

COBEY CREEK - 1ST PLAT
SANITARY SEWER MAIN EXTENSION

NE & SE 1/4, SECTION 29 & NW 1/4 SECTION 28,
TOWNSHIP 47 NORTH, RANGE 31 WEST
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

GENERAL NOTES

- The underground utilities shown herein have been plotted from available information and do not necessarily reflect the actual existence, or nonexistence, size, type, number, or locations of these or other utilities. The contractor shall be responsible for verifying the actual locations of all underground utilities, shown or not shown, and said utilities shall be located in the field prior to any grading, excavation, or construction of improvements. These provisions shall in now way absolve any party from complying with the "UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT", Chapter 319, RSMO.
- Gas, Water, and other Utilities shall not conflict with the depth or horizontal location of existing and proposed sanitary and storm sewers, including building laterals.
- The Contractor shall secure all required permits and notify the Development Services - Inspection Group of the City of Lee's Summit (816-969-1200) at least 48 hours prior to any construction.
- Prior to submittal of construction bids, the Contractor shall be required to visit the site to verify existing conditions and proposed improvements.
- All construction materials and methods used shall comply with the latest editions of the City of Lee's Summit "DESIGN AND CONSTRUCTION MANUAL" as adopted by City Ordinance NO. 5813. See said Manual for standard details.
- The Contractor shall be responsible for notification and coordination with all Utility Companies.
- The Contractor shall notify the Engineer immediately of any discrepancies in the plans.
- "Controlled Fill" indicates fill to be placed in accordance with APWA Section 2100 for grading and site preparation, with APWA Section 2200 for street construction (paving), with APWA Section 2500 for sanitary sewer construction and with APWA Section 2600 for storm sewer construction unless otherwise noted.
- All sanitary manholes shall have a 4' inside diameter unless otherwise noted.
- All disturbed areas to be seeded upon completion of construction.

EXISTING SANITARY SEWER ASSUMPTIONS

- Existing sanitary sewer at Point of Connection = 24" PVC at 0.45%.
- Depth of flow at Point of Connection for fully developed watershed to be critical depth.
- Y(c) from "Modern Sewer Design", Figure 3-24, critical flow and critical velocity in circular conduits.

Point of Connection 24" PVC at 0.45% Capacity = 14.0 cfs
Y(c) / D = .60, depth of flow = 15" = 1.25'

PROPOSED SANITARY SEWER ASSUMPTIONS

- Sanitary sewers provide service for this plan only
- Design flow rate of 0.02 cfs / acre per City Staff Recommendation.

DESIGN FLOWS

Drainage Area	Acreage	Design Flow (cfs)	Total Design Flow (cfs)
Commercial	13.75	0.02	0.67
Residential	83.53	0.02	0.80
			Total 1.47

UTILITIES

City of Lee's
Summit
Department of
Public Works
220 SE Green
Lee's Summit,
Mo.
816-969-1800

KCPL
130 SE Hamblen
Road
Lee's Summit,
Mo.
816-347-4320
Missouri One Call
1-800-344-7483

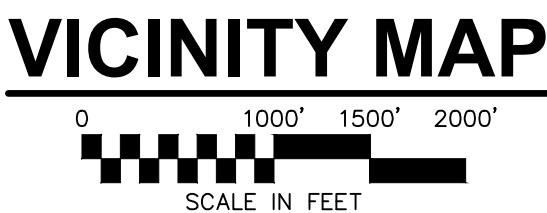
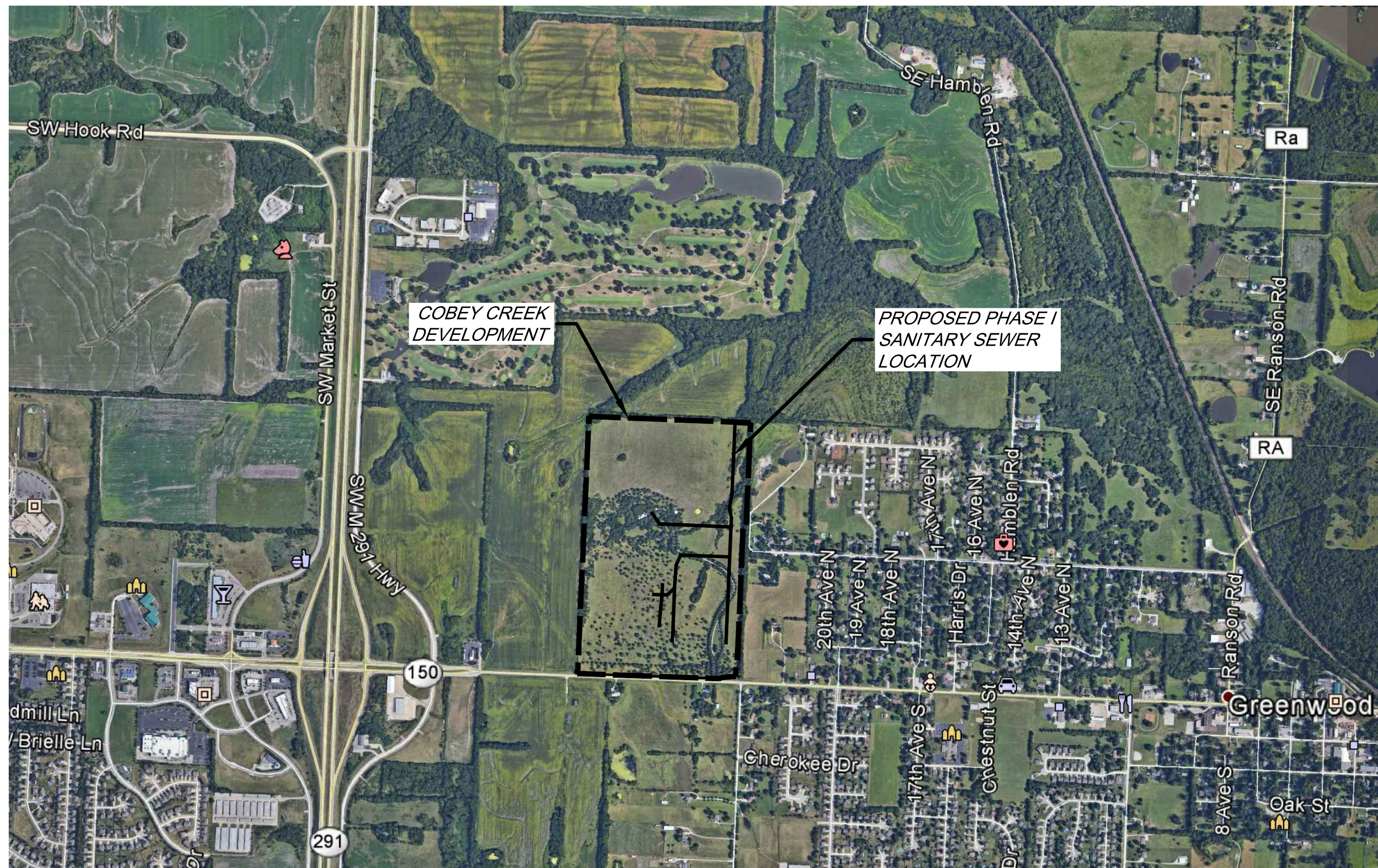
Missouri Gas
Energy
3025 SE Clover
Road
Lee's Summit,
Mo.
816-537-4681

Time Warner
6550 Winchester
Avenue
Kansas City, Mo.
913-643-1901

AT&T
215 N. Spring
Independence,
Mo.
816-325-5610

DEVELOPER
JCM DEVELOPMENT, LLC
1314 MARKET STREET
LEE'S SUMMIT, MO 64082
(816) 786-4008
CONTACT - CHRIS JEFFRIES

ENGINEER
Hg CONSULT, INC.
CONTACT - KEVIN STERRETT
1411 N.E. TODD GEORGE ROAD
LEES SUMMIT, MISSOURI 64086
(816) 703-7098



LEGEND

---	Existing Section Line	---	Proposed Right-of-Way
----	Existing Right-of-Way Line	----	Proposed Property Line
----	Existing Lot Line	----	Proposed Lot Line
-----	Existing Easement Line	-----	Proposed Easement
=====	Existing Curb & Gutter	=====	Proposed Curb & Gutter
=====	Existing Sidewalk	=====	Proposed Sidewalk
=====	Existing Storm Sewer	=====	Proposed Storm Sewer
□	Existing Storm Structure	□	Proposed Storm Structure
W/L	Existing Waterline	A	Proposed Fire Hydrant
---	Existing Gas Main	W/L	Proposed Waterline
----	Existing Sanitary Sewer	----	Proposed Sanitary Sewer
●	Existing Sanitary Manhole	●	Proposed Sanitary Manhole
----	Existing Contour Major	----	Proposed Contour Major
----	Existing Contour Minor	----	Proposed Contour Minor
		=====	Future Curb & Gutter

PROJECT BENCHMARK:

#1 MODNR MONUMENT JA-45
N: 986351.65
E: 2824617.51
TOP ELEV. 1012.79

#2 MONUMENT AT THE INTERSECTION OF M150 & DOC HENRY ROAD
N: 977823.53
E: 2828220.61
TOP ELEV. 1006.04

INDEX OF SHEETS

SANITARY SEWER PLANS

- COVER SHEET
- GENERAL UTILITY LAYOUT - SANITARY SEWER

SANITARY SEWER - PLAN AND PROFILE

- SANITARY SEWER LINE B (STA. 0+00 TO 14+00)
- SANITARY SEWER LINE B (STA. 14+00 TO 24+18.33)
- SANITARY SEWER LINE C (STA. 0+00 TO 8+81.14)
- SANITARY SEWER LINE E (STA. 0+00 TO 1+01.75)
- SANITARY SEWER LINE H (STA. 0+00 TO 1+00.00)
- SANITARY SEWER LINE D (STA. 0+00 TO 14+53.23)

SANITARY SEWER - LATERALS

- SANITARY SEWER SUMMARY TABLE - SANITARY LATERALS

STANDARD DETAILS

- STANDARD DETAILS - STANDARD PRECAST MANHOLE & MANHOLE WALL CONNECTION
- STANDARD DETAILS - MANHOLE COVER & FRAME
- STANDARD DETAILS - TRENCH CHECK & SANITARY STUB & RISER CONNECTION
- STANDARD DETAILS - SANITARY PIPE ENCASUREMENT & TYPICAL TRENCHING AND BEDDING DETAIL

LEGAL DESCRIPTION:

All that part of the Southeast Quarter of Section 29, Township 47 North, Range 31 West, more particularly described as follows:

