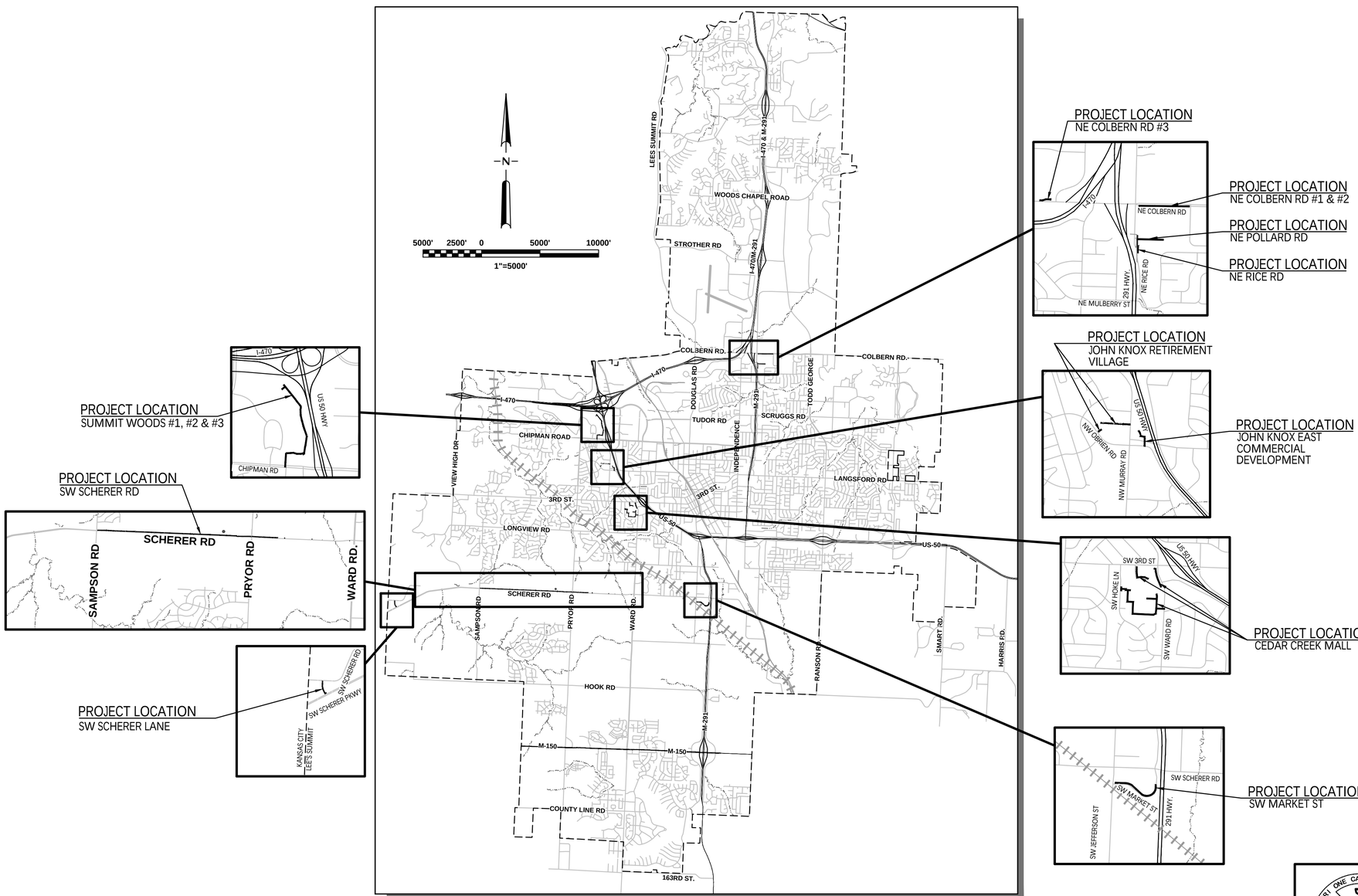
WATER MAIN REPLACEMENT - FY24

WATER UTILITIES DEPARTMENT

CITY OF LEE'S SUMMIT, MISSOURI

PHASE 1 - BID NO. 722

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED



VICINITY MAP

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UTILITY COMPANIES

BEFORE EXCAVATING CALL: 1 (800) DIG-RITE

GAS
SPIRE ENERGY
RICHI GARCIA
(816) 507-0713
richi.garcia@spireenergy.com

ELECTRICITY
EVERGY
PHIL INGRAM
(816) 347-4339
1105 SE US HWY 40
BLUE SPRINGS, MO 64014
phillip.ingram@evergy.com

TELEPHONE
AT&T
CRAIG PERKINS
(816) 275-2721 500
East 8th Street, Room 1152
Kansas City, MO 64106
CP0772@att.com

WATER & WASTEWATER
LEE'S SUMMIT WATER UTILITIES
(816) 969-1940
1200 SE HAMBLEN RD.
LEE'S SUMMIT, MO 64081

STREETS & STORMWATER
PUBLIC WORKS OPERATIONS DIVISION
(816) 969-1870
1971 SE HAMBLEN RD.
LEE'S SUMMIT, MO 64082

SCHOOLS
LS R-7 SCHOOL DISTRICT
TRANSPORTATION
KEITH HENRY
(816) 986-2405

LS R-7 SCHOOL DISTRICT FIBER OPTICS
KINZIE WOODERSON
(816) 986-105

CABLE
COMCAST
JIM DUFF
(816) 795-2257
3400 NW DUNCAN RD.
BLUE SPRINGS, MO 64015
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GOOGLE FIBER
ANDREA SAKLA
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908 BROADWAY BLVD.
KANSAS CITY, MO 64105
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SPECTRUM
(816) 508-7287
TROY PREWITT, STEVE BAXTER
8221 WEST 119TH STREET
OVERLAND PARK, KS 66213
troy@cablem.com
steve.baxter@twcable.com

MISSOURI ONE CALL SYSTEM, INC. 1-800-344-7483 STOP-CALL BEFORE YOU DIG!

NOTE:
KNOWN UNDERGROUND UTILITIES IN THE VICINITY OF THE WORK ARE SHOWN ON THESE PLANS, ALTHOUGH OTHERS MAY EXIST. THE LOCATIONS SHOWN ARE BELIEVED TO BE REASONABLY CORRECT, BUT DO NOT PURPORT TO BE ABSOLUTELY SO. BEFORE STARTING WORK, THE CONTRACTOR SHALL GIVE NOTICE TO AND OBTAIN INFORMATION FROM EACH OWNER AND OPERATOR OF EXISTING UNDERGROUND FACILITIES IN ACCORDANCE WITH THE MISSOURI UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION STATUTE (RSMO CHAPTER 319.015 - 319.050).

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	03/06/2025

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: COVER SHEET

STATE OF MISSOURI KAREN L. ALLIPPI NUMBER PE-2023042571 PROFESSIONAL ENGINEER
3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

GENERAL NOTES:

1. CONTRACTOR SHALL THOROUGHLY REVIEW AND BECOME FAMILIAR WITH THE PROJECT PLANS, SPECIFICATIONS AND ANY SPECIAL CONDITIONS OF THE CONTRACT DOCUMENTS PRIOR TO BEGINNING CONSTRUCTION ON THE PROJECT.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.

3. CONTRACTOR SHALL NOT BE ALLOWED TO WORK WEEKENDS OR HOLIDAYS WITHOUT REQUESTING PRIOR APPROVAL FROM THE CITY THREE WORKING DAYS IN ADVANCE.

4. CONTRACTOR SHALL MAINTAIN THRU TRAFFIC AT ALL TIMES. IF ONE LANE IS TEMPORARILY CLOSED, CONTRACTOR SHALL PROVIDE FLAGGERS AND SIGNAGE PER THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

5. ALL WORK SHALL BE WITHIN EXISTING CITY RIGHT-OF-WAY, UTILITY EASEMENTS OR TEMPORARY EASEMENTS.

6. CONSTRUCTION VEHICLES AND EQUIPMENT SHALL NOT BE PARKED ON PRIVATE PROPERTY. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM SAID PROPERTY OWNER(S) IF SUCH ACCESS IS REQUIRED. NO PAYMENT SHALL BE MADE FOR ADDITIONAL CONSTRUCTION EASEMENTS.

7. ALL EXISTING UTILITIES INDICATED ON THE DRAWINGS ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER; HOWEVER ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR TO OBTAIN THE EXACT LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THEIR EXPENSE. CONTRACTOR SHALL HAVE EACH UTILITY MARKED BY MISSOURI-ONE-CALL.

8. CONTRACTOR SHALL SEQUENCE CONSTRUCTION TO MINIMIZE OUT OF SERVICE TIME OF WATER MAINS AND SERVICE TO CUSTOMERS.

9. SPECIFIC REQUIREMENTS FOR WATER LINE CONSTRUCTION SEQUENCING ARE NOTED IN SECTION 01105 OF THE PROJECT MANUAL. THE CONTRACTOR SHALL NOTIFY CITY STAFF SEVEN CALENDAR DAYS PRIOR TO ANY WATER MAIN SHUTDOWN. CONTRACTOR SHALL GIVE 48 HOURS NOTICE FOR UTILITY SERVICE DISRUPTION TO ANY SPECIFIC PROPERTY OWNERS AND/OR TENANTS.

10. CONTRACTOR SHALL NOTIFY LEES SUMMIT WATER UTILITIES DEPARTMENT AND CITY INSPECTOR AT LEAST 48 HOURS IN ADVANCE OF ANY WORK INVOLVING CLOSING OR OPENING OF ANY WATER VALVES.

11. CONTRACTOR SHALL NOTIFY UTILITY OWNERS AT LEAST 48 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED ACROSS AND/OR ADJACENT TO UTILITIES.

12. OPERATION OF WATER VALVES SHALL BE DONE UNDER THE SUPERVISION OF CITY INSPECTOR AND/OR WATER UTILITY DEPARTMENT PERSONNEL.

13. CONTRACTOR SHALL MINIMIZE DRIVEWAY ACCESS DISRUPTION TO RESIDENTS. AT LOCATION OF DRIVEWAY APPROACH DEMOLITION AND RECONSTRUCTION, THE RESIDENT SHALL BE PROVIDED A MINIMUM OF 48-HOURS NOTICE PRIOR TO COMMENCEMENT OF THE WORK. TRAFFIC SHALL BE MAINTAINED AT PRIVATE ENTRANCES BY PLACEMENT OF TEMPORARY AGGREGATE SURFACING OR OTHER ACCEPTABLE MEANS.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, AND IF DAMAGED, RESTORING MAILBOXES, DRIVEWAY MARKERS, YARD LIGHTS, BASEMENT DRAINS, ROOF DRAINS, SPRINKLER SYSTEMS, UTILITY SERVICE LINE CONNECTIONS, GATES, FENCES, RETAINING WALLS, AND OTHER ITEMS TO PRE-CONSTRUCTION CONDITION OR EQUAL. NO PAYMENT SHALL BE MADE FOR THIS RESTORATION UNLESS LISTED IN THE CONTRACT UNIT PRICES OR STATED IN THIS NOTE. CONTRACTOR SHALL BE PAID FOR REPAIRING SANITARY SEWER SERVICE LATERALS ON A TIME AND MATERIALS BASIS.

15. ALL FENCE REPLACEMENT SHALL BE RELOCATED TO THE PROPERTY LINES, UNLESS THE EXISTING FENCE WAS LOCATED INSIDE THE PROPERTY LINES. FENCE INSIDE THE PROPERTY LINES SHALL BE PLACED IN ITS ORIGINAL LOCATION. GATES AND FENCE CORNERS SHALL BE RE-ESTABLISHED AT THE ORIGINAL LOCATIONS UNLESS INDICATED BY THE PLANS. REMOVALS SHALL BE AS SHOWN ON THE PLANS OR AS APPROVED BY THE OWNER. REMOVALS NOT APPROVED BY OWNER SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.

16. CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING SURVEY MONUMENTS WHICH INCLUDE RIGHT OF WAY MARKERS AND PROPERTY PINS. THE CONTRACTOR SHALL BE REQUIRED TO REESTABLISH SURVEY MONUMENTS WHICH ARE DAMAGED OR DESTROYED BY CONSTRUCTION OPERATIONS. MONUMENTS SHALL BE REESTABLISHED BY A MISSOURI LICENSED LAND SURVEYOR IN ACCORDANCE WITH MISSOURI STATE LAWS AT CONTRACTOR'S EXPENSE.

17. CONNECTIONS TO EXISTING WATER MAINS, FITTINGS OR VALVES SHALL BE CONSIDERED SUBSIDIARY TO THE INSTALLATION OF THE NEW WATER MAIN. NO DIRECT PAYMENT SHALL BE MADE FOR CONNECTING TO EXISTING WATER MAINS, FITTINGS OR VALVES.

18. NO PIPE BURSTING PITS SHALL BE LOCATED WITHIN RESIDENTIAL DRIVEWAYS WITHOUT PRIOR APPROVAL OF THE CONSTRUCTION PROJECT MANAGER.

19. ALL VALVES SHALL BE INSTALLED HORIZONTALLY SUCH THAT THE OPERATING NUT AND STEM ARE PLUMB.

20. CONTRACTOR SHALL PROVIDE TEMPORARY FITTINGS AND RESTRAINT AS NECESSARY TO MAINTAIN SERVICE ON EXISTING AND PROPOSED WATERLINES. INSTALLING TEMPORARY FITTINGS AND RESTRAINT SHALL BE SUBSIDIARY TO THIS WORK AND THE CONTRACTOR SHALL RECEIVE NO DIRECT PAYMENT.

21. MEGALUG IS NOT CONSIDERED PERMANENT RESTRAINT AND MUST BE USED IN CONJUNCTION WITH STRADDLE OR THRUST BLOCKS.

22. WATER SERVICE LINES SHALL BE BORED UNDER PAVED SURFACES.

23. THE PHRASE "REMOVE AND REPLACE" AS USED IN THESE DRAWINGS SHALL REQUIRE THE CONTRACTOR TO REMOVE EXISTING MATERIALS FROM THE PROJECT SITE. THE CONTRACTOR SHALL INSTALL NEW MATERIALS TO REPLACE THOSE MATERIALS REMOVED FROM THE PROJECT SITE.

24. CONTRACTOR SHALL NOT LOCATE VALVE BOXES IN THE CURB.

25. WHEN THE VALVE OPERATING NUT IS MORE THAN 3 FEET BELOW THE VALVE COVER, CONTRACTOR SHALL FURNISH AND INSTALL A VALVE OPERATING NUT EXTENSION IN ACCORDANCE WITH CITY OF LEE'S SUMMIT STANDARDS.

26. CONTRACTOR SHALL ABANDON ALL VALVES LOCATED ALONG WATER MAINS TO BE ABANDONED BY THIS PROJECT. ABANDONING VALVES SHALL BE CONSIDERED SUBSIDIARY TO THE PIPE INSTALLATIONS AND NO DIRECT PAYMENT SHALL BE MADE TO THE CONTRACTOR.

27. ALL DUCTILE IRON FITTINGS, PIPES, BENDS, AND VALVES SHALL BE POLYETHYLENE ENCASED IN ACCORDANCE WITH AWWA C105 "POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE." POLYWRAP SHALL BE MINIMUM 12 MIL CLEAR POLY.

28. EXISTING WATER SERVICES SHALL REMAIN IN SERVICE UNTIL NEW WATERLINE IS TESTED, DISINFECTED, ACCEPTED, AND READY FOR SERVICE TRANSFER. THE CONTRACTOR SHALL CONNECT ALL SERVICE LINES TO A NEW WATER MAIN WHERE OLD WATER MAINS ARE REPLACED OR ABANDONED.

29. ALL EXISTING HYDRANTS, VALVES AND METERS TO BE REMOVED SHALL BE RETURNED TO THE CITY OF LEE'S SUMMIT WATER UTILITIES OFFICE AT 1200 SE HAMBLEN ROAD, UNLESS DIRECTED OTHERWISE BY CITY INSPECTOR.

30. ALL ABANDONED WATER PIPE SHALL BE DRAINED AS MUCH AS POSSIBLE AND CAPPED WITH MINIMUM OF 12" OF CONCRETE.

31. CONTRACTOR SHALL PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL TO PREVENT SOIL AND/OR DEBRIS FROM ENTERING STREETS, DITCHES, CREEKS, YARDS OR RESIDENCES. REPAIR OR DREDGING OF SURFACE WATERS THAT RECEIVE STORMWATER RUNOFF FROM THE PROJECT SITES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

32. EROSION AND SEDIMENT CONTROL (ESC) SHALL BE THE CONTRACTOR'S RESPONSIBILITY INCLUDING MAINTAINING ESC SYSTEMS, REPLACING DAMAGED OR FAILED ESC DEVICES, AND INSPECTING THE SITE IN ORDER TO REPAIR THE ESC SYSTEM WITHIN 24 HOURS AFTER A SIGNIFICANT 1/2-INCH RAIN EVENT.

33. AREA DISTURBED SHALL BE KEPT TO A MINIMUM. ALL VEGETATED AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED WITH SOD UNLESS OTHERWISE NOTED. ALL OTHER DISTURBED AREAS SHALL BE RESTORED TO MATCH PRE-CONSTRUCTION CONDITIONS ACCORDING TO THE STANDARD DETAILS OF THESE PLANS.

34. PIPE RESTRAINT MEASURES ARE SHOWN FOR BASIC INFORMATION PURPOSES. MORE RESTRAINTS MAY BE NECESSARY DEPENDING UPON HOW THE WORK IS PERFORMED. INSTALLING PIPE RESTRAINT MEASURES SHALL BE SUBSIDIARY TO THE PIPE INSTALLATION AND NO DIRECT PAYMENT SHALL BE MADE TO THE CONTRACTOR.

35. ALL RETAINING WALLS THAT ARE DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR. RESTORING RETAINIING WALL SHALL BE CONSIDERED SUBSIDIARY TO THE PIPE INSTALLATION AND NO DIRECT PAYMENT SHALL BE MADE TO THE CONTRACTOR.

36. EXCAVATED MATERIALS SHALL NOT BE STORED ON CITY STREETS OVERNIGHT. CONTRACTOR SHALL NOT STORE EXCAVATED MATERIALS IN GRASSY AREAS WHERE TRENCHLESS METHODS ARE USED TO INSTALL A WATER LINE. CONTRACTOR MAY STORE EXCAVATED MATERIALS IN GRASSY AREAS WHERE TRENCH INSTALLATION IS USED TO INSTALL A WATER LINE.

37. CONTRACTOR SHALL SUBMIT COPIES OF WRITTEN AGREEMENTS WITH PROPERTY OWNERS TO THE CITY'S CONSTRUCTION PROJECT MANAGER.

38. CONTRACTOR SHALL FOLLOW THE PVC PIPE ASSOCIATION GUIDE FOR TAPPING AWWA C900 PIPE. STAGGER MULTIPLE TAPS AT LEAST 18 INCHES APART THAT ARE CONNECTED ON OPPOSITE SIDES OF THE WATER MAIN. TAPS ON THE SAME SIDE OF THE WATER MAIN MUST BE AT LEAST 36 INCHES APART.

39. CONTRACTOR SHALL AVOID DAMAGING TREES DURING THE PROJECT. ANY WORK THAT MAY DAMAGE TREES SHALL BE ADDRESSED ON A CASE BY CASE BASIS.

40. NO STREET SHALL BE CLOSED WITHOUT THE APPROVAL OF THE CITY TRAFFIC ENGINEER. THE CONTRACTOR SHALL NOTIFY THE CITY TRAFFIC ENGINEER AT LEAST 14 DAYS IN ADVANCE OF ANY STREET CLOSURE. IF A DETOUR ROUTE AROUND THE CLOSURE IS TO BE PROVIDED, ALL DETOUR SIGNING SHALL BE AS SHOWN ON A PLAN APPROVED BY THE CITY TRAFFIC ENGINEER.

41. THE NEW MAINS MAY BE INSTALLED OFF EXISTING ALIGNMENT, WITHIN THE EASEMENT OR ROW, WITH APPROVAL FROM THE OWNER.

42. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH PROPERTY OWNERS. THIS COST IS CONSIDERED SUBSIDIARY.

43. BY ORDINANCE 17-42, WORKING HOURS WITHIN THE CITY OF LEE'S SUMMIT ARE 7:00 A.M. TO 10:00 P.M. REQUESTS TO WORK BEYOND THESE HOURS MUST BE FILED WITH THE OWNER ONE WEEK IN ADVANCE.

ABBREVIATIONS

APPROX	APPROXIMATELY
ARV	AIR RELEASE VALVE
BFV	BUTTERFLY VALVE
BM	BENCHMARK
BOL	BEGINNING OF LINE
DEPT	DEPARTMENT
DI	DUCTILE IRON
DIA	DIAMETER
DND	DO NOT DISTURB
E	EAST
EA	EACH
ESMT	EASEMENT
ELEC	ELECTRIC
EL	ELEVATION
EOL	END OF LINE
ENGR	ENGINEER
ESC	EROSION AND SEDIMENT CONTROL
FO	FIBER OPTIC
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
LN	LANE
LF	LINEAR FOOT
LS	LUMP SUM
MODOT	MISSOURI DEPT. OF TRANSPORTATION
MJ	MECHANICAL JOINT
N	NORTH
NTS	NOT TO SCALE
PE	POLYETHYLENE
PVC	POLYVINYL CHLORIDE
PC	POWER & CABLE POLE
PT	POWER & TELEPHONE POLE
PTC	POWER, TELEPHONE, & CABLE POLE
PROJ	PROJECT
RJ	RESTRAINED JOINT
R/W	RIGHT OF WAY
S	SOUTH
SF	SILT FENCE
SS	SANITARY SEWER
SSC	SOLID SLEEVE COUPLING
ST	STORM SEWER
SW	SOUTHWEST
SY	SQUARE YARD
STA	STATION
T/E	TRASH ENCLOSURE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
S.E.	SANITARY EASEMENT
W.E.	WATER MAIN EASEMENT
UTIL	UTILITY
W	WEST

LEGEND

EXISTING		PROPOSED
	WATER VALVE	
M	WATER METER	M
	SANITARY SEWER MANHOLE	
	POWER/TRAFFIC SIGNAL POLE	
	FIRE HYDRANT	
	TREE/LARGE BRUSH	
	STORM INLET/JUNCTION BOX	
GM	GAS METER	
MB	MAIL BOX	
PP	POWER POLE	
PA	POWER ANCHOR	
	SIDEWALK	
UGM	UNDERGROUND UTILITY MARKER	
OHP	OVERHEAD ELECTRIC	
UGE	UNDERGROUND ELECTRIC	
SAN	SANITARY SEWER	
W	WATER LINE	W
STM	STORM SEWER	
G	UNDERGROUND GAS LINE	
UGT	UNDERGROUND TELEPHONE	
FO	UNDERGROUND FIBER OPTIC	
UGTV	UNDERGROUND CABLE TV	
	SECTION LINE	
RW	RIGHT-OF-WAY LINE	
P/L	LOT LINE	
PE	PERMANENT EASEMENT LINE	
TCE	TEMPORARY EASEMENT LINE	

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	02/06/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: GENERAL NOTES & LEGEND

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2023042571
PROFESSIONAL ENGINEER
3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
1	MOBILIZATION	LUMP SUM	1
2	CLEARING AND GRUBBING	LUMP SUM	1
3	DEMOLITION AND REMOVAL	LUMP SUM	1
4	WATER LINE PIPE – 6" PVC	LINEAR FT.	1,547
5	WATER LINE PIPE – 6" HDPE	LINEAR FT.	2,581
6	WATER LINE PIPE – 8" PVC	LINEAR FT.	8,568
7	WATER LINE PIPE – 12" PVC	LINEAR FT.	1,793
8	LOWERING WATER MAIN – 6"	LINEAR FT.	33
9	LOWERING WATER MAIN – 8"	LINEAR FT.	116
10	LOWERING WATER MAIN – 12"	LINEAR FT.	40
11	WATER SERVICE LINE - COPPER (ALL SIZES)	LINEAR FT.	545
12	WATER SERVICE - RE-CONNECTIONS (ALL SIZES)	EACH	87
13	WATER METER WELL	EACH	44
14	WATER METER RELOCATION - REUSE EXISTING METER	EACH	7
15	WATER METER SETTER	EACH	7
16	WATER METERE RING AND COVER	EACH	46
17	WATER LINE VALVE – 4" GATE VALVE	EACH	1
18	WATER LINE VALVE – 6" GATE VALVE	EACH	23
19	WATER LINE VALVE – 8" GATE VALVE	EACH	24
20	WATER LINE VALVE – 12" BUTTERFLY OR GATE VALVE	EACH	9
21	WATER LINE VALVE - 20" BUTTERFLY	EACH	4
22	FIRE HYDRANT ASSEMBLY (WITH NEW HYDRANT) (SMALLER THAN 20" MAIN)	EACH	34
23	FIRE HYDRANT ASSEMBLY (WITH NEW HYDRANT) (20 " MAIN)	EACH	13
24	BLOWOFF ASSEMBLY	EACH	1
25	PAVEMENT REPAIR	SQ. YD.	901
26	DRIVEWAYS - CONCRETE RESIDENTIAL	SQ. YD.	25
27	DRIVEWAYS - CONCRETE COMMERCIAL	SQ. YD.	953
28	FENCE (ALL TYPES)	LINEAR FT.	12
29	CURB AND GUTTER (ALL TYPES)	LINEAR FT.	180
30	SIDEWALK - CONCRETE	SQ. YD.	1,438
31	ADA RAMPS - TYPE A	EACH	27
32	ADA RAMPS - TYPE B	EACH	7
33	SOD	SQ. YD.	9,336
34	EROSION CONTROL	LUMP SUM	1
35	TRAFFIC CONTROL	LUMP SUM	1

PIPE INSTALLATION SCHEDULE

SHEET	PROJECT LOCATION	STA.	TO STA.	LENGTH	PROPOSED PIPE	PIPE INSTALLATION
5	JOHN KNOX RETIREMENT VILLAGE	1+00	2+07	107	8" PVC	TRENCH INSTALLATION
5	JOHN KNOX RETIREMENT VILLAGE	4+37	11+76	739	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
6	JOHN KNOX EAST COMMERCIAL DEVELOPMENT	1+00	1+75	75	6" PVC	TRENCH INSTALLATION
6	JOHN KNOX EAST COMMERCIAL DEVELOPMENT	1+75	3+30	155	6" CERTALOK PVC	INSTALL THROUGH EXISTING CASING
6	JOHN KNOX EAST COMMERCIAL DEVELOPMENT	3+30	6+13	283	6" PVC	TRENCH INSTALLATION
/	/	/	/	/	/	/
7	SUMMIT WOODS (#1)	1+00	2+10	110	8" CERTALOK PVC	INSTALL THROUGH EXISTING CASING
7	SUMMIT WOODS (#1)	2+10	4+75	265	8" FUSIBLE PVC	HDD
7	SUMMIT WOODS (#1)	4+75	9+17	442	8" PVC	TRENCH INSTALLATION
7	SUMMIT WOODS (#1)	9+17	12+00	283	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
8	SUMMIT WOODS (#2)	12+00	21+64	964	8" FUSIBLE PVC	HDD
8	SUMMIT WOODS (#2)	21+64	21+84	20	8" PVC	TRENCH INSTALLATION
8	SUMMIT WOODS (#2)	21+84	23+00	116	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
9	SUMMIT WOODS (#3)	23+00	28+71	571	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
10	CEDAR CREEK - LINE A	1+00	5+70	470	6" HDPE	SLIPLINE
/	/	/	/	/	/	/
11	CEDAR CREEK - LINE B	1+00	6+81	581	6" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
12	CEDAR CREEK - LINE C-1	1+00	2+17	117	8" FUSIBLE PVC	HDD
12	CEDAR CREEK - LINE C-1	2+17	2+96	79	8" FUSIBLE PVC	TRENCH INSTALLATION
12	CEDAR CREEK - LINE C-1	2+96	12+00	904	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
13	CEDAR CREEK LINE C-2	12+00	20+17	817	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
14	CEDAR CREEK - LINE E	1+00	3+63	263	6" FUSIBLE PVC	HDD
14	CEDAR CREEK - LINE D	1+00	3+25	225	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
15	NE COLBERN RD (#1)	1+00	8+00	700	12" PVC	TRENCH INSTALLATION
/	/	/	/	/	/	/
16	NE COLBERN RD (#2)	8+00	14+20	620	12" PVC	TRENCH INSTALLATION
/	/	/	/	/	/	/
17	NE COLBERN RD (#3)	0+00	3+05	305	8" PVC	TRENCH INSTALLATION
/	/	/	/	/	/	/
18	NE RICE RD	0+00	0+27	27	8" PVC	TRENCH INSTALLATION
18	NE RICE RD	0+27	4+00	373	12" PVC	TRENCH INSTALLATION
18	NE RICE RD	4+00	4+50	50	12" PVC	HDD
18	NE RICE RD	4+50	5+00	50	12" PVC	TRENCH INSTALLATION
/	/	/	/	/	/	/
19	NE POLLARD ST	0+00	7+05	705	8" PVC	TRENCH INSTALLATION
/	/	/	/	/	/	/
20	SW MARKET ST (#1)	1+00	3+60	260	8" FUSIBLE PVC	HDD
20	SW MARKET ST (#1)	3+60	5+40	180	8" PVC	TRENCH INSTALLATION / HDD
20	SW MARKET ST (#1)	5+40	8+50	310	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
21	SW MARKET ST (#2)	8+50	14+32	582	8" FUSIBLE PVC	HDD
/	/	/	/	/	/	/
24	SCHERER RD (WTR #1-1)	0+00	9+00	900	6" HDPE	SLIPLINE
/	/	/	/	/	/	/
25	SCHERER RD (WTR #1-2)	9+00	12+26	326	6" HDPE	SLIPLINE
25	SCHERER RD (WTR #1-2)	12+26	12+53	27	6" HDPE	TRENCH INSTALLATION
/	/	/	/	/	/	/
26	SCHERER RD (WTR #2)	0+00	8+60	860	6" HDPE	SLIPLINE
/	/	/	/	/	/	/
27	SCHERER LN	1+00	6+77	577	8" PVC	TRENCH INSTALLATION

NOTES:

1. THE PIPE INSTALLATION SCHEDULE INCLUDES TRENCHLESS INSTALLATION TO MINIMIZE SURFACE DISRUPTION AND RESTORATION. TRENCH EXCAVATION MAY BE REQUIRED IN AREAS WHERE USING TRENCHLESS INSTALLATION IS NOT POSSIBLE. IN THE EVENT TRENCH EXCAVATION IS USED IN AN AREA SCHEDULED FOR TRENCHLESS INSTALLATION, ALL ADDITIONAL COSTS SHALL BE COVERED BY THE CONTRACTOR INCLUDING BUT NOT LIMITED TO PAVEMENT REPAIR, DRIVEWAYS, CURB AND GUTTER, SIDEWALK, AND SOD.
2. WATER MAINS CROSSING A STORM SEWER OR SANITARY SEWER WITHIN 18 INCHES OF VERTICAL SEPARATION SHALL HAVE FUSED PIPE JOINTS AND MEGALUG STYLE RETAINER GLANDS AT ALL MECHANICAL JOINTS WITHIN 10 HORIZONTAL FEET FROM THE CROSSING.
3. WATER MAINS INSTALLED PARALLEL TO A STORM SEWER OR SANITARY SEWER WITHIN 10 FEET OF HORIZONTAL SPACING SHALL HAVE FUSED PIPE JOINTS AND MEGALUG STYLE RETAINER GLANDS AT ALL MECHANICAL JOINTS.
4. THE CONTRACTOR SHALL NOT SLIPLINE HDPE PIPE THROUGH A BEND GREATER THAN 22.5 DEGREES.
5. TEMPORARY WATER MAINS SHALL BE REQUIRED IN ALL AREAS WHERE EXISTING SERVICE LINES CONNECT TO WATER MAINS TO BE REPLACED BY CONTRACTOR.

