

Record Drawing



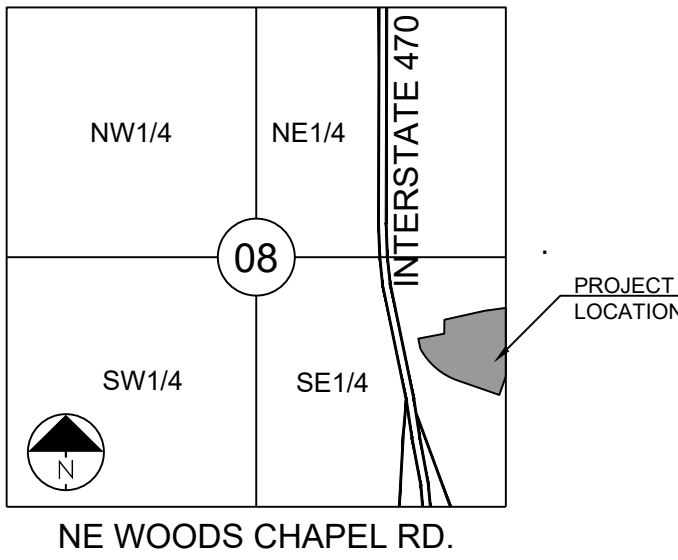
SCHLAGEL & ASSOCIATES, P.A.
Engineers • Planners • Surveyors • Landscape Architects
 14920 West 107th Street • Lenexa, Kansas 66215
 (913) 492-5158 • Fax: (913) 492-8400
 WWW.SCHLAGELASSOCIATES.COM
 Missouri State Certificates of Authority
 #E2002001005237 #LAC2001005237 #LS200200895-F

COLEMAN EQUIPMENT
WATER MAIN PLANS
4101 NE LAKEWOOD WAY
LEE'S SUMMIT, MISSOURI

DRAWN BY:		REVISION DATE	DESCRIPTION
DGF	1	10-31-2017	City Engineering Review No. 1
	2	11-14-2017	ADD VALVE/REMOVE CASING PIPE
CHECKED BY:	3	03-09-2023	As-Built Plan
JTS	4		
DATE PREPARED:	5		
9-25-17	6		
	7		
PROJ. NUMBER:	8		
12.010			

W0.0

I:\PROJECTS\2017\17-019\3.0 Design\3.0 DWG Plans\0.0 Water\17-019 WATER GEN.dwg, GL, 3/9/2023 2:11:19 PM



SECTION 08-48N-31W

LOCATION MAP
SCALE 1" = 2000'

UTILITY INFORMATION & CONTACTS:

Missouri Gas Energy
Attn: Lucas Walls
3025 Southeast Clover Drive
Lee's Summit, Missouri 64082
Phone: (816) 969-2218
Email: lucas.walls@sug.com

Kansas City Power & Light
Attn: Phillip Ingram
1300 Hamblen Road
Lee's Summit, Missouri 64081
Phone: (816) 347-4339
Email: phillip.ingram@kcpl.com

Sewer and Water - City of Lee's Summit
220 SE Green Street
Lee's Summit, Missouri 64063
Phone: (816) 969-1900
Email: publicworks@cityoffs.net

AT&T
Attn: Herb Upshaw
9444 Nail Avenue
Overland Park, Kansas 66207
Phone: (913) 383-4929
Email: hu4112@att.com

