

NOTES:

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT TECHNICAL SPECIFICATIONS.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- 3. ALL WYES ARE STATIONED USING MAIN LINE STATIONS.
- 4. ALL EXCAVATION IS CONSIDERED UNCLASSIFIED.
- 5. ALL SERVICE STUB LINES SHALL HAVE A MINIMUM PIPE STIFFNESS OF SDR-26.
- 6. ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS OTHERWISE NOTED.
- 7. ALL SERVICE STUBS SHALL BE 90° TO THE MAIN, UNLESS OTHERWISE NOTED.
- 8. REFERENCE "MANHOLE IN PAVED AREA" DETAIL FOR MANHOLES PROPOSED IN ASPHALT OR CONCRETE PAVEMENT.
- 9. PROPOSED GRADING IS FOR REFERENCE ONLY. CONTRACTOR IS TO GRADE WITHIN THE LIMITS OF DISTURBANCE AND PROVIDE SANITARY COVER AS REQUIRED BY THE CITY'S TECHNICAL SPECIFICATIONS.

MO GRS BENCHMARK:

STATION NAME - JA-90
KC METRO ALUMINUM GRS DISK SET IN CONCRETE STAMPED "JA-90, 1988"
LOCATED NEAR THE INTERSECTION OF LANGSFORD ROAD AND OLD
LANGSFORD ROAD, 43 FEET SOUTHEAST OF THE CENTER OF LANGSFORD
ROAD AND 32 FEET NORTH OF THE CENTER OF OLD LANGSFORD ROAD.
N:1001052.8503, E:2845604.8272

ELEV. 997.045

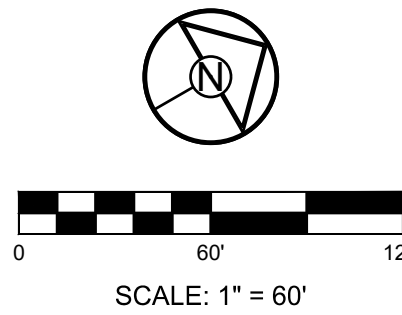
PROJECT BENCHMARK:

"SQUARE" CUT IN TOP OF CONCRETE STORM MANHOLE
STORM MANHOLE IS LOCATED APPROX. 130 FEET EAST OF THE
INTERSECTION OF SE JOEL AVE & BLUE PARKWAY AND 26 FEET SOUTH
OF THE CENTERLINE OF BLUE PARKWAY.
N:996874.9690, E:2840937.1365

ELEV. 1005.719



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#E2002003609-F #LAC2001005237 #LS2002008659-F

PREPARED BY:

STATE OF MISSOURI

MARK ALLEN BREUER

NUMBER PE-2003007268

EXPIRATION DATE 03-29-2023

SCHLAGEL & ASSOCIATES, P.A.

RESIDENCES AT BLACKWELL

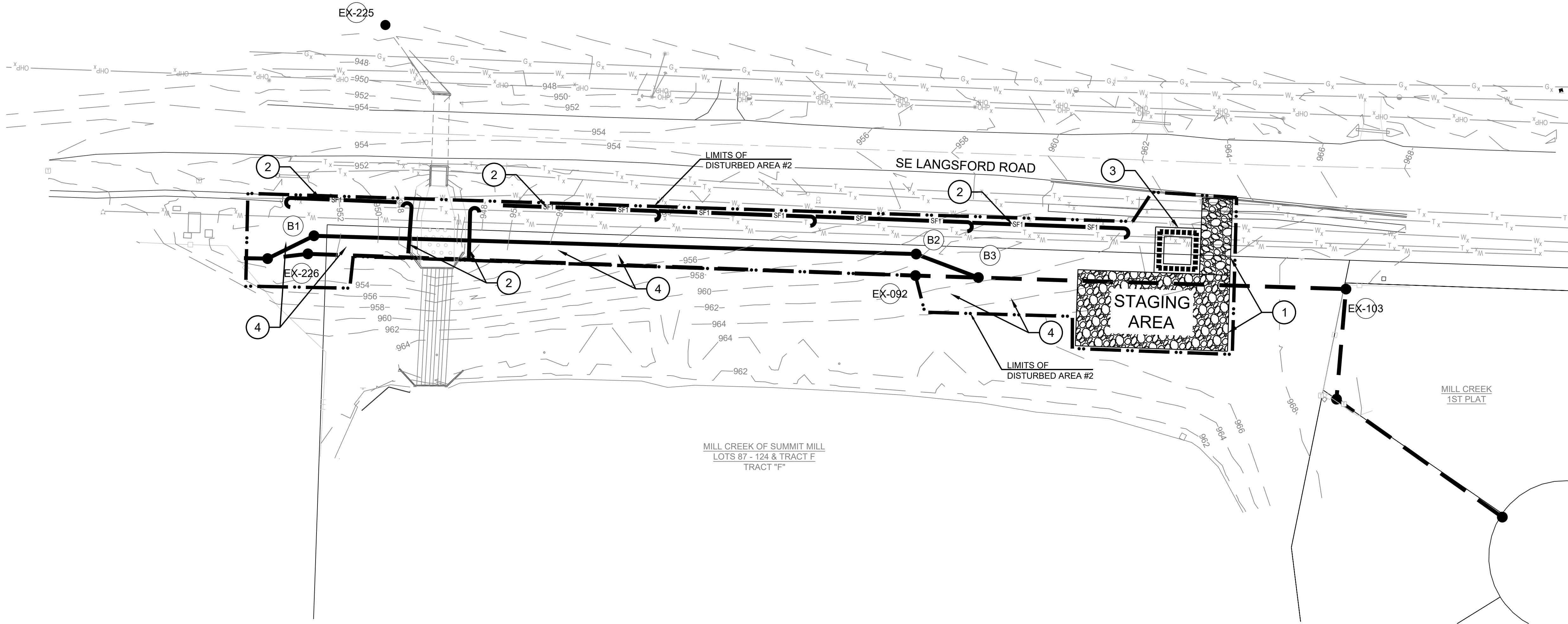
PUBLIC SANITARY SEWER MAIN PLANS

HERITAGE STREET LEE'S SUMMIT, MO

REVISION DATE	DESCRIPTION	PER CITY COMMENTS
01/23/2023		

DRAWN BY: ###	CHECKED BY: ###	DATE PREPARED: 11/30/2022	PROJ. NUMBER: 22-102
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GENERAL LAYOUT & GRADING



NOTES:

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT TECHNICAL SPECIFICATIONS.
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- 3. SEE SHEET 3 FOR EROSION CONTROL STAGING CHART, LEGEND AND NOTES.

MO GRS BENCHMARK:

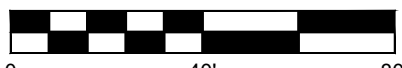
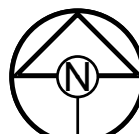
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SCALE: 1" = 40'



