



PROJECT TEAM & UTILITY CONTACT LIST	
<u>OWNER / DEVELOPER</u> CLAYTON PROPERTIES GROUP, LLC, DBA SUMMIT HOMES 120 SE 30TH STREET LEE'S SUMMIT, MO 64082 CONTACT: DAVID PRICE PHONE: 816.246.6700 FAX: 816.246.2662	<u>UTILITY SERVICE NUMBERS</u>  NAME: DEVELOPMENT SERVICES PHONE: 816-969-1200 NAME: LEE'S SUMMIT WATER & SERVICES DEPARTMENT PHONE: 816-969-1940
<u>ENGINEER</u> OLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JULIE E SELLERS, P.E. PHONE: 816.361.1177	NAME: SPIRE (MGE) PHONE: 314-342-0500 NAME: AT&T PHONE: 800-286-8313 NAME: KCP&L PHONE: 816-471-5275
<u>SURVEYOR</u> OLSSON 1301 BURLINGTON, SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JASON ROUDEBUSH, PL S PHONE: 816.361.1177	NAME: SPECTRUM (TWC) PHONE: 877-772-2253 NAME: GOOGLE FIBER PHONE: 877-454-6959
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SECTION 2, TOWNSHIP 47 N, RANGE 32 W
IN LEE'S SUMMIT, JACKSON COUNTY, MO

Date Surveyed: 04-20-2020

Sheet List Table	
Sheet Number	Sheet Title
C301	COVER SHEET
C302	MASTER GENERAL LAYOUT
C303	GENERAL LAYOUT
C304	GENERAL LAYOUT
C305	GENERAL LAYOUT
C306	GENERAL LAYOUT
C307	WATER MAIN PLAN & PROFILE
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C311	WATER MAIN PLAN & PROFILE
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C314	WATER MAIN PLAN & PROFILE
C315	WATER MAIN PLAN & PROFILE
C316	DETAIL SHEET

OF JOHN KNOX RETIREMENT VILLAGE--10TH PLAT, A SUBDIVISION RECORDED AS INSTRUMENT NUMBER 1279980 IN BOOK 35 AT PAGE 61 IN JACKSON COUNTY RECORDER OF DEEDS OFFICE, AND ALL OF FOREST LAKE AT JOHN KNOX VILLAGE -- 1ST PLAT A SUBDIVISION RECORDED AS INSTRUMENT NUMBER E0051292 IN BOOK 1106 AT PAGE 42 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE, BOTH SUBDIVISIONS OF LAND IN THE NORTHEAST QUARTER OF SECTION 2, TOWNSHIP 47 NORTH, RANGE 32, WEST OF THE 5TH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI, AND ALSO AN UNPLATTED TRACT OF LAND IN SAID NORTHEAST QUARTER AND SOUTHEAST QUARTER OF SAID SECTION 2, BEING BOUNDED AND DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE NORTH 02°53'56" EAST, ON THE EAST LINE OF SAID SOUTHEAST QUARTER, 1,328.34 FEET TO THE SOUTHEAST CORNER OF THE NORTH HALF OF SAID SOUTHEAST QUARTER ALSO BEING THE NORTHEAST CORNER OF STERLING HILLS 1ST PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 1188888 IN BOOK 153 AT PAGE 22 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE NORTH 87°49'43" WEST, 580.01 FEET ON THE SOUTH LINE OF SAID NORTH HALF OF SAID SOUTHEAST QUARTER, ALSO BEING THE NORTH LINE OF SAID STERLING HILLS 1ST PLAT TO THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE CONTINUING NORTH 87°49'43" WEST ON SAID SOUTH LINE OF SAID NORTH HALF OF SAID SOUTHEAST QUARTER, ALSO BEING THE NORTH LINE OF SAID STERLING HILLS 1ST PLAT AND ALSO ON THE NORTH LINE OF STERLING HILLS 3RD PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 1121580 IN BOOK 153 AT PAGE 96 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE, ALSO BEING A POINT TO THE EAST LINE OF STERLING HILLS 5TH PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 11273788 IN BOOK 154 AT PAGE 88 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE, 2,048.69 FEET TO THE SOUTHWEST CORNER OF SAID NORTH HALF OF SAID SOUTHEAST QUARTER, THENCE NORTH 03°05'41" EAST ON SAID EAST LINE OF STERLING HILLS 5TH PLAT, ALSO BEING THE WEST LINE OF SAID SOUTHEAST QUARTER, 389.26 FEET; THENCE NORTH 85°54'26" EAST, 236.75 FEET; THENCE NORTH 29°55'27" EAST, 306.11 FEET; THENCE NORTH 41°11'03" EAST, 611.03 FEET; THENCE SOUTH 55°11'51" EAST, 21.43 FEET; THENCE NORTH 22°54'26" EAST, 116.03 FEET; THENCE WESTLY, ALONG A CURVE, TO THE LEFT, HAVING AN INITIAL TANGENT BEARING OF NORTH 81°07'00" WEST WITH A RADIUS OF 100.00 FEET, A CENTRAL ANGLE OF 0°57'28" AND AN ARC DISTANCE OF 60.76 FEET; THENCE NORTH 06°37'15" WEST, 50.00 FEET; THENCE EASTERLY ALONG A CURVE TO THE RIGHT HAVING AN INITIAL TANGENT BEARING OF NORTH 83°22'45" EAST WITH A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 28°01'47" AND AN ARC DISTANCE OF 134.53 FEET; THENCE NORTH 21°24'31" EAST, 135.10 FEET; THENCE NORTH 61°49'26" EAST, 951.56 FEET; THENCE NORTH 70°58'24" EAST, 137.47 FEET; THENCE NORTH 85°52'23" EAST, 130.41 FEET; THENCE NORTH 19°50'07" EAST, 128.42 FEET; THENCE WESTERLY ALONG A CURVE TO THE LEFT HAVING AN INITIAL TANGENT BEARING OF NORTH 70°09'53" WEST WITH A RADIUS OF 375.00 FEET, A CENTRAL ANGLE OF 08°59'37" AND AN ARC DISTANCE OF 58.86 FEET; THENCE NORTH 10°50'30" EAST, 50.00 FEET; THENCE EASTERLY ALONG A CURVE TO THE RIGHT HAVING AN INITIAL TANGENT BEARING OF SOUTH 79°09'30" EAST WITH A RADIUS OF 425.00 FEET, A CENTRAL ANGLE OF 09°42'06" AND AN ARC DISTANCE OF 71.96 FEET; THENCE NORTH 20°32'36" EAST, 229.10 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH HALF OF THE SOUTH HALF OF SAID NORTHEAST QUARTER; THENCE NORTH 87°37'42" WEST, ON SAID NORTH LINE OF SAID SOUTH HALF OF SAID NORTHEAST QUARTER, 574.95 FEET TO THE SOUTHEAST CORNER OF THE FORESTS OF BROOKRIDGE ESTATES THIRD PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 1198645 IN BOOK 153 AT PAGE 46 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE NORTH 03°27'53" EAST, ON THE EAST LINE OF SAID THE FORESTS OF BROOKRIDGE ESTATES -- THIRD PLAT, 765.70 FEET TO THE SOUTHWEST CORNER OF LOT 1, VILLAGE CARE CENTER PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 1736897 IN BOOK 143 AT PAGE 122 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE, THENCE SOUTH 87°23'49" EAST, ON THE SOUTH LINE OF SAID LOT 1, ALSO A PORTION BEING ON THE NORTH LINE OF SAID JOHN KNOX RETIREMENT VILLAGE--10TH PLAT AND SAID FOREST LAKE AT JOHN KNOX VILLAGE--1ST PLAT, 1,343.71 FEET TO THE NORTHEAST CORNER OF SAID FOREST LAKE AT JOHN KNOX VILLAGE 1ST PLAT, ALSO BEING A POINT ON THE EXISTING WEST RIGHT--OF--WAY LINE OF NW PRYOR ROAD, AS NOW ESTABLISHED; THENCE SOUTH 03°27'53" WEST, ON SAID EXISTING WEST RIGHT--OF--WAY LINE ALSO BEING THE EAST LINE OF FOREST LAKE AT JOHN KNOX VILLAGE--1ST PLAT FOR THE NORTH 243.74 FEET, 481.43 FEET; THENCE NORTH 86°32'07" WEST, 479.89 FEET; THENCE SOUTH 03°27'53" WEST, 70.20 FEET; THENCE NORTH 86°32'07" WEST, 200.00 FEET; THENCE SOUTH 03°27'53" WEST, 221.62 FEET TO A POINT ON THE NORTH LINE OF THE SOUTH HALF OF THE SOUTH HALF OF SAID NORTHEAST QUARTER; THENCE SOUTH 87°37'42" EAST ON SAID NORTH LINE OF SAID SOUTH HALF OF SAID SOUTH HALF OF SAID NORTHEAST QUARTER, 200.04 FEET TO THE NORTHWEST CORNER OF LOT 1, JOHN KNOX RETIREMENT VILLAGE 9TH PLAT, A SUBDIVISION IN LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 1274676 IN BOOK 35 AT PAGE 42 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE SOUTH 03°27'53" WEST, ON THE WEST LINE OF SAID JOHN KNOX RETIREMENT VILLAGE 9TH PLAT 400.00 FEET TO THE SOUTHWEST CORNER OF SAID JOHN KNOX RETIREMENT VILLAGE 9TH PLAT; THENCE SOUTH 04°27'07" WEST, 289.53 FEET; THENCE NORTH 85°32'53" WEST, 175.00 FEET; THENCE SOUTH 04°27'07" WEST, 425.00 FEET; THENCE SOUTH 85°32'53" EAST, 175.00 FEET; THENCE SOUTH 04°27'07" WEST, 484.59 FEET; THENCE SOUTH 02°53'56" WEST, 385.97 FEET TO THE POINT OF BEGINNING, CONTAINING 3,360,308 SQUARE FEET OR 77.14 ACRES, MORE OR LESS.

BMK #5 CHISELED SQUARE ON THE S.E. CORNER OF A CONCRETE PAD FOR A TRAFFIC SIGNAL BOX AT THE S.W. CORNER OF PRYOR ROAD AND O'BRIEN ROAD.

ELEVATION: 979.24



Dele Solberg

11/1/2020

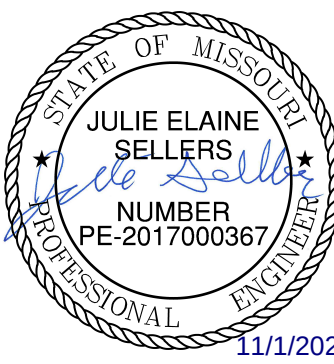
JULIE E SELLERS, P.E.

CIVIL ENGINEER

MO# 2017000367

DATE _____

olson



REVISIONS

COVER SHEET
SANITARY SEWER PLANS

WOODSIDE RIDGE
FIRST PLAT

LEE'S SUMMIT, MO

drawn by: D.A.H.C.
checked by: J.E.S.
designed by: S.M.S.
QA/QC by: M.G.D.
project no.: A18-1140
date: 2019.03.12

SHEET
C201

USER: dhernandez

DWG: F:\2018\1001-1500\018-1140-A\40-Design\Sheets\GNCV\01_Sanitary_36x24\C_TTL01_1140A.dwg

DWG: F:\2018\1001-1500\018
DATE: Mar 13, 2019 2:16pm

GENERAL NOTES:

1. LINEAR FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS (NOT SLOPE MEASUREMENTS) FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
2. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE CURRENT "CITY STANDARDS" AND SPECIFICATIONS OF THE CPD-DS-LDD, LEE'S SUMMIT, EXCEPT AS NOTED.
3. THE DEVELOPER SHALL PERFORM ALIGNMENT AND GRADE, INFILTRATION – EXFILTRATION, DEFLECTION, SOIL DENSITY, AND MANHOLE TESTS AS CALLED OUT IN SECTION 2500 OF THE CURRENT APWA (AMERICAN PUBLIC WORKS ASSOCIATION) STANDARDS AND SPECIFICATIONS. ANY SECTION OF SEWER FAILING ANY OF THE ABOVE MENTIONED TESTS SHALL BE RETESTED BY THE DEVELOPER AFTER REPLACEMENT OR REPAIR.
4. THE DEVELOPER MAY, AS AN ALTERNATE, SUBSTITUTE A.B.S. OR V.C.P. PIPE FOR P.V.C. PIPE. THE FOLLOWING PIPE DEFLECTION TEST SHALL BE IMPLEMENTED ON A.B.S. AND P.V.C. PIPE:

THE DEVELOPER SHALL PERFORM DIAMETRICAL DEFLECTION TESTS ON FLEXIBLE AND SEMI-FLEXIBLE (I.E. POLY-VINYL-CHLORIDE AND ACRYLONITRILLE BUTADIENE STYRENE) PIPE WHEN USED AS A PUBLIC DIAMETER. ALL TESTS HALL BE CONDUCTED BETWEEN MANHOLES. SEWER TESTS SHALL BE CONDUCTED BETWEEN MANHOLES. SEWER TESTED SHALL BE 100% OF THE TOTAL SEWER INSTALLED. A MANDREL WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE BEING INSTALLED SHALL BE USED.
5. THE DEVELOPER SHALL PERFORM DIAMETRICAL DEFLECTION TESTS ON FLEXIBLE AND SEMI-FLEXIBLE (I.E. POLY-VINYL-CHLORIDE AND ACRYLONITRILLE BUTADIENE STYRENE) PIPE WHEN USED AS A PUBLIC SEWER PRIOR TO FINAL ACCEPTANCE. THE MAXIMUM ALLOWABLE DEFLECTION SHALL BE 5% OF THE INSIDE DIAMETER. ALL TESTS SHALL BE CONDUCTED BETWEEN MANHOLES. SEWER TESTED SHALL BE 100% OF THE TOTAL SEWER INSTALLED. A MANDREL WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE BEING INSTALLED SHALL BE USED.
6. PRIOR TO ORDERING PRE-CAST STRUCTURES, SHOP DRAWINGS ARE TO BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL. THE DESIGN ENGINEER SHALL INDICATE APPROVAL OF THE SHOP DRAWINGS.
7. DEVELOPER SHALL PROVIDE EARTHWORK AND MATERIAL TESTING TO COMPLY WITH THE STANDARD SPECIFICATIONS OF THE CPD-DS-LDD.
8. DURING CONSTRUCTION OF THE PROJECT, THE DEVELOPER SHALL KEEP ONE RECORD COPY OF ALL SPECIFICATIONS, DRAWINGS, ADDENDA, MODIFICATIONS, AND SHOP DRAWINGS AT THE SITE IN GOOD CONDITION. THESE DOCUMENTS SHALL BE ANNOTATED TO SHOW ALL CHANGES MADE DURING CONSTRUCTION. THE EXACT LOCATION OF ALL SEWER WYES, TEES, AND SERVICE LINES SHALL BE RECORD ON THESE DOCUMENTS. AT THE CONCLUSION OF CONSTRUCTION, THESE DOCUMENTS SHALL BE FORWARDED TO THE DESIGN ENGINEER FOR PREPARATION OF AS-BUILT DRAWINGS.
9. THE PROJECT BENCHMARKS AND ALL ELEVATIONS SHOWN ON THE PROFILES ARE N.G.V.D.
10. THE DEVELOPER IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE DEVELOPER MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT IS THE DEVELOPERS RESPONSIBILITY TO RELOCATE AND/OR ADJUST ALL EXISTING UTILITIES, CONFLICT WITH PROPOSED SITE IMPROVEMENTS.
11. THE DEVELOPER SHALL 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. THE NAMES AND TELEPHONE NUMBERS OF UTILITY COMPANIES, EVEN IF ONLY REMOTELY INVOLVED WITH THIS HIS PROJECT ARE LISTED UNDER "UTILITY CONTACTS" THIS SHEET.
12. THE DEVELOPER SHALL PROVIDE AND MAINTAIN ALL TRAFFIC CONTROL MEASURES NECESSARY TO ENSURE THAT THE GENERAL PUBLIC IS PROTECTED AT ALL TIMES. TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD-LATEST EDITION).
13. THE SITE PLAN IS BASED ON SURVEY BY OLSSON ASSOCIATES, COMPLETED 12-13-16. CONDITIONS ON SITE AT THE TIME OF CONSTRUCTION MAY VARY FROM THE SURVEYED CONDITIONS. DEVELOPER SHALL VERIFY EXISTING SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
14. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL PERMITS (EXCEPT LAND DISTURBANCE), BONDS, INSURANCE, ETC. AND PAYING ALL FEES. THE COST OF DEVELOPERS BONDS AND INSURANCE AS REQUIRED BY THE CITY OF LEE'S SUMMIT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER.
15. DEVELOPER SHALL COMPLY WITH ALL APPLICABLE REGULATIONS REQUIRED BY THE CITY AND THE STATE.
16. THE DEVELOPER MUST REMOVE AT HIS COST ANY BAD SUBSURFACE SOIL WHICH WOULD NOT BE ABLE TO SUPPORT ANY PROPOSED PUBLIC IMPROVEMENT. BACKFILL SHALL BE ACCOMPLISHED IN ACCORDANCE WITH SECTIONS 2100 AND 2201 ENTITLED "GRADING AND SITE PREPARATION" AND "SUBGRADE PREPARATION".
17. VERTICAL CONTROL IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE DEVELOPER IS ADVISED TO USE BENCHMARK INFORMATION FOR VERTICAL CONTROL. HORIZONTAL CONTROL (CONTROL POINT INFORMATION) IS BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83). THE DEVELOPER IS ADVISED TO USE CONTROL POINT INFORMATION FOR HORIZONTAL CONTROL.

PLUMBING NOTES:

1. ALL LOTS HAVE BEEN SUPPLIED WITH WYES OR LATERALS. PLUMBER SHALL CONNECT HOUSE SERVICE TO MAIN AT LOCATIONS INDICATED.
2. ALL SERVICE LINES SHALL BE LAID AT 2% MINIMUM SLOPE, UNLESS OTHERWISE NOTED.
3. M.S.F.E. ELEVATION – INDICATES BASEMENT FLOOR ELEVATION OR LOWEST FLOOR ELEVATION SERVICEABLE BY PROPOSED SANITARY SEWER.

EXCAVATING NOTES:

1. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTROL DOWNSTREAM EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION.
2. THE DEVELOPER SHALL BE RESPONSIBLE FOR RECORDING ROCK ELEVATIONS AT 25 FOOT (MAXIMUM) INTERVALS WHERE ENCOUNTERED, AND FURNISHING THIS INFORMATION TO THE DESIGN ENGINEER FOR USE ON AS-BUILTS.
3. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES. EROSION CONTROL PLANS AND PROCEDURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION.
4. NO SUBSURFACE EXPLORATION FOR THE DETERMINATION OF AND/OR THE LOCATION OF EXISTING ROCK HAS BEEN MADE.
5. WHEN SEWER LINES CROSS A LOW POINT IN A CREEK, THE SEWER LINE MUST BE ENCASED ACCORDING TO LEE'S SUMMIT.
6. DEVELOPER IS RESPONSIBLE FOR KEEPING ALL PUBLIC ROADWAYS ADJACENT TO THE CONSTRUCTION SITE FREE OF DIRT AND DEBRIS RESULTING FROM ACTIVITIES RELATED TO THE CONSTRUCTION OF THIS PROJECT. INSPECTIONS AND CLEANUP TO OCCUR ON A DAILY BASIS.
7. DEVELOPER SHALL KEEP THE ENTIRE PROJECT SITE FREE OF DEBRIS AND TRASH AT ALL TIMES. DEVELOPER SHALL EXECUTE WORK USING METHODS THAT MINIMIZE EXCESSIVE NOISE OR DUST EMISSIONS. DEVELOPER SHALL PROVIDE METHODS, MEANS AND FACILITIES TO PREVENT CONTAMINATION OF SOIL OR WATER FROM DISCHARGE OF REGULATED MATERIALS (I.E. FUEL) USED DURING CONSTRUCTION.
8. THE DEVELOPER SHALL ERECT AND MAINTAIN ORANGE COLORED TEMPORARY CONSTRUCTION FENCE AROUND ALL AREAS INDICATED ON THE PLANS TO BE LEFT UNDISTURBED BOTH TEMPORARY AND PERMANENTLY THE DEVELOPER WILL BE GIVEN NOTICE WHEN HE MAY ENTER THESE AREAS MARKED TEMPORARY BY THE OWNER ONCE PERMITS HAVE BEEN OBTAINED. THE FENCE MATERIAL SHALL BE 48" TALL. HIGH DENSITY POLYETHYLENE (HDPE) WITH NOMINAL MESH OPENING SIZE OF 1.25 INCHES X 1.25 INCHES.

