

CONSTRUCTION PLANS
FOR

SKYLINE AT LORSON RANCH FILING NO. 1

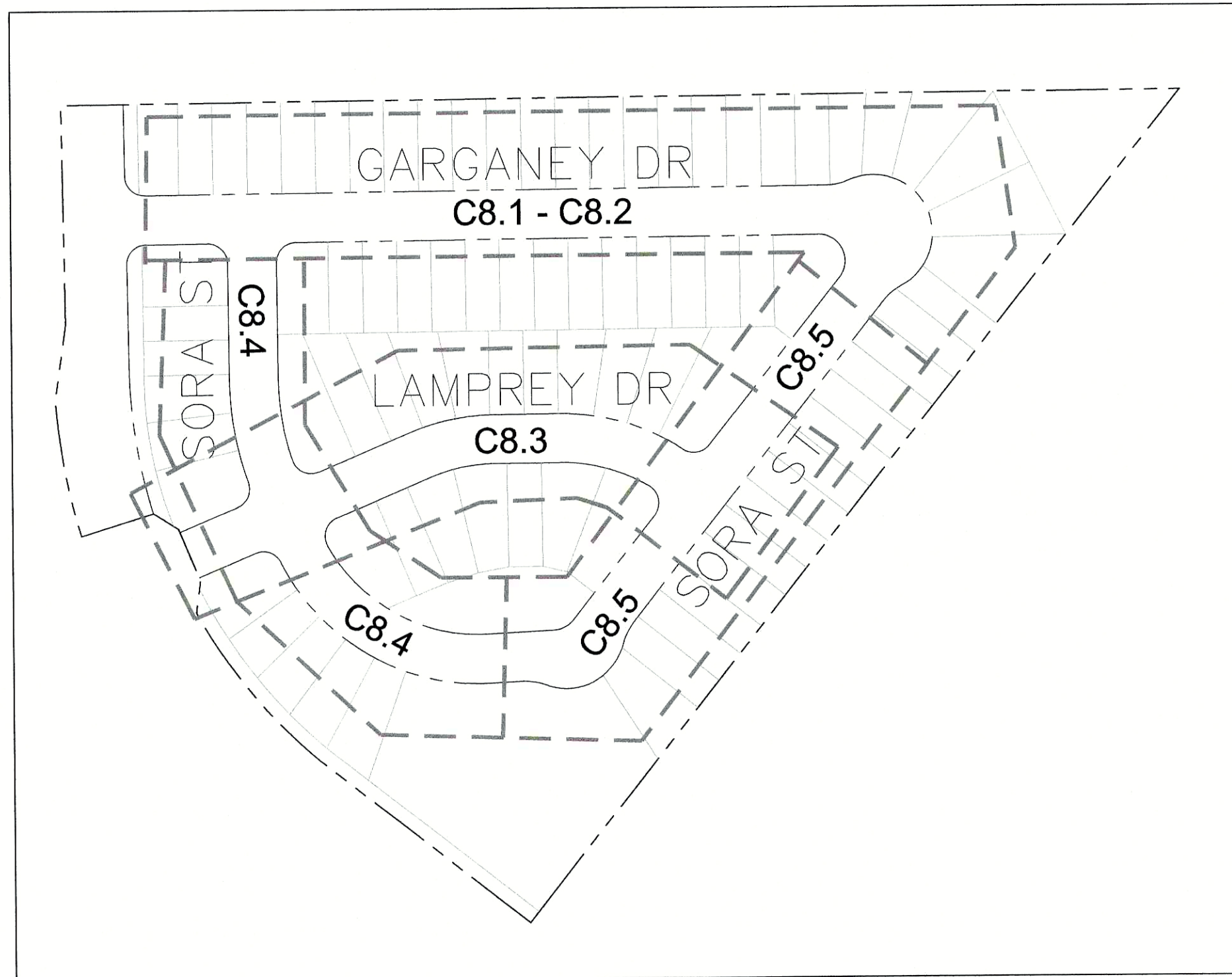
WATERMAIN AND SANITARY SEWER CONSTRUCTION PLANS



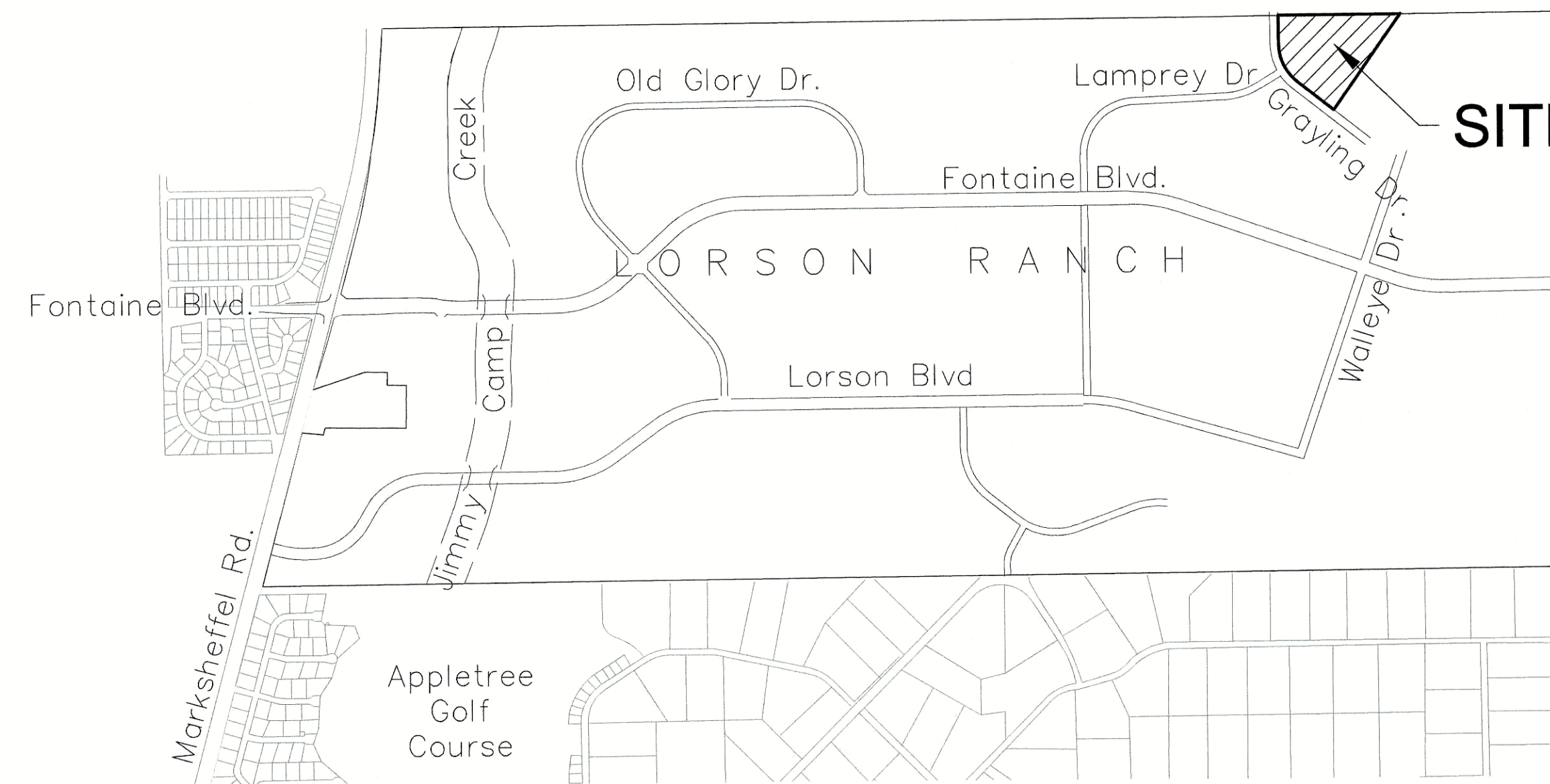
Know what's below.
Call before you dig.

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

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



KEY MAP
NO SCALE



VICINITY MAP
NO SCALE

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

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

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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 [Signature] DATE SEPT 15, 2021
Lorson, LLC
 TITLE AUTHORIZED SIGNING AGENT

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

FIRE DISTRICT APPROVAL

THE NUMBER OF FIRE HYDRANTS AND HYDRANT LOCATIONS TOGETHER WITH THE MAIN SIZES INDICATED ON THIS WATER INSTALLATION PLAN ARE ADEQUATE TO SATISFY THE REQUIREMENTS OF THE SECURITY FIRE PROTECTION DISTRICT'S FIRE AND RESCUE DEPARTMENT. THIS APPROVAL IS BASED ON THE INFORMATION IN THESE PLANS, SPECIFICATIONS AND SUPPLEMENTAL INFORMATION PROVIDED BY THE DESIGN ENGINEER WHOSE SIGNATURE APPEARS IN THESE PLANS, AND THE WIDEFIELD WATER AND SANITATION DISTRICT.

SIGNED [Signature] DATE 12/16/21
 BY FIRE PROTECTION CHIEF OR COORDINATOR

CONSTRUCTION APPROVAL

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

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

APPROVED
Engineering Department
 02/01/2022 10:51:55 AM
 [Signature]
**EPC Planning & Community
 Development Department**

JENNIFER IRVINE, COUNTY ENGINEER/ECM ADMINISTRATOR DATE
 CONDITIONS: APPROVAL OF THESE PLANS IS ONLY FOR UTILITY CONSTRUCTION, NOT ROADS AT THIS TIME.

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.

APPROVED
 [Signature]
Professional Engineer
 33997
 9-15-2021

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 80910
 719-520-6300

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 12/22/2021 BY [Signature]

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
 WATER DESIGN APPROVAL

DATE 12/22/2021 BY [Signature]

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

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 8941'52" 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.

**AS-BUILT
 SAN/WTM
 FEB 2, 2023**



PUDSP 21-002

DATE
 DESCRIPTION
 NO.
 PROJECT FOR: **LORSON, LLC**
 212 N. WAHSATCH AVE. SUITE 301
 COLORADO SPRINGS, COLORADO 80903
 CONTACT: JEFF MARK
 PROJECT: **SKYLINE AT LORSON RANCH FILING NO. 1**
 LAMPREY DRIVE - GRAYLING DRIVE
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

**SKYLINE AT LORSON RANCH FIL NO. 1
 WATERMAIN / SANITARY SEWER
 CONSTRUCTION PLANS**



DATE: SEPT 15, 2021
 PROJECT NO. 100.063
 SHEET NUMBER C0.1
 TOTAL SHEETS: 11

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

WIDEFIELD WATER AND SANITATION DISTRICT GENERAL NOTES

- ALL UTILITY CONSTRUCTION TO BE CONDUCTED IN CONFORMANCE WITH THE CURRENT WIDEFIELD WATER AND SANITATION DISTRICT SPECIFICATIONS. COMPACTION REQUIREMENTS SHALL BE 95% STANDARD PROCTOR AS DETERMINED BY ASTM D698, UNLESS OTHERWISE APPROVED BY THE WIDEFIELD WATER AND SANITATION DISTRICT OR A HIGHER STANDARD IS IMPOSED BY ANOTHER AGENCY HAVING RIGHT-OF-WAY JURISDICTION.
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE WIDEFIELD WATER AND SANITATION DISTRICT. THE WIDEFIELD WATER AND SANITATION DISTRICT RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
- THE DEVELOPER OR HIS ENGINEER HAS LOCATED ALL FIRE HYDRANTS AND FUTURE SERVICE STUBS. ANY REQUIRED REALIGNMENT, EITHER HORIZONTAL OR VERTICAL, SHALL BE AT THE EXPENSE OF THE DEVELOPER.
- ALL DUCTILE IRON PIPE, TO INCLUDE FITTINGS, VALVES AND FIRE HYDRANTS WILL BE WRAPPED WITH POLYETHYLENE TUBING, BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED.
- ALL DUCTILE IRON PIPE SHALL BE DOUBLE BONDED. DIP SHALL HAVE CATHODIC PROTECTION USING NO. 6 WIRE WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET.
- PVC MAIN LINES SHALL BE INSTALLED WITH COATED NO. 12 TRACER WIRE.
- ALL FITTINGS SHALL BE DUCTILE IRON -MECHANICAL JOINT AND HAVE 9 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 DEPARTMENT MANAGER AND/OR JASON DREESEN, WASTEWATER DEPARTMENT MANAGER OF THE WIDEFIELD WATER AND SANITATION DISTRICT AT 719-955-0548 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 9 LB MAGNESIUM ANODES AT EVERY FITTING.
- ALL FIRE HYDRANTS SHALL BE GUARDIAN K-81D HYDRANT KENNEDY VALVE OR AMERICAN AVK SERIES 2700, (MODERN)

UNDERDRAIN CONSTRUCTION NOTES

- 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.
- ALL PVC UNDERDRAIN MAINS SHALL BE 4" PVC, SDR 35.
- UNDERDRAIN LATERALS SHALL BE 3" PVC, SDR 35
- 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.
- 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 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 ENGINEER OF THE FIELD VERIFIED INFORMATION PRIOR TO CONSTRUCTION.
- ALL BENDS SHALL BE FIELD STAKED PRIOR TO CONSTRUCTION.
- 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.

