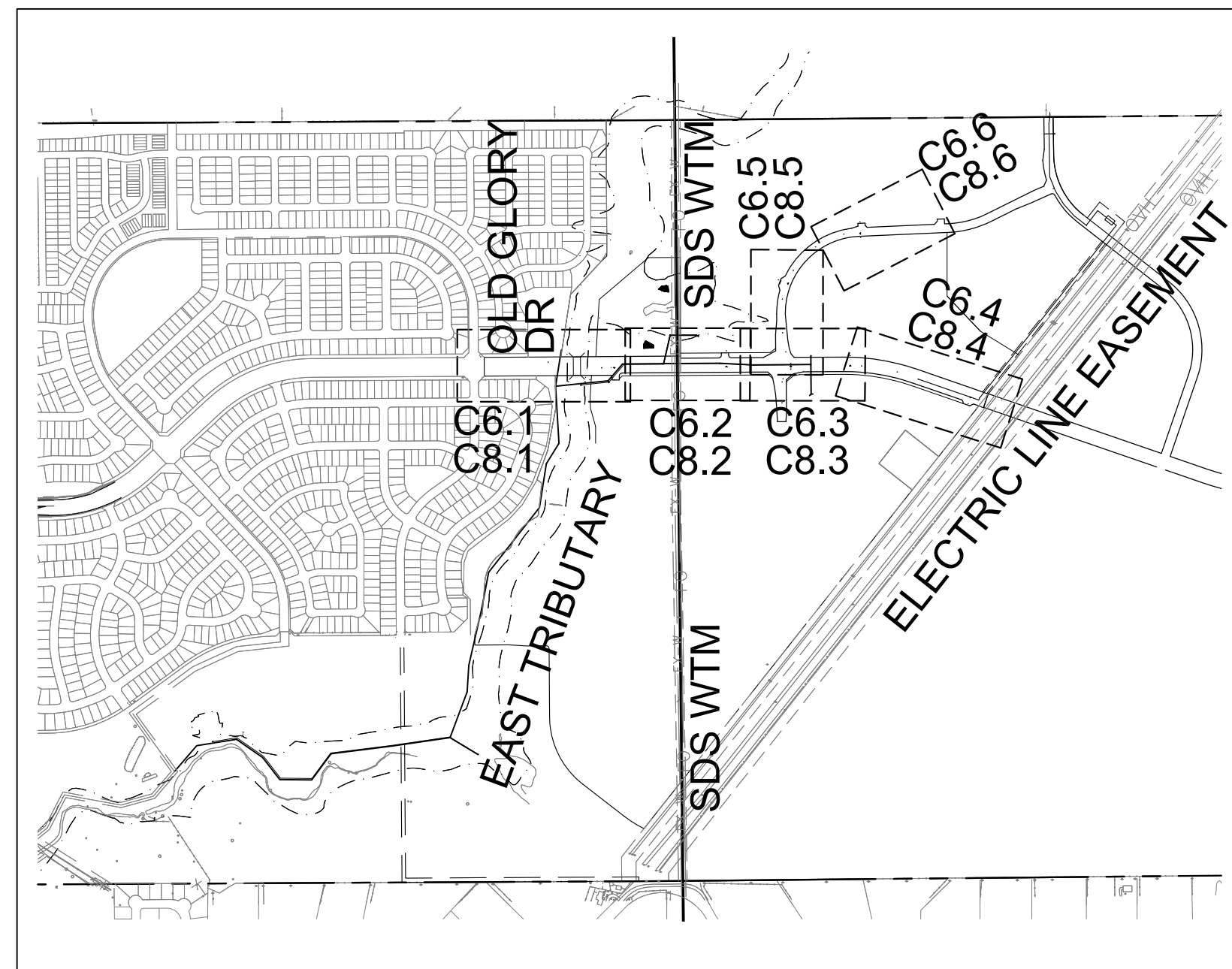


CONSTRUCTION PLANS
FOR
FONTAINE BOULEVARD & LAMPREY DRIVE
WITHIN LORSON RANCH EAST
STREET, STORM SEWER,
AND WATERMAIN CONSTRUCTION PLANS

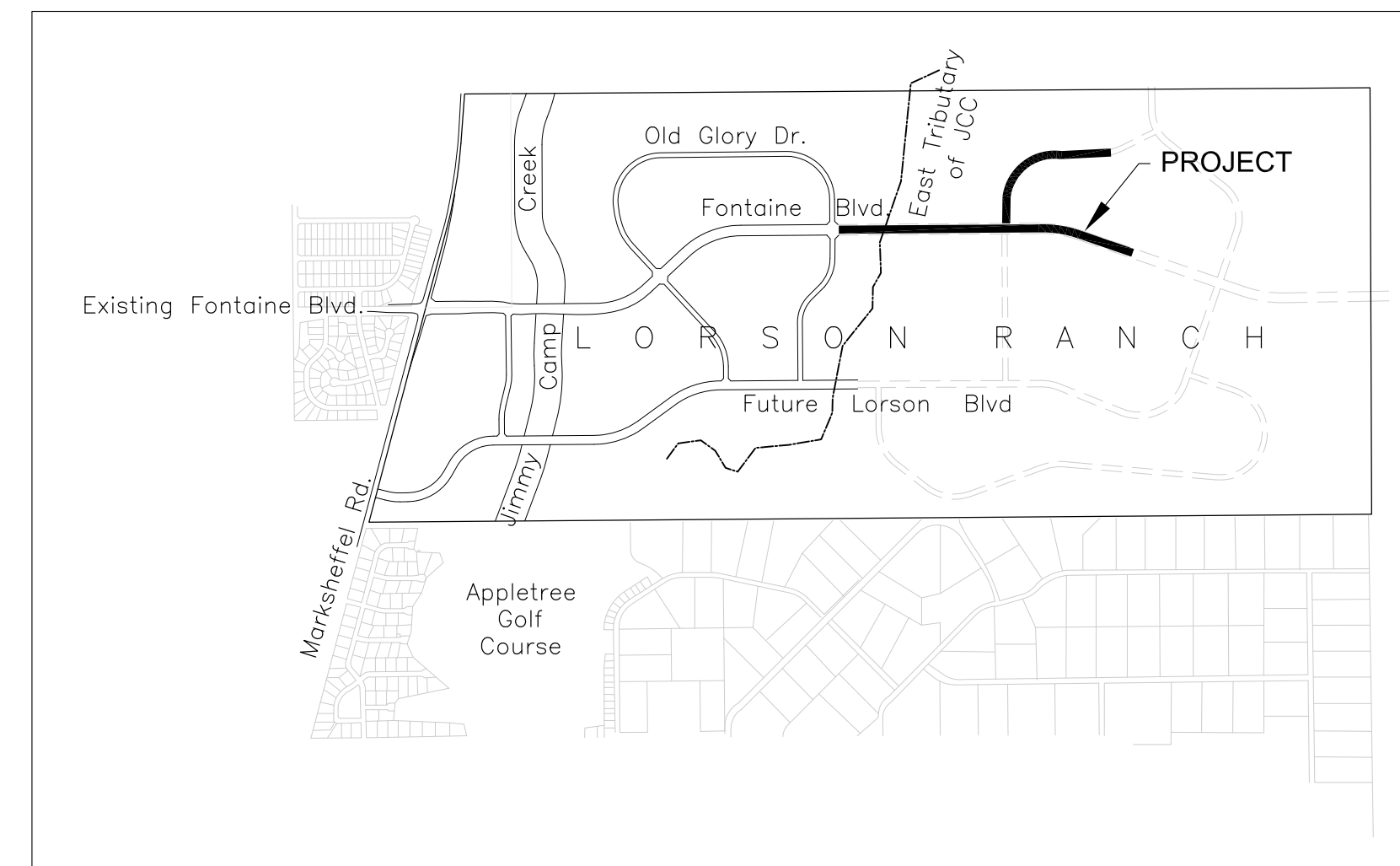


Know what's below.
Call before you dig.

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	TYPICAL STREET SECTIONS
C2.1	HORIZONTAL CONTROL PLAN
C5.1-C5.3	SIGNING AND STRIPING PLAN
C6.1-C6.9	STREET/STORM PLAN AND PROFILE
C7.1	STORM SEWER LATERAL CONSTRUCTION
C8.1-C8.9	WATERMAIN CONSTRUCTION
C9.1-C9.3	ROUNDBOUT CONSTRUCTION
C10.1-C10.3	STREET/STORM DETAILS
S1	STRUCTURAL DETAILS
C12.1	WATERMAIN 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 _____ DATE _____
TITLE _____
ADDRESS 212 N. WAHSATCH AVE. SUITE 301
COLORADO SPRINGS, CO 80903

**COLORADO SPRINGS UTILITIES
WATER PLAN DESIGN APPROVAL**

APPROVED BY: _____
DATE: _____
PROJECT NUMBER: 2018--
WORK ORDER NUMBER:
CSU SHEET ___ OF ___

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.

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. CONSTRUCTION DOCUMENTS WILL BE VALID FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER.

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

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 ENERGY
7060 ALLEGRE ST.
FOUNTAIN, CO 80817
719-393-6639

EL PASO COUNTY
PLANNING AND COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE
COLORADO SPRINGS, CO 80919
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°41'52" 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.

DISTRICT APPROVAL (WATER)

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
WATER DESIGN APPROVAL

DATE _____ BY _____

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

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 _____ BY _____

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

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, CO 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cgl.com

DATE

DESCRIPTION

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

PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
FONTAINE BLVD-OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION LORSON RANCH EAST

DATE:
APRIL 2, 2018

PROJECT NO.
100.041

SHEET NUMBER
C1.1

TOTAL SHEETS: 34

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 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 GRADING SHALL CONFORM TO THE GEOTECHICAL RECOMMENDATIONS FOR LORSON RANCH EAST PREPARED BY RMG, "PRELIMINARY SOILS AND GEOLOGY FOR LORSON RANCH EAST", DATED SEPTEMBER 7, 2016.

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)

GENERAL NOTES

- ROUNDBOUT LIGHTING PLANS (NOT INCLUDED IN THIS PLAN SET) SHALL BE REVIEWED BY EL PASO COUNTY PCD.
- ROUNDBOUT LANDSCAPING PLANS (NOT INCLUDED IN THIS PLAN SET) SHALL BE REVIEW BY EL PASO COUNTY PCD.

WORK WITHIN CSU SOUTHERN DELIVERY SYSTEM EASEMENT CONSTRUCTION NOTES

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

EL PASO COUNTY STANDARD CONSTRUCTION NOTES:

- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
 - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - CDOT M & S STANDARDS
- 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. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY PUBLIC WORK DEPARTMENT AND MUTCD CRITERIA.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY PWD, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

CORE ENGINEERING GROUP
 1500 W. 15TH AVENUE, SUITE 35506
 BOULDER, CO 80501
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: LORSON, LLC
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: FONTAINE BLVD IN LORSON RANCH EAST
 FONTAINE BLVD-CED GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

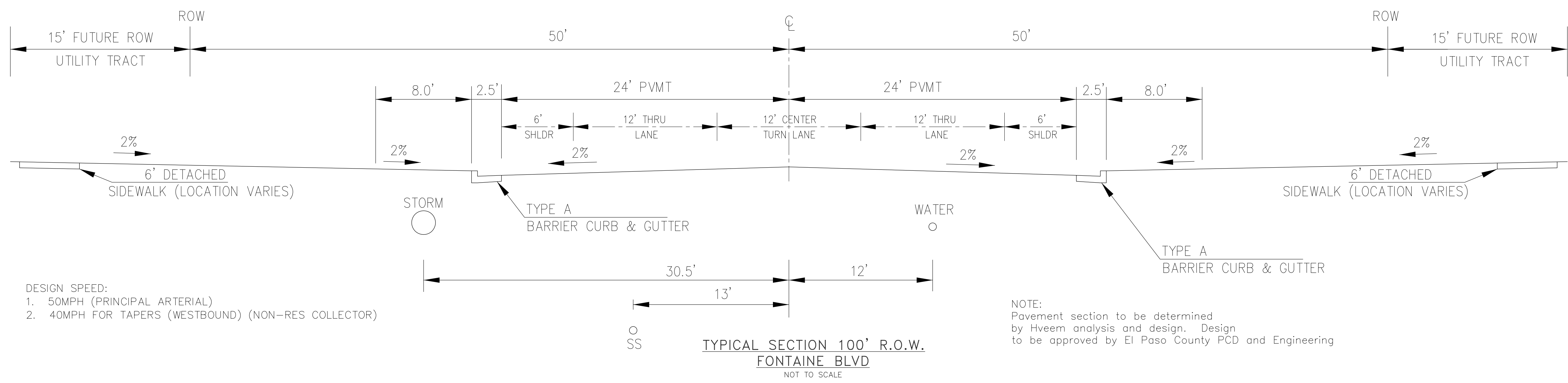
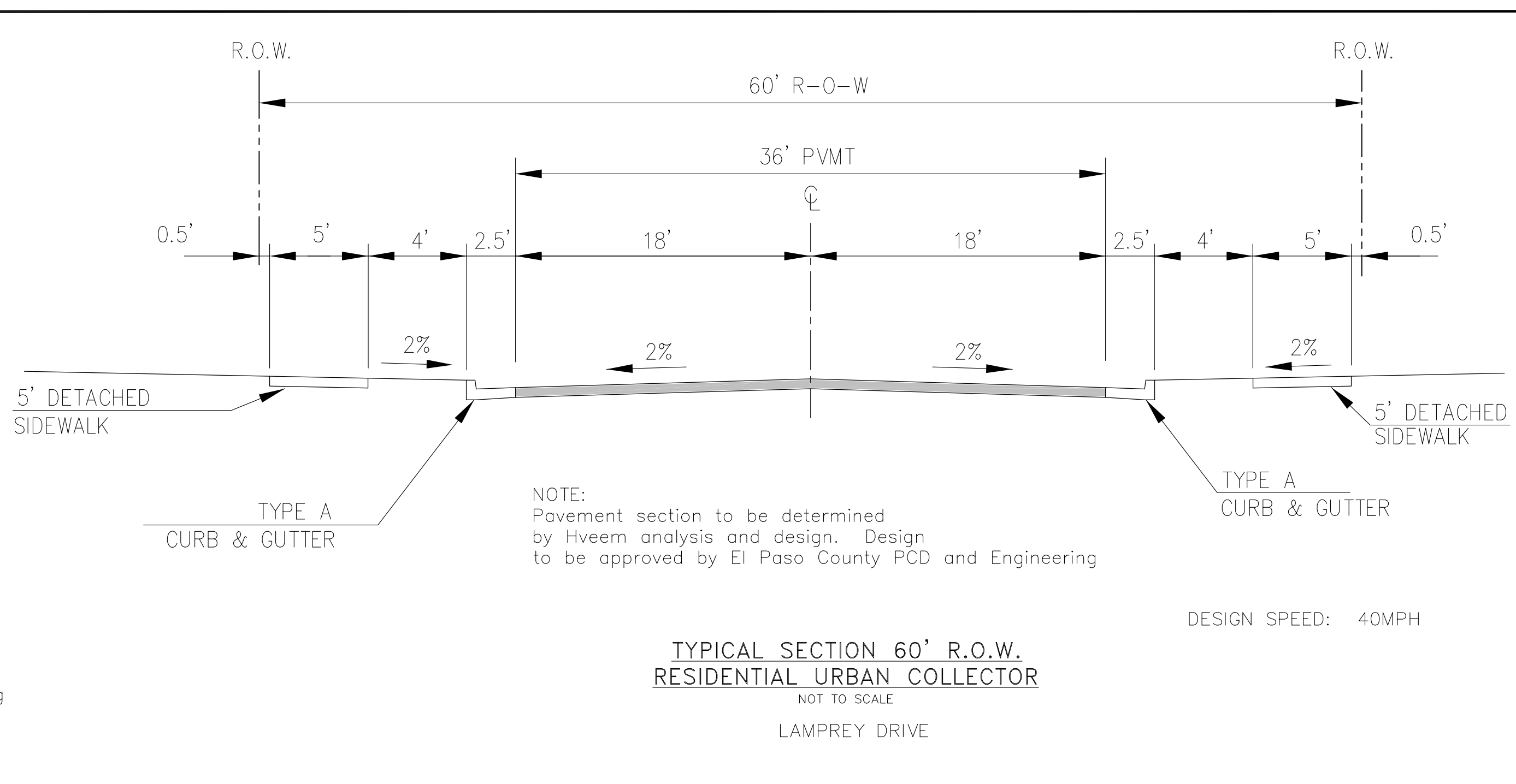
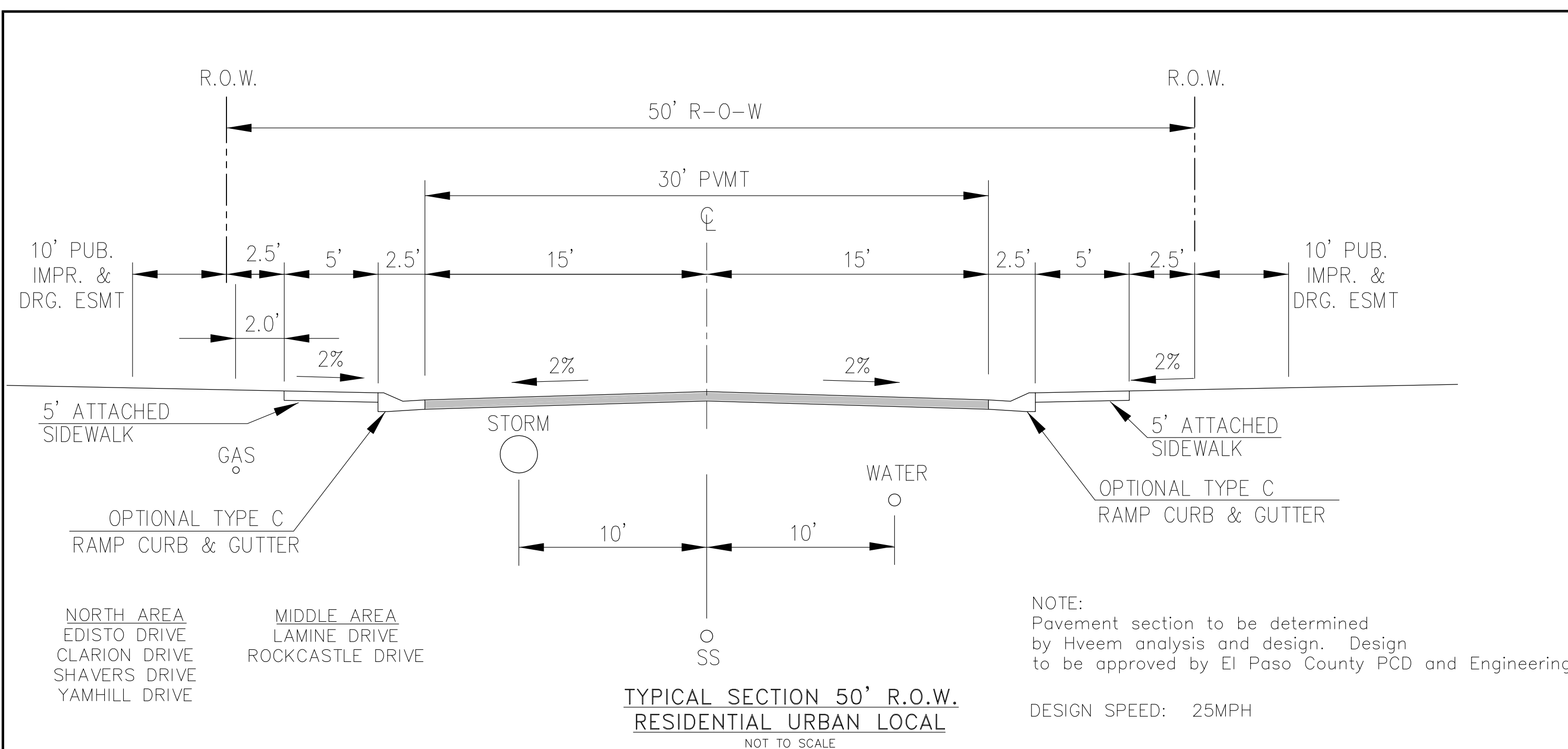
DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION NOTES

DATE: APRIL 2, 2018

PROJECT NO. 100.041

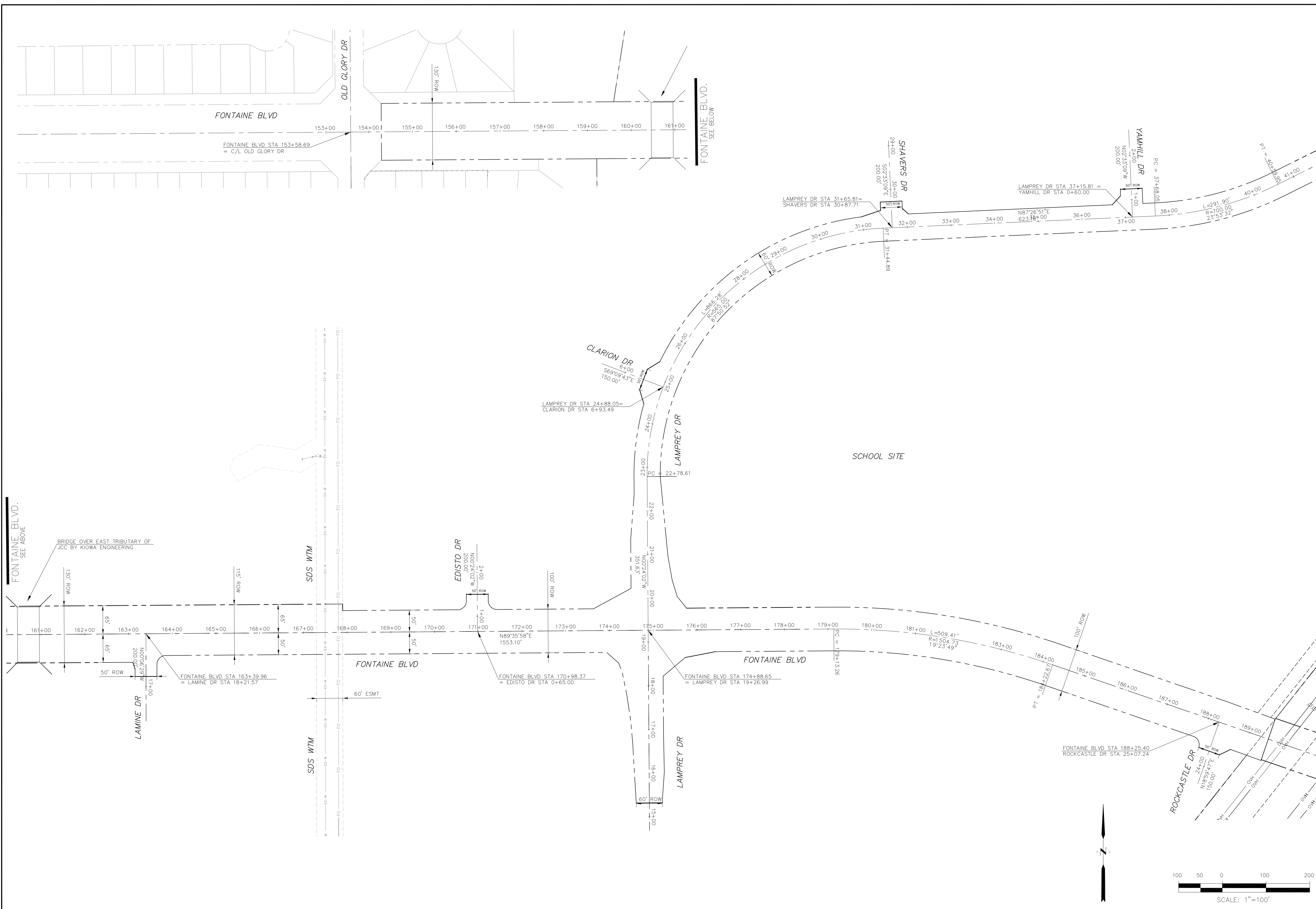
SHEET NUMBER C1.2
 TOTAL SHEETS: 34



CORE ENGINEERING GROUP	
1500 N. 1ST AVENUE, SUITE 300 BOULDER, CO 80506 PH: 719.570.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@cge1.com	
DATE	
DESCRIPTION	
NO.	
PREPARED FOR:	LORSON, LLC
PROJECT:	FONTAINE BLVD IN LORSON RANCH EAST
	212 N. WAHSATCH AVE, SUITE 301 COLORADO SPRINGS, COLORADO 80903 (719) 635-3200 CONTACT: JEFF MARK
DRAWN:	RLS
DESIGNED:	RLS
CHECKED:	RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION
TYPICAL SECTIONS

DATE:	APRIL 2, 2018
PROJECT NO.	100.041
SHEET NUMBER	C1.3
TOTAL SHEETS:	34



CORE
ENGINEERING GROUP
 15004 1ST AVENUE S.
 FT. COLLINS, CO. 80506
 PH: 970.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

DATE: _____
 DESCRIPTION: _____
 NO: _____

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

PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

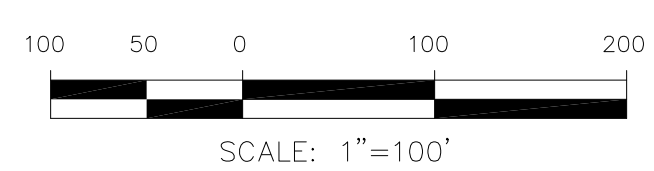
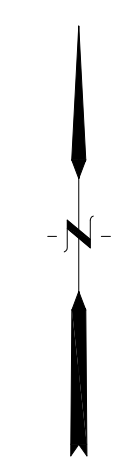
HORIZONTAL CONTROL PLAN

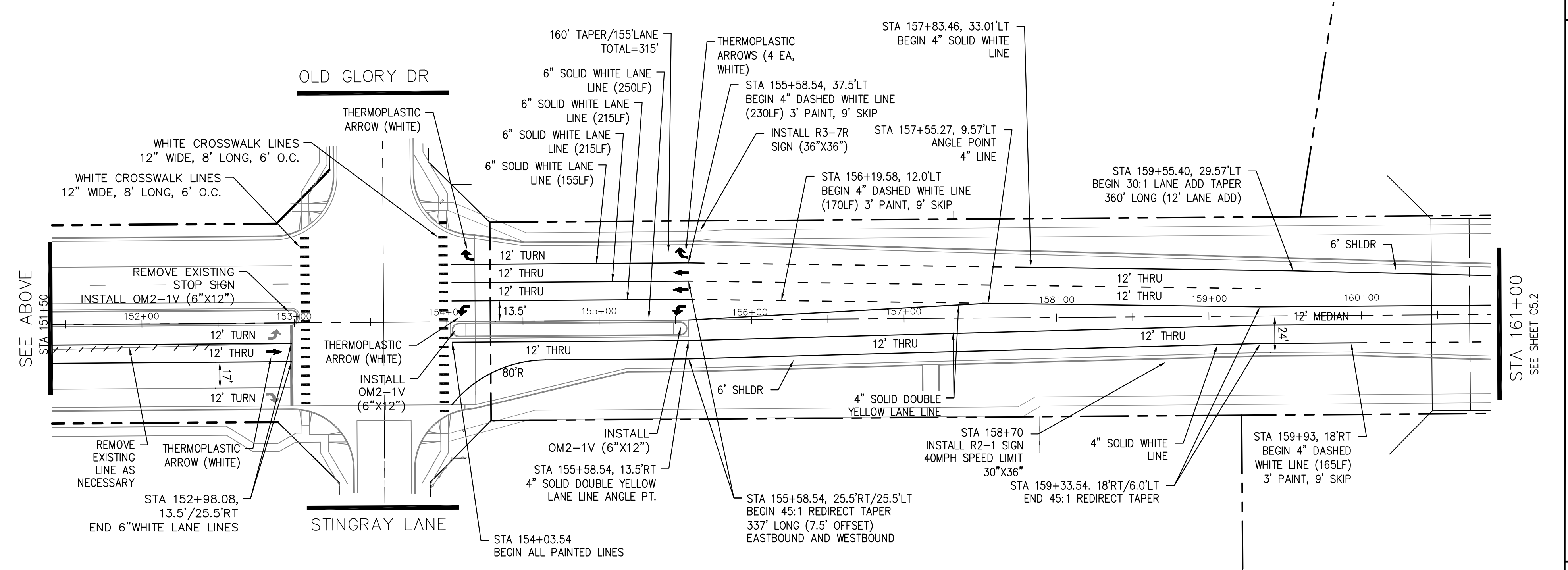
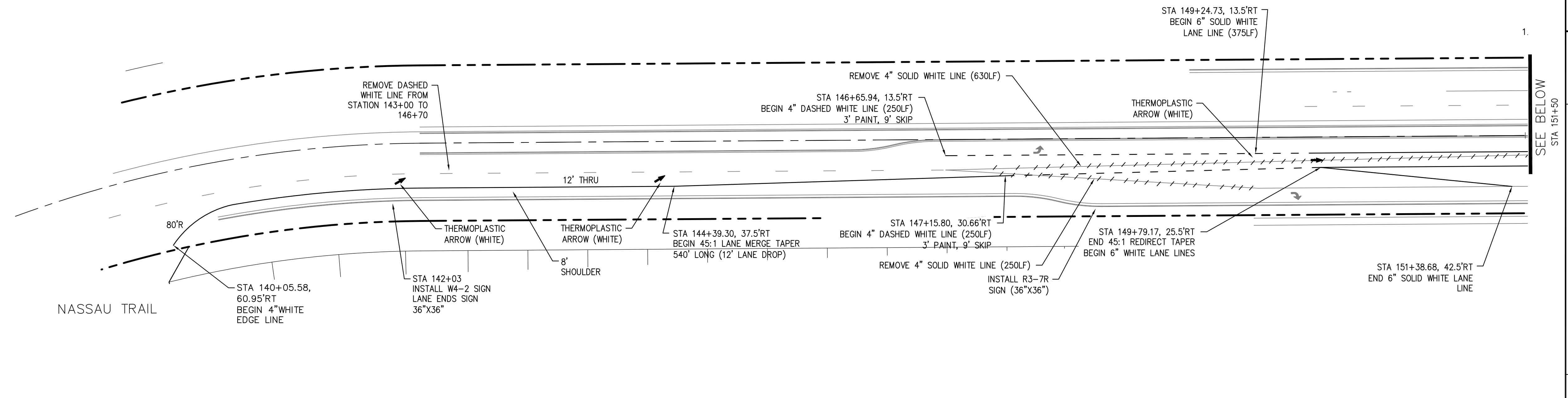
DATE:
 APRIL 2, 2018

PROJECT NO.
 100.041

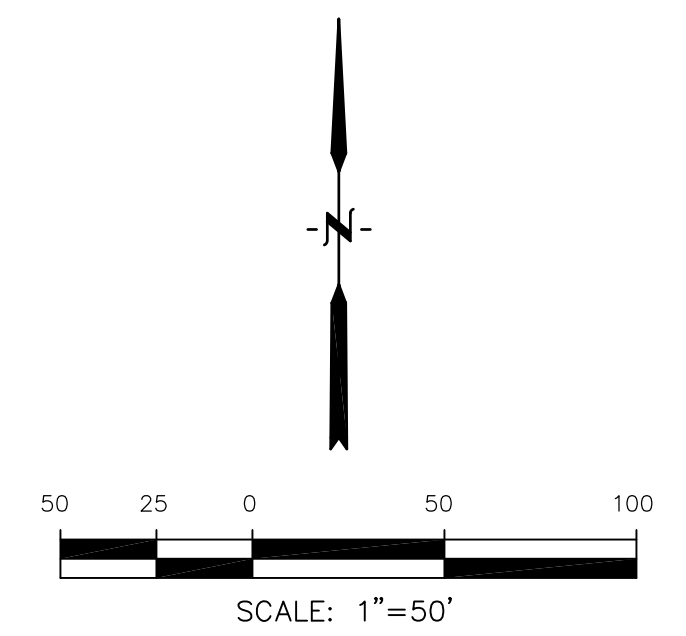
SHEET NUMBER
C2.1

TOTAL SHEETS: 34





- Signing and Striping Notes:**
- All signs and pavement markings shall be in compliance with the current Manual on Uniform Traffic Control Devices (MUTCD).
 - Removal of existing pavement markings shall be accomplished by a method that does not materially damage the pavement. The pavement markings shall be removed to the extent that they will not be visible under day or night conditions. At no time will it be acceptable to paint over existing pavement markings.
 - Any deviation from the striping and signing plan shall be approved by El Paso County Planning and Community Development. All signs shown on the signing and striping plan shall be new signs. Existing signs may remain or be reused if they meet current El Paso County Public Works Department and MUTCD standards.
 - Street name and regulatory stop signs shall be on the same post at intersections.
 - All removed signs shall be disposed of in a proper manner by the contractor.
 - All street name signs shall have "D" series letters, with local roadway signs being 4" upper-lower case lettering on 8" blank and non-local roadway signs being 6" lettering, upper-lower case on 12" blank, with a white border that is not recessed. Multi-lane roadways with speed limits of 40 mph or higher shall have 8" upper-lower case lettering on 18" blank with a white border that is not recessed. The width of the non-recessed white borders shall match page 255 of the 2012 MUTCD "Standard Highway Signs".
 - All traffic signs shall have a minimum High Intensity Prismatic grade sheeting.
 - All local residential street signs shall be mounted on a 1.75" x 1.75" square tube sign post and stub post base. For other applications, refer to the CDOT Standard S-614-8 regarding use of the P2 tubular steel post slipbase design.
 - All signs shall be single sheet aluminum with 0.100" minimum thickness.
 - All limit lines/stop lines, crosswalk lines, pavement legends, and arrows shall be a minimum 125 mil thickness preformed thermoplastic pavement markings with tapered leading edges per CDOT Standard S-627-1. Word and symbol markings shall be the narrow type. Stop bars shall be 24" in width. Crosswalks lines shall be 12" wide and 8' long per CDOT S-627-1.
 - All longitudinal lines shall be a minimum 15mil thickness epoxy paint. All non-local residential roadways shall include both right and left edge line striping and any additional striping as required by CDOT S-627-1.
 - The contractor shall notify El Paso County Planning and Community Development (719) 520-6819 prior to and upon completion of signing and striping.
 - The contractor shall obtain a work in the right of way permit from the El Paso County Public Works Department prior to any signage or striping work within an existing El Paso County roadway.



CORE
ENGINEERING GROUP
 15004 1ST AVENUE S.
 BURNING WOODS, CO 80506
 PH: 719.576.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

NO. _____ DATE _____
 DESCRIPTION _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE., SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

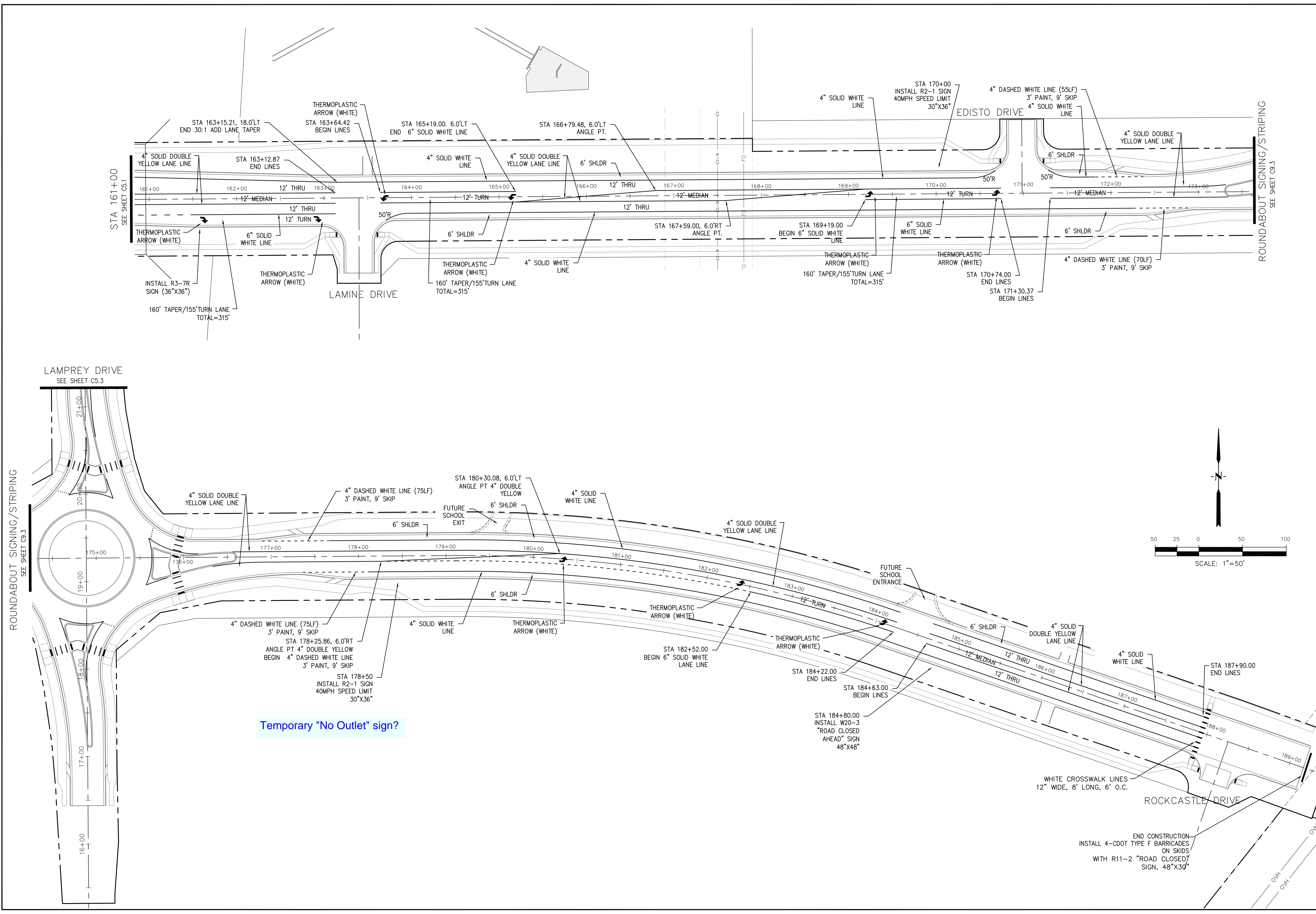
**FONTAINE BLVD
 SIGNING & STRIPING PLAN**

DATE:
APRIL 2, 2018

PROJECT NO.
100.041

SHEET NUMBER
C5.1

TOTAL SHEETS: 34



Temporary "No Outlet" sign?

CORE
ENGINEERING GROUP
 15004 1ST AVENUE S.
 BLDG 79 F70 1100
 DENVER, CO 80202
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

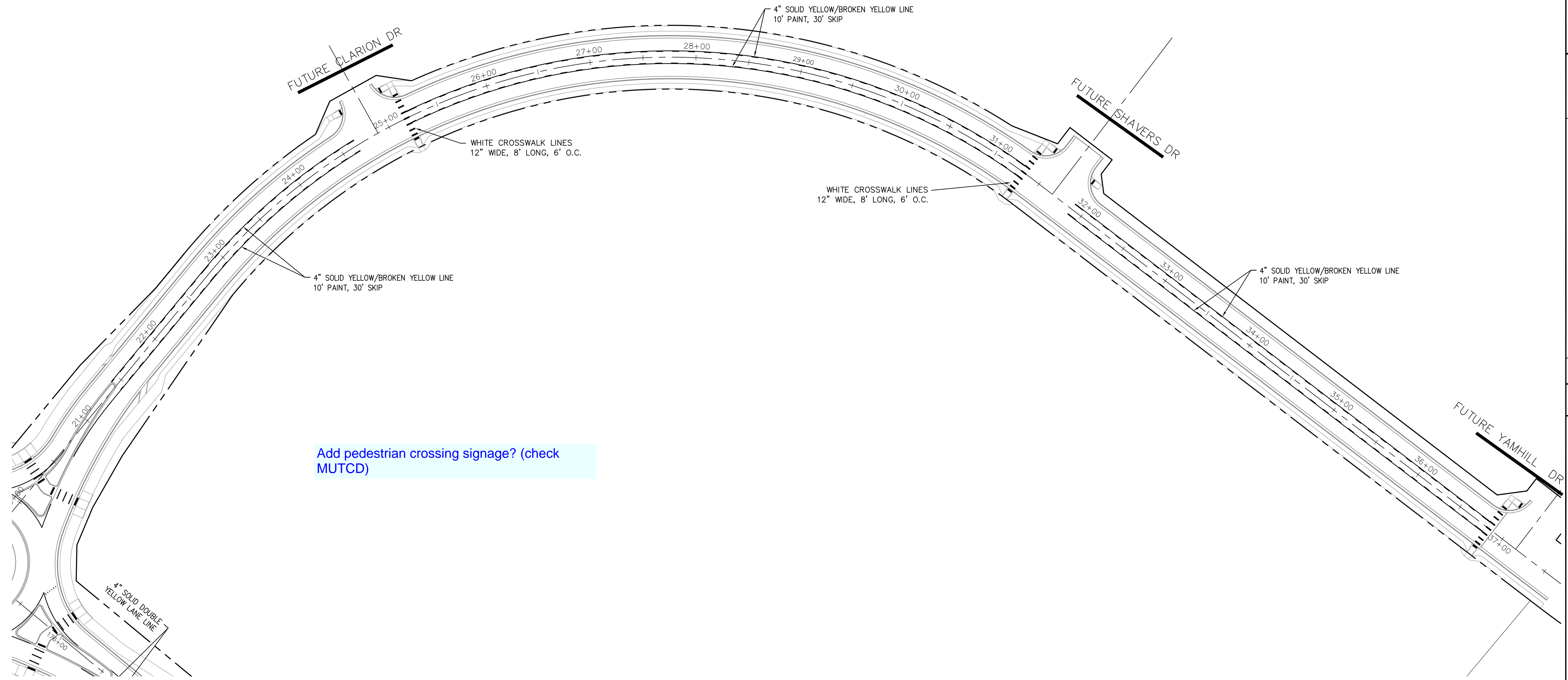
NO. _____ DATE _____
 DESCRIPTION _____
 PREPARED FOR:
LORSON, LLC
 212 N. WAHSATCH AVE. SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 (719) 635-3200
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

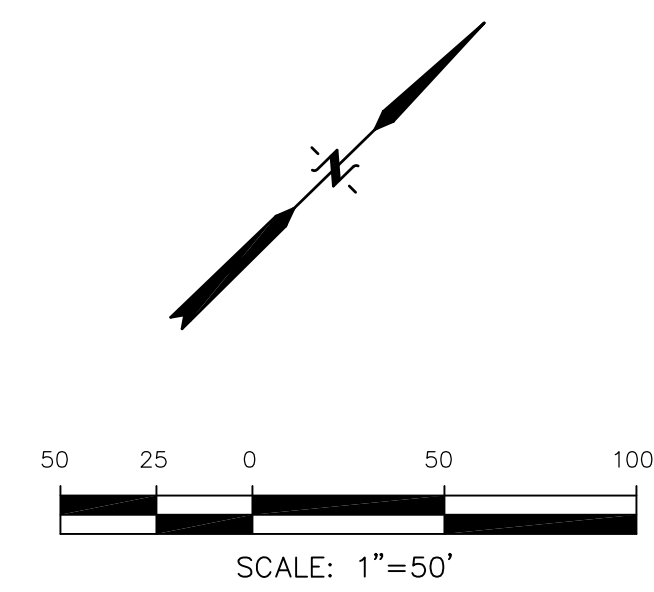
**FONTAINE BLVD IN
 LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO

DATE:
APRIL 2, 2018
 PROJECT NO.
100.041
 SHEET NUMBER
C5.2
 TOTAL SHEETS: 34

ROUNDABOUT SIGNING/STRIPING
SEE SHEET C5.3



Add pedestrian crossing signage? (check MUTCD)



CORE
ENGINEERING GROUP
 15004 1ST AVENUE S.
 BIRMGHAM, AL 35206
 PH: 205 970 1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

NO.	DESCRIPTION	DATE

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

PROJECT:
FONTAINE BLVD IN LORSON RANCH EAST
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

LAMPREY DRIVE
SIGNING & STRIPING PLAN

DATE:
APRIL 2, 2018

PROJECT NO.
100.041

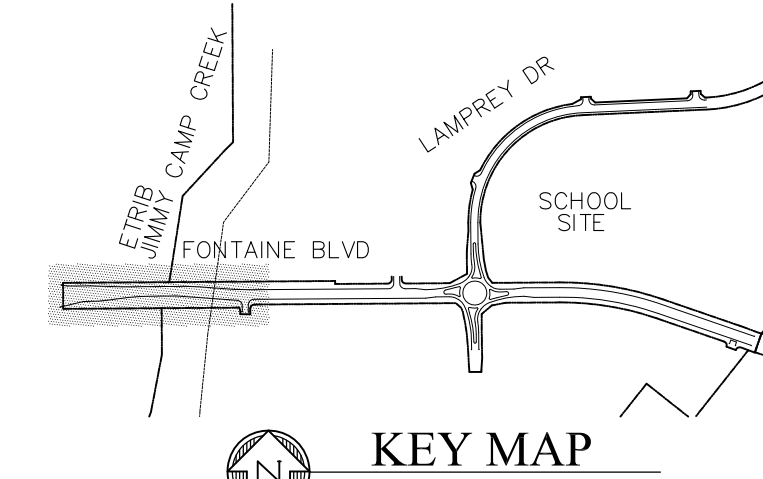
SHEET NUMBER
C5.3

TOTAL SHEETS: 34

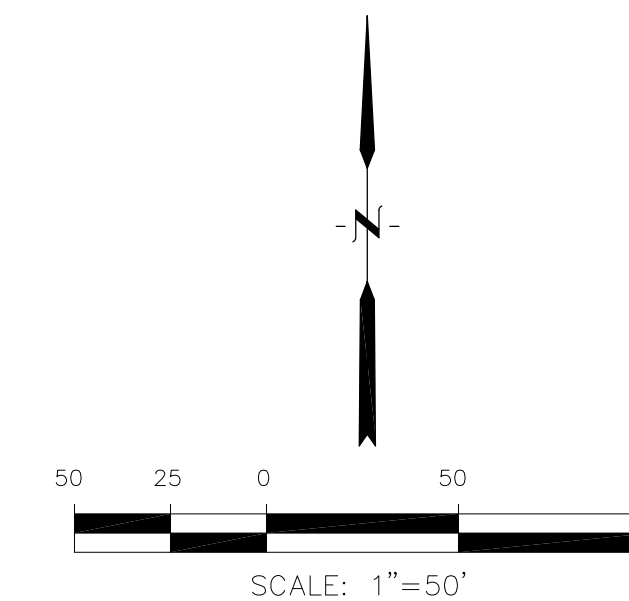
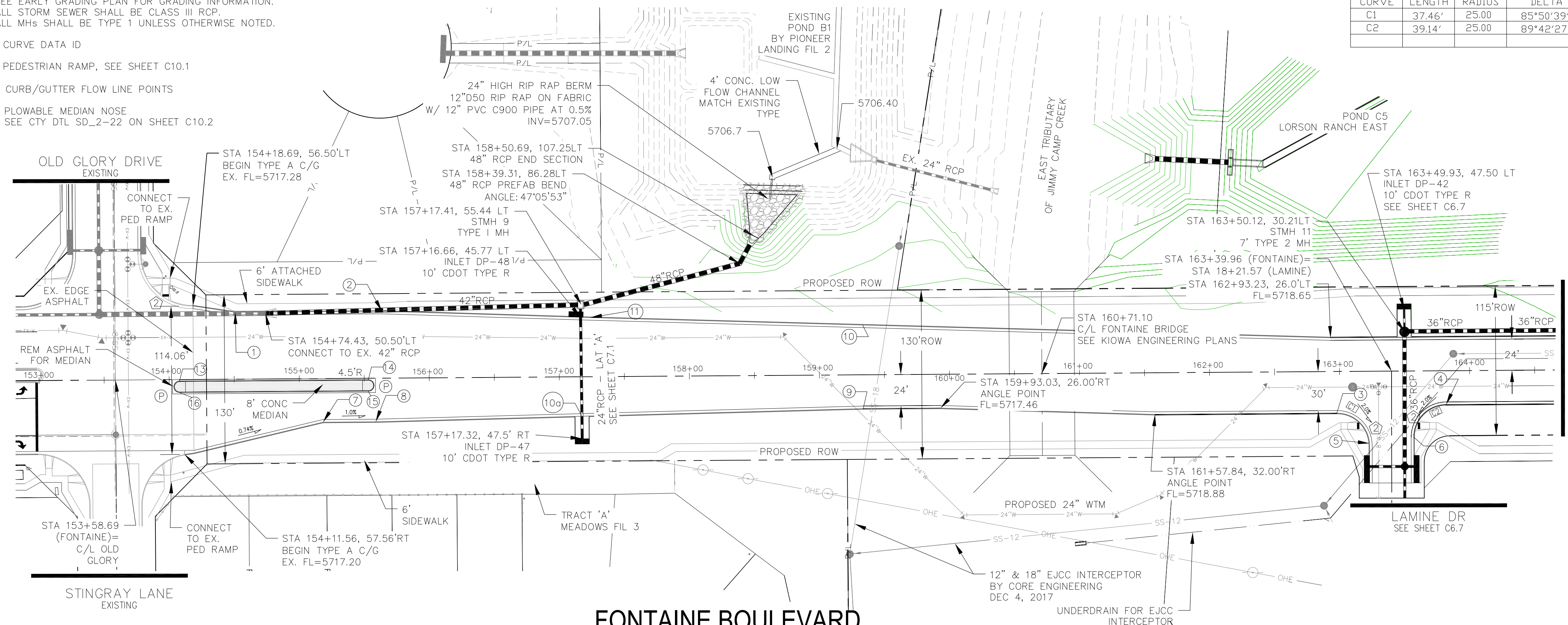
- NOTES**
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
 3. ALL STORM SEWER SHALL BE CLASS III RCP.
 4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

