

# AURA AT CROSSROADS

SITUATED IN THE SOUTHEAST 1/4 OF SECTION 8, TOWNSHIP 14 SOUTH, RANGE  
65 WEST OF THE 6TH P.M.,  
COUNTY OF EL PASO, STATE OF COLORADO

## SANITARY SEWER PLANS

### LEGAL DESCRIPTION

LOT 1 AND TRACT C OF THE CROSSROADS MIXED USE FILING NO. 1 RECORDED AT RECEPTION NO. \_\_\_\_\_, EL PASO COUNTY  
CLERK AND RECORDER

SAID PARCELS CONTAINS 553,058 SQUARE FEET OR 12.70 ACRES, MORE OR LESS.

AND 44,375 SQUARE FEET OR 1.02 ACRES, MORE OR LESS.

### BASIS OF BEARINGS

BEARINGS ARE BASED ON THE WEST LINE OF THE SOUTH-WEST QUARTER OF SECTION 8, TOWNSHIP 14 SOUTH, RANGE 66 WEST OF THE 6TH  
PRINCIPAL MERIDIAN, MONUMENTED AT THE WEST QUARTER CORNER BY AN ILLEGIBLE 3-1/2" BRASS CAP 2' 0" DOWN AND AT THE  
SOUTH-WEST CORNER BY A 3-1/2" ALUMINUM CAP IN A RANGE BOX STAMPED 'LS 22573' ASSUMED TO BEAR NORTH 00°04'51" EAST.

### BENCHMARK

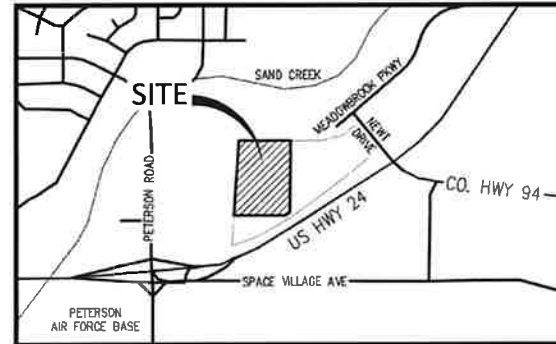
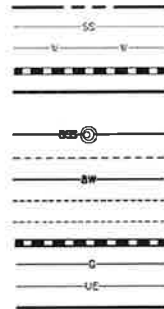
BENCHMARK IS A NGS POINT R 76, BEING A STANDARD U.S. COAST AND GEODETIC SURVEY BENCH MARK DISK SET IN THE TOP OF  
CONCRETE POST. IT PROJECTS 3 INCHES AND IS STAMPED R 76 1935, ELEVATION = 6286.32 NGVD29.

### ABBREVIATIONS

BOP	BOTTOM OF PIPE
CCNG	CONCRETE
DEF	DEFLECTION
DI	DIAMETER
DIP	DUCTILE IRON PIPE
DS	DOWNSPOUT
E	EAST, EASTING
EGL	ENERGY GRADE LINE
EL	ELEVATION
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
F	FLOW LINE
GV	GATE VALVE
HC	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSO	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TOP	TOP OF PIPE
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UTIL	UTILITY
VERT	VERTICAL
WAT	WATER
XING	CROSSING

### LEGEND:

- PROPERTY BOUNDARY
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING STORM LINE
- PROPOSED LANDSCAPE DRAIN PIPE
- PROPOSED LANDSCAPE AREA DRAIN
- PROPOSED SANITARY SEWER W/ MANHOLE
- PROPOSED SANITARY SERVICE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE
- PROPOSED SANITARY SERVICE
- PROPOSED STORM LINE
- PROPOSED GAS LINE
- PROPOSED ELECTRIC LINE
- PROPOSED RETAINING WALL
- PROPOSED HYDRANT



VICINITY MAP  
SCALE: 1" = 500'

### SHEET INDEX

- SS1 COVER SHEET
- SS2 OVERALL UTILITY PLAN
- SS3 SANITARY PLAN & PROFILE LINE A
- SS4 SANITARY PLAN & PROFILE LINE A
- SS5 SANITARY PLAN & PROFILE LINE B
- SS6 SANITARY PLAN & PROFILE LINE B
- SS7 SANITARY DETAILS

### ENGINEERS STATEMENT:

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.



JOHN D. O'ROURKE, P.E.  
STATE OF COLORADO REGISTRATION NO. 43327

05/02/2022

DATE

### OWNER/DEVELOPER'S STATEMENT:

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

*Allison Jones*  
ALLISON JONES  
TRINISIC ACQUISITION COMPANY, LLC  
8235 DOUGLAS AVE., DALLAS, TX 75225

### EL PASO COUNTY:

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

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND  
ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH E.C.M. SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE  
SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR  
APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

APPROVED  
Engineering Department  
06/23/2022 5:06:13 PM  
EPC Planning & Community  
Development Department  
COUNTY ENGINEER/E.C.M. ADMINISTRATOR

DATE

### CHEROKEE METROPOLITAN DISTRICT WASTEWATER PLAN APPROVAL

THE CHEROKEE METROPOLITAN DISTRICT RECOGNIZES THE DESIGN PROFESSIONAL OF RECORD AS THE LICENSED CIVIL ENGINEER HAVING  
RESPONSIBILITIES FOR THE SUBMITTED DESIGN AND THE DISTRICT HAS LIMITED ITS SCOPE OF REVIEW ACCORDINGLY AS SUCH, THE  
APPROVAL GRANTED HEREIN IS FOR THE CONSTRUCTION OF THE FACILITIES AS REPRESENTED ON THESE DOCUMENTS. APPROVAL EXPIRES  
ONE (1) YEAR FROM THE DATE BELOW AND RESUBMITTAL OF THESE PLANS FOR REVIEW AND APPROVAL IS REQUIRED IF CONSTRUCTION  
DOES NOT BEGIN DURING THIS PERIOD.

APPROVED BY *Jeffrey Mays* DATE 6-21-2022

### OWNER/DEVELOPER:



1515 WYNKOOP ST., STE. 300  
DENVER, CO 80202  
P. 970.419.9968  
POC: ALLISON JONES  
ajones@trinsicres.com

### CIVIL ENGINEER



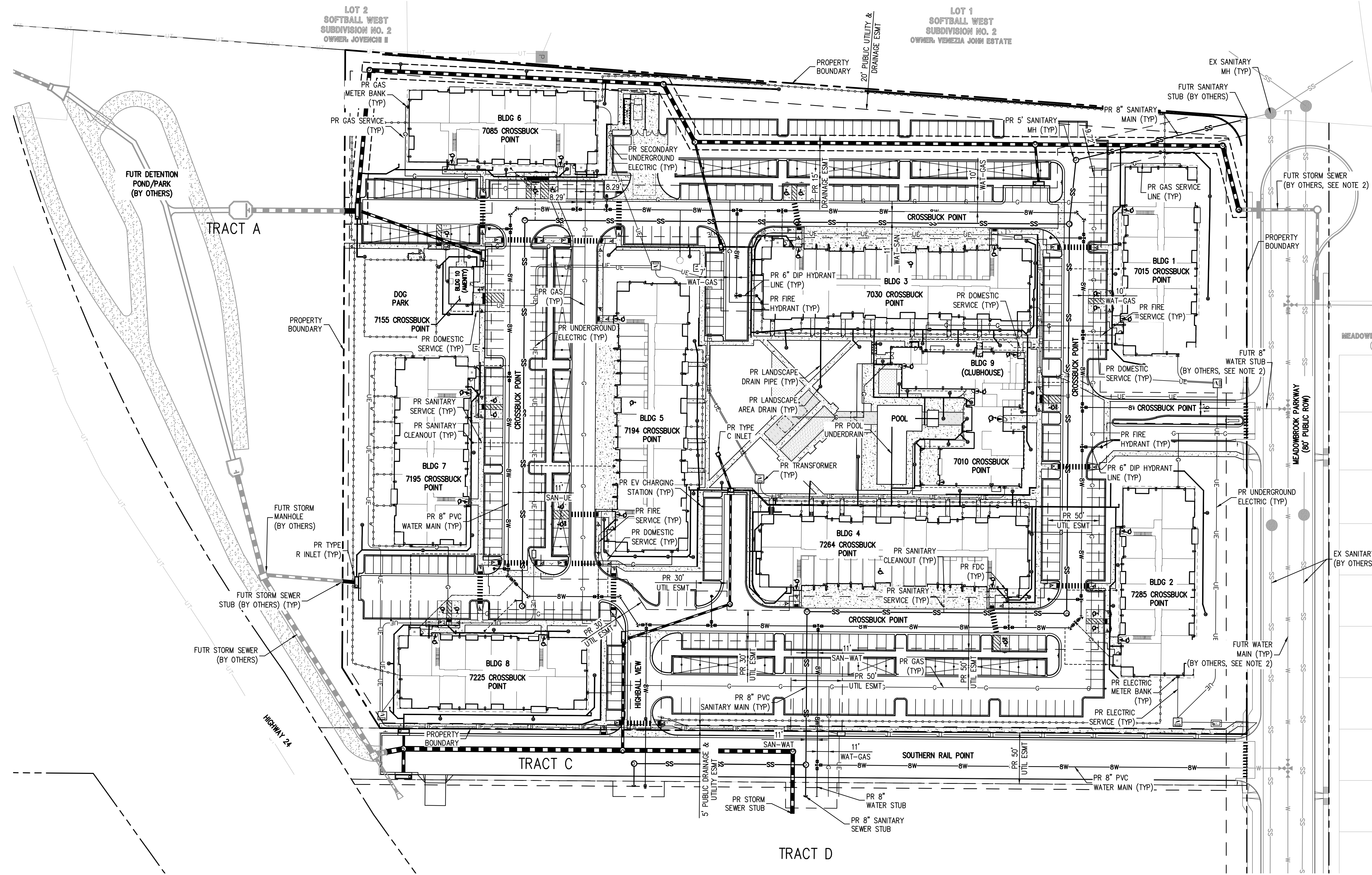
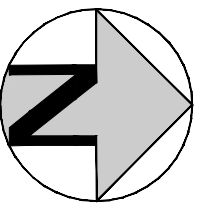
1120 Lincoln Street, Suite 1000  
Denver, Colorado 80203  
P: 303.493.4300 F: 303.423.4311  
HarrisKocherSmith.com



Know what's below.  
Call before you dig.

DATE	REVISION COMMENTS
15-06-2021	PER COUNTY COMMENTS
01-13-2022	PER COUNTY COMMENTS
04-01-2022	ISSUED FOR CONSTRUCTION

8/20/2022 10:00 AM C:\PROJECTS\AURA AT CROSSROADS\AURA-SS-COVER SHEET.DWG Layout Layout1  
 PLOT: 8/20/2022 10:11 AM By: JAMES HARRIS



- NOTES:**
- REPAIR OF ALL LOT 1 STREET PAVEMENT, SIDEWALK, CURB & GUTTER SHALL BE REPLACED BY OWNER/HOA (NOT CHEROKEE METRO DISTRICT) WHEN REPAIRS ARE NEEDED.
  - FUTURE UTILITIES SHOWN ARE TO BE INSTALLED BY CROSSROADS METROPOLITAN DISTRICT NO. 1. REFER TO THE CROSSROADS MIXED USE FILING NO. 1 UTILITY PLANS PREPARED BY MS CIVIL, DATED FEBRUARY 2022.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.  
 FILE PATH: K:\2022\ENGINEERING\UTILITIES\SANITARY\SS - OVERALL UTILITY PLANNING LAYOUT LAYOUT 2  
 5 - ELEM: 05/02/2022 12:52:27 P.M. BY: MATT LEBIEDZINSKI  
 PLOTTED: MON 05/02/2022 12:52:27 P.M. BY: MATT LEBIEDZINSKI

811  
Know what's below.  
Call before you dig.

DATE	REVISION COMMENTS
10-29-2021	PER COUNTY COMMENTS
01-13-2022	PER COUNTY COMMENTS
04-01-2022	ISSUED FOR CONSTRUCTION

**HKS HARRIS KOCHER SMITH**  
 1120 Lincoln Street, Suite 1000  
 Denver, Colorado 80203  
 P: 303.623.6300 F: 303.623.6311  
 HarrisKocherSmith.com