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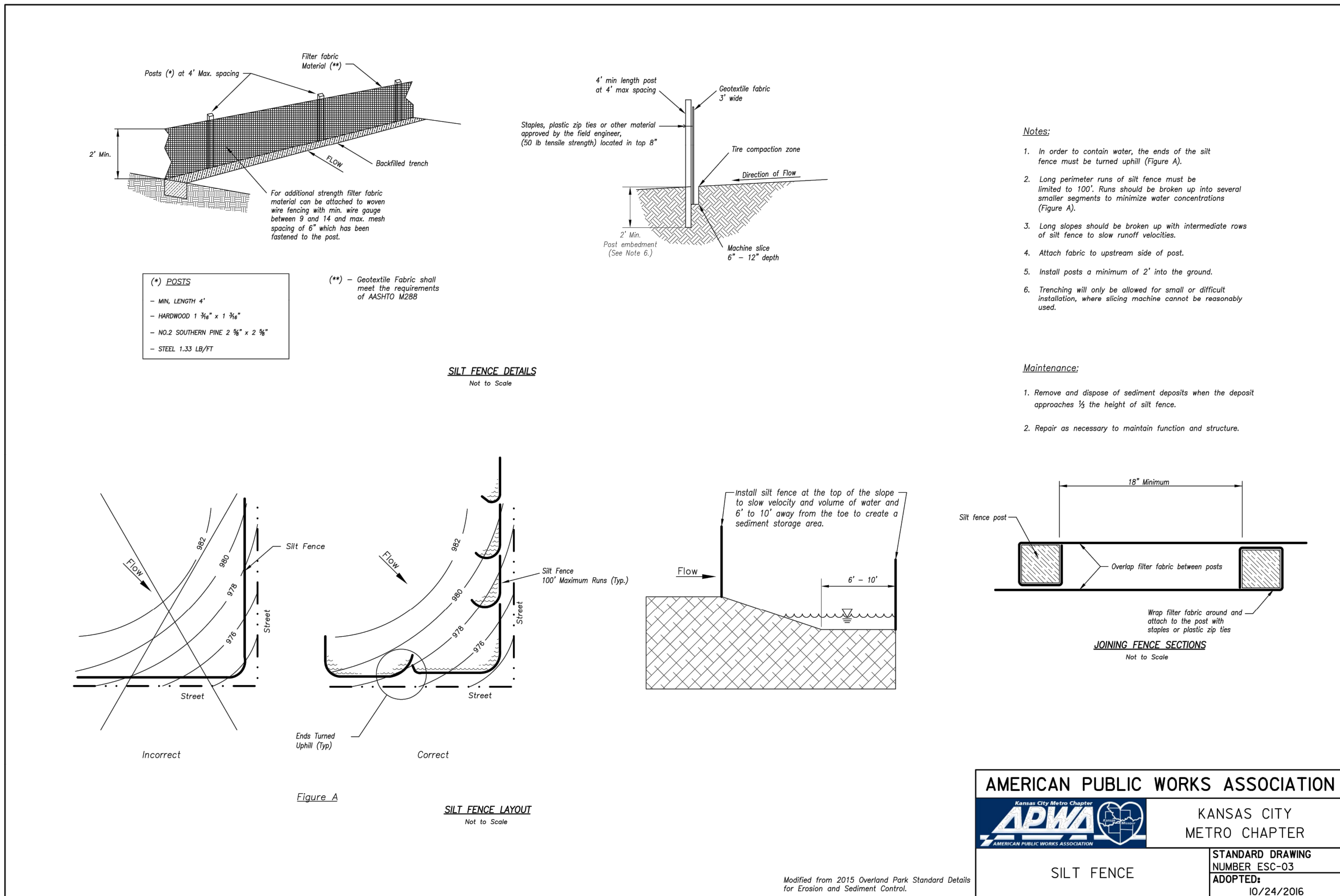
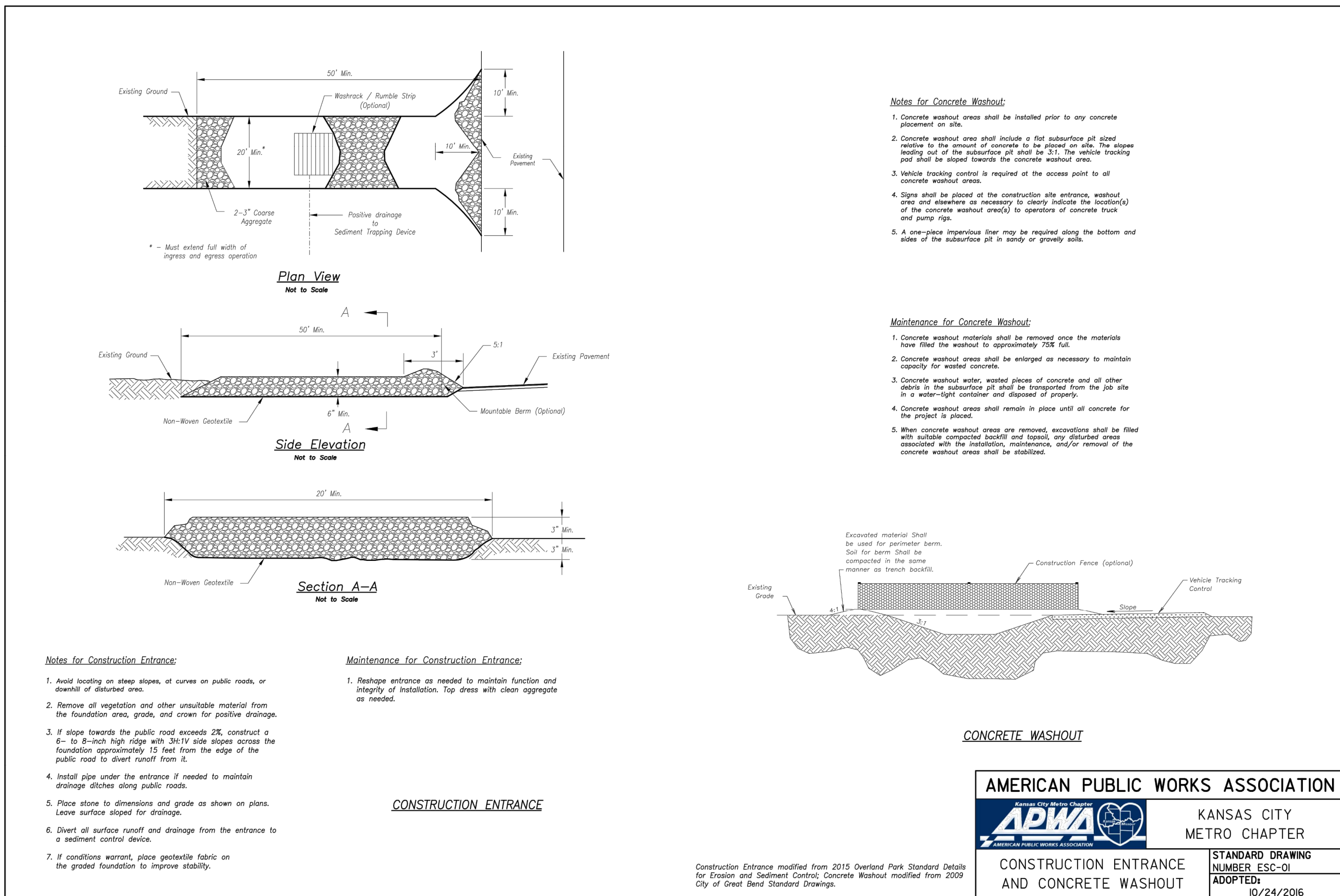
PREPARED BY:



RESIDENCES AT BLACKWELL
PUBLIC SANITARY SEWER MAIN PLANS
HERITAGE STREET LEE'S SUMMIT, MO

EROSION CONTROL PLAN					REVISION DATE	DESCRIPTION
SHEET	DRAWN BY:	#####	CHECKED BY:	#####	A	11/23/2023
	DATE PREPARED:	11/30/2022	PROJ. NUMBER:	22-102	A	
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DRAWN BY:	REVISION DATE:	DESCRIPTION
####	11/01/2023	PER CITY COMMENTS
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CHECKED BY:	3	
####	4	
DATE PREPARED:	5	
11/30/2022	6	
PROJ. NUMBER:	7	
293,400	8	





NOTE:
CITY OF LEE'S SUMMIT TO PROVIDE
SANITARY SEWER CALCULATIONS.

