EXISTING GRATE INLET

EXISTING JUNCTION BOX

EXISTING STORM MANHOLE

LOCATION NW1/4 SW1/4

SECTION 16-47-31

LOCATION MAP SCALE 1" = 2000' BASIS OF BEARINGS MISSOURI COORDINATE **SYSTEM 1983**, **WEST ZONE**

UTILITY CONTACTS:

MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT) Steve Holloway 600 NE Colbern Road Lee's Summit, MO 64086 (816) 607-2186

MISSOURI GAS ENERGY (MGE)

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

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 500 E. 8th Street, Room 370 Kansas City, MO 64106 (816) 275-2341 or (816) 275-1550

John Meadows 4700 Little Blue Parkway Independence, MO 64057 (816) 795-2257

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

(816) 969-1900

SUMMARY OF QUANTITIES QUANTITY UNITS ITEM 525 LF 1 10" PVC SDR-26 LF 2 8" PVC SDR-26 1350 3 6" PVC SDR-26 1750 LF 4 10" x 6" WYES EΑ EΑ 5 8" x 6" WYES 6 STD. 4' DIAMETER MANHOLE EΑ CONNECT TO EXISTING MANHOLE EΑ 8 EXTRA DEPTH IN MANHOLE VF EΑ TRACER WIRE AND BOXES ROCK EXCAVATION (ESTIMATED) 250 CY MANHOLE BARREL ADJUSTMENT EΑ EΑ MANHOLE RING ADJUSTMENT LS 13 | EROSION CONTROL LS BONDS

SANITARY MAIN EXTENSION PLANS

CORNERSTONE AT BAILEY FARMS, FIRST PLAT

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

GENERAL NOTES:

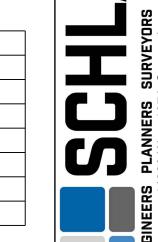
- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
- LINEAL FOOT MEASUREMENTS SHOWN ON THE 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 FOR ALL SANITARY SEWER SERVICE LINES AND SHALL SUPPLY THIS INFORMATION TO THE DESIGN ENGINEER FOR INCLUSION IN THE AS-BUILT RECORD DRAWINGS.

	Sheet List Table					
Sheet Number	Sheet Title					
1	COVER SHEET					
2	GENERAL LAYOUT					
3	LINES B AND J PLAN AND PROFILE					
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

APPROVED BY

CITY ENGINEER APPROVED FOR ONE YEAR FROM THIS DATE DATE

OWNER/DEVELOPER:

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



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

COVER SHEET



5/24/2022 SCHLAGEL & ASSOCIATES, P.A.

PREPARED BY:

JAMES L.

NUMBER

GENERAL LAYOUT

28 30 27 WYE STA. 5+30 7 LF RISER THEN 42 LF OF 6" PVC @1.3% FL=1004.5 WYE STA. 6+21 MSFE=1007.5 5 LF RISER THEN 29 LF OF 6" PVC @1.3% FL=1003.4 WYE STA. 61 LF OF 6" MSFE=1006.4 1+56 WYE STA. 59 LF OF 6" 0+82 PVC @1.3% MSFE=1005.1 35 LF OF 6' FL=1002.2 PVC @1.3% MSFE=1005.7 FL=1001.2 MSFE=1004.2 LOT 11 WYE STA. WYE STA. 4+94 1+77 8 LF RISER 42 LF OF 6" PVC @1.3% 24 LF OF 6" PVC FL=1002.2 MSFE=1005.2 FL=1004.9 MSFE=1007.9 LOT 10 WYE STA. 1+87 29 LF OF 6" PVC @1.3% FL=1002.3 MSFE=1005.3 WYE STA. 2 LF RISER WYE STA. 47 LF OF 6" WYE STA. 47 LF OF 6" 0+99 PVC @1.3% WYE STA. 51 LF OF 6" PVC @1.3% FL=1002.1 FL=1001.1 56 LF OF 6" 1+51 PVC @1.3% MSFE=1004.1 68 LF OF 6" PVC @1.3% MSFE=1005.1 FL=1001.6 PVC @1.3% FL=1002.4 MSFE=1004.6 MSFE=1005.4 FL=1002.4 MSFE=1005.4

