

# Town Centre Logistics Public Water Main Plans

## Lot 4 & Tract A

### Section 29, Township 48 North, Range 31 West

#### LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

**WATER:**

- 1 - THE CONTRACTOR SHALL COORDINATE WITH THE DEVELOPMENT ENGINEERING INSPECTOR PRIOR TO ANY CONNECTIONS TO THE PUBLIC WATER SUPPLY.
- 2 - FIRE HYDRANTS SHALL BE OPTIC YELLOW WATEROUS "PACER" MODEL NO. WB-67-250 WITH NON-RISING STEM OR CITY ENGINEER APPROVED EQUAL. HYDRANTS SHALL HAVE A 5 1/4" VALVE WITH A 4 1/2" PUMPER NOZZLE AND 2 - 2 1/2" HOSE NOZZLES (LEFT HAND OPENING).
- 3 - GATE VALVES SHALL BE MUELLER NO. 2360 Series HUB END "O" RING SEAL NON-RISING STEM. VALVES LARGER THAN 12" SHALL BE BUTTERFLY VALVES MANUFACTURED BY THE HENRY PRATT COMPANY OR CITY ENGINEER APPROVED EQUAL. LEFT HAND OPENING. MINIMUM 200# TESTING AWWA.

4 - ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF 42 INCHES. STREET GRADING SHALL BE COMPLETED PRIOR TO BEGINNING CONSTRUCTION OF WATER MAINS.

5 - ALL BENDS, TEES AND FIRE HYDRANTS SHALL BE INSTALLED WITH SUITABLE CONCRETE THRUST BLOCKS POURED IN PLACE AGAINST UNDISTURBED EARTH AND PER CITY OF LEES SUMMIT AND APWA STANDARDS.

6 - THE MINIMUM SEPARATION BETWEEN THE PROPOSED WATER MAIN AND SANITARY OR STORM SEWERS IS AS FOLLOWS:  
 A - SANITARY SEWERS: HORIZONTAL = 10 FEET - VERTICAL = 18 INCHES  
 B - STORM SEWERS: HORIZONTAL = 10 FEET - VERTICAL = 18 INCHES  
 THESE SEPARATIONS SHALL PREVAIL OVER ANY DATA SHOWN IN THESE PLANS AND THE CONTRACTOR SHALL INSTALL BENDS OR OTHER FITTINGS AS NECESSARY TO ACHIEVE THE REQUIRED SEPARATIONS.

7 - ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813

8 - THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

PROPERTY DESCRIPTION

*Tract 1*  
 All of Lot 2, Lee's Summit Town Centre, Lot 1 & Lot 2, a subdivision in the City of Lee's Summit, Jackson County, Missouri.

*Tracts 2, 3 and 4:*  
 All that part of the N 1/2 of the NW 1/4 of Section 29, Township 48 North, Range 31 West, now in the City of Lee's Summit, Jackson County, Missouri, more particularly described as follows: Commencing at the Northeast corner of said NW 1/4 of Section 29; thence S 1° 35' 52" W, along the East line of the N 1/2 of the NW 1/4 of said Section 29, a distance of 990.83 feet, to the Easterly prolongation of the North line of Lot 3, Lee's Summit Town Centre; thence N 88° 15' 22" W, along the prolongation of the North line of said Lot 3, a distance of 30.00 feet, to the NE corner of said Lot 3, being the Point of Beginning of subject tract; thence continuing N 88° 15' 22" W, along the North line of said Lot 3, a distance of 530.91 feet to the NW corner of said Lot 3, said point also being on the East line of Lot 1, Lee's Summit Town Centre, Lot 1 & Lot 2; thence (the following 5 courses are along the perimeter of said Lot 1) N 1° 42' 31" E, a distance of 255.47 feet; thence N 88° 17' 29" W, a distance of 57.36 feet; thence N 1° 42' 31" E, a distance of 151.50 feet; thence N 88° 17' 29" W, a distance of 683.90 feet; S 1° 35' 47" W, a distance of 151.50 feet, to the NE corner of Lot 2, Lee's Summit Town Centre, Lot 1 & Lot 2; thence N 88° 17' 29" W, along the North line of said Lot 2, a distance of 75.63 feet, to the NW corner of said Lot 2, also point on the East right-of-way line of Town Centre Boulevard; thence N 1° 42' 31" E, along said Easterly right-of-way, a distance of 405.81 feet to a point of curvature; thence continuing along the East, Southeasterly and South right-of-way line, on a curve to the right, having a Radius of 270.00 feet for an arc length of 424.28 feet to a point of tangency; thence continuing along the South right-of-way line, S 88° 15' 23" E, a distance of 1075.54 feet, to the point of intersection of the South line of Town Centre Boulevard and the West right-of-way line of Independence Avenue; thence S 1° 35' 52" W, along said West right-of-way line, a distance of 930.95 feet to the Point of beginning.

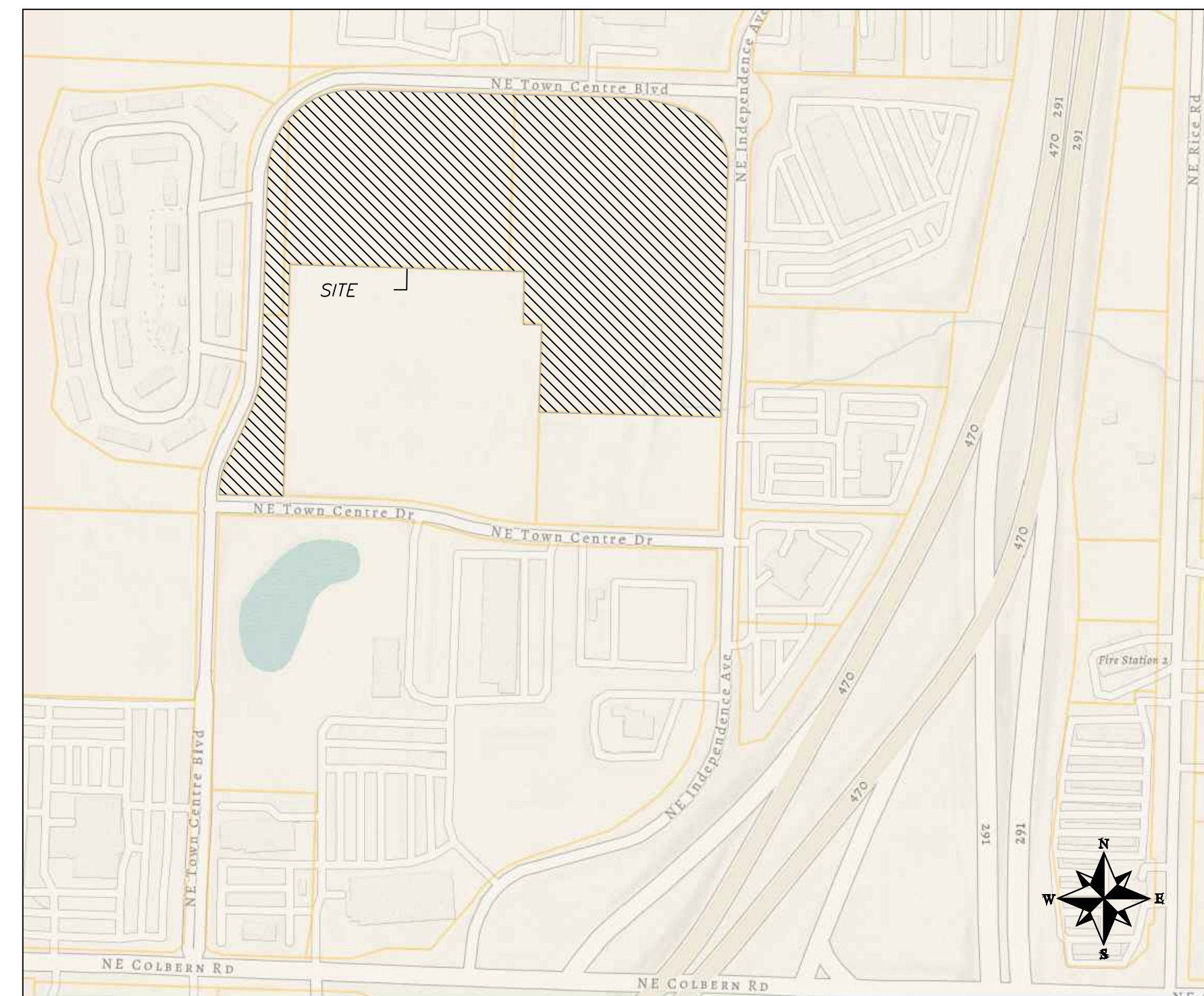
*Tracts 1-4 contains 985,741.48 sq. ft. or 22.63 acres, more or less.*

