LOCATION NW1/4 SW1/4

SECTION 16-47-31

SCALE 1" = 2000'

BASIS OF BEARINGS

MISSOURI COORDINATE

SYSTEM 1983,

WEST ZONE

LOCATION MAP

IN THE CITY OF LEE'S SUMMIT JACKSON COUNTY, MO

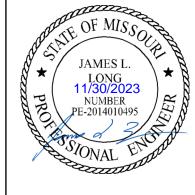
RELEASED FOR CONSTRUCTION As Noted on Plan Review

Development Services Department Lee's Summit. Missouri

12/14/2023

	Sheet List Table
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1	COVER SHEET
2	GENERAL LAYOUT
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4	LINES B AND L PLAN AND PROFILE
5	LINE K (STA 0+00 - 4+34.13) PLAN AND PROFILE
6	SANITARY SEWER DETAILS

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A

UTILITY CONTACTS:

MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT) Steve Holloway 600 NE Colbern Road Lee's Summit, MO 64086

MISSOURI GAS ENERGY (MGE) Brent Jones 3025 SE Clover Drive Lee's Summit, MO 64082 (816) 399-9633 brent.jones@spireenergy.com

(816) 607-2186

EVERGY Ron Dejarnette 1300 SE Hamblin Road Lee's Summit, MO 64081 Office: (816) 347-4316 Cell: (816) 810-5234 ron.dejarnette@evergy.com

CITY OF LEES SUMMIT PUBLIC WORKS Michael Park 220 SE Green Street

Lee's Summit, MO 64063 (816) 969-1800 Mark Manion or Marty Loper

Kansas City, MO 64106 (816) 275-2341 or (816) 275-1550 John Meadows 4700 Little Blue Parkway

500 E. 8th Street, Room 370

CITY OF LEE'S SUMMIT WATER UTILITIES Mark Schaufler 1200 SE Hamblen Road Lee's Summit, MO 64081

Independence, MO 64057

(816) 795-2257

(816) 969-1900

	SUMMARY OF QUA	ANTITIES	
	ITEM	QUANTITY	UNITS
1	10" PVC SDR-26	525	LF
2	8" PVC SDR-26	1350	LF
3	6" PVC SDR-26	1750	LF
4	10" x 6" WYES	7	EA
5	8" x 6" WYES	33	EA
6	STD. 4' DIAMETER MANHOLE	10	EA
7	CONNECT TO EXISTING MANHOLE	2	EA
8	EXTRA DEPTH IN MANHOLE	66	VF
9	TRACER WIRE AND BOXES	40	EA
10	ROCK EXCAVATION (ESTIMATED)	250	CY
11	MANHOLE BARREL ADJUSTMENT	4	EA
12	MANHOLE RING ADJUSTMENT	4	EA
13	EROSION CONTROL	1	LS
14	BONDS	1	LS

GENERAL NOTES:

1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.

SANITARY MAIN EXTENSION PLANS

CORNERSTONE AT BAILEY FARMS, FIRST PLAT

- ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
- LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS
- THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND
- THE CONTRACTOR SHALL ADHERE TO THE PROVISIONS OF THE SENATE BILL NUMBER 583, 78TH GENERAL ASSEMBLY OF THE STATE OF MISSOURI. THE BILL REQUIRES THAT ANY PERSON OR FIRM DOING EXCAVATION ON PUBLIC RIGHT OF WAY DO SO ONLY AFTER GIVING NOTICE TO, AND OBTAINING INFORMATION FROM, UTILITY COMPANIES. STATE LAW REQUIRES 48 HOURS ADVANCE NOTICE. THE CONTRACTOR MAY ALSO UTILIZE THE FOLLOWING TOLL FREE PHONE NUMBER PROVIDED BY "MISSOURI ONE CALL SYSTEM, INC.": 1-800-DIG-RITE. THIS PHONE NUMBER IS APPLICABLE ANYWHERE WITHIN THE STATE OF MISSOURI. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION TO BE PERFORMED
- PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.
- THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE.
- CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES.
- ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE
- CONTRACTOR, OR AS DIRECTED BY THE OWNER AT NO ADDITIONAL COST. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK
- THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS
- THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO
- THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL TRAFFIC HANDLING MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION)
- ALL SANITARY SEWER LATERALS SHALL HAVE A TRENCH CHECK, CONSISTING OF FLOWABLE BACKFILL INSTALLED DURING CONSTRUCTION. TRENCH CHECK SHALL EXTEND TO BOTTOM OF TRENCH, TO WIDTH OF TRENCH, TO 12 INCHES ABOVE PIPE, FOR A MINIMUM LENGTH OF 12 INCHES. TRENCH CHECK SHALL BE LOCATED AT LEAST 5 FEET FROM SANITARY MAIN.