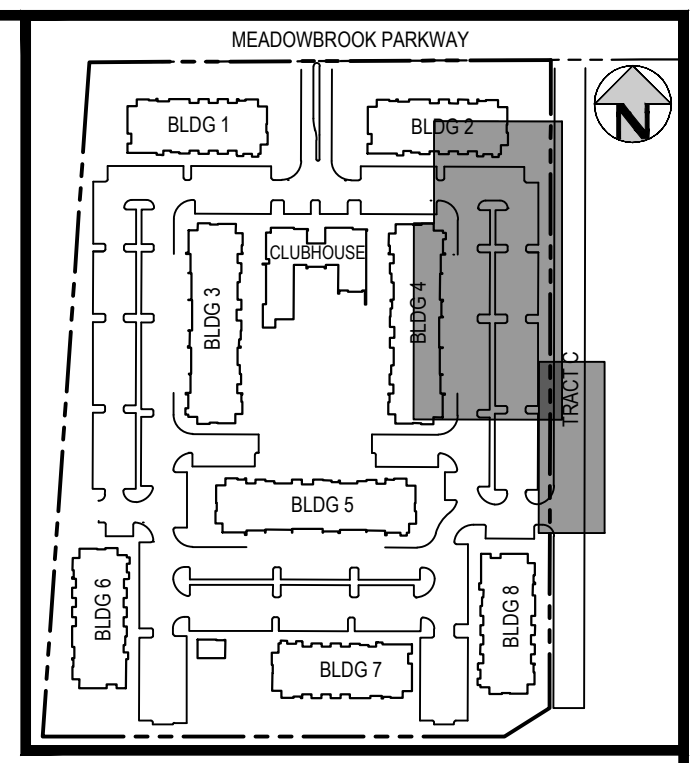
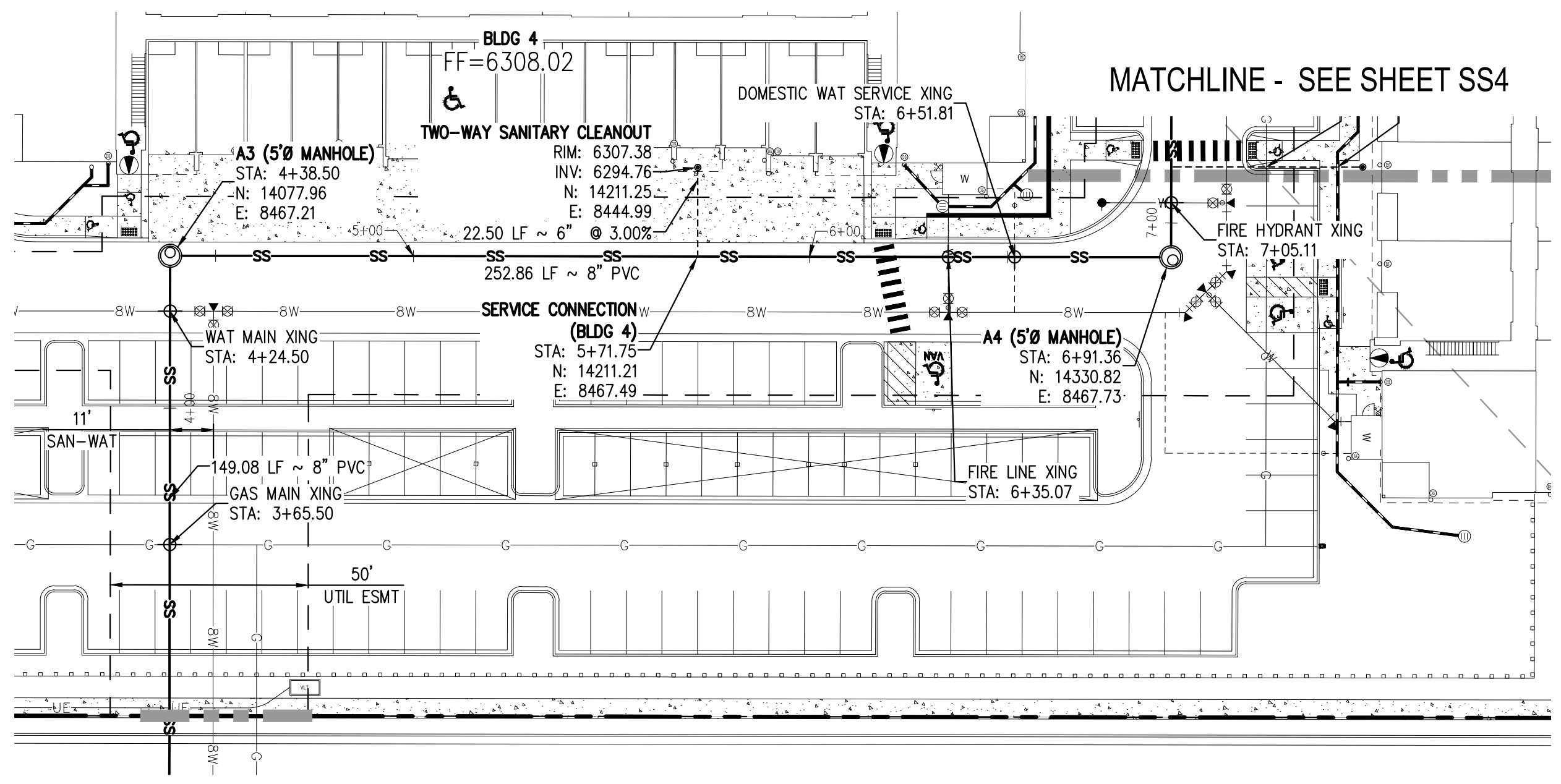
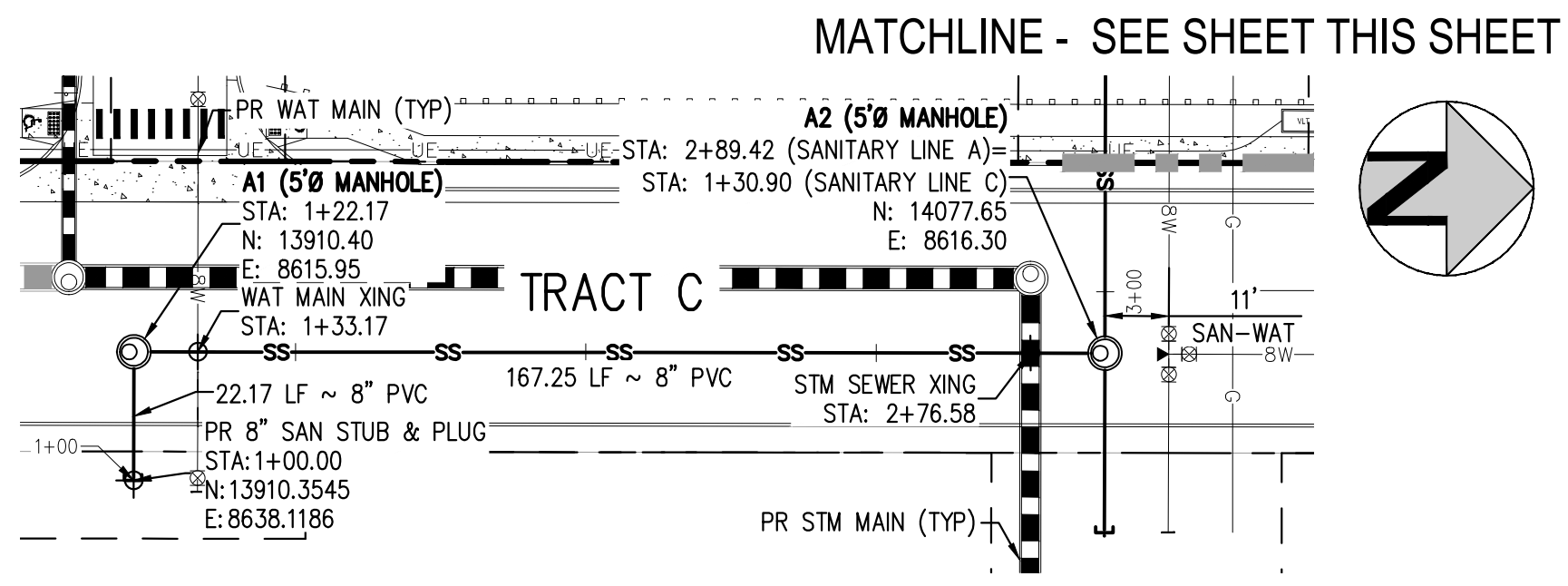
TRINISIC ACQUISITION COMPANY, LLC

AURA AT CROSSROADS  
OVERALL UTILITY PLAN

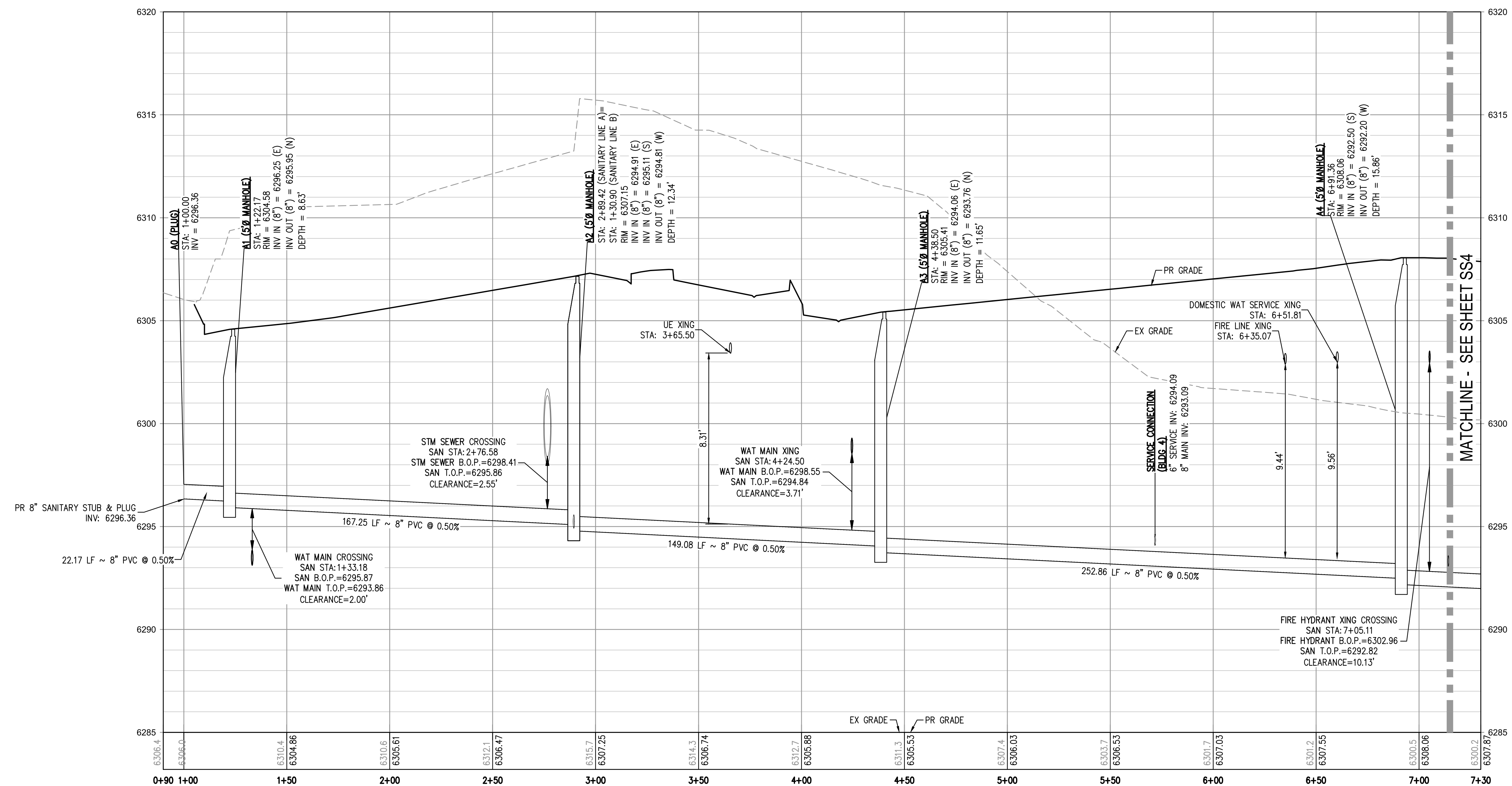
43327  
05/02/2022  
PROFESSIONAL ENGINEER

PROJECT #: 200823  
SHEET NUMBER  
**SS2**  
2 OF 7

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



- GENERAL SANITARY NOTES:**
- THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
  - THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
  - LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
  - PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
  - ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
  - MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
  - FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
  - CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
  - ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
  - THE CONTRACTOR IS RESPONSIBLE FOR:
    - OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
    - VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
    - RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
  - REFER TO CHEROKEE STANDARDS FOR MANHOLE COATING & LINING REQUIREMENTS.
  - MINIMUM MANHOLE DIAMETER IS 5'-0".
  - SANITARY SEWER MAINS WITH A SLOPE LESS THAN 1.04% MUST BE BEDDED AND COMPACTED IN MAXIMUM 6" LIFTS WITH SELECT BEDDING. REFER TO "COLORADO SPRINGS UTILITIES WASTEWATER LINE EXTENSIONS & SERVICE STANDARDS - 2021" SECTION 5.11.D.3 FOR MORE INFORMATION.
  - REFERENCE DETAIL D1-6 SHOWN ON SHEET SS7 FOR ALL SANITARY SERVICE CONNECTIONS.
  - FOR BUILDING 6 AND BUILDING 8, WHERE SANITARY SEWER SERVICE AND LANDSCAPE DRAIN PIPE CROSS WITH LESS THAN 18-INCHES OF CLEARANCE, FLOWFILL SHALL BE REQUIRED PER CSU DETAIL C-2.7.



