

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 B 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 SOUTHWEST QUARTER OF SECTION 8, TOWNSHIP 14 SOUTH, RANGE 68 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 SOUTHWEST CORNER BY A 3-1/2" ALUMINUM CAP IN A RANGE BOX STAMPED "LS 22573" ASSUMED TO BEAR NORTH 00°04'51" EAST.

BENCHMARK

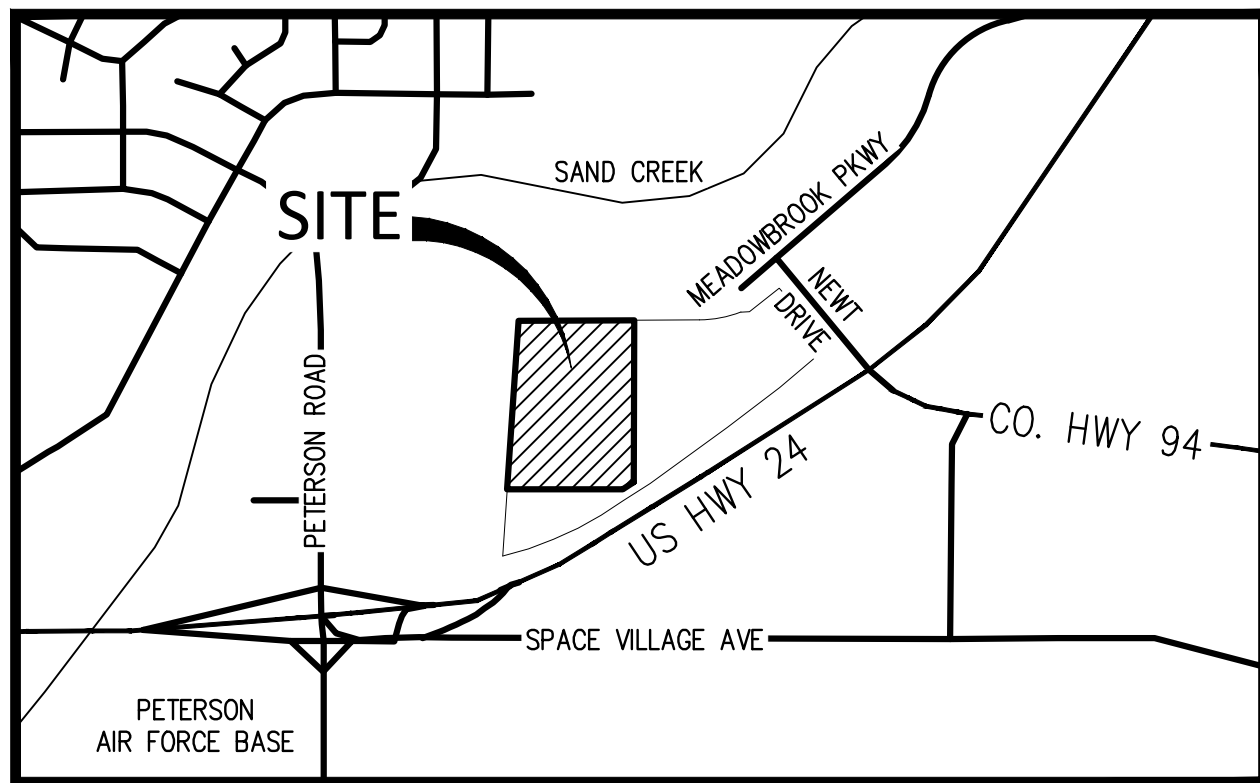
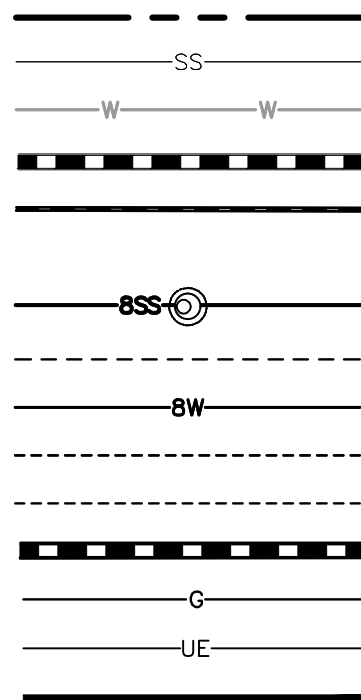
BENCHMARK IS A NGS POINT R 76, BEING A STANDARD U.S. COAST AND GEODETIC SURVEY BENCH MARK DISK SET IN THE TOP OF CONCRETE POST. IT PROJECTS 3 INCHES AND IS STAMPED R 76 1935. ELEVATION = 6286.32 NGVD29.

ABBREVIATIONS

BOP	BOTTOM OF PIPE
CONC	CONCRETE
DEF	DEFLECTION
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DS	DOWNSPOUT
E	EAST, EASTING
ELG	ENERGY GRADE LINE
ELL	ELEVATION
ESMT	EASEMENT
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
GV	GATE VALVE
HCL	HANDICAP
HGL	HYDRAULIC GRADE LINE
HORZ	HORIZONTAL
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
LSD	LANDSCAPE DRAIN
MAX	MAXIMUM
MH	MAN-HOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
N	NORTH, NORTHING
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
RAN	SANITARY
SS	SANITARY SEWER
STA	STATION
STM	STORM
TOP	TOP OF PIPE
TYE	TYPE
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" = 800'

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.

Hudson 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 EGM 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.

JENNIFER IRVIN, P.E.
COUNTY ENGINEER/ECM 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: _____ DATE: _____

OWNER/DEVELOPER:



1515 WYNKOOP ST., STE. 300
DENVER, CO 80202
P: 970-819-9968
POC: ALLISON JONES
ajones@trinsicres.com

CIVIL ENGINEER

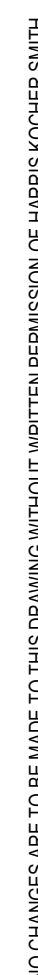


1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

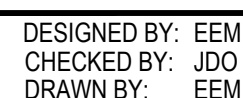


Know what's below.
Call before you dig.

ISSUE DATE: 08-06-2021		PROJECT #: 200823	
DATE	REVISION COMMENTS		
10-29-2021	PER COUNTY COMMENTS		
01-13-2022	PER COUNTY COMMENTS		
04-01-2022	ISSUED FOR CONSTRUCTION		



1. REPAIR OF ALL LOT 1 STREET PAVEMENT, SIDEWALK, CURB & GUTTER SHALL BE REPLACED BY OWNER/HOA (NOT CHEROKEE METRO DISTRICT) WHEN REPAIRS ARE NEEDED.
2. 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.