MISSOURI GEOGRAPHIC REFERENCE SYSTEM **BENCHMARK:**

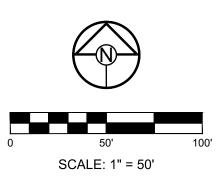
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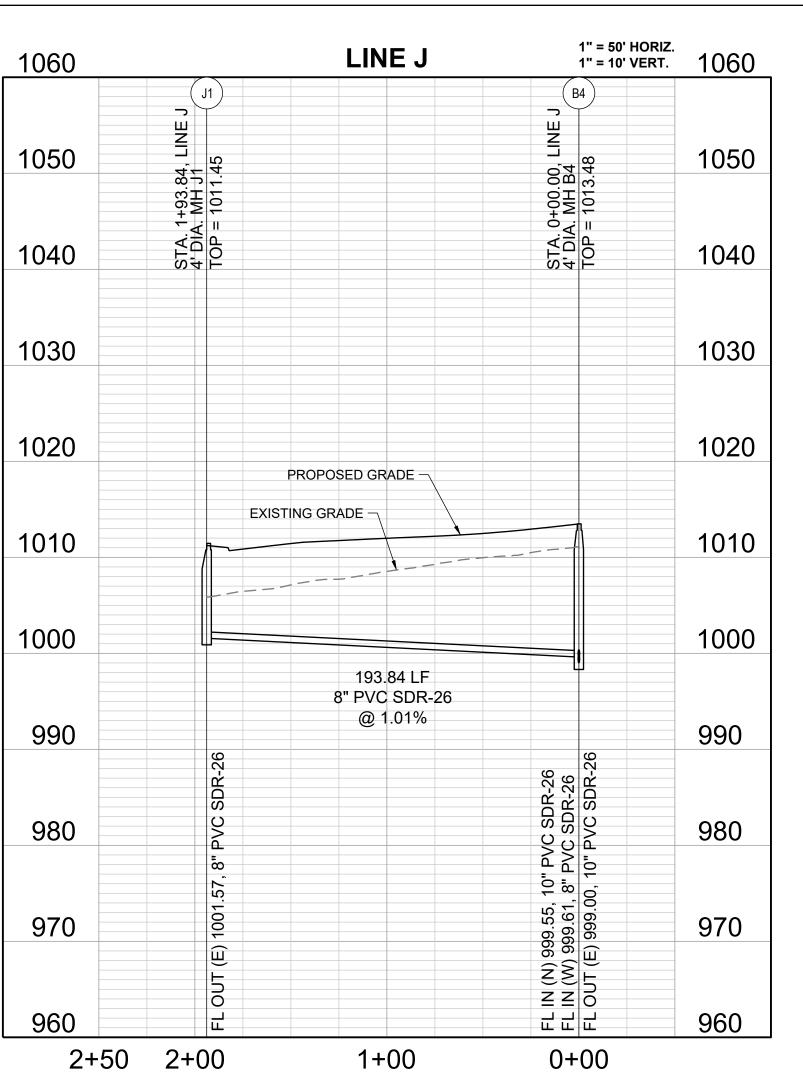
ELEV. = 1046.25

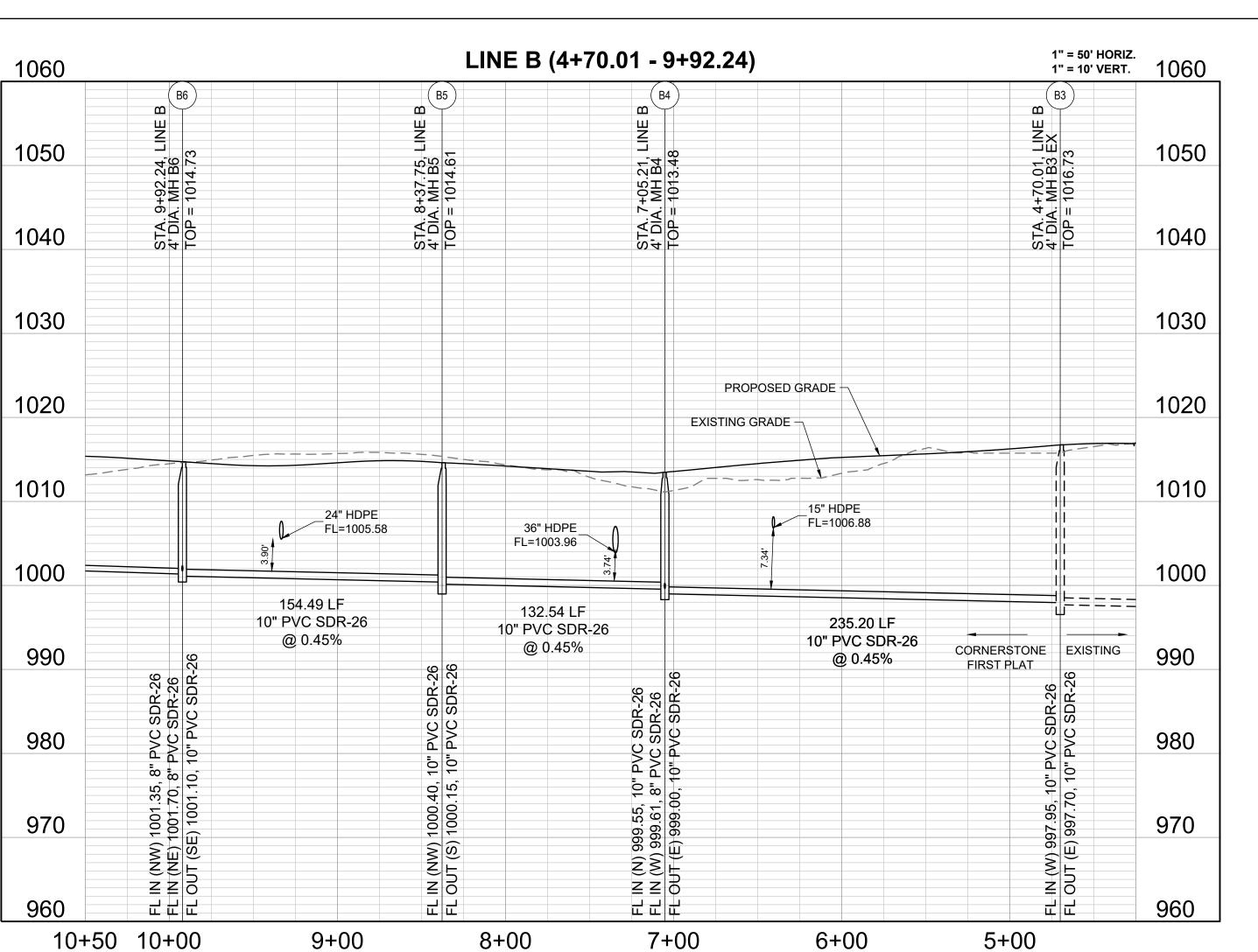
GENERAL NOTES:

- 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.