**LEGEND:**

PROPERTY BOUNDARY	---
EXISTING SANITARY SEWER	SS
EXISTING WATER LINE	W
EXISTING STORM LINE	---
PROPOSED LANDSCAPE DRAIN PIPE	---
PROPOSED LANDSCAPE AREA DRAIN	---
PROPOSED SANITARY SEWER W/ MANHOLE	SS-C
PROPOSED SANITARY SERVICE	---
PROPOSED WATER LINE	W
PROPOSED WATER SERVICE	---
PROPOSED SANITARY SERVICE	---
PROPOSED STORM LINE	---
PROPOSED GAS LINE	---
PROPOSED ELECTRIC LINE	---
PROPOSED RETAINING WALL	---
PROPOSED HYDRANT	---

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DESIGNED BY: ML  
CHECKED BY: EM  
PLOTTED: THU 04/07/22 5:58:09A BY: MATT LEBIEDZINSKI

**811**  
Know what's below.  
Call before you dig.

DESIGNED BY: ML  
CHECKED BY: EM  
DRAWN BY: ML

DATE	REVISION COMMENTS
10-29-2021	PER COUNTY COMMENTS
01-13-2022	PER COUNTY COMMENTS
04-01-2022	ISSUED FOR CONSTRUCTION

**HKS HARRIS KOCHER SMITH**  
1120 Lincoln Street, Suite 1000  
Denver, Colorado 80203  
P: 303.623.6300 F: 303.623.6311  
HarrisKocherSmith.com

**TRINIS ACQUISITION COMPANY, LLC**

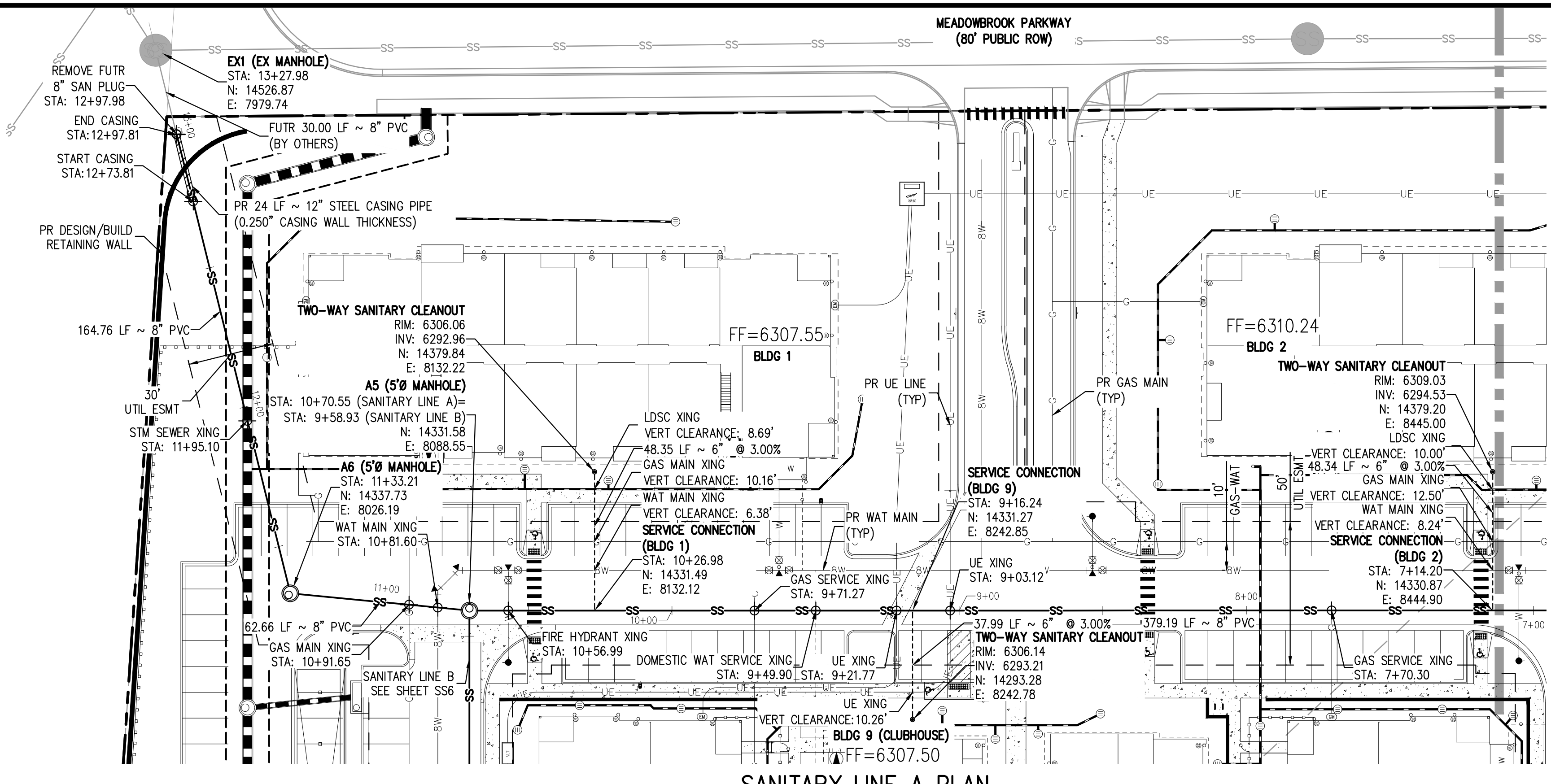
**AURA AT CROSSROADS  
SANITARY PLAN & PROFILE LINE A**

**43327**  
04/08/2022  
PROFESSIONAL ENGINEER

PROJECT #: 200823  
SHEET NUMBER  
**SS3**  
3 OF 7

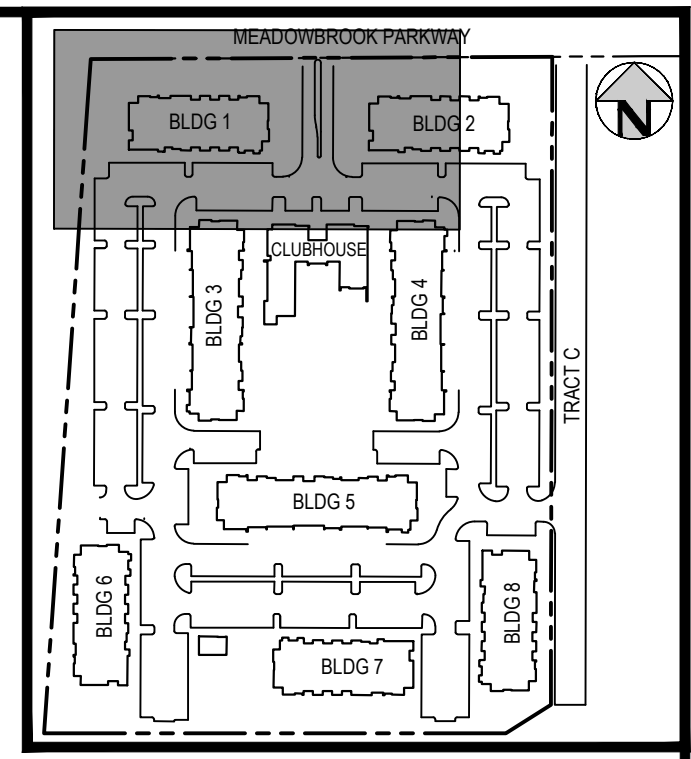
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.

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PLOT BY: ETHAN MARKS



SANITARY LINE A PLAN  
SCALE: 1" = 30'

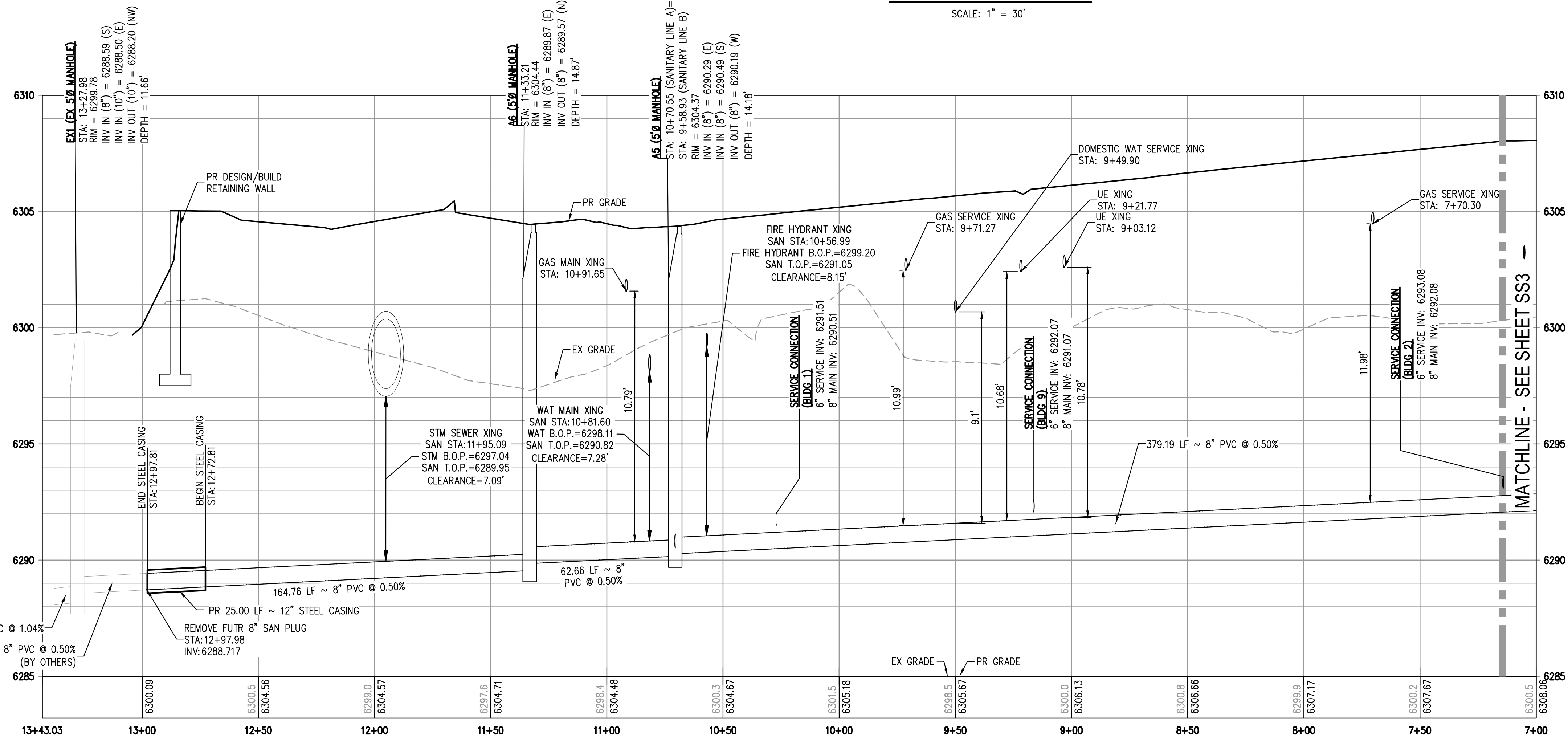
MATCHLINE - SEE SHEET SS3



KEY MAP  
SCALE: 1" = 250'

GENERAL SANITARY NOTES:

1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
  - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
  - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
  - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
11. REFER TO CHECKOKE STANDARDS FOR MANHOLE COATING & LINING REQUIREMENTS.
12. MINIMUM MANHOLE DIAMETER IS 5'-0".
13. SANITARY SEWER MAINS WITH A SLOPE LESS THAN 1.04% MUST BE BEDDED AND COMPACTED IN MAXIMUM 6" LIFTS WITH SELECT BEDDING. REFER TO "COLORADO SPRINGS UTILITIES WASTEWATER LINE EXTENSIONS & SERVICE STANDARDS - 2021" SECTION 5.11.D.3 FOR MORE INFORMATION.
14. REFERENCE DETAIL D1-6 SHOWN ON SHEET SS7 FOR ALL SANITARY SERVICE CONNECTIONS.
15. FOR BUILDING 6 AND BUILDING 8, WHERE SANITARY SEWER SERVICE AND LANDSCAPE DRAIN PIPE CROSS WITH LESS THAN 18-INCHES OF CLEARANCE, FILLFILL SHALL BE REQUIRED PER CSU DETAIL C-2.