- ① CURVE DATA ID
- ② PEDESTRIAN RAMP, SEE SHEET C10.1
- ③ CURB/GUTTER FLOW LINE POINTS
- Ⓟ PLOWABLE MEDIAN NOSE
SEE CTY DTL SD_2-22 ON SHEET C10.2

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	37.46'	25.00	85°50'39"
C2	39.14'	25.00	89°42'27"



FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	154+51.20, 51.50'LT	5716.84
2	155+63.99, 51.50'LT	5715.50
3	162+97.67, 32.00'RT	5718.49
4	163+81.70, 26.0'RT	5718.57
5	163+24.70, 56.08'RT	5717.74
6	163+56.87, 50.88'RT	5717.78
7	155+18.08, 33.50'RT	5716.33
8	155+58.64, 33.50'RT	5715.89
9	159+33.54, 26.00'RT	5716.83
10	159+33.52, 38.32'LT	5716.57
10a	157+17.18, 30.33'LT	5715.05
11	157+24.13, 45.49'LT	5714.78
12	158+58.68, 26.00'LT	5716.02
13	154+07.98, 100'RT	5718.57
14	155+53.16, 100'RT	5716.78
15	155+53.16, 10.00'RT	5716.56
16	154+07.98, 10.00'RT	5718.13

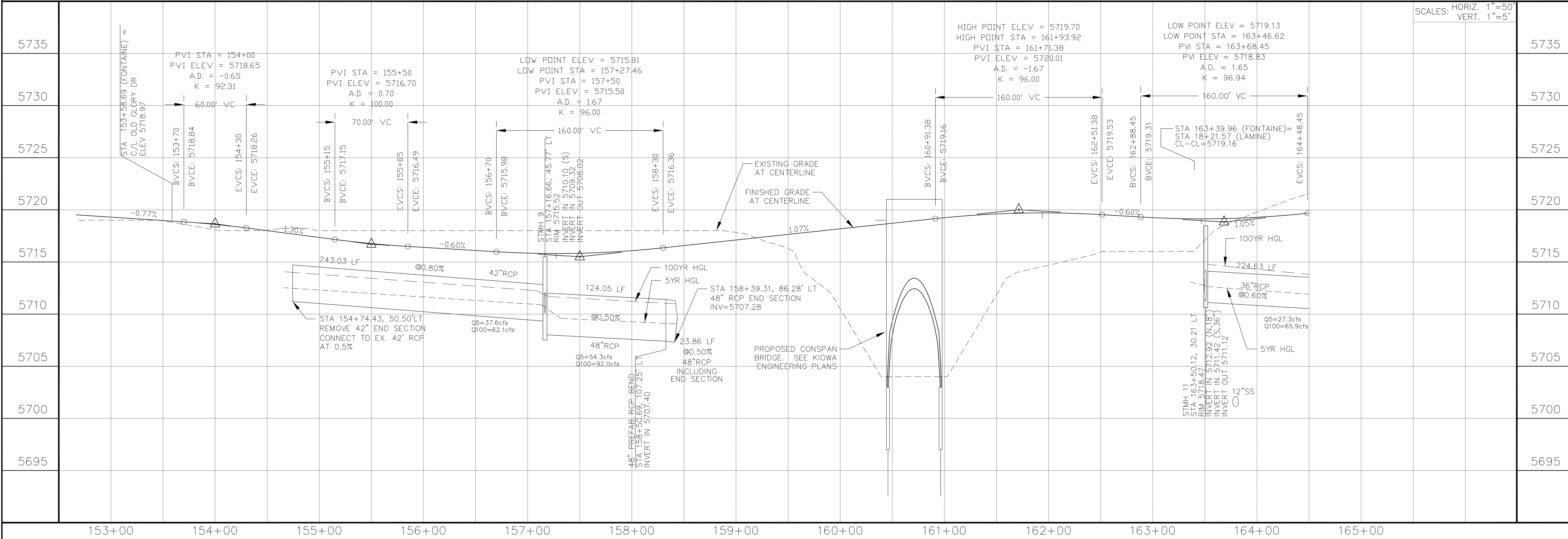


CORE ENGINEERING GROUP
 15004 151ST AVENUE S.
 PHOENIX, AZ 85006
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

PROJECT: FONTAINE BLVD IN LORSON, LLC
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

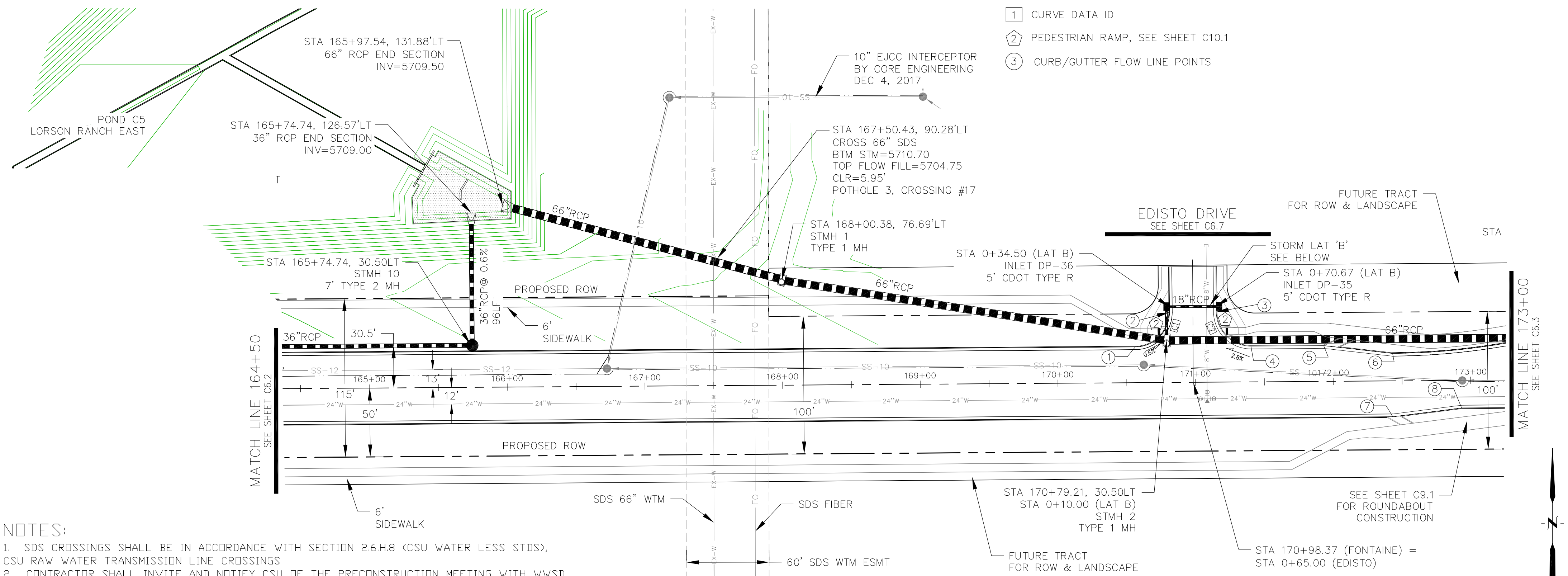
PREPARED FOR: LORSON, LLC
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

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

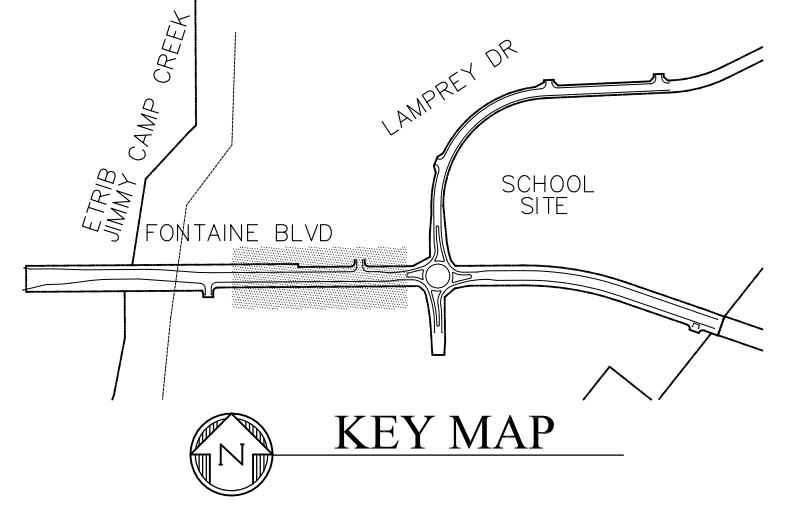


STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STA 153+00 TO 164+50

DATE: APRIL 2, 2018
 PROJECT NO: 100.041
 SHEET NUMBER: C6.1
 TOTAL SHEETS: 34



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	39.27'	25.00	90°00'00"
C2	39.27'	25.00	90°00'00"



FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	170+56.37, 26.00'LT	5725.42
2	170+81.37, 51.50'LT	5725.20
3	171+15.37, 51.50'LT	5725.20
4	171+40.37, 26.00'LT	5726.30
5	171+93.25, 26.00'LT	5726.85
6	172+43.25, 20.00'LT	5727.50
7	172+43.14, 26.00'RT	5727.38
8	172+93.14, 20.00'RT	5728.02

COLORADO SPRINGS UTILITIES WATER PLAN DESIGN APPROVAL

APPROVED BY: _____

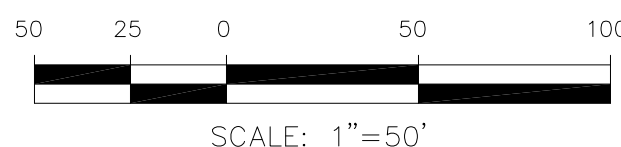
DATE: _____

PROJECT NUMBER: 2018--

WORK ORDER NUMBER: _____

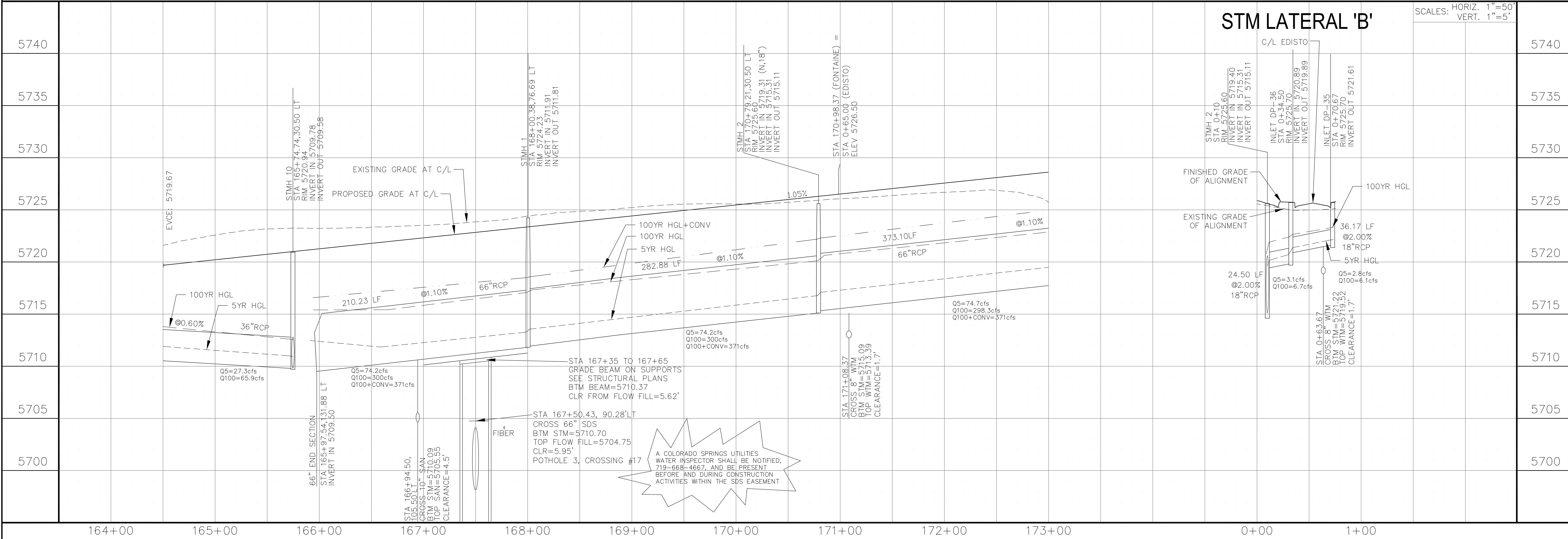
CSU SHEET ____ OF ____

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.

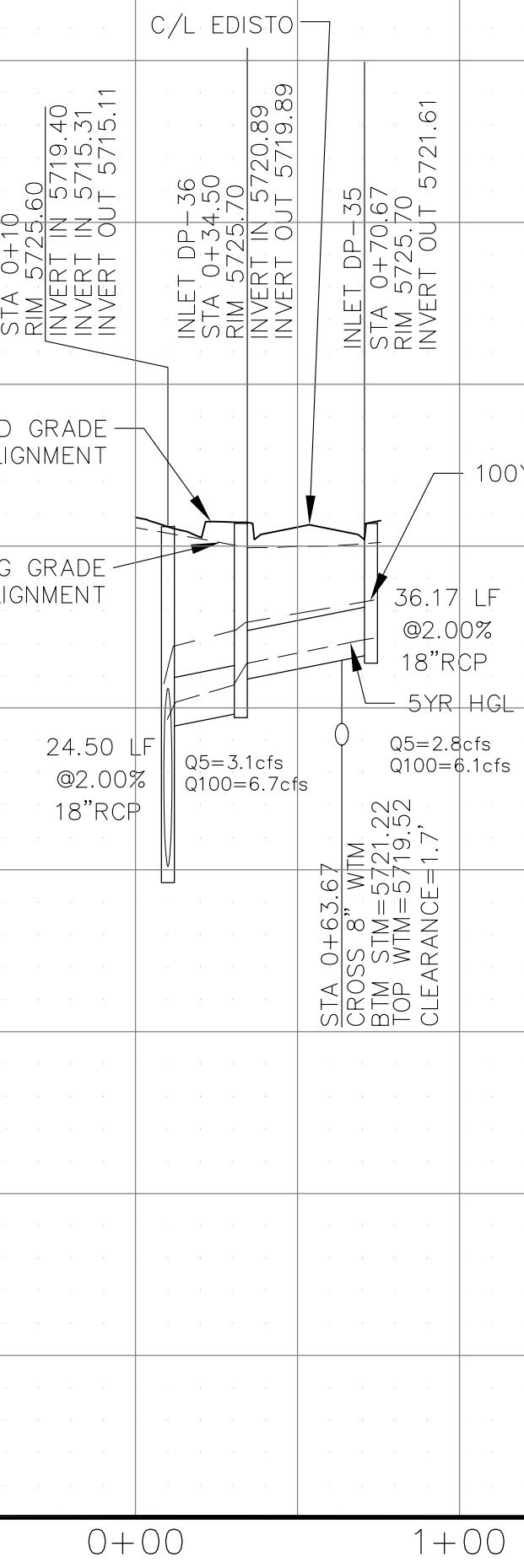


- NOTES:**
1. SDS CROSSINGS SHALL BE IN ACCORDANCE WITH SECTION 2.6.H.8 (CSU WATER LESS STDS), CSU RAW WATER TRANSMISSION LINE CROSSINGS
 2. CONTRACTOR SHALL INVITE AND NOTIFY CSU OF THE PRECONSTRUCTION MEETING WITH WUSD
 3. THE CSU SDS WATERMAIN AND FIBER LOCATIONS ARE SHOWN FROM AS-BUILT DRAWINGS PROVIDED BY CSU
 4. A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4667, AND PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT

FONTAINE BOULEVARD



STM LATERAL 'B'



CORE ENGINEERING GROUP
 15004 151st AVENUE S.
 PHOENIX, AZ 85006
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg.com

DATE: _____

DESCRIPTION: _____

NO: _____

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

PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

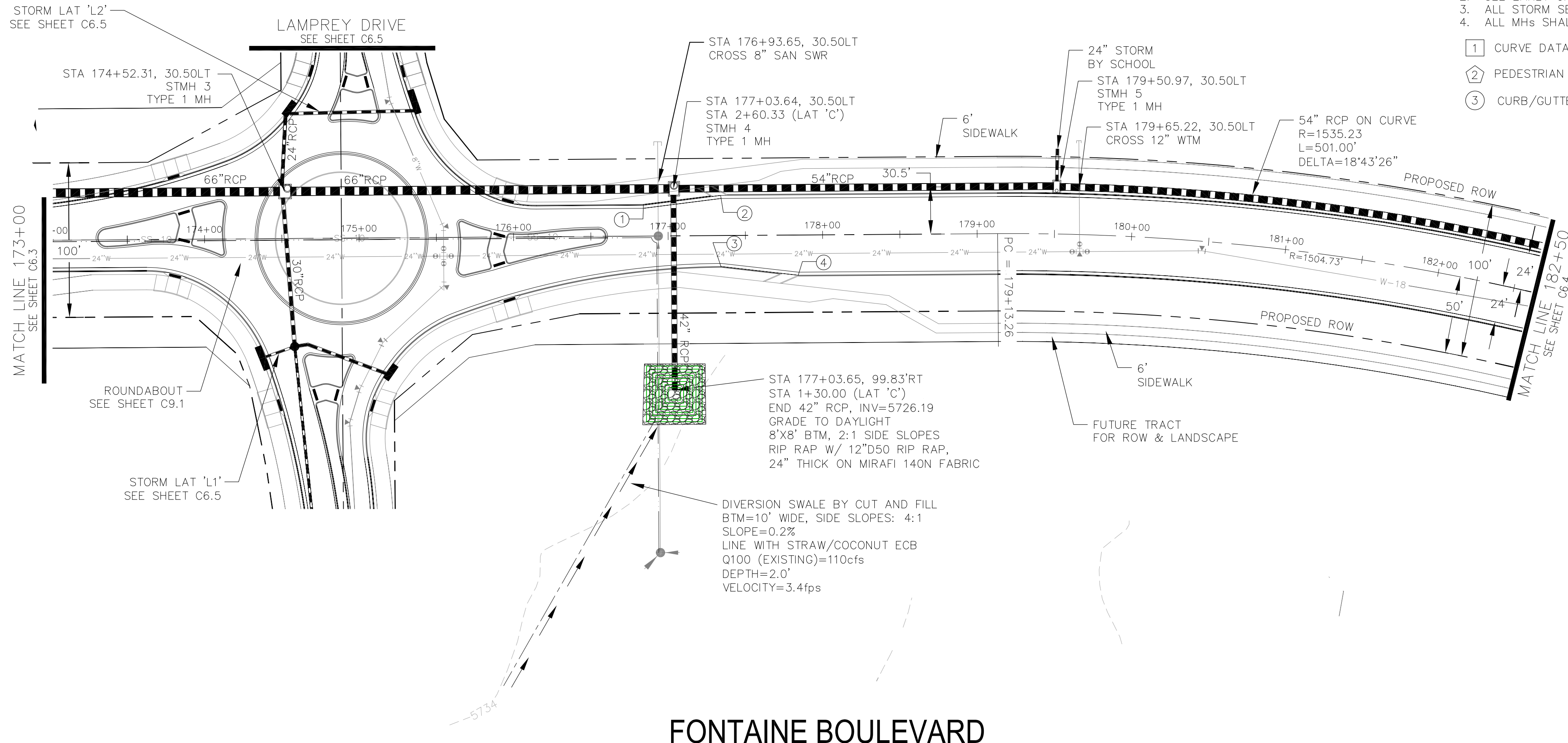
STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STA 164+50 TO 173+00

DATE: **APRIL 2, 2018**

PROJECT NO. **100.041**

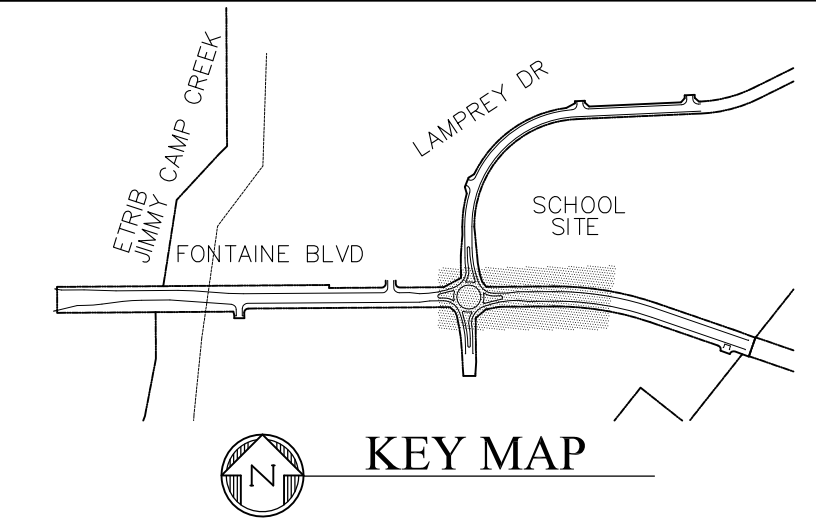
SHEET NUMBER **C6.2**

TOTAL SHEETS: 34

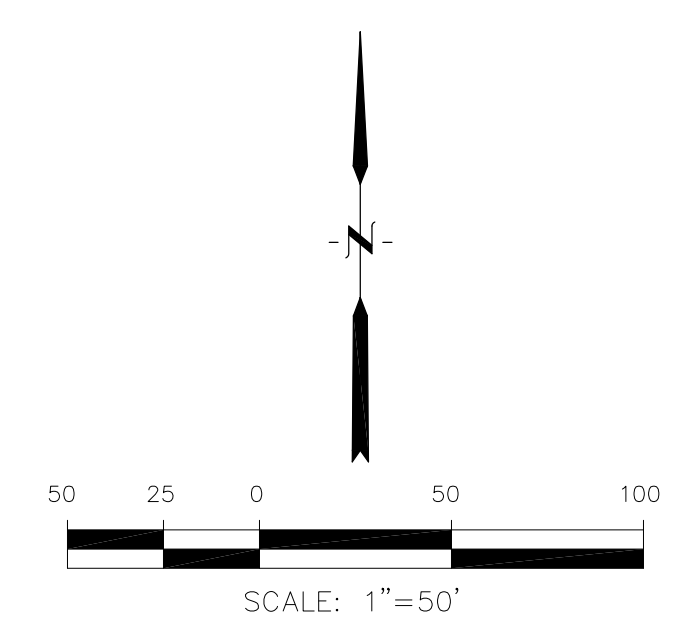


- NOTES**
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
 3. ALL STORM SEWER SHALL BE CLASS III RCP.
 4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

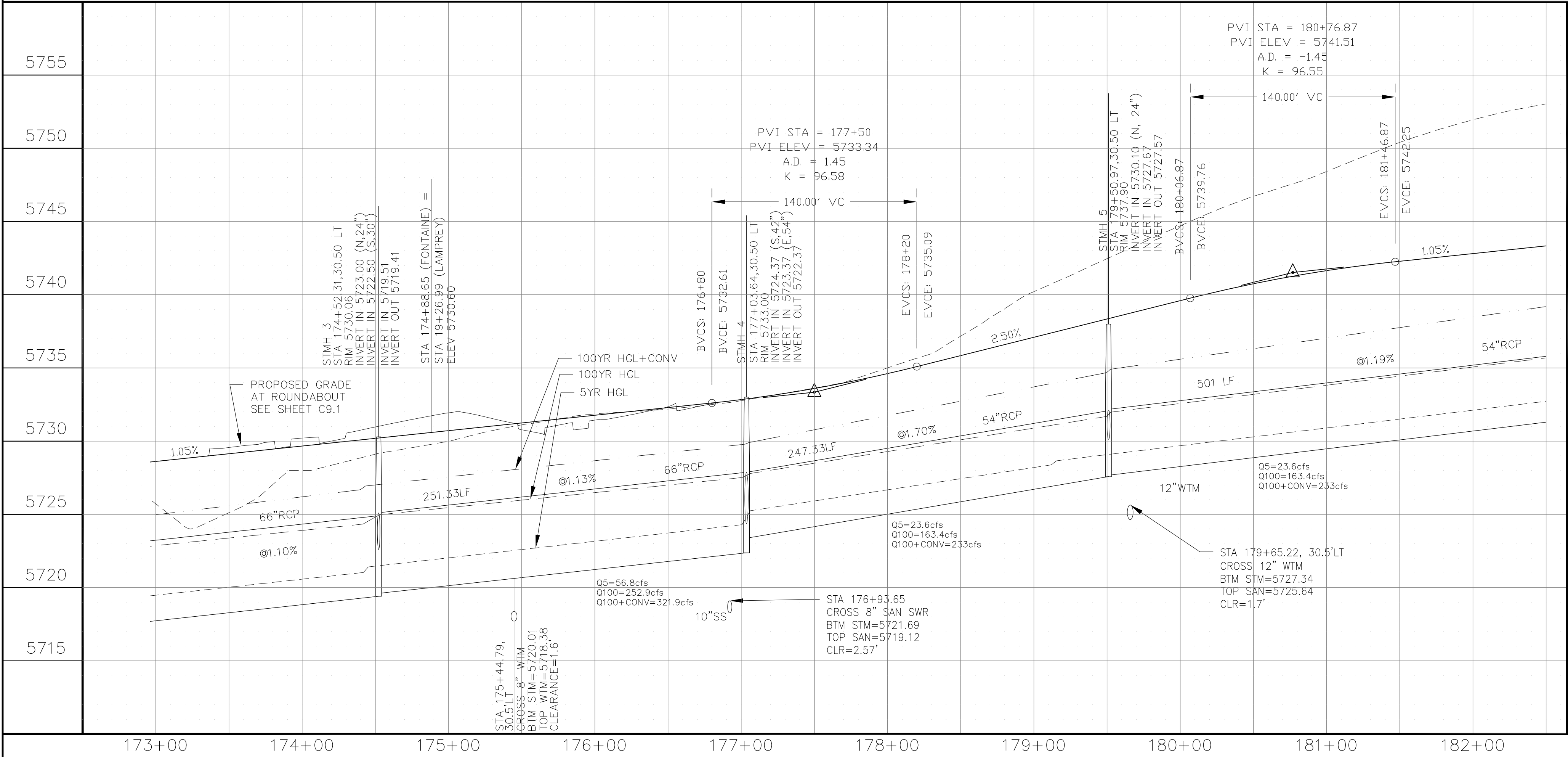
- ① CURVE DATA ID
- ② PEDESTRIAN RAMP, SEE SHEET C10.1
- ③ CURB/GUTTER FLOW LINE POINTS



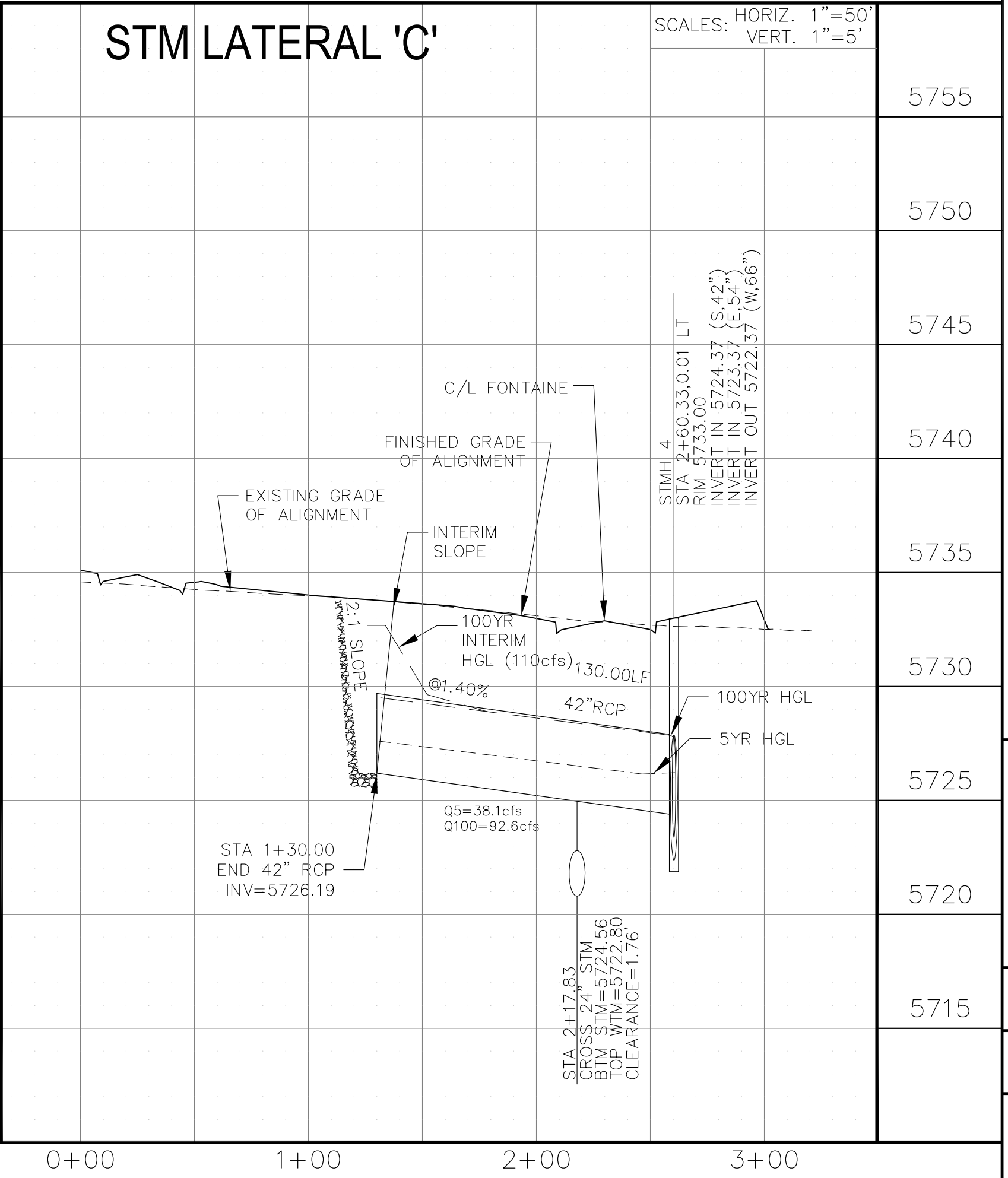
FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	176+84.17, 20.00'LT	5732.13
2	177+34.17, 26.00'LT	5732.69
3	177+34.06, 20.00'RT	5732.81
4	177+84.06, 26.00'RT	5733.62



FONTAINE BOULEVARD



STM LATERAL 'C'



CORE ENGINEERING GROUP
 15004 151ST AVENUE, SUITE 300
 FORT COCKERMAN, COLORADO 80903
 PHONE: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 NO. _____
 DESCRIPTION: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

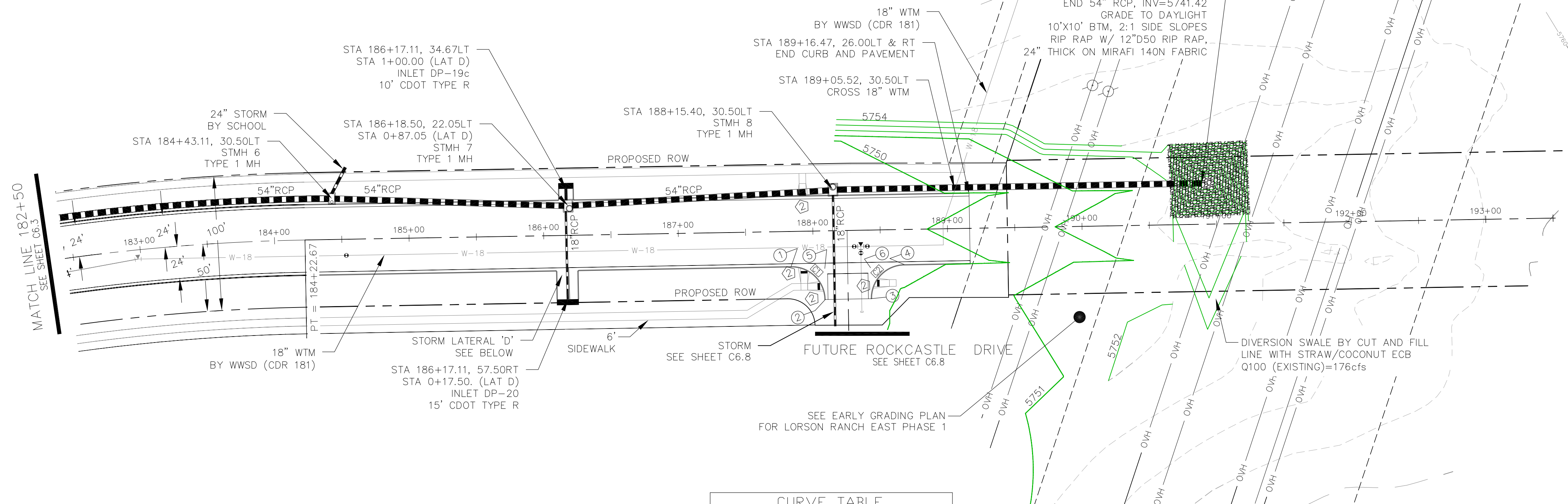
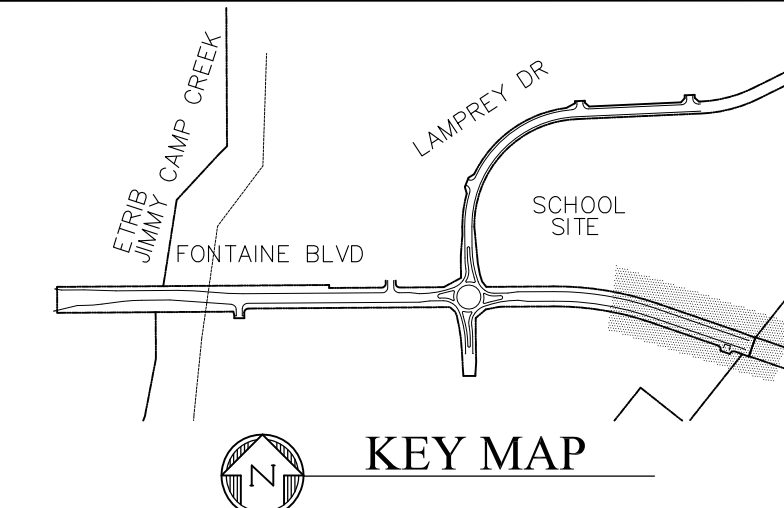
DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STA 173+00 TO 182+50

DATE: APRIL 2, 2018
 PROJECT NO. 100.041
 SHEET NUMBER **C6.3**
 TOTAL SHEETS: 34

- NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
 3. ALL STORM SEWER SHALL BE CLASS III RCP.
 4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

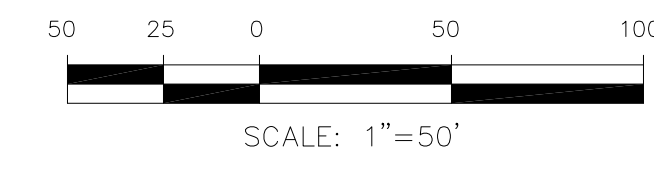
- ① CURVE DATA ID
- ② PEDESTRIAN RAMP, SEE SHEET C10.1
- ③ CURB/GUTTER FLOW LINE POINTS



POINT	STA/OFFSET	FLOWLINE
1	187+83.40, 26.00'RT	5748.29
2	188+08.40, 51.00'RT	5748.85
3	188+42.40, 51.00'RT	5749.10
4	188+67.40, 26.00'RT	5749.17
5	188+08.40, 28.00'RT	5748.55
6	188+42.40, 28.00'RT	5748.91

CURVE	LENGTH	RADIUS	DELTA
C1	39.27'	25.00	90°00'00"
C2	39.27'	25.00	90°00'00"

FONTAINE BOULEVARD



CORE ENGINEERING GROUP
 15004 15TH AVENUE S.
 PHOENIX, AZ 85006
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____

DESCRIPTION: _____

NO: _____

PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO

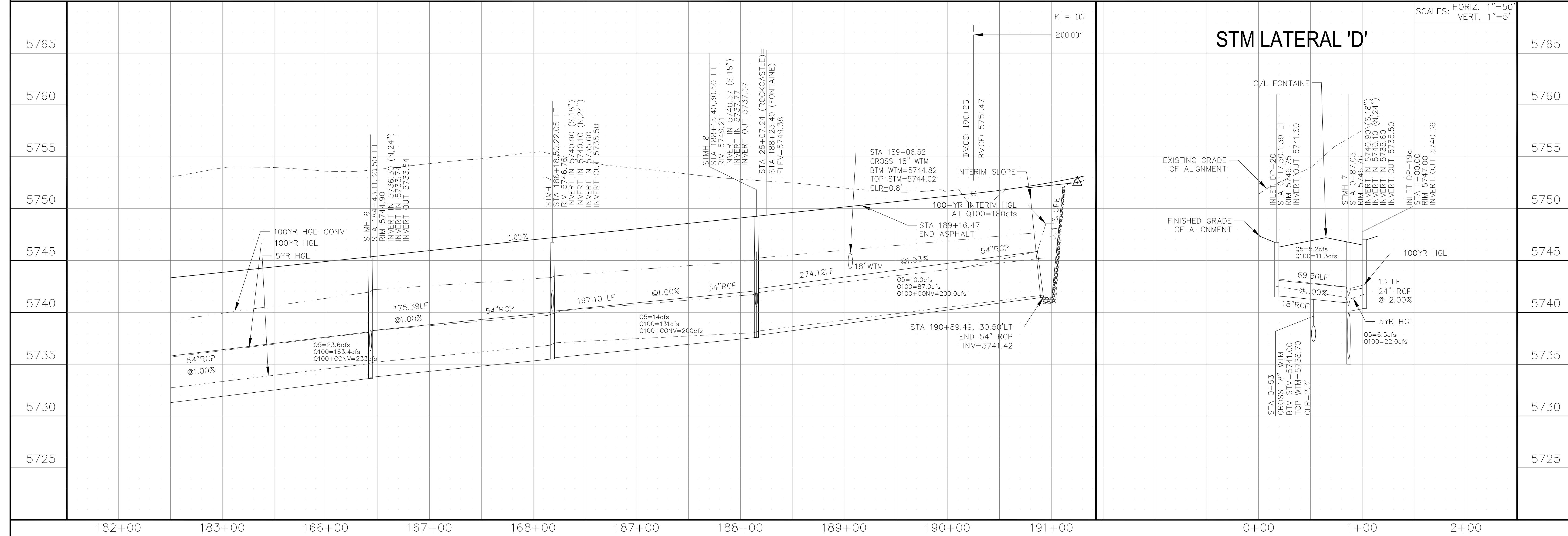
PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

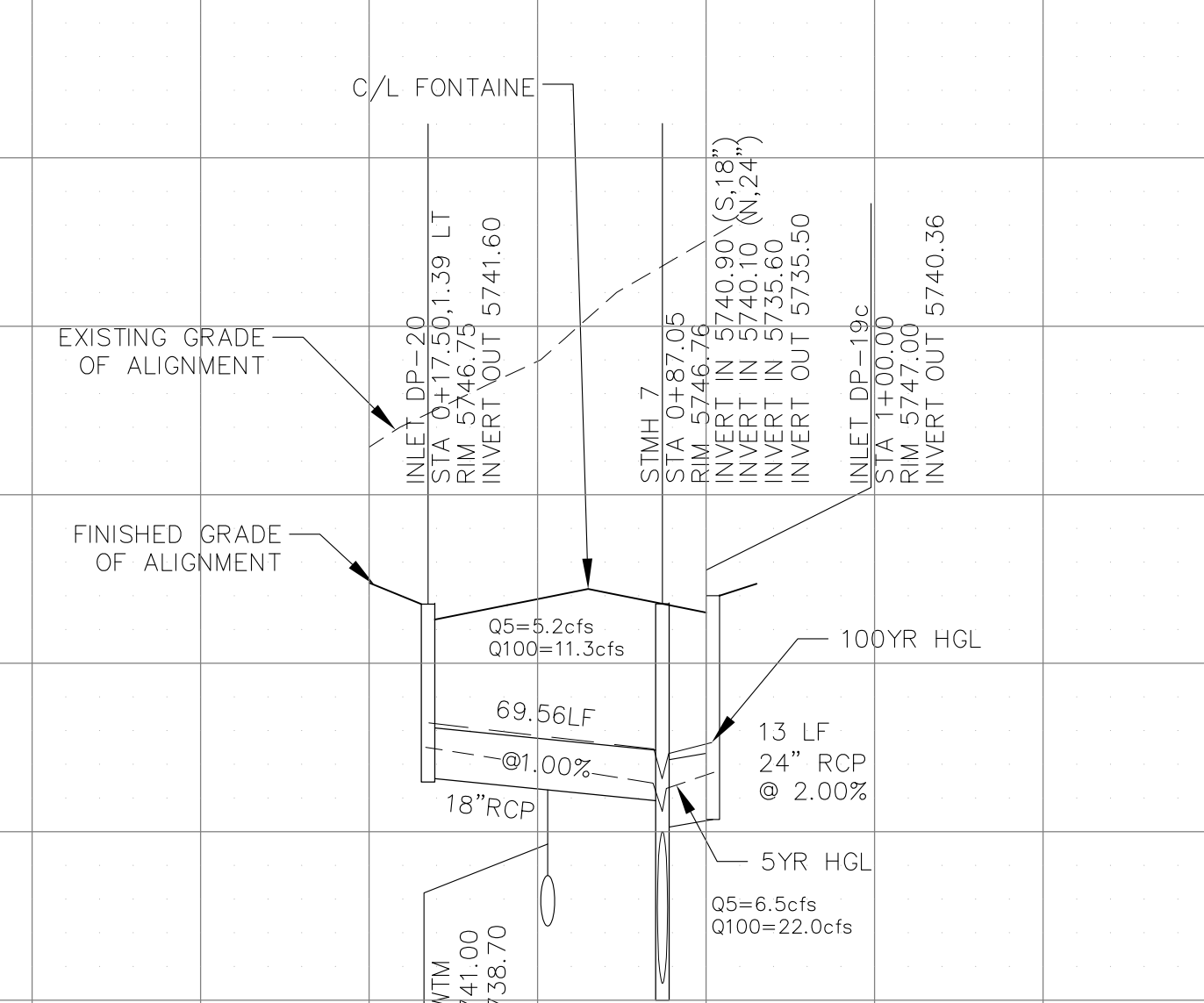
STREET & STORM SEWER PLAN/PROFILE

FONTAINE BOULEVARD

STA 182+50 TO 191+00



STM LATERAL 'D'



