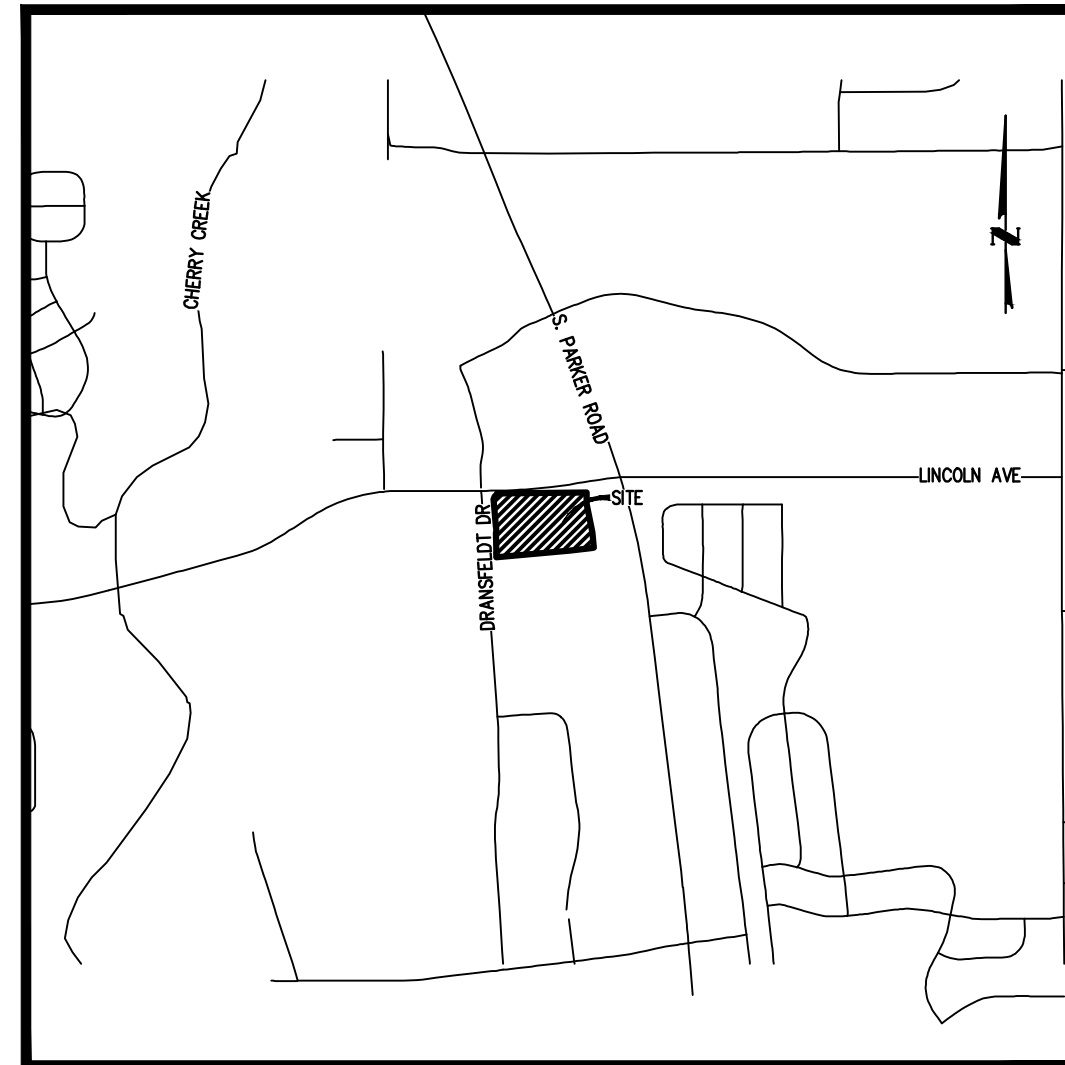


LINCOLN & DRANSFELDT

NORTHWEST 1/4 OF SECTION 15, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH P.M. COUNTY OF DOUGLAS, STATE OF COLORADO

WATER AND SANITARY PLANS



VICINITY MAP
SCALE: 1" = 1500'

ABBREVIATIONS	
BK	BOOK
ESMT	EASEMENT
EX	EXISTING
LF	LINEAR FEET
MH	MANHOLE
MIN	MINIMUM
PR	PROPOSED
PVC	POLYVINYL CHLORIDE
RET	RETAINING
ROW	RIGHT-OF-WAY
SAN	SANITARY
SS	SANITARY SEWER
TB	THRUST BLOCK
TYP	TYPICAL
UE	UNDERGROUND ELECTRIC
UT	UNDERGROUND TELECOM
WAT	WATER

SHEET INDEX

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MATERIALS LIST

SANITARY ITEM	QUANTITY	UNIT
4" PVC, SDR-35	67	LF
6" PVC, SDR-35	116	LF
8" PVC, SDR-35	756	LF
4" PLUG	2	EA
6" PLUG	4	EA
4" DOMESTIC WYE CONNECTION TO MAIN	2	EA
6" DOMESTIC WYE CONNECTION TO MAIN	4	EA
4" DIAMETER MANHOLE	6	EA
WATER ITEM	QUANTITY	UNIT
8" PVC C900 DR 14 W/ TRACER WIRE	1,825	LF
12" PVC C900 DR 14 W/ TRACER WIRE	2	LF
6" DIP FIRE LINE	124	LF
1" TYPE-K COPPER	26	LF
3/4" TYPE-K COPPER	74	LF
8"x8" TEE W/ THRUST BLOCK & RODDING	7	EA
8"x8" SWIVEL TEE W/ THRUST BLOCK & RODDING	7	EA
12"x8" TEE W/ THRUST BLOCK & RODDING	1	EA
8" 11.25" ELBOW W/ THRUST BLOCK & RODDING	2	EA
8" 45" ELBOW W/ THRUST BLOCK & RODDING	17	EA
8" 22.5" ELBOW W/ THRUST BLOCK & RODDING	6	EA
1" PLUG W/ THRUST BLOCK & RODDING	1	EA
6" PLUG W/ THRUST BLOCK & RODDING	1	EA
8" PLUG W/ THRUST BLOCK & RODDING	4	EA
3/4" IRRIGATION METER	3	EA
3/4" IRRIGATION TAP	3	EA
1" DOMESTIC SERVICE TAP	1	EA
6" GATE VALVE	7	EA
8" GATE VALVE	17	EA
8" AIR RELEASE VALVE	1	EA
12" GATE VALVE	1	EA
FIRE HYDRANT ASSEMBLY W/ 8"x8" TEE & GATE VALVE	6	EA

I HEREBY AFFIRM THAT THESE FINAL CONSTRUCTION PLANS WERE PREPARED UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH ALL APPLICABLE TOWN OF PARKER AND STATE OF COLORADO STANDARDS AND STATUTES, RESPECTIVELY; AND THAT I AM FULLY RESPONSIBLE FOR ALL DESIGN AND REVISIONS RELATIVE TO SAID PLANS.

PRELIMINARY
NOT FOR
CONSTRUCTION

RACHEL C. PATTON, P.E. 54450
ON THE BEHALF OF HARRIS KOCHER SMITH

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	---	---
RIGHT-OF-WAY	---	---
SANITARY SEWER PIPE	SS	SS
WATER PIPE	W	W
STORM SEWER PIPE	ST	ST
GAS	G	G
UNDERGROUND TELEPHONE	UT	UT
UNDERGROUND ELECTRIC	UE	UE
OVERHEAD ELECTRIC	OE	OE
JOINT TRENCH	JT	JT
MANHOLE	⊗	⊗
GATE VALVE	⊗	⊗
HYDRANT	⊗	⊗
TEE & FITTINGS	⊗	⊗
WATER DOMESTIC SERVICE	---	---
WATER FIRE SERVICE	---	---
SANITARY SERVICE W/ CLEANOUT	---	---
INLET	⊗	⊗
FLARED END SECTION	---	---
LANDSCAPE DRAIN	---	---
LIGHT	⊗	⊗
TELEPHONE VAULT	⊗	⊗
TELEPHONE JUNCTION BOX	⊗	⊗
ELECTRIC PULL BOX	⊗	⊗
FENCE POST/BOLLARD	⊗	⊗
TRANSFORMER	⊗	⊗

LEGAL DESCRIPTION:

A PARCEL OF LAND SITUATED IN THE NORTHWEST QUARTER OF SECTION 15, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF DOUGLAS, STATE OF COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 15;
THENCE SOUTH 83°44'03" EAST, A DISTANCE OF 846.76 FEET TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF LINCOLN AVENUE AND THE POINT OF BEGINNING;

THENCE NORTH 89°29'00" EAST ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 697.77 FEET TO THE NORTHWEST CORNER OF LOT 1, PEASLEE SUBDIVISION FILING NO. 1, RECORDED AT RECEPTION NO. 99104313;
THENCE ALONG THE WEST LINE OF SAID LOT 1 THE FOLLOWING TWO (2) COURSES:
1) SOUTH 00°31'00" EAST, A DISTANCE OF 89.84 FEET;
2) SOUTH 11°49'46" EAST, A DISTANCE OF 225.08 FEET TO THE NORTHWEST CORNER OF LOT 1, PEASLEE SUBDIVISION FILING NO. 2, RECORDED AT RECEPTION NO. 2005085666;

THENCE SOUTH 05°51'51" EAST ALONG THE WEST LINE OF SAID LOT 1, A DISTANCE OF 120.83 FEET TO A POINT ON THE NORTH LINE OF LOT 1B, PARKER PROFESSIONAL PARK FIRST AMENDMENT, RECORDED AT RECEPTION NO. 8725509;
THENCE SOUTH 84°07'50" WEST ALONG SAID NORTH LINE, A DISTANCE OF 24.51 FEET TO THE NORTHEAST CORNER OF LOT 1, BLOCK 1 E.T. TECHNOLOGIES INC., RECORDED AT RECEPTION NO. 2002093991;

THENCE ALONG SAID NORTH LINE THE FOLLOWING TWO (2) COURSES:
1) SOUTH 82°44'13" WEST, A DISTANCE OF 163.50 FEET;
2) SOUTH 84°51'34" WEST, A DISTANCE OF 577.15 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF DRANSFELDT ROAD DEEDED BY RECEPTION NO. 2002088425 AND A POINT OF NON-TANGENT CURVATURE;

THENCE ALONG SAID EAST RIGHT-OF-WAY LINE THE FOLLOWING SIX (6) COURSE:
1) ALONG THE ARC OF SAID CURVE TO THE RIGHT AN ARC LENGTH OF 25.79 FEET, SAID CURVE HAVING A RADIUS OF 660.00 FEET, A CENTRAL ANGLE OF 02°14'19", AND A CHORD WHICH BEARS NORTH 02°20'42" WEST A CHORD DISTANCE OF 25.79 FEET;
2) NORTH 01°13'32" WEST, A DISTANCE OF 165.71 FEET TO A POINT OF CURVATURE;
3) ALONG THE ARC OF SAID CURVE TO THE LEFT AN ARC LENGTH OF 43.04 FEET, SAID CURVE HAVING A RADIUS OF 740.00 FEET, A CENTRAL ANGLE OF 03°19'57", AND A CHORD WHICH BEARS NORTH 02°53'30" WEST A CHORD DISTANCE OF 43.03 FEET;
4) NORTH 04°33'29" WEST, A DISTANCE OF 217.83 FEET TO A POINT OF CURVATURE;
5) ALONG THE ARC OF SAID CURVE TO THE RIGHT AN ARC LENGTH OF 49.23 FEET, SAID CURVE HAVING A RADIUS OF 30.00 FEET, A CENTRAL ANGLE OF 94°01'51", AND A CHORD WHICH BEARS NORTH 42°27'27" EAST A CHORD DISTANCE OF 43.89 FEET;
6) NORTH 04°33'21" WEST, A DISTANCE OF 15.04 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 346,479 SQUARE FEET OR 7.95 ACRES, MORE OR LESS.

BASIS OF BEARINGS

BEARINGS ARE BASED ON THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 15, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN. AS MONUMENTED AT BOTH THE NORTHWEST QUARTER CORNER AND NORTH QUARTER CORNER BY 3.25" ALUMINUM CAPS, ASSUMED TO BEAR SOUTH 89°29'00" WEST.

AGENCY CONTACT LIST

OWNER/DEVELOPER

PLAZA STREET PARTNERS, LLC (314) 882-7758
2400 W 75TH ST, SUITE 220
PRAIRIE VILLAGE, KS 66208
CONTACT: RYANNE SASS

CIVIL ENGINEER/SURVEYOR

HARRIS KOCHER SMITH (303) 623-6300
1120 LINCOLN ST, SUITE 1000
DENVER, CO 80203
CONTACT: RACHEL PATTON, PE

LANDSCAPE ARCHITECT

NORRIS DESIGN (303) 892-1166
1101 BANNOCK ST
DENVER, CO 80204
CONTACT: JARED CARLON

TOWN OF PARKER

COMMUNITY DEVELOPMENT DEPARTMENT (303) 840-9546
20120 EAST MAIN STREET
PARKER, COLORADO 80134
CONTACT: PAUL WORKMAN

PUBLIC UTILITIES

XCEL ENERGY (303) 571-3358
1123 WEST 3RD AVENUE
DENVER, COLORADO 80223

INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION

(303) 688-3100
5496 U.S. HIGHWAY 85
SEDALIA, COLORADO 80135
CONTACT: JIM POTTER

CENTURY LINK

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11290 SOUTH TWENTY MILE ROAD #130
PARKER, COLORADO 80134

PARKER WATER AND SANITATION DISTRICT

(303) 841-4627
18100 EAST WOODMAN ROAD
PARKER, COLORADO 80134

SOUTH METRO FIRE DISTRICT AUTHORITY

(720) 989-2230
9195 MINERAL AVENUE
CENTENNIAL, COLORADO 80112
CONTACT: RANDY CAPRA

COMCAST

(303) 578-5142
6850 SOUTH TUCSON WAY
ENGLEWOOD, COLORADO 80112

DEVELOPER:

PLAZA STREET PARTNERS
2400 W 75TH ST, SUITE 220
PRAIRIE VILLAGE, KS 66208

ENGINEER:

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

DATE	REVISION COMMENTS
11-17-2021	PER PWSO COMMENTS
04-12-2022	PER PWSO COMMENTS
07-21-2022	PER PWSO COMMENTS
11-22-2022	PER PWSO COMMENTS
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03-09-2023	PER PWSO COMMENTS



NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH.
Filepath: K:\2023\ENGINEERING\UTILITIES\WAS - COVER DWG - Layout - LAYOUT1
Plotted: THU 03/09/23 10:33:58A By: Olivia MacCormack

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE _____ DATE _____

(NOTE - UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.)

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

GENERAL NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
2. THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE TOWN OF PARKER, DOUGLAS COUNTY AND OTHER NEIGHBORING CITIES AND TOWNS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
3. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS CONTACT THE PWSD IMMEDIATELY.
4. PWSD ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED 48 HOURS PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS NECESSARY TO PERFORM THE PROPOSED WORK.
6. ALL CONCRETE SHALL BE A MINIMUM OF CLASS A, 6 SACK, TYPE II, 3000-POUND COMPRESSION STRENGTH.
7. THE DESIGN ENGINEER SHALL SUBMIT ONE (1) SET OF "AS-BUILT" DRAWINGS AND ELECTRONIC FILES TO THE DISTRICT ENGINEER FOR APPROVAL BY DISTRICT. AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT ENGINEER, FULL SIZE PRINTS SHALL BE TRANSMITTED TO THE PWSD OFFICE.
8. NO WORK SHALL BE BACKFILLED UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE DISTRICT ENGINEER OR REPRESENTATIVE OF THE DISTRICT ENGINEER. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY. COMPACTION TESTS MUST BE SUBMITTED TO DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
9. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.
10. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF LINES (WATER AND SEWER) FOR UP TO TWO (2) YEARS FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.
11. SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.
12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
 'X' FOR SANITARY SERVICE SEWERS
 'Y' FOR WATER SERVICES
13. NO TREES ALLOWED IN EASEMENTS OR WITHIN 8' OF WATER OR SANITARY SEWER MAINS IN RIGHT OF WAY.
14. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSD AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSD SPECIFICATION MANUAL.

WATER SYSTEM NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST REVISION.
2. ALL WATER MAINS SHALL BE PER PWSD MATERIALS SPECIFICATIONS. ALL MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE SUITABLE FOR CHLORINATED AND CHLORAMINATED WATER.
3. ALL BENDS, PLUGS, REDUCERS, AND FIRE HYDRANTS TO BE RODDED OR MEGA-LUGGED. ALL FITTINGS SHALL BE WRAPPED PER PWSD MATERIALS SPECIFICATIONS.
4. THERE SHALL BE A MINIMUM COVER OF 4.5 FEET OVER ALL WATER MAINS.
5. FIRE HYDRANTS SHALL CONFORM TO AWWA C-502 "DRY BARREL FIRE HYDRANTS" PIPE HYDRANT ASSEMBLIES PER PWSD SPECIFICATIONS.
6. ALL BENDS, TEES, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST WITH CONCRETE THRUST BLOCKS.
7. PRECAUTIONS SHALL BE TAKEN TO PROTECT THE INTERIOR OF PIPES, FITTINGS, AND VALVES AGAINST CONTAMINATION. ALL OPENINGS IN THE PIPELINE SHALL BE CLOSED WITH WATERTIGHT PLUGS WHEN PIPE LAYING IS STOPPED AT THE CLOSE OF THE DAY'S WORK OR FOR OTHER REASONS, SUCH AS REST BREAKS OR MEAL PERIODS.
8. VALVES IN STREETS ARE TO BE LOCATED AT PROPERTY LINE EXTENSIONS EXCEPT FOR TAPPING TEES; WHERE AN ADDITIONAL VALVE SHALL BE PLACED ON THE TAPPING TEE. OTHER LOCATIONS SHOWN ON THE PLANS.
9. WHEN NECESSARY TO LOWER OR RAISE WATER LINES AT STORM DRAINS AND OTHER UTILITY CROSSINGS, A MINIMUM CLEARANCE OF 1.5 FEET SHALL BE MAINTAINED BETWEEN OUTSIDE OF PIPES.
10. THE CONTRACTOR SHALL NOTIFY THE PWSD AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION. IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP, THE CONTRACTOR MUST NOTIFY THE DISTRICT ENGINEER 48 HOURS PRIOR TO RE-START.
11. PIPE BEDDING SHALL BE A CLEAN, WELL-GRADED SAND OR SQUEEGEE SAND IN ACCORDANCE WITH PWSD STANDARDS AND SPECIFICATIONS, LATEST REVISION.
12. THE CONTRACTOR SHALL NOTIFY THE PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH THE EXCAVATION. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.
13. COMPACTION OF ALL TRENCHES MUST BE ATTAINED IN ACCORDANCE WITH THE SOILS REPORTS AND COMPACTION TEST RESULTS SUBMITTED TO THE DISTRICT ENGINEER PRIOR TO PROBATIONARY ACCEPTANCE.
14. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR, DESIGN ENGINEER, AND REPRESENTATIVE OF OTHER APPROVING AGENCIES.
15. CHLORINATION AND FLUSHING: ALL WATER MAINS SHALL BE INSTALLED AND CHLORINATED PER PWSD SPECIFICATIONS. CHLORINATION OF FINISHED PIPELINE COMPLETED BEFORE HYDROSTATIC TESTING.
16. HYDROSTATIC TESTING: ALL WATER MAINS SHALL BE TESTED PER THE REQUIREMENTS OF THE PWSD SPECIFICATIONS UP TO MINIMUM OF 150 PSI IN THE PRESENCE OF A PWSD INSPECTOR/ENGINEER.

SANITARY SEWER SYSTEM NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE PWSD ENGINEERING STANDARDS AND SPECIFICATIONS, LATEST VERSION.
2. ALL SEWER MAINS SHALL BE PVC, ASTM D-3034, SDR 35 OR APPROVED EQUAL. ALL SEWER MAIN SIZE IS 8" IN DIAMETER UNLESS OTHERWISE NOTED.
3. SEWER LINES SHALL BE INSTALLED 5.0 FEET SOUTH OR WEST OF STREET CENTERLINE, UNLESS OTHERWISE SHOWN ON PLANS. SEWER LINES SHALL BE 10.00 FEET FROM WATER LINES EXCEPT WHEN CROSSING EACH OTHER. SEWER LINES WHICH CROSS LESS THAN 1.50 FEET VERTICALLY FROM THE WATER MAIN SHALL BE ENCASED IN CONCRETE AS PER PWSD SPECIFICATIONS. USE RUBBER GASKETS FOR PVC ENCASEMENT.
4. SEWER RIM ELEVATIONS SHOWN ARE APPROPRIATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. RING AND COVER SHALL BE SET IN CENTERED CONCRETE RINGS WITH RAM-NECK FOR ADJUSTMENT TO MATCH FINAL PAVEMENT ELEVATIONS.
5. THE CONTRACTOR AND SURVEY CREW SHALL VERIFY ELEVATIONS OF EXISTING SEWER LINES AND MANHOLES TO BE TIED TO PRIOR TO CONSTRUCTION OR STAKING OF SANITARY SEWER.
6. NO UNDERDRAIN SYSTEM WILL BE ALLOWED TO BE PLACED IN MAINLINE OR SEWER SERVICE TRENCHES.
7. SEWER SERVICE TEES FOR EACH UNIT SHALL BE STAKED BY A SURVEY CREW AND FURNISHED AND INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER "AS CONSTRUCTED" LOCATION OF TEES. SEWER WYES SHALL BE USED RATHER THAN TEES.
8. ALL MANHOLES SHALL BE 48-INCHES IN DIAMETER WITH 24-INCH RING AND COVER, ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED. ALL MANHOLES SHALL HAVE SHAPED INVERTS.
9. PIPE BEDDING SHALL BE CLASS "B" AND SHALL CONFORM TO ASTM C-33 OR D-448 GRADATION NO. 6 OR NO. 67.
10. AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION, A PRE-CONSTRUCTION MEETING WILL BE HELD AT THE OFFICE OF THE DISTRICT ENGINEER AND ATTENDED BY THE CONTRACTOR AND REPRESENTATIVES OF THE OTHER APPROVING AGENCIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE DISTRICT ENGINEER TO SCHEDULE THIS MEETING.
11. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS WHICH HAVE BEEN APPROVED BY THE PWSD AND THE DISTRICT ENGINEER AND ONE (1) COPY OF THE LATEST PWSD SPECIFICATION MANUAL.
12. ALL SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE PWSD STANDARDS AND SPECIFICATIONS PRIOR TO ACCEPTANCE OR ANY CONNECTION TO AN EXISTING SEWER LINE.
13. PRIOR TO STARTING WORK WHERE SEWER MAIN IS TO BE CONNECTED TO EXISTING PWSD SEWER SYSTEMS, THE NEAREST MANHOLE TO THE POINT OF TIE-IN SHALL BE PLUGGED WITH A PLUMBER'S PLUG ON THE INLET SIDE BY THE CONTRACTOR. THIS PLUG SHALL REMAIN IN PLACE UNTIL FINAL PROBATIONARY ACCEPTANCE BY PWSD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUMPING AND CLEANING THESE MANHOLES AND REMOVING THE PLUG WHEN INSTRUCTED BY THE DISTRICT. PRIOR TO PROBATIONARY ACCEPTANCE WALK-THROUGH, THE CONTRACTOR SHALL JET CLEAN THE ENTIRE SANITARY SEWER SYSTEM AND PUMP OUT AT THE PLUGGED MANHOLE.