Issued:

Revision	Notes:	
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	03/06/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: QUANTITIES

STATE OF MISSOURI
KAREN L. ALLIGOOD
NUMBER PE-2002042571
PROFESSIONAL ENGINEER
3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

WATER METER SCHEDULE

SHEET	ADDRESS	METER SIZE	SERVICE LINE SIZE
5	1706 NW O'BRIEN ROAD		
5	1702 NW O'BRIEN ROAD	2"	2"
5	510 NW MURRAY ROAD	2"	2"
5	508 NW MURRAY ROAD	2"	2"
5	506 NW MURRAY ROAD	1.5"	1.5"
5	500 NW MURRAY ROAD	2"	2"
/	/	/	/
6	401 NW MURRAY ROAD	1"	1"
6	425 NW MURRAY ROAD	1"	1"
/	/	/	/
7	1692 NW CHIPMAN ROAD	1"	1"
7	1688 NW CHIPMAN ROAD	2"	2"
7	1684 NW CHIPMAN ROAD	2"	2"
7	1664 NW CHIPMAN ROAD	2"	2"
7	1680 NW CHIPMAN ROAD	1"	1"
7	1680A NW CHIPMAN ROAD	2"	2"
7	1672 NW CHIPMAN ROAD	2"	2"
/	/	/	/
8	1640 NW CHIPMAN ROAD	2"	2"
8	1632 NW CHIPMAN ROAD	2"	2"
8	1600 NW CHIPMAN ROAD	2"	2"
/	/	/	/
10	301 SW WARD ROAD (1,2)	1"	1"
10	302 SW WARD ROAD	1"	1"
10	320 SW WARD ROAD (1,2)	1"	1"
/	/	/	/
11	1101 SW 3RD STREET (1,2)	1"	1"
11	300 SW WARD ROAD (1,2)	1.5"	1.5"
/	/	/	/
12	310 SW WARD ROAD	1.5"	1.5"
12	400 SW WARD ROAD	5/8" X 3/4"	3/4"
12	404 SW WARD ROAD (1,2)	5/8" X 3/4"	3/4"
12	406 SW WARD ROAD (1,2)	5/8" X 3/4"	3/4"
12	408 SW WARD ROAD (1,2)	5/8" X 3/4"	3/4"
12	410 SW WARD ROAD	5/8" X 3/4"	3/4"
12	412 SW WARD ROAD	5/8" X 3/4"	3/4"
12	418 SW WARD ROAD	5/8" X 3/4"	3/4"
12	418 SW WARD ROAD	5/8" X 3/4"	3/4"
12	418 SW WARD ROAD	5/8" X 3/4"	3/4"
12	422 SW WARD ROAD	5/8" X 3/4"	3/4"
12	424 SW WARD ROAD	5/8" X 3/4"	3/4"
/	/	/	/
13	428 SW WARD ROAD	5/8" X 3/4"	3/4"
13	430 SW WARD ROAD	5/8" X 3/4"	3/4"
13	432 SW WARD ROAD	5/8" X 3/4"	3/4"
13	434 SW WARD ROAD (2)	5/8" X 3/4"	3/4"
13	436 SW WARD ROAD	5/8" X 3/4"	3/4"
13	438 SW WARD ROAD	1"	1"
13	444 SW WARD ROAD (1,2,3,5)	1.5"	1.5"
13	450 SW WARD ROAD	1"	1"
13	330 SW WARD ROAD (1,2,3,5)	5/8" X 3/4"	3/4"
13	330 SW WARD ROAD	2"	2"
/	/	/	/
15	913 NE COLBERN ROAD (2)	2"	2"
/	/	/	/
16	1021 NE COLBERN ROAD	1.5"	1.5"

WATER METER SCHEDULE

SHEET	ADDRESS	METER SIZE	SERVICE LINE SIZE
18	1707 NE RICE ROAD (1,2)	5/8" X 3/4"	3/4"
18	1711 NE RICE ROAD	5/8" X 3/4"	3/4"
18	1711 NE RICE ROAD	2"	2"
18	1737 NE RICE ROAD	5/8" X 3/4"	3/4"
/	/	/	/
19	1725 NE RICE ROAD (1,2)	1"	1"
19	1725 NE RICE ROAD (1,2)	5/8" X 3/4"	3/4"
19	951 NE POLLARD STREET (1,2)	5/8" X 3/4"	3/4"
/	/	/	/
20	1831 SW MARKET STREET (1,2)	5/8" X 3/4"	3/4"
20	1825 SW MARKET STREET (1,2)	1"	1"
20	1820 SW MARKET STREET (1,2)	1"	1"
20	1819 SW MARKET STREET (1,2)	5/8" X 3/4"	3/4"
/	/	/	/
21	1808 SW MARKET STREET (1,2)	5/8" X 3/4"	3/4"
21	1813 SW MARKET STREET (1,2)	5/8" X 3/4"	3/4"
21	1807 SW MARKET STREET (1,2)	5/8" X 3/4"	3/4"
21	1801A SW MARKET STREET (4)	5/8" X 3/4"	3/4" DOUBLE SETTER
21	1801B SW MARKET STREET (1,2,5)	5/8" X 3/4"	
21	1800 SW MARKET STREET (1,2)	1"	1"
21	1803 SW MARKET STREET (1,2)	1"	1"
/	/	/	/
23	2150 SW SCHERER ROAD (1,2)	2"	2"
23	2150 SW SCHERER ROAD (1,2)	6"	6"
23	2050 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
23	1701 SW SCHERER ROAD (1,2)	1"	1"
23	1301 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
23	1301 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
23	1201 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
/	/	/	/
24	2937 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
24	2927 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
24	2919 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
24	2911 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
24	2903 SW SCHERER ROAD (4, 6)	5/8" X 3/4"	3/4" DOUBLE SETTER
24	2903 SW SCHERER ROAD (1,2,5)	5/8" X 3/4"	
24	2841 SW SCHERER ROAD (4, 6)	5/8" X 3/4"	3/4" DOUBLE SETTER
24	2841 SW SCHERER ROAD (1,2,5)	5/8" X 3/4"	
24	2831 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
/	/	/	/
25	2821 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
25	2807 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
/	/	/	/
26	1907 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
26	1825 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
26	1811 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"
26	1727 SW SCHERER ROAD (1,2)	5/8" X 3/4"	3/4"

NOTES:

(1) INDICATES WATER METER WELL TO BE REMOVED AND REPLACED.
(2) INDICATES WATER METER RING AND COVER TO BE REMOVED AND REPLACED.
(3) INDICATES WATER METER WELL TO BE RELOCATED.
(4) INDICATES RELOCATION OF TWO WATER METERS FROM A DOUBLE SETTER TO TWO NEW METER WELLS.
(5) INDICATES WATER METER SETTER IS TO BE REMOVED AND REPLACED.
(6) INDICATES THE SECOND SERVICE TAP IN THE EXISTING DOUBLE SETTER IS UNUSED. RELOCATE ONE METER TO A NEW METER WELL.

Revision	Notes:	Issued:
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1	ISSUED FOR CONSTRUCTION	02/13/2025

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

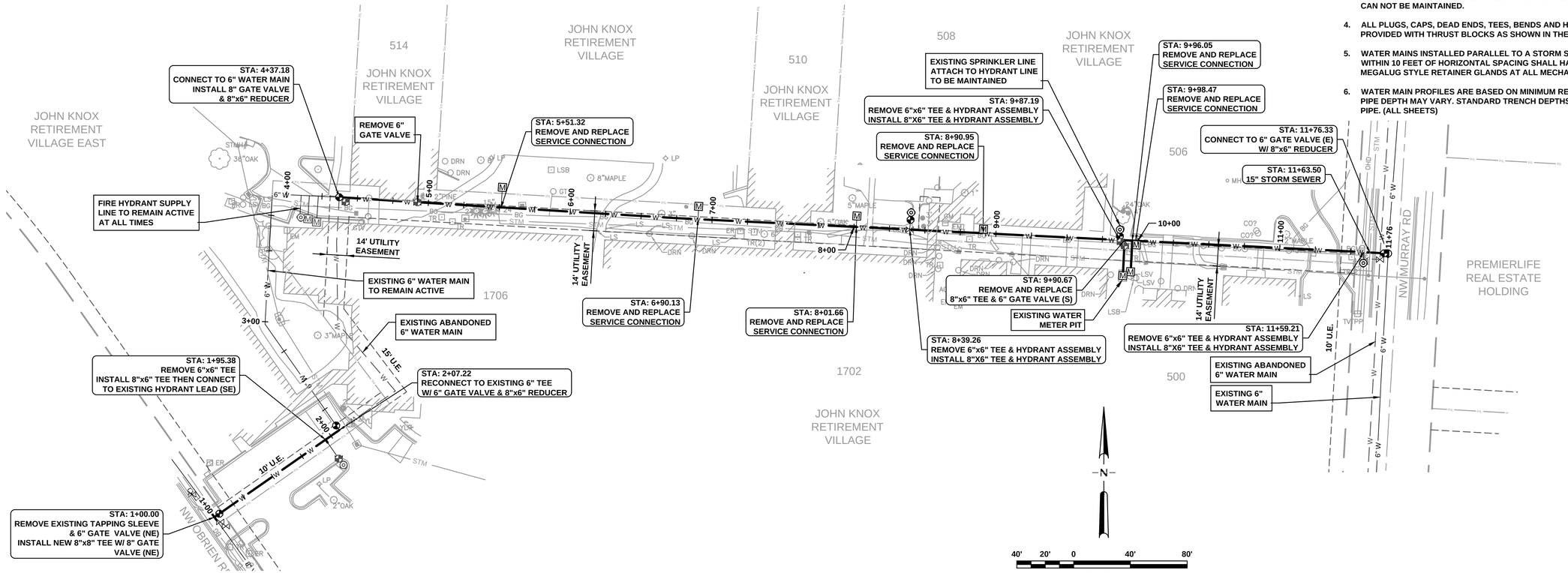
Sheet Name: WATER METER SCHEDULE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

NOTES:

1. A MINIMUM OF 42" OF COVER SHALL BE MAINTAINED OVER THE TOP OF THE WATER MAIN TO THE FINISHED GRADE.
2. A MINIMUM VERTICAL CLEAR DISTANCE OF 18" SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY SANITARY SEWER AND STORM SEWER CROSSING.
3. FUSED PIPE JOINTS AND MEGALUG STYLE RETAINER GLANDS AT MECHANICAL JOINTS SHALL BE USED WHEN THE 18" MINIMUM VERTICAL CLEAR DISTANCE CAN NOT BE MAINTAINED.
4. ALL PLUGS, CAPS, DEAD ENDS, TEES, BENDS AND HYDRANTS SHALL BE PROVIDED WITH THRUST BLOCKS AS SHOWN IN THE STANDARD DETAILS.
5. WATER MAINS INSTALLED PARALLEL TO A STORM SEWER OR SANITARY SEWER WITHIN 10 FEET OF HORIZONTAL SPACING SHALL HAVE FUSED PIPE JOINTS AND MEGALUG STYLE RETAINER GLANDS AT ALL MECHANICAL JOINTS.
6. WATER MAIN PROFILES ARE BASED ON MINIMUM REQUIRED COVER. EXISTING PIPE DEPTH MAY VARY. STANDARD TRENCH DEPTHS ARE 42"-84" TO TOP OF PIPE. (ALL SHEETS)



JOHN KNOX RETIREMENT VILLAGE

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	02/06/2025

LEE'S SUMMIT MISSOURI

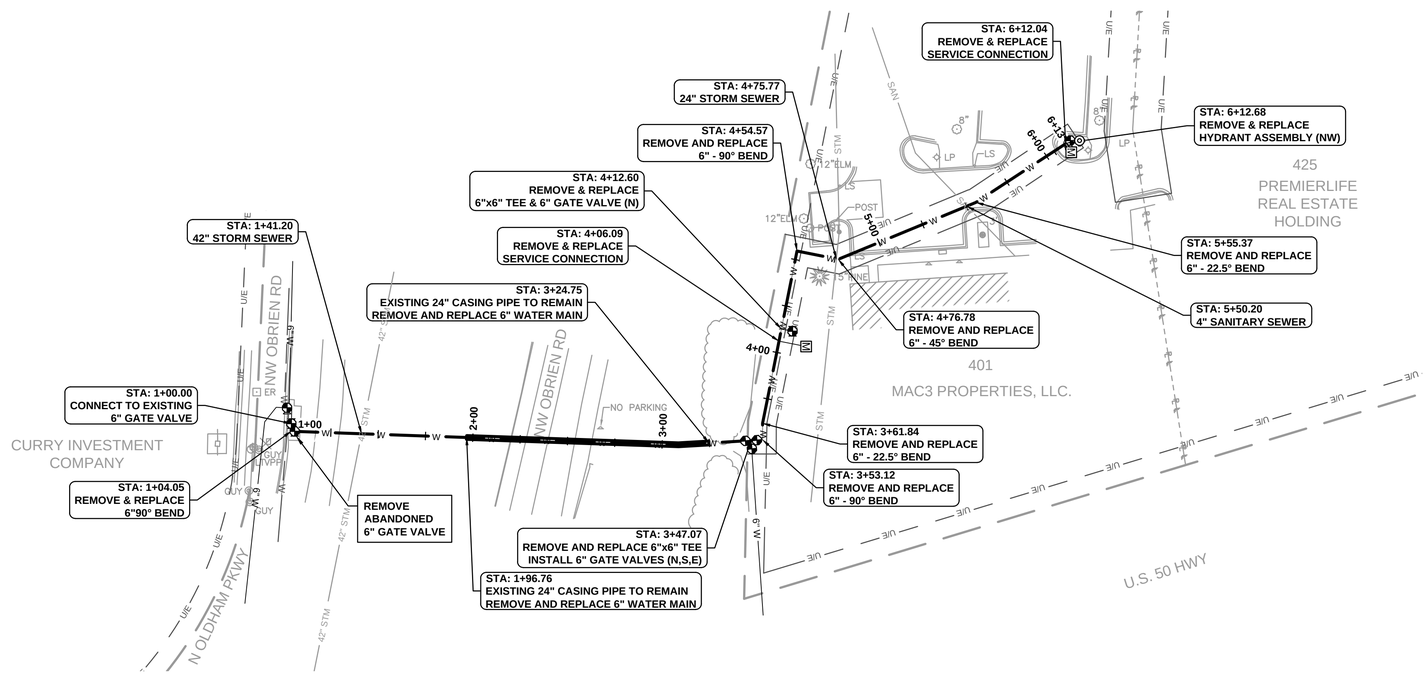
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI KAREN L. ALLIGOOD NUMBER E-2023042571 PROFESSIONAL ENGINEER 3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



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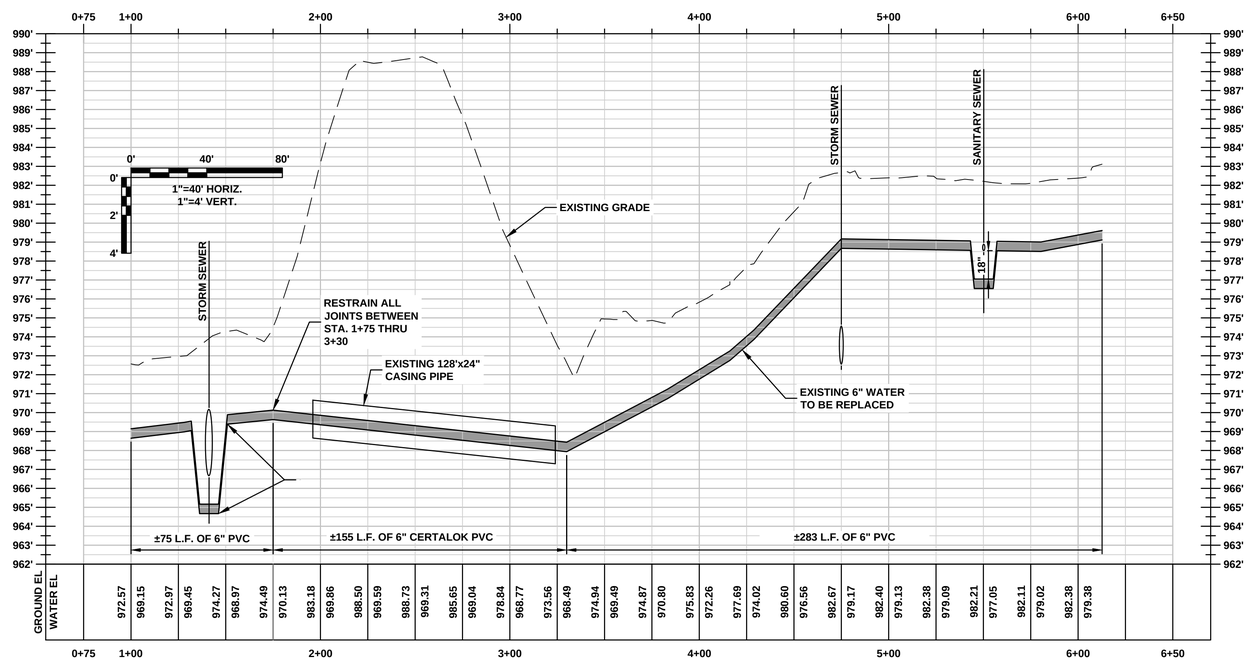
6. WATER MAIN PROFILES ARE BASED ON MINIMUM REQUIRED COVER. EXISTING PIPE DEPTH MAY VARY. STANDARD TRENCH DEPTHS ARE 42"-84" TO TOP OF PIPE. (ALL SHEETS)

N

40' 20' 0 40' 80'

1"=40'



JOHN KNOX EAST COMMERCIAL DEVELOPMENT

Revision	Notes:	Issued:
0	MJ/NR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

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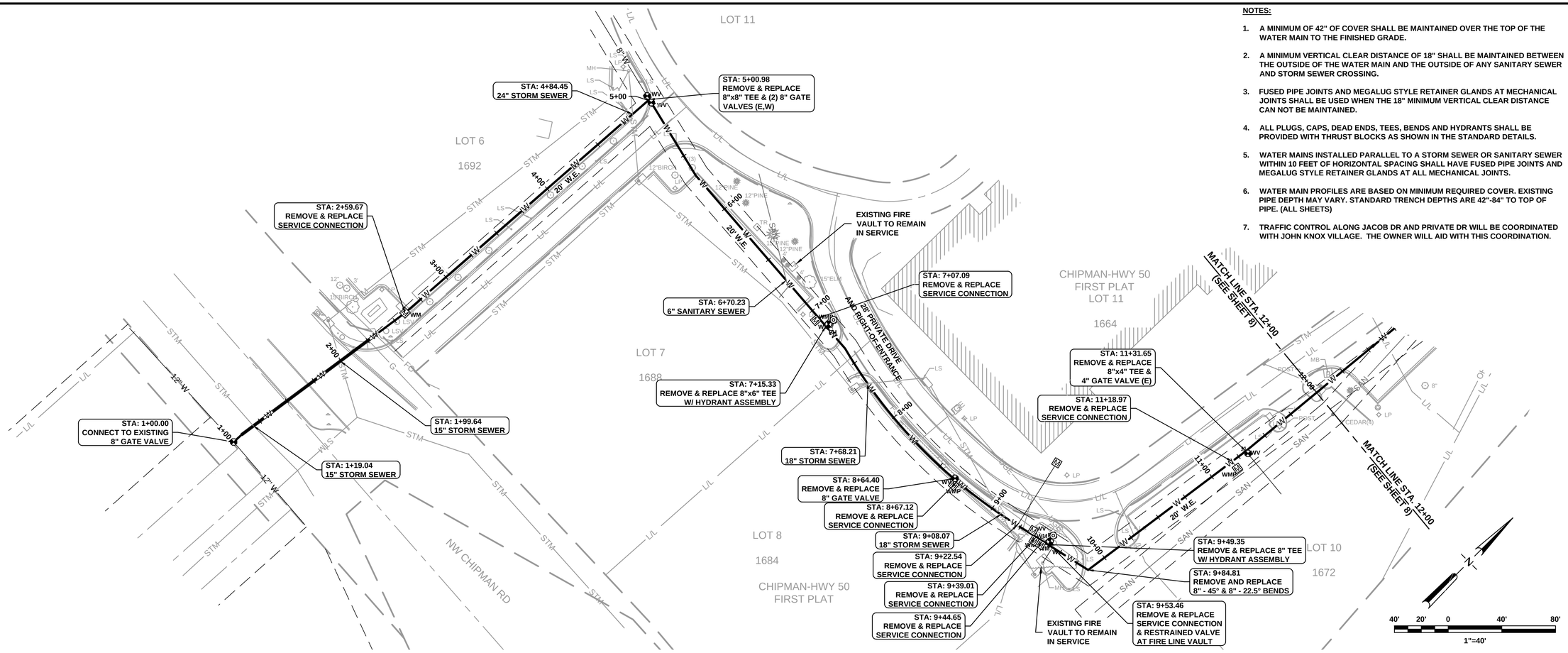
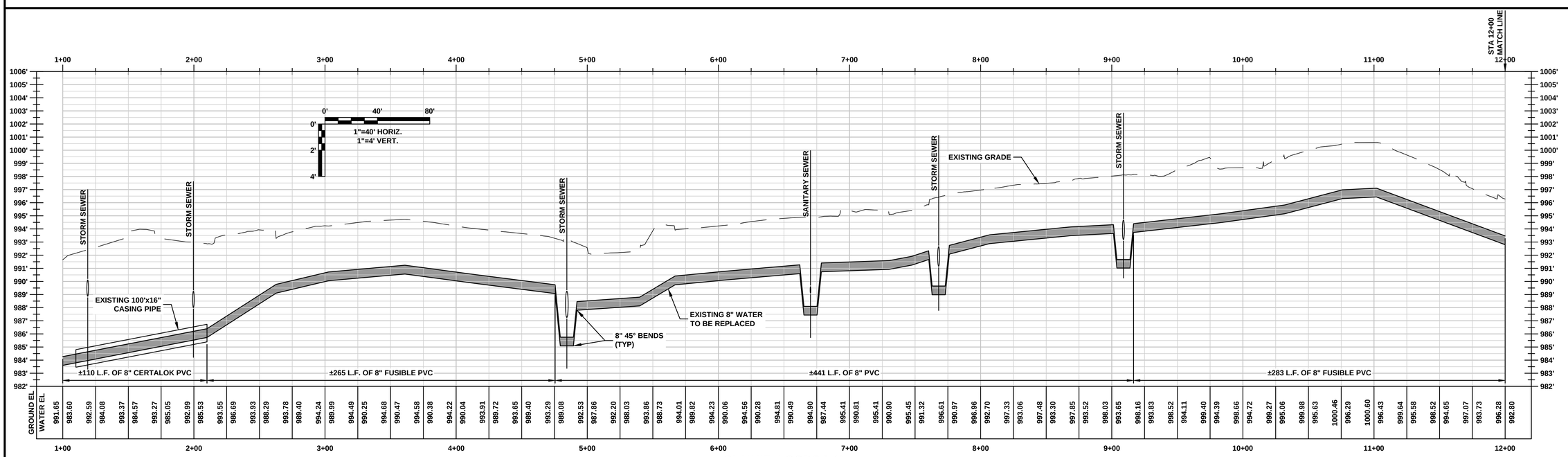
6. WATER MAIN PROFILES ARE BASED ON MINIMUM REQUIRED COVER. EXISTING PIPE DEPTH MAY VARY. STANDARD TRENCH DEPTHS ARE 42"-84" TO TOP OF PIPE. (ALL SHEETS)
7. TRAFFIC CONTROL ALONG JACOB DR AND PRIVATE DR WILL BE COORDINATED WITH JOHN KNOX VILLAGE. THE OWNER WILL AID WITH THIS COORDINATION.