LEGEND	
EOTVGH	EXISTING CABLE TV, OVERHEAD
EOTV	EXISTING CABLE TV, UNDERGROUND
OTVGH	PROPOSED CABLE TV, OVERHEAD
CTV	PROPOSED CABLE TV, UNDERGROUND
FTVGH	FUTURE CABLE TV, OVERHEAD
FTV	FUTURE CABLE TV, UNDERGROUND
FOGH	EXISTING FIBER OPTIC, OVERHEAD
FO	EXISTING FIBER OPTIC, UNDERGROUND
FOGH	PROPOSED FIBER OPTIC, OVERHEAD
FO	PROPOSED FIBER OPTIC, UNDERGROUND
FFGH	FUTURE FIBER OPTIC, OVERHEAD
FFG	FUTURE FIBER OPTIC, UNDERGROUND
EFP	EXISTING FIRE PROTECTION SYSTEM LINE
FP	PROPOSED FIRE PROTECTION SYSTEM LINE
EFP	FUTURE FIRE PROTECTION SYSTEM LINE
EFL	EXISTING FUEL LINE
FL	PROPOSED FUEL LINE
FFL	FUTURE FUEL LINE
EG	EXISTING NATURAL GAS LINE
G	PROPOSED NATURAL GAS LINE
FG	FUTURE NATURAL GAS LINE
ETELGH	EXISTING TELEPHONE LINE, OVERHEAD
ETEL	EXISTING TELEPHONE LINE, UNDERGROUND
TELGH	PROPOSED TELEPHONE LINE, OVERHEAD
TEL	PROPOSED TELEPHONE LINE, UNDERGROUND
FTELGH	FUTURE TELEPHONE LINE, OVERHEAD
FTEL	FUTURE TELEPHONE LINE, UNDERGROUND
EEGH	EXISTING POWER/ELECTRIC LINE, OVERHEAD
EE	EXISTING POWER/ELECTRIC LINE, UNDERGROUND
EOGH	PROPOSED POWER/ELECTRIC LINE, OVERHEAD
E	PROPOSED POWER/ELECTRIC LINE, UNDERGROUND
FEGH	FUTURE POWER/ELECTRIC LINE, OVERHEAD
FE	FUTURE POWER/ELECTRIC LINE, UNDERGROUND
ESS	EXISTING SANITARY SEWER
SS	PROPOSED SANITARY SEWER
FSS	FUTURE SANITARY SEWER
ESL	EXISTING STEAM LINE
SL	PROPOSED STEAM LINE
FSL	FUTURE STEAM LINE
EST	EXISTING STORM SEWER
ST	PROPOSED STORM SEWER
FST	FUTURE STORM SEWER
EW	EXISTING WATER LINE
W	PROPOSED WATER LINE
FW	FUTURE WATER LINE

ESTIMATE OF QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
STREET				
1	8" SANITARY PVC (SDR-26)	L.F.	10316.76	10319.02
2	CONCRETE ENCASEMENT	L.F.	96	105
3	STEEL CASING	L.F.	60	60
4	MANHOLES, STD. 4' DIA.	EA.	60	62
5	DROP MANHOLE STD. 4' DIA.	EA.	4	4
6	DROP ADDTION	V.F.	24.02	48.65
7	CONNECTION TO EXISTING M.H.	EA.	5	4
8	SERVICE WYE	EA.	452	152
9	4" LATERAL PIPE	L.F.	6234.76	6234.76
10	CLEANOUT	EA.	6	6
11	STREET BORE	L.F.	466	166

SUMMARY OF QUANTITIES AS INDICATED ABOVE AND ANY QUANTITIES AS SHOWN WITHIN THE PLANS HAVE BEEN PROVIDED FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR USE IN PREPARATION OF CONTRACT DOCUMENTS. QUANTITIES INTENDED FOR, BUT NOT LIMITED TO, THE PREPARATION OF PROPOSALS AND BID DOCUMENTS SHALL BE INDEPENDENTLY EVALUATED BY THE ESTIMATING PARTY BASED UPON THE CONTENTS OF THESE PLANS.

AS-BUILT / SERVICE LINE NOTE

- 1.) CONTRACTOR SHALL PLACE 2"x4" TIMBER OR METALLIC TAPE AT END OF EACH SERVICE LINE STUB. STANDARD 8' LENGTH MAY BE VARIED WITH 3' EXPOSED WHEN PLACED DIRECTLY OVER THE SERVICE LINE TERMINATION POINT. 2"x4" TIMBER SHALL BE MARKED APPROPRIATELY TO IDENTIFY SEWER SERVICE STUB.
- 2.) CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING OF ROCK ELEVATIONS AT 25' INTERVALS WHERE ENCOUNTERED. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR RECORDING SERVICE LINE LOCATIONS FROM THE DOWNSTREAM OR UPSTREAM MANHOLE AND SERVICE LINE LENGTHS DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL ALSO RECORD VERTICAL ELEVATIONS WITH A REFERENCE POINT. ALL INFORMATION SHALL BE PROVIDED TO THE ENGINEER OF RECORD FOR PREPARATION OF AS-BUILT PLANS.

CONTROL POINT TABLE				
POINT NUMBER	EASTING	NORTHING	POINT ELEVATION	DESCRIPTION
1	2813424.811	1004323.277	978.52	SET 3/4" IB/CAP ON THE WEST SIDE OF PRYOR ROAD ON THE NORTH SIDE OF THE NORTH ENTRANCE TO THE JOHN KNOX VILLAGE CARE CENTER. 23.0' S TO BACK OF CURB. 51.0' SE TO POWER POLE. 52.4' S TO LIGHT POLE.
2	2810579.799	1003600.769	965.27	SET 3/4" IB/CAP ON THE SW CORNER OF THE INTERSECTION OF NW ASHURST AND NW ESSEX AVE. 12.2' NW TO CENTERLINE FIBER BOX. 37.3' E TO STOP SIGN. 39.7' E-NE TO LIGHT POLE.
3	2810569.194	1000980.591	904	SET 3/4" IB/CAP AT THE SE CORNER OF NW CODY DRIVE AND NW WHITLOCK DRIVE. 12.2' E TO NW CORNER CURB INLET. 7.7' SE TO POWER POLE. 49.7' W-NW TO STOP SIGN.
4	2813406.046	1000727.167	958.11	SET 3/4" IB/CAP ON THE SE CORNER SW PRYOR ROAD AND SW 1ST STREET. 10.8' NE TO FIRE HYDRANT. 22.1' NE TO SE CORNER CURB INLET. 22.0' SW TO NE CORNER CURB INLET.
6	2813383.638	1002469.496	979.56	SET 3/4" IB/CAP ON THE SW CORNER OF PRYOR ROAD AND O'BRIEN ROAD. IT IS IN LINE WITH THE PC OF THE CURB RETURN N AND THE BENCHMARK E.
BENCHMARK				
POINT NUMBER	EASTING	NORTHING	POINT ELEVATION	DESCRIPTION
5	2813403.101	1002468.034	979.24	CHISELED BOX ON THE SE CORNER OF A CONCRETE PAD FOR A TRAFFIC SIGNAL BOX AT THE SW CORNER OF PRYOR ROAD AND O'BRIEN ROAD.

olsson

NO. Certificate of Authority #001892
300 E. Main Street, Suite 100
NORTH KANSAS CITY, MO 64116
TEL. 816.861.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
Number PE-2017000367
4/4/2019
RENEWAL
11/1/2020

BY

REVISIONS DESCRIPTION

DATE

NO. REV.

REVISONS

2019

GENERAL NOTES
SANITARY SEWER PLANS

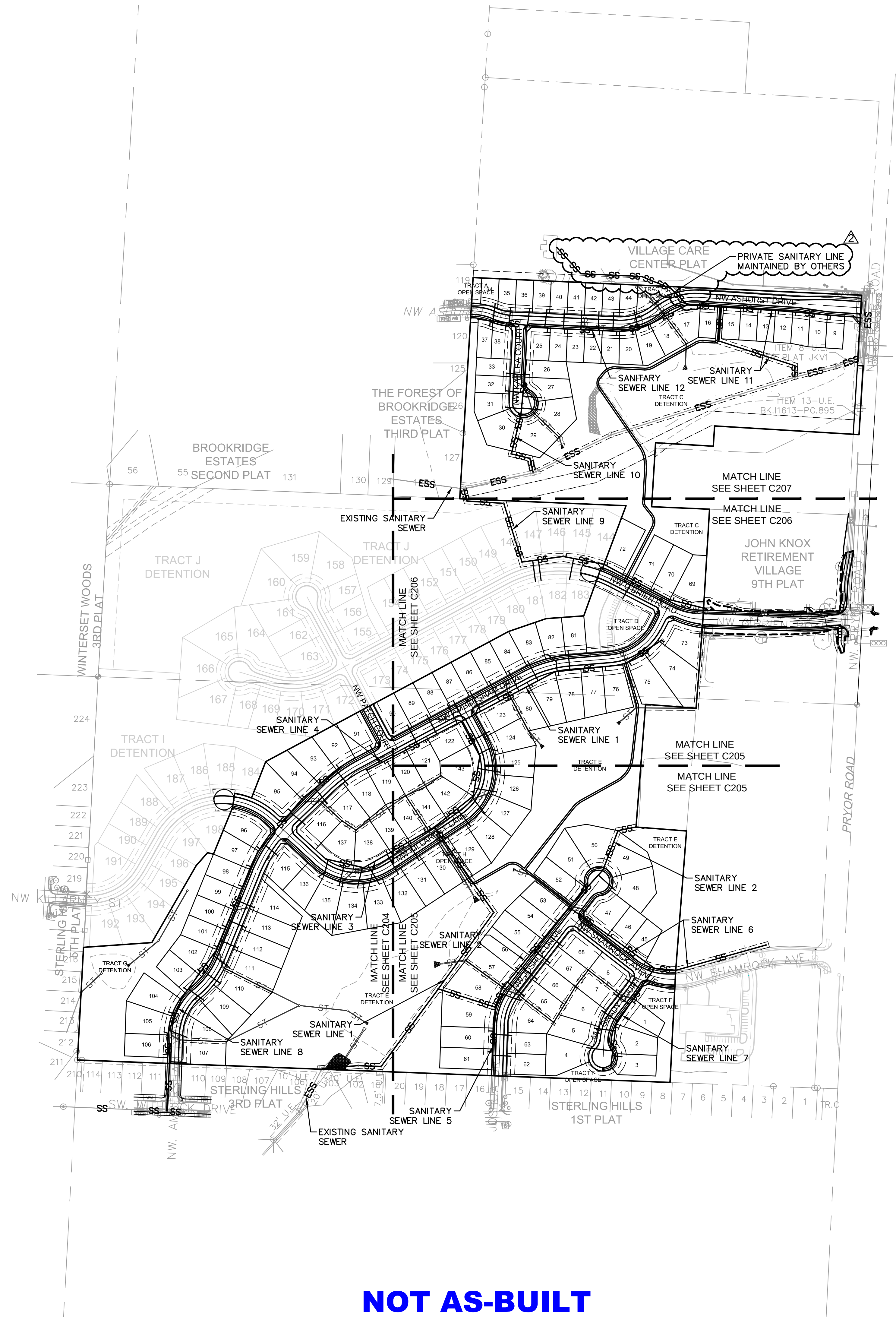
WOODSIDE RIDGE
FIRST PLAT

LEE'S SUMMIT, MO

drawn by: D.A.H.Q.
checked by: J.E.S.
designed by: S.M.S.
QA/QC by: M.G.D.
project no.: A18-1140
date: 2019.03.12

SHEET
C202

ALL NOTES REFERENCED ON THIS PLAN SHEET MAY HAVE APPLICATIONS TO EVERY FACET OF THE CONSTRUCTION PLANS. THE NOTE HEADINGS OR TITLES ARE TO BE USED AS A GENERAL GUIDE TO APPLICABLE SITUATIONS.



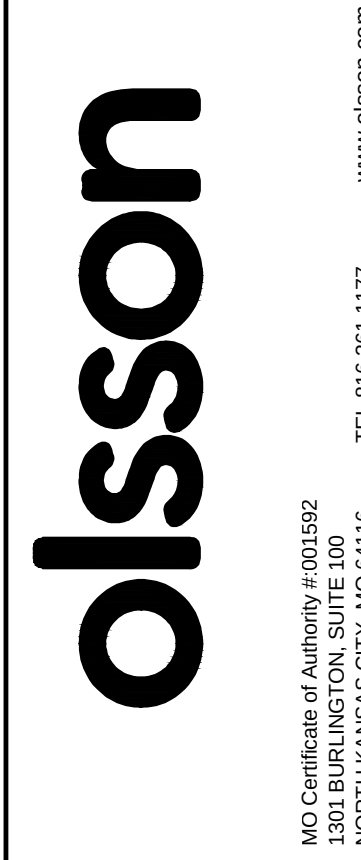
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USER: ssaylor

SHEET
C203

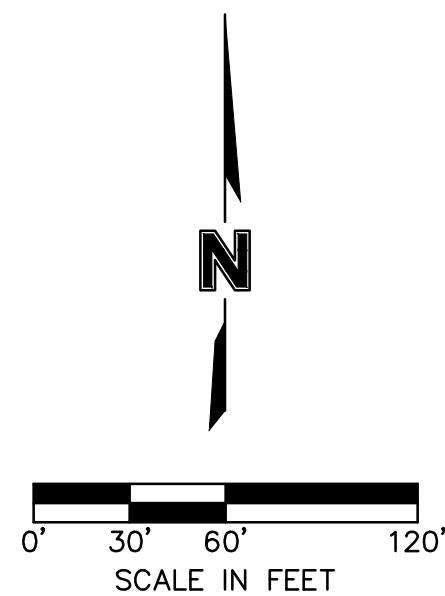
LEE'S SUMMIT MO	2019
-----------------	------

REVISIONS

	BY

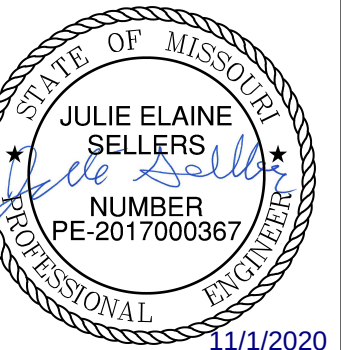


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1302 DORLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

[illegible]

GENERAL LAYOUT SANITARY SEWER PLANS	WOODSIDE RIDGE FIRST PLAT	2019
LEE'S SUMMIT, MO		

Drawn by: D.A.H.O
 Checked by: J.E.S
 Designed by: S.M.S
 A/QC by: M.G.D
 Project no.: A18-1140
 Date: 2019.03.12

SHEET
C204

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DATE: Mar 13, 2019 2:18pm
USER: dhernandez



DWG:
DATE:

MO Certificate of Authority #:001592
3301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

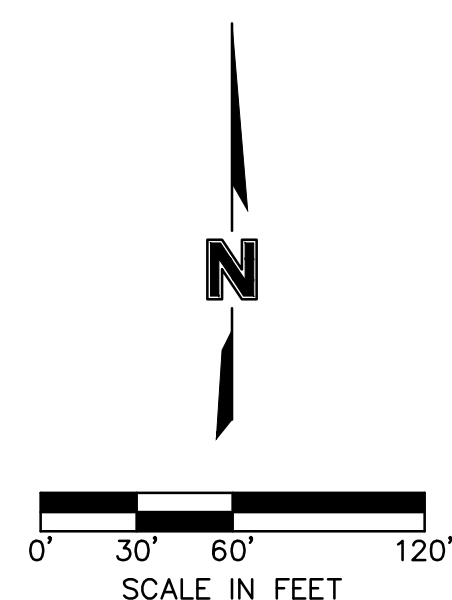


REVISIONS

2015

SHEET
C205

C205



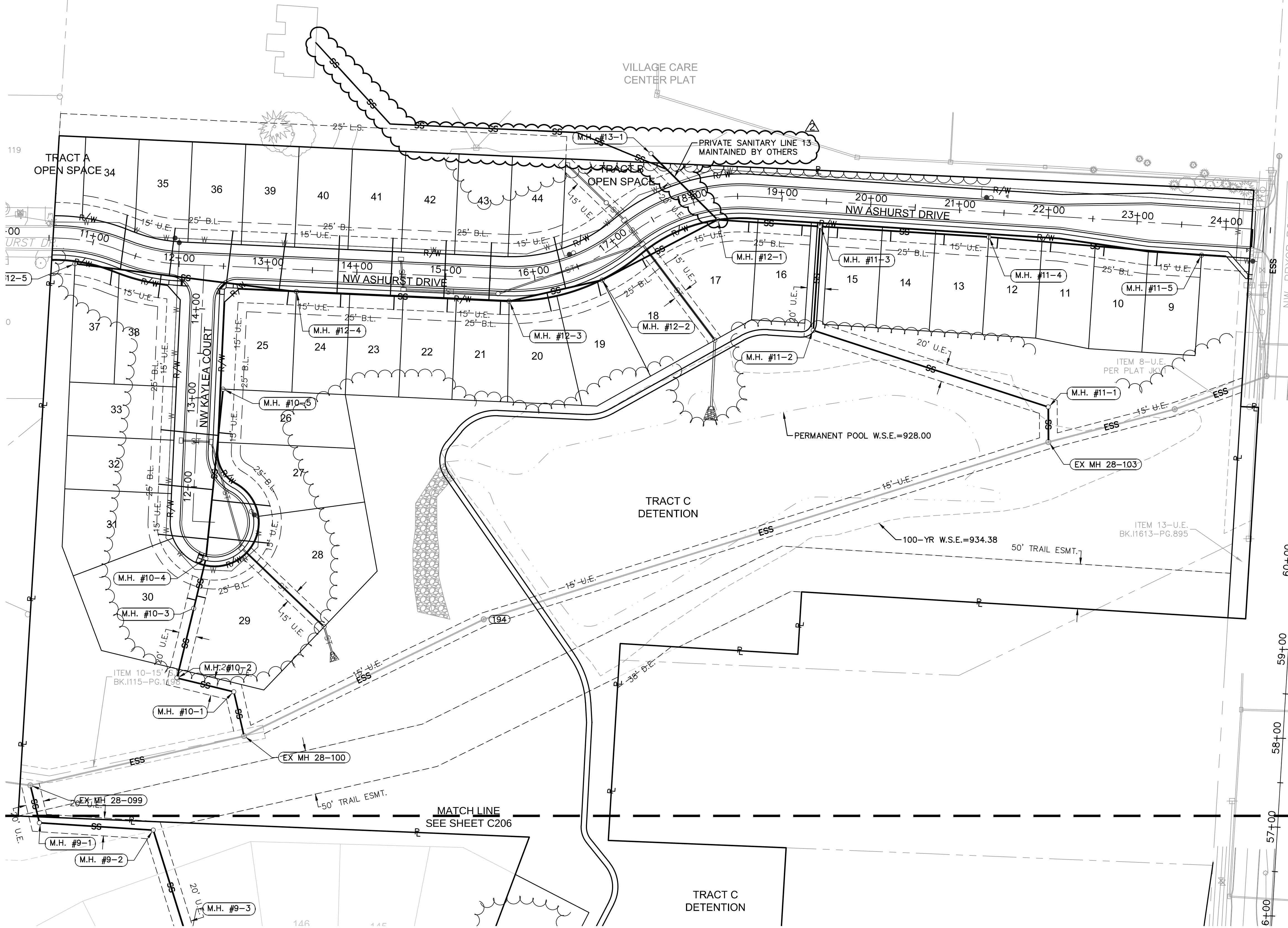
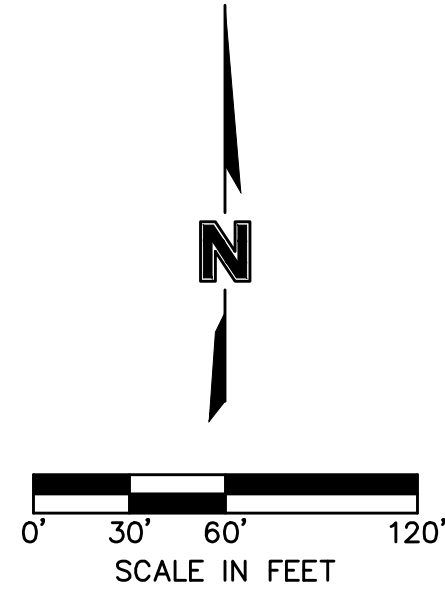
NOT AS-BUILT

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DATE: Apr 04, 2019 1:28pm
USER: ssaylor



Key Map



NOT AS-BUILT

olsson

NOT A CONFIRMATION OF ADOPTION OF THIS PLAT
300 EAST BROADWAY, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL. 816.861.1177
WWW.OLSSON.COM

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
4/8/20
RENEWAL 11/1/2020

BY

REVISIONS DESCRIPTION

NO. REV. DATE

03/12/2019 REVISED PER CITY COMMENTS

4/4/2019 REVISED PER SECOND SUBMITTAL CITY COMMENTS

GENERAL LAYOUT
SANITARY SEWER PLANS

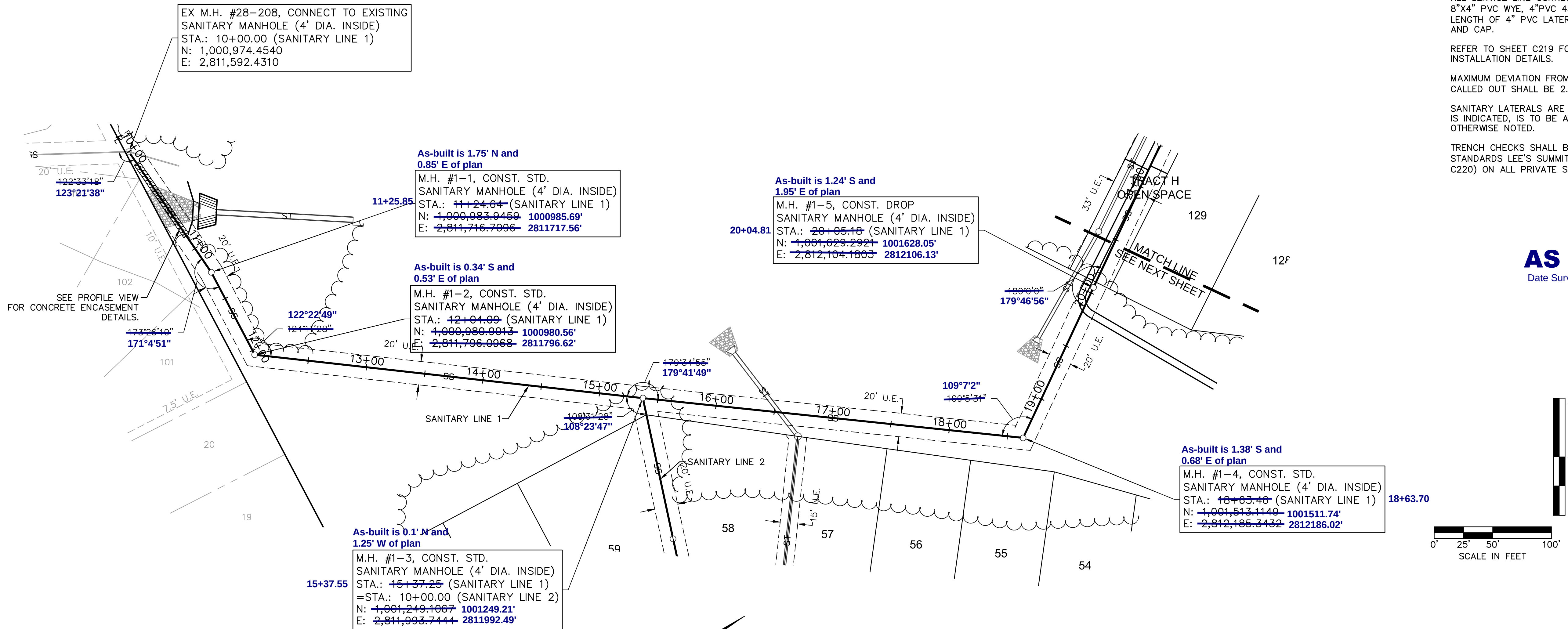
WOODSIDE RIDGE
FIRST PLAT

LEE'S SUMMIT, MO

2019

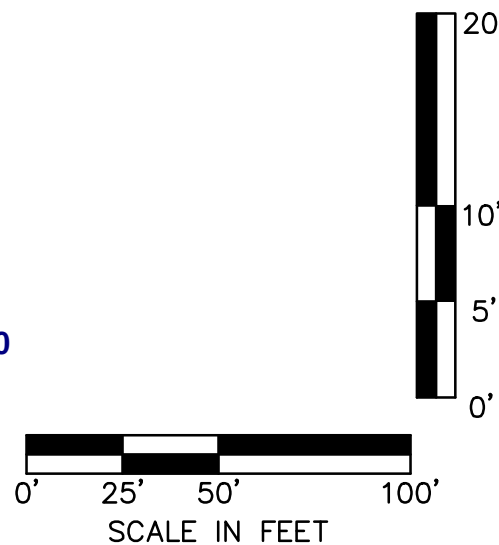
drawn by: D.A.H.O.
checked by: J.E.S.
designed by: S.M.S.
QA/QC by: M.G.D.
project no.: A18-1140
date: 2019.03.12

