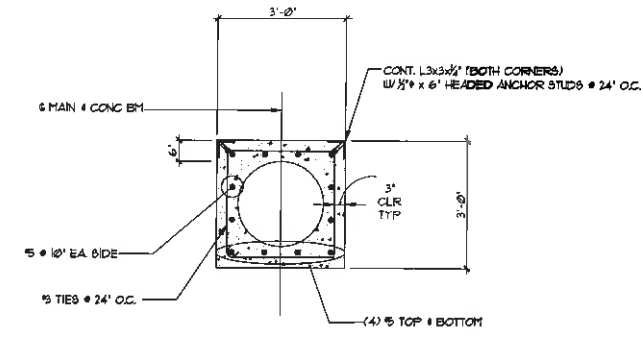
A. The Contractor shall inform the Engineer of Record at least 24 hours prior to casting any concrete so as to allow the Engineer of Record the opportunity to review the placement of reinforcing and/or embedded items. Contact Rocky Mountain Group: (719) 548-0600.



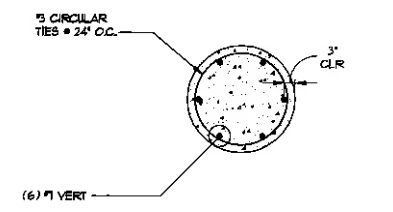
1 STREAM CROSSING ELEVATION
SCALE 1/4" = 1'-0"



A DRILLED PIER DETAIL
SCALE 1/2" = 1'-0"



B CONG ENCASEMENT DETAIL
SCALE 1/2" = 1'-0"



C 30" DRILLED PIER DETAIL
SCALE 1/2" = 1'-0"

