

CONSTRUCTION NOTES

- ALL WORK SHALL COMPLY WITH THE CODES AND POLICIES FOR EL PASO COUNTY.
2. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THIS GRADING PLAN WAS OBTAINED FROM AERIAL CONTOURS AND PREVIOUS CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXAMINE THE SITE AND BE FAMILIAR WITH THE EXISTING CONDITIONS.
3. 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
4. THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
5. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECT TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
6. PRIOR TO PAVING OPERATIONS, THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED WITH A LOADED 988 FRONT-END LOADER OR SIMILAR HEAVY RUBBER TIRED VEHICLE (GVW OF 50,000 POUNDS WITH 18 KIP PER AXLE AT TIRE PRESSURES OF 90 PSI) TO DETECT ANY SOFT OR LOOSE AREAS. IN AREAS WHERE SOFT OR LOOSE SOILS, PUMPING OR EXCESSIVE MOVEMENT IS OBSERVED, THE EXPOSED MATERIALS SHALL BE OVER-EXCAVATED TO A MINIMUM DEPTH OF TWO FEET BELOW PROPOSED FINAL GRADE OR TO A DEPTH AT WHICH SOILS ARE STABLE. AFTER THIS HAS BEEN COMPLETED, THE EXPOSED MATERIALS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES AND MOISTURE CONDITIONED. THE SUBGRADE SHALL THEN BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) AT 0 TO +4.0% OF OPTIMUM MOISTURE CONTENT FOR A-6 AND A-7-6 SOILS ENCOUNTERED. OTHER SUBGRADE TYPES SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557) AT PLUS OR MINUS 2.0% OF OPTIMUM MOISTURE CONTENT. AREAS WHERE STABLE NATURAL SOILS ARE ENCOUNTERED AT PROPOSED SUBGRADE ELEVATION SHALL ALSO BE SCARIFIED (18 INCHES FOR A-7-6 SOILS BELOW FULL-DEPTH ASPHALT CONCRETE) AND COMPACTED AS OUTLINED ABOVE PRIOR TO PAVING OPERATIONS. SUBGRADE FILL SHALL BE PLACED IN SIX-INCH LIFTS AND UNIFORMLY COMPACTED, MEETING THE REQUIREMENTS AS PREVIOUSLY DESCRIBED.
7. SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED, DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
8. FILL SHALL BE PLACED IN 8-INCH MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED PRIOR TO SUCCESSIVE LIFTS.
9. 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.
10. FINISHED CONTOURS/SPOT ELEVATIONS SHOWN HEREON REPRESENT FINISHED GRADES. ALL PAVEMENT SUBGRADES ARE BASED ON THE COMPOSITE ASPHALT PAVEMENT RECOMMENDATIONS MADE IN THE "GEOTECHNICAL STUDY" FOR THIS PROJECT.

EL PASO COUNTY STANDARD CONSTRUCTION NOTES:

3. 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.
2. 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).
3. 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:
 - a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - b. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - d. CDOT M & S STANDARDS
4. 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.
5. 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.
6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) – INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
7. 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.
8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND DSD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
10. 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.
11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
12. 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.
13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY PUBLIC WORK DEPARTMENT AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY PWD, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
15. 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.

NOTES

DATE:
JUNE 18, 2019

PROJECT NO.
100.046

SHEET NUMBER
C0.2

TOTAL SHEETS: 21

CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719-659-7800
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com

PROJECT:	CARRIAGE MEADOWS SOUTH AT LORSON RANCH FILING NO. 2 FONTAINE BLVD-CARRIAGE MEADOWS DR COLORADO SPRINGS, COLORADO	PREPARED FOR:	LORSON, LLC 212 N. WAHSATCH AVE. SUITE 301 COLORADO SPRING, CO 80903 (719) 635-3200 CONTACT: JEFF MARK
----------	------------------------------------------------------------------------------------------------------------------------------	---------------	--------------------------------------------------------------------------------------------------------------------

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

CONSTRUCTION NOTES

1. ALL WORK SHALL COMPLY WITH THE CODES AND POLICIES FOR EL PASO COUNTY.
2. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THIS GRADING PLAN WAS OBTAINED FROM DREXEL, BARRELL & CO., JULY, 2005. SUPPLEMENTAL SURVEY DATA WAS OBTAINED FOR MARKSHEFFEL ROAD FROM M&S CIVIL GROUP IN NOVEMBER, 2016. THE CONTRACTOR SHALL BE RESPONSIBLE TO EXAMINE THE SITE AND BE FAMILIAR WITH THE EXISTING CONDITIONS.
3. 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
4. THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
5. 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.
6. PRIOR TO PAVING OPERATIONS, THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED WITH A LOADED 988 FRONT-END LOADER OR SIMILAR HEAVY RUBBER Tired VEHICLE (GVW OF 50,000 POUNDS WITH 18 KIP PER AXLE AT TIRE PRESSURES OF 90 PSI) TO DETECT ANY SOFT OR LOOSE AREAS. IN AREAS WHERE SOFT OR LOOSE SOILS, PUMPING OR EXCESSIVE MOVEMENT IS OBSERVED, THE EXPOSED MATERIALS SHALL BE OVER-EXCAVATED TO A MINIMUM DEPTH OF TWO FEET BELOW PROPOSED FINAL GRADE OR TO A DEPTH AT WHICH SOILS ARE STABLE. AFTER THIS HAS BEEN COMPLETED, THE EXPOSED MATERIALS SHALL BE SCARIFIED TO A DEPTH OF 12 INCHES AND MOISTURE CONDITIONED. THE SUBGRADE SHALL THEN BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698) AT 0 TO +4.0% OF OPTIMUM MOISTURE CONTENT FOR A-6 AND A-7-6 SOILS ENCOUNTERED. OTHER SUBGRADE TYPES SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557) AT PLUS OR MINUS 2.0% OF OPTIMUM MOISTURE CONTENT. AREAS WHERE STABLE NATURAL SOILS ARE ENCOUNTERED AT PROPOSED SUBGRADE ELEVATION SHALL ALSO BE SCARIFIED (18 INCHES FOR A-7-6 SOILS BELOW FULL-DEPTH ASPHALT CONCRETE) AND COMPACTED AS OUTLINED ABOVE PRIOR TO PAVING OPERATIONS. SUBGRADE FILL SHALL BE PLACED IN SIX-INCH LIFTS AND UNIFORMLY COMPACTED, MEETING THE REQUIREMENTS AS PREVIOUSLY DESCRIBED.
7. SUBGRADE MATERIALS DEEMED UNSUITABLE BY THE ENGINEER SHALL BE EXCAVATED, DISPOSED OF AND REPLACED WITH APPROVED MATERIALS.
8. FILL SHALL BE PLACED IN 8-INCH MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED PRIOR TO SUCCESSIVE LIFTS.
9. 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.
10. FINISHED CONTOURS/SPOT ELEVATIONS SHOWN HEREON REPRESENT FINISHED GRADES. ALL PAVEMENT SUBGRADES ARE BASED ON THE COMPOSITE ASPHALT PAVEMENT RECOMMENDATIONS MADE IN THE "GEOTECHNICAL STUDY" FOR LORSON RANCH.

WIDEFIELD WATER AND SANITATION DISTRICT GENERAL NOTES

1. 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.
2. 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.
3. 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.
4. ALL DUCTILE IRON PIPE, TO INCLUDE FITTINGS, VALVES AND FIRE HYDRANTS WILL BE WRAPPED WITH POLYETHEYLENE TUBING, BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED.
5. 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.
6. PVC MAIN LINES SHALL BE INSTALLED WITH COATED NO. 12 TRACER WIRE.
7. ALL FITTINGS SHALL BE DUCTILE IRON –MECHANICAL JOINT AND HAVE 9 LB. MAGNESIUM ANODES AT EVERY FITTING.
8. 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.
9. 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.
10. 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.
11. ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION.
12. ANY WATER UTILITY MATERIAL REMOVED AND NOT REUSED SHALL BE RETURNED TO THE WIDEFIELD WATER AND SANITATION DISTRICT IF THE DISTRICT SO REQUESTS.
13. 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.
14. ANY PUMPING OR BYPASS OPERATIONS MUST BE REVIEWED AND APPROVED PRIOR TO EXECUTION BY BOTH THE WIDEFIELD WATER AND SANITATION DISTRICT AND THE ENGINEER.
15. 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.
16. 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.
17. 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.
18. 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

1. ALL DUCTILE IRON PIPE AND FITTINGS SHALL HAVE CATHODIC PROTECTION AND 9 LB MAGNESIUM ANODES AT EVERY FITTING.
2. ALL FIRE HYDRANTS SHALL BE GUARDIAN K-81D HYDRANT KENNEDY VALVE OR AMERICAN AVK SERIES 2700, (MODERN)

UNDERDRAIN CONSTRUCTION NOTES

1. SUMP PUMP DISCHARGES FROM HOUSES MUST DISCHARGE TO UNDERGROUND UNDERDRAIN LATERALS, OPEN SPACE, PONDS, OR SWALES AND ARE NOT ALLOWED TO FLOW OVER PUBLIC SIDEWALK OR CURB/GUTTER.
2. ALL PVC UNDERDRAIN MAINS SHALL BE 4" PVC, SDR 35.
3. UNDERDRAIN LATERALS SHALL BE 3" PVC, SDR 35
4. UNDERDRAIN CLEANOUT BOXES ON THE MAINS SHALL BE A CAST IRON TWO PIECE HEAVY DUTY VALVE BOX MANUFACTURED BY STAR PIPE PRODUCTS OR APPROVED EQUAL. THE TOP PIECE SHALL BE 16" TALL AND THE BOTTOM PIECE SHALL BE 36" TALL.
5. PVC MAIN LINES SHALL BE INSTALLED WITH COATED NO. 12 TRACER WIRE.
6. ALL FITTINGS SHALL BE DUCTILE IRON –MECHANICAL JOINT AND HAVE 1 LB. MAGNESIUM ANODES AT EVERY FITTING.
7. 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.
8. THE CONTRACTOR SHALL FIELD EXCAVATE AND VERIFY THE VERTICAL AND HORIZONTAL LOCATION OF ALL TIE-INS. CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE FIELD VERIFIED INFORMATION PRIOR TO CONSTRUCTION.
9. ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION.
10. 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 THE CONTRACTOR AT FULL COST OF LABOR AND MATERIALS TO THE CONTRACTOR.