**HARRIS
KOCHER
SMITH**

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

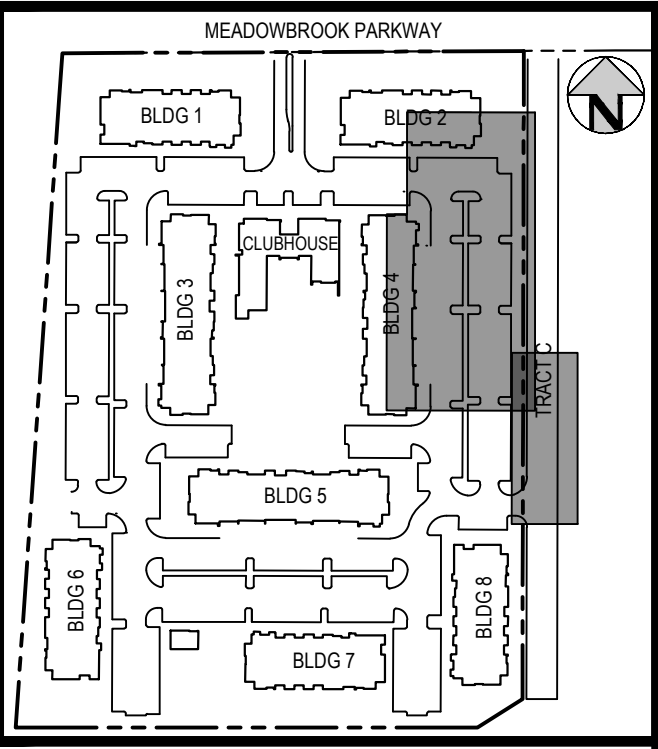
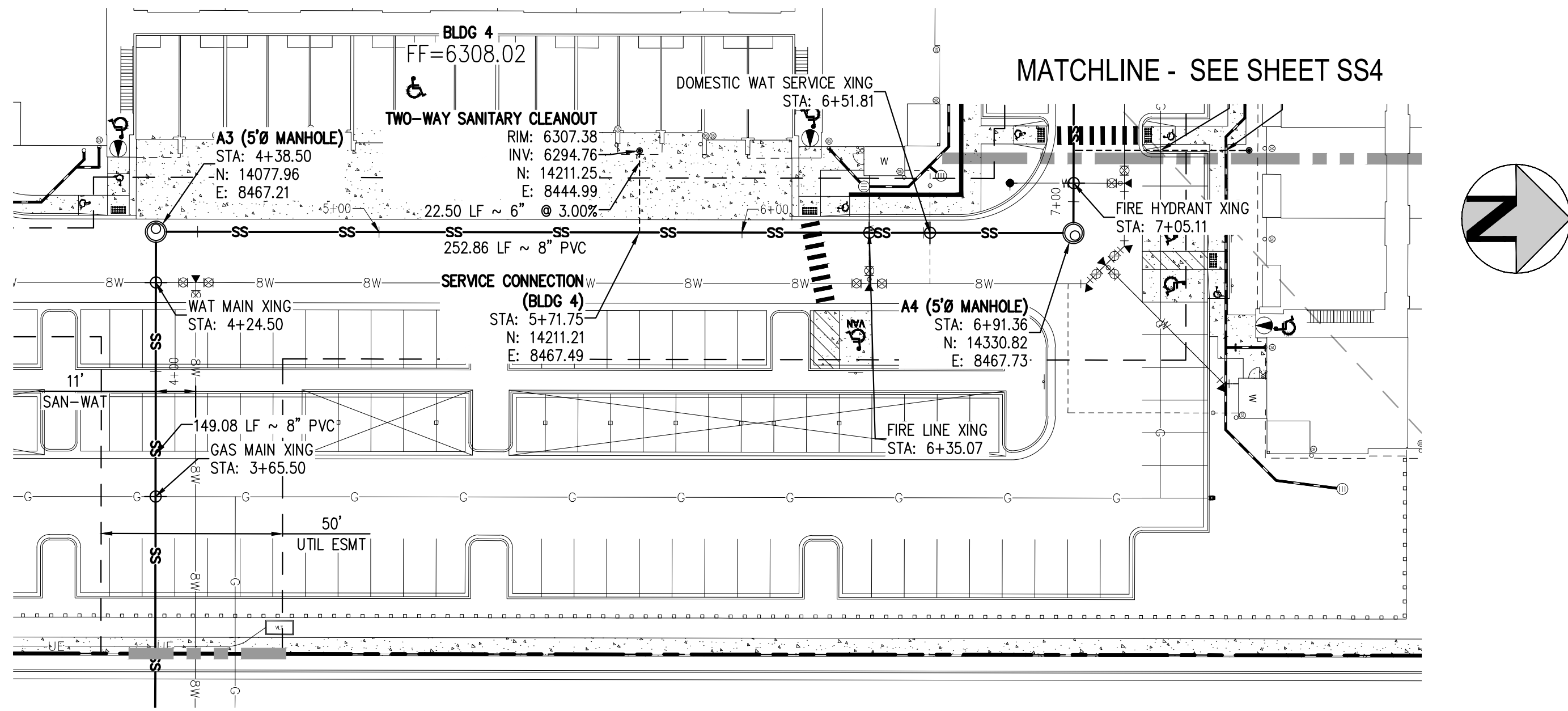
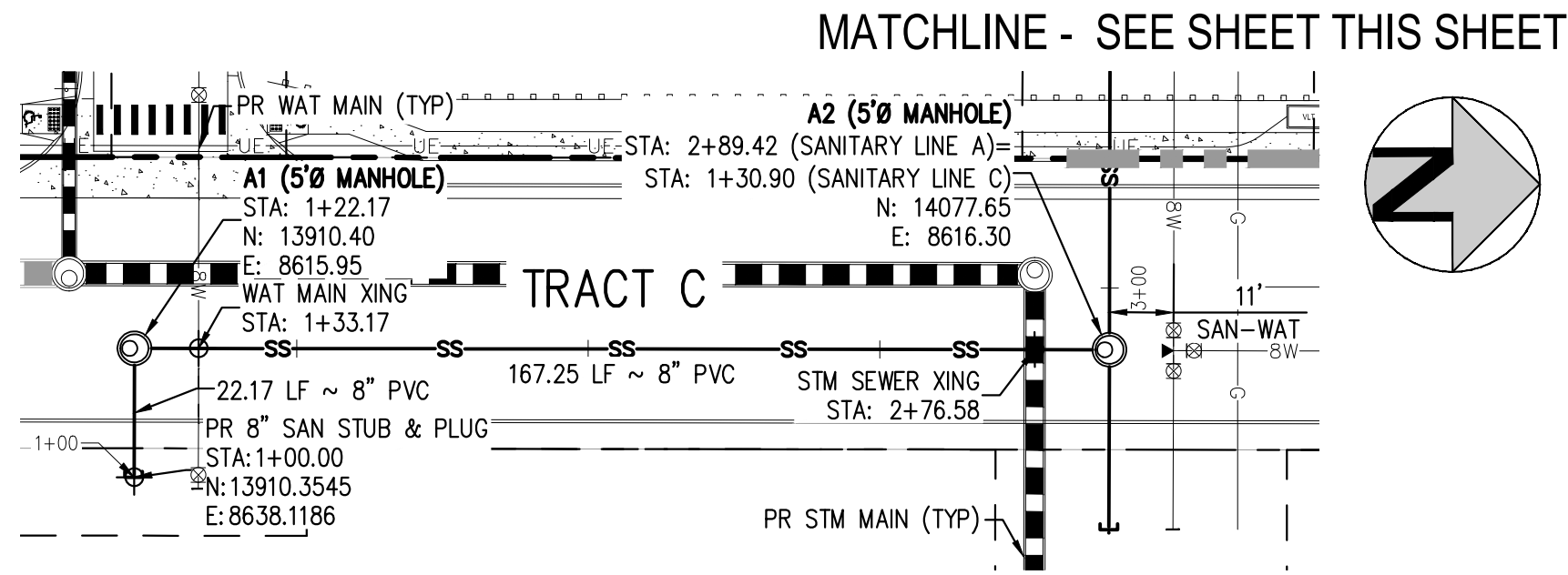
AURA AT CROSSROADS

OVERALL UTILITY PLAN



2 OF 7

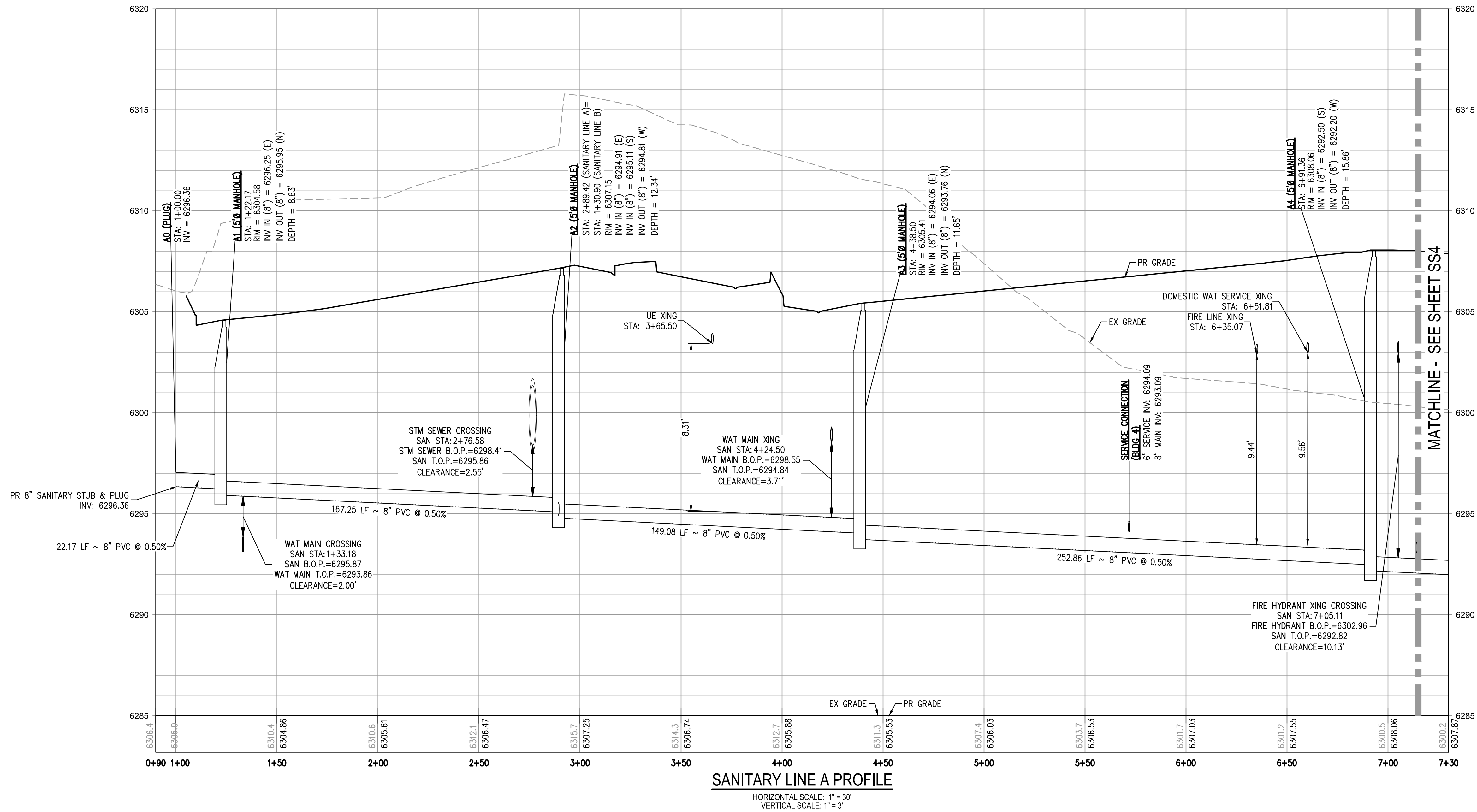
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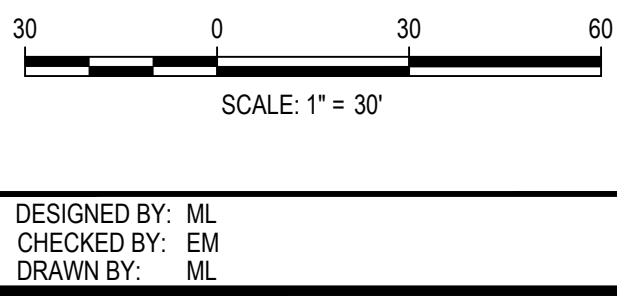
KEY MAP
SCALE: 1" = 250'

- 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 C2-7.