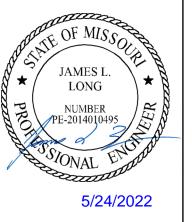








PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

FARMS, ENSION RANSON ROA 1300 SE

CORNERSTONE AT BAIL SANITARY MAIN E

LINES B AND J PLAN AND **PROFILE**

MISSOURI GEOGRAPHIC REFERENCE SYSTEM **BENCHMARK:**

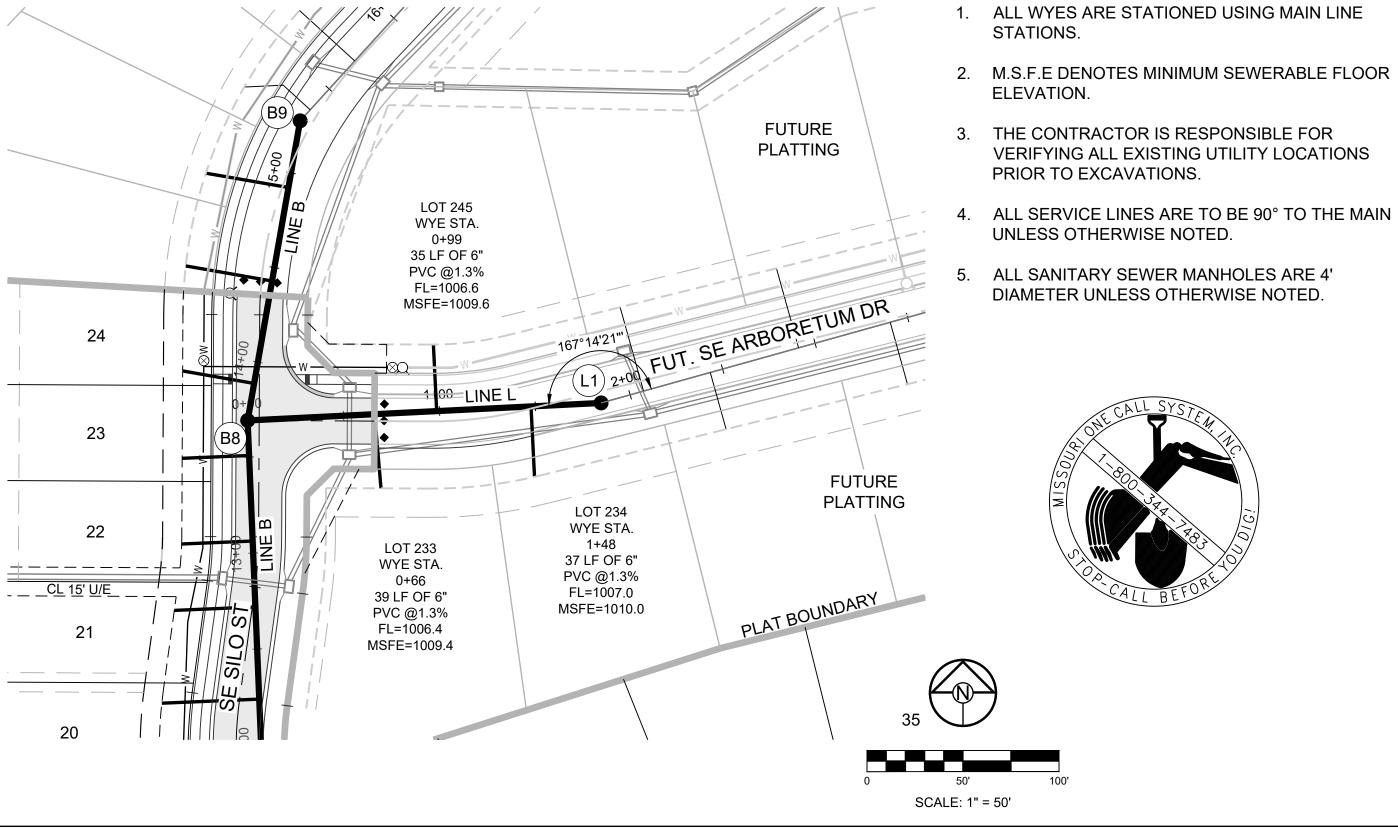
BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