**OIL - GAS WELLS**

ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

**FLOOD INFORMATION:**

THE SUBJECT PROPERTY SURVEYED LIES WITHIN A FLOOD ZONE DESIGNATED ZONE (X), AREAS LOCATED OUTSIDE THE 100 YEAR FLOOD PLAIN, PER F.E.M.A. MAP, COMMUNITY PANEL NO. 29095CD430G EFFECTIVE DATE: JANUARY 20, 2017.



Vicinity Map

**DEVELOPER:**  
 DAVID GEVERS  
 INDEPENDENCE SAFETY STORAGE NORTH II LLC  
 1120 NW EAGLE RIDGE BLVD STE A  
 GRAIN VALLEY, MO 64029  
 Phone:

**INDEX OF SHEETS:**

- C.500 ~ COVER SHEET
- C.501 ~ WATER MAIN GENERAL LAYOUT
- C.502 ~ WATER MAIN LINE PLAN & PROFILE
- C.503 ~ WATER MAIN LINE PLAN & PROFILE
- C.504 ~ DETAIL SHEET

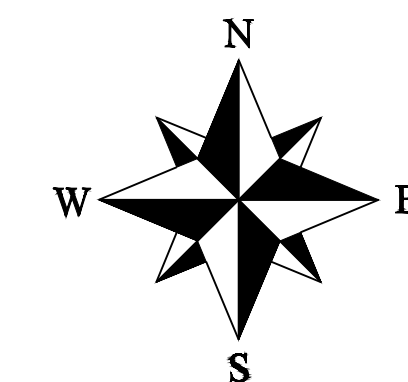
**Summary of Quantities:**

ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
<b>WATER</b>		
FIRE HYDRANT ASSEMBLY	UNIT	5.00
8" WATER LINE	LF	1,738.47
CONNECT TO EXISTING	UNIT	2.00
8" GATE VALVE	UNIT	4.00
TEES, CROSSES AND BENDS	UNIT	12.00
THRUST BLOCK	UNIT	12.00

**UTILITY COMPANIES:**

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS.

- EVERGY ~ 298-1196
- MISSOURI GAS ENERGY ~ 756-5261
- SOUTHWESTERN BELL TELEPHONE ~ 761-5011
- COMCAST CABLE ~ 795-1100
- WILLIAMS PIPELINE ~ 422-6300
- CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800
- CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200
- CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900
- MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483



**LEGEND:**

- B/L - BUILDING SET-BACK
- C/A - COMMON AREA
- D/E - DRAINAGE EASEMENT
- FND. - FOUND
- L/E - LANDSCAPE EASEMENT
- L.N.A. - LIMITS OF NO ACCESS
- R/W - RIGHT OF WAY
- SAN - SANITARY SEWER LINE
- S/W - SIDEWALK
- U/E - UTILITY EASEMENT
- W - WATER LINE
- ST - STORM SEWER LINE

**ENGINEER'S CERTIFICATION:**

I HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DESIGNED AND THESE PLANS PREPARED IN ACCORDANCE WITH THE CURRENT DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT, MISSOURI AND THE STATE OF MISSOURI. I FURTHER CERTIFY THAT THESE PLANS WERE DESIGNED IN ACCORDANCE TO AASHTO STANDARDS.

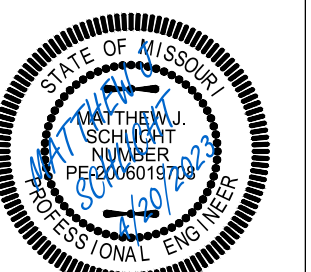


Professional Registration  
 Missouri  
 Engineering 200502188-D  
 Surveying 200500319-D  
 Kansas  
 Engineering E-1695  
 Surveying LS-218  
 Oklahoma  
 Engineering 6254  
 Nebraska  
 Engineering CA2821

Town Centre Logistics Lot 4 & Tract A  
 LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

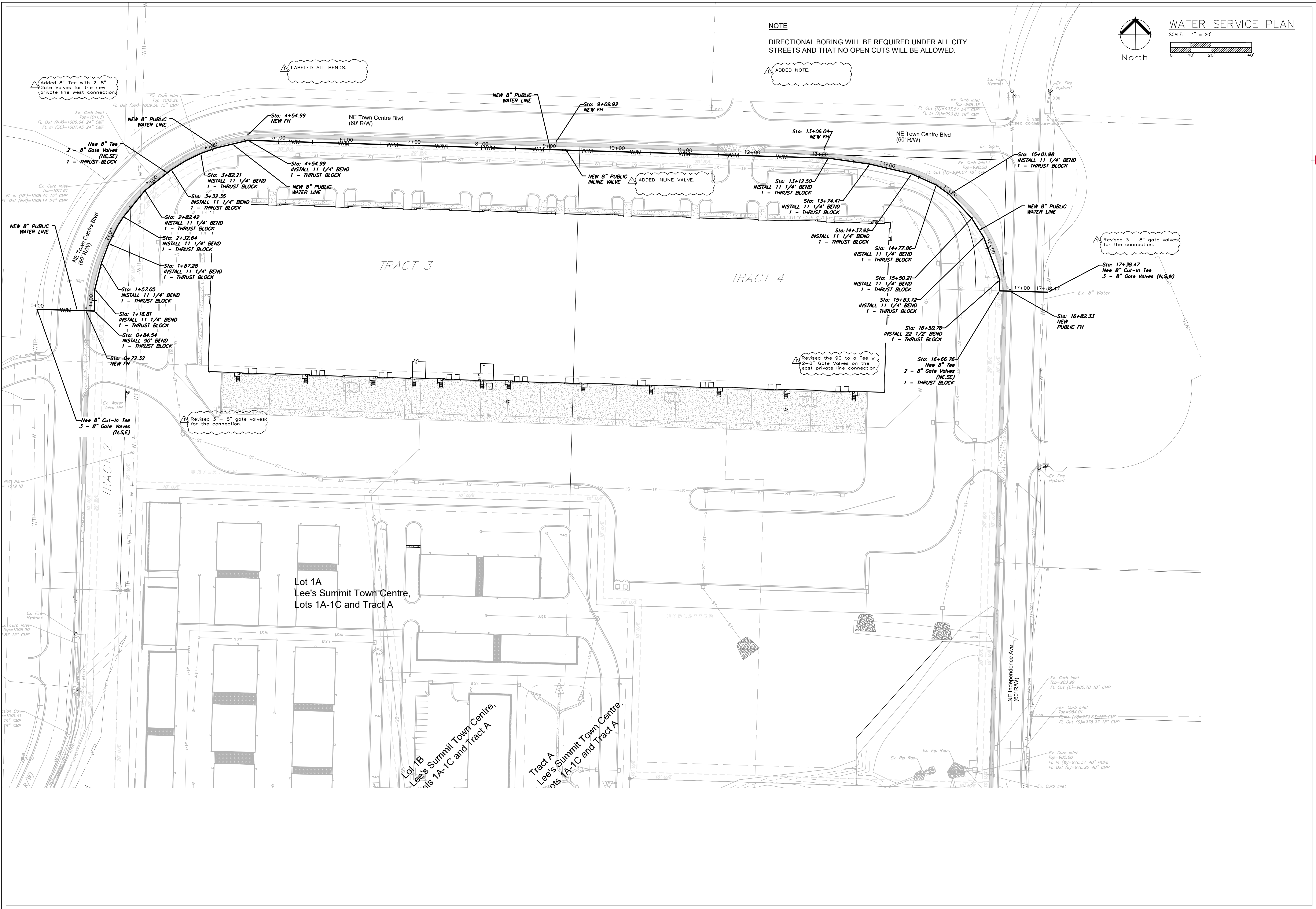
Project: TOWN CENTRE, LSHO  
 Issue Date: March 13, 2023