DATE: APRIL 2, 2018

PROJECT NO. 100.041

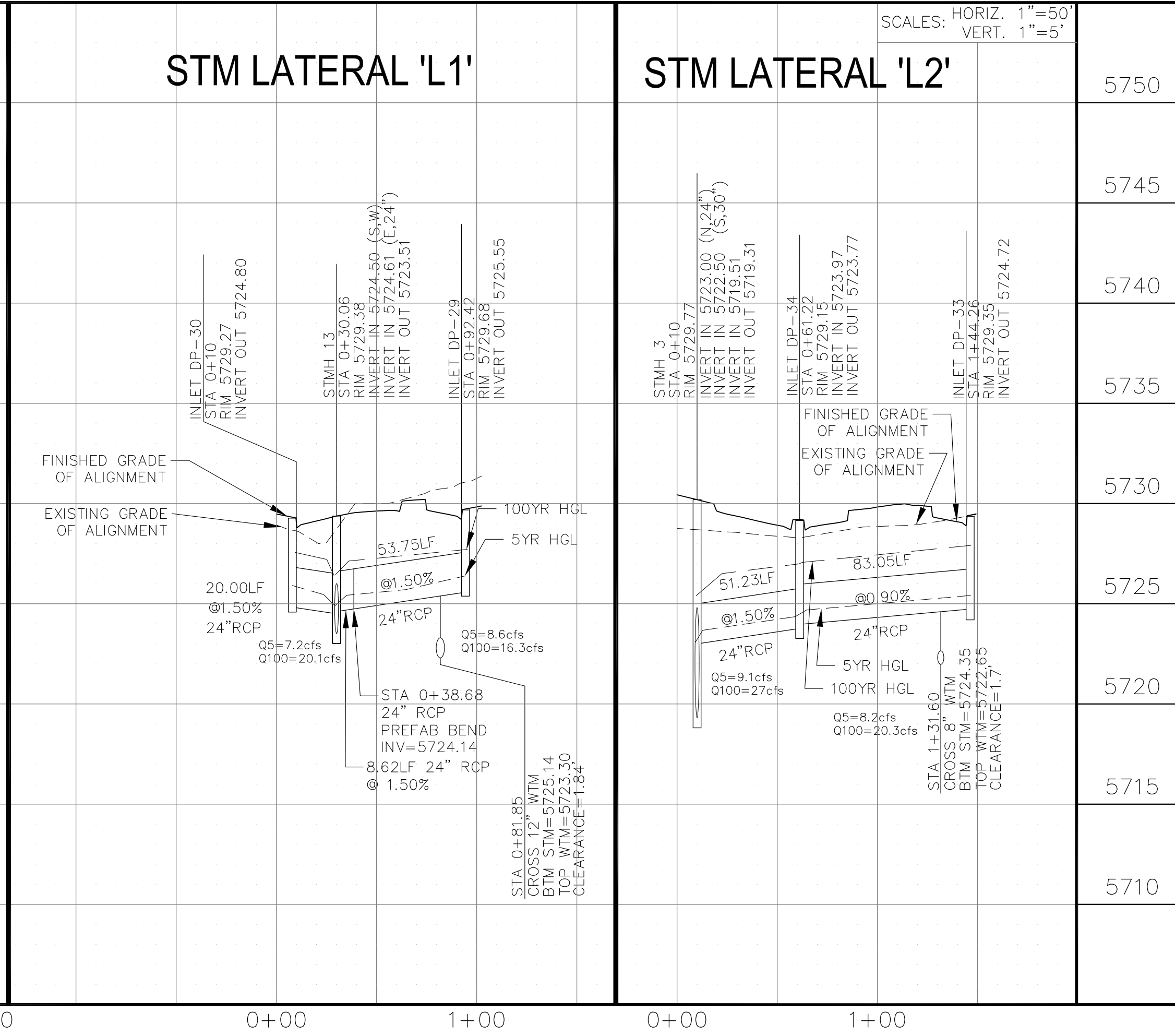
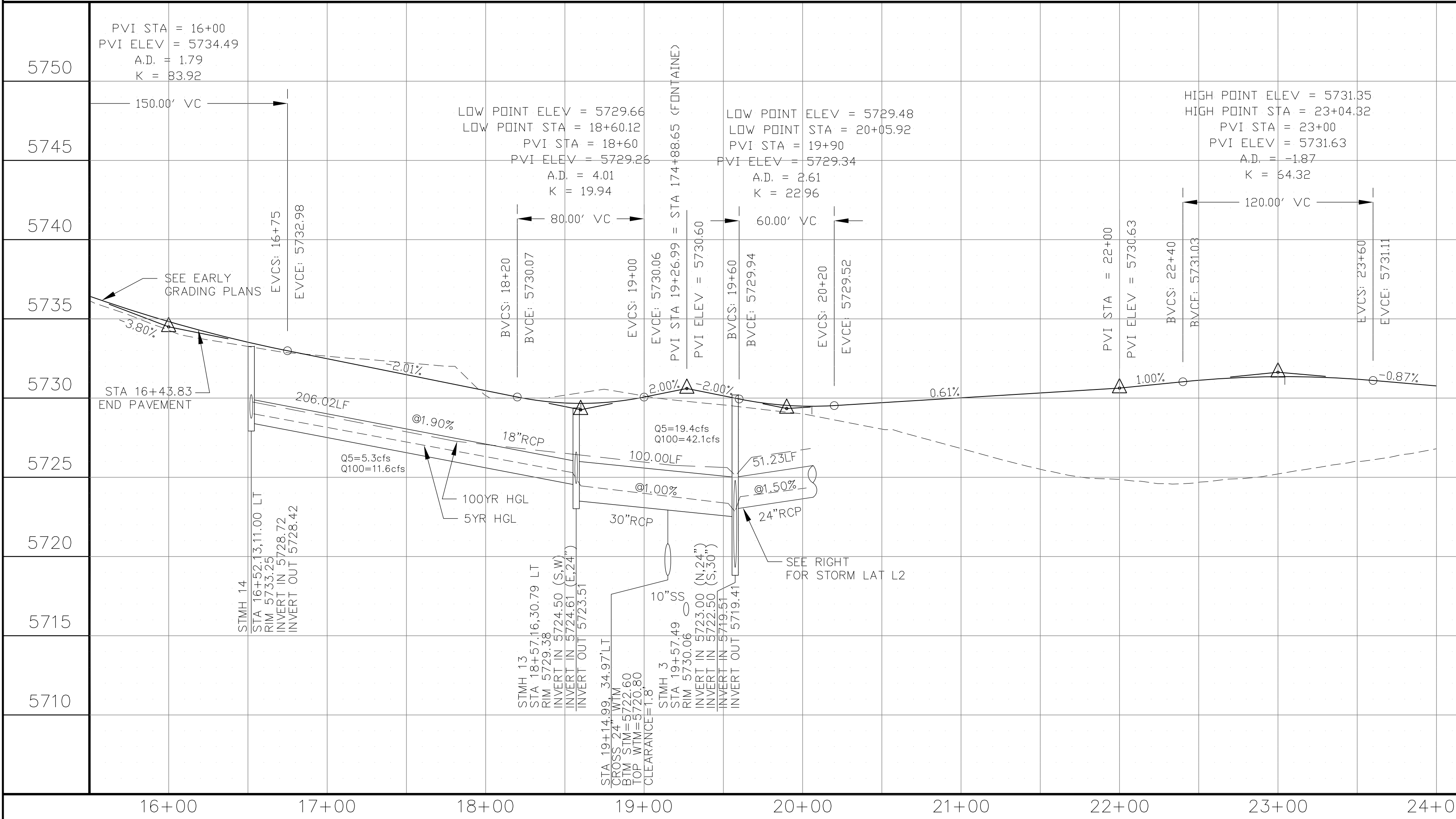
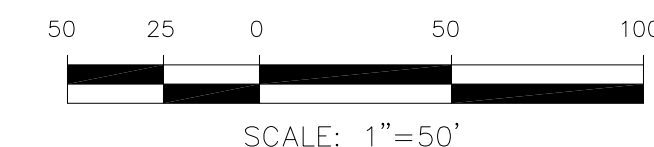
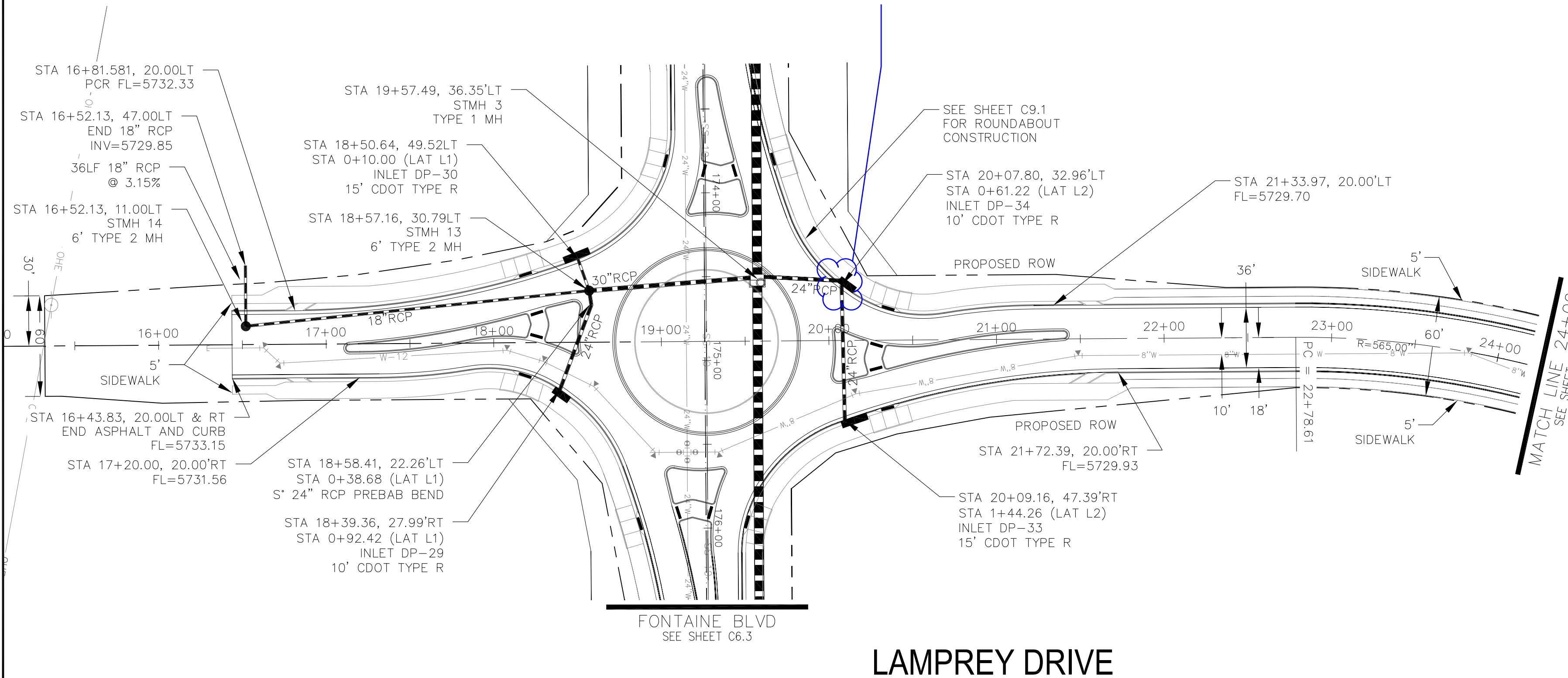
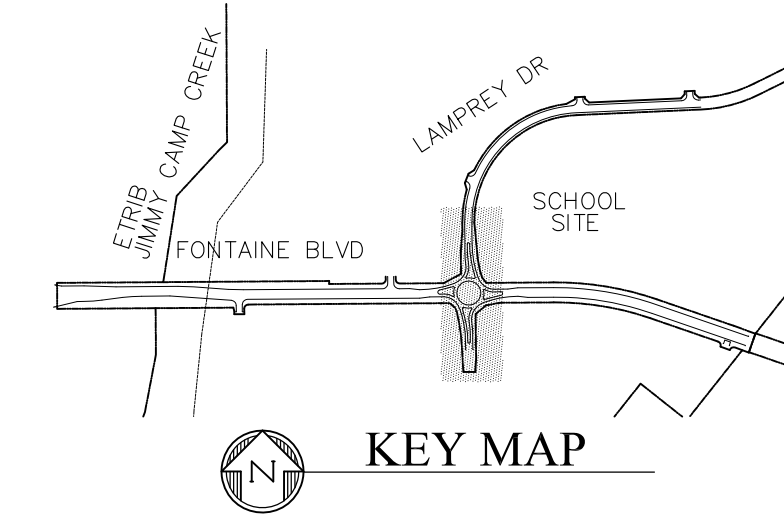
SHEET NUMBER **C6.4**

TOTAL SHEETS: 34

- NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
 3. ALL STORM SEWER SHALL BE CLASS III RCP.
 4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

- 1 CURVE DATA ID
- 2 PEDESTRIAN RAMP, SEE SHEET C10.1
- 3 CURB/GUTTER FLOW LINE POINTS

The pipe is coming out of the corner of the box. Provide detail/ensure constructability.



CORE ENGINEERING GROUP
 15004 151st AVENUE S.E.
 SUITE 100
 FORT COLLINS, CO 80506
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 NO. _____
 DESCRIPTION: _____
 PROJECT: **FONTAINE BLVD IN LAMPREY DR**
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

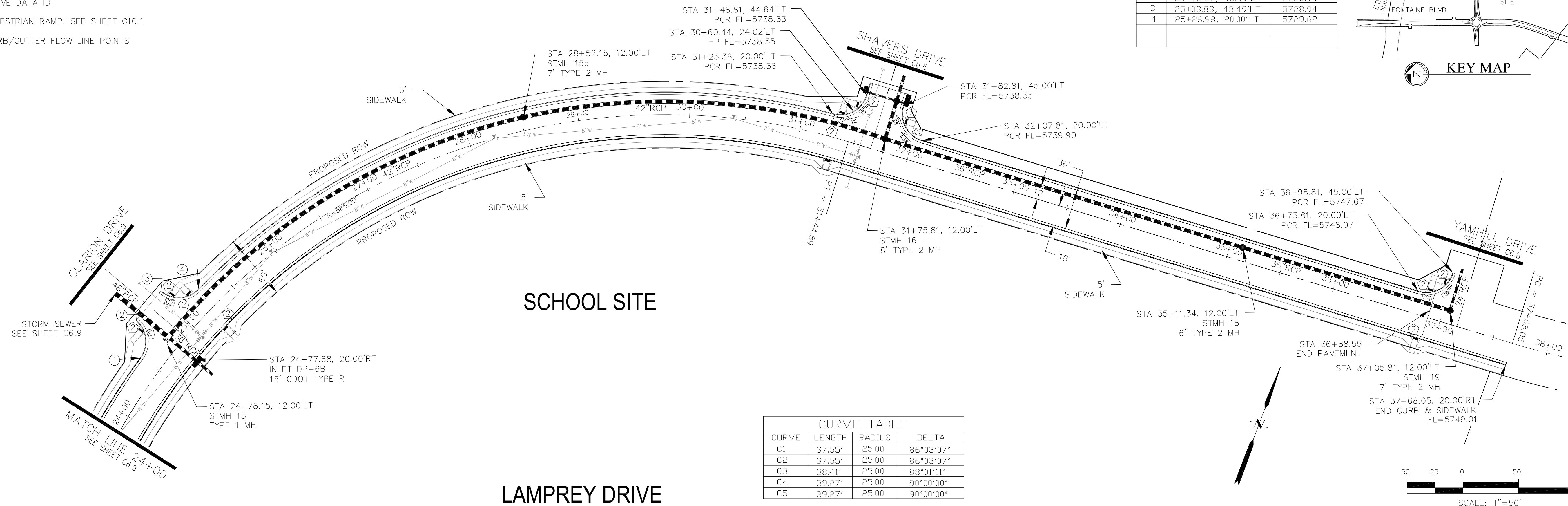
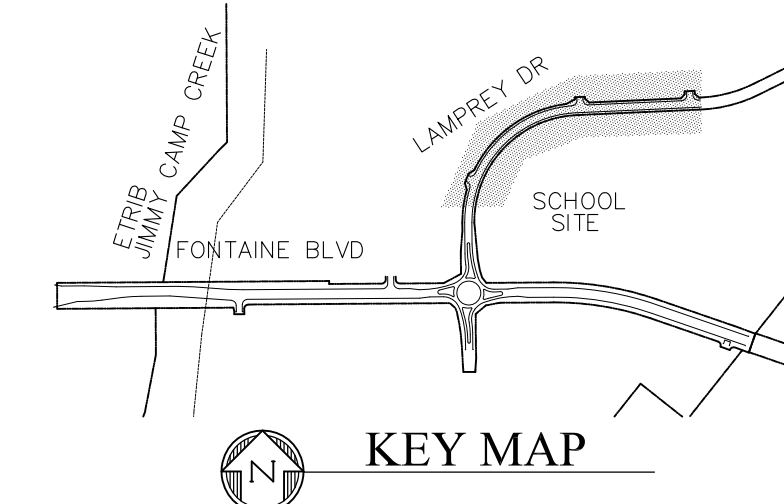
STREET & STORM SEWER PLAN/PROFILE
LAMPREY DRIVE
STA 16+00 TO 24+00

DATE: APRIL 2, 2018
 PROJECT NO. 100.041
 SHEET NUMBER **C6.5**
 TOTAL SHEETS: 34

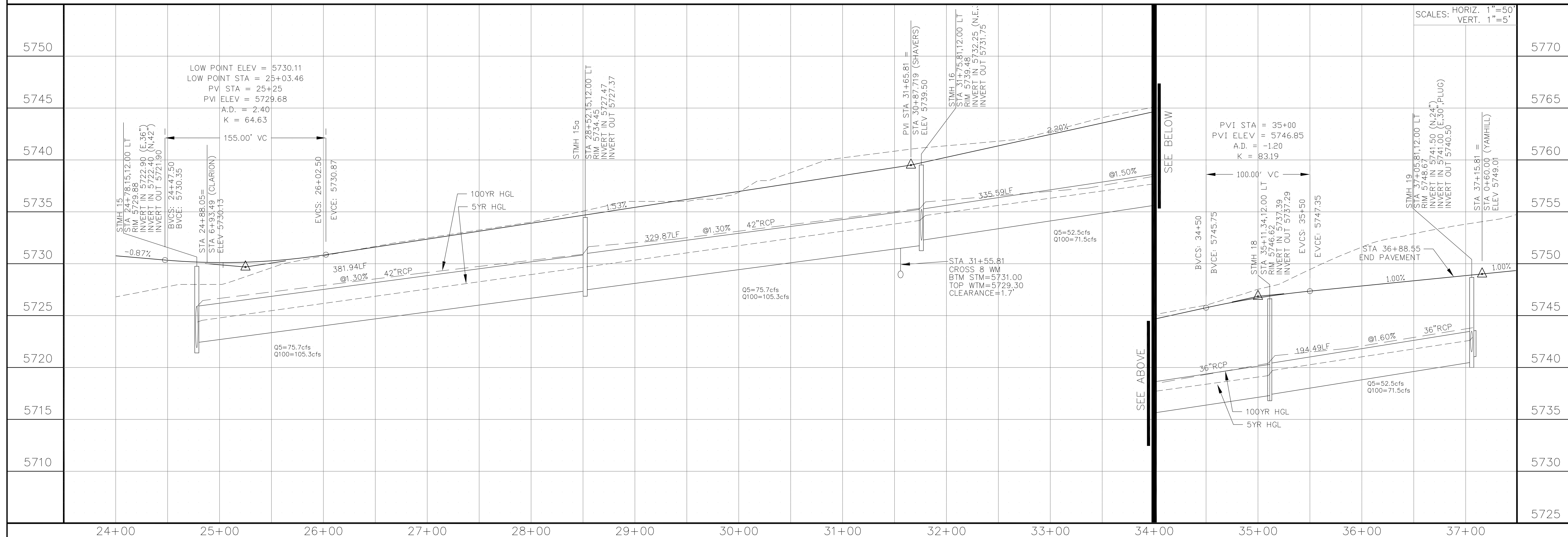
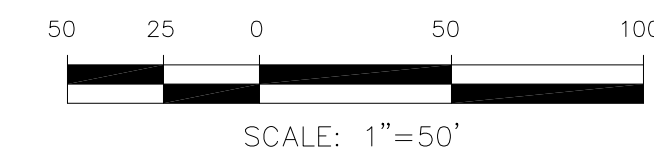
- NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
 3. ALL STORM SEWER SHALL BE CLASS III RCP.
 4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

- ① CURVE DATA ID
- ② PEDESTRIAN RAMP, SEE SHEET C10.1
- ③ CURB/GUTTER FLOW LINE POINTS

POINT	STA/OFFSET	FLOWLINE
1	24+49.11, 20.00'LT	5729.82
2	24+72.27, 43.49'LT	5728.94
3	25+03.83, 43.49'LT	5728.94
4	25+26.98, 20.00'LT	5729.62



CURVE	LENGTH	RADIUS	DELTA
C1	37.55'	25.00'	86°03'07"
C2	37.55'	25.00'	86°03'07"
C3	38.41'	25.00'	88°01'11"
C4	39.27'	25.00'	90°00'00"
C5	39.27'	25.00'	90°00'00"



CORE ENGINEERING GROUP
 15004 15TH AVENUE, SUITE 300
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

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

PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

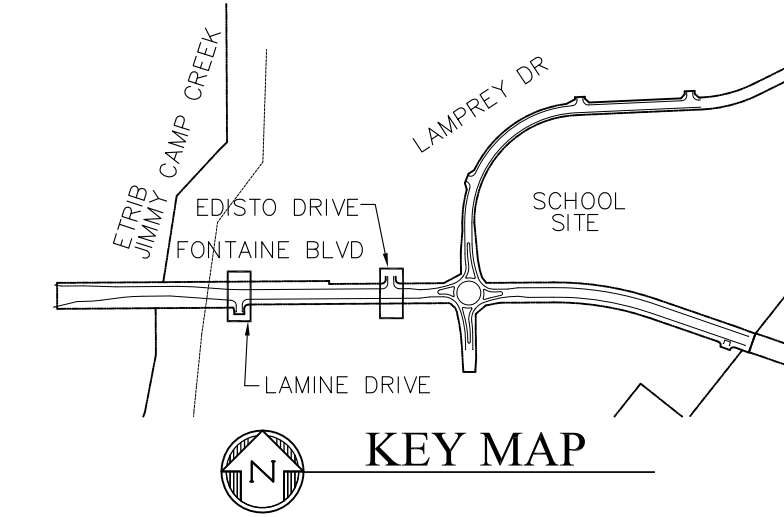
STREET & STORM SEWER PLAN/PROFILE
LAMPREY DRIVE
STA 24+00 TO 37+15.81

DATE: APRIL 2, 2018
 PROJECT NO: 100.041
 SHEET NUMBER: **C6.6**
 TOTAL SHEETS: 34

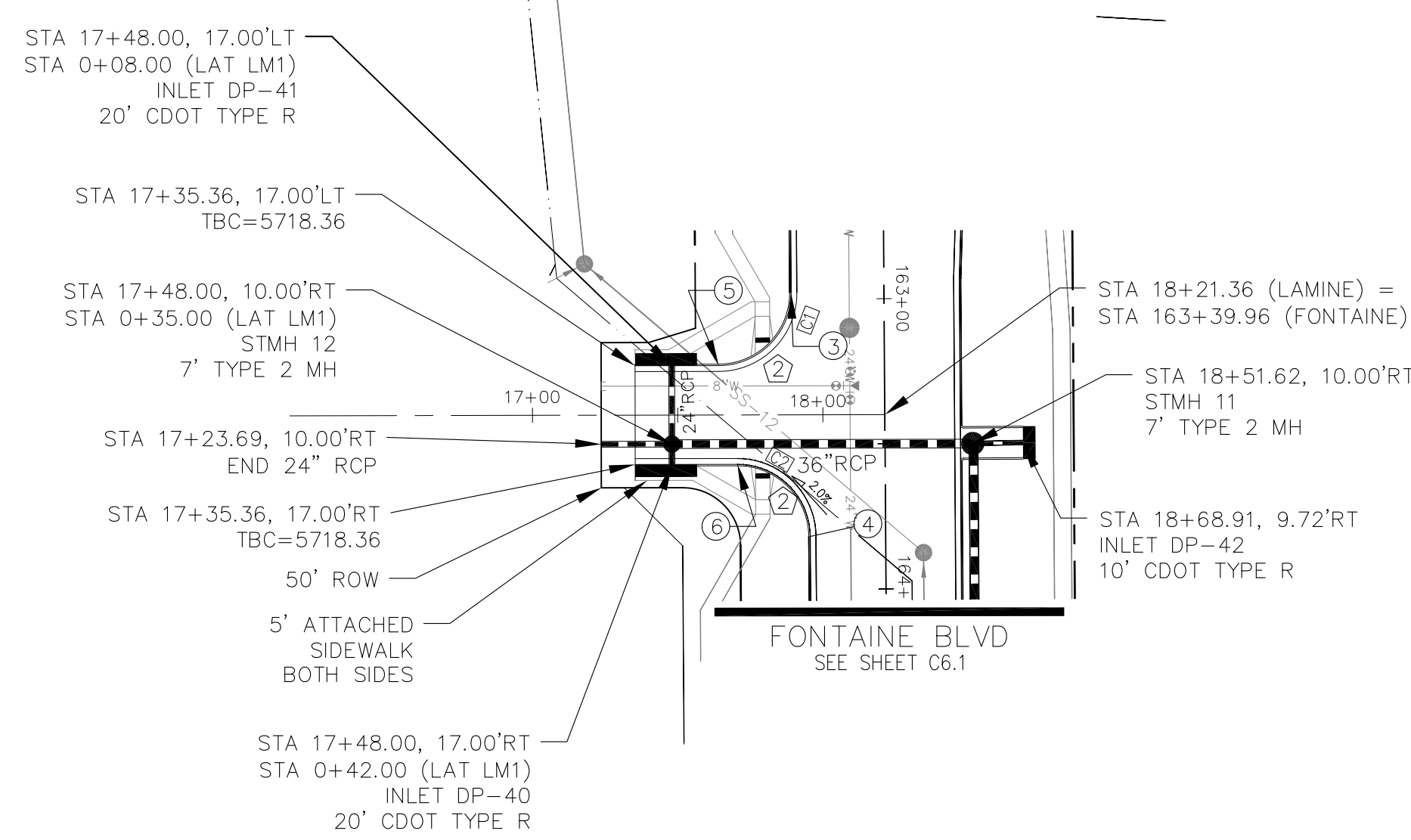
- NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
 3. ALL STORM SEWER SHALL BE CLASS III RCP.
 4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

- 1 CURVE DATA ID
- 2 PEDESTRIAN RAMP, SEE SHEET C10.1
- 3 CURB/GUTTER FLOW LINE POINTS

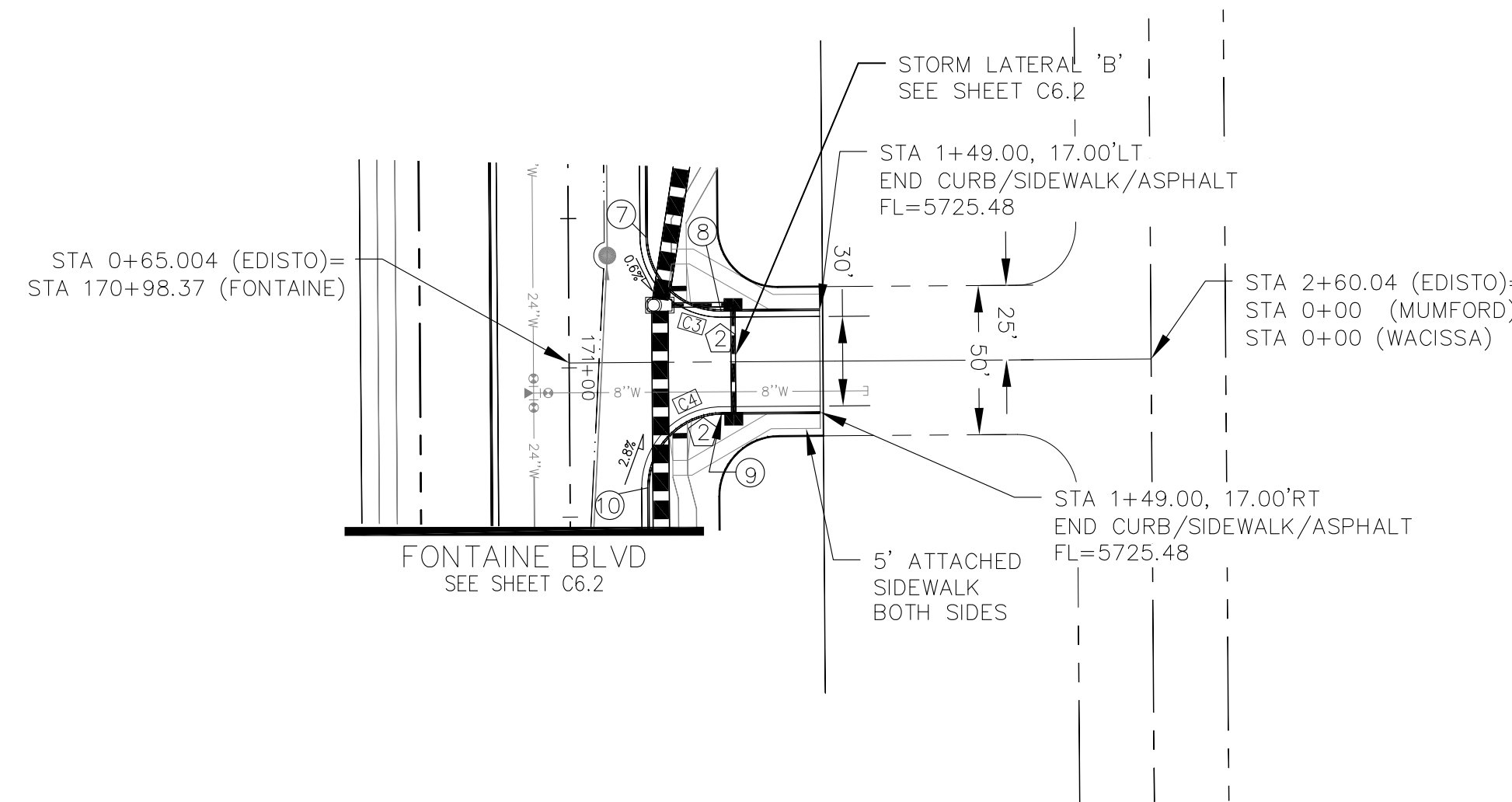
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	39.40'	25.00	90°17'33"
C2	39.14'	25.00	89°42'27"
C3	39.27'	25.00	90°00'00"
C4	39.27'	25.00	90°00'00"



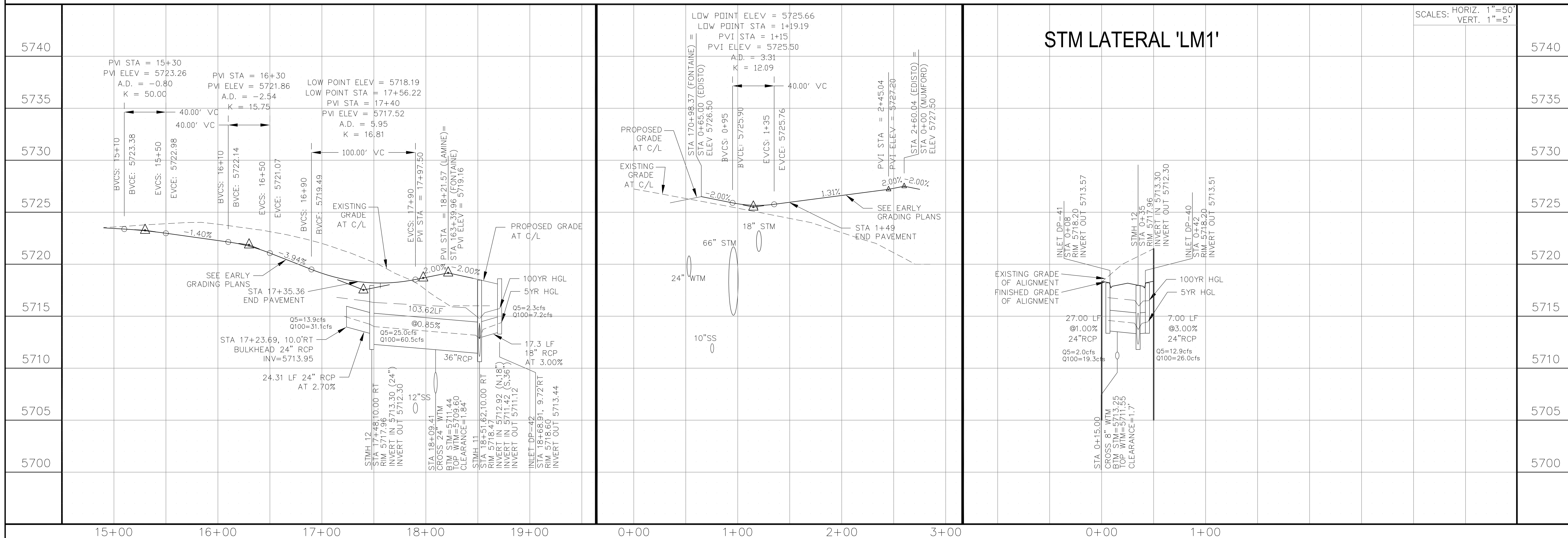
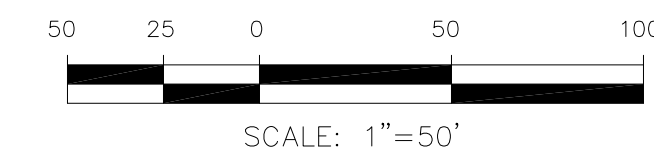
FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
3	163+01.50, 32.16'RT	5718.51
4	163+81.70, 26.0'RT	5718.57
5	17+65.87, 17.00'LT	5717.74
6	17+70.57, 17.00'RT	5717.78
7	170+56.37, 26.00'LT	5725.42
8	1+16.00, 17.00'LT	5725.20
9	1+16.00, 17.00'RT	5725.20
10	171+40.37, 26.00'LT	5726.30



LAMINE DRIVE



EDISTO DRIVE



STM LATERAL 'LM1'

CORE ENGINEERING GROUP
 15004 151st AVENUE S.
 FORT COLLINS, CO 80506
 PH: 970.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
FONTAINE BLVD IN LORSON RANCH EAST
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

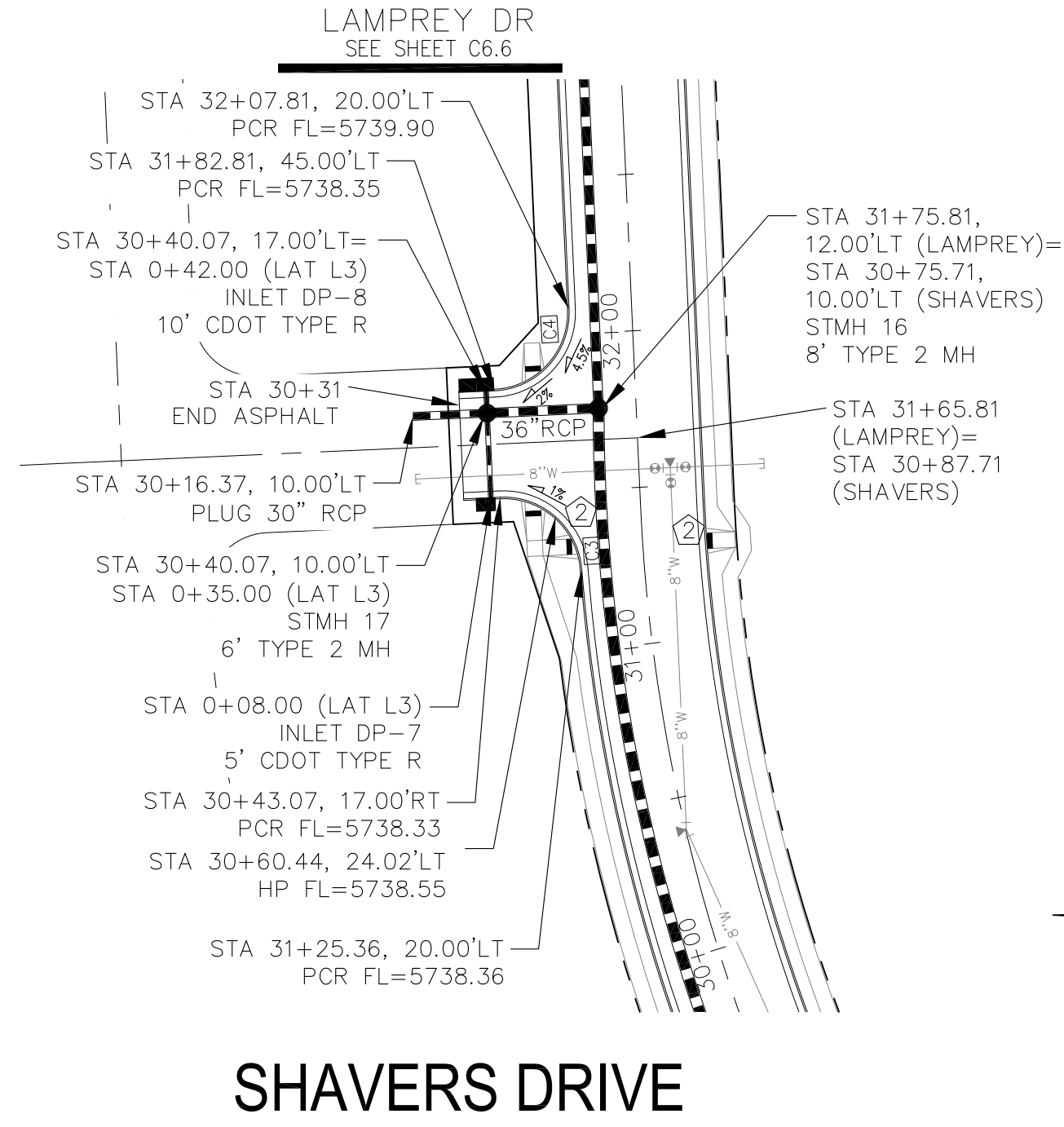
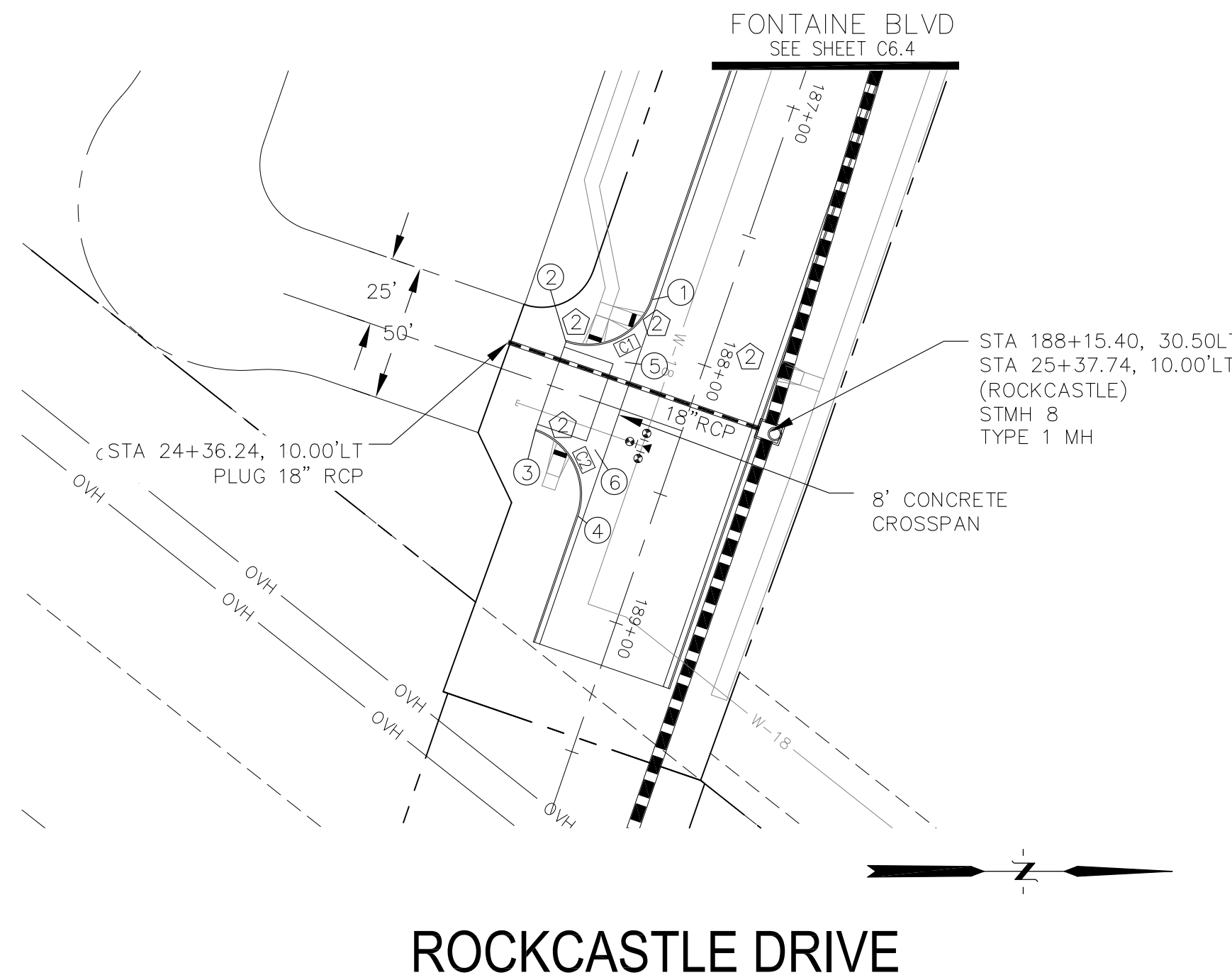
STREET & STORM SEWER PLAN/PROFILE
LAMINE DRIVE AND EDISTO DRIVE

DATE:
 APRIL 2, 2018

PROJECT NO.
 100.041
 SHEET NUMBER
C6.7
 TOTAL SHEETS: 34

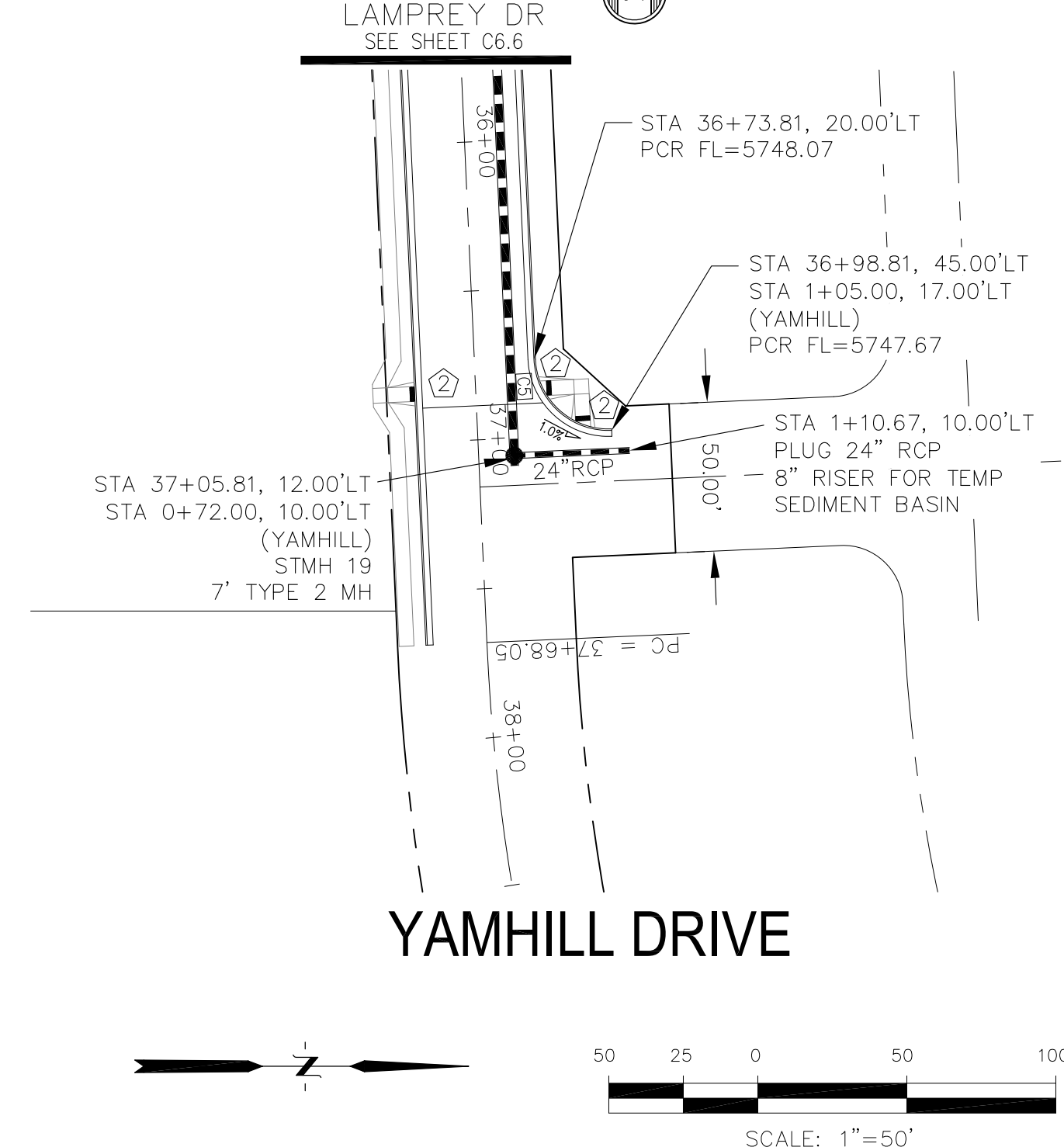
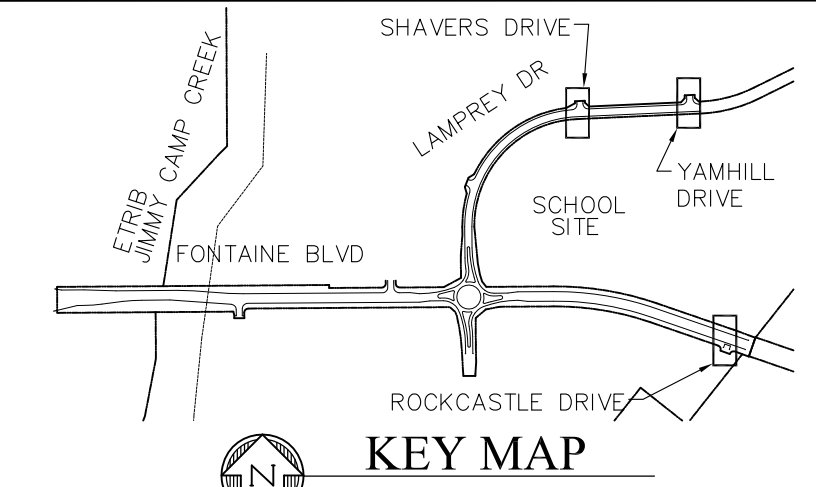
- NOTES
- ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 - SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
 - ALL STORM SEWER SHALL BE CLASS III RCP.
 - ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

- ① CURVE DATA ID
- ② PEDESTRIAN RAMP, SEE SHEET C10.1
- ③ CURB/GUTTER FLOW LINE POINTS



FL CURB/GUTTER TABLE			
POINT	STA/OFFSET	FLOWLINE	
1	187+83.40, 26.00'RT	5748.29	
2	24+56.24, 17.00'LT	5748.85	
3	24+56.24, 17.00'RT	5749.10	
4	188+67.40, 26.00'RT	5749.17	
5	188+08.40, 28.00'RT	5748.55	
6	188+42.40, 28.00'RT	5748.91	

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	39.27'	25.00	90°00'00"
C2	39.27'	25.00	90°00'00"
C3	38.41'	25.00	88°01'11"
C4	39.27'	25.00	90°00'00"
C5	39.27'	25.00	90°00'00"



CORE
ENGINEERING GROUP

15004 1ST AVENUE, SUITE 301
FONTAINE BLVD., OLD GLORY DR
COLORADO SPRINGS, COLORADO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cgl.com

DATE: _____

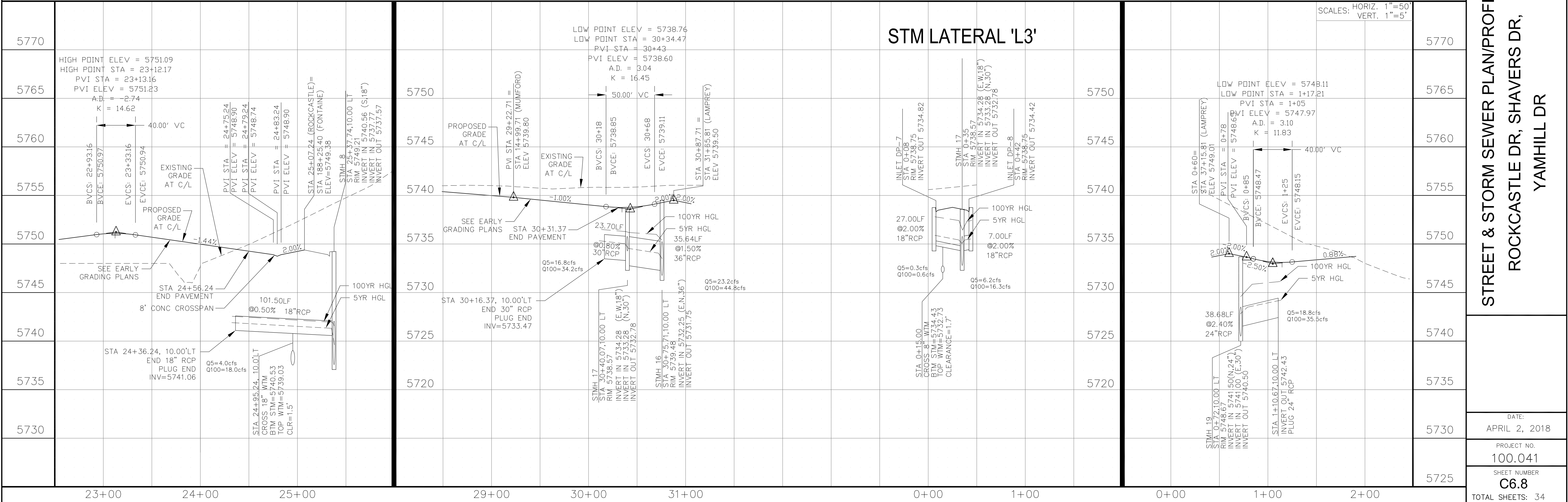
DESCRIPTION: _____

NO: _____

PROJECT: **FONTAINE BLVD IN LORSON, LLC**
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
ROCKCASTLE DR, SHAVERS DR,
YAMHILL DR