SANITARY LINE A PROFILE  
HORIZONTAL SCALE: 1" = 30'  
VERTICAL SCALE: 1" = 3'

MATCHLINE - SEE SHEET SS3

LEGEND:

PROPERTY BOUNDARY	---
EXISTING SANITARY SEWER	SS
EXISTING WATER LINE	W
EXISTING STORM LINE	---
PROPOSED LANDSCAPE DRAIN PIPE	---
PROPOSED LANDSCAPE AREA DRAIN	---
PROPOSED SANITARY SEWER W/ MANHOLE	SS-C
PROPOSED SANITARY SERVICE	---
PROPOSED WATER LINE	W
PROPOSED WATER SERVICE	---
PROPOSED SANITARY SERVICE	---
PROPOSED STORM LINE	---
PROPOSED GAS LINE	G
PROPOSED ELECTRIC LINE	UE
PROPOSED RETAINING WALL	---
PROPOSED HYDRANT	---



Know what's below.  
Call before you dig.



DESIGNED BY: ML  
CHECKED BY: EM  
DRAWN BY: ML

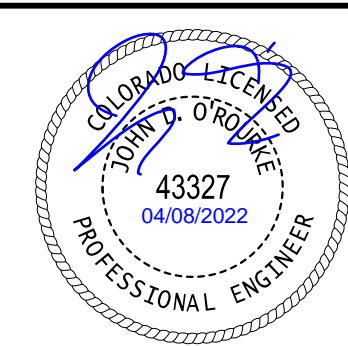
ISSUE DATE: 08-06-2021	
DATE	REVISION COMMENTS
10-29-2021	PER COUNTY COMMENTS
01-13-2022	PER COUNTY COMMENTS
04-01-2022	ISSUED FOR CONSTRUCTION



1120 Lincoln Street, Suite 1000  
Denver, Colorado 80203  
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TRINIS ACQUISITION COMPANY, LLC

AURA AT CROSSROADS  
SANITARY PLAN & PROFILE LINE A

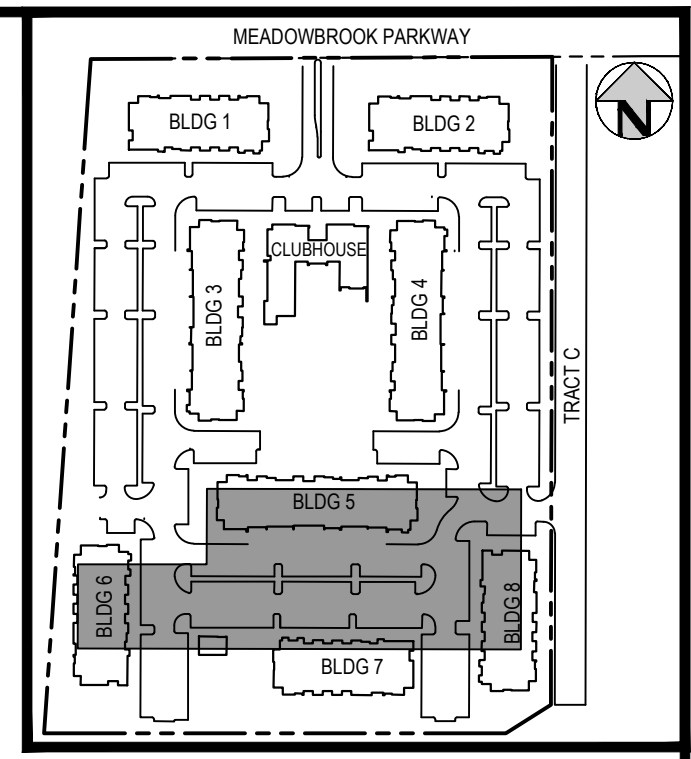
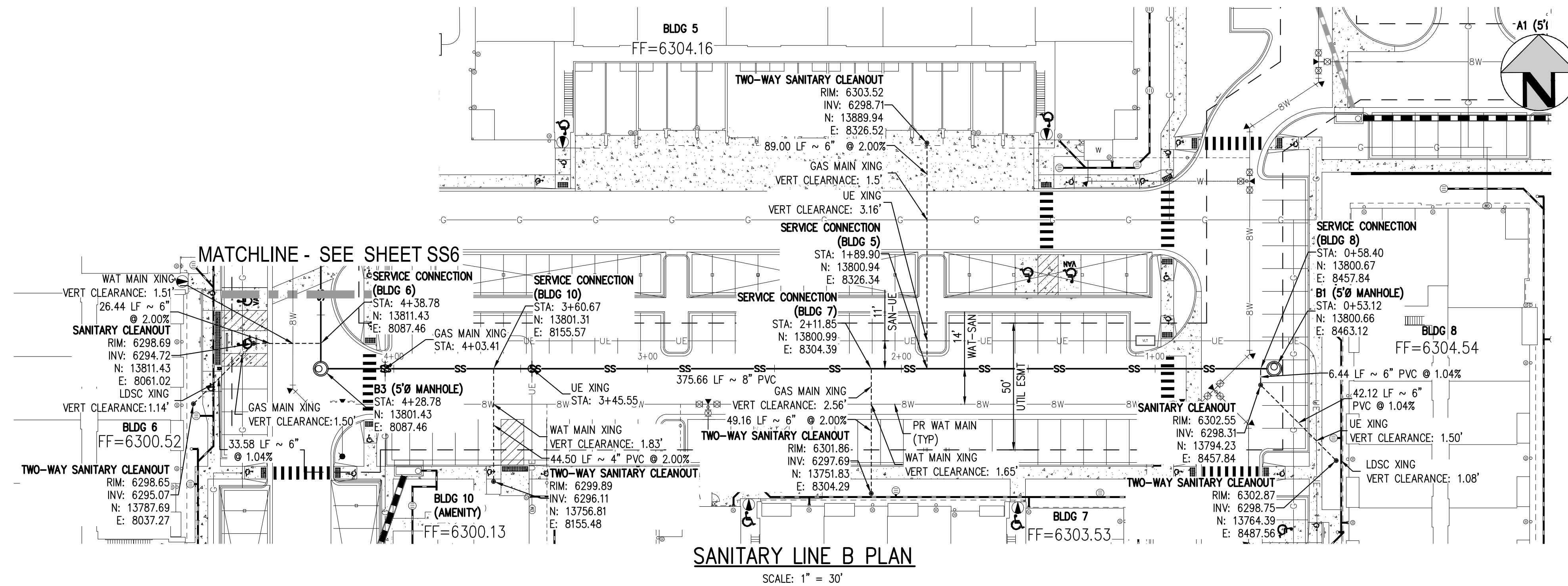


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SHEET NUMBER

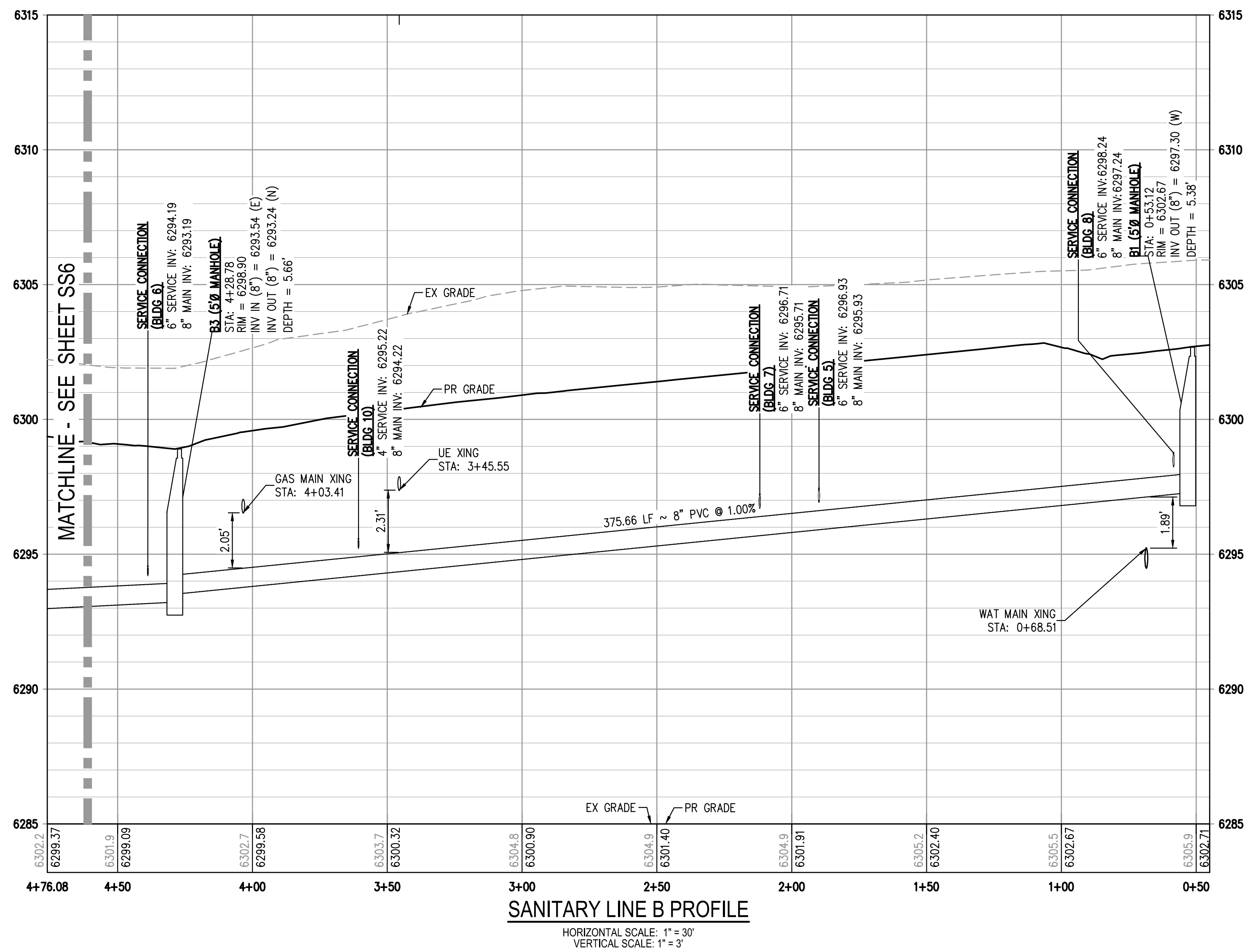
SS4

4 OF 7

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.