FILEPATH: K:\200829\ENGINEERING\UTILITIES\NWS - COVER DWG LAYOUT.LAYOUT2
 5/16/2023 10:34:00A BY: OLIVIA MCCrackEN
 PLOTTED: THU 03/09/2023 10:34:00A BY: OLIVIA MCCrackEN



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 DRAWN BY:

ISSUE DATE: 08-16-2021

DATE	REVISION COMMENTS
11-17-2021	PER PWSD COMMENTS
04-12-2022	PER PWSD COMMENTS
07-21-2022	PER PWSD COMMENTS
11-22-2022	PER PWSD COMMENTS
01-18-2023	PER PWSD COMMENTS
03-09-2023	PER PWSD COMMENTS



PLAZA STREET PARTNERS

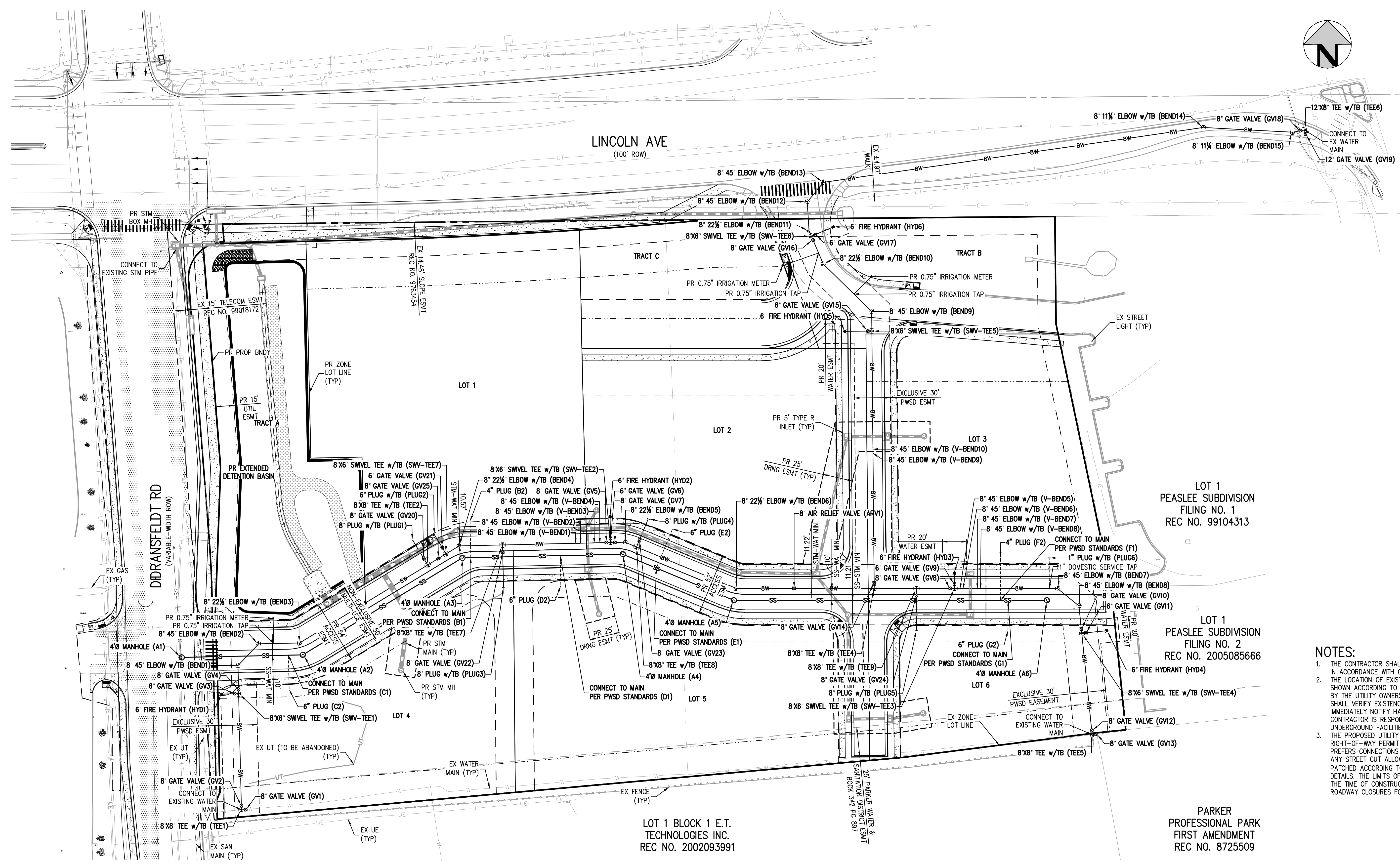
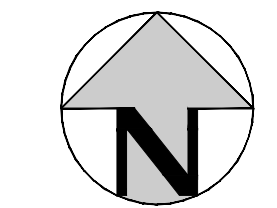
LINCOLN & DRANSFELDT
 NOTES

PROJECT #: 200829
 SHEET NUMBER

2

2 OF 21

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



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. THE PROPOSED UTILITY CONNECTION WILL REQUIRE A TOWN RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING WORK. THE TOWN PREFERS CONNECTIONS TO BE BORED TO THE EXTENT POSSIBLE, AND ANY STREET CUT ALLOWED BY THE TOWN WILL BE REQUIRED TO BE PATCHED ACCORDING TO THE TOWN'S CONSTRUCTION STANDARDS AND DETAILS. THE LIMITS OF PATCHING WILL BE DETERMINED BY THE TOWN AT THE TIME OF CONSTRUCTION. THE TOWN OF PARKER DOES NOT ALLOW ROADWAY CLOSURES FOR UTILITY WORK.

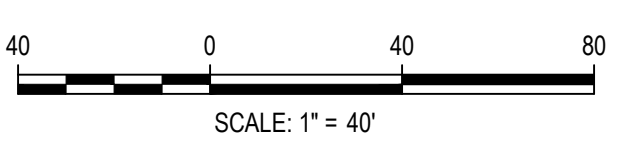
ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE _____ DATE _____
(NOTE - UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.)

FILE PATH: K:\200829\ENGINEERING\UTILITIES\811 - OVERALL UTILITY PLAN - FULL SCHEDULING LAYOUT LAYOUT 1.dwg
DATE PLOTTED: 10/24/24 10:34:24 AM BY: OLIVIA KACZARENKO



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DATE	REVISION COMMENTS
11-17-2021	PER PWSO COMMENTS
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01-18-2023	PER PWSO COMMENTS
03-09-2023	PER PWSO COMMENTS

DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS



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PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
OVERALL UTILITY PLAN - FULL SITE

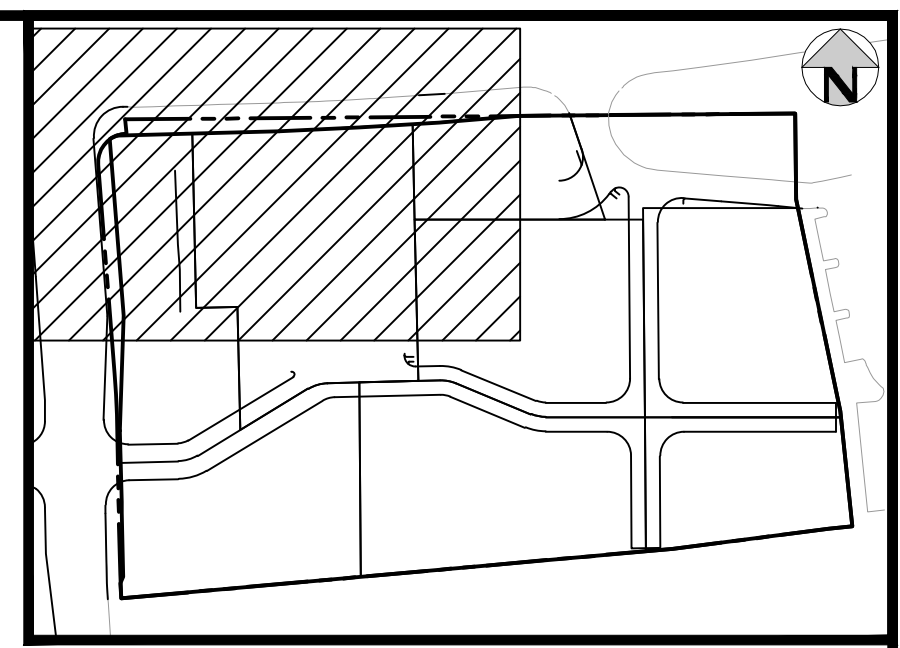
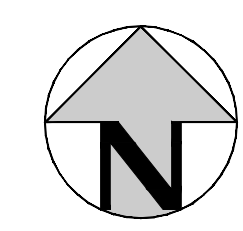
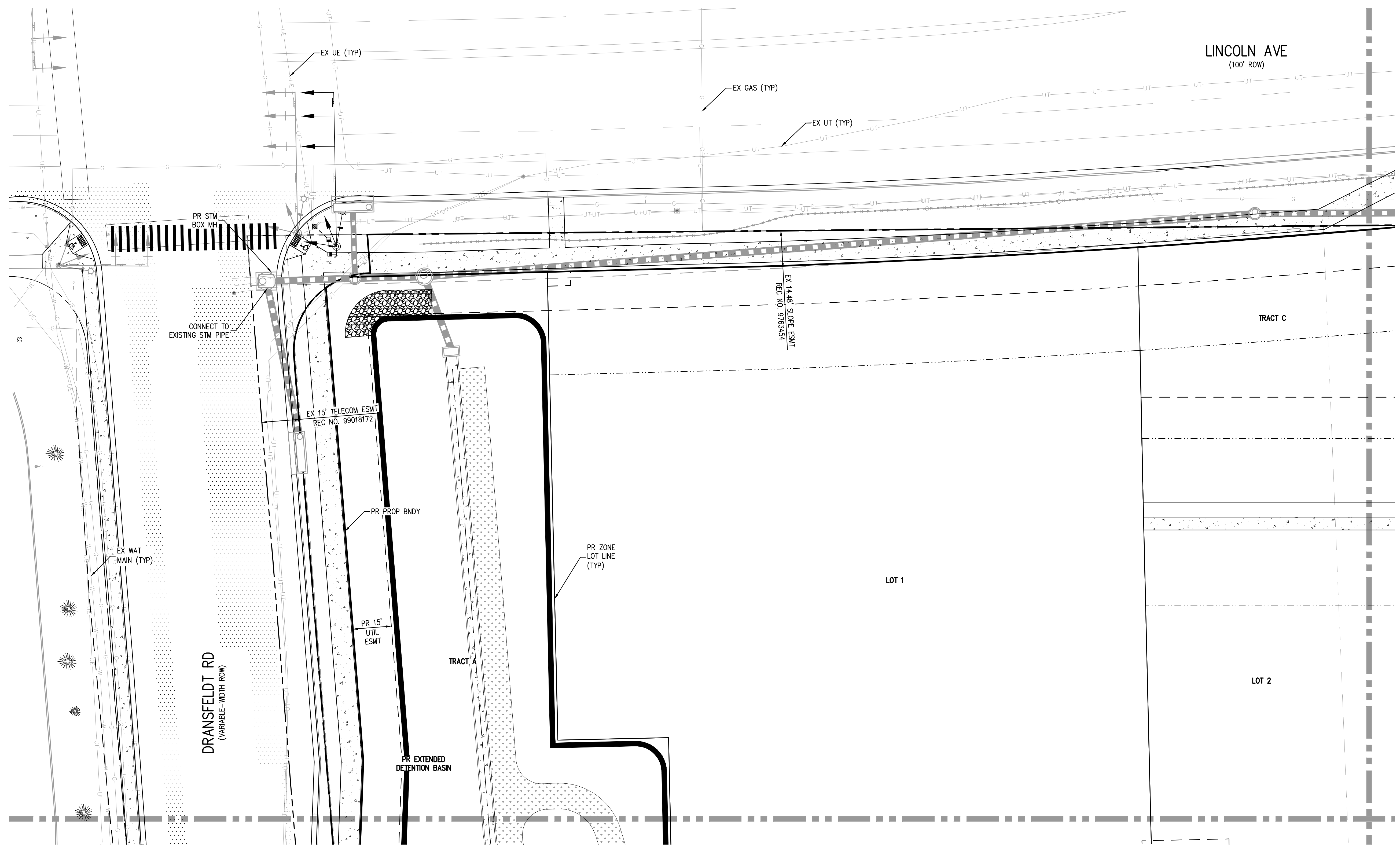
PRELIMINARY
NOT FOR
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PROJECT #: 200829
SHEET NUMBER

3

3 OF 21

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



MATCHLINE - SEE SHEET 5

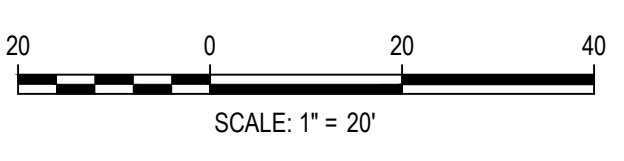
MATCHLINE - SEE SHEET 6

- NOTES:**
1. THE CONTRACTOR SHALL NOTIFY COLORADO 811 PRIOR TO EXCAVATION, IN ACCORDANCE WITH COLORADO STATE STATUTES.
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ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE _____ DATE _____
 (NOTE - UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.)

FILEPATH: K:\200829\ENGINEERING\UTILITIES\MS - OVERALL UTILITY PLANS\DWGS_LAYOUT\LAYOUT1.dwg
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 CHECKED BY: RCP
 PLOTTED: THU 09/09/2023 10:34:20A BY: OLIVIA KACZACKEN



DESIGNED BY: MJS
 CHECKED BY: RCP
 DRAWN BY: MJS

ISSUE DATE: 08-16-2021	
DATE	REVISION COMMENTS
11-17-2021	PER PWSO COMMENTS
04-12-2022	PER PWSO COMMENTS
07-21-2022	PER PWSO COMMENTS
11-22-2022	PER PWSO COMMENTS
01-18-2023	PER PWSO COMMENTS
03-09-2023	PER PWSO COMMENTS

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

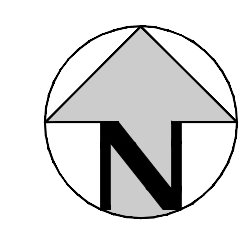
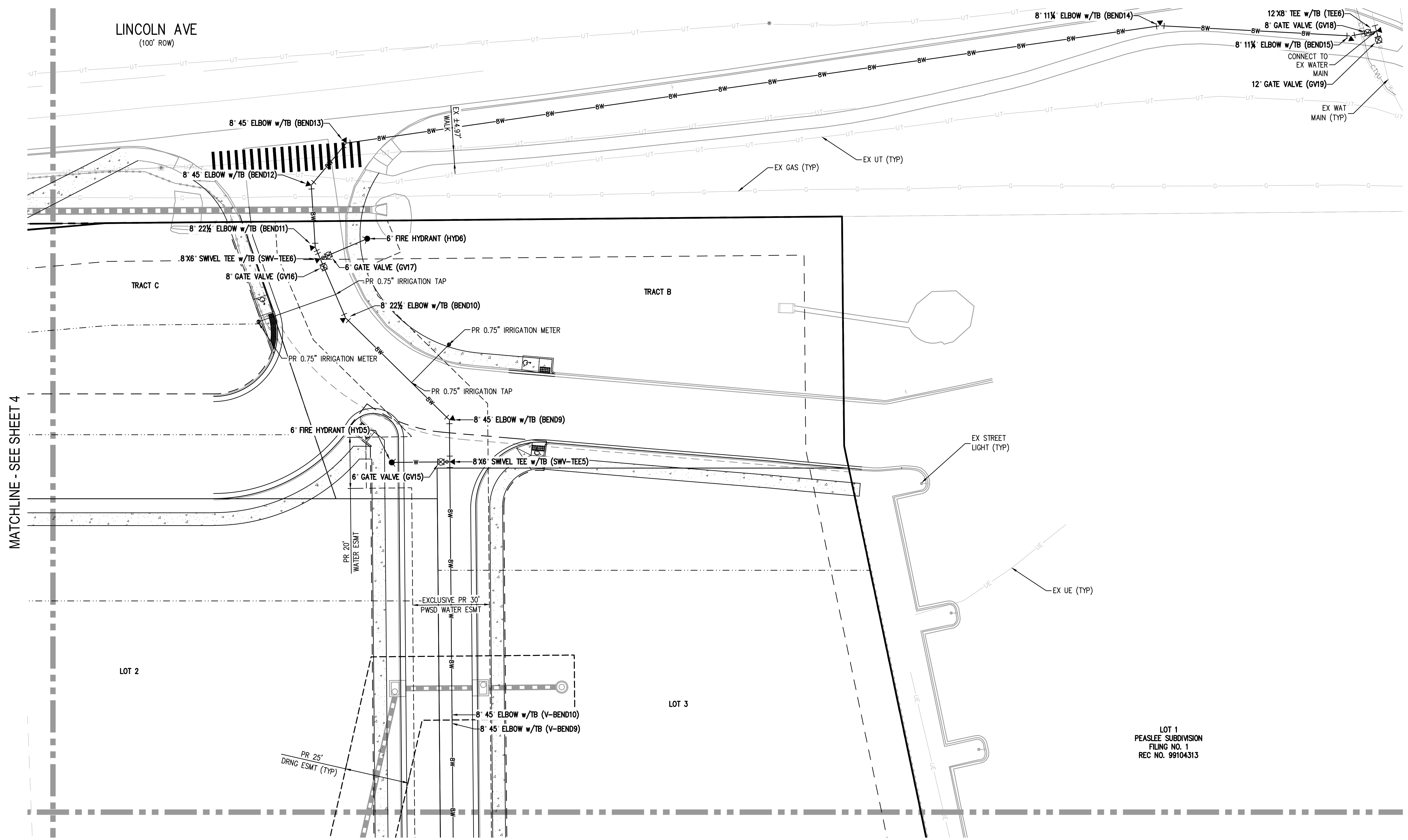
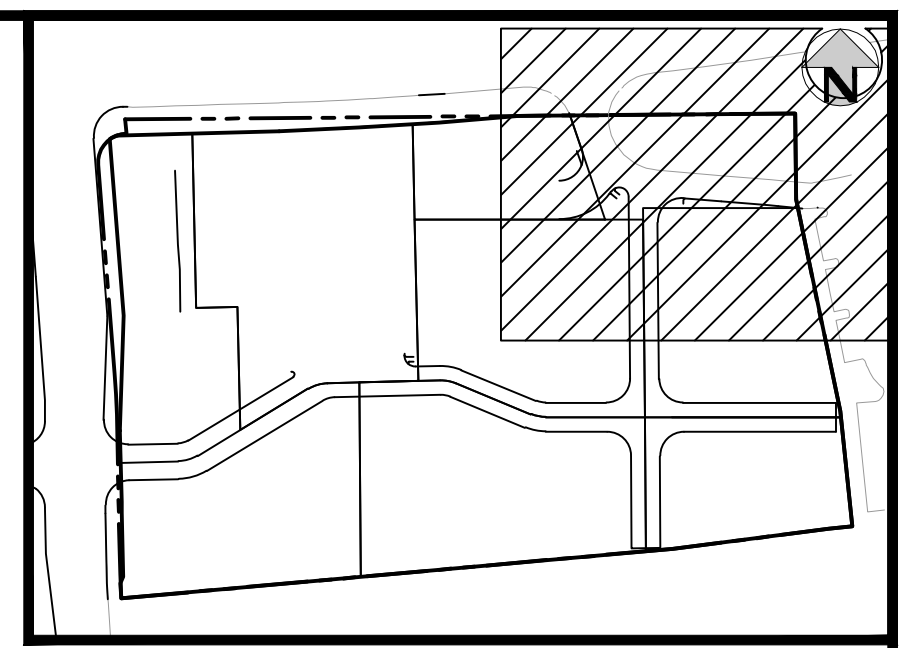
PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
 OVERALL UTILITY PLAN

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PROJECT #: 200829
 SHEET NUMBER
4
 4 OF 21

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MATCHLINE - SEE SHEET 4

MATCHLINE - SEE SHEET 7

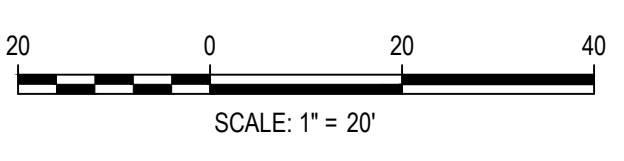
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LOT 1
PEASLEE SUBDIVISION
FILING NO. 1
REC NO. 99104313

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DESIGNED BY: MJS
CHECKED BY: RCP
PLOTTED: THU 09/09/2023 10:34:56A BY: OLIVIA MCCracken



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

DATE	REVISION COMMENTS
11-17-2021	PER PWSD COMMENTS
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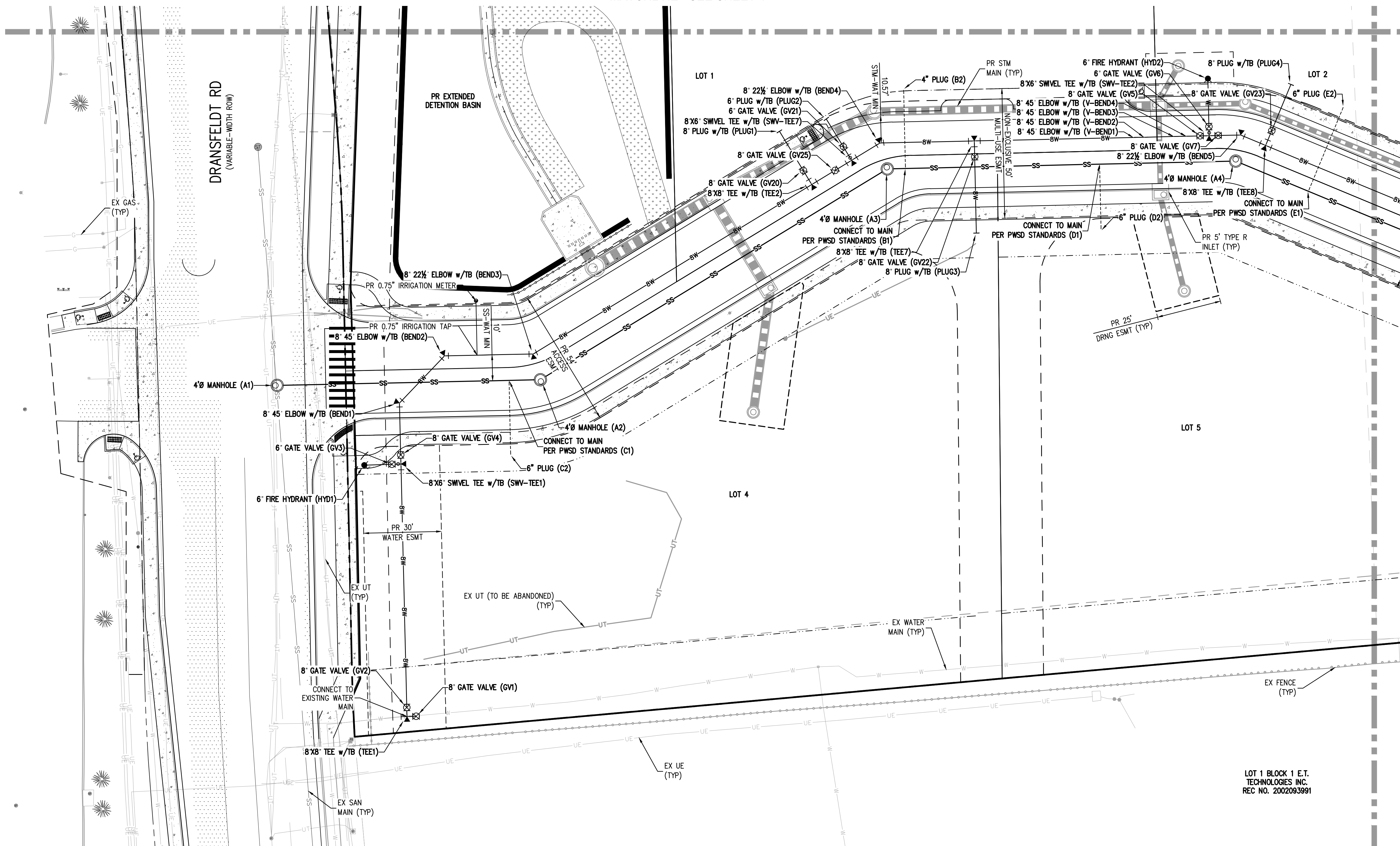
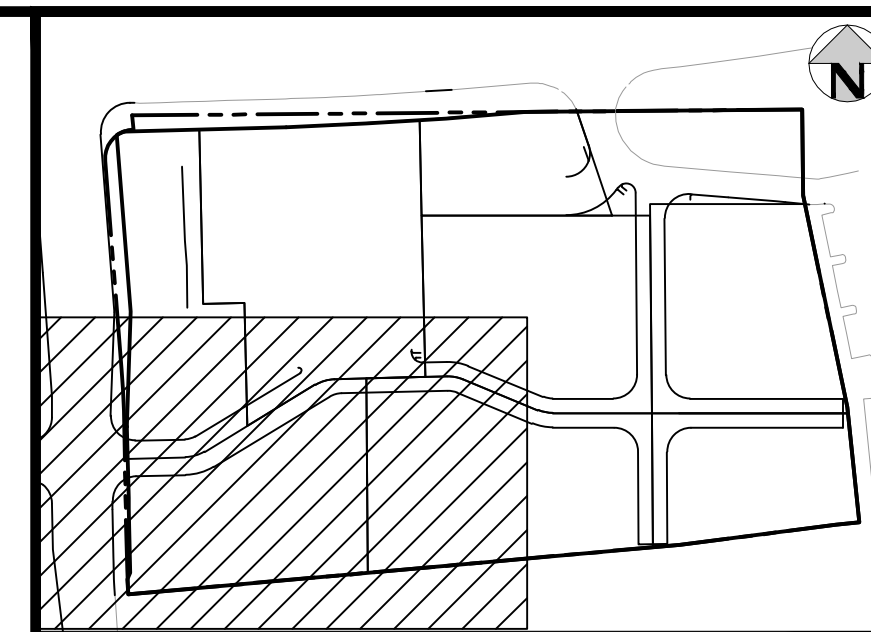
PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
OVERALL UTILITY PLAN

PRELIMINARY
NOT FOR
CONSTRUCTION

PROJECT #: 200829
SHEET NUMBER
5
5 OF 21

MATCHLINE - SEE SHEET 4



MATCHLINE - SEE SHEET 7

NOTES:

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LOT 1 BLOCK 1 E.T. TECHNOLOGIES INC. REC NO. 2002093991