- 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 | SSS |
| 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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2 SHEETS
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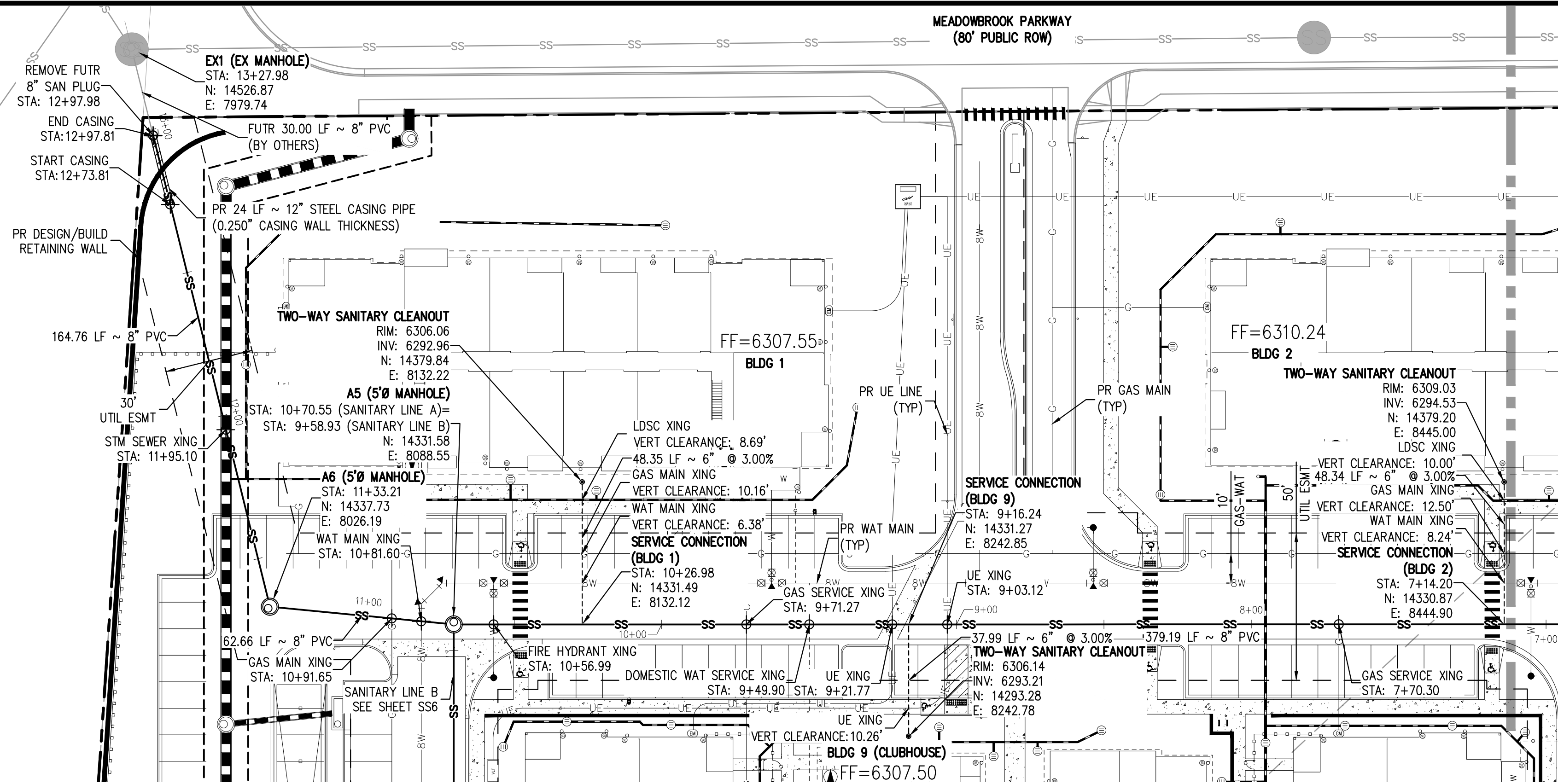
TRINIS ACQUISITION COMPANY, LLC

AURA AT CROSSROADS
SANITARY PLAN & PROFILE LINE A



PROJECT #: 200823
SHEET NUMBER
SS3
3 OF 7

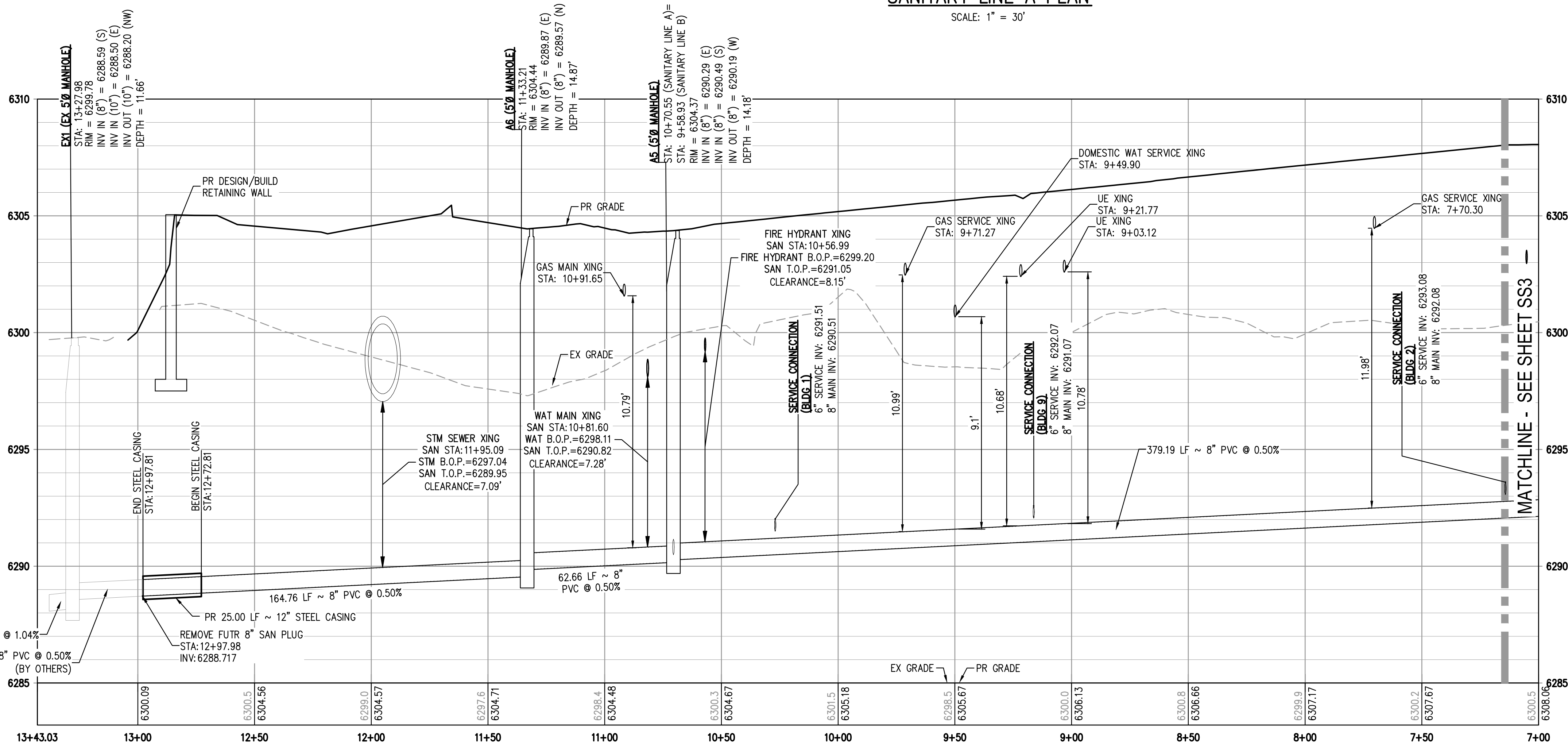
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SANITARY LINE A PLAN

SCALE: 1" = 30'

MATCHLINE - SEE SHEET SS3



SANITARY LINE A PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

MATCHLINE - SEE SHEET SS3

GENERAL SANITARY NOTES:

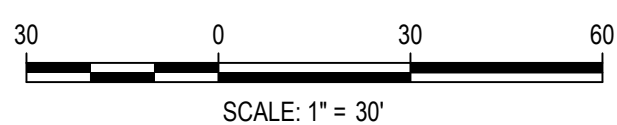
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LEGEND:

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	SSS
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.
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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



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TRINISIC ACQUISITION COMPANY, LLC