UTILITIES:

- Existing utilities have been shown to the greatest extent possible based upon information provided to the Engineer. The contractor is responsible for contacting the respective utility companies and field locating utilities prior to construction and identifying any potential conflicts. All conflicts shall immediately be brought to the attention of the Engineer.
- The contractor shall be responsible for coordinating any required utility relocations. Utilities damaged through the
- negligence of the contractor shall be repaired at the contractor's expense. Contractor shall verify flow-lines and structure tops prior to construction, and shall notify Engineer of any discrepancies. Provide shop drawings for all precast and manufactured utility structures for review by the Engineer prior to construction of
- Utility Separation: Waterlines shall have a minimum of 10 feet horizontal and 2 feet vertical separation from all sanitary sewer lines, manholes, and sanitary sewer service laterals, as measured from edge to edge. If minimum separations can not be obtained, concrete encasement of the sanitary line shall be required 10 feet in each direction of the conflict.
- Payment for trenching, backfilling, pipe embedment, flowable fill, backfill materials, clean up, seeding, sodding and any other items necessary for the construction of the utility line shall be included in the contract price for the utility installation.
- The Contractor shall be responsible for contacting respective utility companies 48-hours in advance for the inspection of any proposed utility main extension or service line or service connection to any existing main.
- Trench spoils shall be neatly placed onsite adjacent to the trench, and compacted to prevent saturation and excess sediment runoff. Unsuitable materials, excess rock and shale, asphalt, concrete, trees, brush etc. shall be properly disposed of offsite. Materials may be wasted onsite at the direction of the Owner or his appointed representative.
- All excavation is considered unclassified, unless noted otherwise. Unclassified excavation for utility trenching is subsidiary to the unit price provided for the pipe. Any quantity provided for rock excavation is estimated based on the best information provided to the Project Engineer. The Engineer has the authority to identify and define the physical characteristics to determine the classification. Unit price quantities for rock excavation will be paid at a trench width of the nominal pipe diameter of the installed main plus 18 inches. Contractor is required to dispose of excess rock from their trenches by disposing it in areas as specified by the Project Engineer.

CONTRACTOR SHALL OBTAIN ELEVATIONS AND LOCATIONS

SUPPLY THIS INFORMATION TO THE DESIGN ENGINEER FOR

FOR ALL SANITARY SEWER SERVICE LINES AND SHALL

INCLUSION IN THE AS-BUILT RECORD DRAWINGS.

APPROVED BY

CITY ENGINEER APPROVED FOR ONE YEAR FROM THIS DATE DATE

OWNER/DEVELOPER:

CLAYTON PROPERTIES GROUP INC., DBA SUMMIT HOMES BRAD KEMPF 120 SE 30TH STREET LEE'S SUMMIT, MISSOURI p (816) 246-6700 BRADLEY@SUMMITHOMESKC.COM

PL2021486 PRSUBD20216450

New City Requirements:

structures.

Flowable fill required per City

specifications at all sanitary sewer



MISSOURI GEOGRAPHIC REFERENCE SYSTEM **BENCHMARK:**

ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND

COVER SHEET

SHEET

ORNERSTONE SANITARY



VERS SURVEYORS LANDSCAPE ARCHITECT St 107th Street • Lenexa, Kansas 66215) 492-5158 • Fax: (913) 492-8400 V.SCHLAGELASSOCIATES.COM Missouri State Certificates of Authority 03800-F #LAC2001005237 #LS2002008859-F

PREPARED BY:

JAMES L.
LONG
11/30/2023
NUMBER
PE-2014010495

SCHLAGEL & ASSOCIATES, P.A.

ORNERSTONE AT BAILEY FARMS, FIRST P SANITARY MAIN EXTENSION PLANS

 SION DATE
 DESCRIPTION

 11/28/2022
 PER CITY COMMENTS

 14/20/2022
 PER CITY COMMENTS DATED 02/28/2022

 15/24/2022
 PER CITY COMMENTS DATED 5/24/2022

 1/30/2023
 Added "New City Requirements" Note

CHECKED BY: 2 04/20/2022 PER CIT 3 05/24/2022 PER CIT 4 11/30/2023 Added "NATE PREPARED: 6 12/20/2021 6 PROJ. NUMBER: 8

GENERAL LAYOUT

SHEET

2

MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

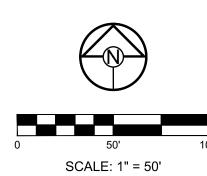
BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

GENERAL NOTES:

- 1. ALL WYES ARE STATIONED USING MAIN LINE STATIONS.
- 2. M.S.F.E DENOTES MINIMUM SEWERABLE FLOOR ELEVATION.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATIONS.
- 4. ALL SERVICE LINES ARE TO BE 90° TO THE MAIN UNLESS OTHERWISE NOTED.
- 5. ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS OTHERWISE NOTED.





