

LEGEND:

CO

TJB

G/E

U/E

PUBLIC EASEMENT

SERVICE LINESIDEWALK

TOP ELEVATION

- UTILITY EASEMENT

ROW or R/W - RIGHT-OF-WAY

CURB & GUTTER

P/L PROPERTY LINES

—— STO—— STORM SEWER

TREELINE

REINFORCED CONCRETE PIPE

SANITARY SEWER EASEMENT

- WATER SURFACE ELEVATION

**ASPHALT PAVEMENT - EXISTING** 

ASPHALT PAVEMENT - PROPOSED

**CONCRETE PAVEMENT - EXISTING** 

ASPHALT PAVEMENT - EXISTING

CONCRETE SIDEWALK - EXISTING

**CONCRETE SIDEWALK - PROPOSED** 

**CURB & GUTTER - EXISTING** 

EXISTING LOT AND R/W LINES

EXISTING PLAT LINES

SANITARY SEWER MAIN

SANITARY SEWER MAIN - EXIST.

—— UGE, —— UNDERGROUND ELECTRIC - EX.

LIGHT - EXISTING

**EXISTING MANHOLE** 

**EXISTING AREA INLET** 

EXISTING CURB INLET
EXISTING GRATE INLET
EXISTING JUNCTION BOX
EXISTING STORM MANHOLE

WATERLINE - EXISTING

EXISTING SANITARY MANHOLE

PROPOSED SANITARY MANHOLE

STORM SEWER - EXISTING

—— T<sub>X</sub>—— TELEPHONE LINE - EXIST.

GAS LINE - EXISTING

ELECTRIC LINE - EXISTING

CLEANOUT

---- CATV<sub>x</sub> ---- CABLE TV - EXISTING

WATERLINE EASEMENT

# 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

CITY OF LEES SUMMIT PUBLIC WORKS 220 SE Green Street

Lee's Summit, MO 64063 (816) 969-1800

ron.dejarnette@evergy.com

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
1300 SE Hambler Bood

Mark Schaufler 1200 SE Hamblen Road Lee's Summit, MO 64081 (816) 969-1900

#### **SUMMARY OF QUANTITIES** QUANTITY ITEM UNITS 8" PVC SDR 26 8" ZINC-COATED (CLASS 50) PROTECTO 401 D.I.P | 452 6" PVC SDR 26 EA 8" x 6" WYE REINFORCED CONCRETE ENCASEMENT EA STANDARD 4' DIAMETER MANHOLE lΕΑ SEWER CONNECTION EA POST-CONST. BARREL ADJUSTMENT POST-CONST. RING (3"-12") ADJUSTMENT ΙEΑ VF EXTRA DEPTH IN MANHOLE LS CLEARING & GRUBBING MOBILIZATION **EROSION CONTROL** BONDS

# OFFSITE SANITARY SEWER MAIN PLANS FOR PERGOLA PARK, 5TH PLAT

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

#### **GENERAL NOTES**:

- 1. 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.
- 3. LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE
- MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.

  4. NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE.
- 5. THE UTILITY LOCATIONS SHOWN ON THESE PLANS ARE TAKEN FROM UTILITY COMPANY RECORDS AND APPARENT FIELD LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 6. 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.
- 7. PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. AFTER APPROVAL OF THE SHOP DRAWINGS, A COPY OF THE APPROVED AND SIGNED SHOP DRAWINGS SHALL BE PROVIDED TO THE CITY INSPECTOR UPON REQUEST.
- 8. THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE.
- 9. 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.

  O. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE
- CONTRACTOR, OR AS DIRECTED BY THE OWNER.
- 11. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK EXCAVATION.
- 12. THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION, AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
- 13. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE
- 14. THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200
- 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).

# UTILITIES:

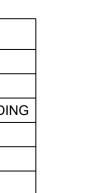
- Existing utilities have been shown to the greatest extent possible based upon information provided to the Engineer. The
  contractor is responsible for contacting the respective utility companies and field locating utilities prior to construction and
  identifying any potential conflicts. All conflicts shall immediately be brought to the attention of the Engineer.
- 2. 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.
- 3. 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 the structures.
- 4. 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.
- 5. 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.
- 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.
- 8. 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

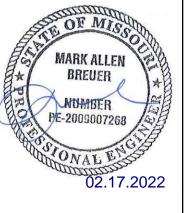
trenches by disposing it in areas as specified by the Project Engineer.

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL LAYOUT AND GRAD
3	LINE A
4	LINE A CONT.
5	DETAIL SHEET



ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARC 14920 West 107th Street • Lenexa, Kansas 66215 (913) 492-5158 • Fax: (913) 492-8400 WWW.SCHLAGELASSOCIATES.COM

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

NS E

WER

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OF

**APPROVED BY:** 

CITY ENGINEER
APPROVED FOR ONE YEAR FROM THIS DATE

DATE



# OWNER/DEVELOPER:

NLV DEVELOPMENT COMPANY LLC RUSSELL PEARSON 3152 SW GRANDSTAND CIRCLE LEE'S SUMMIT, MO 64081 p 816-589-4415

RPEARSON@BOXDEVCO.COM

# MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.

ELEV. 935.18

# PROJECT BENCHMARK:

CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 998893.4148 EASTING: 2803318.5413 ELEV. 1004.09

CHECKED BY:

MAB

DATE PREPAREI

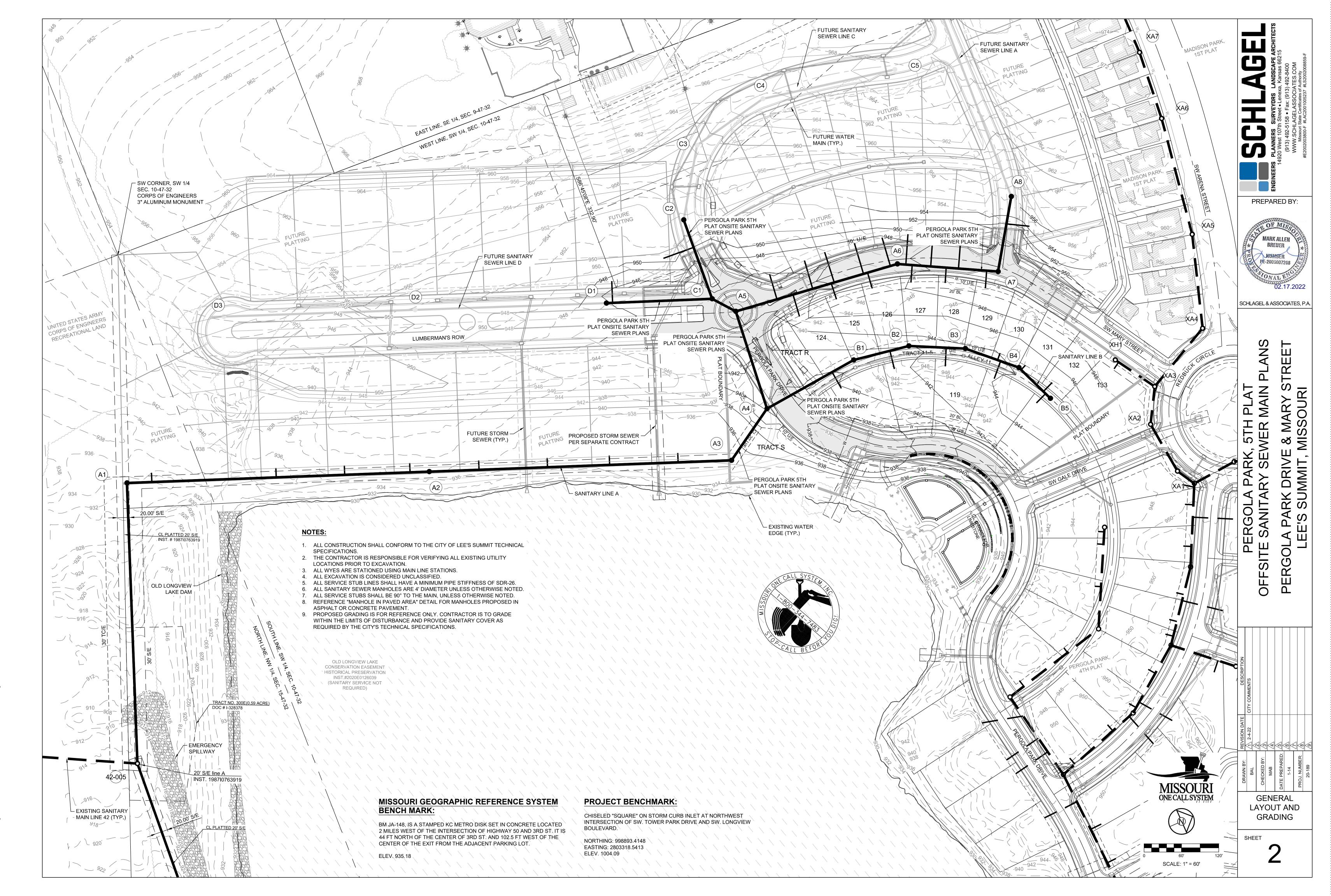
1-14

PROJ. NUMBER

COVER SHEET

SHEET

1



0.DECTS\2020\20-189\3.0 Design\3.0 DWG Plans\7.0 San\OFFSITE\20-189-SAN-GRAD-OFFSITE.dwg, 2/7/2022 3:16:

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### 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.
- ALL WYES ARE STATIONED USING MAIN LINE STATIONS.
   ALL EXCAVATION IS CONSIDERED UNCLASSIFIED.
- 5. ALL SERVICE STUB LINES SHALL HAVE A MINIMUM PIPE STIFFNESS OF SDR-26.
- 6. MSFE = MINIMUM SERVICEABLE FLOOR ELEVATION
- 7. SSNR = SEWER SERVICE NOT REQUIRED
- 8. DDS = DISTANCE DOWNSTREAM
- 9. WSE = WATER SURFACE ELEVATION10. ALL SANITARY SEWER MANHOLES ARE 4' DIAMETER UNLESS
- OTHERWISE NOTED. 11. TRACER WIRE SHALL BE INSTALLED ALONG THE TOP OF
- 11. TRACER WIRE SHALL BE INSTALLED ALONG THE TOP OF SERVICE STUBS. THE WIRE SHALL HAVE HDPE INSULATION, BE NO SMALLER THAN 12 GAUGE, AND INTENDED FOR UNDERGROUND APPLICATIONS. THE TRACER WIRE SHALL BE GREEN IN COLOR. TRACER WIRES SHALL TERMINATE AT THE GROUND SURFACE INSIDE A TRACER BOX. TRACER BOX LIDS SHALL BE GREEN IN COLOR. TRACER WIRE SHALL BE GROUNDED A MINIMUM ONE POUND MAGNESIUM ANODE AT THE SEWER LINE.