SHEET
C207

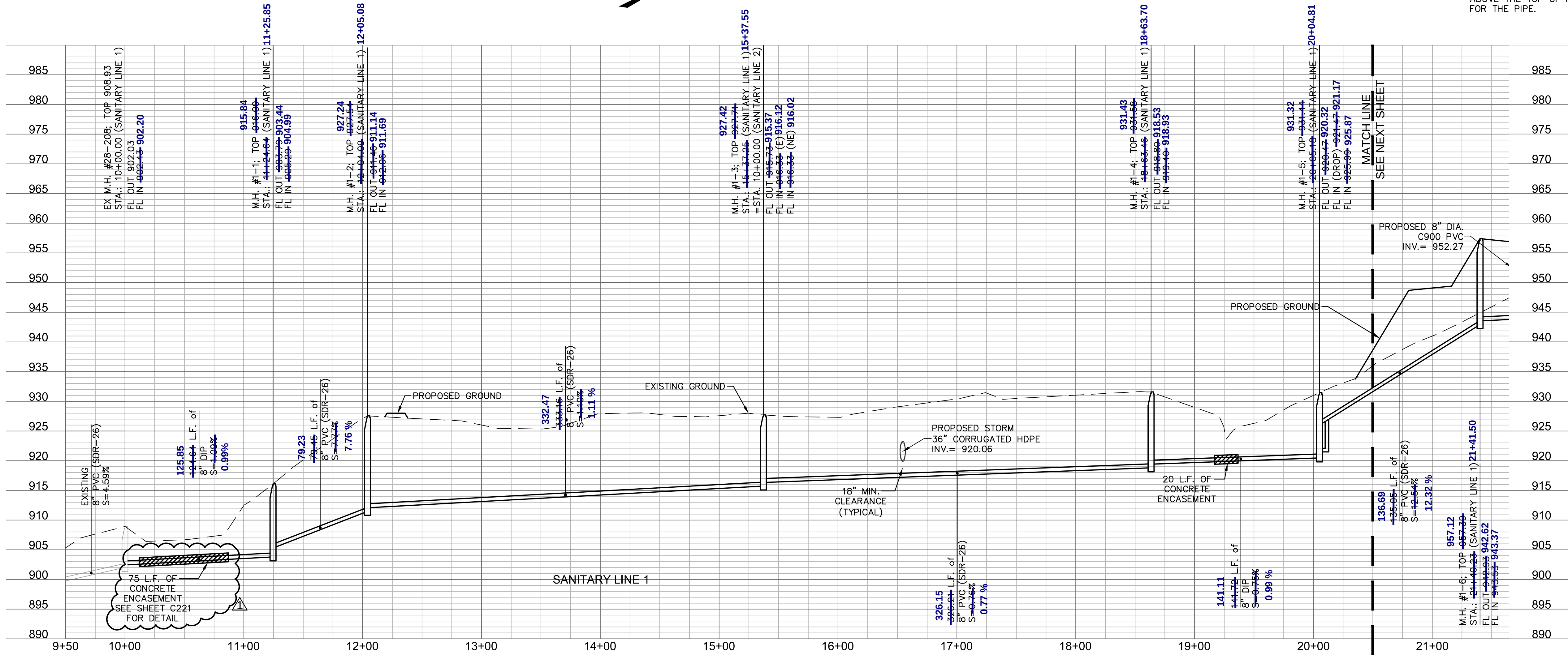


NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X4" PVC WYE, 4" PVC 45° BEND, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.
REFER TO SHEET C219 FOR SANITARY DESIGN AND LATERAL INSTALLATION DETAILS.
MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.
SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.
TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARDS LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C220) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

AS BUILT
Date Surveyed: 04-20-2020



NOTES:
CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 36" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.



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NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"X4" PVC WYE, 4" PVC 45° BEND, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.
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AS BUILT
Date Surveyed: 04-20-2020

NOTES:
CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 36" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.

STATE OF MISSOURI
JULIE ELAINE SELLERS
Professional Engineer
NUMBER PE-2017000367
11/1/2020

NO.	REV.	DATE	REVISIONS DESCRIPTION
1	A	03/12/2019	REVISED PER CITY COMMENTS

SANITARY SEWER PLAN & PROFILE
SANITARY SEWER PLANS

WOODSIDE RIDGE
FIRST PLAT

LEE'S SUMMIT, MO

2019

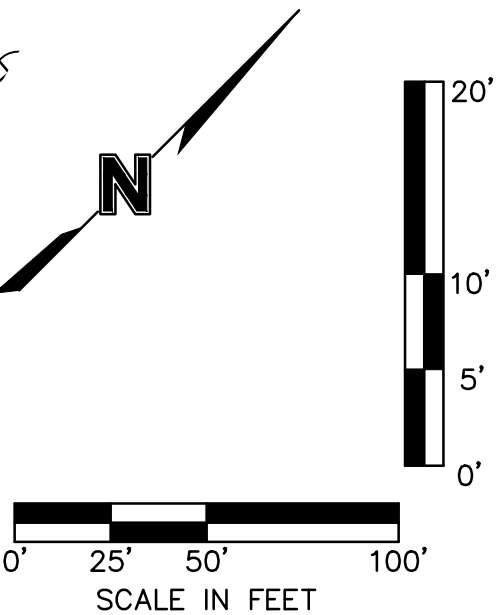
SHEET
C208

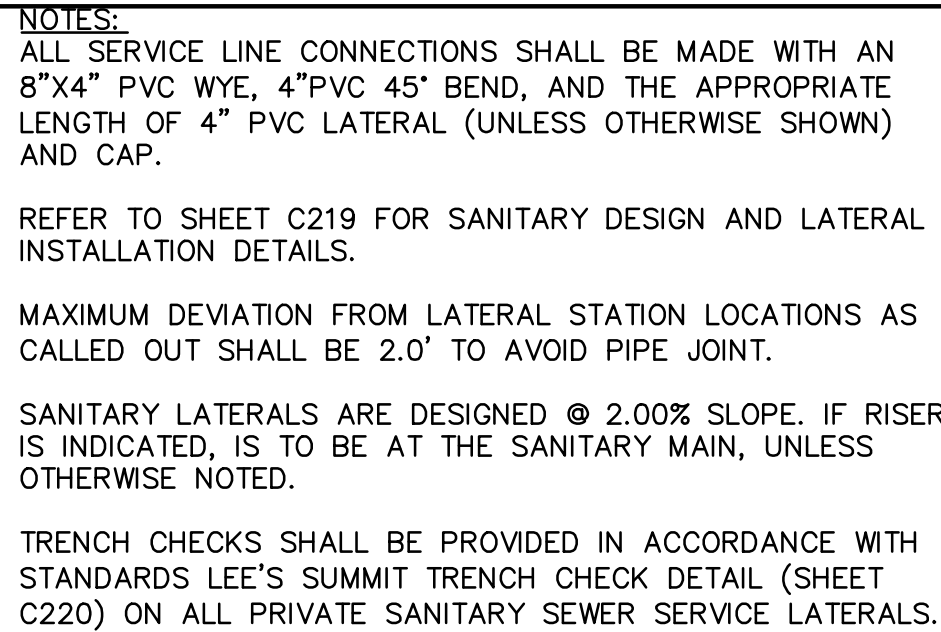
drawn by: D.A.H.O.
checked by: J.E.S.
designed by: S.M.S.
QA/QC by: M.G.D.
project no.: A18-1140
date: 2019.03.12

Date Surveyed: 04-20-2020

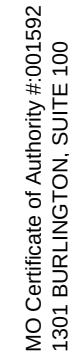
As-built is 1.11' N and 0.12' W of plan

M.H. #1-13, CONST. STD.
SANITARY MANHOLE (4' DIA. INSIDE)
STA.: ~~34+35.32~~ (SANITARY LINE 1)
=STA.: ~~35+24.81~~ (C) **35+25.53** **36.11'**
NW AMBERSHAM DRIVE, ~~36.84'~~ RT

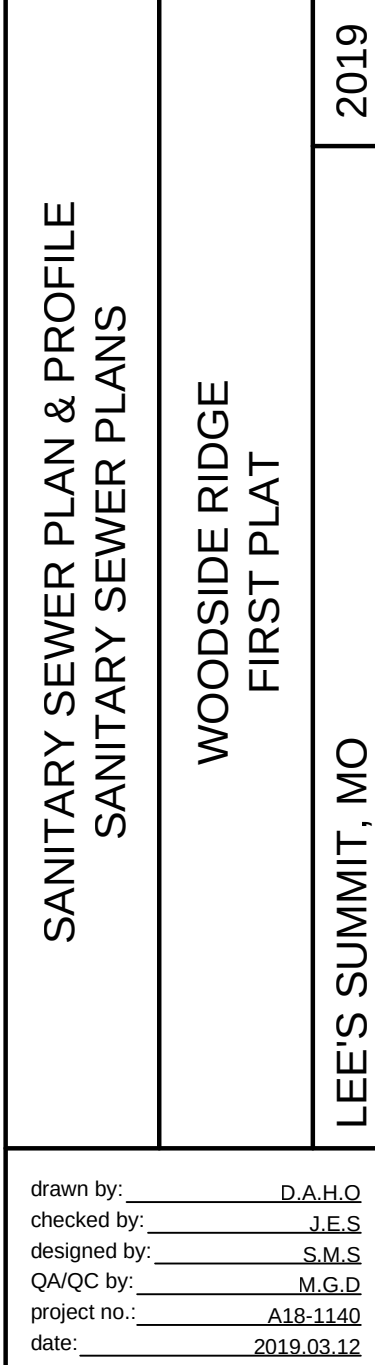




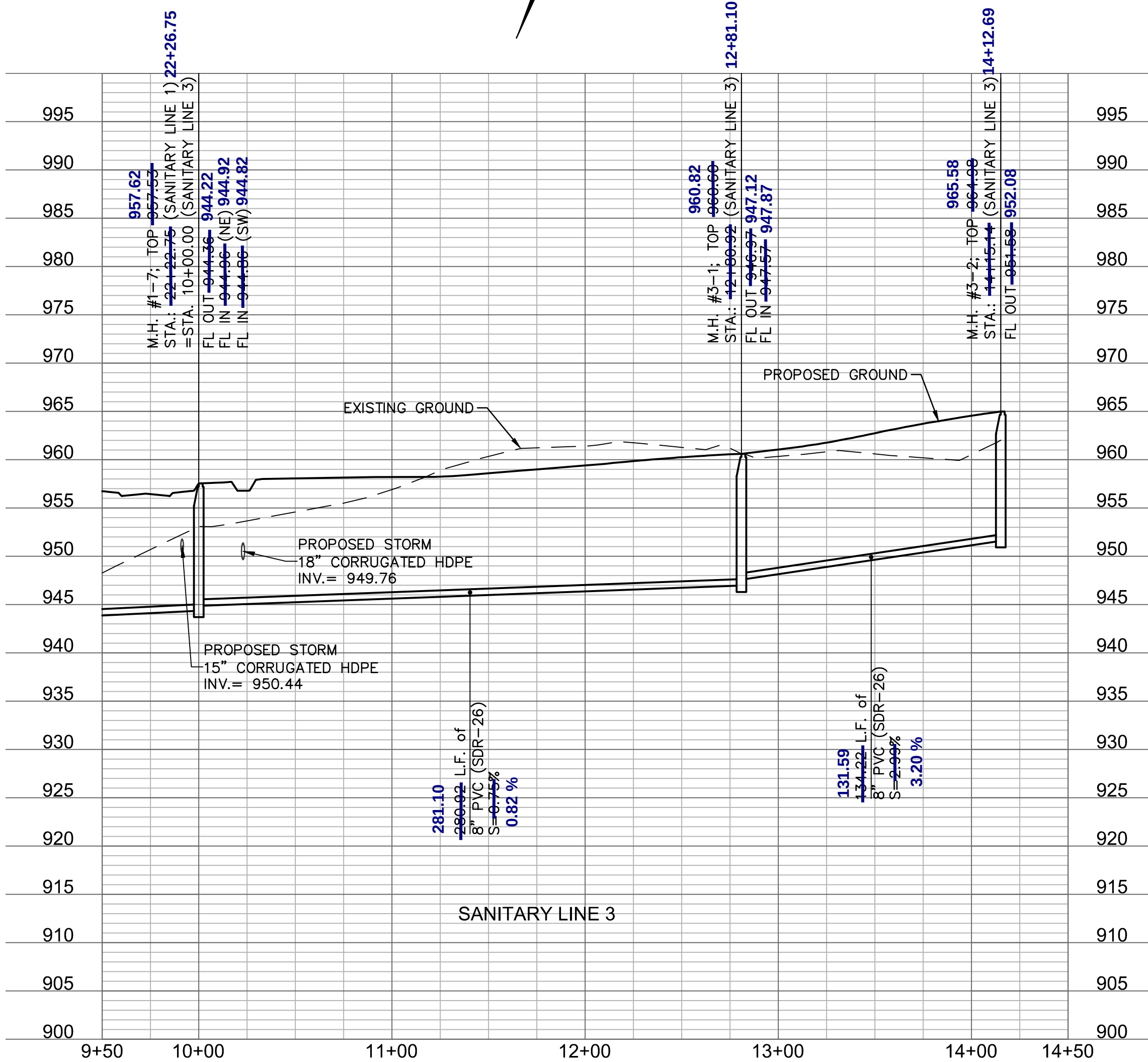
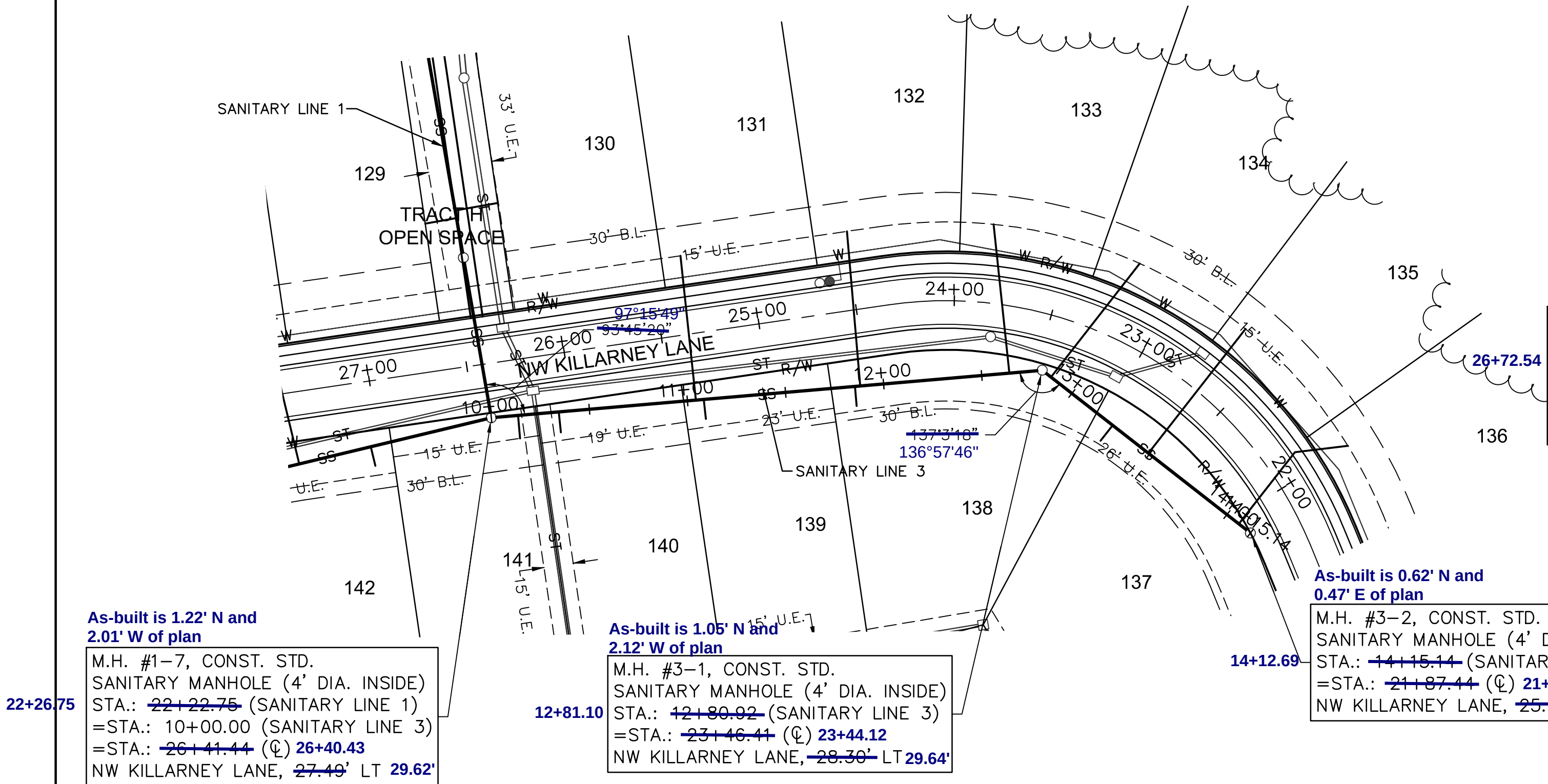
Date Surveyed: 04-20-2020



REVISIONS



SHEET
C210



NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"x4" PVC WYE, 4"PVC 45° BEND, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.