MO GRS BENCHMARK:

STATION NAME - JA-90

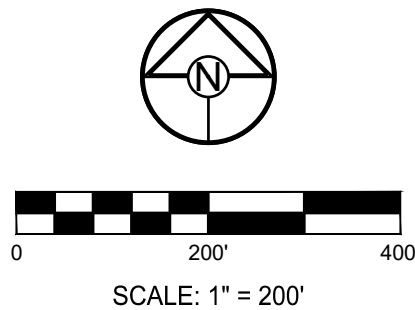
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1 01/23/2023	PER CITY COMMENTS
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DRAWN BY: ###	CHECKED BY: ###	DATE PREPARED: 11/30/2022	PROJ. NUMBER: 22-102
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TRIB MAP

SHEET

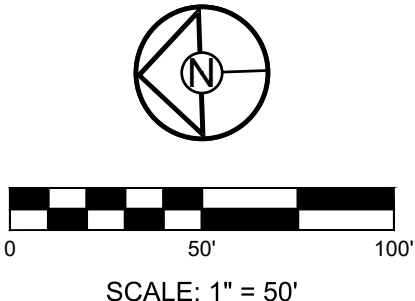
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PREPARED BY:

STATE OF MISSOURI
MARK ALLEN BREUER
NUMBER
PE-2003007268
11/23/2023
PROFESSIONAL ENGINEER

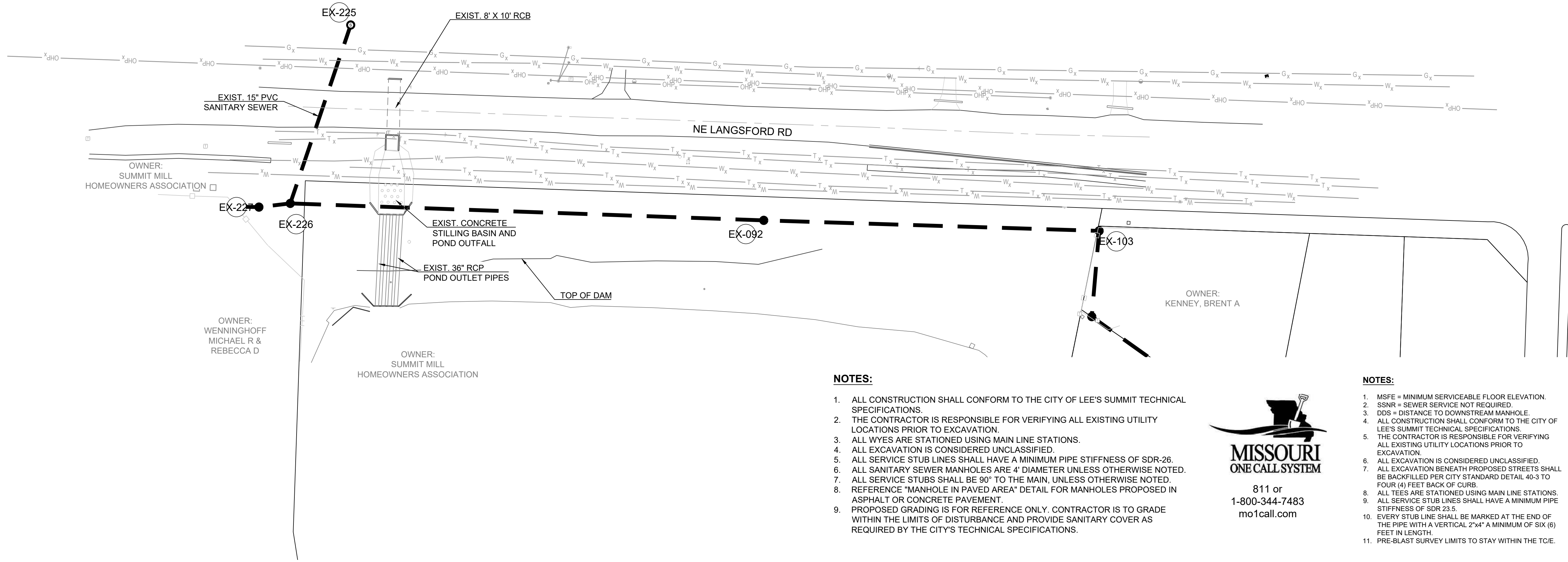
SCHLAGEL & ASSOCIATES, P.A.



LINE A

SHEET

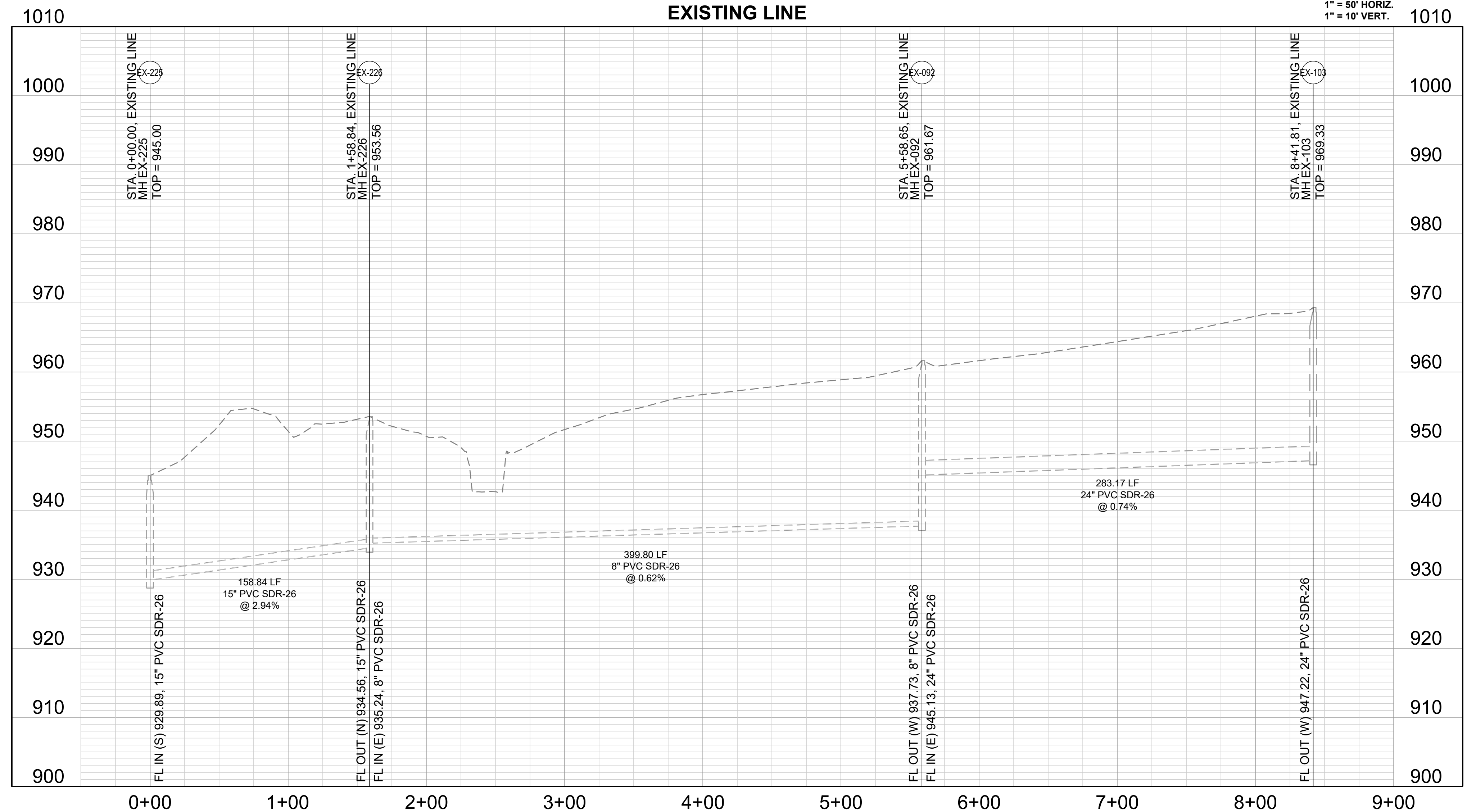
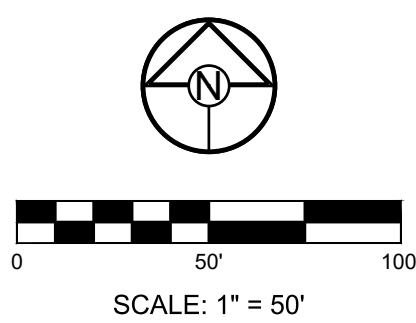
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 - 6. ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS OTHERWISE NOTED.
 - 7. ALL SERVICE STUBS SHALL BE 90" TO THE MAIN, UNLESS OTHERWISE NOTED.
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- NOTES:**
- 1. MSFE = MINIMUM SERVICEABLE FLOOR ELEVATION.
 - 2. SSNR = SEWER SERVICE NOT REQUIRED.
 - 3. DDS = DISTANCE TO DOWNSTREAM MANHOLE.
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 - 7. ALL EXCAVATION BENEATH PROPOSED STREETS SHALL BE BACKFILLED PER CITY STANDARD DETAIL 40-3 TO FOUR (4) FEET BACK OF CURB.
 - 8. ALL TEES ARE STATIONED USING MAIN LINE STATIONS.
 - 9. ALL SERVICE STUB LINES SHALL HAVE A MINIMUM PIPE STIFFNESS OF SDR 23.5.
 - 10. EVERY STUB LINE SHALL BE MARKED AT THE END OF THE PIPE WITH A VERTICAL 2"x4" A MINIMUM OF SIX (6) FEET IN LENGTH.
 - 11. PRE-BLAST SURVEY LIMITS TO STAY WITHIN THE T.O.E.