DATE: APRIL 2, 2018

PROJECT NO. 100.041

SHEET NUMBER **C6.8**

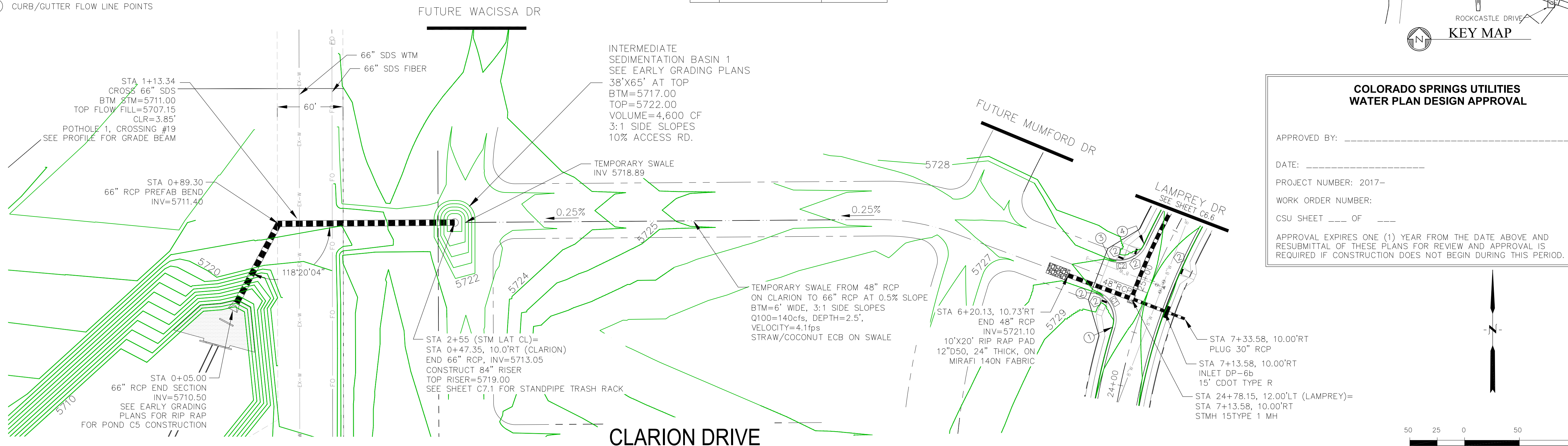
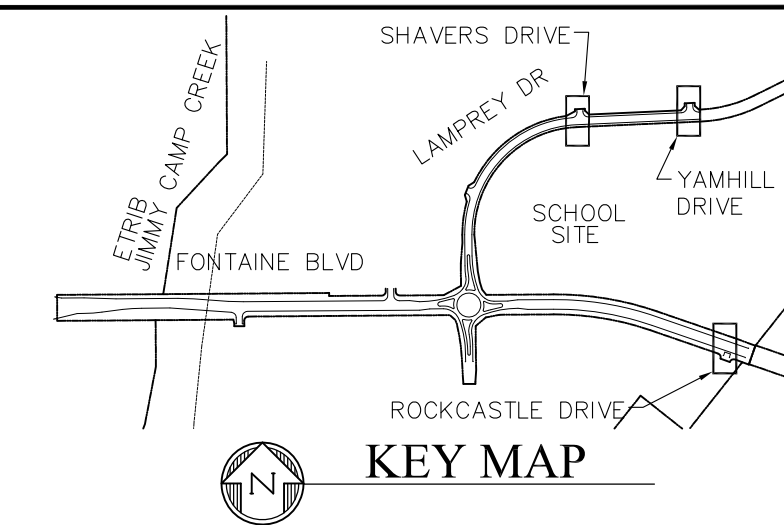
TOTAL SHEETS: 34

- NOTES**
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
 3. ALL STORM SEWER SHALL BE CLASS III RCP.
 4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

- 1 CURVE DATA ID
- 2 PEDESTRIAN RAMP, SEE SHEET C10.1
- 3 CURB/GUTTER FLOW LINE POINTS

FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
1	24+49.11, 20.00'LT	5729.82
2	6+49.93, 17.00'RT	5728.94
3	6+49.93, 17.00'LT	5728.94
4	25+26.98, 20.00'LT	5729.62

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	37.55'	25.00	86°03'07"
C2	37.55'	25.00	86°03'07"



**COLORADO SPRINGS UTILITIES
WATER PLAN DESIGN APPROVAL**

APPROVED BY: _____

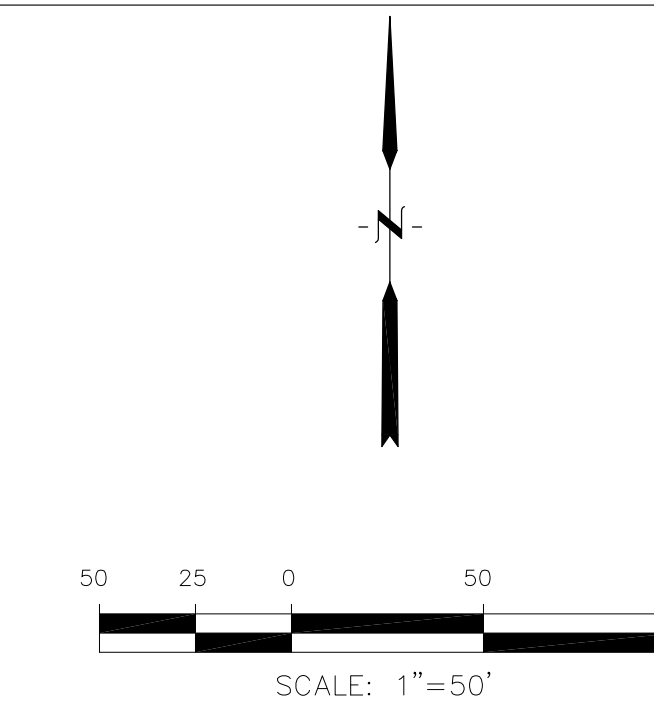
DATE: _____

PROJECT NUMBER: 2017-

WORK ORDER NUMBER: _____

CSU SHEET ____ OF ____

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.



CORE ENGINEERING GROUP

15004 151ST AVENUE, SUITE 300
DENVER, CO 80202
PHONE: 303.750.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

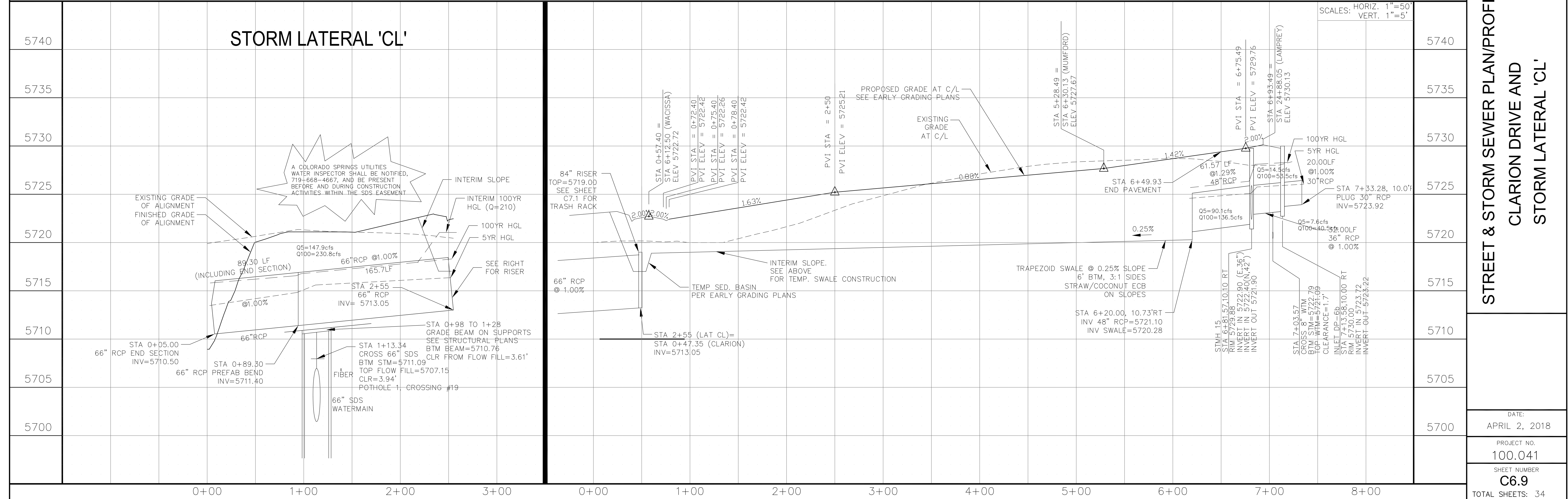
PROJECT: **FONTAINE BLVD IN LORSON, LLC**
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

DATE: _____

DESCRIPTION: _____

NO: _____

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS



STREET & STORM SEWER PLAN/PROFILE

CLARION DRIVE AND STORM LATERAL 'CL'

DATE: APRIL 2, 2018

PROJECT NO. 100.041

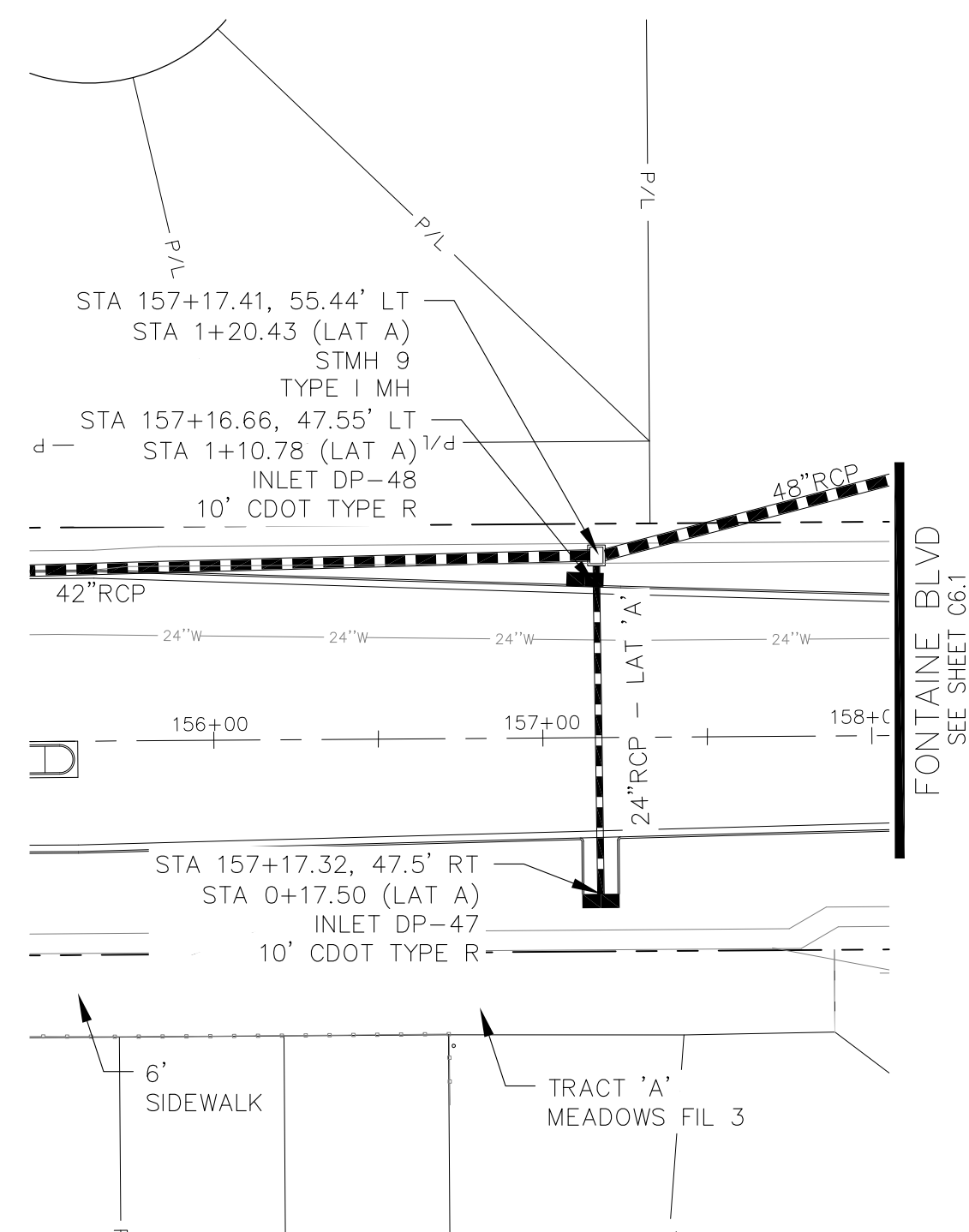
SHEET NUMBER **C6.9**

TOTAL SHEETS: 34

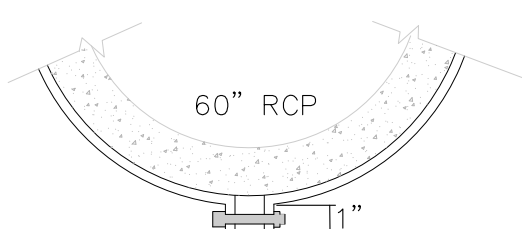
NOTES

1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE EARLY GRADING PLAN FOR GRADING INFORMATION.
3. ALL STORM SEWER SHALL BE CLASS III RCP.
4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.

- ① CURVE DATA ID
- ② PEDESTRIAN RAMP, SEE SHEET C10.1
- ③ CURB/GUTTER FLOW LINE POINTS

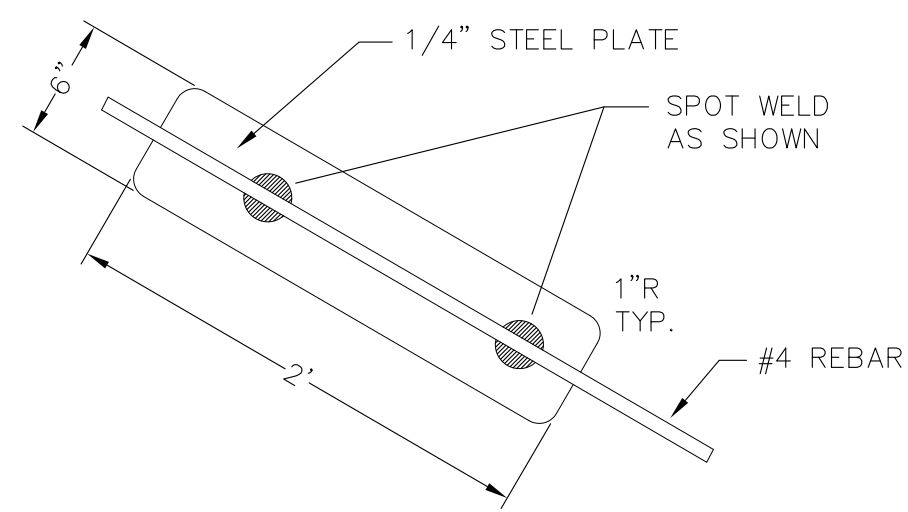


STORM LATERAL 'A'

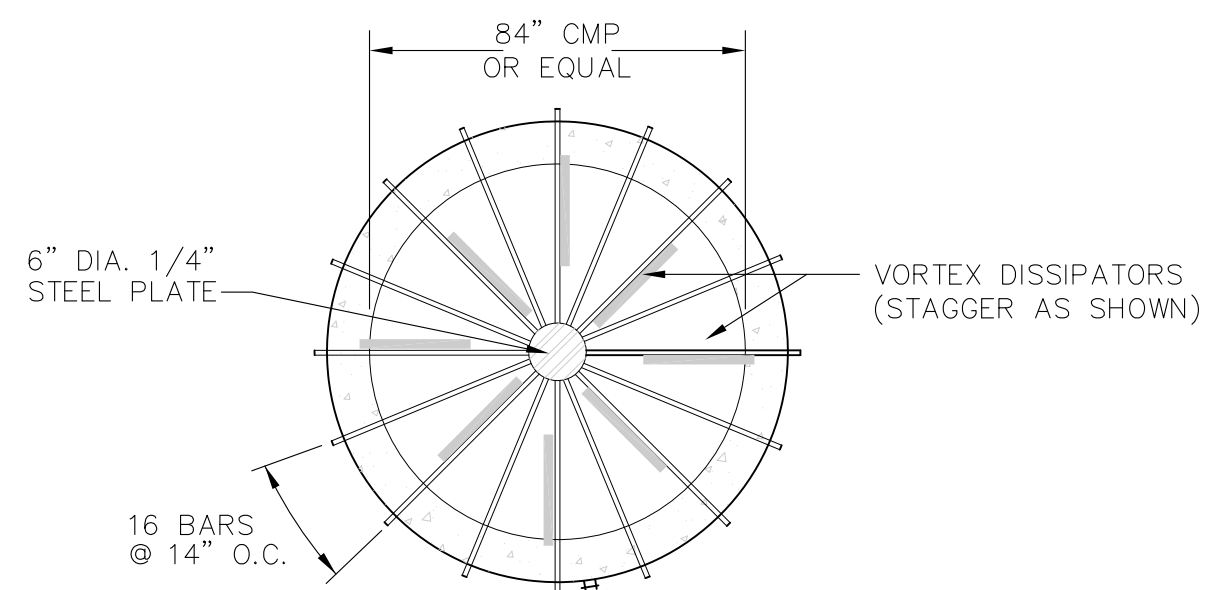


2 1/2" Ø STD THREAD BOLTS WITH LOCK WASHERS & NUTS (GALVANIZED) (REVERSE BOLT DIRECTIONS)

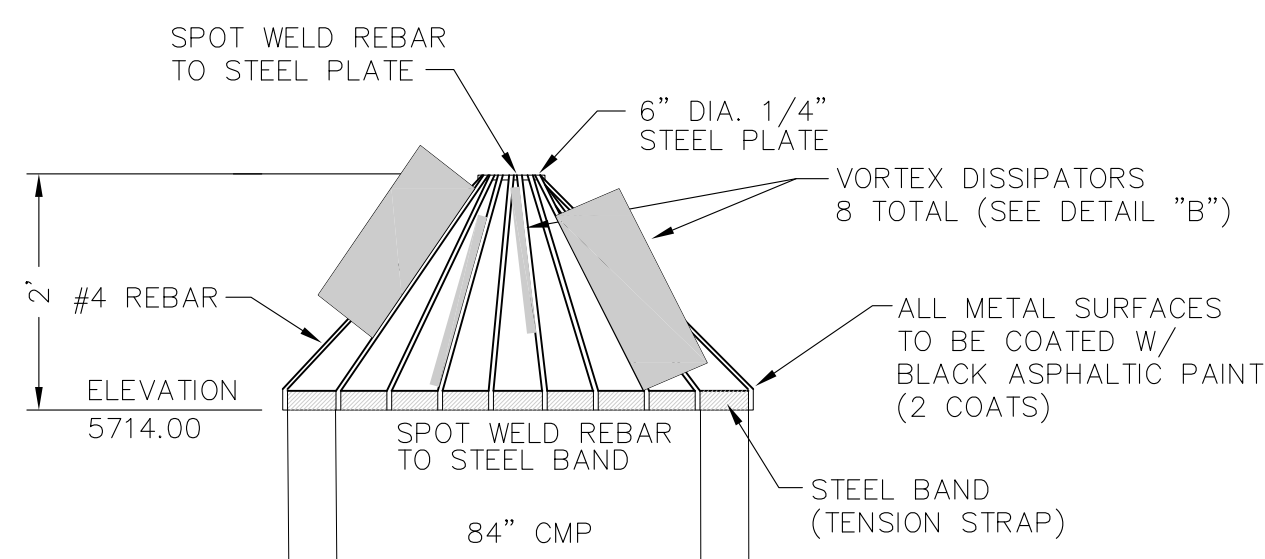
DETAIL 'A'



DETAIL 'B' VORTEX DISSIPATOR

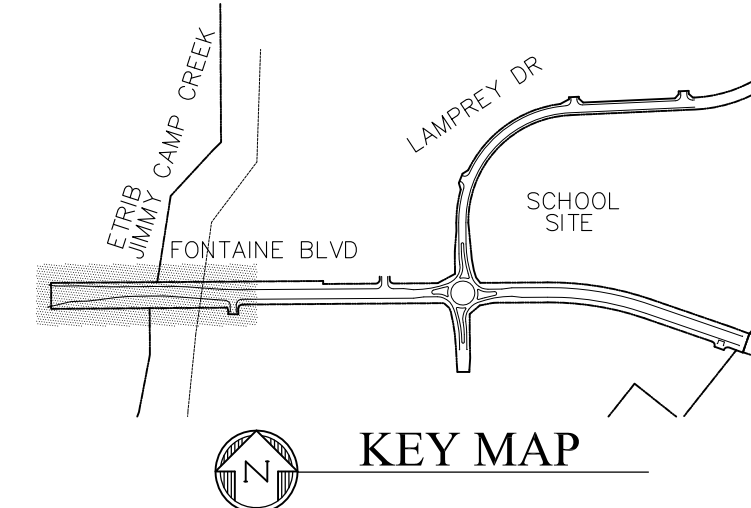


PLAN

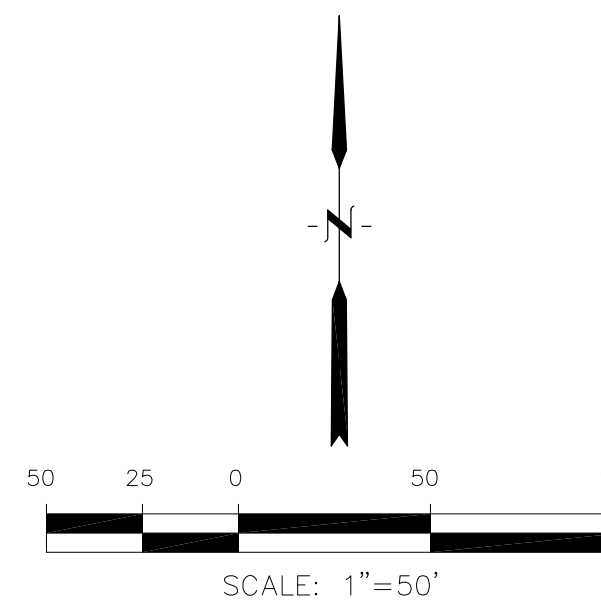


ELEVATION

STAND PIPE TRASH RACK DETAILS
STORM LATERAL CL (SHEET C6.9)
NOT TO SCALE

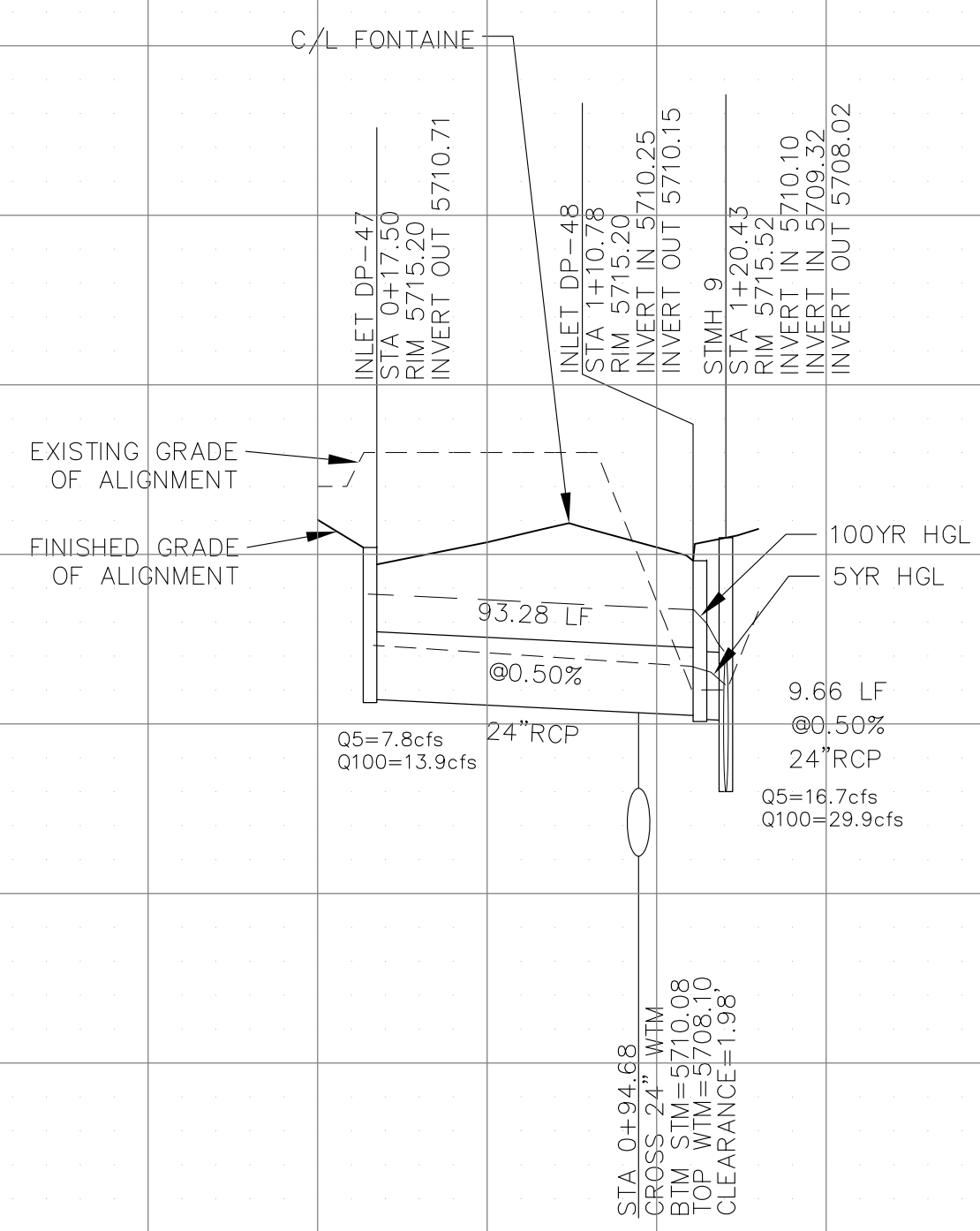


KEY MAP



<p>CORE ENGINEERING GROUP 15004 151ST AVENUE, SUITE 301 DENVER, CO 80202 PHONE: 719.570.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@ceg1.com</p>	<p>DATE: _____</p> <p>DESCRIPTION: _____</p> <p>NO: _____</p> <p>PROJECT: FORNATION BLVD IN LORSON RANCH EAST FORNATION BLVD - OLD GLORY DR COLORADO SPRINGS, COLORADO</p> <p>PREPARED FOR: LORSON, LLC 212 N. WAHATCH AVE, SUITE 301 COLORADO SPRINGS, COLORADO 80903 (719) 635-3200 CONTACT: JEFF MARK</p> <p>DRAWN: RLS DESIGNED: RLS CHECKED: RLS</p>
---	---

NO.	DESCRIPTION	DATE
5735		5735
5730		5730
5725		5725
5720		5720
5715		5715
5710		5710
5705		5705
5700		5700
5695		5695



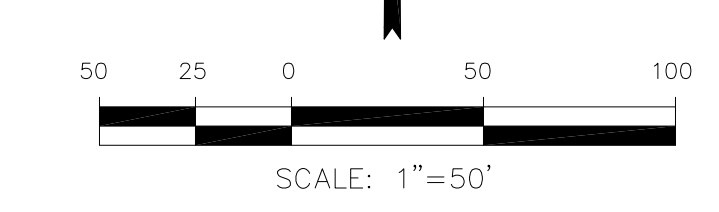
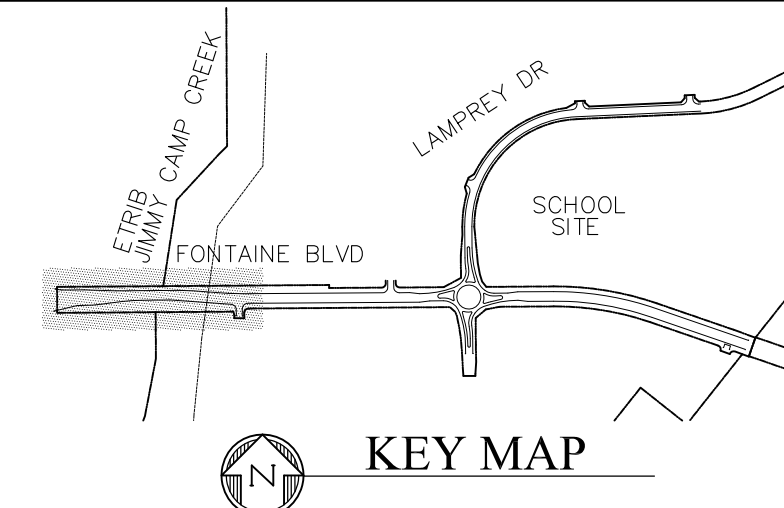
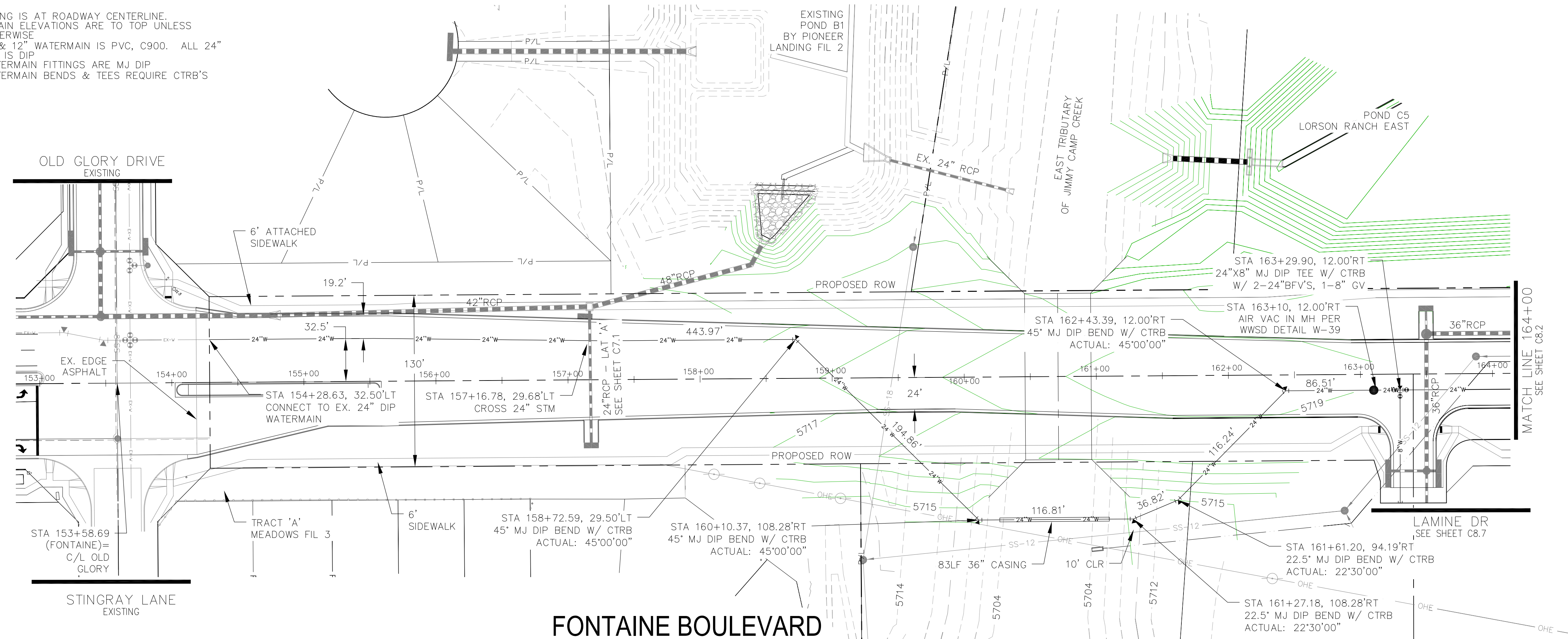
SCALES: HORIZ. 1"=50'
VERT. 1"=5'

STREET & STORM SEWER PLAN/PROFILE
FONTAINE BOULEVARD
STORM LATERAL 'A'

DATE: APRIL 2, 2018
PROJECT NO. 100.041
SHEET NUMBER C7.1
TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
4. ALL WATERMAIN FITTINGS ARE MJ DIP
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S



CORE ENGINEERING GROUP
 15004 151ST AVENUE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PHONE: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg.com

DATE: _____

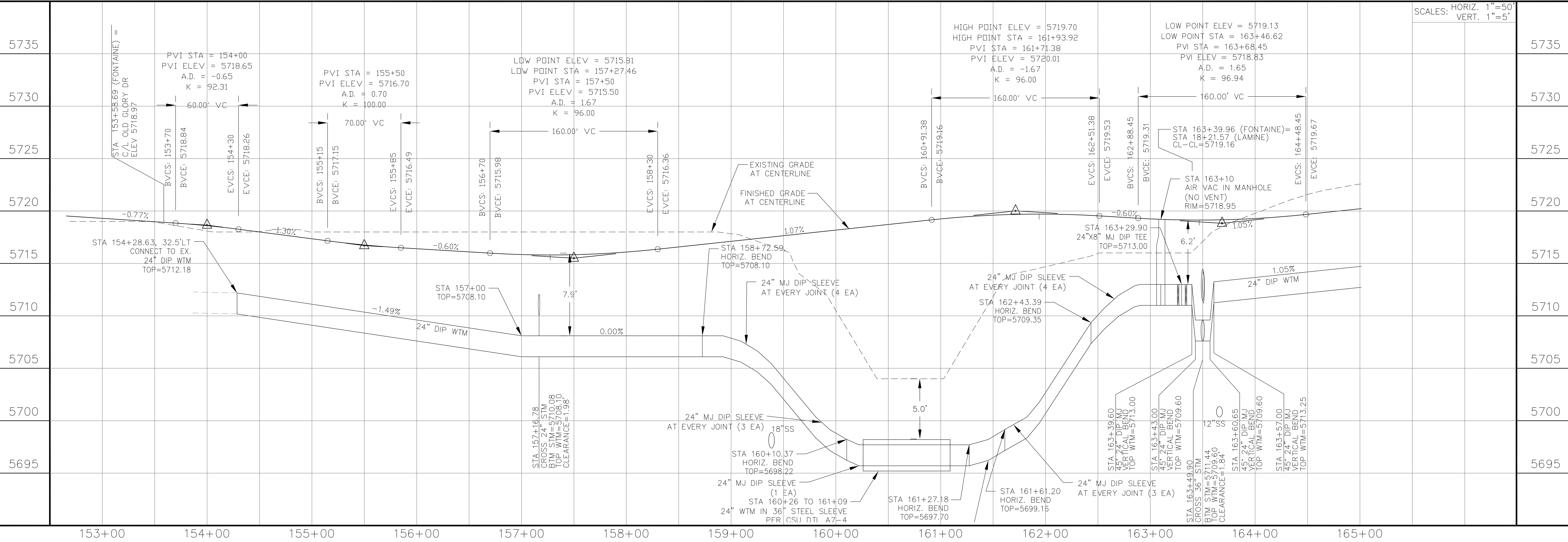
DESCRIPTION: _____

NO: _____

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

PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS



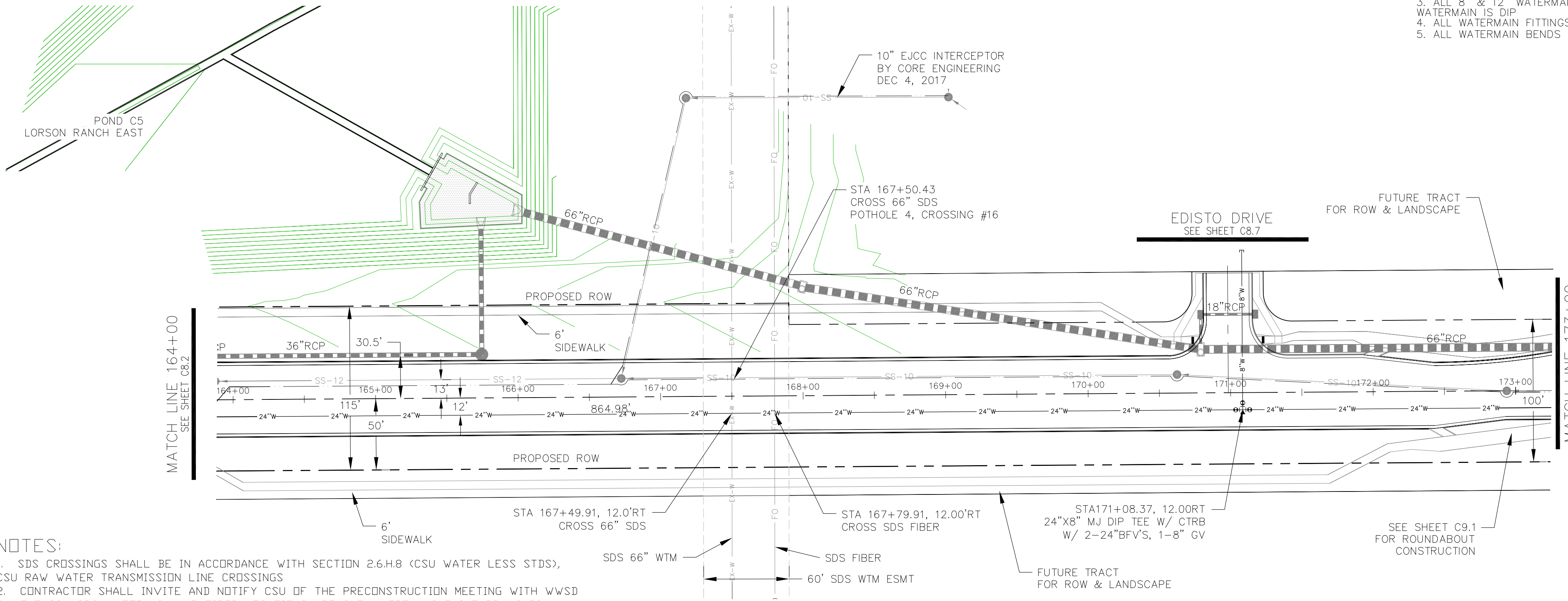
WATERMAIN PLAN/PROFILE
FONTAINE BOULEVARD
STA 153+00 TO 164+00

DATE: APRIL 2, 2018

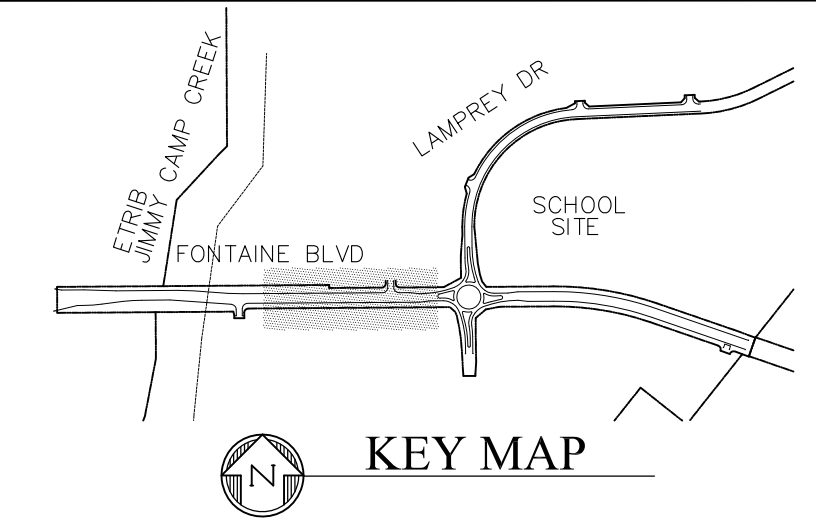
PROJECT NO: 100.041

SHEET NUMBER: C8.1

TOTAL SHEETS: 34



- NOTES**
1. STATIONING IS AT ROADWAY CENTERLINE.
 2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
 3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
 4. ALL WATERMAIN FITTINGS ARE MJ DIP
 5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S



- NOTES:**
1. SDS CROSSINGS SHALL BE IN ACCORDANCE WITH SECTION 2.6.H.8 (CSU WATER LESS STD'S), CSU RAW WATER TRANSMISSION LINE CROSSINGS
 2. CONTRACTOR SHALL INVITE AND NOTIFY CSU OF THE PRECONSTRUCTION MEETING WITH WWS&D
 3. THE CSU SDS WATERMAIN AND FIBER LOCATIONS ARE SHOWN FROM AS-BUILT DRAWINGS PROVIDED BY CSU
 4. A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4667, AND PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT

**COLORADO SPRINGS UTILITIES
WATER PLAN DESIGN APPROVAL**

APPROVED BY: _____

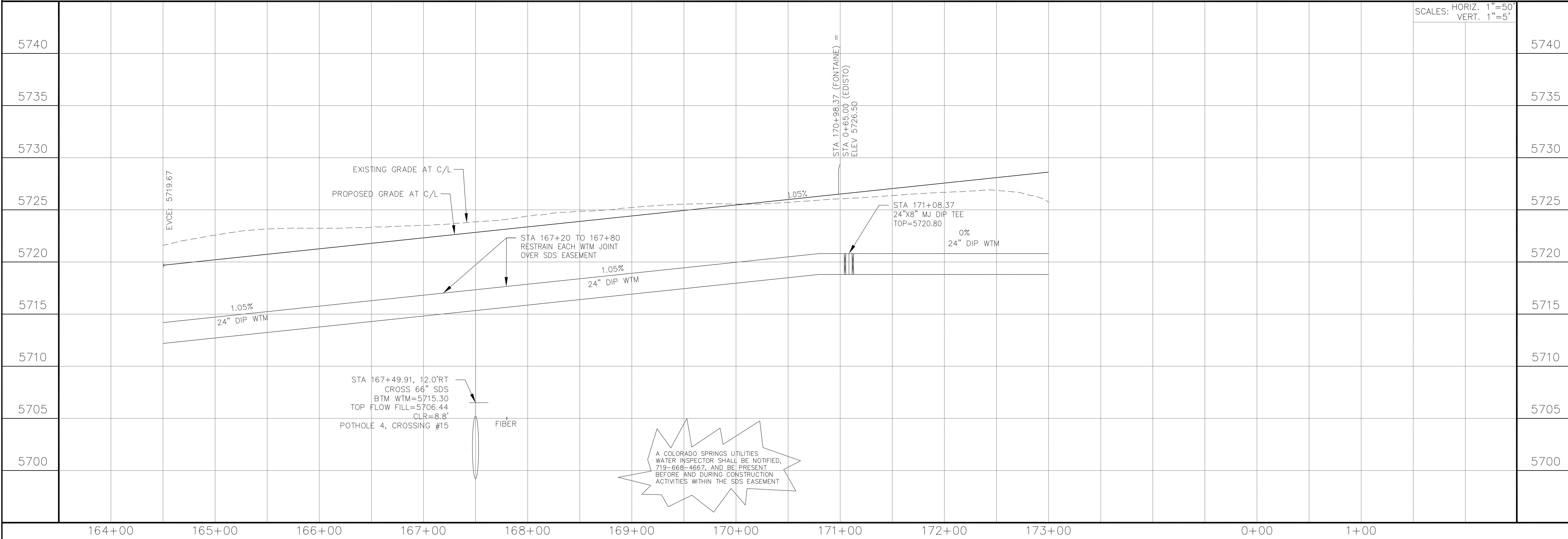
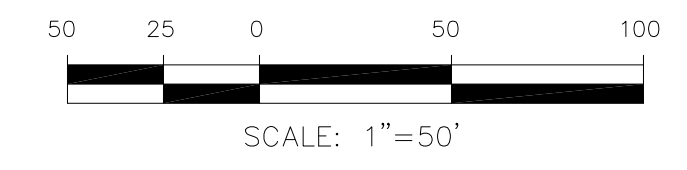
DATE: _____

PROJECT NUMBER: 2018--

WORK ORDER NUMBER: _____

CSU SHEET ____ OF ____

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.