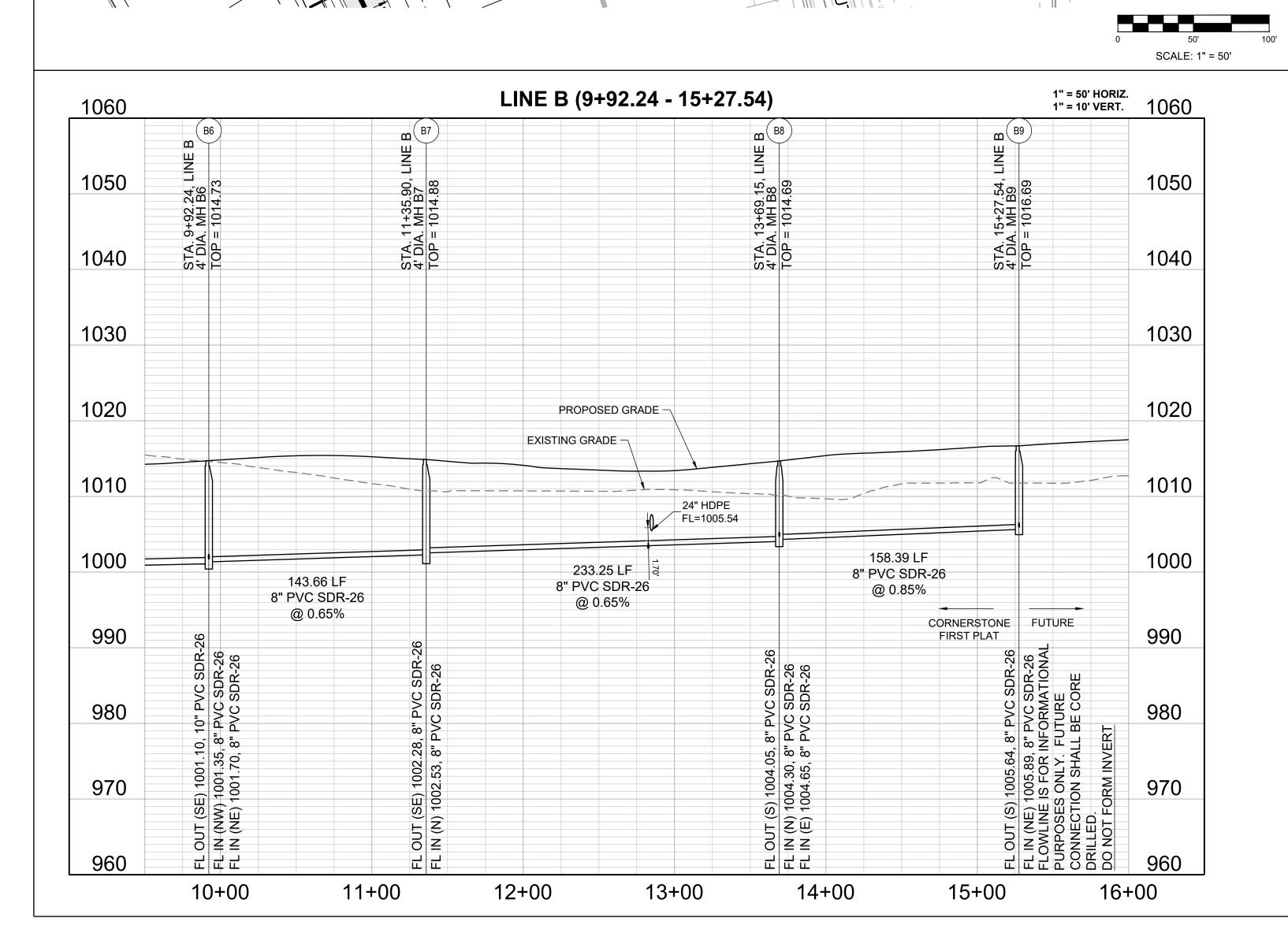
ELEV. = 1046.25

GENERAL NOTES:

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- 2. M.S.F.E DENOTES MINIMUM SEWERABLE FLOOR
- 3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS
- UNLESS OTHERWISE NOTED.
- ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS OTHERWISE NOTED.







LOT 28

WYE STA.

12+72

42 LF OF

6" PVC

@1.3%

FL=1004.6

MSFE=1007.6

FUTURE SE ARBORETUM DR

LOT 29

STA.

13+06

37 LF OF

6" PVC

@1.3%

FL=1004.8

LOT 30

WYE STA.

13+51

35 LF OF

6" PVC

@1.3%

FL=1005.1

WYE STA.

13+89

FL=1005.7

MSFE=1007.8 MSFE=1008.1 MSFE=1008.7 MSFE=1009.2

41 LF OF 6"

PVC @1.3% PVC @1.3%

LOT 195

WYE STA.

14+43

46 LF OF 6"

FL=1006.2

WYE STA.