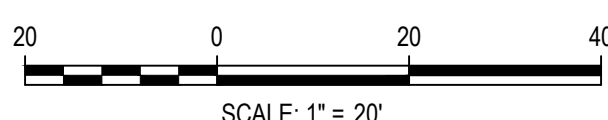
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 CHECKED BY: RCP
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11-17-2021	PER PWSD COMMENTS
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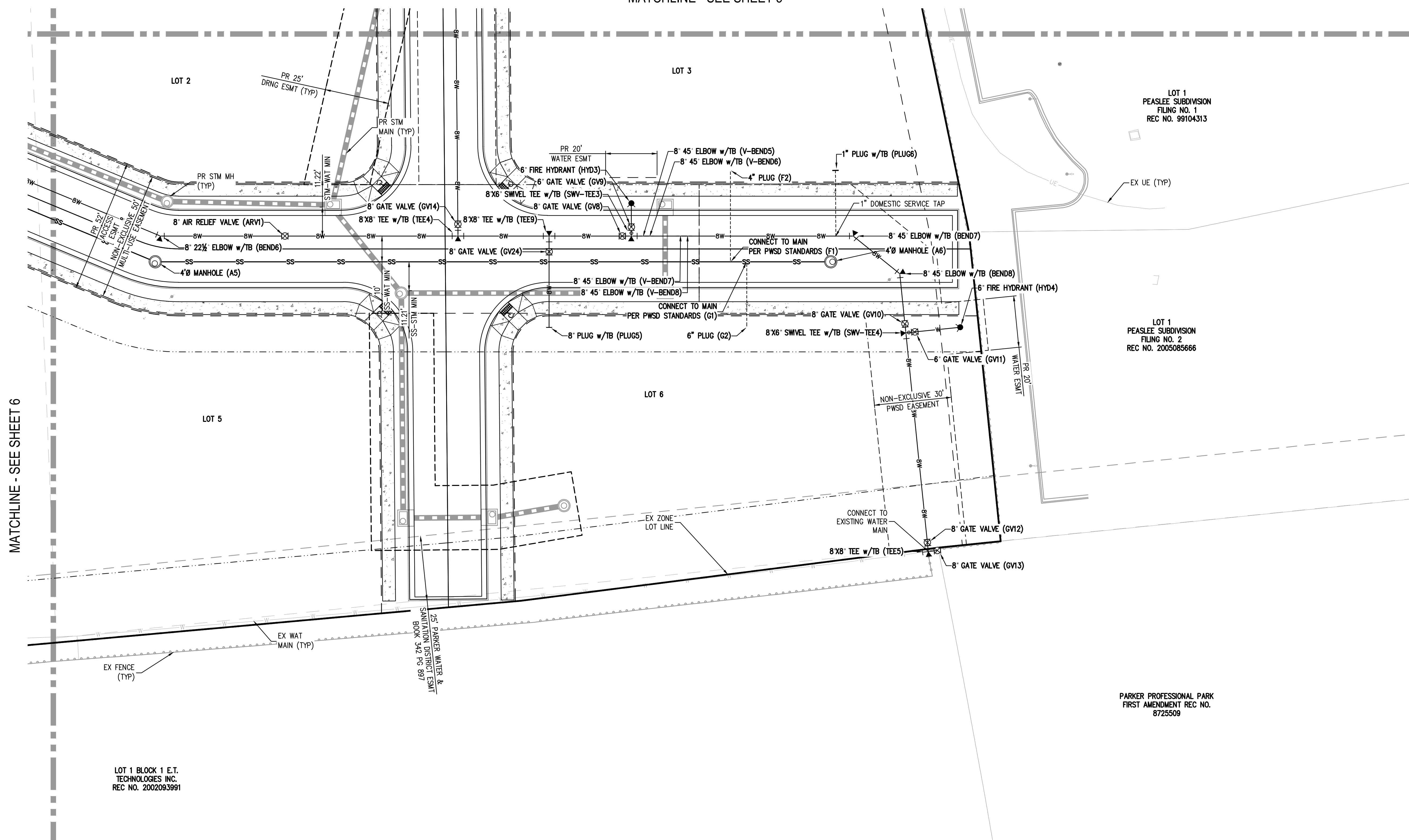
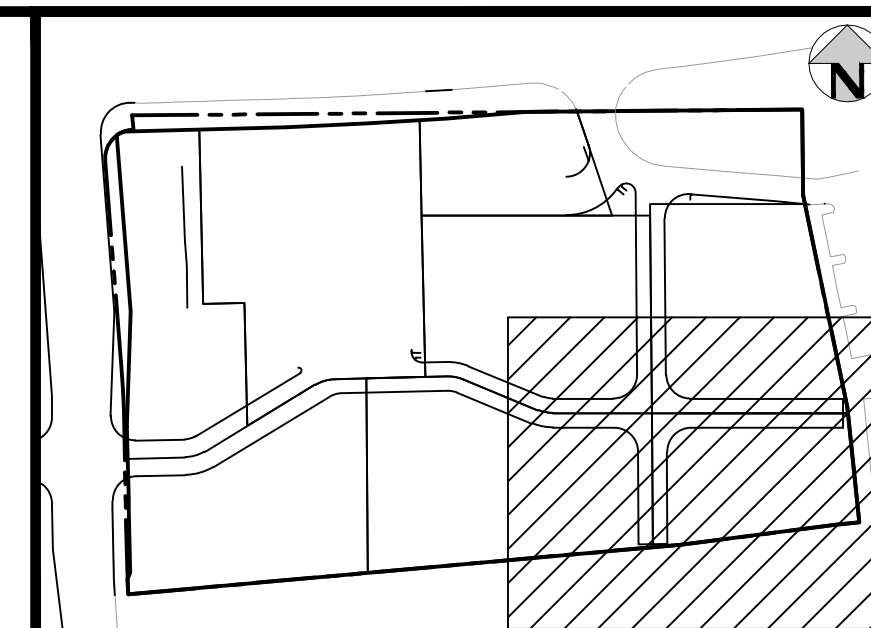
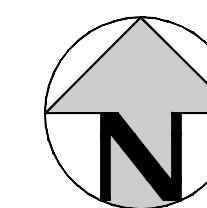
PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
OVERALL UTILITY PLAN

PRELIMINARY
NOT FOR
CONSTRUCTION

PROJECT #: 200829
SHEET NUMBER
6
6 OF 21

MATCHLINE - SEE SHEET 5



- NOTES:**
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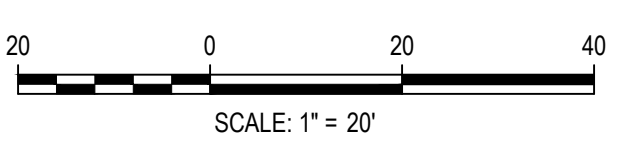
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PARKER PROFESSIONAL PARK FIRST AMENDMENT REC NO. 8725509

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

FILE PATH: K:\200829\ENGINEERING\UTILITIES\MS - OVERALL UTILITY PLANS\DWG LAYOUT\LAYOUT (4) DWG.DWG
 DESIGNED BY: MJS
 CHECKED BY: RCP
 PLOTTED: THU 09/09/23 10:34:56A BY: OLIVIA MCCACKEN

MATCHLINE - SEE SHEET 6



DESIGNED BY: MJS
 CHECKED BY: RCP
 DRAWN BY: MJS

DATE	REVISION COMMENTS
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PLAZA STREET PARTNERS

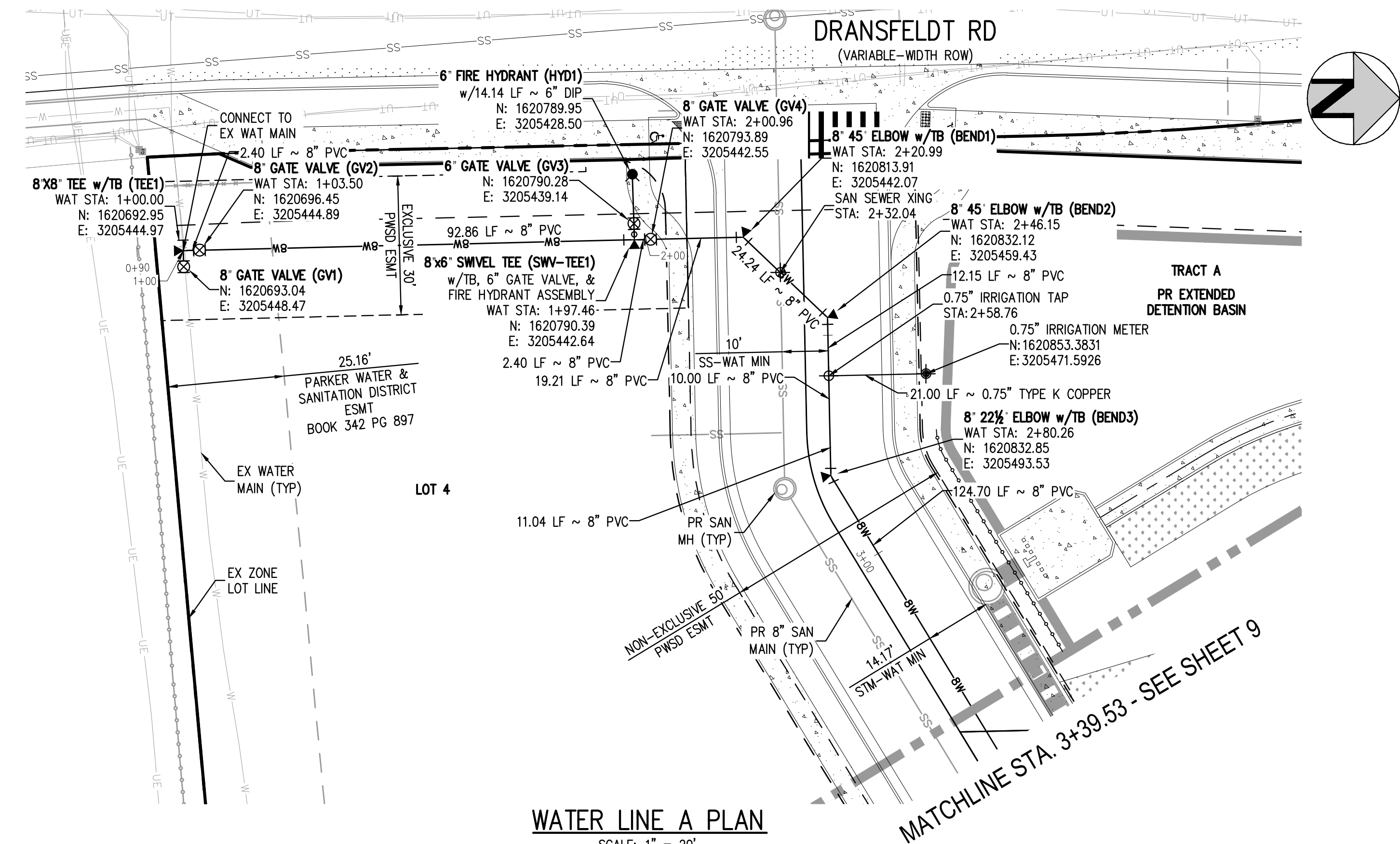
LINCOLN & DRANSFELDT
 OVERALL UTILITY PLAN

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PROJECT #: 200829
 SHEET NUMBER
7
 7 OF 21

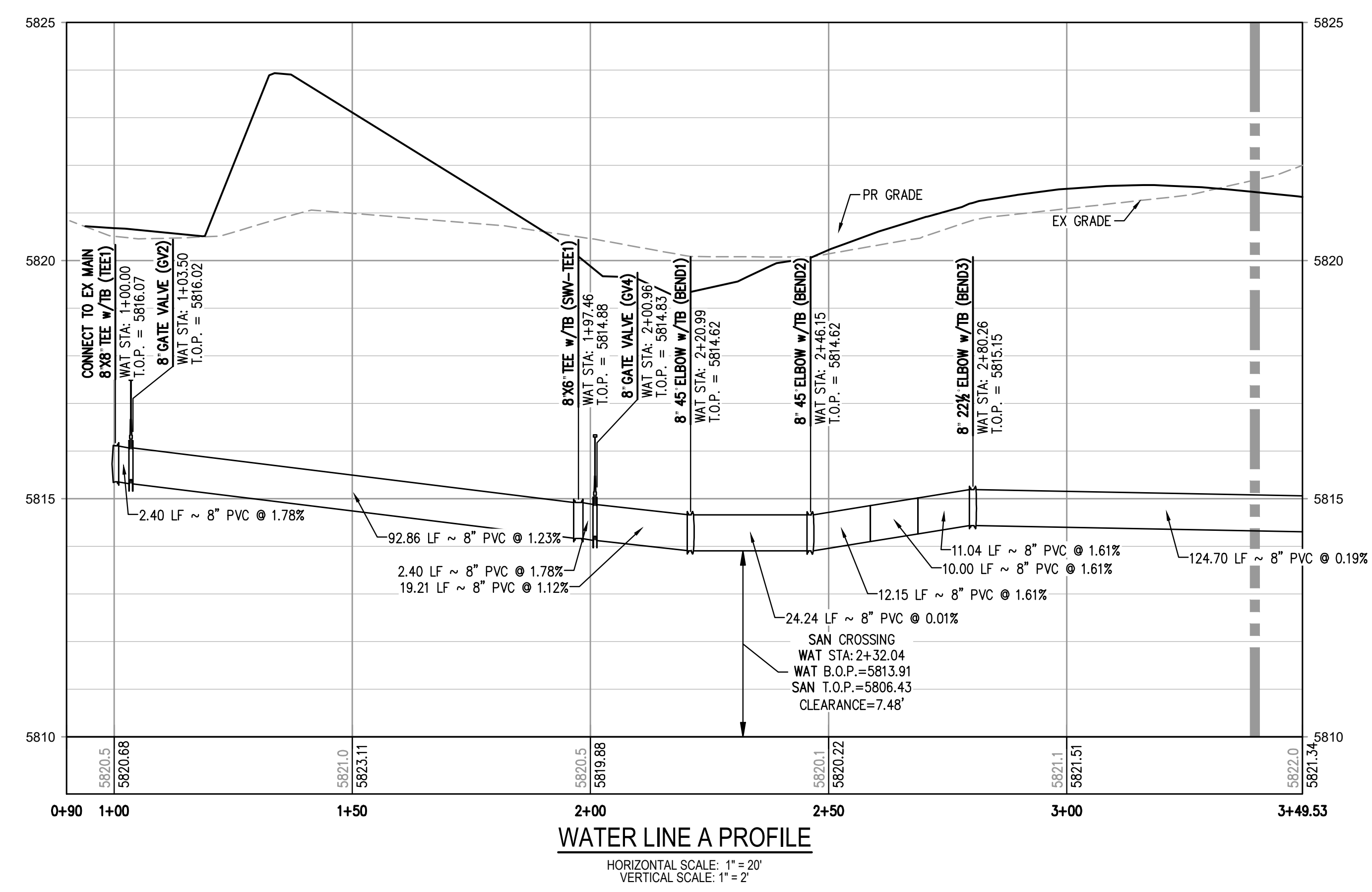
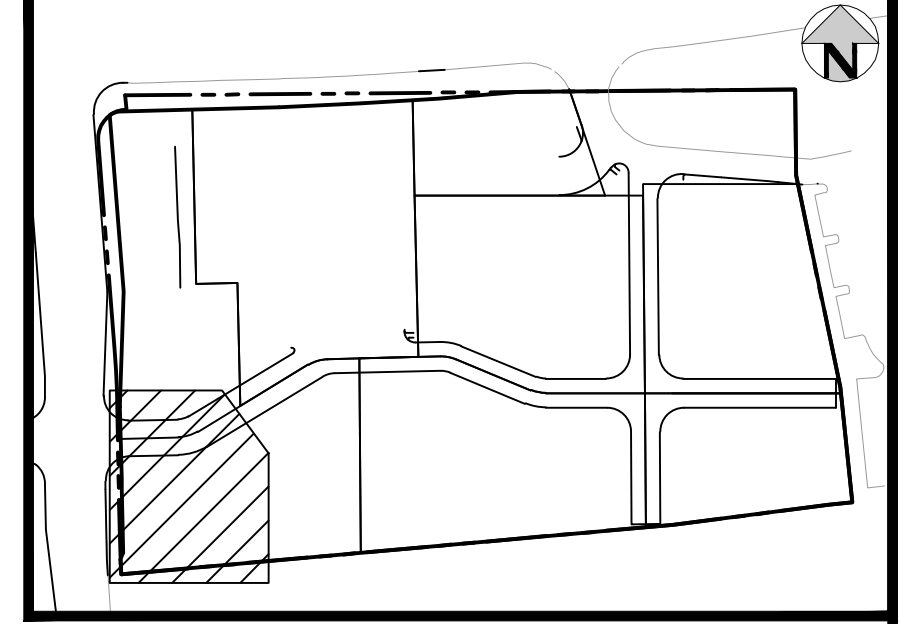
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PLOTTED: THU 03/09/2023 10:34:53A



WATER LINE A PLAN
SCALE: 1" = 20'

MATCHLINE STA. 3+39.53 - SEE SHEET 9



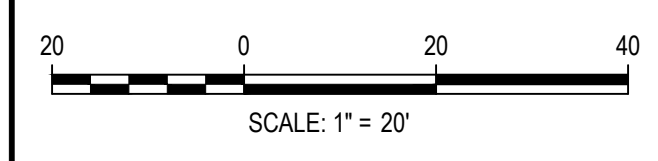
WATER LINE A PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

MATCHLINE STA. 3+39.53 - SEE SHEET 9

- NOTES:**
1. DEPTH UNKNOWN. CONTRACTOR SHALL VERIFY DEPTH PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONFLICTS.
 2. A MINIMUM OF 18" VERTICAL CLEARANCE MUST BE PROVIDED BETWEEN ALL UTILITIES AT CROSSINGS.



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DATE	REVISION COMMENTS
11-17-2021	PER PWSO COMMENTS
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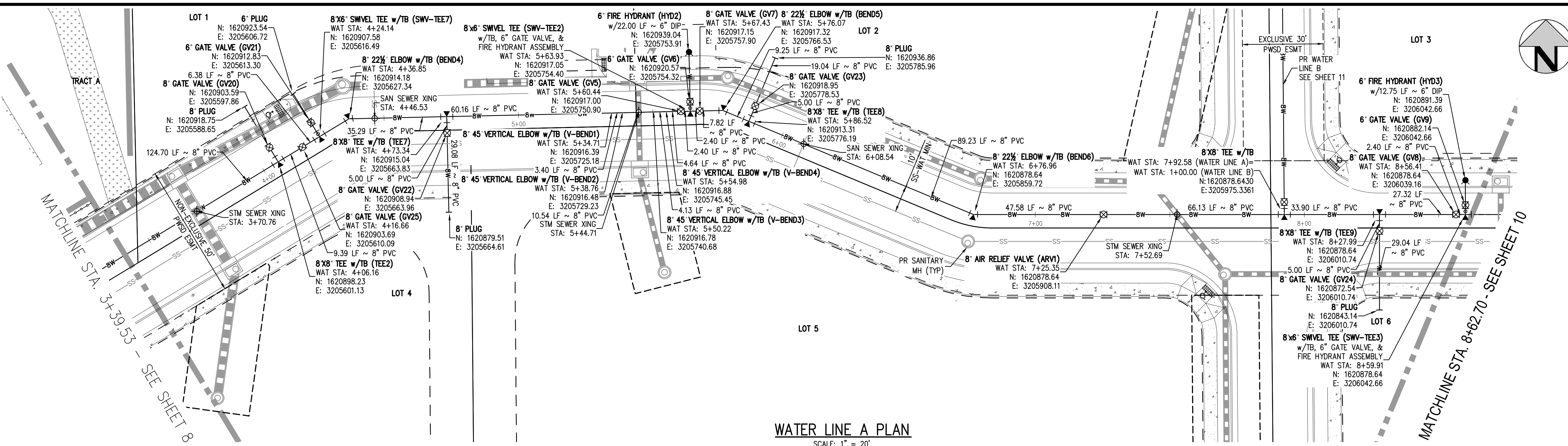
PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
WATER LINE A PLAN & PROFILE

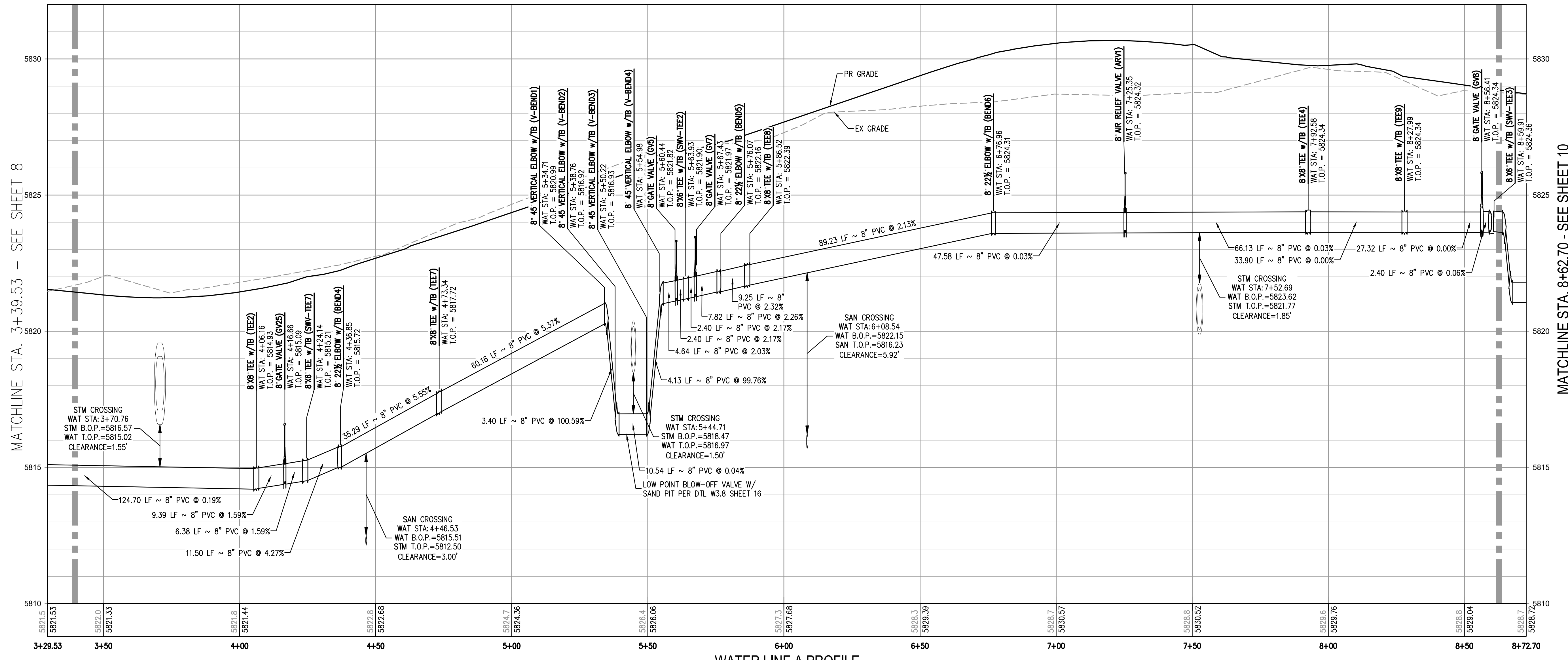
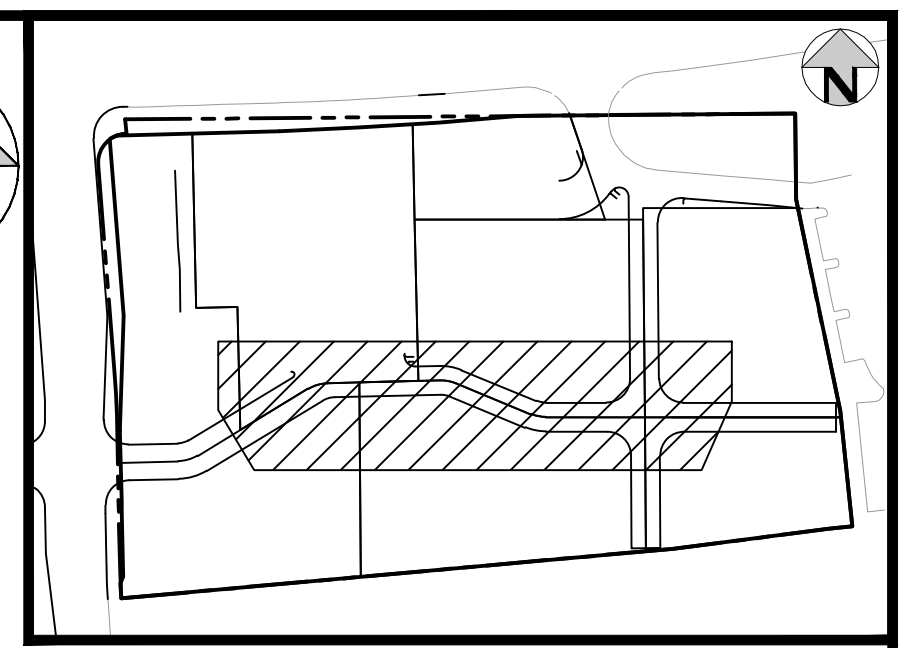
PRELIMINARY
NOT FOR
CONSTRUCTION