A COLORADO SPRINGS UTILITIES WATER INSPECTOR SHALL BE NOTIFIED, 719-668-4667, AND BE PRESENT BEFORE AND DURING CONSTRUCTION ACTIVITIES WITHIN THE SDS EASEMENT

CORE ENGINEERING GROUP
 15004 151ST AVENUE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____

DESCRIPTION: _____

NO: _____

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

PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

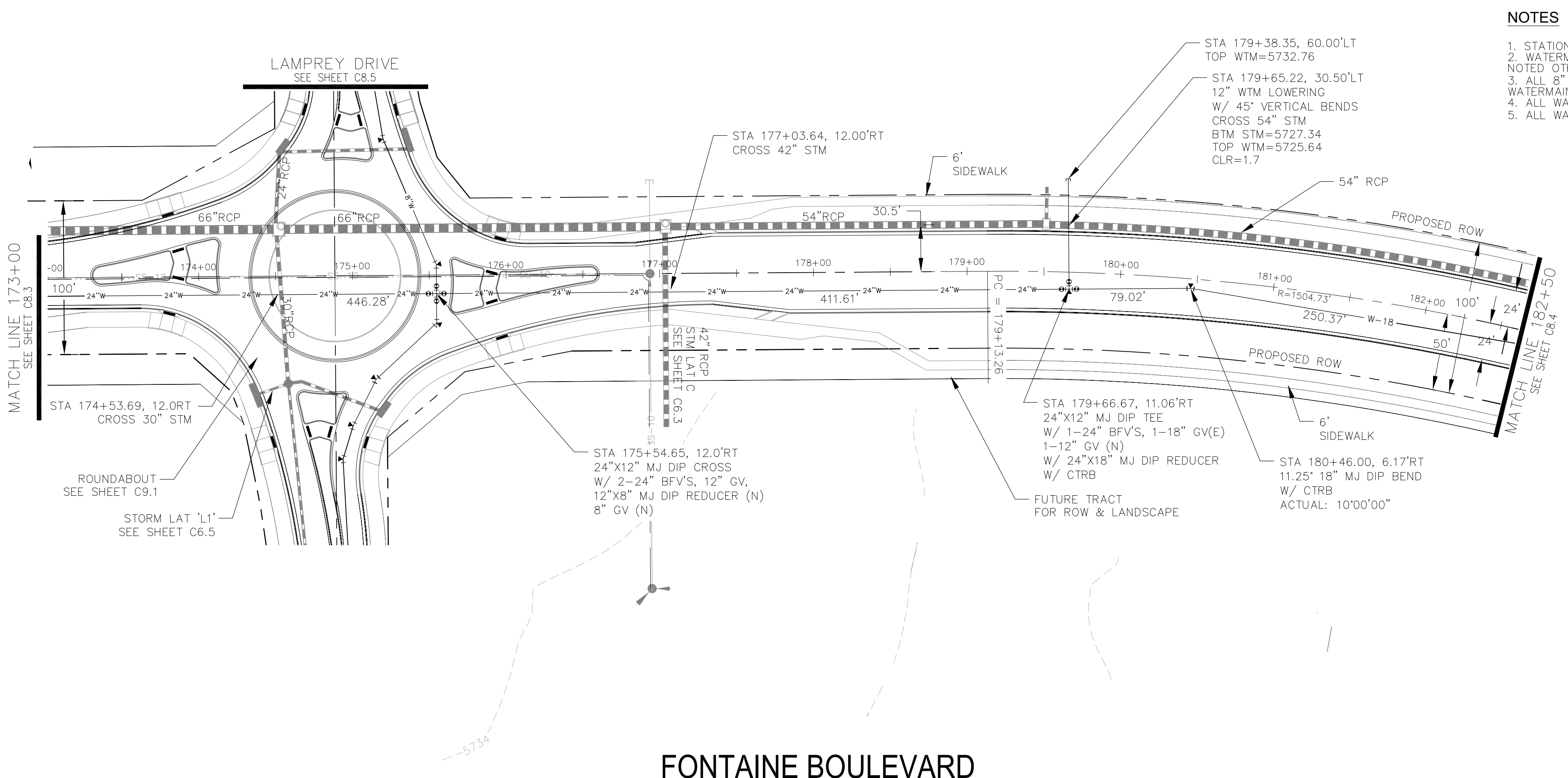
WATERMAIN PLAN/PROFILE
FONTAINE BOULEVARD
STA 164+00 TO 173+00

DATE: APRIL 2, 2018

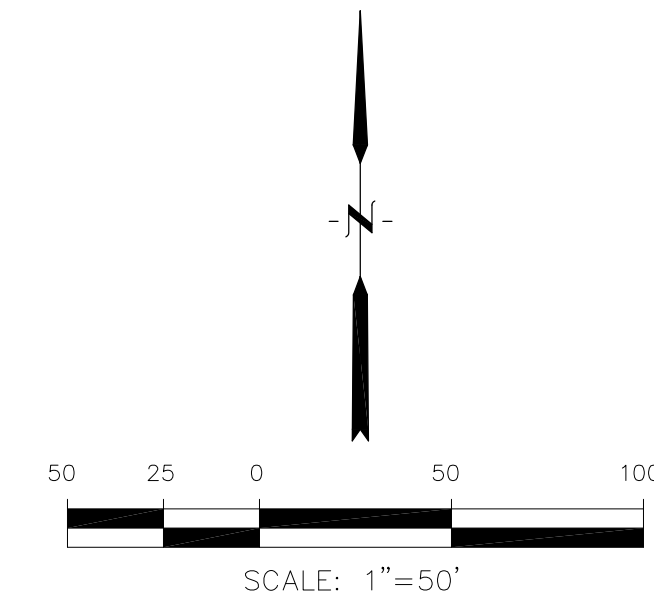
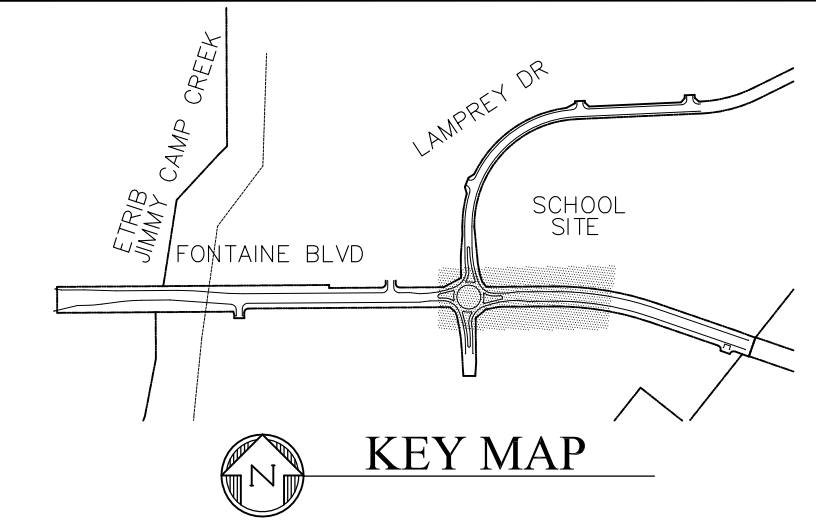
PROJECT NO. 100.041

SHEET NUMBER **C8.2**

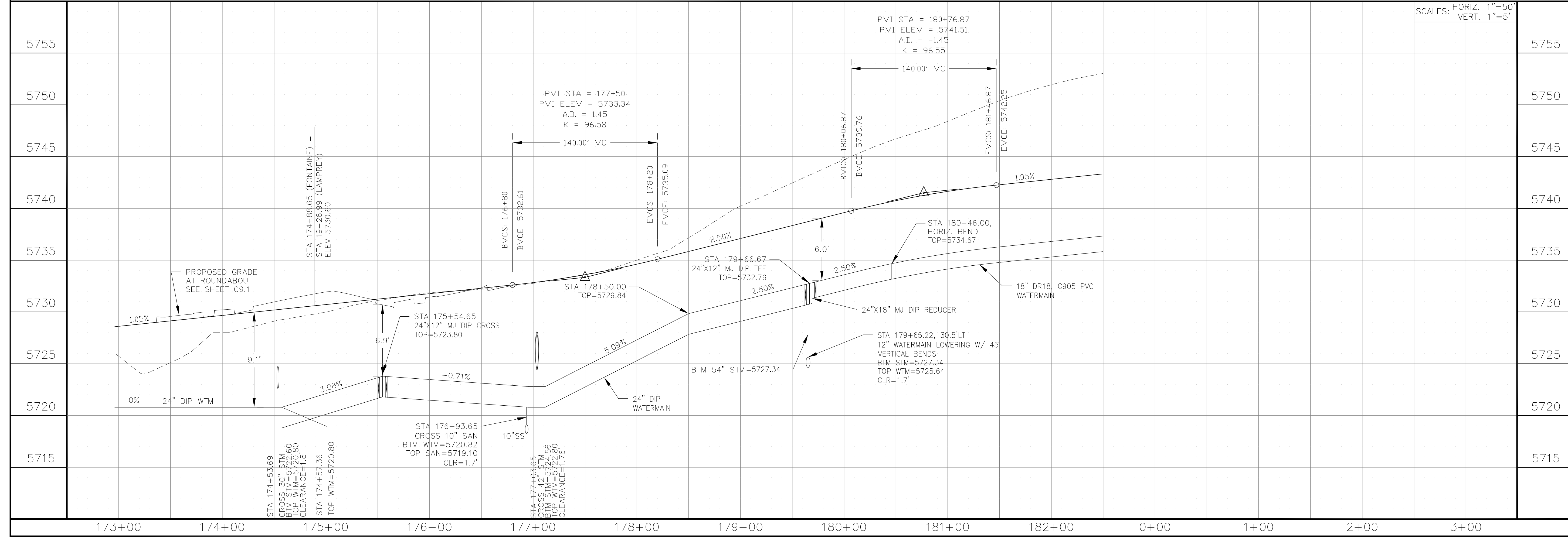
TOTAL SHEETS: 34



- NOTES**
1. STATIONING IS AT ROADWAY CENTERLINE.
 2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE.
 3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP.
 4. ALL WATERMAIN FITTINGS ARE MJ DIP.
 5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S



FONTAINE BOULEVARD



CORE ENGINEERING GROUP
 15004 151st AVENUE, SUITE 300
 COLORADO SPRINGS, COLORADO 80903
 PHONE: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

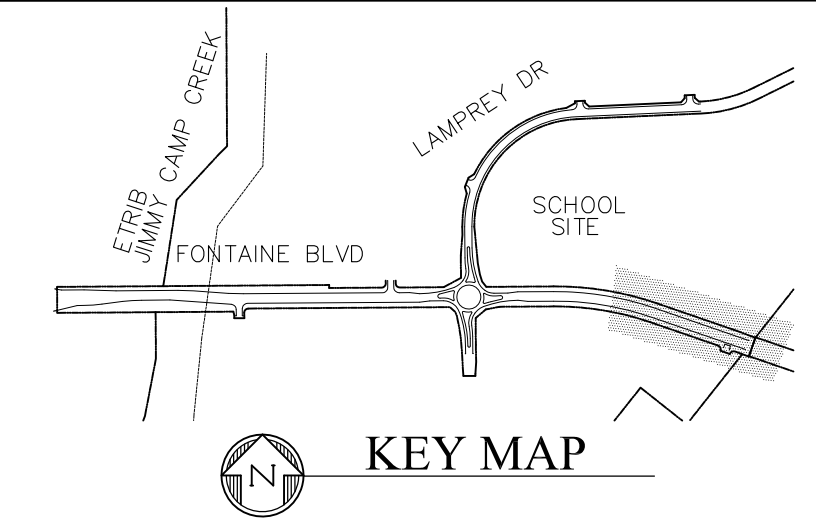
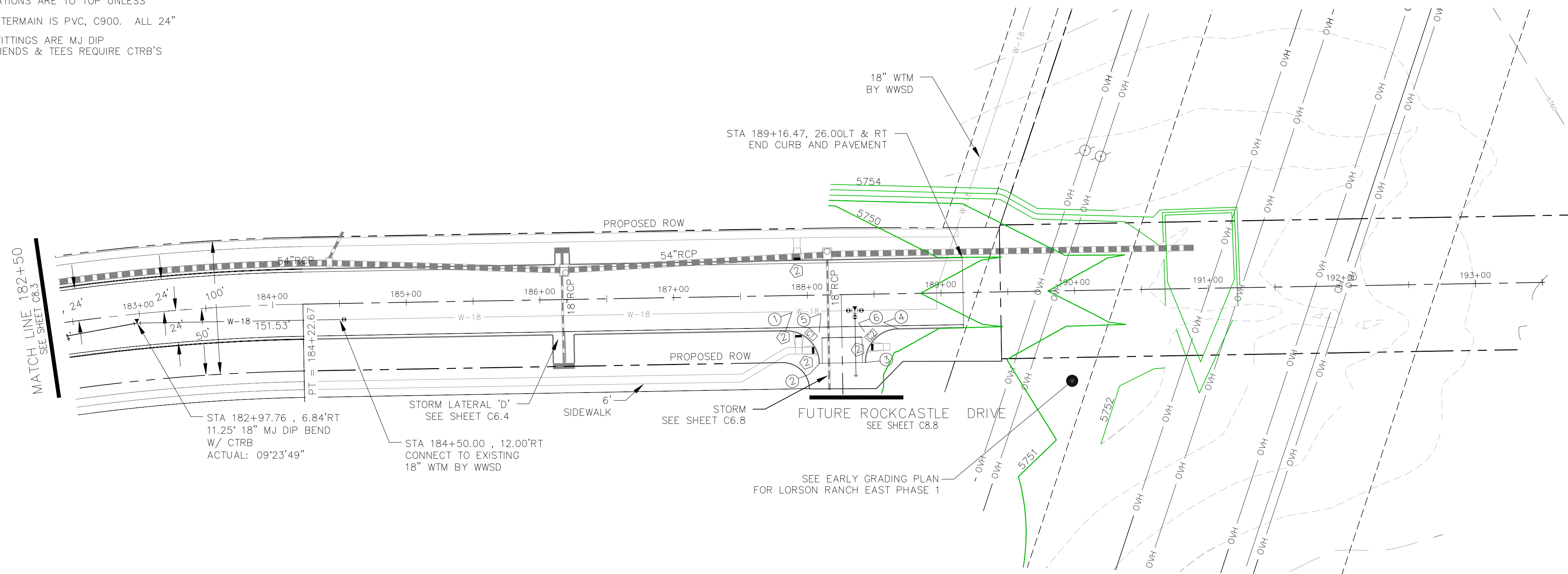
DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

WATERMAIN PLAN/PROFILE
FONTAINE BOULEVARD
STA 173+00 TO 182+50

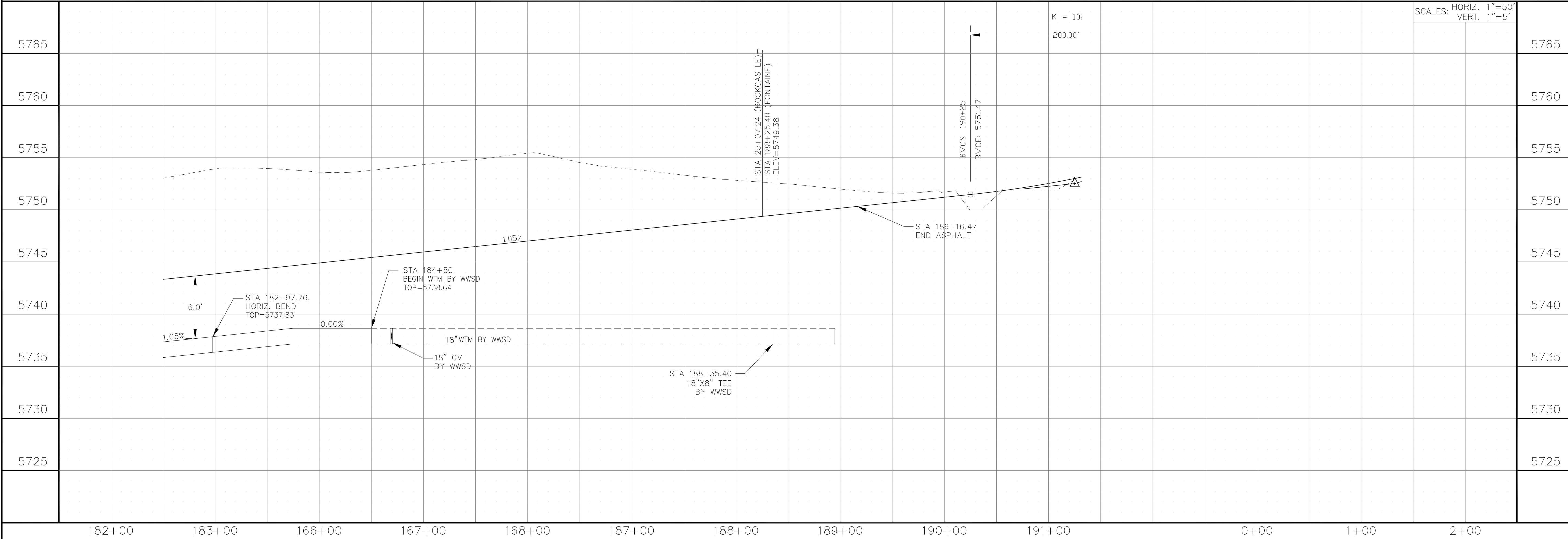
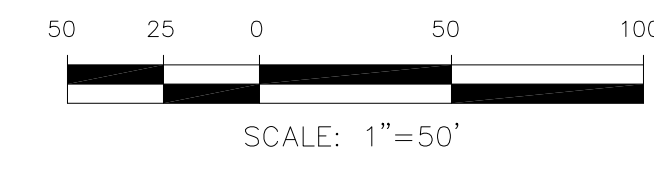
DATE: APRIL 2, 2018
 PROJECT NO: 100.041
 SHEET NUMBER: **C8.3**
 TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE.
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP.
4. ALL WATERMAIN FITTINGS ARE MJ DIP.
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S.



FONTAINE BOULEVARD



CORE ENGINEERING GROUP
 15004 151st Avenue, S.E.
 Denver, CO 80232
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

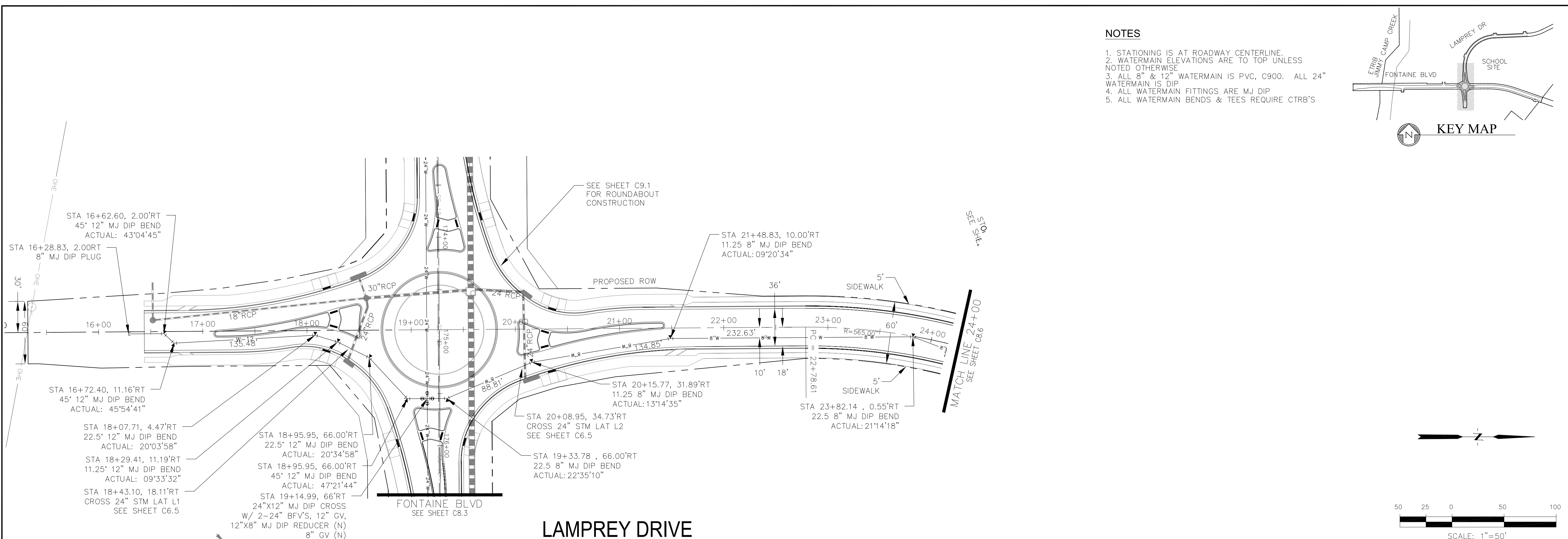
WATERMAIN PLAN/PROFILE
FONTAINE BOULEVARD
STA 182+50 TO 191+00

DATE: APRIL 2, 2018

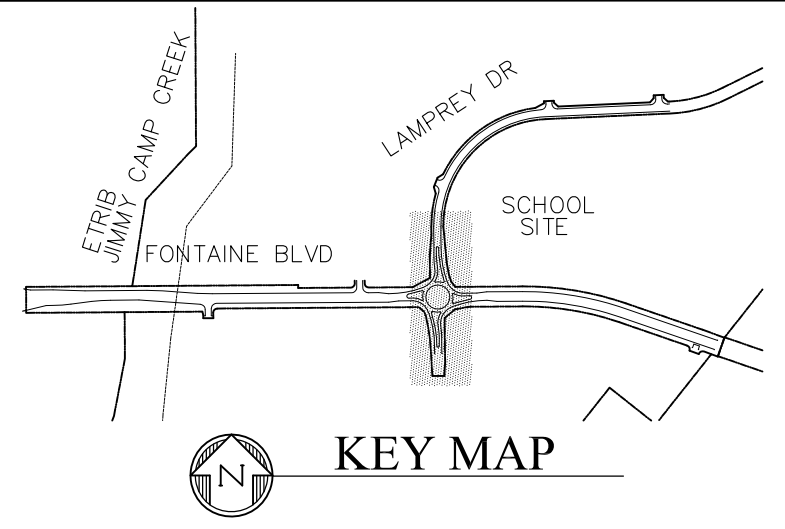
PROJECT NO. 100.041

SHEET NUMBER **C8.4**

TOTAL SHEETS: 34



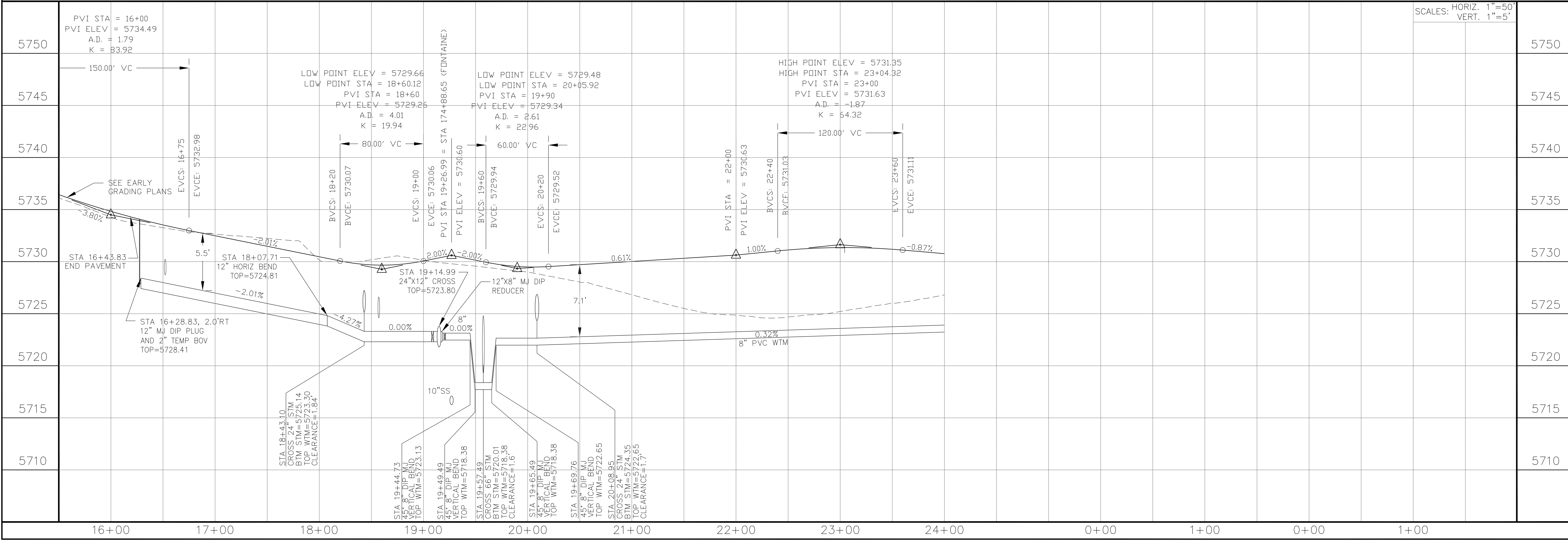
- NOTES**
1. STATIONING IS AT ROADWAY CENTERLINE.
 2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
 3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
 4. ALL WATERMAIN FITTINGS ARE MJ DIP
 5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S



CORE ENGINEERING GROUP
 15004 151ST AVENUE S.
 DENVER, CO 80202
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

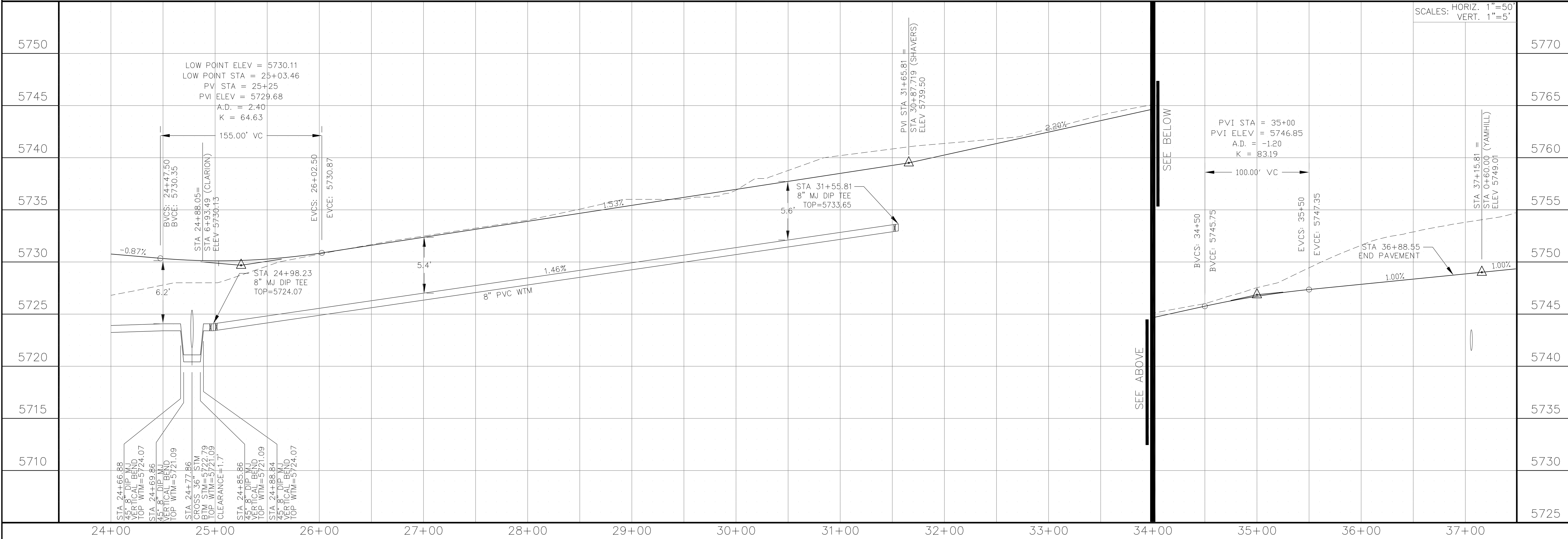
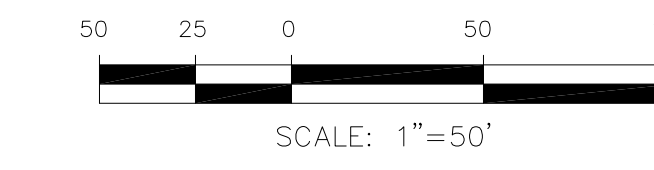
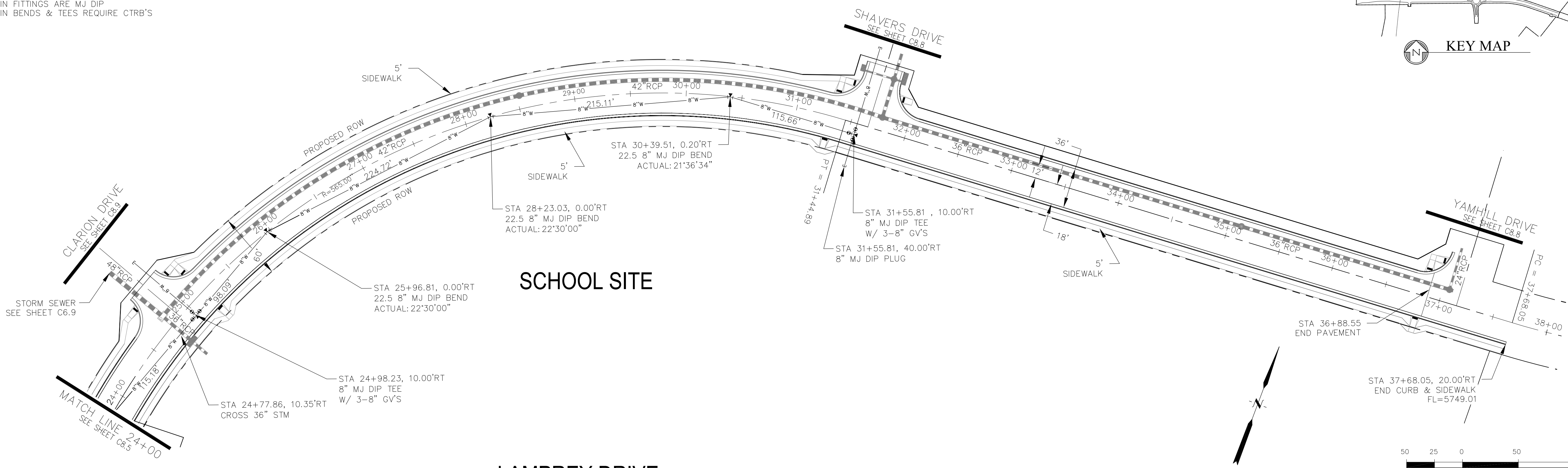
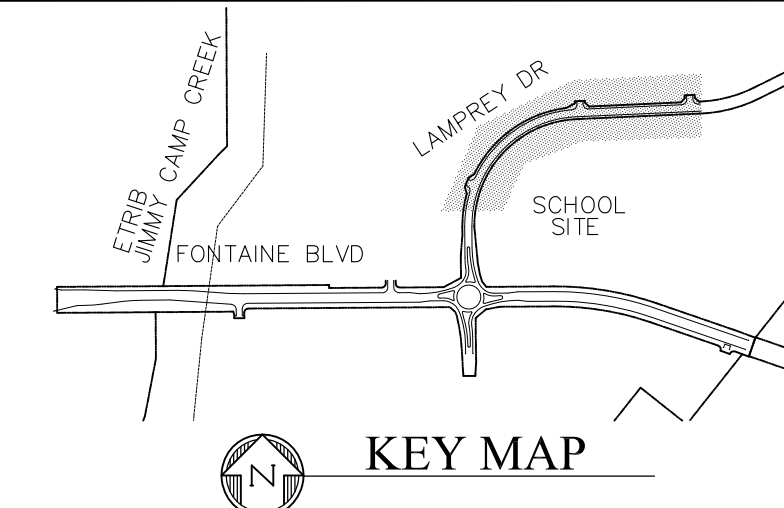


WATERMAIN PLAN/PROFILE
LAMPREY DRIVE
STA 16+00 TO 24+00

DATE: APRIL 2, 2018
 PROJECT NO. 100.041
 SHEET NUMBER **C8.5**
 TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE.
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP.
4. ALL WATERMAIN FITTINGS ARE MJ DIP.
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S



CORE ENGINEERING GROUP
 15004 151st AVENUE, SUITE 300
 DENVER, CO 80242
 PHONE: 303.779.5700
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cgl.com

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

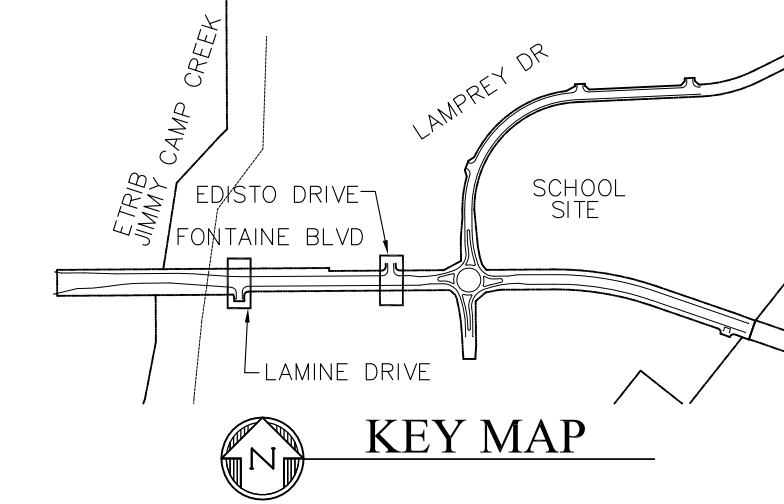
PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DATE: APRIL 2, 2018
 PROJECT NO: 100.041
 SHEET NUMBER: **C8.6**
 TOTAL SHEETS: 34

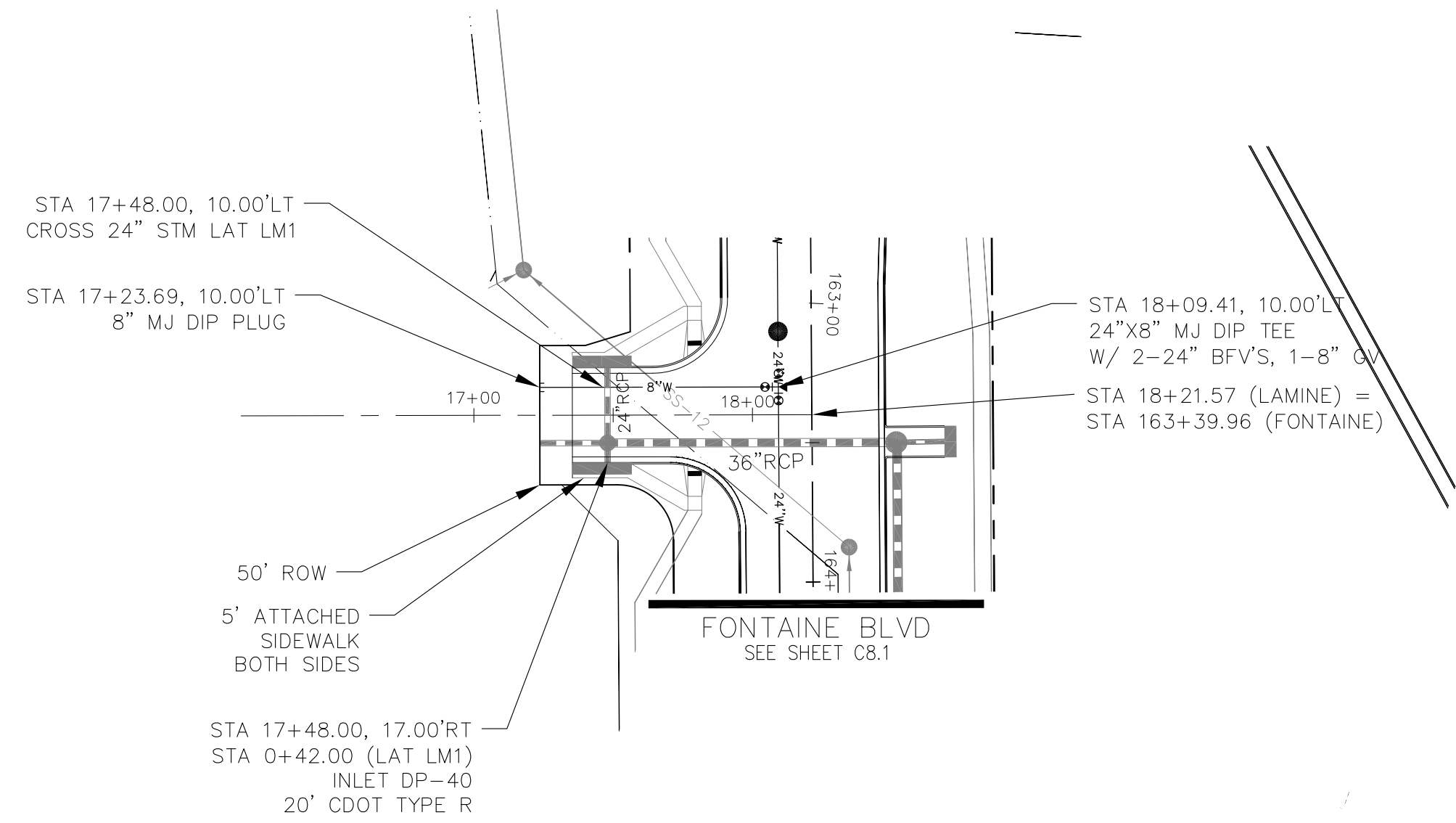
NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
3. ALL 8" & 12" WATERMAIN IS PVC, C900. ALL 24" WATERMAIN IS DIP
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5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S

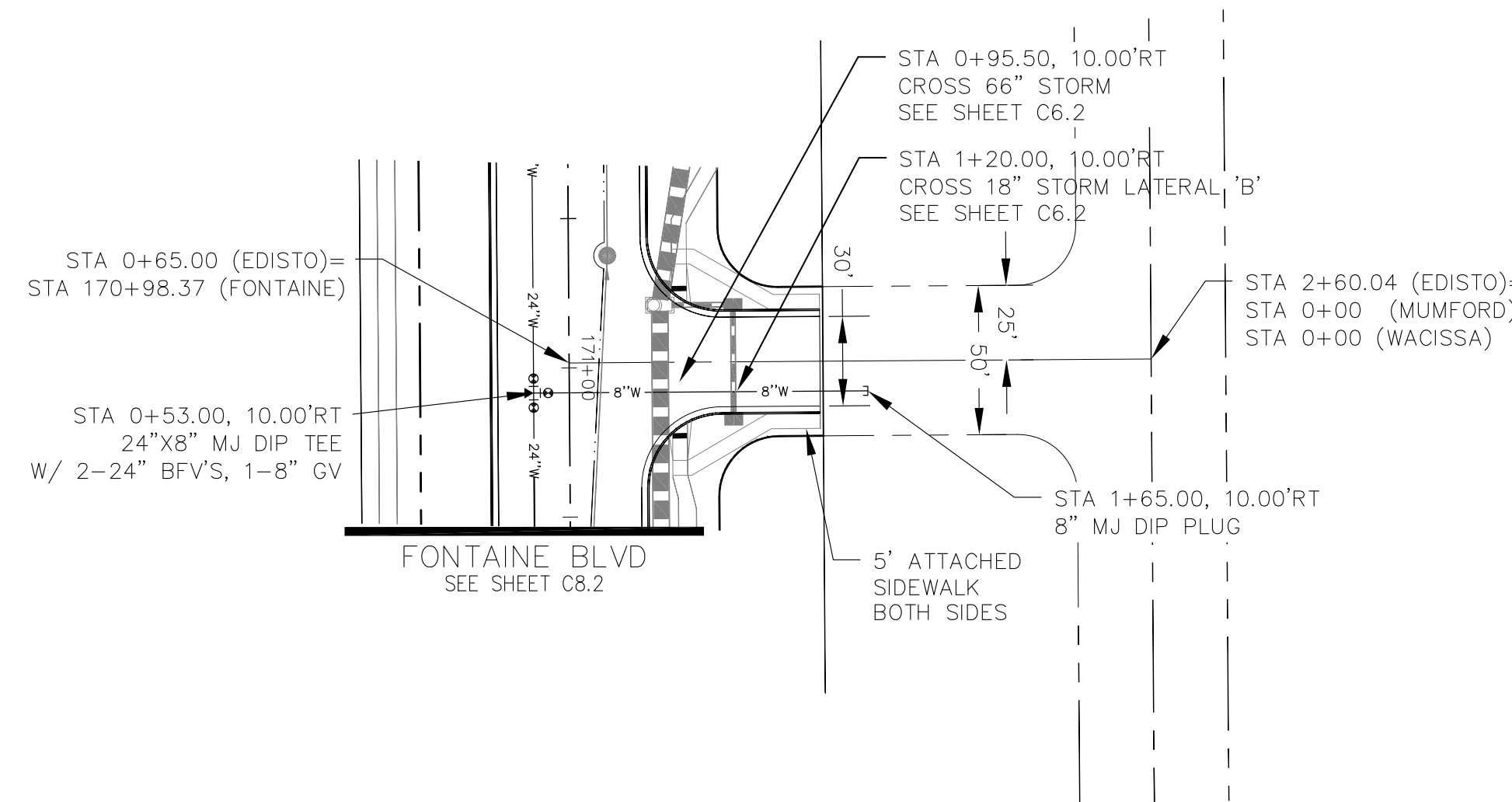
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	37.46'	25.00	85°50'39"
C2	39.14'	25.00	89°42'27"
C3	39.27'	25.00	90°00'00"
C4	39.27'	25.00	90°00'00"



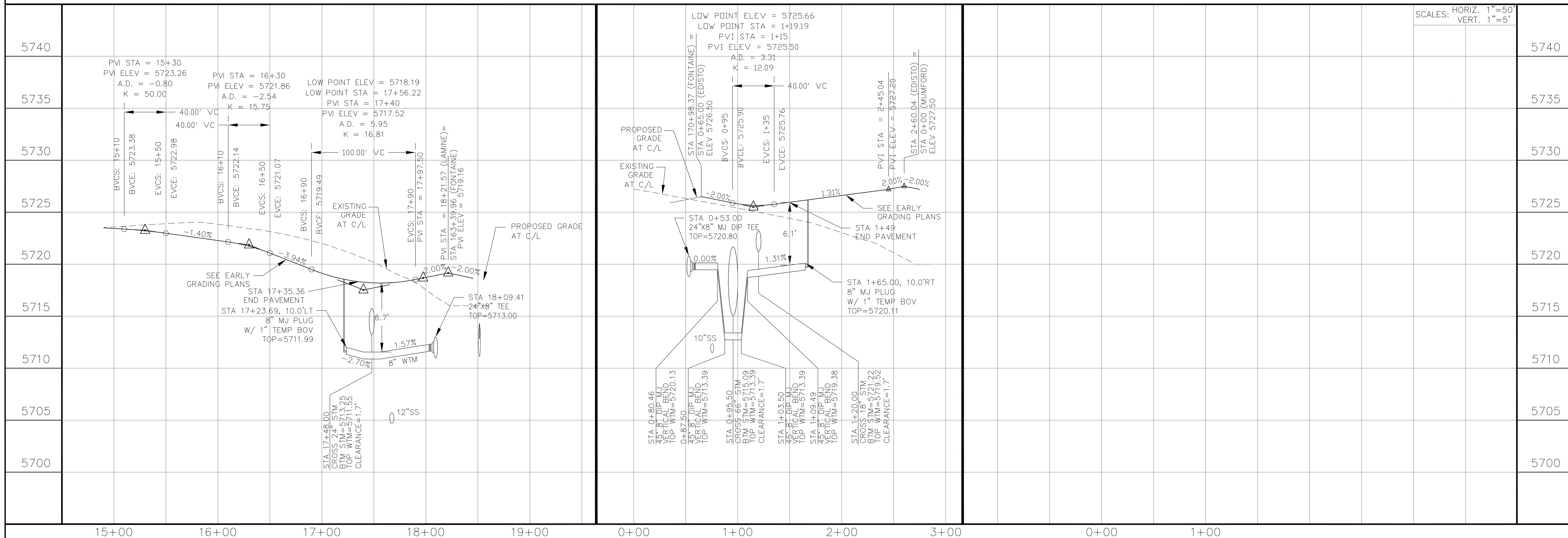
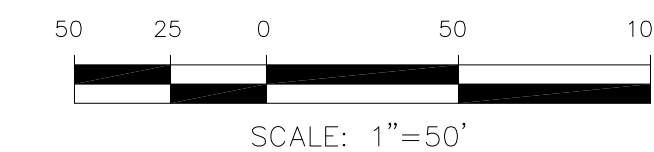
FL CURB/GUTTER TABLE		
POINT	STA/OFFSET	FLOWLINE
3	163+01.50, 32.16'RT	5718.51
4	163+81.70, 26.0'RT	5718.57
5	17+65.87, 17.00'LT	5717.74
6	17+70.57, 17.00'RT	5717.78
7	170+56.37, 26.00'LT	5725.42
8	1+16.00, 17.00'LT	5725.20
9	1+16.00, 17.00'RT	5725.20
10	171+40.37, 26.00'LT	5726.30



LAMINE DRIVE



EDISTO DRIVE



CORE ENGINEERING GROUP
 15004 1ST AVENUE S.
 FORT COLLINS, CO 80506
 PH: 970.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

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

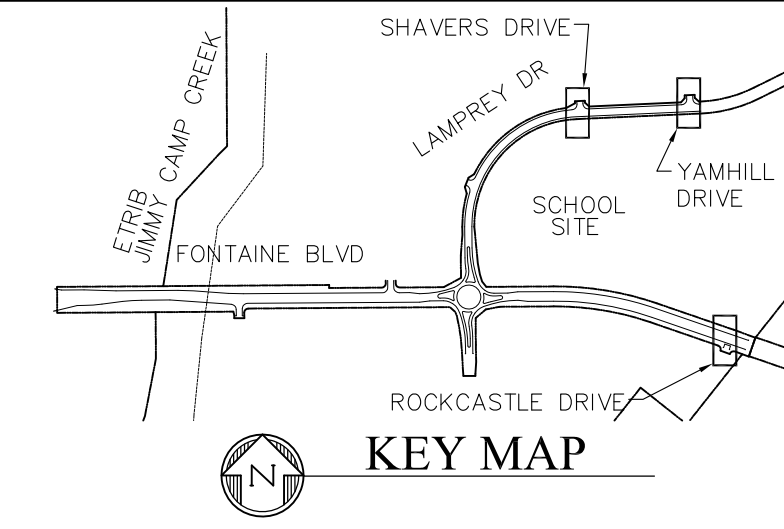
PREPARED FOR:
LORSON, LLC
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 (719) 635-3200
 CONTACT: JEFF MARK