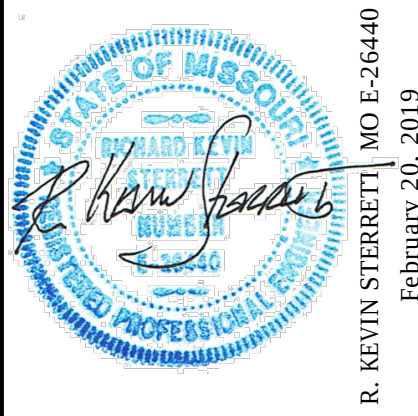
Commencing at the Southeast corner of said Southeast Quarter; thence North 02°30'29" East, along the East line of the Southeast Quarter of said Section 29, a distance of 58.62 feet; thence departing said East line, North 87°29'31" West, a distance of 40.00 feet to the North right-of-way line of Missouri State Highway No. 150, as now established, and the Point of Beginning; thence South 85°26'23" West, along the North right-of-way line of said Missouri State Highway No. 150, a distance of 142.47 feet; thence South 65°50'12" West, continuing along said North right-of-way line, a distance of 27.99 feet; thence continuing along said North right-of-way line, North 87°54'10" West, along a line 30 feet North of and parallel with the South line of said Southeast Quarter, a distance of 1436.75 feet; thence departing said North right-of-way line, North 02°32'36" East, a distance of 2613.35 feet to the North line of said Southeast Quarter; thence South 87°44'49" East, along the North line of said Southeast Quarter, a distance of 1641.53 feet to the Northeast corner of said Southeast Quarter; thence South 02°30'29" West, along the East line of said Southeast Quarter, a distance of 1081.05 feet; thence departing said East line, North 87°29'31" West, a distance of 30.00 feet; thence South 02°30'29" West, along a line 30 feet West of and parallel with the East line of said Southeast Quarter, a distance of 1302.74 feet; thence South 08°13'07" West, a distance of 100.51 feet; thence South 02°30'29" West, along a line 40 feet West of and parallel with the East line of said Southeast Quarter, a distance of 96.45 feet to the Point of Beginning. Containing 4,237,595.37 square feet or 97.28 acres, more or less.

NOTE:

- The subject property is located within the Big Creek Watershed.
- There was no oil or gas wells located on the subject property as of May 14, 2018 as shown by the Missouri Geological Survey GEOSTRAT (Geosciences Technical Resource Assessment Tool).



NO.	BY	DATE	REVISION
1	SPW	02/20/19	REF CITY'S COMMENTS
2	SPW	02/20/19	REF CITY'S COMMENTS
1	SPW	07/21/19	SUBMITTAL TO CITY OF LEE'S SUMMIT



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11010 Haskell Street, Suite 210, Kansas City, Kansas 66109
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SANITARY SEWER MAIN EXTENSION
COVER SHEET

COBEY CREEK FIRST PLAT
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

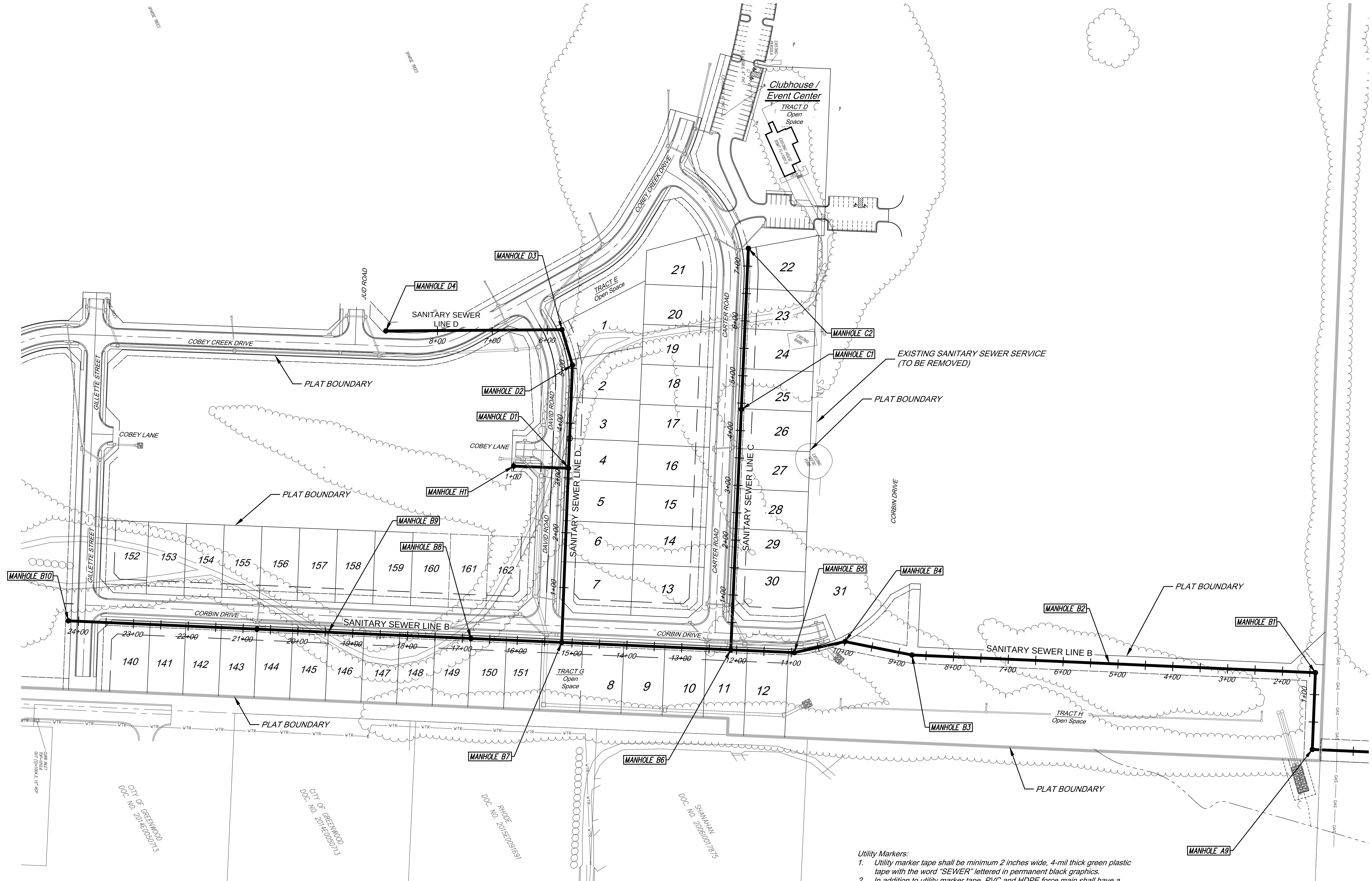
X-REF NO.
16-059 Base

DRAWING NO.
16-059 Phase I Sanitary

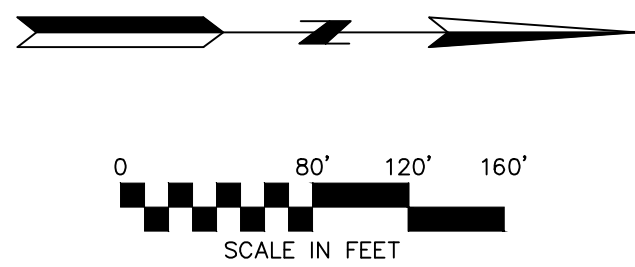
DATE
February 20, 2019

SHEET NO.
16-059

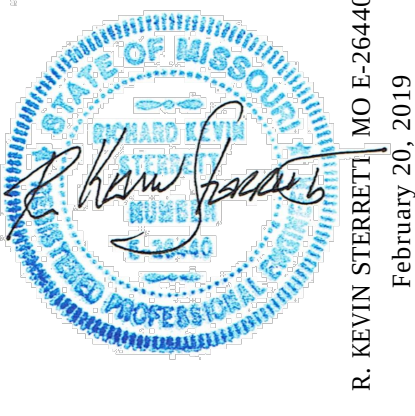
1 SHEET OF 11



- Utility Markers:
- Utility marker tape shall be minimum 2 inches wide, 4-mil thick green plastic tape with the word "SEWER" lettered in permanent black graphics.
 - In addition to utility marker tape, PVC and HDPE force main shall have a tracer wire installed along the top of the pipe. The wire shall be insulated, no smaller than 12 gauge, and for underground applications.
 - Splices in wiring shall be made with epoxy/silicon splice connector.
 - Tracer wire shall be installed along the top of service laterals. 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 3500 11 Rev 01/06/16 the ground surface inside a tracer box. Tracer box lids shall be green in color. Tracer wire shall be grounded to a minimum one pound magnesium anode at the sewer line.



DATE	REVISION	NO.	BY	CHK/APP.
02/20/19	REP CITY'S COMMENTS	3	SPW	RCS
02/28/19	REP CITY'S COMMENTS	2	SPW	RCS
07/25/19	REP CITY'S COMMENTS	1	SPW	RCS
11/27/18	SUBMITTAL TO CITY OF LEE'S SUMMIT			



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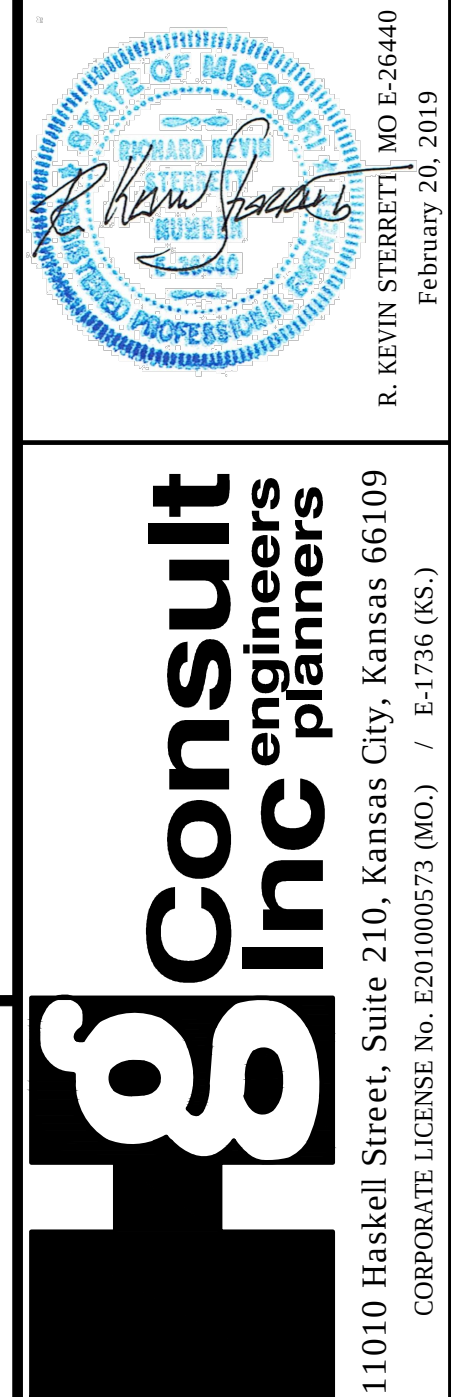
**SANITARY SEWER MAIN EXTENSION
GENERAL UTILITY LAYOUT**