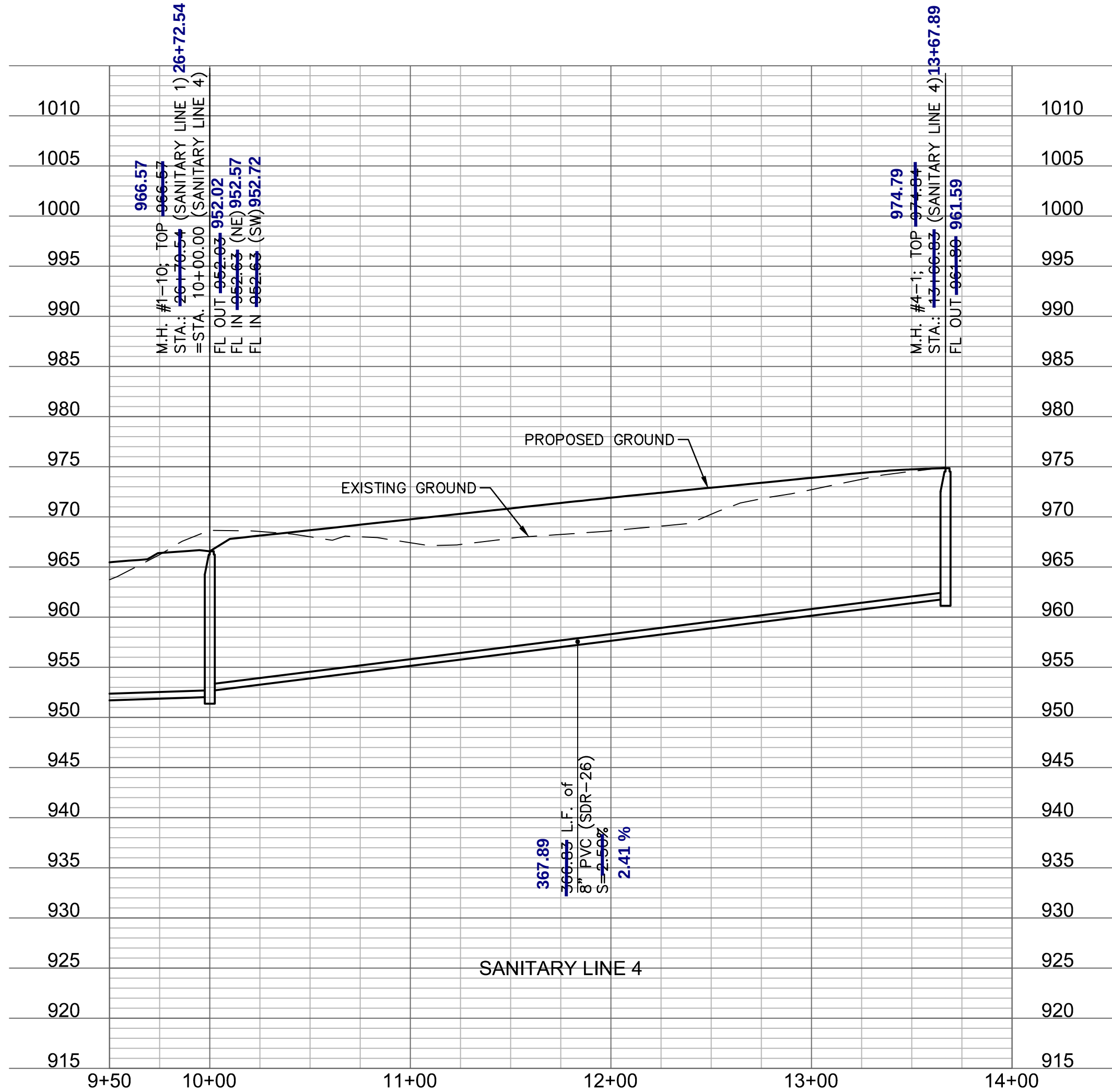
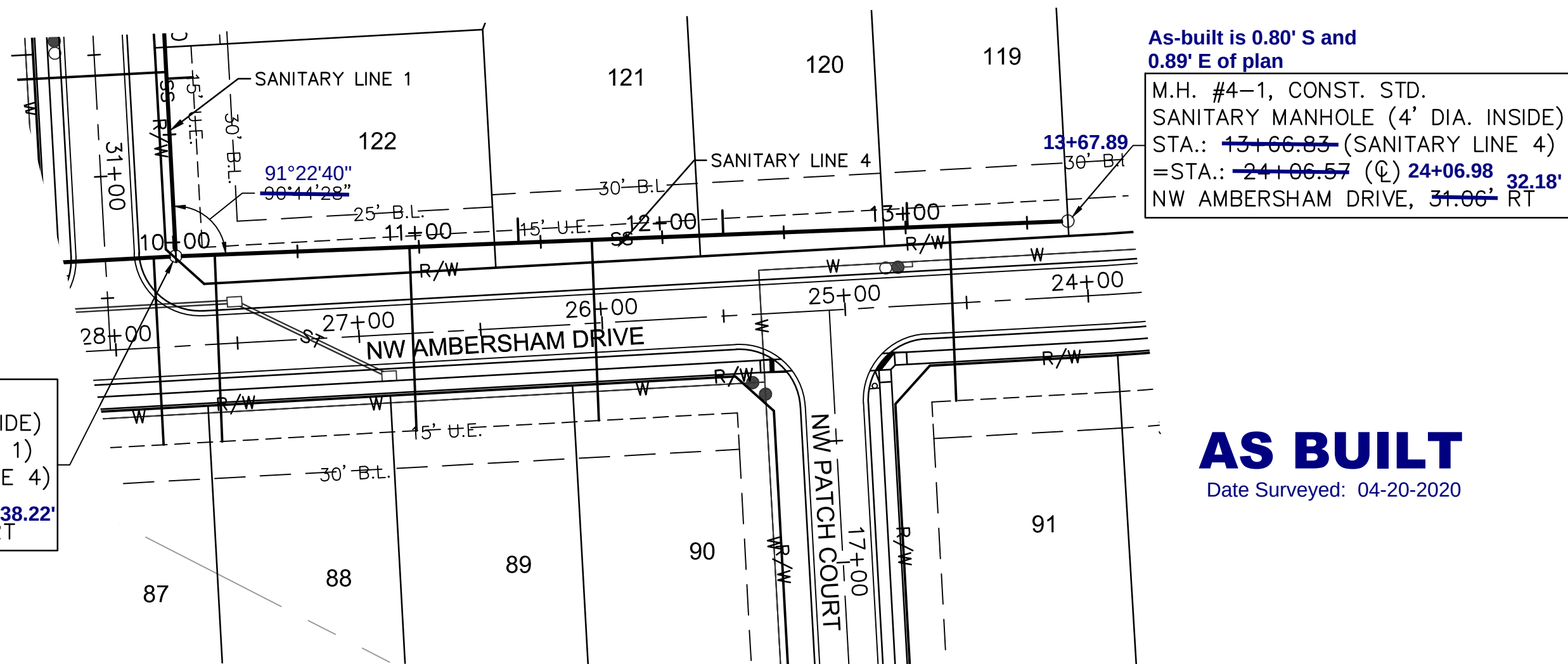
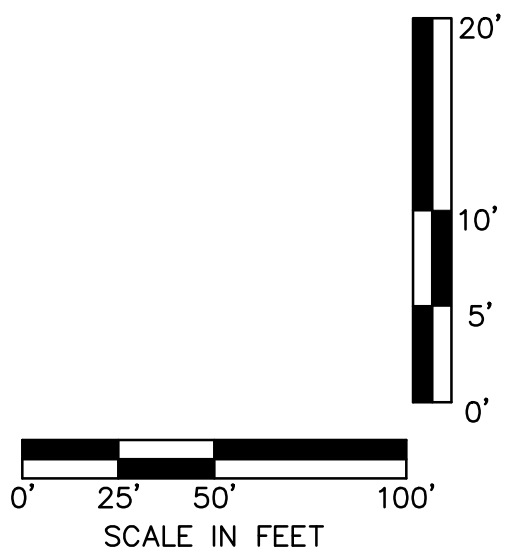
REFER TO SHEET C219 FOR SANITARY DESIGN AND LATERAL INSTALLATION DETAILS.

MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.

SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE. IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.

TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARDS LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C220) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

NOTES:
CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 36" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.



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NO. 00182
300 E. MAIN ST., SUITE 100
NORTH KANSAS CITY, MO 64116
TEL. 816.861.1177
WWW.OLSSON.COM

STATE OF MISSOURI
JULIE ELAINE SELLERS
Professional Engineer
NUMBER PE-2017000367
11/1/2020

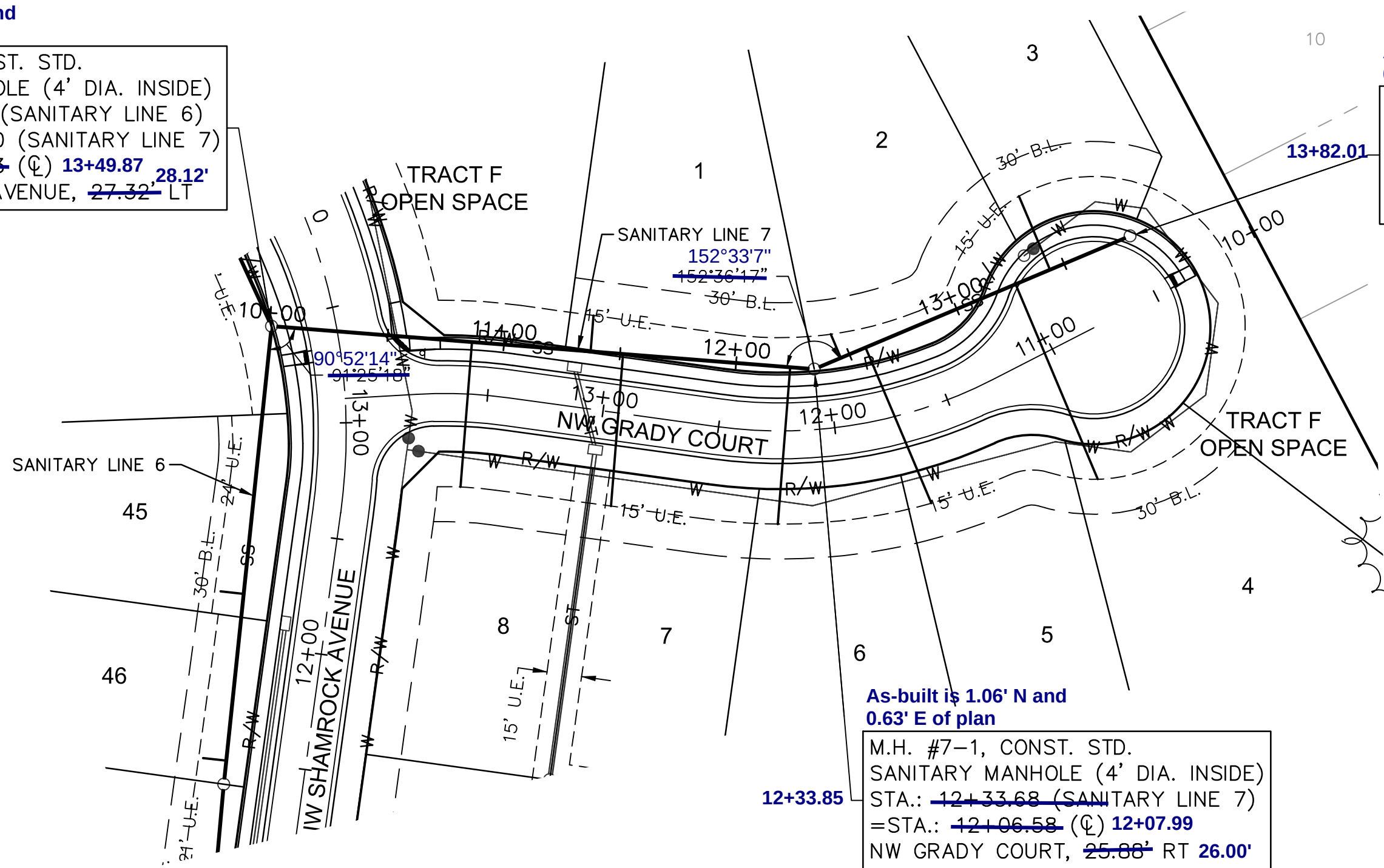
BY: _____
NO. REV. _____
DATE _____
REVISIONS DESCRIPTION

2019
SANITARY SEWER PLAN & PROFILE
SANITARY SEWER PLANS
WOODSIDE RIDGE
FIRST PLAT
LEE'S SUMMIT, MO

drawn by: _____ D.A.H.O.
checked by: _____ J.E.S.
designed by: _____ S.M.S.
QA/QC by: _____ M.G.D.
project no.: A18-1140
date: 2019.03.12

SHEET C211

As-built is 0.09' N and
2.31' E of plan
M.H. #6-2, CONST. STD.
SANITARY MANHOLE (4' DIA. INSIDE)
STA.: ~~13+62.30~~ (SANITARY LINE 6)
=STA.: 10+00.00 (SANITARY LINE 7)
=STA.: ~~13+47.43~~ (C) ~~13+49.87~~ ~~28.12'~~
NW SHAMROCK AVENUE, ~~27.32'~~ LT



As-built is 0.14' N and
0.58' W of plan
M.H. #7-2, CONST. STD.
SANITARY MANHOLE (4' DIA. INSIDE)
STA.: ~~13+80.79~~ (SANITARY LINE 7)
=STA.: ~~10+48.14~~ (C) ~~10+48.25~~
NW GRADY COURT, ~~28.66'~~ RT ~~27.42'~~

As-built is 1.71' N and
10.51' W of plan
M.H. #10-2, CONST. FLAT TOP
SANITARY MANHOLE (4' DIA. INSIDE)
STA.: ~~11+16.84~~ (SANITARY LINE 10)
N: ~~1,003,097.0286~~ ~~1003098.74'~~
E: ~~2,812,246.2060~~ ~~2812235.70'~~

EX MH 28-100, CONNECT TO EXISTING
SANITARY MANHOLE (4' DIA. INSIDE)
STA.: 15+03.11 (EX SANITARY LINE 1)
N: 1,003,031.7870
E: 2,812,321.6620

NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN
8"x4" PVC WYE, 4"PVC 45° BEND, AND THE APPROPRIATE
LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN)
AND CAP.

REFER TO SHEET C219 FOR SANITARY DESIGN AND LATERAL
INSTALLATION DETAILS.

MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS
CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.

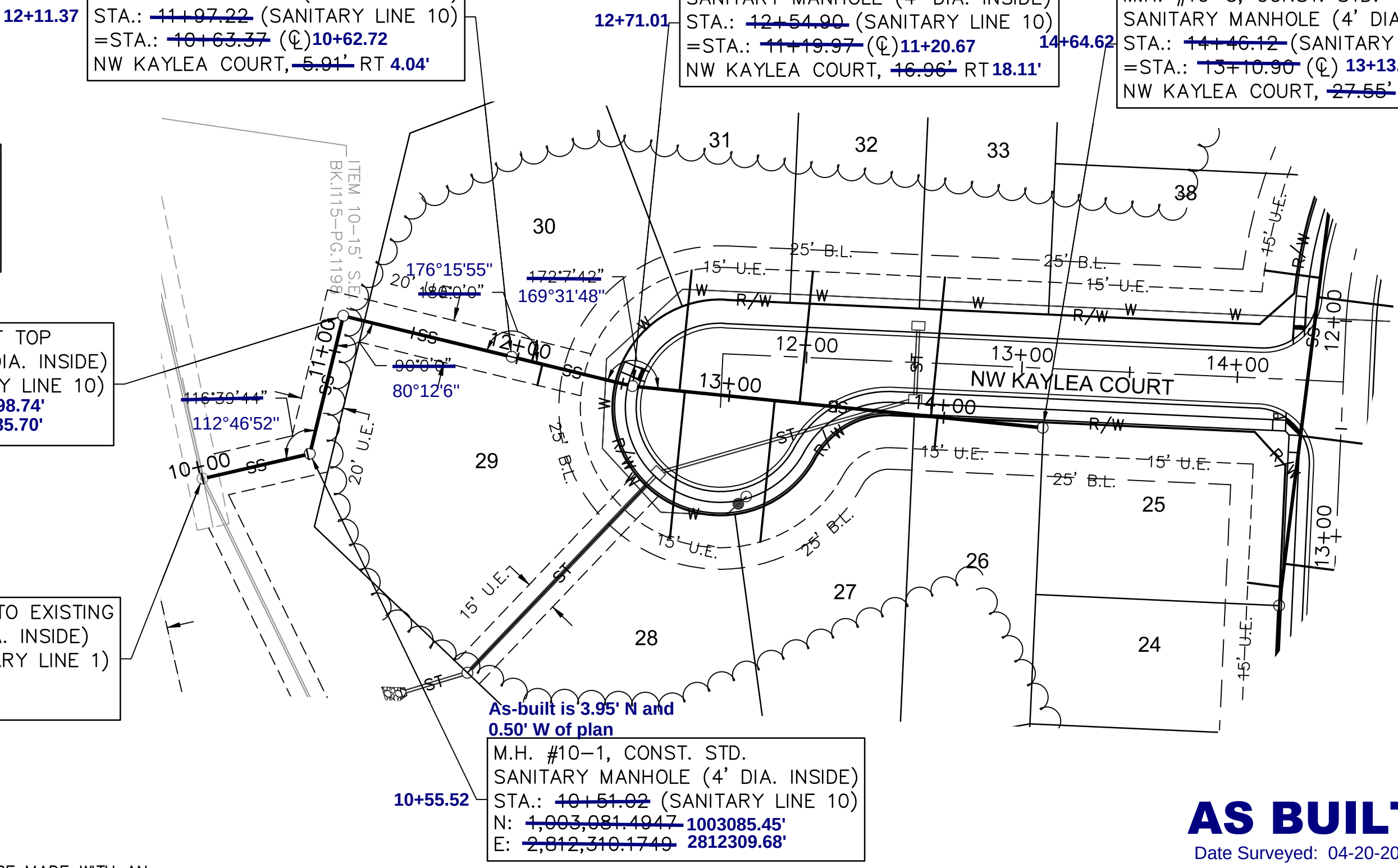
SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE, IF RISER
IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS
OTHERWISE NOTED.

TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH
STANDARDS LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET
C220) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

As-built is 0.56' S and
1.90' W of plan
M.H. #10-3, CONST. STD.
SANITARY MANHOLE (4' DIA. INSIDE)
STA.: ~~11+97.22~~ (SANITARY LINE 10)
=STA.: ~~10+63.37~~ (C) ~~10+62.72~~
NW KAYLEA COURT, ~~5.01'~~ RT ~~4.04'~~

As-built is 0.65' N and
1.18' E of plan
M.H. #10-4, CONST. STD.
SANITARY MANHOLE (4' DIA. INSIDE)
STA.: ~~12+54.90~~ (SANITARY LINE 10)
=STA.: ~~11+19.97~~ (C) ~~11+20.67~~
NW KAYLEA COURT, ~~16.06'~~ RT ~~18.11'~~

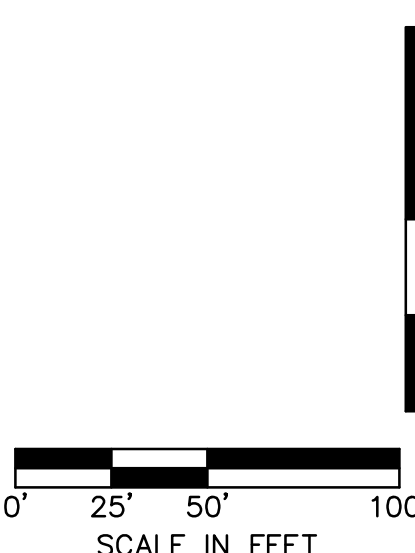
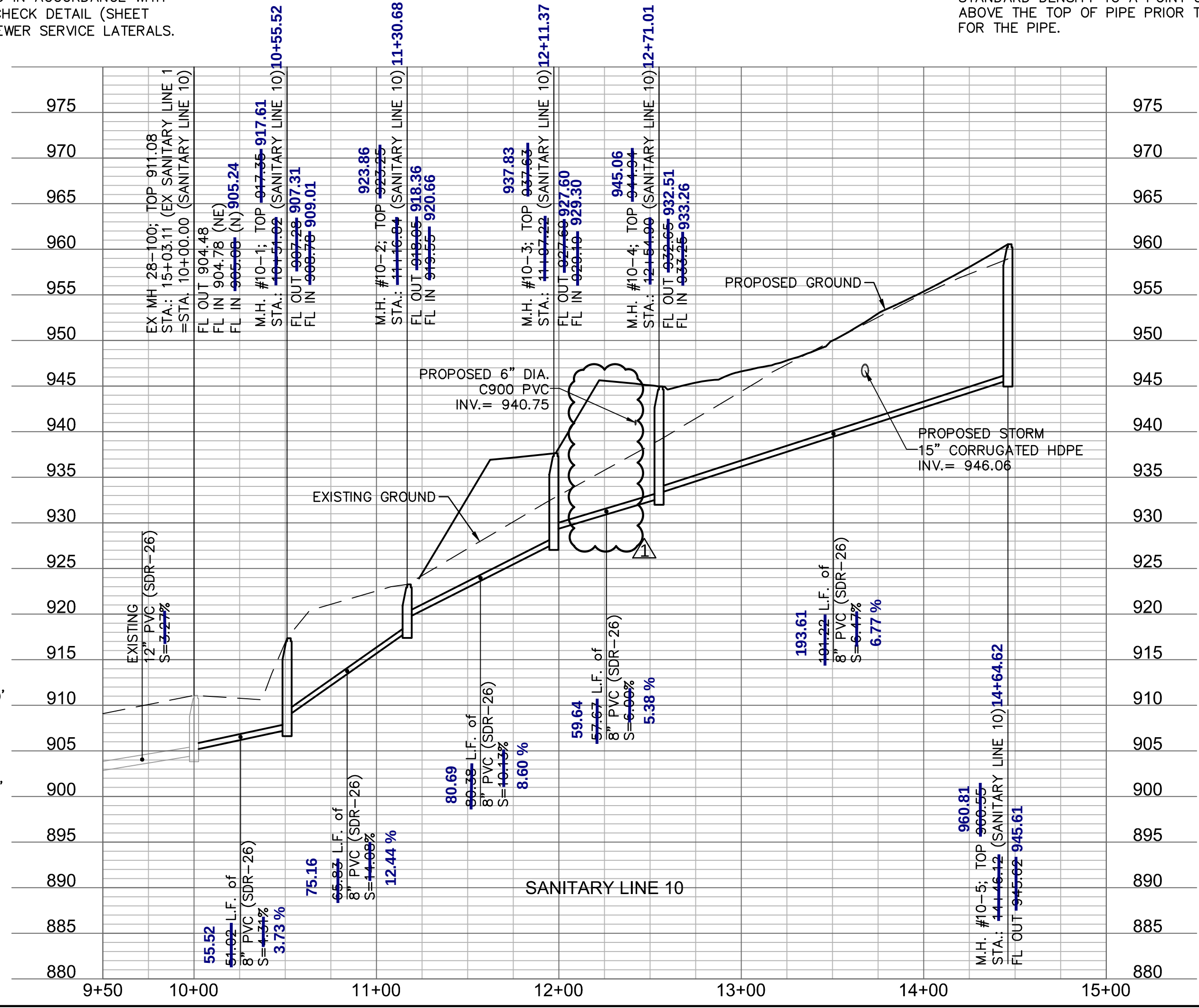
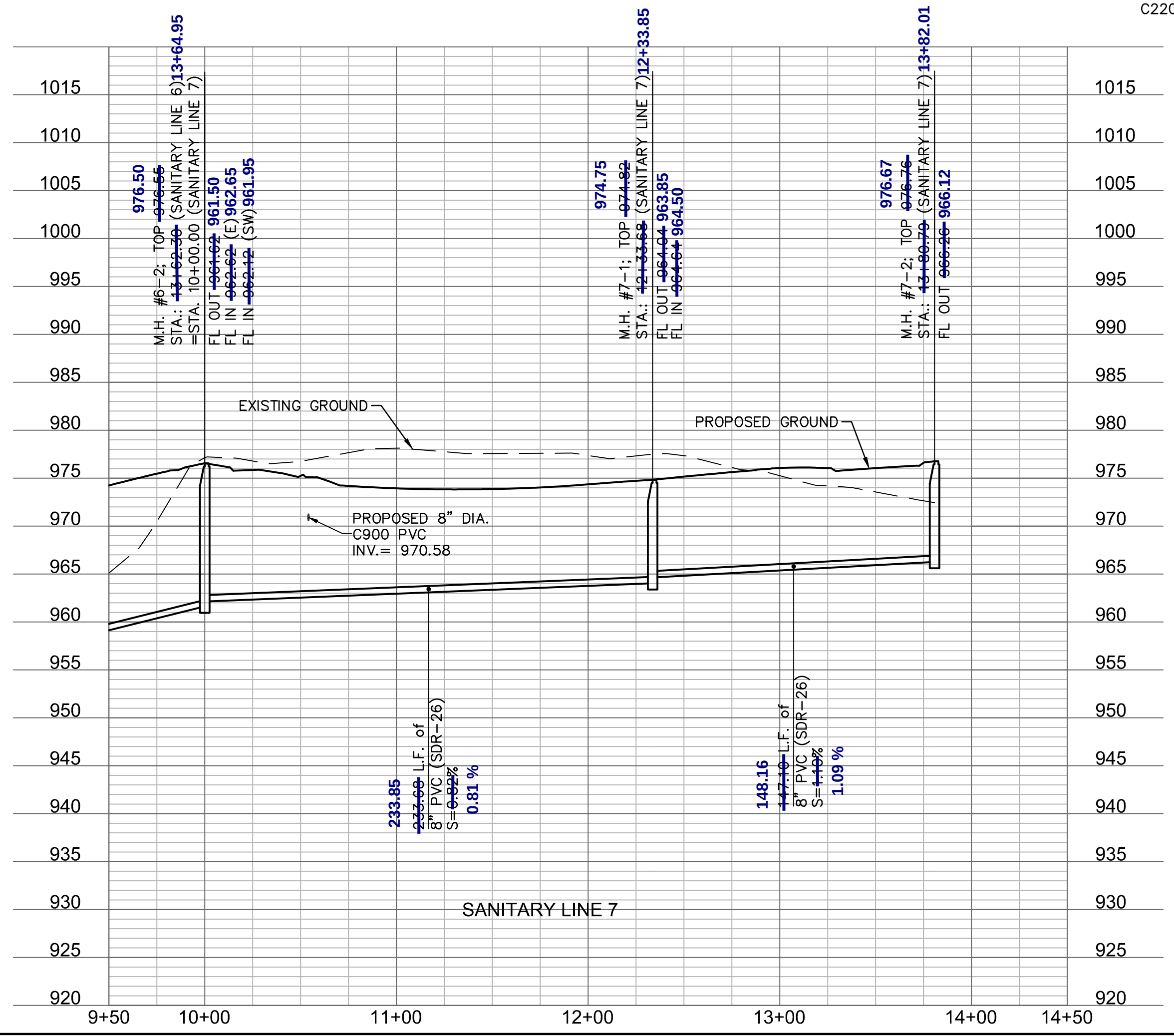
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1.42' E of plan
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SANITARY MANHOLE (4' DIA. INSIDE)
STA.: ~~11+46.12~~ (SANITARY LINE 10)
=STA.: ~~13+10.90~~ (C) ~~13+13.98~~
NW KAYLEA COURT, ~~27.55'~~ RT ~~28.84'~~