**AS-BUILT
SAN/WTM
FEB 2, 2023**



**CORE
ENGINEERING GROUP**
15004 1ST AVENUE S.
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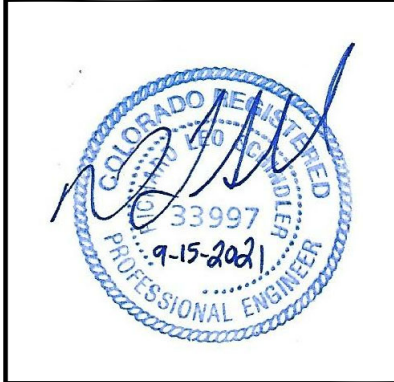
NO.	DESCRIPTION	DATE

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

PROJECT:
**SKYLINE AT LORSON
RANCH FILING NO. 1**
LAMPREY DRIVE - GRAYLING DRIVE
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

**SANITARY SEWER/WATERMAIN
NOTES**

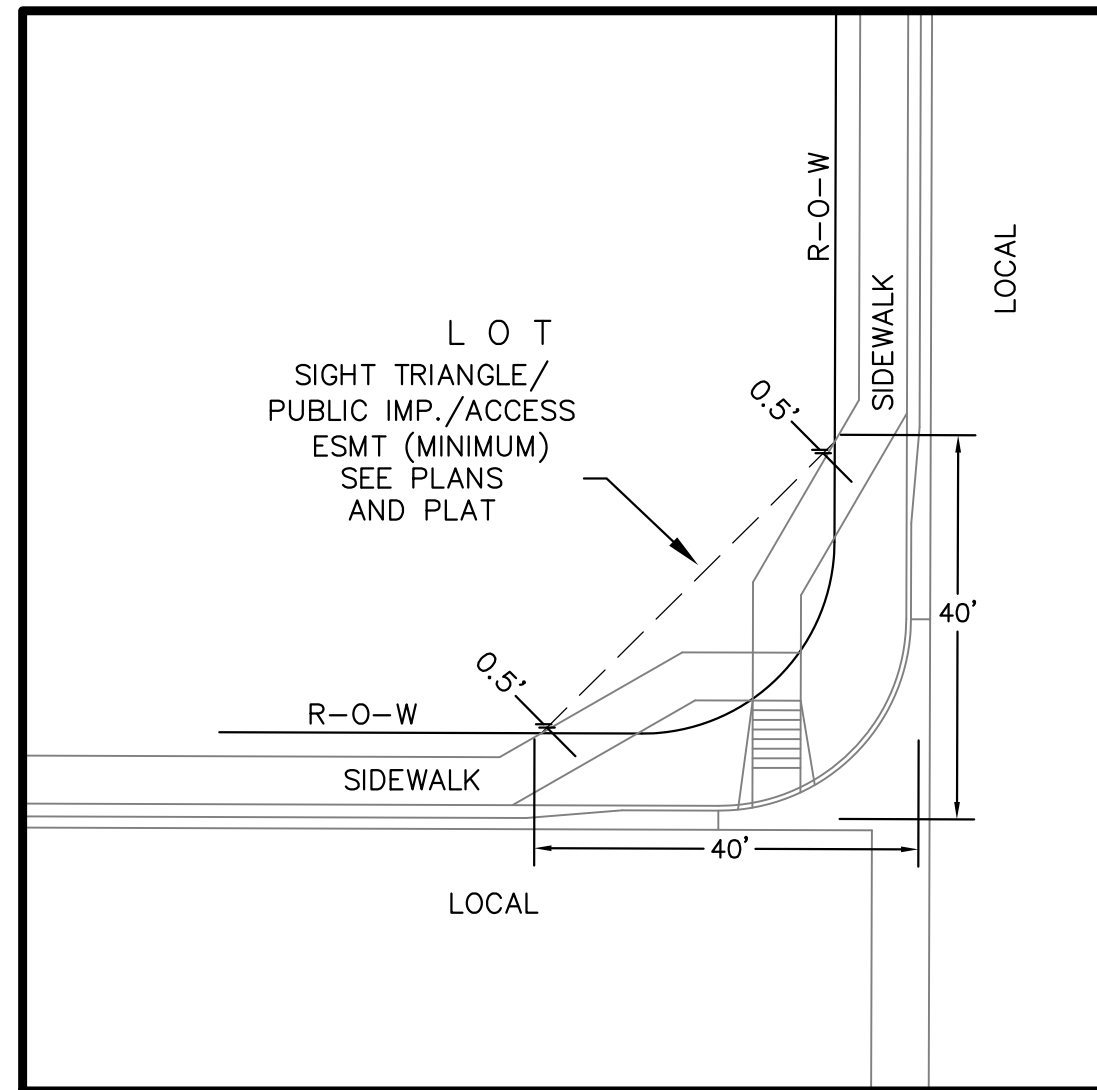


DATE:
SEPT 15, 2021

PROJECT NO.
100.063

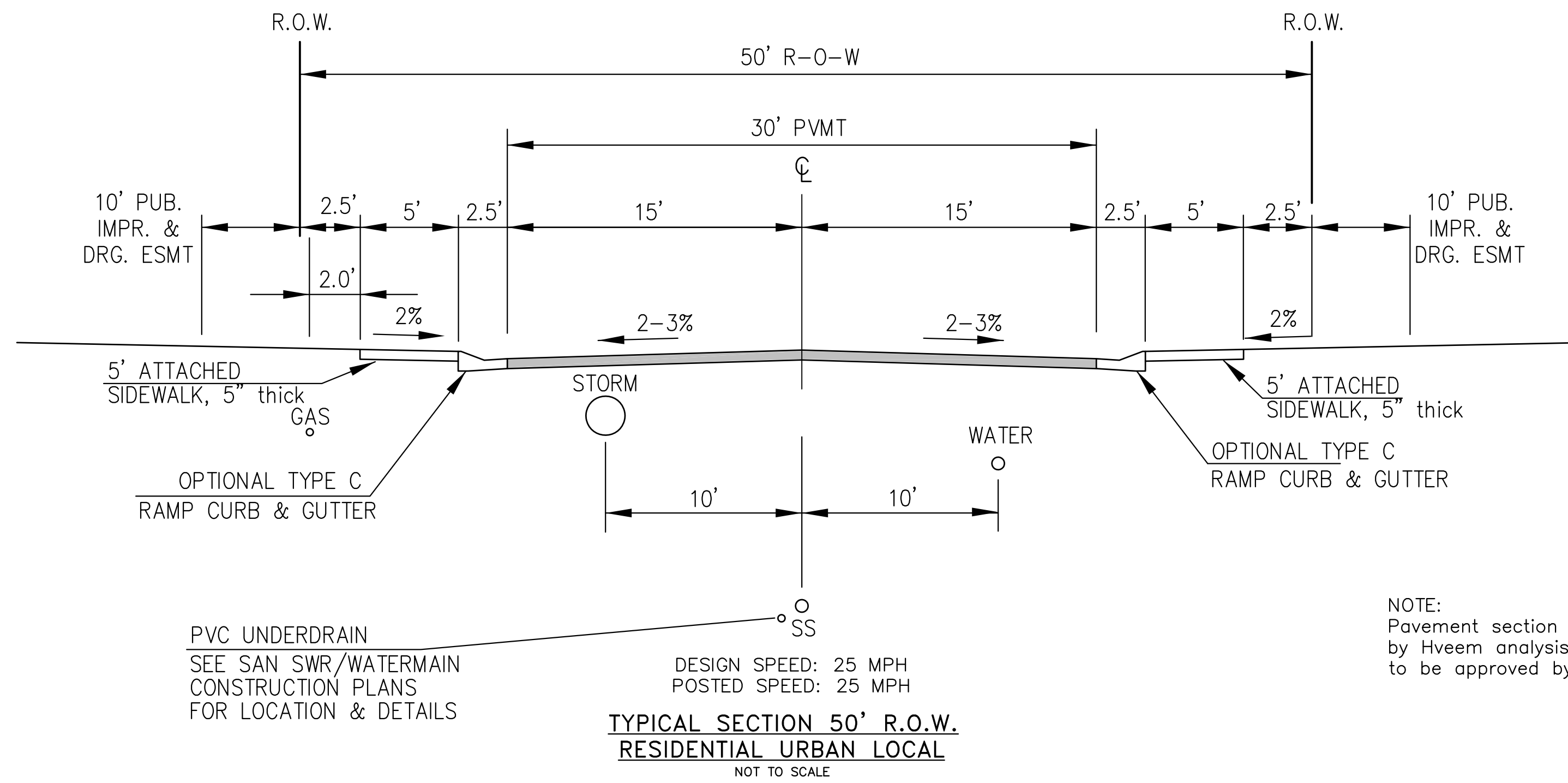
SHEET NUMBER
C1.2

TOTAL SHEETS: 11



**LOCAL ROADWAY SIGHT TRIANGLE
PUBLIC IMPROVEMENT ESMT.**
NOT TO SCALE

NOTE:
ADDITIONAL PUBLIC IMPROVEMENT EASEMENTS ARE REQUIRED WHERE
SIDEWALK ENCKROACHES INTO THE PRIVATE LOTS. SEE CONSTRUCTION DRAWINGS
AND THE FINAL PLAT. SEE CONSTRUCTION DRAWINGS AND PLAT FOR SIGHT TRIANGLES



**TYPICAL SECTION 50' R.O.W.
RESIDENTIAL URBAN LOCAL**
NOT TO SCALE

GARGANEY DRIVE, LAMPREY DRIVE, SORA STREET

NOTE:
Pavement section to be determined
by Hveem analysis and design. Design
to be approved by El Paso County PCD Engineering

**CORE
ENGINEERING GROUP**
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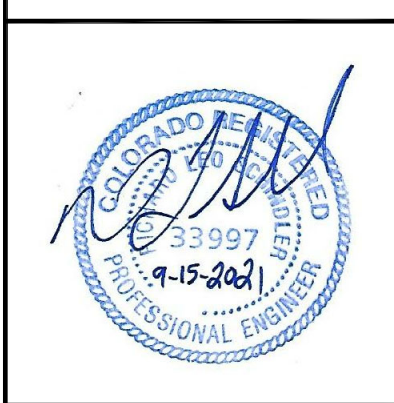
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PROJECT:
**SKYLINE AT LORSON
RANCH FILING NO. 1**
LAMPREY DRIVE - GRAYLING DRIVE
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

TYPICAL SECTIONS



DATE:
SEPT 15, 2021

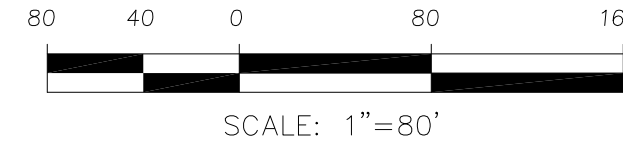
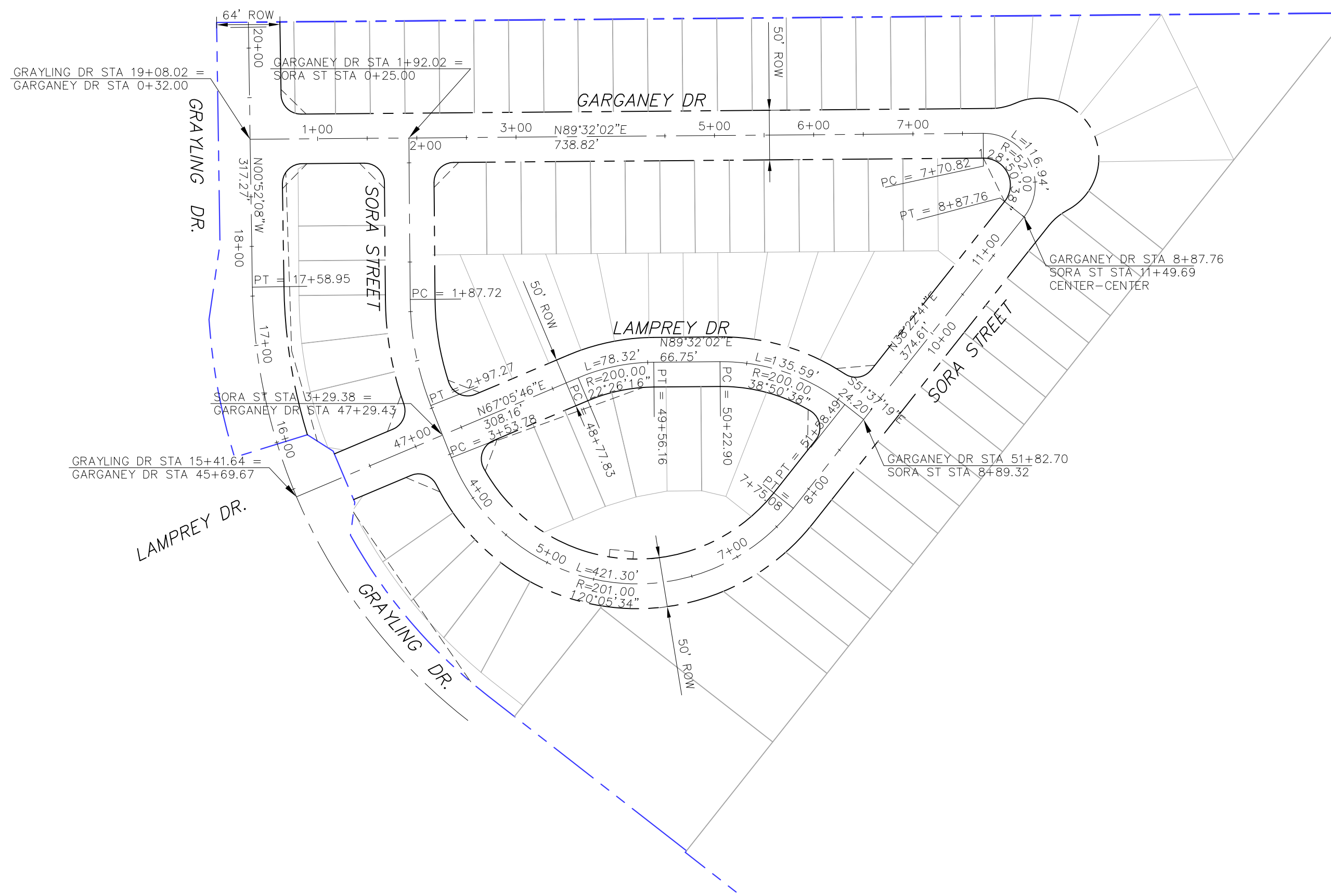
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SHEET NUMBER
C1.3