COBEY CREEK FIRST PLAT

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

X-REF NO. 16-059 Base	2
DRAWING NO. 16-059 Phase I Sanitary	11
DATE February 20, 2019	
JOB NO. 16-059	
SHEET OF	

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02/20/19	PER CITY'S COMMENTS	3	SPW	RAS
02/08/19	PER CITY'S COMMENTS	2	SPW	RAS
01/21/19	PER CITY'S COMMENTS	1	SPW	RAS
11/21/18	SUBMITAL TO CITY OF LEES SUMMIT		SPW	RAS

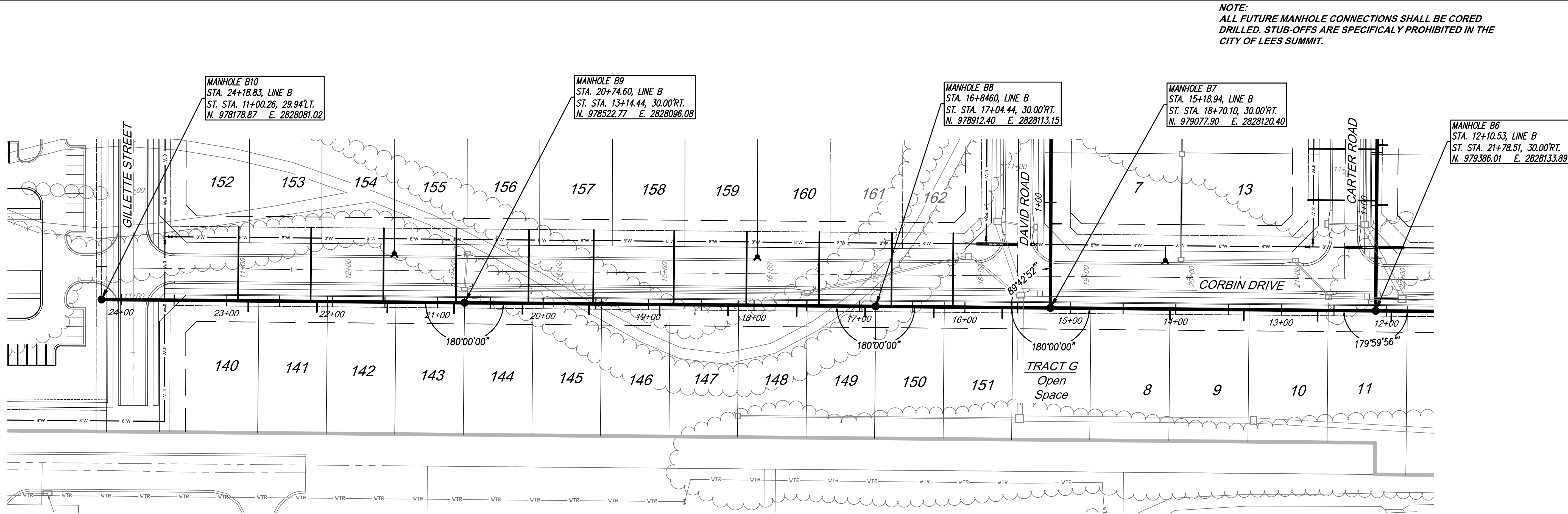
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01/21/19	PER CITY'S COMMENTS	1	SPW	RAS
11/21/18	SUBMITAL TO CITY OF LEES SUMMIT		SPW	RAS

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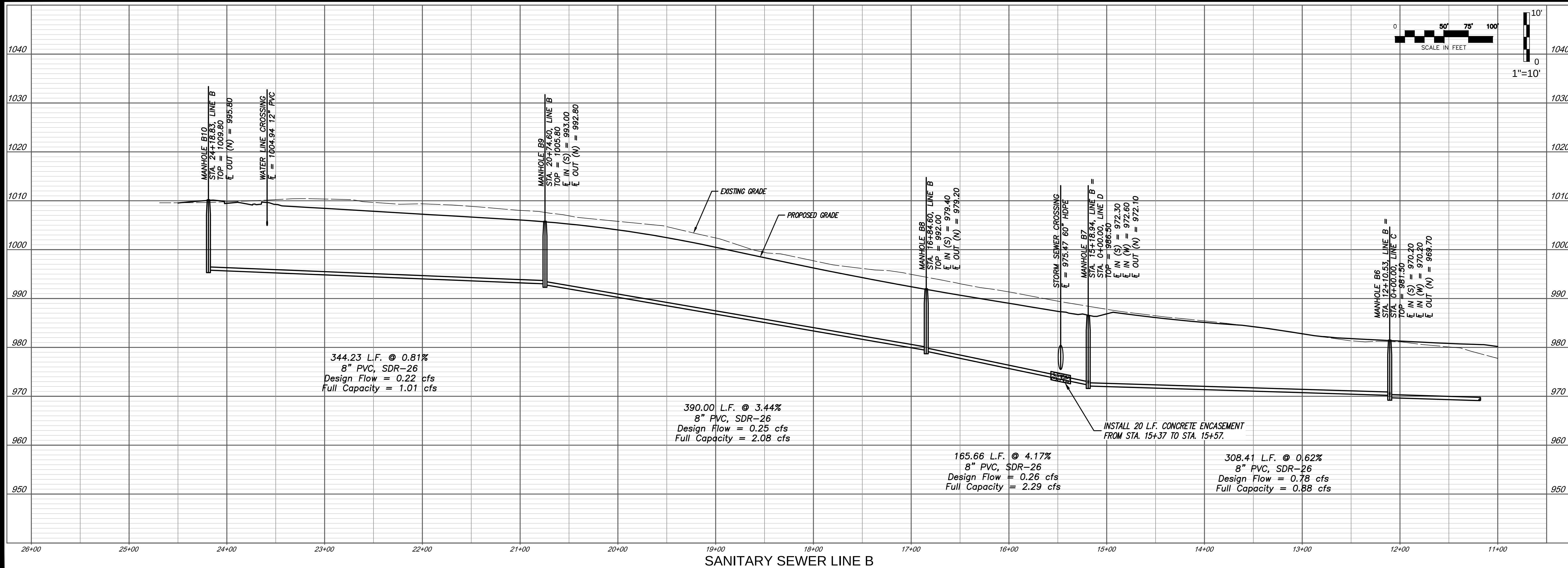


Know what's below.
Call before you dig.



NOTE:
ALL FUTURE MANHOLE CONNECTIONS SHALL BE CORED
DRILLED. STUB-OFFS ARE SPECIFICALLY PROHIBITED IN THE
CITY OF LEES SUMMIT.

NOTE:
TRENCH CHECKS WILL BE INSTALLED PER THE LEES
SUMMIT STANDARD DETAIL SHOWN ON SHEET 10.



NO.	BY	DATE	REVISION
1	SPW	04/16/19	STORM SEWER CROSSINGS AND ADD ENCASUREMENT
2	SPW	02/20/19	PER CITY'S COMMENTS
3	SPW	02/26/19	PER CITY'S COMMENTS
4	SPW	07/25/19	SUBMITTAL TO CITY OF LEES SUMMIT
5	SPW	11/21/19	PER CITY'S COMMENTS



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SANITARY SEWER MAIN EXTENSION
PLAN AND PROFILE

COBEY CREEK FIRST PLAT

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

X-REF NO.
16-059 Base

DRAWING NO.
16-059 Phase I Sanitary

DATE
April 16, 2019

SHEET NO.
16-059

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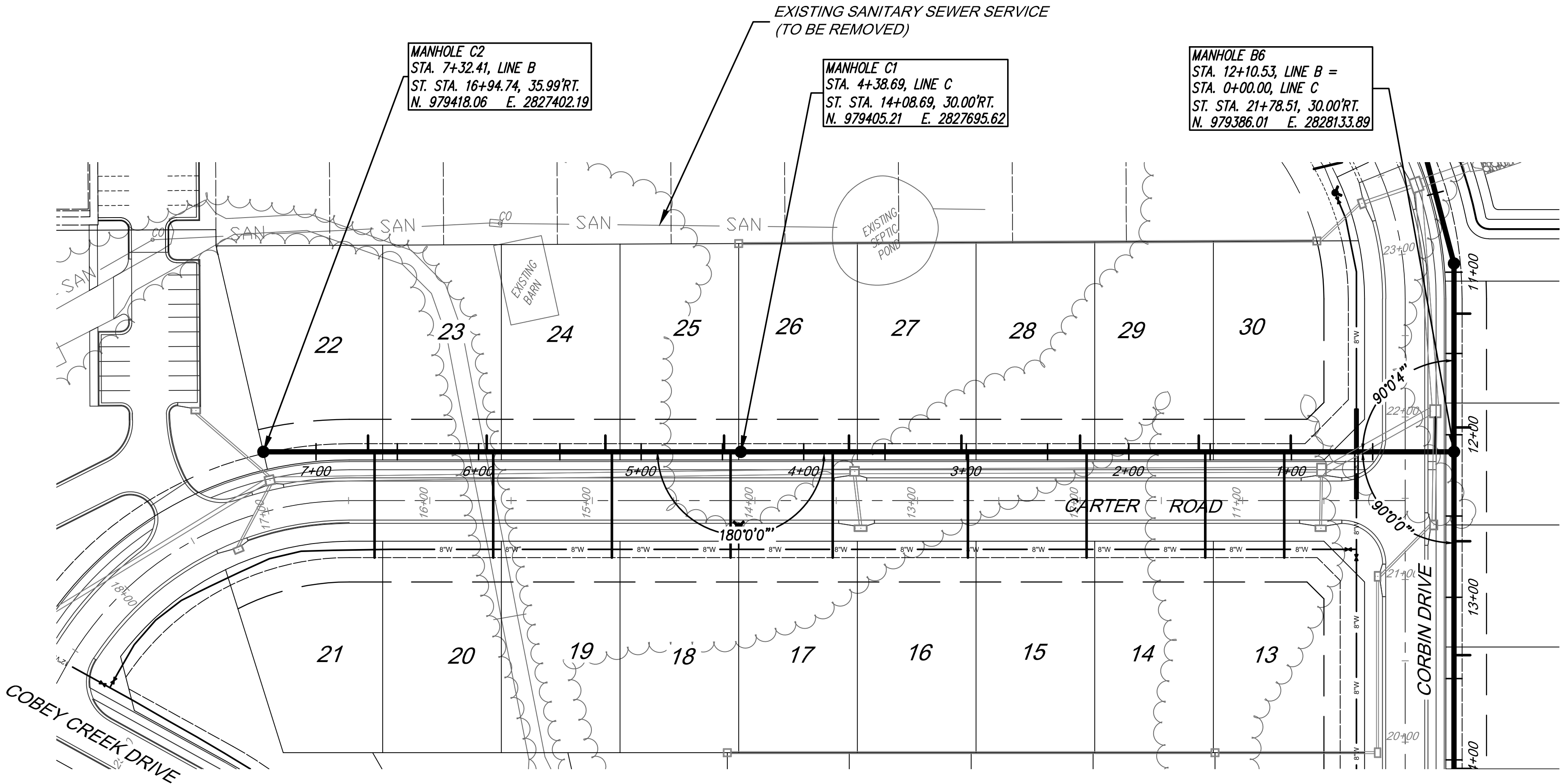
MANHOLE H1
STA. 1+00.00, LINE H
ST. STA. 12+87.17, 69.99'L.T.
N. 978990.29 E. 2827799.09