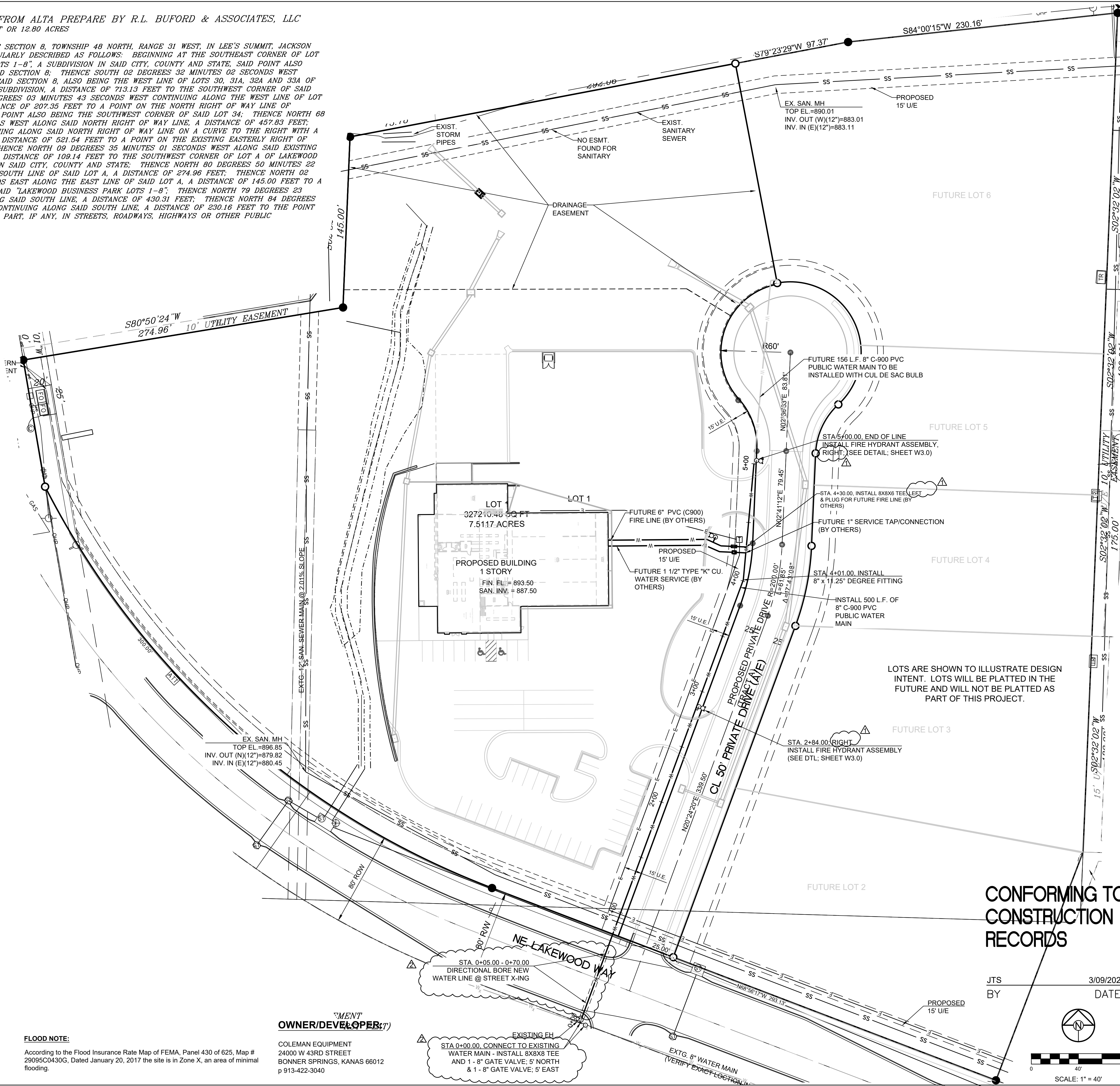
811
Missouri One Call - 1-800-344-7483

UTILITY STATEMENT:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDON. THE SURVEYOR FURTHER DOES NOT WARRANTY THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

PROPERTY DESCRIPTION FROM ALTA PREPARE BY R.L. BUFORD & ASSOCIATES, LLC
CONTAINING 557,618 SQUARE FEET OR 12.80 ACRES

PART OF THE SOUTHEAST 1/4 OF SECTION 8, TOWNSHIP 48 NORTH, RANGE 31 WEST, IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF LOT 5, "LAKEWOOD BUSINESS PARK LOTS 1-8", A SUBDIVISION IN SAID CITY, COUNTY AND STATE, SAID POINT ALSO BEING ON THE EAST LINE OF SAID SECTION 8; THENCE SOUTH 02 DEGREES 32 MINUTES 02 SECONDS WEST ALONG THE SAID EAST LINE OF SAID SECTION 8, ALSO BEING THE WEST LINE OF LOTS 30, 31A, 32A AND 33A OF SAID LAKEWOOD BUSINESS PARK SUBDIVISION, A DISTANCE OF 713.13 FEET TO THE SOUTHWEST CORNER OF SAID LOT 33A; THENCE SOUTH 21 DEGREES 03 MINUTES 43 SECONDS WEST CONTINUING ALONG THE WEST LINE OF LOT 34 OF SAID SUBDIVISION, A DISTANCE OF 207.35 FEET TO A POINT ON THE NORTH RIGHT OF WAY LINE OF RELOCATED LAKEWOOD WAY, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF SAID LOT 34; THENCE NORTH 68 DEGREES 56 MINUTES 17 SECONDS WEST ALONG SAID NORTH RIGHT OF WAY LINE, A DISTANCE OF 457.83 FEET; THENCE NORTHWESTERLY CONTINUING ALONG SAID NORTH RIGHT OF WAY LINE ON A CURVE TO THE RIGHT WITH A RADIUS OF 710.00 FEET, AN ARC DISTANCE OF 521.54 FEET TO A POINT ON THE EXISTING EASTERLY RIGHT OF WAY LINE OF I-470 HIGHWAY; THENCE NORTH 09 DEGREES 35 MINUTES 01 SECONDS WEST ALONG SAID EXISTING EASTERLY RIGHT OF WAY LINE, A DISTANCE OF 109.14 FEET TO THE SOUTHWEST CORNER OF LOT A OF LAKEWOOD BUSINESS PARK, A SUBDIVISION IN SAID CITY, COUNTY AND STATE; THENCE NORTH 80 DEGREES 50 MINUTES 22 SECONDS EAST ALONG THE SAID SOUTH LINE OF SAID LOT A, A DISTANCE OF 274.96 FEET; THENCE NORTH 02 DEGREES 32 MINUTES 02 SECONDS EAST ALONG THE EAST LINE OF SAID LOT A, A DISTANCE OF 145.00 FEET TO A POINT ON THE SOUTH LINE OF SAID "LAKEWOOD BUSINESS PARK LOTS 1-8"; THENCE NORTH 79 DEGREES 23 MINUTES 29 SECONDS EAST ALONG SAID SOUTH LINE, A DISTANCE OF 430.31 FEET; THENCE NORTH 84 DEGREES 00 MINUTES 15 SECONDS EAST CONTINUING ALONG SAID SOUTH LINE, A DISTANCE OF 230.16 FEET TO THE POINT OF BEGINNING, SUBJECT TO THAT PART, IF ANY, IN STREETS, ROADWAYS, HIGHWAYS OR OTHER PUBLIC RIGHT-OF-WAYS.



Record Drawing

FLOOD NOTE:

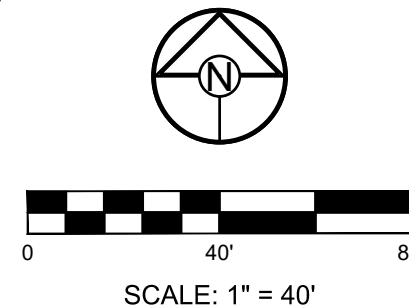
According to the Flood Insurance Rate Map of FEMA, Panel 430 of 625, Map # 29095C0430G, Dated January 20, 2017 the site is in Zone X, an area of minimal flooding.