TOTAL SHEETS: 11

**AS-BUILT
SAN/WTM
FEB 2, 2023**

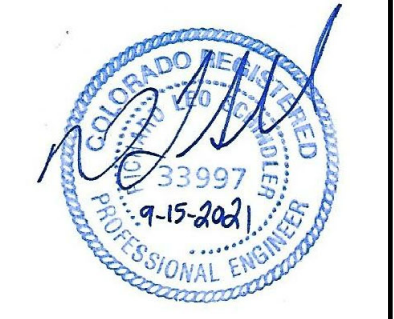




AS-BUILT
SAN/WTM
FEB 2, 2023



SKYLINE AT LORSON RANCH FIL. NO. 1
HORIZONTAL CONTROL PLAN



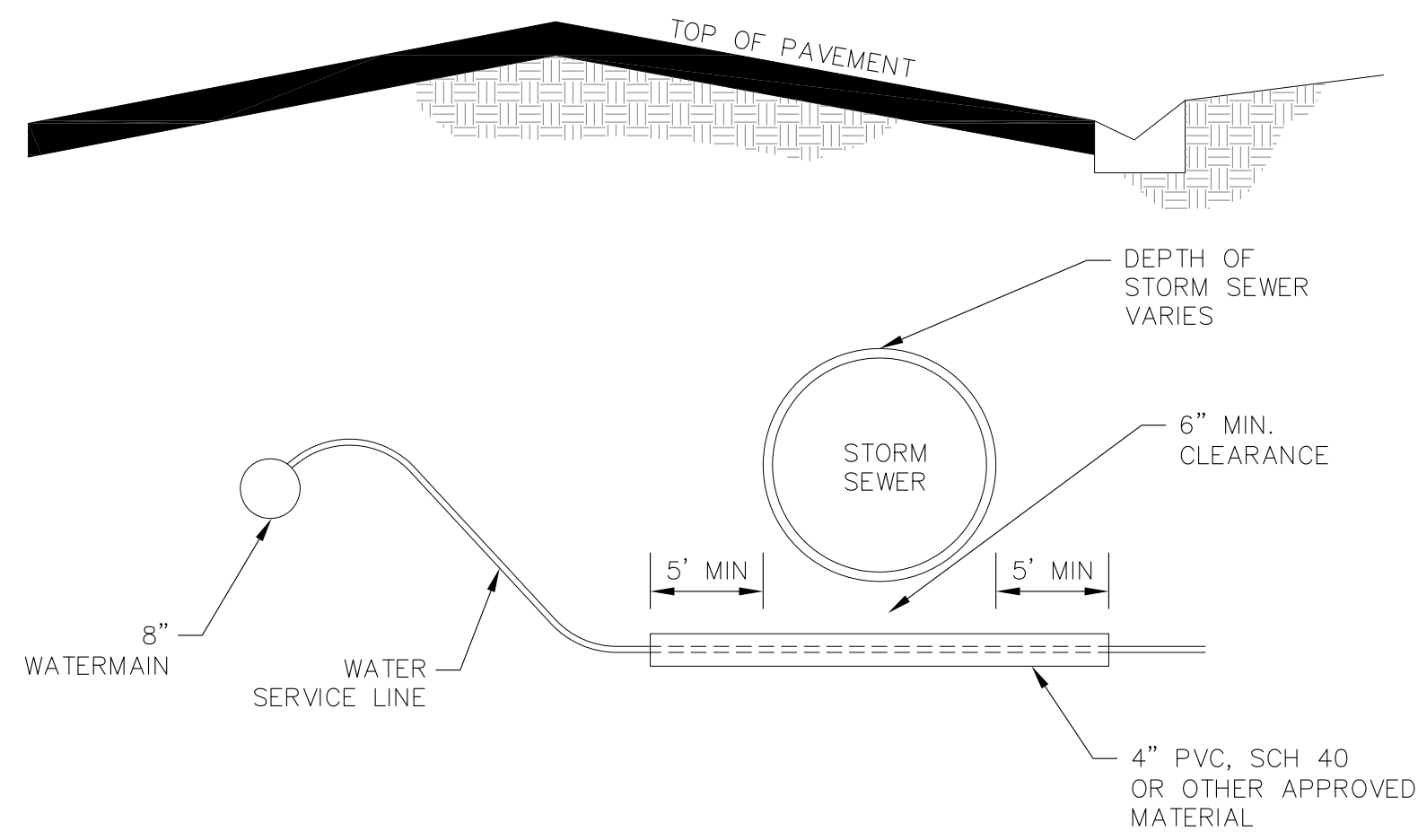
DATE:
 SEPT 15, 2021
 PROJECT NO.
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 SHEET NUMBER
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 TOTAL SHEETS: 11

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

PROJECT:
 SKYLINE AT LORSON
 RANCH FILING NO. 1
 LAMPREY DR, GRAYLING DRIVE
 COLORADO SPRINGS, COLORADO

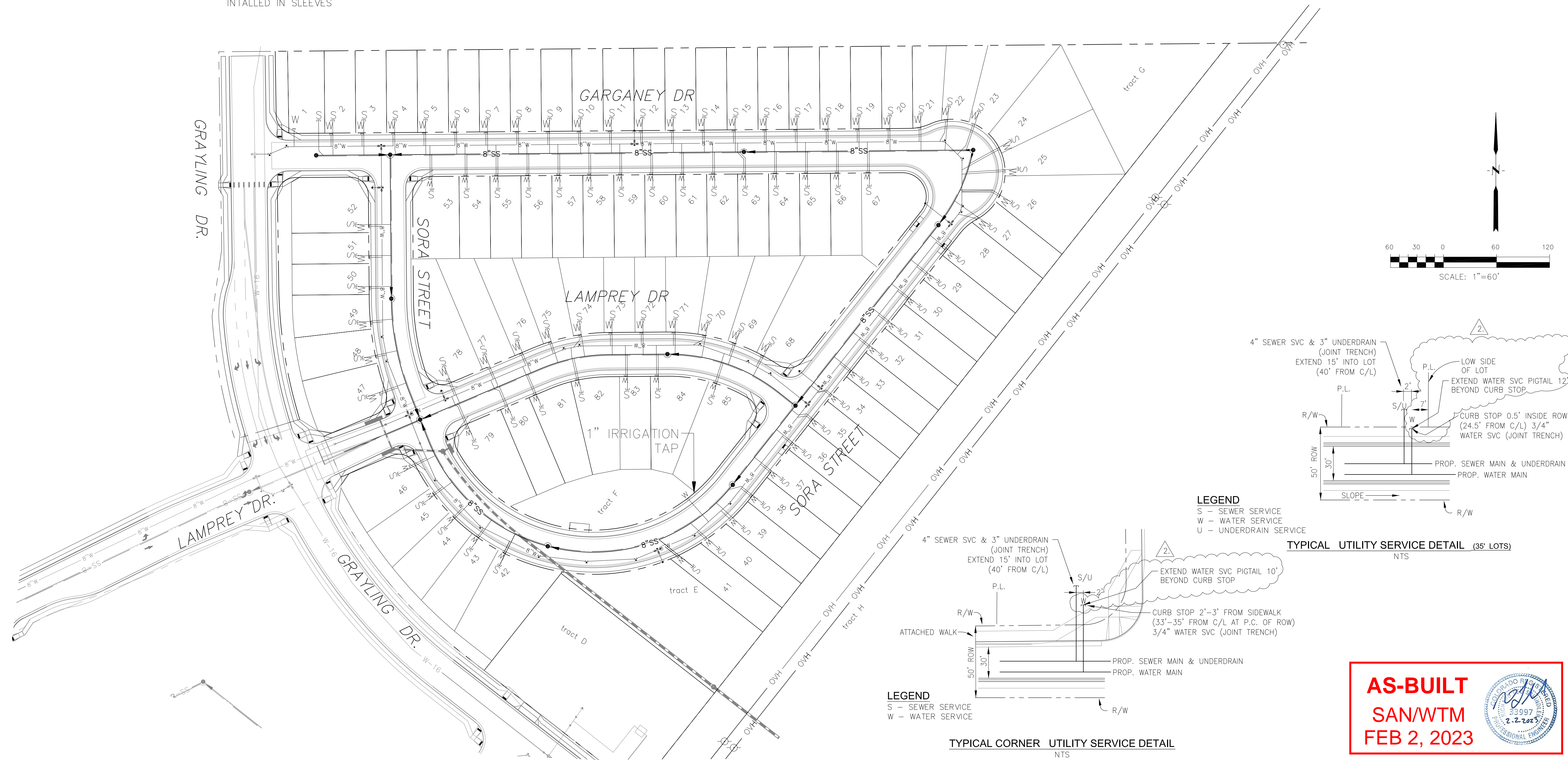
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 EMAIL: Rich@ceg1.com



WATER SERVICE UNDER STORM SEWER DETAIL
NTS

NOTE:
1. WATER SERVICES ON ALL LOTS CROSSING STORM SEWER SHALL BE INSTALLED IN SLEEVES



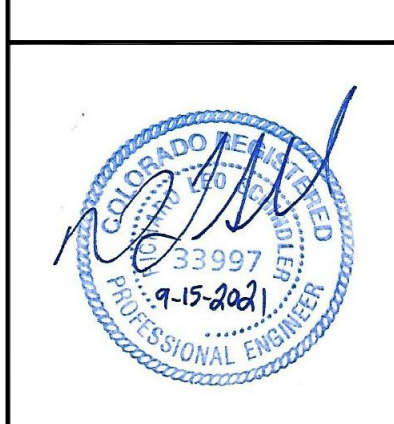
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CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rich@cegi.com

DATE: 11/30/2021
4/2/2022
DESCRIPTION: CHANGE SVC'S TO 7" FROM LOW SIDE OF LOT
ADD PIGTAILS TO WATER SERVICES

NO. 1.
2.
PROJECT: SKYLINE AT LORSON RANCH FILING NO. 1
LAMPREY DRIVE - GRAYLING DRIVE
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

SKYLINE AT LORSON RANCH FIL NO. 1
UTILITY SERVICES PLAN



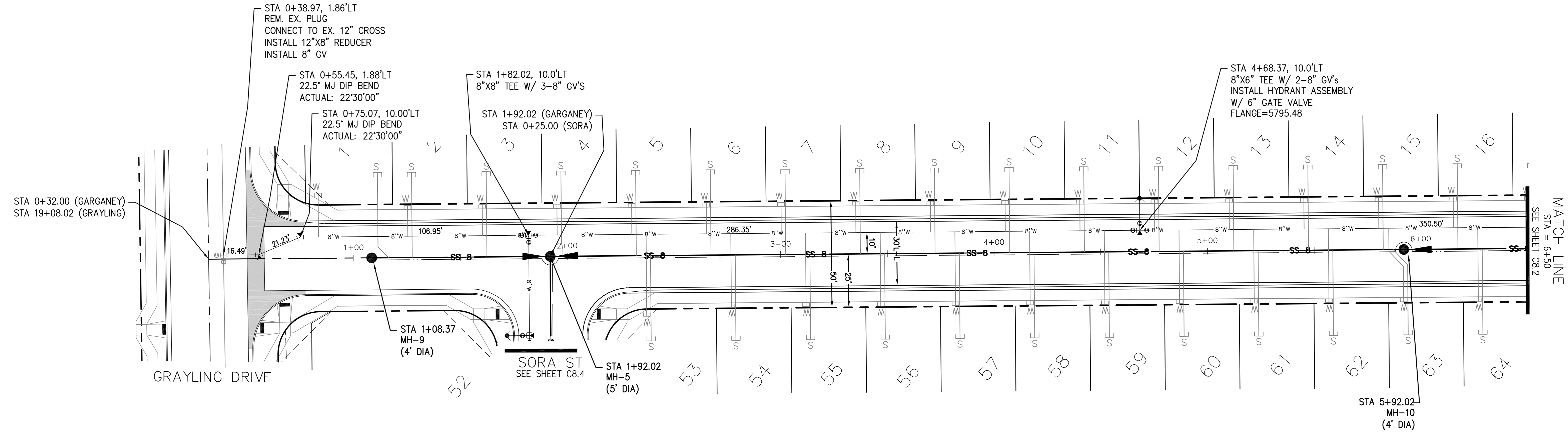
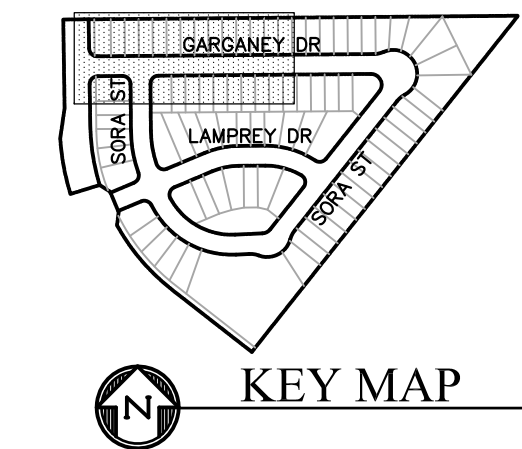
DATE: SEPT 15, 2021
PROJECT NO: 100.063
SHEET NUMBER: C3.1
TOTAL SHEETS: 11