Structure Table

994454.4063

994243.1403

994115.9707

Structure Name

42-005

42-006

42-007

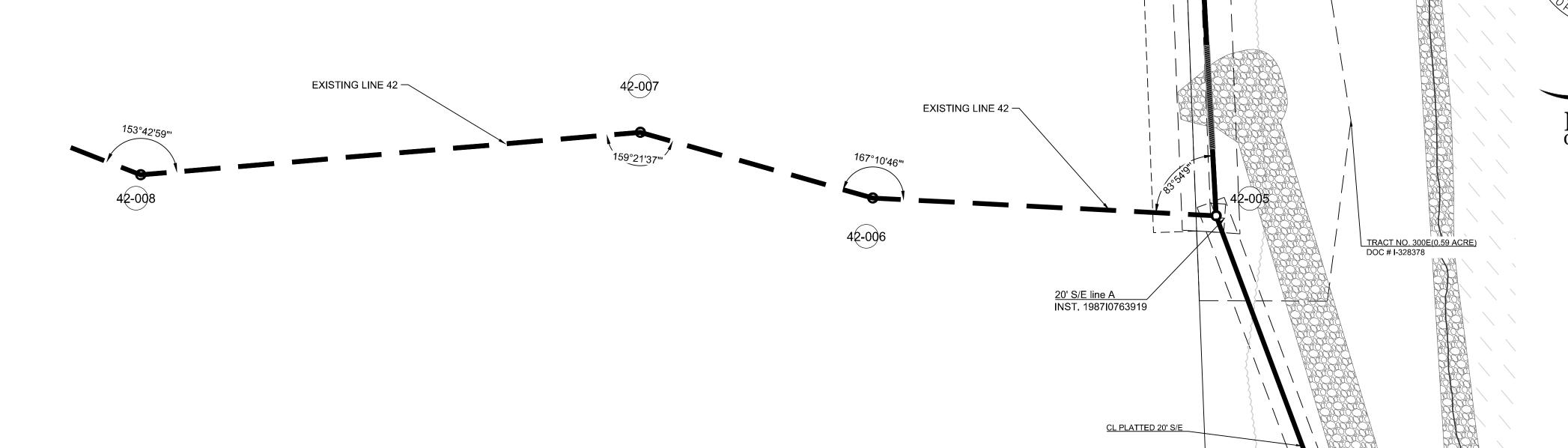
Structure Northing | Structure Easting

2803187.2619

2803075.1570

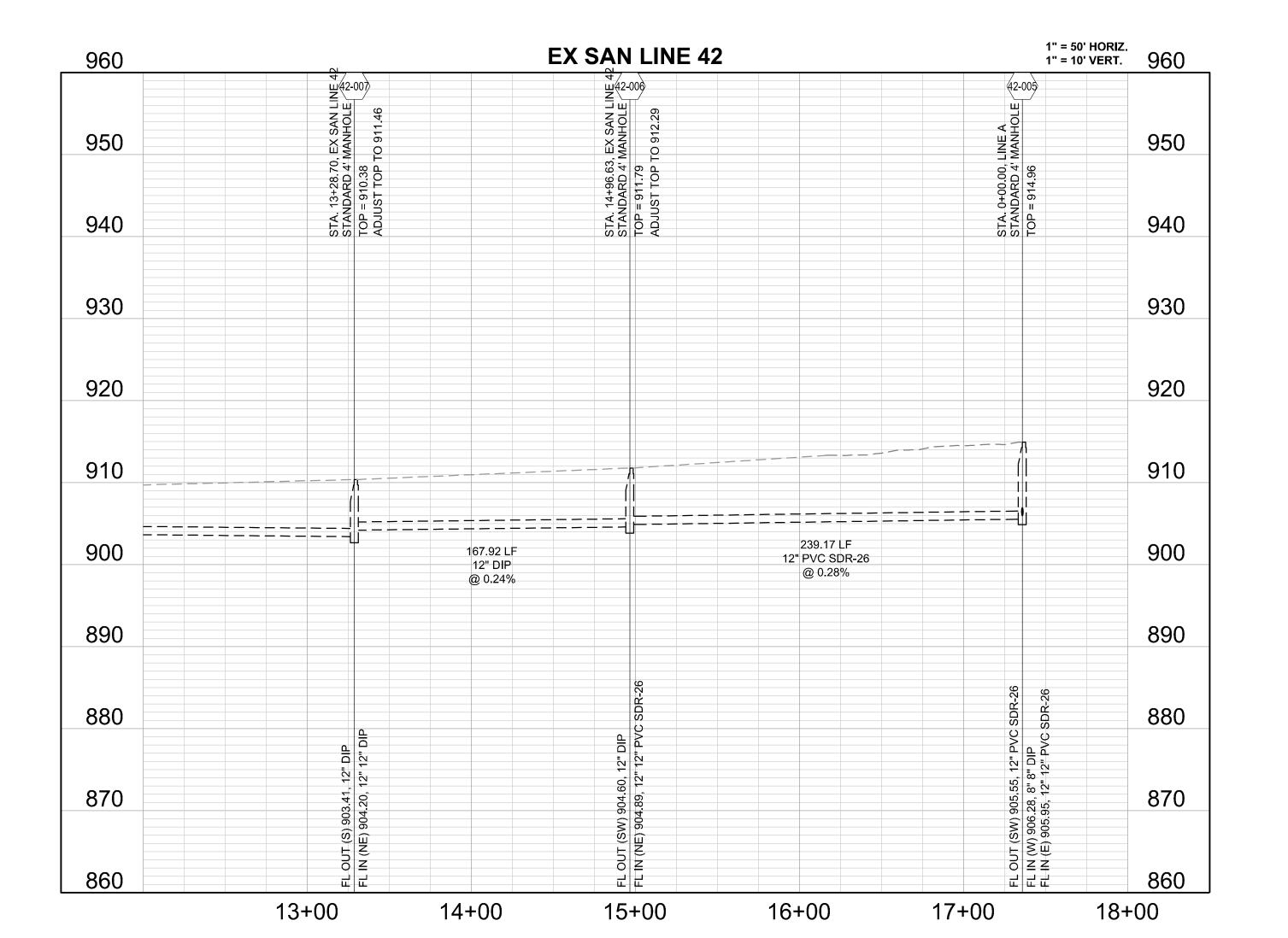
2802965.4933

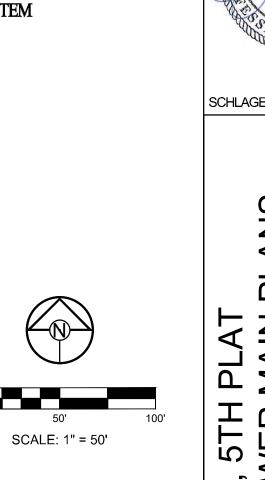
12. ALL SERVICE STUBS SHALL BE 90° TO THE MAIN, UNLESS OTHERWISE NOTED.