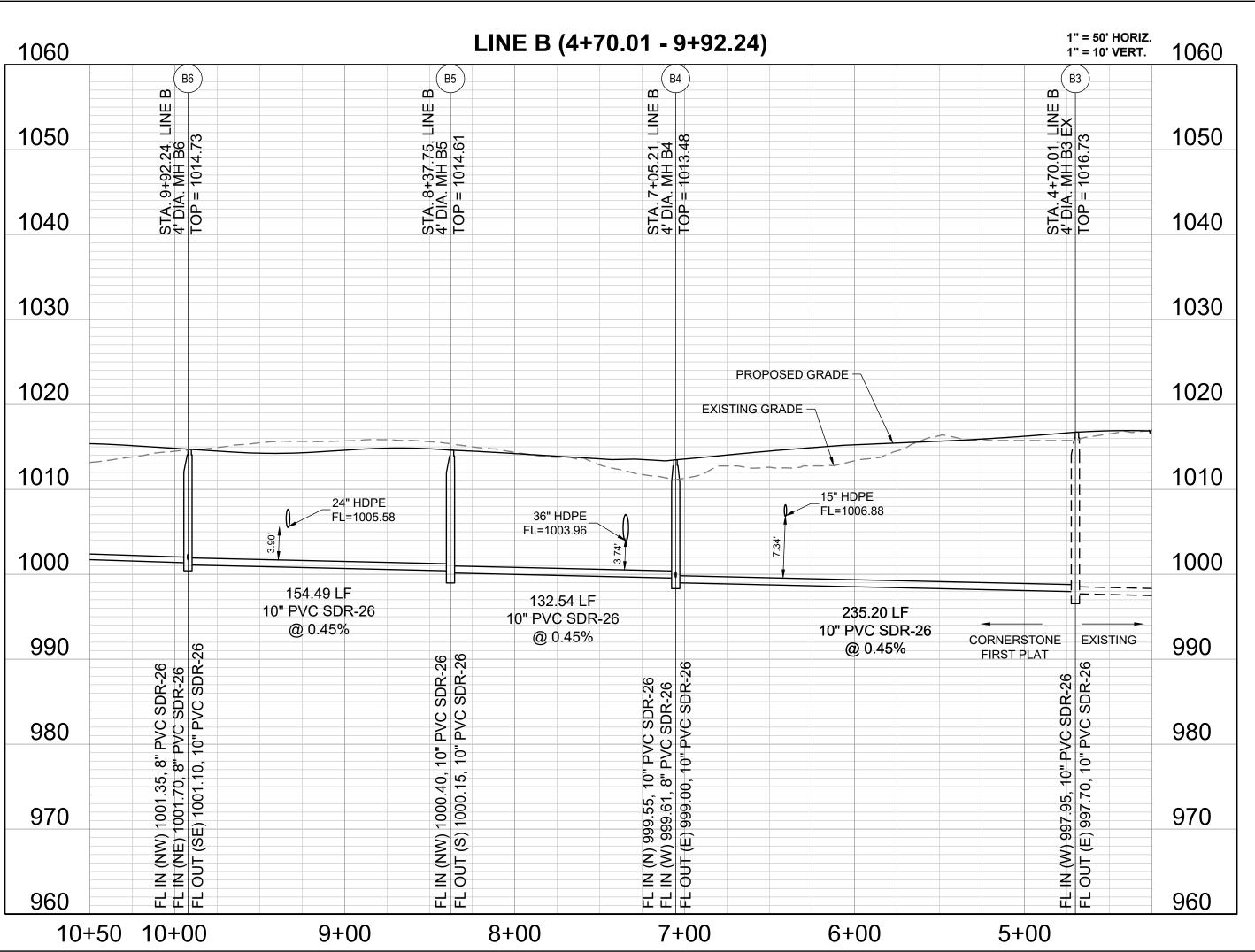
1" = 50' HORIZ. 1" = 10' VERT. LINE J 1060 1060 1050 1050 STA. 1+93.84, L 4' DIA. MH J1 TOP = 1011.45 STA. 0+00.00, L 4' DIA. MH B4 TOP = 1013.48 1040 1040 1030 1030 1020 1020 PROPOSED GRADE EXISTING GRADE -1010 1010 1000 1000 193.84 LF 8" PVC SDR-26 @ 1.01% 990 980 980 FL IN (N) 999.55, 10" FL IN (W) 999.61, 8" F FL OUT (E) 999.00, 10 970 970 960 960

1+00

0+00

2+50

2+00



RELEASED FOR CONSTRUCTION
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Development Services Department Lee's Summit, Missouri 12/14/2023 CORNERSTONE AT BAILEY FARMS, F SANITARY MAIN EXTENSION P

RANSON ROA

1300 SE

PREPARED BY:

JAMES L.

SCHLAGEL & ASSOCIATES, P.A.

REVISION DATE		DESCRIPTION	_
1 01/28/2022 F		01/28/2022 PER CITY COMMENTS	
2 04/20/2022 F	<u>п</u>	2 04/20/2022 PER CITY COMMENTS DATED 02/28/2022	
3 05/24/2022 P	Д	3 05/24/2022 PER CITY COMMENTS DATED 5/24/2022	
4 11/30/2023 A	Ğ	Added "New City Requirements" Note	
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✓			

LINES B AND J
PLAN AND
PROFILE

SHEET

3

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Development Services Department Lee's Summit, Missouri 12/14/2023