ROCKY MOUNTAIN GROUP
ARCHITECTS
RMG
ENGINEERS

4000 S. UNIVERSITY BLVD., SUITE 100
DENVER, CO 80202
TEL: (303) 733-1000
WWW.ROCKYMOUNTAINGROUP.COM

PROFESSIONAL ENGINEER
31528
FOR STRUCTURAL ONLY

EL PASO COUNTY REGISTERED PROFESSIONAL ENGINEER

EAST JIMMY CAMP CREEK INTERCEPTOR
FONTAINE BLVD - LORSON BLVD
EL PASO COUNTY, COLORADO

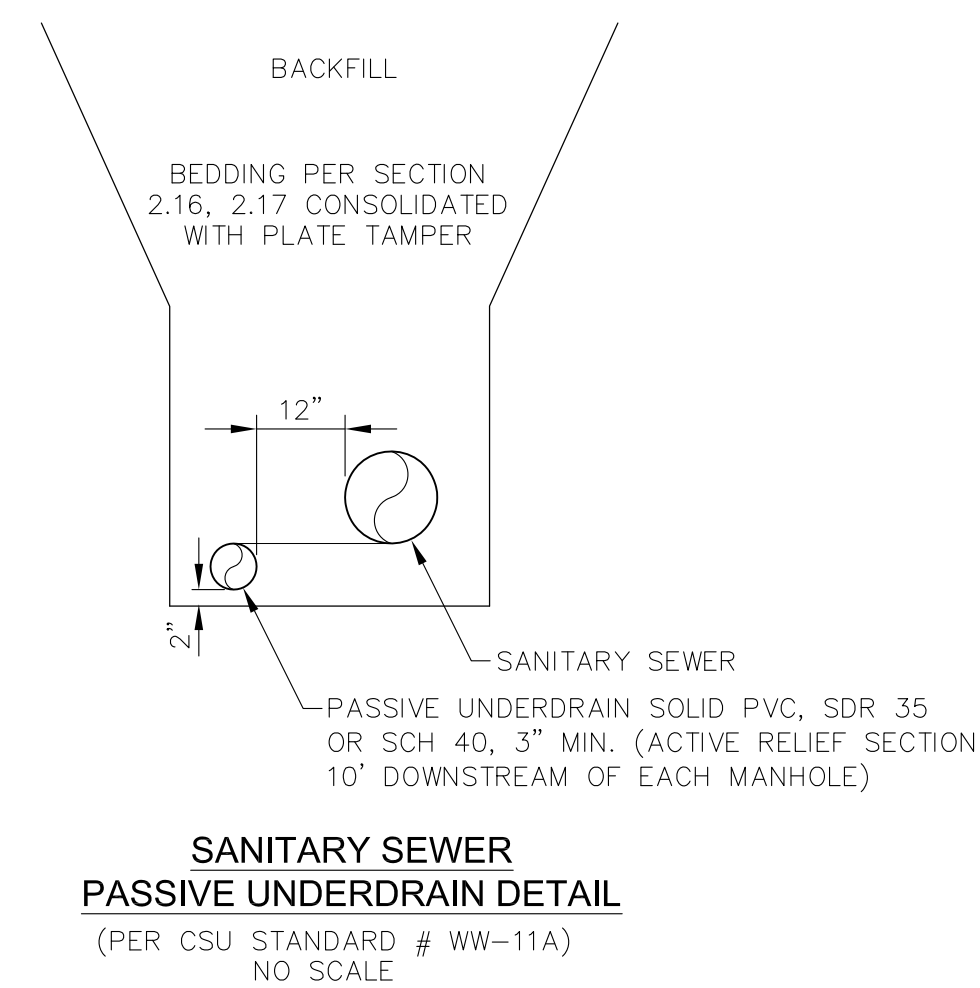
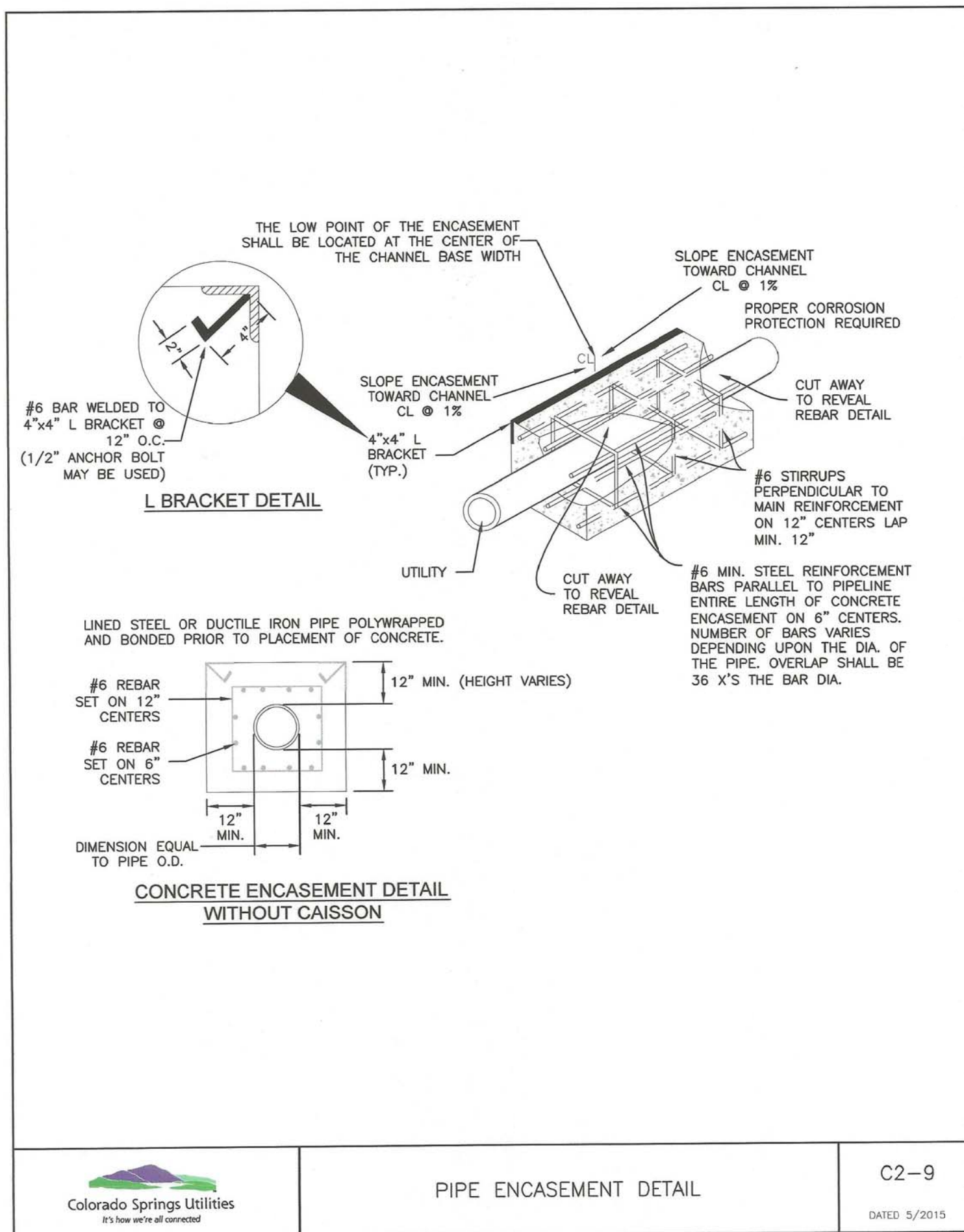
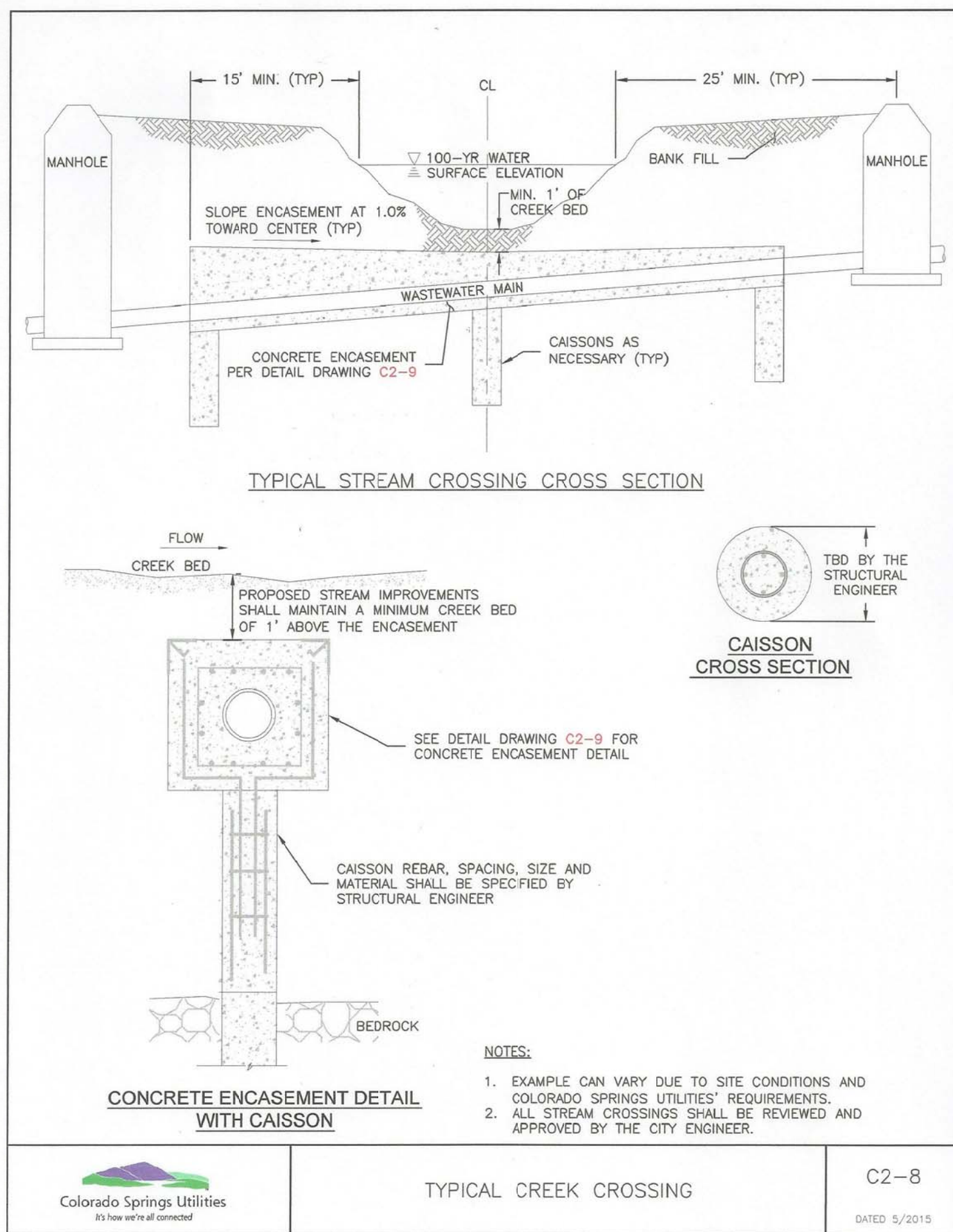
LORSON RANCH METROPOLITAN DISTRICT NO. 1