PROJECT #: 200829
SHEET NUMBER
8
8 OF 21

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



WATER LINE A PLAN
SCALE: 1" = 20'



WATER LINE A PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

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DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

DATE	REVISION COMMENTS
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PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
WATER LINE A PLAN & PROFILE

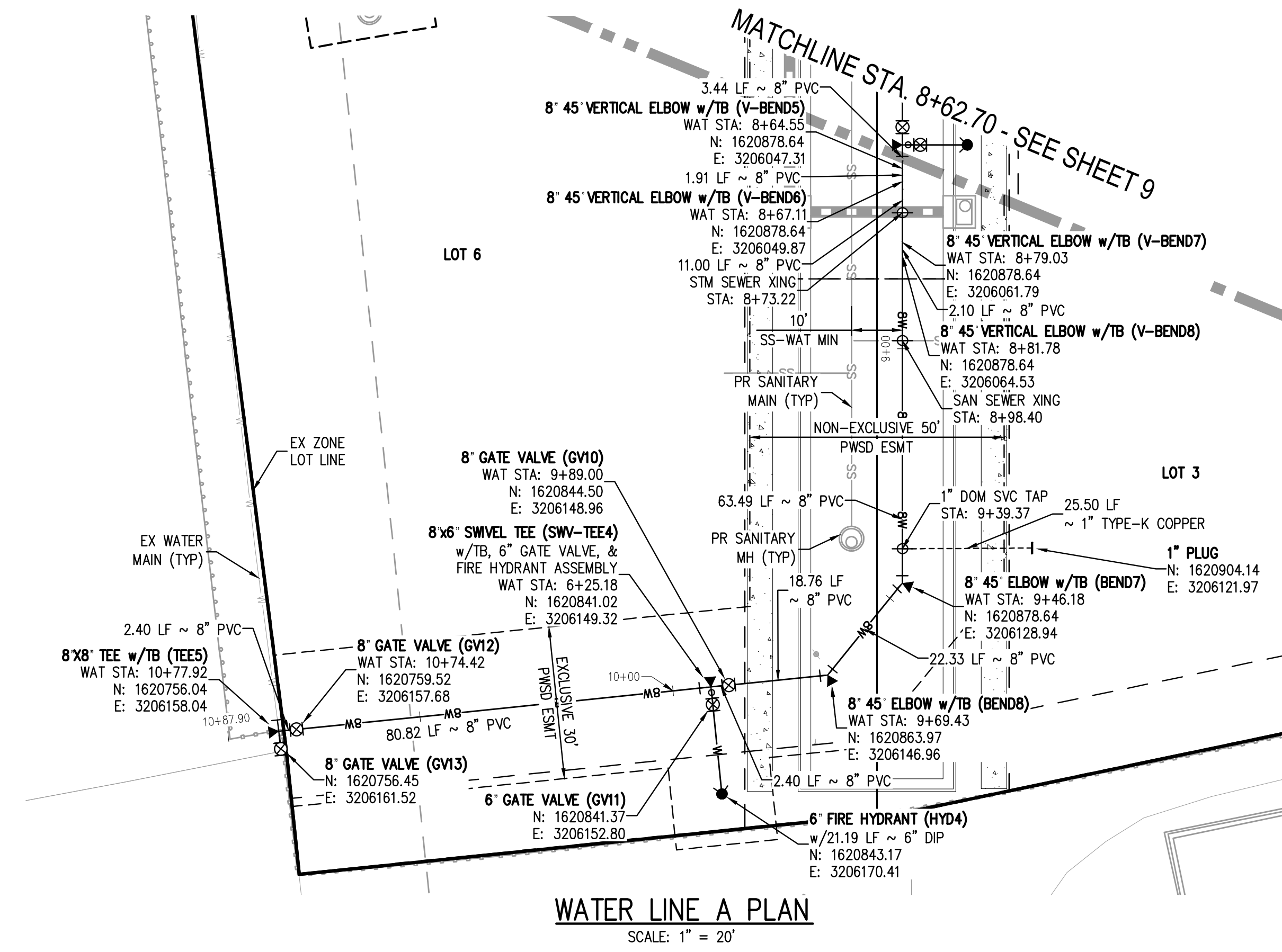
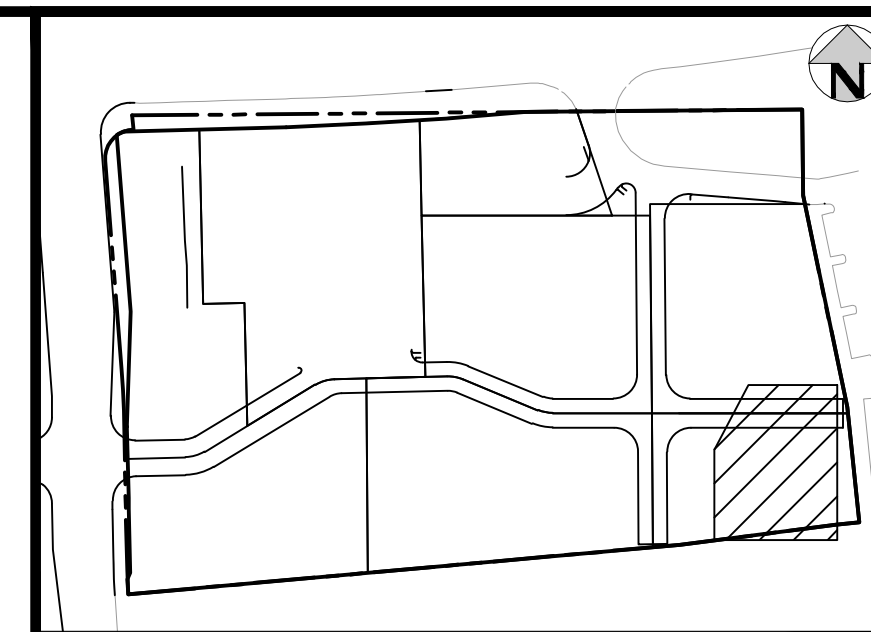
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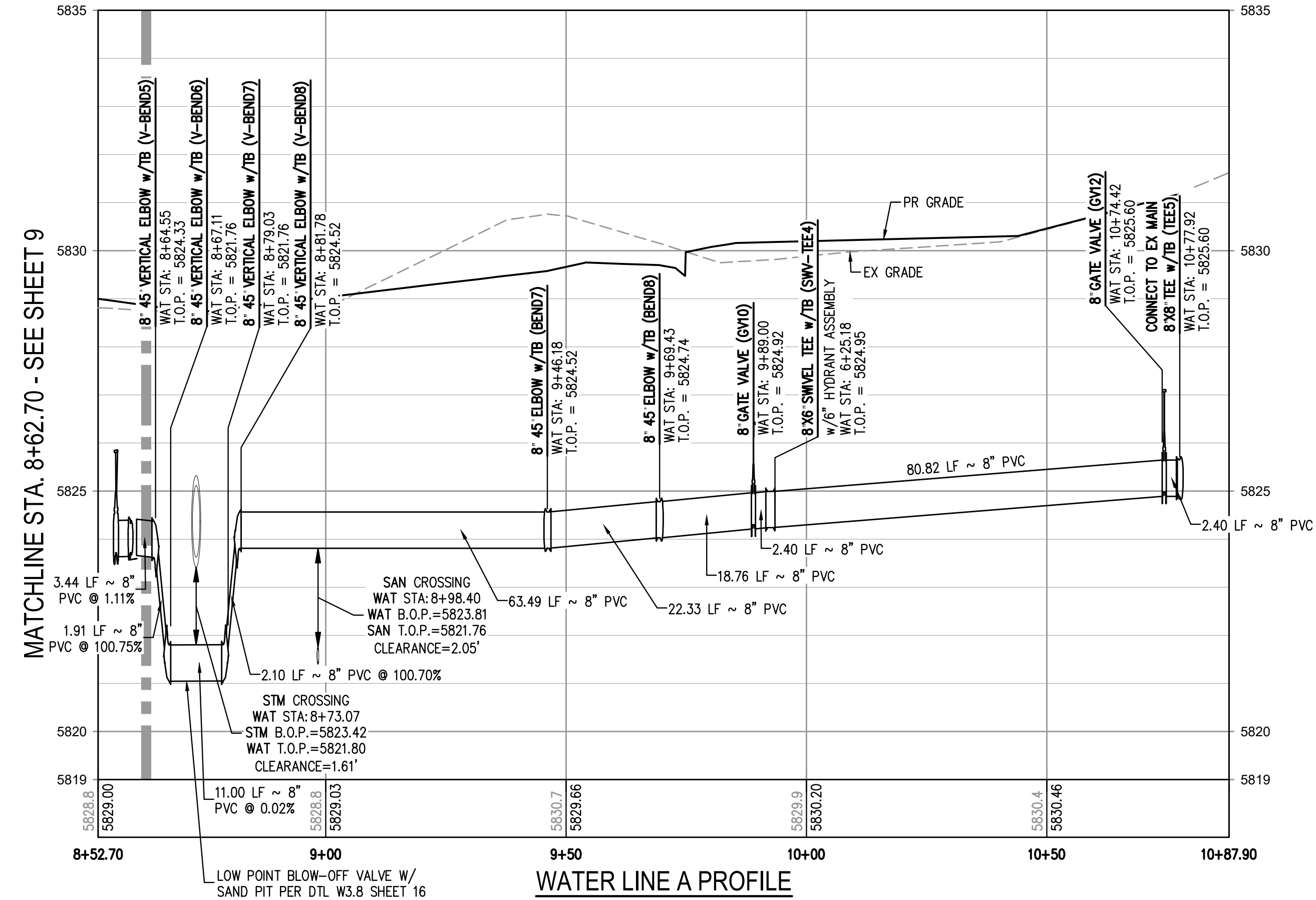
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9 OF 21

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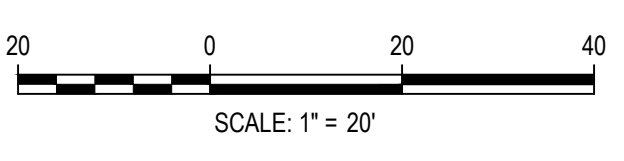
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SCALE: 1" = 20'



WATER LINE A PROFILE
HORIZONTAL SCALE: 1" = 20'
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PLOTTED: THU 03/09/23 10:35:09A BY: OLIVIA MCCracken



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ISSUE DATE: 08-16-2021	
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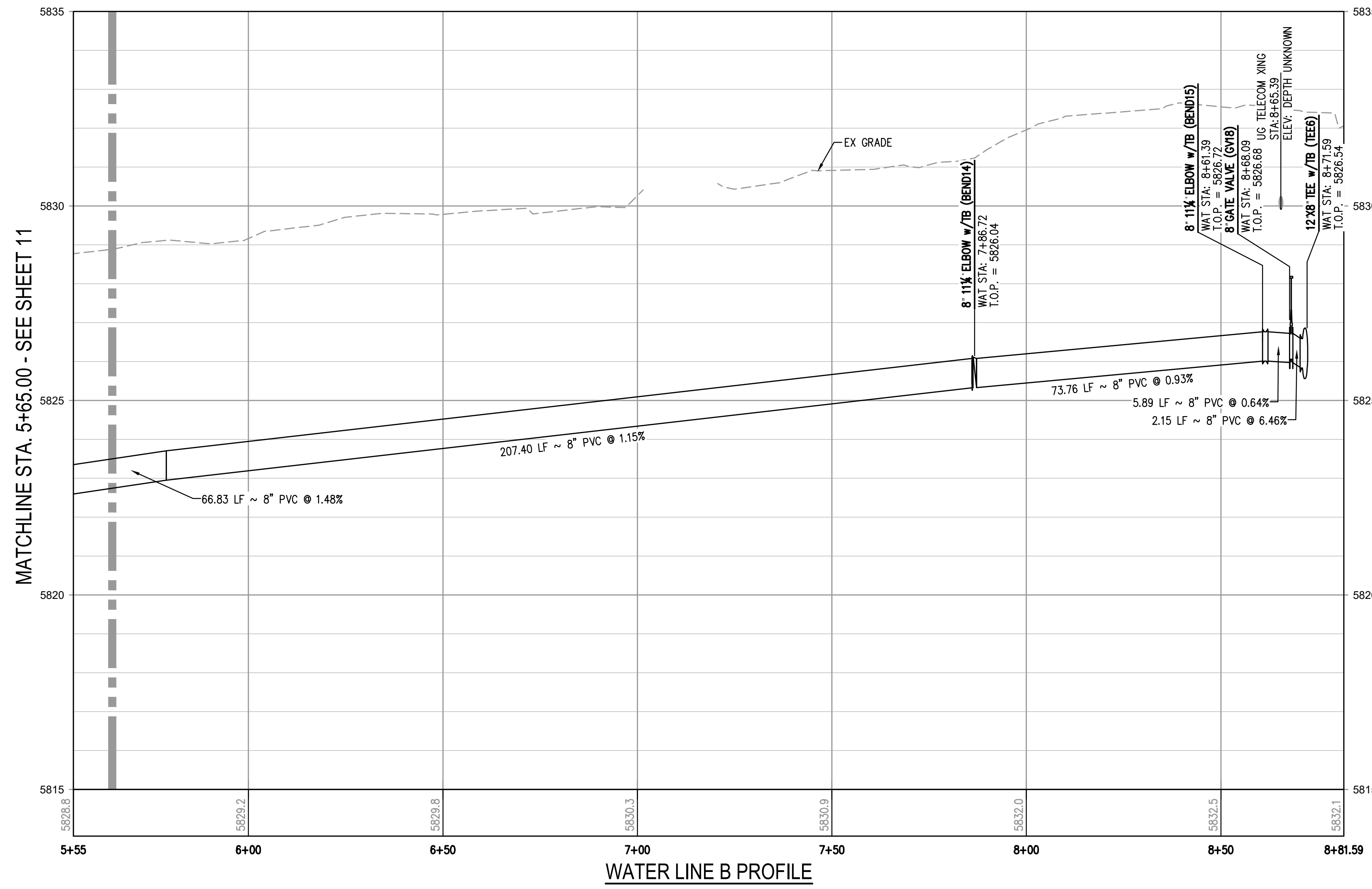
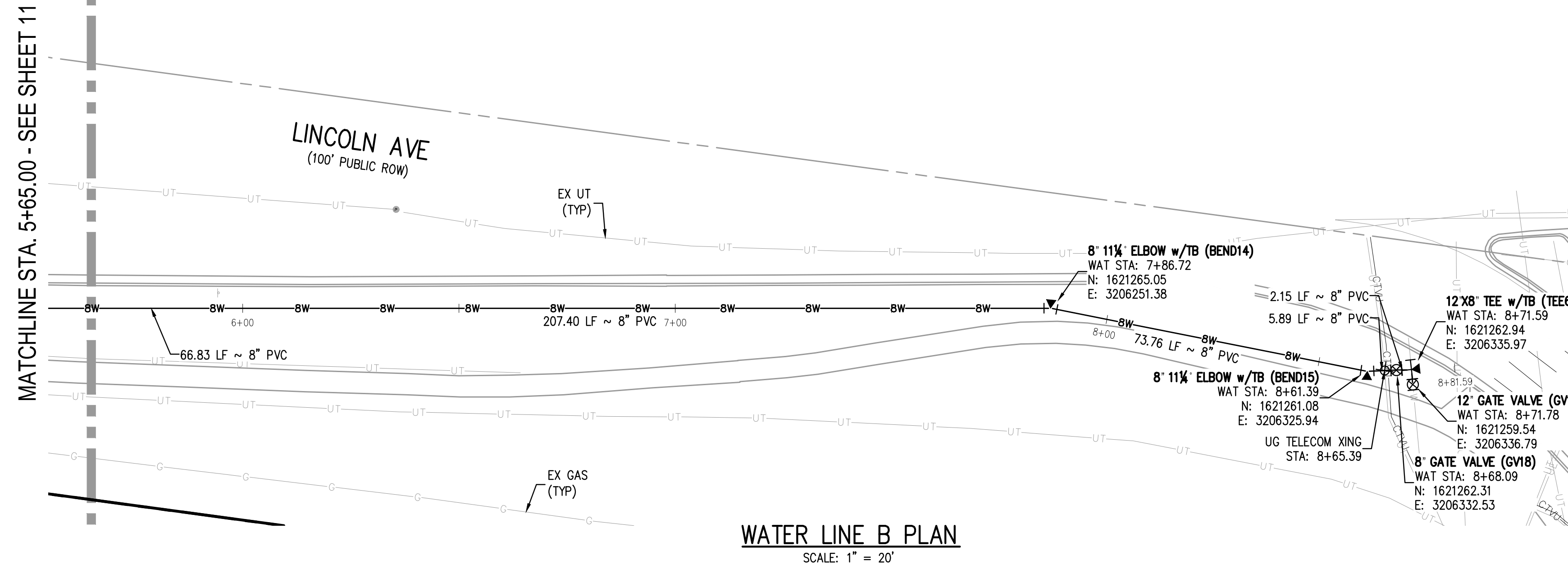
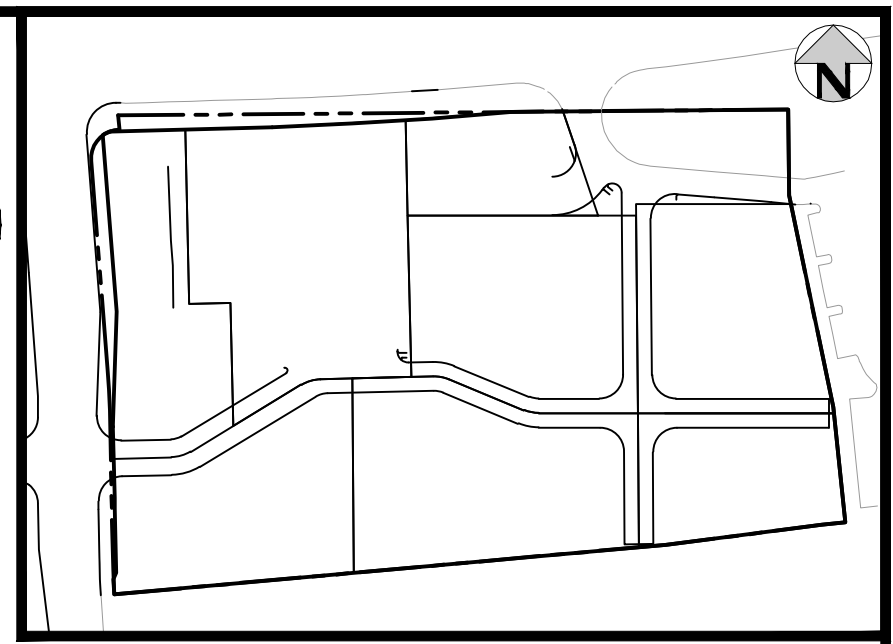
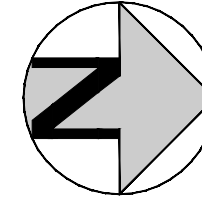
PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
WATER LINE A PLAN & PROFILE

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PROJECT #: 200829
SHEET NUMBER
10
10 OF 21

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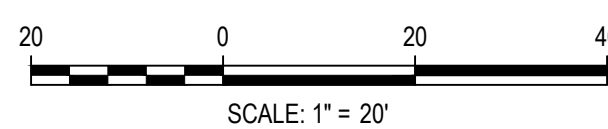


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PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
 WATER LINE B PLAN & PROFILE