SUMMIT WOODS (#1)

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	02/06/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI KAREN L. ALLISON NUMBER PE-2002042571 PROFESSIONAL ENGINEER 3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

NOTES:

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2. A MINIMUM VERTICAL CLEAR DISTANCE OF 18" SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY SANITARY SEWER AND STORM SEWER CROSSING.
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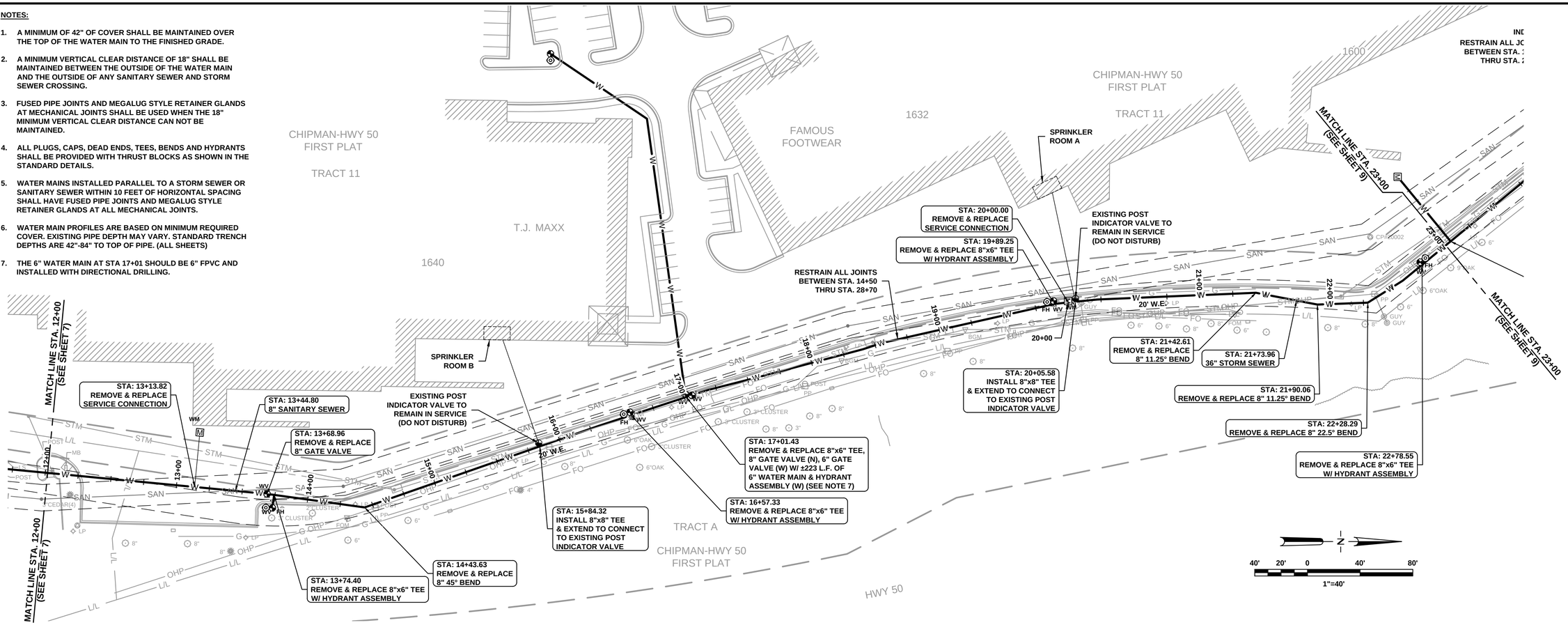
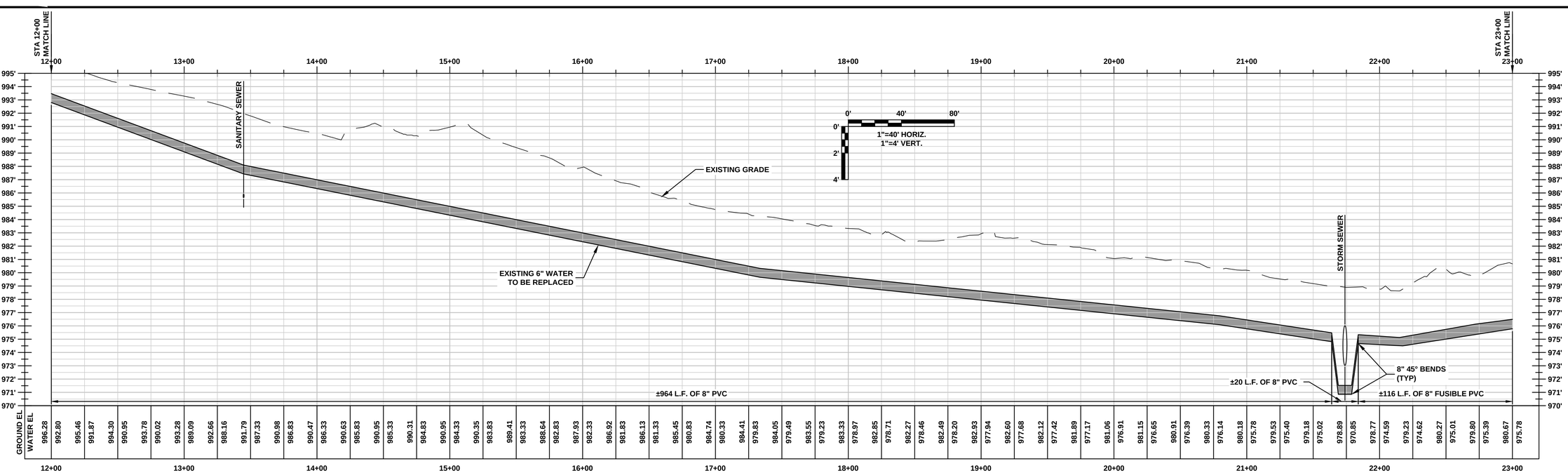
6. WATER MAIN PROFILES ARE BASED ON MINIMUM REQUIRED COVER. EXISTING PIPE DEPTH MAY VARY. STANDARD TRENCH DEPTHS ARE 42"-84" TO TOP OF PIPE. (ALL SHEETS)
7. THE 6" WATER MAIN AT STA 17+01 SHOULD BE 6" FPVC AND INSTALLED WITH DIRECTIONAL DRILLING.





SUMMIT WOODS (#2)

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	03/06/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI — KAREN L. ALLISON — NUMBER PE-2002042571 — PROFESSIONAL ENGINEER — 3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

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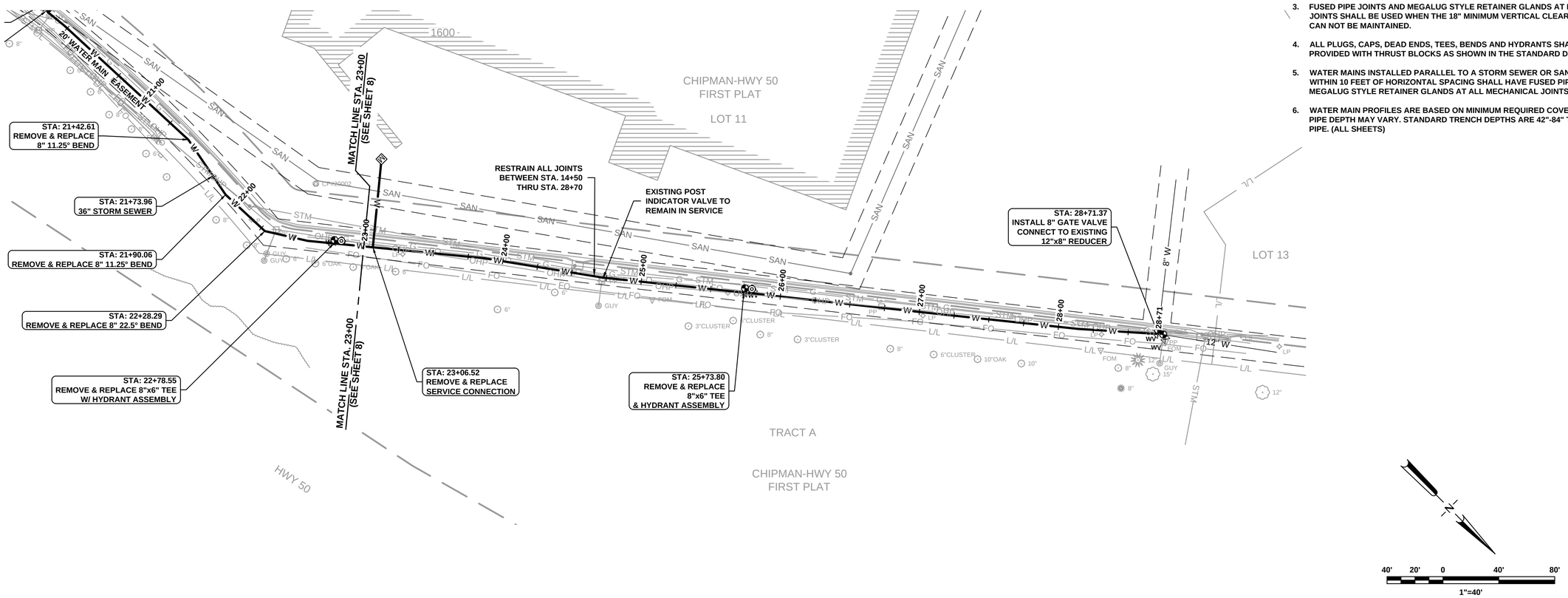
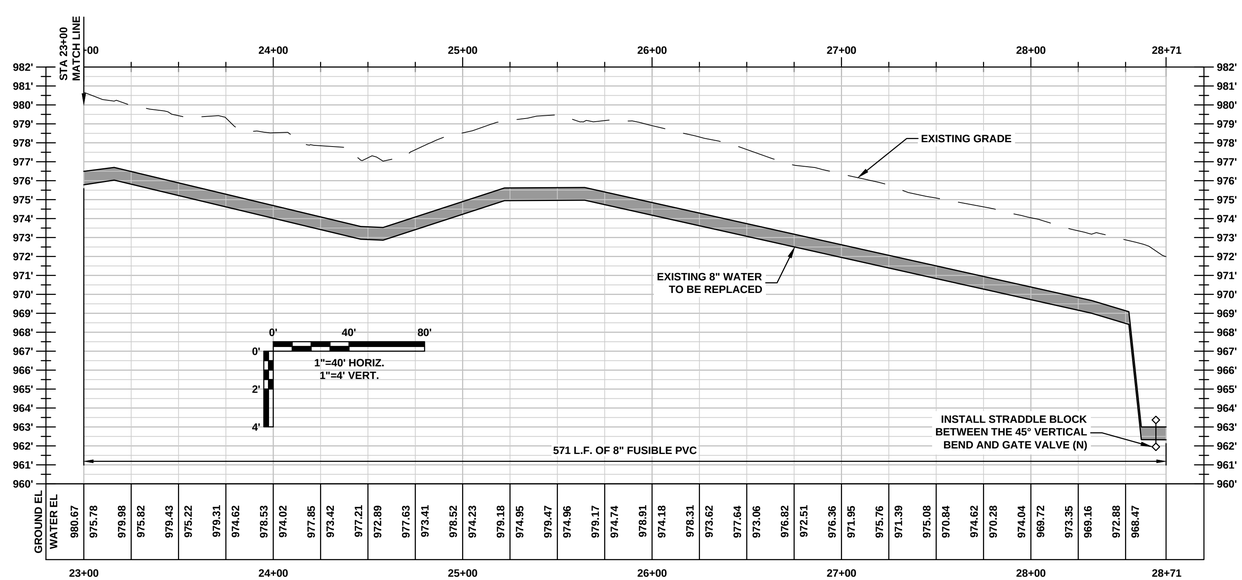
6. WATER MAIN PROFILES ARE BASED ON MINIMUM REQUIRED COVER. EXISTING PIPE DEPTH MAY VARY. STANDARD TRENCH DEPTHS ARE 42"-84" TO TOP OF PIPE. (ALL SHEETS)





SUMMIT WOODS (#3)

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

NOTES:

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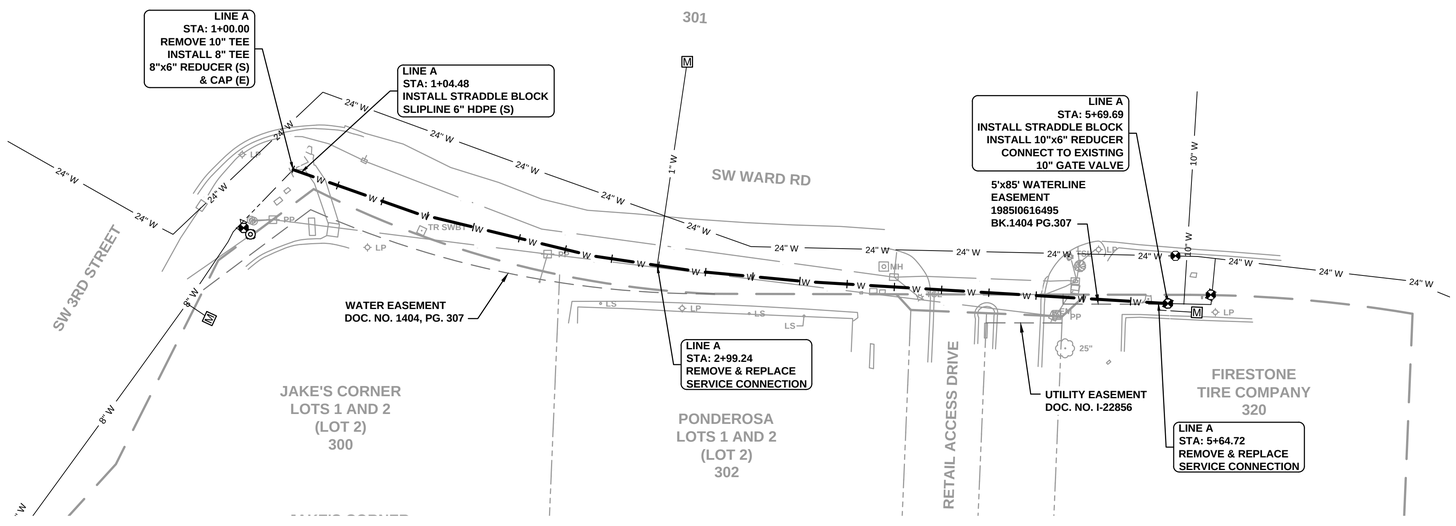
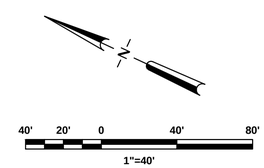
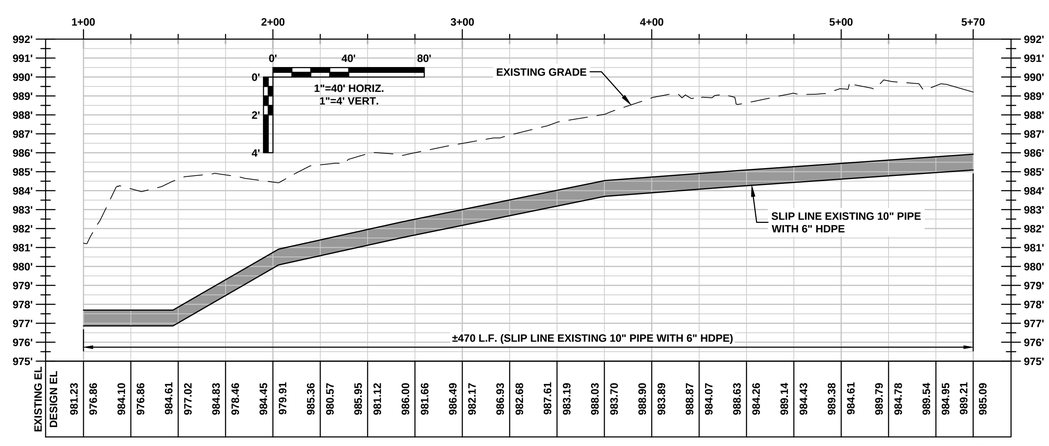






CEDAR CREEK - LINE A

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	02/06/2025

LEE'S SUMMIT MISSOURI

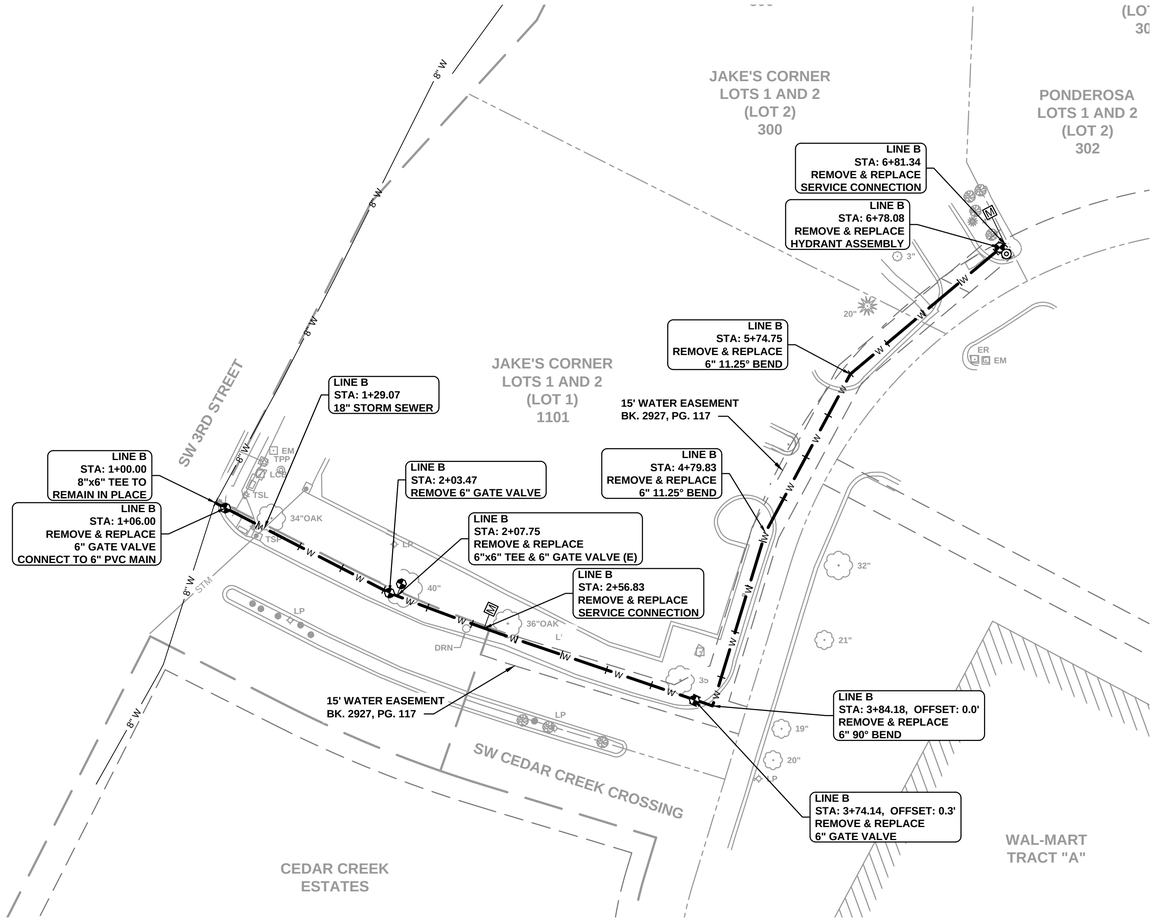
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2003042571
PROFESSIONAL ENGINEER
3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



NOTES:

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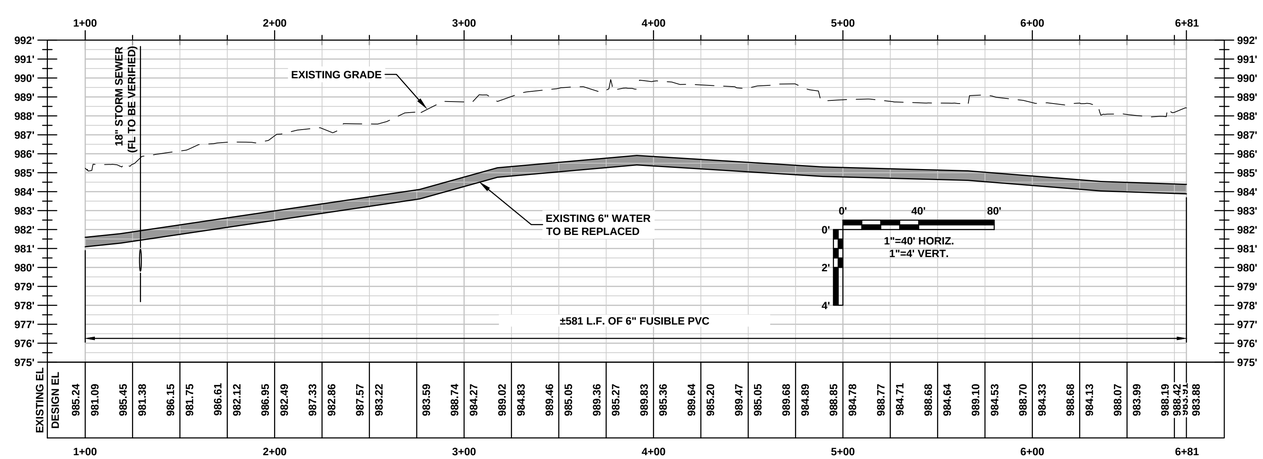


CEDAR CREEK - LINE B

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	02/06/2025

LEE'S SUMMIT MISSOURI

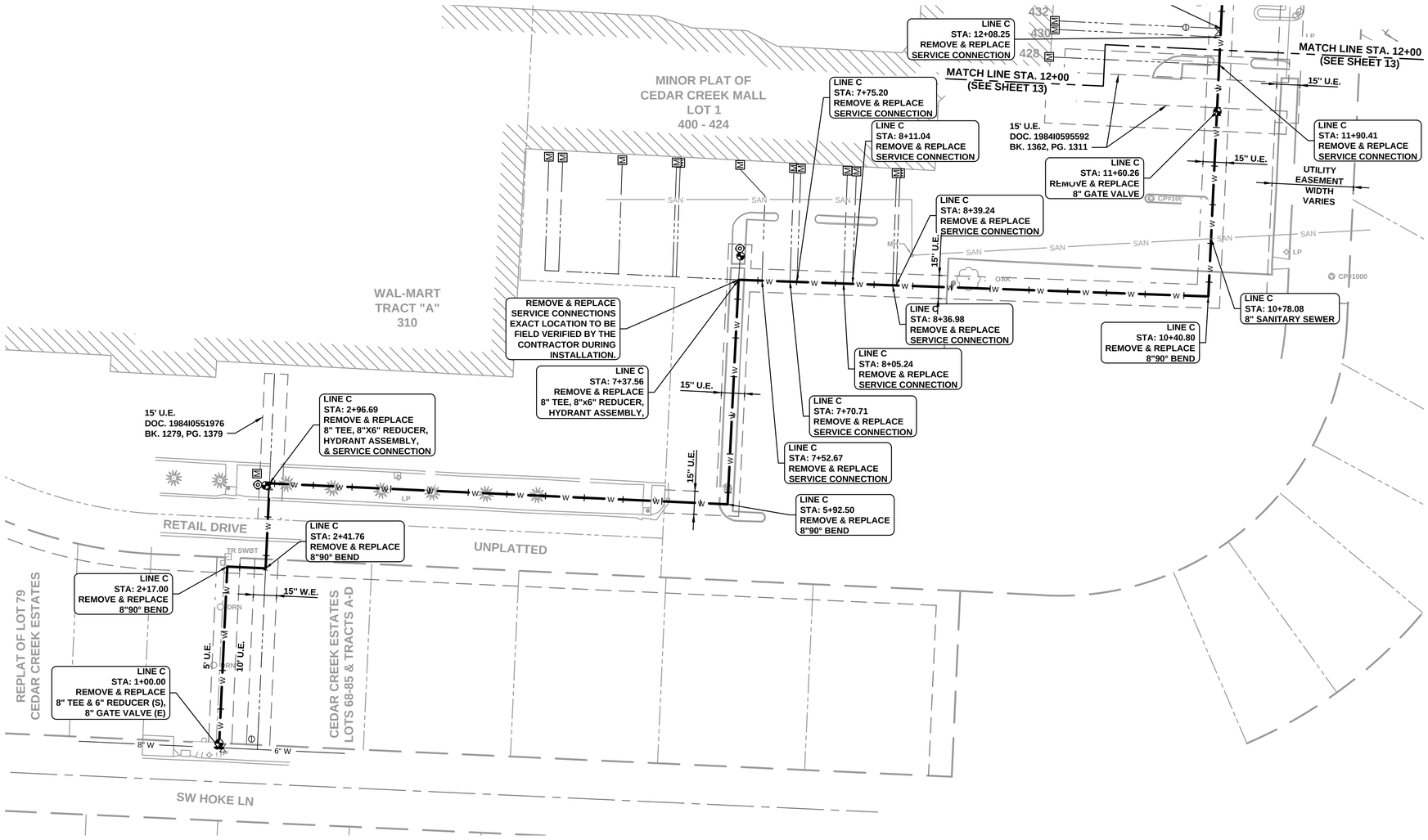
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2003042571
PROFESSIONAL ENGINEER
3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



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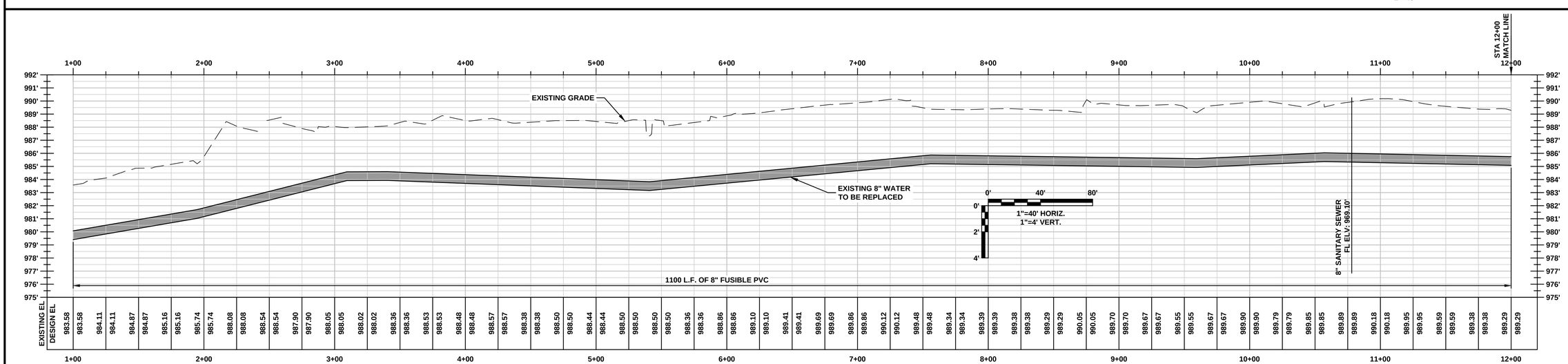


CEDAR CREEK - LINE C-1

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	03/06/2025

LEE'S SUMMIT MISSOURI

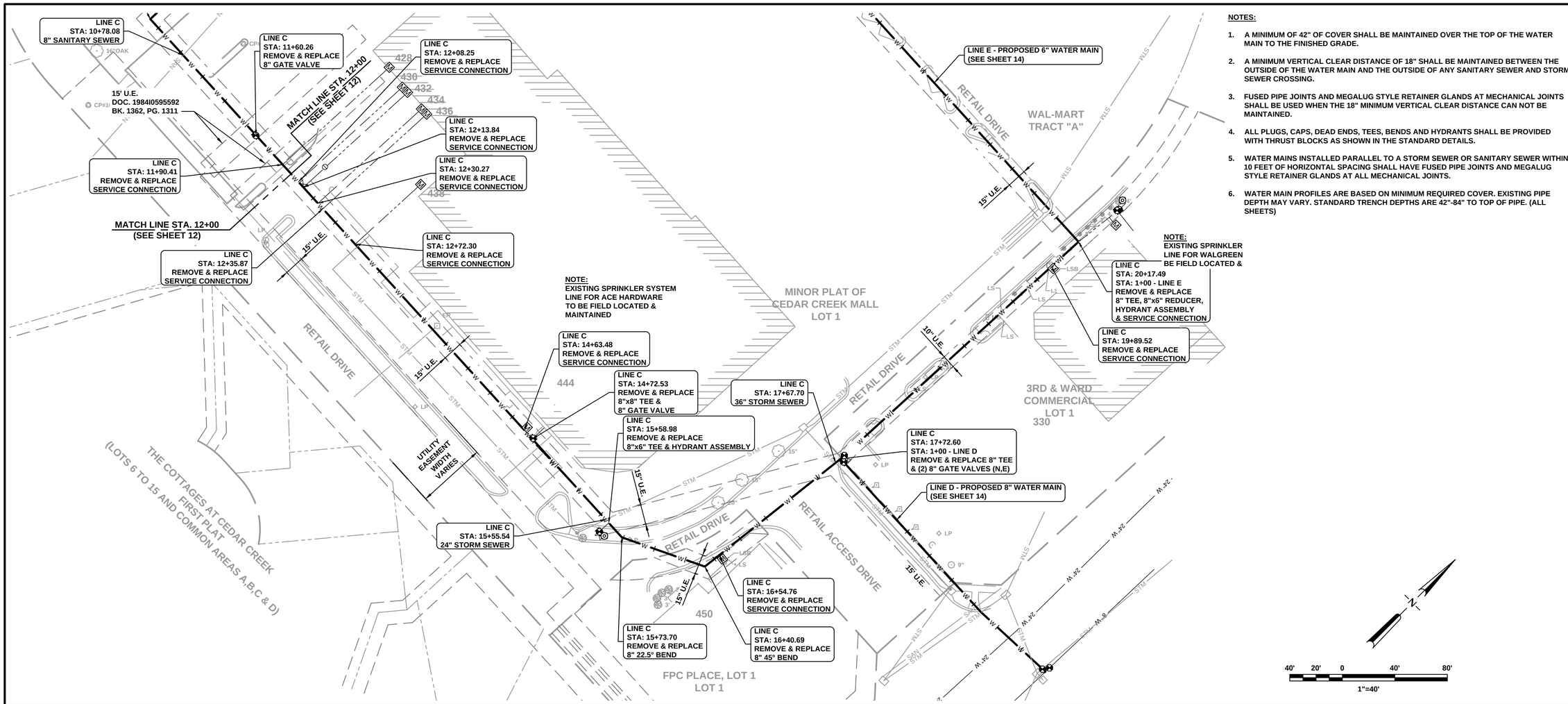
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