As-built is 3.95' N and
0.50' W of plan
M.H. #10-1, CONST. STD.
SANITARY MANHOLE (4' DIA. INSIDE)
STA.: ~~10+51.92~~ (SANITARY LINE 10)
N: ~~1,003,081.4947~~ ~~1003085.45'~~
E: ~~2,812,310.1740~~ ~~2812309.68'~~

AS BUILT
Date Surveyed: 04-20-2020

NOTES:
CONTRACTOR SHALL FILL AND COMPACT TO 95%
STANDARD DENSITY TO A POINT 36" MINIMUM
ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION
FOR THE PIPE.



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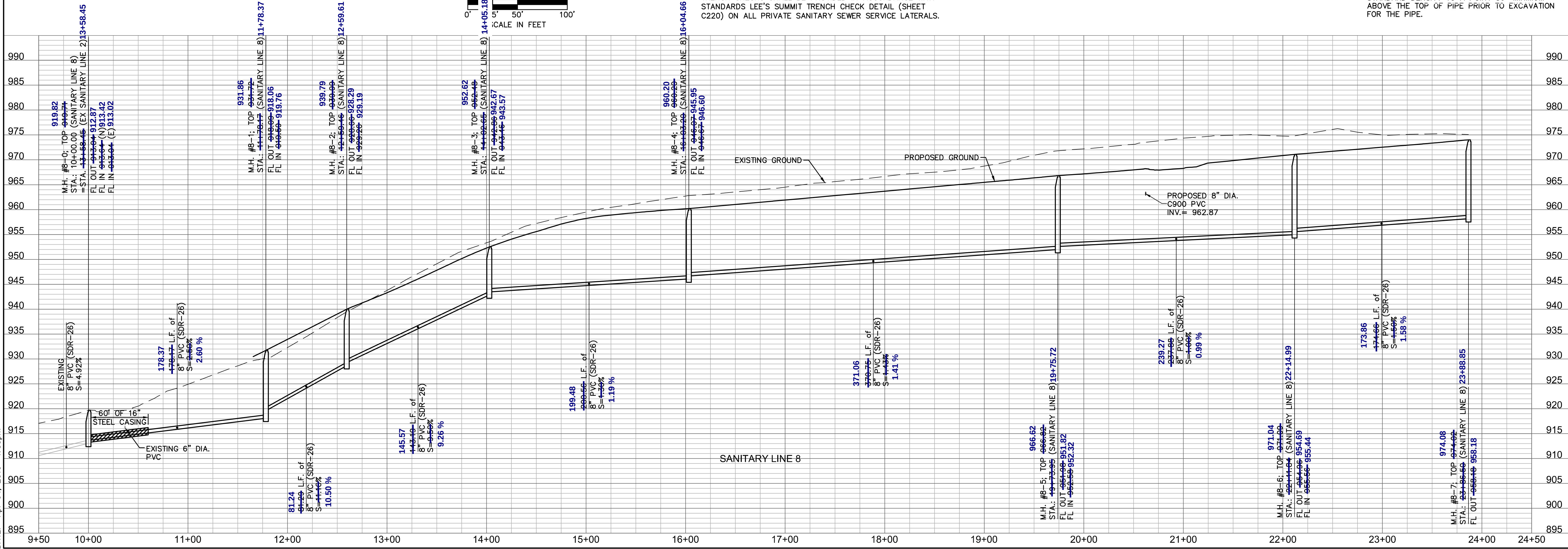
NSI Certified of Authority #031892
300 RUPPING ST. SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.861.1177
WWW.OLSSON.COM

STATE OF MISSOURI
JULIE ELAINE
SELLERS
Professional Engineer
NUMBER
PE-2017000387
11/1/2020

BY
NO. REV. DATE
03/12/2019
REVISIONS DESCRIPTION
REVISED PER CITY COMMENTS

SANITARY SEWER PLAN & PROFILE
SANITARY SEWER PLANS
WOODSIDE RIDGE
FIRST PLAT
LEE'S SUMMIT, MO
2019

SHEET
C213



olsson

NOT A CONTRACT OF AGENCY #031892
300 E. MAIN ST., SUITE 100
NORTH KANSAS CITY, MO 64116
TEL. 816.861.1177
WWW.OLSSON.COM

STATE OF MISSOURI
JULIE ELAINE
SELLERS
Professional Engineer
NUMBER
PE-2017000367
11/1/2020

BY

NO. REV.

DATE

REVISIONS DESCRIPTION

REVISED PER CITY COMMENTS

REVISED PER SECOND SUBMITTAL CITY COMMENTS

SANITARY SEWER PLAN & PROFILE
SANITARY SEWER PLANS

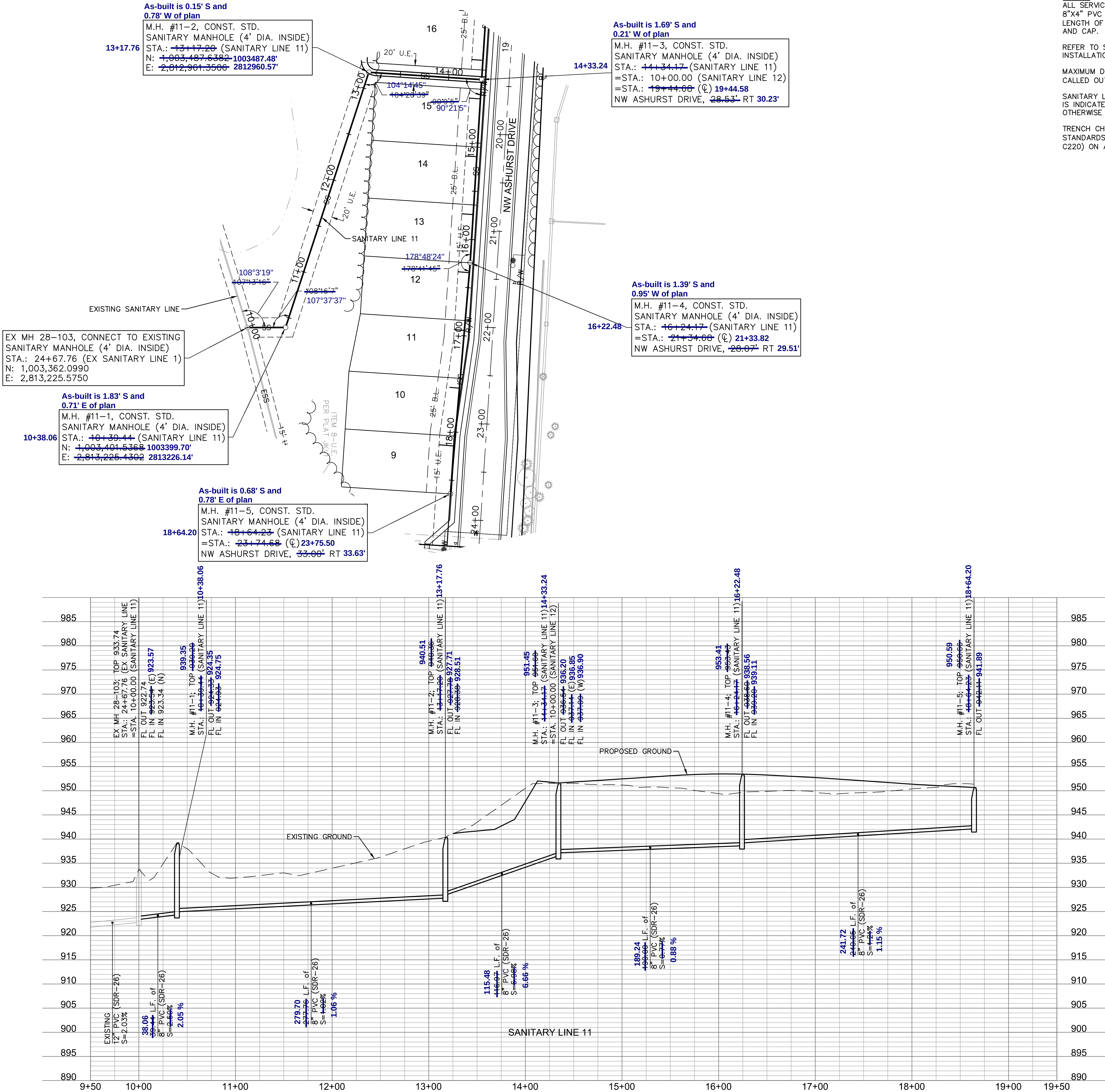
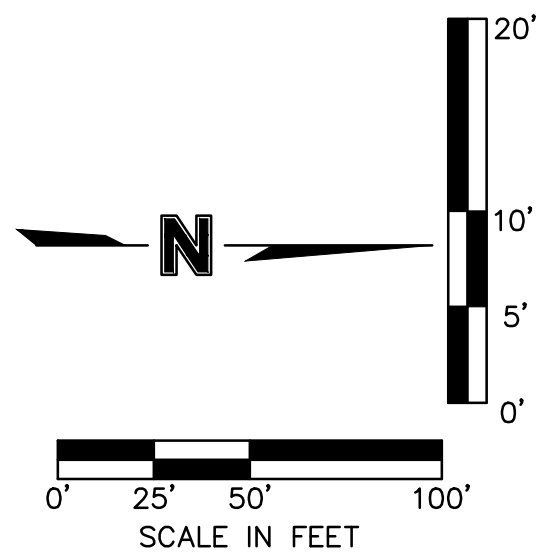
WOODSIDE RIDGE
FIRST PLAT

LEE'S SUMMIT, MO

2019

drawn by: D.A.H.O.
checked by: J.E.S.
designed by: S.M.S.
QA/QC by: M.G.B.
project no.: A18-1140
date: 2019.03.12

SHEET
C214



AS BUILT
Date Surveyed: 04-20-2020

NOTES:
CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 36" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.

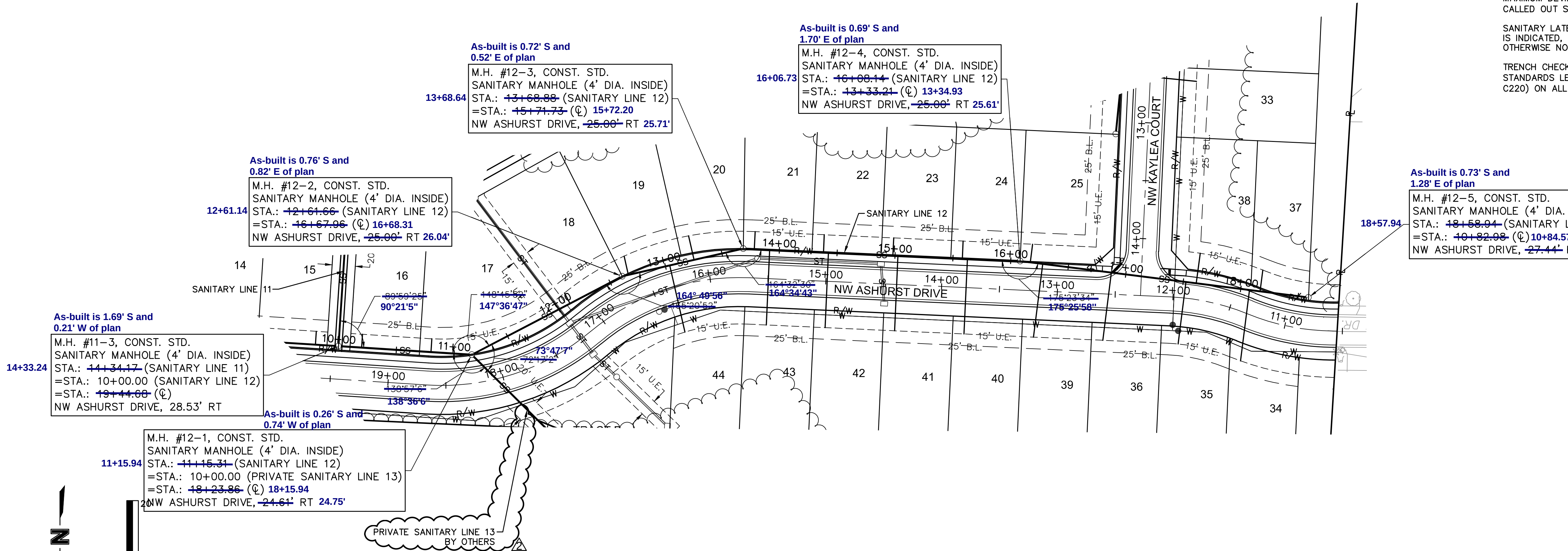
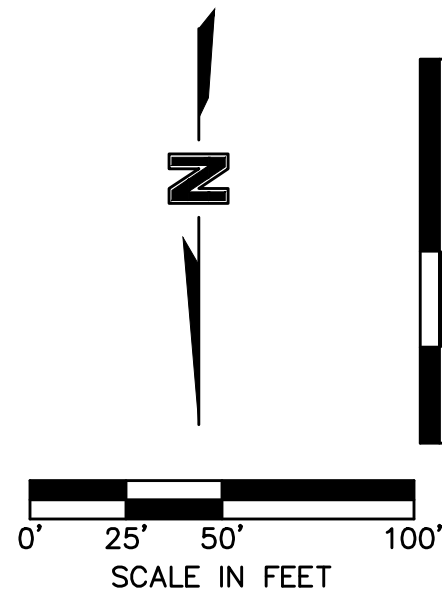
NOTES:
ALL SERVICE LINE CONNECTIONS SHALL BE MADE WITH AN 8"x4" PVC WYE, 4" PVC 45° BEND, AND THE APPROPRIATE LENGTH OF 4" PVC LATERAL (UNLESS OTHERWISE SHOWN) AND CAP.
REFER TO SHEET C219 FOR SANITARY DESIGN AND LATERAL INSTALLATION DETAILS.
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SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE, IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.
TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARDS LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C220) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

SHEET C216	
drawn by: _____ D.A.H.Q. checked by: _____ J.E.S. designed by: _____ S.M.S. QA/QC by: _____ M.G.D. project no.: _____ A18-1140 date: _____ 2019.03.12	
SANITARY SEWER PLAN & PROFILE SANITARY SEWER PLANS WOODSIDE RIDGE FIRST PLAT LEE'S SUMMIT, MO	
2019	
REVISIONS	
NO. REV.	DATE
BY	
REVISIONS DESCRIPTION	

STATE OF MISSOURI
JULIE ELAINE SELLERS
Professional Engineer
NUMBER PE-2017000367
11/17/2020

olsson

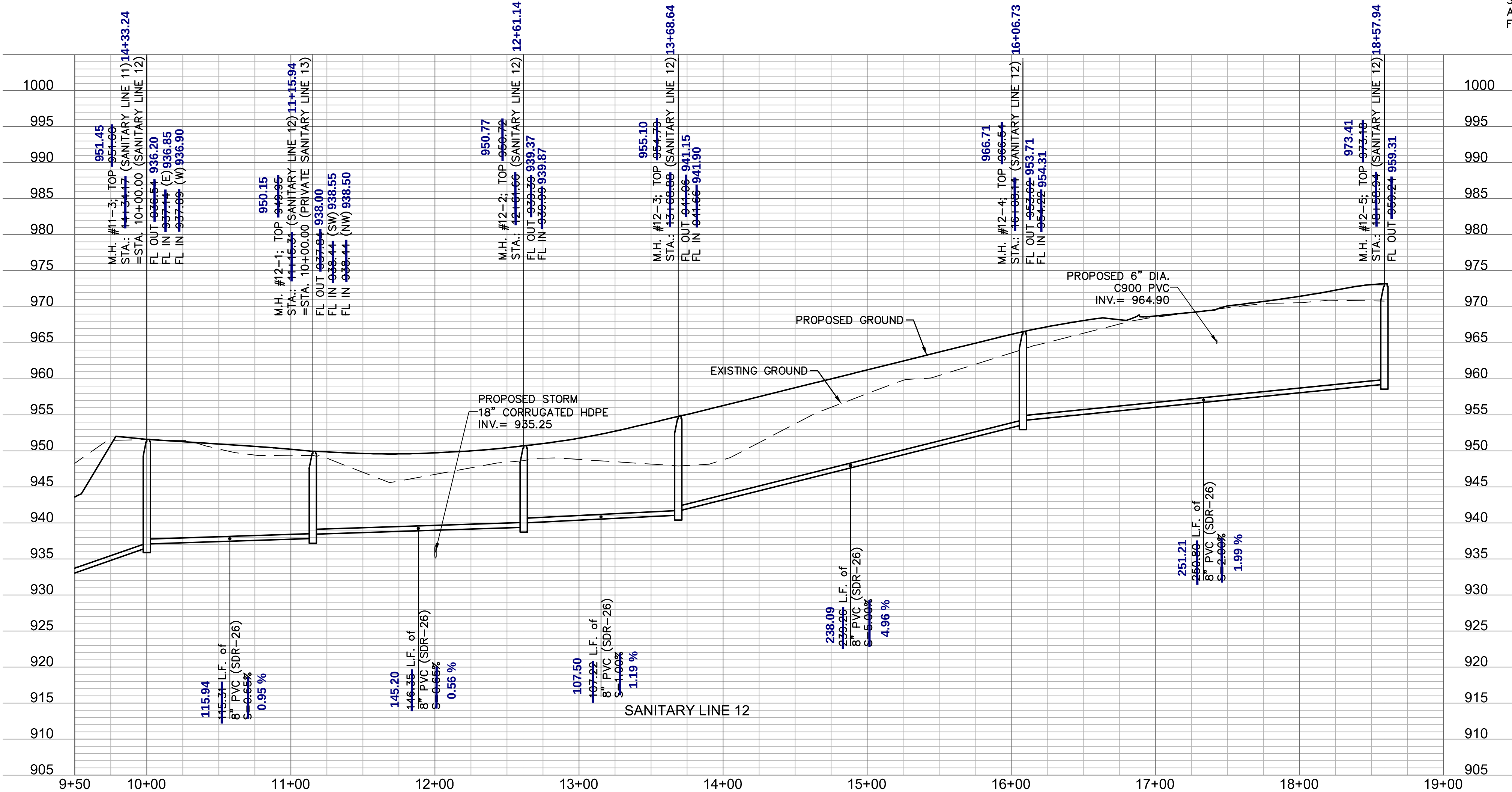
NO. 00000000 of Ashurst at 001892
300 E. BIRLING ST. SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.961.1177
www.olsson.com