CL PLATTED 20' S/E INST. # 1987I0763919

SANITARY LINE A -





OFFICE SANITARY SEWER MAIN PLANS
PERGOLA PARK DRIVE & MARY STREET

LEE'S SUMMIT, MISSOURI

PREPARED BY:

MARK ALLEN

BREUER

NUMBER

D BY: 2-4-22 CITY COMMENTS

D BY: 3

B 4

T 4

T 5-4-22 CITY COMMENTS

B 4

T 6

MBER: 8

S 9

EXISTING LINE 42

SHEET 3

#### MISSOURI GEOGRAPHIC REFERENCE SYSTEM **BENCH MARK:**

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ELEV. 935.18

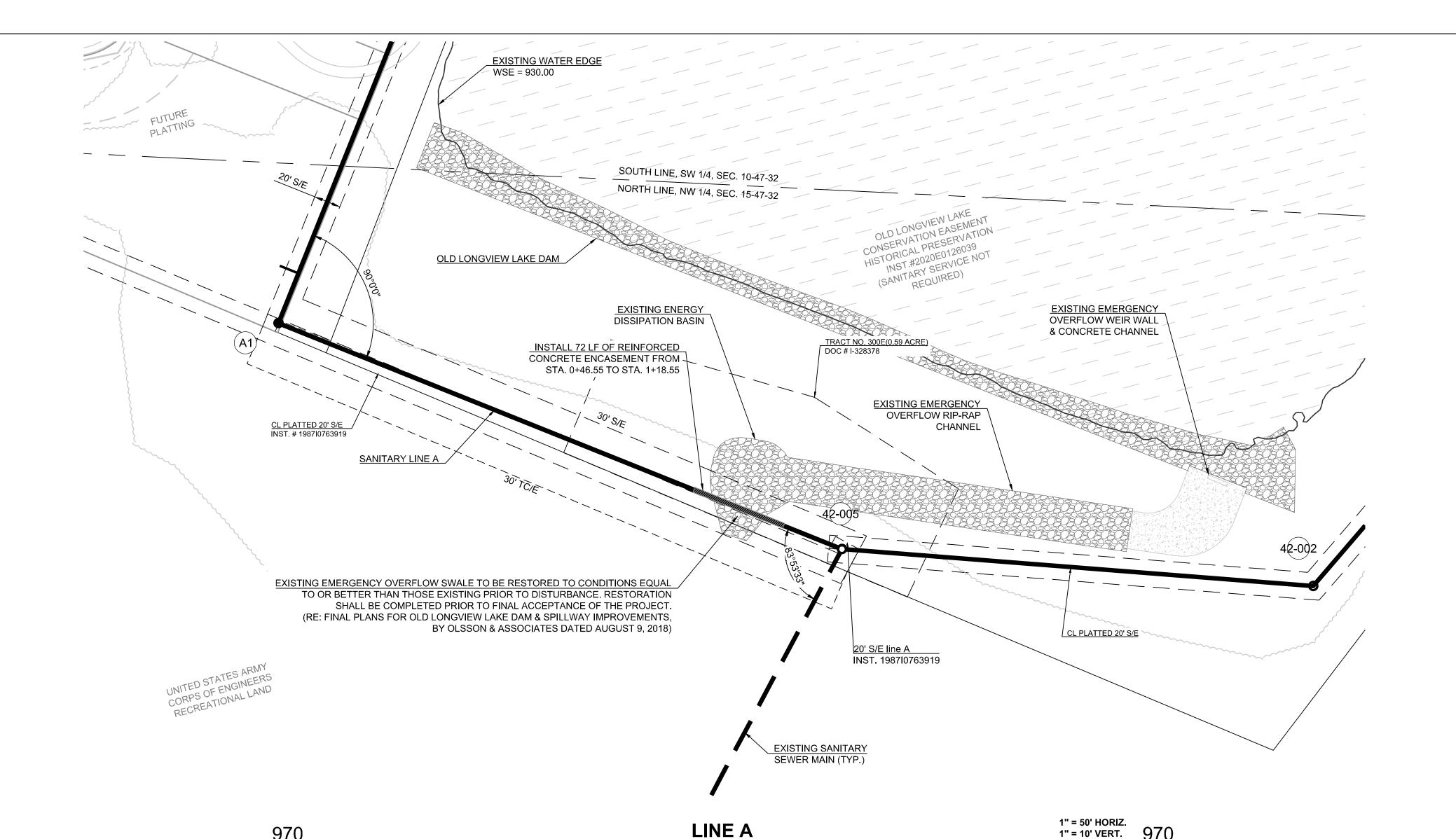
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CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 998893.4148 EASTING: 2803318.5413 ELEV. 1004.09