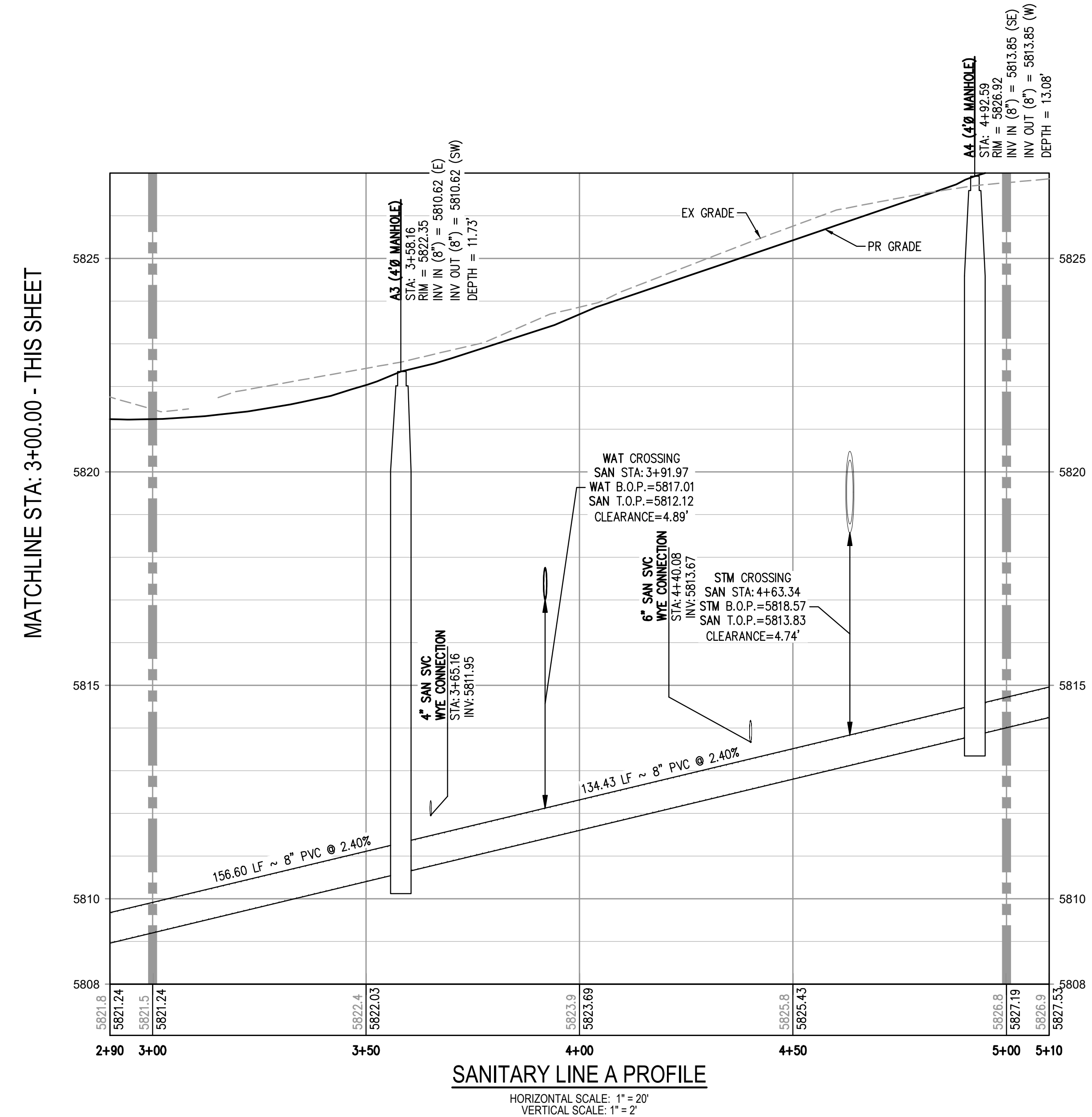
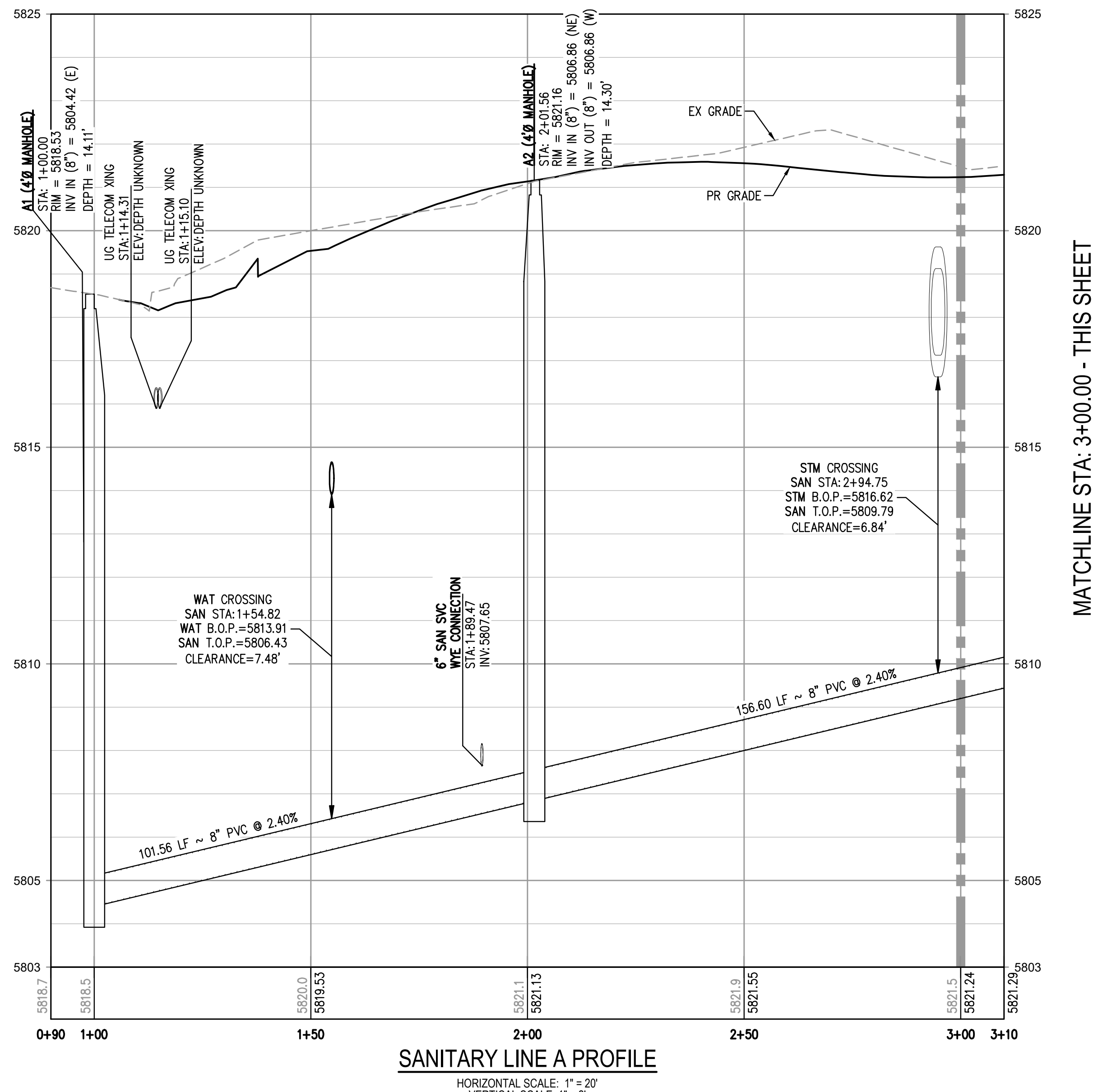
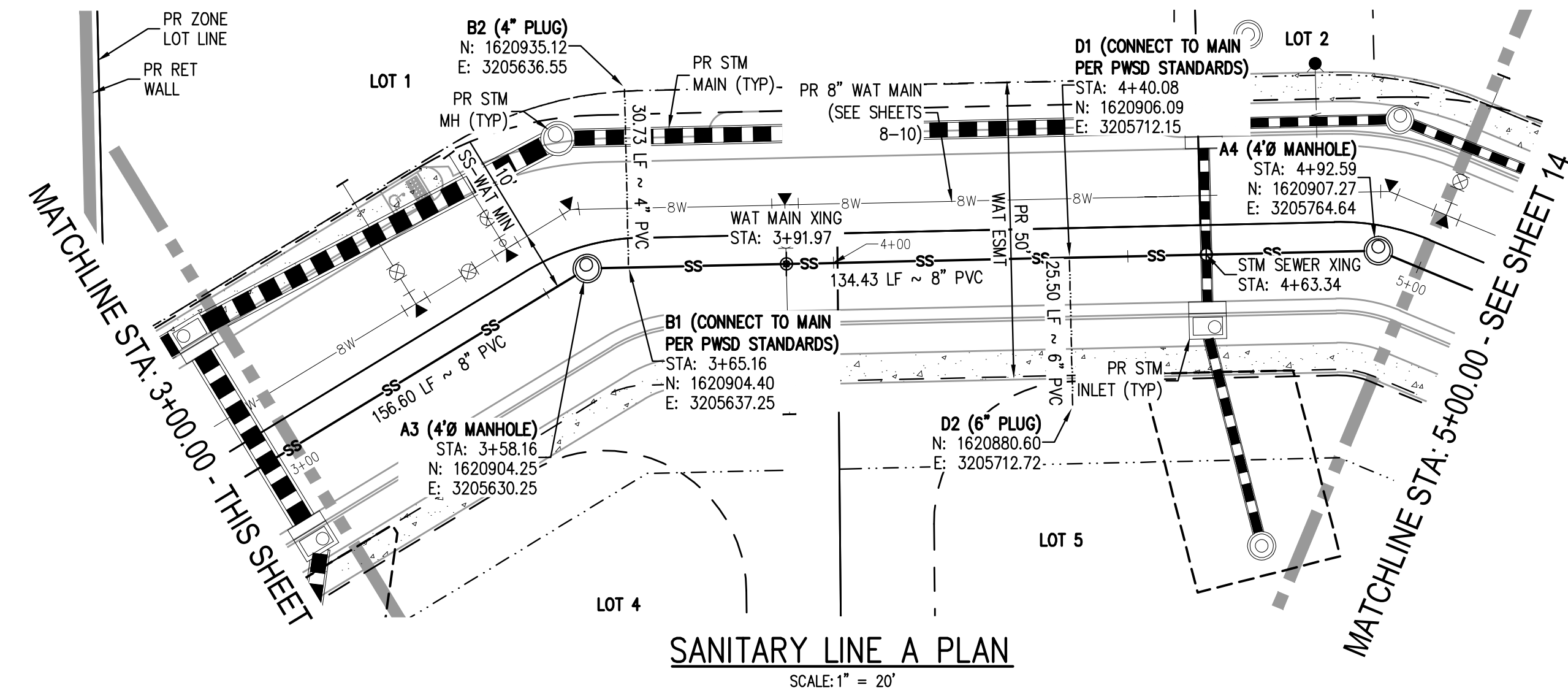
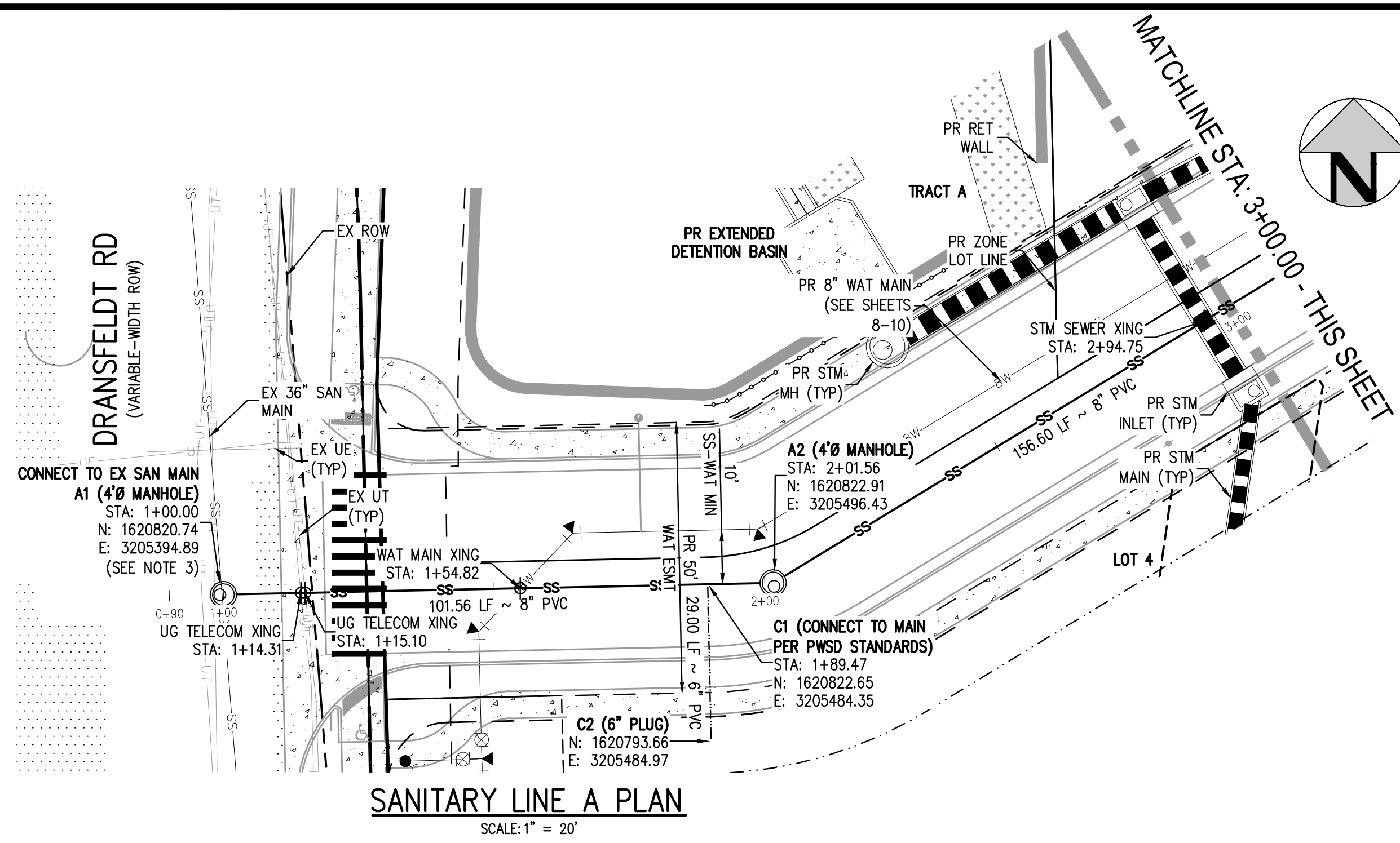
PRELIMINARY
 NOT FOR
 CONSTRUCTION

PROJECT #: 200829
 SHEET NUMBER

12

12 OF 21

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



- NOTES:**
1. DEPTH UNKNOWN, CONTRACTOR SHALL VERIFY DEPTH PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONFLICTS.
 2. A MINIMUM OF 18" VERTICAL CLEARANCE MUST BE PROVIDED BETWEEN ALL UTILITIES AT CROSSINGS.
 3. THE PROPOSED UTILITY CONNECTION WILL REQUIRE A TOWN OF PARKER RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING CONSTRUCTION. THE TOWN PREFERS CONNECTIONS TO BE BORED TO THE EXTENT POSSIBLE AND ANY STREET CUT ALLOWED BY THE TOWN WILL BE REQUIRED TO BE RESTORED ACCORDING TO THE TOWN'S CONSTRUCTION STANDARDS AND DETAILS. THE LIMITS OF PATCHING WILL BE DETERMINED BY THE TOWN AT THE TIME OF CONSTRUCTION. THE TOWN OF PARKER DOES NOT ALLOW ROADWAY CLOSURES FOR UTILITY WORK.

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DATE: 08-16-2021 10:35:56A BY: OLIVIA MCCracken



DESIGNED BY: MJS
CHECKED BY: RCP
DRAWN BY: MJS

DATE	REVISION COMMENTS
11-17-2021	PER PWSD COMMENTS
04-12-2022	PER PWSD COMMENTS
07-21-2022	PER PWSD COMMENTS
11-22-2022	PER PWSD COMMENTS
01-18-2023	PER PWSD COMMENTS
03-09-2023	PER PWSD COMMENTS

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Denver, Colorado 80203
P: 303.623.6300 F: 303.623.6311
HarrisKocherSmith.com

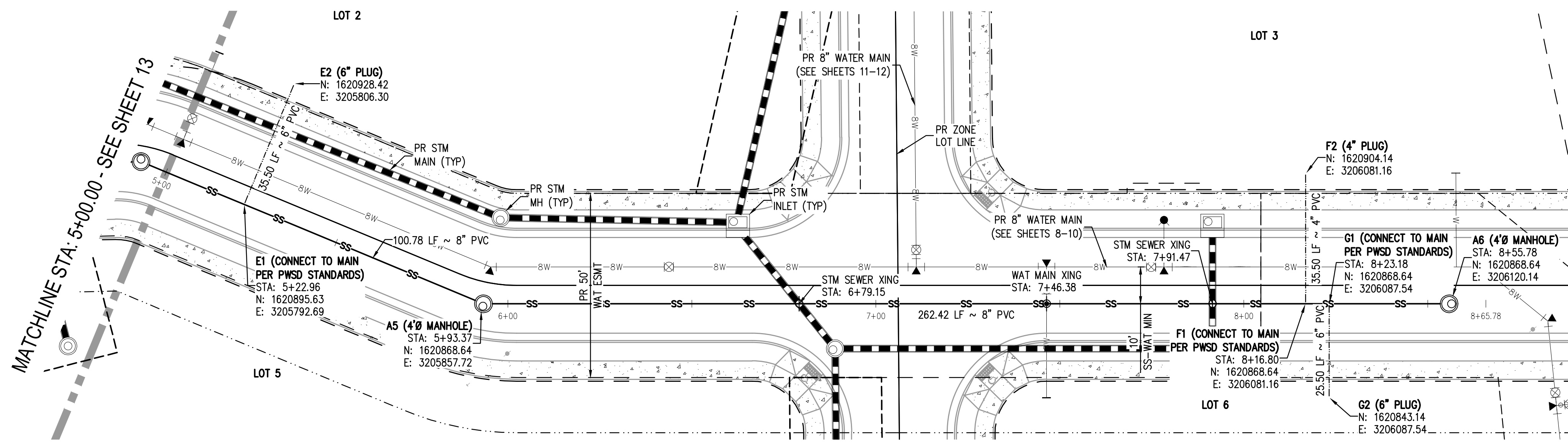
PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
SANITARY PLAN & PROFILE

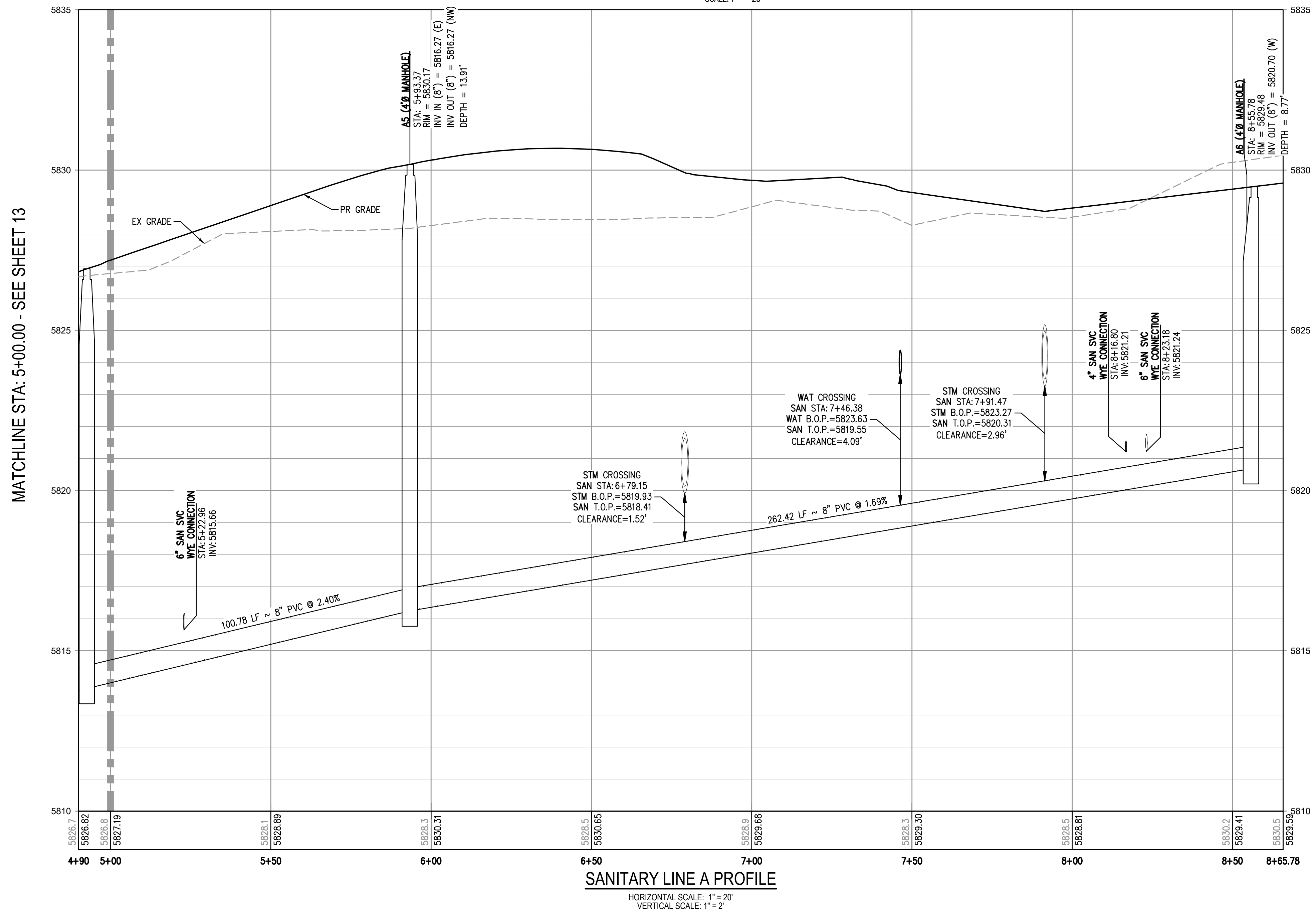
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PROJECT #: 200829
SHEET NUMBER
13
13 OF 21

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SANITARY LINE A PLAN
SCALE: 1" = 20'



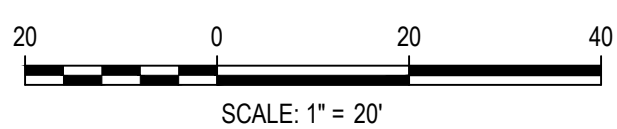
SANITARY LINE A PROFILE
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 2'

- NOTES:**
1. DEPTH UNKNOWN, CONTRACTOR SHALL VERIFY DEPTH PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF ANY CONFLICTS.
 2. A MINIMUM OF 18" VERTICAL CLEARANCE MUST BE PROVIDED BETWEEN ALL UTILITIES AT CROSSINGS.

FILE PATH: K:\200829\ENGINEERING\UTILITIES\SANITARY\1\148 - SANITARY PLAN & PROFILE.DWG LAYOUT: LAYOUT1 (2)
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04-12-2022	PER PWSD COMMENTS
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03-09-2023	PER PWSD COMMENTS

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PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
 SANITARY PLAN & PROFILE

PRELIMINARY
 NOT FOR
 CONSTRUCTION

PROJECT #: 200829
 SHEET NUMBER

14

14 OF 21

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

INSPECTION POLICY:

- ALL SERVICE INSPECTIONS MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
- SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
- IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE OR SERVICE FAILS, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE AND A RE-INSPECTION FEE CHARGED.
- SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
- THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
- ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
- LOTS WITHOUT BUILDING ADDRESSES BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
- CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION, UNLESS COORDINATED WITH DISTRICT INSPECTOR.

INSTALLATION NOTES:

WATER

- ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING. (3/4" MIN.)
- APPROVED BEDDING TO BE SQUEEGEE.
- ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE STUB-IN AND BUILDING. COMPRESSION COUPLINGS WILL NOT BE ALLOWED ON NEW CONSTRUCTION. SILVER SOLDERED JOINTS MUST BE USED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSO PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.
- A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 45-90° ANGLE. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
- WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD. CRAWL SPACE REQUIRES CONTINUOUS COPPER WITH A 1' BURY.
- CURB STOP MUST BE PLUMB AND CENTERED OVER THE NUT. IT SHOULD BE STRAPPED TO THE METER PIT (RESIDENTIAL INSTALLATIONS) OR CENTERED OVER THE EASEMENT LINE (COMMERCIAL INSTALLATIONS). THE ASSEMBLY MUST BE AT OR SLIGHTLY ABOVE FINISHED GRADE.
- Moved curb boxes must be inspected by PWSO prior to burial.
- Waterline must be attached to a support board that is mounted to the wall.
- NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
- CURBSTOP BOXES AND METER PITS CANNOT BE IN DRIVEWAYS.
- ONLY 3/4" (JUMPER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
- ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SEWER SERVICE
"V" FOR WATER SERVICES
- NO SPLICES OR FLARED COUPLINGS ALLOWED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE USED IN MOVING STOPBOXES ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWSO PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.

PARKER WATER & SANITATION DISTRICT
DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES

SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET W1.1

TYPICAL PLAN

PARKER WATER & SANITATION DISTRICT
WATER DISTRIBUTION SYSTEM
TYPICAL PLAN

SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET W2.1

TYPICAL STREET CROSS SECTION

TYPICAL STREET C PROFILE

PARKER WATER & SANITATION DISTRICT
TYPICAL STREET CROSS SECTION
TYPICAL STREET C PROFILE

SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET W2.2

TYPICAL PLAN FOR CURVED STREETS

PARKER WATER & SANITATION DISTRICT
WATER DISTRIBUTION SYSTEM
TYPICAL PLAN FOR CURVED STREETS

SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/16
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET W2.3

PREFERRED FIRE HYDRANT LOCATION

PARKER WATER & SANITATION DISTRICT
FIRE HYDRANTS
LOCATION & INSTALLATION

SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01
DIRECTOR OF ENGINEERING	10/16

2016 REVISION SHEET W2.5

PIPE LOCATION SYSTEM

PARKER WATER & SANITATION DISTRICT
LOCATOR WIRE DETAILS

SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01
DIRECTOR OF ENGINEERING	01/22
	01/16
	10/16