AS BUILT
Date Surveyed: 04-20-2020

NOTES:
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NOTES:
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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER
PE-2017000367
11/1/2020

NO. REV. DATE DESCRIPTION

1 4/4/2019 REVISED PER SECOND SUBMITTAL CITY COMMENTS

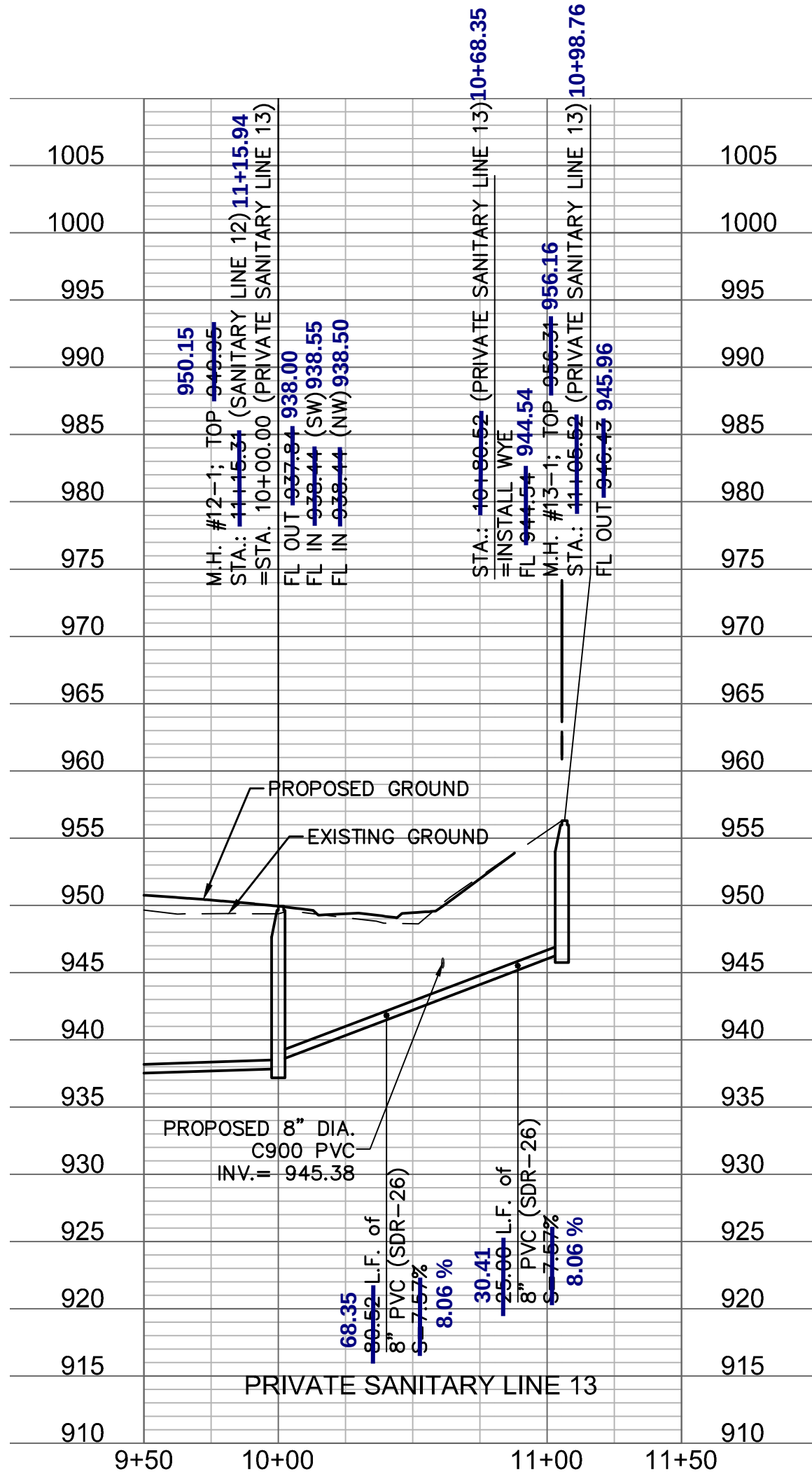
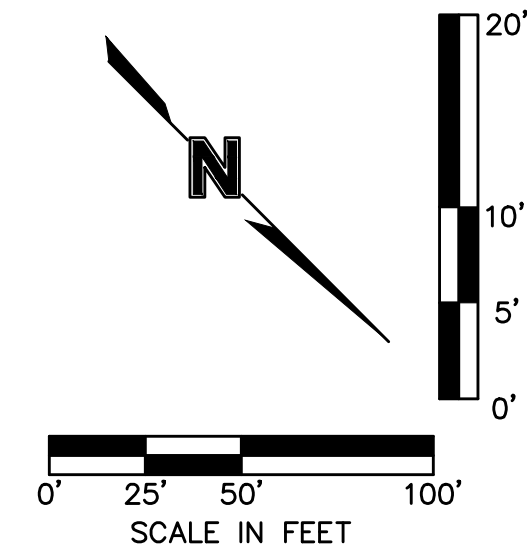
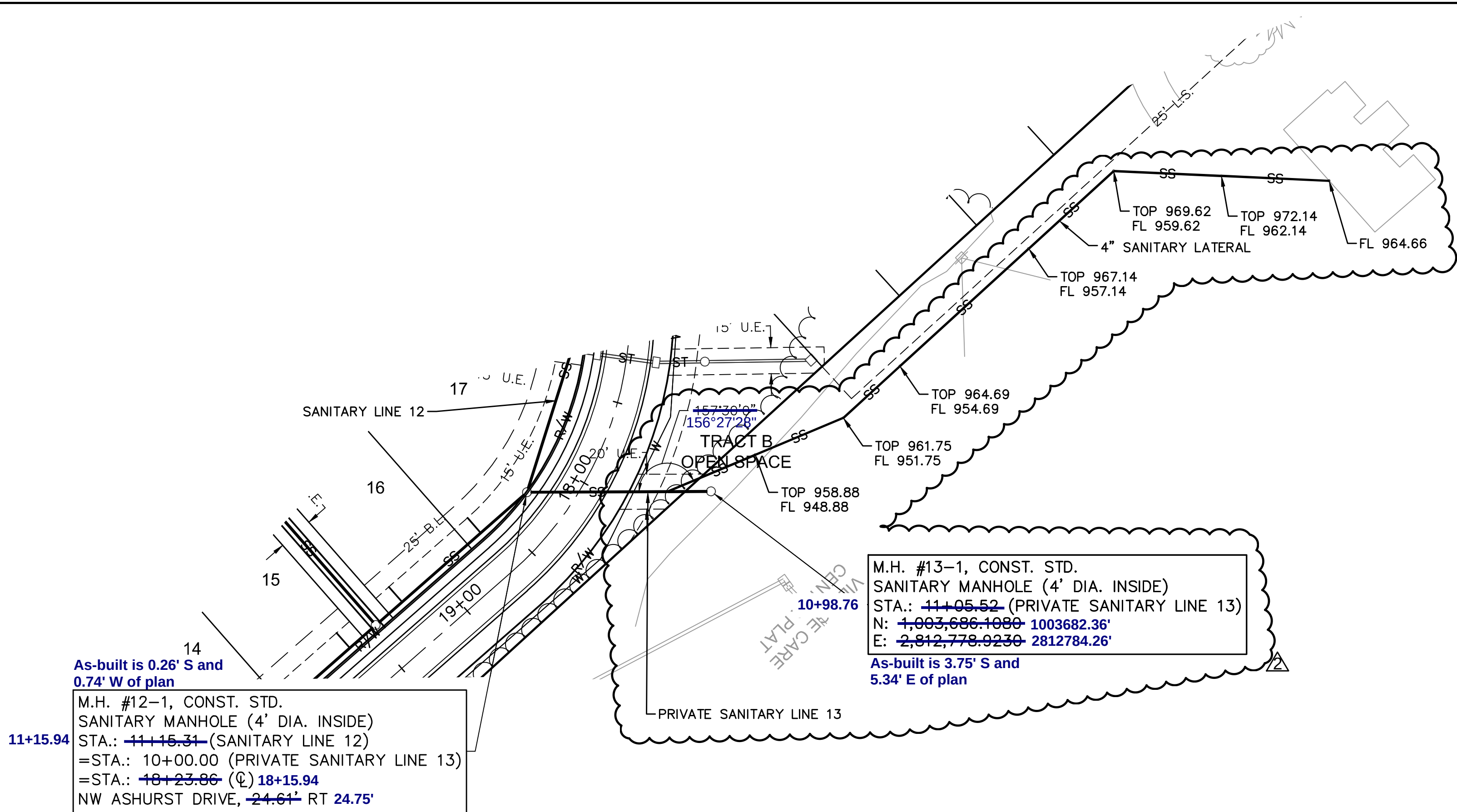
SANITARY SEWER PLAN & PROFILE
SANITARY SEWER PLANS

WOODSIDE RIDGE
FIRST PLAT

LEE'S SUMMIT, MO

drawn by: D.A.H.O.
checked by: J.E.S.
designed by: S.M.S.
QA/QC by: M.G.D.
project no.: A18-1140
date: 2019.03.12

SHEET
C217



NOTES:
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MAXIMUM DEVIATION FROM LATERAL STATION LOCATIONS AS CALLED OUT SHALL BE 2.0' TO AVOID PIPE JOINT.
SANITARY LATERALS ARE DESIGNED @ 2.00% SLOPE, IF RISER IS INDICATED, IS TO BE AT THE SANITARY MAIN, UNLESS OTHERWISE NOTED.
TRENCH CHECKS SHALL BE PROVIDED IN ACCORDANCE WITH STANDARDS LEE'S SUMMIT TRENCH CHECK DETAIL (SHEET C220) ON ALL PRIVATE SANITARY SEWER SERVICE LATERALS.

AS BUILT
Date Surveyed: 04-20-2020

NOTES:
CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 36" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE.

SANITARY SEWER PLAN & PROFILE
SANITARY SEWER PLANS

WOODSIDE RIDGE
FIRST PLAT

LEE'S SUMMIT, MO

drawn by: J.E.S.
checked by: J.E.S.
designed by: S.M.S.
QA/QC by: M.G.D.
project no.: A18-1140
date: 2019.03.12

SHEET
C218

BY

NO. REV.

DATE

REVISIONS DESCRIPTION

REVISED PER SECOND SUBMITTAL CITY COMMENTS

11/17/2020

REVISIONS

STATE OF MISSOURI
JULIE ELAINE
SELLERS
NUMBER
PE-2017000367
11/17/2020

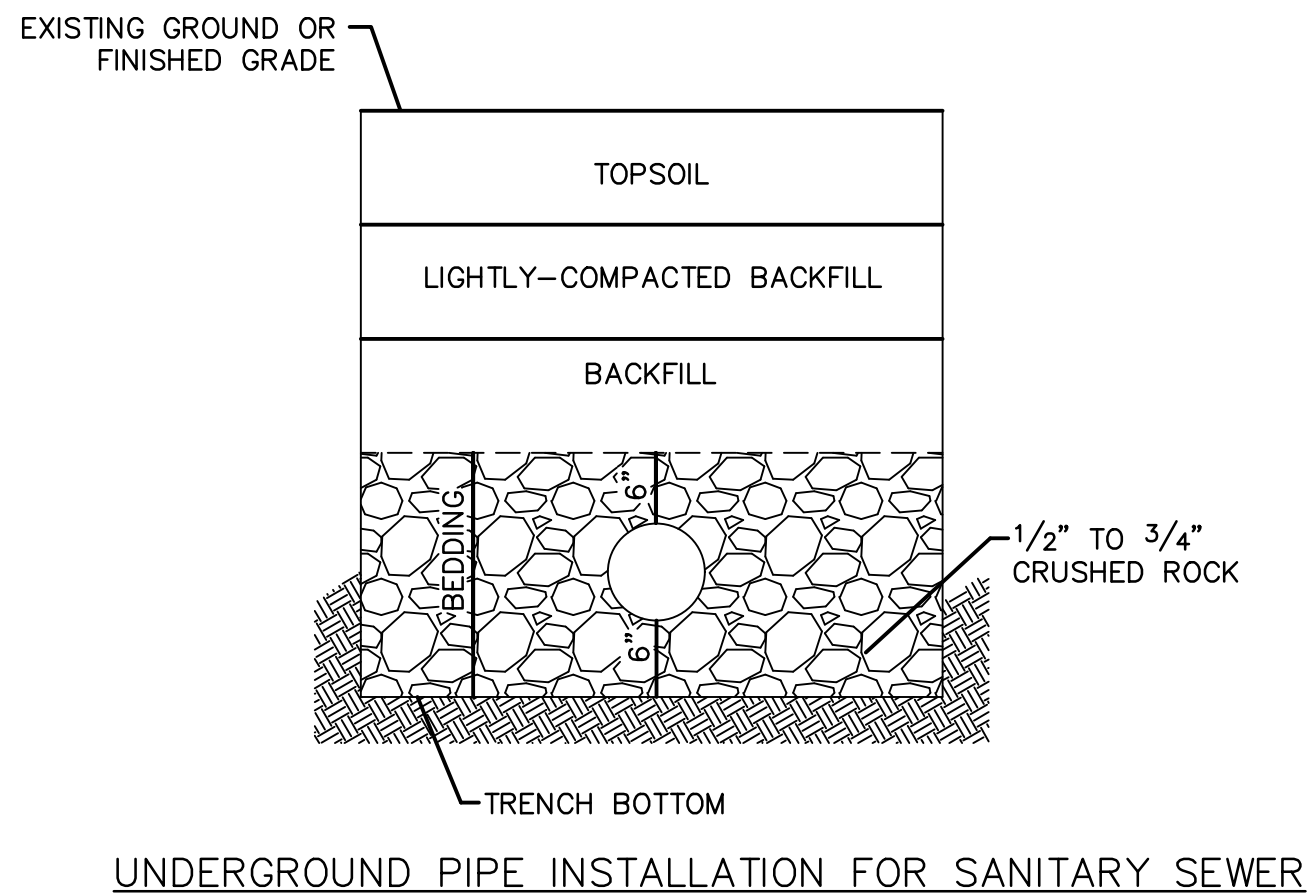
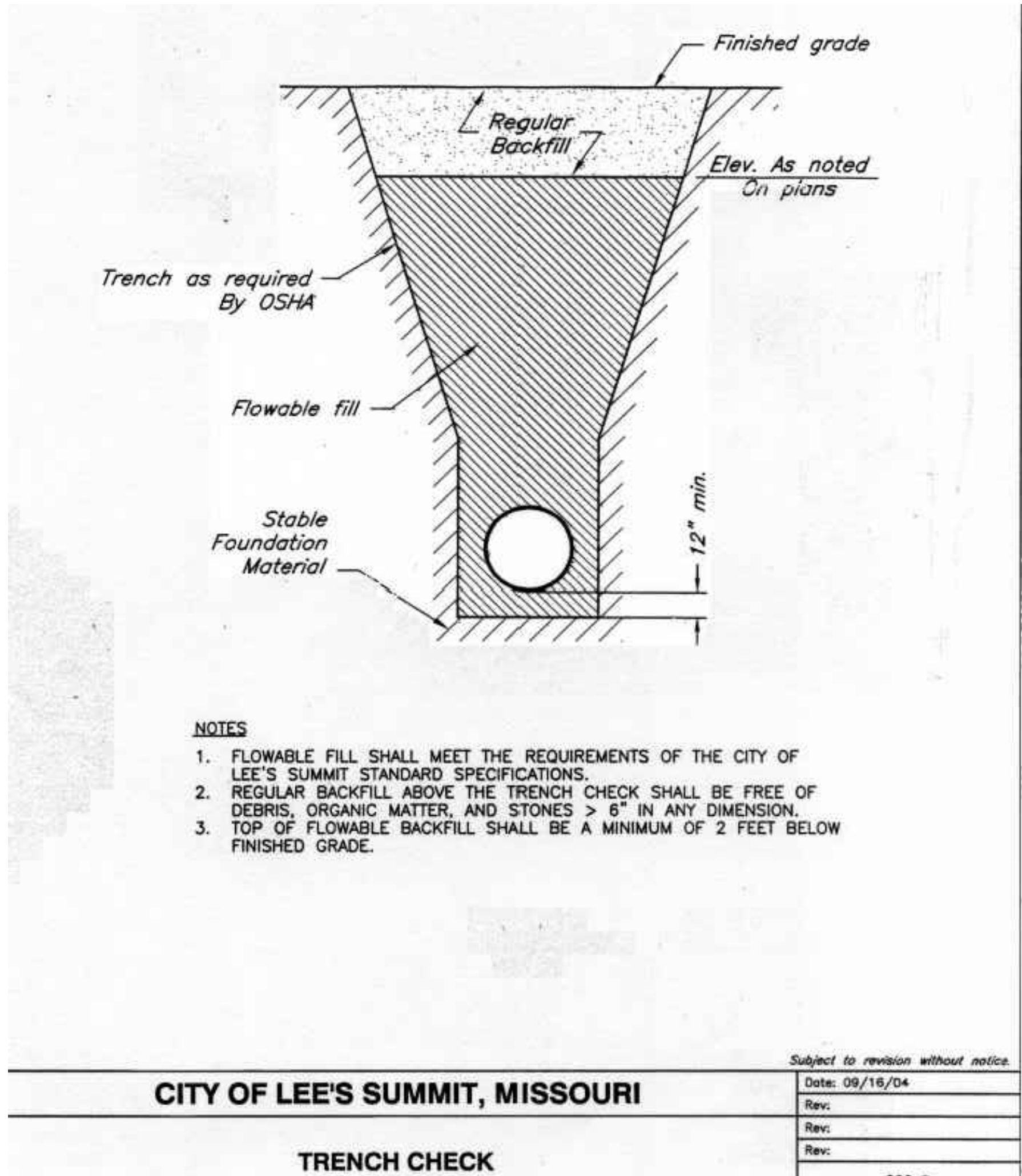
www.olsson.com
TEL. 816.961.1177
NCS, a Division of Ashurst, at 101.092
300 E. Main Street, Suite 100
North Kansas City, MO 64116

Sanitary Sewer Laterals						
Lot Number	Lateral Station	Lateral Length	Riser	Flowline at Main	Flowline at End of Lateral	Minimum Servicable Floor Elevation
		(ft)	(ft)	(ft)	(ft)	(ft)
1	11+37.37	15.49	0.0	962.7	964.0	966.77
2	12+46.01	11.06	0.0	964.2	965.4	968.21
3	13+43.41	34.27	0.0	965.3	966.9	969.74
4	13+27.41	90.82	0.0	965.1	967.9	970.70
5	12+57.54	72.54	0.0	964.3	966.8	969.56
6	12+23.28	67.54	0.0	963.4	965.7	968.51
7	11+51.34	65.47	0.0	962.8	965.1	967.88
8	10+86.31	62.38	0.0	962.2	964.5	967.29
9	18+14.54	16.02	0.0	941.5	942.8	945.58
10	17+54.39	10.00	0.0	940.7	941.9	944.73
11	16+94.41	10.49	0.0	940.0	941.2	944.02
12	16+34.42	11.72	1.0	939.3	941.5	944.30
13	15+74.15	11.81	3.0	938.2	942.3	945.15
14	15+14.15	11.67	2.0	937.7	940.9	943.70
15	14+54.15	11.52	2.0	937.2	940.4	943.24
16	10+20.00	11.47	1.0	937.2	939.4	942.18
17	10+80.00	11.47	0.0	937.6	938.8	941.59
18	12+10.85	10.30	0.0	939.0	940.2	943.02
19	12+67.16	16.61	0.0	940.0	941.3	944.13
20	13+25.26	21.27	0.0	940.6	942.0	944.81
21	13+78.44	15.09	1.0	942.1	944.4	947.18
22	14+38.14	15.07	1.0	945.1	947.4	950.16
23	14+98.14	15.05	1.0	948.1	950.4	953.16
24	15+58.14	15.02	1.0	951.1	953.4	956.16
25	16+16.90	15.75	1.0	954.4	956.7	959.45
26	13+97.13	15.18	2.0	942.4	945.7	948.51
27	13+21.13	65.88	0.0	937.5	939.8	942.65
28	12+79.26	68.43	0.0	934.8	937.2	939.99
29	12+11.84	10.00	2.0	930.1	933.2	936.02
30	12+06.84	10.00	4.0	929.8	934.9	937.68
31	12+76.72	56.19	0.0	934.7	936.8	939.58
32	13+32.79	61.37	0.0	938.3	940.5	943.31
33	13+93.98	64.77	1.0	942.2	945.5	948.32
34	18+07.57	61.60	1.0	958.2	961.4	964.18
35	17+52.29	53.87	0.0	957.1	959.1	961.94
36	16+87.48	58.85	0.0	955.8	957.9	960.75
37	18+16.71	18.52	1.0	958.4	960.7	963.50
38	17+61.32	26.14	1.0	957.2	959.7	962.55
39	16+27.67	63.64	0.0	954.6	956.8	959.64
40	15+62.50	64.98	0.0	951.3	953.6	956.40
41	15+02.50	64.96	0.0	948.3	950.6	953.40
42	14+42.50	64.93	0.0	945.3	947.6	950.40
43	13+91.65	64.91	0.0	942.8	945.1	947.86
44	13+03.74	58.94	1.0	938.4	941.5	944.32
45	12+46.82	10.00	5.0	955.3	961.4	964.17
46	11+74.86	10.00	2.0	951.7	954.8	957.64
47	10+81.79	10.25	1.0	948.8	951.0	953.79
48	17+90.24	78.50	3.0	949.8	955.3	958.07
49	18+62.05	10.00	3.0	951.3	955.4	958.21
50	18+67.05	10.00	3.0	951.3	955.5	958.26
51	17+34.10	35.25	4.0	948.8	954.4	957.18
52	16+65.55	16.53	3.0	947.5	951.8	954.60
53	15+77.14	12.84	1.0	945.8	948.0	950.81
54	15+05.97	10.80	1.0	945.0	947.2	949.99
55	14+33.99	10.00	1.0	944.2	946.4	949.18
56	13+62.02	10.00	1.0	943.4	945.6	948.39
57	12+90.56	10.00	0.0	942.6	943.8	946.62
58	12+17.02	11.69	2.0	941.6	944.8	947.56
59	10+07.50	13.64	2.0	942.7	946.0	948.78
60	10+82.60	18.33	1.0	945.2	947.6	950.40
61	11+54.58	16.54	1.0	947.6	950.0	952.76
62	11+65.59	63.76	0.0	948.0	950.3	953.09
63	10+93.62	61.97	0.0	945.6	947.9	950.66
64	12+58.00	75.21	1.0	941.8	945.3	948.11
65	13+05.36	74.85	0.0	942.8	945.3	948.08
66	13+77.33	72.84	0.0	943.6	946.0	948.83
67	14+49.30	70.82	0.0	944.4	946.8	949.58
68	15+21.27	68.81	0.0	945.2	947.5	950.34
69	19+40.78	10.00	1.0	955.7	957.9	960.72
70	18+63.63	10.00	1.0	954.2	956.4	959.22
71	17+88.64	10.00	1.0	953.4	955.6	958.39
72	16+80.47	10.00	1.0	952.2	954.4	957.20
73	34+28.11	10.00	0.0	958.2	959.4	962.24
74	33+66.59	20.73	0.0	957.6	959.0	961.78
75	32+96.09	17.26	0.0	956.8	958.1	960.93
76	32+11.16	14.56	0.0	955.8	957.1	959.93