Water Main Cover Sheet  
 Construction Plans for:  
 Town Centre Logistics Lot 4 & Tract A  
 Lee's Summit, Jackson County, Missouri

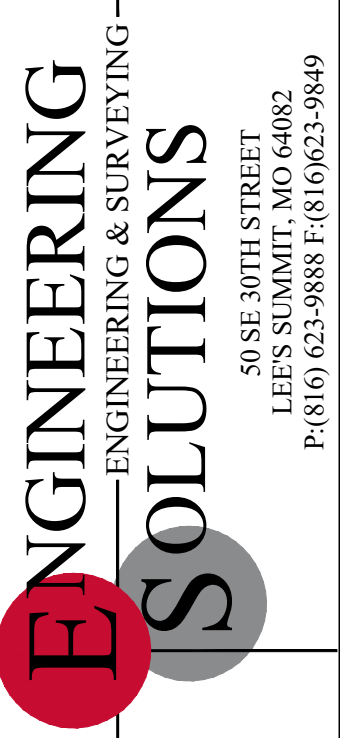
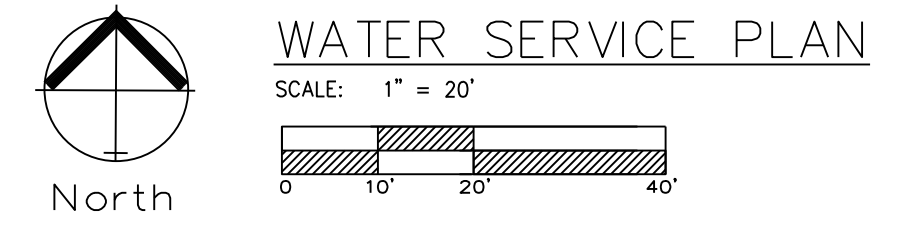


Matthew J. Schlicht  
 MO PE 2006019708  
 KS PE 19071  
 OK PE 25226

REVISIONS



**NOTE**  
DIRECTIONAL BORING WILL BE REQUIRED UNDER ALL CITY STREETS AND THAT NO OPEN CUTS WILL BE ALLOWED.



Professional Registration  
Missouri  
Engineering 2005022188-D  
Surveying 2005006189-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

Project:  
Town Centre Logistics Lot 4 & Tract A  
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Project:  
TOWN CENTER,  
LSMO  
Issue Date:  
March 13, 2023

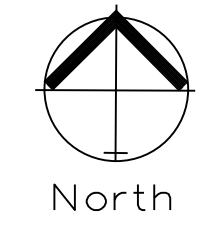
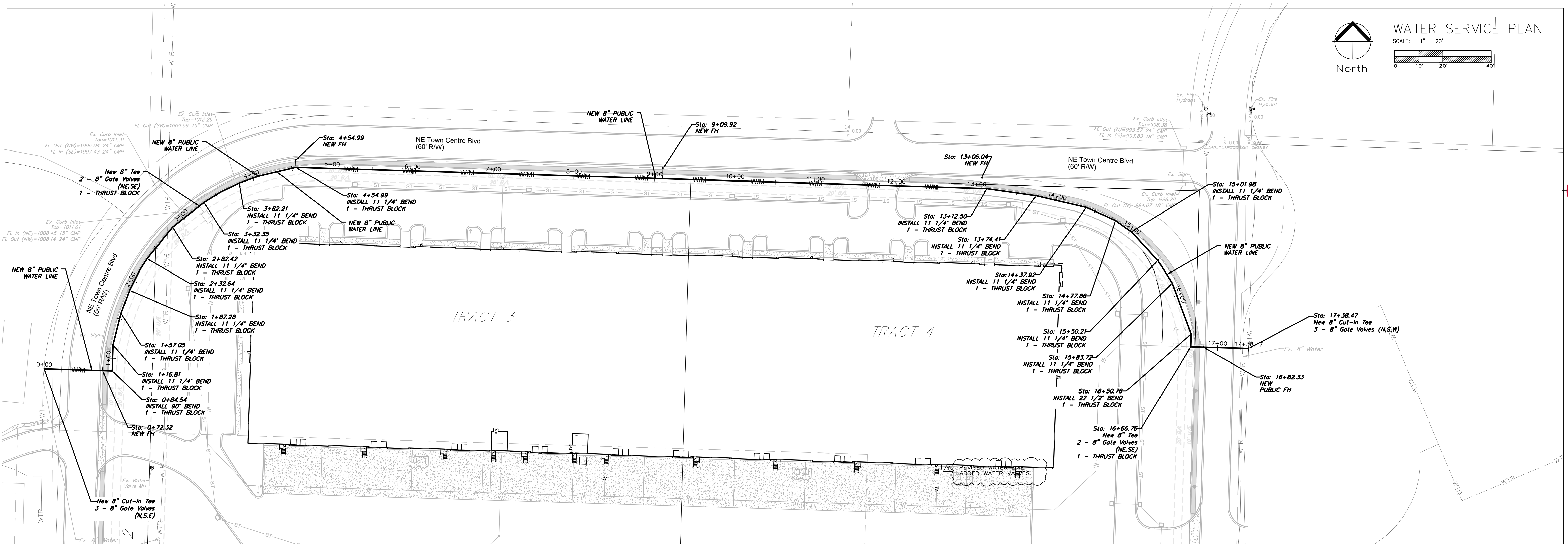
Water Service Plan  
Construction Plans for:  
Town Centre Logistics Lot 4 & Tract A  
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht  
MO PE 2006019708  
KS PE 19071  
OK PE 25226