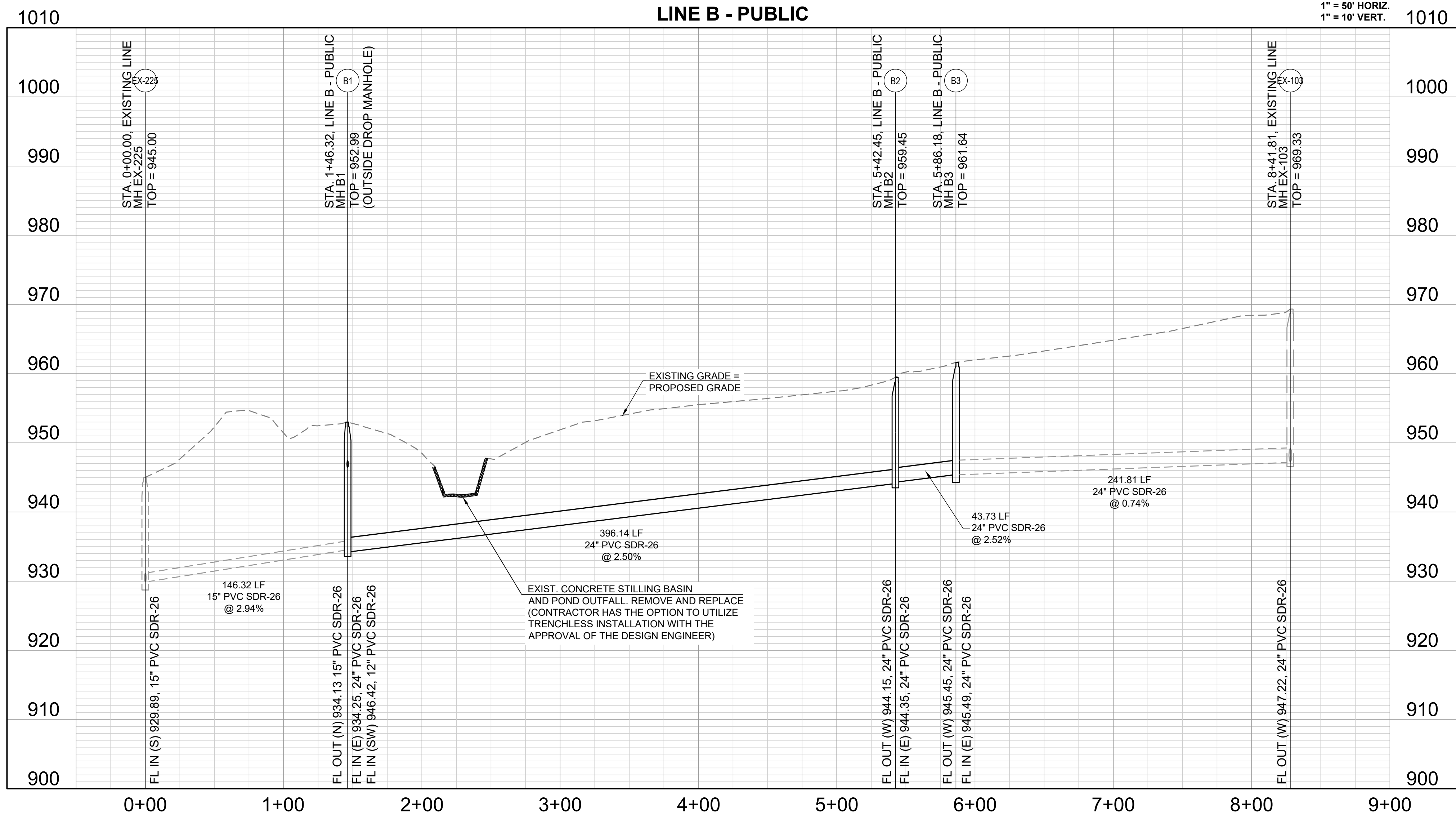
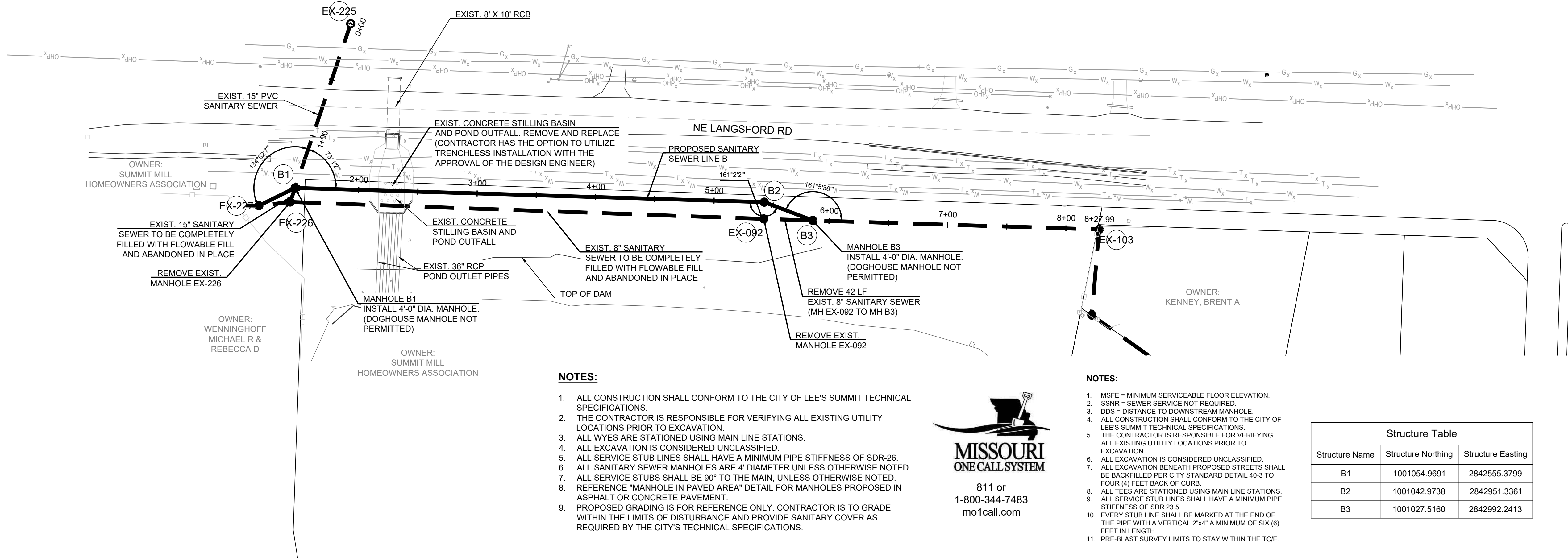