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1+00

2+00

950

940

920

910

870

- IMPERVIOUS

0+00

DITCH CHECK

12" PVC SDR-26

@ 0.28%

FL IN (W) 906.28, 8" DIP FL IN (E) 905.95, 12" PVC SDR-2 FL OUT (SW) 905.55, 12" PVC S

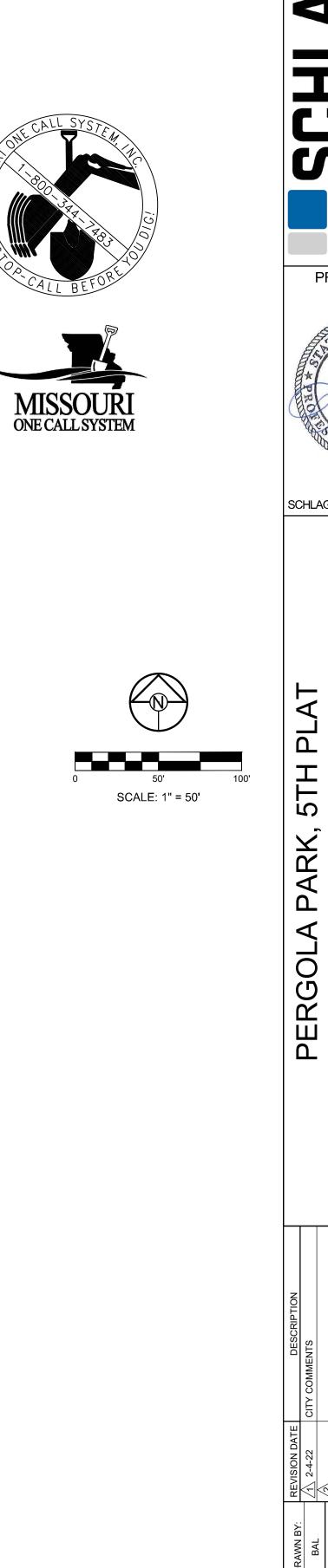
	960	コ め : の
	950	THOSE EXISTING PRIOR TO DISTURBANCE.  RESTORATION SHALL BE COMPLETED PRIOR TO FINAL
	940	ACCEPTANCE OF THE PROJECT. (RE: FINAL PLANS FOR OLD LONGVIEW LAKE DAM & SPILLWAY IMPROVEMENTS, BY OLSSON & ASSOCIATES, DATED AUGUST 9, 2018)
Structure Table	930	PROPOSED GRADE  - EXISTING GROUND = PROPOSED GRADE
Structure Name         Structure Northing         Structure Easting           42-005         994454.4063         2803187.2619           A1         994622.3587         2802768.5044	920	IMPERVIOUS DITCH CHECK  EMERGENCY OVERFLOW SWALE (RE: SWALE NOTE)
	910	
	900	451.18 LF  8" ZINC-COATED DIP  @ 1.00%  DIP (CLASS 50) W/ RESTRAINED JOINTS  PROTECTO 401 OR POLYBOND PLUS  LINING AND POLYETHYLENE  ENCASEMENT
	890	INSTALL 72 LF OF REINFORCED CONCRETE ENCASEMENT FROM
	880	STA. 0+46.55 TO STA. 1+18.55
	870	

5+00

4+00

3+00

 $\checkmark$ 



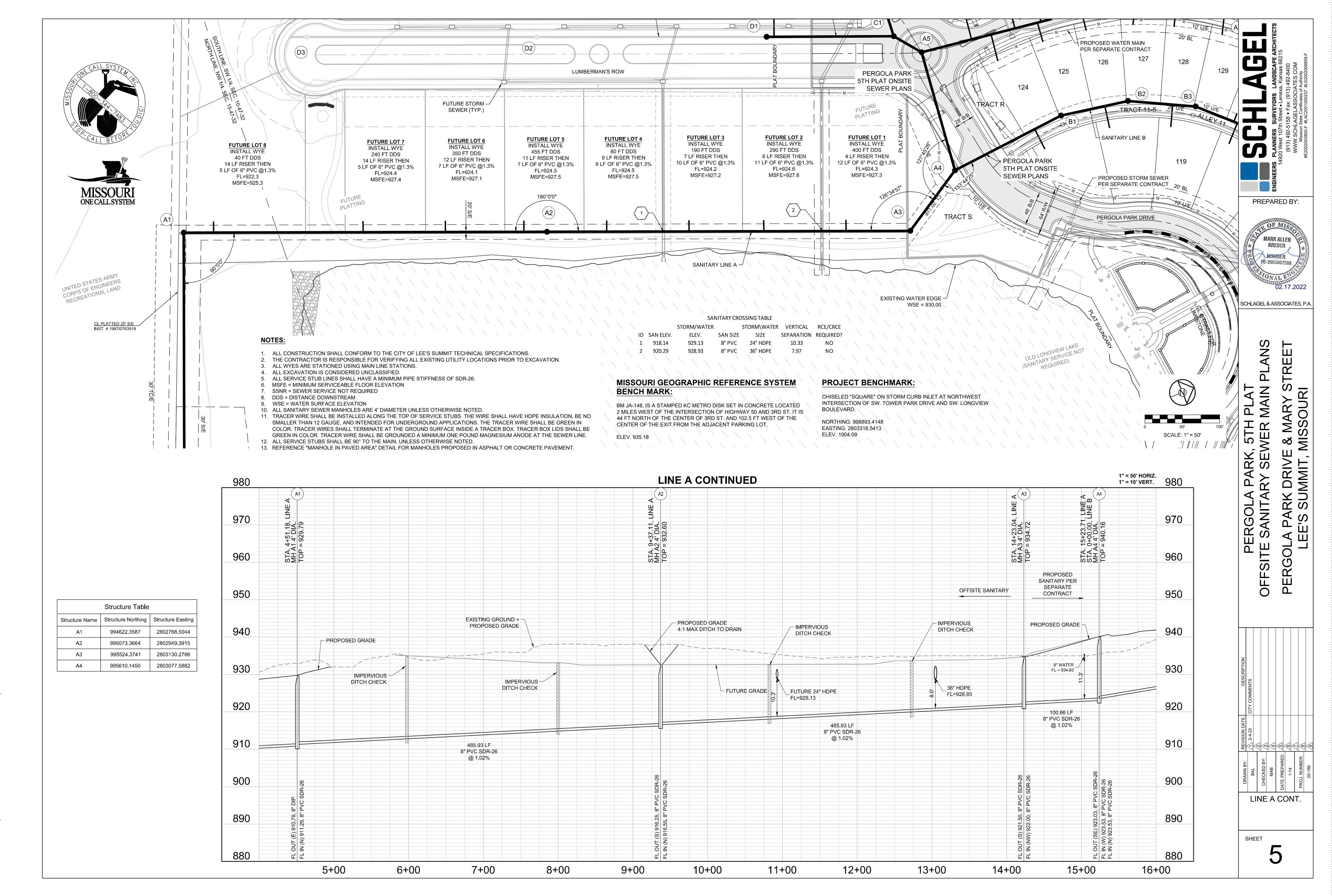
PREPARED BY:



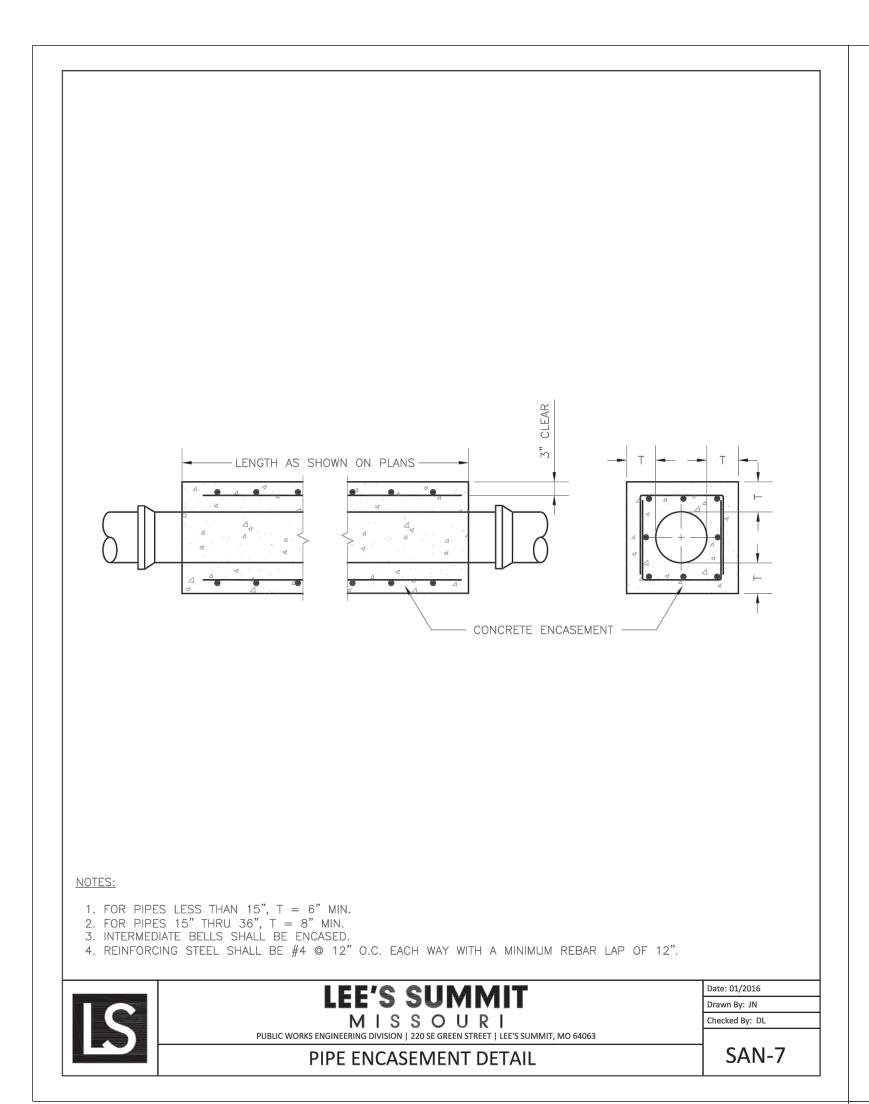
, 5TH WER RK SE **PERGOL** OFFSITE

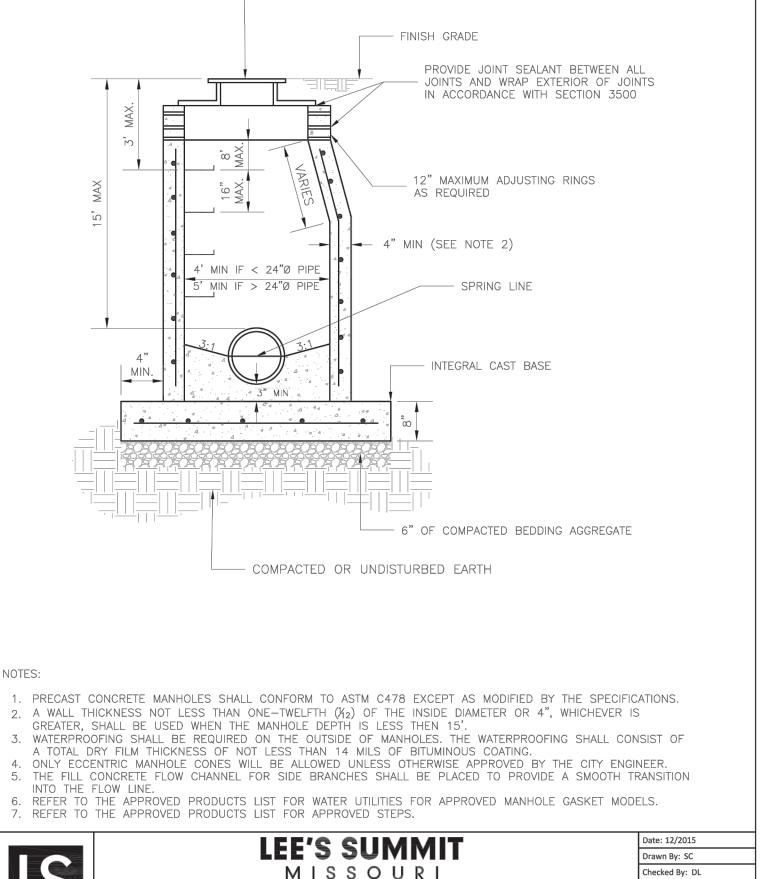
LINE A

SHEET



I:\PROJECTS\2020\20-189\3.0 Design\3.0 DWG Plans\7.0 San\OFFSITE\20-189-SAN-PP-OFFSITE.dwg, 2/7/2022 3:17:36 PM, 1:1