12+24

51 LF OF 6"

PVC @1.3%

FL=1004.4

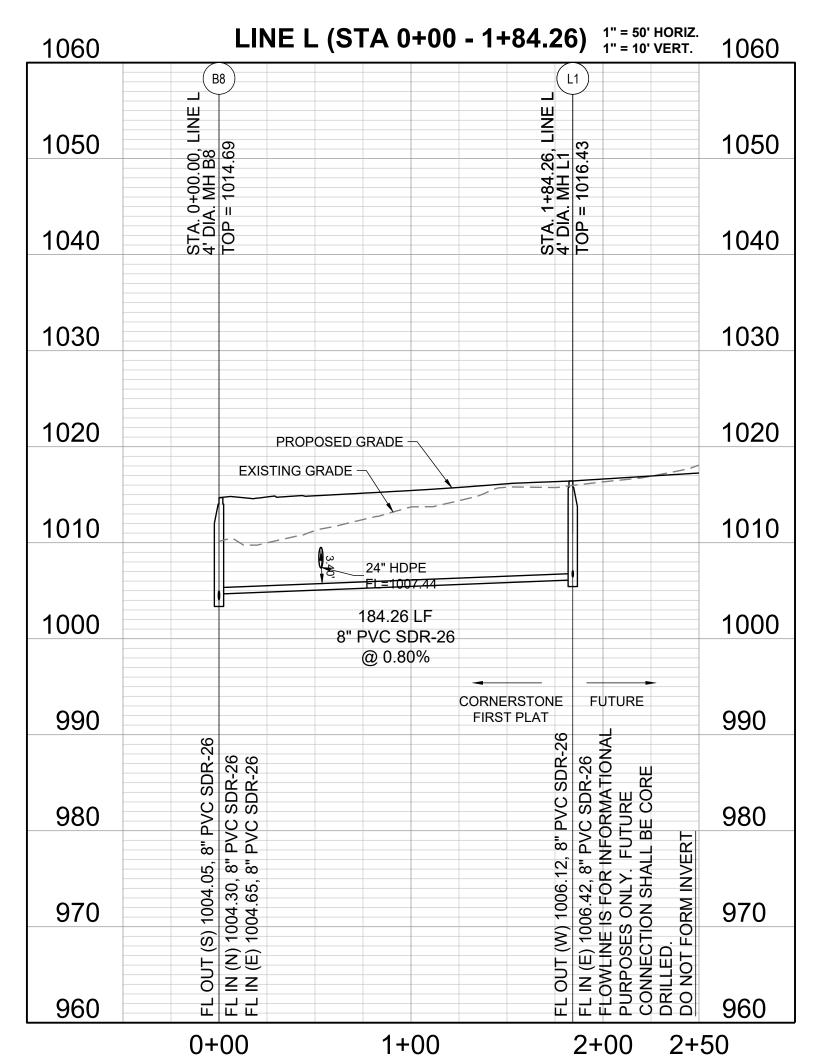
MSFE=1007.4

WYE STA.

11+73

PVC @1.3% FL=1004.1

53 LF OF 6"



SCHLAGEL & ASSOCIATES, P.A. FARMS, ENSION CORNERSTONE AT BAIL SANITARY MAIN E

RANSON ROA

1300 SE

PREPARED BY:

JAMES L.

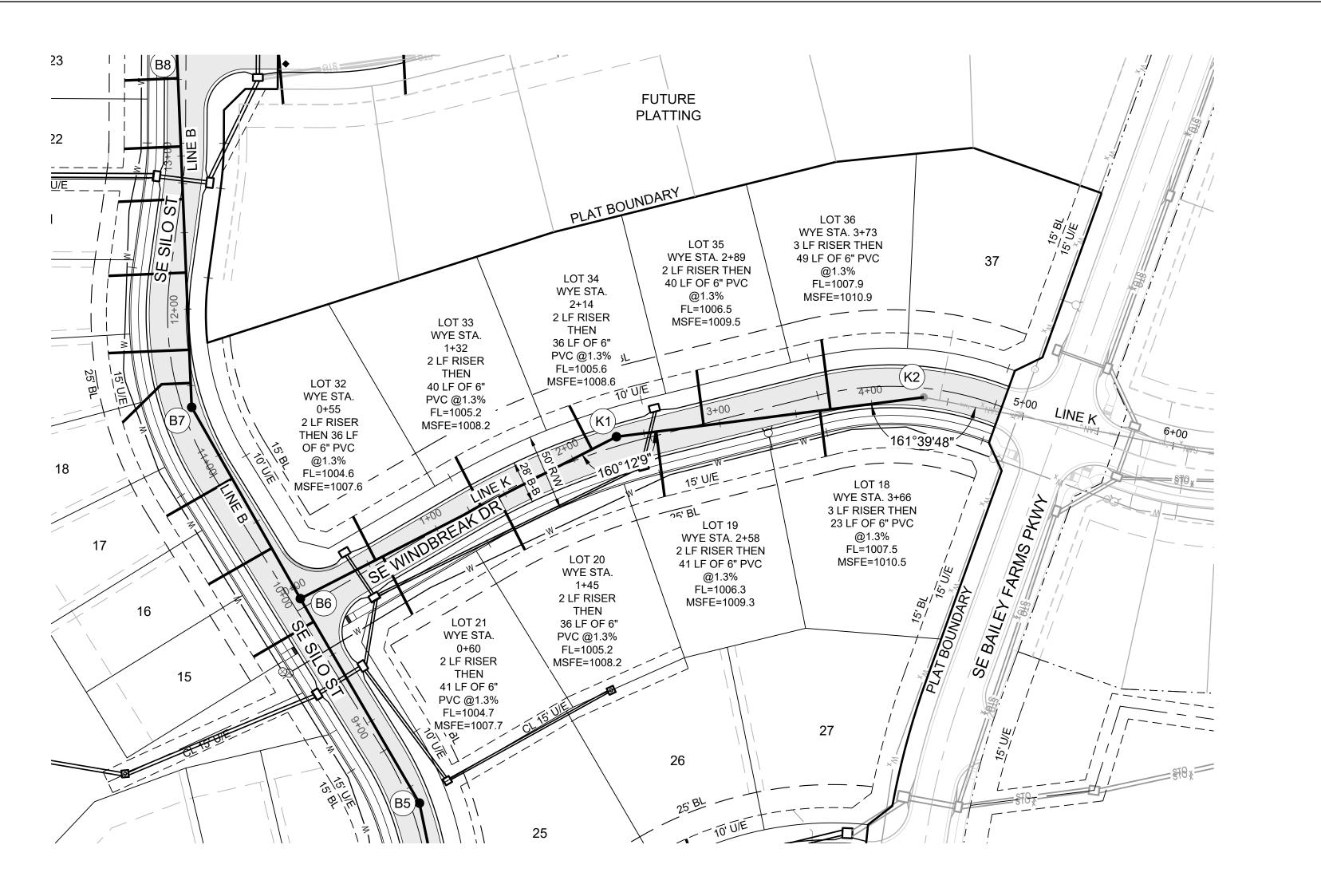
NUMBER

5/24/2022

LINES B AND L PLAN AND PROFILE

SHEET

4



MISSOURI GEOGRAPHIC REFERENCE SYSTEM **BENCHMARK:**

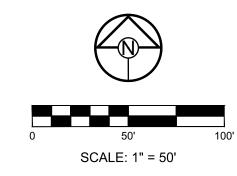
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ELEV. = 1046.25