AS-BUILT
SAN/WTM
FEB 2, 2023

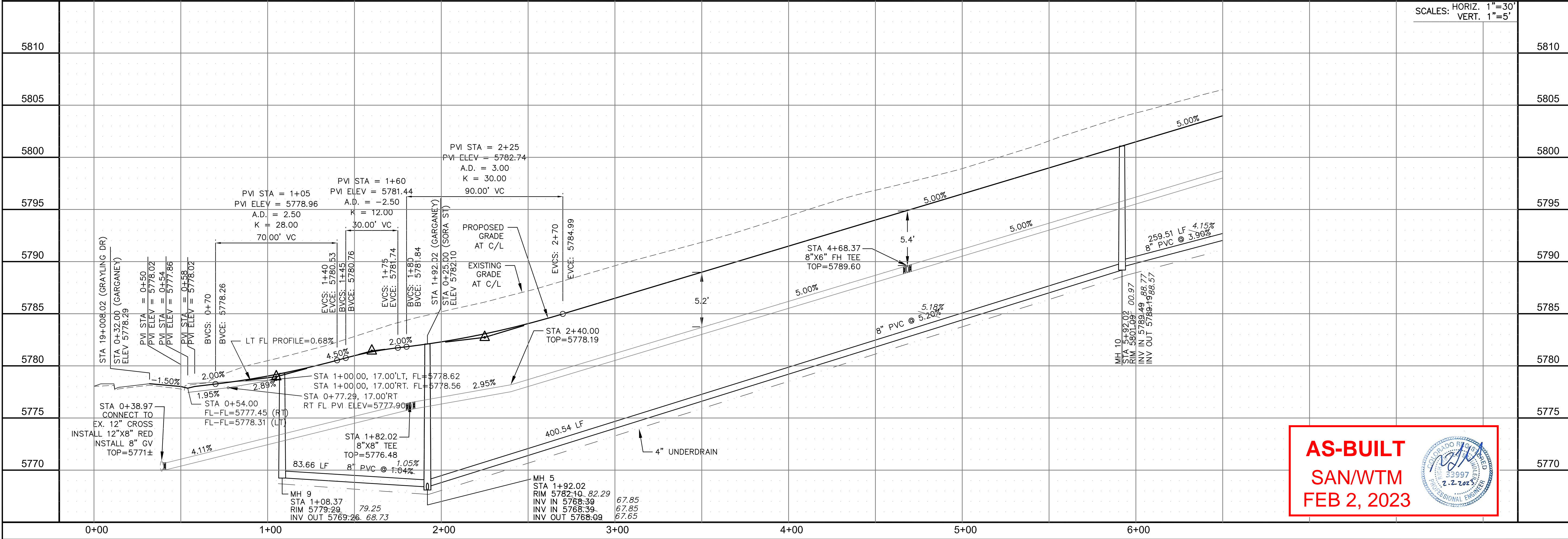
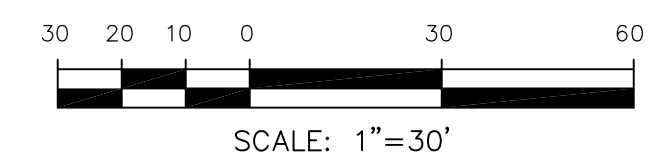


NOTES

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



GARGANEY DRIVE



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

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BIRCH CREEK, CO 80150
PHONE: 303.799.1100
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:
SKYLINE AT LORSON
RANCH FILING NO. 1
LAMPREY DRIVE, GRAYLING DRIVE
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

WATERMAIN / SANITARY
GARGANEY DRIVE
STA 0+00 TO 6+50



DATE:
SEPT 15, 2021

PROJECT NO.
100.063

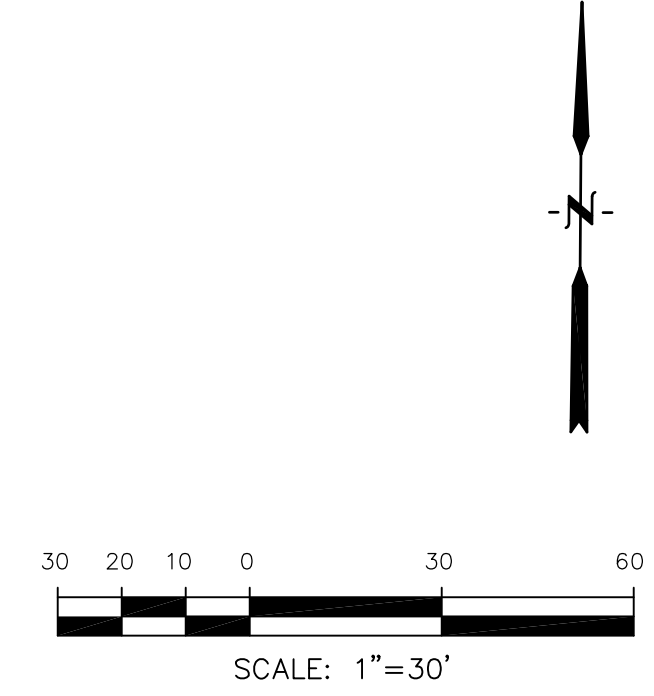
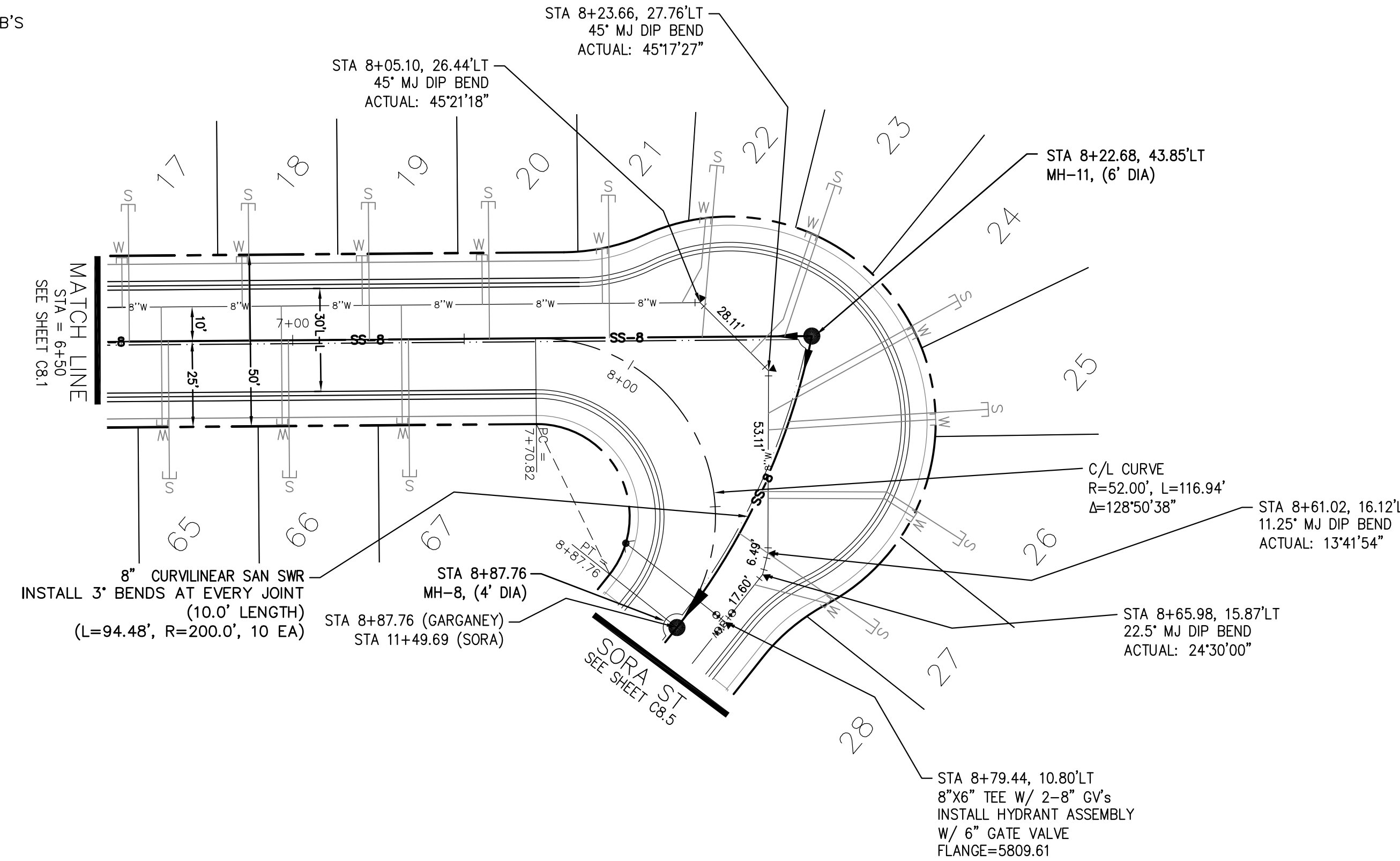
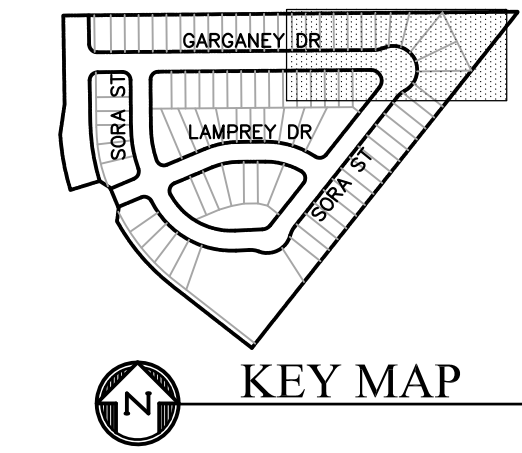
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C8.1

TOTAL SHEETS: 11

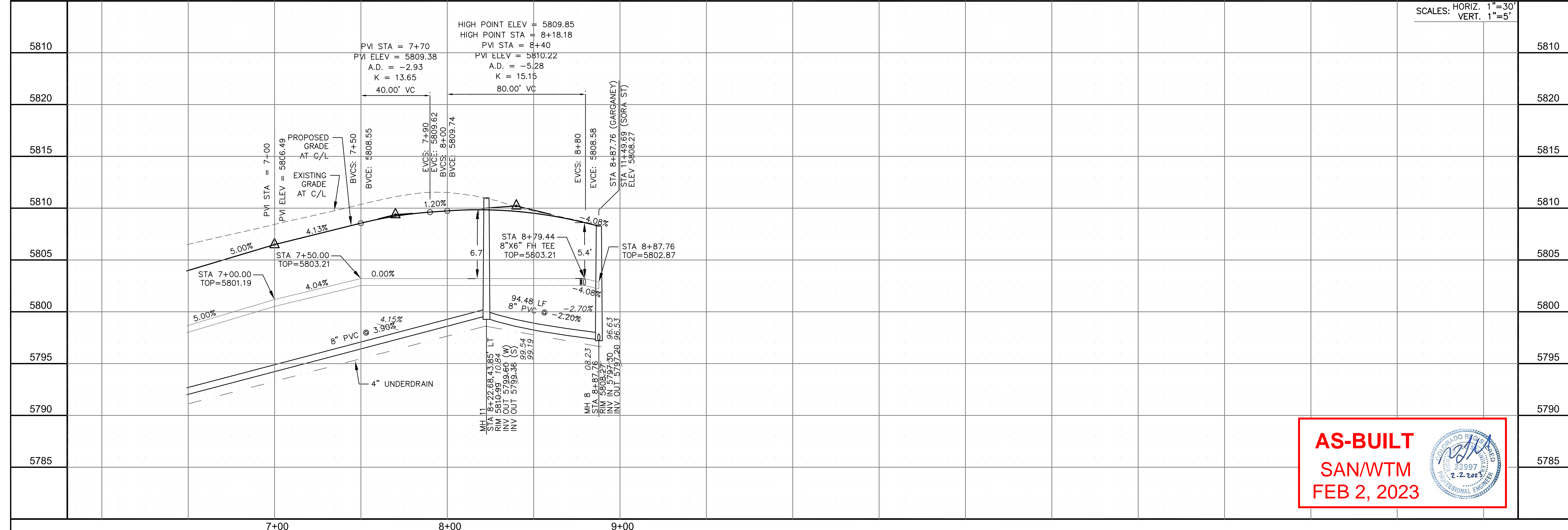
AS-BUILT
SAN/WTM
FEB 2, 2023

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



GARGANEY DRIVE



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

CORE ENGINEERING GROUP
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BIRCH CREEK, CO 80150
PH: 303.799.5700
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:
SKYLINE AT LORSON
RANCH FILING NO. 1
LAMPREY DRIVE, GRATING DRIVE
COLORADO SPRINGS, COLORADO