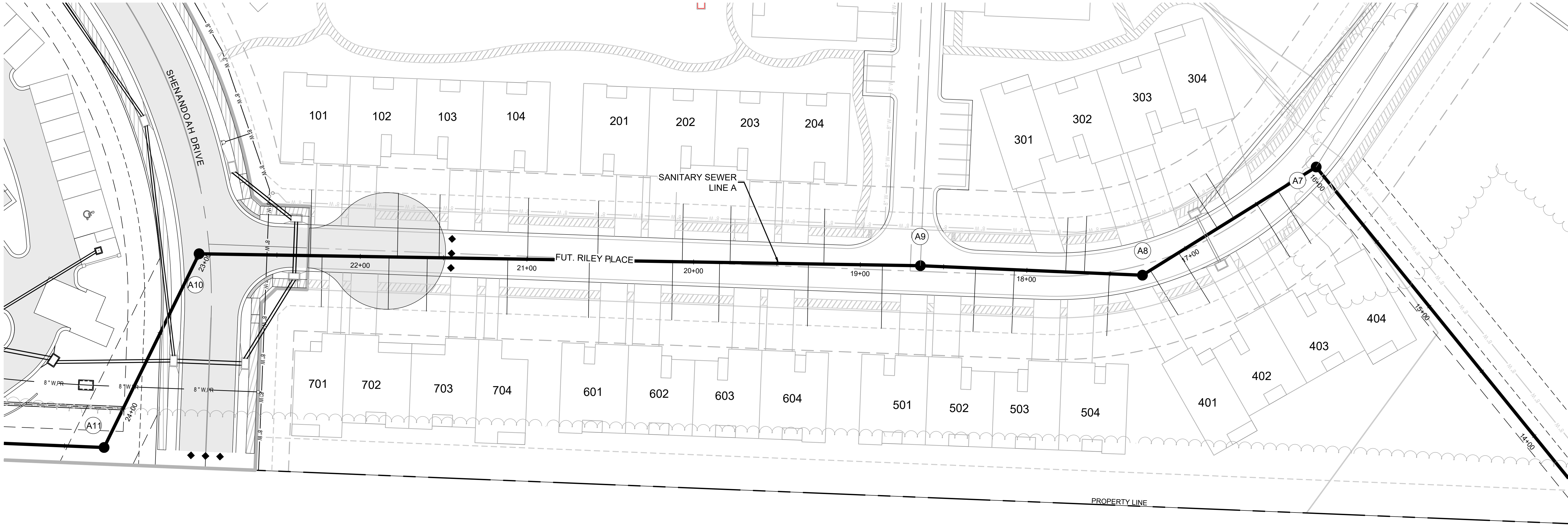
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HERITAGE STREET LEE'S SUMMIT, MO

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DRAWN BY:	TRC
CHECKED BY:	MAB
DATE PREPARED:	11/30/2022
PROJ. NUMBER:	22-102

EXISTING LINE





Unit Number	Line Station	Main Line Flowline Elevation	Stub Line Length	Service Line Grade	End of Stub Flowline Elevation	Connection Type	Stub Cleanout	MSFE Elevation
101	22+30	987.3	40	1.3	994.1	TEE	NO	997.1
102	21+78	987.0	38	1.3	994.5	TEE	NO	997.5
103	21+53	986.8	38	1.3	995.1	TEE	NO	998.1
104	21+00	986.5	37	1.3	995.4	TEE	NO	998.4
201	20+58	986.3	36	1.3	995.2	TEE	NO	998.2
202	20+07	986.0	35	1.3	995.6	TEE	NO	998.6
203	19+78	985.8	34	1.3	994.7	TEE	NO	997.7
204	19+22	985.5	33	1.3	993.6	TEE	NO	996.6
301	17+77	982.7	33	1.3	989.4	TEE	NO	992.4
302	17+65	982.4	34	1.3	989.1	TEE	NO	992.1
303	16+78	980.6	32	1.3	987.4	TEE	NO	990.4
304	16+66	980.5	32	1.3	987.2	TEE	NO	990.2
401	17+25	981.2	32	1.3	988.7	TEE	NO	991.7
402	17+05	981.0	36	1.3	988.5	TEE	NO	991.5
403	16+50	980.3	38	1.3	986.4	TEE	NO	989.4
404	16+35	980.1	38	1.3	986.2	TEE	NO	989.2
501	18+87	985.2	38	1.3	993.5	TEE	NO	996.5
502	18+31	984.1	38	1.3	991.6	TEE	NO	994.6
503	18+07	983.5	38	1.3	991.0	TEE	NO	994.0
504	17+50	982.0	37	1.3	990.2	TEE	NO	993.2
601	20+63	986.6	35	1.3	996.2	TEE	NO	999.2
602	20+13	986.0	35	1.3	995.6	TEE	NO	998.6
603	19+84	985.8	36	1.3	995.4	TEE	NO	998.4
604	19+31	985.5	37	1.3	994.4	TEE	NO	997.4
701	22+23	987.3	31	1.3	994.0	TEE	NO	997.0
702	21+83	987.0	31	1.3	995.2	TEE	NO	998.2
703	21+60	986.9	32	1.3	995.0	TEE	NO	998.0
704	21+11	986.6	33	1.3	996.2	TEE	NO	999.2

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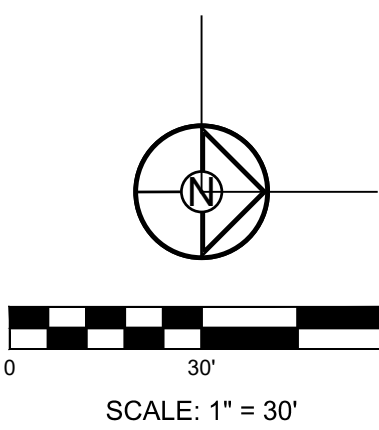
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MARK ALLEN BREUER

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PUBLIC SANITARY SEWER MAIN PLANS