OWNER/DEVELOPER
COLEMAN EQUIPMENT

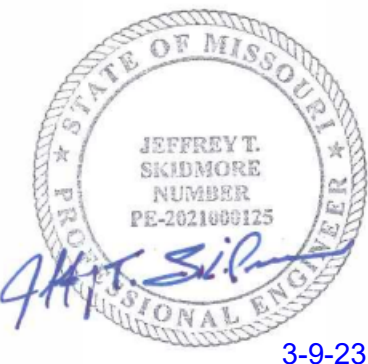
24000 W 43RD STREET
BONNER SPRINGS, KANSAS 66012
p 913-422-3040

CONFORMING TO
CONSTRUCTION
RECORDS

JTS
BY
3/09/2023
DATE



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#E2002003600-F #LAC2001005237 #LS2002008659-F



**COLEMAN EQUIPMENT
WATER MAIN PLANS**
4101 NE LAKEWOOD WAY
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
10-31-2017	CIV Engineering Review No. 1
11-14-2017	ADD VALVE/REMOVE CASING PIPE
03-09-2023	As-Built Plan

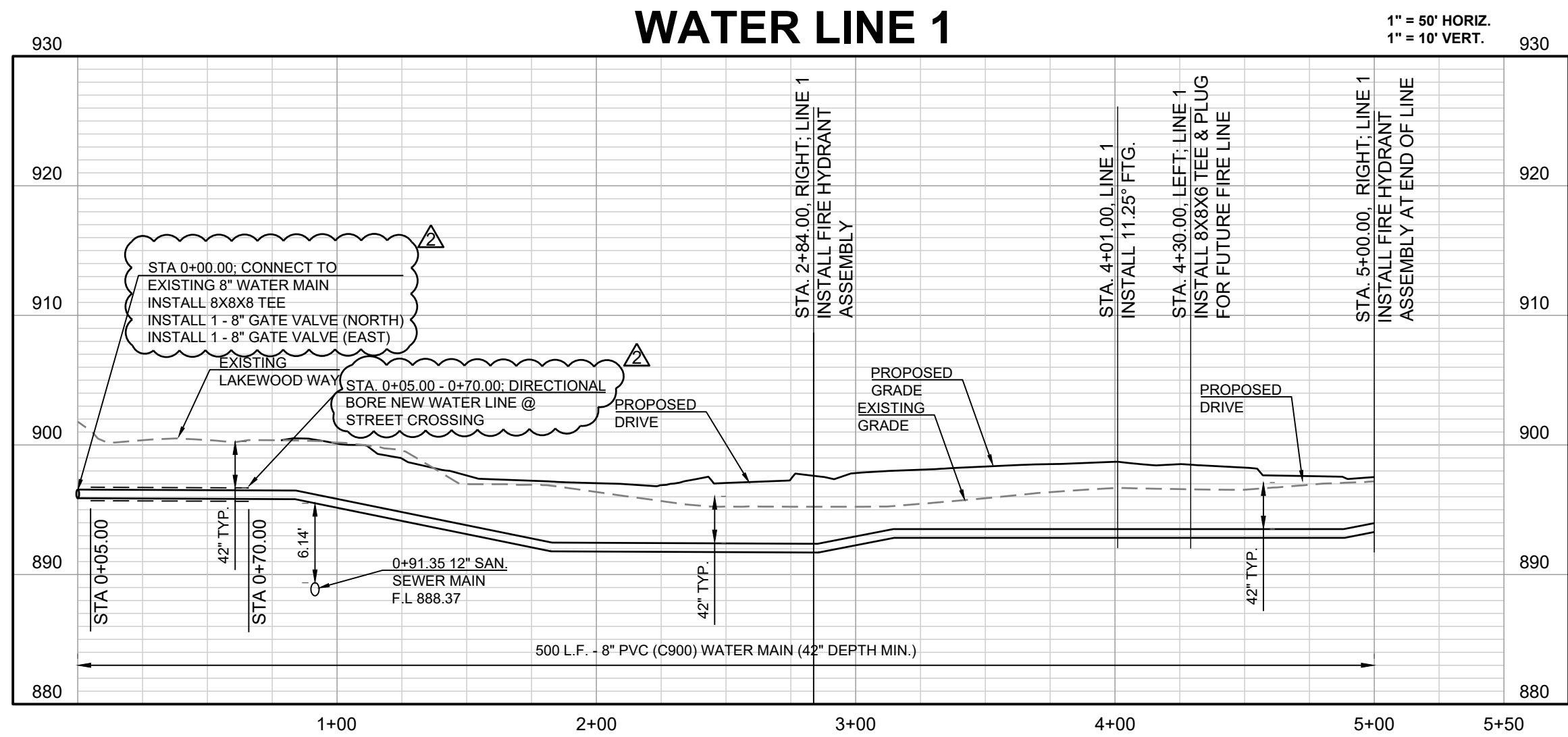
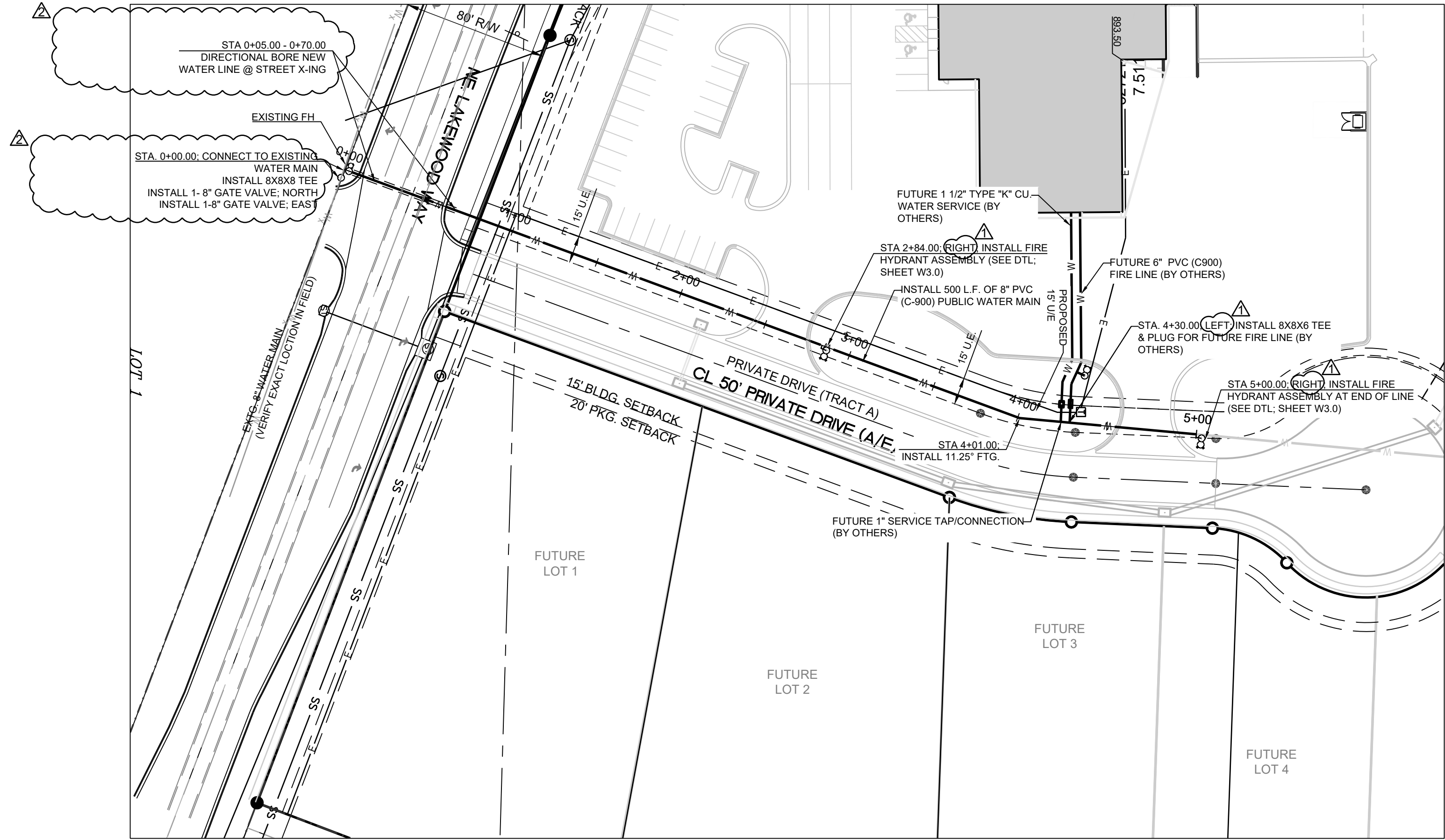
DRAWN BY:	SCH
CHECKED BY:	SCH
DATE PREPARED:	9-25-17
PROJ. NUMBER:	17-019