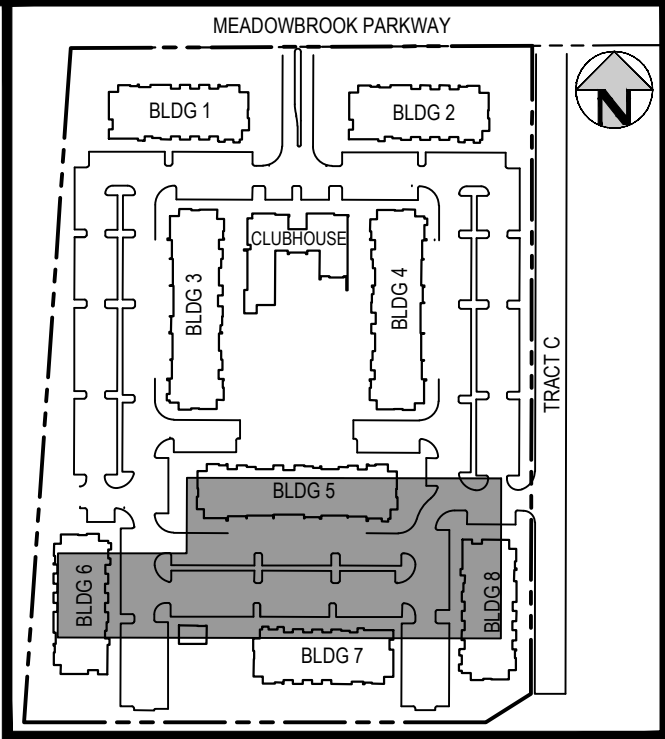
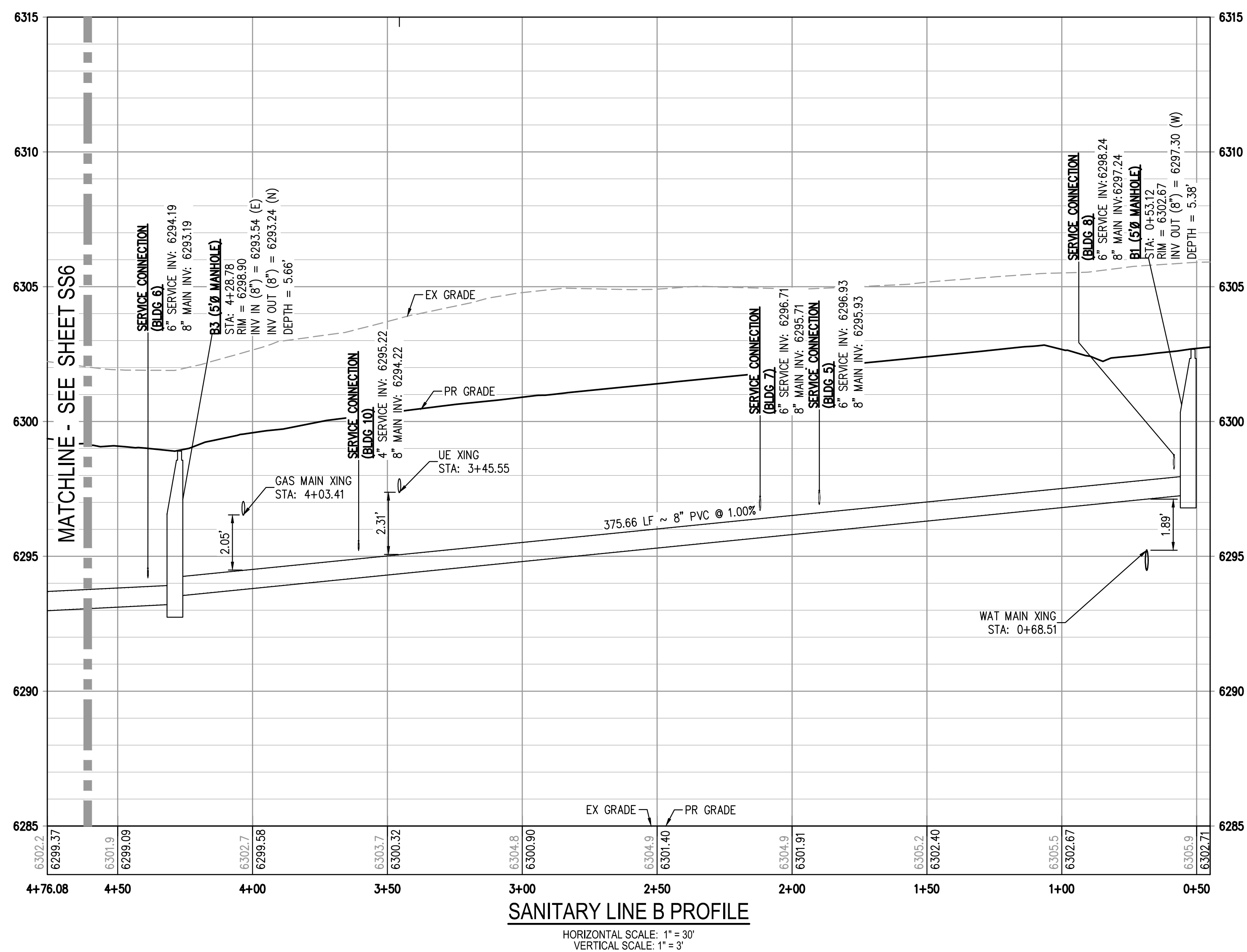
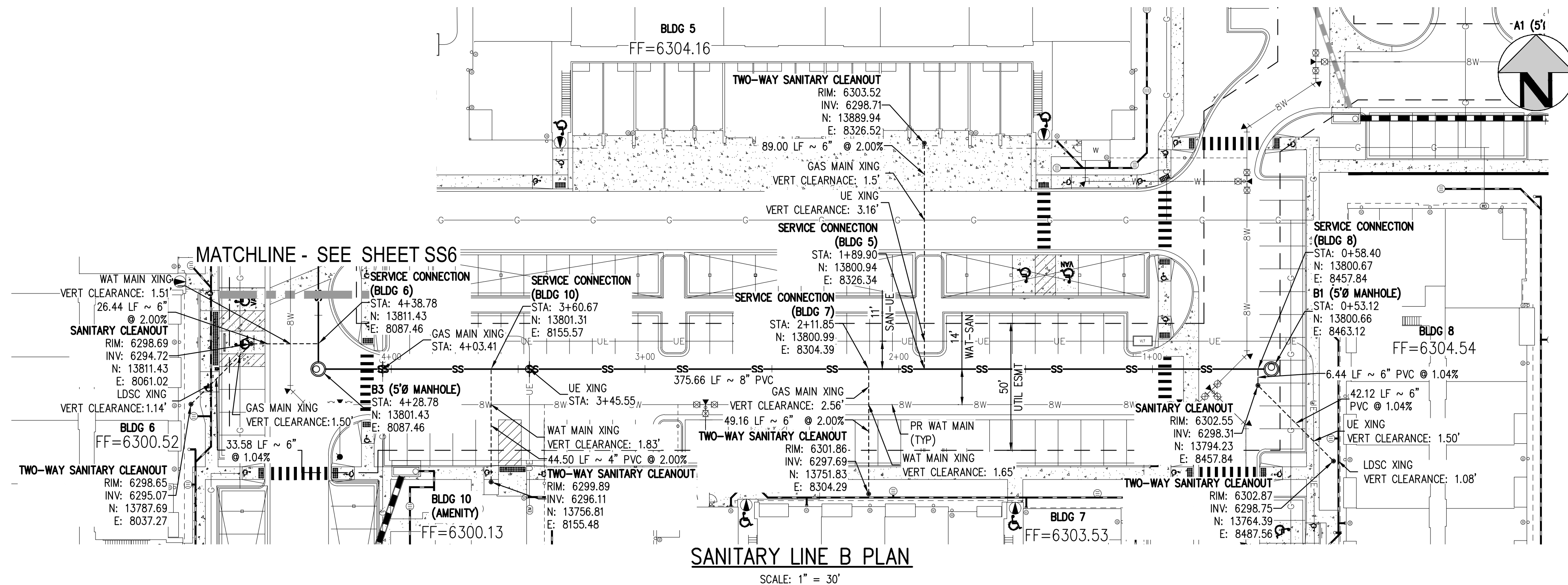
AURA AT CROSSROADS
SANITARY PLAN & PROFILE LINE A



PROJECT #: 200823
SHEET NUMBER

SS4

4 OF 7



KEY MAP
SCALE: 1" = 250'

GENERAL SANITARY NOTES:

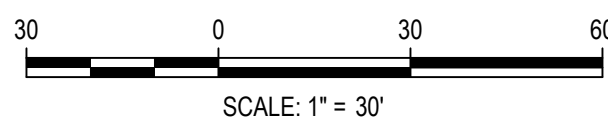
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14. REGISTERED DETAIL D-16 SHOWN ON SHEET SS7 FOR ALL SANITARY SERVICE CONNECTIONS.
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LEGEND:

PROPERTY BOUNDARY	=====
EXISTING SANITARY SEWER	-----SS-----
EXISTING WATER LINE	-----W-----W-----
EXISTING STORM LINE	=====
PROPOSED LANDSCAPE DRAIN PIPE	=====
PROPOSED LANDSCAPE AREA DRAIN	-----⊕-----
PROPOSED SANITARY SEWER W/ MANHOLE	-----SS⊙-----
PROPOSED SANITARY SERVICE	-----
PROPOSED WATER LINE	-----BW-----
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.
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DESIGNED BY: ML
CHECKED BY: EM
DRAWN BY: ML