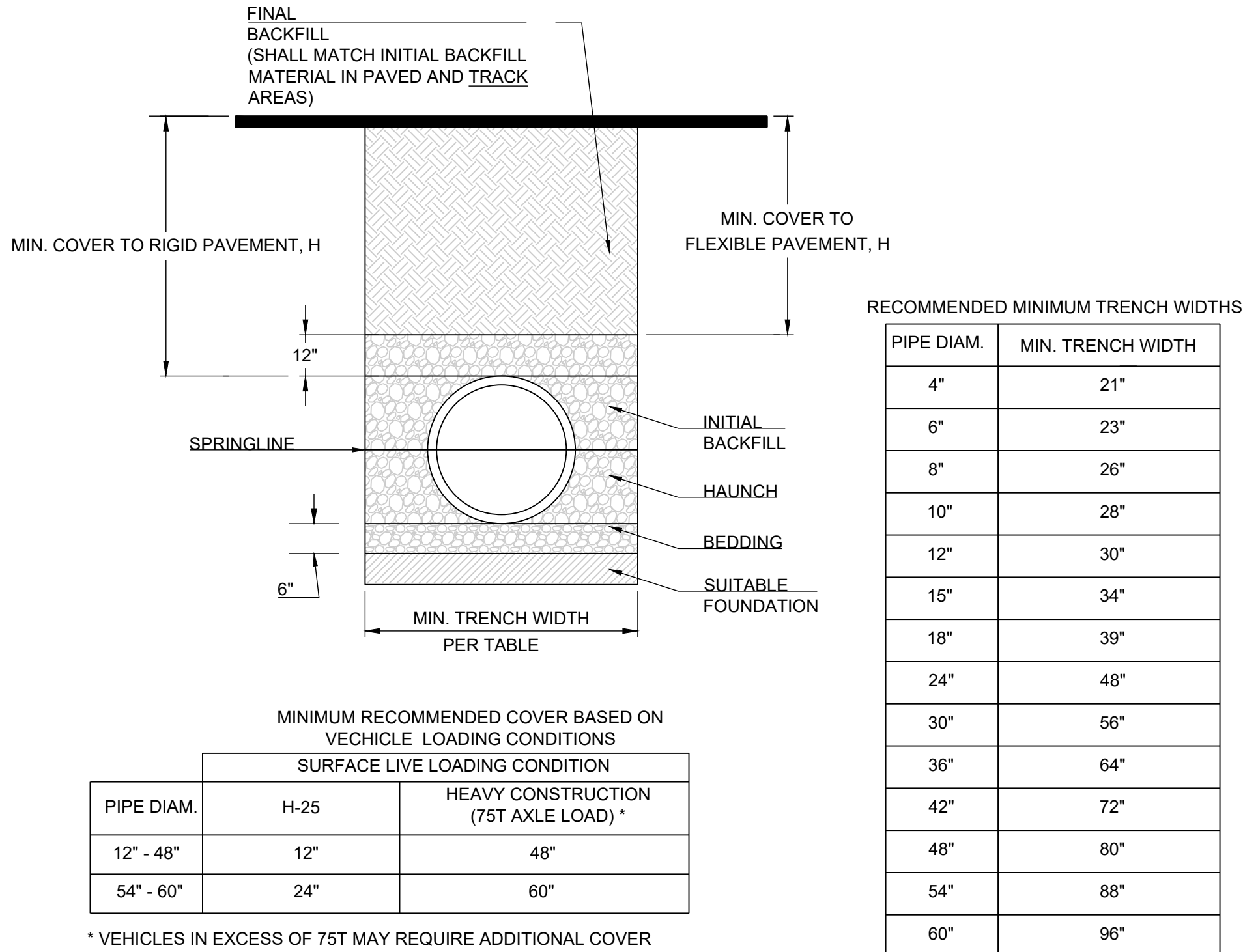
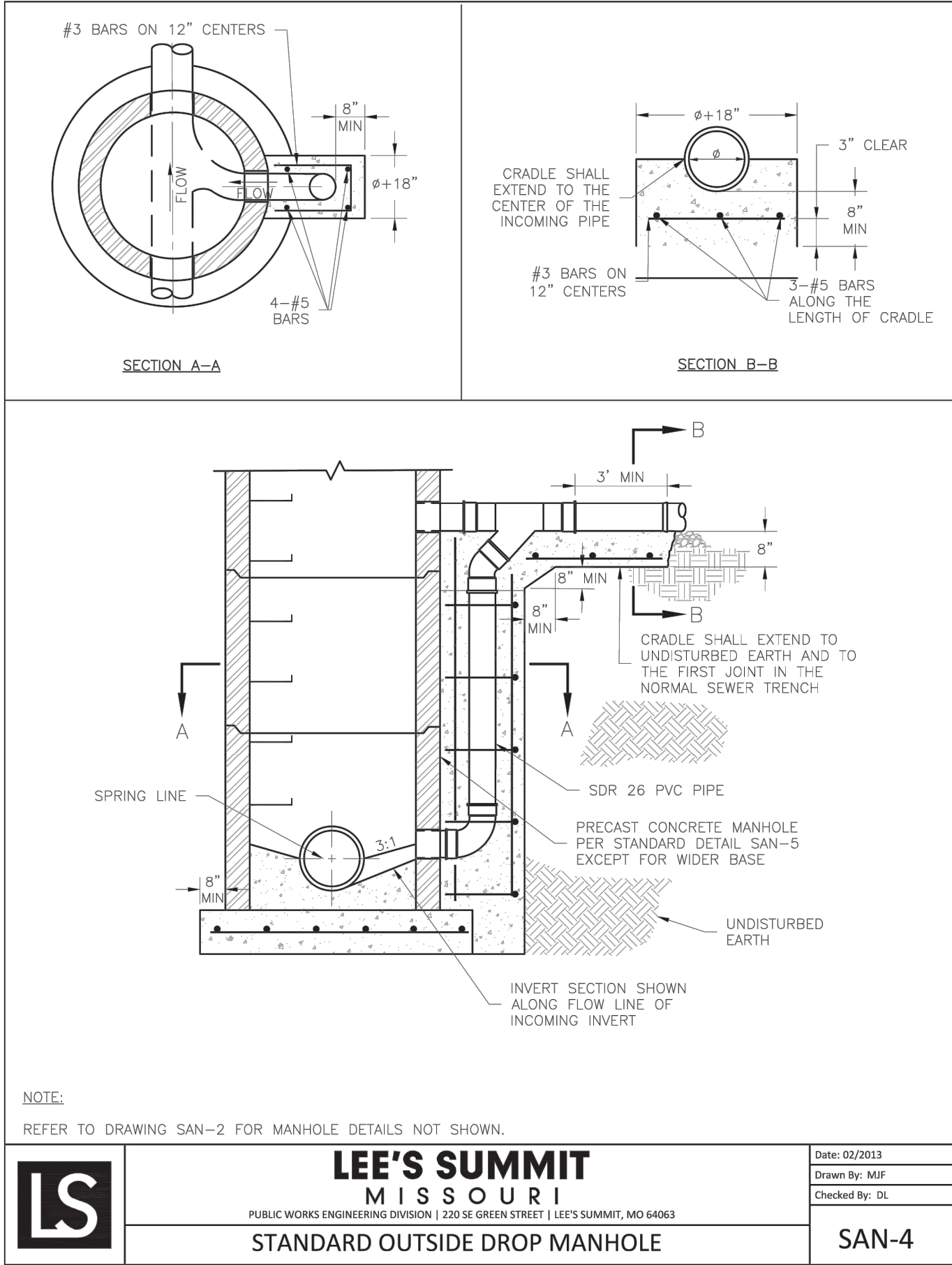
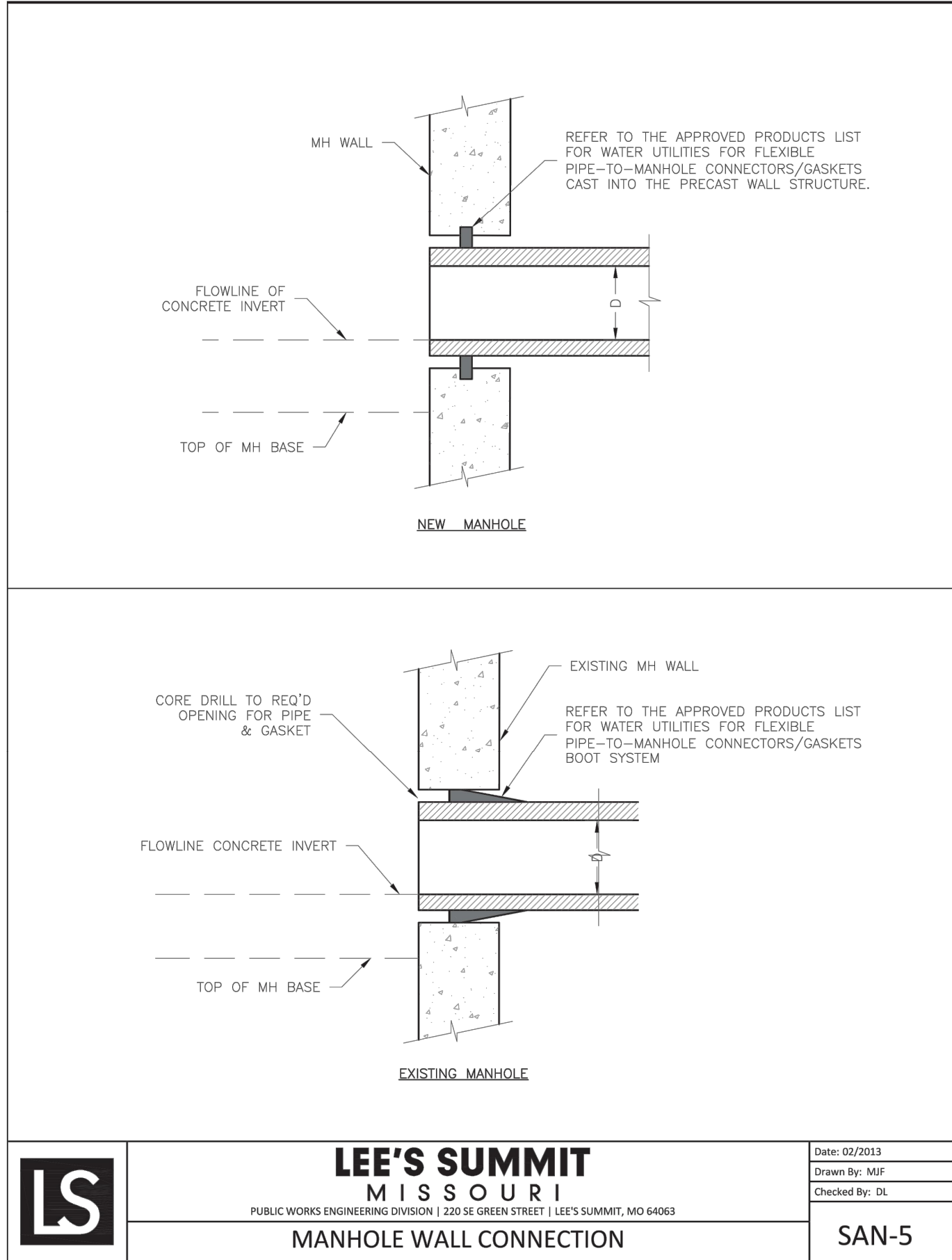