WATERMAIN PLAN/PROFILE
LAMINE DRIVE
AND EDISTO DRIVE

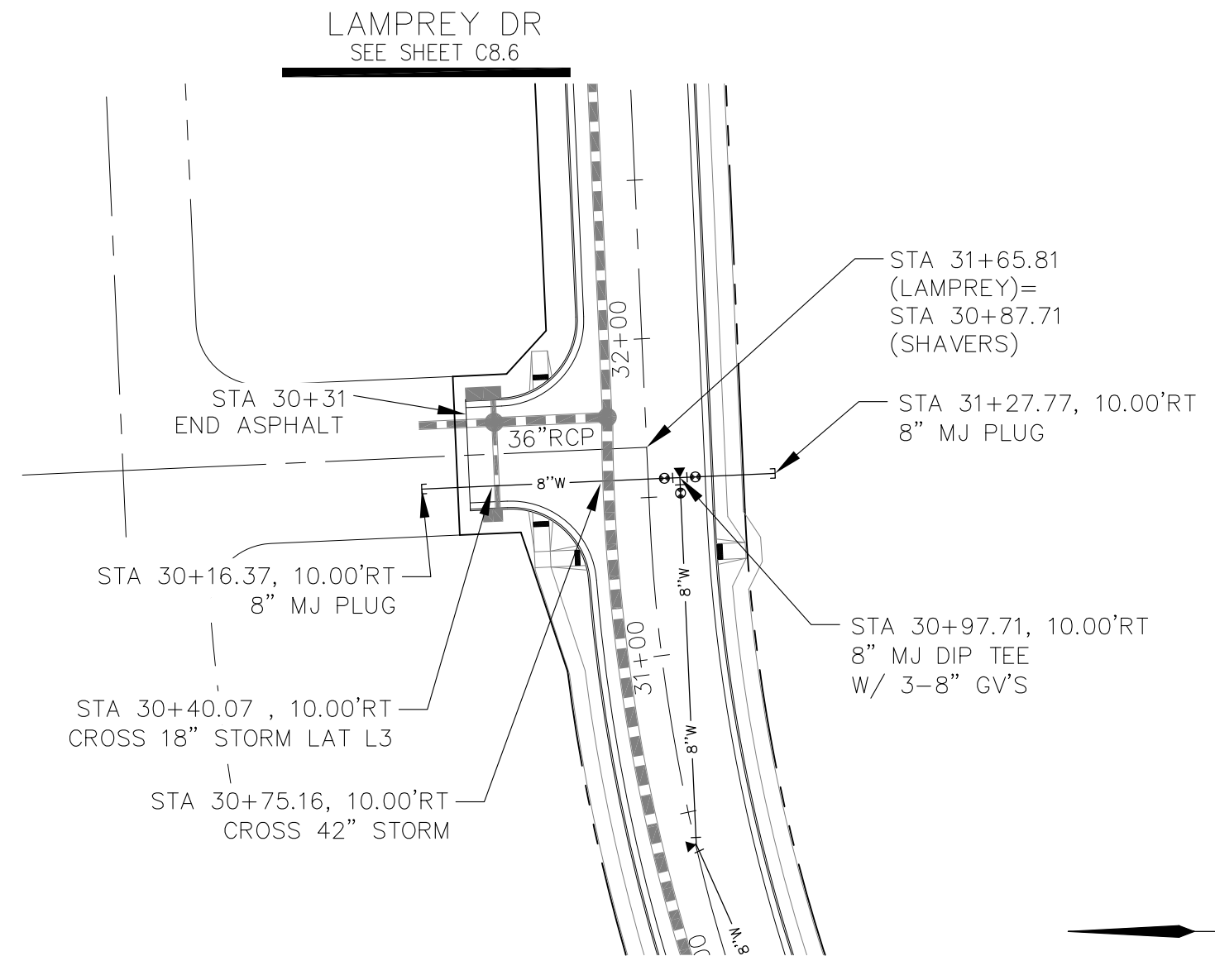
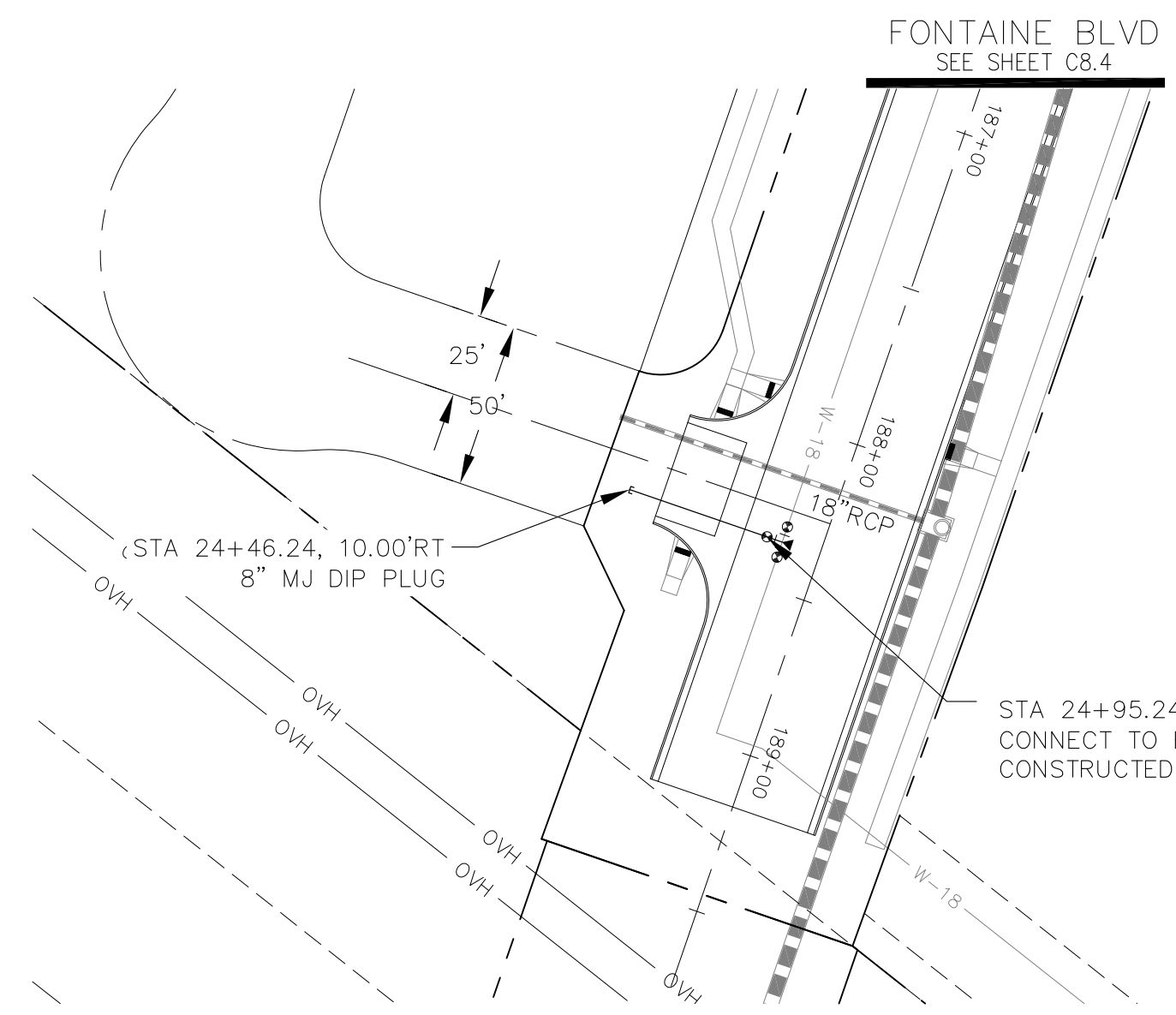
DATE: APRIL 2, 2018
 PROJECT NO. 100.041
 SHEET NUMBER **C8.7**
 TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
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4. ALL WATERMAIN FITTINGS ARE MJ DIP.
5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S

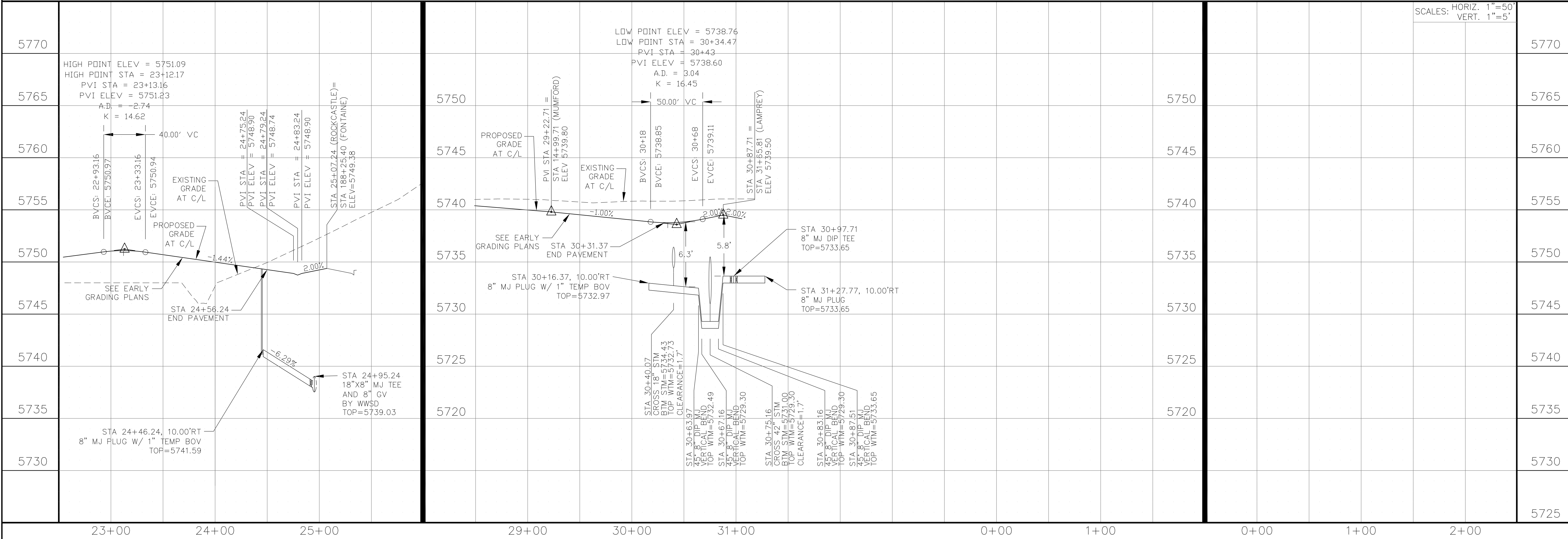
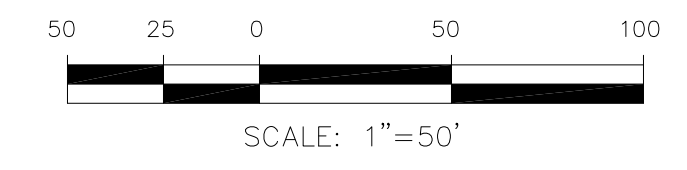


CORE ENGINEERING GROUP
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 DENVER, CO 80202
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com



ROCKCASTLE DRIVE

SHAVERS DRIVE



DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: LORSON, LLC
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK

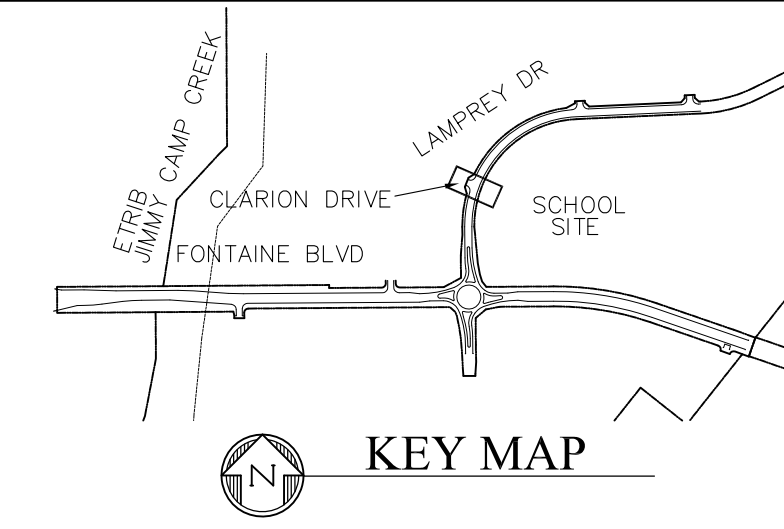
DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

STREET & STORM SEWER PLAN/PROFILE
ROCKCASTLE DR, SHAVERS DR,
YAMHILL DR

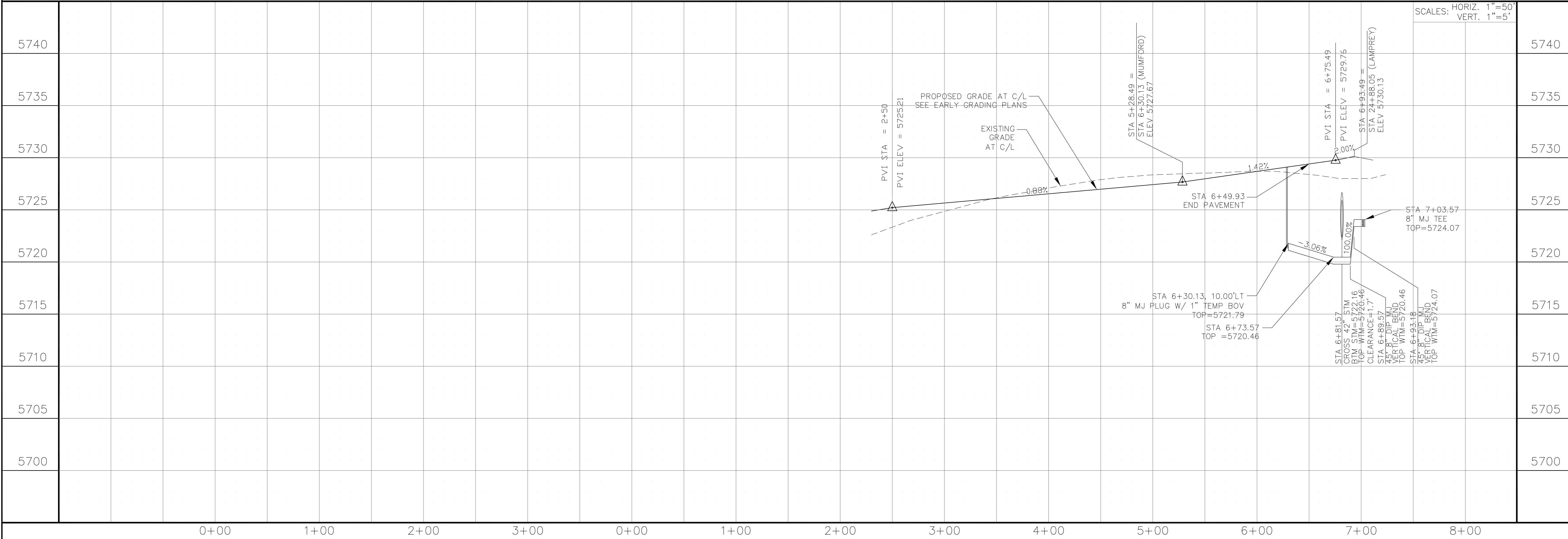
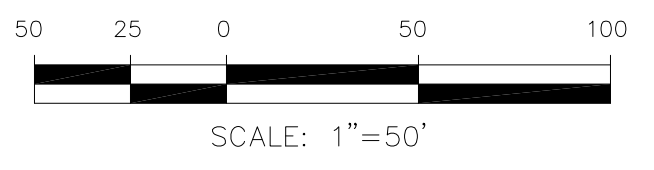
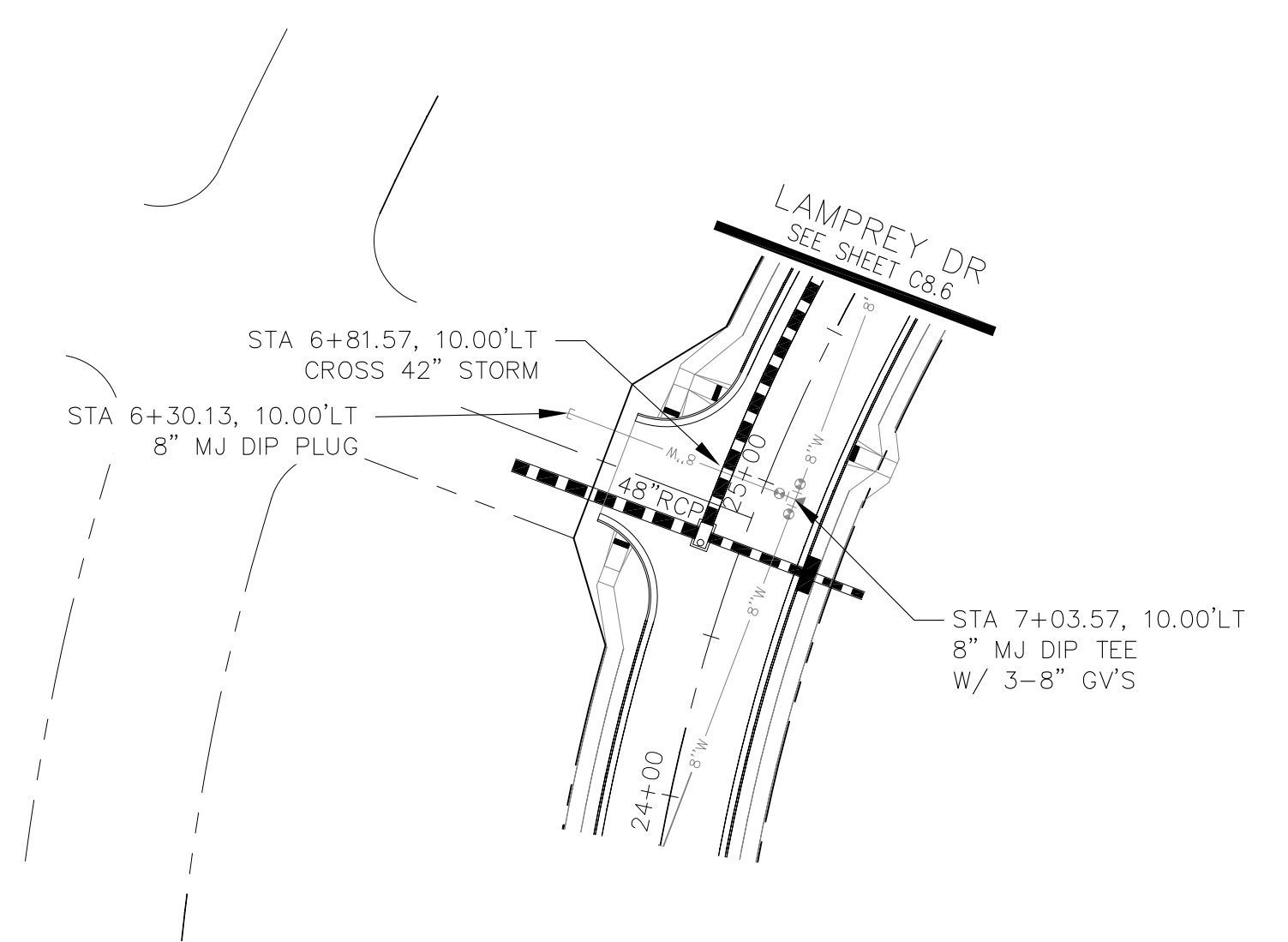
DATE: APRIL 2, 2018
 PROJECT NO. 100.041
 SHEET NUMBER C8.8
 TOTAL SHEETS: 34

NOTES

1. STATIONING IS AT ROADWAY CENTERLINE.
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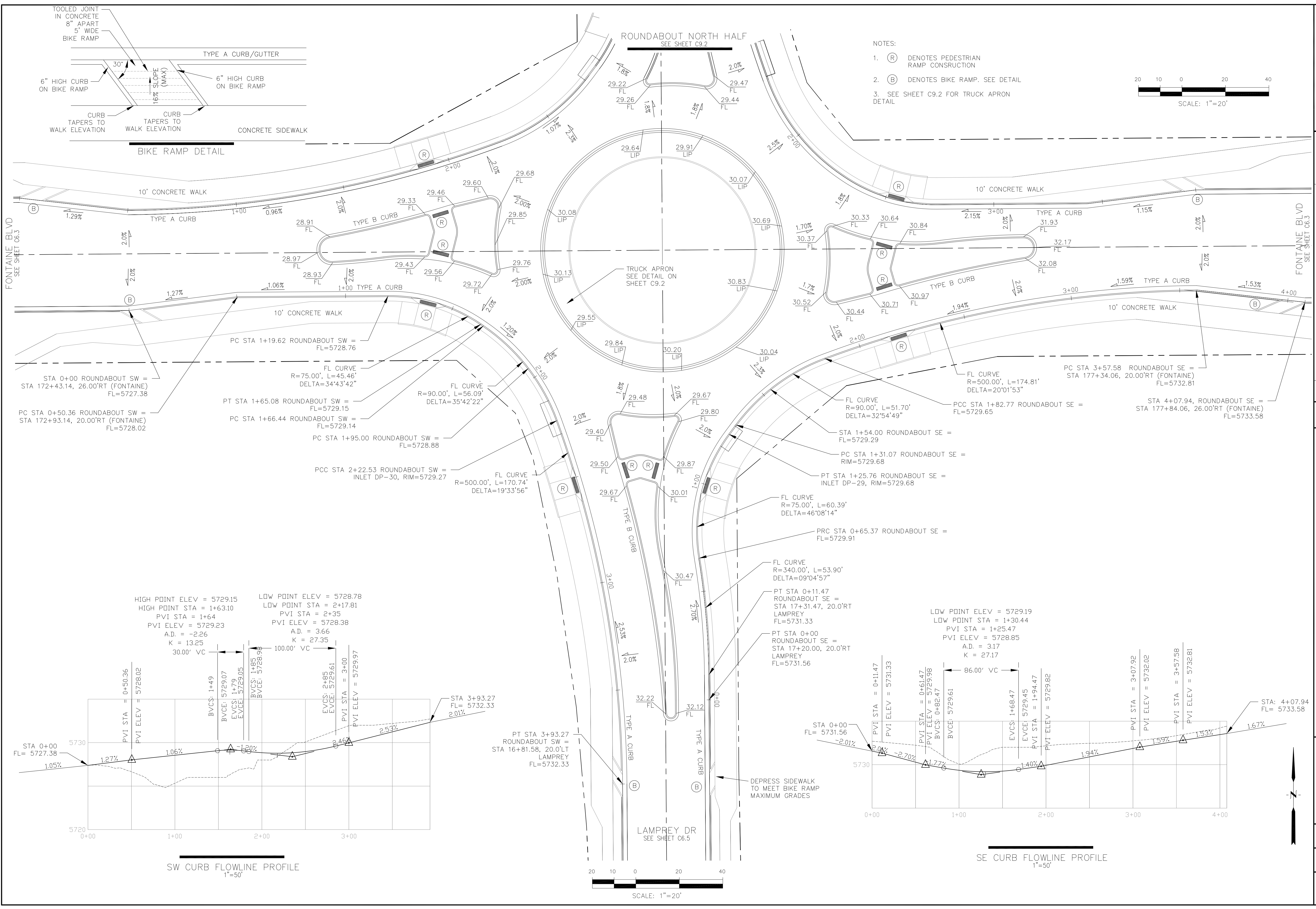


CLARION DRIVE

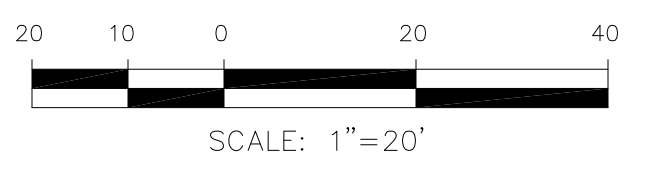


<p>WATERMAIN PLAN/PROFILE CLARION DRIVE</p>	<p>DATE: APRIL 2, 2018</p>
	<p>PROJECT NO. 100.041</p>
	<p>SHEET NUMBER C8.9</p>
	<p>TOTAL SHEETS: 34</p>

<p>DRAWN: RLS DESIGNED: RLS CHECKED: RLS</p>	<p>PROJECT NO. 100.041 PROJECT: FONTAINE BLVD IN LORSON RANCH EAST FONTAINE BLVD.-OLD GLORY DR COLORADO SPRINGS, COLORADO</p>
<p>PREPARED FOR: LORSON, LLC 212 N. WAHSATCH AVE, SUITE 301 COLORADO SPRINGS, COLORADO 80903 (719) 635-3200 CONTACT: JEFF MARK</p>	<p>ENGINEERING GROUP 15004 1ST AVENUE S. DENVER, CO 80202 PH: 719.570.1100 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@egi.com</p>



- NOTES:
1. (R) DENOTES PEDESTRIAN RAMP CONSTRUCTION
 2. (B) DENOTES BIKE RAMP. SEE DETAIL
 3. SEE SHEET C9.2 FOR TRUCK APRON DETAIL



FONTAINE BLVD
SEE SHEET C6.3

FONTAINE BLVD
SEE SHEET C6.3

ROUNDABOUT NORTH HALF
SEE SHEET C9.2

LAMPREY DR
SEE SHEET C6.5

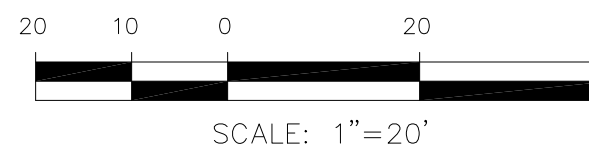
HIGH POINT ELEV = 5729.15
HIGH POINT STA = 1+63.10
PVI STA = 1+64
PVI ELEV = 5729.23
A.D. = -2.26
K = 13.25

LOW POINT ELEV = 5728.78
LOW POINT STA = 2+17.81
PVI STA = 2+35
PVI ELEV = 5728.38
A.D. = 3.66
K = 27.35

LOW POINT ELEV = 5729.19
LOW POINT STA = 1+30.44
PVI STA = 1+25.47
PVI ELEV = 5728.85
A.D. = 3.17
K = 27.17

SW CURB FLOWLINE PROFILE
1"=50'

SE CURB FLOWLINE PROFILE
1"=50'



CORE
ENGINEERING GROUP
15004 151ST AVENUE, S.
DENVER, CO 80202
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com

DATE: _____
DESCRIPTION: _____
NO: _____

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

PROJECT:
**FONTAINE BLVD IN
LORSON RANCH EAST**
FONTAINE BLVD - OLD GLORY DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

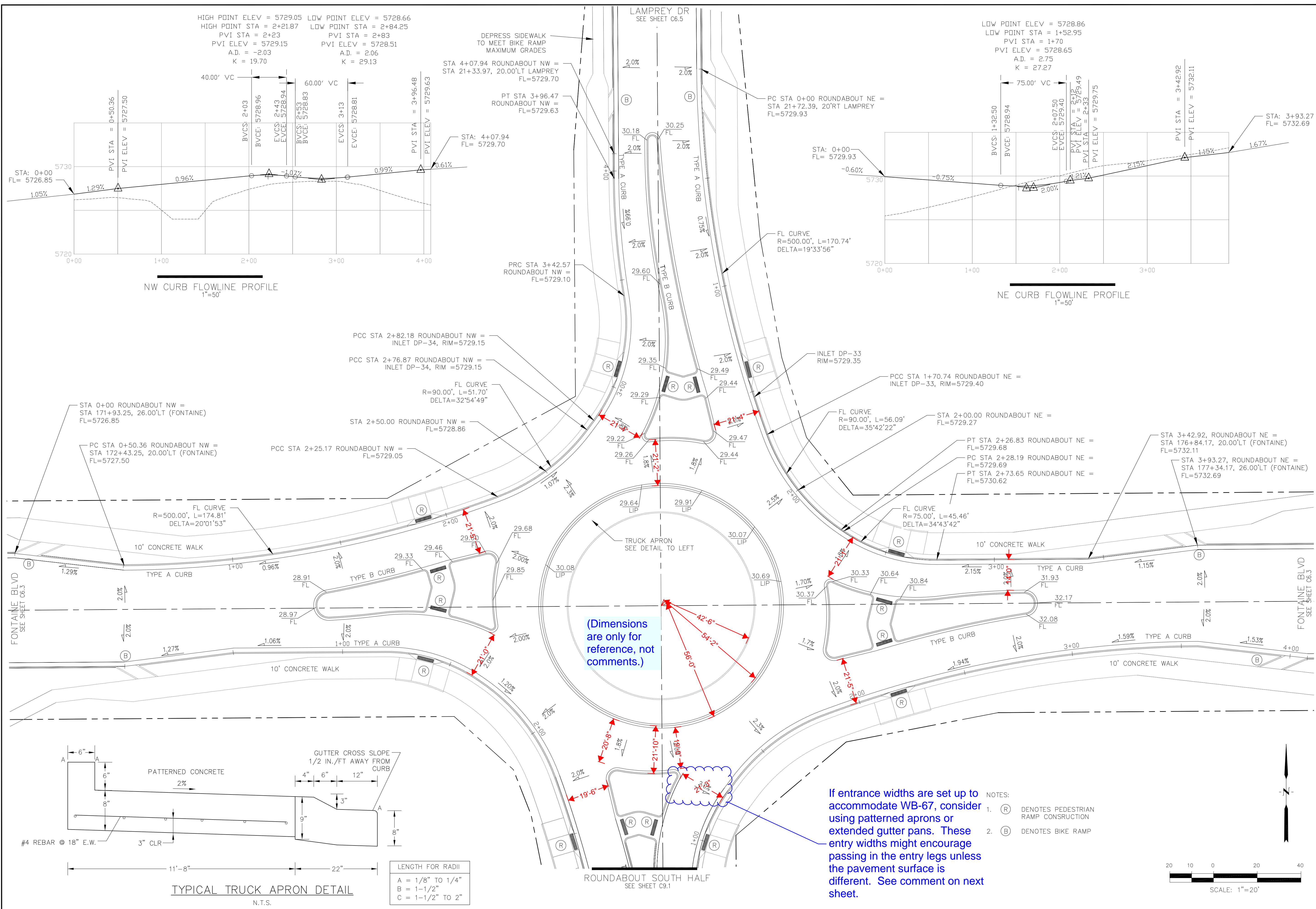
ROUNDABOUT DETAILED GRADING
FONTAINE BOULEVARD
SOUTH HALF

DATE:
APRIL 2, 2018

PROJECT NO.
100.041

SHEET NUMBER
C9.1

TOTAL SHEETS: 34



HIGH POINT ELEV = 5729.05 LOW POINT ELEV = 5728.66
 HIGH POINT STA = 2+21.87 LOW POINT STA = 2+84.25
 PVI STA = 2+23 PVI STA = 2+83
 PVI ELEV = 5729.15 PVI ELEV = 5728.51
 A.D. = -2.03 A.D. = 2.06
 K = 19.70 K = 29.13

LOW POINT ELEV = 5728.86
 LOW POINT STA = 1+52.95
 PVI STA = 1+70
 PVI ELEV = 5728.65
 A.D. = 2.75
 K = 27.27

NW CURB FLOWLINE PROFILE
 1"=50'

NE CURB FLOWLINE PROFILE
 1"=50'

TYPICAL TRUCK APRON DETAIL
 N.T.S.

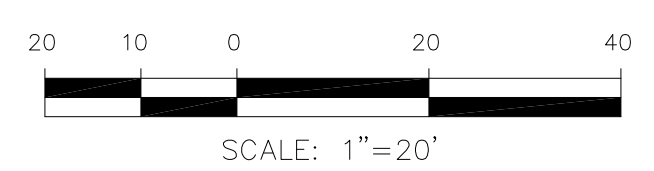
LENGTH FOR RADII

A	= 1/8" TO 1/4"
B	= 1-1/2"
C	= 1-1/2" TO 2"

(Dimensions are only for reference, not comments.)

If entrance widths are set up to accommodate WB-67, consider using patterned aprons or extended gutter pans. These entry widths might encourage passing in the entry legs unless the pavement surface is different. See comment on next sheet.

- NOTES:
1. (R) DENOTES PEDESTRIAN RAMP CONSTRUCTION
 2. (B) DENOTES BIKE RAMP



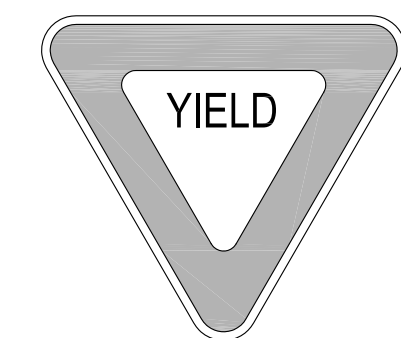
CORE ENGINEERING GROUP
 15004 151ST AVENUE, SUITE 3500
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cegi.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

ROUNDABOUT DETAILED GRADING
FONTAINE BOULEVARD
NORTH HALF

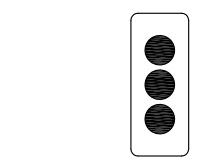
DATE: APRIL 2, 2018
 PROJECT NO. 100.041
 SHEET NUMBER **C9.2**
 TOTAL SHEETS: 34



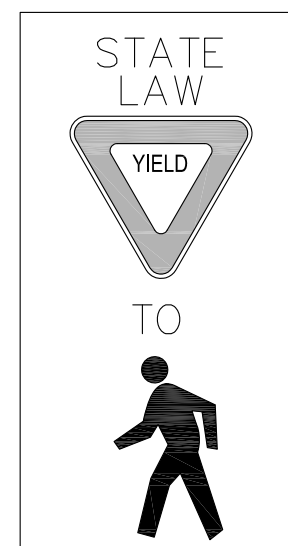
R1-2



R4-7R

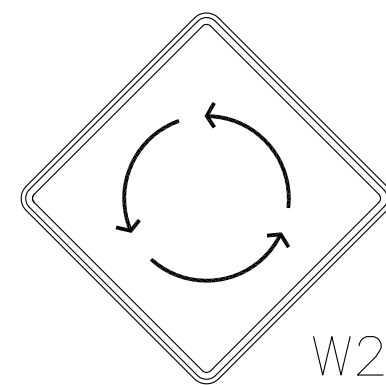


OM2-1



R1-6

Add small arrow (all 4 street name signs)

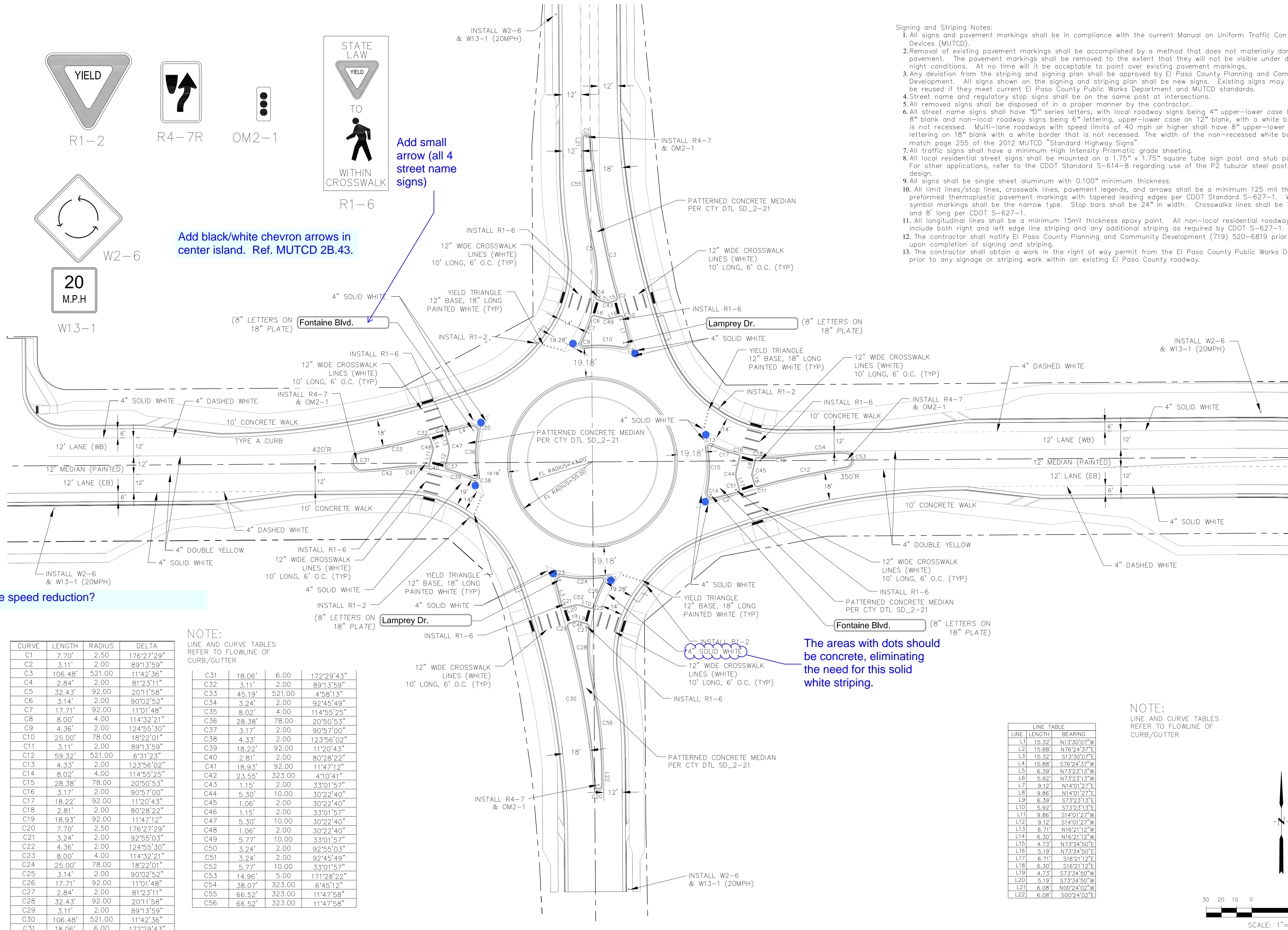


W2-6

Add black/white chevron arrows in center island. Ref. MUTCD 2B.43.



W13-1



Signing and Striping Notes:

- All signs and pavement markings shall be in compliance with the current Manual on Uniform Traffic Control Devices (MUTCD).
- Removal of existing pavement markings shall be accomplished by a method that does not materially damage the pavement. The pavement markings shall be removed to the extent that they will not be visible under day or night conditions. At no time will it be acceptable to paint over existing pavement markings.
- Any deviation from the striping and signing plan shall be approved by El Paso County Planning and Community Development. All signs shown on the signing and striping plan shall be new signs. Existing signs may remain or be reused if they meet current El Paso County Public Works Department and MUTCD standards.
- Street name and regulatory stop signs shall be on the same post at intersections.
- All removed signs shall be disposed of in a proper manner by the contractor.
- All street name signs shall have "D" series letters, with local roadway signs being 4" upper-lower case lettering on 8" blank and non-local roadway signs being 6" lettering, upper-lower case on 12" blank, with a white border that is not recessed. Multi-lane roadways with speed limits of 40 mph or higher shall have 8" upper-lower case lettering on 18" blank with a white border that is not recessed. The width of the non-recessed white borders shall match page 255 of the 2012 MUTCD "Standard Highway Signs".
- All traffic signs shall have a minimum High Intensity Prismatic grade sheeting.
- All local residential street signs shall be mounted on a 1.75" x 1.75" square tube sign post and stub post base. For other applications, refer to the CDOT Standard S-614-8 regarding use of the P2 tubular steel post slipbase design.
- All signs shall be single sheet aluminum with 0.100" minimum thickness.
- All limit lines/stop lines, crosswalk lines, pavement legends, and arrows shall be a minimum 125 mil thickness preformed thermoplastic pavement markings with tapered leading edges per CDOT Standard S-627-1. Word and symbol markings shall be the narrow type. Stop bars shall be 24" in width. Crosswalk lines shall be 12" wide and 8' long per CDOT S-627-1.
- All longitudinal lines shall be a minimum 15mil thickness epoxy paint. All non-local residential roadways shall include both right and left edge line striping and any additional striping as required by CDOT S-627-1.
- The contractor shall notify El Paso County Planning and Community Development (719) 520-6819 prior to and upon completion of signing and striping.
- The contractor shall obtain a work in the right of way permit from the El Paso County Public Works Department prior to any signage or striping work within an existing El Paso County roadway.

Advance speed reduction?

The areas with dots should be concrete, eliminating the need for this solid white striping.

NOTE:

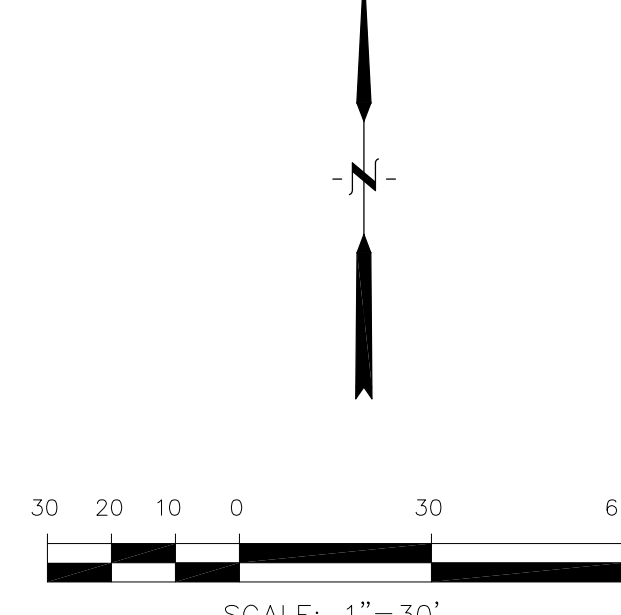
LINE AND CURVE TABLES REFER TO FLOWLINE OF CURB/GUTTER

CURVE	LENGTH	RADIUS	DELTA
C1	7.70'	2.50	176°27'29"
C2	3.11'	2.00	89°13'59"
C3	106.48'	521.00	11°42'36"
C4	2.84'	2.00	81°23'11"
C5	32.43'	92.00	20°11'58"
C6	3.14'	2.00	90°02'52"
C7	17.71'	92.00	11°01'48"
C8	8.00'	4.00	114°32'21"
C9	4.36'	2.00	124°55'30"
C10	25.00'	78.00	18°22'01"
C11	3.11'	2.00	89°13'59"
C12	59.32'	521.00	6°31'23"
C13	4.33'	2.00	123°56'02"
C14	8.02'	4.00	114°55'25"
C15	28.38'	78.00	20°50'53"
C16	3.17'	2.00	90°57'00"
C17	18.22'	92.00	11°20'43"
C18	2.81'	2.00	80°28'22"
C19	18.93'	92.00	11°47'12"
C20	7.70'	2.50	176°27'29"
C21	3.24'	2.00	92°55'03"
C22	4.36'	2.00	124°55'30"
C23	8.00'	4.00	114°32'21"
C24	25.00'	78.00	18°22'01"
C25	3.14'	2.00	90°02'52"
C26	17.71'	92.00	11°01'48"
C27	2.84'	2.00	81°23'11"
C28	32.43'	92.00	20°11'58"
C29	3.11'	2.00	89°13'59"
C30	106.48'	521.00	11°42'36"
C31	18.06'	6.00	172°29'43"

CURVE	LENGTH	RADIUS	DELTA
C31	18.06'	6.00	172°29'43"
C32	3.11'	2.00	89°13'59"
C33	45.19'	521.00	4°58'13"
C34	3.24'	2.00	92°45'49"
C35	8.02'	4.00	114°55'25"
C36	28.38'	78.00	20°50'53"
C37	3.17'	2.00	90°57'00"
C38	4.33'	2.00	123°56'02"
C39	18.22'	92.00	11°20'43"
C40	2.81'	2.00	80°28'22"
C41	18.93'	92.00	11°47'12"
C42	23.55'	323.00	4°10'41"
C43	1.15'	2.00	33°01'57"
C44	5.30'	10.00	30°22'40"
C45	1.06'	2.00	30°22'40"
C46	1.15'	2.00	33°01'57"
C47	5.30'	10.00	30°22'40"
C48	1.06'	2.00	30°22'40"
C49	5.77'	10.00	33°01'57"
C50	3.24'	2.00	92°55'03"
C51	3.24'	2.00	92°45'49"
C52	5.77'	10.00	33°01'57"
C53	14.96'	5.00	171°28'22"
C54	38.07'	323.00	6°45'12"
C55	66.52'	323.00	11°47'58"
C56	66.52'	323.00	11°47'58"

LINE	LENGTH	BEARING
L1	15.32'	N13°30'07"W
L2	15.88'	N76°24'37"E
L3	15.32'	S13°30'07"E
L4	15.88'	S76°24'37"W
L5	6.39'	N73°23'13"W
L6	5.92'	N73°23'13"W
L7	9.12'	N14°01'27"E
L8	9.86'	N14°01'27"E
L9	6.39'	S73°23'13"E
L10	5.92'	S73°23'13"E
L11	9.86'	S14°01'27"W
L12	9.12'	S14°01'27"W
L13	6.71'	N16°21'12"W
L14	6.30'	N16°21'12"W
L15	4.73'	N73°34'50"E
L16	5.19'	N73°34'50"E
L17	6.71'	S16°21'12"E
L18	6.30'	S16°21'12"E
L19	4.73'	S73°34'50"W
L20	5.19'	S73°34'50"W
L21	6.08'	N00°24'02"W
L22	6.08'	S00°24'02"E

NOTE: LINE AND CURVE TABLES REFER TO FLOWLINE OF CURB/GUTTER



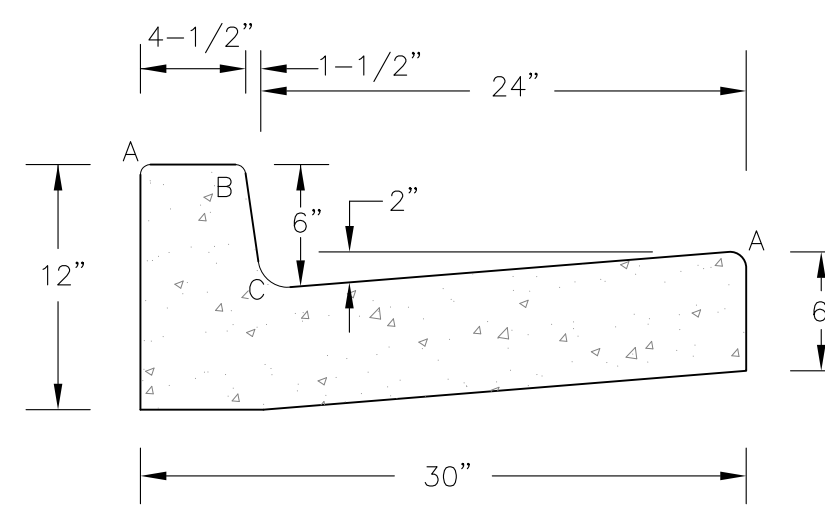
CORE ENGINEERING GROUP
 15004 151ST AVENUE, SUITE 35506
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@ceg1.com

DATE: _____
 DESCRIPTION: _____
 NO: _____
 PREPARED FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 PROJECT: **FONTAINE BLVD IN LORSON RANCH EAST**
 FONTAINE BLVD.-OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

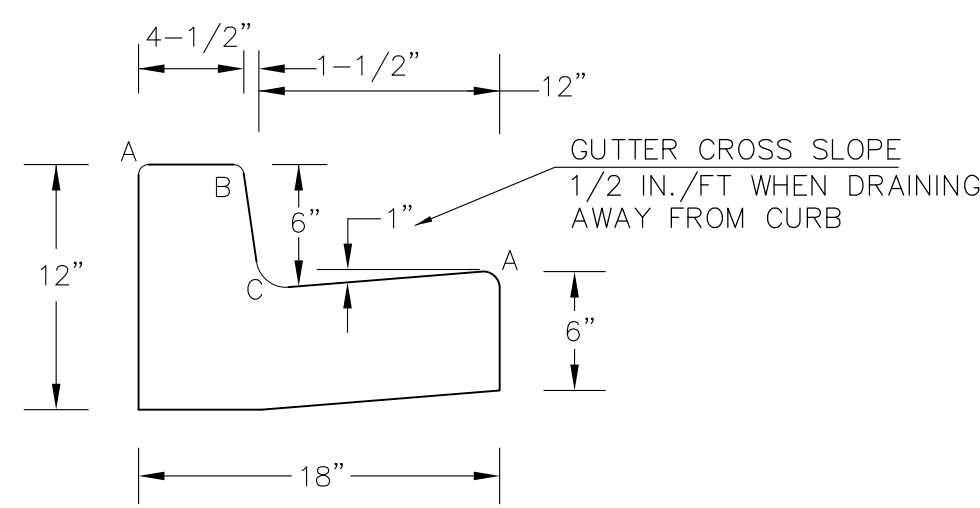
DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