CORE
ENGINEERING GROUP

15004 151ST AVENUE S,
DENVER, CO 80206
PH: 719-459-7800
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg.com

DATE

DESCRIPTION

NO

PROJECT: CARRIAGE MEADOWS
SOUTH AT LORSON
RANCH FILING NO. 2
FONTAINE BLVD--CARRIAGE MEADOWS DR
COLORADO SPRINGS, COLORADO

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

SEWER / WATER NOTES

DATE:
JUNE 18, 2019

PROJECT NO.
100.046

SHEET NUMBER
C0.3

TOTAL SHEETS: 21



TYPICAL STREET AND DRIVEWAY SECTIONS					
DATE: JUNE 18, 2019					
PROJECT NO. 100.046					
SHEET NUMBER C0.4					
TOTAL SHEETS: 21					

CORE ENGINEERING GROUP

15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719-659-7800
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cegi.com

CORE		ENGINEERING GROUP	
NO.	DESCRIPTION	DATE	
		PROJECT: CARRIAGE MEADOWS SOUTH AT LORSON RANCH FILING NO. 2 FONTAINE BLVD-CARRIAGE MEADOWS DR COLORADO SPRINGS, COLORADO (719) 635-3200 CONTACT: JEFF MARK	
DRAWN:	RLS	PREPARED FOR:	
DESIGNED:	RLS	LORSON, LLC	
CHECKED:	RLS	212 N. WAHSATCH AVE, SUITE 301 COLORADO SPRINGS, COLORADO 80903	

NOTES

1. COMMON SIDEWALKS ARE 5' WIDE. SIDEWALKS TO FRONT STEPS ARE 4' WIDE. ALL SIDEWALKS ARE 4" THICK

2. CURB AND GUTTER TO BE "CATCH" UNLESS OTHERWISE NOTED

3. PARKING STALL LINES TO BE PAINTED WHITE

(A) 6" SIDEWALK CHASE OR PIPE WITH HEADWALL

(B) 2' CONCRETE SWALE

(C) 6" CURB. BULLNOSE ALL ENDS AS NECESSARY

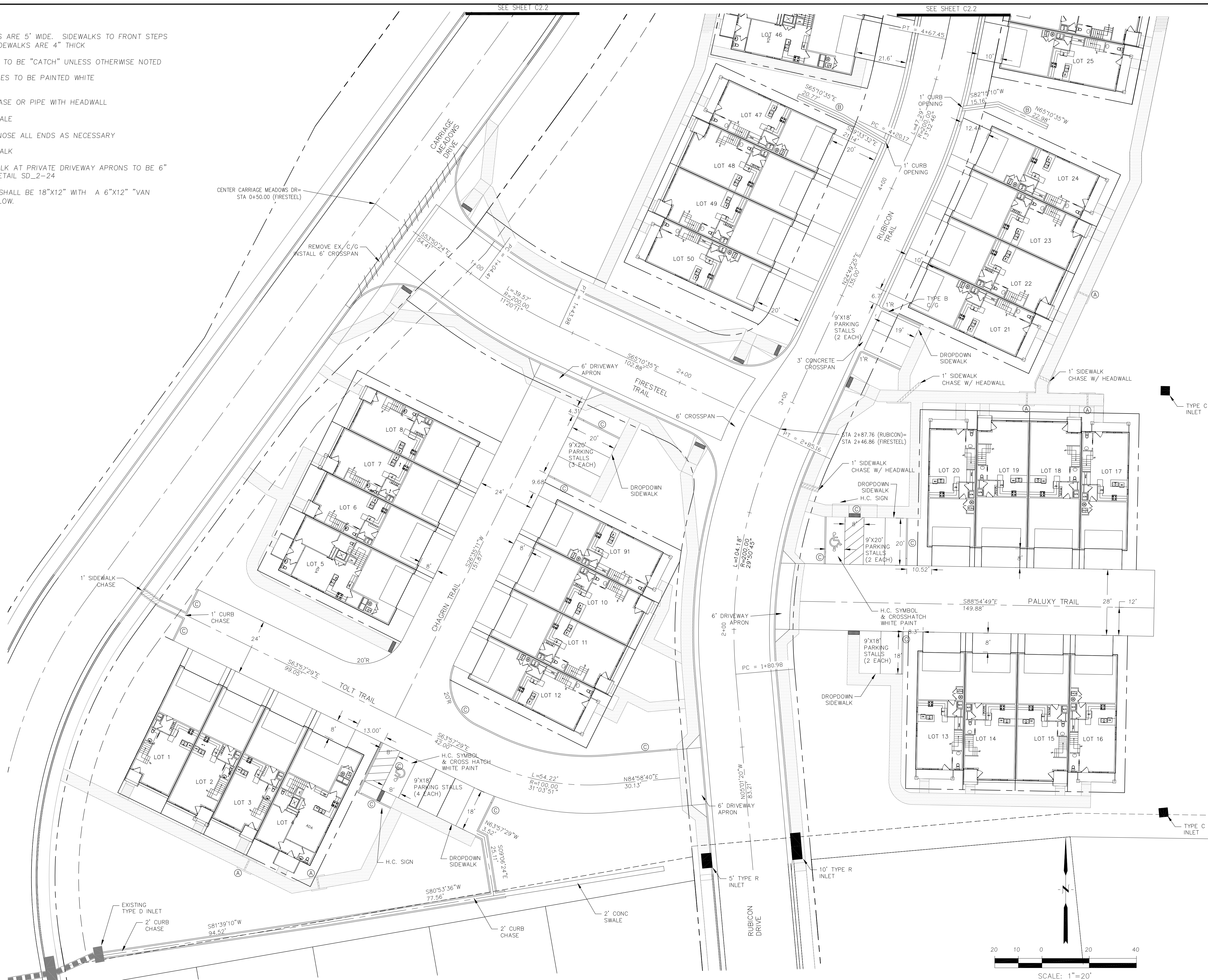
CONCRETE SIDEWALK

4. CONCRETE SIDEWALK AT PRIVATE DRIVEWAY APRONS TO BE 6" THICK PER COUNTY DETAIL SD_2-24

5. HANDICAP SIGNS SHALL BE 18"x12" WITH A 6"x12" "VAN ACCESSIBLE" SIGN BELOW.

CENTER CARRIAGE MEADOWS DR=
STA 0+50.00 (FIRESTEEL)

REMOVE EX. C/G
INSTALL 6" CROSSSPAN



CARRIAGE MEADOWS SOUTH AT LORSON RANCH FIL. NO. 2 HORIZONTAL CONTROL PLAN

DATE:
JUNE 18, 2019

PROJECT NO.
100.046

SHEET NUMBER
C2.1

TOTAL SHEETS: 21

CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNING WATERS, CO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rich@ceg.com