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

WATERMAIN / SANITARY
GARGANEY DRIVE
STA 6+50 TO 8+87.76



AS-BUILT
SAN/WTM
FEB 2, 2023



DATE:
SEPT 15, 2021

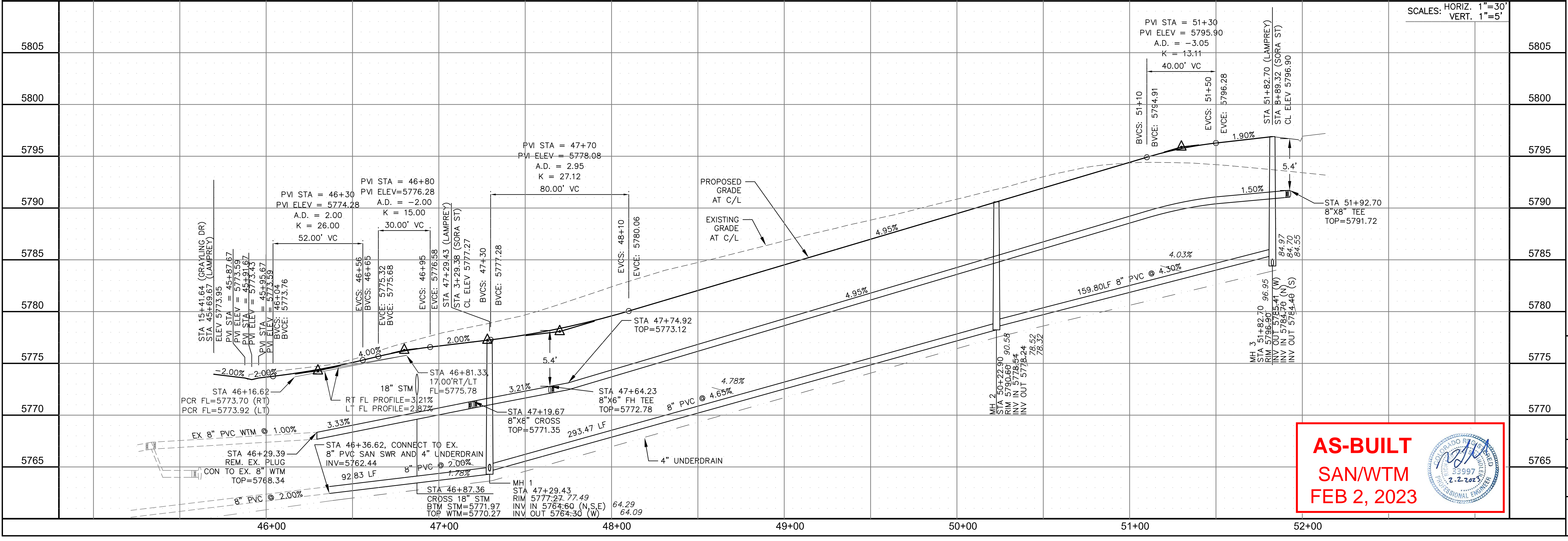
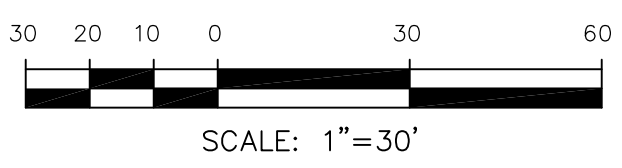
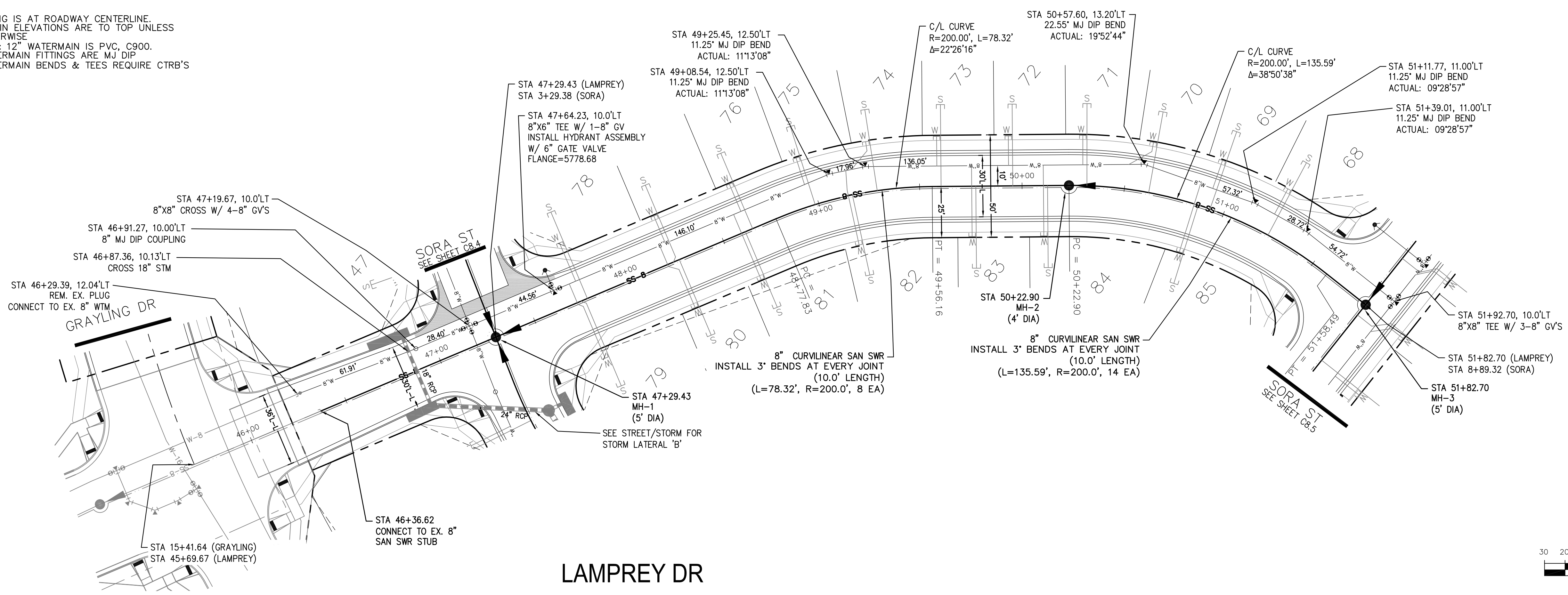
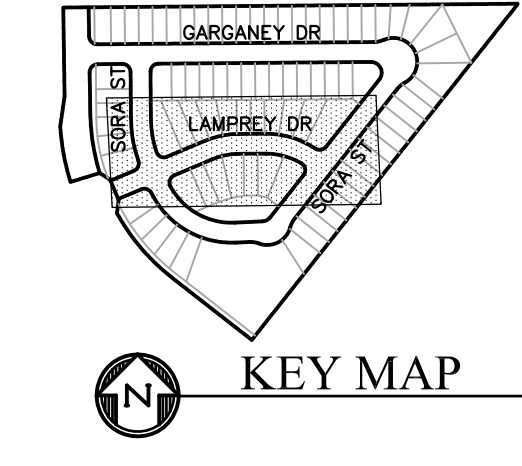
PROJECT NO.
100.063

SHEET NUMBER
C8.2

TOTAL SHEETS: 11

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



AS-BUILT
SAN/WTM
FEB 2, 2023

CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNING WOODS, CO 80016
PHONE: 719.570.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cengr.com

DATE: _____

DESCRIPTION: _____

NO. _____

PREPARED FOR: **LORSON, LLC**
212 N. WAHSATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@cengr.com

PROJECT: **SKYLINE AT LORSON RANCH FILING NO. 1**
LAMPREY DRIVE, GRAYLING DRIVE
COLORADO SPRINGS, COLORADO
CONTACT: JEFF MARK

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

WATERMAIN / SANITARY
LAMPREY DR
STA 46+16 TO 51+83

DATE: SEPT 15, 2021

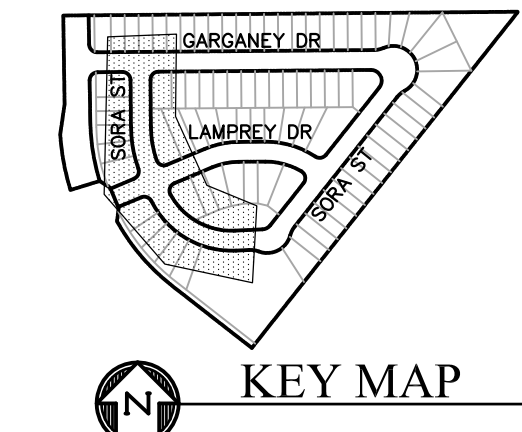
PROJECT NO. 100.063

SHEET NUMBER C8.3

TOTAL SHEETS: 11

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



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

DATE: _____
 DESCRIPTION: _____
 NO: _____

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

PROJECT:
SKYLINE AT LORSON
 RANCH FILING NO. 1
 LAMPREY DRIVE, GRATING DRIVE
 COLORADO SPRINGS, COLORADO

DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

WATERMAIN / SANITARY
SORA STREET
STA 0+25 TO 6+40

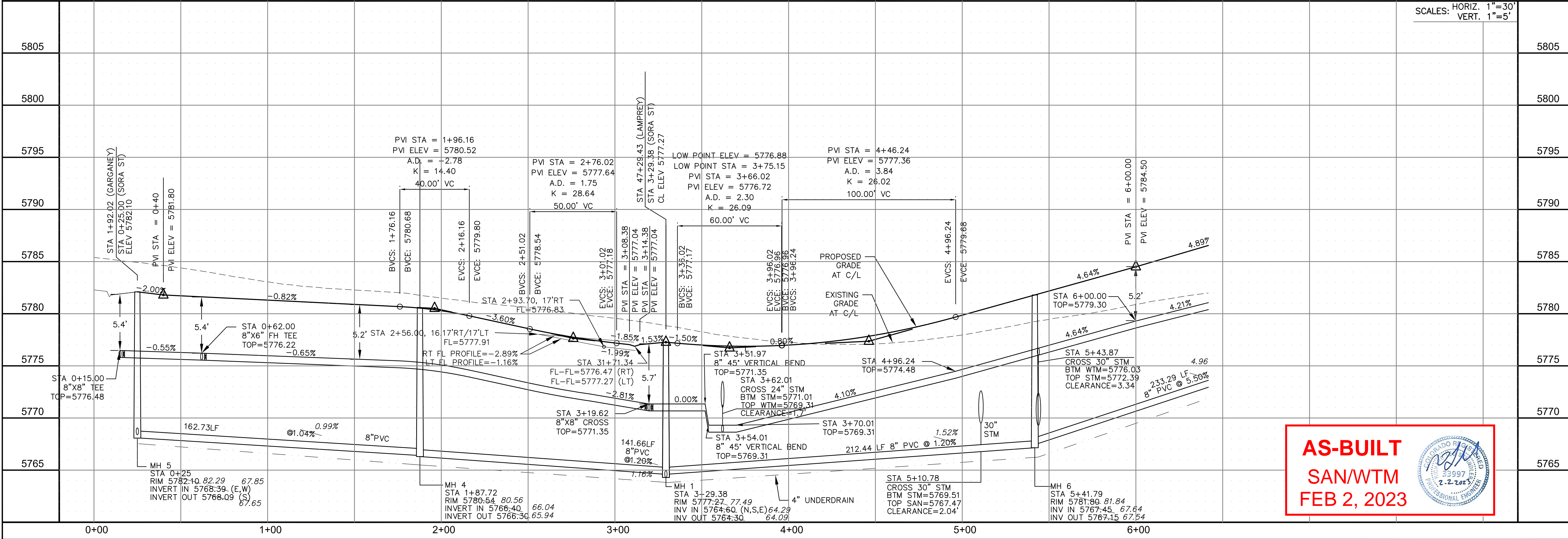
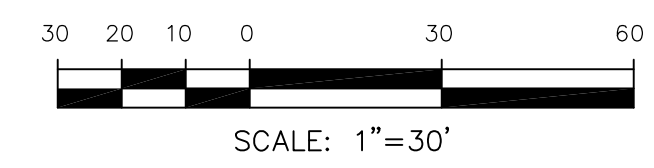
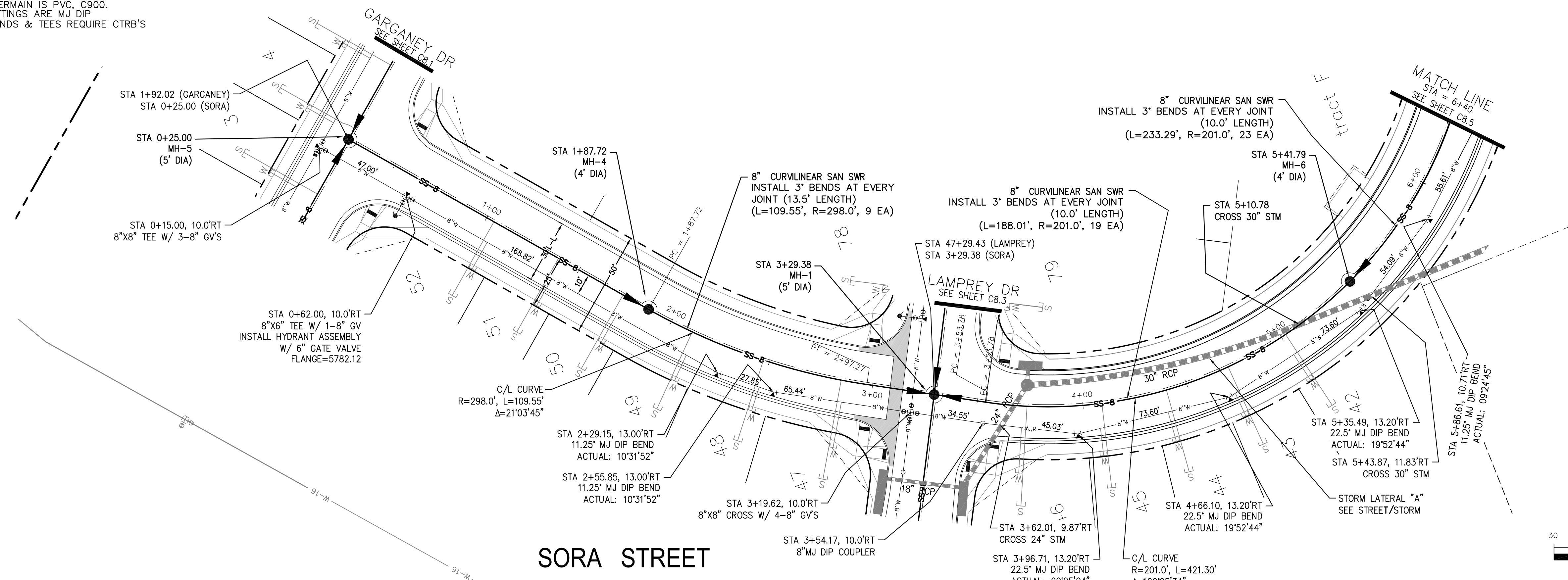