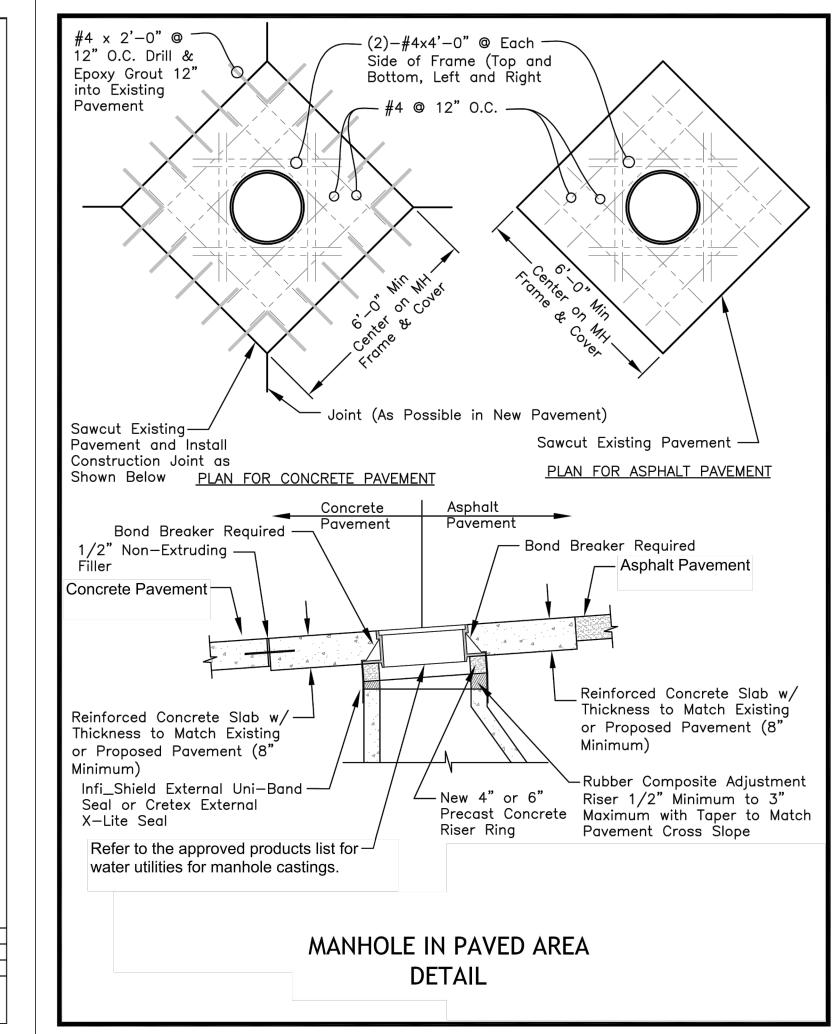
STANDARD SANITARY PRECAST MANHOLE

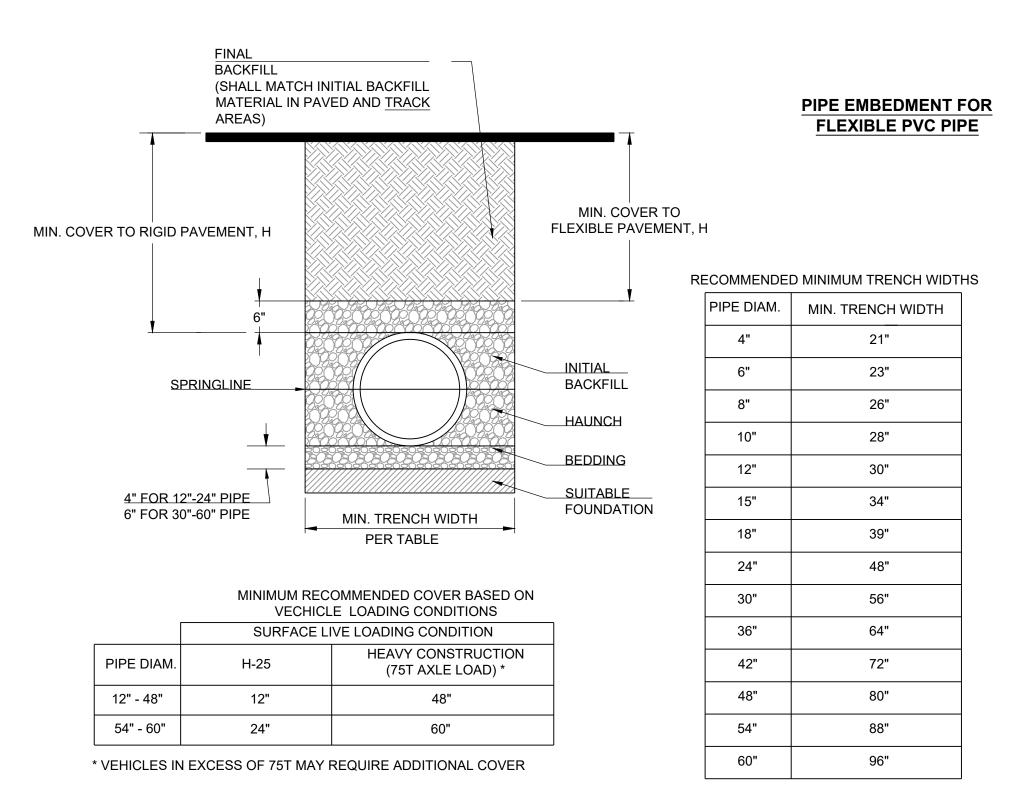
SAN-2

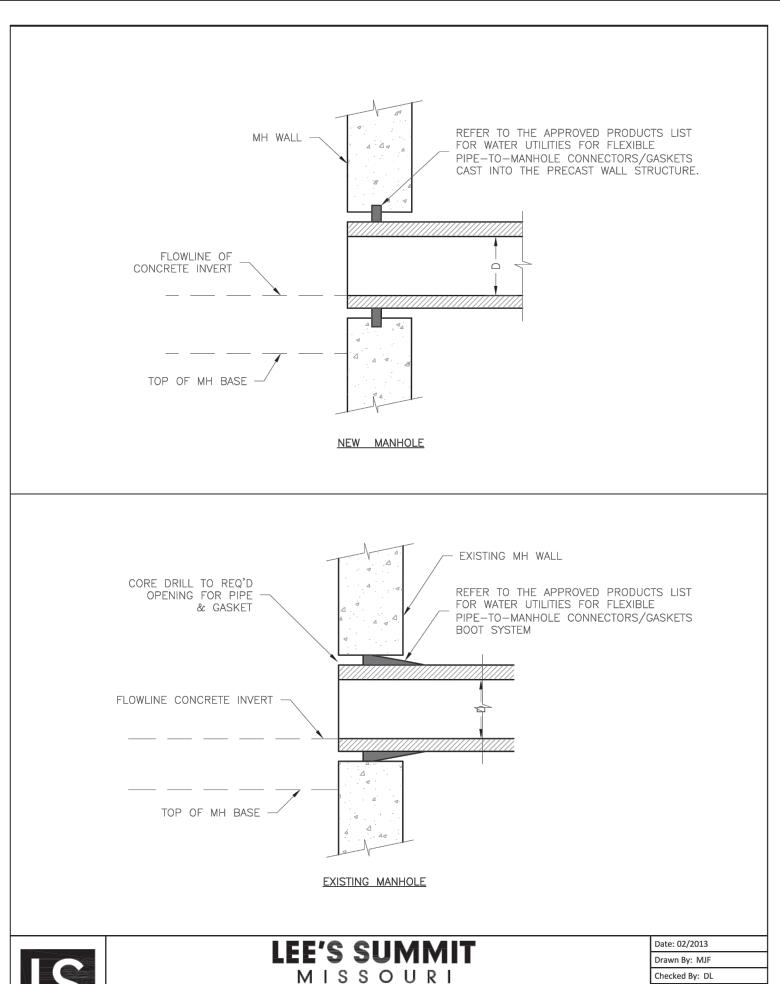
SAN-5

REFER TO THE APPROVED PRODUCTS LIST

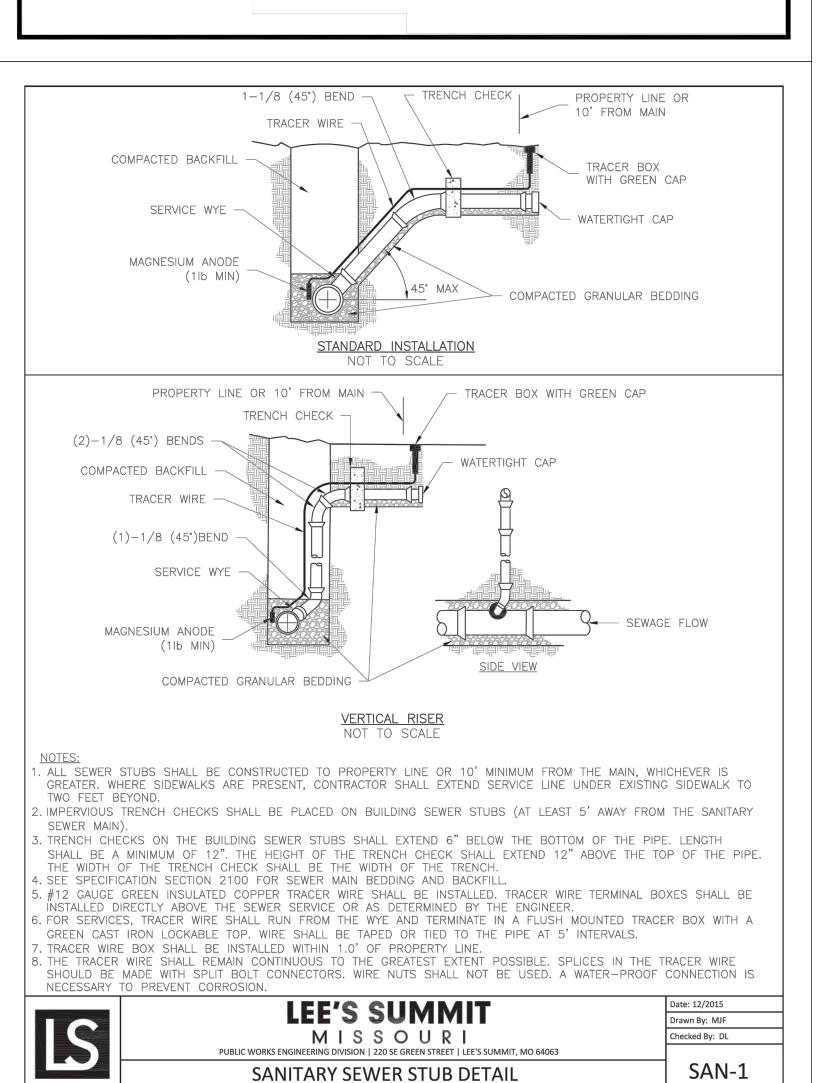
FOR WATER UTILITIES FOR MANHOLE CASTINGS







MANHOLE WALL CONNECTION



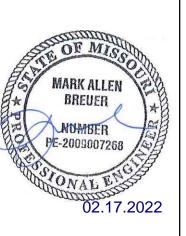


1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION

- 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- 3. <u>FOUNDATION</u>: 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. <u>BEDDING:</u> 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. <u>INITIAL BACKFILL:</u> 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.



PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

PERGOLA PARK, 5TH PLAT
OFFSITE SANITARY SEWER MAIN PLANS
PERGOLA PARK DRIVE & MARY STREET
LEE'S SUMMIT, MISSOURI

 WIN BY:
 REVISION DATE
 DESCRIPTION

 SAL
 1 2-4-22
 CITY COMMENTS

 SKED BY:
 3
 4

 MAB
 4
 4

 I-14
 6
 6

 NUMBER:
 8
 6

DETAIL SHEET

SHEET

6