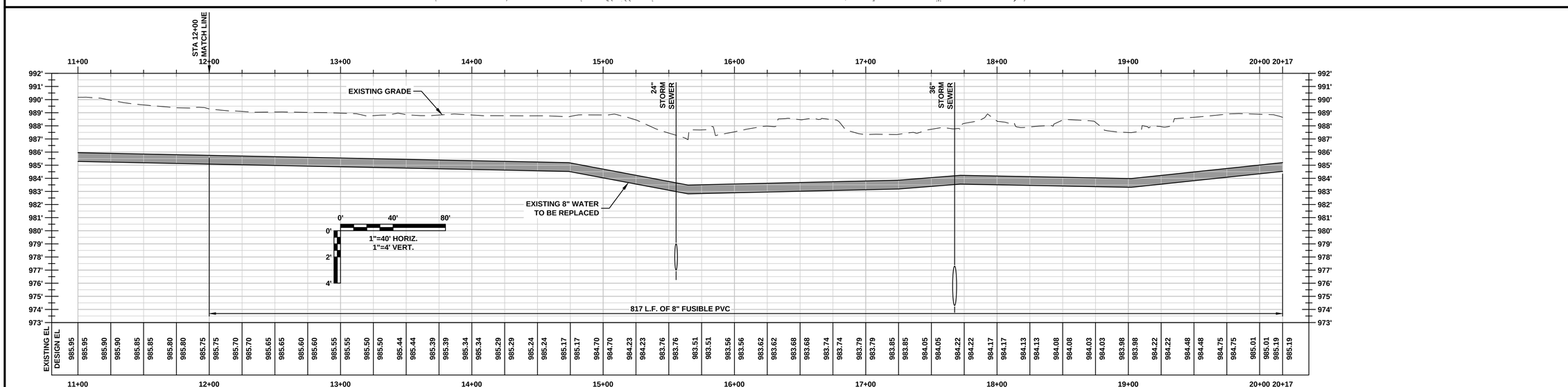
Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722





CEDAR CREEK - LINE C-2

NOTES:

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Revision	Notes:	Issued:
0	MINOR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	03/06/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

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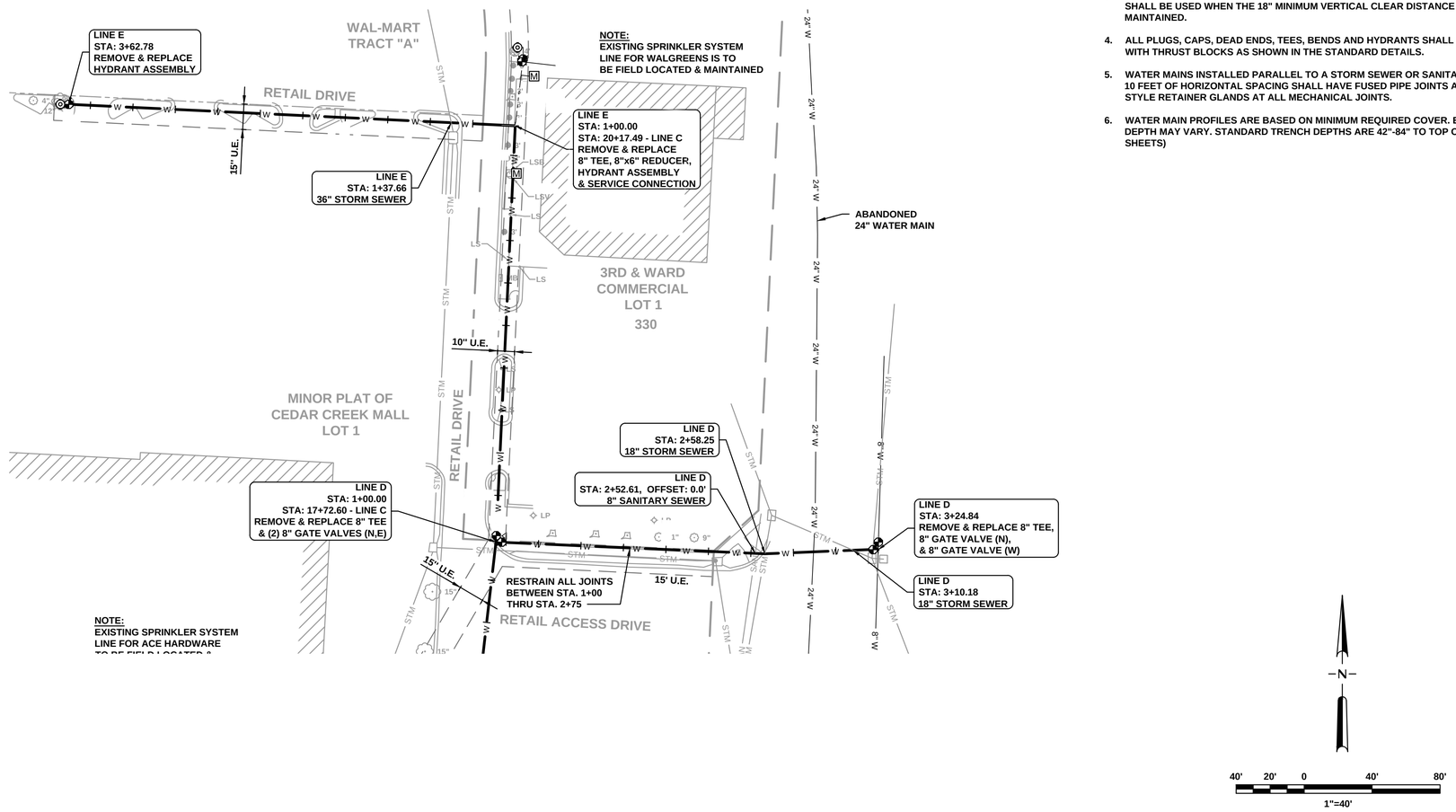
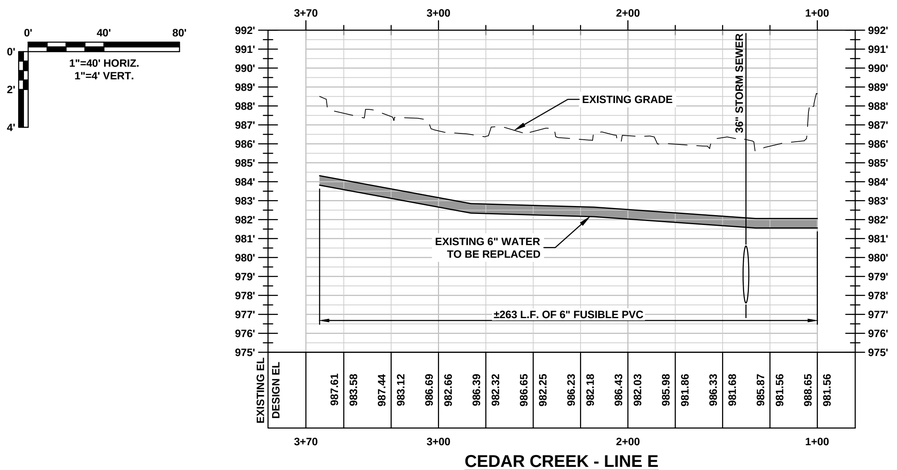
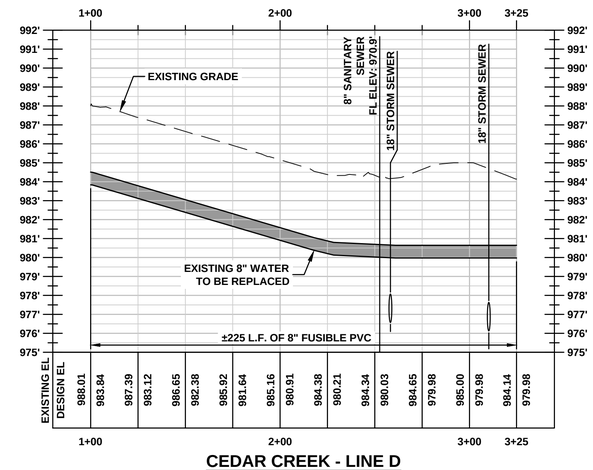




CEDAR CREEK - LINE E



CEDAR CREEK - LINE D

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025
2	BID ADDENDUM #2	02/06/2025

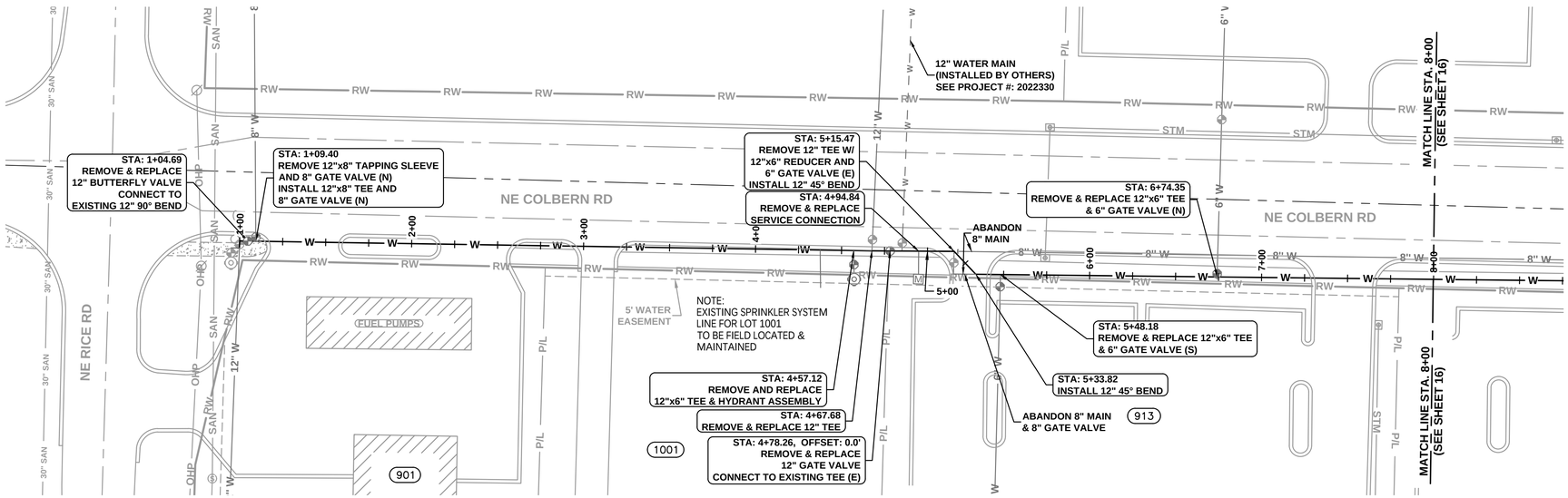
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2003042571
PROFESSIONAL ENGINEER
3/6/2025

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



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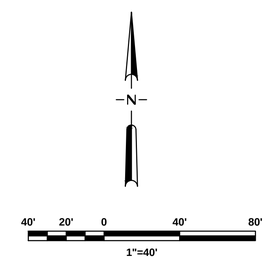

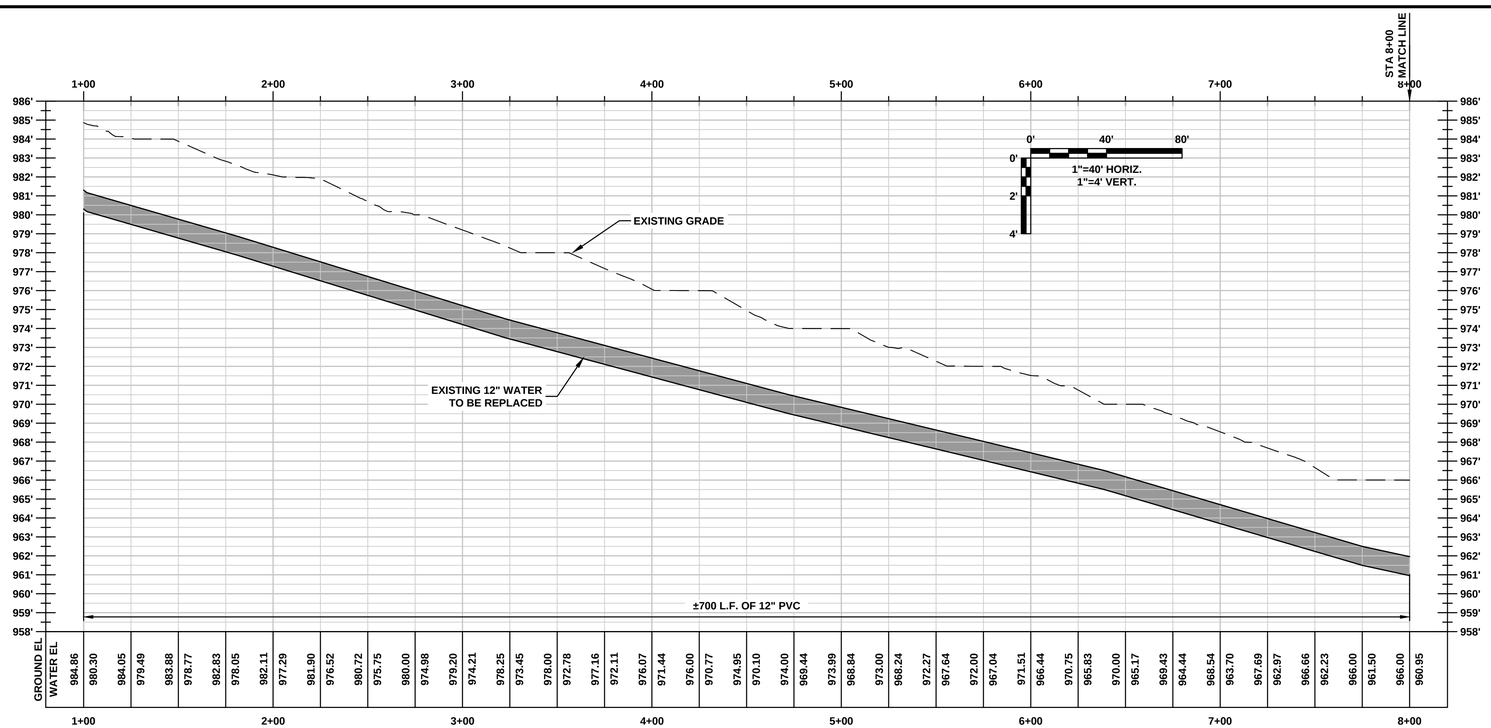

NE COLBERN RD (#1)

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

NOTES:

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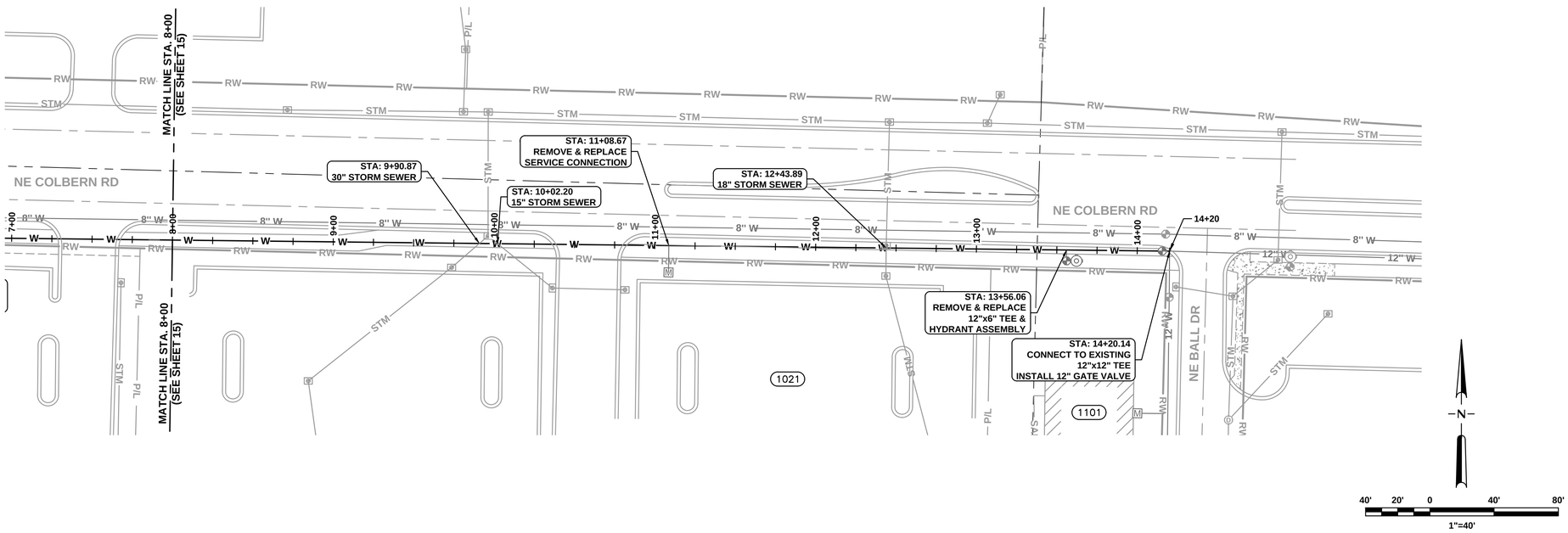

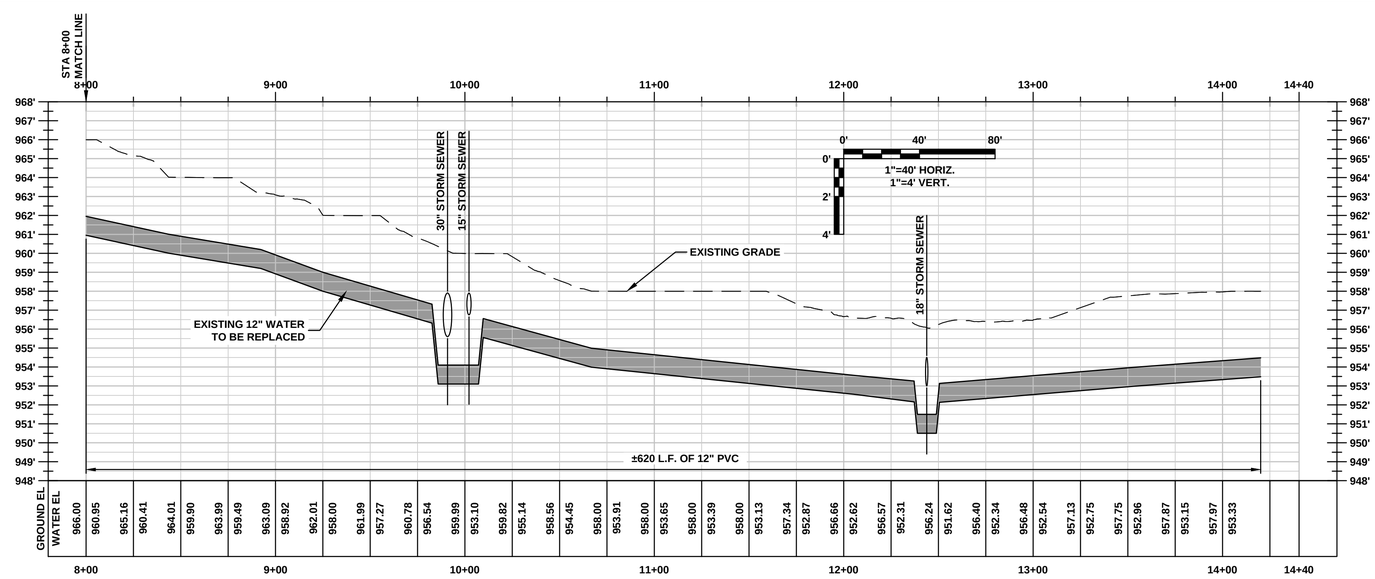

NE COLBERN RD (#2)

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER OR-2023042371
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

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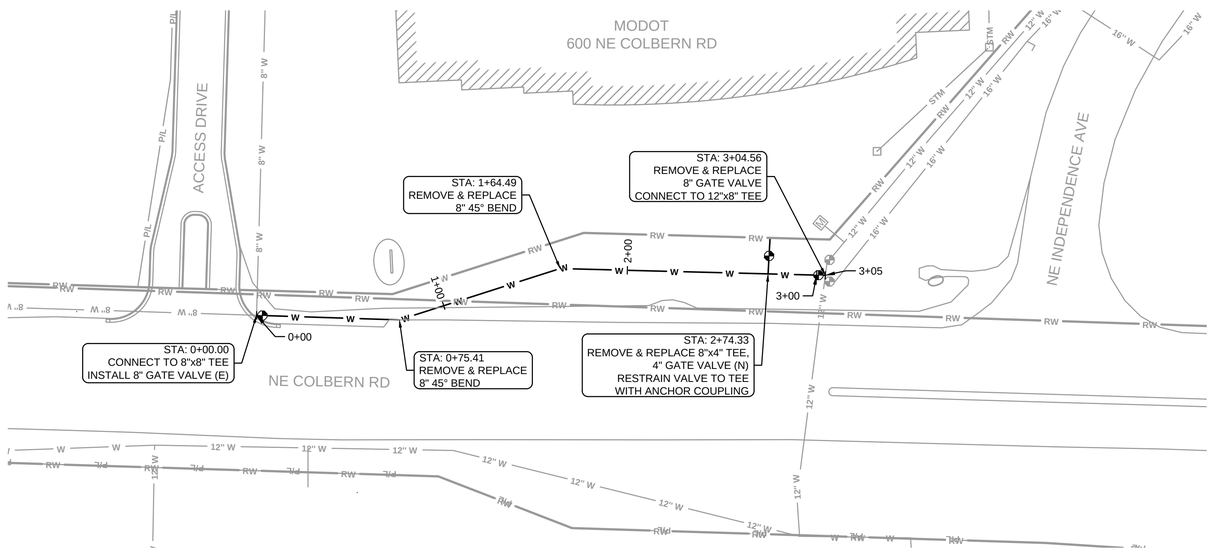
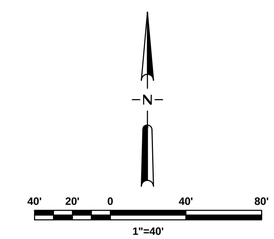
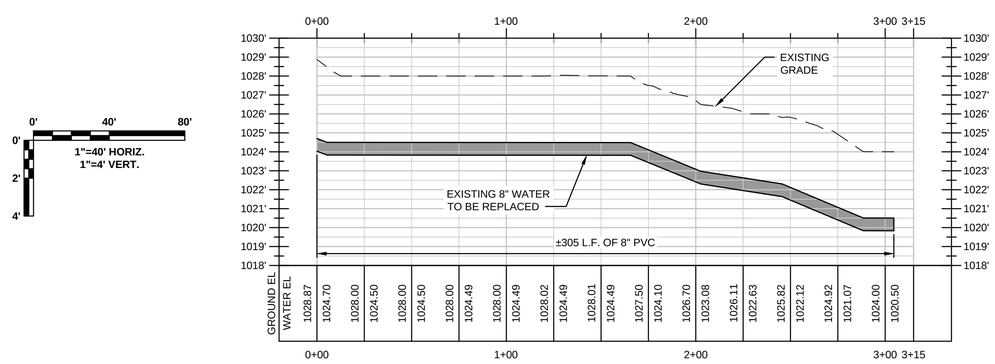






NE COLBERN RD (#3)

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

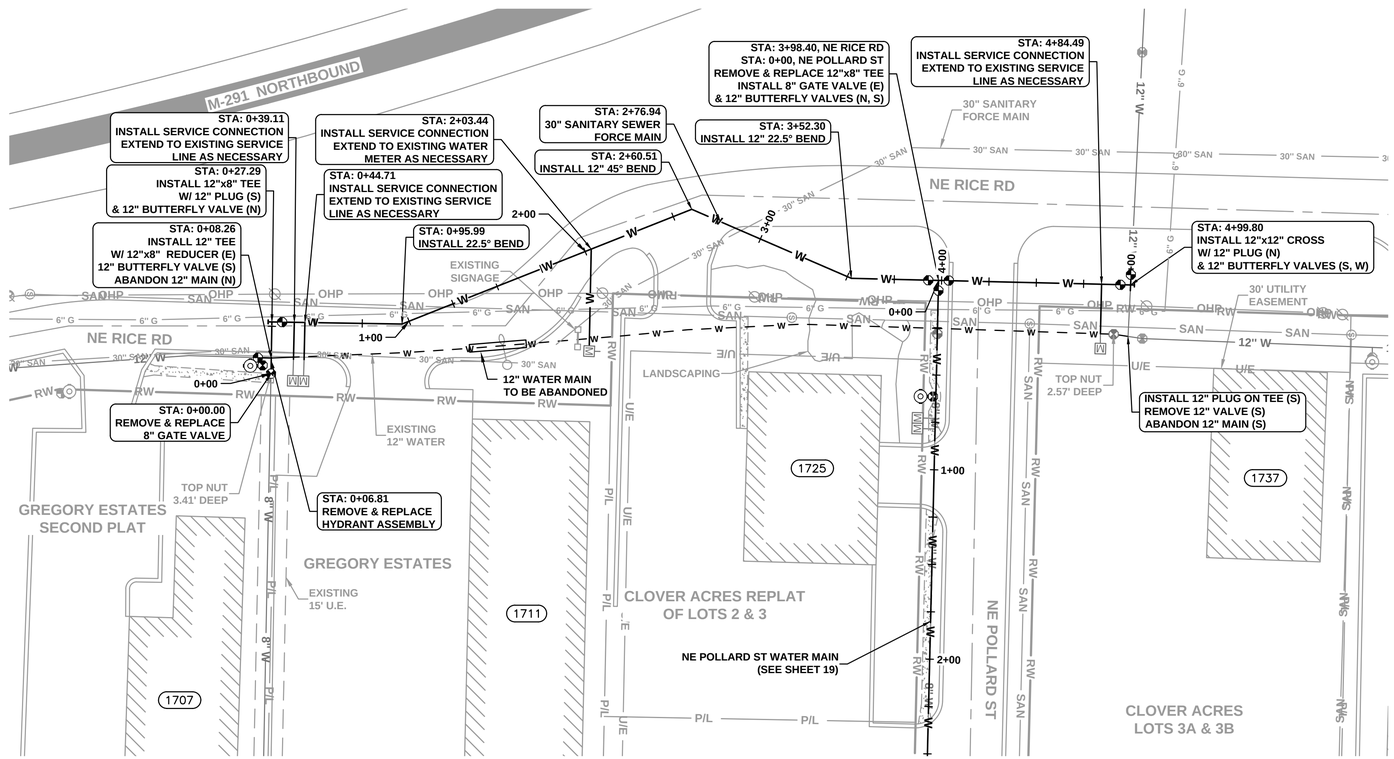
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2023042571
PROFESSIONAL ENGINEER

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



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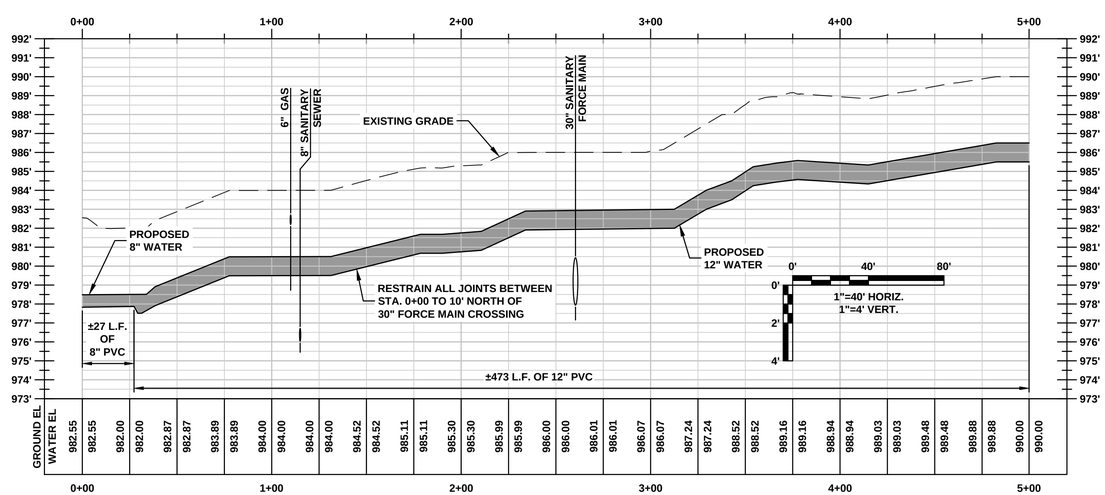
N

40' 20' 0 40' 80'
1"=40'



NE RICE ROAD

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
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PROFESSIONAL ENGINEER