FUTURE

PLATTING

FUTURE **PLATTING**

PLAT BOUNDARY

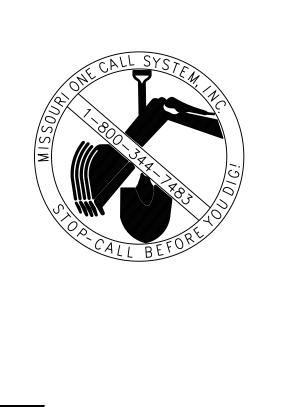
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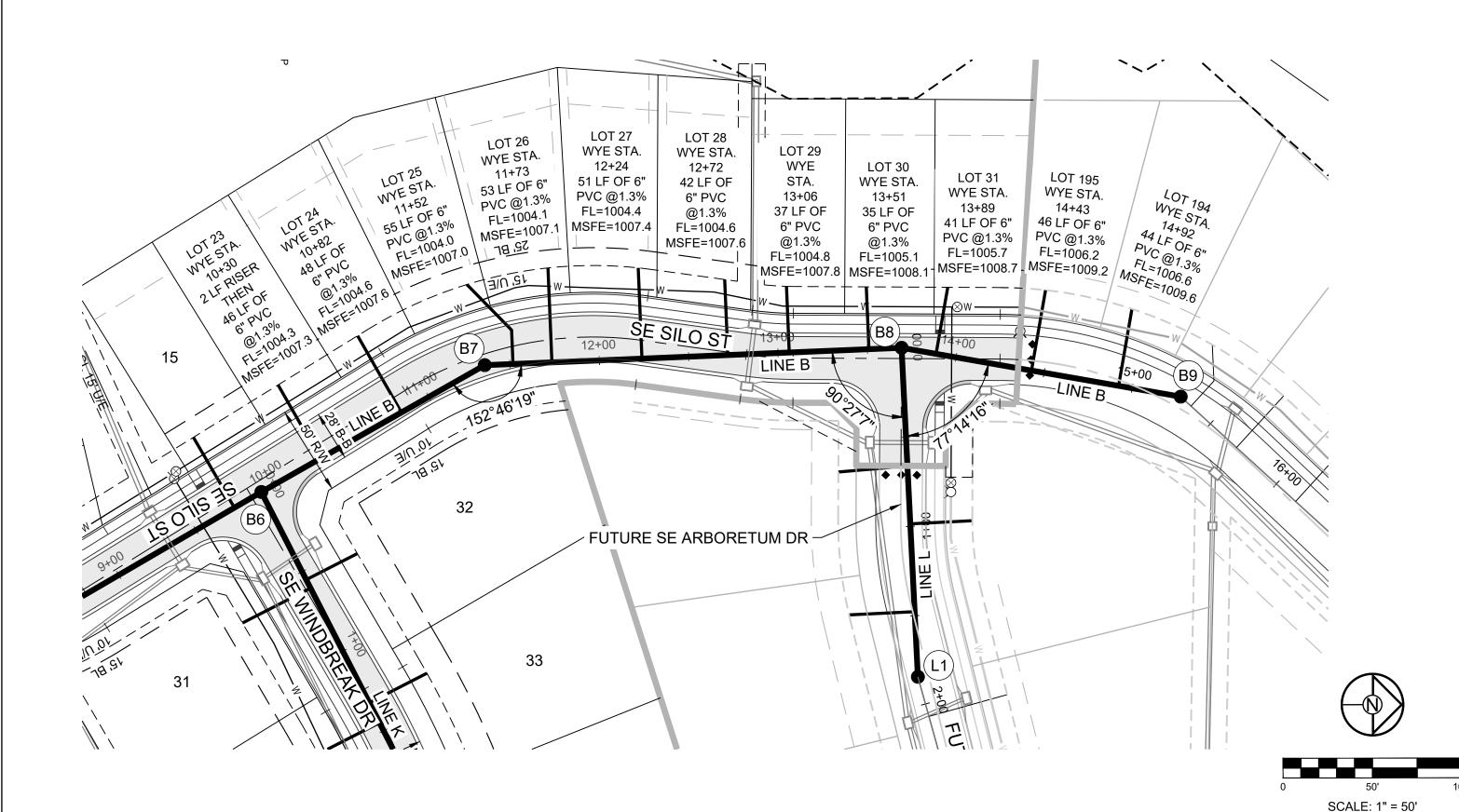
BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