These plans are copyrighted by Rocky Mountain Group. All rights reserved. Any sale, reproduction, or distribution of these plans without the express written consent of Rocky Mountain Group is strictly prohibited.

DRILLED PIER DETAILS AT STREAM CROSSING

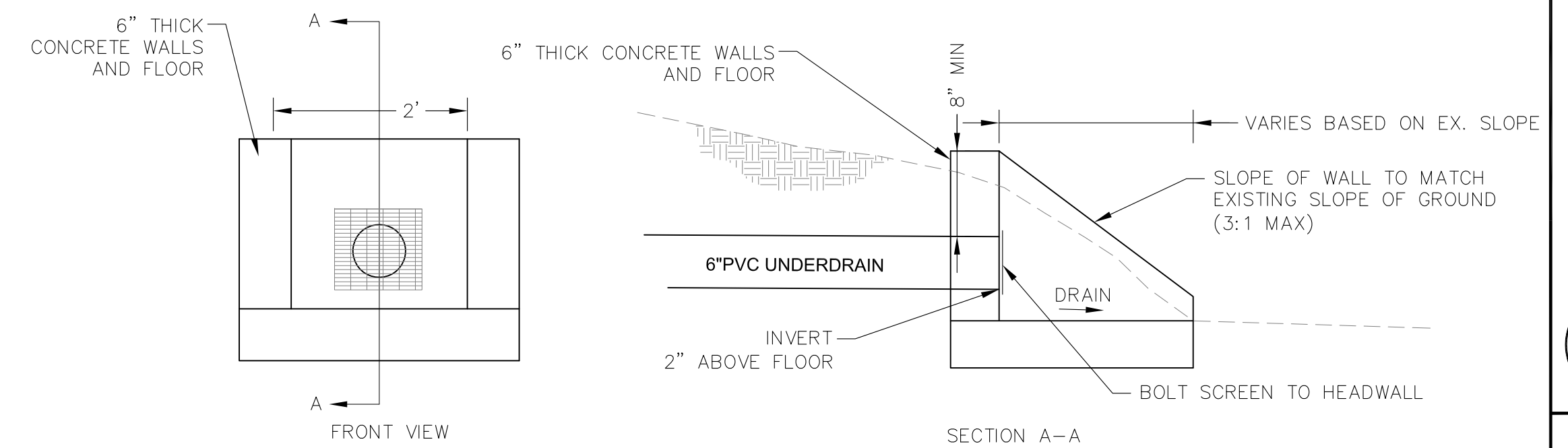
PROJECT STATUS: **FOR CONSTRUCTION**

ARCHITECT: RMG	DATE: 10-31-2017
DRAWN: CDM	REVISION: #
CHECKED: RMG	DATE:
DATE:	DATE:
JOHN NO. 159665	
SHEET NO. S1	13 of 14