GENERAL
LAYOUT
ASI #1

SHEET
W1.0
OF

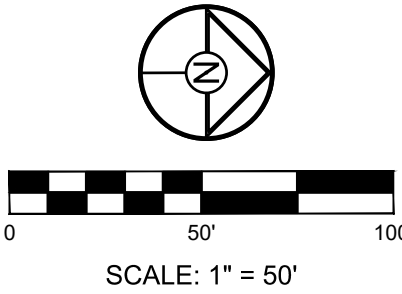
I:\PROJECTS\2017\17-019\3.0 Design\3.0 DWG Plans\0. Water\17-019 WATER PP.dwg, WATER PP, 3/9/2023 2:11:36 PM

Record Drawing



CONFORMING TO
CONSTRUCTION
RECORDS

JTS 3/09/2023
BY DATE





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Missouri State Certificates of Authority
#E2002003600-F #LAC200100237 #LS200200859-F



JEFFREY T. SCHLAGER
SUBSCRIBE
NUMBER
PE-2021890125
3-9-23

COLEMAN EQUIPMENT
WATER MAIN PLANS
4101 NE LAKEWOOD WAY
LEE'S SUMMIT, MISSOURI

REVISION	DATE	DESCRIPTION
1	10-31-2017	Civil Engineering Review No. 1
2	11-14-2017	ADD VALVE/REMOVE CASING PIPE
3	03-09-2023	As-Built Plan
4		
5		
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DRAWN BY:	SCH
CHECKED BY:	SCH
DATE PREPARED:	9-25-17
PROJ. NUMBER:	17-019