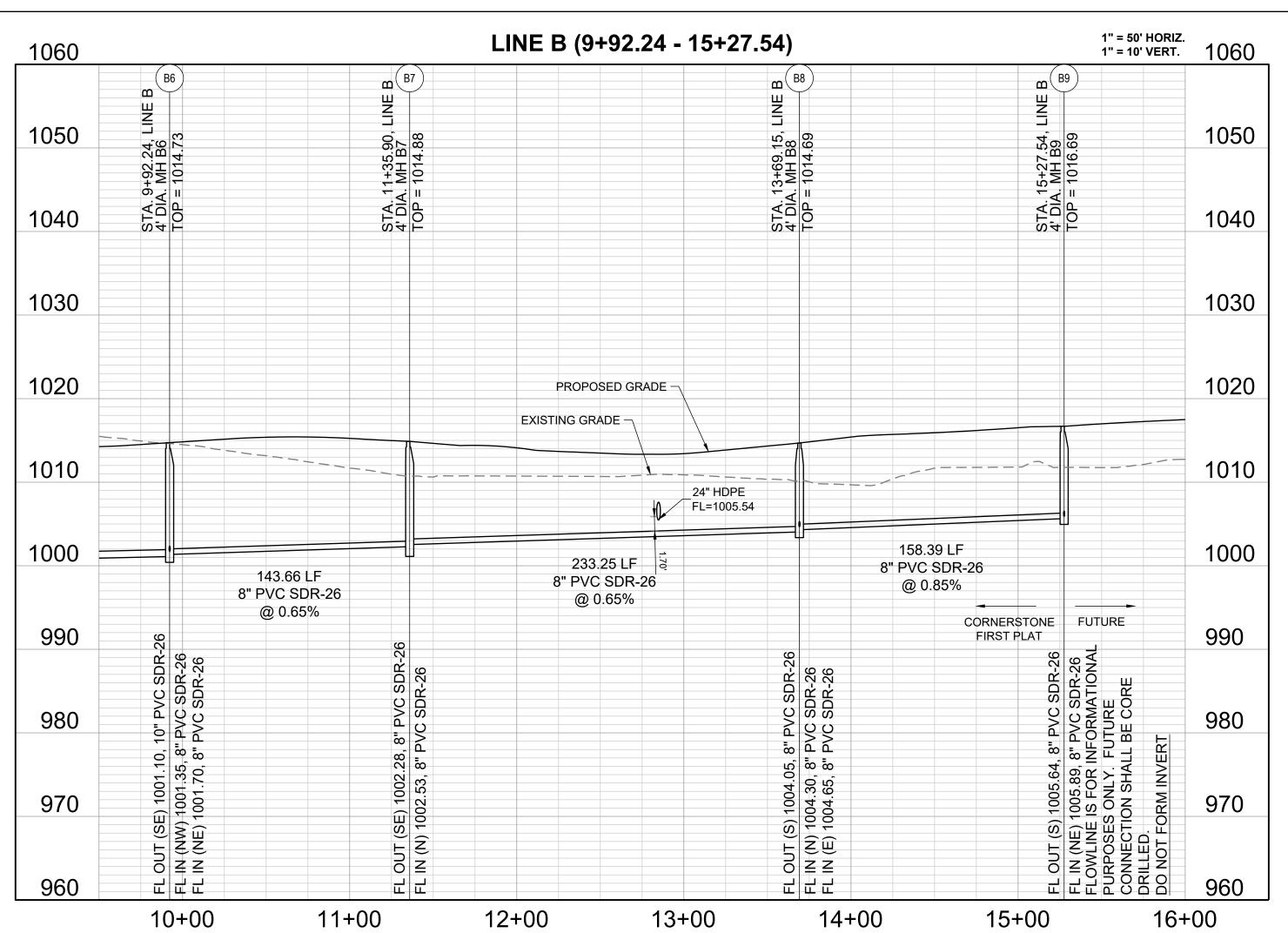
ELEV. = 1046.25

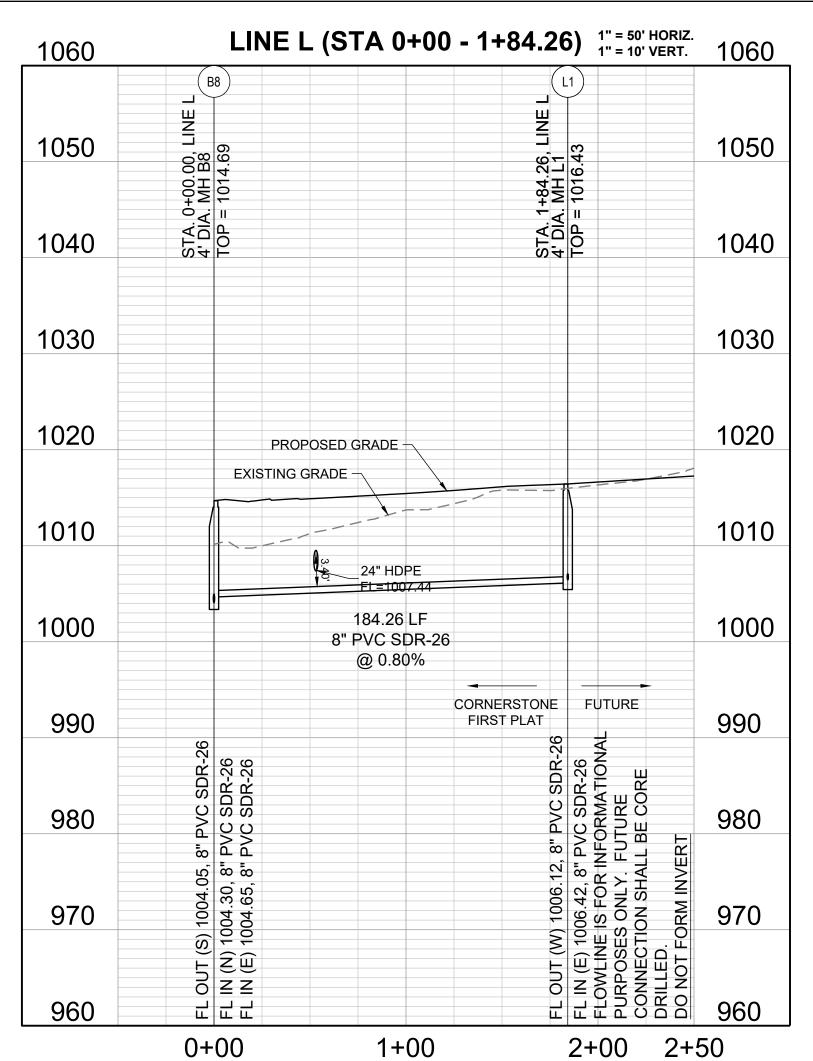
GENERAL NOTES:

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- 3. THE CONTRACTOR IS RESPONSIBLE FOR
- 4. ALL SERVICE LINES ARE TO BE 90° TO THE MAIN UNLESS OTHERWISE NOTED.
- ALL SANITARY SEWER MANHOLES ARE 4'









WYE STA.

0+99 35 LF OF 6" PVC @1.3%

FL=1006.6

MSFE=1009.6

LOT 233

WYE STA.

39 LF OF 6"

PVC @1.3% FL=1006.4 MSFE=1009.4 LOT 234

WYE STA.

37 LF OF 6"

PVC @1.3%

FL=1007.0

MSFE=1010.0

24

23

22

____CL 15' U/E

ELEVATION.

VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATIONS.

DIAMETER UNLESS OTHERWISE NOTED.



SCALE: 1" = 50'

FARMS, ENSION CORNERSTONE AT BAIL SANITARY MAIN E

RANSON ROA

1300 SE

PREPARED BY:

JAMES L.

SCHLAGEL & ASSOCIATES, P.A.