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AURA AT CROSSROADS
SANITARY PLAN & PROFILE LINE B



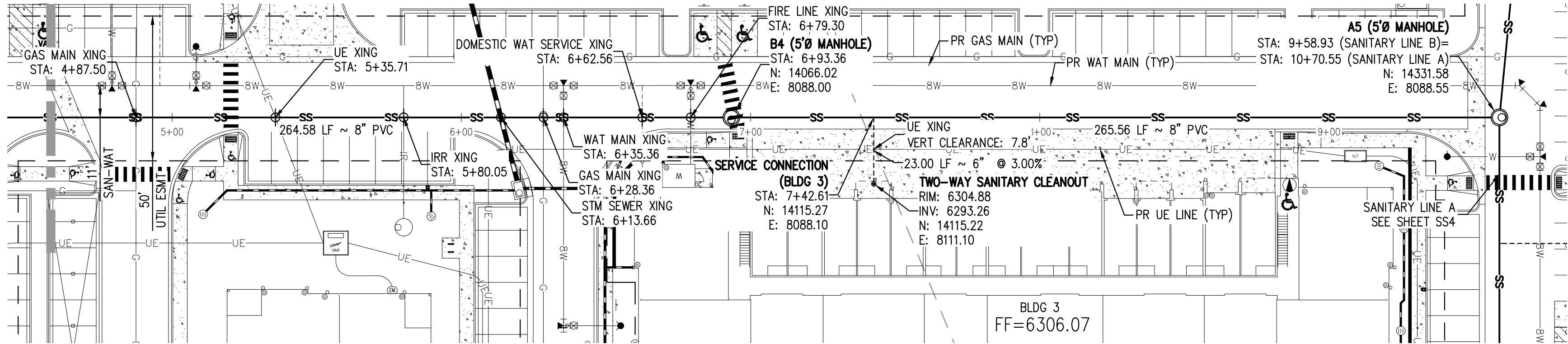
PROJECT #: 200823
SHEET NUMBER

SS5

5 OF 7

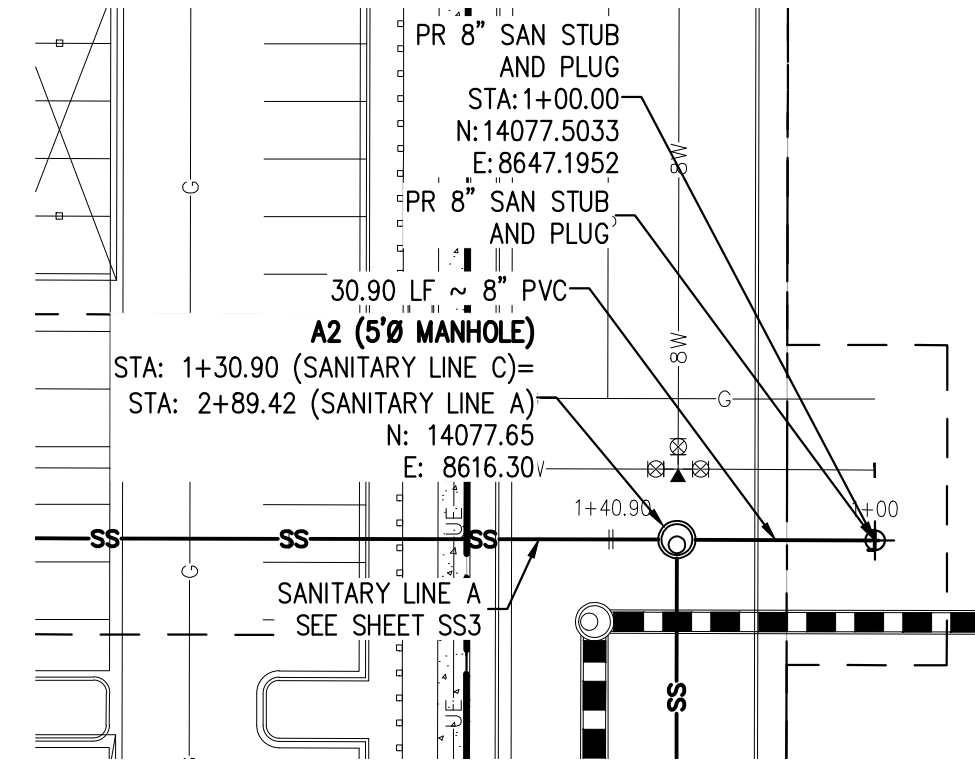
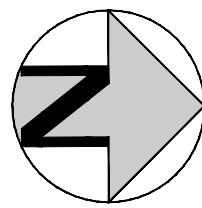
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MATCHLINE - SEE SHEET SS5



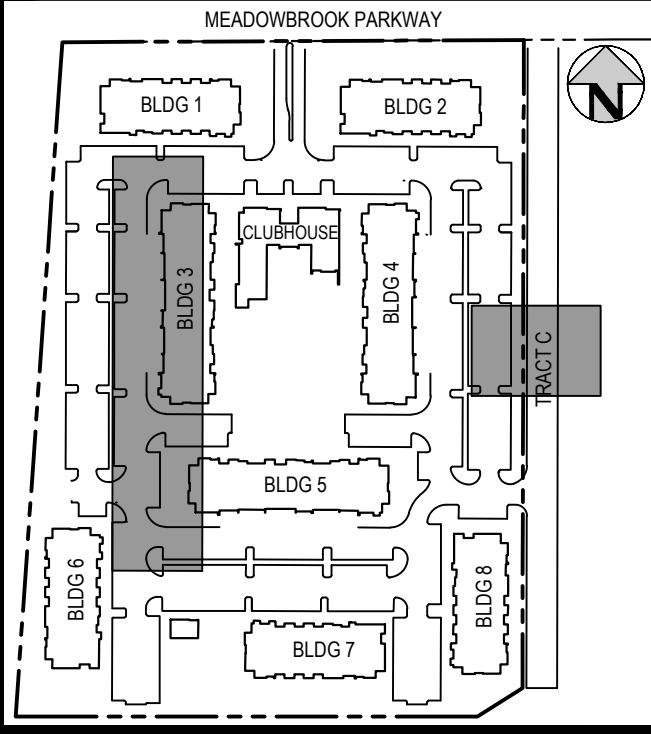
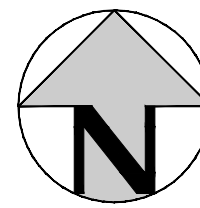
SANITARY LINE B PLAN

SCALE: 1" = 30'



SANITARY LINE C PLAN

SCALE: 1" = 30'



KEY MAP

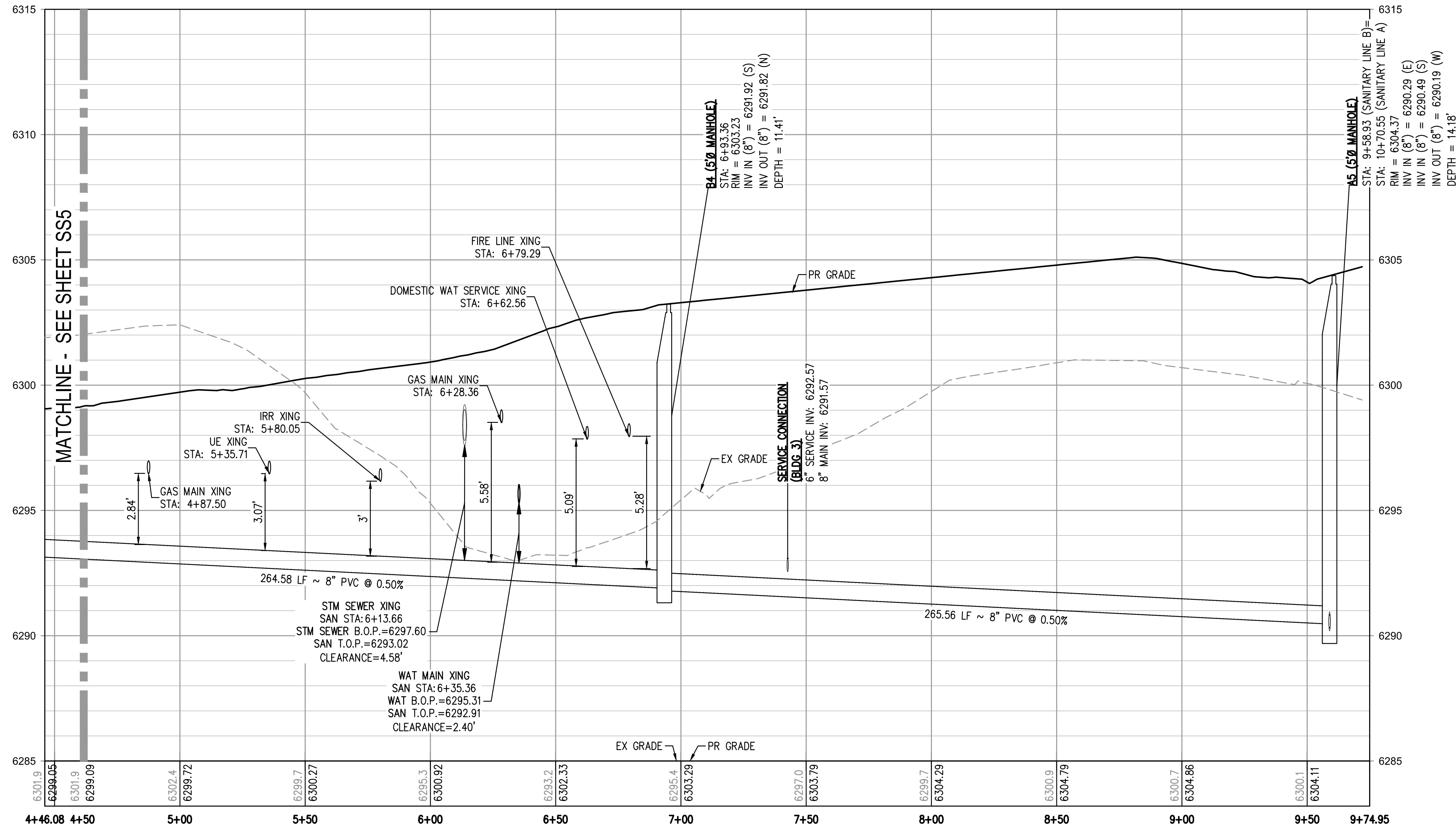
SCALE: 1" = 250'

GENERAL SANITARY NOTES:

- 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 C2-7.

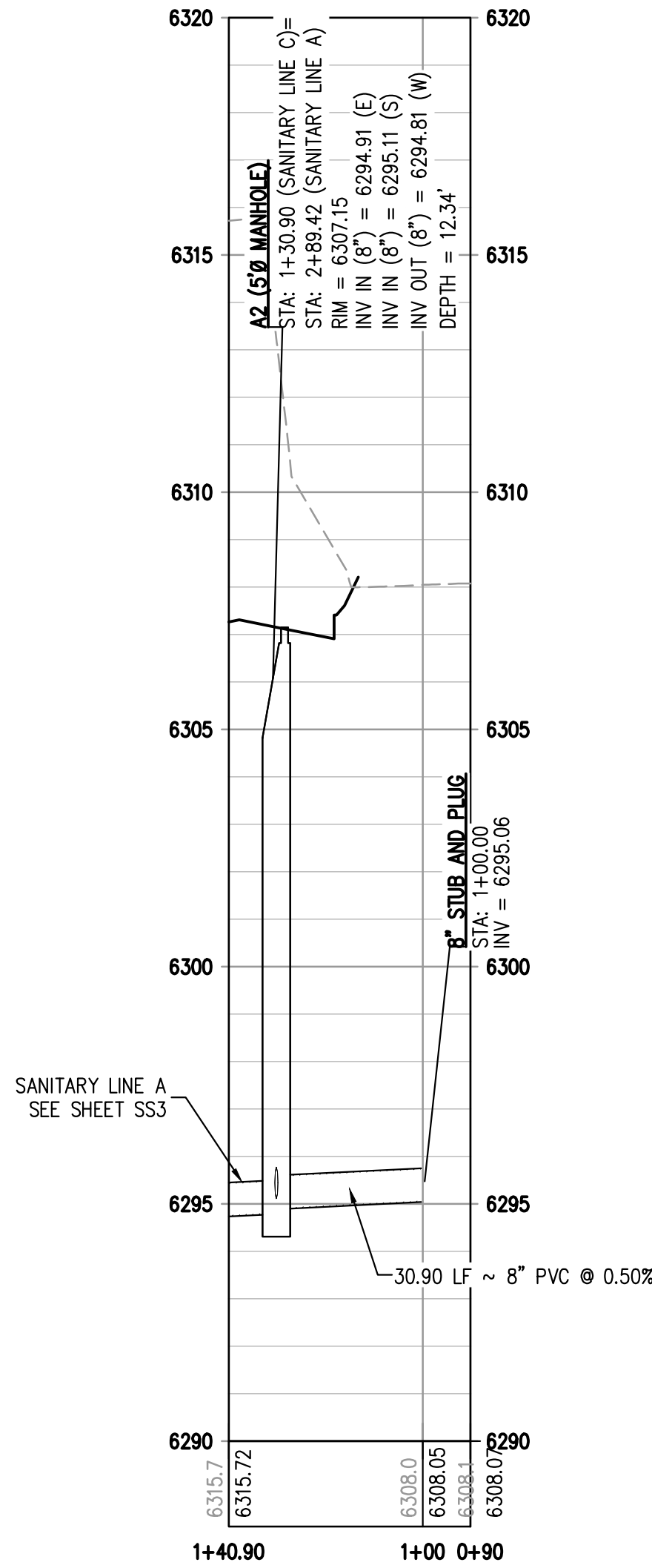
LEGEND:

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	SSS
PROPOSED SANITARY SERVICE	---
PROPOSED WATER LINE	8W
PROPOSED WATER SERVICE	---
PROPOSED SANITARY SERVICE	---
PROPOSED STORM LINE	---
PROPOSED GAS LINE	G
PROPOSED ELECTRIC LINE	UE
PROPOSED RETAINING WALL	---
PROPOSED HYDRANT	---



SANITARY LINE B PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



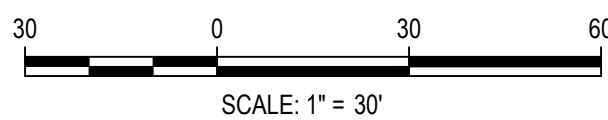
SANITARY LINE C PROFILE

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

FILEPATH: K:\200823\ENGINEERING\UTILITIES\SANITARY\SS - PLAN & PROFILE\DWG LAYOUT: LAYOUT1 (4)
DESIGNED BY: ML
CHECKED BY: EM
PLOTTED: THU 04/07/22 5:56:26A BY: MATT LEBIEDZINSKI



Know what's below.
Call before you dig.



SCALE: 1" = 30'

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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HarrisKocherSmith.com

TRINIS ACQUISITION COMPANY, LLC

AURA AT CROSSROADS
SANITARY PLAN & PROFILE LINE B

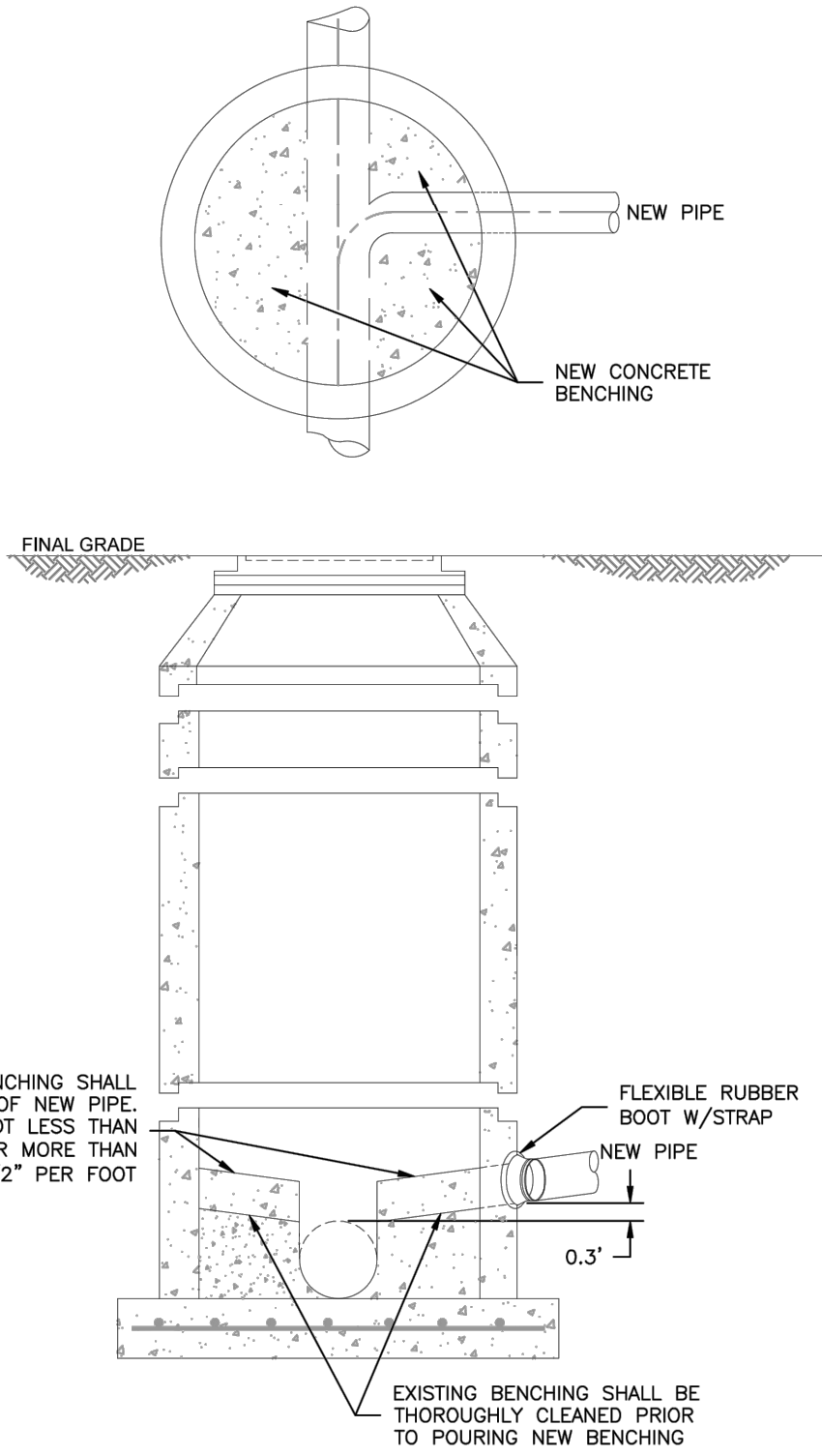


PROJECT #: 200823
SHEET NUMBER

SS6

6 OF 7

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



NOTES:

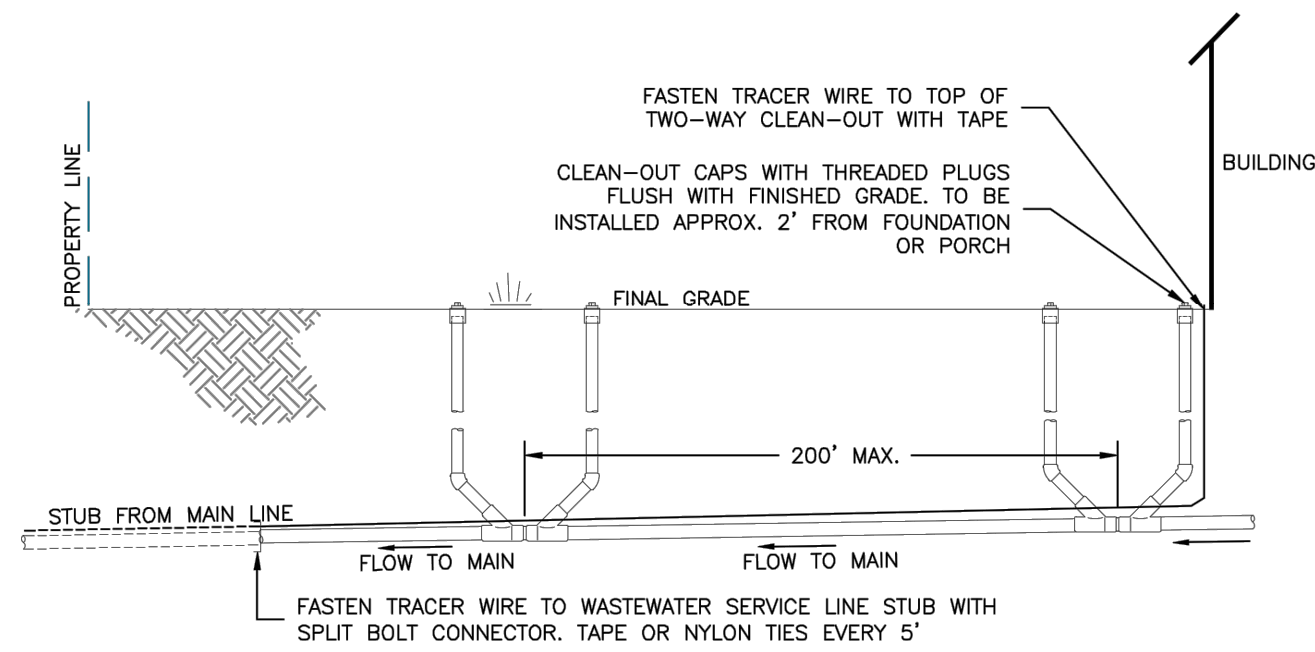
1. SEE DETAIL DRAWING C3-1 FOR MANHOLE REQUIREMENTS.