MANHOLE D1
STA. 3+18.58, LINE D =
STA. 0+00.00, LINE H
ST. STA. 12+88.58, 30.00'RT.
N. 979090.25 E. 2827802.06

MANHOLE C2
STA. 7+32.41, LINE B
ST. STA. 16+94.74, 35.99'RT.
N. 979418.06 E. 2827402.19

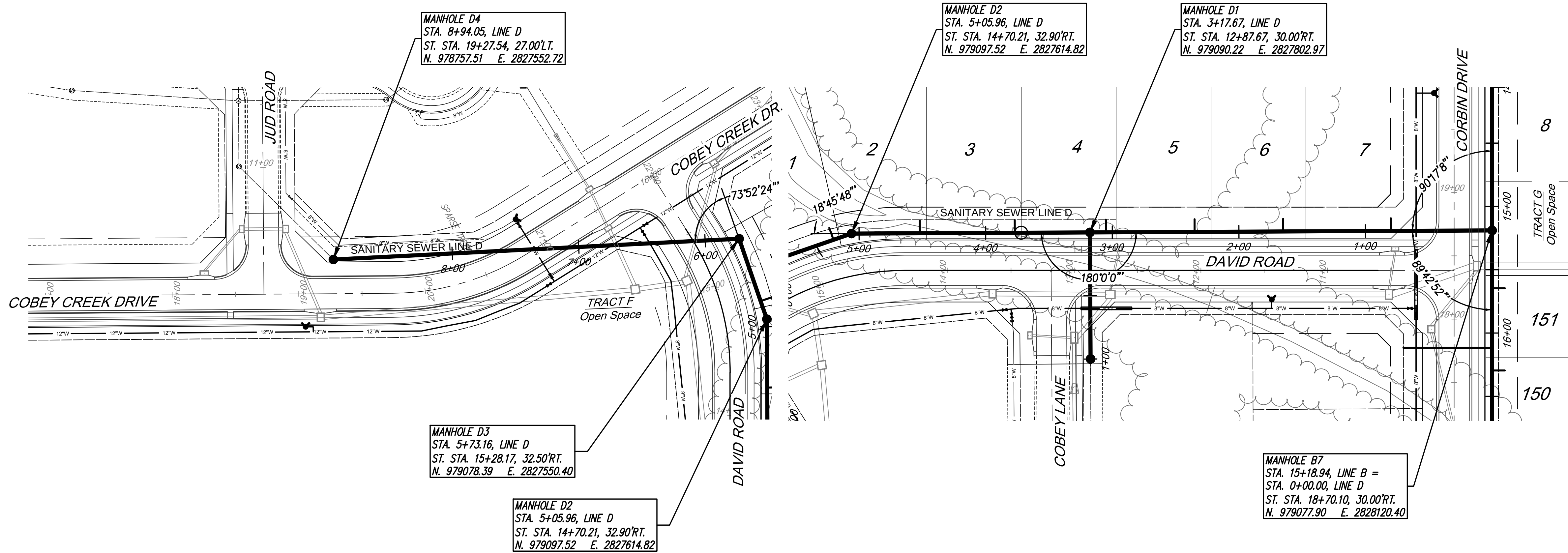
MANHOLE C1
STA. 4+38.69, LINE C
ST. STA. 14+08.69, 30.00'RT.
N. 979405.21 E. 2827695.62

MANHOLE B6
STA. 12+10.53, LINE B =
STA. 0+00.00, LINE C
ST. STA. 21+78.51, 30.00'RT.
N. 979386.01 E. 2828133.89

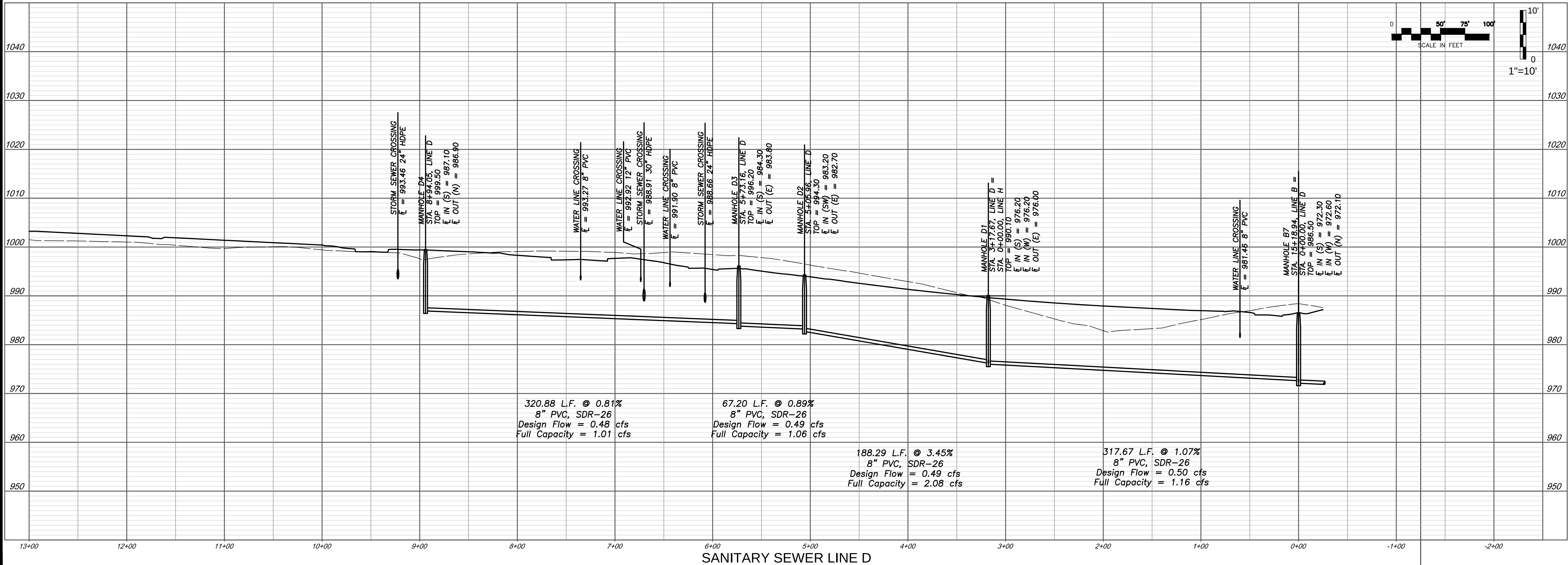




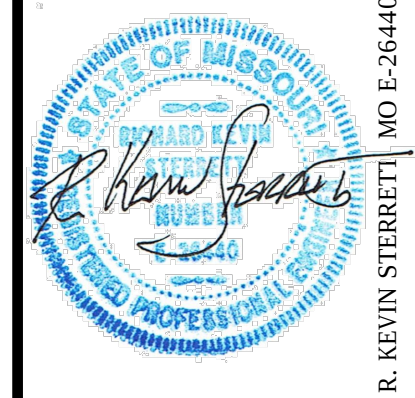
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NOTE:
TRENCH CHECKS WILL BE INSTALLED PER THE LEES
SUMMIT STANDARD DETAIL SHOWN ON SHEET 10.



DATE	REVISION	NO.	BY	CORP.
02/20/19	PER CITY'S COMMENTS	3	SPW	RAS
02/08/19	PER CITY'S COMMENTS	2	SPW	RAS
01/21/19	PER CITY'S COMMENTS	1	SPW	RAS
11/21/18	SUBMITTAL TO CITY OF LEES SUMMIT	1	SPW	RAS



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SANITARY SEWER MAIN EXTENSION
PLAN AND PROFILE

COBEY CREEK FIRST PLAT

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

X-REF NO.
16-059 Base

DRAWING NO.
16-059 Phase I Sanitary

DATE
February 20, 2019

JOB NO.
16-059

SHEET OF 11

SHEET	SANITARY	SANITARY	LOT	LATERAL	FLOWLINE	SHEET	SANITARY	SANITARY	LOT	LATERAL	FLOWLINE	SHEET	SANITARY	SANITARY	LOT	LATERAL	FLOWLINE
	LINE NO.	STATION	NO.	LENGTH (LF)	AT END		LINE NO.	STATION	NO.	LENGTH (LF)	AT END		LINE NO.	STATION	NO.	LENGTH (LF)	AT END
3	B	10+18	31	69	968.87	5	C	1+00	30	10	972.19	6	D	0+80	7	10	973.99
3	B	11+26	12	10	969.35	5	C	1+04	13	65	973.34	6	D	1+65	6	10	974.89
3	B	11+95	11	10	970.07	5	C	1+53	14	65	974.06	6	D	2+35	5	10	975.64
4	B	12+65	10	10	971.07	5	C	1+57	29	10	973.02	6	D	3+05	4	10	976.39
4	B	13+35	9	10	971.50	5	C	2+26	15	65	975.13	6	D	3+77	3	10	978.78
4	B	14+05	8	10	971.93	5	C	2+30	28	10	974.09	6	D	4+52	2	10	981.36
						5	C	2+99	16	65	976.20	6	D	5+21	1	10	983.86
4	B	15+64	151	10	974.71	5	C	3+03	27	10	975.15						
4	B	16+11	162	70	977.87	5	C	3+72	26	10	976.16						
4	B	16+29	150	10	977.42	5	C	3+82	17	65	977.41						
4	B	16+69	161	70	980.29	5	C	4+45	18	65	978.66						
4	B	16+94	149	10	980.35	5	C	4+49	25	10	977.81						
4	B	17+38	160	70	982.97	5	C	5+18	19	65	981.35						
4	B	17+59	148	10	983.29	5	C	5+22	24	10	981.20						
4	B	18+07	159	70	985.34	5	C	5+91	20	65	984.04						
4	B	18+24	147	10	984.73	5	C	5+95	23	10	983.08						
4	B	18+76	158	70	987.71	5	C	6+64	21	65	986.72						
4	B	18+89	146	10	986.96	5	C	6+68	22	10	985.77						
4	B	19+52	157	70	990.33												
4	B	19+56	145	10	990.71												
4	B	20+14	156	70	992.46												
4	B	20+19	144	10	991.43												
4	B	20+81	155	70	994.78												
4	B	20+85	143	10	993.61												
4	B	21+47	142	10	994.12												
4	B	21+51	154	70	995.35												
4	B	22+14	141	10	994.66												
4	B	22+20	153	70	995.91												
4	B	22+79	140	10	995.19												
4	B	22+89	152	70	996.47												