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**LEGEND:**

PROPERTY BOUNDARY	---
EXISTING SANITARY SEWER	SS
EXISTING WATER LINE	W
EXISTING STORM LINE	---
PROPOSED LANDSCAPE DRAIN PIPE	---
PROPOSED LANDSCAPE AREA DRAIN	---
PROPOSED SANITARY SEWER W/ MANHOLE	SS-M
PROPOSED SANITARY SERVICE	---
PROPOSED WATER LINE	W
PROPOSED WATER SERVICE	---
PROPOSED SANITARY SERVICE	---
PROPOSED STORM LINE	---
PROPOSED GAS LINE	G
PROPOSED ELECTRIC LINE	UE
PROPOSED RETAINING WALL	---
PROPOSED HYDRANT	H

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SCALE: 1" = 30'

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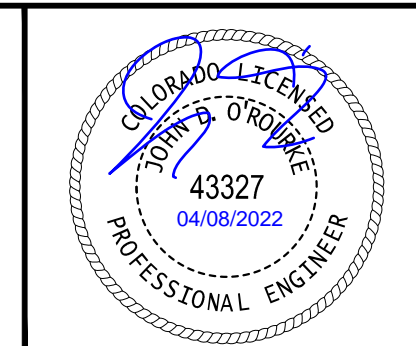
ISSUE DATE: 08-06-2021

DATE	REVISION COMMENTS
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01-13-2022	PER COUNTY COMMENTS
04-01-2022	ISSUED FOR CONSTRUCTION

**HKS HARRIS KOCHER SMITH**  
 1120 Lincoln Street, Suite 1000  
 Denver, Colorado 80203  
 P: 303.623.6300 F: 303.623.6311  
 HarrisKocherSmith.com

TRINISIC ACQUISITION COMPANY, LLC

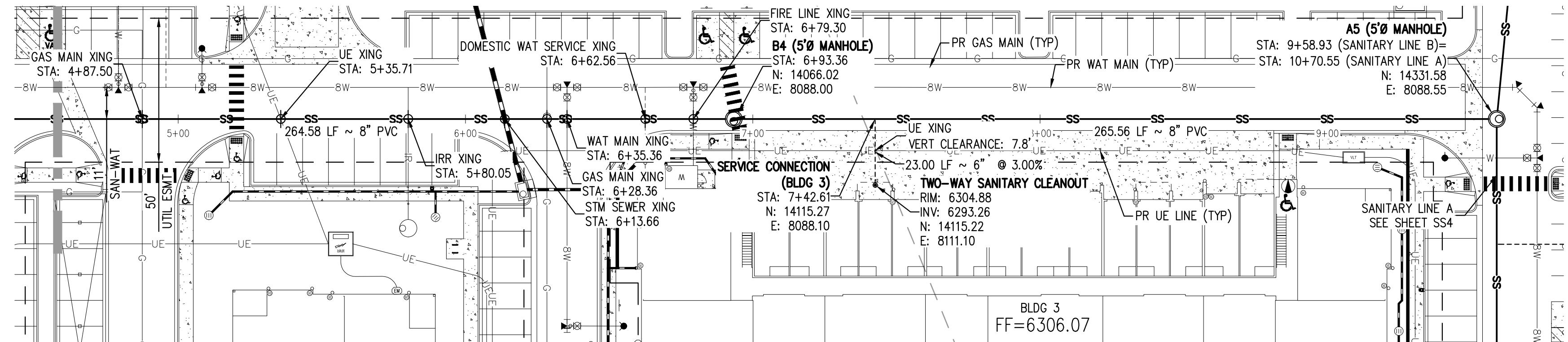
AURA AT CROSSROADS  
 SANITARY PLAN & PROFILE LINE B



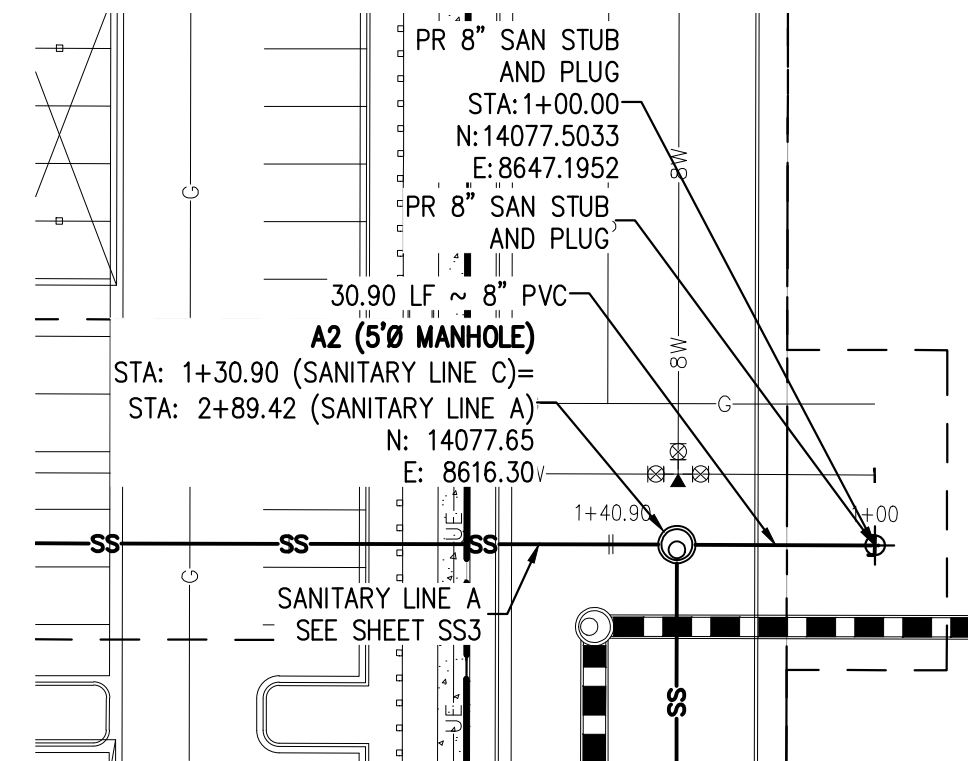
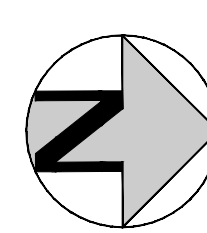
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 SHEET NUMBER  
**SS5**  
 5 OF 7

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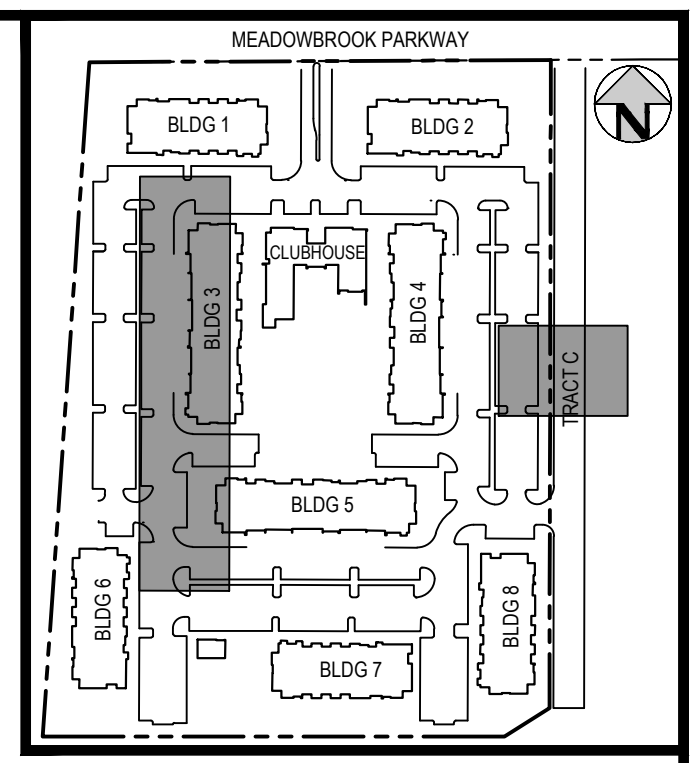
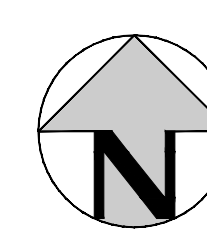
MATCHLINE - SEE SHEET SS5



**SANITARY LINE B PLAN**  
SCALE: 1" = 30'



**SANITARY LINE C PLAN**  
SCALE: 1" = 30'



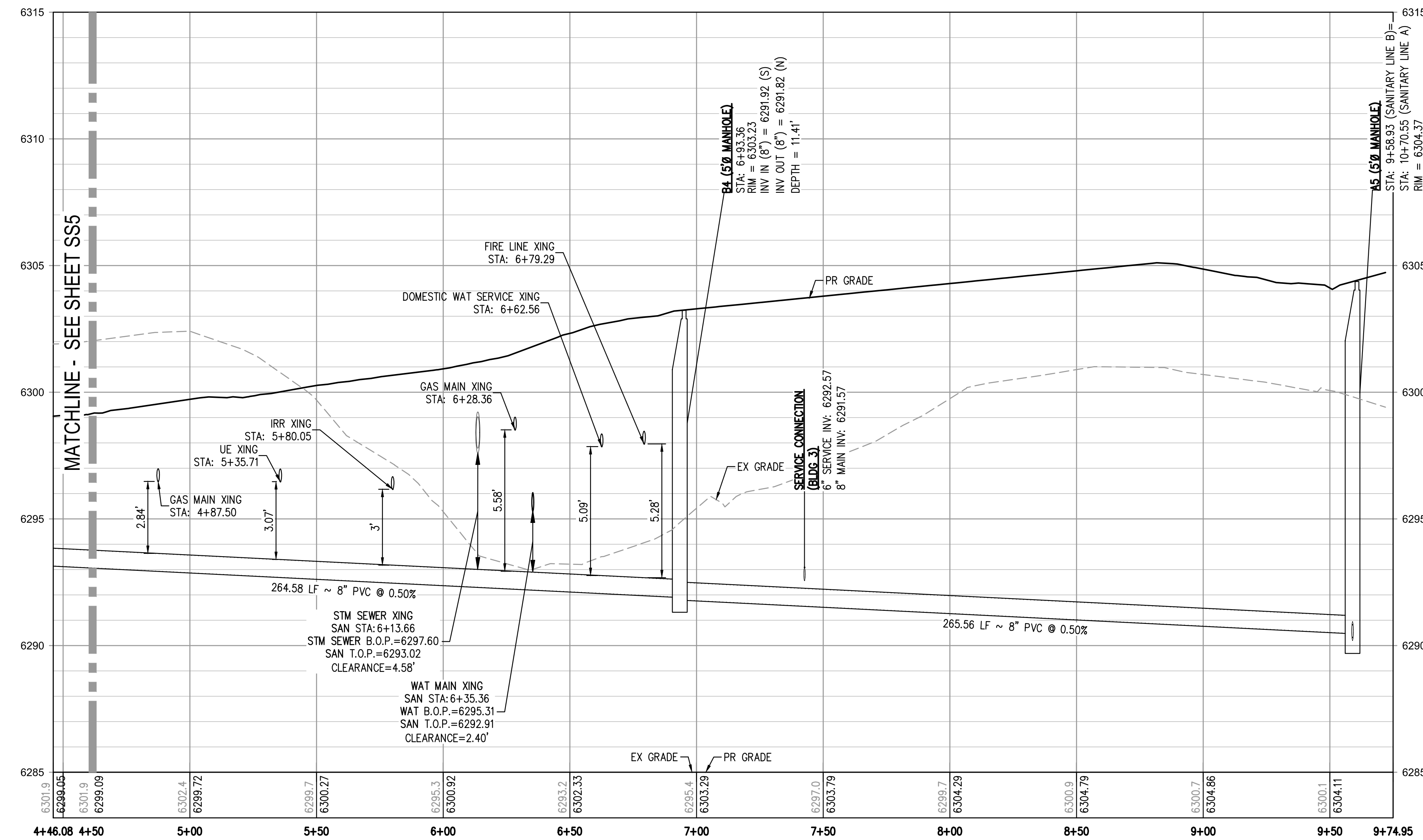
**KEY MAP**  
SCALE: 1" = 250'