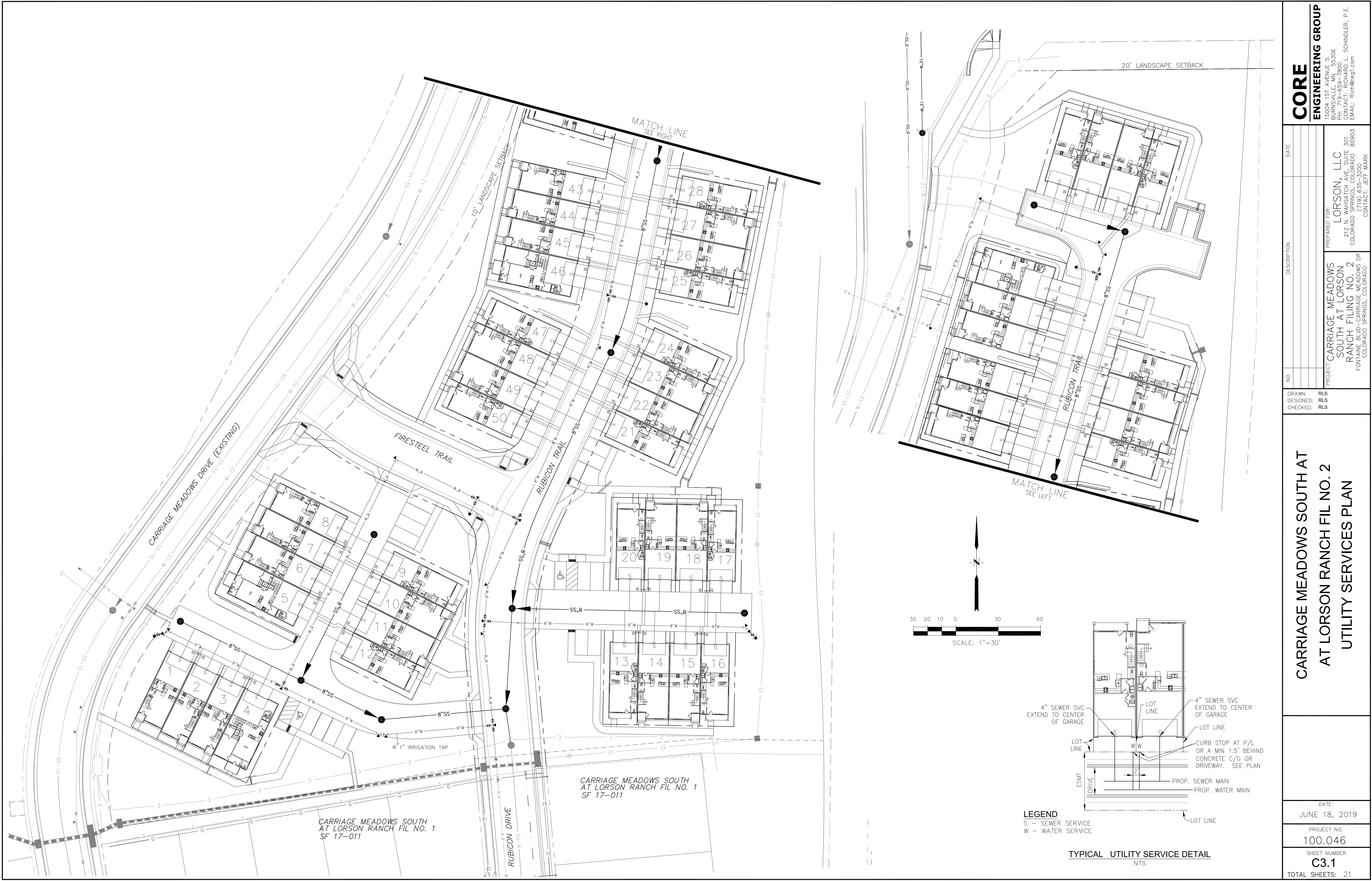
PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE. SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

PROJECT: CARRIAGE MEADOWS
SOUTH AT LORSON
RANCH FILING NO. 2
FONTAINE BLVD-CARRIAGE MEADOWS DR
COLORADO SPRINGS, COLORADO

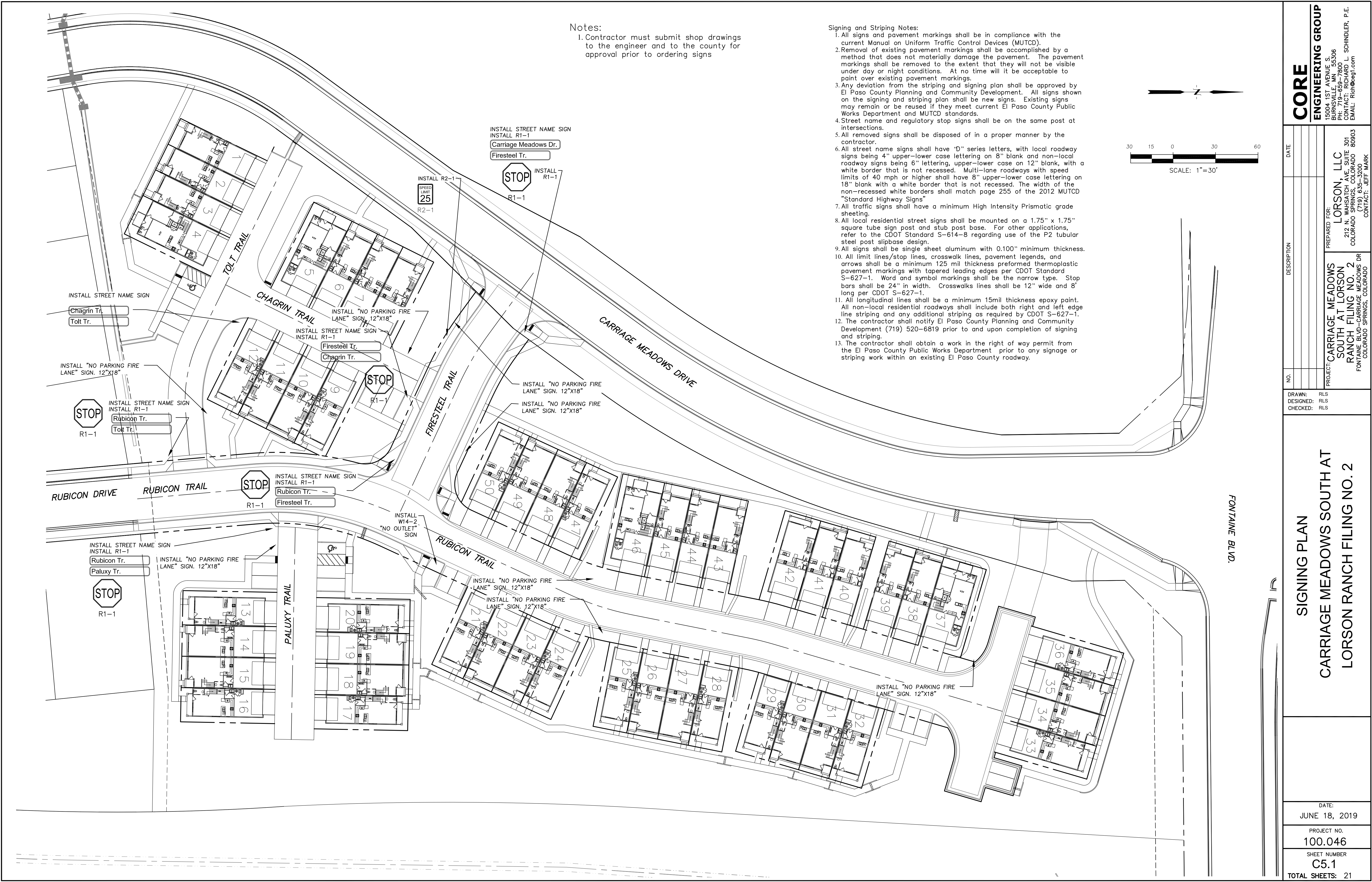
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS



CORE ENGINEERING GROUP 15004 1ST AVENUE S. BURNING WOODS, CO 80903 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: rich@ceg1.com	
DATE:	
DESCRIPTION:	
NO.:	
PROJECT: CARRIAGE MEADOWS SOUTH AT LORSON RANCH FILING NO. 2 FONTAINE BLVD-CARRIAGE MEADOWS DR COLORADO SPRINGS, COLORADO	
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	
CARRIAGE MEADOWS SOUTH AT LORSON RANCH FIL. NO. 2 HORIZONTAL CONTROL PLAN	
DATE: JUNE 18, 2019	
PROJECT NO. 100.046	
SHEET NUMBER C2.2	
TOTAL SHEETS: 21	



CORE ENGINEERING GROUP 15004 1ST AVENUE S. BURNSVILLE, MN 55306 PH: 719-659-7800 CONTACT: RICHARD L. SCHINDLER, P.E. EMAIL: Rich@ceg.com	
DATE	
DESCRIPTION	
NO.	
DRAWN: RLS DESIGNED: RLS CHECKED: RLS	PREPARED FOR: LORSON, LLC 212 N. WAHSATCH AVE., SUITE 301 COLORADO SPRINGS, COLORADO 80903 CONTACT: JEFF MARK
CARRIAGE MEADOWS SOUTH AT AT LORSON RANCH FIL NO. 2 UTILITY SERVICES PLAN	
DATE: JUNE 18, 2019	
PROJECT NO. 100.046	
SHEET NUMBER C3.1	
TOTAL SHEETS: 21	



Notes:
1. Contractor must submit shop drawings to the engineer and to the county for approval prior to ordering signs

- Signing and Striping Notes:
1. All signs and pavement markings shall be in compliance with the current Manual on Uniform Traffic Control Devices (MUTCD).
 2. 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.
 3. 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.
 4. Street name and regulatory stop signs shall be on the same post at intersections.
 5. All removed signs shall be disposed of in a proper manner by the contractor.
 6. 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"
 7. All traffic signs shall have a minimum High Intensity Prismatic grade sheeting.
 8. 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.
 9. All signs shall be single sheet aluminum with 0.100" minimum thickness.
 10. 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.
 11. 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.
 12. The contractor shall notify El Paso County Planning and Community Development (719) 520-6819 prior to and upon completion of signing and striping.
 13. 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.
BURNHELM, NM 85906
PHONE: 719-659-7800
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg.com

DATE

DESCRIPTION

NO.