2016 REVISION SHEET W2.6

FILE PATH: K:\200829\ENGINEERING\UTILITIES\WATER&S - DETAILS\DWG - LAYOUT - 12 SEWER DETAILS
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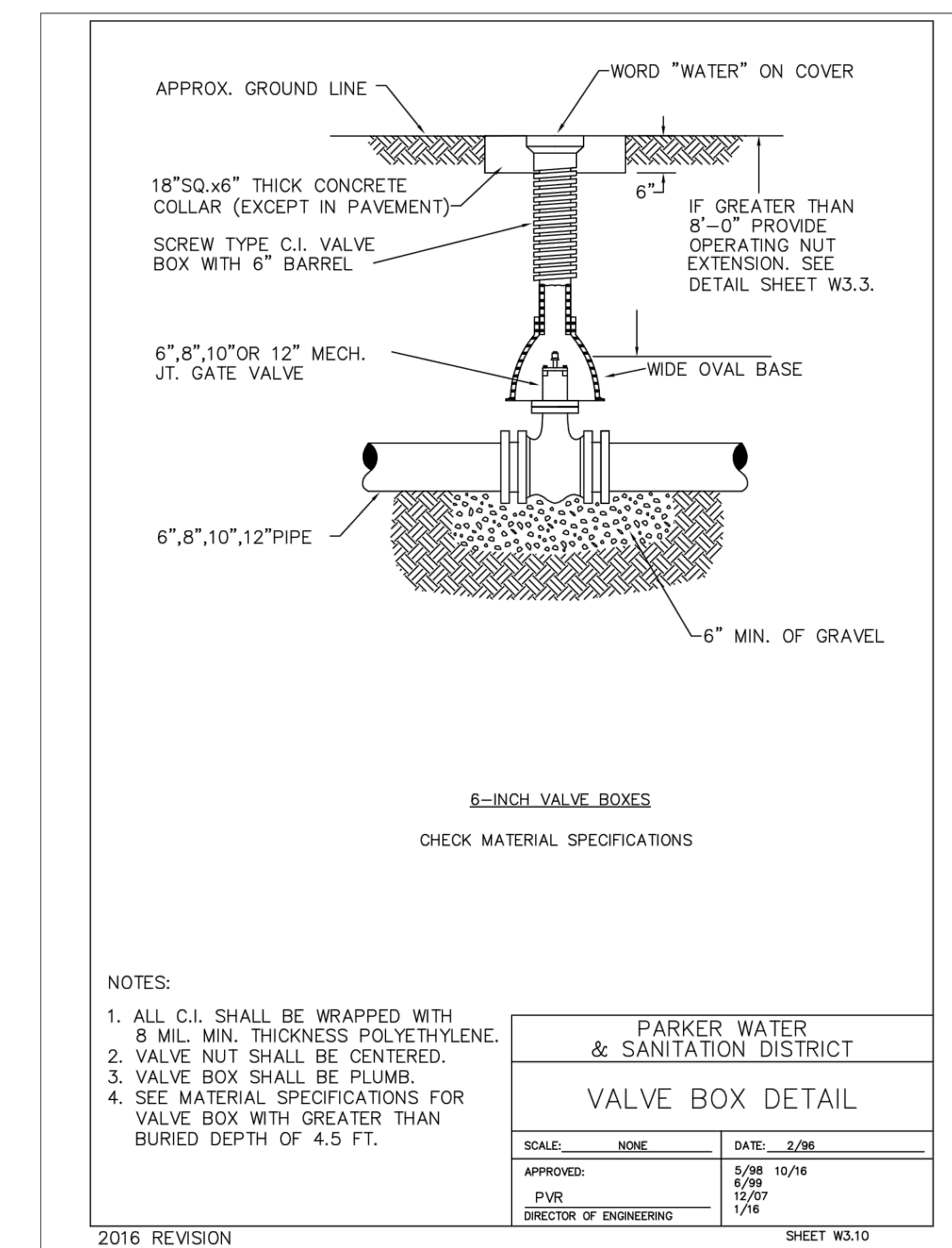
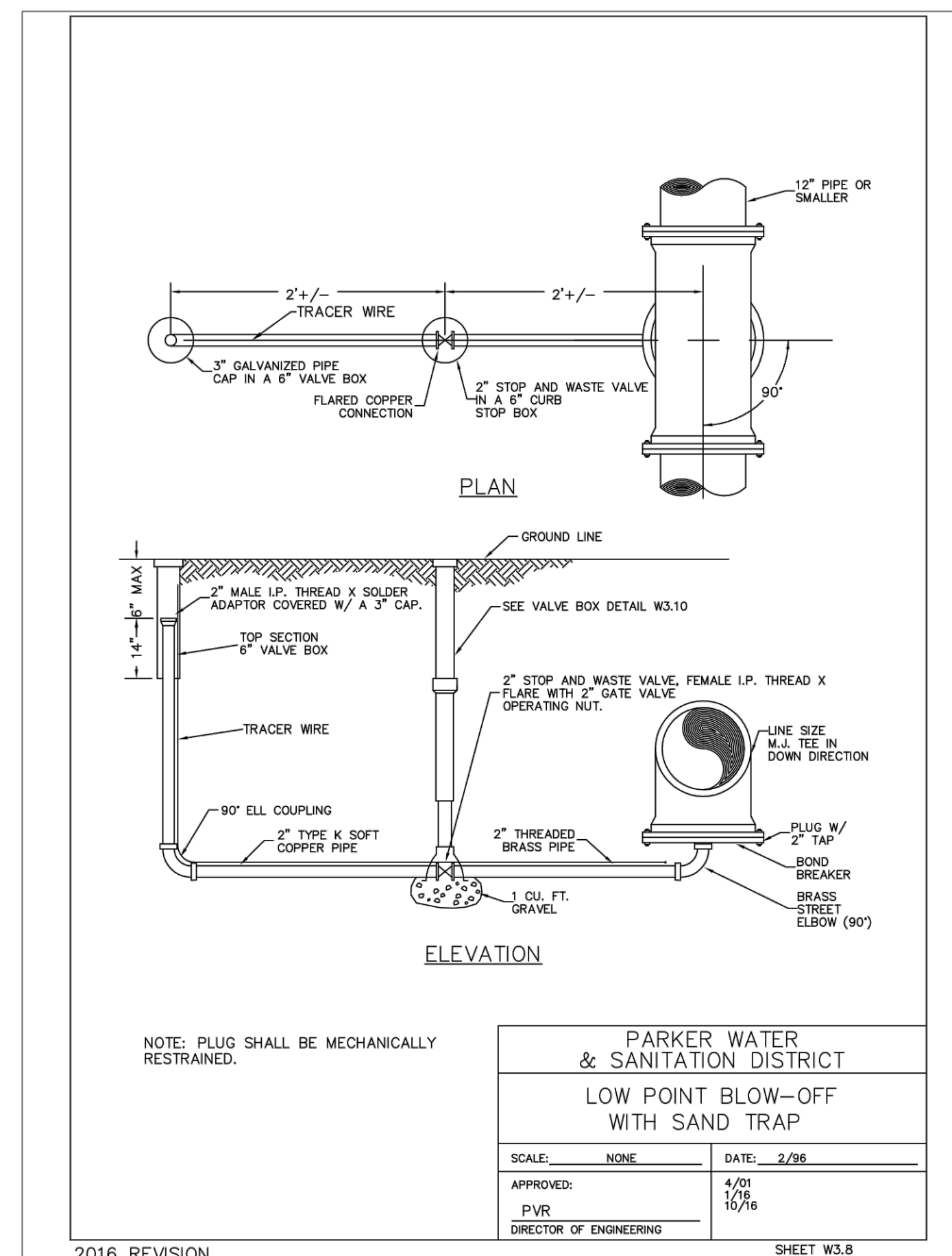
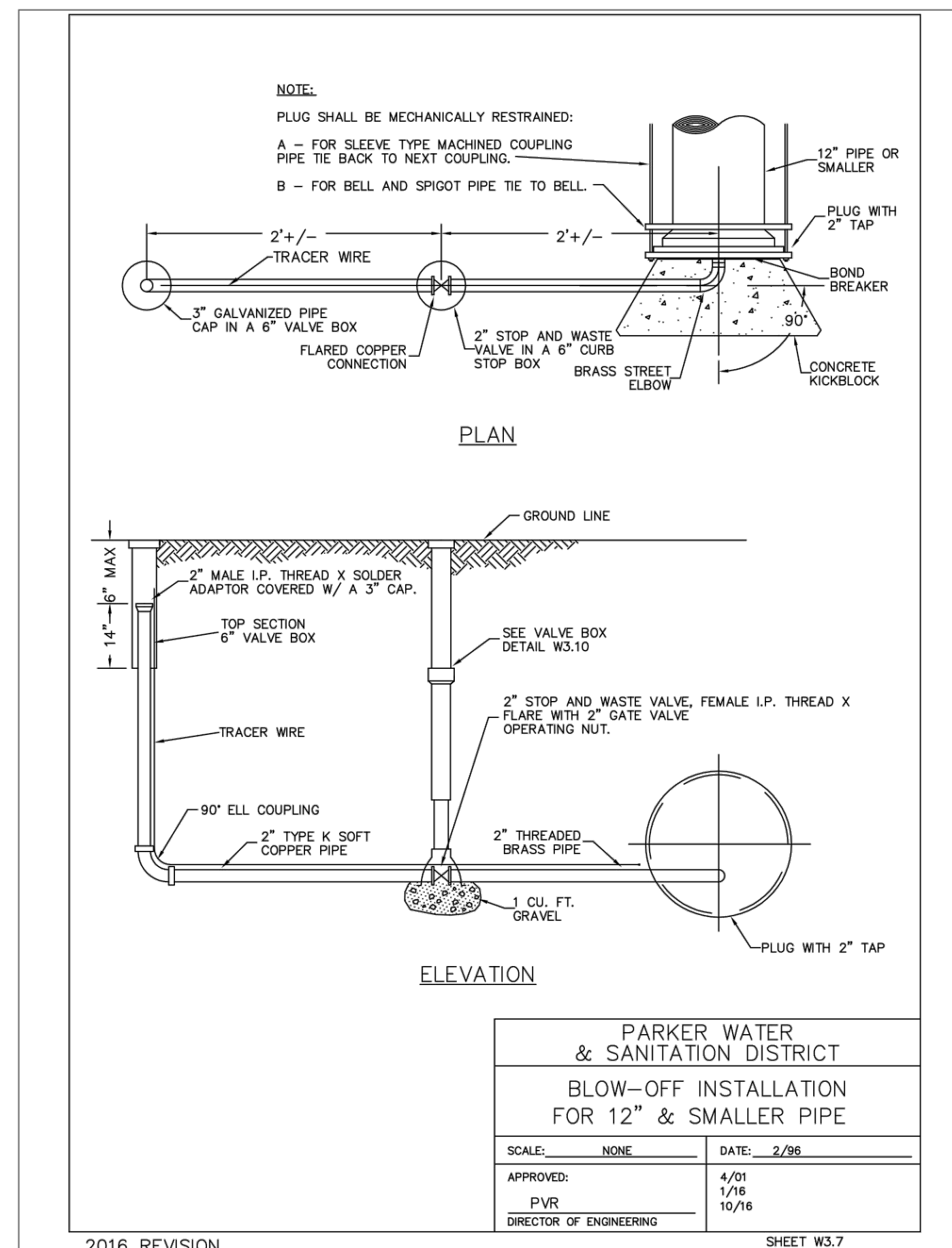
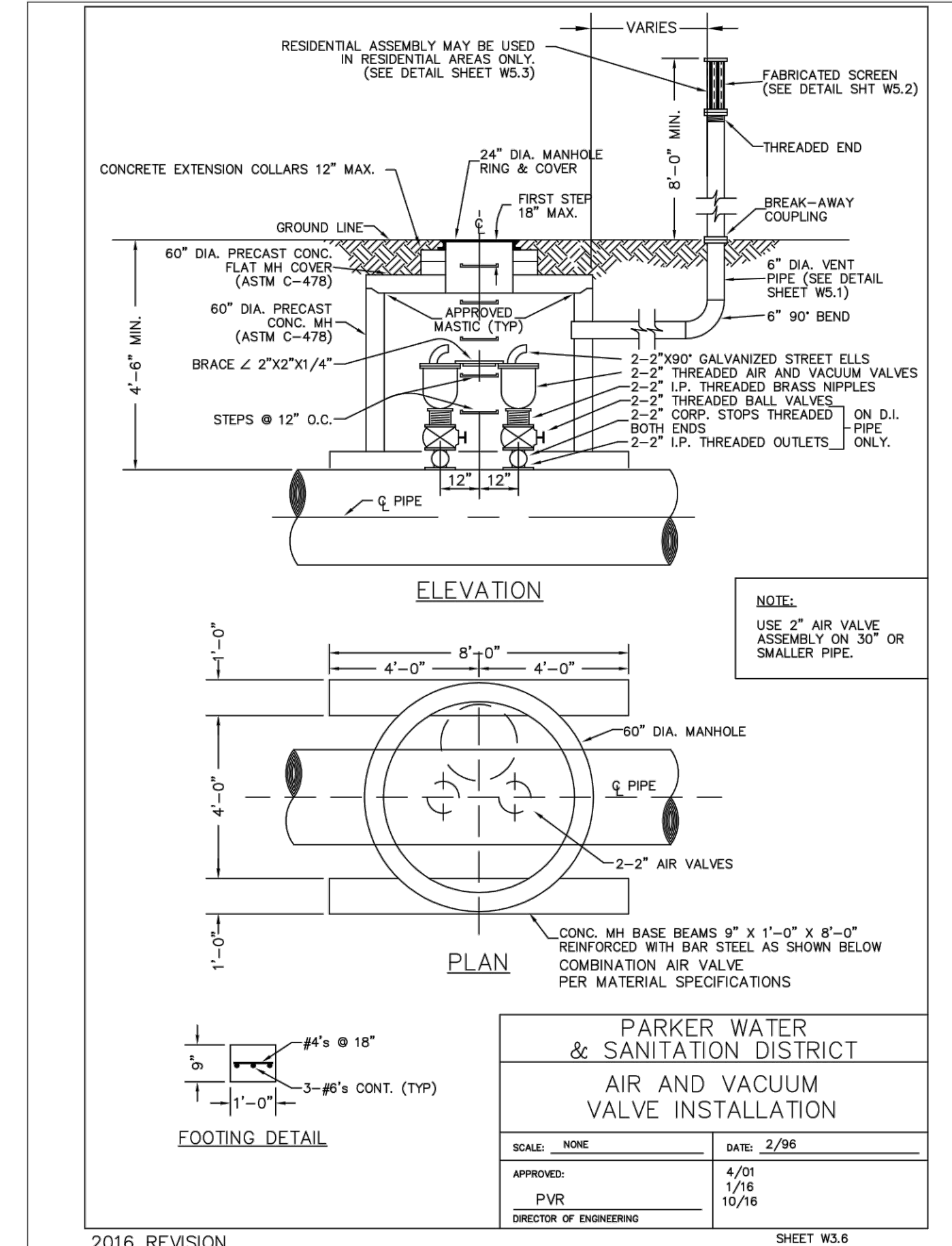
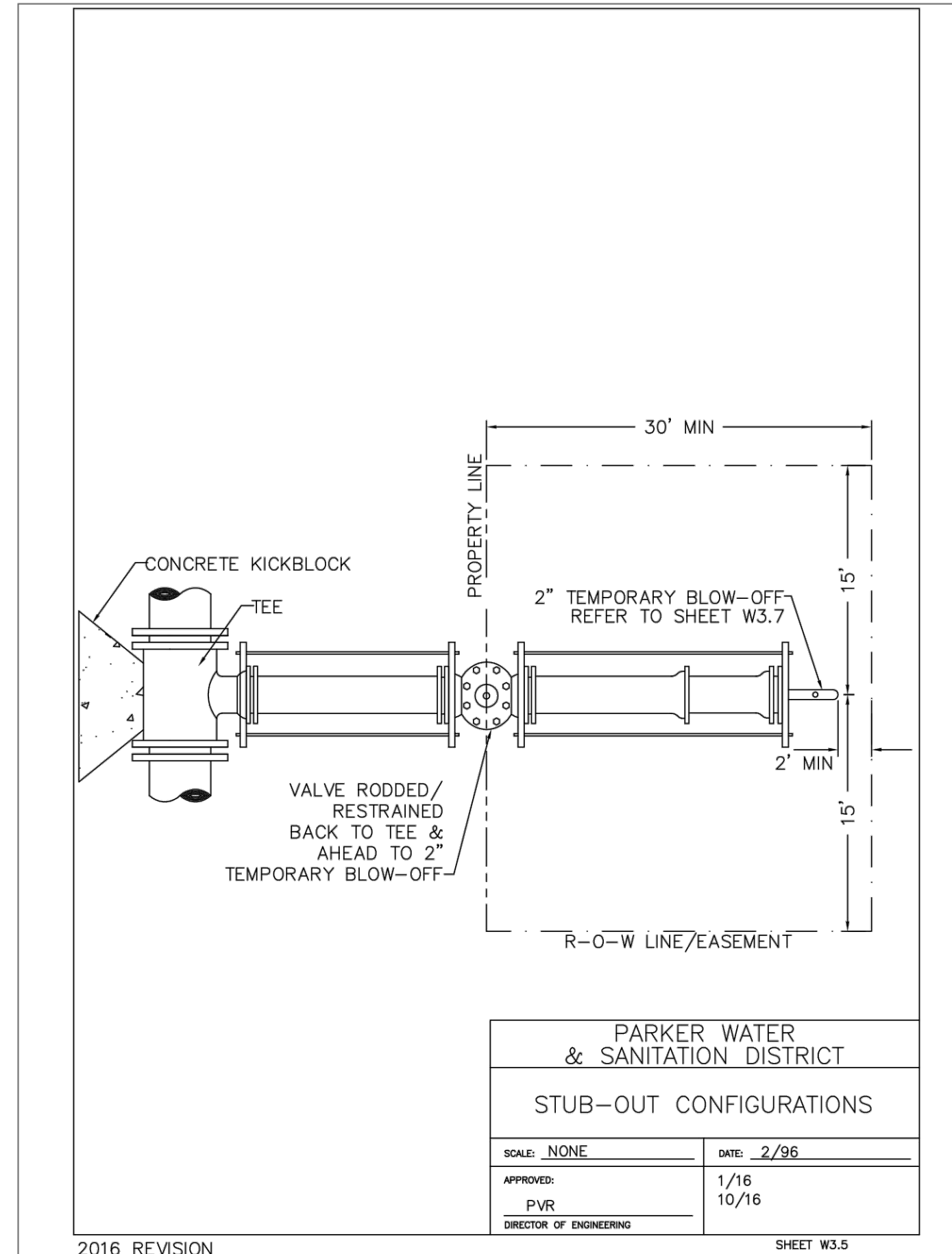
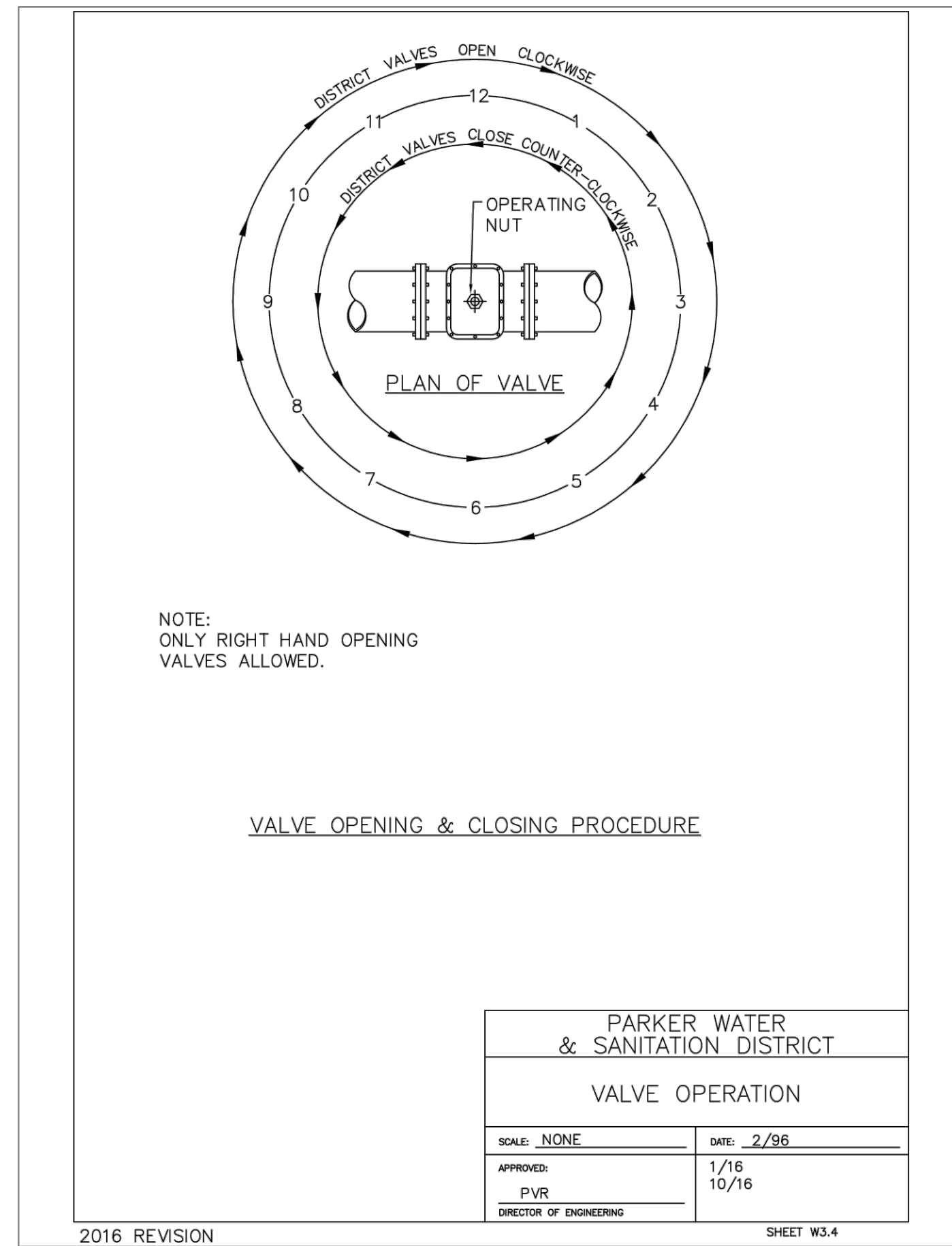
LINCOLN & DRANSFELDT
WATER DETAILS

PROJECT #: 200829
SHEET NUMBER

15

15 OF 21

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LINCOLN & DRANSFELDT
WATER DETAILS

PROJECT #: 200829
SHEET NUMBER

16

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11-1/4', 22-1/2', 45' & 90' BENDS DEAD END

TYPICAL CROSS SECTION

TEE

SIZE OF PIPE	11-1/4'	22-1/2'	45'	90'	TEE OR DEAD END
4"	1.00	1.00	1.00	1.00	1.00
6"	1.00	1.25	2.25	4.00	3.00
8"	1.00	2.00	4.00	7.50	5.25
12"	1.00	4.25	8.25	15.25	11.00
16"	3.50	6.50	12.50	23.00	16.50
24"	6.50	10.00	18.25	35.50	25.00

MINIMUM BEARING SURFACE AREA (IN SQUARE FEET)

**PARKER WATER & SANITATION DISTRICT
CONCRETE KICKBLOCKS BEARING SURFACES AND INSTALLATION**

SCALE: NONE DATE: 2/96

APPROVED: PVR 4/01 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W3.18

HALF PLAN

STANDARD LIFTING SLOT DETAIL

**PARKER WATER & SANITATION DISTRICT
24" DIAMETER RING AND COVER**

SCALE: NONE DATE: 6/05

APPROVED: PVR 12/07 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W3.19

STANDARD TRENCH SECTION

STREET CUT PATCH

PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-8"	2'-8"
8"	2'-0"	3'-0"
12"	2'-6"	3'-6"
16"	3'-0"	4'-0"
24"	3'-0"	4'-0"

**PARKER WATER & SANITATION DISTRICT
TYPICAL TRENCH SECTION PIPE PROTECTION**

SCALE: NONE DATE: 2/96

APPROVED: PVR 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W4.1

PIPE BEDDING:

(a) Installation of Bedding and Pipe: After completion of the trench excavation and proper preparation of the foundation, six inches (6") of bedding material shall be placed on the trench bottom for support under the pipe. Bell holes shall be dug deep enough to provide a minimum of two inches (2") of clearance between the bell and bedding material. Pipe shall be installed in such a manner as to insure full support of the pipe barrel over its entire length. After the pipe is adjusted for line and grade, and the joint is made, the bedding material shall be carefully placed and tamped under the haunches of the pipe and in the previously dug bell holes.

Tamping is herein defined as the act of placing approved bedding material under the haunches of the pipe, paying particular attention to voids, bell holes, and sling holes. The purpose of tamping is to ensure uniform support for the pipe.

The limits of bedding shall be from six inches (6") below the bottom of the pipe to twelve inches (12") above the top of the pipe. Approved backfill may then be installed to the groundline. See Chapter 2 of these Standards for backfill and compaction of backfill.

Compaction of bedding is not required. The only requirement is sufficient tamping to achieve uniform support under the pipe. See Sheet W4.1 of the Standard Details for a typical trench cross section.

(b) Bedding Material: The bedding material shall be a clean well-graded sand or squeegee sand and shall conform to the following limits when tested by means of laboratory sieves:

Well-Graded Sand for (24-inch or large diameter)

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 4	70-100
No. 8	36-93
No. 16	20-60
No. 30	8-65
No. 50	2-30
No. 100	1-10
No. 200	0-3

Squeegee Sand
for use with 20-inch or smaller

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 200	0-3

If approved by the District, fines form the trench walls and spoils pile may be used to provide uniform support for the pipe. No rock or stone larger than that allowed by the sieve analysis, or any other detrimental substance, shall be placed closer to the pipe than six inches (6"). Approved bedding materials shall be stockpiled on the jobsite to be used in the event natural materials become unsatisfactory. The District reserves the right to require the use of the specified bedding material at any time.