SANITARY SEWER MAIN EXTENSION
SUMMARY TABLES - SAN. LATERALS

COBEY CREEK FIRST PLAT
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

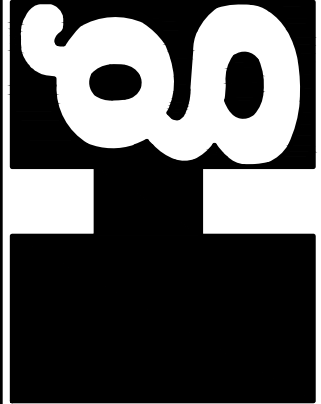
X-REF NO.
16-059 Base

DRAWING NO.
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DATE
February 20, 2019

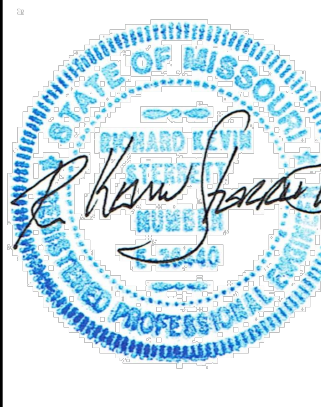
JOB NO.
16-059

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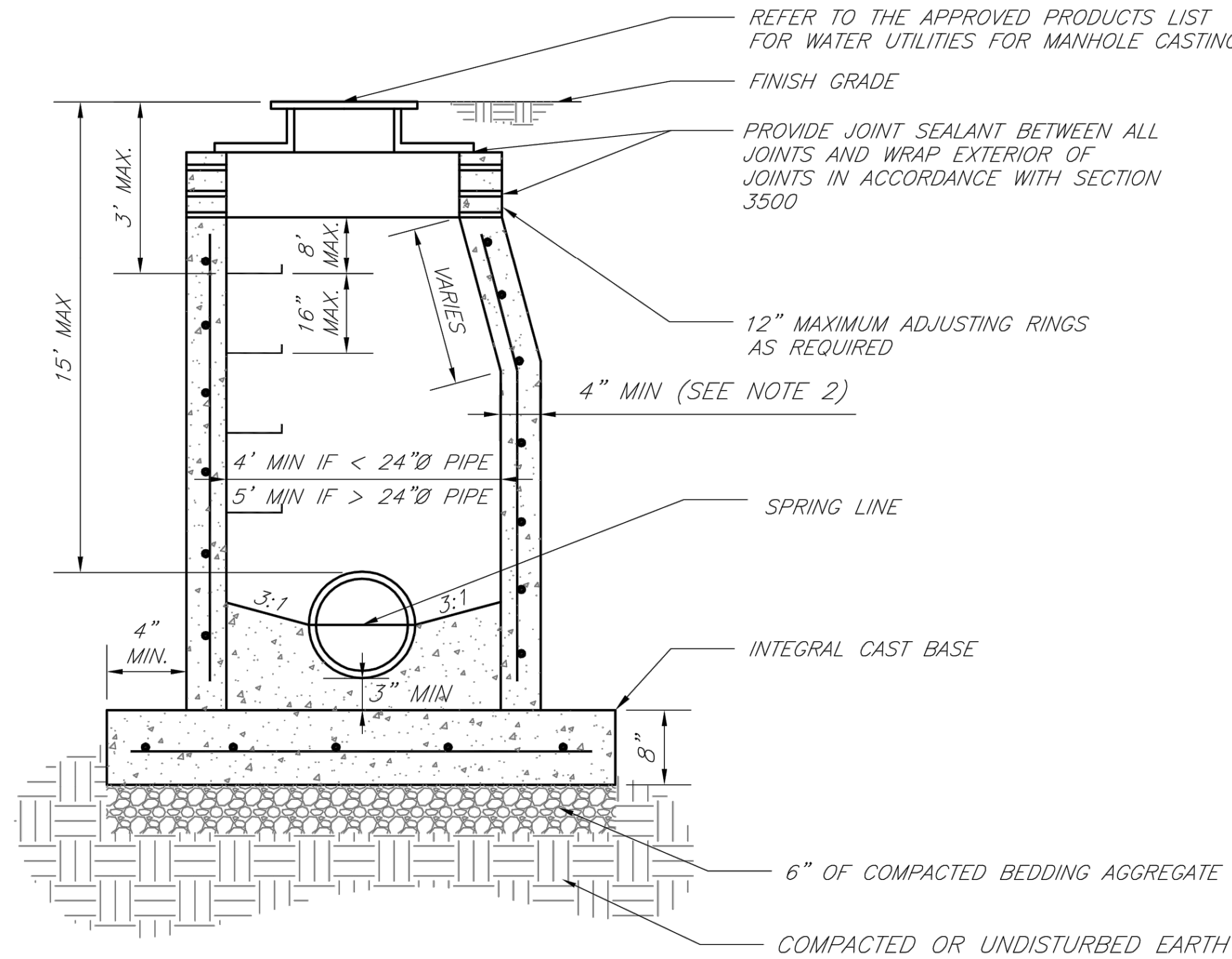
11010 Haskell Street, Suite 210, Kansas City, Kansas 66109
CORPORATE LICENSE No. E201000573 (MO.) / E-1736 (KS.)



R. Kevin Sterrett
Professional Engineer
State of Missouri
License No. 16-059

R. KEVIN STERRETT MO E-26440
February 20, 2019

DATE	REVISION	NO.	BY	CHK/APP
02/20/19	REP CITY'S COMMENTS	3	SPW	RCS
02/08/19	REP CITY'S COMMENTS			
01/21/19	REP CITY'S COMMENTS	2	SPW	RCS
11/27/18	SUBMITTAL TO CITY OF LEE'S SUMMIT	1	SPW	RCS
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- NOTES:
1. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C478 EXCEPT AS MODIFIED BY THE SPECIFICATIONS.
 2. A WALL THICKNESS NOT LESS THAN ONE-TWELFTH ($\frac{1}{12}$) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS GREATER, SHALL BE USED WHEN THE MANHOLE DEPTH IS LESS THAN 15'.
 3. WATERPROOFING SHALL BE REQUIRED ON THE OUTSIDE OF MANHOLES. THE WATERPROOFING SHALL CONSIST OF A TOTAL DRY FILM THICKNESS OF NOT LESS THAN 14 MILS OF BITUMINOUS COATING.
 4. ONLY ECCENTRIC MANHOLE CONES WILL BE ALLOWED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
 5. THE FILL CONCRETE FLOW CHANNEL FOR SIDE BRANCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION INTO THE FLOW LINE.
 6. REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR APPROVED MANHOLE GASKET MODELS.
 7. REFER TO THE APPROVED PRODUCTS LIST FOR APPROVED STEPS.

LS

LEE'S SUMMIT

MISSOURI

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

STANDARD PRECAST MANHOLE – SANITARY SEWER

Date: 02/13

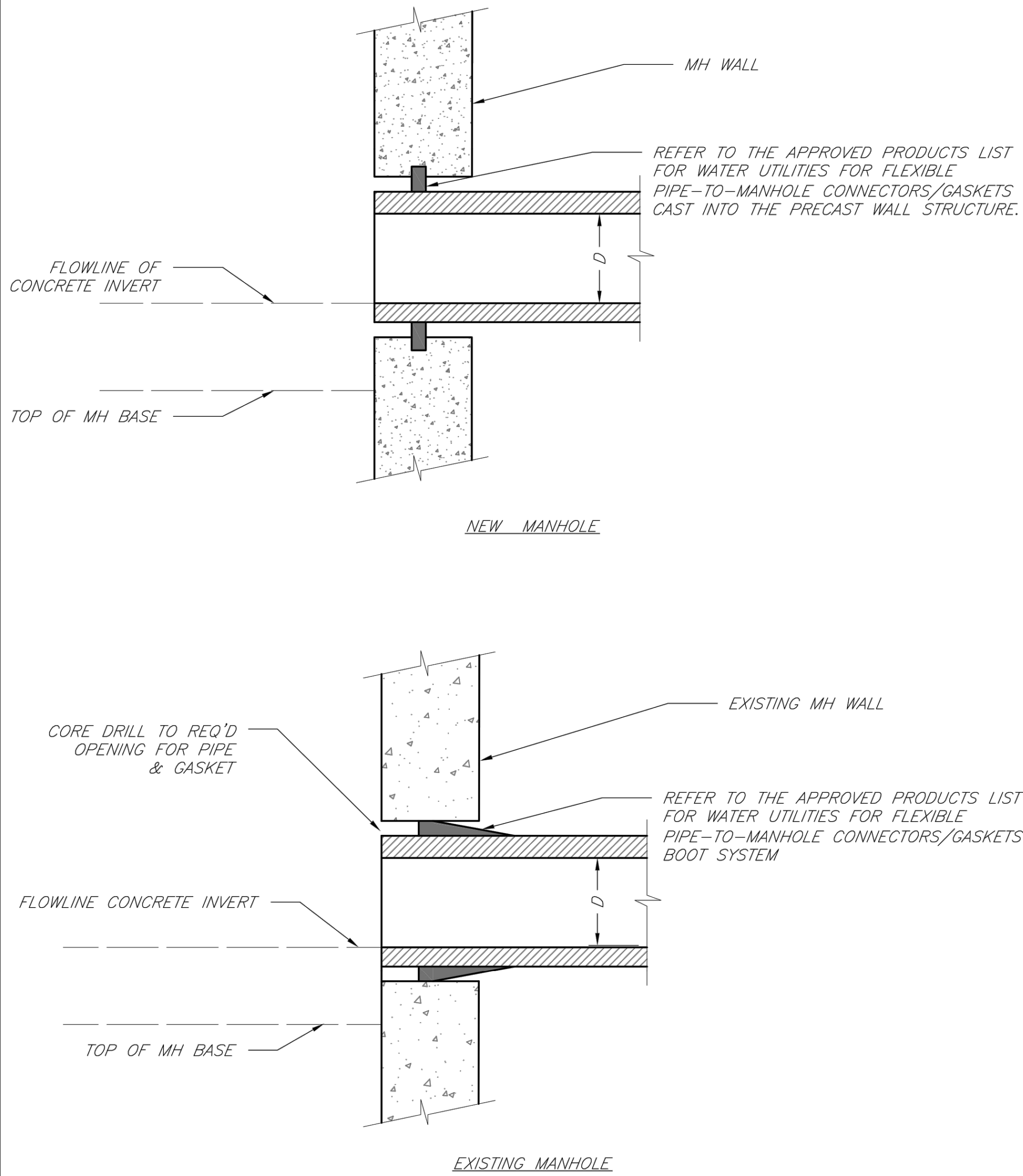
Drawn By: JN

Checked By: DL

FILE: SAN-2

Rev: 1/14

Rev:



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LEE'S SUMMIT

MISSOURI

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

MANHOLE WALL CONNECTIONS

Date: 02/13

Drawn By: JN

Checked By: DL

FILE: SAN-5

Rev: 1/14

Rev:

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SANITARY SEWER MAIN EXTENSION

SANITARY DETAILS

COBEY CREEK FIRST PLAT

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

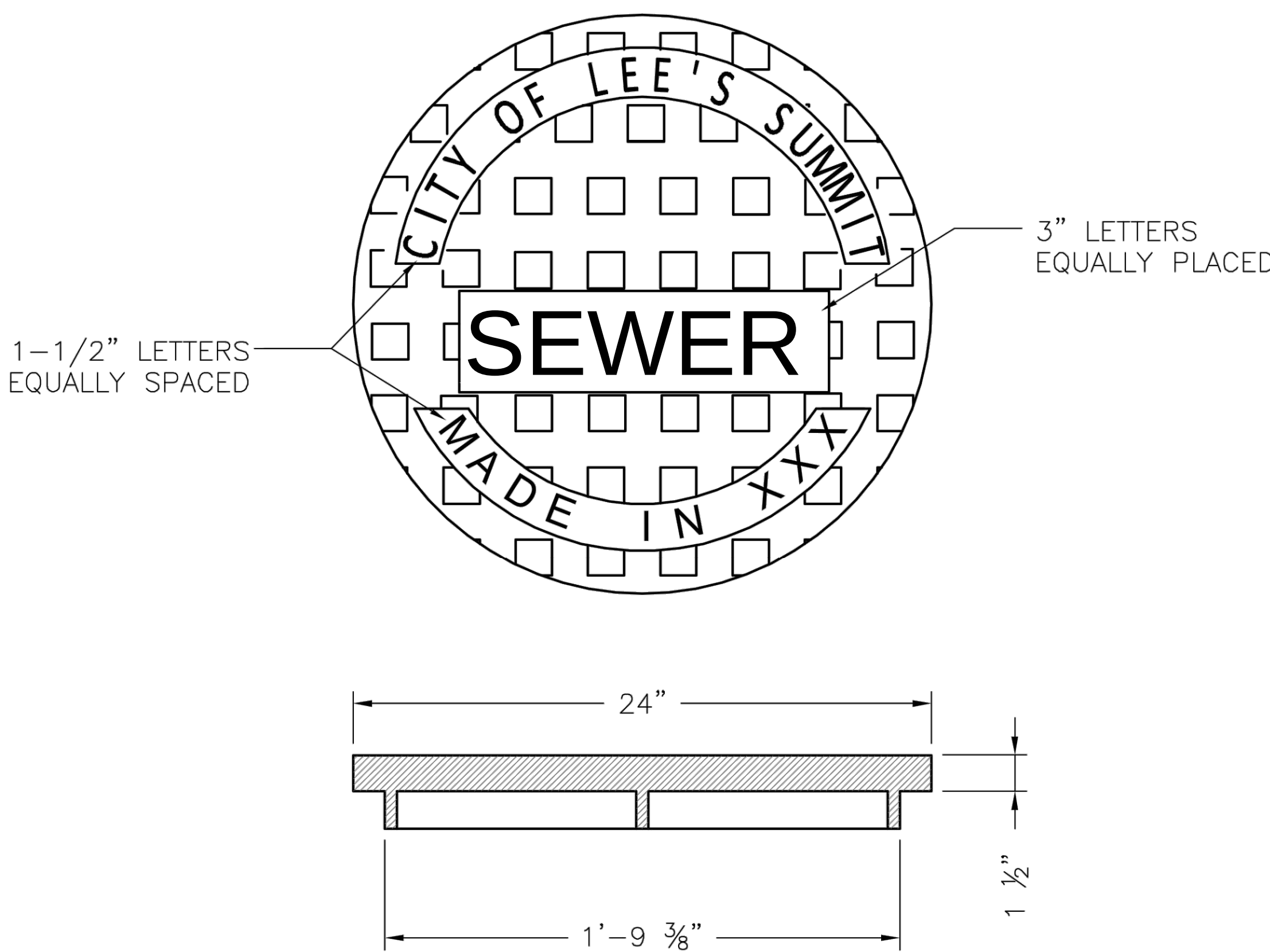
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STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB
NOTE: PICK HOLES NOT SHOWN

*COVER AND FRAME MODEL INFORMATION REFER TO
THE STORMWATER APPROVED PRODUCT LIST.

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LEE'S SUMMIT

MISSOURI

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

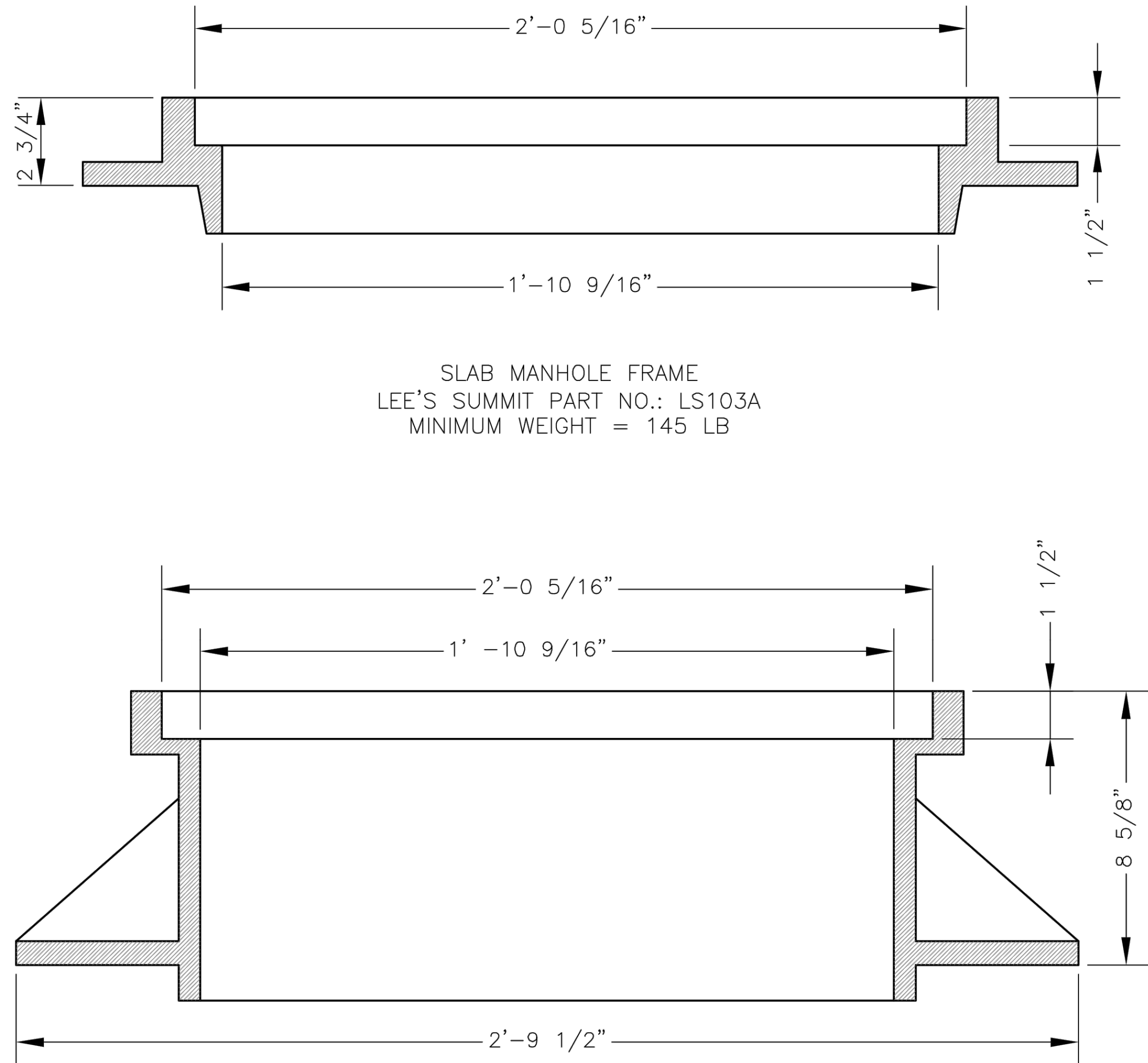
Sanitary Manhole Cover Detail

Date: 04/17

Drawn By: MJF

Checked By: DL

ST-6



SLAB MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS103A
MINIMUM WEIGHT = 145 LB

STANDARD 24" MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS101A
MINIMUM WEIGHT = 250 LB

*COVER AND FRAME MODEL INFORMATION REFER TO
THE STORMWATER APPROVED PRODUCTS LIST.

LS

LEE'S SUMMIT

MISSOURI

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Sanitary Manhole Frame Detail

Date: 04/17

Drawn By: MJF

Checked By: DL

ST-7

DATE	REVISION	NO.	BY	CHK/APP.
02/20/19	REP CITY'S COMMENTS	3	SPW	RCS
02/08/19	REP CITY'S COMMENTS	2	SPW	RCS
01/25/19	REP CITY'S COMMENTS	1	SPW	RCS
11/27/18	SUBMITTAL TO CITY OF LEE'S SUMMIT			

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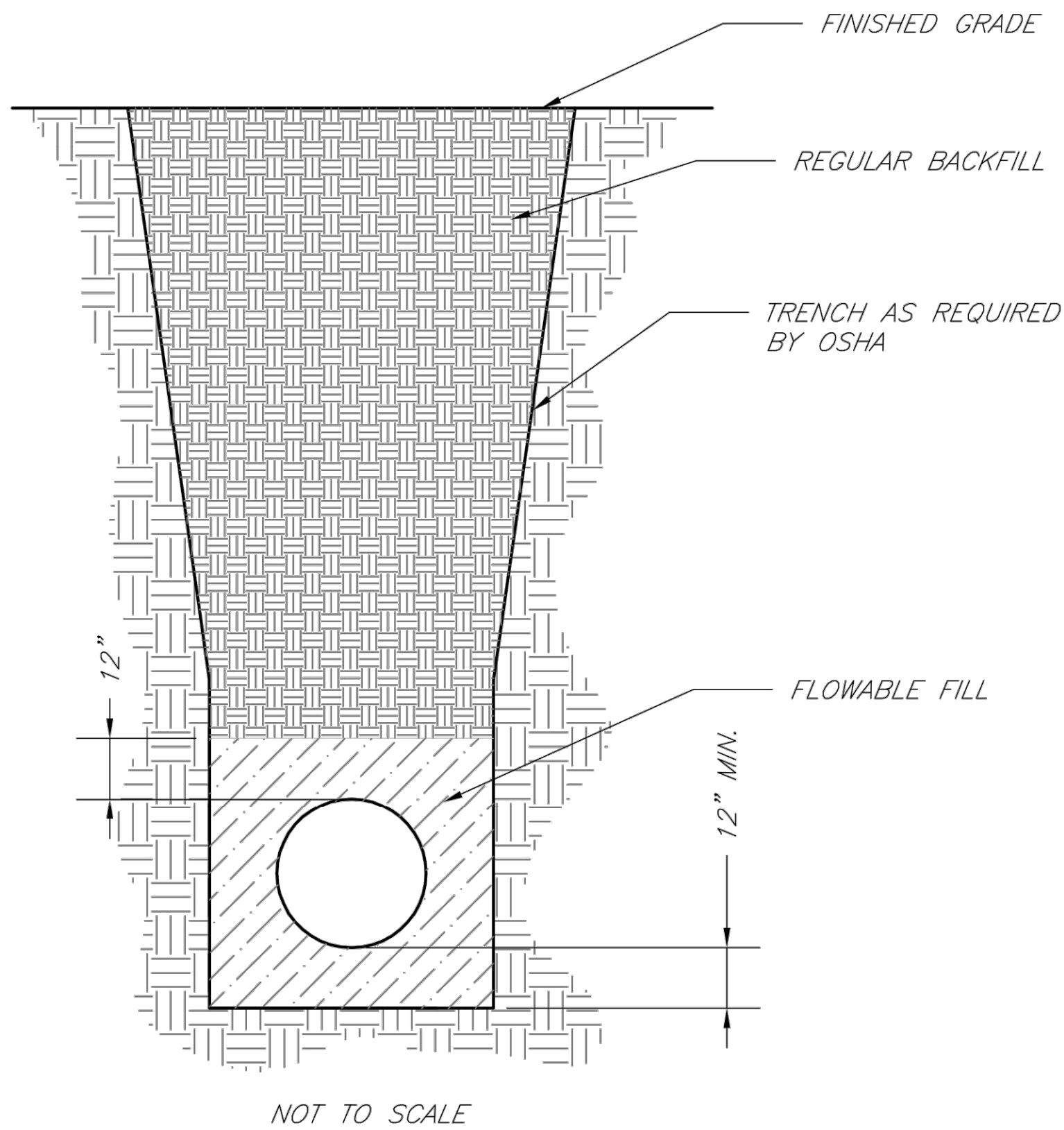
engineers