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- 3. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS
- 4. ALL SERVICE LINES ARE TO BE 90° TO THE MAIN
- 5. ALL SANITARY SEWER MANHOLES ARE 4'





1060		LINE K	(STA 0+00 - 4+	+34.13)	1" = 50' HOR 1" = 10' VER	т. 1060
1050	1+00.00, LINE K MH B6 1014.73		1+31.83, LINE K MH K1 1017.10		1+34.13, LINE K 1019.87	1050
1040	STA. 0+ 4' DIA. N 1 OP = 1		STA. 2+ 4' DIA. N TOP = 1		STA. 4+ MH K2 E TOP = 1	1040
1030						1030
1020	E	PROPOSED GRADE —				1020
1010		15" HDPE FL=1008.42				1010
1000	, co	231.83 LF		202.30 LF 8" PVC SDR-26		1000
990	9	8" PVC SDR-26 @ 0.65%	92	@ 0.65%	CORNERSTONE EXISTING FIRST PLAT	990
980	OUT (SE) 1001.10, 10" PVC SDR-26 IN (NW) 1001.35, 8" PVC SDR-26 IN (NE) 1001.70, 8" PVC SDR-26		8" PVC SDR-26 VC SDR-26		8" PVC SDR-26 PVC SDR-26	980
970	(SE) 1001.10, 1 W) 1001.35, 8" E) 1001.70, 8" F		FL OUT (SW) 1003.21, 8" PVC SDF FL IN (E) 1003.51, 8" PVC SDR-26		FL OUT (W) 1004.82, 8" FL IN (E) 1005.12, 8" PV	970
960	FL OUT (S FL IN (NW) FL IN (NE)		FL OUT (S		FL OUT (M	960

ELEVATION.

PRIOR TO EXCAVATIONS.

UNLESS OTHERWISE NOTED.

DIAMETER UNLESS OTHERWISE NOTED.



Y FARMS, 'ENSION F

1300 SE RANSON ROA

PREPARED BY:

JAMES L.

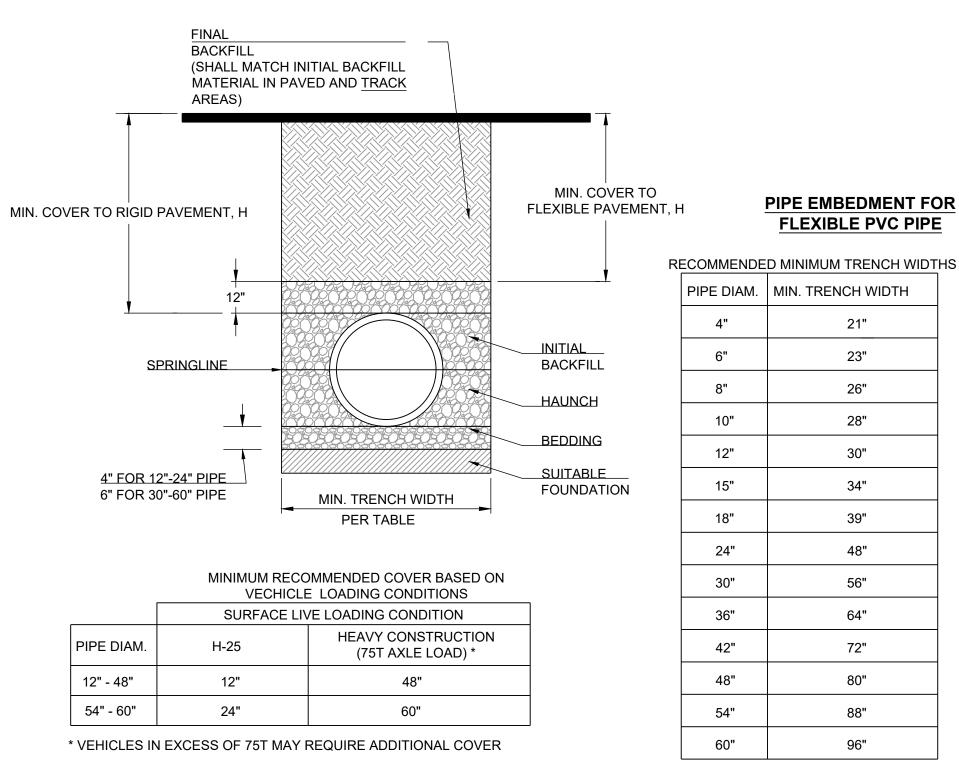
NUMBER

SCHLAGEL & ASSOCIATES, P.A.