**PARKER WATER & SANITATION DISTRICT
PIPE BEDDING**

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98 2/00 12/07 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W4.2

CONDUIT OR STORM SEWER CROSSING

PARKER WATER & SANITATION DISTRICT

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98 10/16 2/00 12/07 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W4.6

STANDARD PIPE BEDDING

PIPE BEDDING IN ROCK

**PARKER WATER & SANITATION DISTRICT
BEDDING DETAILS**

SCALE: NONE DATE: 2/96

APPROVED: PVR 1/16 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W4.8

FILE PATH: K:\2008\ENGINEERING\UTILITIES\WATER\W&S - DETAILS\DWG - LAYOUT - 10 WATER DETAILS (2).NO SCALE: THU 03/09/2023 10:36:05A BY: OLIVIA MCCrackEN



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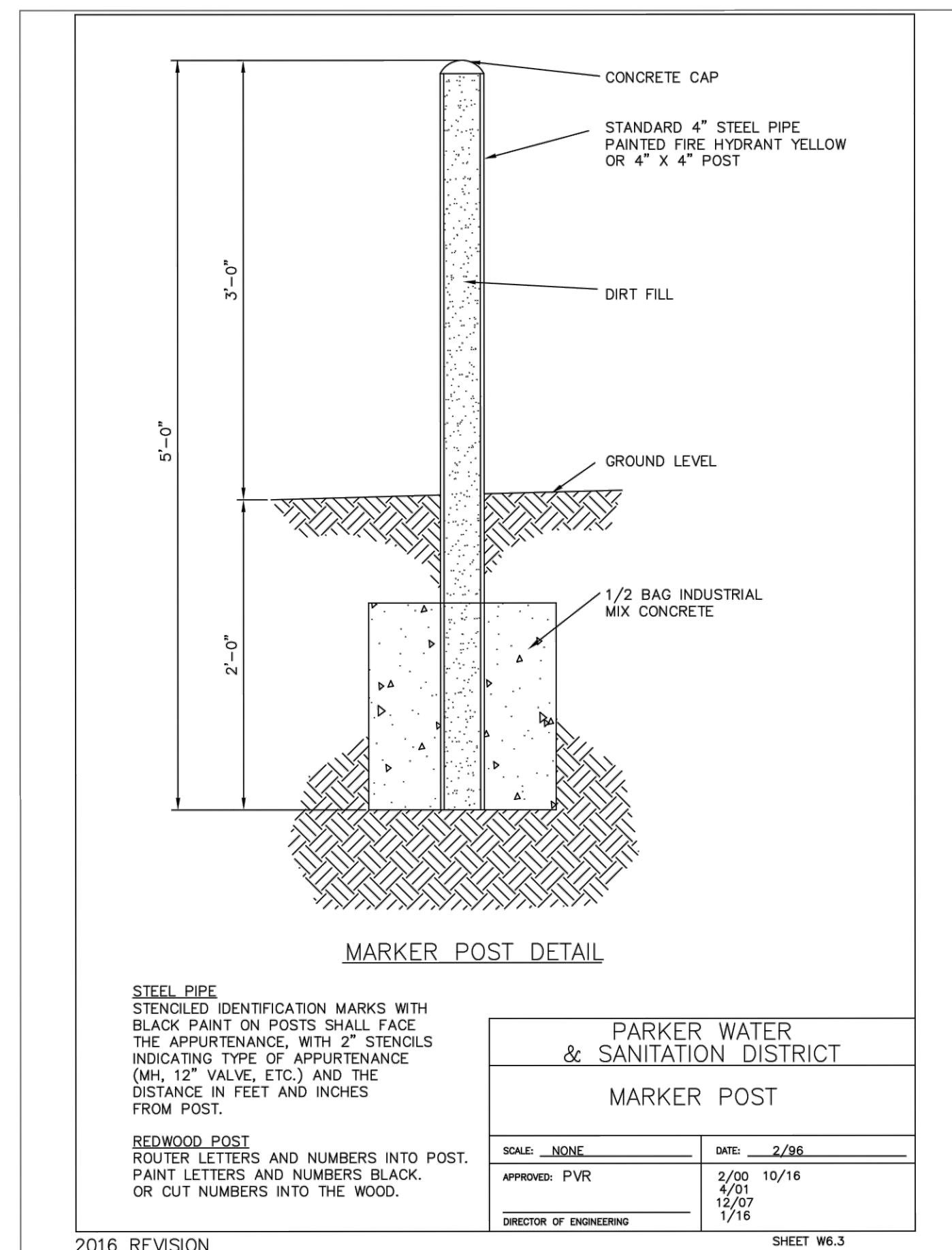
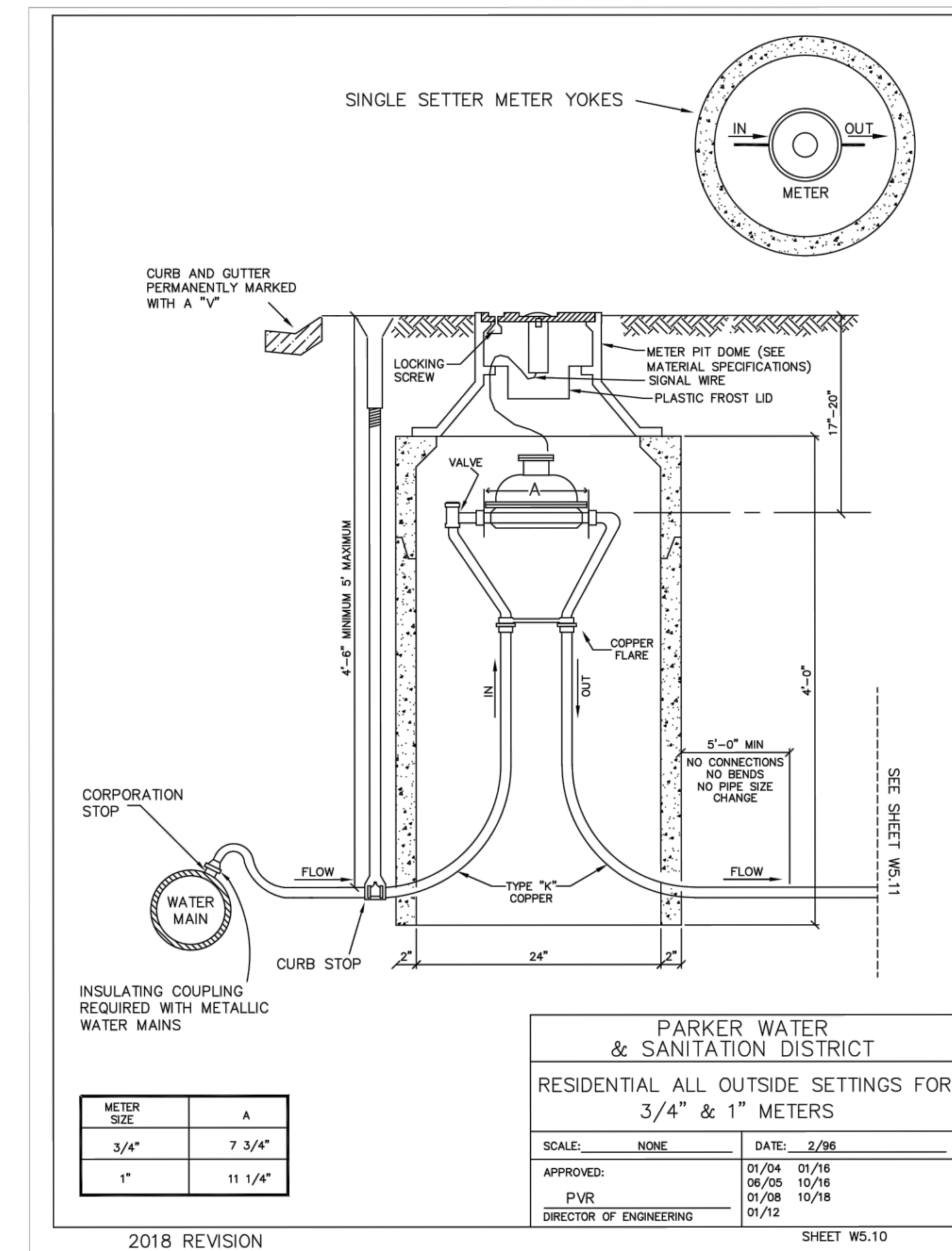
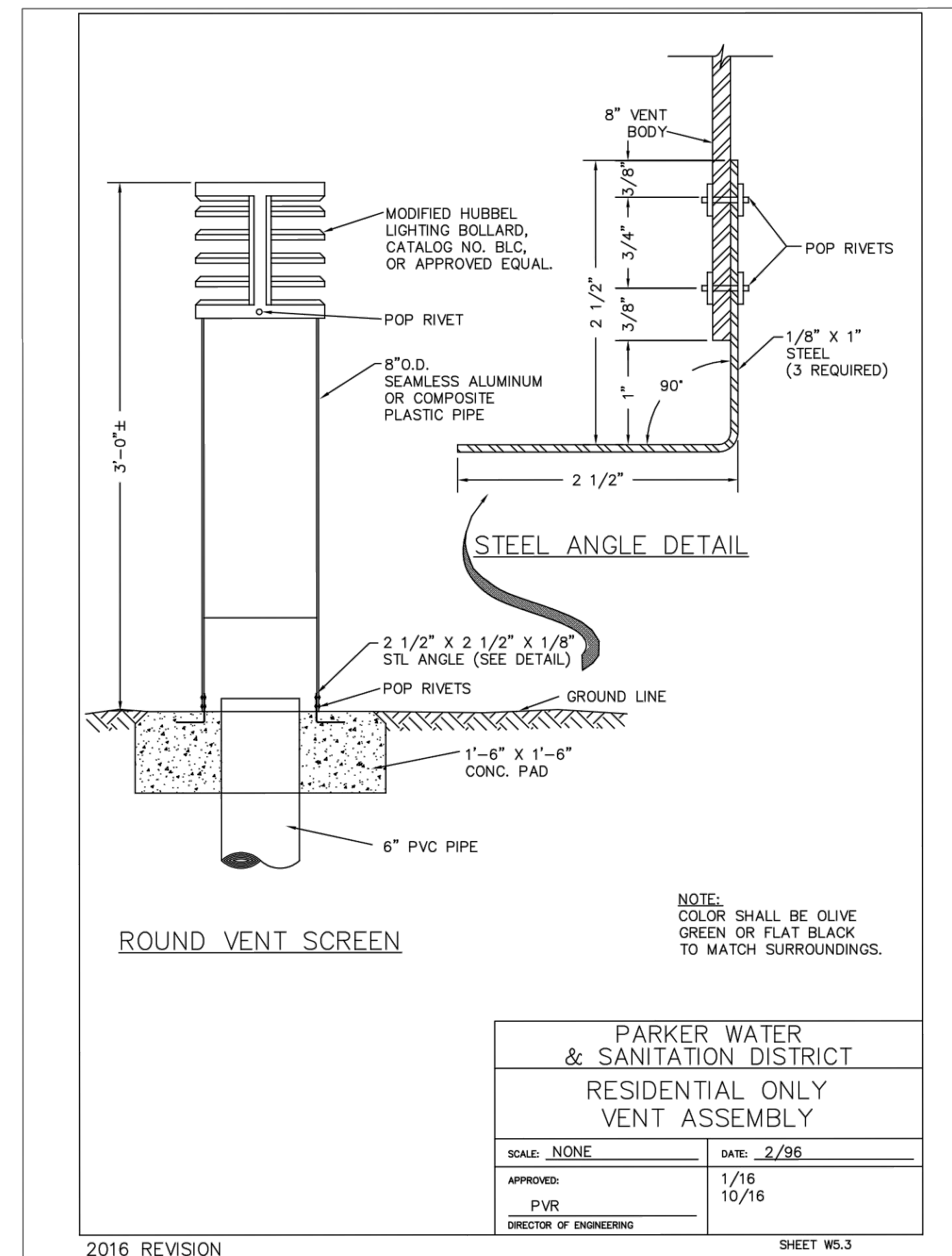
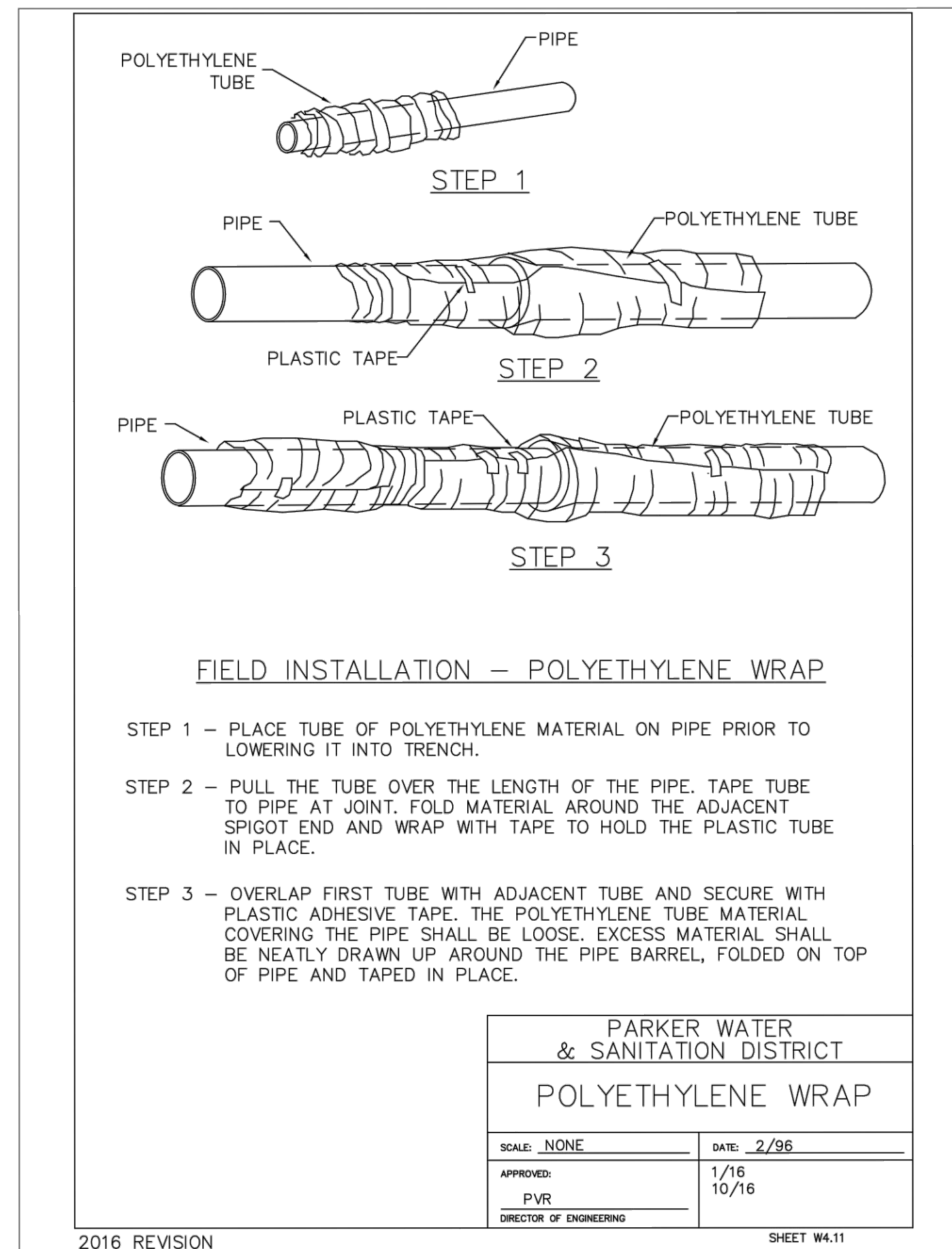
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PLAZA STREET PARTNERS

LINCOLN & DRANSFELDT
WATER DETAILS

PROJECT #: 200829
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LINCOLN & DRANSFELDT
WATER DETAILS

PROJECT #: 200829
SHEET NUMBER

18

18 OF 21

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INSPECTION POLICY:

1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
2. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTE 1 ABOVE AND A RE-INSPECTION FEE CHARGED.
3. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
4. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
5. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
6. LOTS WITHOUT BUILDING ADDRESSES OR LOT AND BLOCK NUMBERS BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
7. CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION UNLESS COORDINATED WITH DISTRICT INSPECTOR.

INSTALLATION NOTES:

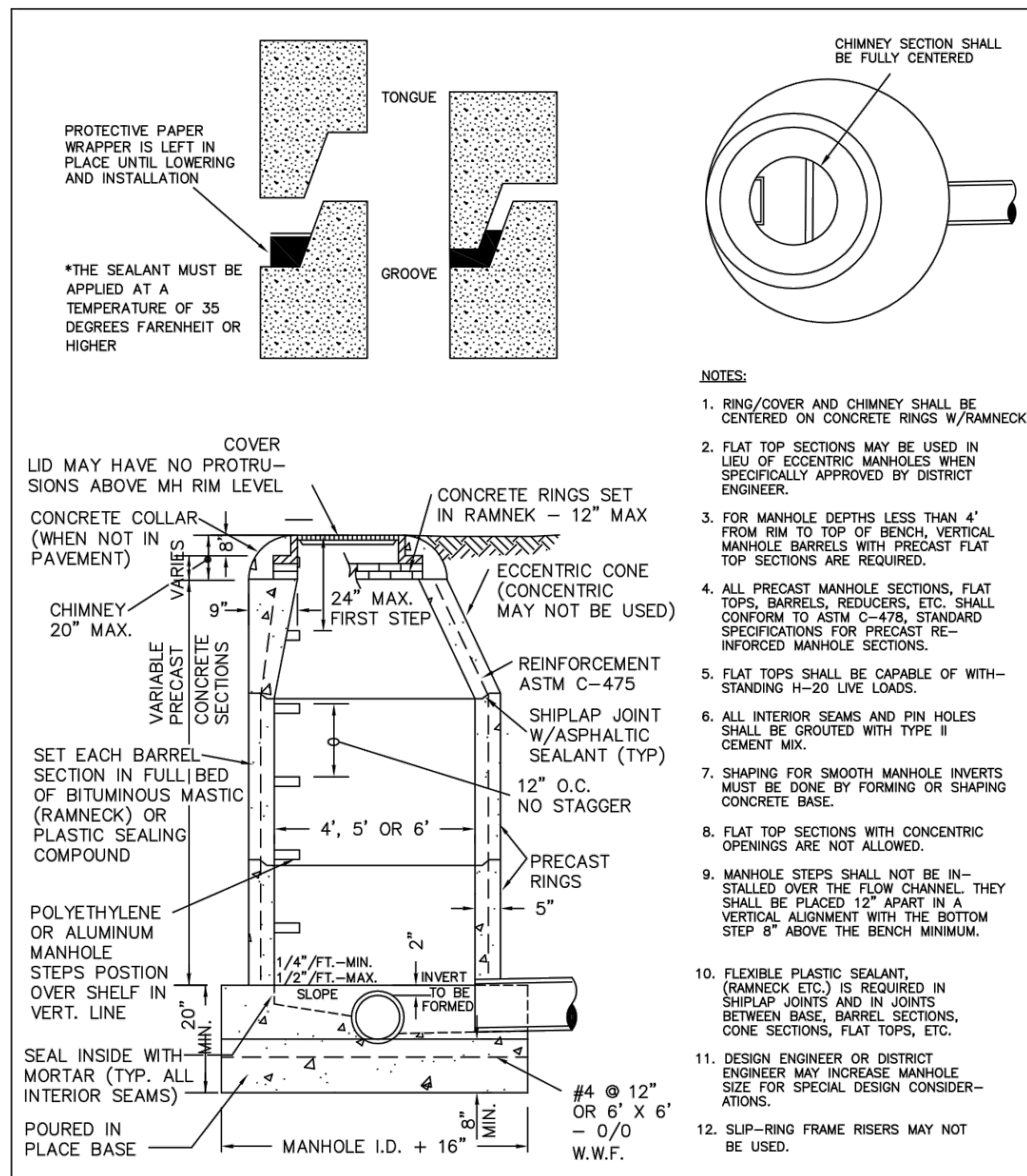
SEWER

1. ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHD 40 PIPE. APPROVED BEDDING IS TO BE SQUEEGE.
2. NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3".
3. MINIMUM GRADE SHALL BE 2%.
4. INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
5. CLEAN-OUTS SHALL BE INSTALLED AT 100' INTERVALS AND EVERY CHANGE IN DIRECTION. CLEAN-OUTS ARE NOT REQUIRED FOR SERVICES LESS THAN 100' UNLESS THERE ARE CHANGES IN DIRECTION. PROVIDE DUAL CLEAN-OUT WITHIN 5 FEET OF FOUNDATION.
6. STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
7. SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
8. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
 X FOR SANITARY SEWER SERVICE
 W FOR WATER SERVICES

PARKER WATER & SANITATION DISTRICT	
DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 10/16 1/08 1/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET S1.1

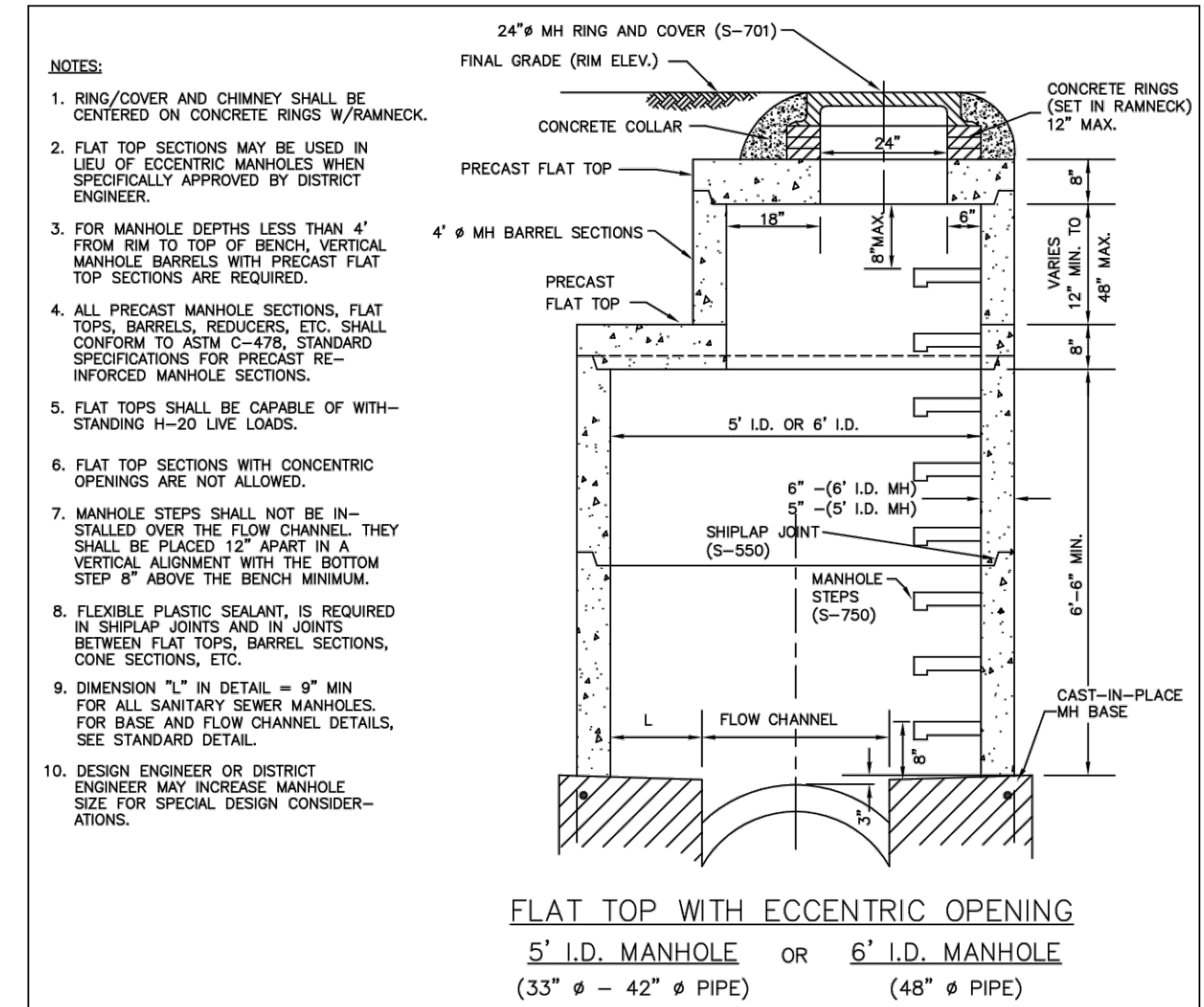


PIPE I.D.	MANHOLE I.D.
18" & SMALLER	4'-0"
21" TO 48"	5'-0"
54"	6'-0"
60" & LARGER	SPECIAL DESIGN

PARKER WATER & SANITATION DISTRICT	
PARKER MANHOLE ECCENTRIC CONE	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01 10/16 01/02 10/16 1/08 1/16
DIRECTOR OF ENGINEERING	

2016 REVISION

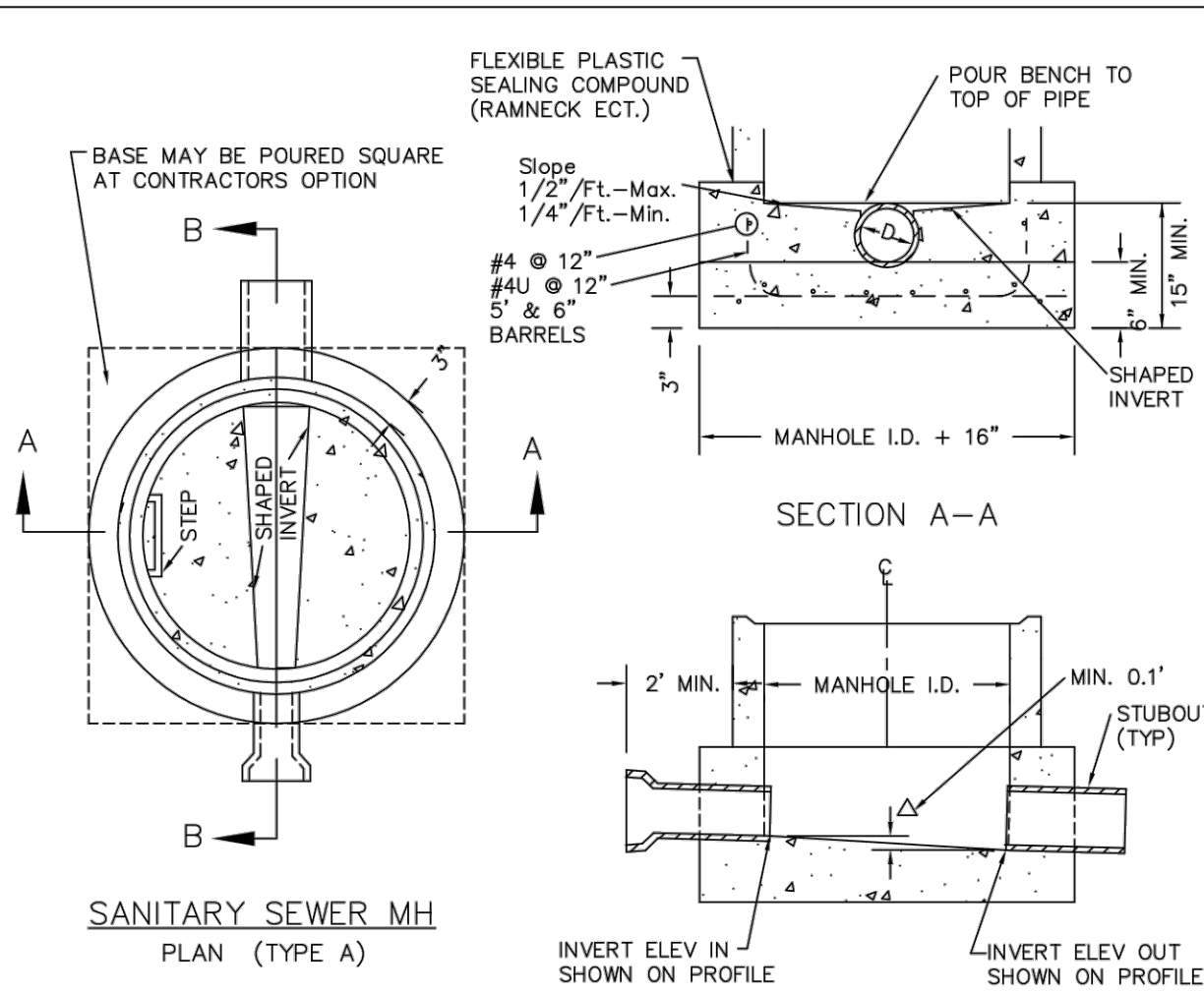
SHEET S3.1



PARKER WATER & SANITATION DISTRICT	
PRECAST MANHOLE FLAT TOP W/ ECCENTRIC OPENING	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01 10/16 1/08 1/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET S3.2