planners

11010 Haskell Street, Suite 210, Kansas City, Kansas 66109
CORPORATE LICENSE NO. E201000573 (MO.) / E-1736 (KS.)

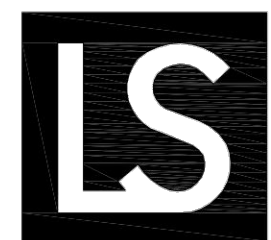
SANITARY SEWER MAIN EXTENSION
SANITARY DETAILS

COBEY CREEK FIRST PLAT
LEE'S SUMMIT - JACKSON COUNTY - MISSOURI



NOTES:

1. FLOWABLE FILL SHALL MEET THE REQUIREMENTS OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
2. REGULAR BACKFILL ABOVE THE TRENCH CHECK SHALL BE FREE OF DEBRIS, ORGANIC MATTER, AND STONES > 6" IN ANY DIMENSION.
3. TOP OF FLOWABLE BACKFILL SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE.
4. LENGTH OF TRENCH CHECK SHALL BE A MINIMUM OF 12".



**LEE'S SUMMIT
MISSOURI**

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

TRENCH CHECK

Date: 02/13

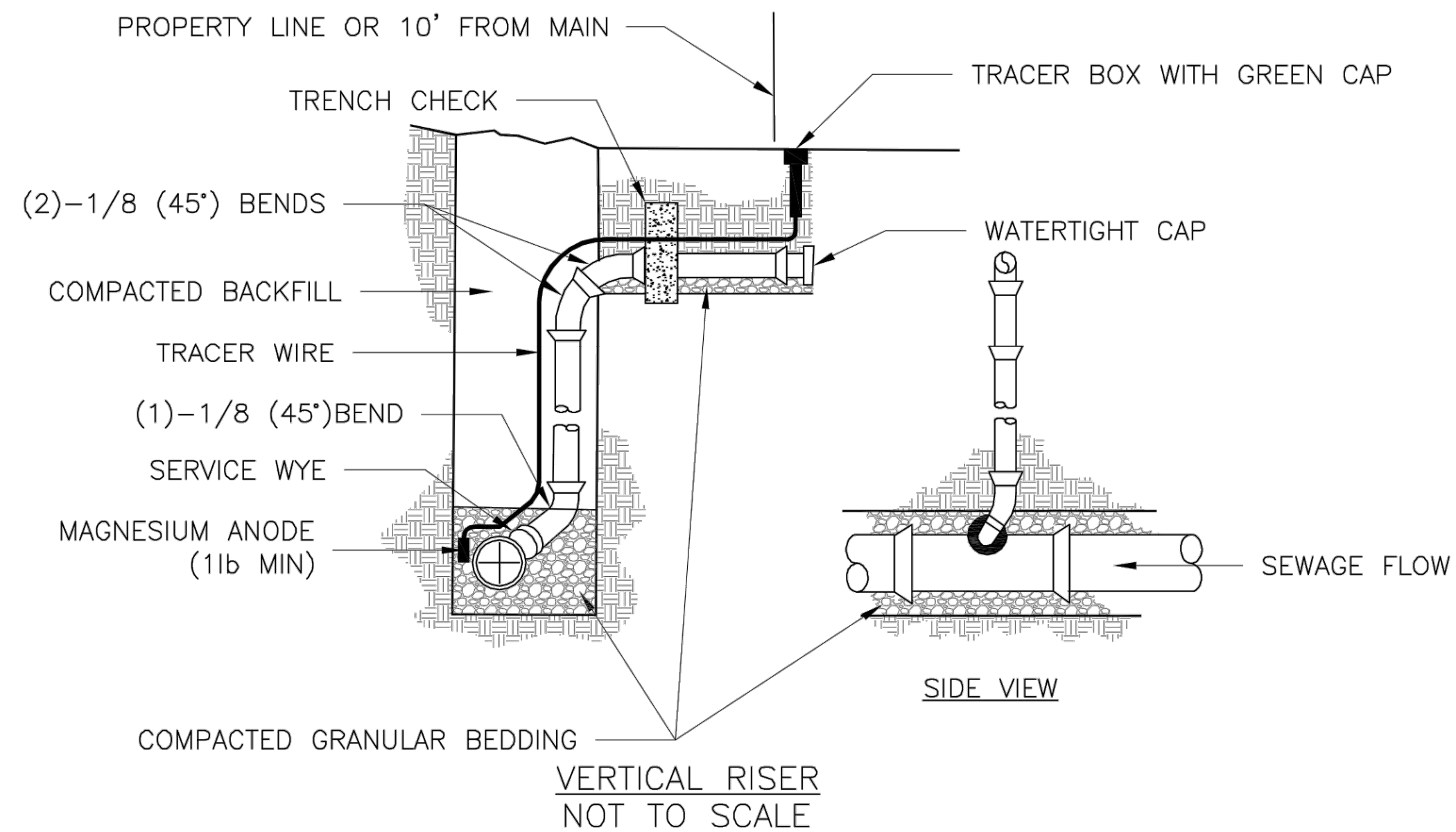
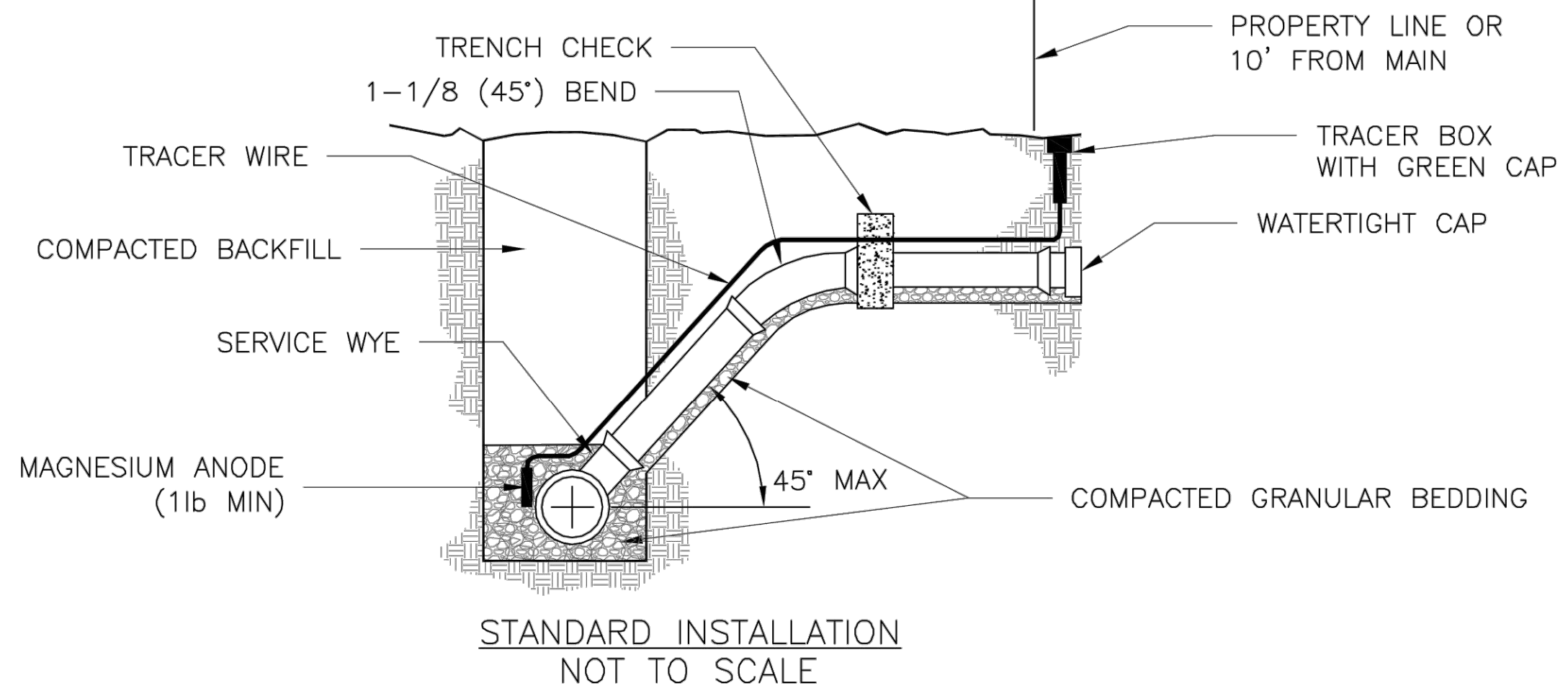
Drawn By: JN

Checked By: DL

FILE: WAT-6

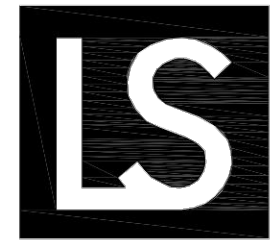
Rev: 1/14

Rev:



NOTES:

1. ALL SEWER STUBS SHALL BE CONSTRUCTED TO PROPERTY LINE OR 10' MINIMUM FROM THE MAIN. WHERE SIDEWALKS ARE PRESENT, CONTRACTOR SHALL EXTEND SERVICE LINE UNDER EXISTING SIDEWALK TO TWO FEET BEYOND.
2. ALL NEW CONSTRUCTION OFF SEWER STUBS SHALL BE TEMPORARILY MARKED WITH A MARKING STAKE, 36" ABOVE GROUND AND PAINTED GREEN.
3. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY SEWER MAIN).
4. TRENCH CHECKS ON THE BUILDING SEWER STUBS SHALL EXTEND 6" BELOW THE BOTTOM OF THE PIPE. LENGTH SHALL BE A MINIMUM OF 12". THE HEIGHT OF THE TRENCH CHECK SHALL EXTEND 12" ABOVE THE TOP OF THE PIPE. THE WIDTH OF THE TRENCH CHECK SHALL BE THE WIDTH OF THE TRENCH.
5. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
6. #12 GAUGE GREEN INSULATED COPPER TRACER WIRE SHALL BE INSTALLED. TRACER WIRE TERMINAL BOXES SHALL BE INSTALLED DIRECTLY ABOVE THE SEWER SERVICE OR AS DETERMINED BY THE ENGINEER.
7. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A GREEN CAST IRON LOCKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.
8. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.
9. THE TRACER WIRE SHALL REMAIN CONTINUOUS TO THE GREATEST EXTENT POSSIBLE. SPLICES IN THE TRACER WIRE SHOULD BE MADE WITH SPLIT BOLT CONNECTORS. WIRE NUTS SHALL NOT BE USED. A WATER-PROOF CONNECTION IS NECESSARY TO PREVENT CORROSION.