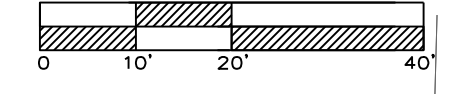
REVISIONS

NO.	DATE	DESCRIPTION

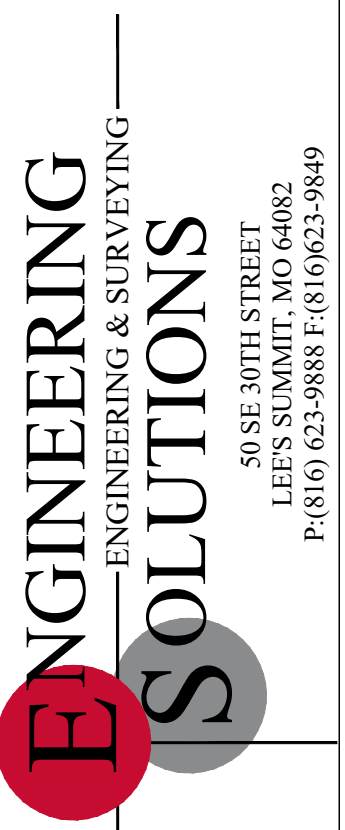
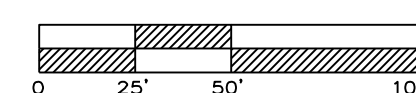
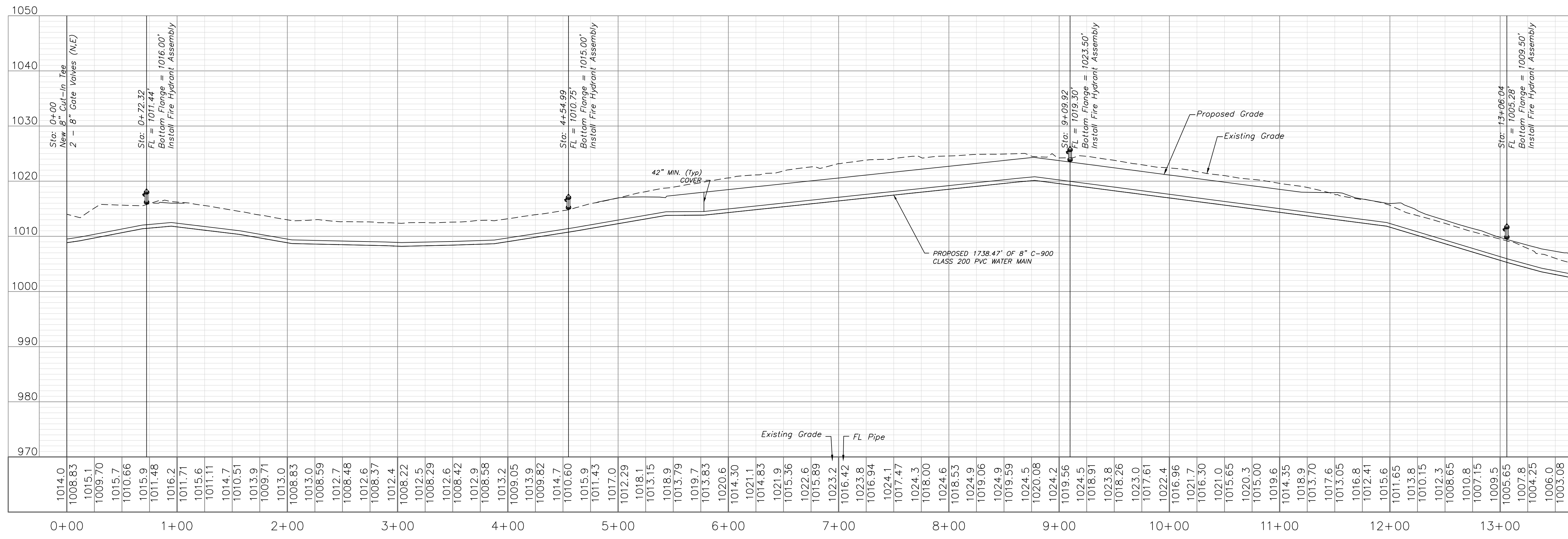


WATER SERVICE PLAN

SCALE: 1" = 20'



# WATERLINE 1



Professional Registration  
 Missouri  
 Engineering 2005002188-D  
 Surveying 200500319-D  
 Kansas  
 Engineering E-1895  
 Surveying LS-218  
 Oklahoma  
 Engineering 6254  
 Nebraska  
 Engineering CA2821

Project:  
 TOWN CENTER,  
 LSHO  
 Issue Date:  
 March 13, 2023

Water Service Plan  
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 Town Centre Logistics Lot 4 & Tract A  
 Lee's Summit, Jackson County, Missouri