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

DATE:
JUNE 18, 2019

PROJECT NO.
100.046

SHEET NUMBER
C5.1

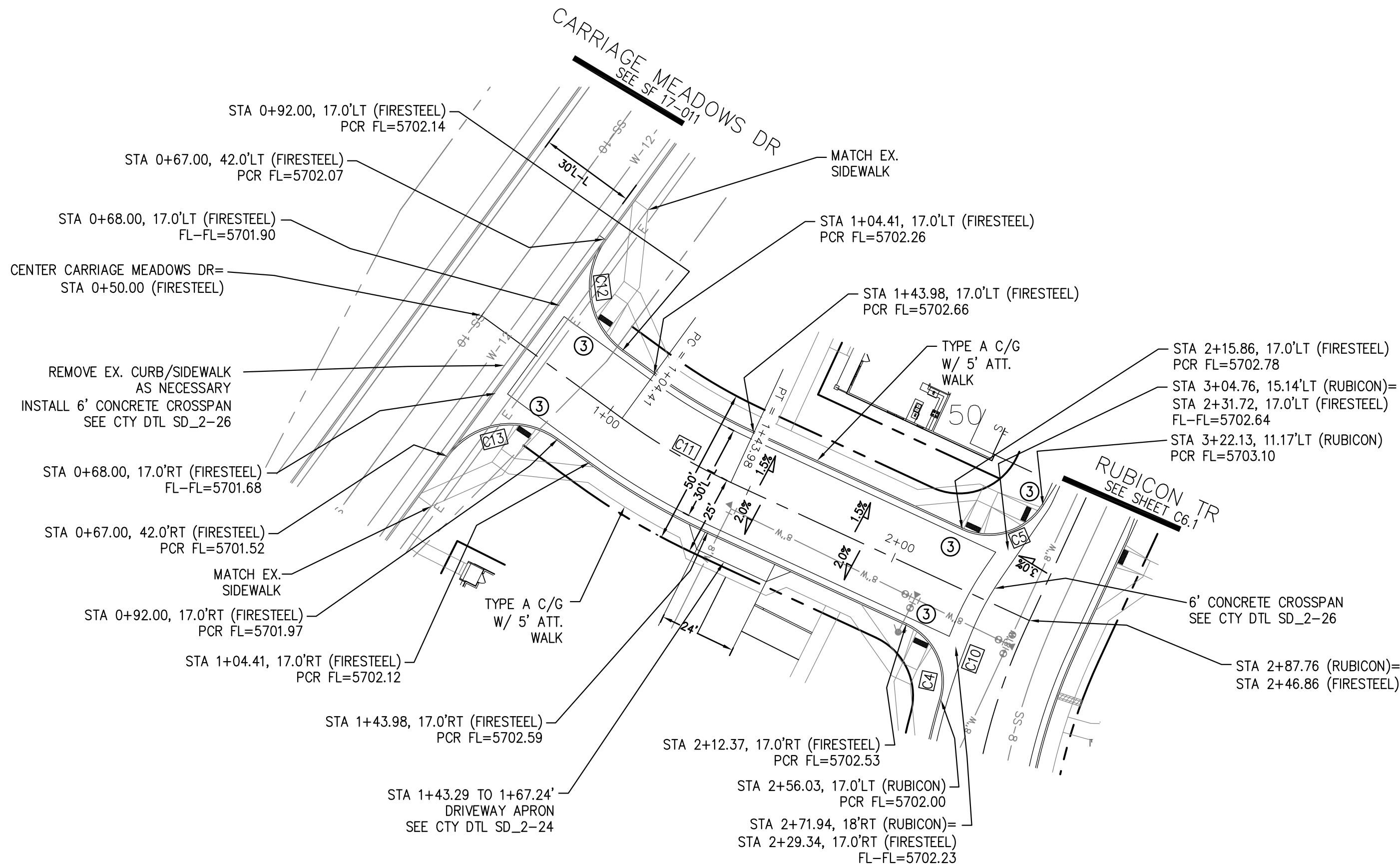
TOTAL SHEETS: 21

SIGNING PLAN

CARRIAGE MEADOWS SOUTH AT
LORSON RANCH FILING NO. 2

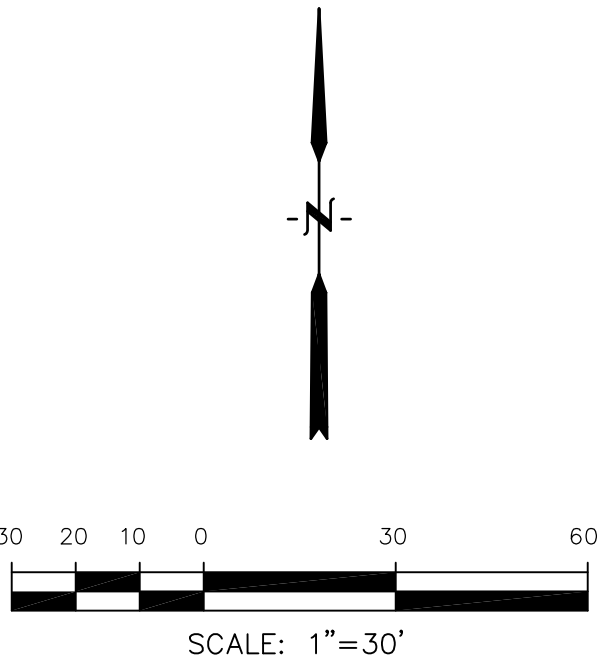
PREPARED FOR:
LORSON, LLC
212 N. WAHSATCH AVE. SUITE 301
COLORADO SPRINGS, COLORADO 80903
(719) 635-3200
CONTACT: JEFF MARK

PROJECT: CARRIAGE MEADOWS
SOUTH AT LORSON
RANCH FILING NO. 2
FONTAINE BLVD-CARRIAGE MEADOWS DR
COLORADO SPRINGS, COLORADO

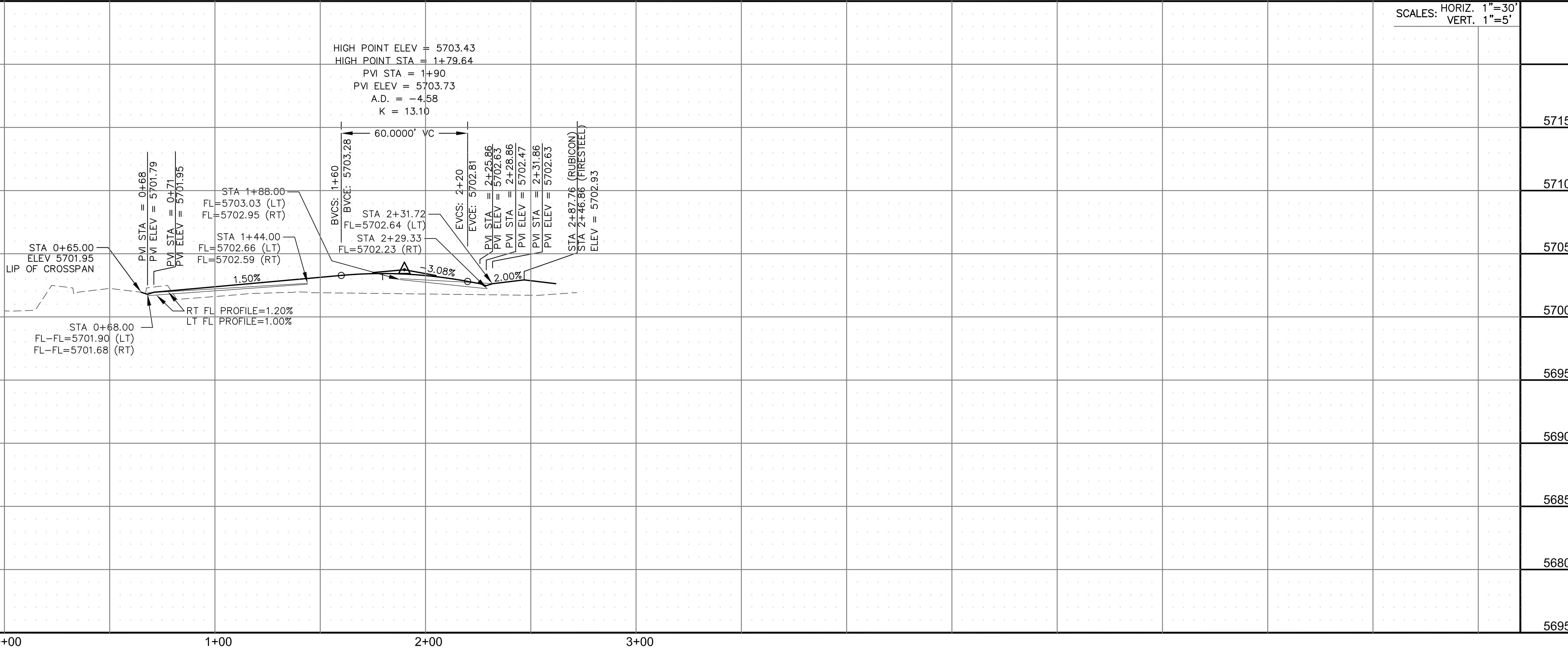


- NOTES
1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
 2. SEE GRADING PLAN FOR GRADING INFORMATION.
 3. ALL STORM SEWER SHALL BE CLASS III RCP.
 4. ALL MHS SHALL BE TYPE 1 UNLESS OTHERWISE NOTED.
- 1 CURVE DATA ID
- 2 CURB TRANSITIONS
- 3 PEDESTRIAN RAMP, SEE SHEET C10.1

CURVE TABLE				
CURVE	LENGTH	RADIUS	DELTA	DESCRIPTION
C4	28.50'	20.00	81°39'12"	FLOWLINE
C5	28.78'	20.00	82°26'17"	FLOWLINE
C10	18.50'	90.00	11°46'34"	LIP-CROSSSPAN
C11	39.57'	200.00	11°20'11"	CENTERLINE
C12	39.27'	25.00	90°00'00"	FLOWLINE
C13	39.27'	25.00	90°00'00"	FLOWLINE



FIRESTEEL TRAIL



CORE

ENGINEERING GROUP

15004 1ST AVENUE S.
BURNING WOOD, MO 65506
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg.com

DATE

DESCRIPTION

NO.