ROUNDABOUT SIGNAGE/STRIPING

DATE: APRIL 2, 2018
 PROJECT NO: 100.041
 SHEET NUMBER: C9.3
 TOTAL SHEETS: 34

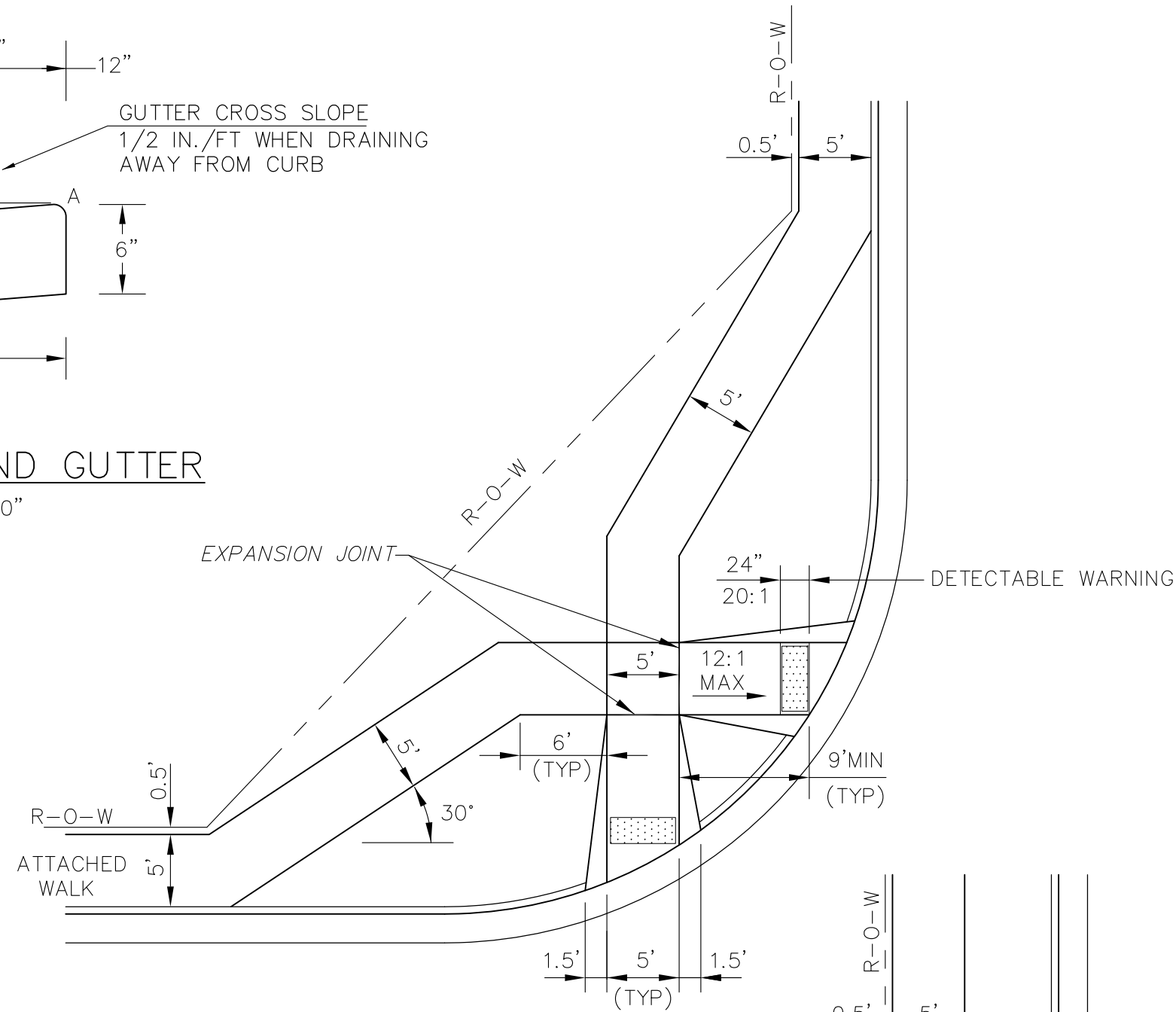


TYPE 'A'
VERTICAL CURB AND GUTTER
SCALE 1" = 1'-0"

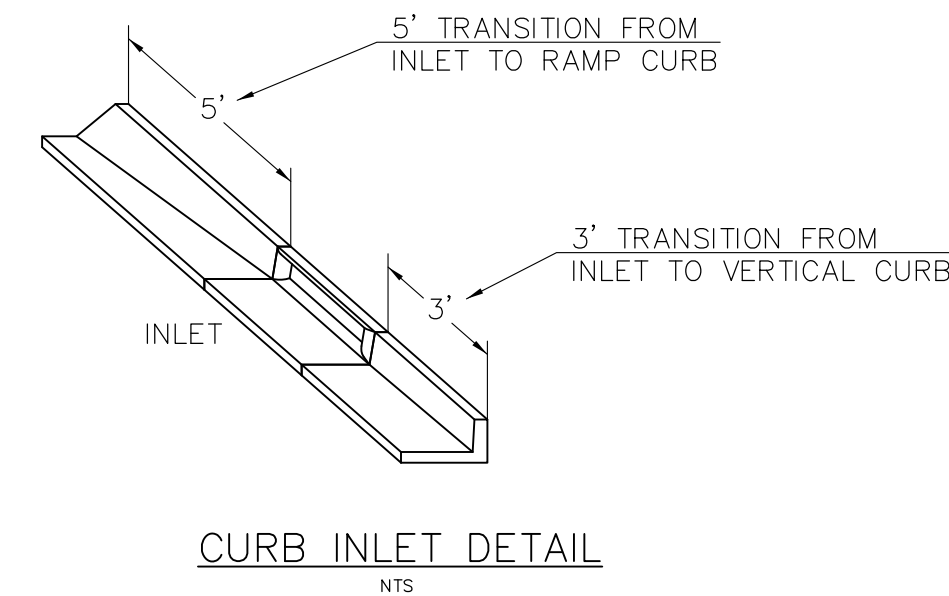


TYPE 'B'
VERTICAL CURB AND GUTTER
SCALE 1" = 1'-0"

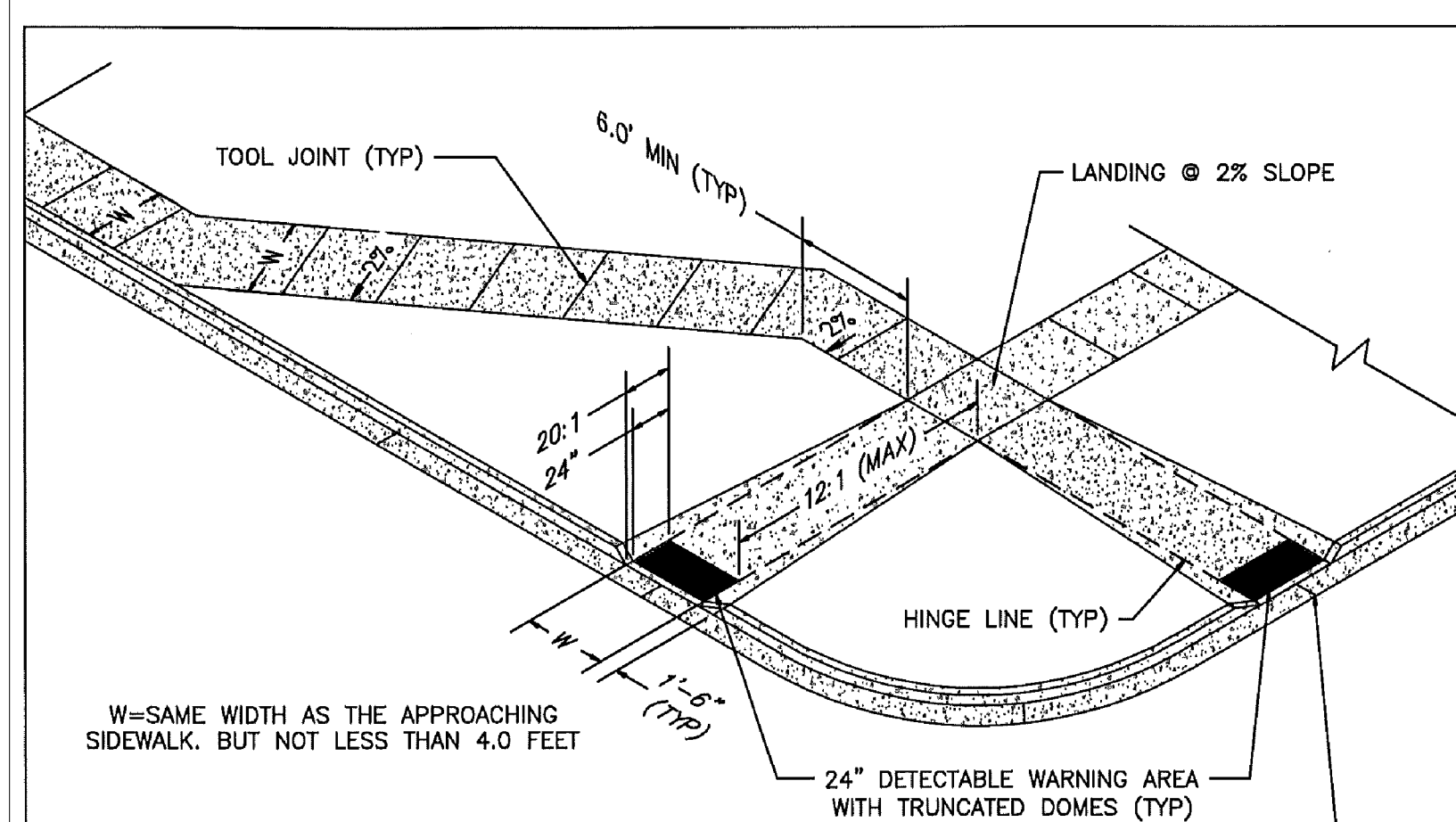
LENGTH FOR RADII	
A	= 1/8" TO 1/4"
B	= 1-1/2"
C	= 1-1/2" TO 2"



PEDESTRIAN RAMPS AT INTERSECTIONS (ECM SD_2-40)
NO SCALE



CURB INLET DETAIL
NTS



W=SAME WIDTH AS THE APPROACHING SIDEWALK, BUT NOT LESS THAN 4.0 FEET

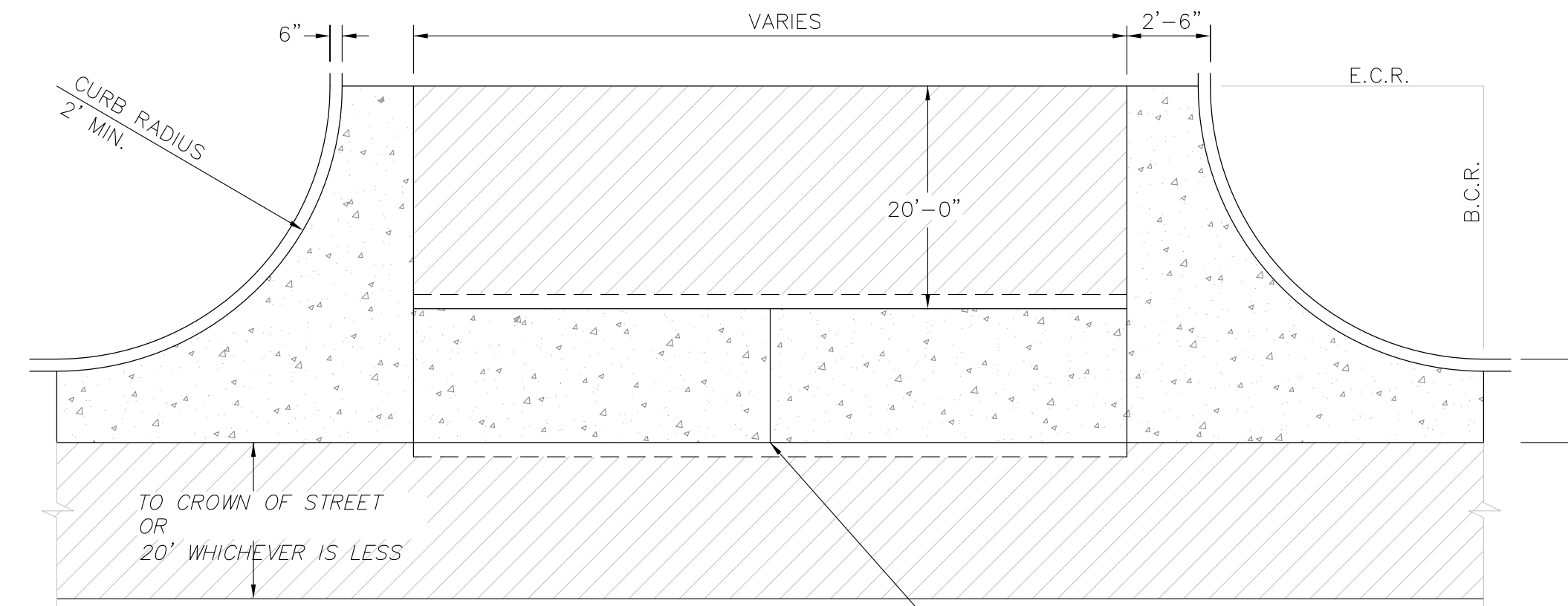
PEDESTRIAN RAMP NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
2. CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
3. PEDESTRIAN RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON-COLORED, NON-SCORED, COARSE BROOM FINISH.
4. RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 12:1 MAXIMUM RUNNING RAMP SLOPE AND 20:1 DETECTABLE WARNING AREA DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS.
5. DETECTABLE WARNING AREA SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
6. DETECTABLE WARNING AREA SHALL BE PREFABRICATED REDDISH INTEGRALLY COLORED TRUNCATED-DOMES.
7. THE DETECTABLE WARNING AREA SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
8. RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
9. ALL RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID-BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
10. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED RAMP AREAS.

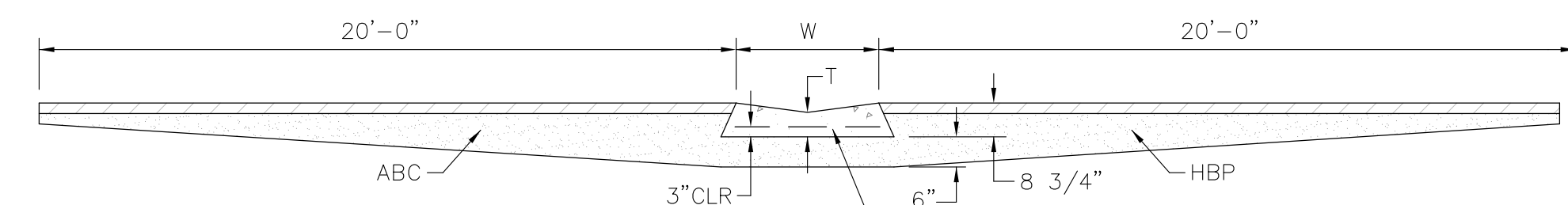
LAYOUT CURB SECTIONS SO THAT AT LEAST ONE TOOL JOINT IS WITHIN RAMP THROAT

GENERAL NOTES

1. WHERE THE 1"-6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA, THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
2. PEDESTRIAN WALKWAY AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
3. AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUSIVE OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.



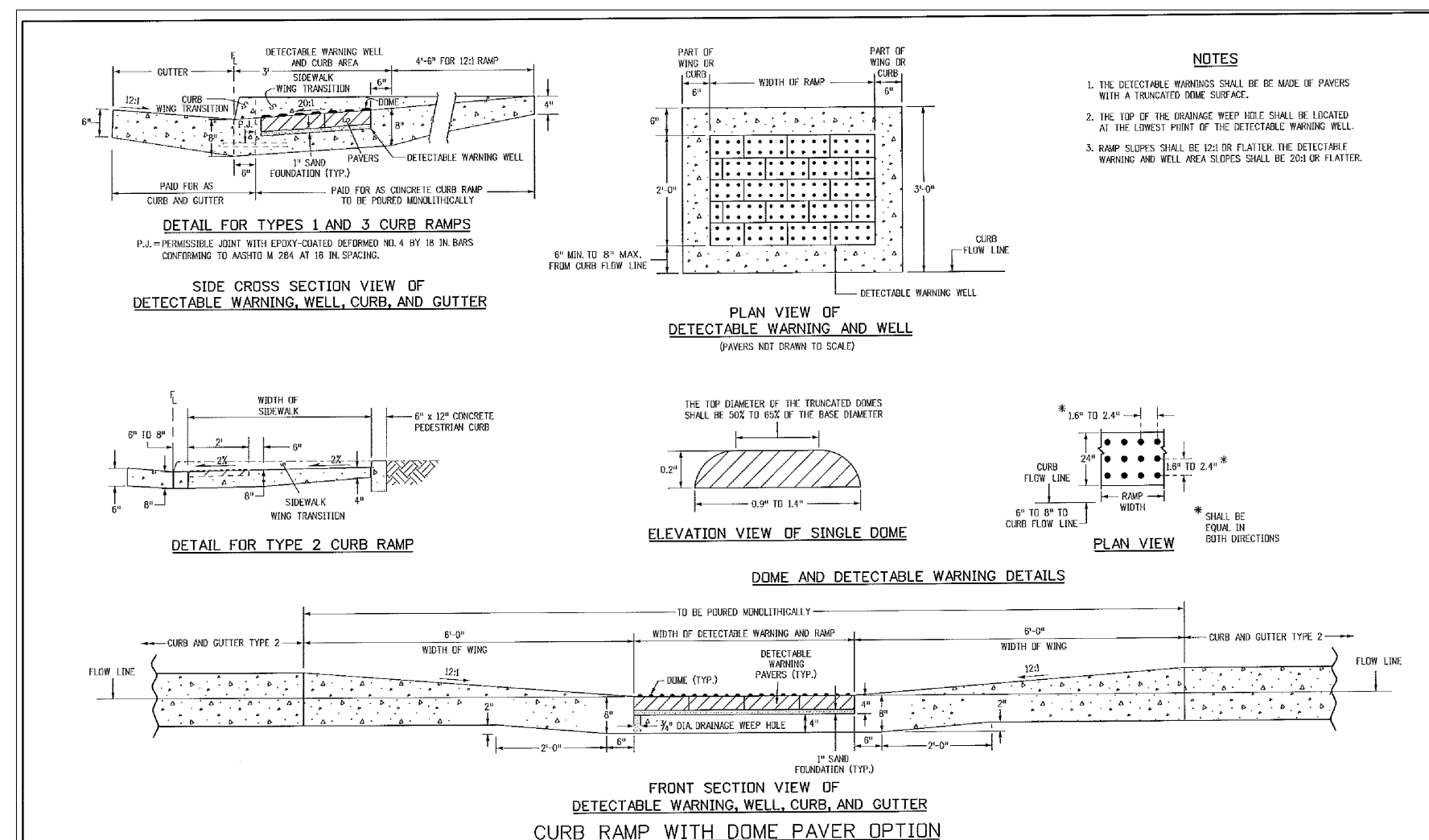
PLAN VIEW



TYPICAL CROSSSPAN LAYOUT (ECM SD_2-26)
NO SCALE

NOTES

1. W = WIDTH SHALL BE 6' FOR LOCAL, 8' FOR COLLECTORS, 10' FOR ARTERIAL ROADS.
2. T = SQUARED-OFF RETURN TO BE POURED MONOLITHIC 8" PCC, OR 9" FOR COLLECTORS MINIMUM WITH 6x6 - 4,4 WWF OR #4 @ 18"E.W.
3. [Symbol] = 3" MINIMUM ASPHALT DEPTH (2 LIFTS).
4. DESIGN TO SPECIFY ELEVATIONS AT PI AND PCR.



TRUNCATED DOME DETAILS (ECM SD_2-42)
NO SCALE

CORE ENGINEERING GROUP
1500 N. 1ST AVENUE, SUITE 300
DENVER, CO 80202
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cengr.com

PROJECT: FONTAINE BLVD IN LORSON, LLC
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
FONTAINE BLVD - OLD GLORY DR
COLORADO SPRINGS, COLORADO
CONTACT: JEFF MARK

NO. DATE DESCRIPTION

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

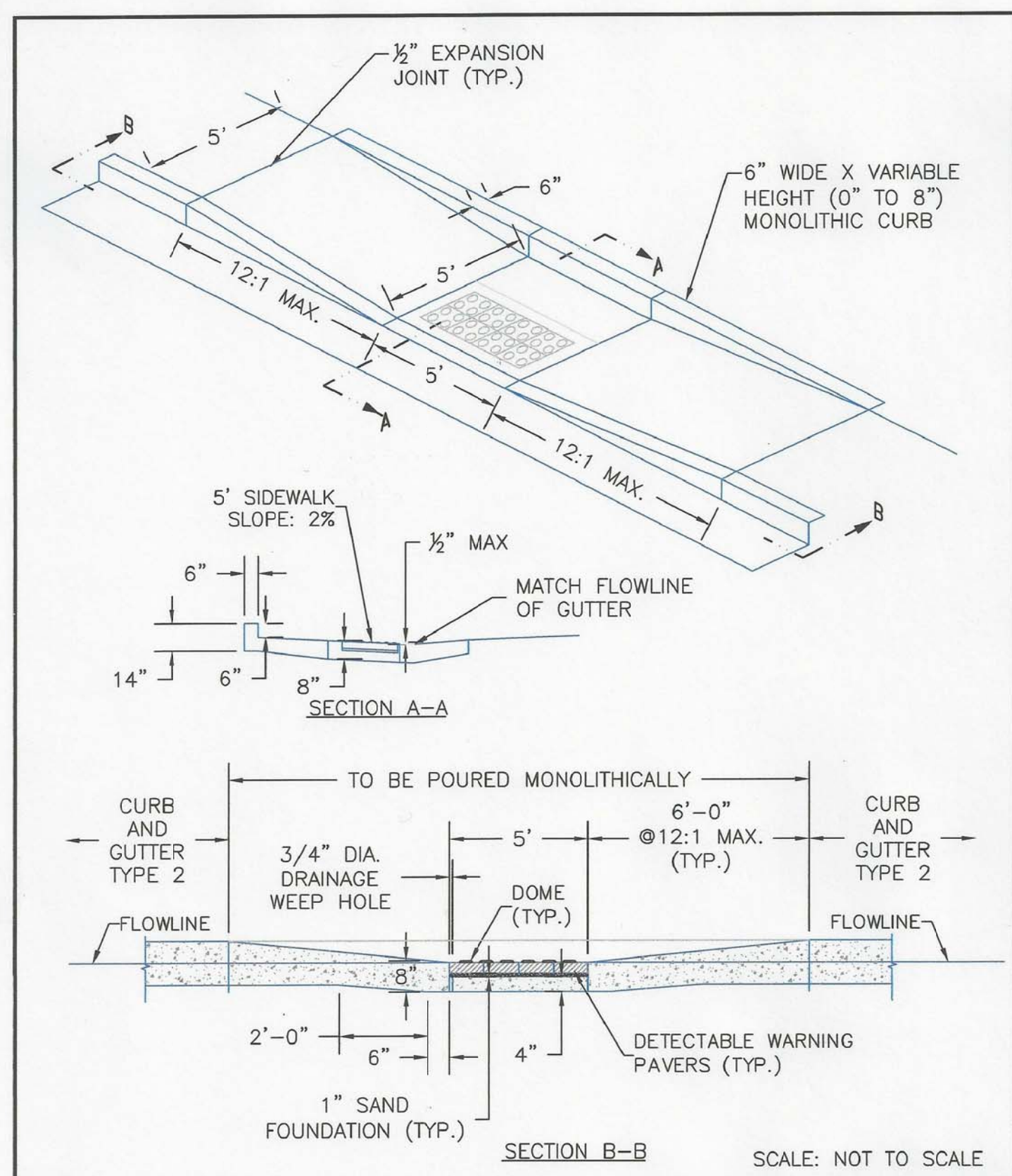
DATE: APRIL 2, 2018
PROJECT NO. 100.041
SHEET NUMBER C10.1
TOTAL SHEETS: 34

DATE APPROVED: 7/9/09
André P. Brackin
DEPARTMENT OF TRANSPORTATION

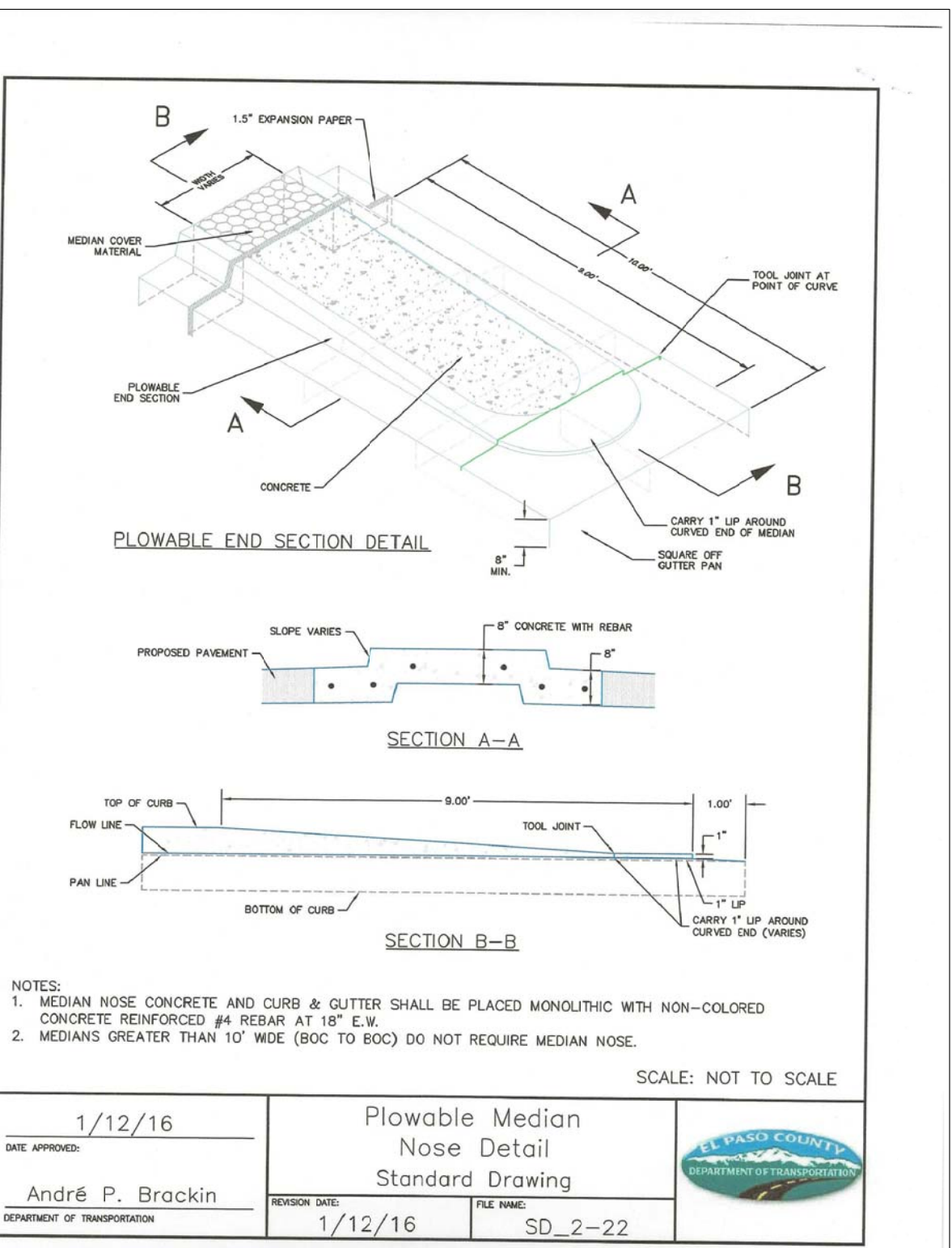
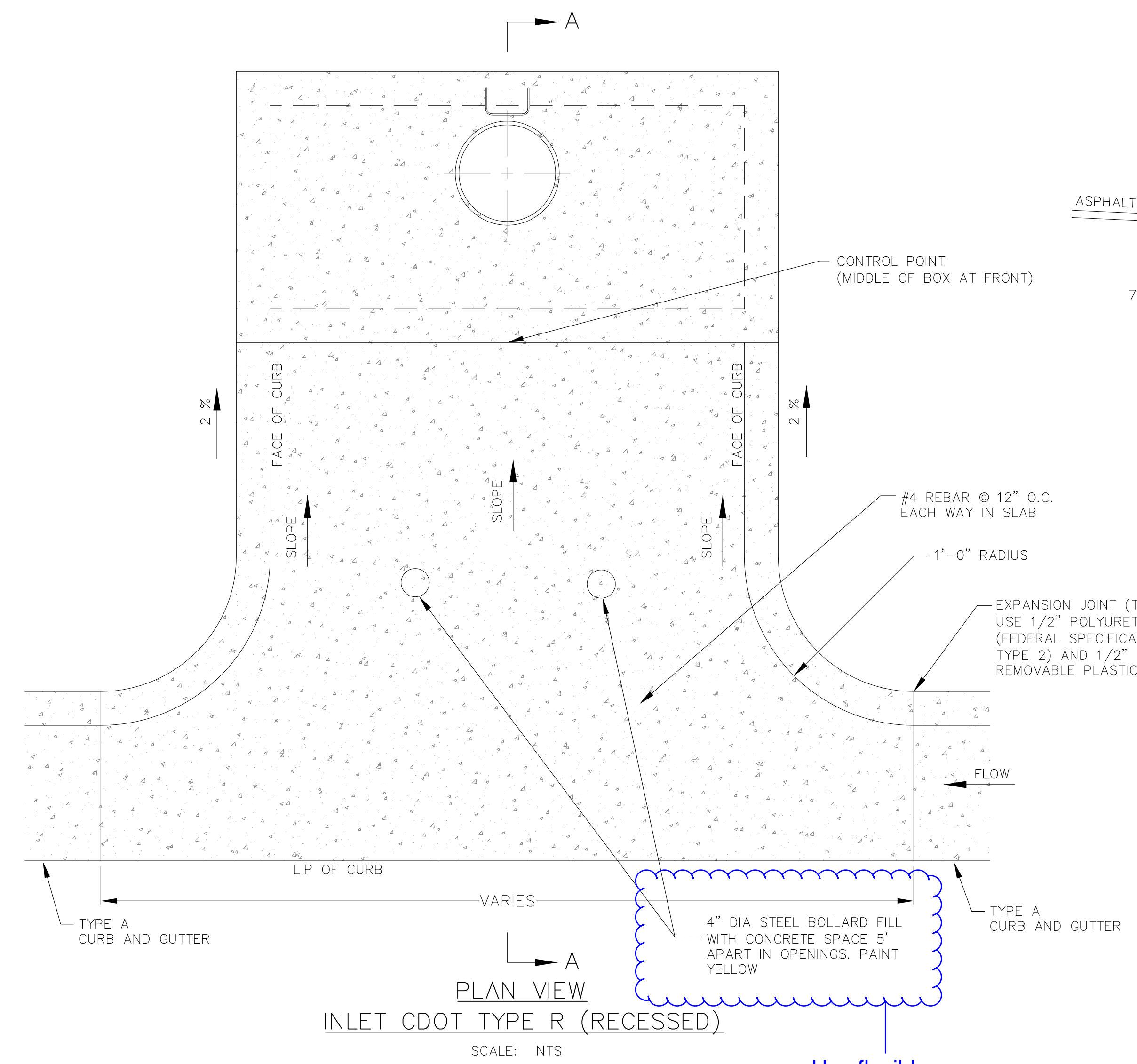
Pedestrian Intersection Ramp
Standard Drawing
REVISION DATE: 1/18/11
FILE NAME: SD_2-41



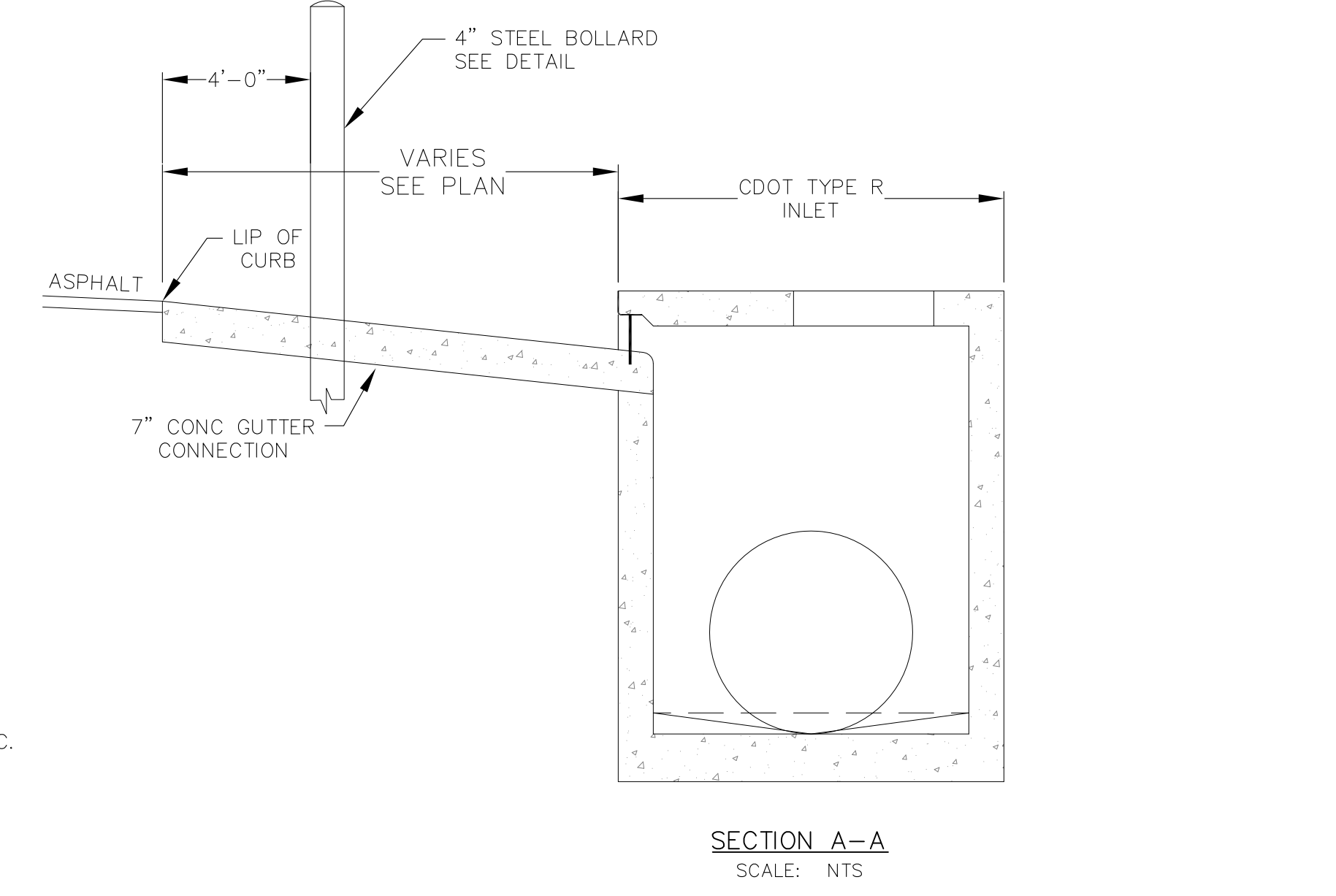
Computer File Information	Sheet Revisors	Colorado Department of Transportation	STANDARD PLAN NO.
Drawn: [Name], [Date]	Checked: [Name], [Date]	4200 East Arkansas Avenue Denver, CO 80231 Phone: (303) 757-8800 Fax: (303) 757-9800	M-608-1
Project Development Branch	DD/LTA	Issued By: Project Development Branch on July 4, 2013	Sheet No. 6 of 6



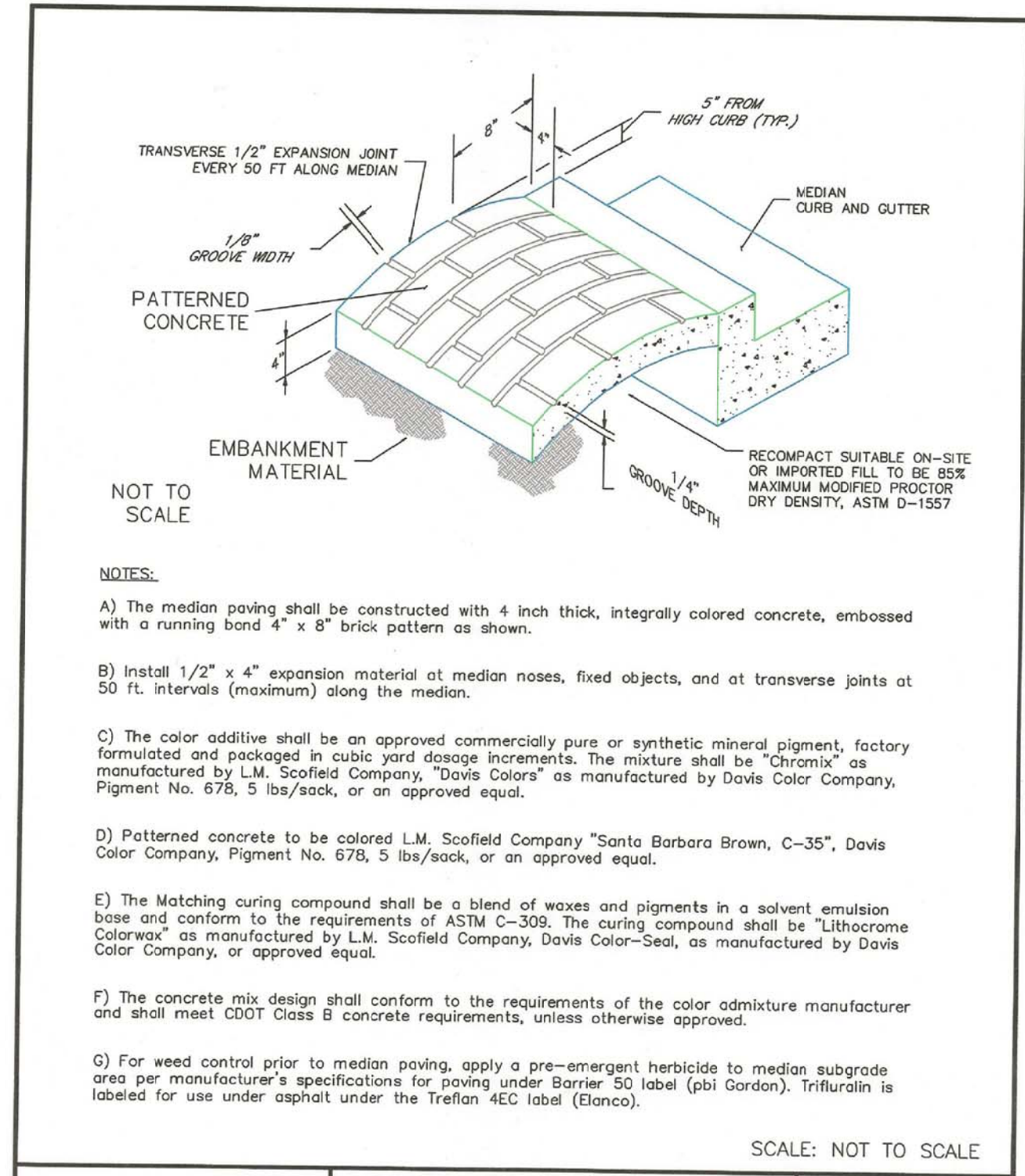
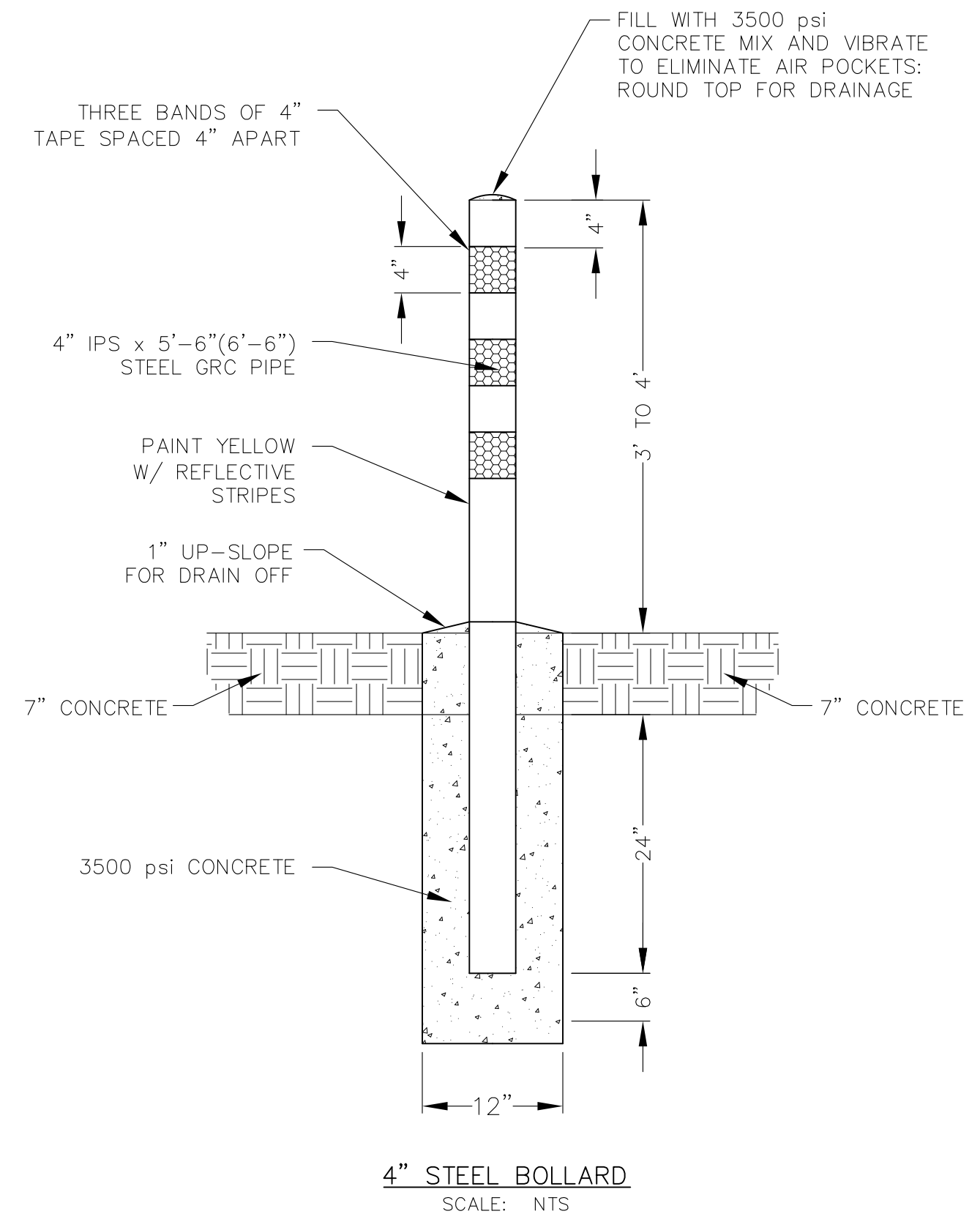
DATE APPROVED: 8/11/11	PROJECT: Parallel Pedestrian Ramp Detail	FILE NAME: SD_2-50
DESIGNED BY: André P. Brackin	REVISION DATE: 12/8/15	FILE NAME: SD_2-50



DATE APPROVED: 1/12/16	PROJECT: Plowable Median Nose Detail	FILE NAME: SD_2-22
DESIGNED BY: André P. Brackin	REVISION DATE: 1/12/16	FILE NAME: SD_2-22



- NOTES**
- REINFORCING NOT SHOWN FOR CLARITY. REFERENCE CDOT M604-12 DETAILS.
 - SEE STORM DRAIN PROFILES FOR PIPE INVERT ELEVATIONS.
 - CONSTRUCT IN ACCORDANCE WITH EL PASO COUNTY STANDARDS EXCEPT WHERE MODIFIED HERE.



DATE APPROVED: 7/9/09	PROJECT: Patterned Concrete Median Paving	FILE NAME: SD_2-21
DESIGNED BY: André P. Brackin	REVISION DATE: 1/18/11	FILE NAME: SD_2-21

CORE ENGINEERING GROUP
 1500 15TH AVENUE, SUITE 300
 BOULDER, CO 80506
 PH: 719.570.1100
 CONTACT: RICHARD L. SCHINDLER, P.E.
 EMAIL: Rich@cgei.com

PROJECT: FONTAINE BLVD IN LORSON, LLC
 212 N. WAHSATCH AVE, SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 FONTAINE BLVD - OLD GLORY DR
 COLORADO SPRINGS, COLORADO
 CONTACT: JEFF MARK

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION STREET/STORM DETAILS

DATE: APRIL 2, 2018
 PROJECT NO. 100.041
 SHEET NUMBER C10.2
 TOTAL SHEETS: 34

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 Pikes 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 308R) 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 slabs:
 See specifications for any additional durability requirements.
 Mix "A" For drilled piers:
 3000 psi minimum compressive strength at age of 28 days.
 Type I/II Cement, minimum of 410 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% ± Entrained air.
 4" (8" with superplasticizer) maximum slump.

C. Reinforcing is to be new billet steel ASTM A615, 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 (WUF) 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 on drawings. 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 #5 and larger 2" Clear
 b) Bars #5 and smaller 1 1/2" Clear
 3) Slabs At center (uno.)
 4) Concrete not exposed to earth or weather... 3/4"
 5) Beams, Columns, Ties, Stirrups or spirals around primary reinforcement, or primary reinforcement with no ties, stirrups 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 12 hours of cumulative curing time at a temperature of 50°F or more. Concrete must be adequately covered during cold periods to maintain the surface temperature. Due to varying weather conditions, alternative curing processes, and the use of Type III cement, Rocky Mountain Group suggests forms remain in place a minimum of 3 days to assure 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 standard: ACI 301 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 C112.
 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 C138 or ASTM C231.
 4) Slab tolerance: Maintain surface flatness with maximum variation of 1/8 inch in 20 feet.

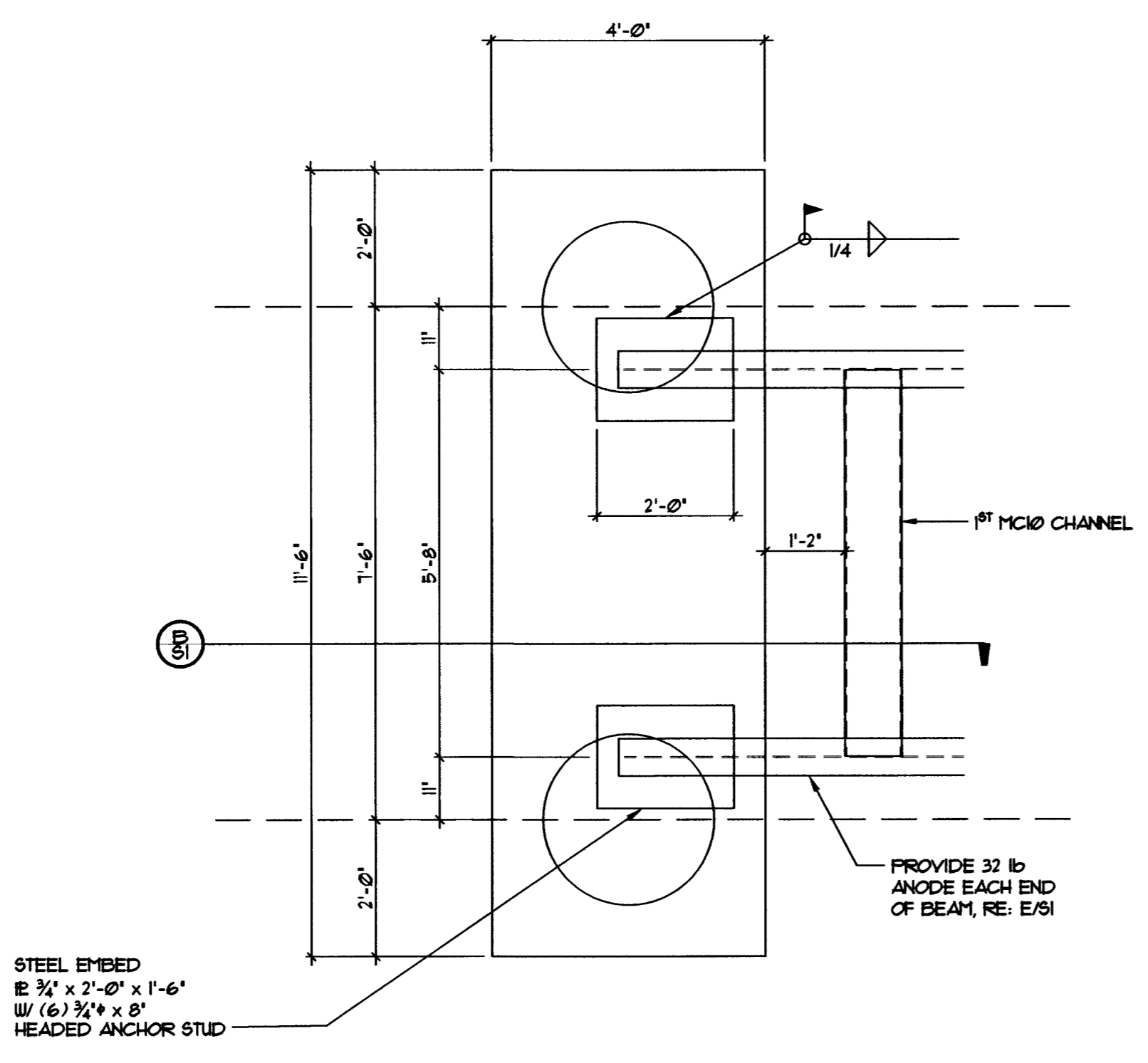
3. DRILLED PIER FOUNDATIONS:
 A. The foundation design has been completed in accordance with pertinent standards, recommended design soil parameters, accepted engineering design procedures, and is based on the best information available at the time of completion. The design is intended to minimize differential 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. B3665 prepared by RMG Engineers dated 11/11. 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 11" 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 the 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 top bars at corner (42) bar diameters
 Other bars staggered (36) bar diameters

4. STRUCTURAL STEEL:
 A. Structural steel, including cast in angles, plates or other sections shall be detailed and erected in accordance with the American Institute of Steel Construction (AISC) Specifications and Code of Standard Practice, latest edition.
 B. All wide flange and channel structural steel shall conform to ASTM A992. All other structural shapes and miscellaneous steel shall conform to ASTM A36 unless otherwise noted. Tube steel columns shall conform to ASTM A500, Grade-B. Pipe columns shall conform to ASTM A53.
 C. Shop connections shall be welded with E70xx electrodes and ground smooth where exposed. Field connections shall be made with bolts conforming to ASTM A325N unless otherwise noted. Field welds shall be made with E70xx electrodes. All welding shall be in accordance with AWS Structural Welding Code, latest edition and performed by certified, licensed welder.
 D. Headed stud anchors shall conform to AWS D11 and shall be automatically end welded.