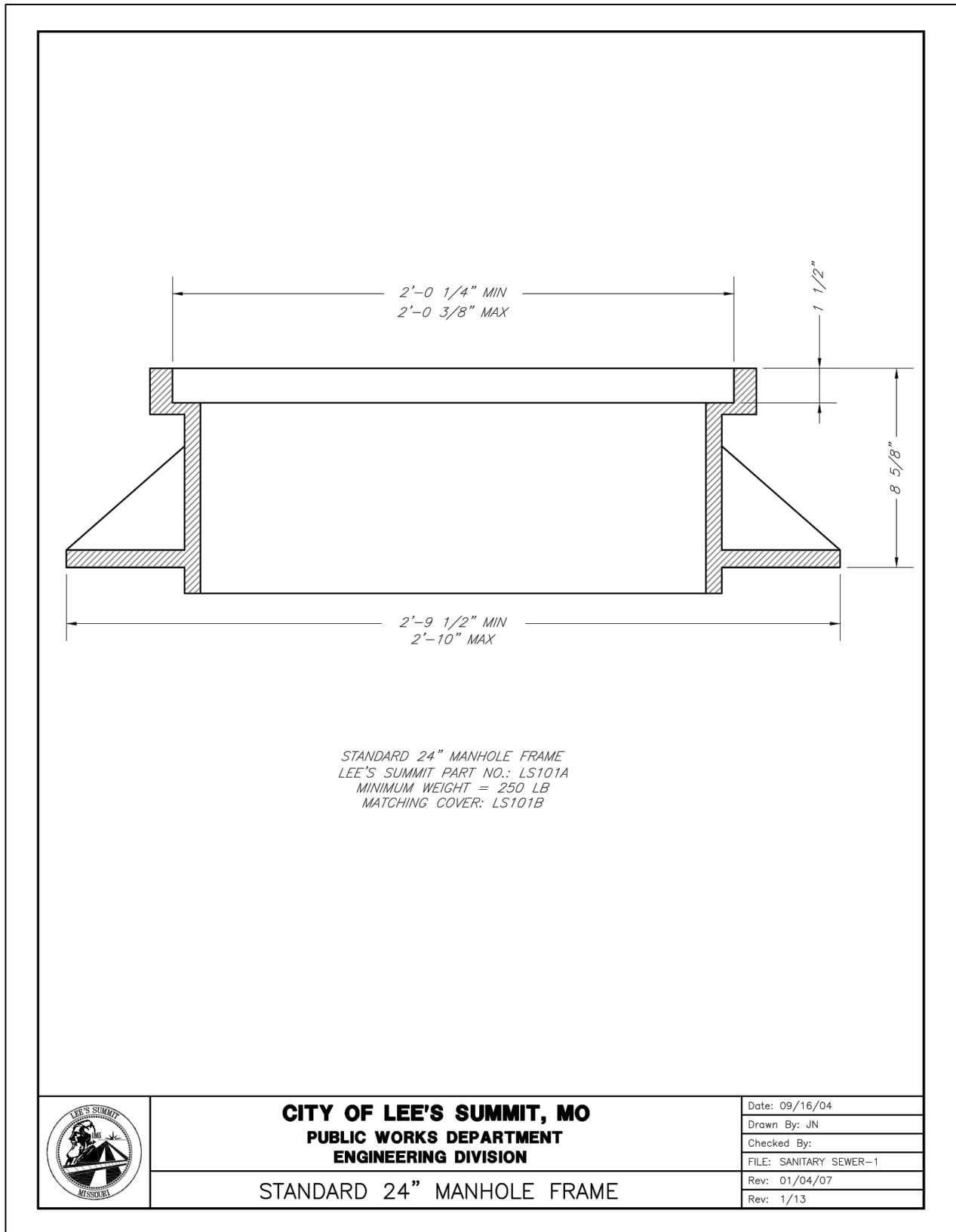
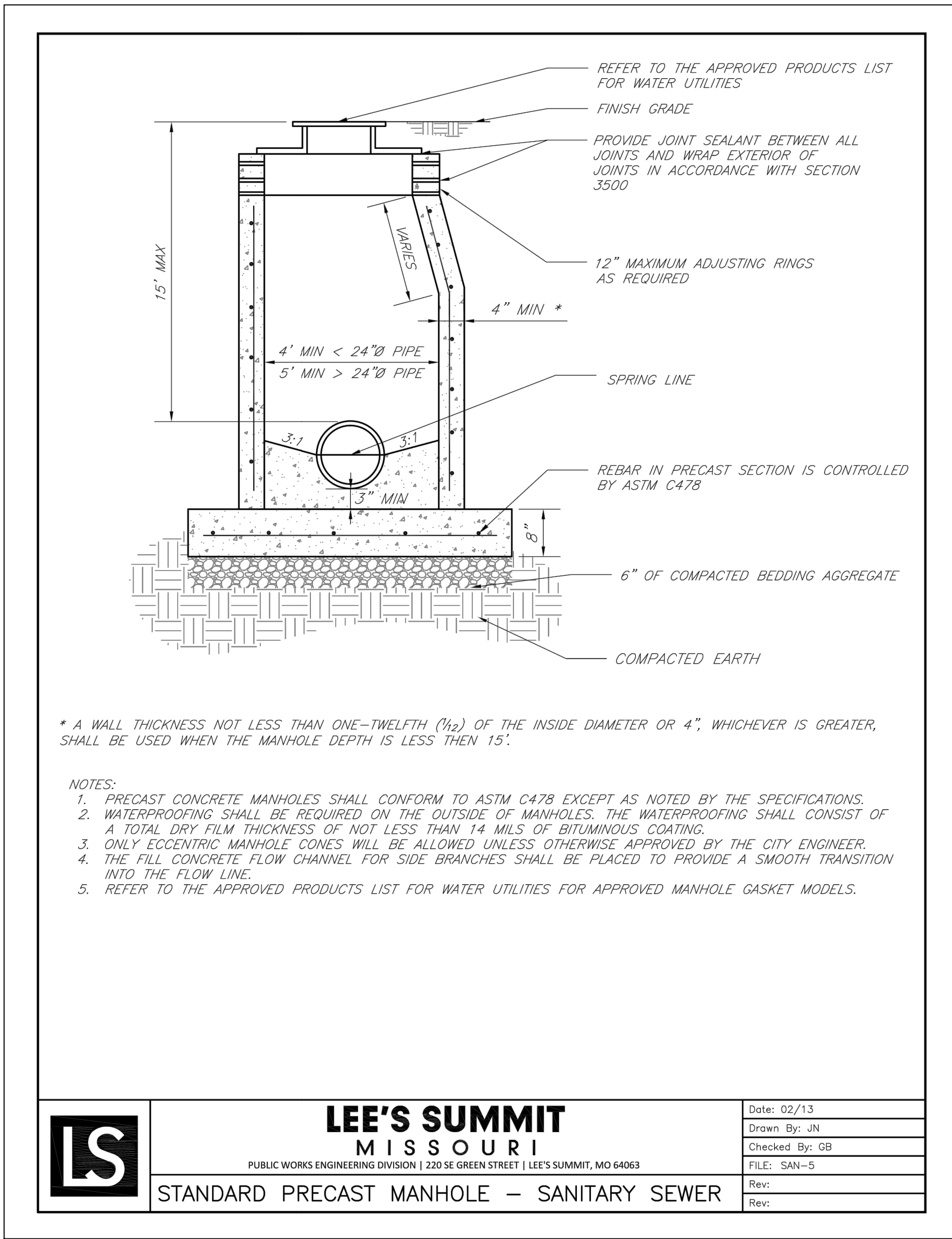
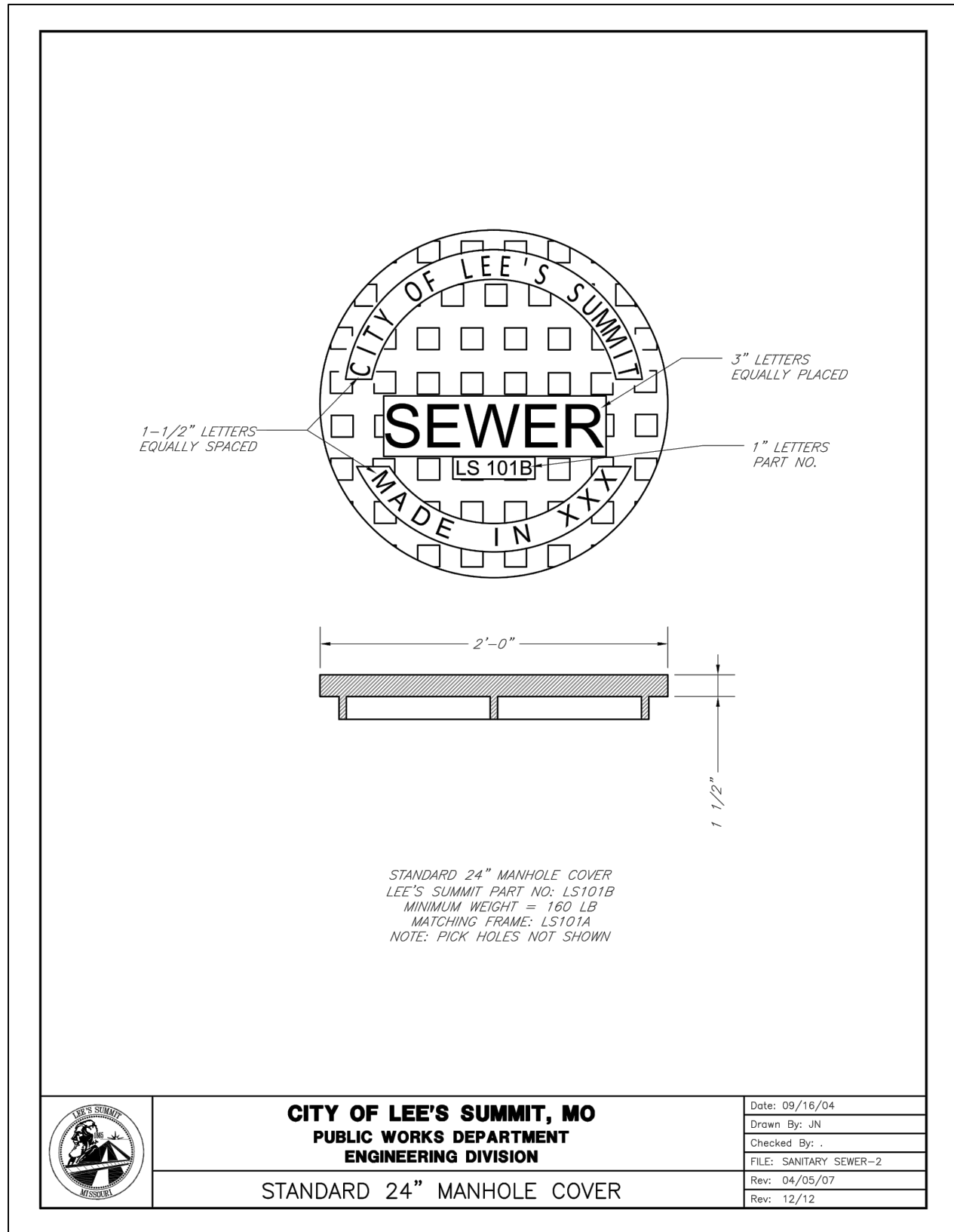
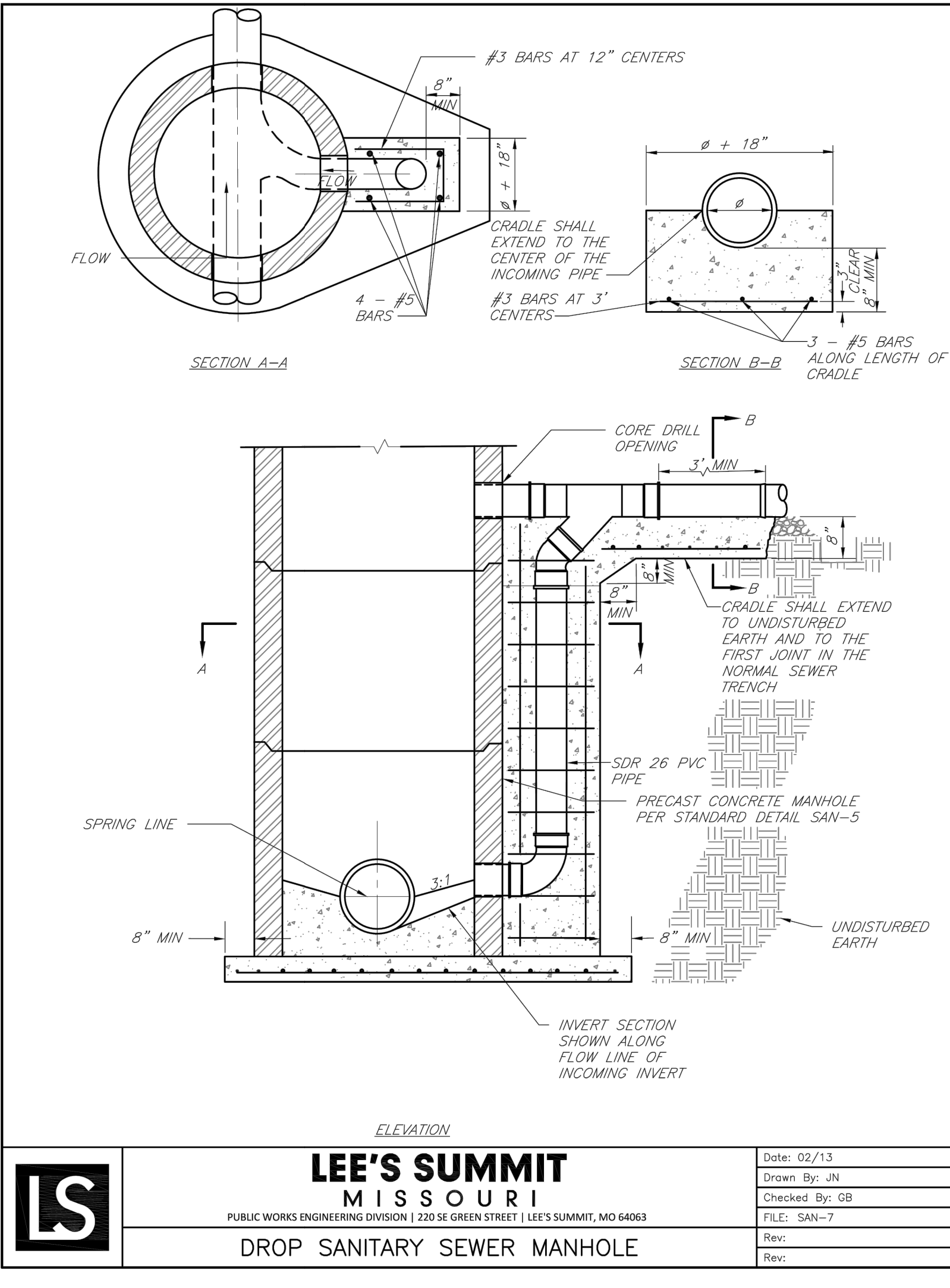
Sanitary Sewer Laterals						
Lot Number	Lateral Station	Lateral Length	Riser	Flowline at Main	Flowline at End of Lateral	Minimum Servicable Floor Elevation
		(ft)	(ft)	(ft)	(ft)	(ft)
77	31+36.17	13.10	0.0	955.4	956.6	959.41
78	30+48.26	13.79	0.0	954.8	956.1	958.86
79	29+44.42	10.00	0.0	953.8	955.0	957.81
80	28+69.45	10.00	0.0	953.3	954.5	957.32
81	30+88.65	67.83	0.0	955.0	957.4	960.20
82	30+44.07	74.32	0.0	954.8	957.2	960.04
83	29+70.49	76.71	0.0	954.0	956.5	959.31
84	28+95.51	77.69	0.0	953.5	956.0	958.84
85	28+20.51	77.45	0.0	953.0	955.6	958.35
86	27+45.51	77.21	0.0	952.5	955.1	957.86
87	26+79.63	76.93	1.0	952.1	955.6	958.40
88	10+16.02	76.72	2.0	952.4	956.9	959.72
89	10+96.00	75.43	1.0	954.4	957.9	960.71
90	11+71.00	74.22	1.0	956.3	959.8	962.57
91	13+17.99	71.86	0.0	960.0	962.4	965.21
92	23+79.00	16.17	4.0	958.1	963.3	966.12
93	23+00.88	15.51	4.0	956.9	962.1	964.93
94	22+21.14	10.00	3.0	955.7	959.8	962.64
95	21+55.52	14.60	3.0	954.4	958.6	961.43
96	19+86.57	15.69	2.0	952.7	956.0	958.79
97	19+17.86	17.34	2.0	951.2	954.5	957.29
98	18+43.01	16.56	2.0	950.1	953.4	956.20
99	17+68.01	15.57	2.0	949.0	952.3	955.11
100	16+93.02	14.58	2.0	948.0	951.2	954.02
101	16+18.03	13.59	1.0	946.9	949.1	951.95
102	15+14.21	15.00	2.0	944.9	948.2	950.99
103	14+35.11	15.00	0.0	943.9	945.2	948.00
104	13+41.01	25.34	0.0	937.0	938.5	941.33
105	12+70.85	14.54	1.0	930.4	932.6	935.43
106	11+99.16	19.92	2.0	921.9	925.3	928.10
107	11+71.54	57.13	3.0	917.9	923.0	925.82
108	12+82.19	66.11	3.0	931.4	936.7	939.50
109	14+40.26	68.81	0.0	944.0	946.3	949.14
110	15+21.12	78.57	0.0	945.0	947.6	950.39
111	15+84.15	72.68	0.0	945.8	948.3	951.09
112	16+42.19	66.10	0.0	947.2	949.6	952.36
113	17+17.18	65.11	1.0	948.3	951.6	954.40
114	17+92.17	64.12	1.0	949.4	952.6	955.45
115	20+08.44	62.09	1.0	952.9	956.2	958.95
116	21+51.57	65.45	0.0	954.4	956.7	959.47
117	22+70.30	67.19	2.0	956.4	960.7	963.55
118	23+66.62	63.26	3.0	957.9	963.1	965.89
119	13+00.87	10.00	2.0	959.5	962.7	965.51
120	12+25.07	10.00	2.0	957.7	960.8	963.61
121	11+40.94	10.00	3.0	955.5	959.7	962.49
122	25+97.51	10.79	2.0	950.9	954.1	956.91
123	25+94.81	69.22	1.0	950.9	954.3	957.08
124	25+42.22	72.34	0.0	950.6	953.0	955.80
125	24+91.89	79.16	0.0	949.4	952.0	954.76
126	24+22.50	77.93	0.0	948.0	950.6	953.38
127	23+89.11	71.72	0.0	947.1	949.5	952.33
128	23+23.14	76.78	0.0	946.0	948.5	951.34
129	21+19.77	16.13	5.0	939.8	946.0	948.78
130	21+15.83	21.93	5.0	939.3	945.6	948.40
131	11+04.31	71.57	0.0	945.0	947.5	950.26
132	11+88.09	78.85	0.0	945.7	948.2	951.04
133	12+64.08	75.93	0.0	946.2	948.7	951.55
134	12+86.47	72.00	0.0	947.1	949.6	952.36
135	13+49.32	80.15	0.0	949.0	951.6	954.40
136	14+07.66	73.32	0.0	950.7	953.2	956.01
137	13+26.28	10.00	2.0	948.3	951.5	954.27
138	11+85.42	10.00	1.0	945.6	947.8	950.62
139	11+08.28	10.00	0.0	945.1	946.3	949.06
140	10+34.35	10.00	0.0	944.5	945.7	948.51
141	10+13.63	12.00	0.0	944.4	945.6	948.39
142	22+85.72	10.00	1.0	945.4	947.6	950.37
143	24+08.77	10.00	2.0	947.8	950.9	953.72
TRACT D	17+83.69	72.63	0.0	953.4	955.8	958.61
FT 144	16+09.02	10.00	1.0	950.9	953.1	955.88
FT 145	15+36.62	10.00	1.0	950.2	952.4	955.16
FT 146	14+65.30	10.00	2.0	948.9	952.0	954.82
FT 147	13+56.03	10.00	4.0	945.9	951.0	953.81
FT 148	13+51.03	10.00	3.0	945.6	949.7	952.55
FT 181	14+20.62	73.28	0.0	948.4	950.9	953.68
FT 182	14+40.57	71.87	1.0	948.6	952.0	954.83
FT 183	15+63.83	73.18	0.0	950.4	952.9	955.71

NOTE: THE LATERAL FOR
"TRACT D" IS 6" PVC, ALL
OTHERS ARE 4" PVC.