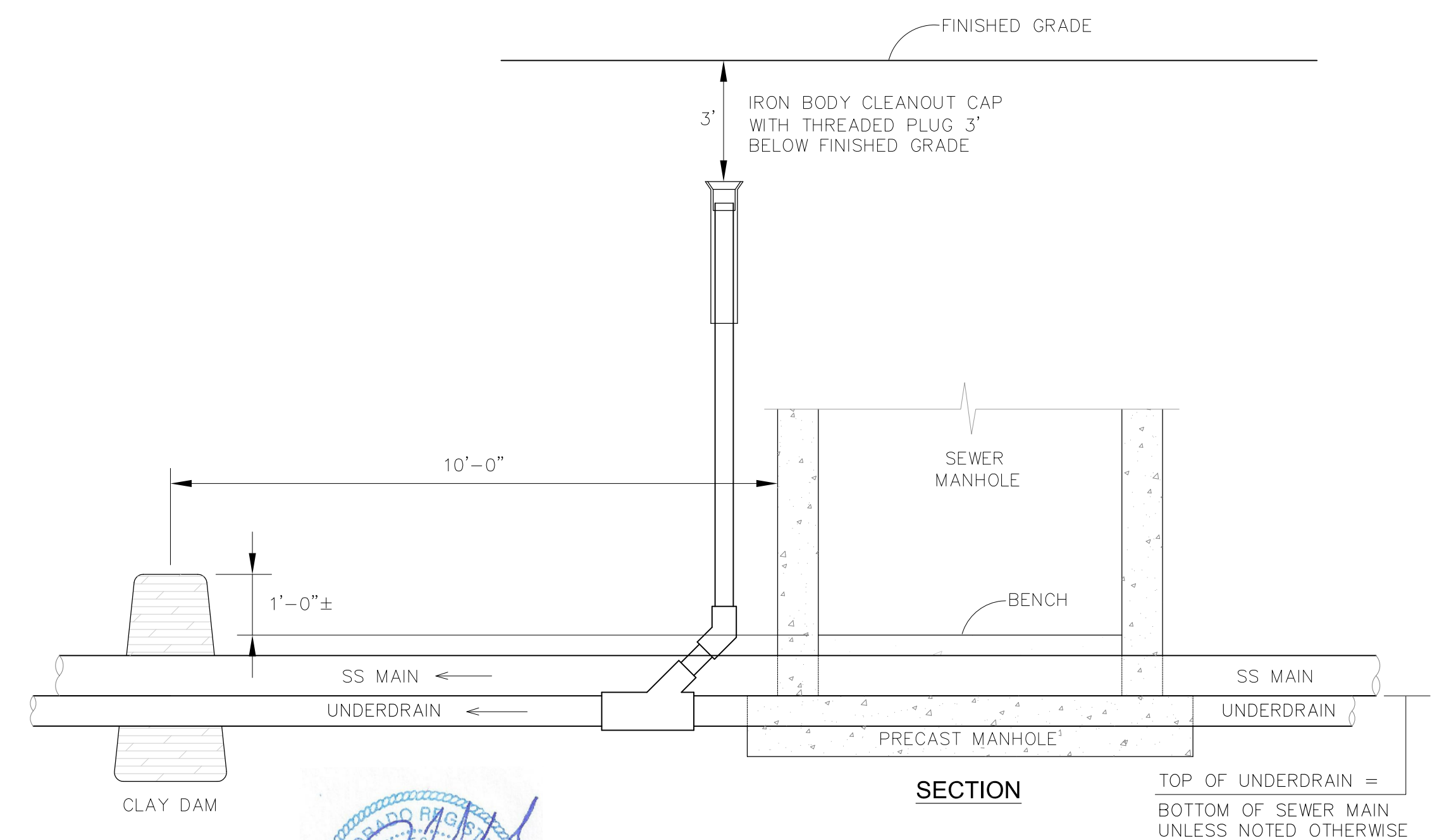
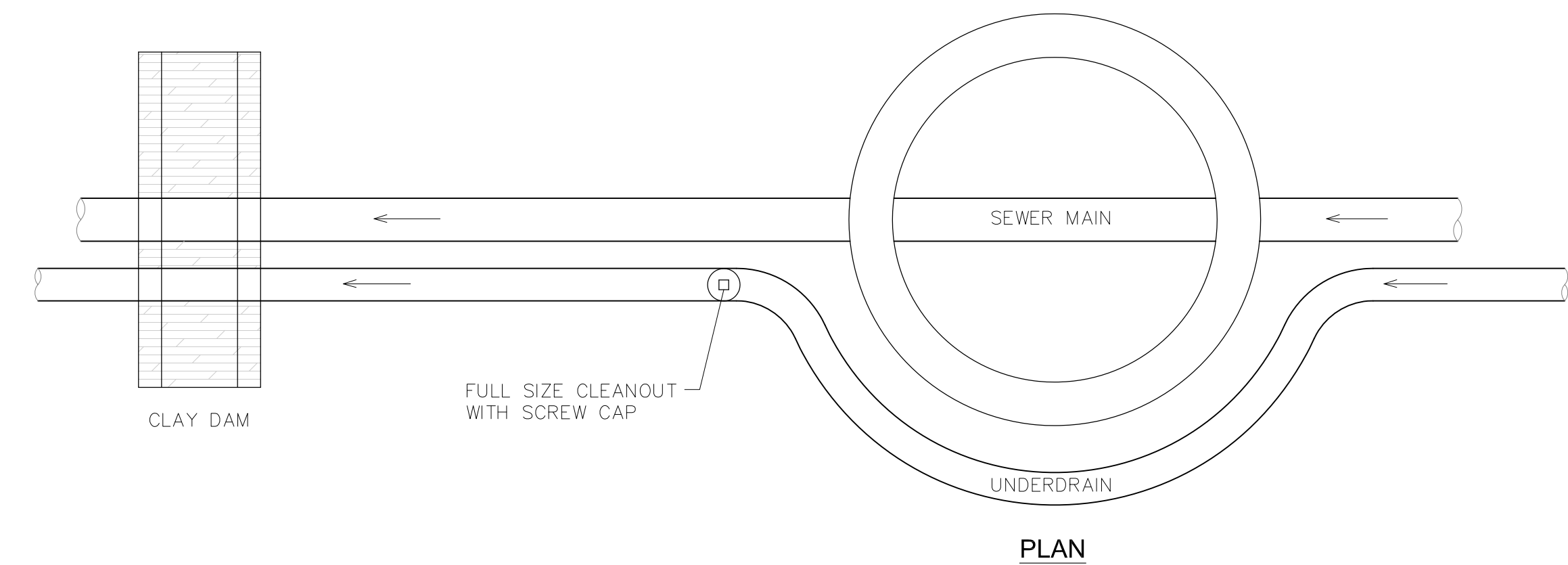
NOTE:
POINT OF DISCHARGE TO PUBLIC SYSTEM IS REQUIRED.
UNDERDRAIN CONNECTIONS SHALL BE 3" SCH 40.

THE UNDERDRAIN WILL BE CONSTRUCTED WITH THE SANITARY SEWER LINE AND IS DIRECTED SOUTH TO LORSON BOULEVARD, THEN WEST IN LORSON BOULEVARD, THEN SOUTH WHERE THE UNDERDRAIN WILL OUTLET INTO THE EAST TRIBUTARY OF JIMMY CAMP CREEK.



UNDERDRAIN OUTFALL HEADWALL / WINGWALL DETAIL

NO SCALE



GROUNDWATER UNDERDRAIN CLEANOUT (PASSIVE) LOCATIONS OUTSIDE MANHOLE

NO SCALE



NO.	DESCRIPTION	DATE
1.		X

PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE., SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT:
EAST JCC INTERCEPTOR
FONTANE BLVD., LORSON BLVD.
EL PASO COUNTY, COLORADO

DRAWN:	LJA
DESIGNED:	RLS
CHECKED:	RLS

UTILITY DETAILS
EAST JIMMY CAMP CREEK INTERCEPTOR

DATE
DECEMBER 4, 2017

PROJECT NO.
100.041

SHEET NUMBER
C12.1

TOTAL SHEETS: 15