DATE:
 SEPT 15, 2021

PROJECT NO.
 100.063

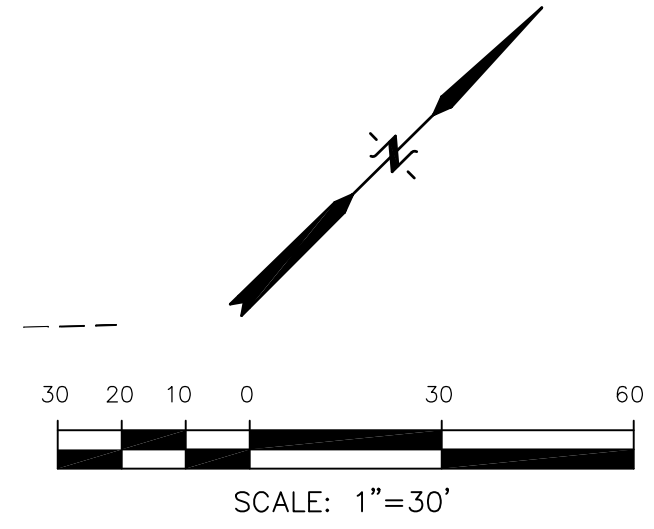
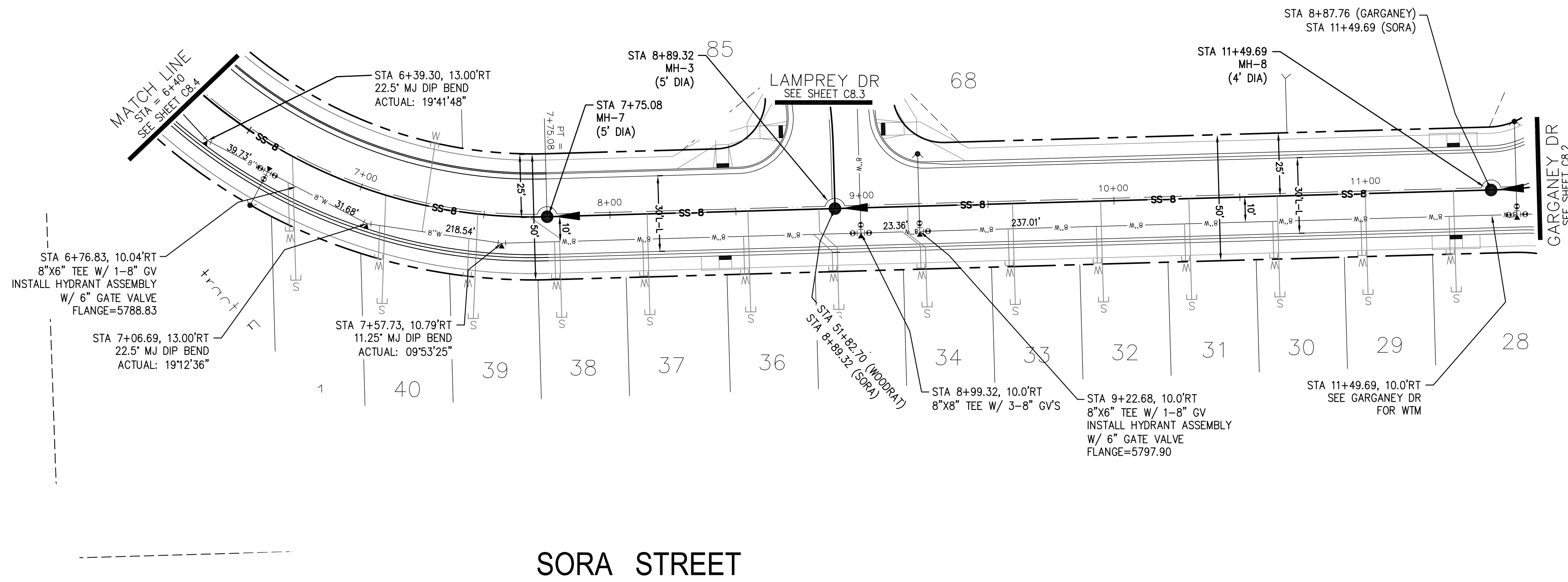
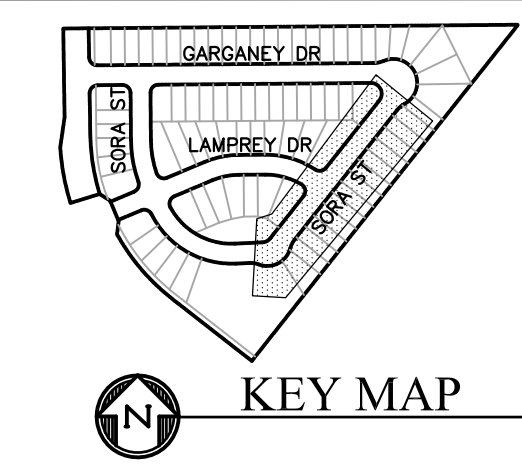
SHEET NUMBER
 C8.4

TOTAL SHEETS: 11



AS-BUILT
SAN/WTM
FEB 2, 2023





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 BIRCH CREEK, CO 80150
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 CONTACT: RICHARD L. SCHINDLER, P.E.
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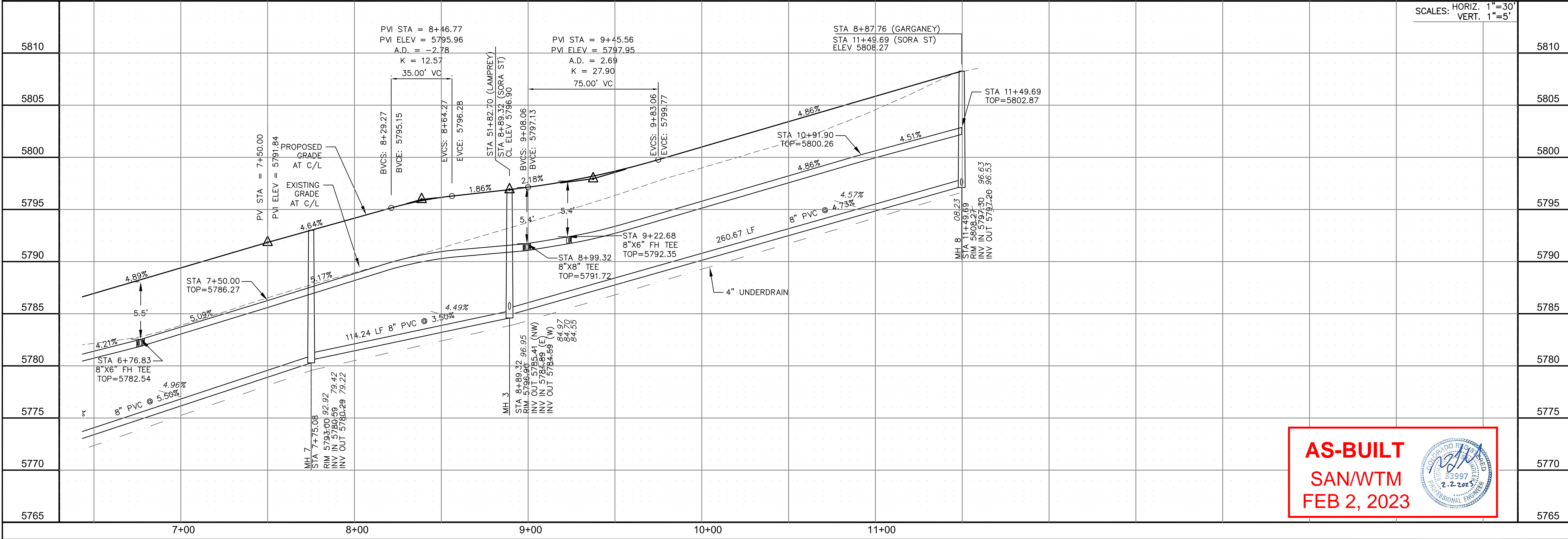
DATE: _____
 DESCRIPTION: _____
 NO.: _____
 DRAWN: RLS
 DESIGNED: RLS
 CHECKED: RLS

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

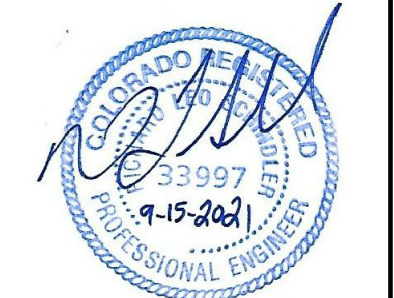
PROJECT:
SKYLINE AT LORSON RANCH FILING NO. 1
 LAMPREY DRIVE, GRATING DRIVE
 COLORADO SPRINGS, COLORADO