LINES B AND L PLAN AND

PROFILE

SHEET 4

2+00 2+50 1+00

1" = 50' HORIZ. 1" = 10' VERT. 1060

960

5+00

MISSOURI GEOGRAPHIC REFERENCE SYSTEM **BENCHMARK:**

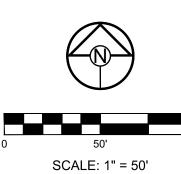
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1050 1050 STA. 4+34.13, L MH K2 EX TOP = 1019.87 STA. 2+31.83, L 4' DIA. MH K1 TOP = 1017.10 1040 1040 1030 1030 PROPOSED GRADE -EXISTING GRADE -1020 1020 1010 1010 _15" HDPE FL=1008.42 1000 1000 202.30 LF 8" PVC SDR-26 @ 0.65% 231.83 LF 8" PVC SDR-26 @ 0.65% CORNERSTONE EXISTING FIRST PLAT 990 990 FL OUT (W) 1004.82, 8" PVC FL IN (E) 1005.12, 8" PVC SD 980 980 970 970

2+00

3+00

4+00

LINE K (STA 0+00 - 4+34.13)

1060

960

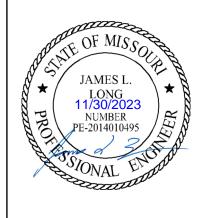
0+00

1+00

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PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

FARMS, ENSION I

RANSON ROA

CORNERSTONE AT BAIL SANITARY MAIN E 1300 SE

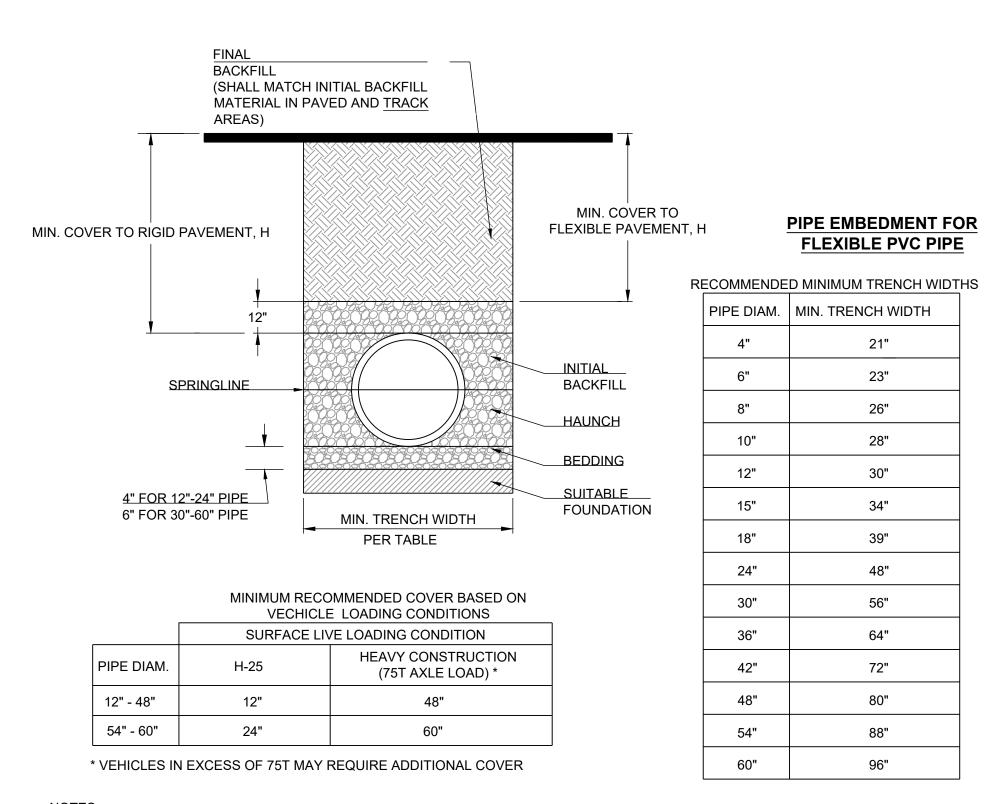
LINE K (STA 0+00 - 4+34.13) PLAN AND PROFILE