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
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2. A MINIMUM VERTICAL CLEAR DISTANCE OF 18" SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY SANITARY SEWER AND STORM SEWER CROSSING.
3. FUSED PIPE JOINTS AND MEGALUG STYLE RETAINER GLANDS AT MECHANICAL JOINTS SHALL BE USED WHEN THE 18" MINIMUM VERTICAL CLEAR DISTANCE CAN NOT BE MAINTAINED.
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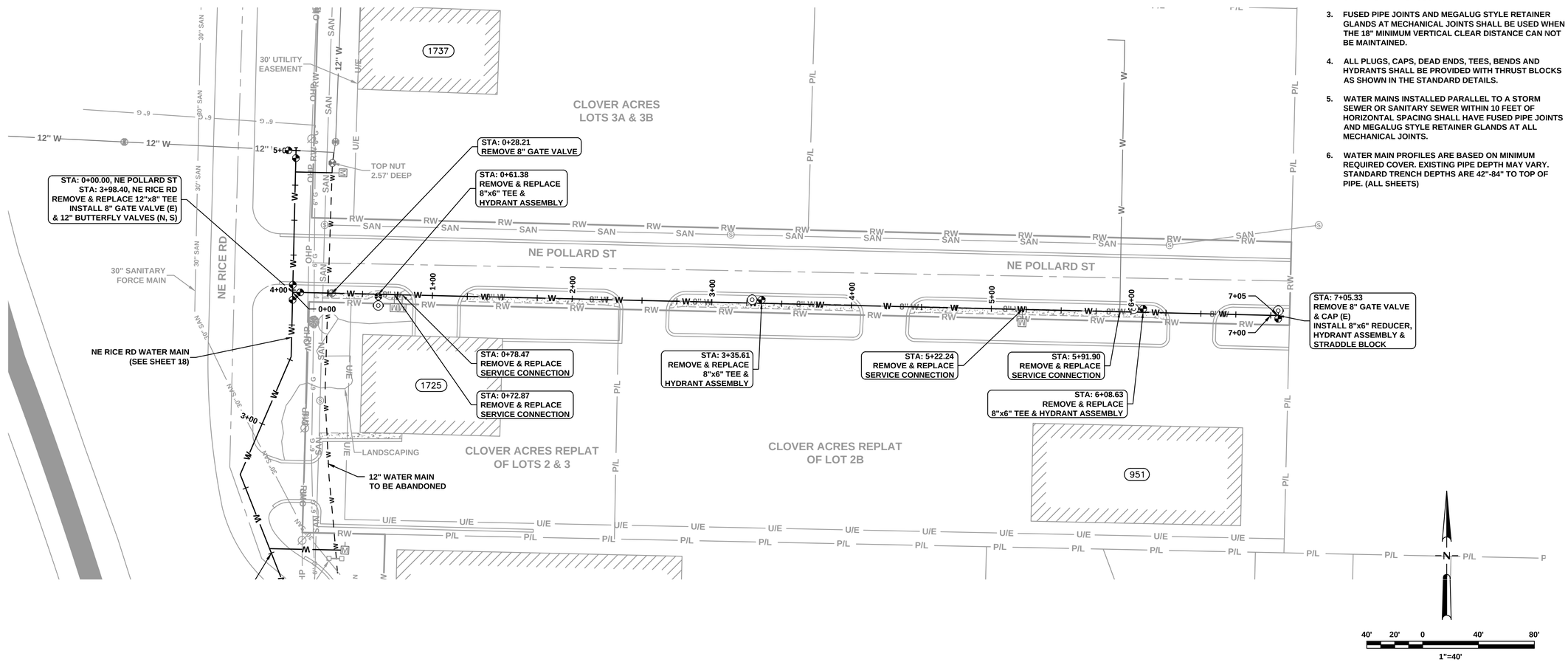
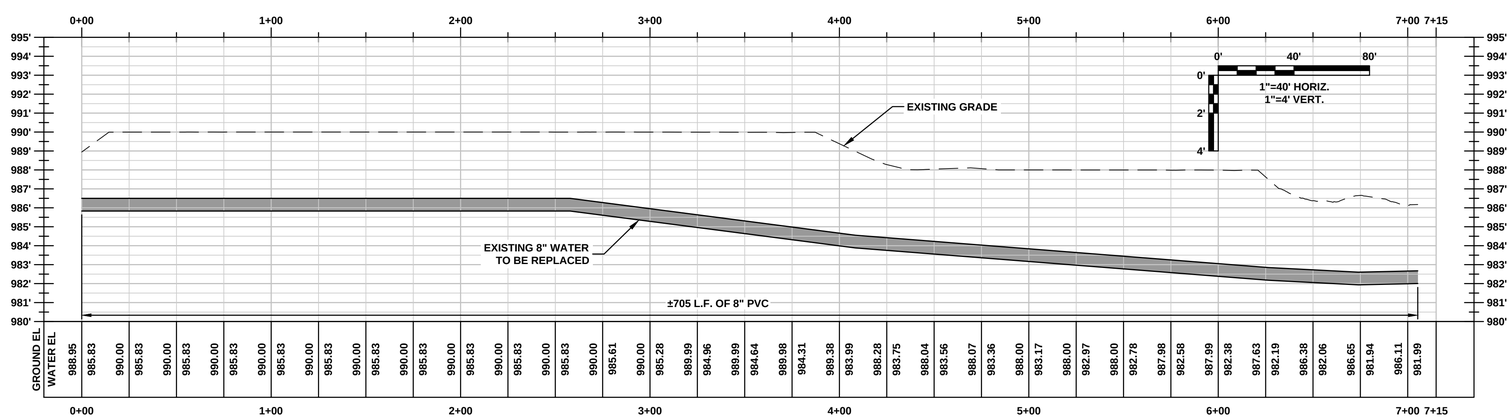




NE POLLARD ST

Revision	Notes:	Issued:
0	MJ/NR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

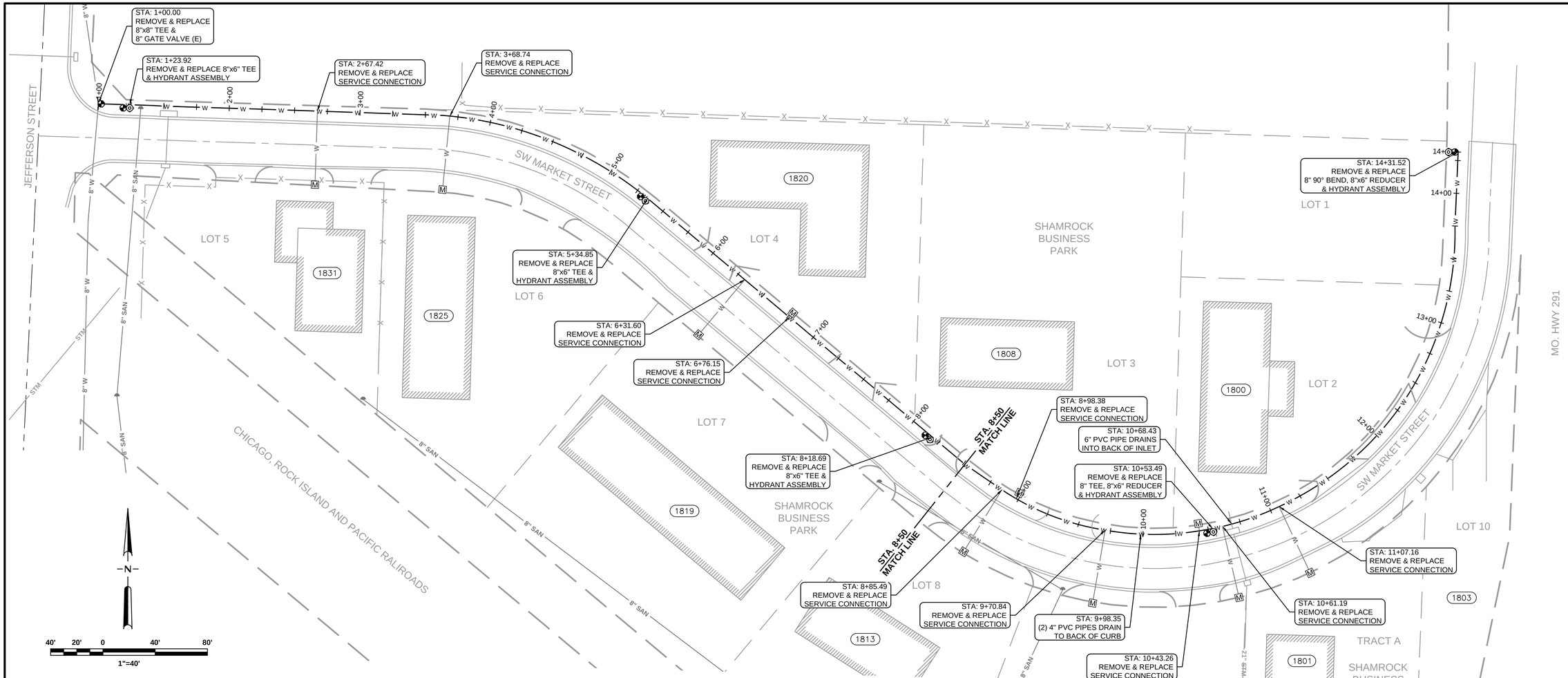
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

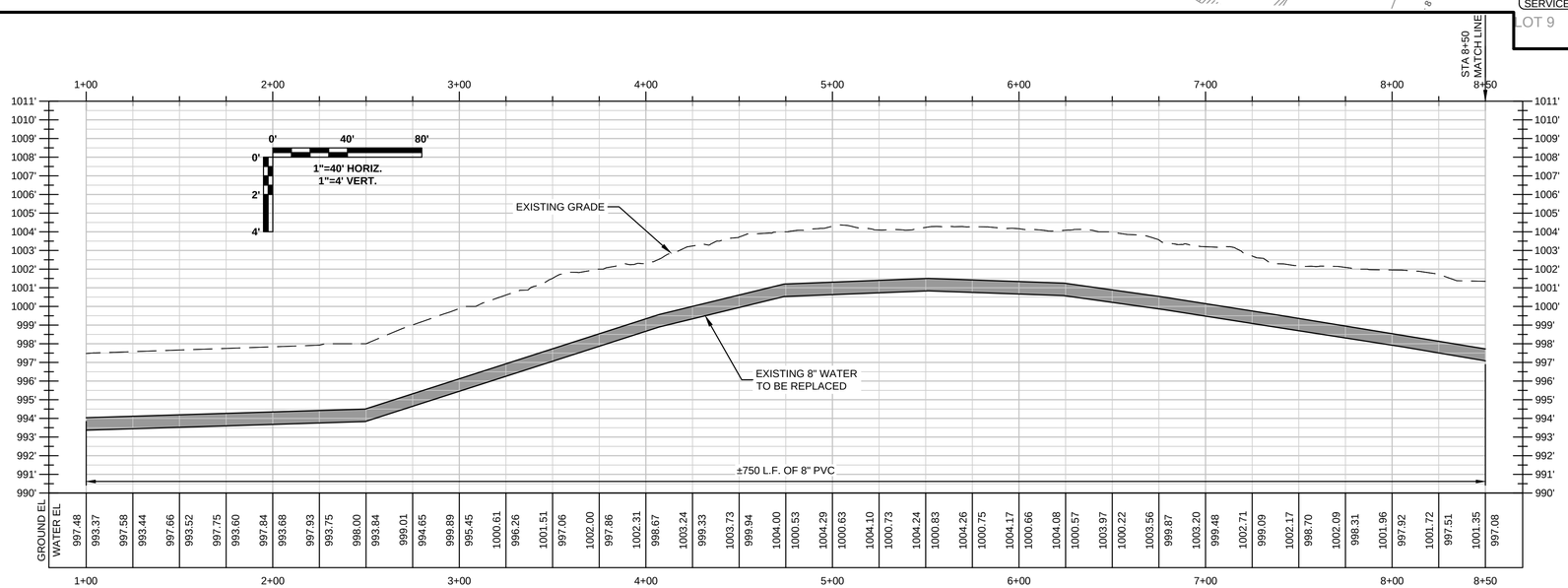
Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI KAREN L. ALLISON NUMBER PE-2023042571 PROFESSIONAL ENGINEER 2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722





SW MARKET ST (#1)

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LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
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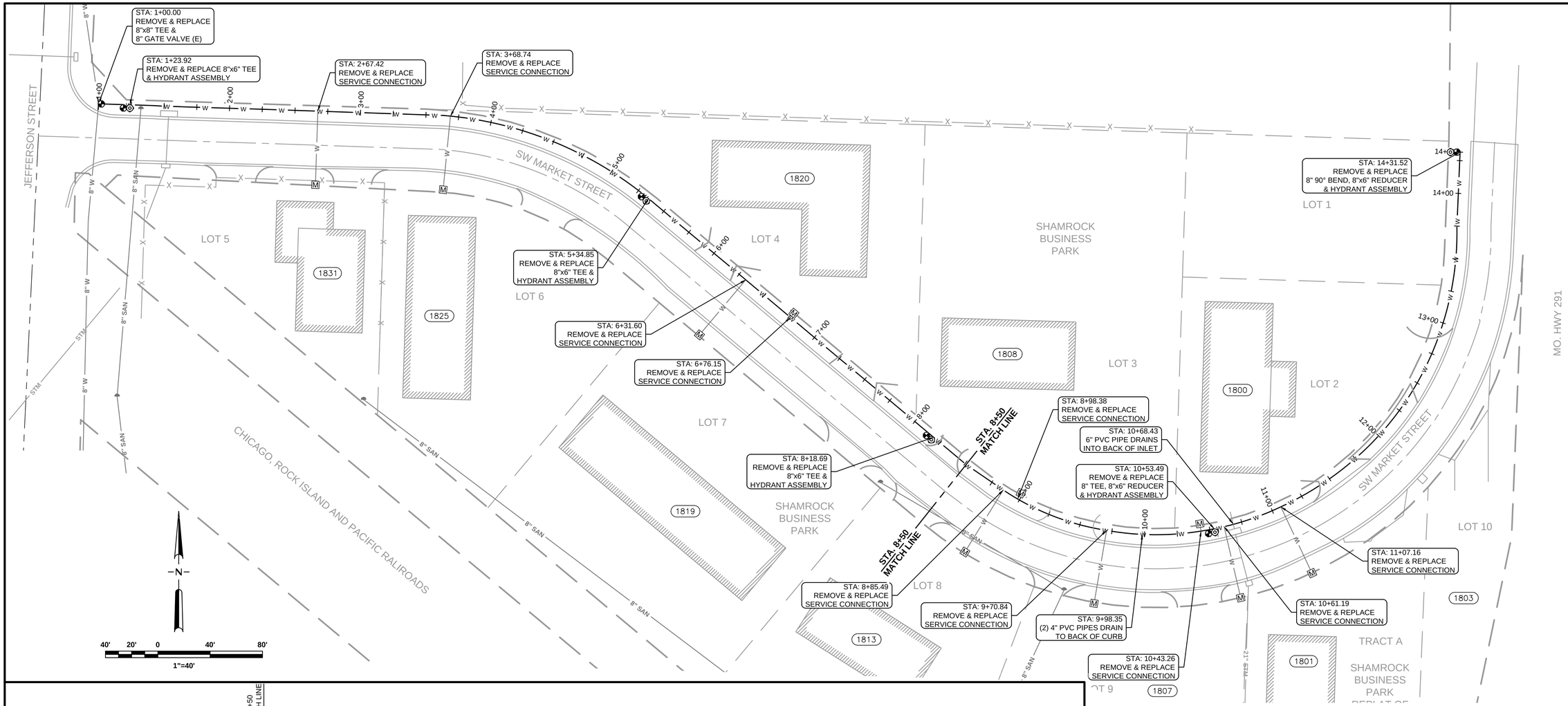

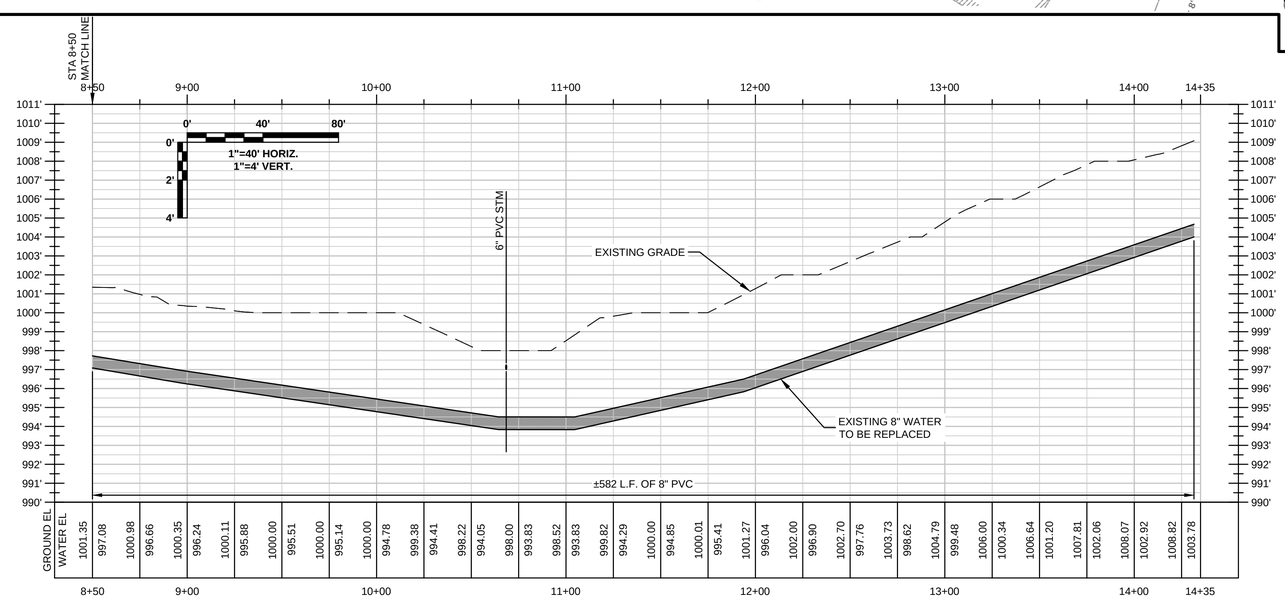

SW MARKET ST (#2)

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LEE'S SUMMIT MISSOURI

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

Project: **WATER MAIN REPLACEMENT - FY24**
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: **WATER PLAN & PROFILE**

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
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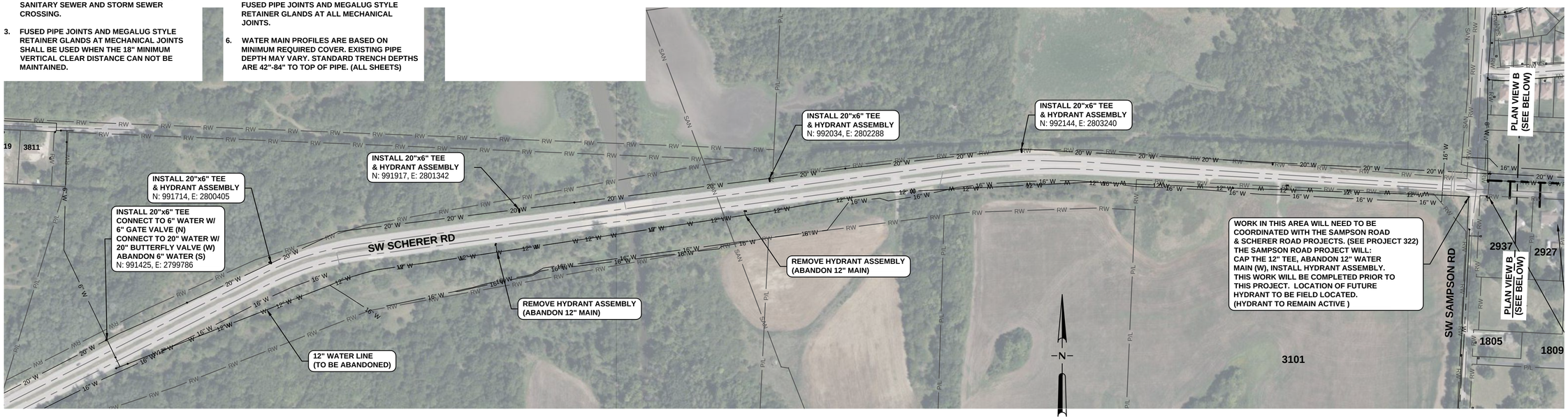
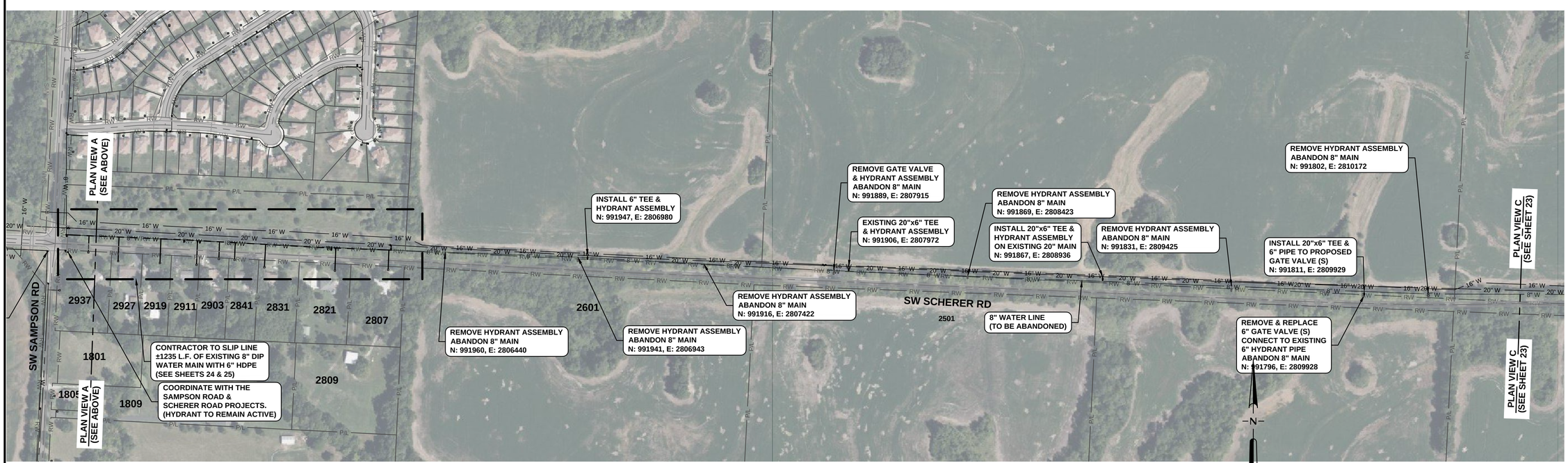


SW SCHERER ROAD 12" WATER MAIN ABANDONMENT
PLAN VIEW A

200' 100' 0 200' 400'
1"=200'



SW SCHERER ROAD 12" WATER MAIN ABANDONMENT
PLAN VIEW B

200' 100' 0 200' 400'
1"=200'

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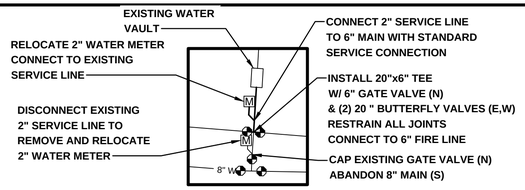
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

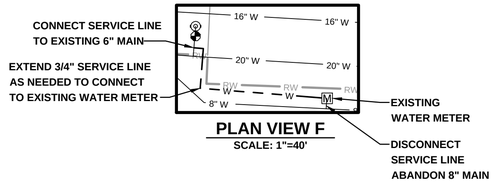
Sheet Name: WATER ABANDONMENT PLAN

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

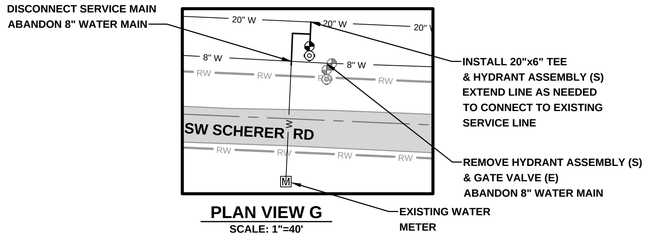
Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



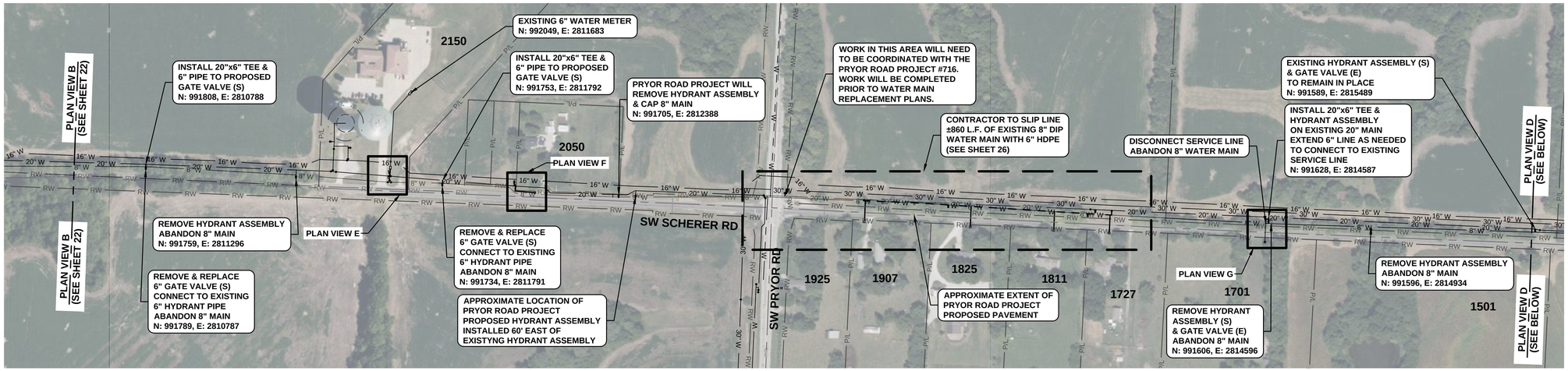
PLAN VIEW E
SCALE: 1"=40'



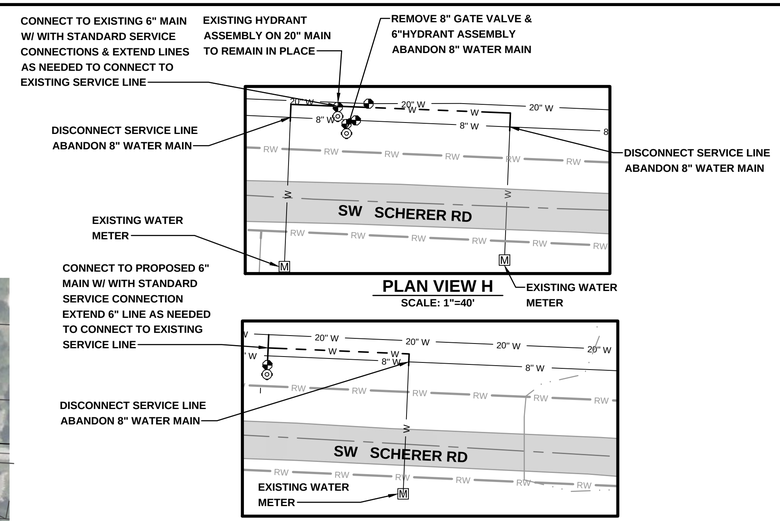
PLAN VIEW F
SCALE: 1"=40'



PLAN VIEW G
SCALE: 1"=40'

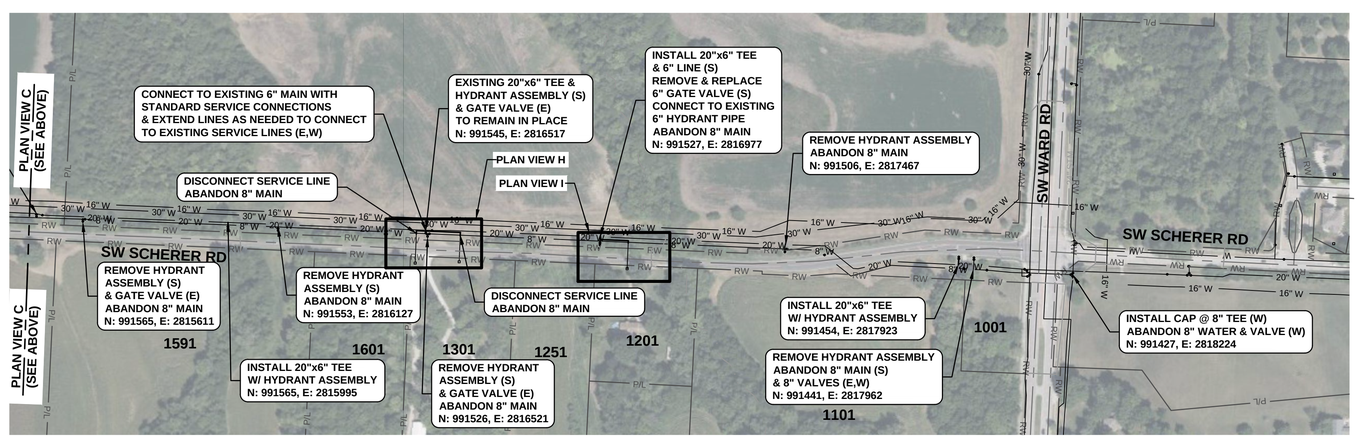


SW SCHERER ROAD 8" WATER MAIN ABANDONMENT
PLAN VIEW C



PLAN VIEW H
SCALE: 1"=40'

PLAN VIEW I
SCALE: 1"=40'