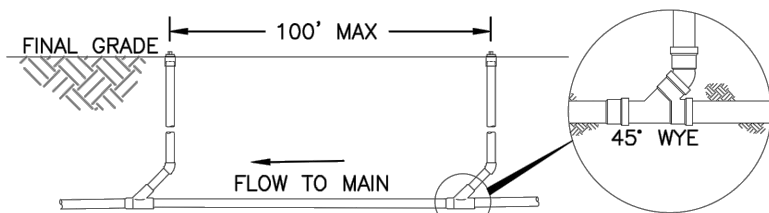
CORE DRILLING INTO AN EXISTING MANHOLE

C3-3

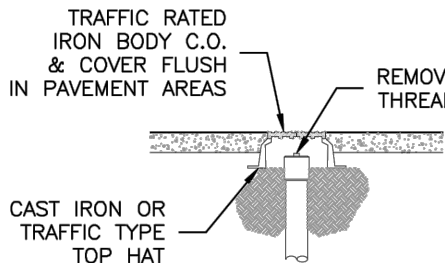
DATED: 5/2015



TWO-WAY CLEAN-OUT INSTALLATION



SINGLE CLEAN-OUT INSTALLATION



NOTES:

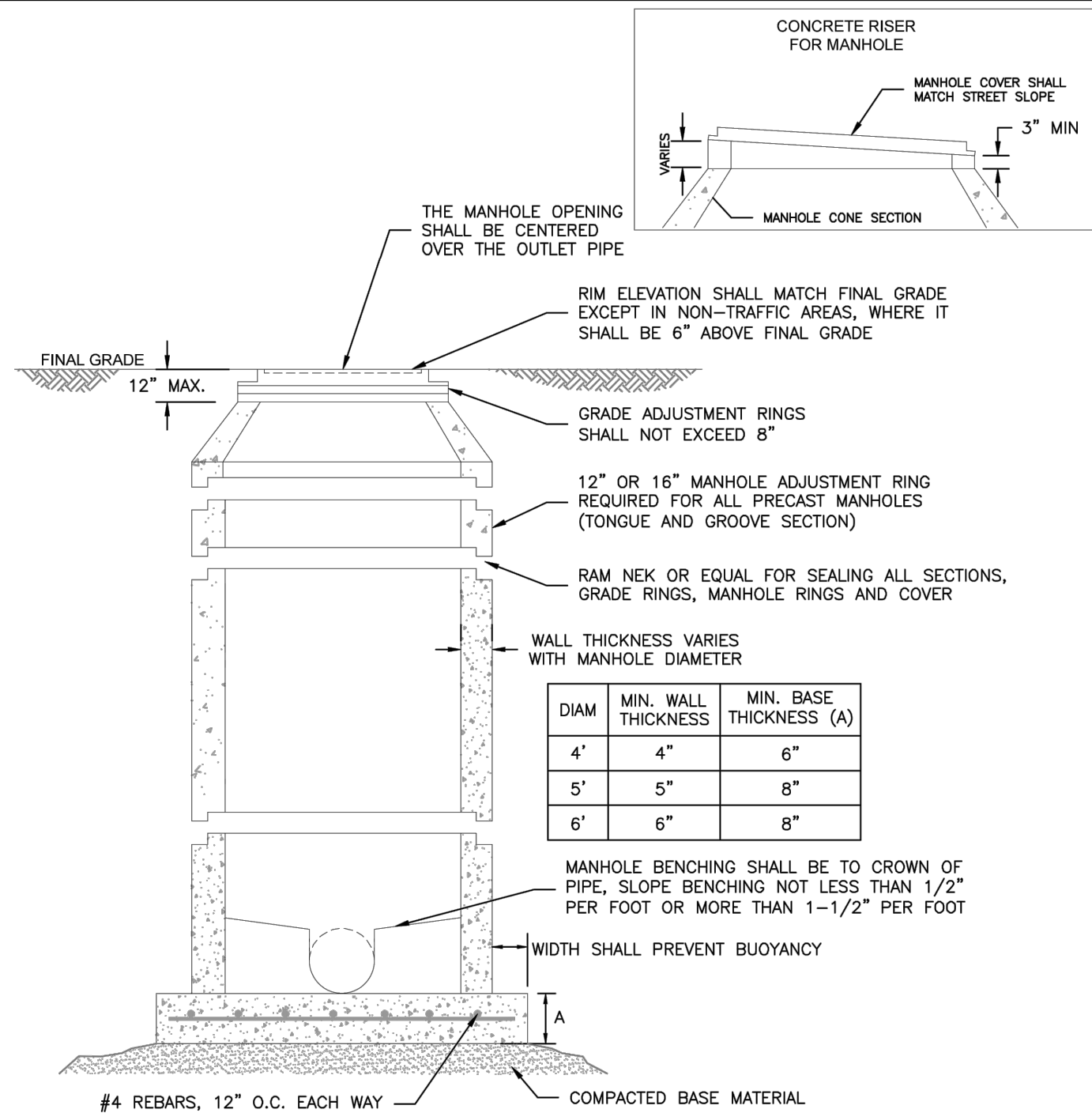
1. SINGLE CLEAN-OUT TO BE PLACED AT 100' INTERVALS, TWO-WAY CLEAN-OUTS AT 200' INTERVALS (100' EACH WAY CLEANING).
2. TRACER WIRE TO BE CONTINUOUSLY CONNECTED FROM THE MAIN LINE TO THE CLEAN-OUT LOCATED AT THE BUILDING.



TYPICAL WASTEWATER SERVICE LINE WITH TRACER WIRE AND CLEAN-OUTS

D1-4

DATED: 5/2015



NOTES:

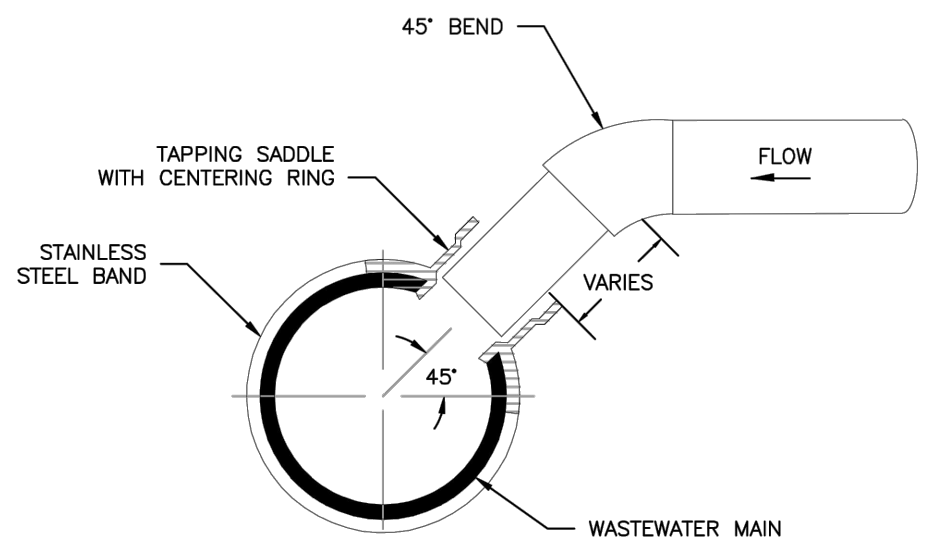
1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI @ 28 DAYS AND DESIGNED FOR HS-20 LOADING CONDITIONS.
2. ALL CONCRETE SHALL BE MECHANICALLY VIBRATED.
3. FOR CAST IN PLACE MANHOLES, DO NOT DROP CONCRETE A DISTANCE OF MORE THAN 5' UNLESS APPROVED BY COLORADO SPRINGS UTILITIES.
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.



STANDARD CONCRETE MANHOLE

C3-1

DATED: 5/2015



TYPICAL WASTEWATER SERVICE TAPPING SADDLE

NOTES:

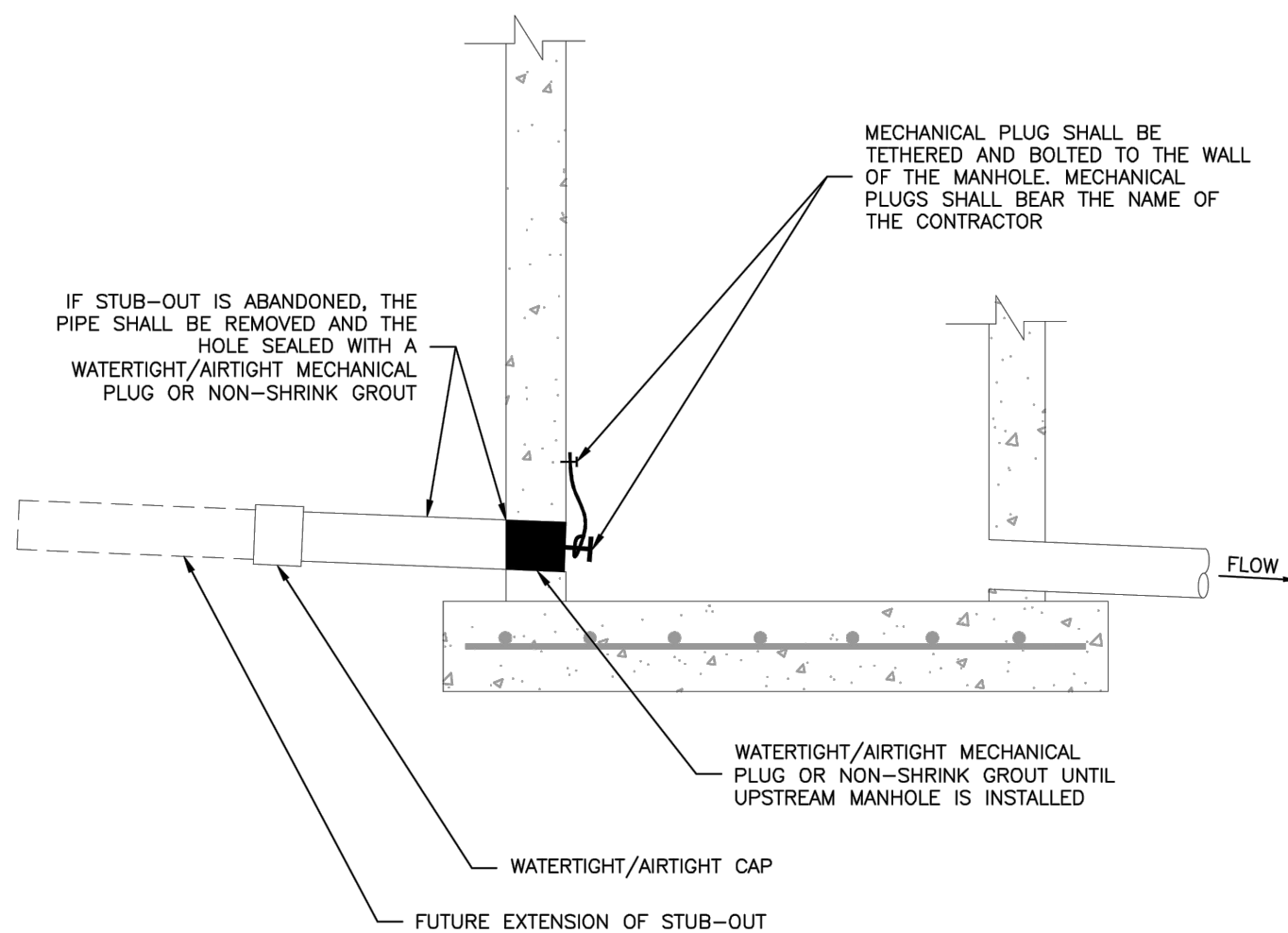
1. WHEN THE WASTEWATER MAIN IS VCP, USE THE SDR 35 PVC SADDLE WITH A LARGER SKIRT. SADDLE SHALL BE ONE NOMINAL SIZE LARGER THAN THE WASTEWATER MAIN.
2. PIPE WILL BE CUT WITH AN O.D. HOLE SAW OR TAPPING MACHINE. A 4-1/2" O.D. HOLE SAW SHALL BE USED FOR 4" TAPS AND A 6-1/2" O.D. HOLE SAW SHALL BE USED 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.