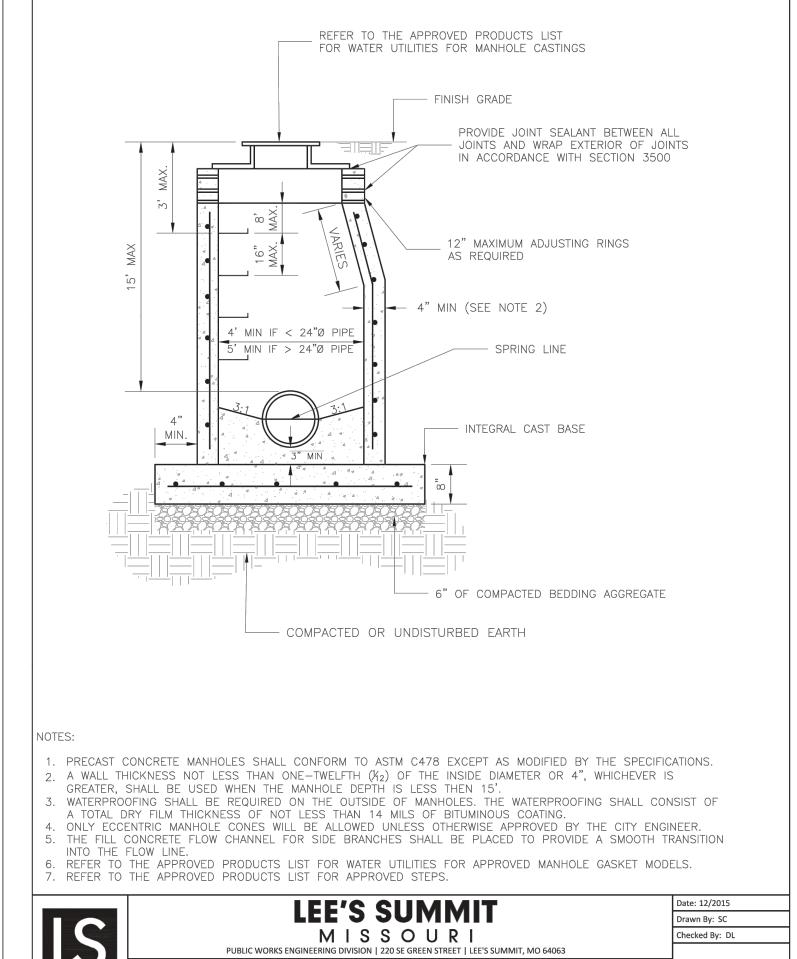
5/24/2022

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DESCRIPTION	PER CITY COMMENTS	PER CITY COMMENTS DATED 02/28/2022	PER CITY COMMENTS DATED 5/24/2022						
REVISION DATE	1 01/28/2022	72/ 04/20/2022	/3\ 05/24/2022	4	(5)	9	</td <td>\8/</td> <td> <</td>	\8/	 <
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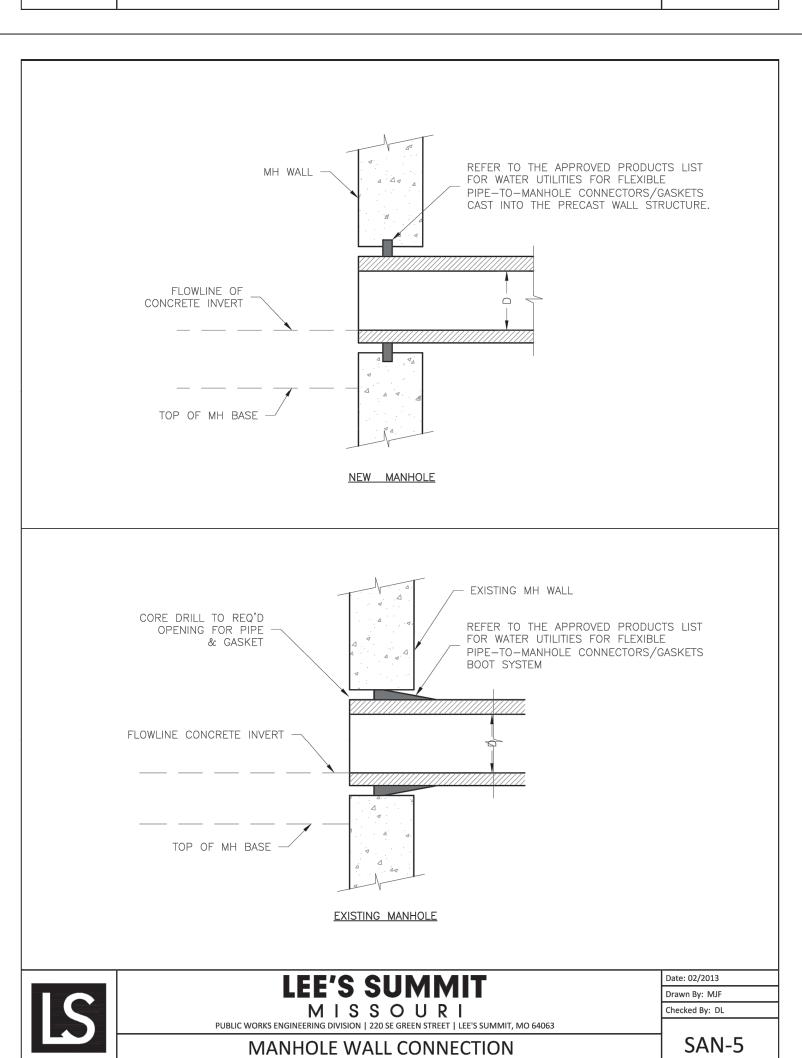
LINE K (STA 0+00 - 4+34.13) PLAN AND PROFILE