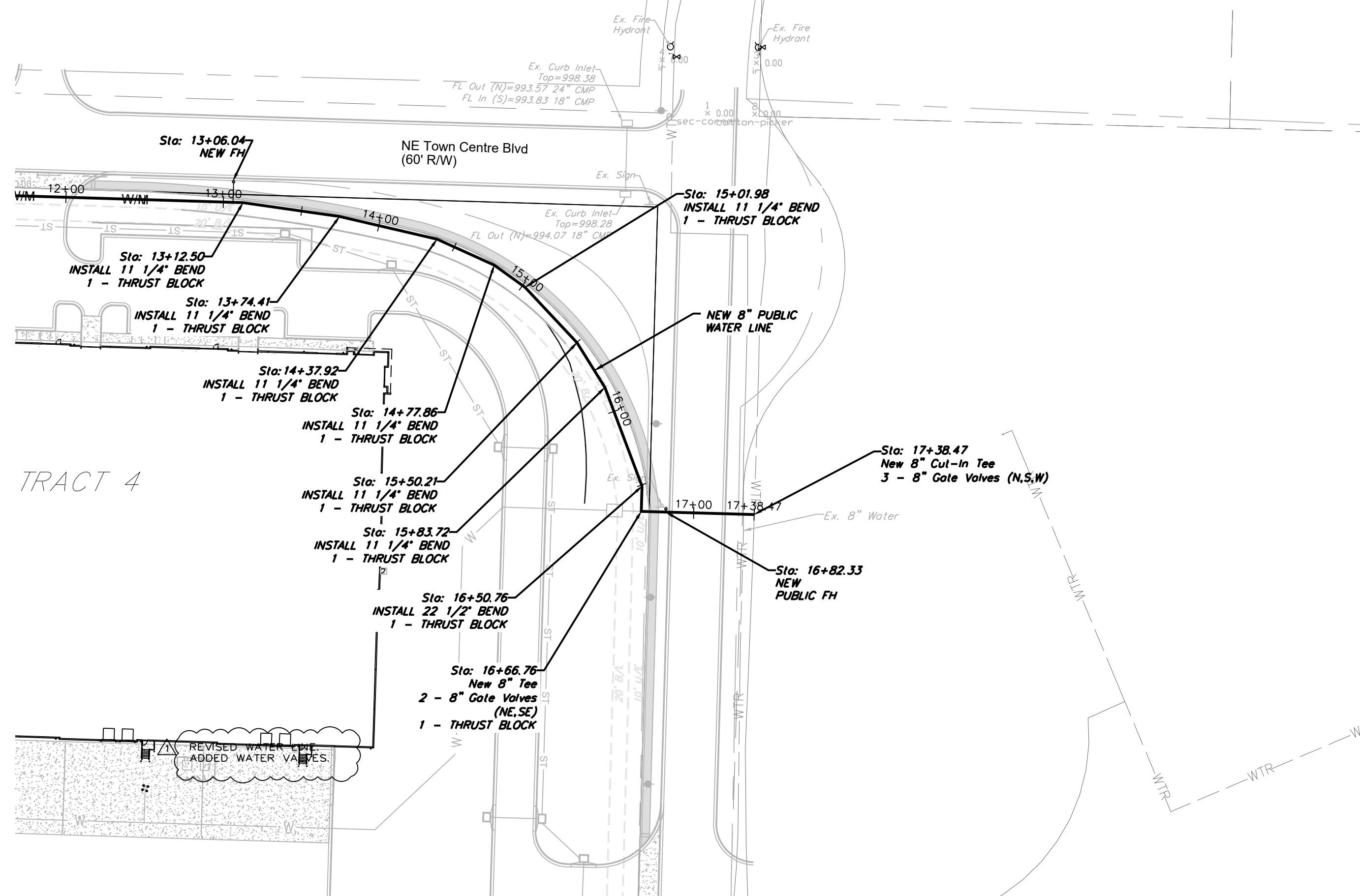
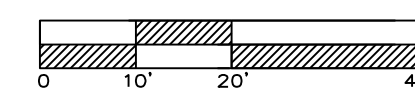
Matthew J. Schlicht  
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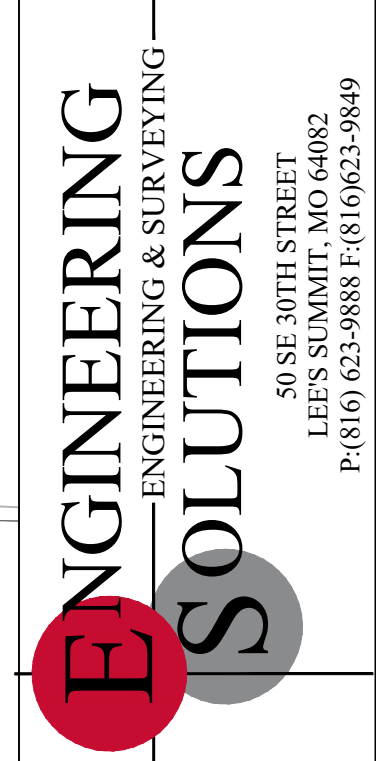
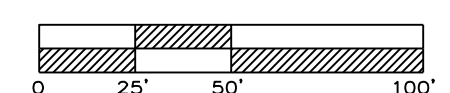
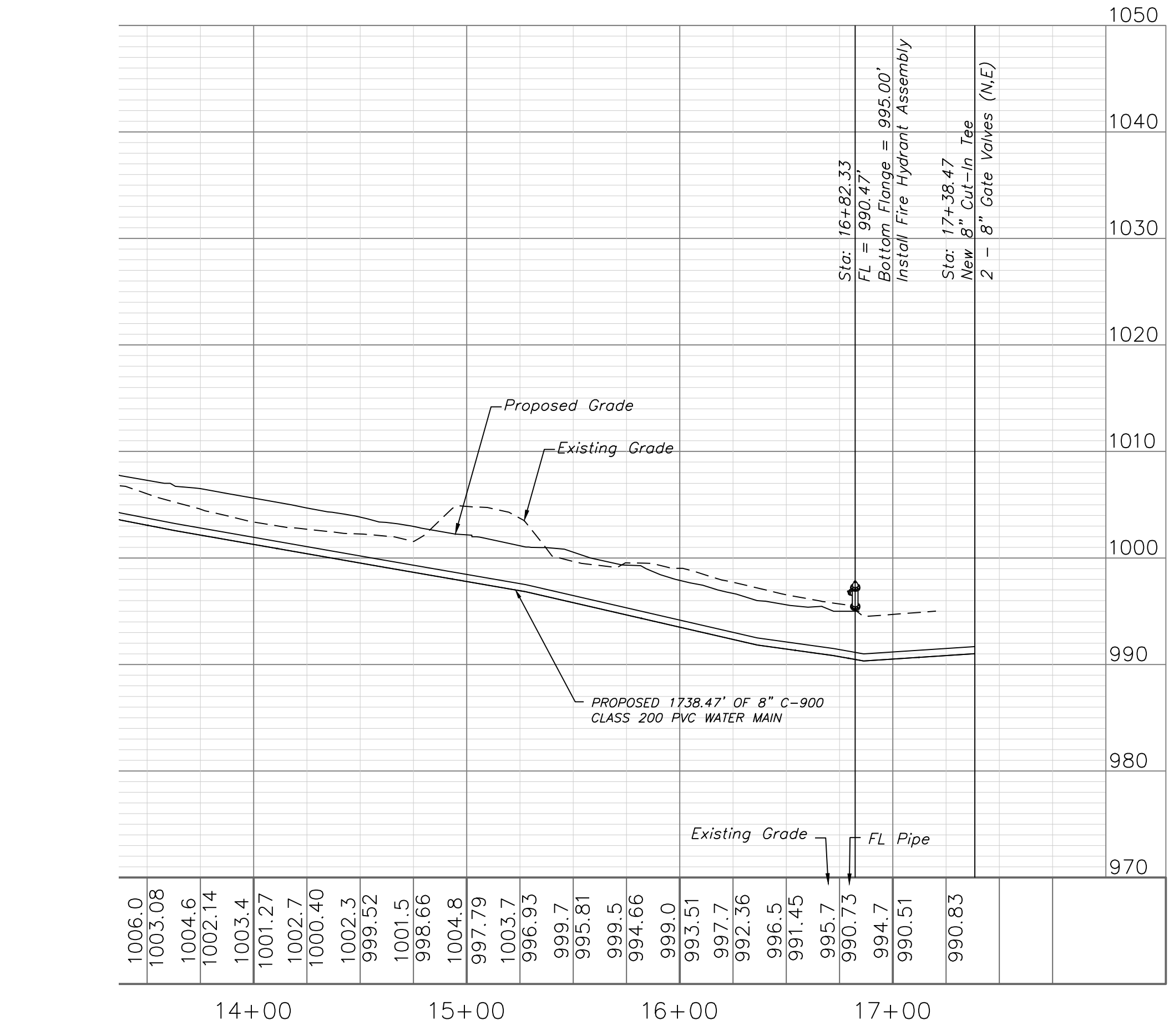



WATER SERVICE PLAN

SCALE: 1" = 20'



TRACT 4



Professional Registration  
Missouri Engineering 2005002188-D  
Surveying 2005000318-D  
Kansas Engineering E-1695  
Surveying LS-218  
Oklahoma Engineering 6254  
Nebraska Engineering CA2821

Project: Town Centre Logistics Lot 4 & Tract A  
Lee's Summit, Jackson County, Missouri

Project: TOWN CENTER, LSMO  
Issue Date: March 13, 2023

Water Service Plan  
Construction Plans for:  
Town Centre Logistics Lot 4 & Tract A  
Lee's Summit, Jackson County, Missouri



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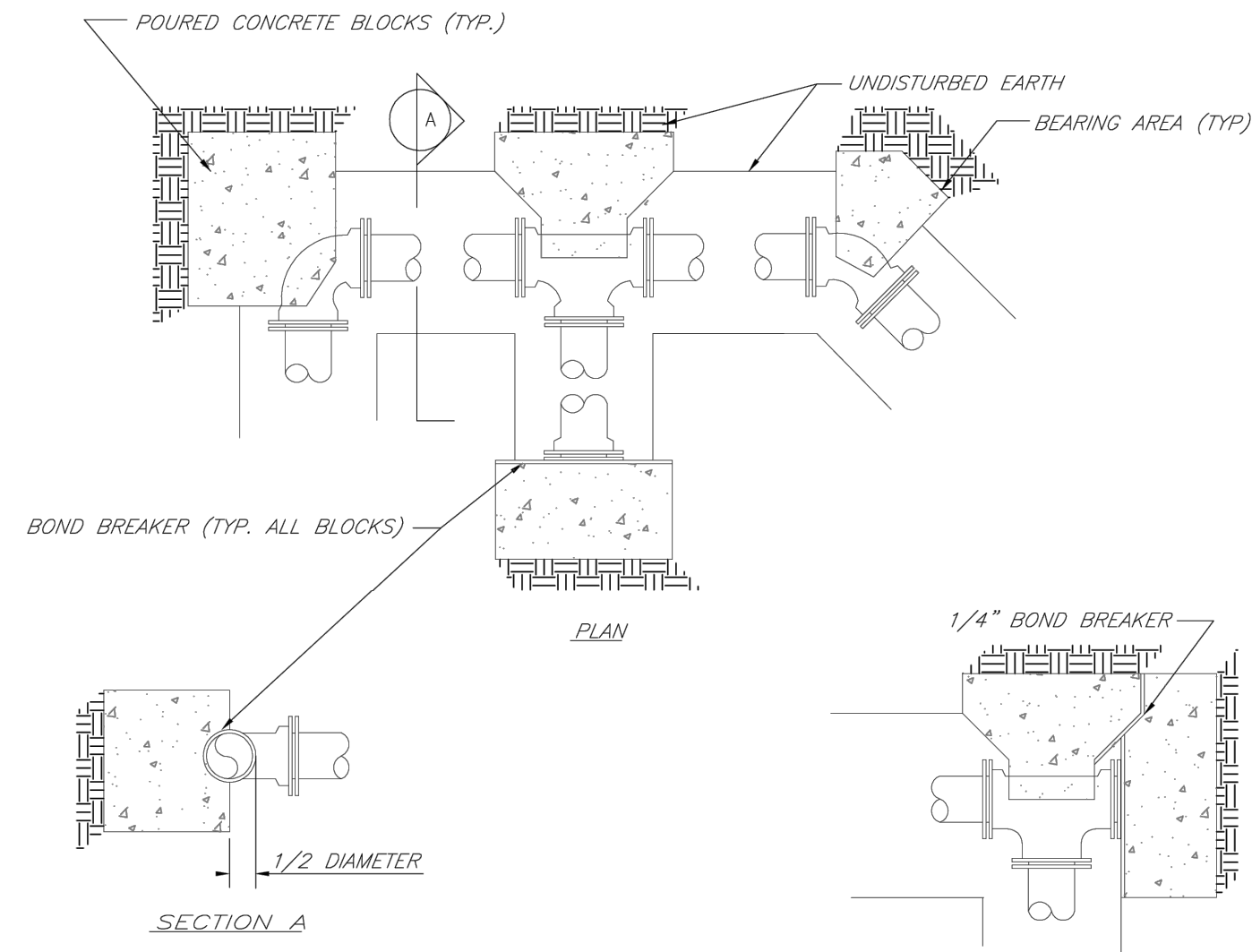
REVISIONS