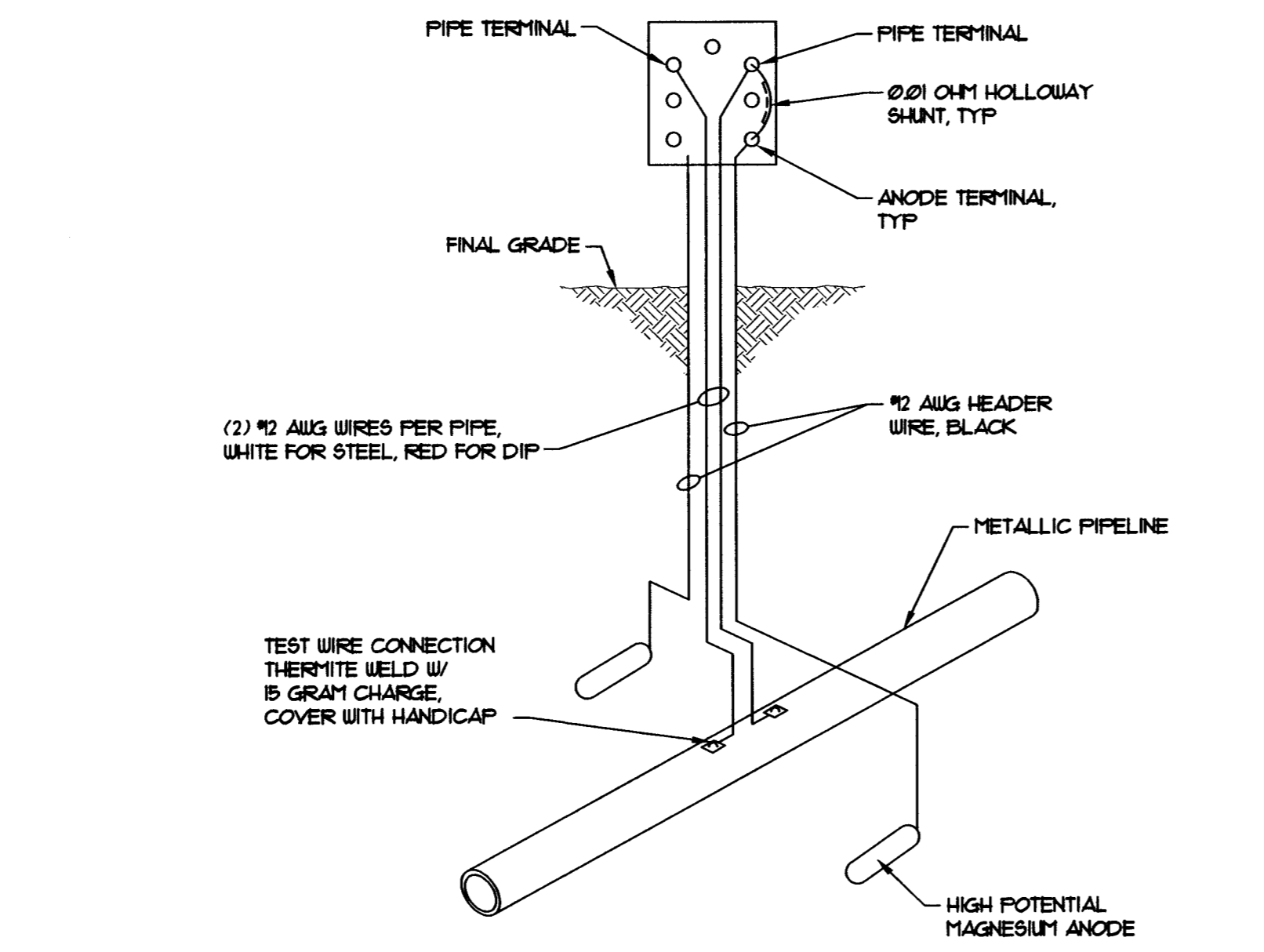
5. FIELD OBSERVATIONS:
 A. The Contractor shall inform the Engineer of Record at least 24 hours prior to casting any concrete so as to allow the Engineer of Record the opportunity to review the placement of reinforcing and/or embedded items. Contact Rocky Mountain Group: (719) 548-0600.



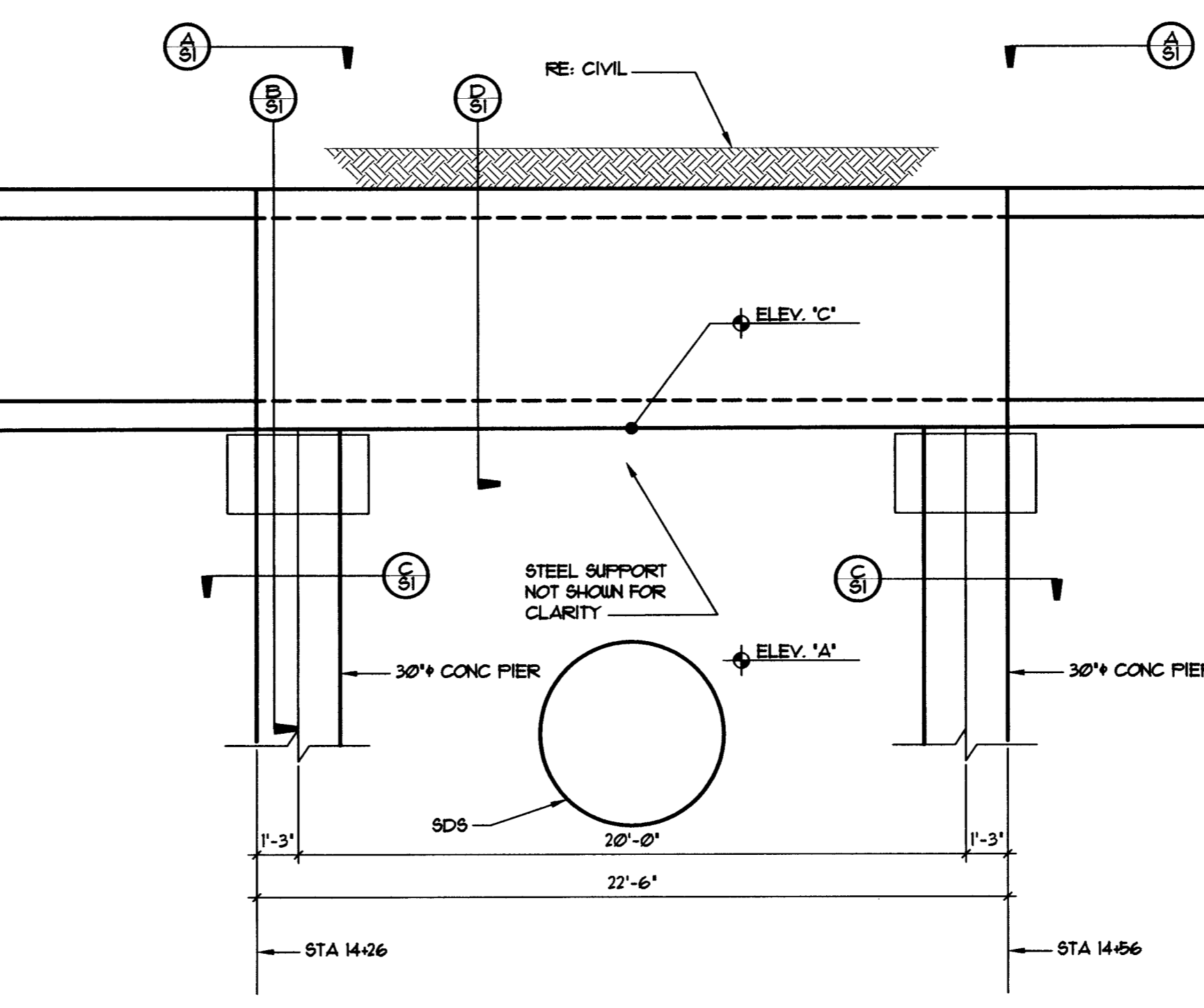
A PIER CAP PLAN
 S1 SCALE: 1/2" = 1'-0"

NOTE: ALL EXPOSED STEEL BE COATED IN ASPHALT COATING

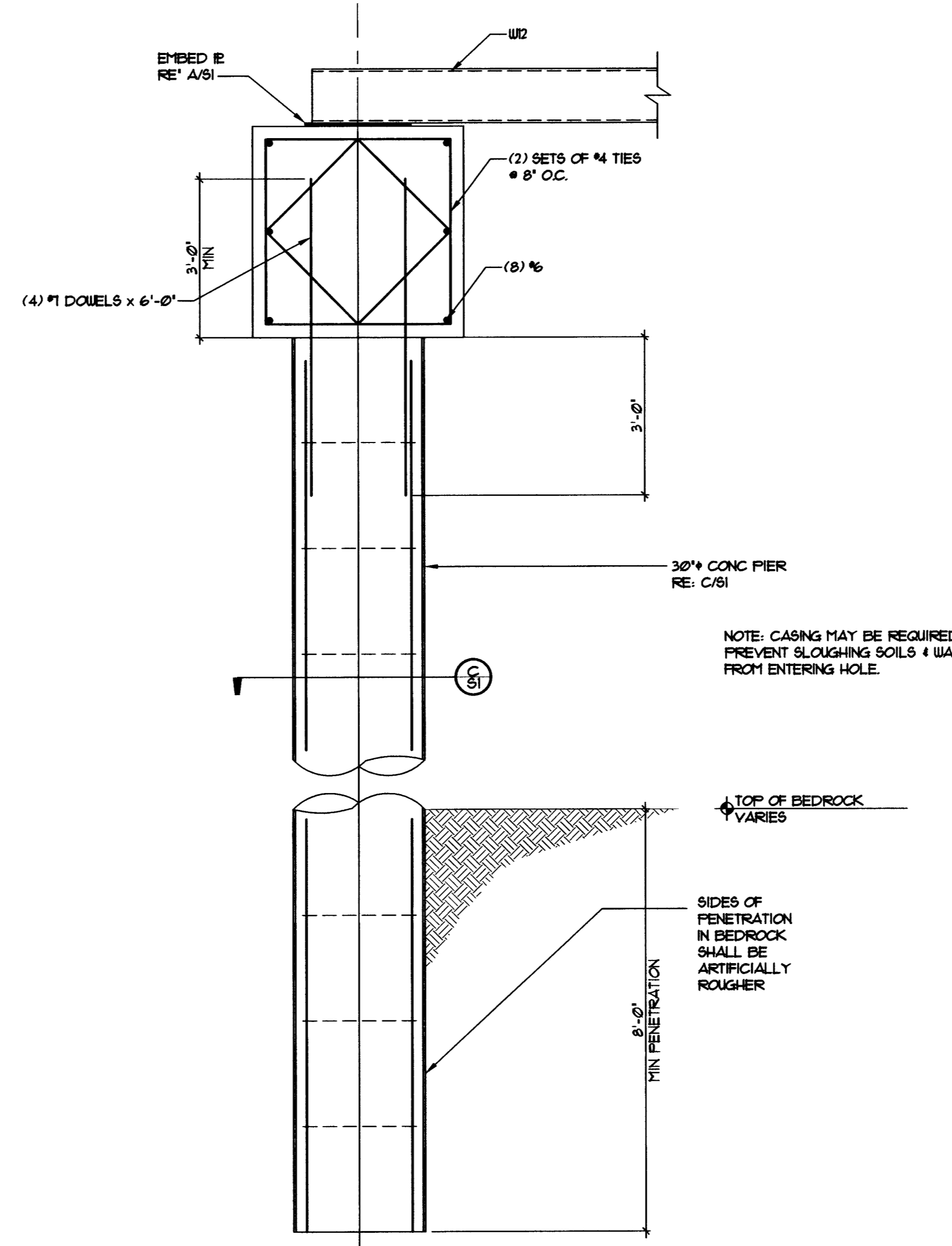
NOTES:
 1. THE CONTRACTOR SHALL COORDINATE WITH COLORADO SPRINGS UTILITIES TO WIRE TERMINAL BOARD.
 2. THERMITE WELD WIRES TO PIPE WITH A 15 GRAM CHARGE.
 3. THERMITE WELD CONNECTIONS AND ANY BARE METAL SHALL BE COVERED WITH FRIPERLESS HANDICAP OR CORROSION TAPE.
 4. CONTRACTOR TO VERIFY CONTINUITY OF ALL WIRES TO TERMINAL BOARD PRIOR TO FINAL ACCEPTANCE.



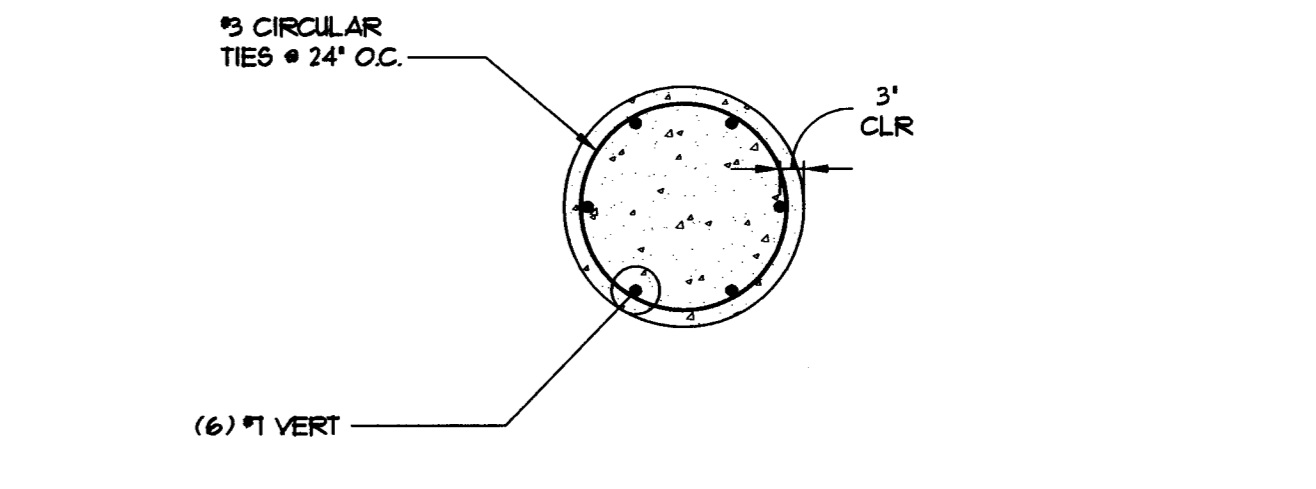
E TERMINAL BOARD WIRING DIAGRAM AT CATHODIC PROTECTION TEST STATION
 S1 SCALE: N.T.S.



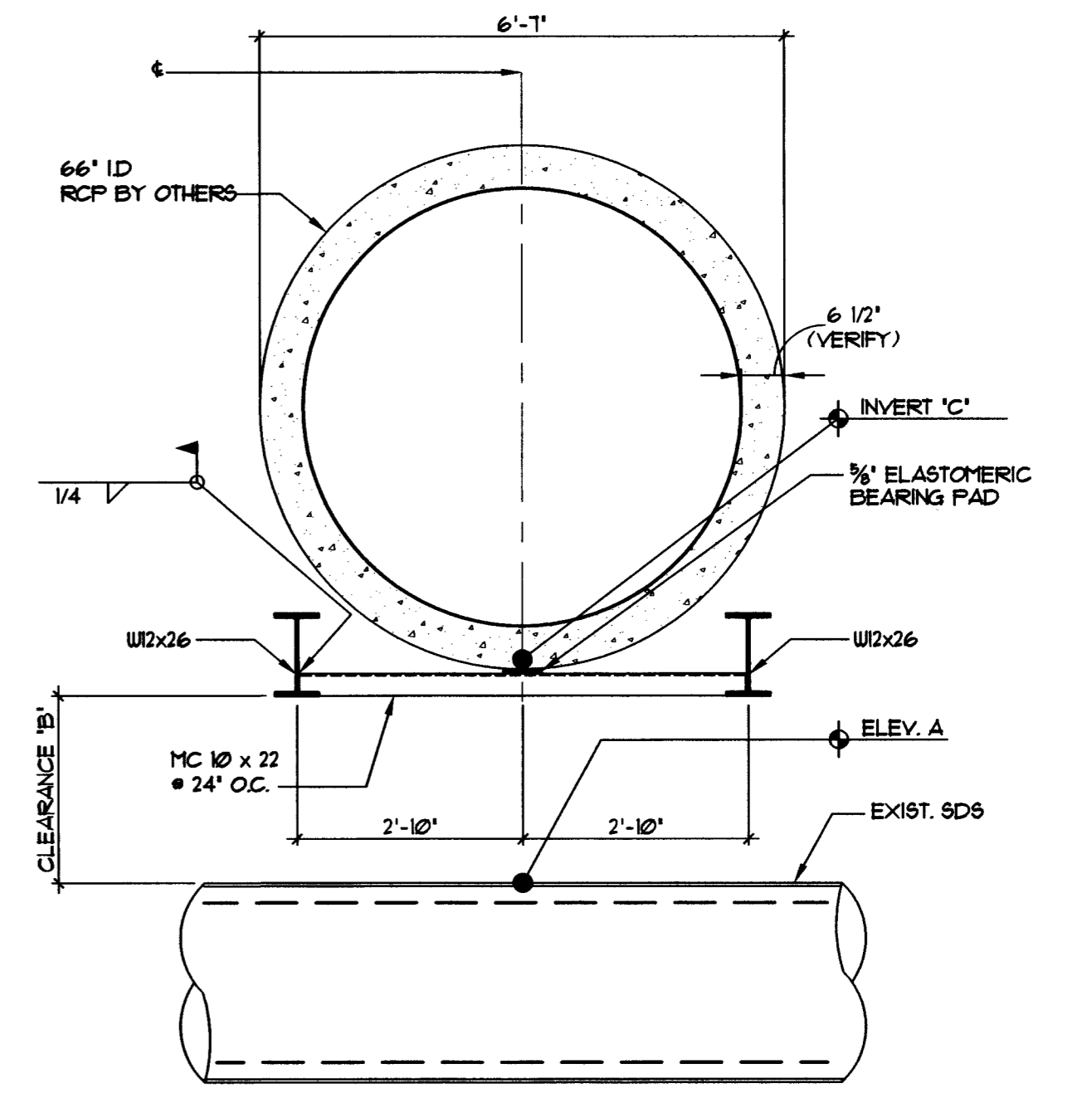
1 SDS CROSSING ELEVATION
 S1 SCALE: 1/4" = 1'-0"



B DRILLED PIER DETAIL
 S1 SCALE: 1/2" = 1'-0"



C 30" DRILLED PIER DETAIL
 S1 SCALE: 1/2" = 1'-0"



D RCP SUPPORT OVER SDS
 S1 SCALE: 1/2" = 1'-0"

DIMENSIONS		
CROSSING	NO. IS	NO.11
A	5106.95	5104.10
B	2.82	5.43
C	5102.05	5103.90

ROCKY MOUNTAIN GROUP
 ARCHITECTS
RMG
 ENGINEERS
 2910 AUSTIN BLUFFS PARKWAY, SUITE 100, COLORADO SPRINGS, CO 80918
 SOUTHERN COLORADO
 ARCHITECTURAL
 Structural
 Engineers
 5200
 BOULDER, COLORADO, DENVER METRO, NORTHERN COLORADO

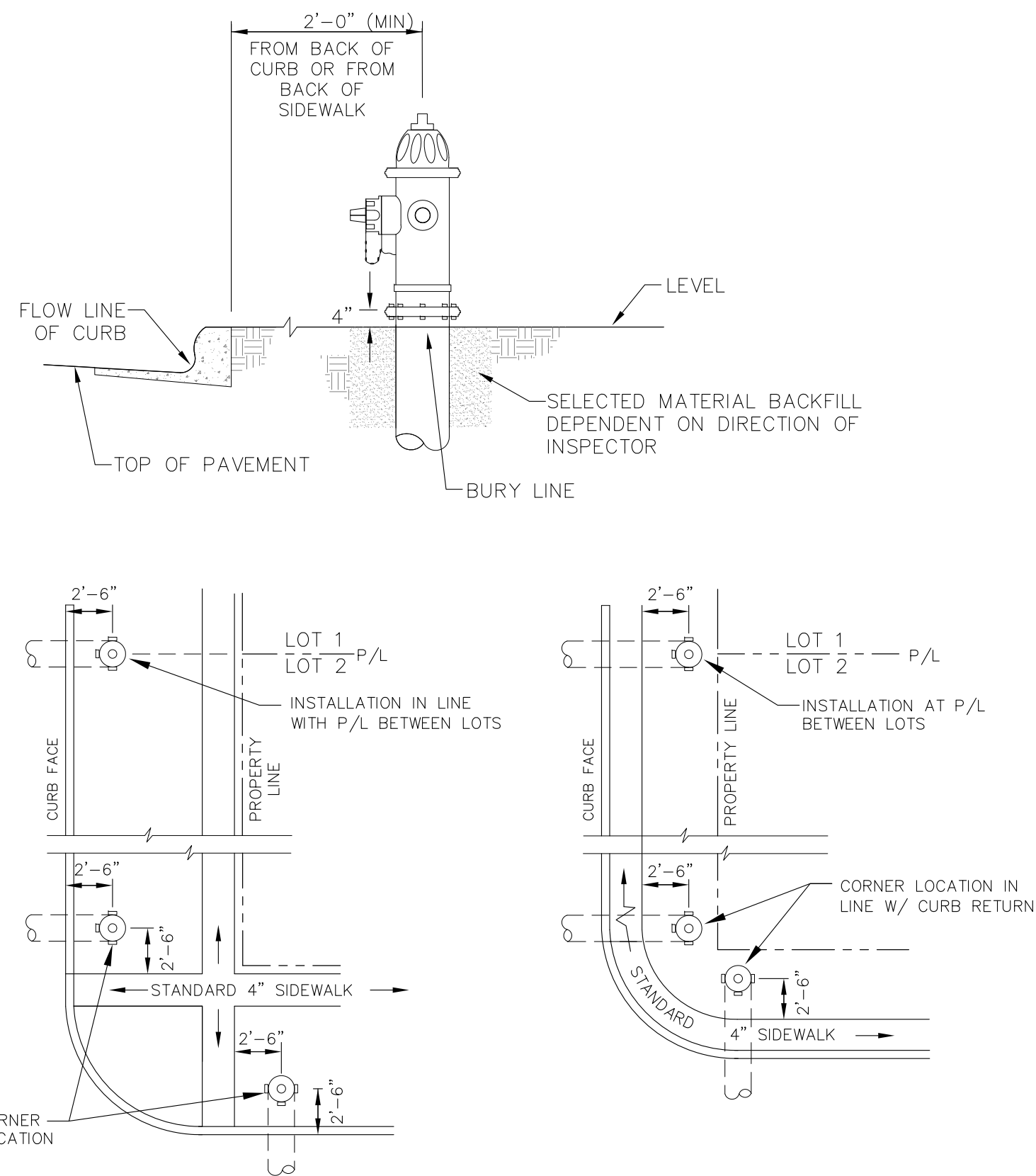
COLORADO REGISTERED
 PROFESSIONAL ENGINEER
 No. 31528
 FOR STRUCTURAL ONLY

COLORADO LICENSED
 PROFESSIONAL WELDER
 No. 31528
 5-22-18

FOUNTAIN BLVD STREET/STORM CONSTRUCTION
 FOUNTAINE BLVD - LORSON BLVD
 EL PASO COUNTY, COLORADO
 LORSON RANCH METROPOLITAN DISTRICT NO. 1
 PROJECT STATUS
 FOR CONSTRUCTION

SHEET NAME
DRILLED PIER DETAILS AT SDS CROSSINGS NO. 17 & NO. 19
 ARCHENG: MW
 DRAWN: CM
 CHECKED: MW
 DATE
 3-22-18
 # REVISION DATE
 JOB NO.
 159665
 SHEET NO.
S1

No. 17 & No. 19, Fountain Blvd, El Paso County, CO, 80918, 3/22/18
 17-FountainBlvd-Street/Storm-Construction-Details-At-Sds-Crossings-El-Paso-County-Colorado-159666-Structural-Details-From-RMG-159666



DETACHED SIDEWALK LOCATION
NO SCALE

ATTACHED SIDEWALK LOCATION
NO SCALE

NOTE

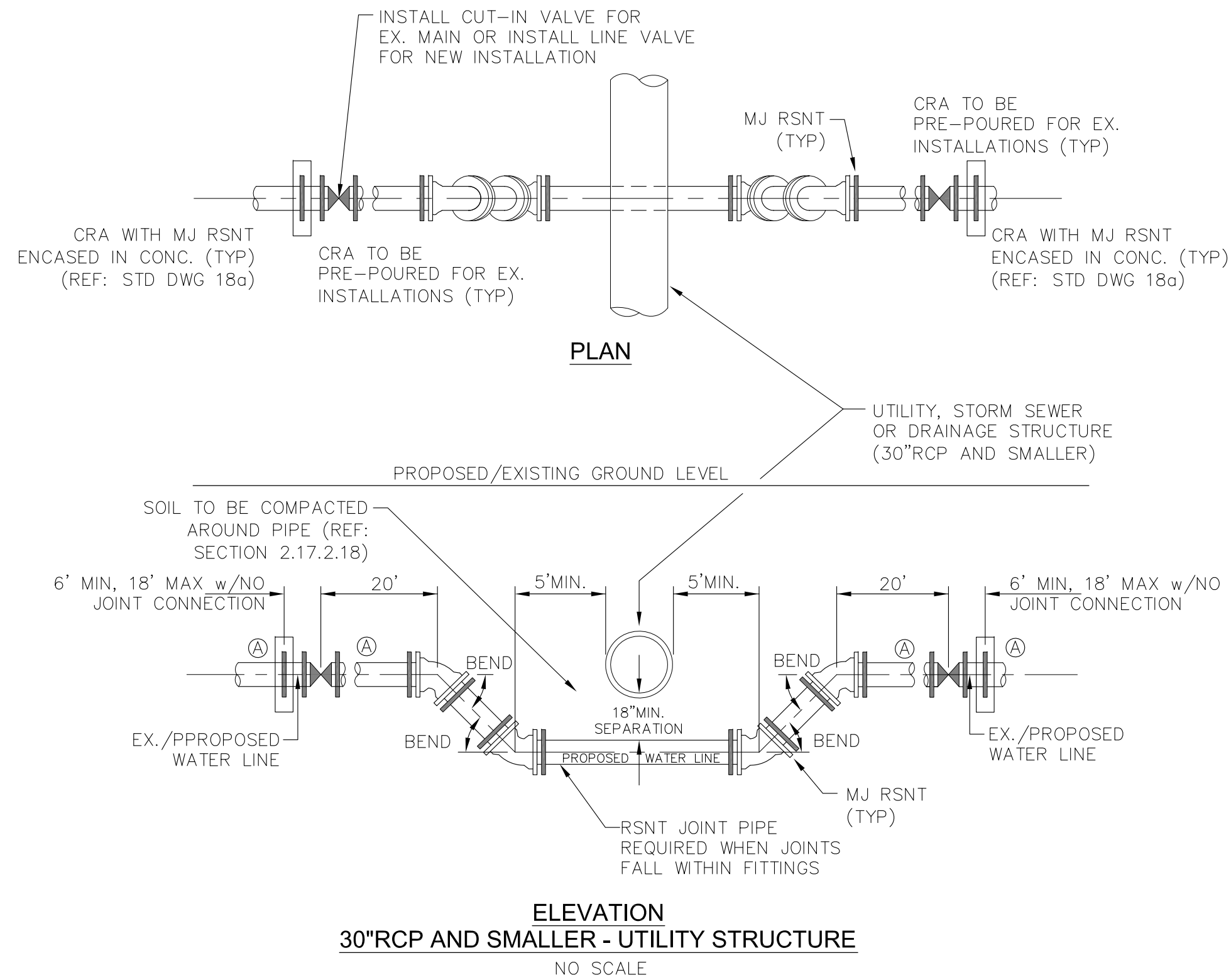
ALL HYDRANTS SHALL BE MEULLER SUPER CENTURION 200.

NOTES

1. HYDRANT NOZZLE SHALL BE POSITIONED AT RIGHT ANGLES TO CURB. IF NO CURB OR SIDEWALK EXIST, NOZZLE SHALL BE PLACED AT RIGHT ANGLE TO STREET OR ALLEY.
2. HYDRANTS WILL BE PLACED A MINIMUM OF 5.0 FEET FROM ANY UTILITY OR DRAINAGE STRUCTURE (TO BE CO-ORDINATED WITH JOINT TRENCH INSTALLATION)
3. ANY HYDRANT BEING INSTALLED WITH CONDITIONS OTHER THAN THOSE MENTIONED AND/OR DETAILED BELOW WILL REQUIRE SIGNED APPROVAL FROM SECURITY FIRE PROTECTION DISTRICT.

FIRE HYDRANT LOCATIONS

NO SCALE

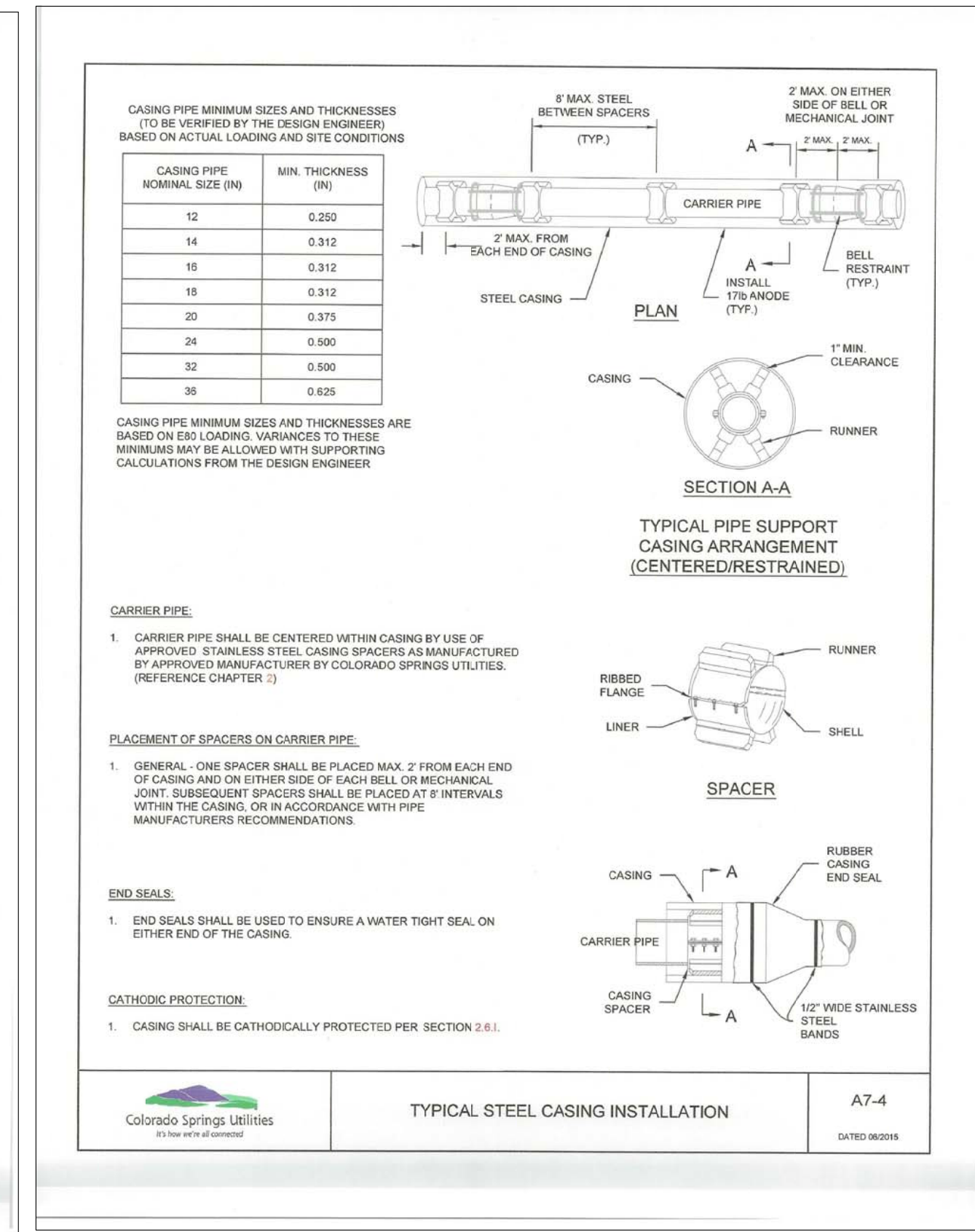
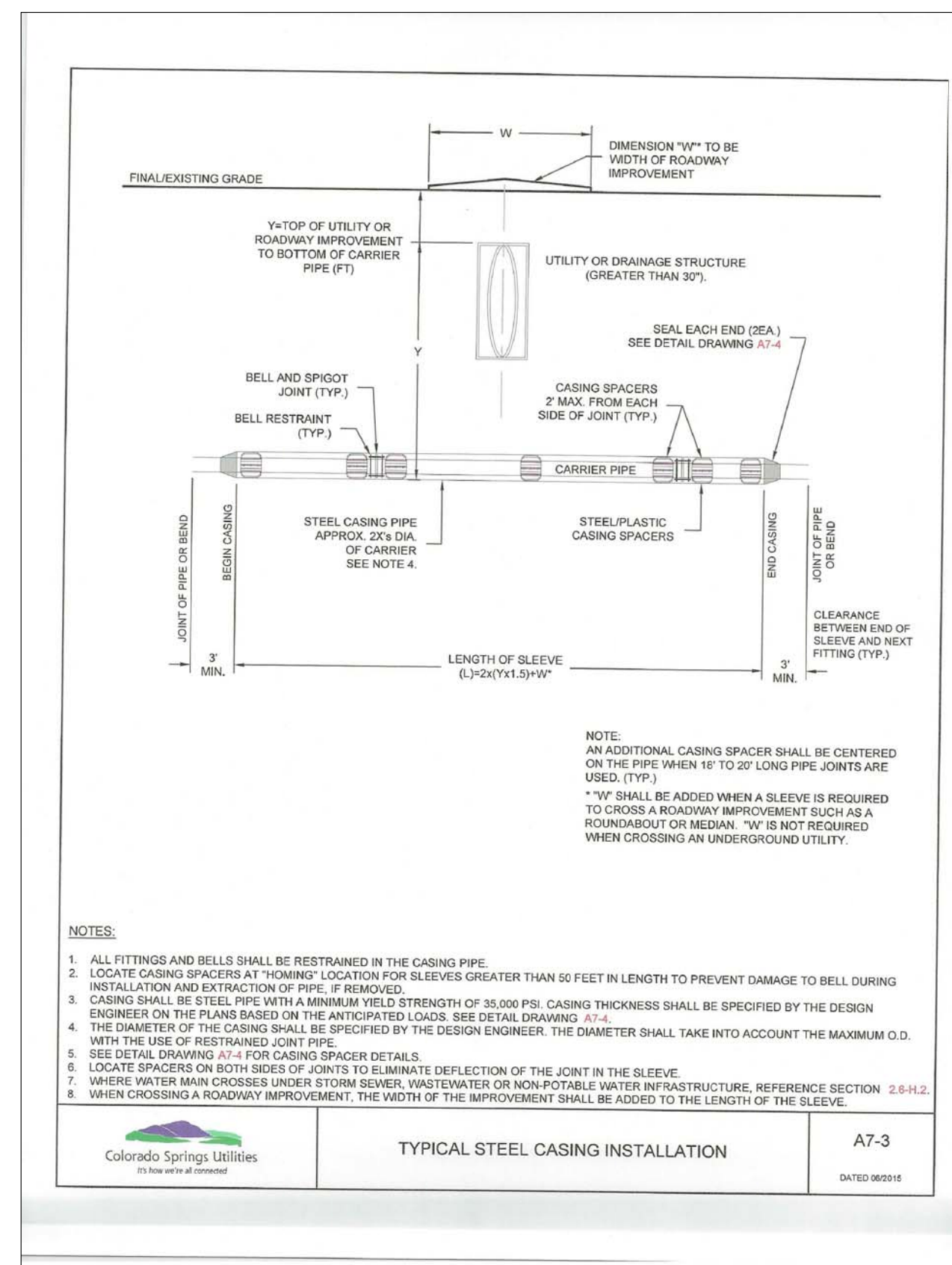


ELEVATION
30"RCP AND SMALLER - UTILITY STRUCTURE
NO SCALE

GENERAL NOTES

1. D.I.P. PIPE REQUIRED IN LOWERINGS (AT THE DISCRETION OF THE WRD/INSPECTOR PVC PIPE MAYBE APPROVED).
2. ⓐ LOWERINGS TO BE CATHODIC PROTECTED UNDER THE DIRECTION OF THE WRD INSPECTOR. (17 lb).
3. ALL FITTINGS SHALL HAVE MJ RSNTS. SEE DRAWINGS NO. 27, 28 & SECTION 5.14 OF THE WRD SPECIFICATIONS.
4. EXAMPLE CAN VARY DUE TO SITE CONDITIONS AND INSPECTOR'S DIRECTION'S.

LOWERING DETAIL WITH MJ RSNT FITTINGS AND RSNT JOINT PIPE (w/APPROVAL OF W.R.D.)
(PER CSU STANDARD # 20a)
NO SCALE



CORE ENGINEERING GROUP
1500 W. 15TH AVENUE, SUITE 300
DENVER, CO 80202
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cge1.com

DATE: _____
DESCRIPTION: _____
NO: _____
PROJECT: **FONTAINE BLVD IN LORSON, LLC**
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
FONTAINE BLVD - OLD GLORY DR
COLORADO SPRINGS, COLORADO
CONTACT: JEFF MARK

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

FONTAINE BLVD STREET/STORM AND WATER/SEWER CONSTRUCTION WATERMAIN DETAILS

DATE: APRIL 2, 2018
PROJECT NO. 100.041
SHEET NUMBER C12.1
TOTAL SHEETS: 34

Markup Summary

dsdrice (34)



Temporary "No Outlet" sign?

Subject: Text Box

Page Label: 6

Lock: Unlocked

Status:

Checkmark: Unchecked

Author: dsdrice

Date: 4/16/2018 9:35:06 AM

Color: ■

Temporary "No Outlet" sign?

Add pedestrian crossing signage? (check MUTCD)

Subject: Text Box

Page Label: 7

Lock: Unlocked

Status:

Checkmark: Unchecked

Author: dsdrice

Date: 4/18/2018 3:16:56 PM

Color: ■

Add pedestrian crossing signage? (check MUTCD)



Subject: Cloud+

Page Label: 12

Lock: Unlocked

Status:

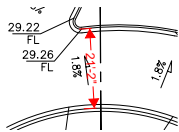
Checkmark: Unchecked

Author: dsdrice

Date: 4/16/2018 9:38:52 AM

Color: ■

The pipe is coming out of the corner of the box.
Provide detail/ensure constructability.



Subject: Length Measurement

Page Label: 28

Lock: Unlocked

Status:

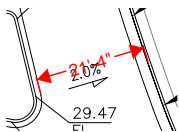
Checkmark: Unchecked

Author: dsdrice

Date: 4/16/2018 10:16:21 AM

Color: ■

21'-2"



Subject: Length Measurement

Page Label: 28

Lock: Unlocked

Status:

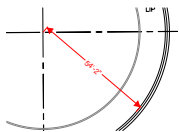
Checkmark: Unchecked

Author: dsdrice

Date: 4/16/2018 10:14:10 AM

Color: ■

21'-4"



Subject: Length Measurement

Page Label: 28

Lock: Unlocked

Status:

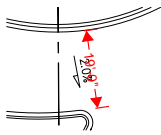
Checkmark: Unchecked

Author: dsdrice

Date: 4/16/2018 9:40:51 AM

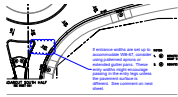
Color: ■

54'-2"



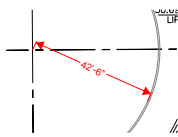
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 9:40:24 AM
Color: ■

19'-0"



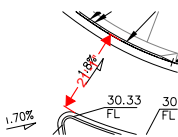
Subject: Cloud+
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/18/2018 10:46:56 AM
Color: ■

If entrance widths are set up to accommodate WB-67, consider using patterned aprons or extended gutter pans. These entry widths might encourage passing in the entry legs unless the pavement surface is different. See comment on next sheet.



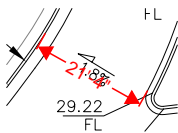
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 9:40:40 AM
Color: ■

42'-6"



Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 10:15:32 AM
Color: ■

21'-1"



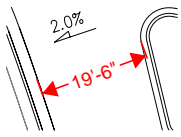
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 10:14:27 AM
Color: ■

21'-4"

(Dimensions are only for reference, not comments.)

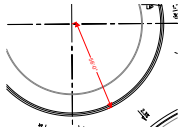
Subject: Text Box
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 9:40:24 AM
Color: ■

(Dimensions are only for reference, not comments.)



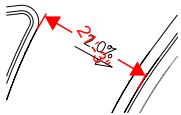
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 9:42:20 AM
Color: ■

19'-6"



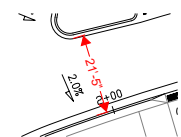
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 9:40:24 AM
Color: ■

56'-0"



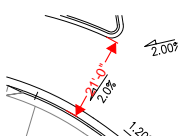
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 9:42:44 AM
Color: ■

21'-3"



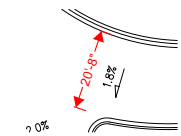
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 10:15:16 AM
Color: ■

21'-5"



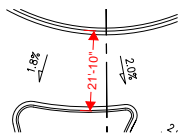
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 10:13:09 AM
Color: ■

21'-0"

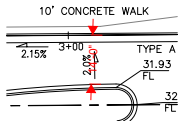


Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 9:40:24 AM
Color: ■

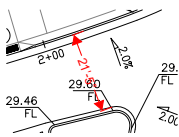
20'-8"



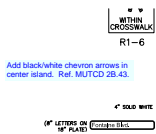
Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 10:16:43 AM
Color: ■



Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 10:15:46 AM
Color: ■

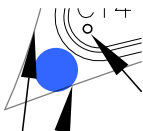


Subject: Length Measurement
Page Label: 28
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 10:14:01 AM
Color: ■

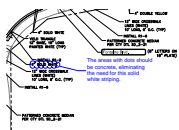


Subject: Text Box
Page Label: 29
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/18/2018 12:51:09 PM
Color: ■

Add black/white chevron arrows in center island. Ref. MUTCD 2B.43.

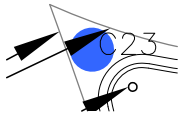


Subject: Highlight
Page Label: 29
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 2:56:43 PM
Color: ■

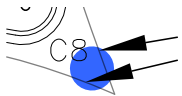


Subject: Cloud+
Page Label: 29
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 2:59:05 PM
Color: ■

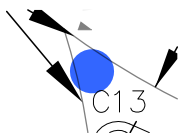
The areas with dots should be concrete, eliminating the need for this solid white striping.



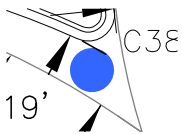
Subject: Highlight
 Page Label: 29
 Lock: Unlocked
 Status:
 Checkmark: Unchecked
 Author: dsdrice
 Date: 4/16/2018 2:56:35 PM
 Color: ■



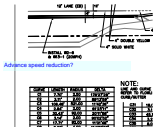
Subject: Highlight
 Page Label: 29
 Lock: Unlocked
 Status:
 Checkmark: Unchecked
 Author: dsdrice
 Date: 4/16/2018 2:56:49 PM
 Color: ■



Subject: Highlight
 Page Label: 29
 Lock: Unlocked
 Status:
 Checkmark: Unchecked
 Author: dsdrice
 Date: 4/16/2018 2:56:45 PM
 Color: ■

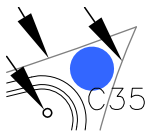


Subject: Highlight
 Page Label: 29
 Lock: Unlocked
 Status:
 Checkmark: Unchecked
 Author: dsdrice
 Date: 4/16/2018 2:56:33 PM
 Color: ■

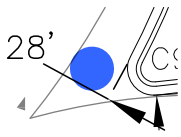


Subject: Text Box
 Page Label: 29
 Lock: Unlocked
 Status:
 Checkmark: Unchecked
 Author: dsdrice
 Date: 4/16/2018 2:55:59 PM
 Color: ■

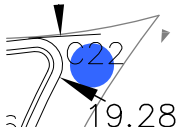
Advance speed reduction?



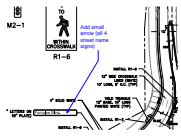
Subject: Highlight
 Page Label: 29
 Lock: Unlocked
 Status:
 Checkmark: Unchecked
 Author: dsdrice
 Date: 4/16/2018 2:56:31 PM
 Color: ■



Subject: Highlight
Page Label: 29
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 2:56:52 PM
Color: ■

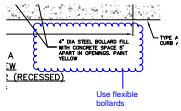


Subject: Highlight
Page Label: 29
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/16/2018 2:56:37 PM
Color: ■



Subject: Callout
Page Label: 29
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/18/2018 2:53:49 PM
Color: ■

Add small arrow (all 4 street name signs)



Subject: Cloud+
Page Label: 31
Lock: Unlocked
Status:
Checkmark: Unchecked
Author: dsdrice
Date: 4/17/2018 10:28:51 AM
Color: ■

Use flexible bollards