SW SCHERER ROAD 8" WATER MAIN ABANDONMENT
PLAN VIEW D

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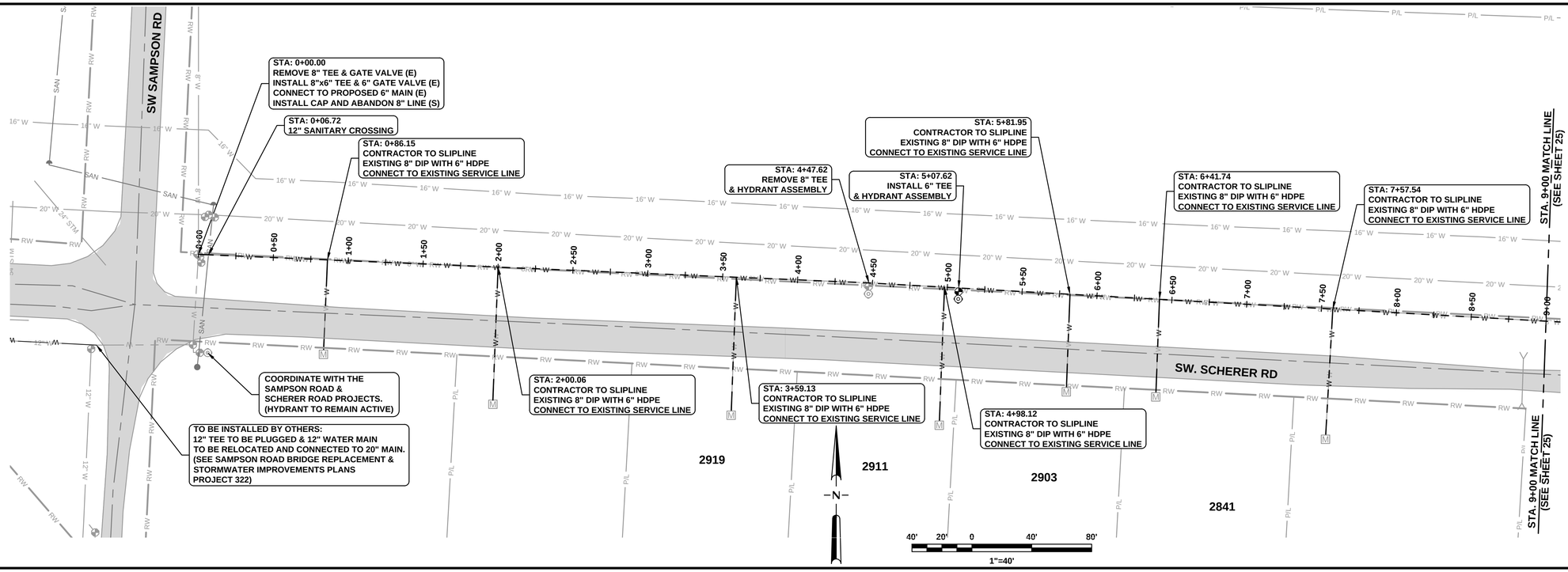
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

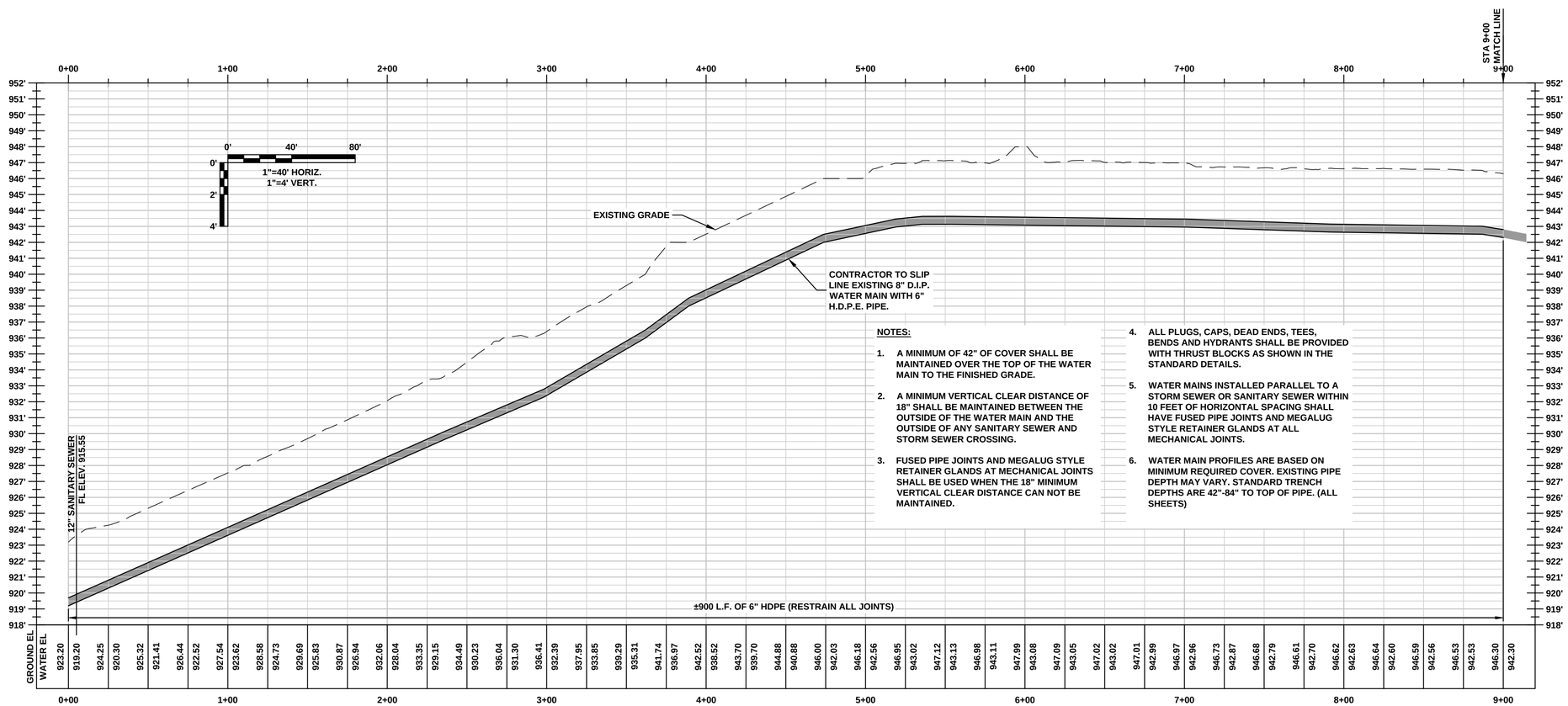
Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER ABANDONMENT PLAN

STATE OF MISSOURI KAREN L. ALLISON NUMBER PE-2023042571 PROFESSIONAL ENGINEER 2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722





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SCHERER RD - WTR #1-1

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LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
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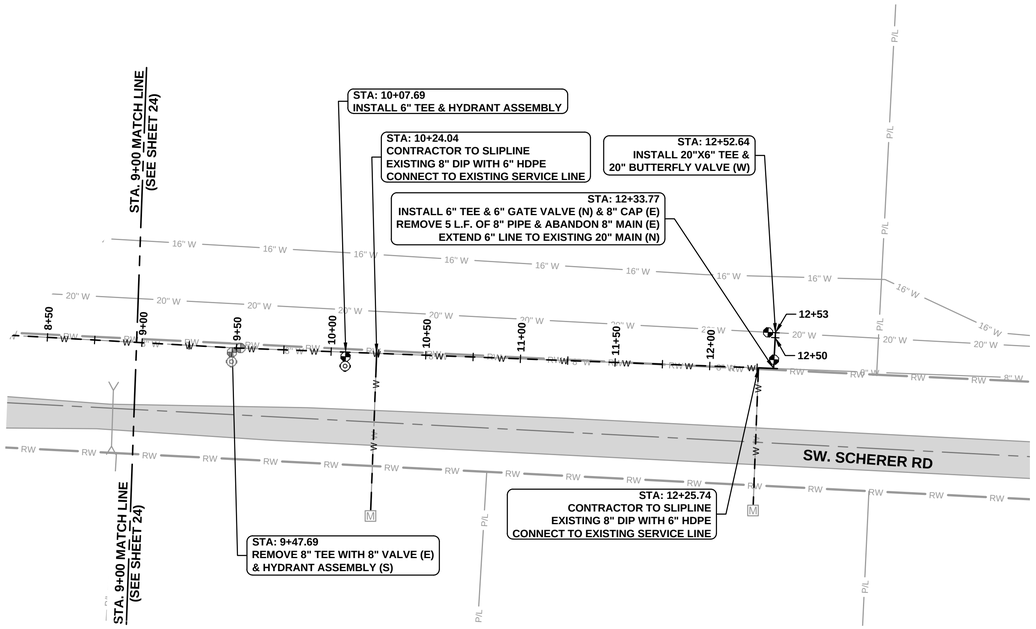

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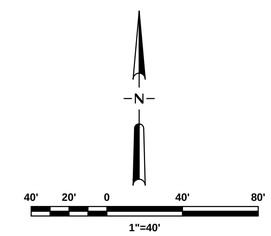

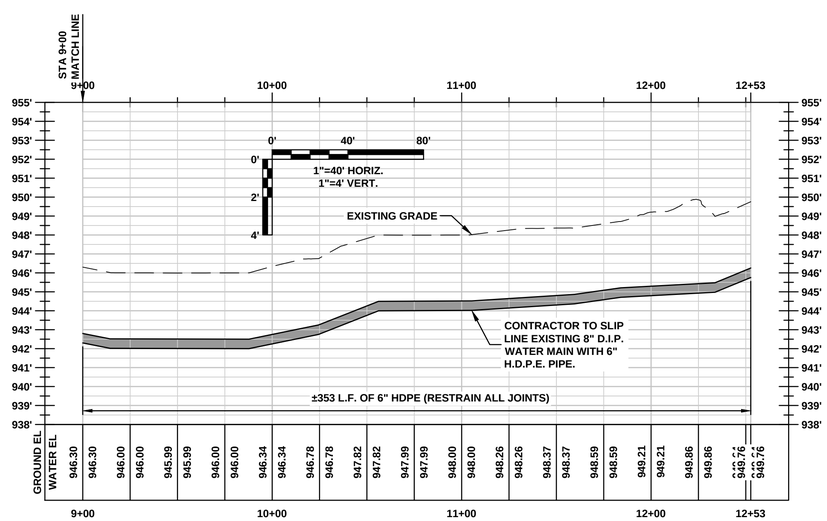

SCHERER RD - WTR #1-2

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LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER

Drawn By:	CNS
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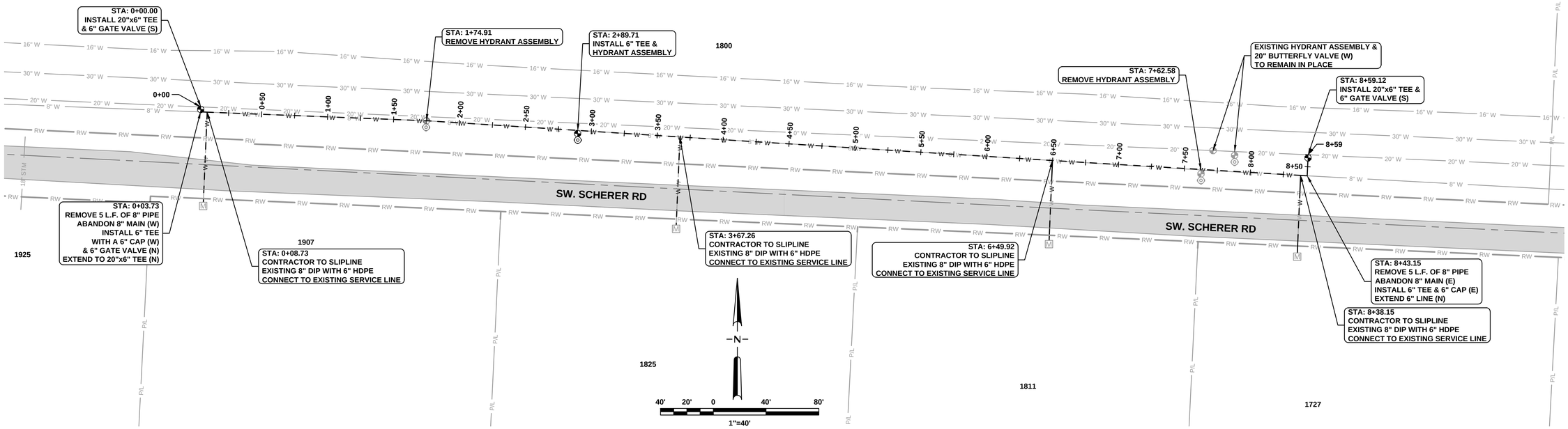

SCHERER RD - WTR #2

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
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LEE'S SUMMIT MISSOURI

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

Project: **WATER MAIN REPLACEMENT - FY24**
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: **WATER PLAN & PROFILE**

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
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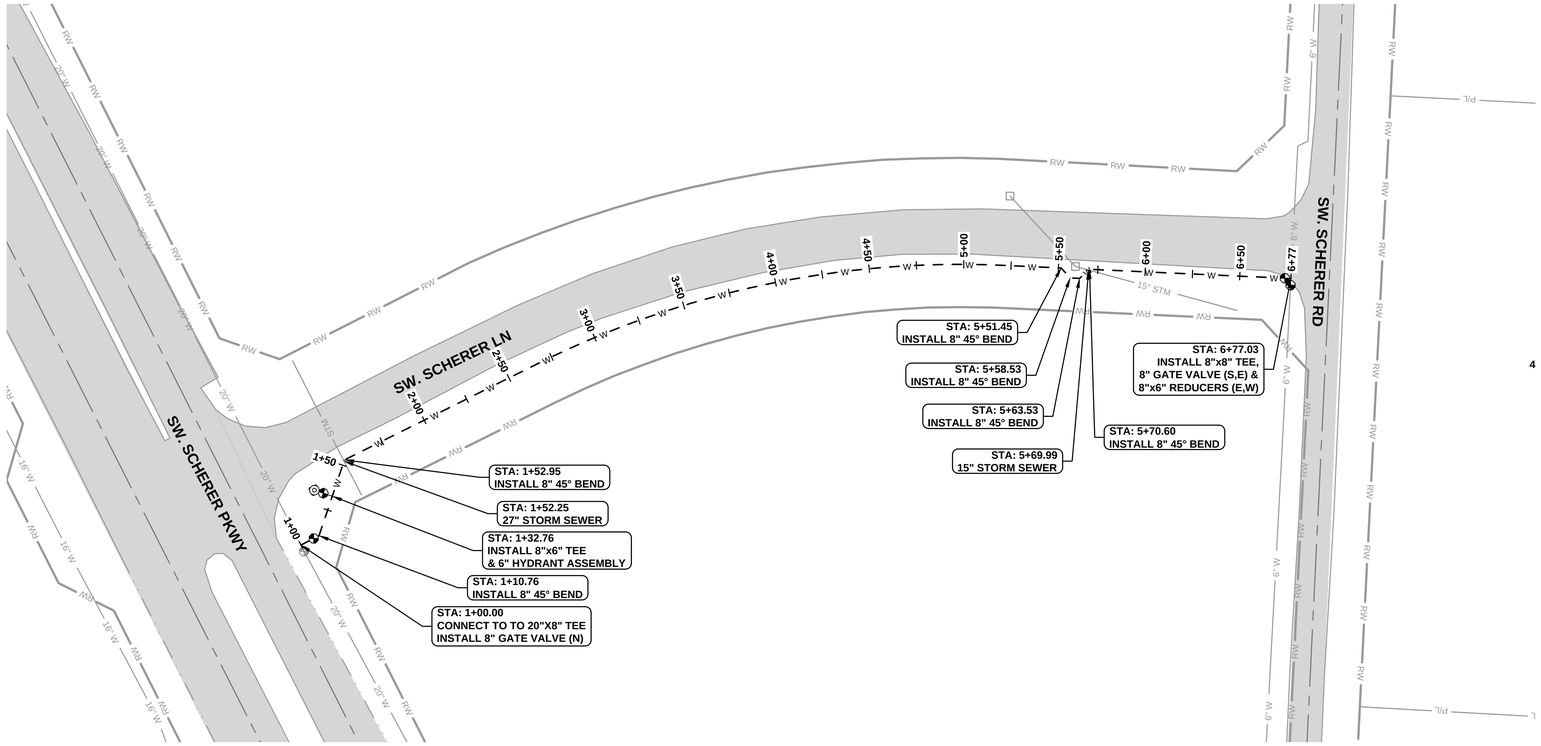

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N

40' 20' 0 40' 80'

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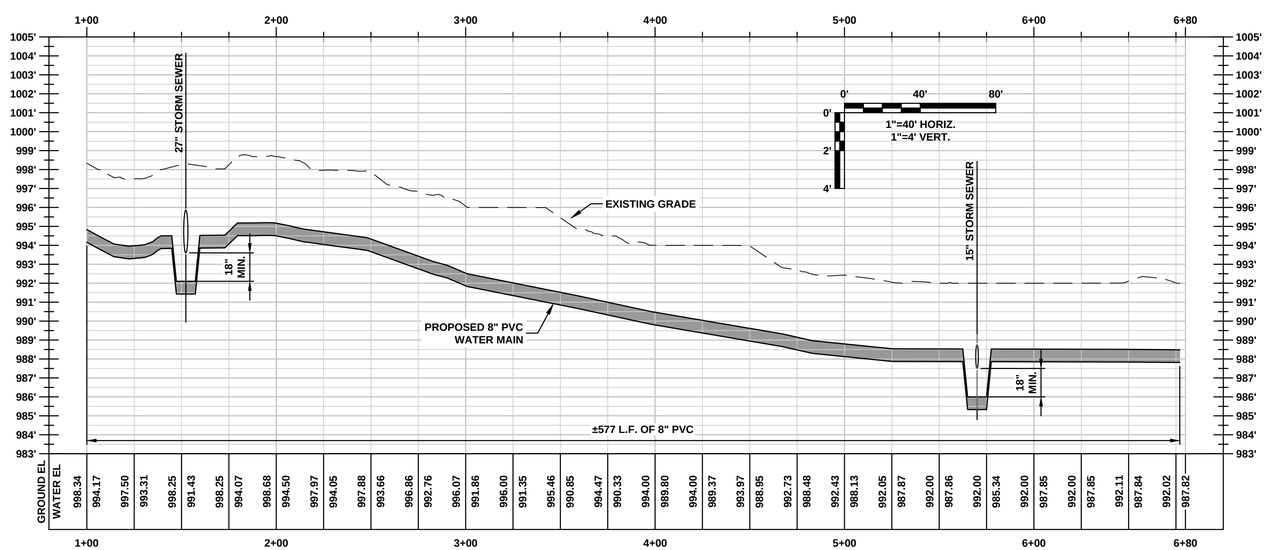

SW SCHERER LANE

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LEE'S SUMMIT MISSOURI

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

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PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: WATER PLAN & PROFILE

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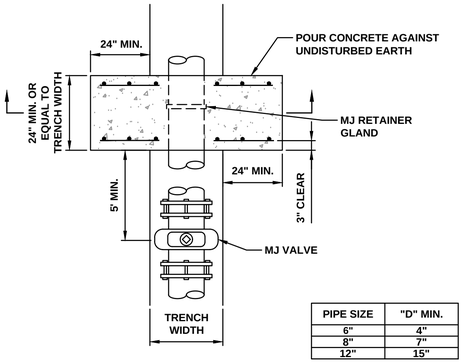
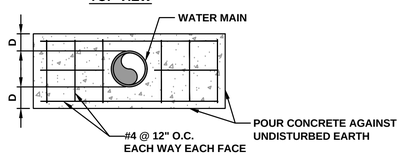
Date:	02/22/2024
Project#	722



PIPE SIZE	"D" MIN.
6"	4"
8"	7"
12"	15"

TOP VIEW



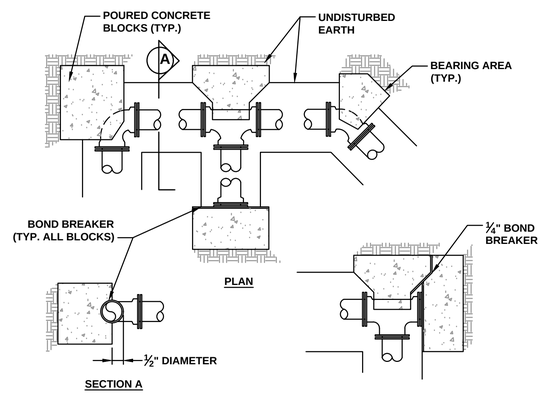
SECTION A-A

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

STRADDLE BLOCK
NOT TO SCALE

REQUIRED CONCRETE BEARING AREA (SQUARE FEET - SF)

NOM. DIA. (INCHES)	180 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	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

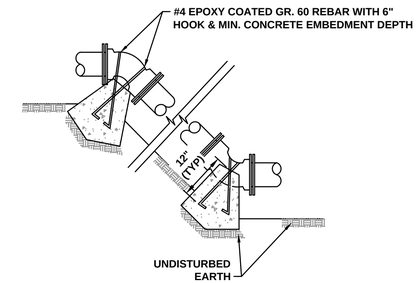


NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING AREA MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

HORIZONTAL THRUST BLOCKS
NOT TO SCALE

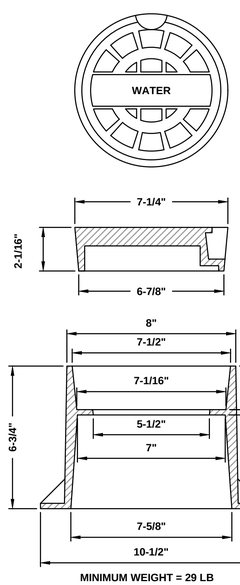
REQUIRED CONCRETE VOLUME (CUBIC FEET - CF)

NOM. DIA. (INCHES)	180 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	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



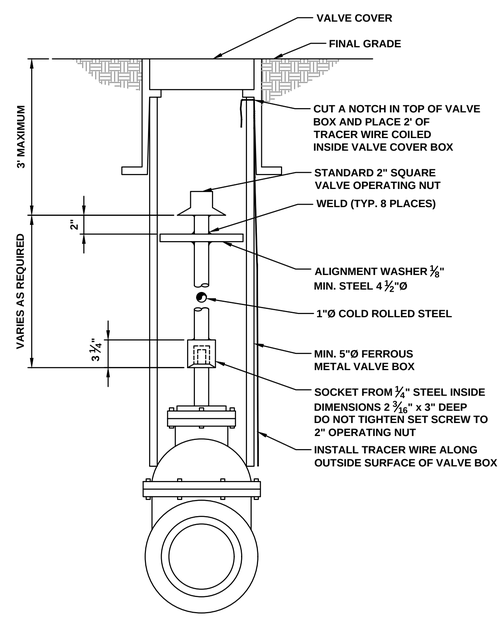
NOTES:
1. ALL BENDS WITHOUT RESTRAINED JOINTS SHALL HAVE CONCRETE THRUST BLOCKS INSTALLED FOR RESTRAINT.
2. MEGA LUGS MAY BE USED ONLY IN CONJUNCTION WITH CONCRETE THRUST BLOCKING.
3. BEARING MUST BE AGAINST UNDISTURBED SOIL.
4. DO NOT COVER JOINTS OR BOLTS (WHERE APPLICABLE) WITH CONCRETE.

VERTICAL THRUST BLOCKS
NOT TO SCALE

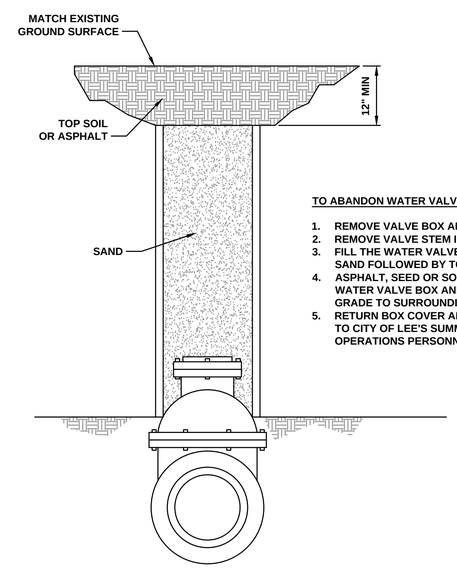


MINIMUM WEIGHT = 29 LB

VALVE BOX COVER
NOT TO SCALE



VALVE STEM & BOX EXTENSION
NOT TO SCALE



TO ABANDON WATER VALVE:

1. REMOVE VALVE BOX AND COVER
2. REMOVE VALVE STEM IF PRESENT
3. FILL THE WATER VALVE BOX WITH SAND FOLLOWED BY TOP SOIL
4. ASPHALT, SEED OR SOD OVER WATER VALVE BOX AND MATCH GRADE TO SURROUNDING GRADE
5. RETURN BOX COVER AND STEM TO CITY OF LEE'S SUMMIT WATER OPERATIONS PERSONNEL.

ABANDONED VALVE
NOT TO SCALE

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

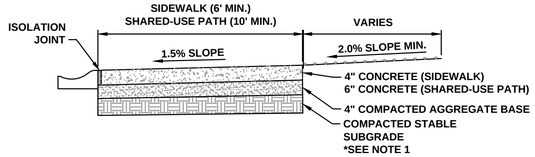
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: THRUST BLOCKS & VALVES

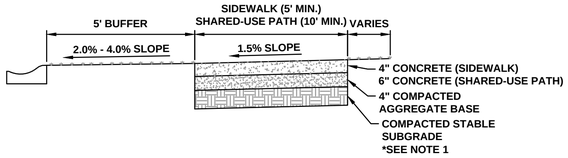
STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



SIDEWALK/SHARED-USE PATH WITHOUT BUFFER

NOT TO SCALE

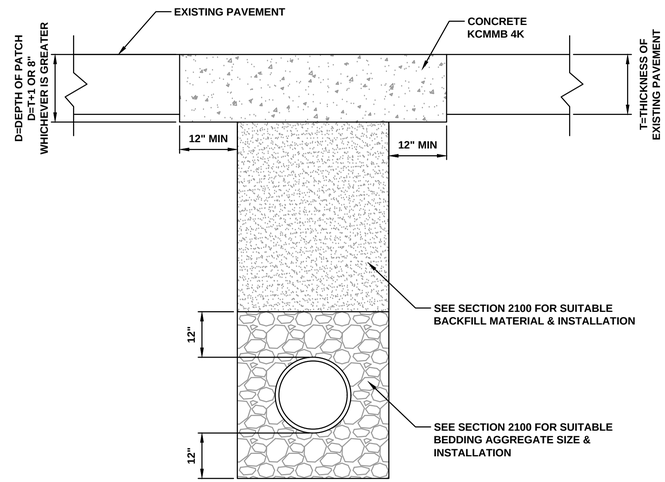


SIDEWALK/SHARED-USE PATH WITH BUFFER

NOT TO SCALE

GENERAL NOTES:

1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS/SHARED-USE PATHS.
4. ALL SIDEWALK/SHARED-USE PATHS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN ISOLATION JOINT SHALL BE PLACED AT A MAXIMUM OF 100 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK/SHARED-USE PATHS, BUT NO GREATER THAN 10 FT.
6. AN ISOLATION JOINT SHALL BE PLACED WHERE THE SIDEWALK/SHARED-USE PATHS MEETS A RESIDENTIAL DRIVEWAY.
7. SHARED-USE PATHS WIDTH SHALL BE 10 FT. WIDE.
8. SIDEWALK/SHARED-USE PATHS FINISHING SHALL BE FULL BROOM FINISH OR AS DIRECTED BY CITY INSPECTOR.
9. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

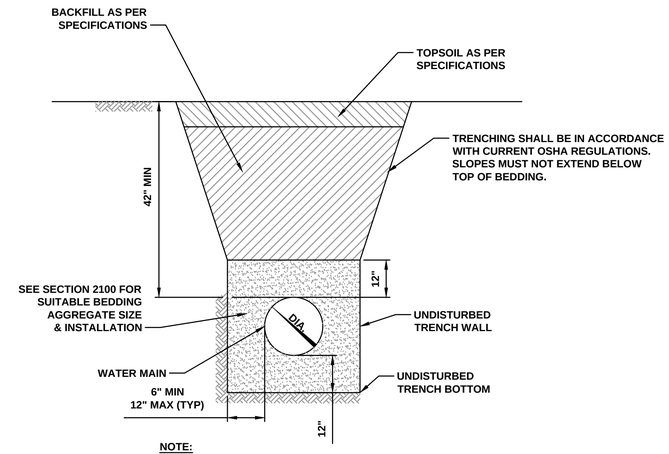


NOTES:

1. PAVEMENT SHALL BE SAWED AND REMOVED WITHOUT DAMAGE TO ADJACENT PAVEMENT.

ASPHALT OR CONCRETE PUBLIC STREET

NOT TO SCALE

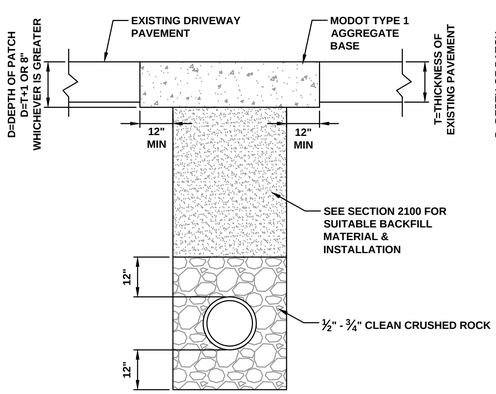


NOTE:

BELL HOLES SHALL BE DUG SO THAT NO PART OF THE BELL SHALL BE IN CONTACT WITH THE TRENCH BOTTOM.