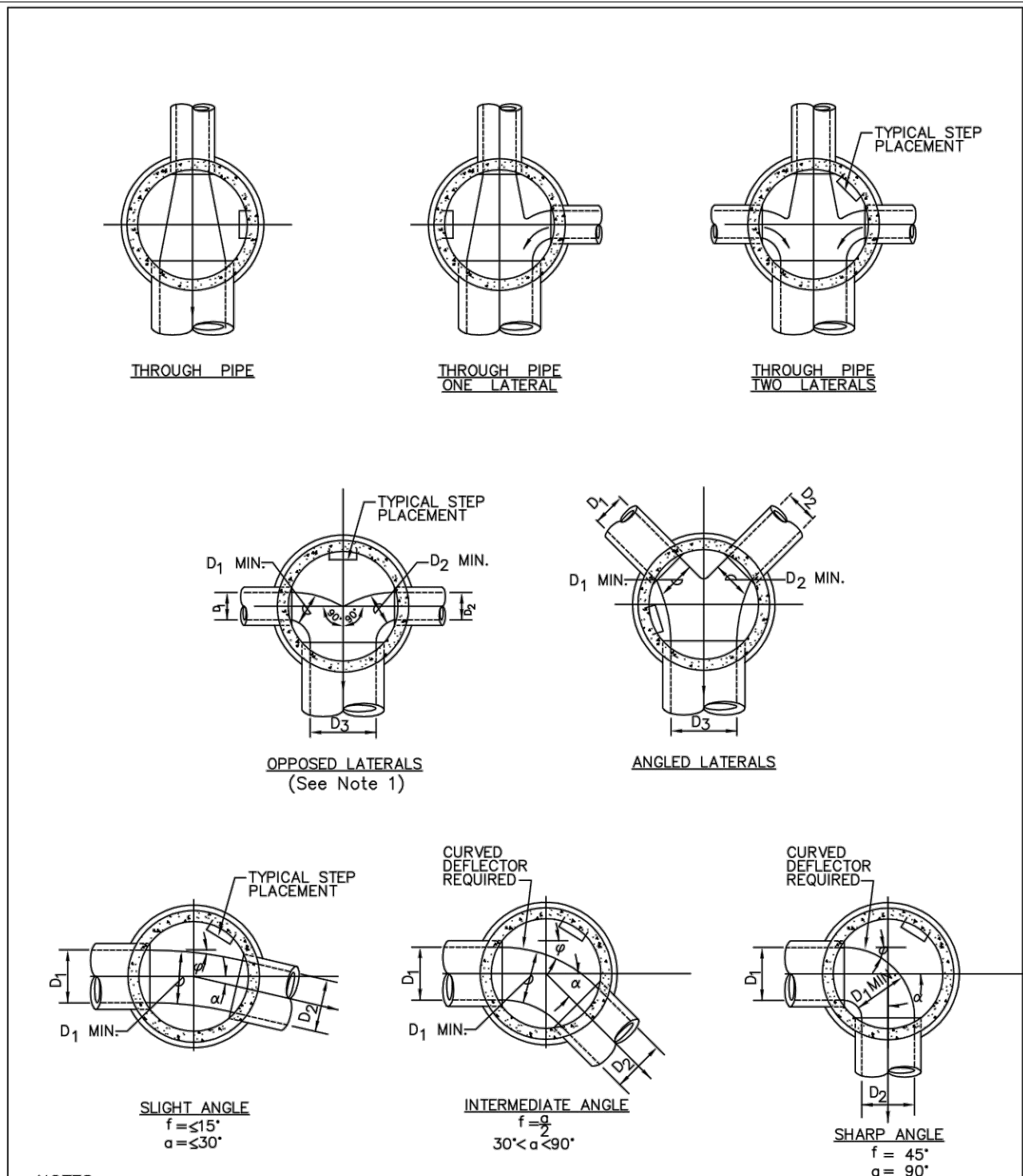


- NOTES:**
1. Manhole barrel min. thickness to be 5".
 2. Shaping for smooth manhole inverts may be done by forming or shaping with cement mortar (San. Sewer).
 3. The manhole steps shall conform to District Standards and Specifications.
 4. Precast sections to conform to A.S.T.M C-478.
 5. All dead-end manholes, that call out a stub out, shall be thru at 0.40% minimum slope.
 6. Stub outs shall extend 2'-0" minimum past manhole O.D. and be satisfactorily plugged.
 7. Reinforcing in base required for manhole.
 8. Slope of bench = 1/2"/ft.-Max. 1/4"/ft.-Min.
 9. Δ = invert drop thru MH (if Δ > 18", outside drop MH required). Min. 0.1' for all straight through MH and 0.2' for all angled MH.

PARKER WATER & SANITATION DISTRICT	
CAST-IN-PLACE MANHOLE BASE DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 01/16 01/08 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET S3.5

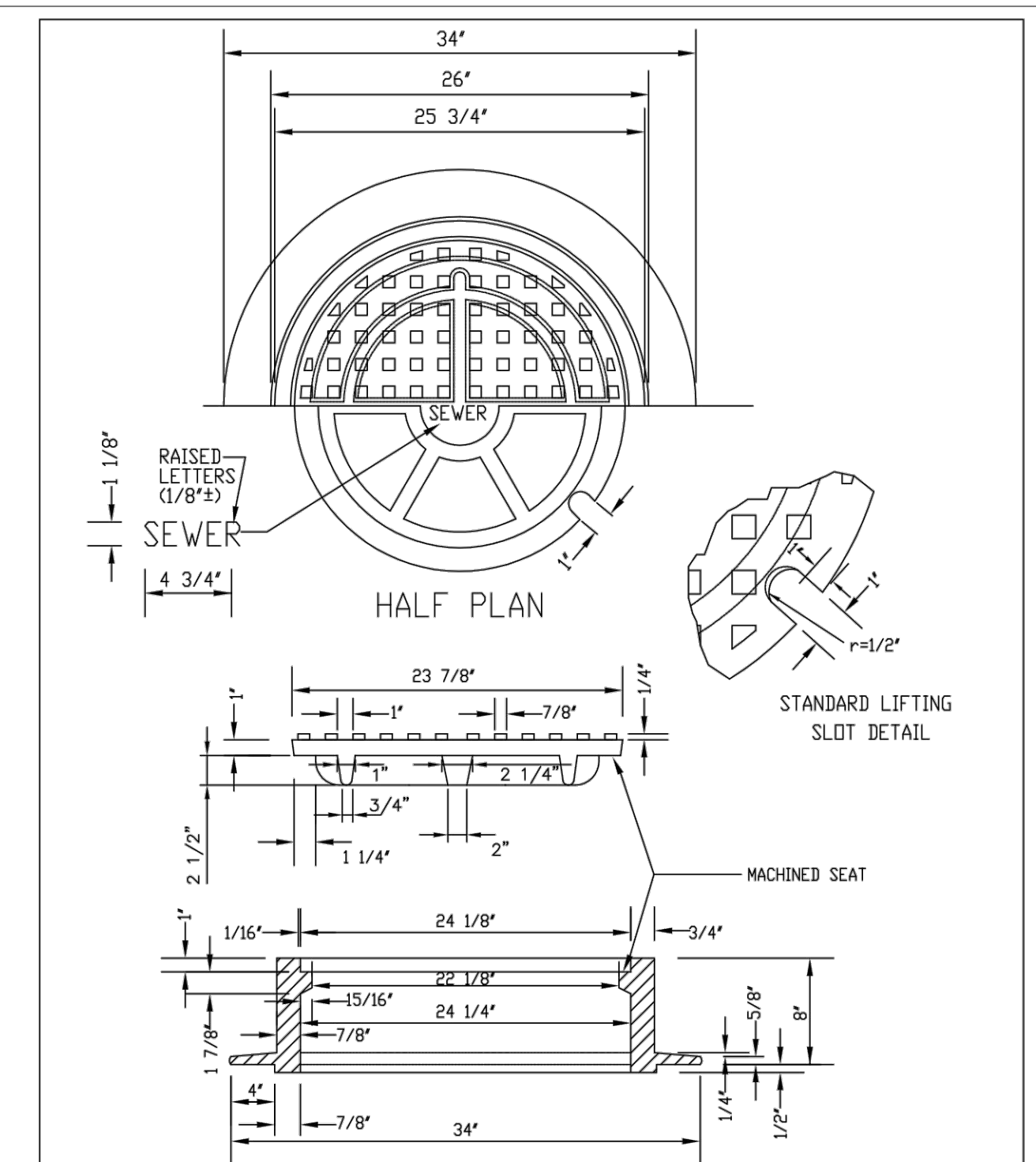


- NOTES:**
1. Manhole shall be coated using bituminous mastic (ramneck) or plastic sealing compound.

PARKER WATER & SANITATION DISTRICT	
TYPICAL BASE CHANNELIZATION DETAILS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/16 10/16
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- NOTE:**
1. Casting Specifications: ASTM A-48 With A Minimum Tensile Strength Of 25 KSI (Class 25) (Or Approved Equal).
 2. All Casting To Be Dipped In Asphalt Base Paint.
 3. No other manhole lids will be accepted without prior approval from the District Engineer.

PARKER WATER & SANITATION DISTRICT	
24\"/>	
SCALE: NONE	DATE: 2/96
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SHEET S3.9

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PROJECT #: 200829
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ALUMINUM STEP

CONCRETE WALL SECTION

STEPS TO BE HOOKED BEHIND REINFORCING WHEN CONCRETE SECTIONS ARE CAST.

VERTICAL SPACING 12" MIN. 16" MAX. WITH BOTTOM STEP 6"-8" ABOVE BENCH

REINFORCING

TYPICAL INSTALLATION

TOE POCKET DETAILS

VARIABLE, 16" MAX. (MAX. SPACING BETWEEN TOE POCKETS=16")

SECTION

NOTES:

- ALUMINUM ALLOY SPECIFICATIONS
 - FED. SPEC. QQ-A-200/8 (ALUMINUM-MAGNESIUM-SILICATE ALLOY)
 - MINIMUM TENSILE STRENGTH= 38,000 p.s.i.
 - MINIMUM YIELD STRENGTH= 35,000 p.s.i.
 - MINIMUM ELONGATION=10% IN 2 MINIMUM LOAD CAPACITY (APPLIED AT CENTER OF STEP)
- 1000 lb. WITH 6" PROJECTION FROM WALL.
 - 1500 lb. WITH 4" PROJECTION FROM WALL.
- WEIGHT PER STEP=2.23 POUNDS
- STEPS TO BE CAST, UNALTERED, IN MAN-HOLE WALL IN STRAIGHT LINE, VERTICALLY, AT THE SAME TIME THE BARREL OR CONE SECTIONS ARE CAST.
- VERTICAL SPACING BETWEEN STEPS SHALL BE CONSISTENT IN EACH INDIVIDUAL MANHOLE.
- TOE POCKETS ARE REQUIRED IN STORM SEWER MANHOLES TOP OF BENCH IS MORE THAN 18" ABOVE INVERT. TOE POCKETS ARE NOT REQUIRED IN SANITARY SEWER MANHOLE UNLESS OTHERWISE SPECIFIED.

STANDARD EXTRUDED ALUMINUM MANHOLE STEP

PARKER WATER & SANITATION DISTRICT
STANDARD EXTRUDED ALUMINUM MANHOLE STEP

SCALE: NONE DATE: 2/96

APPROVED: PVR 01/16 10/16

DIRECTOR OF ENGINEERING SHEET S3.10

2016 REVISION

PIN FOR PRESS STEP

NOTES:

- ASTM SPECIFICATIONS:
 - ASTM C-478
 - ASTM A-815 GRADE 60 (STEEL ROD)
 - ASTM 2146-89, TYPE II, GRADE 18906 (POLYPROPYLENE)
- STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURE SHALL HAVE A 9-3/4 INCH LEG AND SHALL PROJECT FROM THE WALL 6-5/8 INCHES.
- STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8-1/4 INCH LEG AND SHALL PROJECT FROM THE WALL 4-7/8 INCHES.
- ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3-3/8 INCHES.
- STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN.
- INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 P.S.I. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
- STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD EXCLUSIVELY FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.

POLYPROPYLENE REINFORCED PLASTIC STEP

PARKER WATER & SANITATION DISTRICT
POLYPROPYLENE REINFORCED PLASTIC MANHOLE STEP

SCALE: NONE DATE: 2/00

APPROVED: PVR 01/16 10/16

DIRECTOR OF ENGINEERING SHEET S3.11

2016 REVISION

MARKER POST DETAIL

CONCRETE CAP

STANDARD 4" STEEL PIPE PAINTED FIRE HYDRANT YELLOW OR 4" X 4" REDWOOD POST

DIRT FILL

GROUND LEVEL

12" CONCRETE

STEEL PIPE STENCILED IDENTIFICATION MARKS ON POSTS SHALL FACE THE APPURTENANCE WITH 2" STENCILS INDICATING TYPE OF APPURTENANCE (MH, 12" VALVE, ETC.) AND THE DISTANCE IN FEET AND INCHES FROM POST.

REDWOOD POST ROUTER LETTERS AND NUMBERS INTO POST. PAINT LETTERS AND NUMBERS BLACK.

PARKER WATER & SANITATION DISTRICT
MARKER POST DETAIL

SCALE: NONE DATE: 2/96

APPROVED: PVR 2/00 10/16 4/01 1/08 1/16

DIRECTOR OF ENGINEERING SHEET S3.13

2016 REVISION

TYPICAL TRENCH DETAIL

NOTES:

- Sloping or benching of trench side walls, where permitted shall be in accordance with applicable Federal, State and Local safety regulations.
- Trench shall be braced and shored as necessary to afford safe working conditions or to protect adjacent utilities, structures, etc. Unless otherwise specified on the plans, no pavement will be made for removal, replacement or relocation of curb and gutter, utilities, sidewalks, structures, etc. outside the maximum limits of excavation as shown and the contractor shall be responsible for protection of same.
- If dimension T_0 is $\leq 5'$, then existing asphalt pavement shall be removed and replaced up to the gutter. Maximum asphalt pay width, B_0 & B_1 , shall then be based upon this actual width.

**PARKER WATER & SANITATION DISTRICT
SEWER TRENCHING AND BEDDING DETAIL**

SCALE: NONE DATE: 2/96

APPROVED: PVR 5/98 1/16 10/16

DIRECTOR OF ENGINEERING SHEET S4.1

2016 REVISION

MANHOLE INVERT TIE-IN

WATERTIGHT/AIRTIGHT MECHANICAL SEAL OR NON-SHRINK GROUT W/ WATER STOP

PROPOSED SANITARY SEWER

EXISTING SANITARY SEWER

STEPS

NEW MANHOLE BENCHING SHALL BE TO CROWN OF NEW PIPE SLOPE BENCHING NOT LESS THAN 1/2" PER FOOT OR MORE THAN 1-1/2" PER FOOT (SEE ALSO NOTE 1)

DRILL EXISTING BENCH AND SET REBAR IN EPOXY.

EXISTING BENCH

EXISTING BENCHING SHALL BE THOROUGHLY CLEANED PRIOR TO POURING NEW BENCHING

NOTES:

- NEW BENCH SHALL INCLUDE REINFORCEMENT TO CONTROL CONCRETE CRACKING.

**PARKER WATER & SANITATION DISTRICT
MANHOLE INVERT TIE-IN DETAIL**

SCALE: NONE DATE: 2/96

APPROVED: PVR 1/16 10/16

DIRECTOR OF ENGINEERING SHEET S4.9

2016 REVISION

MANHOLE STUB-OUT DETAIL

IF STUB-OUT IS ABANDONED, THE PIPE SHALL BE REMOVED AND THE HOLE SEALED WITH NON-SHRINK GROUT.

STEPS

MECHANICAL PLUG SHALL BE TETHERED AND BOLTED TO WALL OF THE MANHOLE. MECHANICAL PLUGS SHALL BEAR THE NAME OF THE CONTRACTOR.

**PARKER WATER & SANITATION DISTRICT
MANHOLE STUB-OUT DETAIL**

SCALE: NONE DATE: 2/96

APPROVED: PVR 1/16 10/16

DIRECTOR OF ENGINEERING SHEET S4.10

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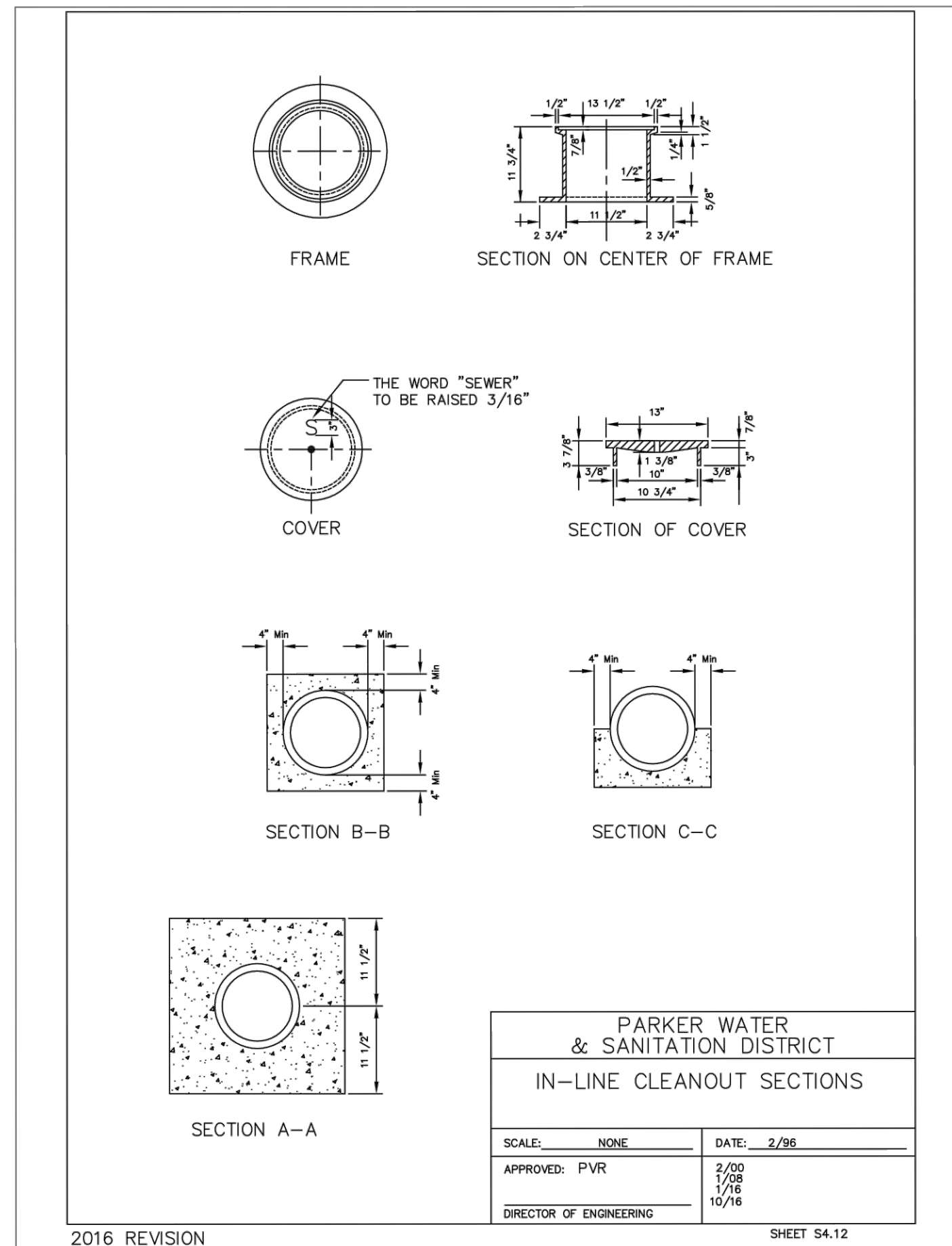
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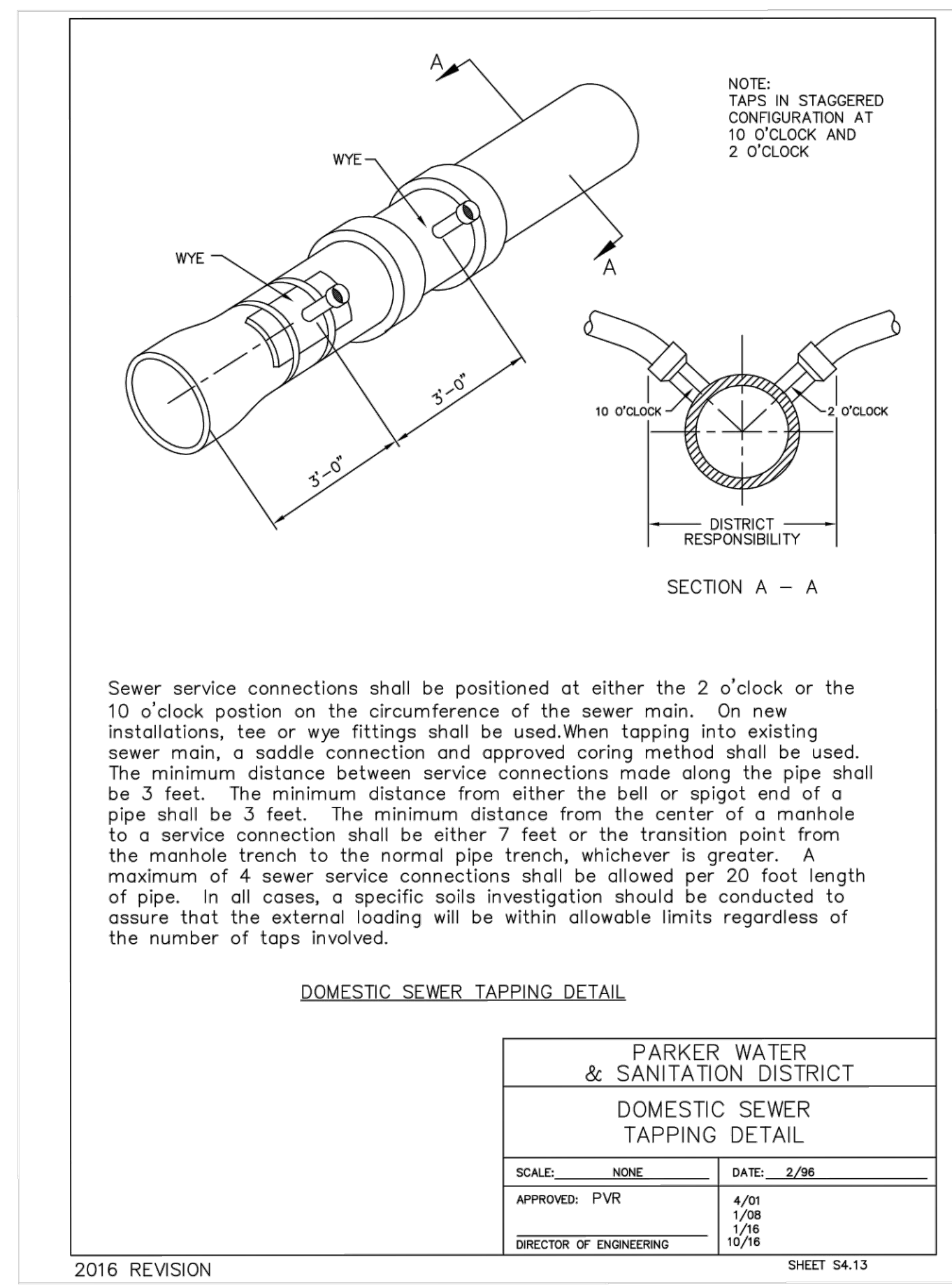
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2016 REVISION

PARKER WATER & SANITATION DISTRICT	
IN-LINE CLEANOUT SECTIONS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	3/02 1/08 10/16
DIRECTOR OF ENGINEERING	

SHEET S4.12



2016 REVISION

PARKER WATER & SANITATION DISTRICT	
DOMESTIC SEWER TAPPING DETAIL	
SCALE: NONE	DATE: 2/96
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