No.	Description

REQUIRED CONCRETE BEARING AREA (SQUARE FEET - SF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 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	35.3	19.6	10.0	5.0
16	33.5	47.4	25.6	13.1	6.6
18	42.4	58.7	32.5	16.5	8.3
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.

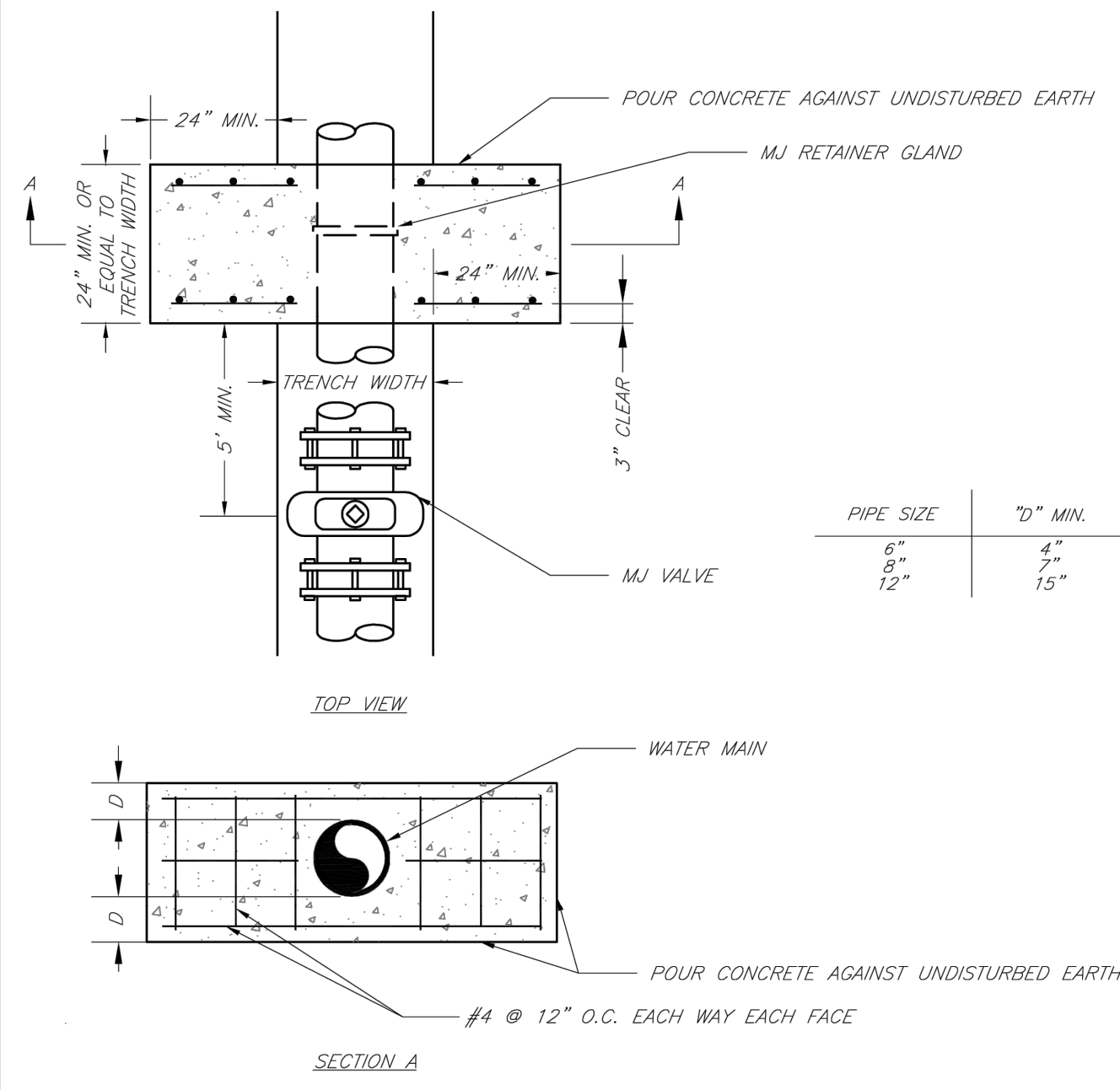
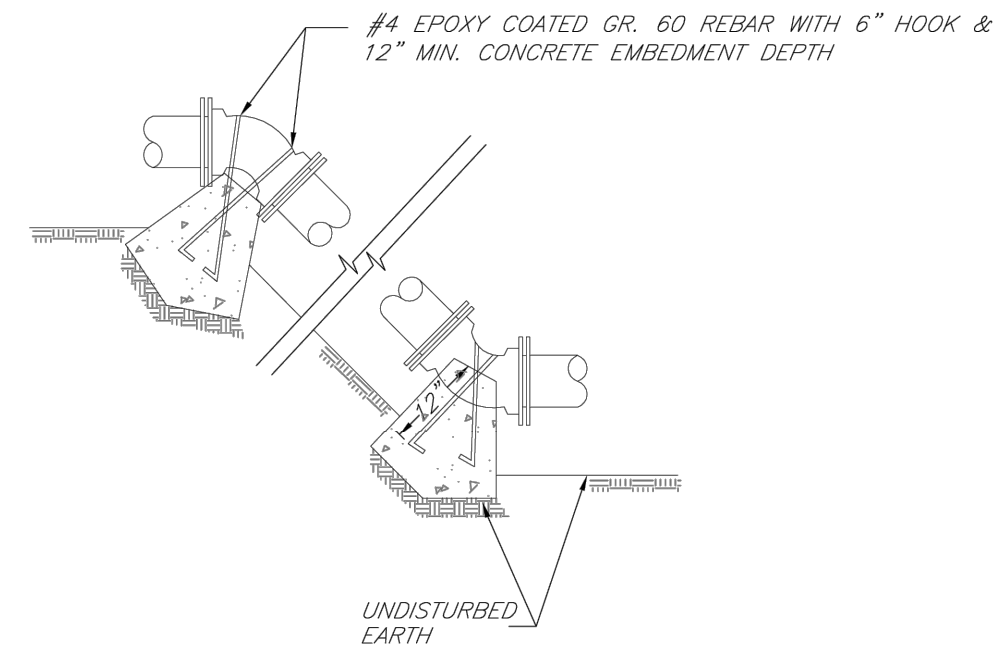
- NOTES:
- ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
  - MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
  - BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
  - DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.