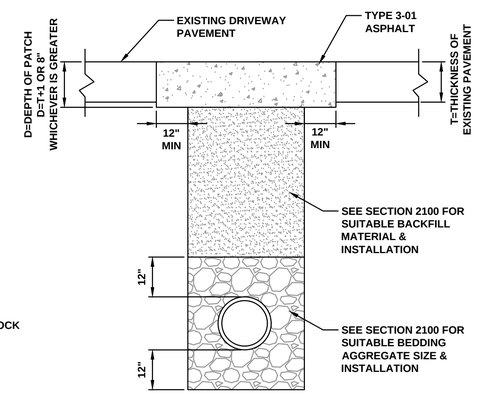
TRENCH DETAIL

NOT TO SCALE



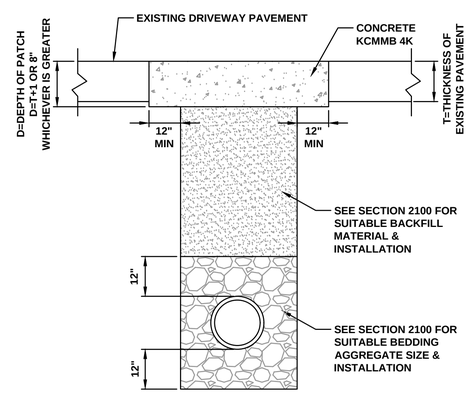
GRAVEL DRIVEWAY RESTORATION

NOT TO SCALE



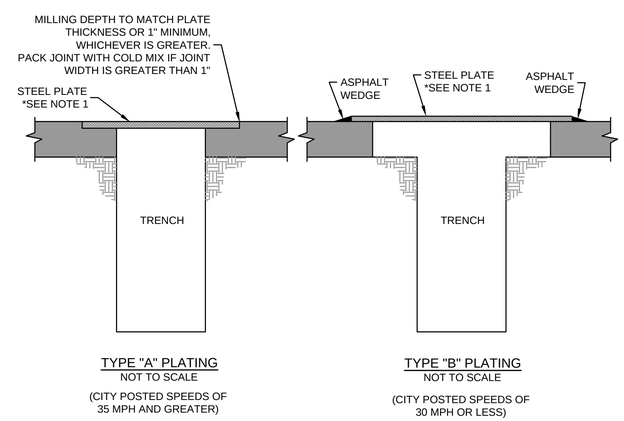
ASPHALT DRIVEWAY RESTORATION

NOT TO SCALE



CONCRETE DRIVEWAY RESTORATION

NOT TO SCALE



TYPE "A" PLATING
NOT TO SCALE
(CITY POSTED SPEEDS OF 35 MPH AND GREATER)

TYPE "B" PLATING
NOT TO SCALE
(CITY POSTED SPEEDS OF 30 MPH OR LESS)

TRENCH PLATE DETAIL

GENERAL NOTES:

1. THE CONTRACTOR SHALL PROVIDE ADEQUATE OVERLAP OF PLATE ON ASPHALT TO ASSURE NO SLIPPAGE OF PLATE AND NO COLLAPSING OF TRENCH.
2. ALL PLATES SHALL BE ANCHORED SO PLATES DO NOT MOVE OR SHIFT UNDER TRAFFIC.

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

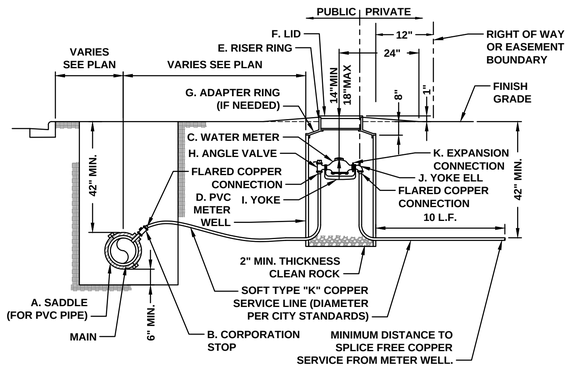
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: ENCASEMENTS & TRENCHES

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

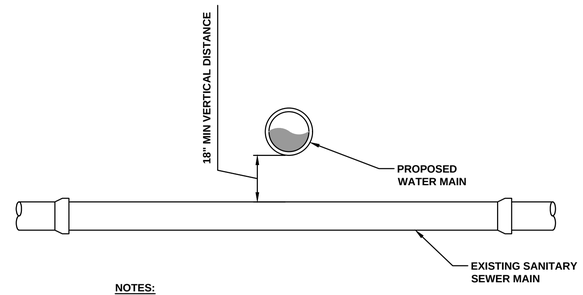


NOTES:

1. METER INSTALLATION SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC OR IN CONCRETE PAVEMENT WITHOUT CITY APPROVAL.
2. IF METER IS TO BE LOCATED OTHER THAN IN FRONT OF PROPERTY LINE, CITY APPROVAL SHALL BE OBTAINED.
3. CITY TO FURNISH ITEMS A-K ONLY ON NEW DEVELOPMENT HOMES.
4. NO OTHER EQUIPMENT SHALL BE INSTALLED IN THIS PIT.
5. 42" MINIMUM BURY DEPTH FOR ALL SERVICE LINES.
6. EXCAVATION FOR TAP TO EXPOSE 4 LINEAR FEET OF MAIN.
7. NO SPLICES ALLOWED BETWEEN METER AND MAIN.
8. SERVICE CONNECTION TAP AT APPROXIMATELY 45 DEGREES.
9. LID AND RISER RING SHALL BE SET SO THAT GROUND WATER WILL DRAIN AWAY FROM THE WELL.
10. CONTACT WATER UTILITIES, 816-969-1900, FOR REQUIREMENTS OF A METER LARGER THAN 2"

SERVICE CONNECTION METER WELL

NOT TO SCALE

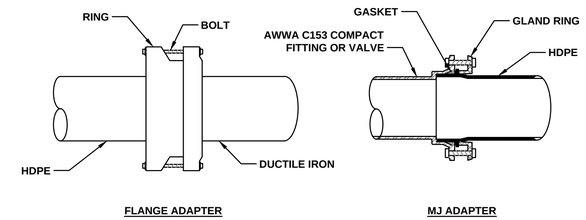


NOTES:

1. FULL LENGTH OF WATER PIPE SHALL BE LOCATED SUCH THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.

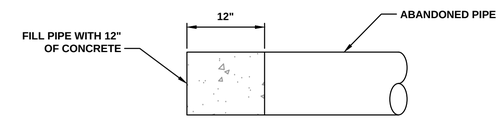
SANITARY SEWER UTILITY CROSSING

NOT TO SCALE



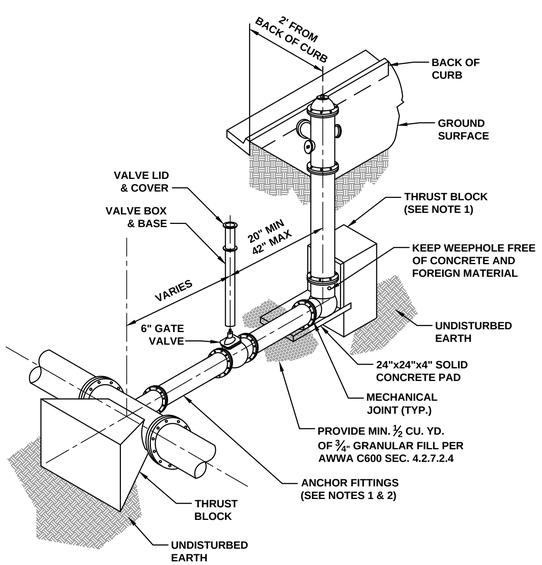
HDPE TO DUCTILE IRON CONNECTION

NOT TO SCALE



ABANDONED WATER MAIN

NOT TO SCALE

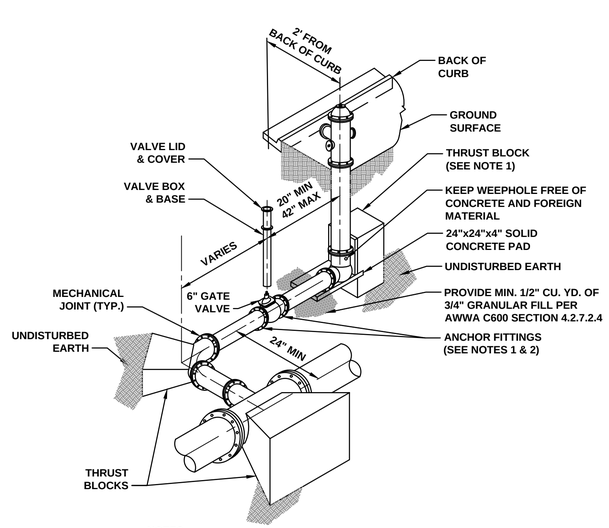


NOTES:

1. WHEN RETAINER GLANDS ARE USED IN LIEU OF ANCHOR FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
2. GATE VALVE MAY BE BOLTED DIRECTLY TO ANCHOR 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.

HYDRANT INSTALLATION STRAIGHT SET

NOT TO SCALE



NOTES:

1. WHEN RETAINER GLANDS ARE USED IN LIEU OF ANCHOR RESTRAINT FITTINGS, HORIZONTAL THRUST BLOCKS ARE REQUIRED.
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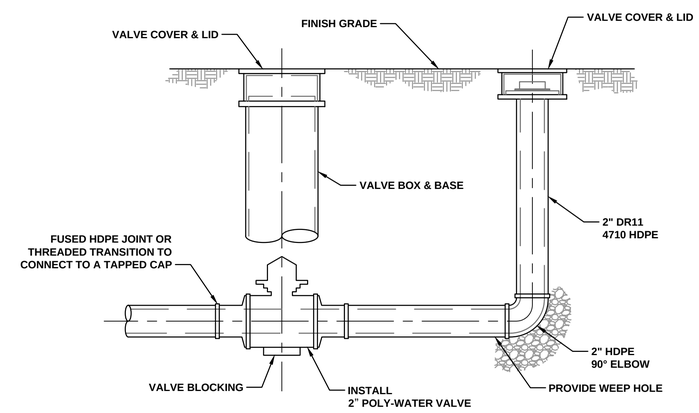
4. BOTTOM HYDRANT FLANGE SHALL BE 2" TO 6" ABOVE FINISHED GRADE.
5. FOR STREETS WITHOUT CURBS FIRE HYDRANTS SHALL BE PLACED WITHIN 1 FOOT OF THE R/W LINE, BUT NOT MORE THAN 10' FROM EDGE OF PAVEMENT. FIRE HYDRANT SHALL NOT BE PLACED IN BOTTOM OF DITCH.
6. HYDRANT SHALL BE ROTATED AS DIRECTED BY INSPECTOR.

HYDRANT ASSEMBLY WITH 90° BEND

NOT TO SCALE



BLOW OFF ASSEMBLY

NOT TO SCALE

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

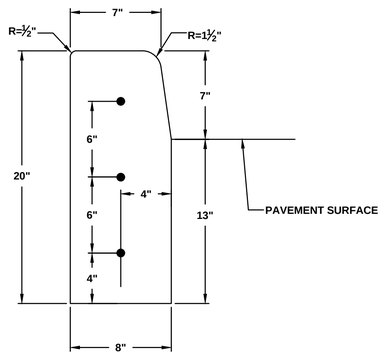
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

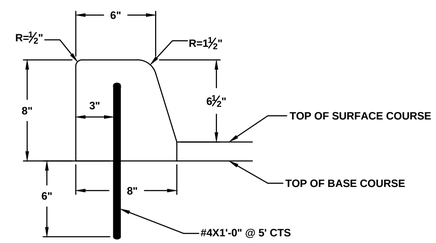
Sheet Name: HYDRANTS AND METERS

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER

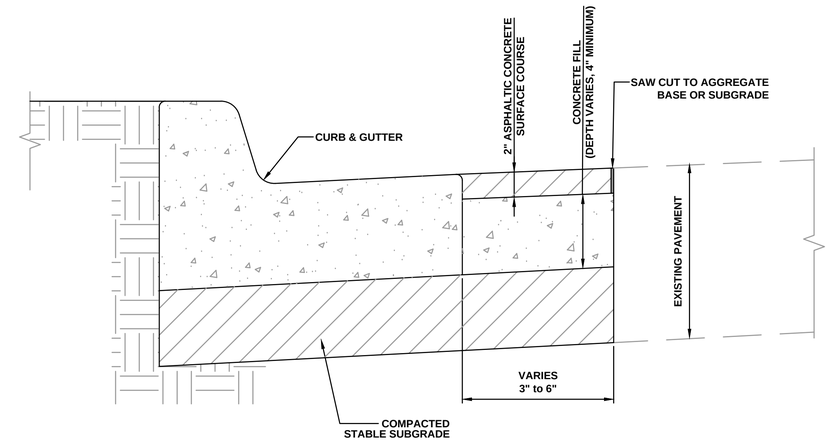
Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



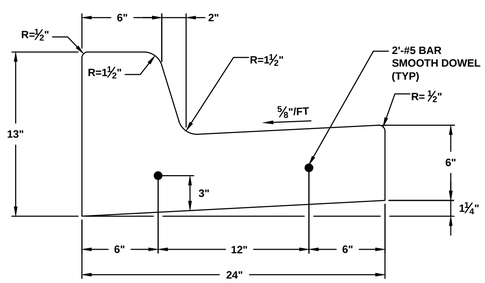
STRAIGHT CURB
(TYPE C-1)



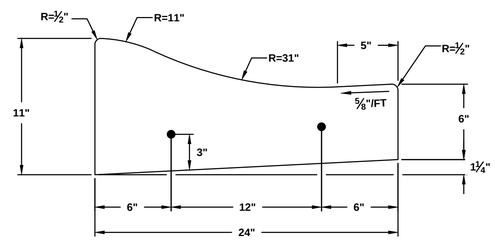
DOWELLED CURB
(TYPE DC)



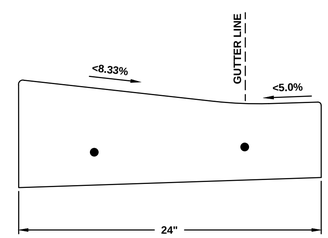
CURB REPLACEMENT DETAIL



STRAIGHT BACK CURB & GUTTER
(TYPE CG-1)



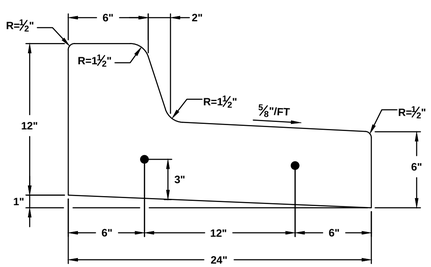
ROLL BACK CURB & GUTTER
(TYPE CG-2)



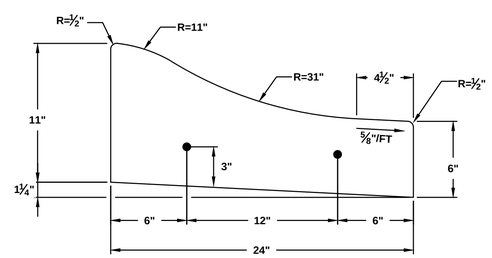
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)

GENERAL NOTES

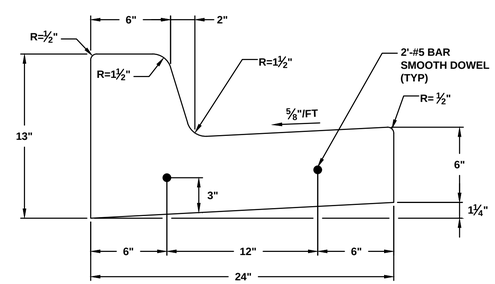
1. ¾" ISOLATION JOINTS WITH 2 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES AND BONDED EITHER THROUGH CASTING IN PLACE OR DRILLING AND BONDING UTILIZING AN EPOXY OR POLYESTER BONDING AGENT FOR THE OTHER END.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.
9. ALL TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED CONSISTENT WITH THE ISOLATION JOINT DETAIL AS PRESENTED IN GENERAL NOTE 1 (ABOVE).



STRAIGHT BACK DRY CURB & GUTTER
(TYPE CG-1 DRY)



ROLL BACK DRY CURB & GUTTER
(TYPE CG-2 DRY)



TRANSVERSE CONSTRUCTION JOINT DETAIL
(ALL CURB & GUTTER TYPES)

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

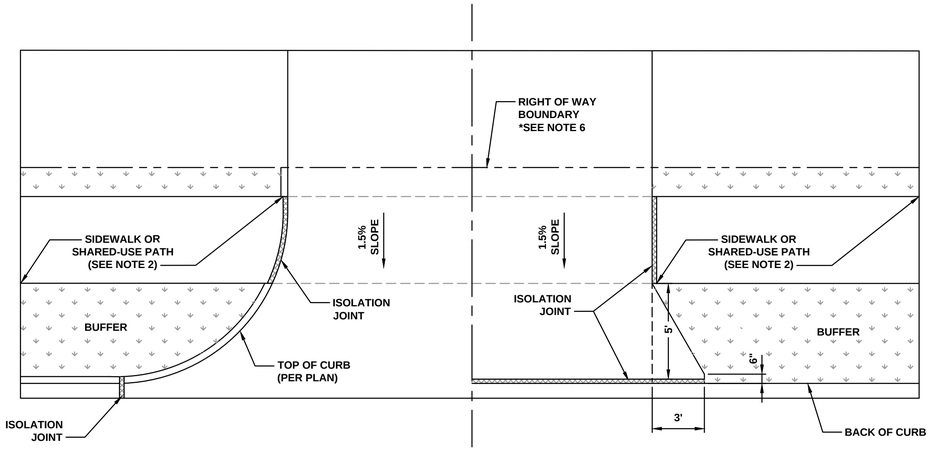
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: CURB DETAILS

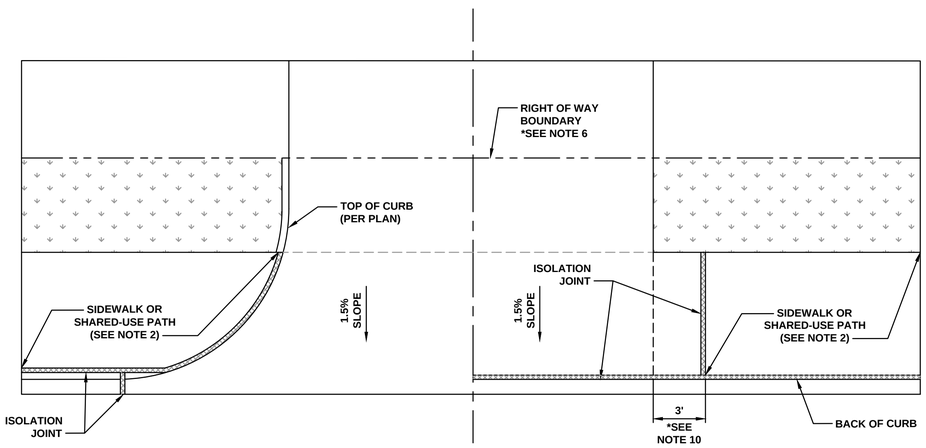
STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



8" COMMERCIAL DRIVEWAY **6" RESIDENTIAL DRIVEWAY**

DRIVEWAY WITH BUFFER
NOT TO SCALE

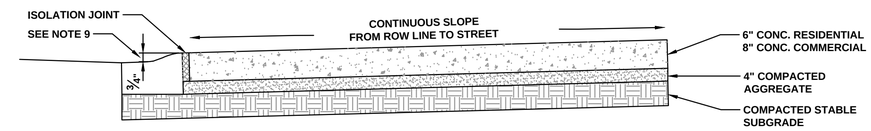


8" COMMERCIAL DRIVEWAY **6" RESIDENTIAL DRIVEWAY**

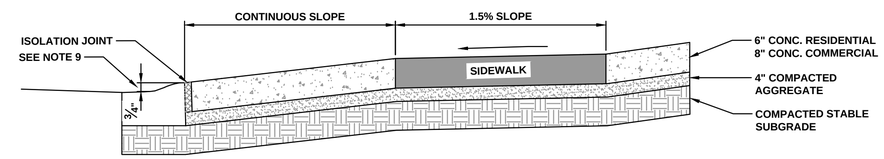
DRIVEWAY WITHOUT BUFFER
NOT TO SCALE

GENERAL NOTES

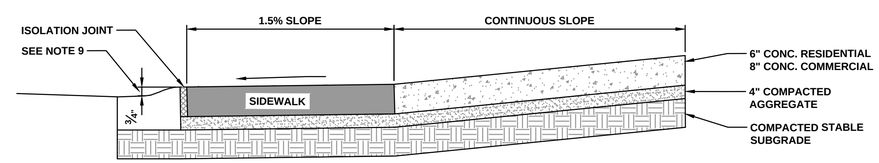
1. SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT DETAIL GEN-3B, SIDEWALK/SHARED USE PATH RAMP AT DRIVEWAY DETAIL).
3. JOINT AT BACK OF CURB LINE SHALL BE AN ISOLATION JOINT FOR RESIDENTIAL DRIVEWAYS.
4. KCMMB 4K CONCRETE MIX IS REQUIRED FOR ALL CURBS.
5. COMMERCIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMMB 4K CONCRETE MIX.
6. RESIDENTIAL DRIVEWAYS, IN THE PUBLIC RIGHT OF WAY, KCMMB 4K CONCRETE MIX IS RECOMMENDED. OTHER CONCRETE MIXES NEED TO BE APPROVED BY CITY INSPECTOR.
7. A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
8. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
9. ¾" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CG-1 CURB ONLY). MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
10. SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3' FROM THE DRIVEWAY.
11. THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT 0F WAY.



DRIVEWAY TYPICAL SECTION
(NO SIDEWALK OR SHARED-USE PATH)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITH BUFFER)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITHOUT BUFFER)
NOT TO SCALE

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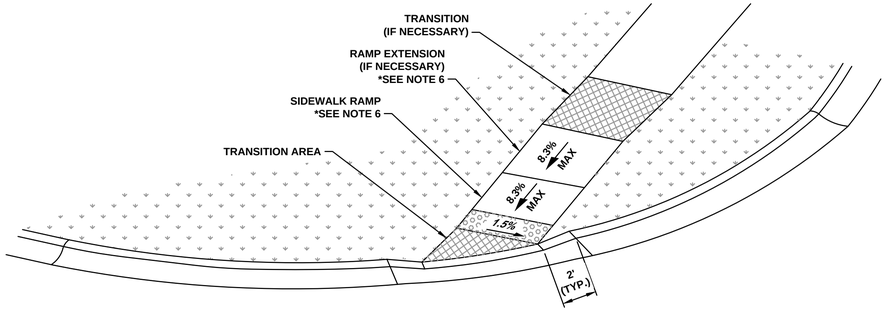
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

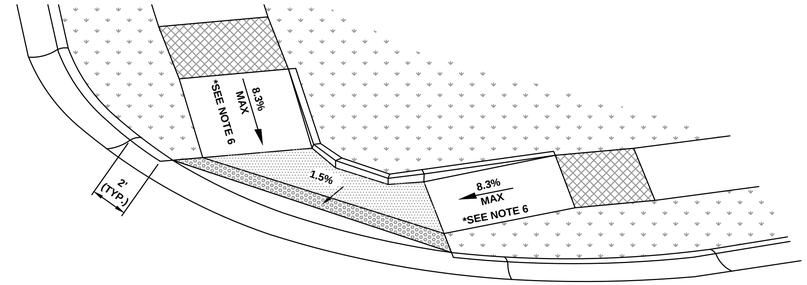
Sheet Name: DRIVEWAY DETAILS

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

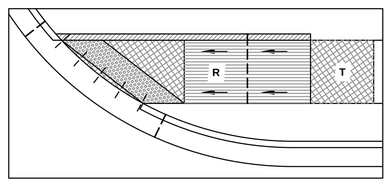
Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP



3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP



ALTERNATE DETECTABLE SURFACE LAYOUT

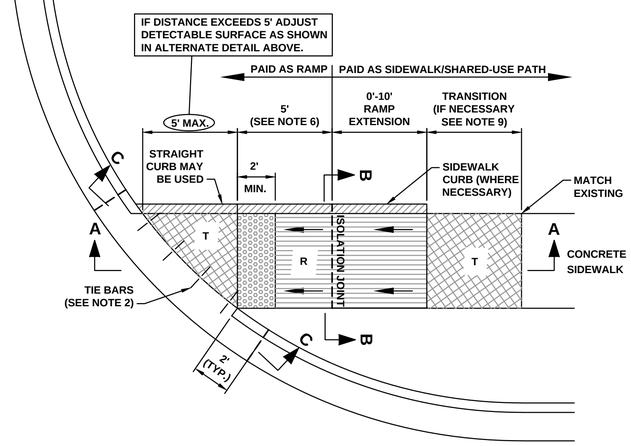
SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION BY BEING CAST IN PLACE OR DRILLED AND BONDED USING EPOXY RESIN BONDING COMPOUND.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 100' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%

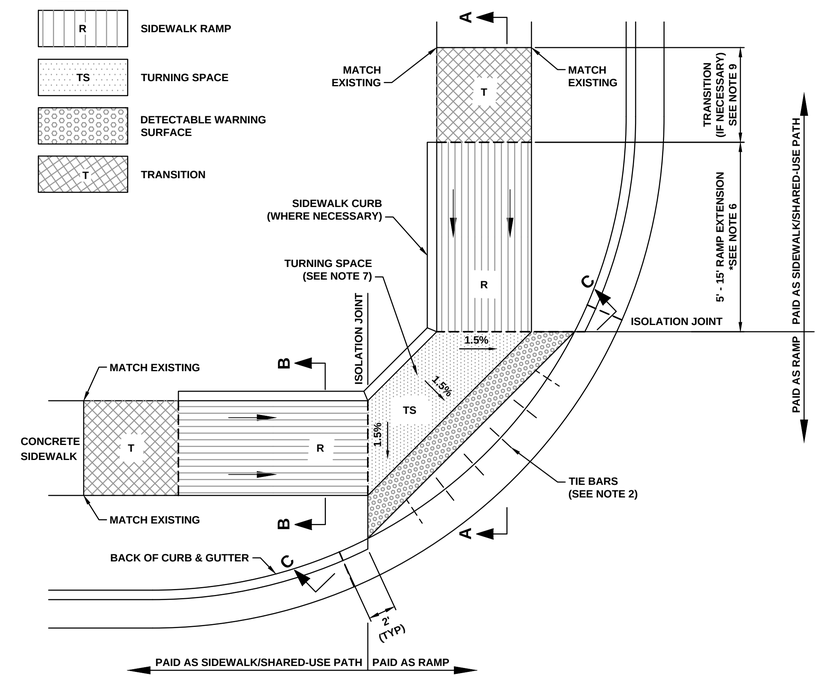
   *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'X4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).