TYPICAL WASTEWATER SERVICE LINE TAPPING METHOD

D1-6

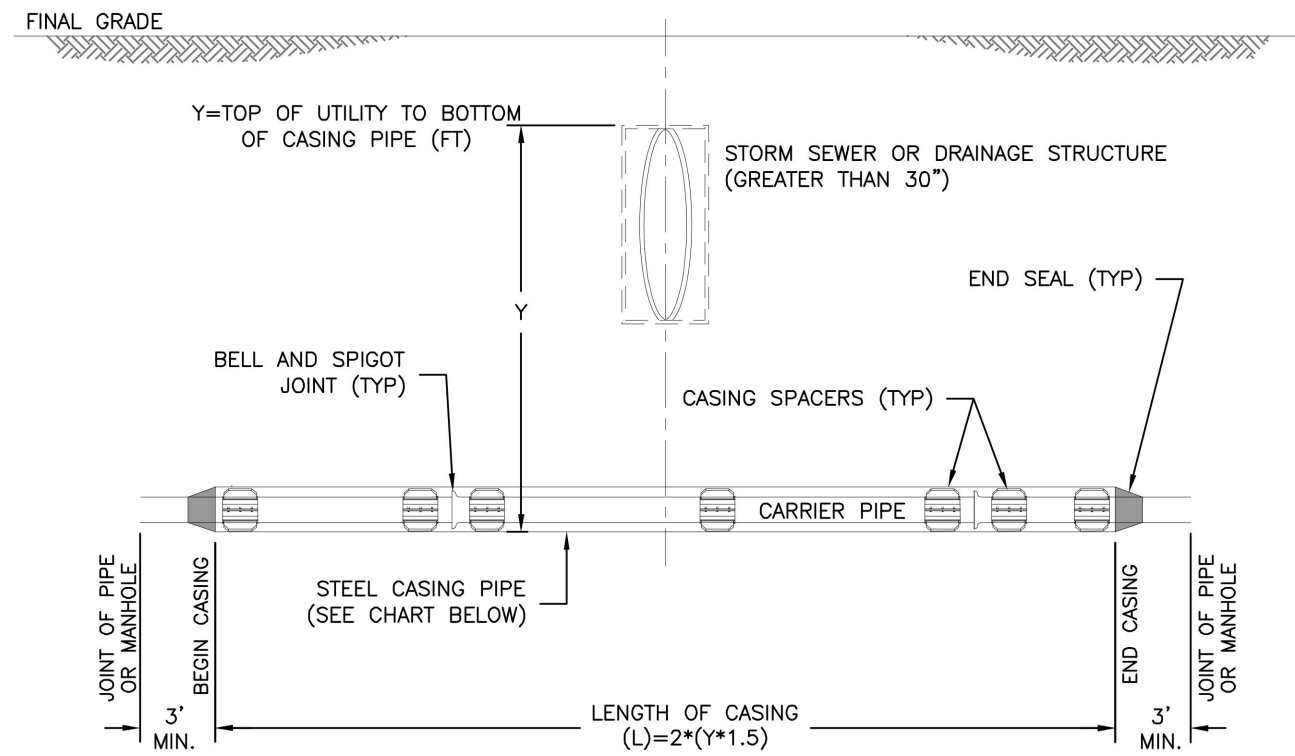
DATED: 5/2015



WASTEWATER MAIN STUB-OUT FROM MANHOLE

C3-4

DATED: 5/2015



CARRIER PIPE SIZE (INCH)	MIN. CASING PIPE SIZE (INCH)	MIN. CASING WALL THICKNESS (INCH)
8	12	0.250
12	16	0.312
18	22	0.375
20 & 21	24	0.500
24	30	0.500
30	36	0.625
36	42	0.625

NOTES:

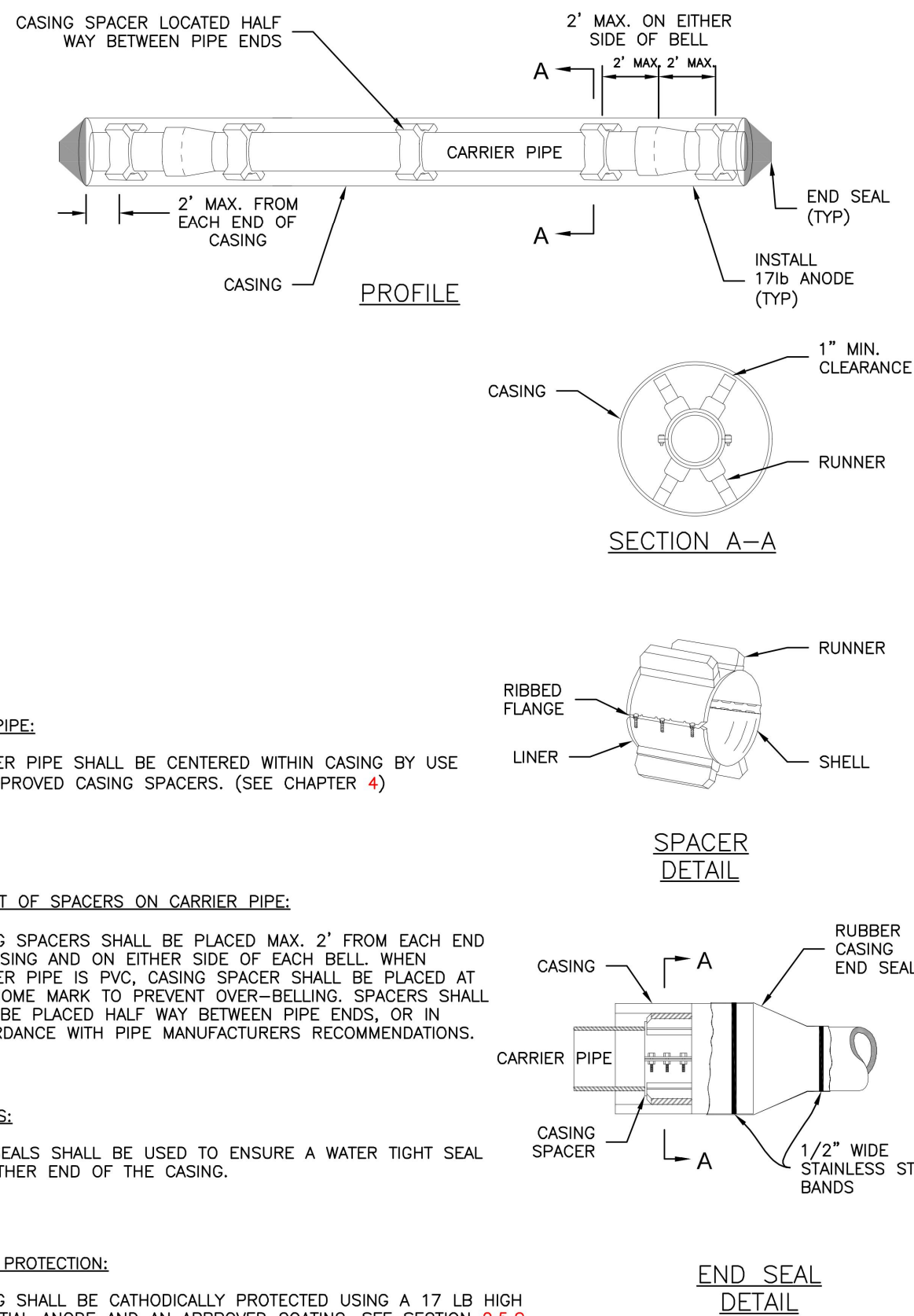
1. THE DESIGN ENGINEER SHALL VERIFY THAT THE SIZE OF THE CASING PIPE WILL MEET THE NEEDS OF THE PROJECT.
2. CASING WALL THICKNESS BASED ON E80 LOADING.
3. CASING SHALL BE STEEL PIPE WITH A MINIMUM YIELD STRENGTH OF 35,000 PSI.
4. SEE DETAIL DRAWING C2-5 FOR CASING SPACER DETAILS.
5. WHERE THE WASTEWATER 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.



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.



TYPICAL STEEL CASING INSTALLATION (CONTINUED)

C2-5

DATED: 5/2015



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



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TRINISIC ACQUISITION COMPANY, LLC

AURA AT CROSSROADS
SANITARY DETAILS



PROJECT #: 200823
SHEET NUMBER

SS7

7 OF 7

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