SHEET

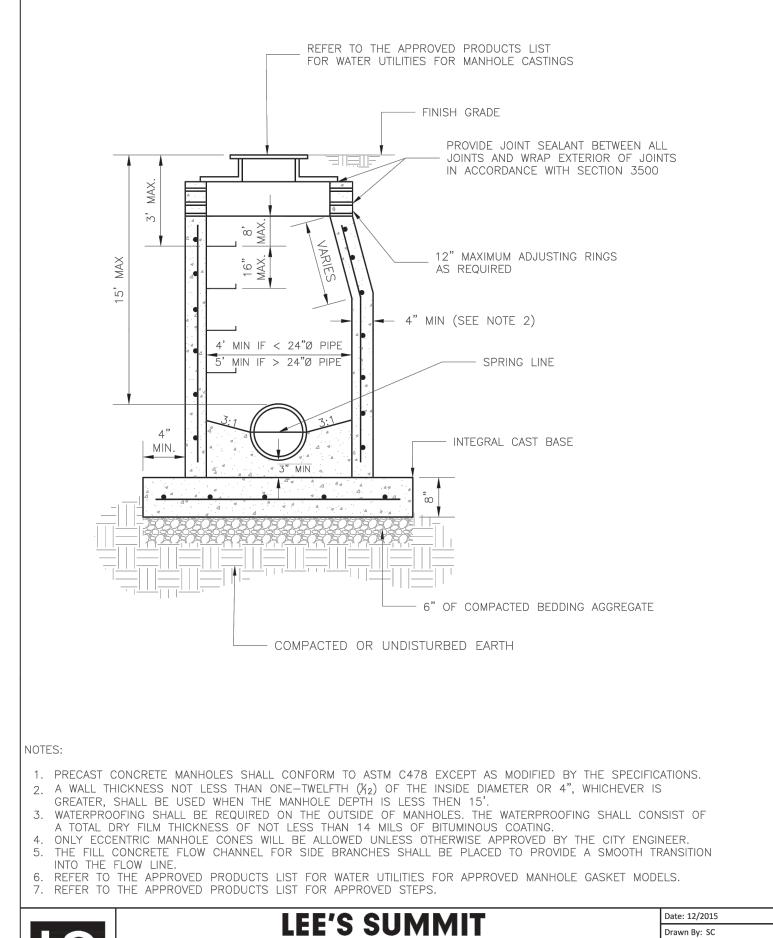
5

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> **Development Services Department** Lee's Summit, Missouri 12/14/2023



- 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 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).
- 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 FLOATION. 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.