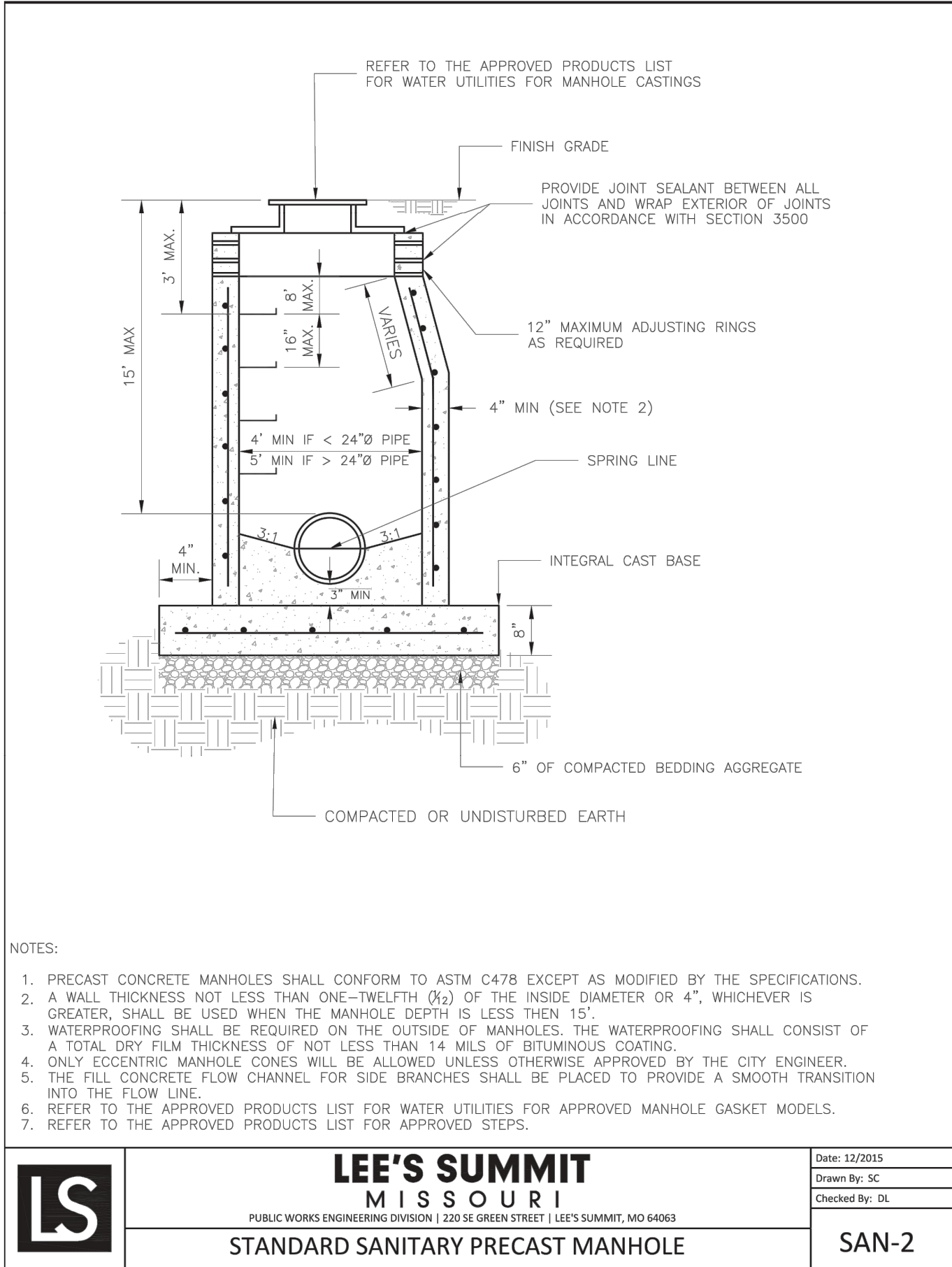
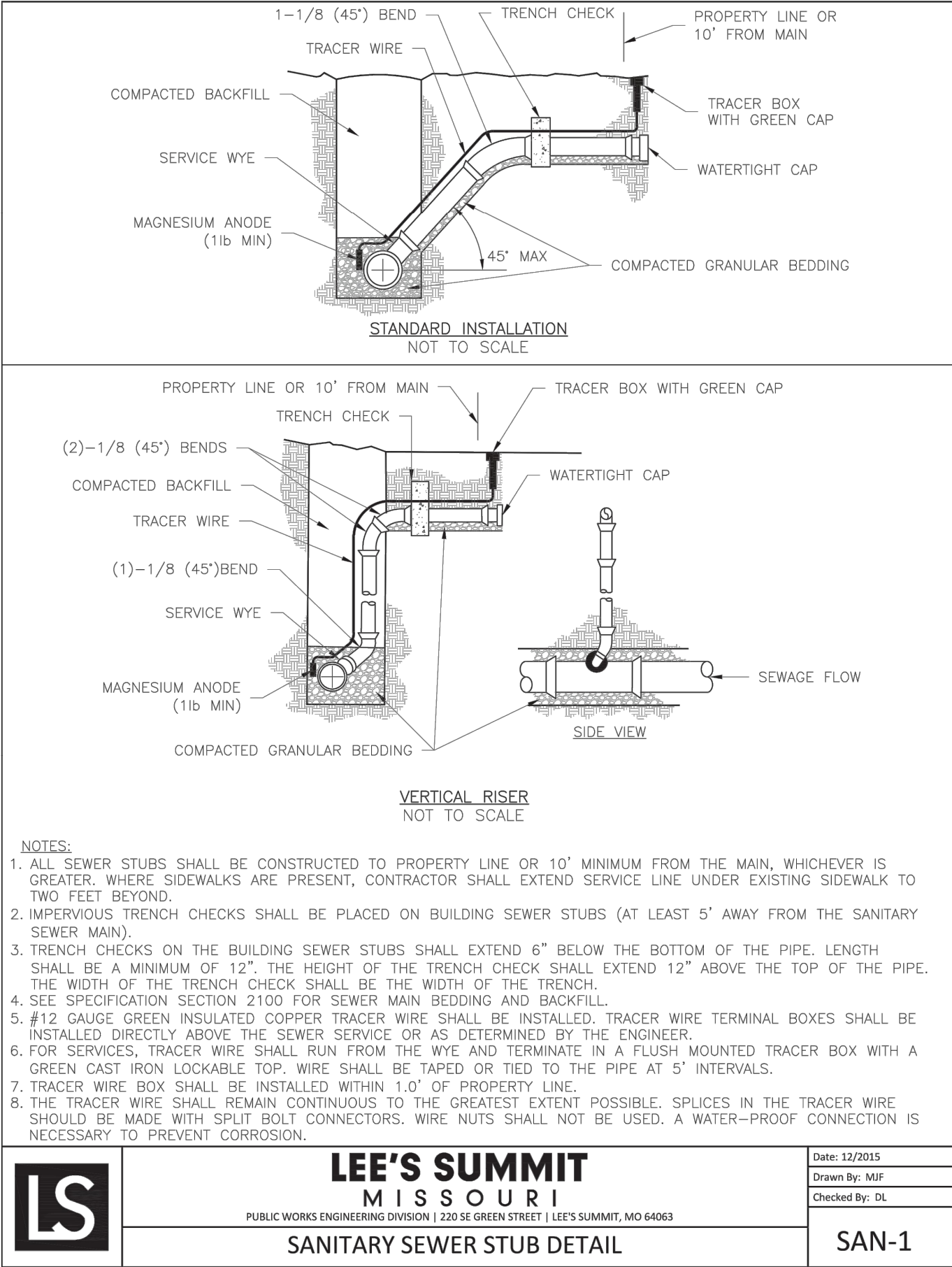
HERITAGE STREET LEE'S SUMMIT, MO