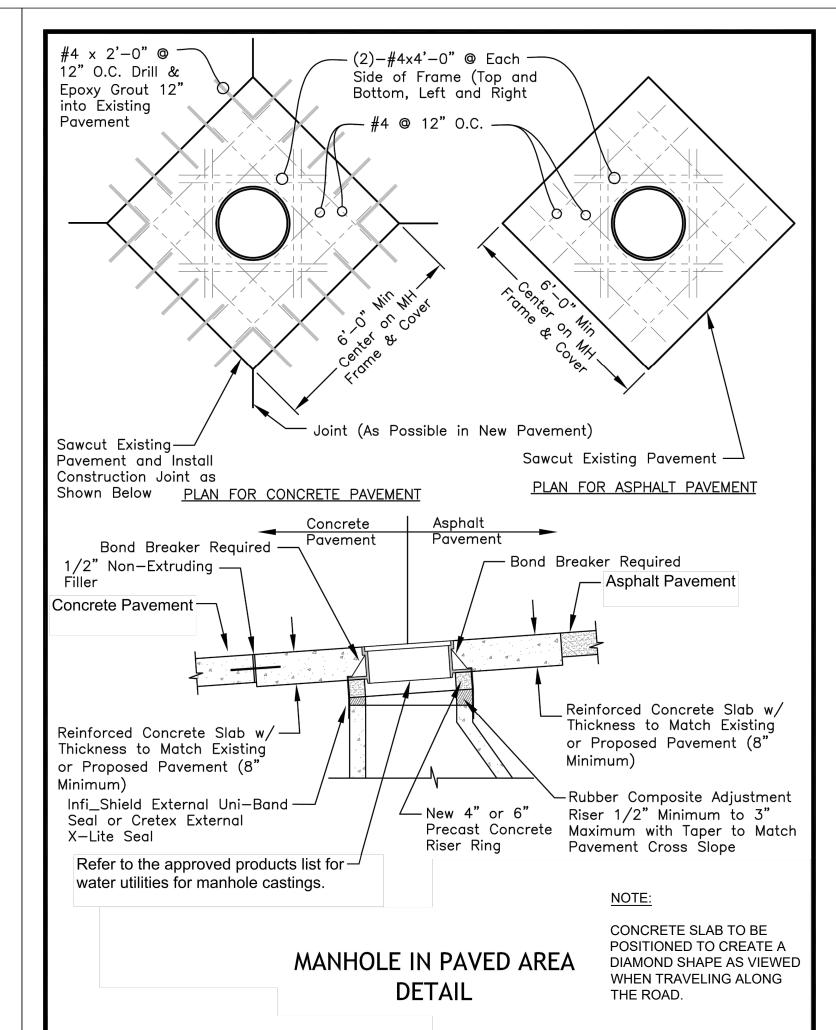
- 1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION
- 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN 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.

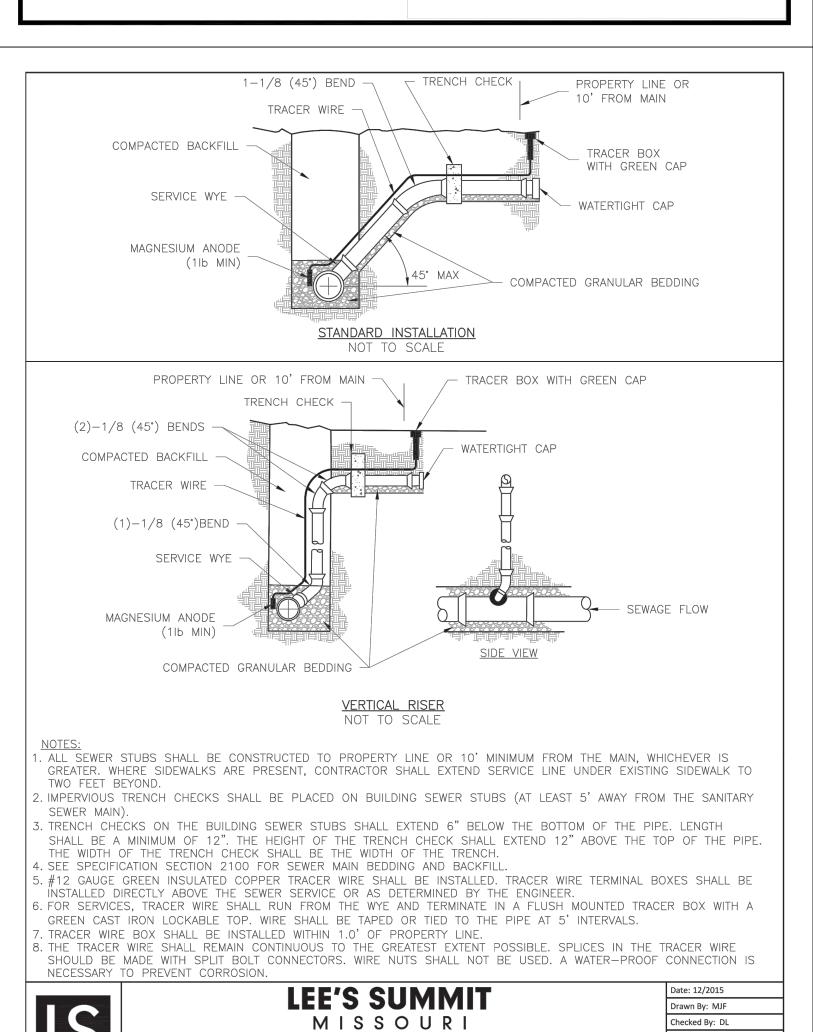


STANDARD SANITARY PRECAST MANHOLE



SAN-2

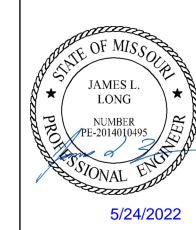




SANITARY SEWER STUB DETAIL

SAN-1





SCHLAGEL & ASSOCIATES, P.A.

FARMS, ENSION SANITARY

SANITARY SEWER DETAILS