**GENERAL SANITARY NOTES:**

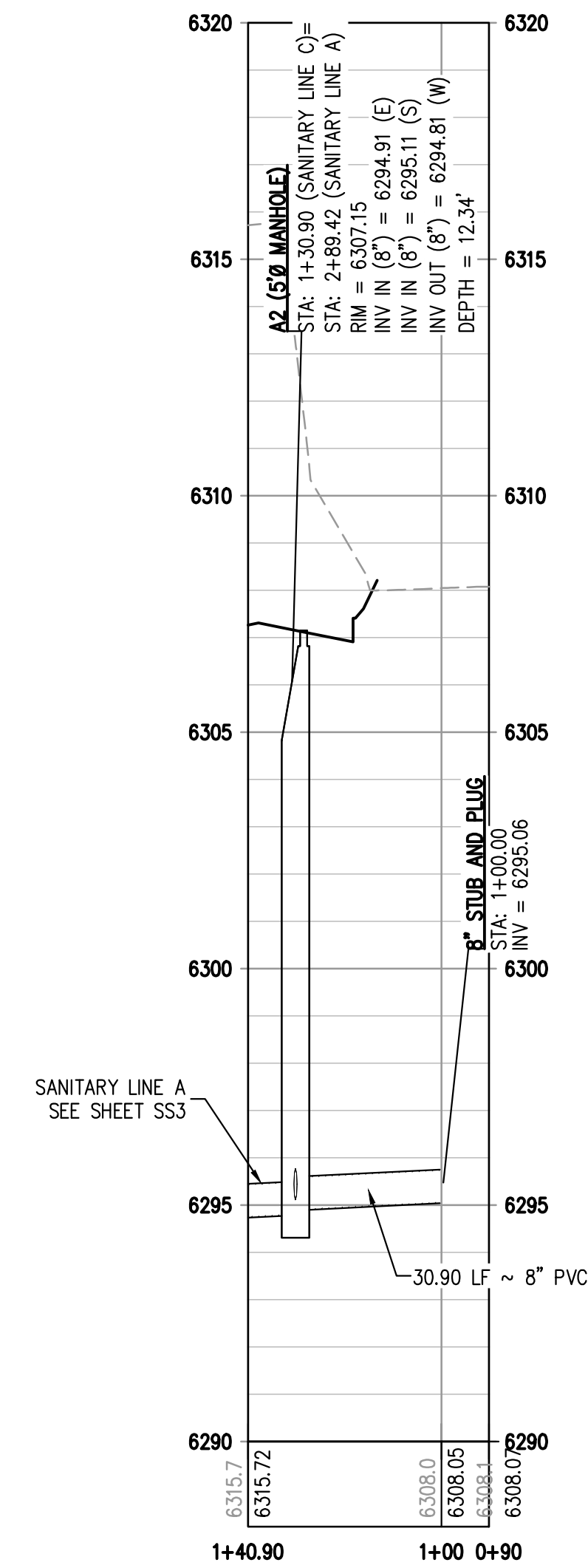
1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE, AS SUPPLIED BY THE UTILITY OWNERS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL VERIFY EXISTENCE, SIZE, AND LOCATION OF EXISTING UTILITIES AND IMMEDIATELY NOTIFY HARRIS KOCHER SMITH OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES TO EXISTING UNDERGROUND FACILITIES.
3. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO START OF CONSTRUCTION.
4. PIPE LENGTHS ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. ALL COORDINATES ARE AT THE CENTER OF THE STRUCTURE UNLESS OTHERWISE INDICATED.
5. ALL WORK, INCLUDING CORRECTION WORK, SHALL BE INSPECTED BY THE UTILITY PROVIDER'S REPRESENTATIVE WHO SHALL HAVE THE AUTHORITY TO HALT CONSTRUCTION WHEN THERE IS A LACK OF ADHERENCE TO STANDARD CONSTRUCTION PRACTICES.
6. MAINTAIN A MINIMUM OF TEN FEET OF HORIZONTAL SEPARATION BETWEEN ALL SANITARY SEWER AND DOMESTIC WATER MAINS AND SERVICES IN ACCORDANCE WITH STATE OF COLORADO AND JURISDICTIONAL UTILITY PROVIDER SPECIFICATIONS.
7. FOR ALL NON-CONCENTRIC MANHOLES, MANHOLE RINGS/COVERS AND STEPS LIDS SHALL BE ROTATED AS SHOWN IN PLAN VIEW.
8. CONTRACTOR SHALL ADJUST ALL EXISTING RIM ELEVATIONS TO MATCH THE PROPOSED GRADE.
9. ALL SANITARY SERVICE CLEANOUTS LOCATED ADJACENT TO A BUILDING SHALL BE TWO-WAY CLEANOUTS.
10. THE CONTRACTOR IS RESPONSIBLE FOR:
  - a. OBTAINING ALL APPLICABLE LICENSES, BONDS, PERMITS, STANDARDS AND SPECIFICATIONS FOR SEWER MAIN INSTALLATION.
  - b. VERIFYING THE LOCATION AND DEPTH OF EXISTING UTILITIES AND NOTIFYING THE ENGINEER OF ANY DISCREPANCIES.
  - c. RESTORING ALL DISTURBED AREAS TO ORIGINAL CONDITION, OR AS INDICATED ON THE PLANS.
11. REFER TO CHEROKEE STANDARDS FOR MANHOLE COATING & LINING REQUIREMENTS.
12. MINIMUM MANHOLE DIAMETER IS 5'-0".
13. SANITARY SEWER MAINS WITH A SLOPE LESS THAN 1.04% MUST BE BEDDED AND COMPACTED IN MAXIMUM 6" LIFTS WITH SELECT BEDDING. REFER TO "COLORADO SPRINGS UTILITIES WASTEWATER LINE EXTENSIONS & SERVICE STANDARDS - 2021" SECTION 5.11.D.3 FOR MORE INFORMATION.
14. REFERENCE DETAIL D1-6 SHOWN ON SHEET SS7 FOR ALL SANITARY SERVICE CONNECTIONS.
15. FOR BUILDING 6 AND BUILDING 8, WHERE SANITARY SEWER SERVICE AND LANDSCAPE DRAIN PIPE CROSS WITH LESS THAN 18-INCHES OF CLEARANCE, FLOWFILL SHALL BE REQUIRED PER CSU DETAIL C-2.

**LEGEND:**

PROPERTY BOUNDARY	---
EXISTING SANITARY SEWER	SS
EXISTING WATER LINE	W
EXISTING STORM LINE	---
PROPOSED LANDSCAPE DRAIN PIPE	---
PROPOSED LANDSCAPE AREA DRAIN	---
PROPOSED SANITARY SEWER W/ MANHOLE	SS-C
PROPOSED SANITARY SERVICE	---
PROPOSED WATER LINE	W
PROPOSED WATER SERVICE	---
PROPOSED SANITARY SERVICE	---
PROPOSED STORM LINE	---
PROPOSED GAS LINE	G
PROPOSED ELECTRIC LINE	UE
PROPOSED RETAINING WALL	---
PROPOSED HYDRANT	H

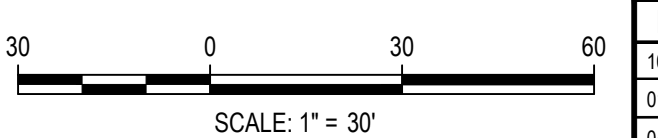


**SANITARY LINE B PROFILE**  
HORIZONTAL SCALE: 1" = 30'  
VERTICAL SCALE: 1" = 3'



**SANITARY LINE C PROFILE**  
HORIZONTAL SCALE: 1" = 30'  
VERTICAL SCALE: 1" = 3'

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DESIGNED BY: ML  
CHECKED BY: EM  
DRAWN BY: ML

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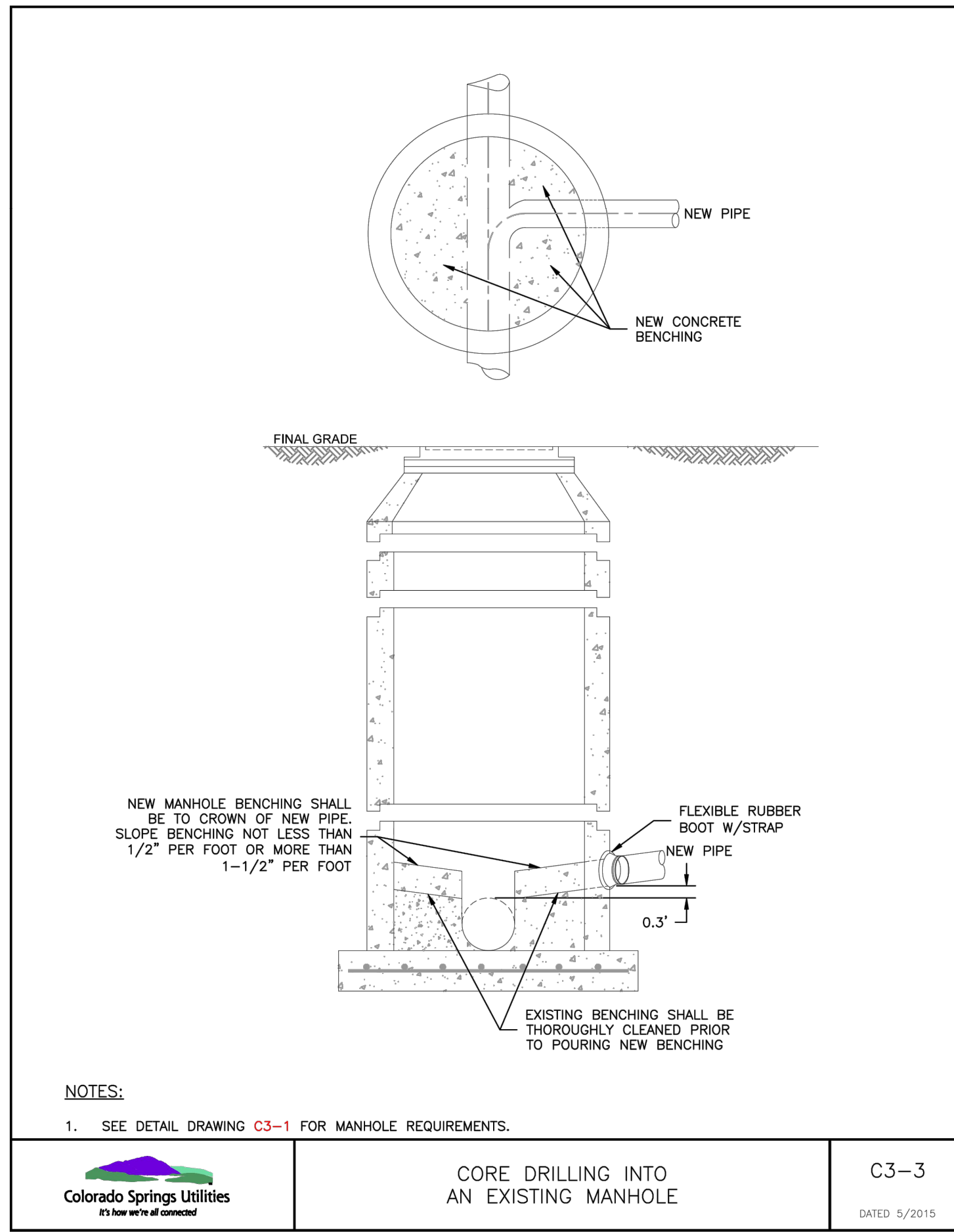
TRINIS ACQUISITION COMPANY, LLC

AURA AT CROSSROADS  
SANITARY PLAN & PROFILE LINE B



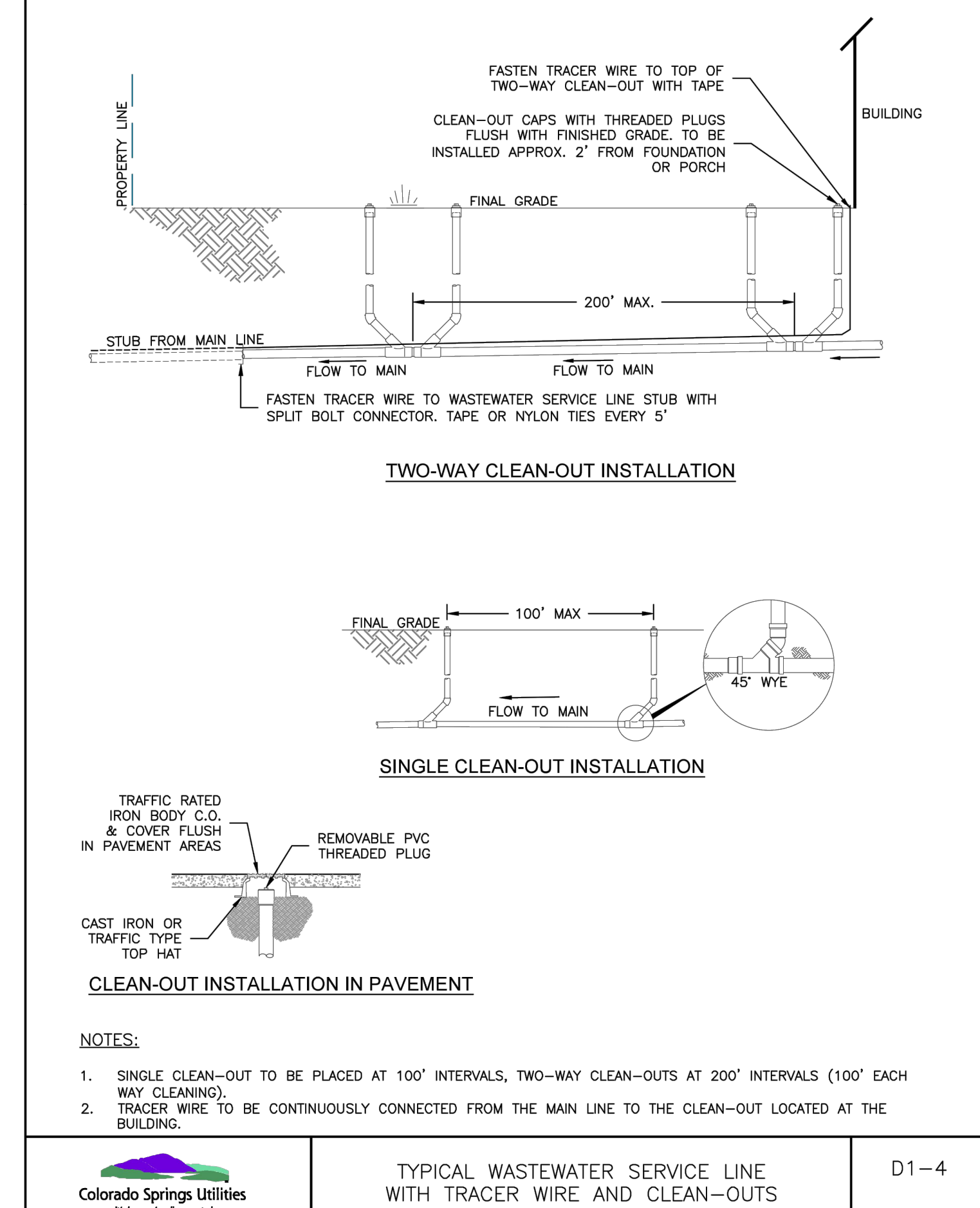
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SHEET NUMBER  
**SS6**  
6 OF 7