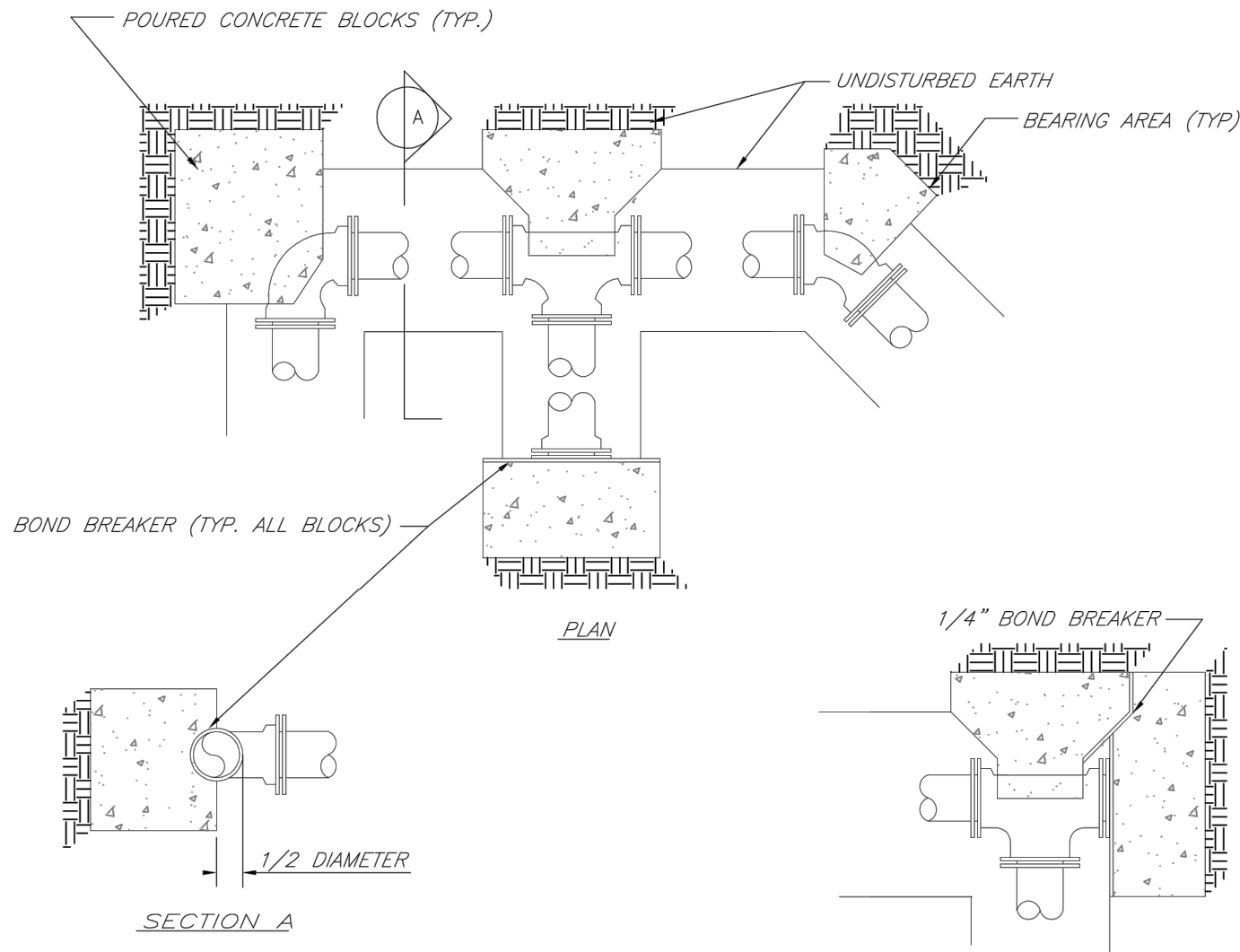
PLAN AND PROFILE
ASI #1
SHEET
W2.0
OF

I:\PROJECTS\2017\17-018\3.0 DWG Plans\3.0 Water\17-019 WATER DETAILS.dwg, DETAIL 1, 3/9/2023 2:11:47 PM

Record Drawing

REQUIRED CONCRETE BEARING AREA (SQUARE FEET - SF)					
NOM. DIA. (INCHES)	180	90	45	22.5	11.25
	TEE, PLUG	BEND	BEND	BEND	BEND
6	4.7	6.7	4.0	4.0	4.0
8	8.4	11.8	6.4	4.0	4.0
10	13.1	18.5	10.0	5.1	4.0
12	18.8	26.7	14.4	7.4	4.0
14	25.7	36.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	REST. JT.	32.5	16.5	8.3
20	REST. JT.	REST. JT.	40.1	20.4	10.3
24	REST. JT.	REST. JT.	REST. JT.	29.4	14.8

- NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
 2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
 3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
 4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

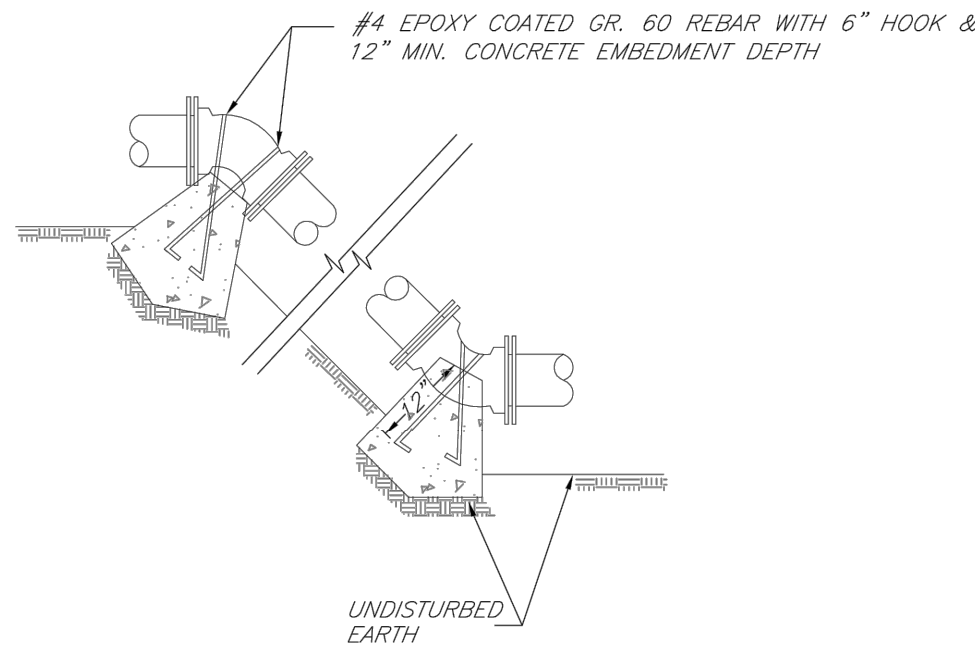


LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
HORIZONTAL THRUST BLOCKS

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-1
Rev: 1/14
Rev:

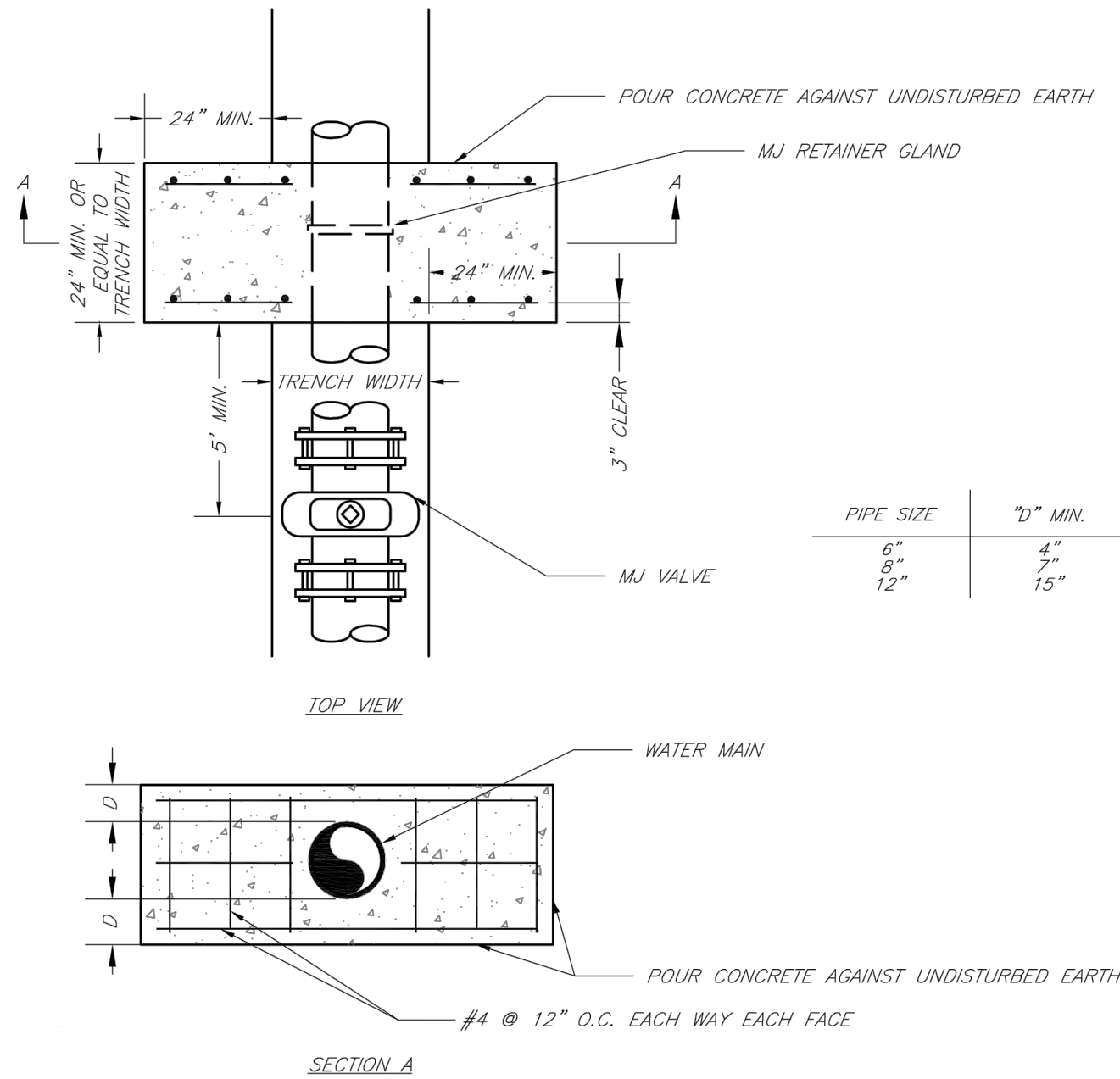
REQUIRED CONCRETE VOLUME (CUBIC FEET - CF)					
NOM. DIA. (INCHES)	180	90	45	22.5	11.25
	TEE, PLUG	BEND	BEND	BEND	BEND
6	50.5	71.4	38.6	19.7	9.9
8	89.8	126.9	68.7	35.0	17.6
10	140.2	198.3	107.3	54.7	27.5
12	202.0	REST. JT.	154.6	78.8	39.6
14	REST. JT.	REST. JT.	210.4	107.3	53.9
16	REST. JT.	REST. JT.	REST. JT.	140.1	70.4
18	REST. JT.	REST. JT.	REST. JT.	177.3	89.1
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	110.0
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	158.4

- NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
 2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
 3. BEARING MUST BE AGAINST UNDISTURBED SOIL.
 4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