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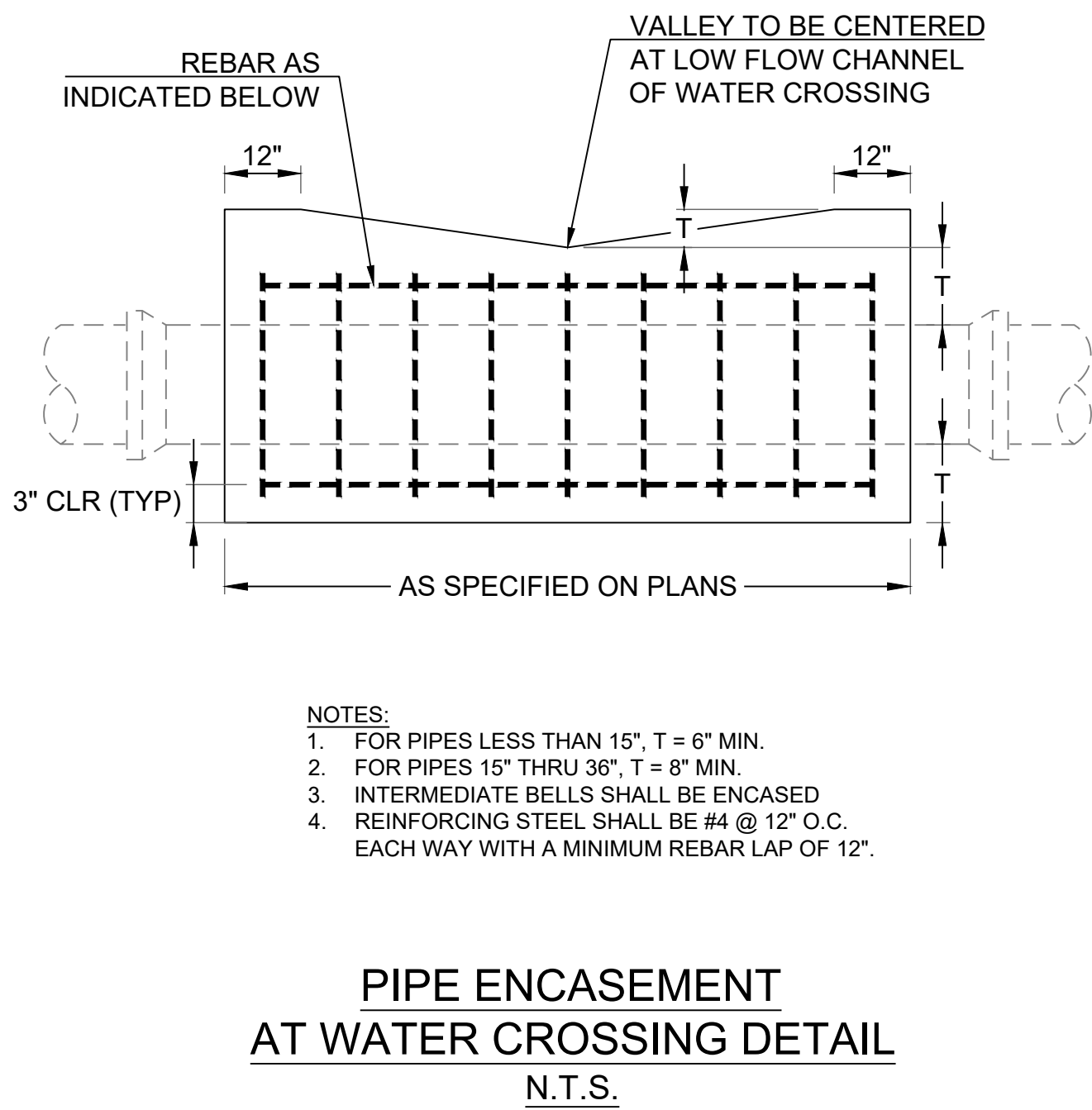
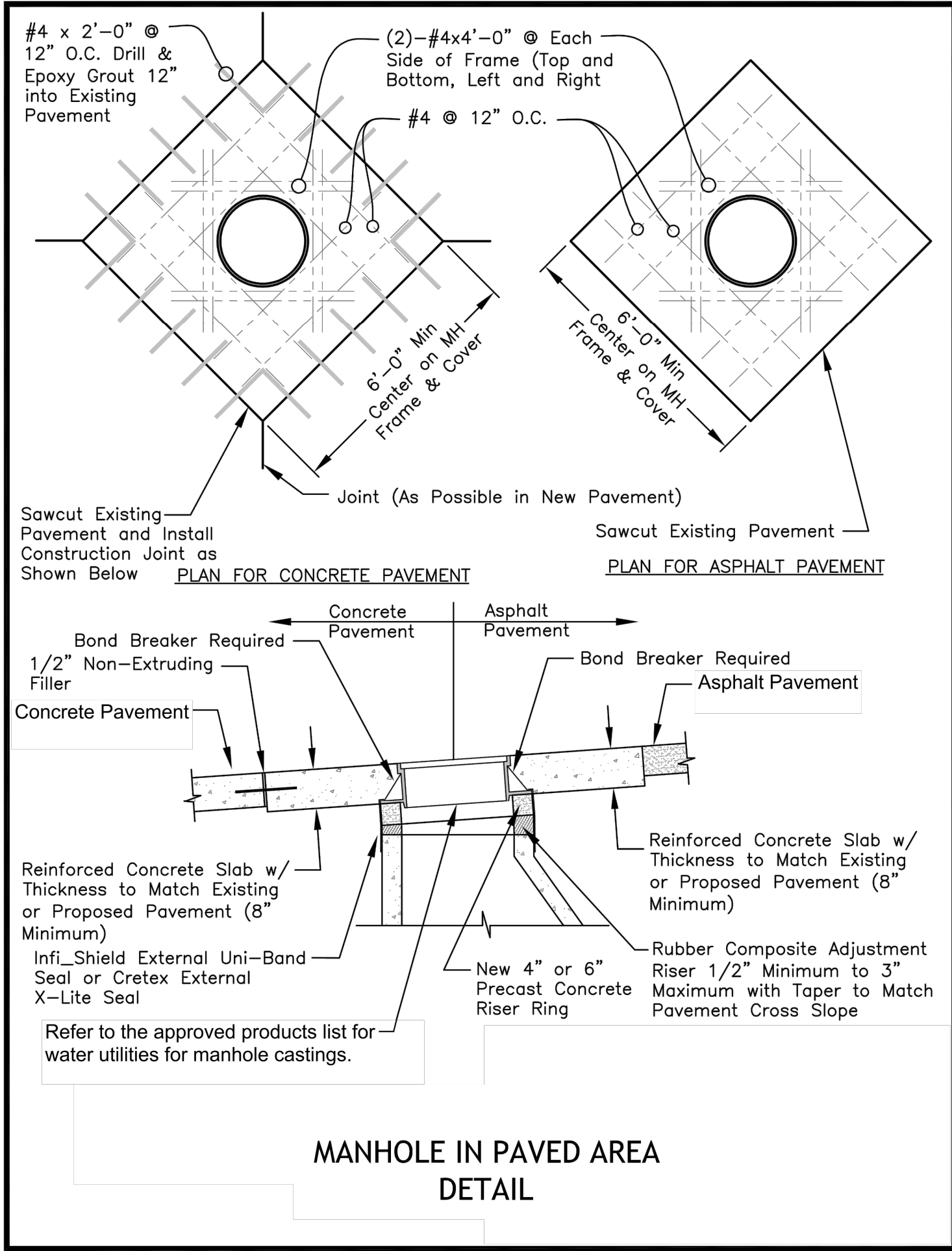
DRAWN BY: ###	CHECKED BY: ###	DATE PREPARED: 11/30/2022	PROJ. NUMBER: 22-102
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SANITARY SERVICE LINES

SHEET 12



- NOTES:**
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION
 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
 3. **FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 4. **BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 6" (100mm).
 5. **INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 6. **MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



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PREPARED BY:
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#LS-28-2023

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