MISSOURI

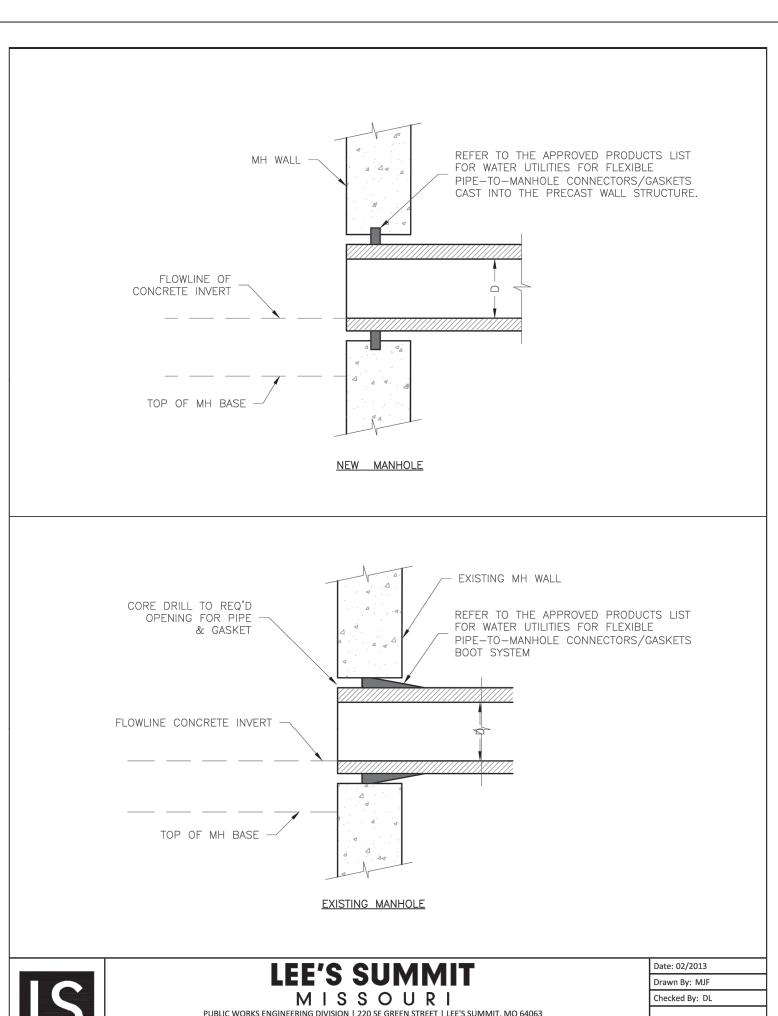
STANDARD SANITARY PRECAST MANHOLE

Drawn By: SC

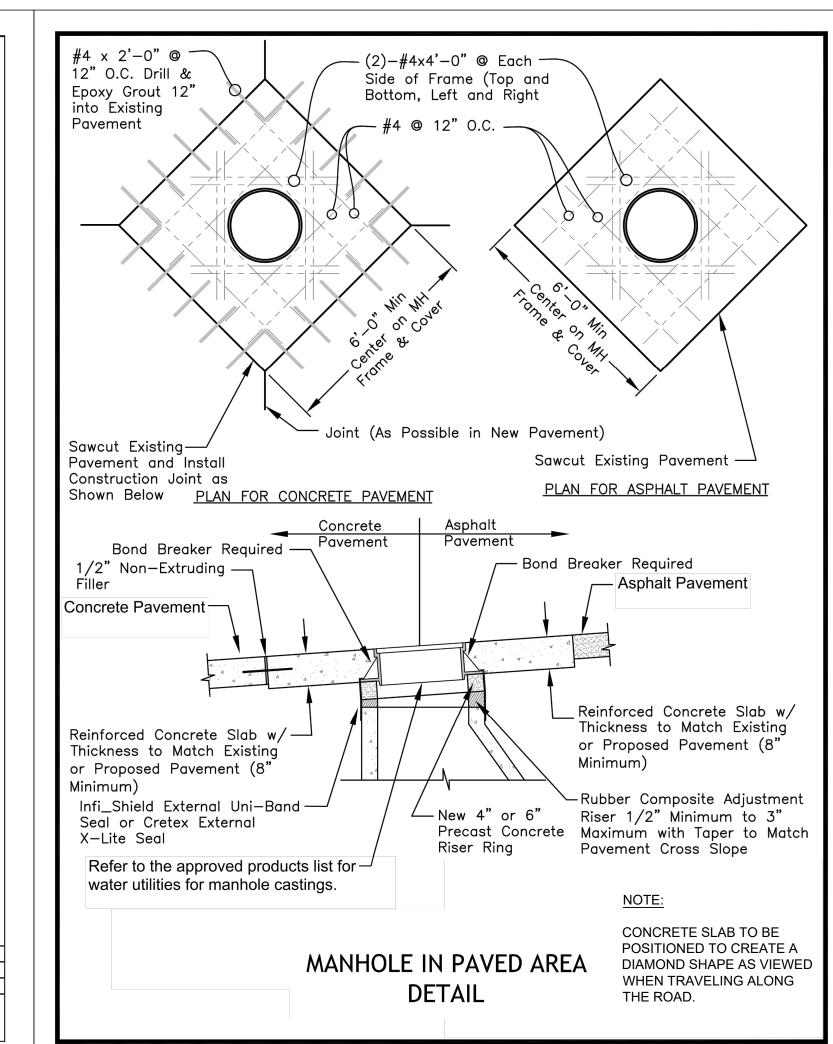
necked By: DL

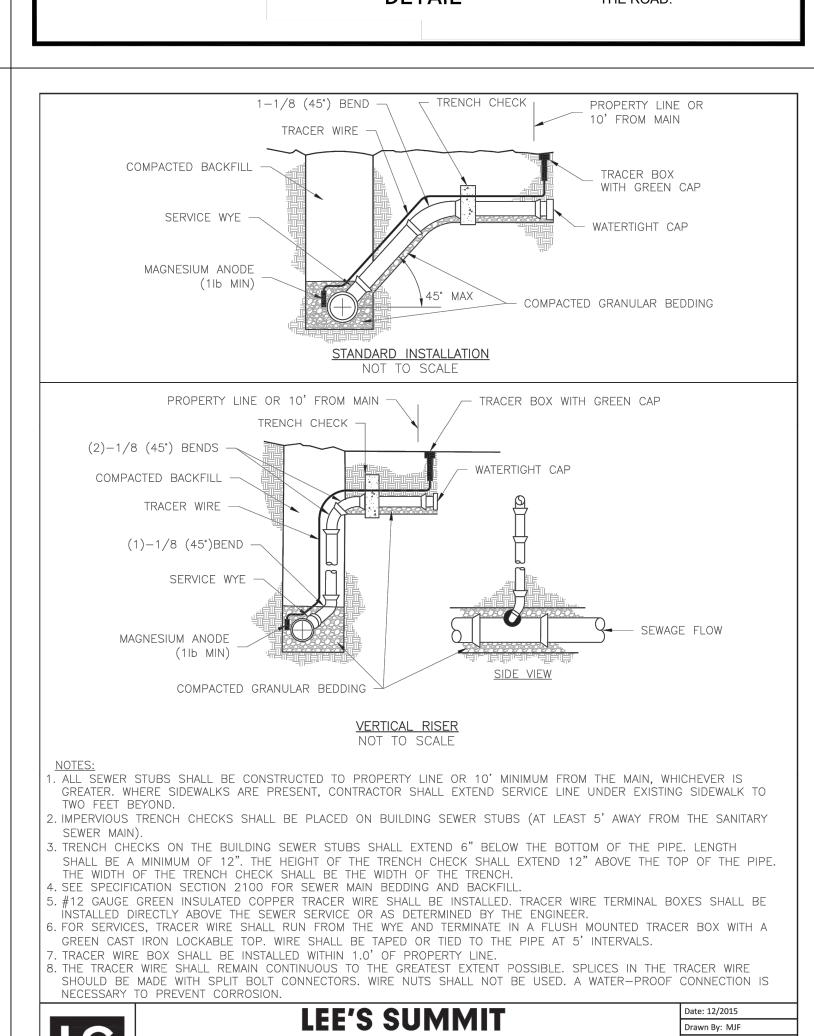
SAN-2

SAN-5



MANHOLE WALL CONNECTION



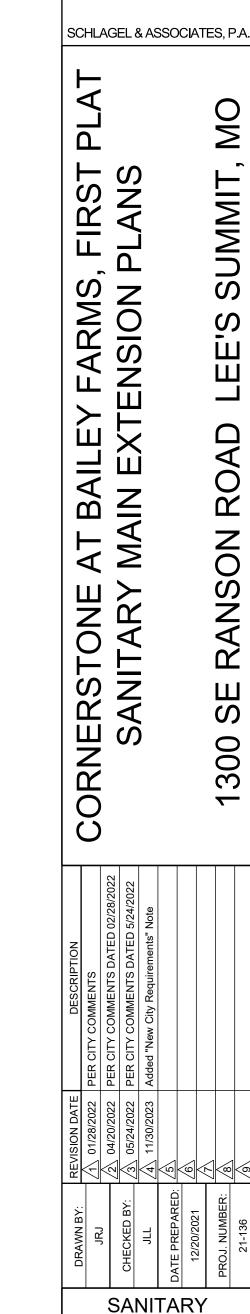


MISSOURI

SANITARY SEWER STUB DETAIL

hecked By: DL

SAN-1



PREPARED BY:

JAMES L.

SANITARY SEWER DETAILS

SHEET