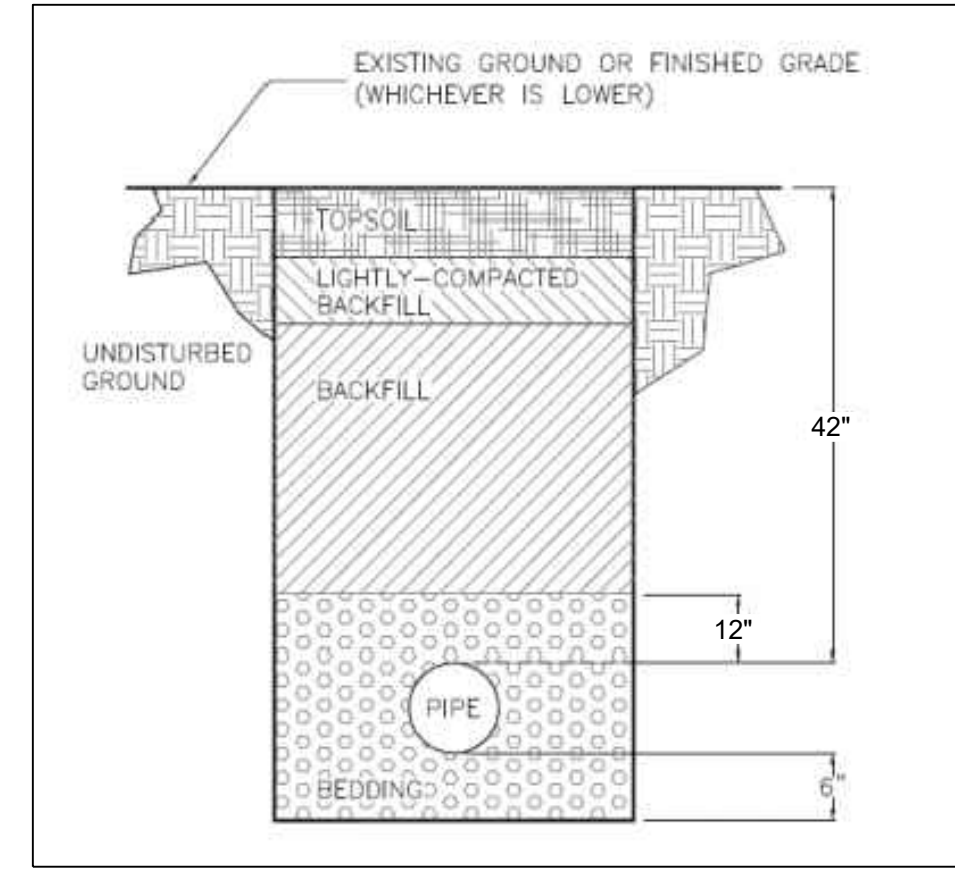
REQUIRED CONCRETE VOLUME (CUBIC FEET - CF)

NOM. DIA. (INCHES)	TEE, PLUG	90 BEND	45 BEND	22.5 BEND	11.25 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	287.1	154.6	78.8	39.6
14	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.
16	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.
18	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.
20	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.
24	REST. JT.	REST. JT.	REST. JT.	REST. JT.	REST. JT.

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



- NOTE:
- THIS DETAIL NOT TO BE USED FOR PIPE GREATER THAN 12"



TRENCH AND BACKFILL DETAIL  
N.T.S.