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

PROJECT: CARRIAGE MEADOWS
SOUTH AT LORSON
RANCH FILING NO. 2
FONTANE BLVD-CARRIAGE MEADOWS DR
COLORADO SPRINGS, COLORADO

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

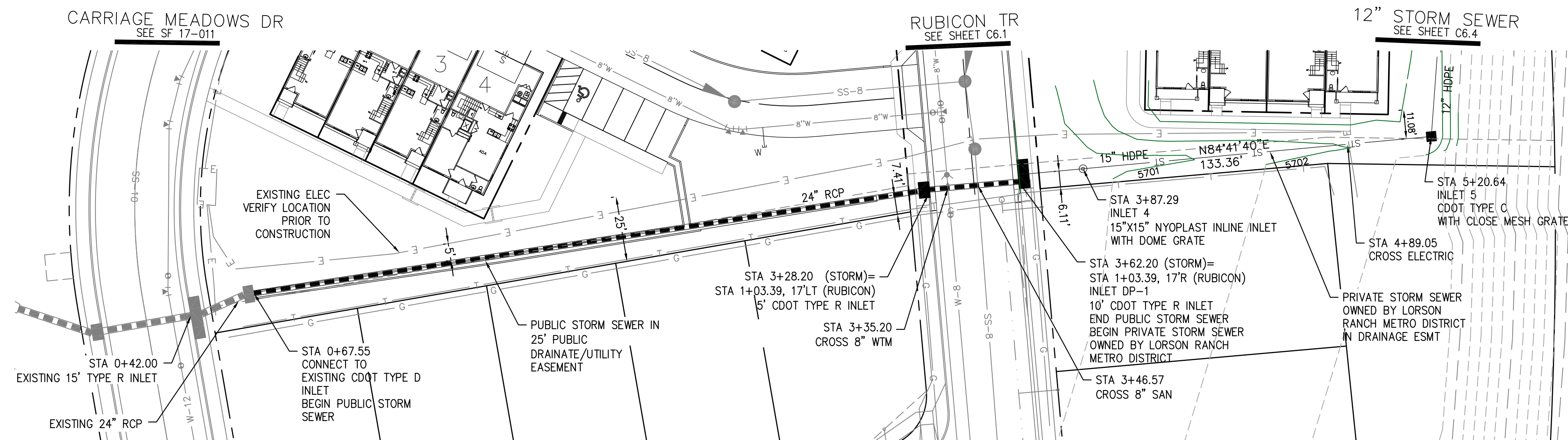
STREET/STORM
FIRESTEEL TRAIL
STA 0+00 TO 2+50

DATE:
JUNE 28, 2019

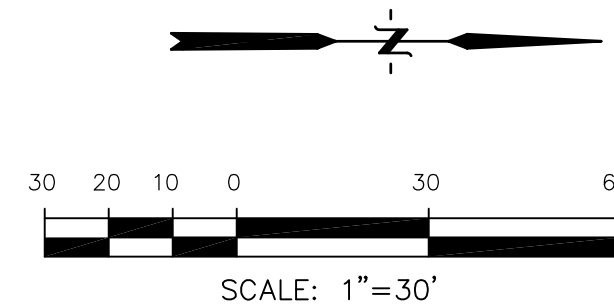
PROJECT NO.
100.046

SHEET NUMBER
C6.2

TOTAL SHEETS: 21



STORM SEWER



		SCALES: HORIZ. 1"=30' VERT. 1"=5'	
5715			5715
5710			5710
5705			5705
5700			5700
5695			5695
5690			5690
5685			5685
5680			5680
5695			5695

Sanitary sewer line plan view showing a 24" RCP pipe with various inlets, manholes, and a bridge crossing. The plan includes stationing from 0+00 to 4+89.05, elevations from 5680 to 5715, and flow data (Q5, Q100). Key features include CARRIAGE MEADOWS DR, RUBICON TRAIL, and a bridge with a 12' clearance. The sewer line is shown with a 0.50% slope and a 0.80% slope section. A 15" HDPE pipe is shown crossing the sewer line under the bridge. A 12" HDPE pipe is shown at the end of the line. The plan also shows existing and proposed grades, and a connection to an existing CDOT Type D inlet.

STORM SEWER

STA 0+67.55 TO 5+20.64

DATE:	JUNE 28, 2019
PROJECT NO.	100.046
SHEET NUMBER	C6.3
TOTAL SHEETS:	21

NOTES

1. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.
2. SEE 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

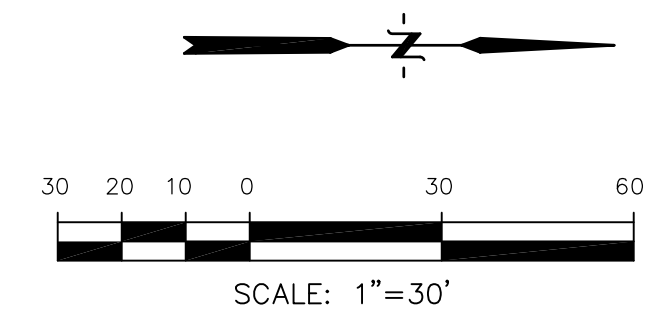
② CURB TRANSITIONS

③ PEDESTRIAN RAMP, SEE SHEET C10.1

[illegible]

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> STORM SEWER </div>	<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> STA 0+67.55 TO 5+20.64 </div>	DATE:
		JUNE 28, 2019
		PROJECT NO.
		100.046
		SHEET NUMBER
		C6.3
TOTAL SHEETS:		21

[illegible]

STORM SEWER

STA 5+20.64 TO 10+21.27

DATE:
JUNE 28, 2019

PROJECT NO.
100.046

SHEET NUMBER
C6.4

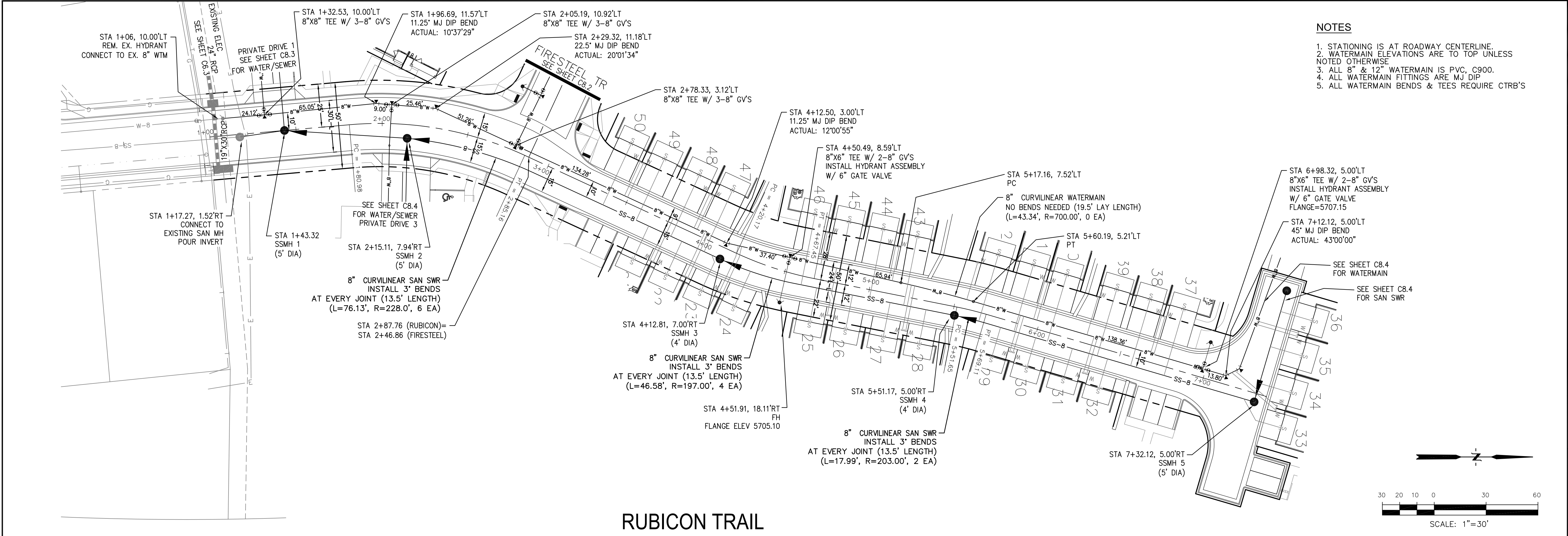
TOTAL SHEETS: 21

CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cceg1.com

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

DESCRIPTION	AMOUNT
CT: CARRIAGE MEADOWS	
SOUTH AT LORSON	
RANCH FILING NO. 2	

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS



COREENGINEERING GROUP

15004 1ST AVENUE S.
BURNING WOOD, CO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE