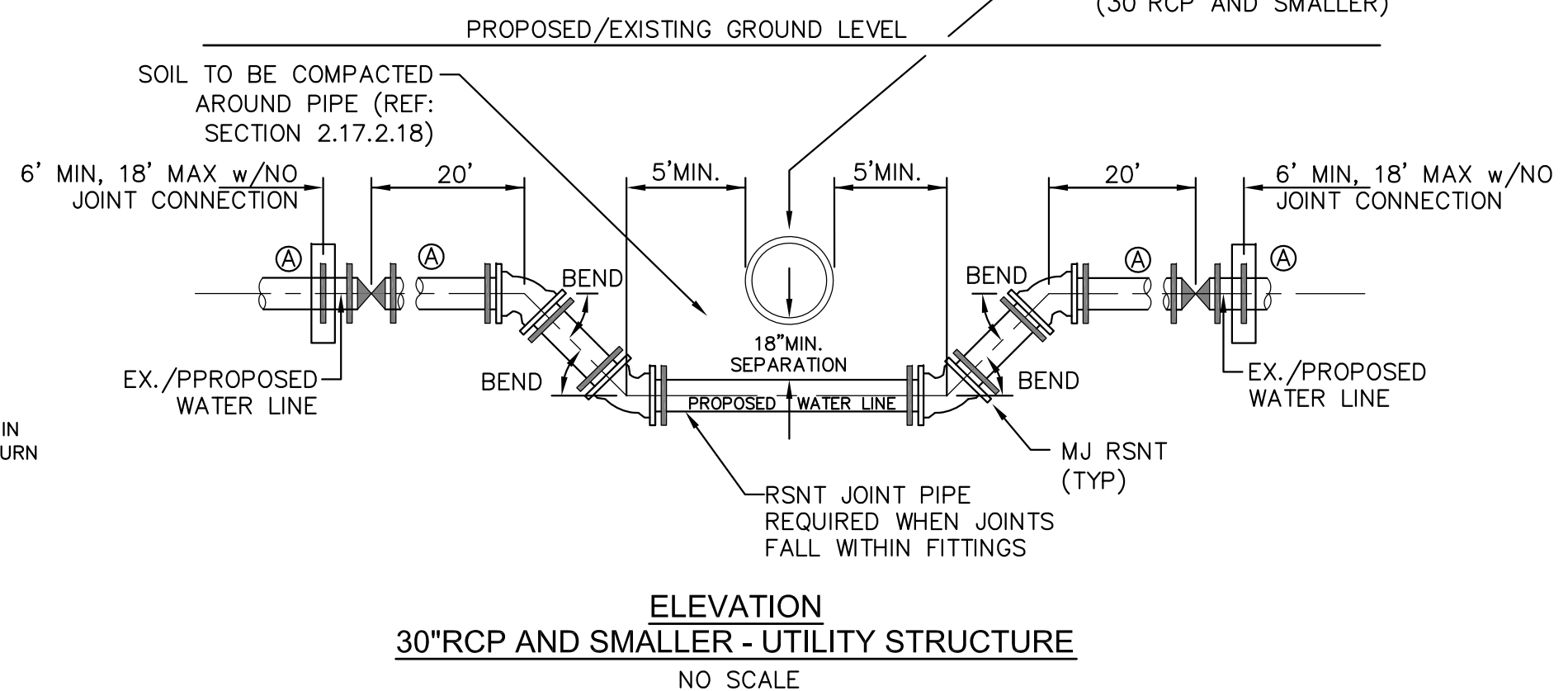
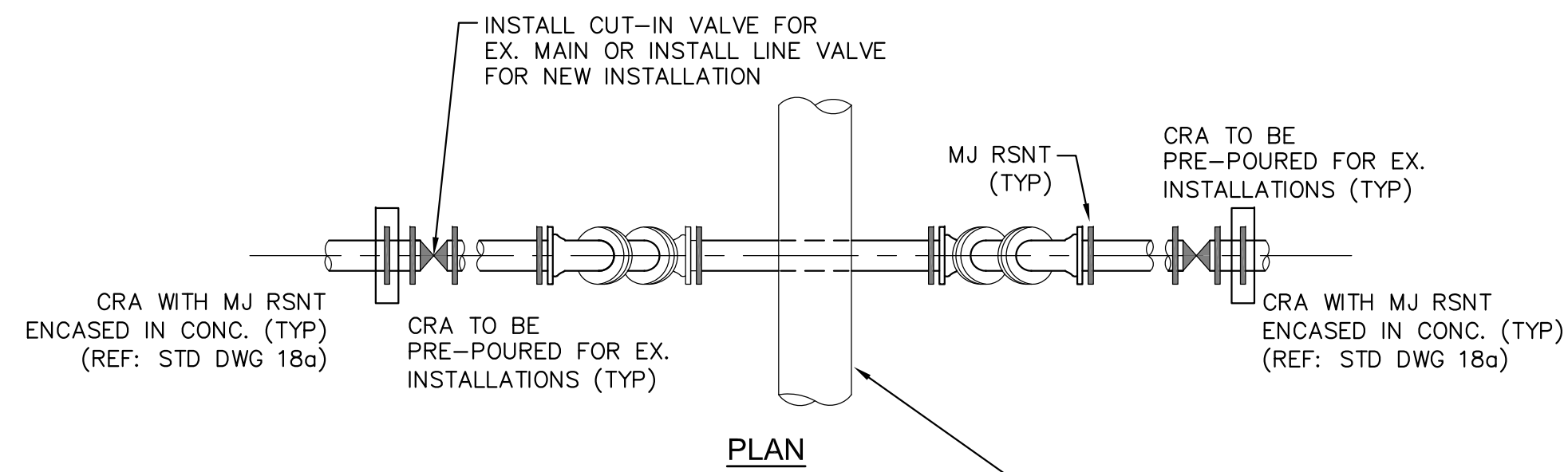
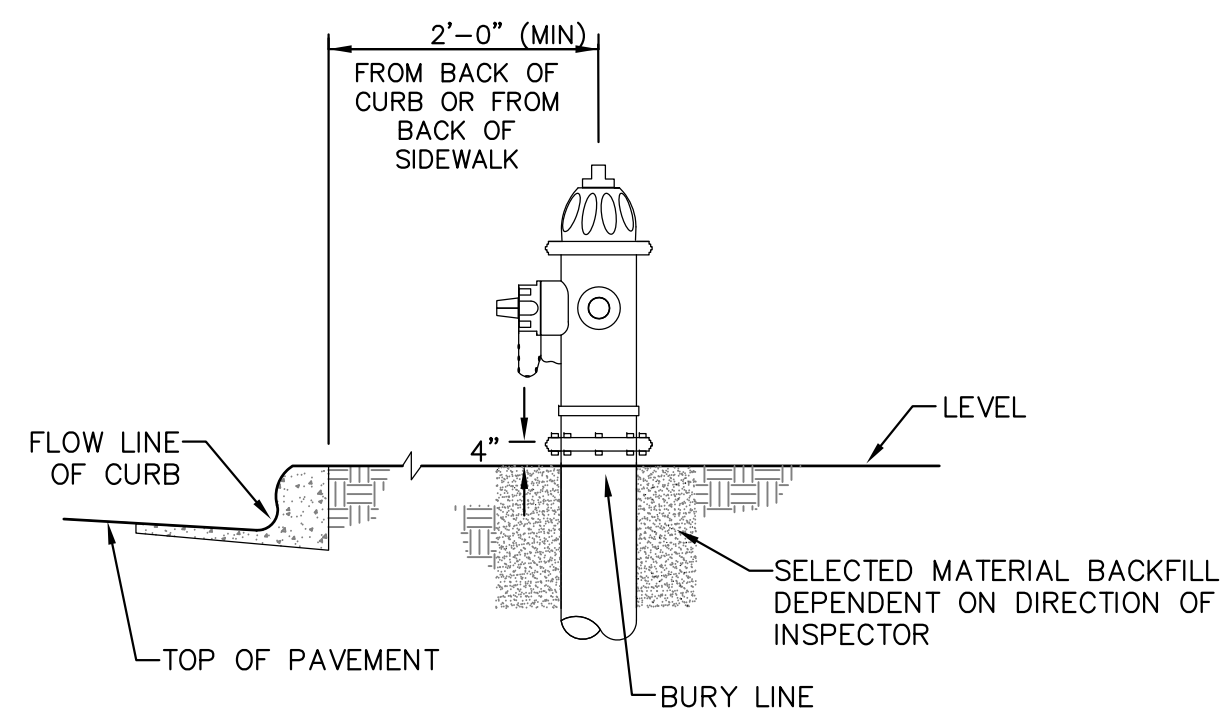
WATERMAIN / SANITARY
SORA STREET
STA 6+40 TO 11+57.79

DATE: SEPT 15, 2021
 PROJECT NO. 100.063
 SHEET NUMBER C8.5
 TOTAL SHEETS: 11



AS-BUILT
SAN/WTM
FEB 2, 2023

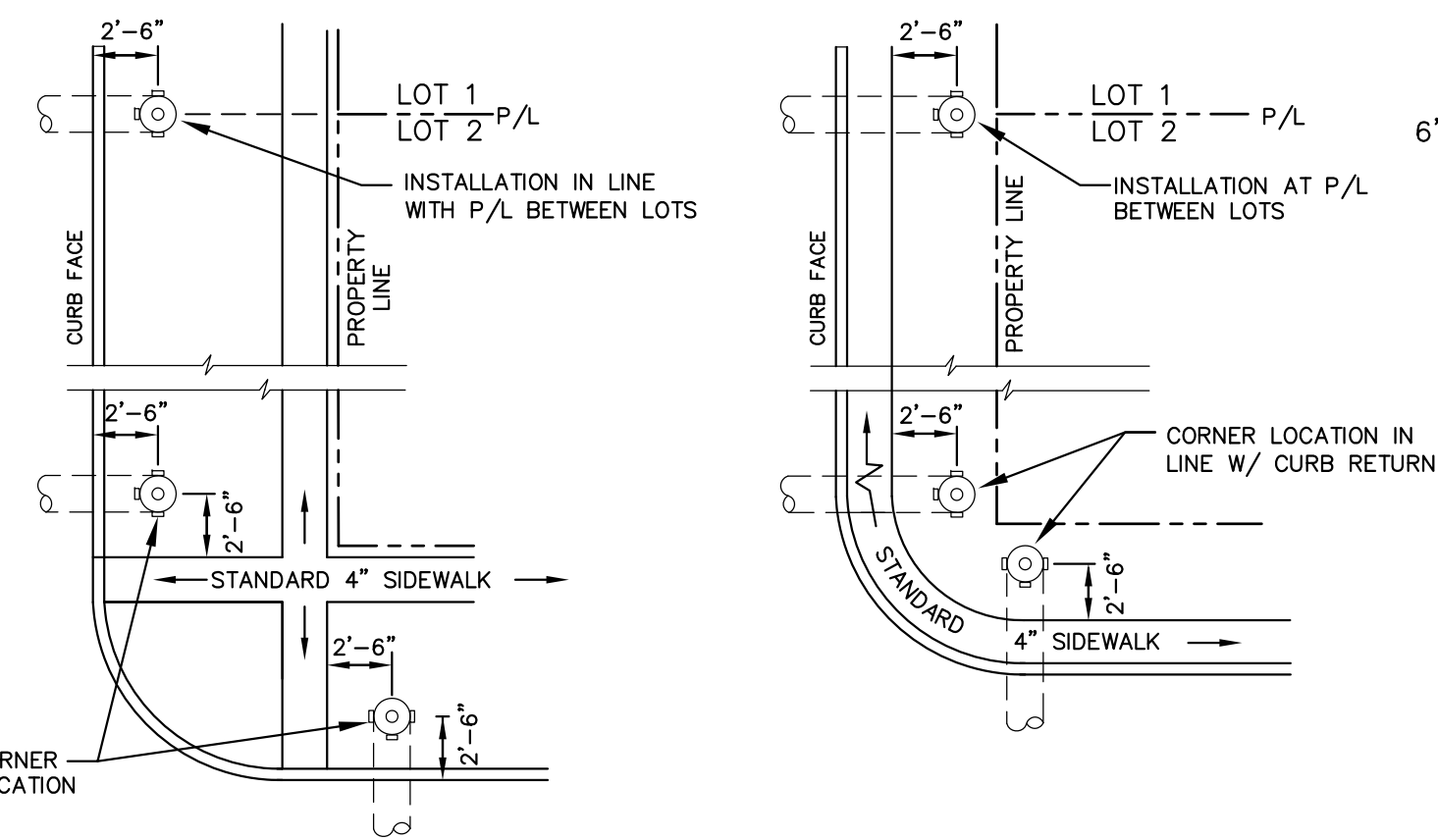




GENERAL NOTES

1. D.I.P. PIPE REQUIRED IN LOWERINGS (AT THE DISCRETION OF THE WRD/INSPECTOR PVC PIPE MAYBE APPROVED).
2. (A) 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



DETACHED SIDEWALK LOCATION NO SCALE

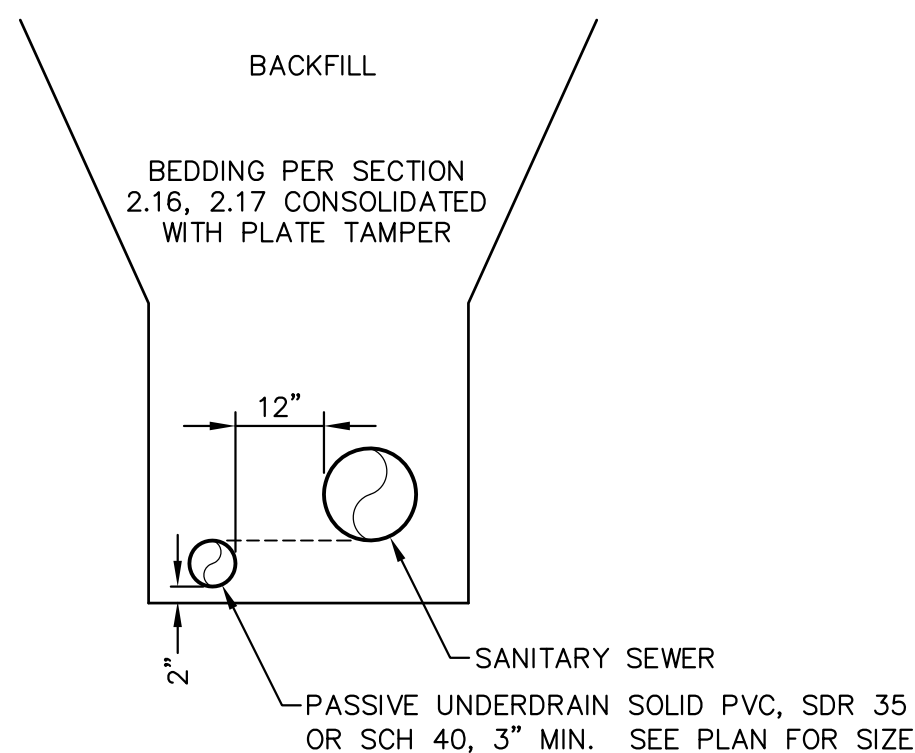
ATTACHED SIDEWALK LOCATION NO SCALE

NOTE
ALL HYDRANTS SHALL BE GUARDIAN K-81D OR AVK SERIES 2700.

NOTES

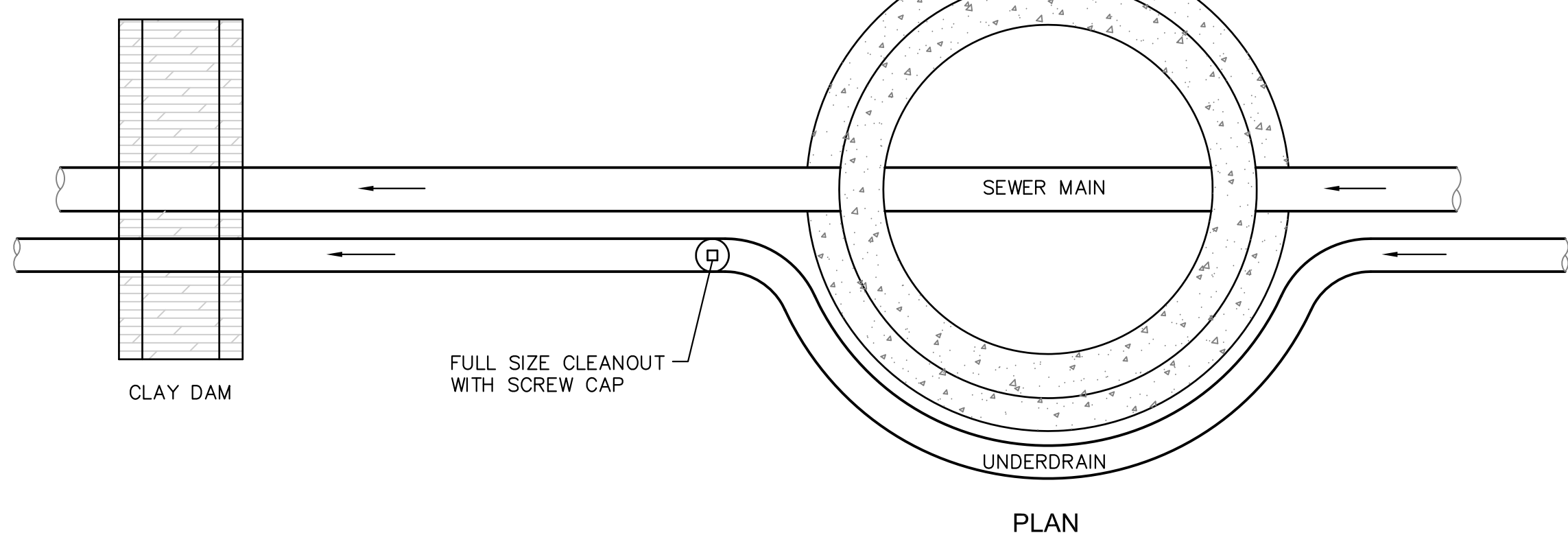
1. HYDRANT NOZZLE SHALL BE POSITIONED AT RIGHT ANGLES TO CURB. IF NO CURB OR SIDEWALK EXIST, NOZZLE SHALL BE PLACED AT RIGHT ANGLE TO STREET OR ALLEY.
2. HYDRANTS WILL BE PLACED A MINIMUM OF 5.0 FEET FROM ANY UTILITY OR DRAINAGE STRUCTURE (TO BE CO-ORDINATED WITH JOINT TRENCH INSTALLATION)
3. ANY HYDRANT 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