LEGEND

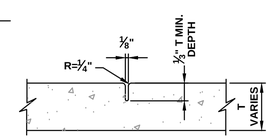
- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION



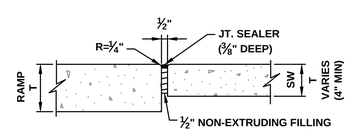
TYPE A SIDEWALK/SHARED-USE RAMP
NOT TO SCALE



TYPE B SIDEWALK/SHARED-USE RAMP
NOT TO SCALE

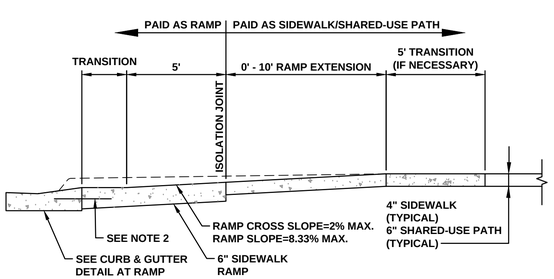


CONTRACTION JOINT

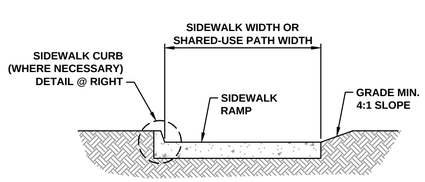


ISOLATION JOINT

JOINT DETAILS
NOT TO SCALE



SECTION A-A



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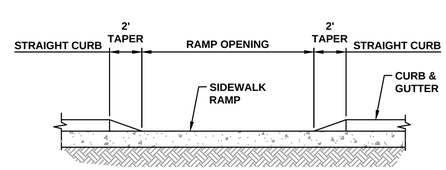

SECTION C-C

TYPE A & B SIDEWALK RAMP
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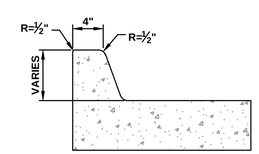
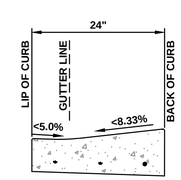


SIDEWALK CURB DETAIL
NOT TO SCALE



CURB & GUTTER DETAIL AT RAMP
NOT TO SCALE

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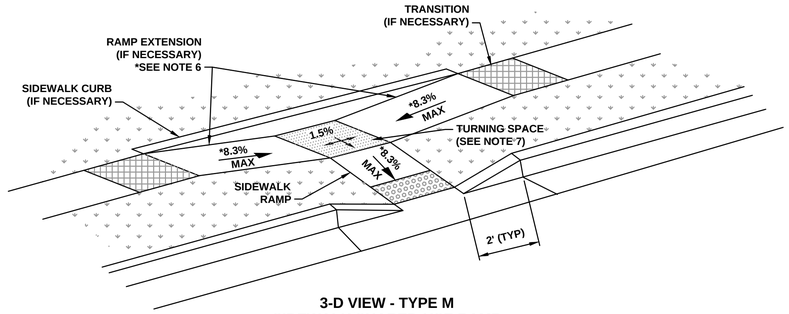
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

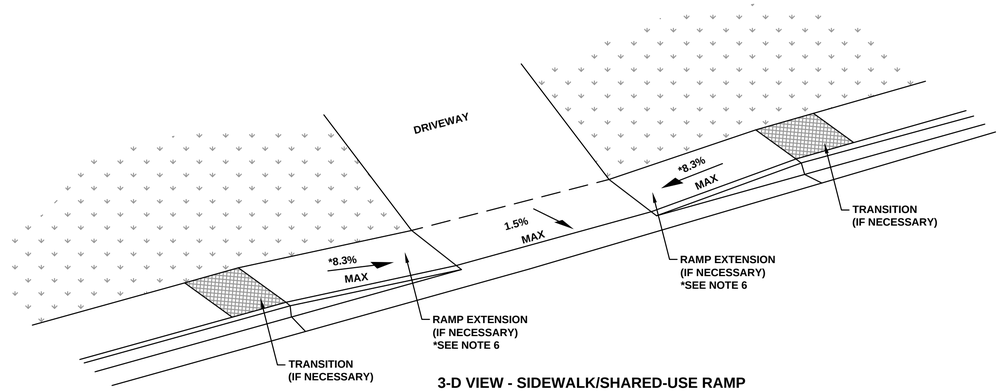
Sheet Name: CURB DETAILS

STATE OF MISSOURI — KAREN L. ALLISON — NUMBER PE-2023042571 — PROFESSIONAL ENGINEER

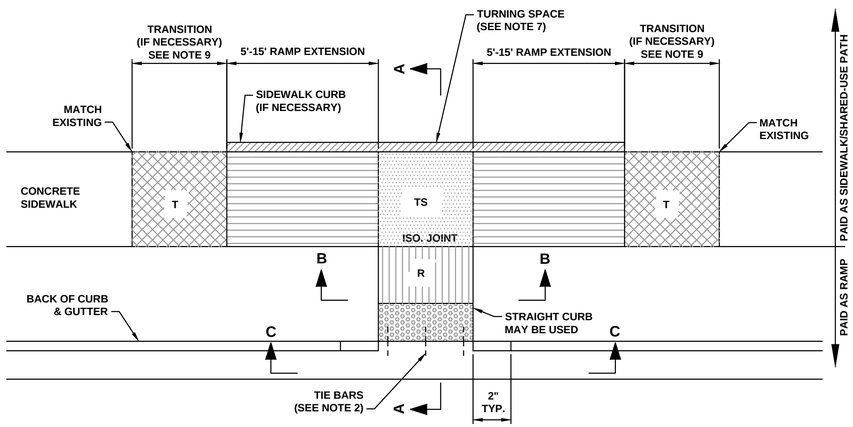
Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722



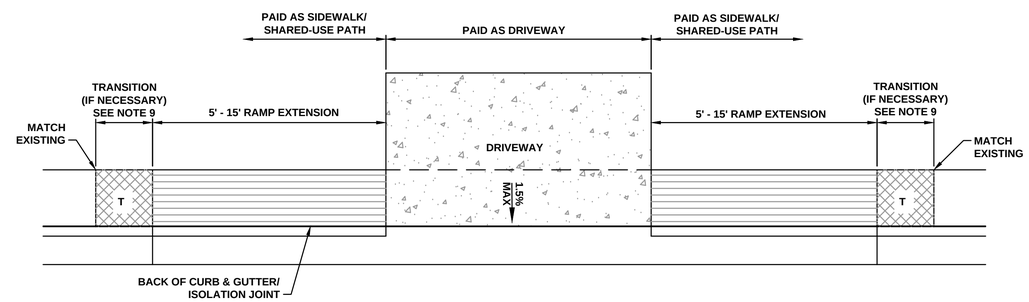
3-D VIEW - TYPE M
SIDEWALK/SHARED-USE RAMP



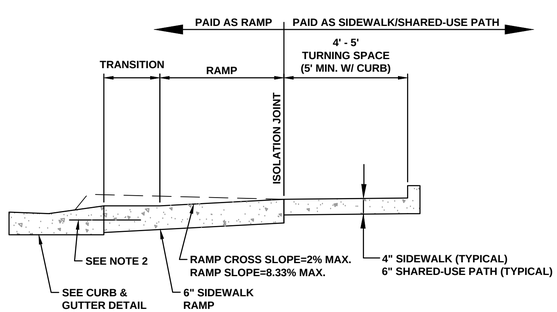
3-D VIEW - SIDEWALK/SHARED-USE RAMP
AT DRIVEWAY WITH ADJOINING CURB



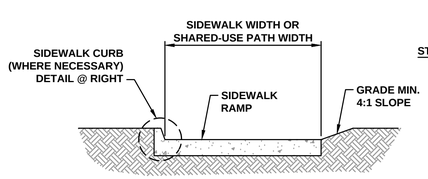
TYPE M SIDEWALK/SHARED-USE RAMP
NOT TO SCALE



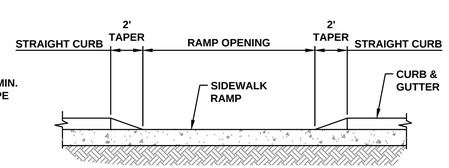
SIDEWALK/SHARED USE RAMP
AT DRIVEWAY WITH ADJOINING CURB



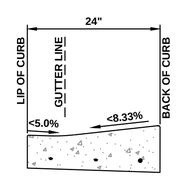
SECTION A-A



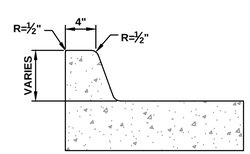
SECTION B-B



SECTION C-C



CURB & GUTTER DETAIL
AT RAMP
NOT TO SCALE



SIDEWALK CURB DETAIL
NOT TO SCALE

LEGEND

- R — SIDEWALK RAMP
- TS — TURNING SPACE
- DETECTABLE WARNING SURFACE
- T — TRANSITION

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

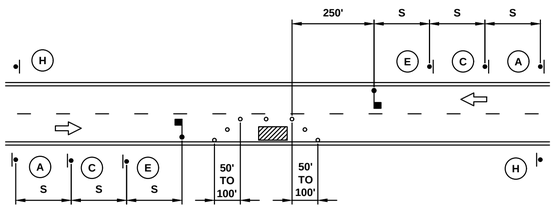
Sheet Name: CURB DETAILS

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER
PE-2023042571
PROFESSIONAL ENGINEER

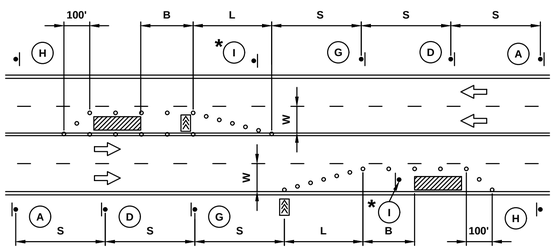
Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

SYMBOL LEGEND

- WORK AREA
- SIGN
- BARRICADE
- DIRECTION OF TRAVEL
- CHANNELIZER
- ARROW PANEL
- FLAGGER

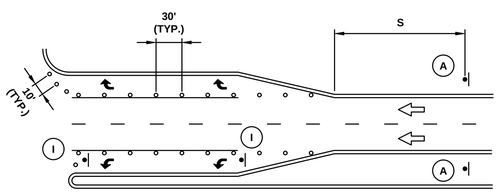


LANE CLOSURE - TWO LANE STREET

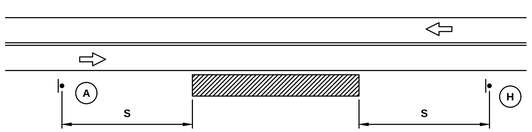


LANE CLOSURE - FOUR LANE STREET

*INSTALL SIGNS EVERY 200 FEET THROUGHOUT THE CLOSED LANE OR AS NEEDED



TURN LANE CLOSURE



TYPICAL SIGNING FOR WORK ADJACENT TO THE STREET

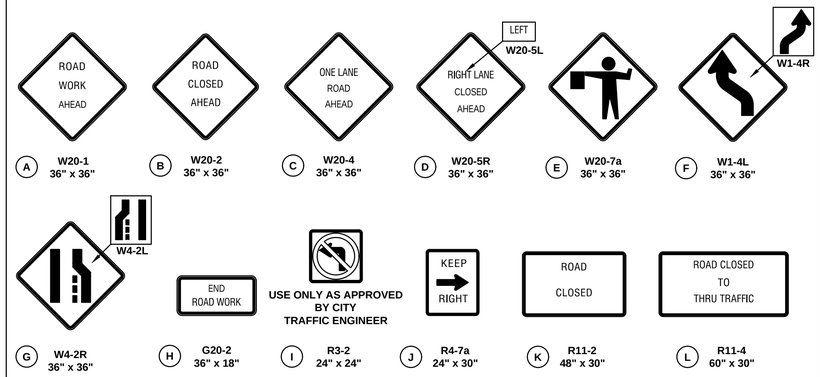
GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE "B"	
SPEED LIMIT (MPH)	LENGTH (FEET)
25	35
30	55
35	85
40	120
45	170

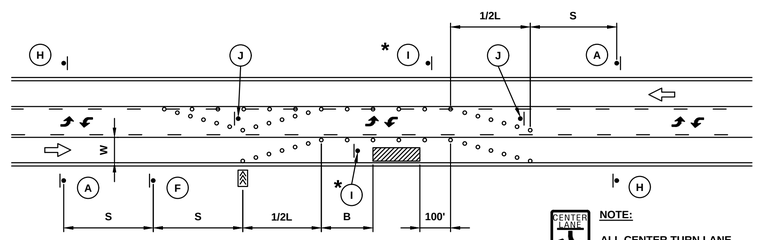
MAXIMUM CHANNELIZER SPACING		
SPEED LIMIT (MPH)	WITHIN TAPER (FEET)	OUTSIDE TAPER (FEET)
25	25	50
30	30	60
35	35	70
40	40	80
45	45	90

TAPER DIMENSIONS (FEET)				
SPEED LIMIT (MPH)	MINIMUM TAPER LENGTH "L", PER LANE WIDTH "W"			MINIMUM NUMBER OF CHANNELIZERS
	10	11	12	
25	105	115	125	6
30	150	165	180	7
35	205	225	245	8
40	270	295	320	9
45	450	495	540	13

SIGN SPACING "S"	
SPEED LIMIT (MPH)	SPACING (FEET)
25	100
30-35	250
≥ 40	350

SIGN LEGEND





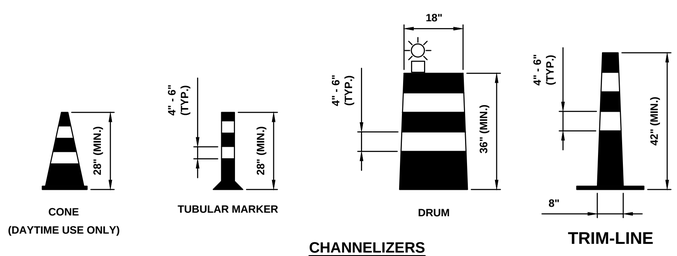
R3-9b

NOTE:

ALL CENTER TURN LANE SIGNS (MUTCD NO. R3-9B) SHALL BE COVERED DURING LANE CLOSURE

LANE CLOSURE - THREE LANE STREET

*INSTALL SIGNS EVERY 200 FEET THROUGHOUT THE CLOSED LANE OR AS NEEDED

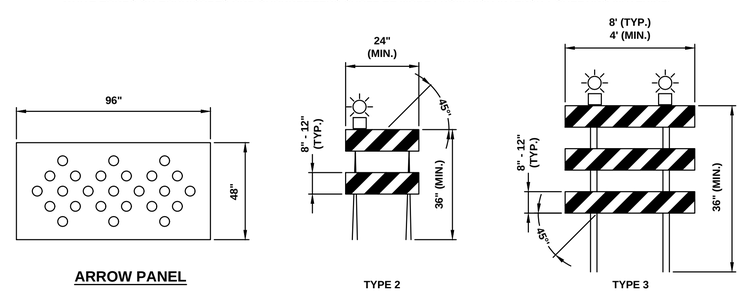


CHANNELIZERS

TRIM-LINE

NOTE:

WHITE BANDS ON BARRICADES AND CHANNELIZERS SHALL BE MADE FROM HIGH INTENSITY SHEETING MATERIAL.



ARROW PANEL

(OPTIONAL ON TWO LANE AND THREE LANE STREETS WITH SPEEDS LESS THAN 35 MPH)

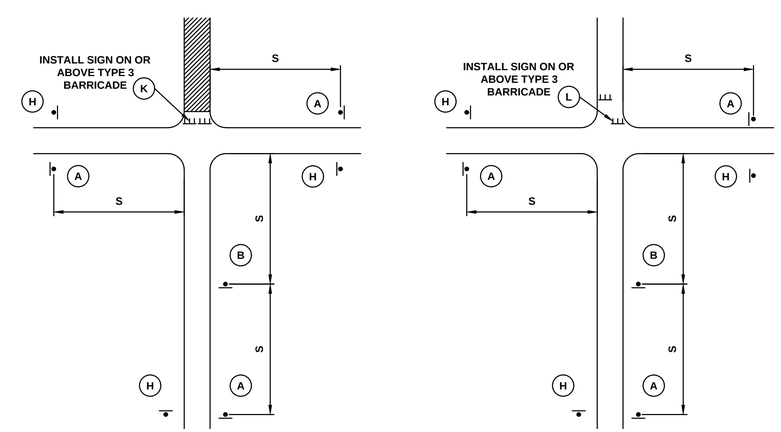
TYPE 2

TYPE 3

BARRICADES

GENERAL NOTES:

1. ALL SIGNS, BARRICADES, CHANNELIZERS, MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. ALL TRAFFIC CONTROL DEVICES SHALL BE STANDARD IN SIZE, SHAPE, COLOR, AND MESSAGE, IN GOOD CONDITION, AND RETRO-REFLECTORIZED. ALL SIGNS SHALL BE SECURELY MOUNTED WITH HEIGHT AND LATERAL LOCATION AS DESCRIBED IN THE MUTCD.
3. WARNING LIGHTS SHALL BE USED ON BARRICADES IN PLACE AT NIGHT AND ON WARNING SIGNS WHICH ALERT DRIVERS ABOUT A CHANGE IN ALIGNMENT, TRAFFIC CONTROL, LANE CLOSURE, OR ROAD CLOSURE.
4. FLAGGERS SHALL BE USED WHERE INDICATED ON THE PLANS, WHERE CONSTRUCTION VEHICLES INTERACT WITH NORMAL TRAFFIC, OR WHERE CONSTRUCTION ACTIVITIES IMPOSE A RESTRICTION ON TRAFFIC, AS DIRECTED BY THE CITY TRAFFIC ENGINEER. WHERE FLAGGERS ARE USED, ADVANCE SIGNING SHALL BE ERECTED AS SHOWN IN THE DETAILS OR AS SPECIFIED IN THE MUTCD. FLAGGERS SHALL MEET THE REQUIREMENTS IN THE MUTCD IN REGARD TO CHARACTER, TRAINING, ATTIRE, AND BEHAVIOR.
5. TRIM-LINES ARE THE CITY'S PREFERRED CHANNELIZING DEVICE. CONES MAY NOT BE USED AT NIGHTTIME.
6. TRAFFIC CONTROL DEVICES NOT IN USE OR NOT APPLICABLE SHALL BE EITHER COVERED OR REMOVED FROM THE WORK AREA.
7. THE CONTRACTOR SHALL USE BARRICADES, STREET PLATES, OR FENCING AS NEEDED TO EFFECTIVELY SHIELD PEDESTRIAN AND VEHICULAR TRAFFIC FROM EXPOSED OBJECTS, EXCAVATIONS, AND CONSTRUCTION ACTIVITIES.
8. ACCESS SHALL BE MAINTAINED TO ALL DRIVEWAYS AND SIDE STREETS UNLESS NOTED OTHERWISE ON THE PLANS.
9. NO STREET SHALL BE CLOSED WITHOUT THE APPROVAL OF THE CITY TRAFFIC ENGINEER. THE CONTRACTOR SHALL NOTIFY THE CITY TRAFFIC ENGINEER AT LEAST 10 DAYS IN ADVANCE OF ANY STREET CLOSURE. IF A DETOUR ROUTE AROUND THE CLOSURE IS TO BE PROVIDED, ALL DETOUR SIGNING SHALL BE AS SHOWN ON A PLAN APPROVED BY THE CITY TRAFFIC ENGINEER.
10. CONSTRUCTION VEHICLES PARKED ALONG STREETS SHALL BE LOCATED WITHIN THE WORK AREA (TRAFFIC CONTROL) OR WHERE OTHERWISE NORMALLY PERMITTED. CONSTRUCTION MATERIALS, INCLUDING TRAFFIC CONTROL AND VEHICLES SHALL NOT RESTRICT SIGHT DISTANCE FOR VEHICLES EXITING AT STREETS OR DRIVES.
11. CONSTRUCTION MATERIALS SHALL BE KEPT OFF OF SIDEWALKS, CONSOLIDATED IN ONE LOCATION WITHIN CITY RIGHT-OF-WAY, AND REMOVED DAILY UNLESS OTHERWISE APPROVED BY THE INSPECTOR. DIRT, MUD, AND OTHER CONSTRUCTION DEBRIS ON STREETS AND SIDEWALKS SHALL BE REMOVED IMMEDIATELY.
12. THE CONTRACTOR SHALL NOT PERFORM ANY WORK THAT WILL RESTRICT VEHICULAR TRAFFIC IN ANY WAY BETWEEN THE HOURS OF 7:00 A.M. AND 9:00 A.M. OR 4:00 P.M. AND 6:00 P.M. MONDAY THROUGH FRIDAY UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS.
13. ALL TRAVEL LANES SHOULD BE AT LEAST 11 FEET WIDE UNLESS OTHERWISE AUTHORIZED BY THE CITY TRAFFIC ENGINEER. A "NARROW LANES" SIGN SHALL BE INSTALLED IN ADVANCE OF A LANE WIDTH REDUCTION TO LESS THAN 11 FEET.
14. ALL EDGE DROP-OFFS OF MORE THAN 2 INCHES AND LESS THAN 4 INCHES SHOULD BE PROTECTED BY A WEDGE OR BARRIER AND ALL EDGE DROP-OFFS GREATER THAN 4 INCHES SHALL HAVE EDGE PROTECTION (SEE TRAFFIC CONTROL SPECIFICATIONS FOR EDGE TREATMENT REQUIREMENTS).
15. THE "WORKERS" SYMBOLIC SIGN (MUTCD NO. W21-1A) MAY BE USED INSTEAD OF THE "ROAD WORK AHEAD" SIGN FOR WORK WITH A DURATION OF 12 HOURS OR LESS. THE "END ROAD WORK" SIGN IS NOT REQUIRED TO BE INSTALLED AFTER THE "WORKERS" SIGN.
16. NO TRAFFIC SIGNAL SHALL BE ALTERED OR MODIFIED IN ANY WAY WITHOUT A PLAN APPROVED BY THE CITY TRAFFIC ENGINEER.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES ON AN AROUND-THE-CLOCK BASIS, WHETHER OR NOT WORK IS ACTIVELY BEING PURSUED AND ANY DEFICIENCIES NOTED SHALL BE CORRECTED IMMEDIATELY.
18. THE TRAFFIC CONTROL REQUIREMENTS SHOWN ON THESE PLANS ARE MINIMUM REQUIREMENTS ONLY AND DO NOT ATTEMPT TO ADDRESS IN DEPTH THE VARIETY OF SITUATIONS THAT MAY OCCUR ONCE CONSTRUCTION HAS STARTED. IN NO WAY DO THE REQUIREMENTS SHOWN ON THESE PLANS RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR SELECTING THE PROPER TRAFFIC CONTROL DEVICES AND IMPLEMENTATION PROCEDURES THAT WILL ASSURE THE SAFETY OF DRIVERS, PEDESTRIANS, AND WORKERS AT ALL TIMES.
19. SHOULD THE CONTRACTOR FAIL TO ENFORCE THE TRAFFIC CONTROL PLAN OR FAIL TO CLEAN, REPLACE OR OTHERWISE MAINTAIN THE TRAFFIC CONTROL DEVICES WHEN DIRECTED TO DO SO BY THE CITY TRAFFIC ENGINEER OR REPRESENTATIVE, THE CITY MAY TAKE ONE OR MORE OF THE FOLLOWING ACTIONS:
    A. EMPLOY ANOTHER AGENCY TO CORRECT DEFICIENCIES IN TRAFFIC CONTROL DEVICES AND DEDUCT THE COST FROM THE CONTRACTOR'S PAY ESTIMATE.
    B. STOP THE WORK UNTIL DEFICIENCIES ARE CORRECTED.
    C. SUSPEND ALL PAY ESTIMATES UNTIL DEFICIENCIES ARE CORRECTED, OR
    D. PLACE THE CONTRACTOR IN DEFAULT.



NO ACCESS ALLOWED

LOCAL ACCESS PERMITTED

TYPICAL STREET CLOSURE

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

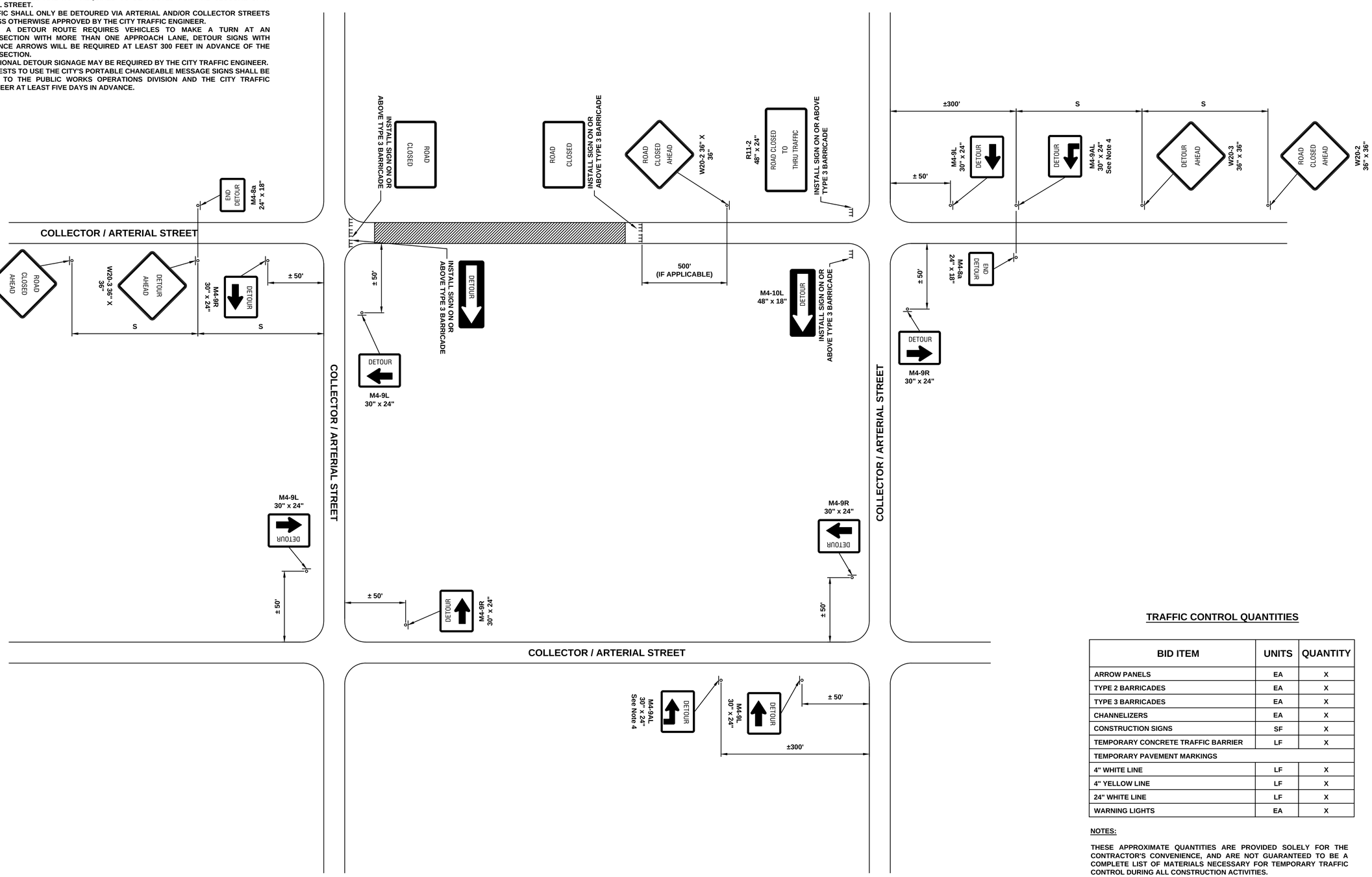
Sheet Name: TRF-1 TRAFFIC CONTROL DETAILS

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER E-2023042571
PROFESSIONAL ENGINEER

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722

NOTES:

1. ALL SIGNS, BARRICADES, CHANNELIZERS, MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. DETOUR ROUTES ARE NOT REQUIRED TO BE POSTED FOR THE CLOSURE OF A LOCAL STREET.
3. TRAFFIC SHALL ONLY BE DETOURED VIA ARTERIAL AND/OR COLLECTOR STREETS UNLESS OTHERWISE APPROVED BY THE CITY TRAFFIC ENGINEER.
4. WHEN A DETOUR ROUTE REQUIRES VEHICLES TO MAKE A TURN AT AN INTERSECTION WITH MORE THAN ONE APPROACH LANE, DETOUR SIGNS WITH ADVANCE ARROWS WILL BE REQUIRED AT LEAST 300 FEET IN ADVANCE OF THE INTERSECTION.
5. ADDITIONAL DETOUR SIGNAGE MAY BE REQUIRED BY THE CITY TRAFFIC ENGINEER.
6. REQUESTS TO USE THE CITY'S PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE MADE TO THE PUBLIC WORKS OPERATIONS DIVISION AND THE CITY TRAFFIC ENGINEER AT LEAST FIVE DAYS IN ADVANCE.



TRAFFIC CONTROL QUANTITIES

BID ITEM	UNITS	QUANTITY
ARROW PANELS	EA	X
TYPE 2 BARRICADES	EA	X
TYPE 3 BARRICADES	EA	X
CHANNELIZERS	EA	X
CONSTRUCTION SIGNS	SF	X
TEMPORARY CONCRETE TRAFFIC BARRIER	LF	X
TEMPORARY PAVEMENT MARKINGS		
4" WHITE LINE	LF	X
4" YELLOW LINE	LF	X
24" WHITE LINE	LF	X
WARNING LIGHTS	EA	X

NOTES:

THESE APPROXIMATE QUANTITIES ARE PROVIDED SOLELY FOR THE CONTRACTOR'S CONVENIENCE, AND ARE NOT GUARANTEED TO BE A COMPLETE LIST OF MATERIALS NECESSARY FOR TEMPORARY TRAFFIC CONTROL DURING ALL CONSTRUCTION ACTIVITIES.

Revision	Notes:	Issued:
0	MDNR REVIEW	06/24/2024
1	ISSUED FOR CONSTRUCTION	02/13/2025

LEE'S SUMMIT MISSOURI

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

Project: WATER MAIN REPLACEMENT - FY24
PHASE 1 - BID# 722
CITY OF LEE'S SUMMIT, JACKSON COUNTY, MO

Sheet Name: TRF-2 TRAFFIC CONTROL DETAILS

STATE OF MISSOURI
KAREN L. ALLISON
NUMBER PE-2023042571
PROFESSIONAL ENGINEER
2/13/25

Drawn By:	CNS
Checked By:	KLA
Date:	02/22/2024
Project#	722