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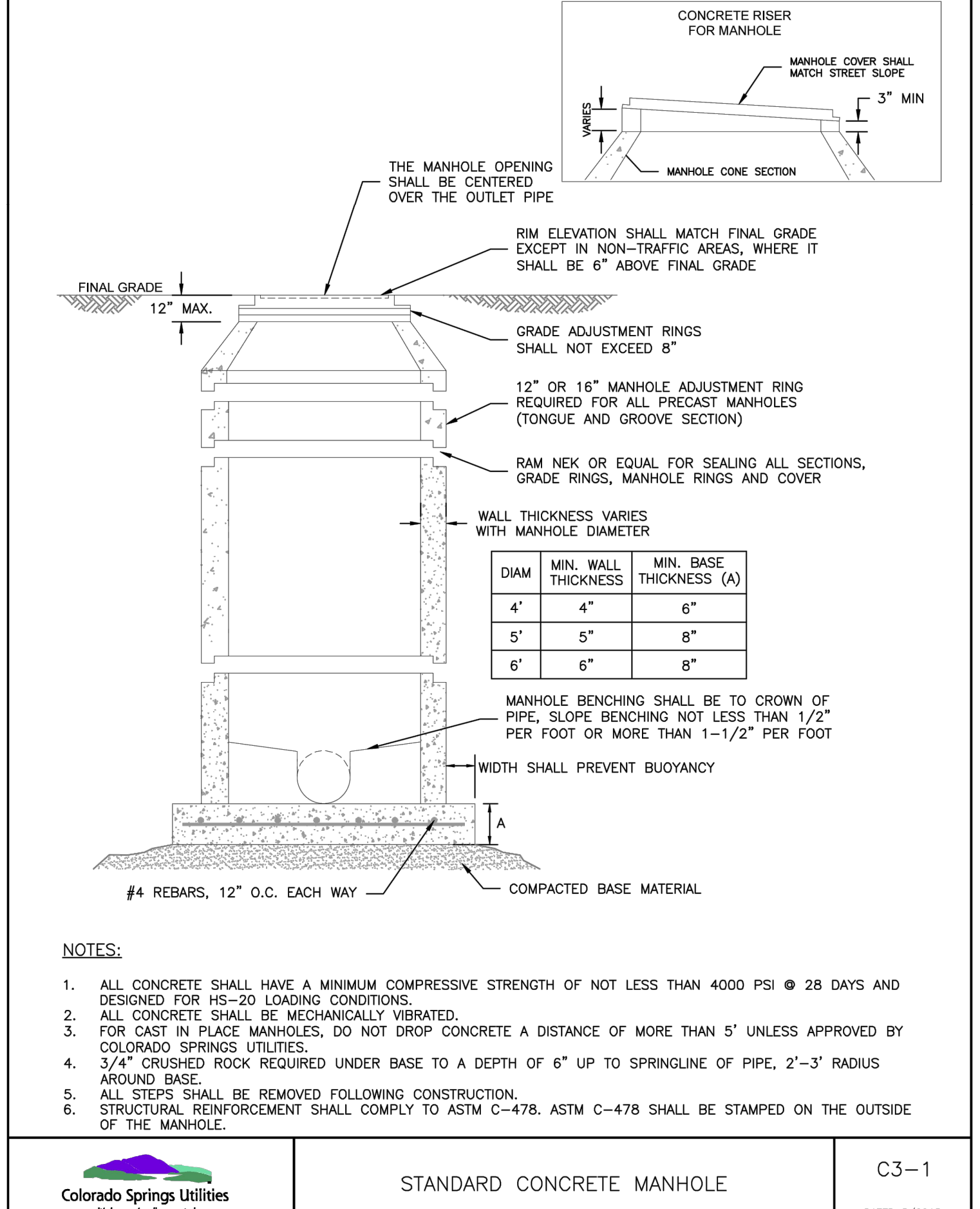
**NOTES:**  
1. SEE DETAIL DRAWING C3-1 FOR MANHOLE REQUIREMENTS.

Colorado Springs Utilities  
**CORE DRILLING INTO AN EXISTING MANHOLE**  
C3-3  
DATED: 5/2015



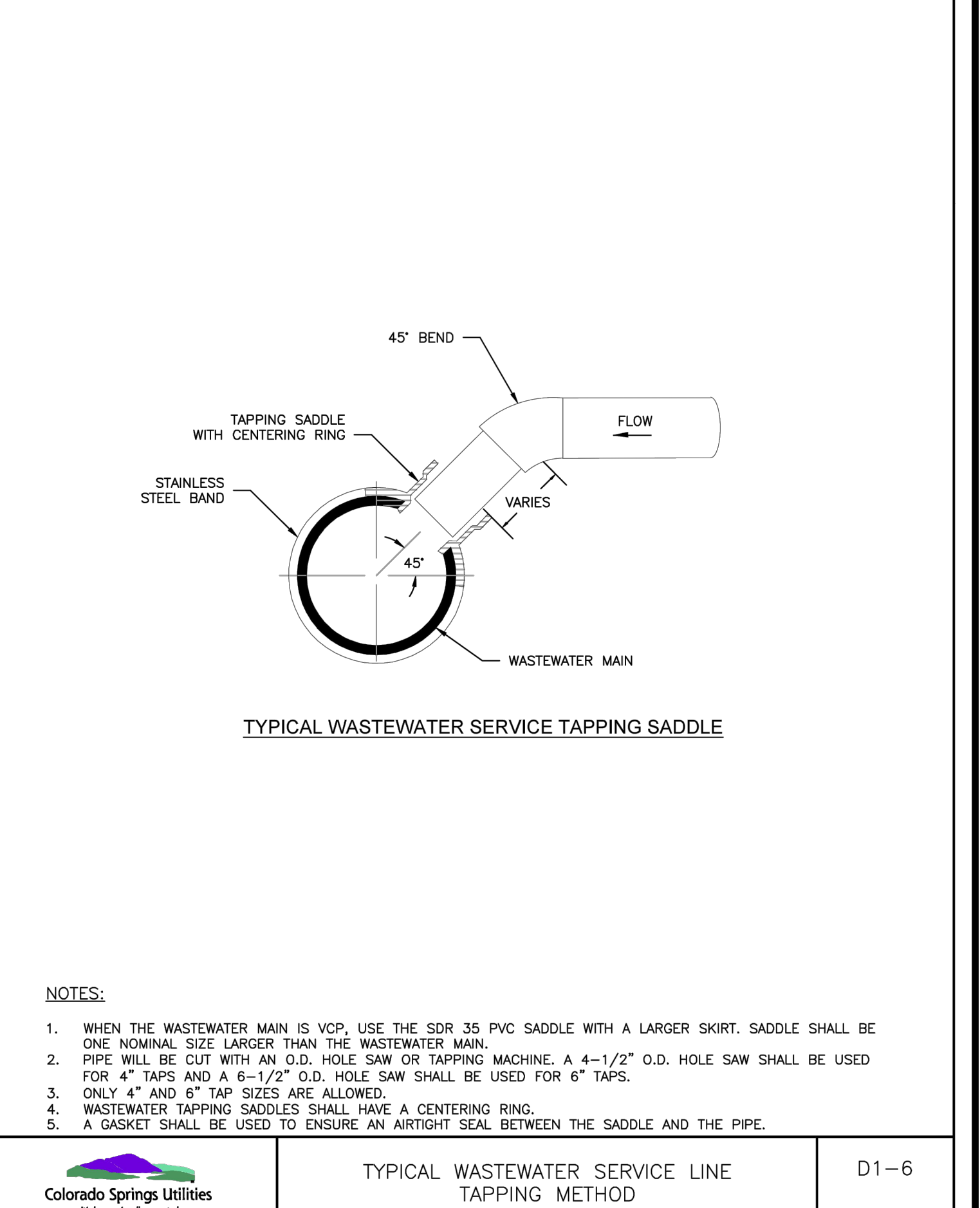
**NOTES:**  
1. SINGLE CLEAN-OUT TO BE PLACED AT 100\' INTERVALS, TWO-WAY CLEAN-OUTS AT 200\' INTERVALS (100\' EACH WAY CLEANING).  
2. TRACER WIRE TO BE CONTINUOUSLY CONNECTED FROM THE MAIN LINE TO THE CLEAN-OUT LOCATED AT THE BUILDING.

Colorado Springs Utilities  
**TYPICAL WASTEWATER SERVICE LINE WITH TRACER WIRE AND CLEAN-OUTS**  
D1-4  
DATED: 5/2015



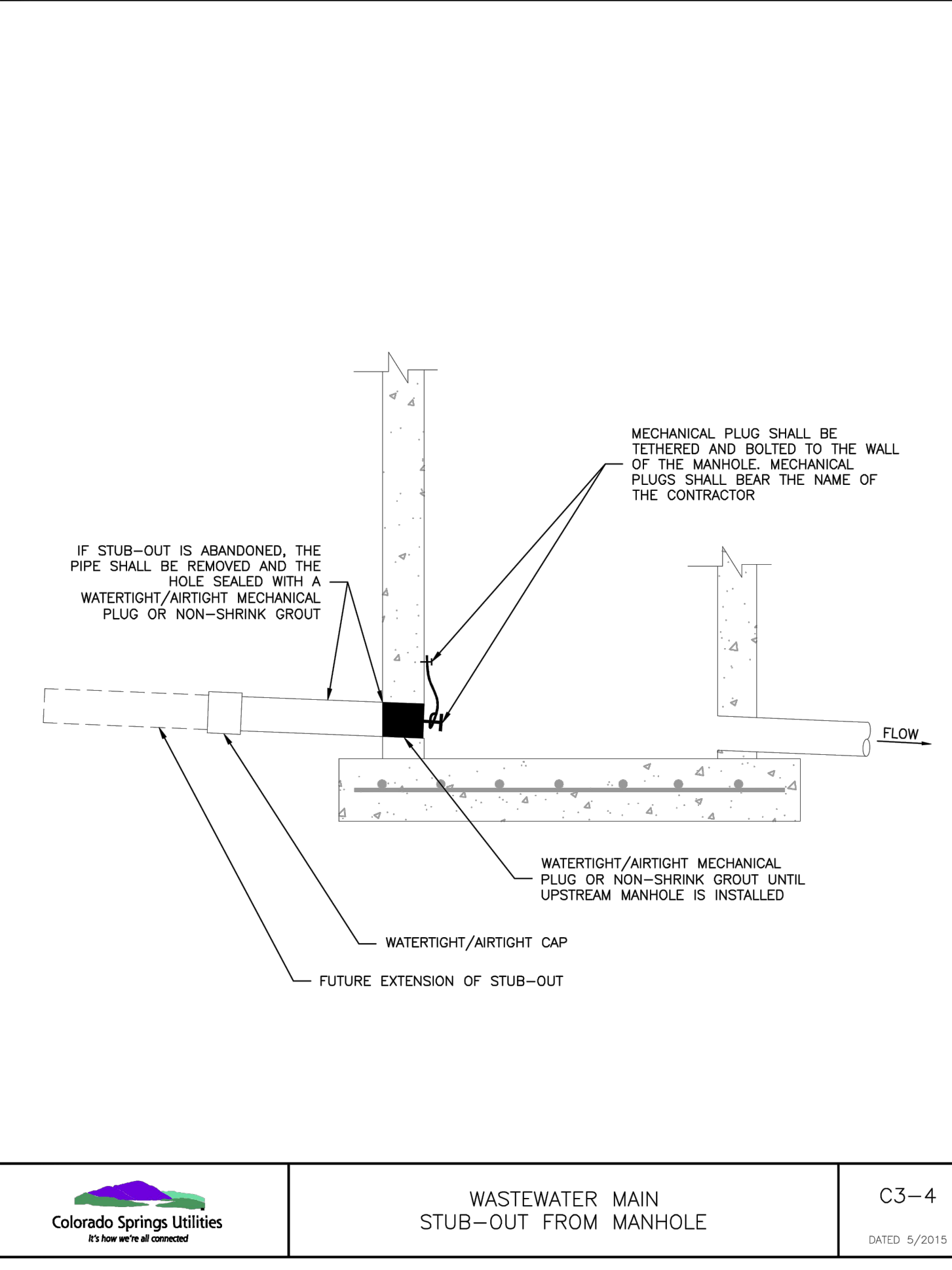
**NOTES:**  
1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI @ 28 DAYS AND DESIGNED FOR HS-20 LOADING CONDITIONS.  
2. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED.  
3. FOR CAST IN PLACE MANHOLES, DO NOT DROP CONCRETE A DISTANCE OF MORE THAN 5\' UNLESS APPROVED BY COLORADO SPRINGS UTILITIES.  
4. 3/4" CRUSHED ROCK REQUIRED UNDER BASE TO A DEPTH OF 6" UP TO SPRINGLINE OF PIPE, 2"-3" RADIUS AROUND BASE.  
5. ALL STEPS SHALL BE REMOVED FOLLOWING CONSTRUCTION.  
6. STRUCTURAL REINFORCEMENT SHALL COMPLY TO ASTM C-478. ASTM C-478 SHALL BE STAMPED ON THE OUTSIDE OF THE MANHOLE.