**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

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

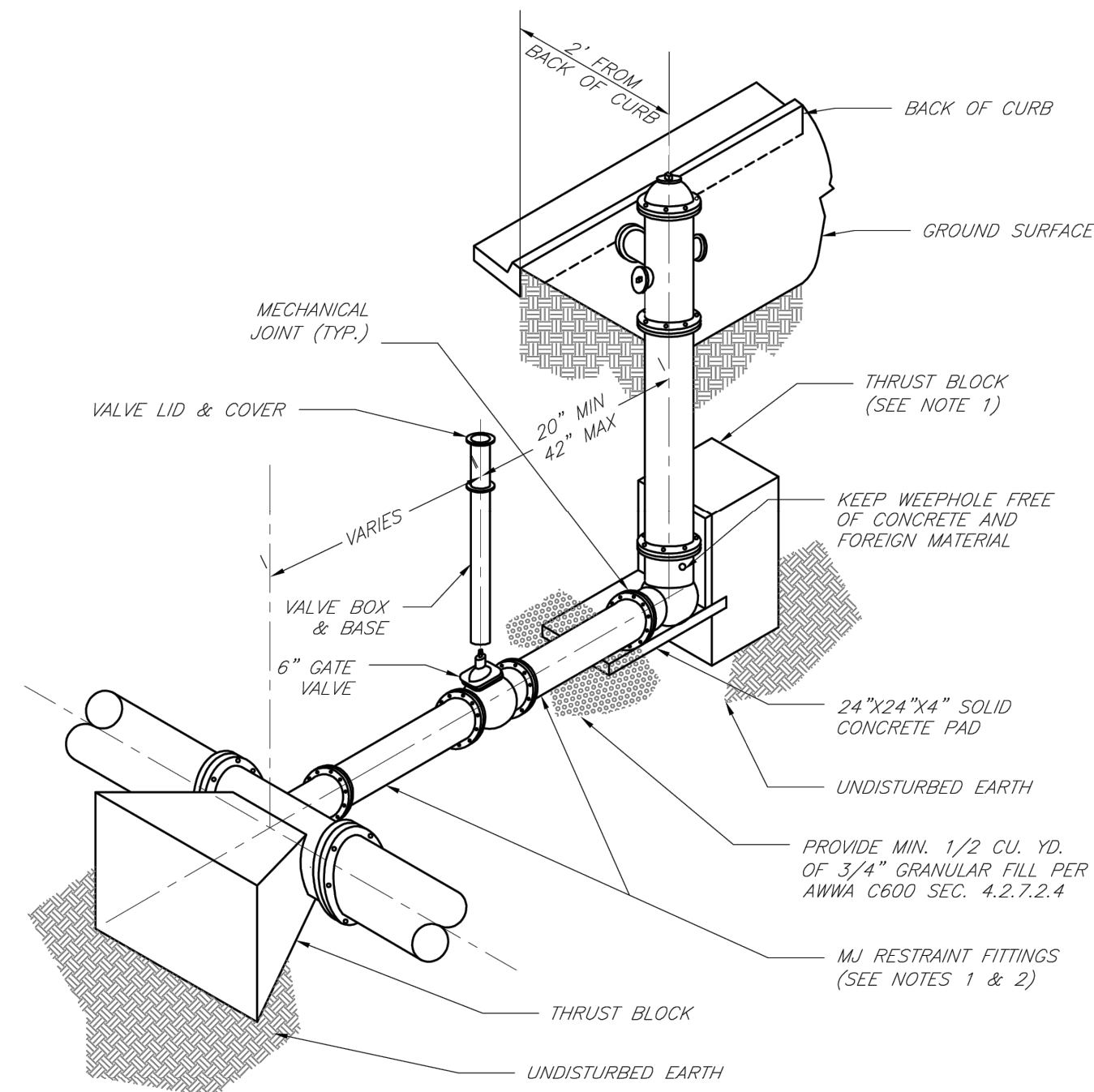
**VERTICAL THRUST BLOCKS**

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

**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

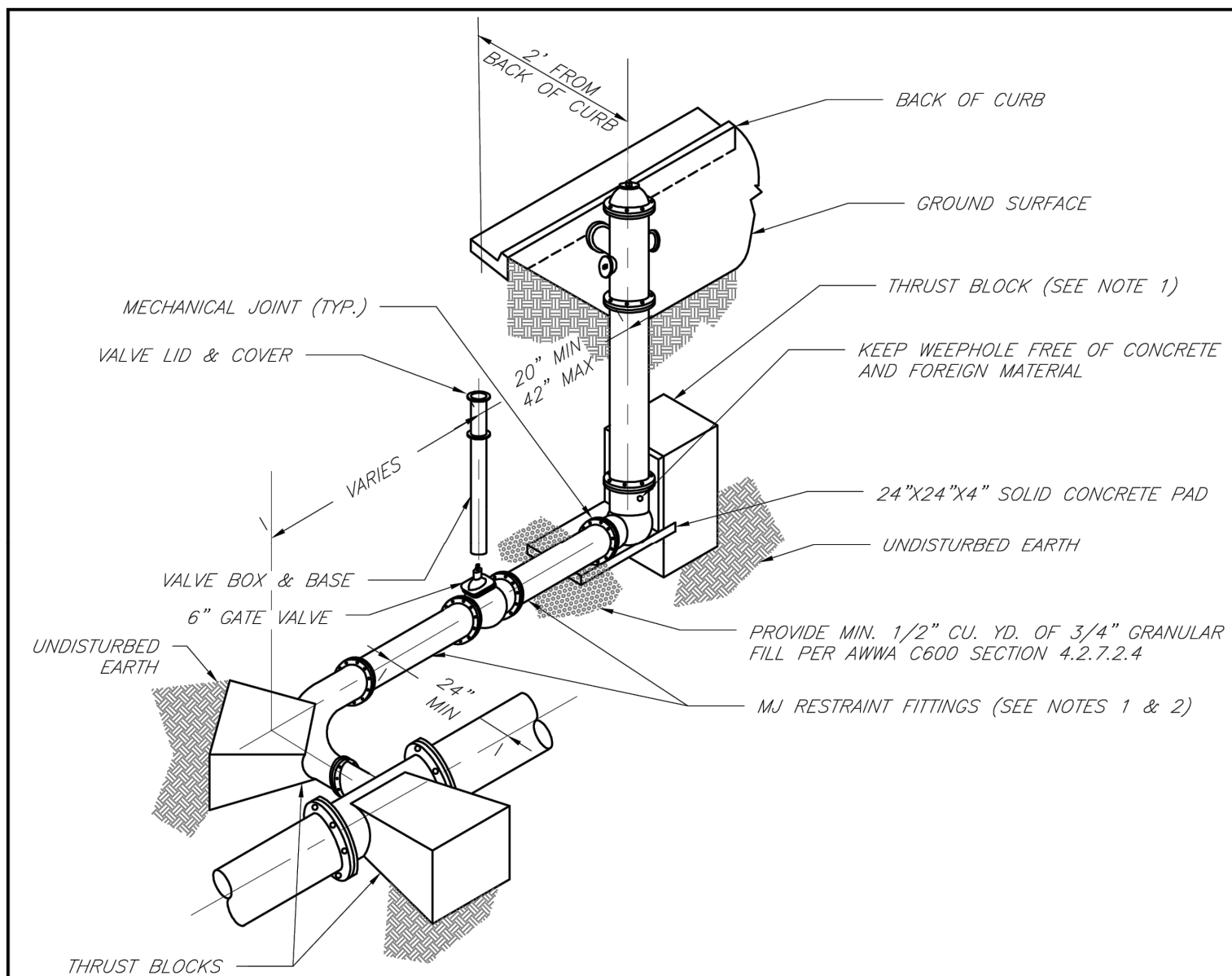


- NOTES:
- WHEN RETAINER GLANDS ARE USED IN LIEU OF MECHANICAL JOINT (MJ) RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
  - GATE VALVE MAY BE BOLTED DIRECTLY TO MJ RESTRAINT TEE.
  - SEE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR FIRE HYDRANT, VALVES, VALVE BOX LID, AND COVER.
  - BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
  - 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.
  - 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

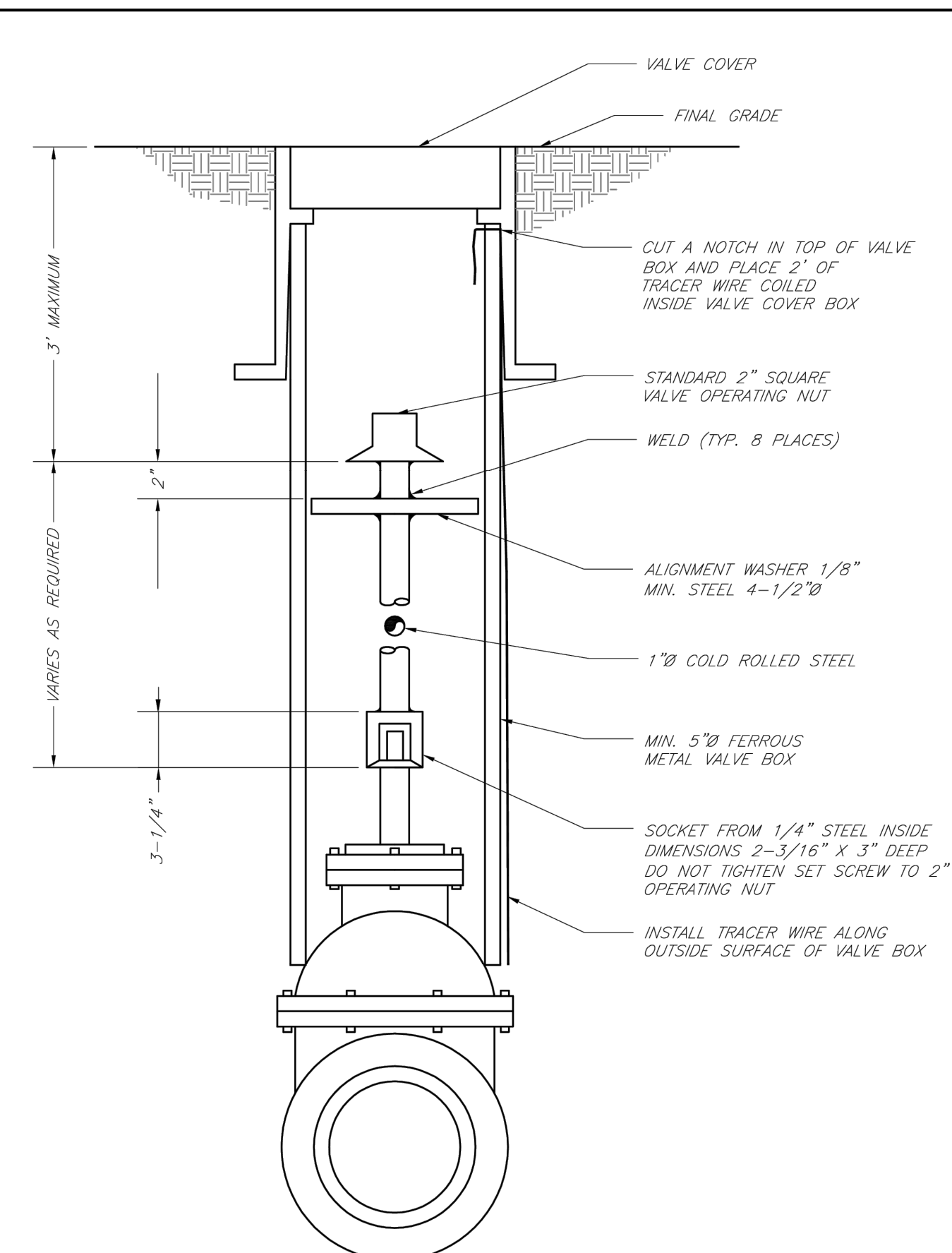


- NOTES:
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**LEE'S SUMMIT MISSOURI**  
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

**HYDRANT WITH 90 DEGREE BEND**

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



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

**VALVE STEM EXTENSION AND VALVE BOX**

Date: 02/13  
Drawn By: JN  
Checked By: DL  
FILE: WAT-9  
Rev: 1/14