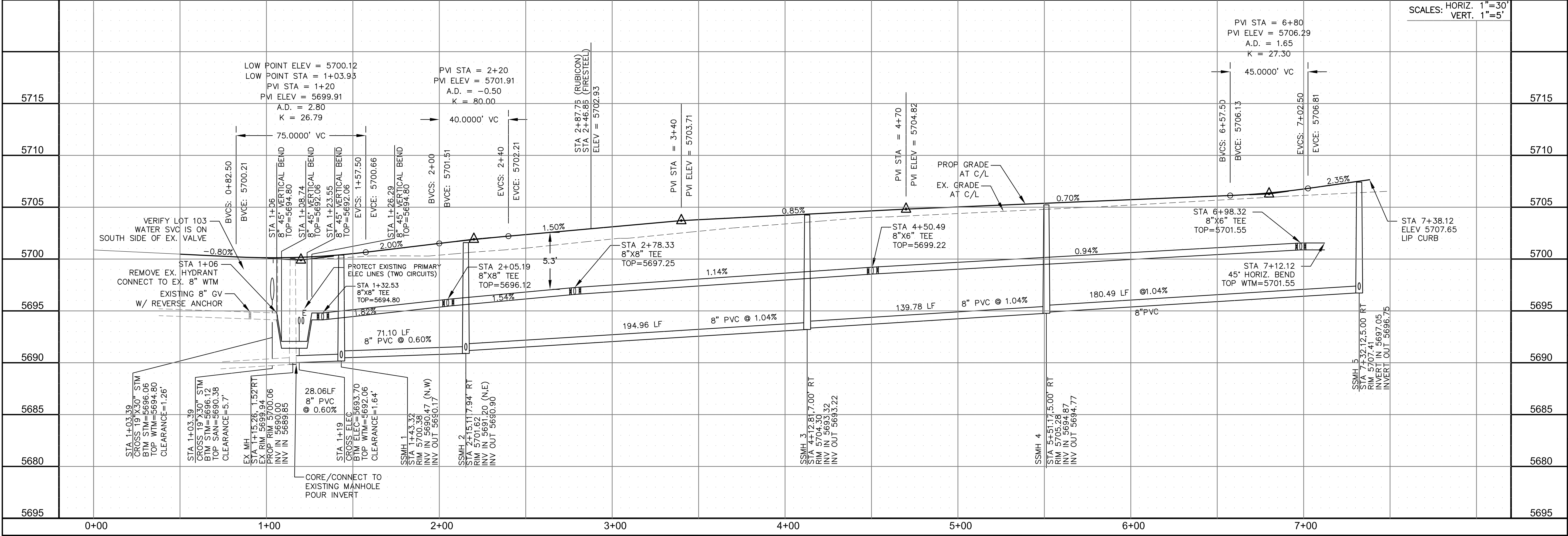
DESCRIPTION

NO.

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

PROJECT:
**CARRIAGE MEADOWS
SOUTH AT LORSON
RANCH FILING NO. 2**
FONTAINE BLVD-CARRIAGE MEADOWS DR
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

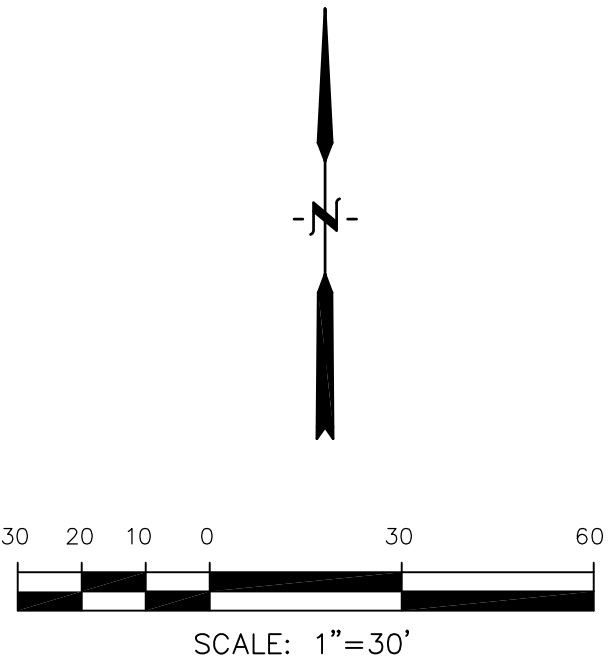


DATE:
JUNE 28, 2019

PROJECT NO.
100.046

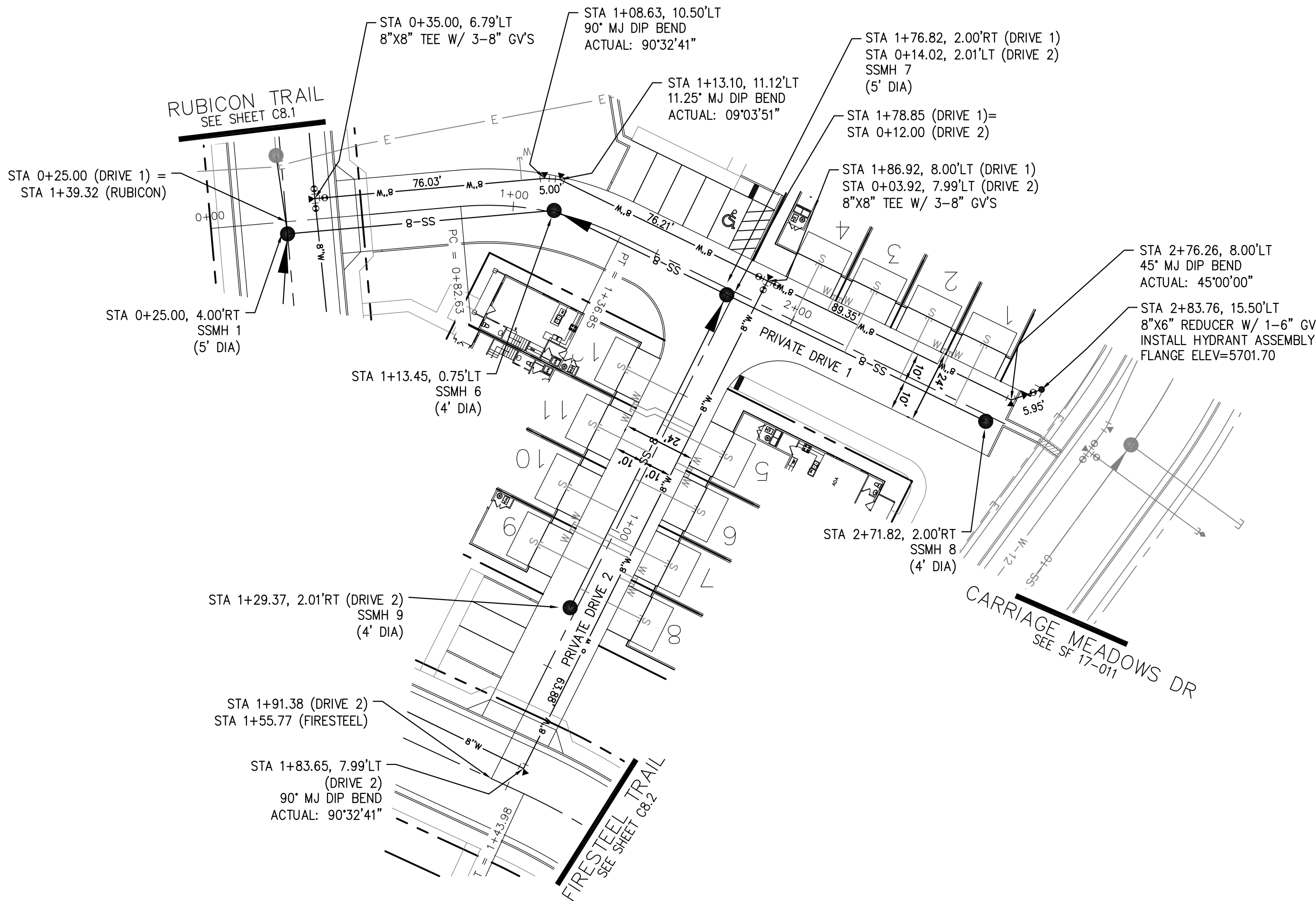
SHEET NUMBER
C8.1

TOTAL SHEETS: 21

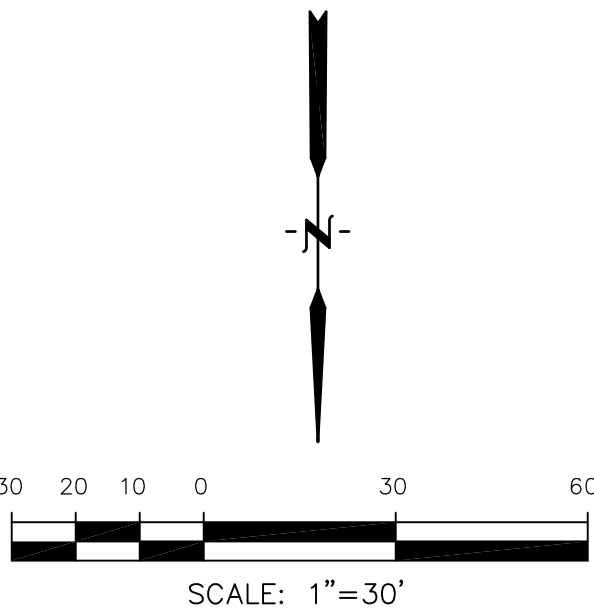


SCALES: HORIZ. 1"=30'
VERT. 1"=5'