Colorado Springs Utilities  
**STANDARD CONCRETE MANHOLE**  
C3-1  
DATED: 5/2015

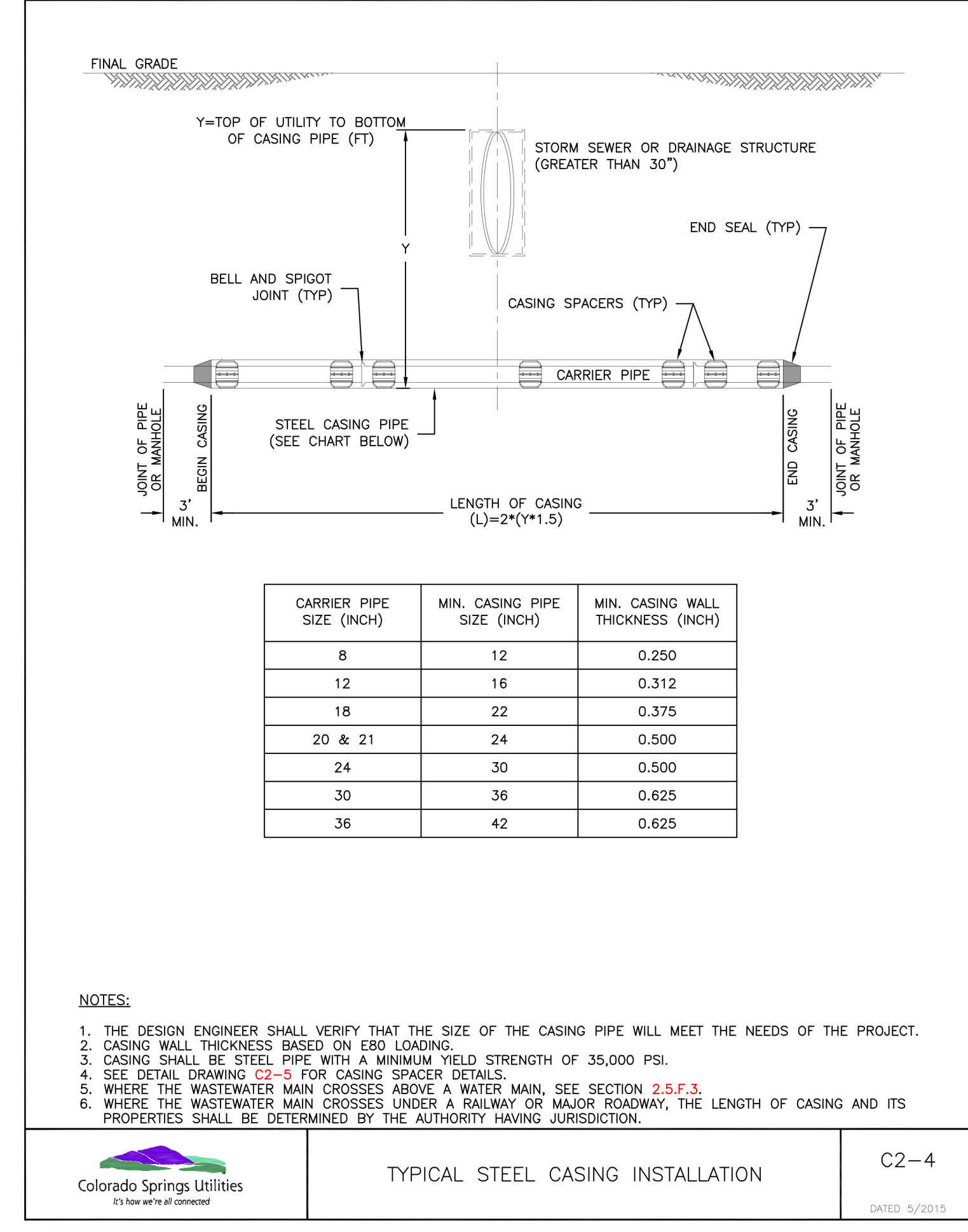


**NOTES:**  
1. WHEN THE WASTEWATER MAIN IS VCP, USE THE SDR 35 PVC SADDLE WITH A LARGER SKIRT. SADDLE SHALL BE ONE NOMINAL SIZE LARGER THAN THE WASTEWATER MAIN.  
2. PIPE WILL BE CUT WITH AN O.D. HOLE SAW OR TAPPING MACHINE. A 4-1/2" O.D. HOLE SAW SHALL BE USED FOR 4" TAPS AND A 6-1/2" O.D. HOLE SAW SHALL BE USED FOR 6" TAPS.  
3. ONLY 4" AND 6" TAP SIZES ARE ALLOWED.  
4. WASTEWATER TAPPING SADDLES SHALL HAVE A CENTERING RING.  
5. A GASKET SHALL BE USED TO ENSURE AN AIRTIGHT SEAL BETWEEN THE SADDLE AND THE PIPE.

Colorado Springs Utilities  
**TYPICAL WASTEWATER SERVICE LINE TAPPING METHOD**  
D1-6  
DATED: 5/2015

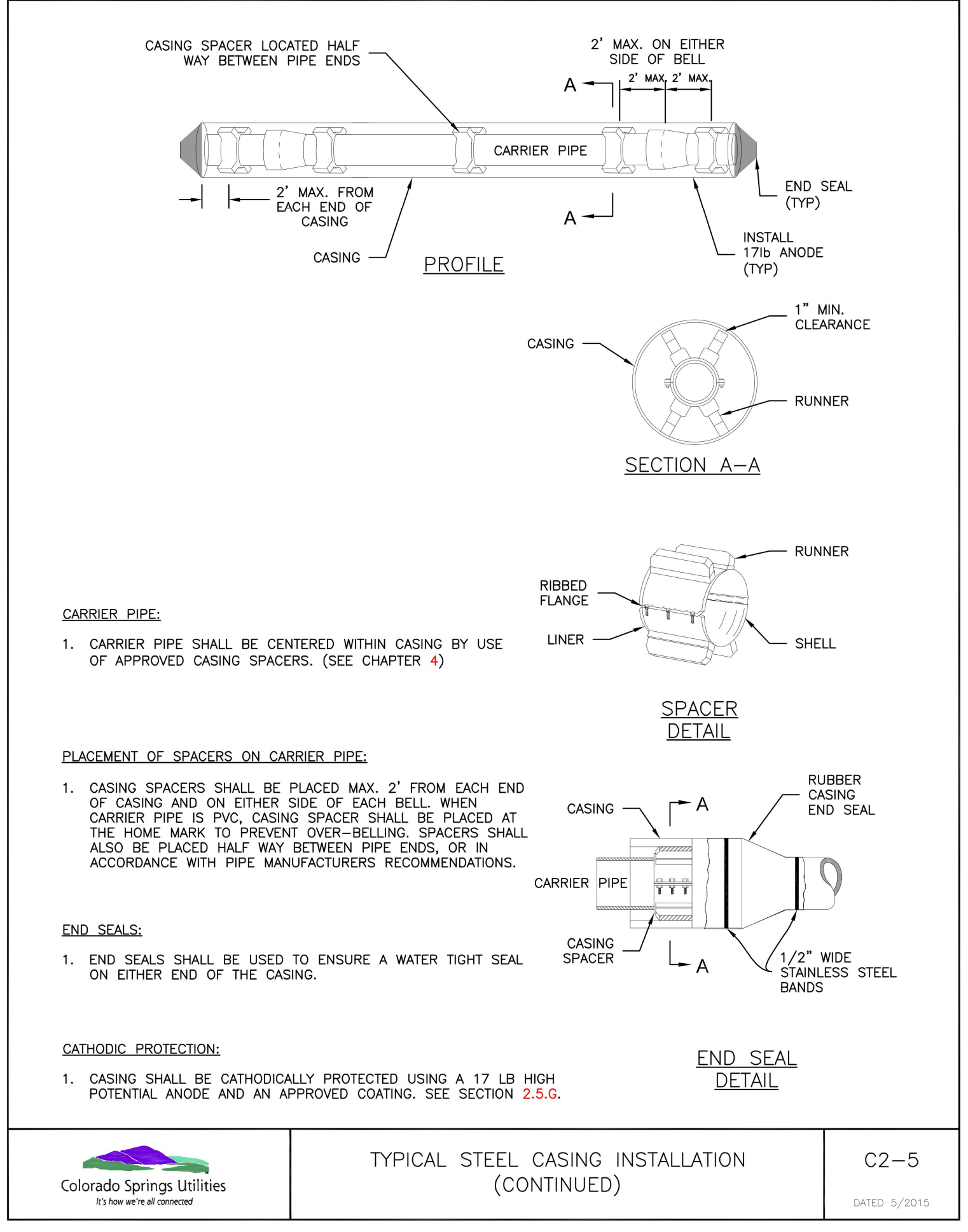


Colorado Springs Utilities  
**WASTEWATER MAIN STUB-OUT FROM MANHOLE**  
C3-4  
DATED: 5/2015



**NOTES:**  
1. THE DESIGN ENGINEER SHALL VERIFY THAT THE SIZE OF THE CASING PIPE WILL MEET THE NEEDS OF THE PROJECT.  
2. CASING WALL THICKNESS BASED ON E80 LOADING.  
3. CASING SHALL BE STEEL PIPE WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI.  
4. SEE DETAIL DRAWING C2-5 FOR CASING SPACER DETAILS.  
5. WHERE THE WASTEWATER MAIN CROSSES ABOVE A WATER MAIN, SEE SECTION 2.5.F.3.  
6. WHERE THE WASTEWATER MAIN CROSSES UNDER A RAILWAY OR MAJOR ROADWAY, THE LENGTH OF CASING AND ITS PROPERTIES SHALL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.

Colorado Springs Utilities  
**TYPICAL STEEL CASING INSTALLATION**  
C2-4  
DATED: 5/2015



**CARRIER PIPE:**  
1. CARRIER PIPE SHALL BE CENTERED WITHIN CASING BY USE OF APPROVED CASING SPACERS. (SEE CHAPTER 4)

**PLACEMENT OF SPACERS ON CARRIER PIPE:**  
1. CASING SPACERS SHALL BE PLACED MAX. 2\' FROM EACH END OF CASING AND ON EITHER SIDE OF EACH BELL WHEN CARRIER PIPE IS PVC. CASING SPACER SHALL BE PLACED AT THE HOME MARK TO PREVENT OVER-BELLING. SPACERS SHALL ALSO BE PLACED HALF WAY BETWEEN PIPE ENDS, OR IN ACCORDANCE WITH PIPE MANUFACTURERS RECOMMENDATIONS.

**END SEALS:**  
1. END SEALS SHALL BE USED TO ENSURE A WATER TIGHT SEAL ON EITHER END OF THE CASING.

**CATHODIC PROTECTION:**  
1. CASING SHALL BE CATHODICALLY PROTECTED USING A 17 LB HIGH POTENTIAL ANODE AND AN APPROVED COATING. SEE SECTION 2.5.G.

Colorado Springs Utilities  
**TYPICAL STEEL CASING INSTALLATION (CONTINUED)**  
C2-5  
DATED: 5/2015

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TRINIS ACQUISITION COMPANY, LLC

AURA AT CROSSROADS  
SANITARY DETAILS



PROJECT #: 200823  
SHEET NUMBER  
**SS7**  
7 OF 7