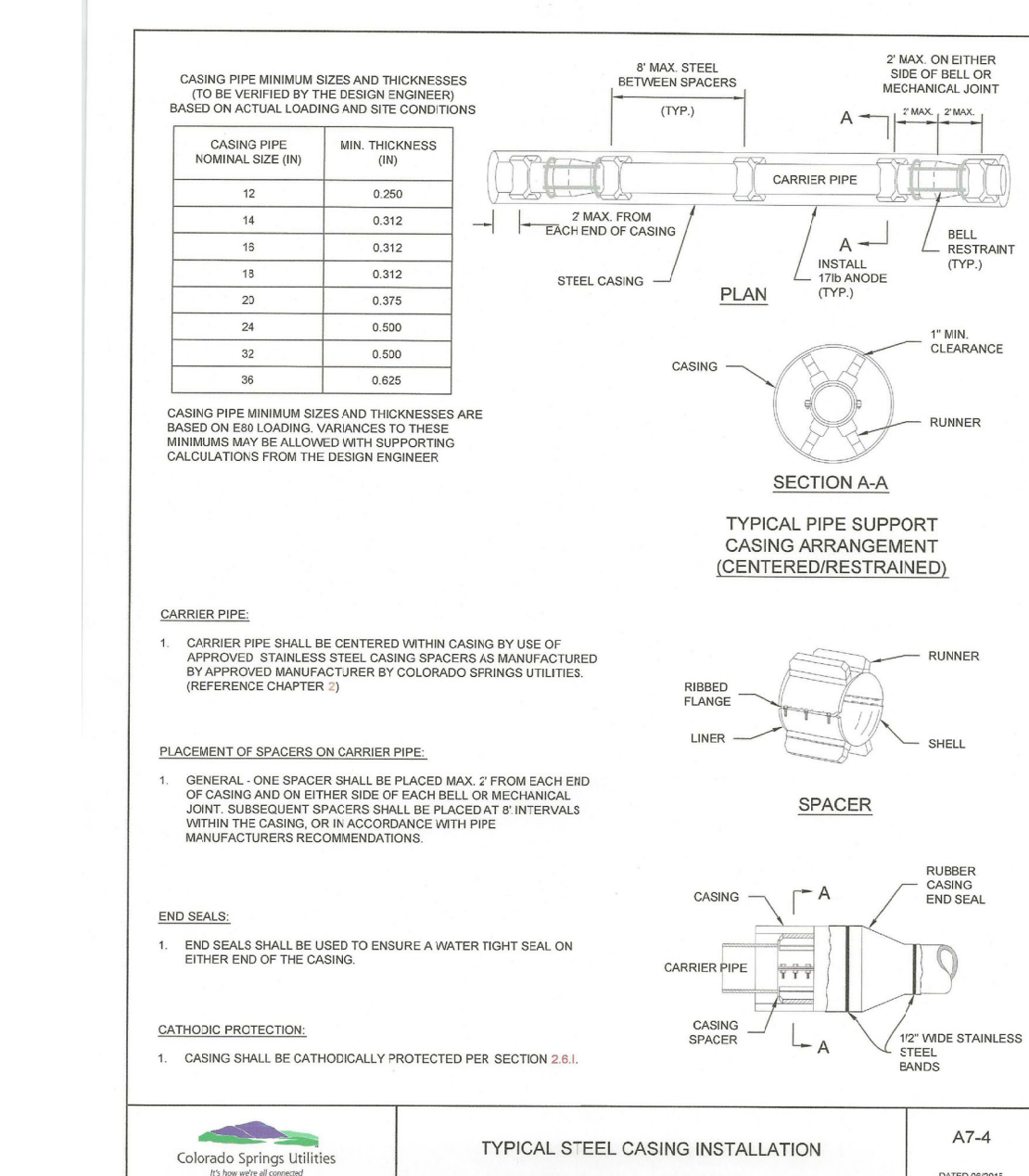


SANITARY SEWER PASSIVE UNDERDRAIN DETAIL (PER CSU STANDARD # WW-11A) NO SCALE

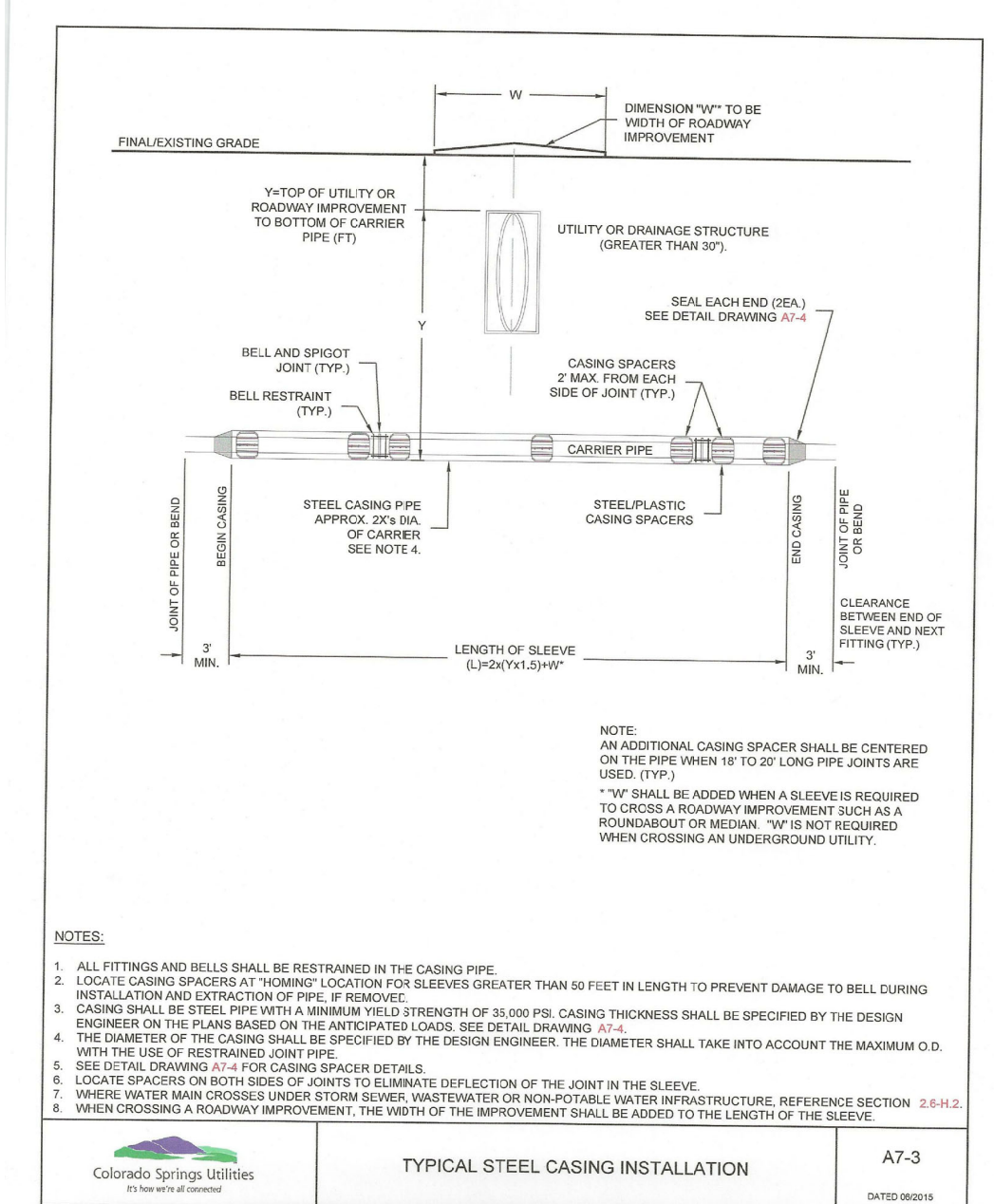
NOTE:
POINT OF DISCHARGE TO PUBLIC SYSTEM IS REQUIRED. UNDERDRAIN CONNECTIONS SHALL BE 3\"/>



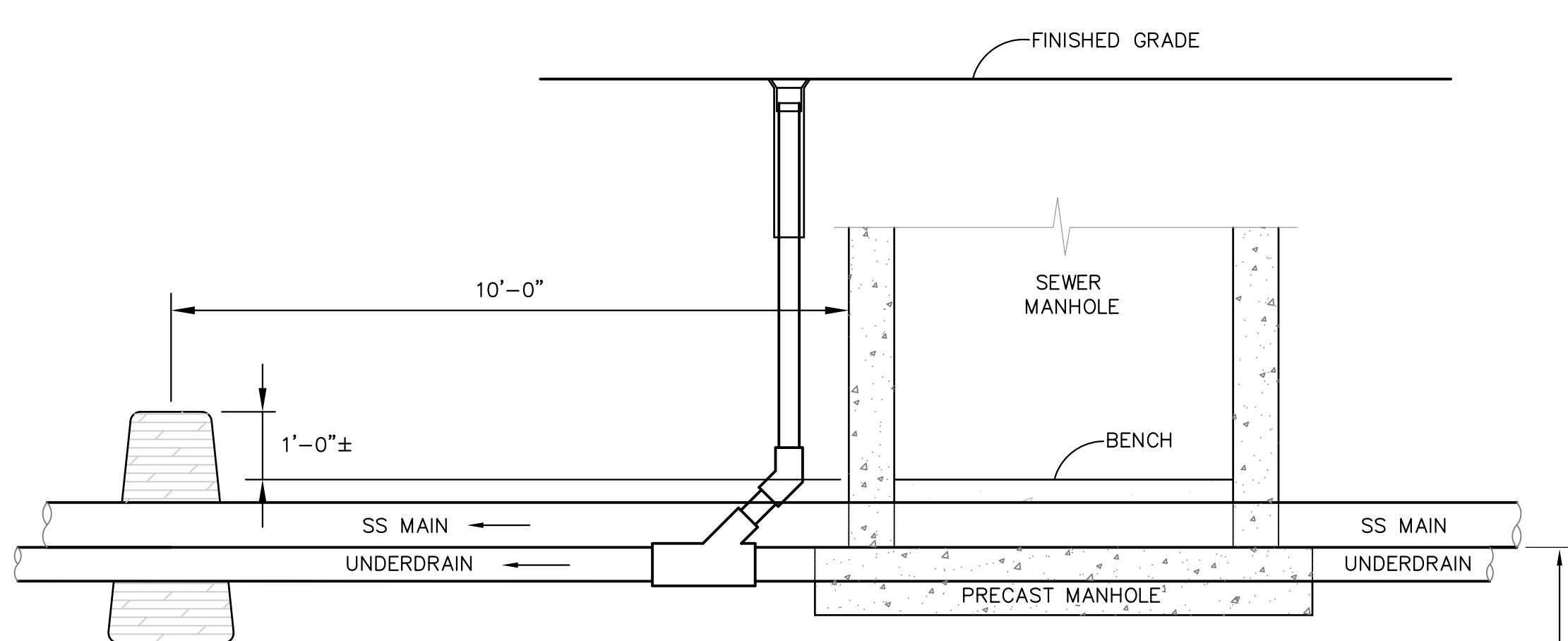
PLAN



TYPICAL STEEL CASING INSTALLATION A7-4



TYPICAL STEEL CASING INSTALLATION A7-3



SECTION

GROUNDWATER UNDERDRAIN CLEANOUT (PASSIVE) LOCATIONS OUTSIDE MANHOLE

(PER CSU STANDARD # WW-12) NO SCALE

TOP OF UNDERDRAIN EQUALS BOTTOM OF SEWER MAIN UNLESS NOTED OTHERWISE

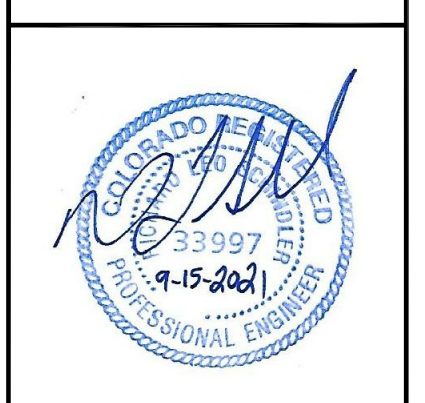


CORE ENGINEERING GROUP
15004 1ST AVENUE S.
BURNSVILLE, MN 55306
PH: 718.970.1100
CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: rich@cegi.com

DATE: _____
DESCRIPTION: _____
NO: _____
PREPARED FOR: **LORSON, LLC**
PROJECT: **SKYLINE AT LORSON RANCH FILING NO. 1**
212 N. WAHSAATCH AVE, SUITE 301
COLORADO SPRINGS, COLORADO 80903
CONTACT: JEFF MARK

DRAWN: RLS
DESIGNED: RLS
CHECKED: RLS

WATER/SEWER DETAILS



DATE: SEPT 15, 2021

PROJECT NO. 100.063

SHEET NUMBER C12.1

TOTAL SHEETS: 11