DATE:	JUNE 28, 2019
PROJECT NO.	100.046
SHEET NUMBER	C8.2
TOTAL SHEETS:	21



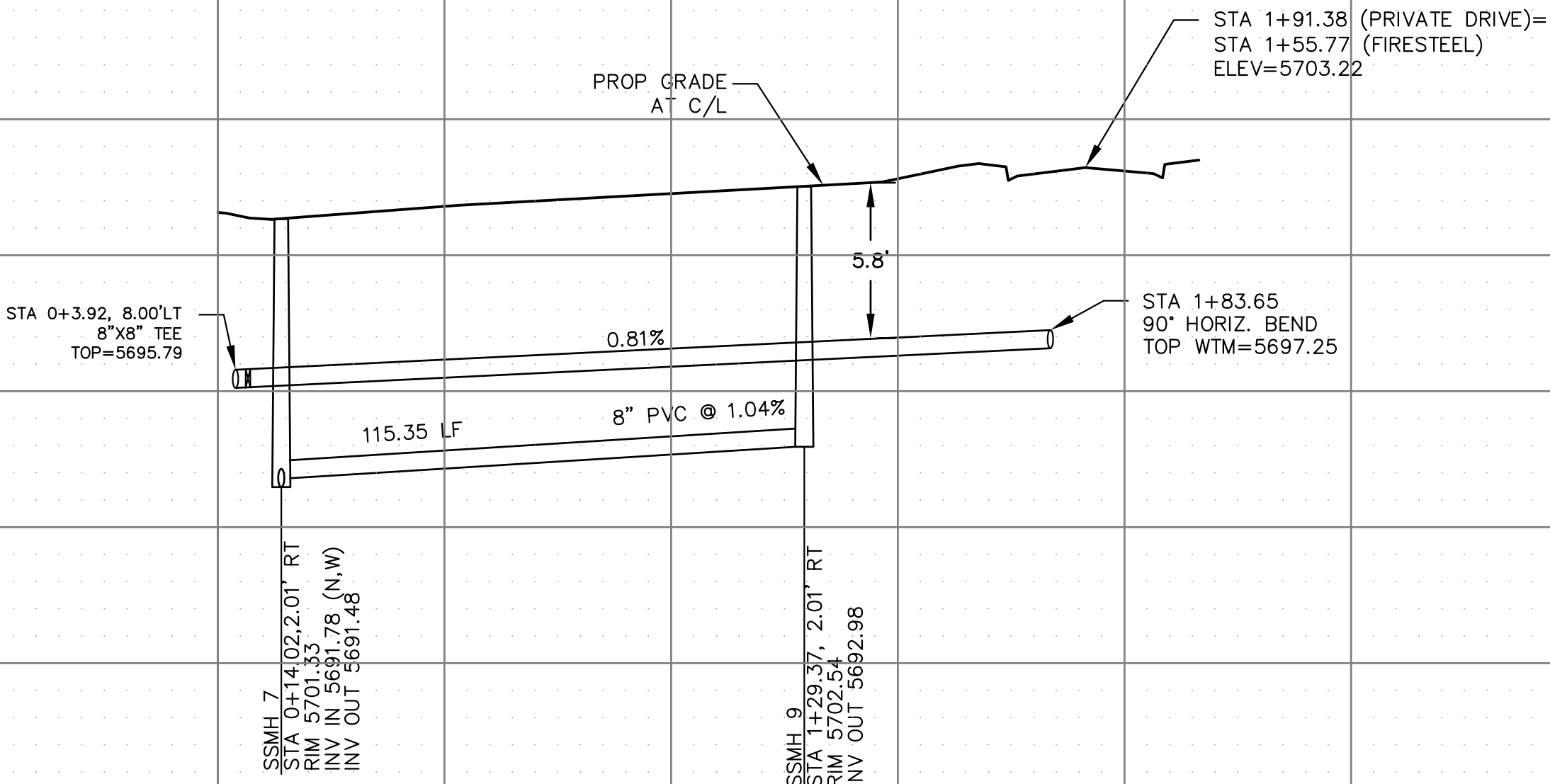
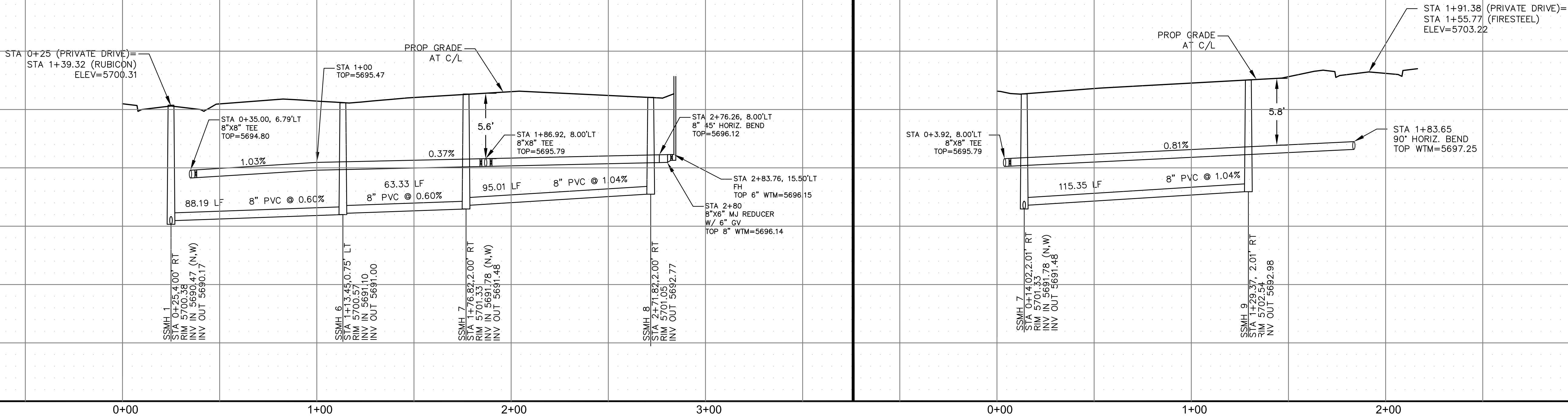
- NOTES
1. STATIONING IS AT ROADWAY CENTERLINE.
 2. WATERMAIN ELEVATIONS ARE TO TOP UNLESS NOTED OTHERWISE
 3. ALL 8" & 12" WATERMAIN IS PVC, C900.
 4. ALL WATERMAIN FITTINGS ARE MJ DIP
 5. ALL WATERMAIN BENDS & TEES REQUIRE CTRB'S



PRIVATE DRIVE 1
TOLT TRAIL

PRIVATE DRIVE 2
CHAGRIN TRAIL

SCALES: HORIZ. 1"=30'
VERT. 1"=5'



SANITARY / WATER
PRIVATE DRIVES 1 AND 2
TOLT TRAIL & CHAGRIN TRAIL

CORE
ENGINEERING GROUP

15004 1ST AVENUE S.
BURNING WOOD, CO 80903
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: CARRIAGE MEADOWS
SOUTH AT LORSON
RANCH FILING NO. 2
FONTANE BLVD-CARRIAGE MEADOWS DR
COLORADO SPRINGS, COLORADO