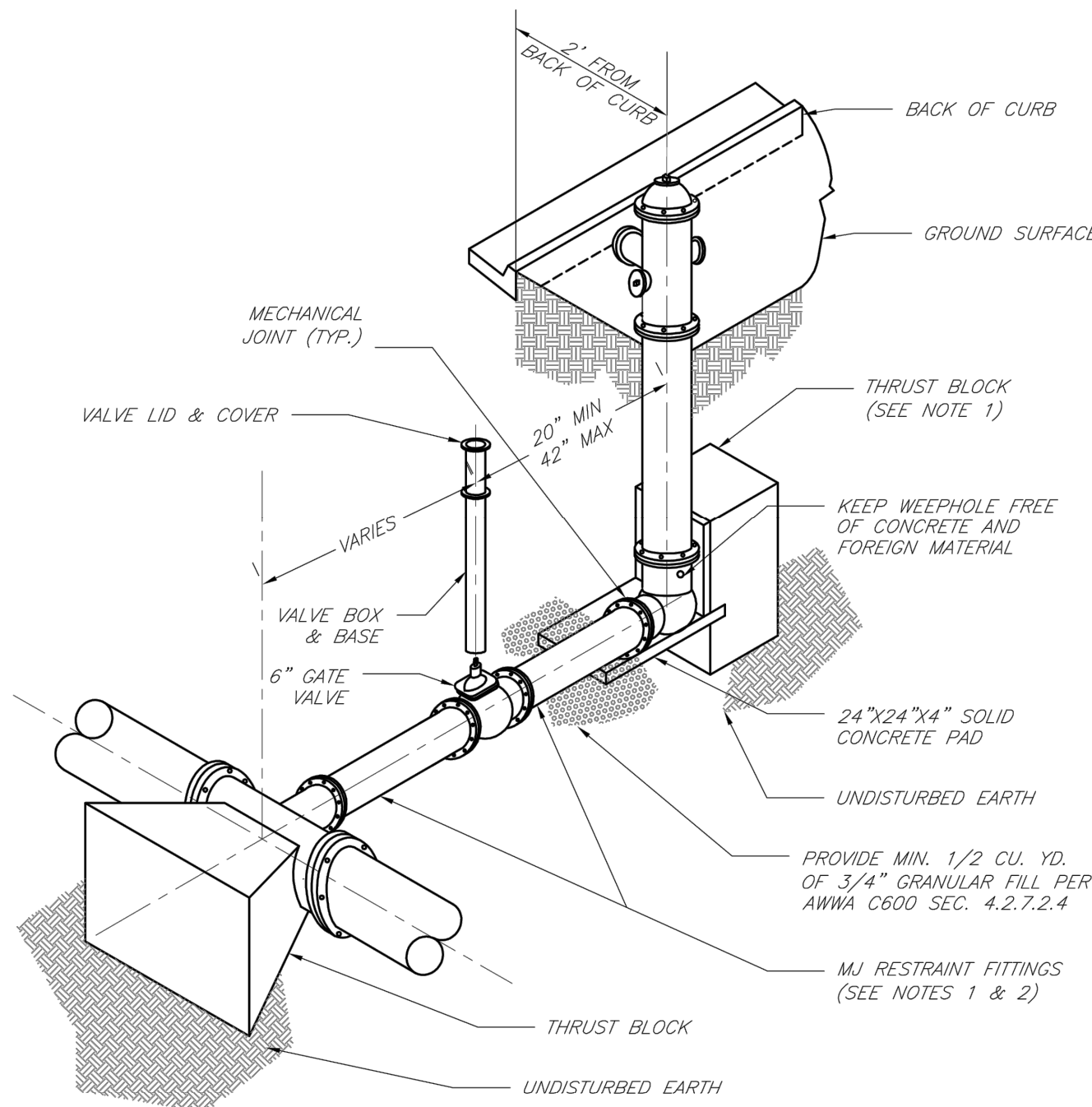
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
VERTICAL THRUST BLOCKS

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-2
Rev: 1/14
Rev:



LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
STRADDLE BLOCK

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-3
Rev: 1/14
Rev:

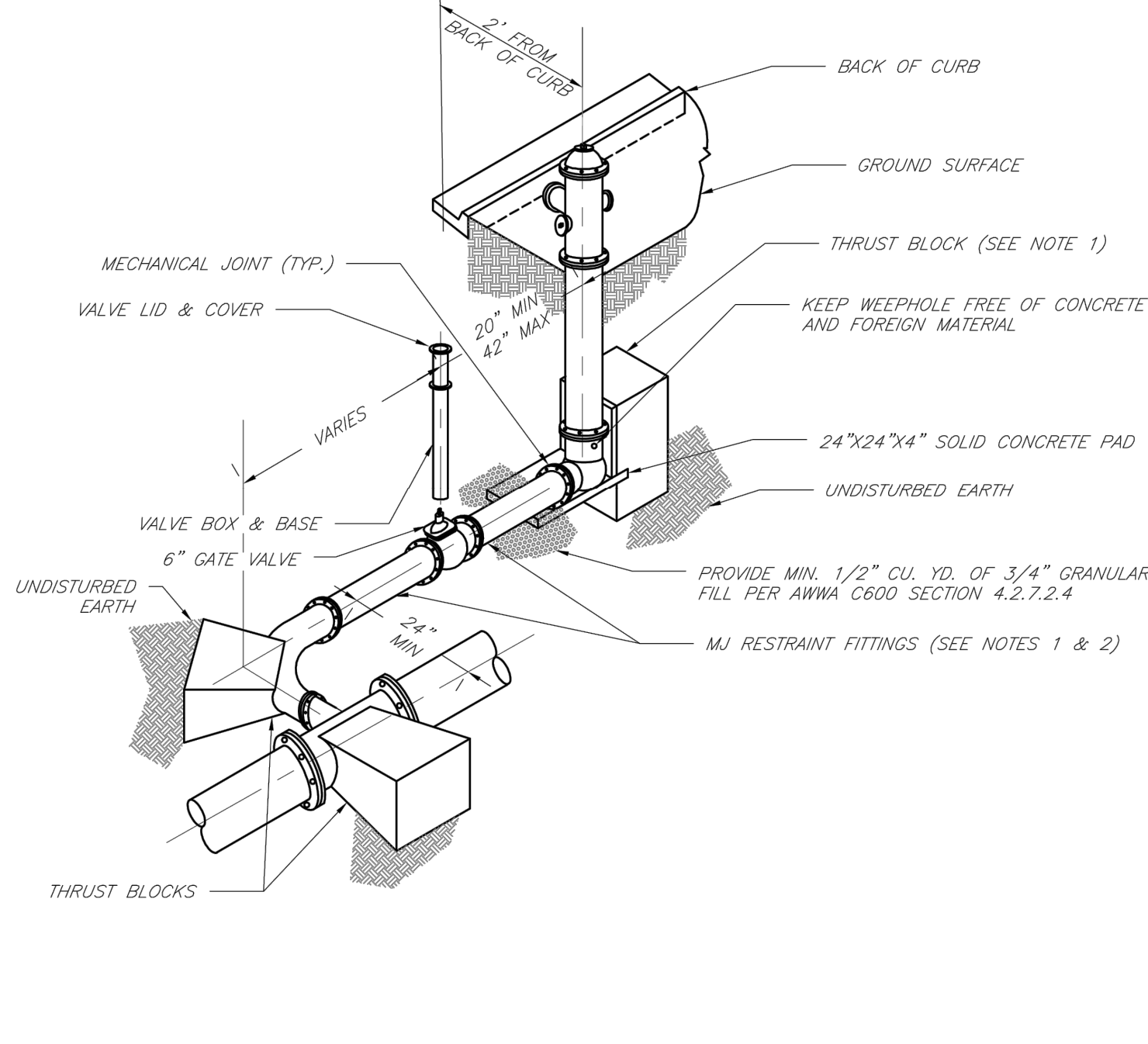


- NOTES:
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
 2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
 3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
 4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
 5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10" FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
 6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.



LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
HYDRANT INSTALLATION - STRAIGHT SET

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-7
Rev: 1/14
Rev:



- NOTES:
1. WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
 2. GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
 3. SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
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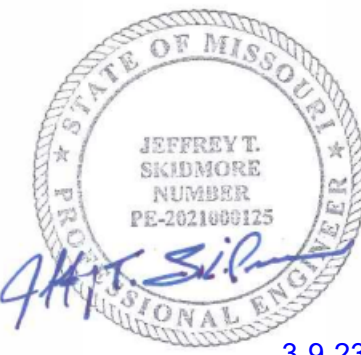
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063
HYDRANT WITH 90 DEGREE BEND

Date: 02/13
Drawn By: JN
Checked By: DL
FILE: WAT-8
Rev: 1/14
Rev:

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JTS
BY 3/09/2023
DATE

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3-9-23

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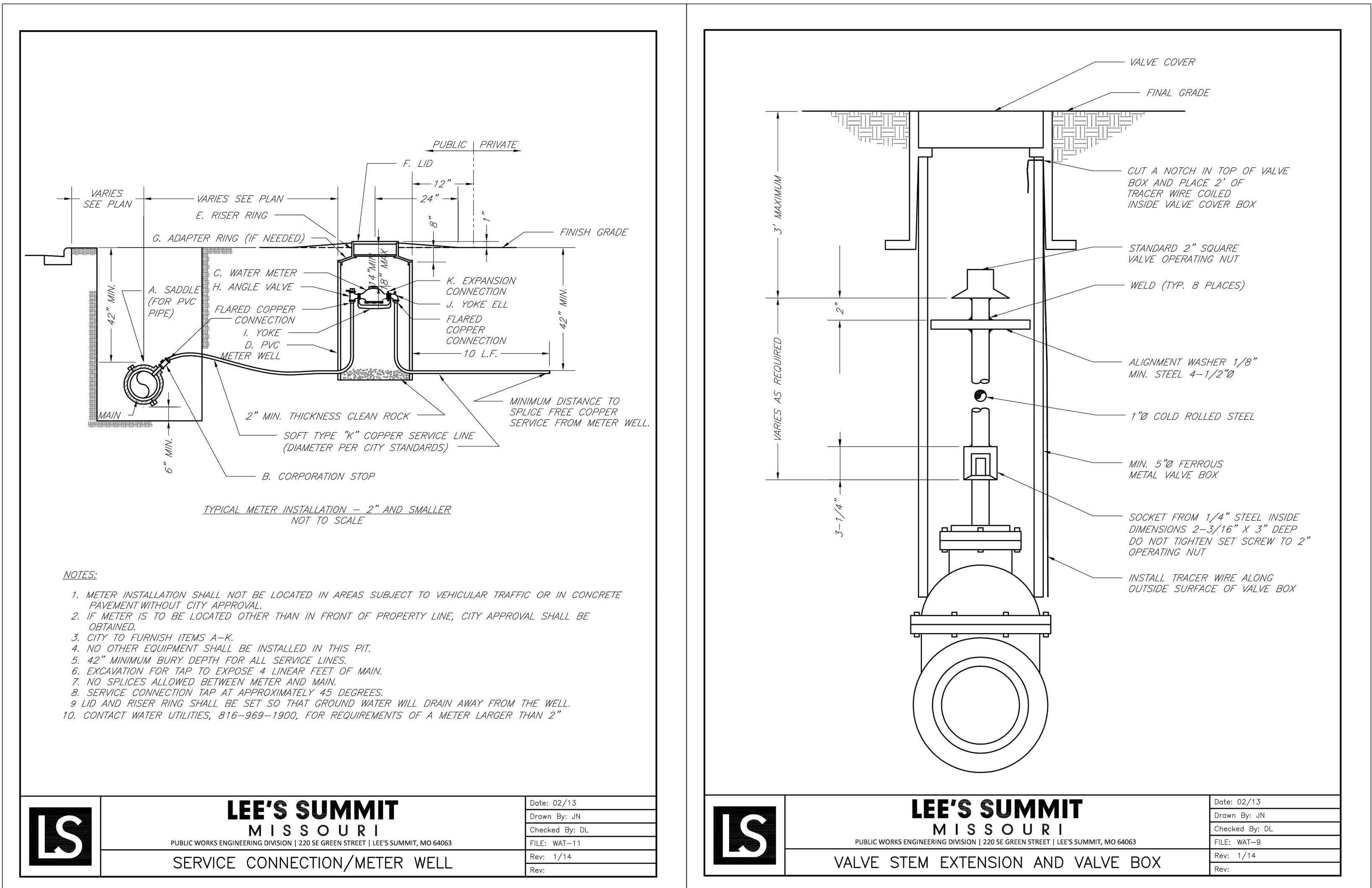
DETAILS

ASI #1

SHEET

W3.0
OF

Record Drawing



CONFORMING TO
CONSTRUCTION
RECORDS

JTS
BY

3/09/2023
DATE