**LEE'S SUMMIT
MISSOURI**

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

BUILDING SEWER STUB AND RISER

Date: 04/17

Drawn By: MJF

Checked By: DL

SAN-1



**SANITARY SEWER MAIN EXTENSION
SANITARY DETAILS**

COBEY CREEK FIRST PLAT

LEE'S SUMMIT - JACKSON COUNTY - MISSOURI

X-REF NO.
16-059 Base

DRAWING NO.
16-059 Phase I Sanitary

DATE
February 20, 2019

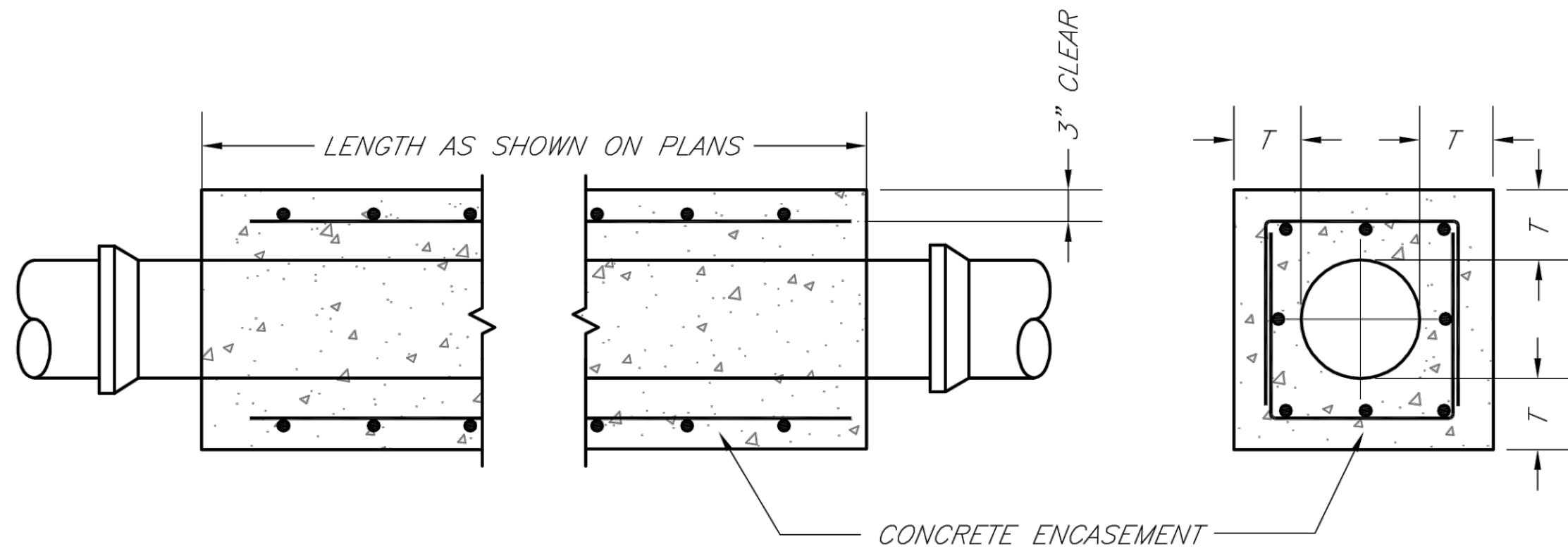
JOB NO.
16-059

SHEET
OF

10 **11**

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NOTES:

1. FOR PIPES LESS THAN 15", T = 6" MIN.
2. FOR PIPES 15" THRU 36", T = 8" MIN.
3. INTERMEDIATE BELLS SHALL BE ENCASED.
4. REINFORCING STEEL SHALL BE #4 @ 12" O.C. EACH WAY WITH A MINIMUM REBAR LAP OF 12".

LS

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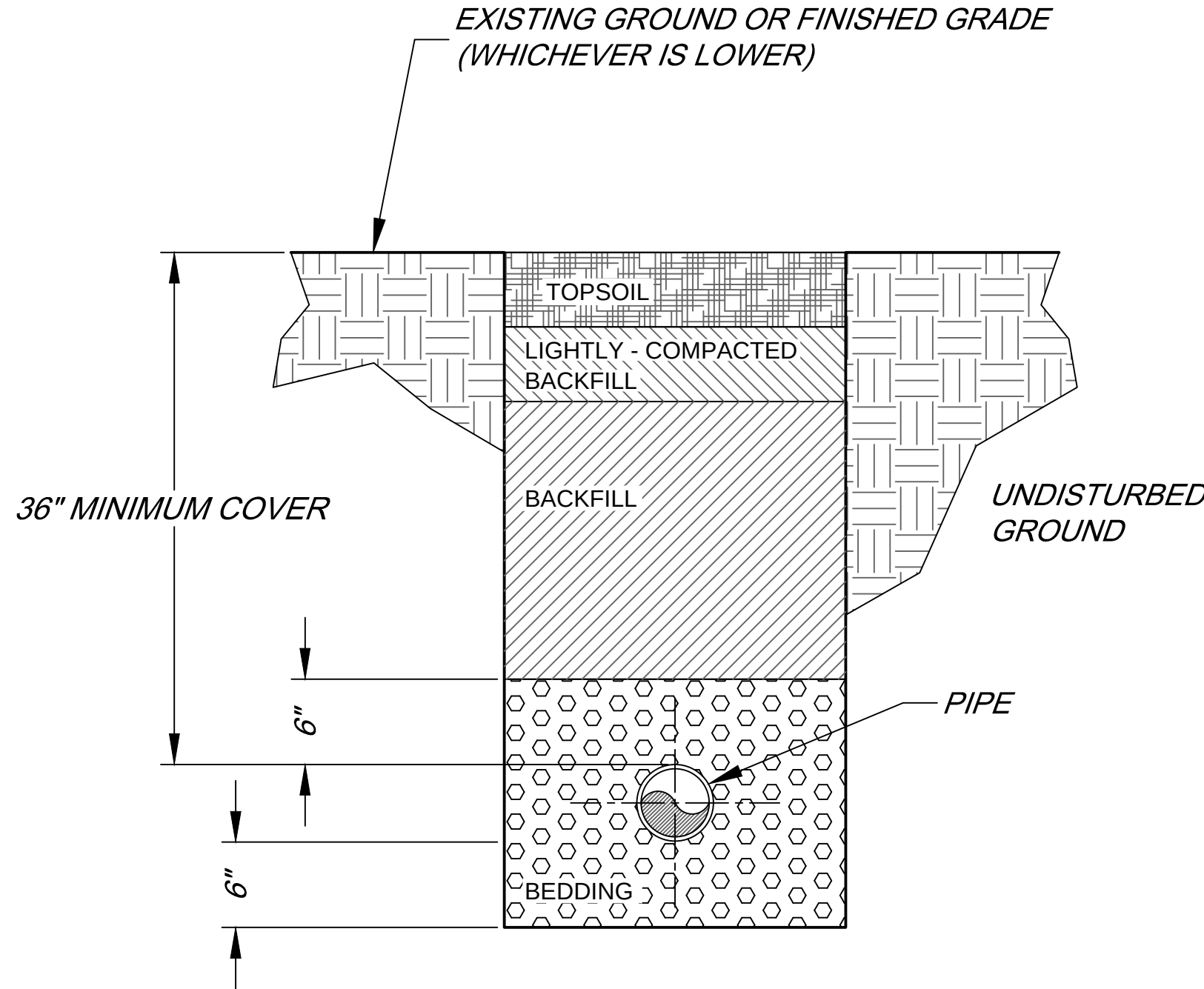
Checked By: DL

FILE: SAN-7

Rev: 1/14

Rev:

SANITARY PIPE ENCASEMENT



SANITARY SEWER
TYPICAL TRENCHING AND
BEDDING DETAIL

NOT TO SCALE

NOTES:

1. BEDDING:
BEDDING AGGREGATE SHALL BE PLACED FROM A LEVEL OF 6 INCHES BELOW THE BOTTOM OF THE PIPE TO A LEVEL OF 6 INCHES ABOVE THE TOP OF THE PIPE.
2. BACKFILL:
A) TRENCH FOUNDATION:
THE AREA AT THE BOTTOM OF THE EXCAVATION SHALL BE COMPOSED OF A STABLE MATERIAL CAPABLE OF SUPPORTING THE PLACEMENT OF BEDDING MATERIAL, PIPE, OR STRUCTURES.
B) BACKFILL OF ALL PIPES UNDER ROADWAYS, CURB AND GUTTER AND ALL OTHER PAVED AREAS WITHIN THE RIGHT OF WAY SHALL CONSIST OF FLOWABLE BACKFILL AS SPECIFIED IN APWA SPEC. 2100 PARAGRAPH 2602.2H MIX DESIGN TYPE A. THE FLOWABLE BACKFILL SHALL EXTEND 2 FEET FROM THE BACK OF CURB TO 2 FEET BACK OF CURB, UP TO 18" INCHES BELOW FINISHED GRADE. FOR EXISTING ROADWAYS FLOWABLE BACKFILL SHALL BE EXTENDED TO THE BASE OF PAVEMENT.

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Inc

engineers

planners

11010 Haskell Street, Suite 210, Kansas City, Kansas 66109
CORPORATE LICENSE No. E201000573 (MO.) / E-1736 (KS.)

SANITARY SEWER MAIN EXTENSION
SANITARY DETAILS

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11
OF
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