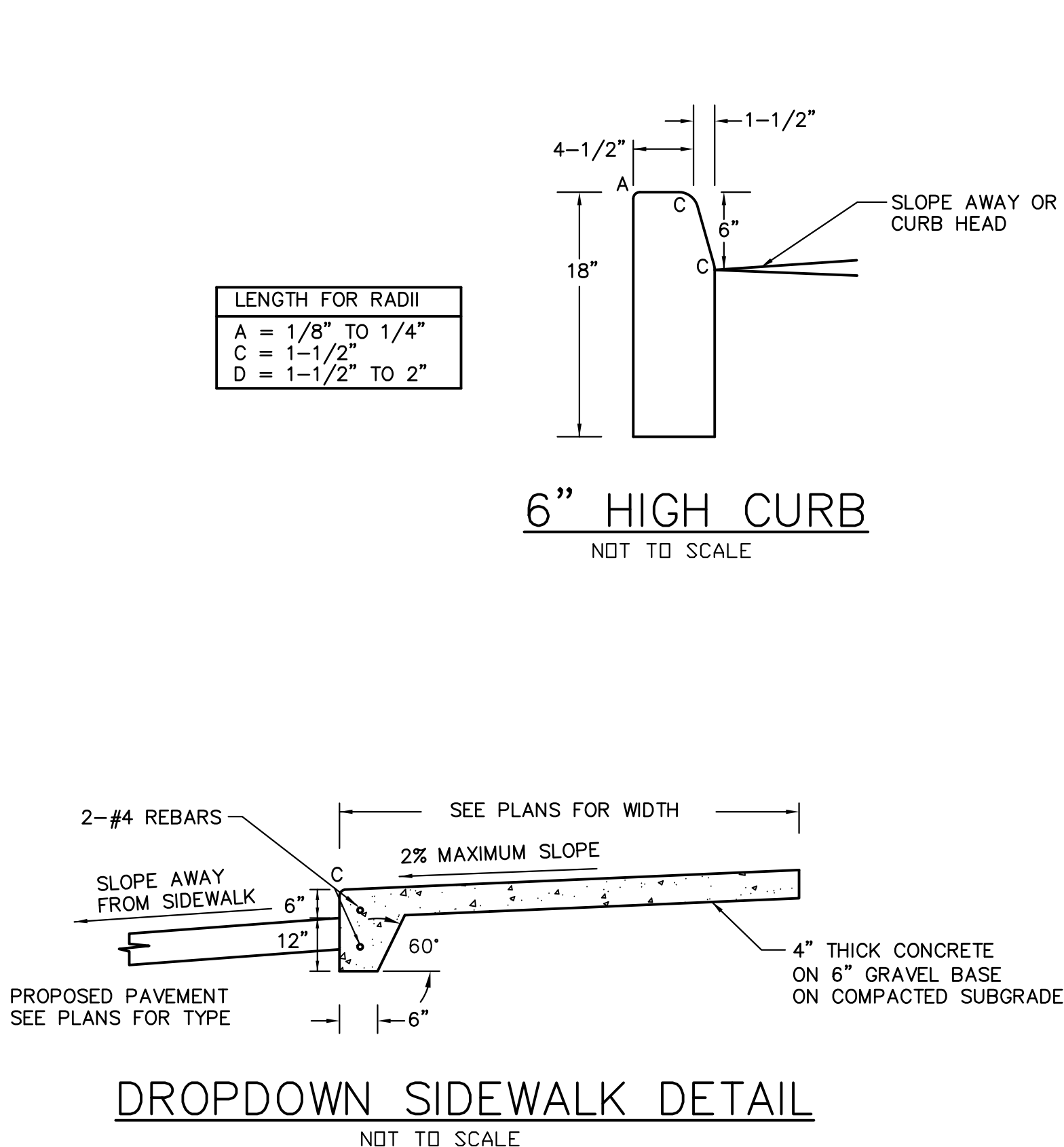
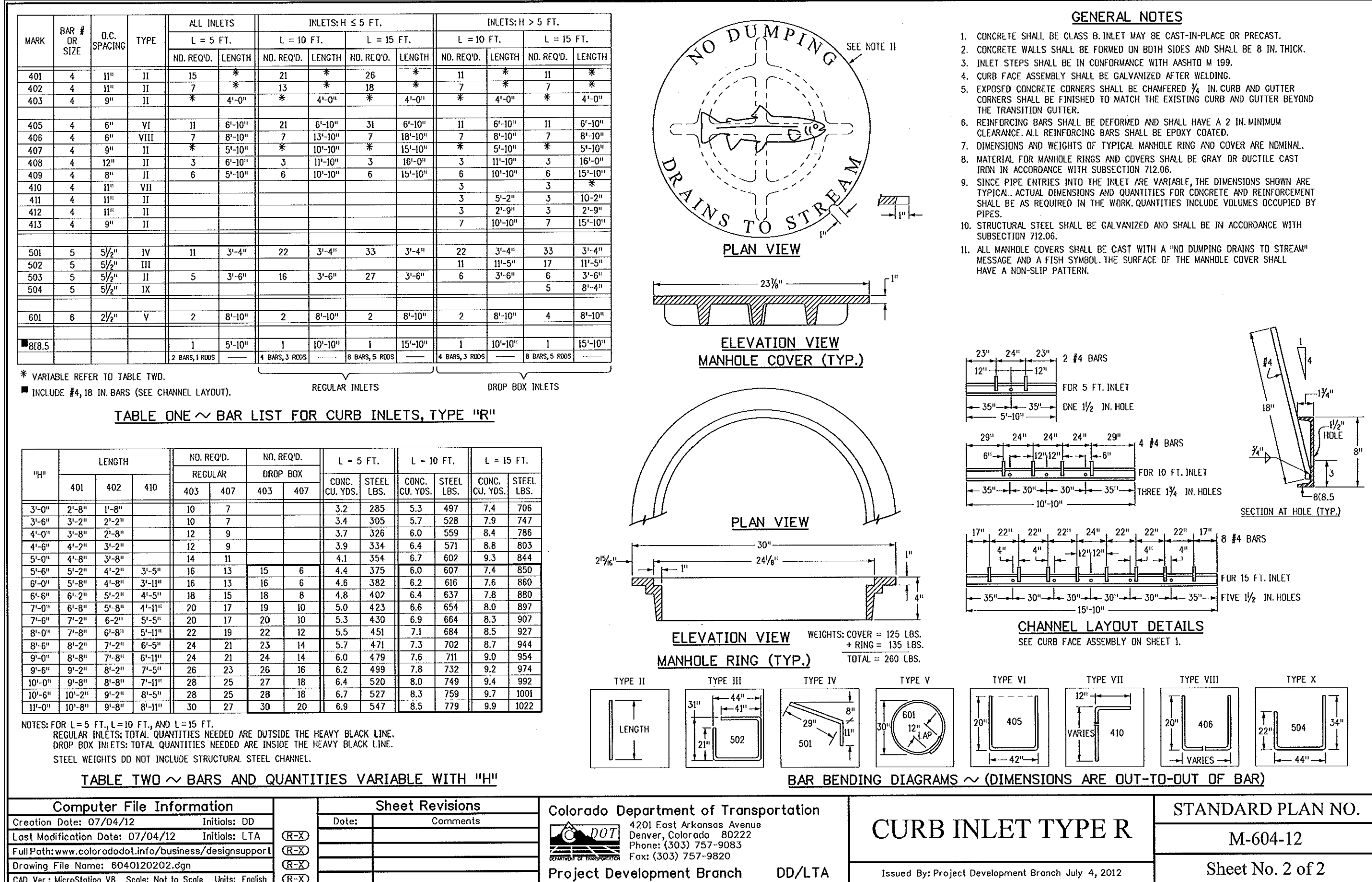
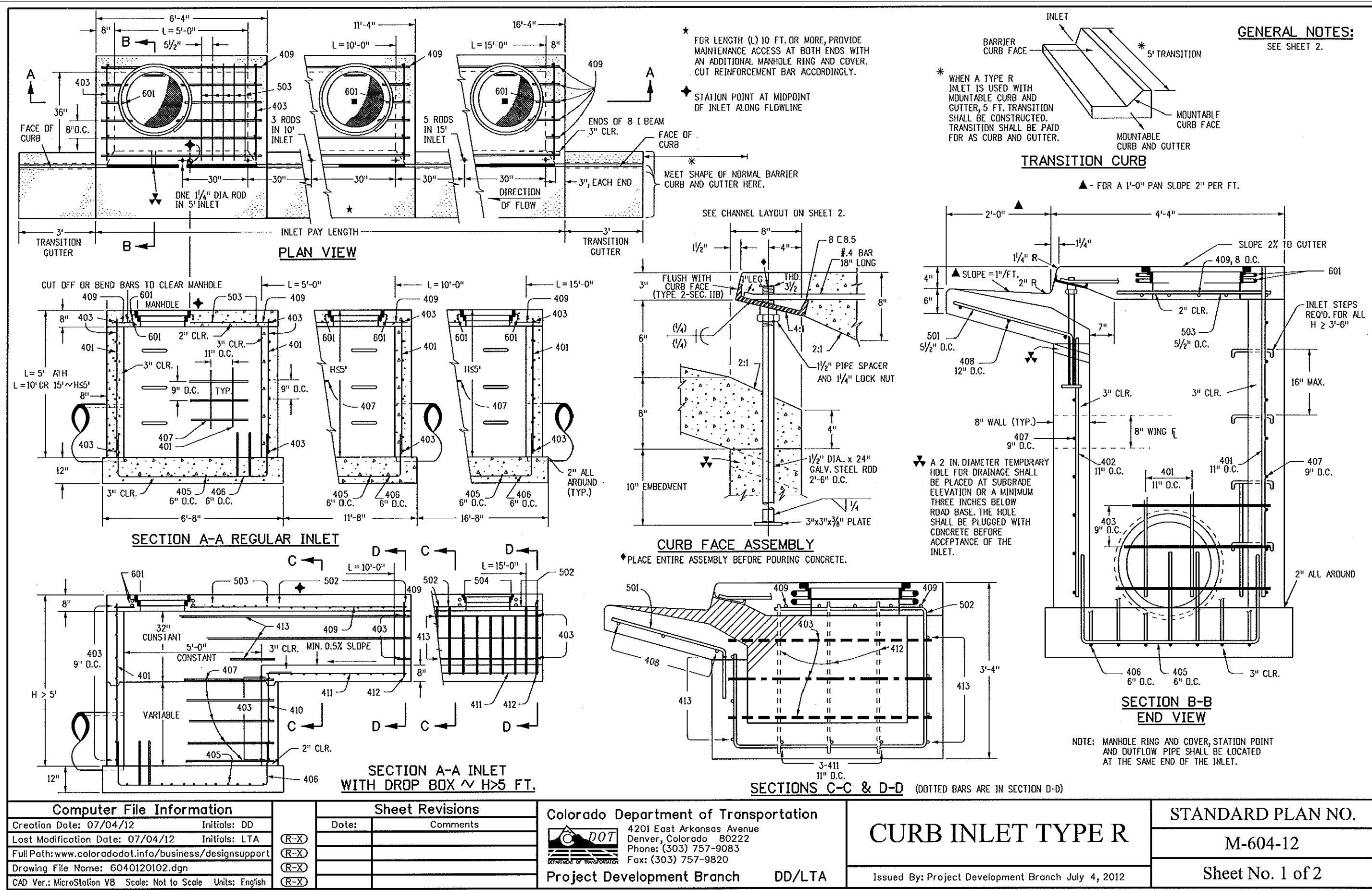
DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

DATE:
JUNE 28, 2019

PROJECT NO.
100.046

SHEET NUMBER
C8.3

TOTAL SHEETS: 21



CORE
ENGINEERING GROUP
15004 1ST AVENUE S.
DENVER, COLORADO 80232
PHONE: (303) 757-9820
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

DATE: _____

DESCRIPTION: _____

NO: _____

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

PROJECT: CARRIAGE MEADOWS SOUTH AT LORSON RANCH FILING NO. 2
FONTAINE BLVD-CARRIAGE MEADOWS DR
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

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

CARRIAGE MEADOWS SOUTH AT
LORSON RANCH FILING NO. 2
STORM SEWER DETAILS

DATE: JUNE 18, 2019

PROJECT NO. 100.046

SHEET NUMBER C10.2

TOTAL SHEETS: 21