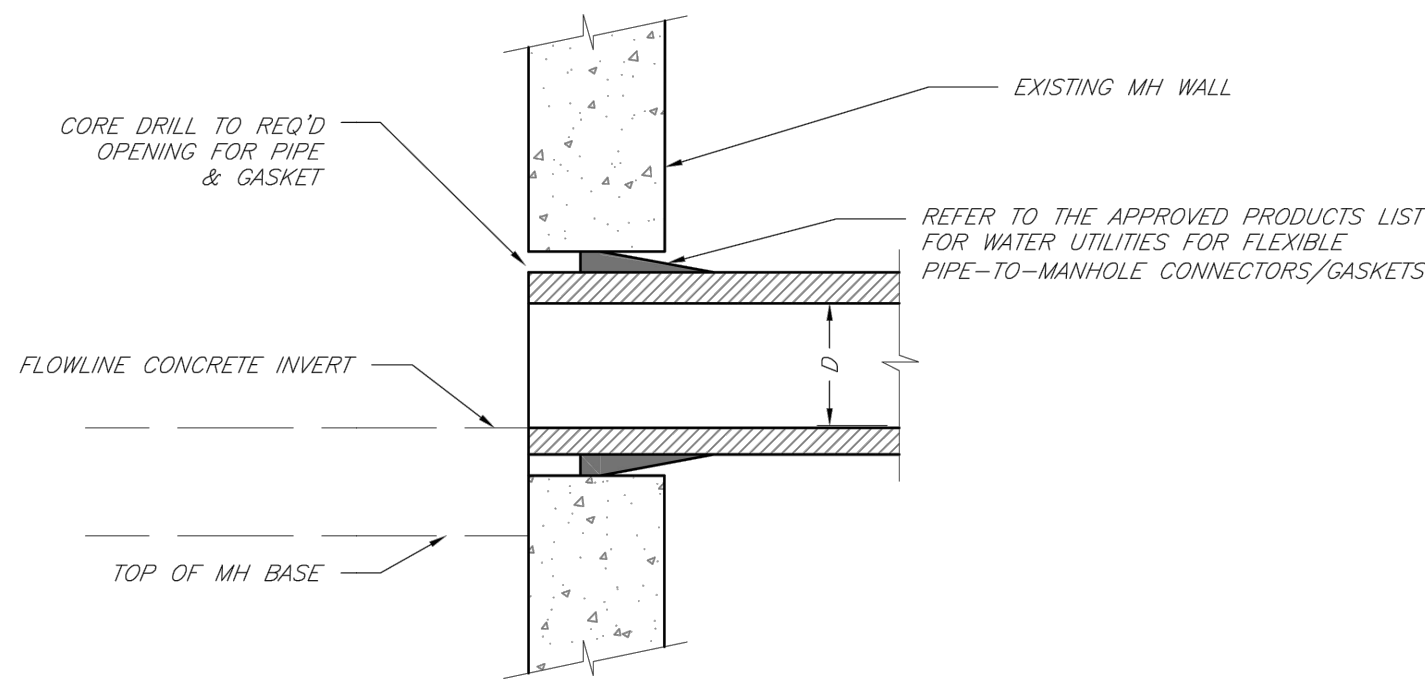
Sanitary Sewer Design Information											
Upstream Manhole	Downstream Pipe Slope	Downstream Pipe Diameter	Proposed Cumulative Area	Future Cumulative Area	Peak Base Flow 50-Year Design	Peak Infiltration Flow 50-Year Design	Peak Inflow 50-Year Design	Total Peak Flow	Downstream Pipe Mannings N	Downstream Pipe Capacity	Downstream Pipe Full Flow Velocity
	(%)	(in)	(Ac.)	(Ac.)	(gpd)	(gpd)	(cfs)	(cfs)		(cfs)	(fps)
EX MH 28-208	4.59%	8	42.22	0.00	63330.00	21110.000	1.004	1.135	0.014	2.40	6.89
MH 1-1	1.09%	8	42.22	0.00	63330.00	21110.000	1.004	1.135	0.014	1.17	3.36
MH 1-2	7.77%	8	42.22	0.00	63330.00	21110.000	1.004	1.135	0.014	3.13	8.96
MH 1-3	1.10%	8	42.22	0.00	63330.00	21110.000	1.004	1.135	0.014	1.18	3.37
MH 1-4	0.76%	8	14.12	0.00	21180.00	7060.000	0.392	0.435	0.014	0.98	2.80
MH 1-5	0.75%	8	14.12	0.00	21180.00	7060.000	0.392	0.435	0.014	0.97	2.78
MH 1-6	12.54%	8	14.12	0.00	21180.00	7060.000	0.392	0.435	0.014	3.97	11.38
MH 1-7	1.00%	8	14.12	0.00	21180.00	7060.000	0.392	0.435	0.014	1.12	3.21
MH 1-8	1.65%	8	9.67	0.00	14505.00	4835.000	0.279	0.309	0.014	1.44	4.13
MH 1-9	1.94%	8	9.67	0.00	14505.00	4835.000	0.279	0.309	0.014	1.56	4.48
MH 1-10	0.68%	8	8.35	0.00	12525.00	4175.000	0.245	0.270	0.014	0.93	2.65
MH 1-11	0.65%	8	4.94	0.00	7410.00	2470.000	0.151	0.167	0.014	0.90	2.59
MH 1-12	0.65%	8	3.68	0.00	5520.00	1840.000	0.115	0.127	0.014	0.90	2.59
MH 1-13	1.10%	8	1.59	0.00	2385.00	795.000	0.053	0.057	0.014	1.18	3.37
MH 2-1	15.67%	8	28.10	0.00	42150.00	14050.000	0.713	0.800	0.014	4.44	12.72
MH 2-2	1.00%	8	28.10	0.00	42150.00	14050.000	0.713	0.800	0.014	1.12	3.21
MH 2-3	0.65%	8	26.44	0.00	39660.00	13220.000	0.677	0.759	0.014	0.90	2.59
MH 2-4	1.10%	8	25.61	0.00	38415.00	12805.000	0.659	0.738	0.014	1.18	3.37
MH 2-5	1.79%	8	7.50	0.00	11250.00	3750.000	0.222	0.245	0.014	1.50	4.30
MH 2-6	1.00%	8	6.77	0.00	10155.00	3385.000	0.202	0.223	0.014	1.12	3.21
MH 2-7	1.00%	8	6.77	0.00	10155.00	3385.000	0.202	0.223	0.014	1.12	3.21
MH 3-1	0.75%	8	3.63	0.00	5445.00	1815.000	0.114	0.125	0.014	0.97	2.78
MH 3-2	2.99%	8	1.52	0.00	2280.00	760.000	0.050	0.055	0.014	1.94	5.56
MH 4-1	2.50%	8	2.30	0.00	3450.00	1150.000	0.074	0.081	0.014	1.77	5.08
MH 5-1	3.33%	8	1.66	0.00	2490.00	830.000	0.055	0.060	0.014	2.05	5.87
MH 6-1	2.13%	8	13.91	0.00	20865.00	6955.000	0.387	0.430	0.014	1.64	4.69
MH 6-2	4.99%	8	13.51	0.00	20265.00	6755.000	0.377	0.419	0.014	2.51	7.18
MH 6-3	6.47%	8	10.13	0.00	15195.00	5065.000	0.291	0.323	0.014	2.85	8.18
MH 6-4	1.00%	8	10.13	0.00	15195.00	5065.000	0.291	0.323	0.014	1.12	3.21
MH 7-1	0.82%	8	2.82	0.00	4230.00	1410.000	0.090	0.099	0.014	1.02	2.91
MH 7-2	1.10%	8	1.41	0.00	2115.00	705.000	0.047	0.051	0.014	1.18	3.37
MH 8-0	4.92%	8	9.72	0.00	14580.00	4860.000	0.281	0.311	0.014	2.49	7.13
MH 8-1	2.50%	8	9.72	0.00	14580.00	4860.000	0.281	0.311	0.014	1.77	5.08
MH 8-2	11.16%	8	9.39	0.00	14085.00	4695.000	0.272	0.301	0.014	3.75	10.74
MH 8-3	9.50%	8	9.08	0.00	13620.00	4540.000	0.264	0.292	0.014	3.46	9.91
MH 8-4	1.30%	8	7.93	0.00	11895.00	3965.000	0.233	0.258	0.014	1.28	3.67
MH 8-5	1.43%	8	6.16	0.00	9240.00	3080.000	0.185	0.204	0.014	1.34	3.84
MH 8-6	1.00%	8	3.66	0.00	5490.00	1830.000	0.115	0.126	0.014	1.12	3.21
MH 8-7	1.50%	8	1.71	0.00	2565.00	855.000	0.056	0.062	0.014	1.37	3.94
EX MH 28-099	1.17%	12	5.13	4.45	14370.00	4790.000	0.277	0.307	0.014	3.58	4.56
MH 9-1	12.45%	8	5.13	4.45	14370.00	4790.000	0.277	0.307	0.014	3.96	11.34
MH 9-2	3.98%	8	5.13	4.45	14370.00	4790.000	0.277	0.307	0.014	2.24	6.41
MH 9-3	17.19%	8	5.13	4.45	14370.00	4790.000	0.277	0.307	0.014	4.65	13.33
MH 9-4	5.67%	8	5.13	4.45	14370.00	4790.000	0.277	0.307	0.014	2.67	7.65
MH 9-5	1.00%	8	4.34	0.00	6510.00	2170.000	0.134	0.148	0.014	1.12	3.21
MH 9-6	1.00%	8	3.27	0.00	4905.00	1635.000	0.103	0.113	0.014	1.12	3.21
MH 9-7	1.10%	8	2.12	0.00	3180.00	1060.000	0.069	0.075	0.014	1.18	3.37
MH 9-8	1.50%	8	0.45	0.00	675.00	225.000	0.016	0.017	0.014	1.37	3.94
EX MH 28-100	3.27%	12	2.26	0.00	3390.00	1130.000	0.073	0.080	0.014	5.98	7.62
MH 10-1	4.31%	8	2.26	0.00	3390.00	1130.000	0.073	0.080	0.014	2.33	6.67
MH 10-2	14.08%	8	2.26	0.00	3390.00	1130.000	0.073	0.080	0.014	4.21	12.06
MH 10-3	10.13%	8	2.26	0.00	3390.00	1130.000	0.073	0.080	0.014	3.57	10.23
MH 10-4	6.00%	8	2.26	0.00	3390.00	1130.000	0.073	0.080	0.014	2.75	7.87
MH 10-5	6.47%	8	1.58	0.00	2370.00	790.000	0.052	0.057	0.014	2.85	8.18
EX MH 28-103	2.03%	12	214.47	0.00	321705.00	107235.000	3.314	3.977	0.014	4.71	6.00
MH 11-1	2.50%	8	6.47	0.00	9705.00	3235.000	0.194	0.214	0.014	1.77	5.08
MH 11-2	1.02%	8	6.47	0.00	9705.00	3235.000	0.194	0.214	0.014	1.13	3.25
MH 11-3	6.98%	8	6.47	0.00	9705.00	3235.000	0.194	0.214	0.014	2.96	8.49
MH 11-4	0.77%	8	1.47	0.00	2205.00	735.000	0.049	0.053	0.014	0.98	2.82
MH 11-5	1.21%	8	0.87	0.00	1305.00	435.000	0.030	0.032	0.014	1.23	3.54
MH 12-1	0.65%	8	5.00	0.00	7500.00	2500.000	0.153	0.169	0.014	0.90	2.59
MH 12-2	0.65%	8	3.97	0.00	5955.00	1985.000	0.124	0.136	0.014	0.90	2.59
MH 12-3	1.00%	8	3.73	0.00	5595.00	1865.000	0.117	0.128	0.014	1.12	3.21
MH 12-4	5.00%	8	3.10	0.00	4650.00	1550.000	0.098	0.108	0.014	2.51	7.19
MH 12-5	2.00%	8	1.58	0.00	2370.00	790.000	0.052	0.057	0.014	1.59	4.55
MH 13-1	7.57%	8	0.47	0.00	705.00	235.000	0.016	0.018	0.014	3.09	8.84



- NOTES:
1. A MINIMUM OF 36 INCHES OF COVER SHALL BE OVER THE TOP OF THE PIPE. THIS MINIMUM OF COVER SHALL BE FROM THE TOP OF PIPE TO THE FINISHED GRADE.
 2. BEDDING AGGREGATE SHALL BE PLACED FROM A LEVEL 6 INCHES BELOW THE BOTTOM OF THE PIPE TO A LEVEL 6 INCHES ABOVE THE TOP OF THE PIPE.
 3. TRENCH BACKFILL IN PAVED AREAS WITHIN STREET OR ALLEY RIGHT OF WAYS
 - a. NARROW TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES 24 INCHES OR LESS IN WIDTH AND SHALL BE TYPE A FLOWABLE FILL.
 - b. STANDARD TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES BETWEEN 24 TO 48 INCHES WIDE SHALL BE EITHER TYPE A FLOWABLE FILL OR DENSE, WELL GRADED AGGREGATE BASE MATERIAL. AGGREGATE BASE MATERIAL SHALL MEET THE REQUIREMENTS FOR KDOT AB-3; MODOT TYPES 1 OR 5; OR APWA 2202.2.
 - c. WIDE TRENCH: SUITABLE BACKFILL MATERIAL FOR TRENCHES GREATER THAN 48 INCHES WIDE SHALL BE SUITABLE MATERIAL AS SPECIFIED FOR EARTH EMBANKMENT IN APWA STANDARD SPECIFICATIONS, SECTION 2102.2.C.
 4. SUITABLE BACKFILL MATERIAL OUTSIDE OF PAVED AREAS WITHIN RIGHT OF WAY, AND ALL AREAS OUTSIDE RIGHT OF WAY, MAY BE SUITABLE MATERIAL AS SPECIFIED FOR EARTH EMBANKMENT IN APWA STANDARD SPECIFICATIONS, SECTION 2102.2.C. SUITABLE BACKFILL MATERIAL MAY ALSO BE OTHER TRENCH BACKFILL MATERIAL (FLOWABLE FILL OR AGGREGATE BASE) DEPENDING ON SITE CONDITIONS, TRENCH WIDTHS OR AT THE DIRECTION OF THE CITY'S ON SITE INSPECTOR.



NOT AS-BUILT



LS

LEE'S SUMMIT

MISSOURI

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

EXISTING WALL CONNECTION

Date: 02/13

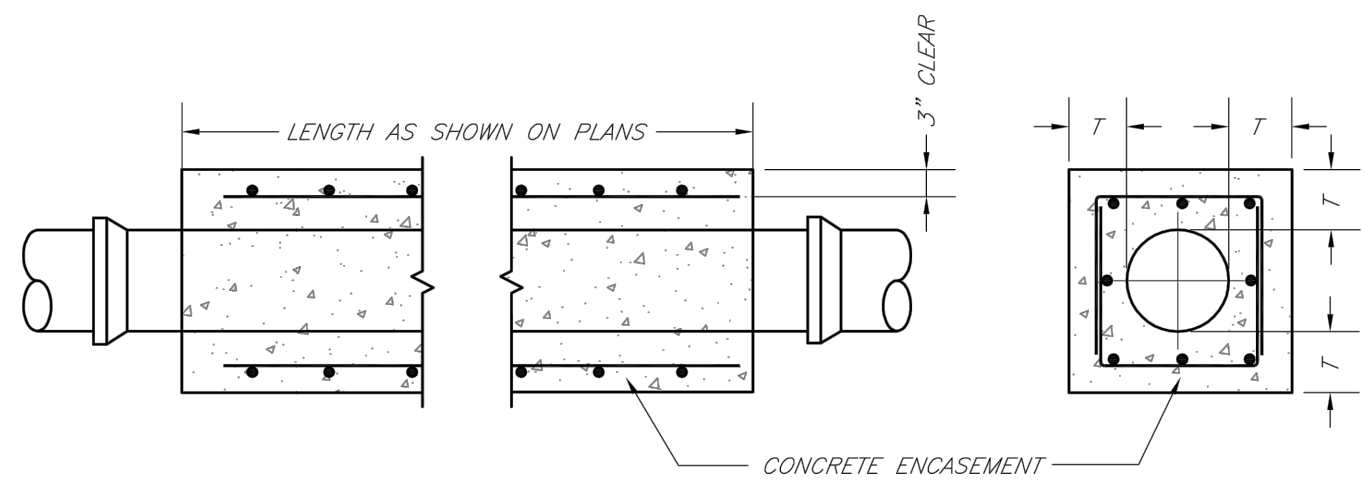
Drawn By: JN

Checked By: GB

FILE: SAN-9

Rev:

Rev:



- 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".

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SANITARY PIPE ENCASEMENT

Date: 02/13

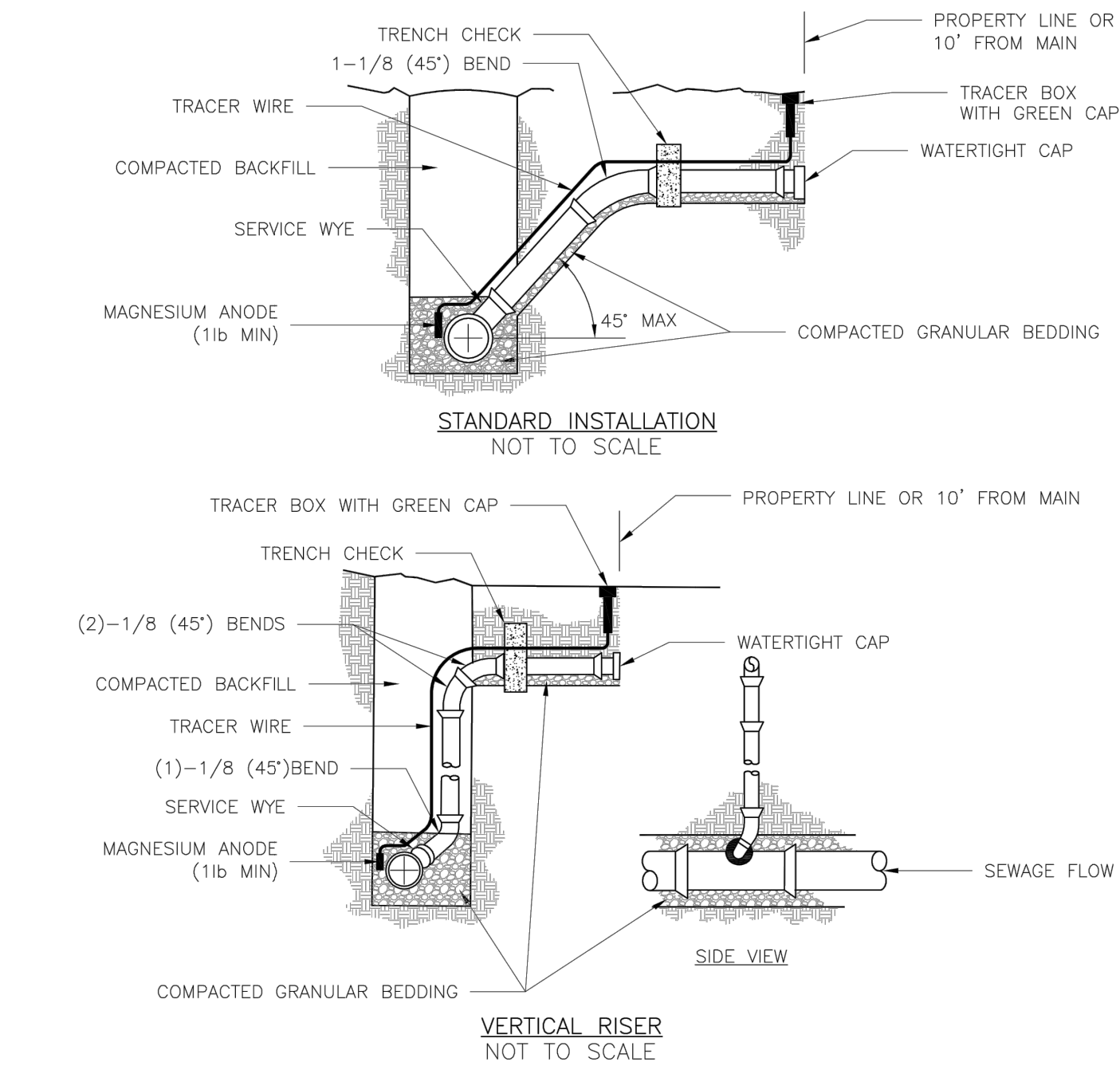
Drawn By: JN

Checked By: DL

FILE: SAN-7

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. IMPERVIOUS TRENCH CHECKS SHALL BE PLACED ON BUILDING SEWER STUBS (AT LEAST 5' AWAY FROM THE SANITARY SEWER MAIN).
 3. 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.
 4. SEE SPECIFICATION SECTION 2100 FOR SEWER MAIN BEDDING AND BACKFILL.
 5. #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.
 6. FOR SERVICES, TRACER WIRE SHALL RUN FROM THE WYE AND TERMINATE IN A FLUSH MOUNTED TRACER BOX WITH A GREEN CAST IRON LOOKABLE TOP. WIRE SHALL BE TAPED OR TIED TO THE PIPE AT 5' INTERVALS.
 7. TRACER WIRE BOX SHALL BE INSTALLED WITHIN 1.0' OF PROPERTY LINE.
 8. 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.

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BUILDING SEWER STUB AND RISER

Date: 02/13

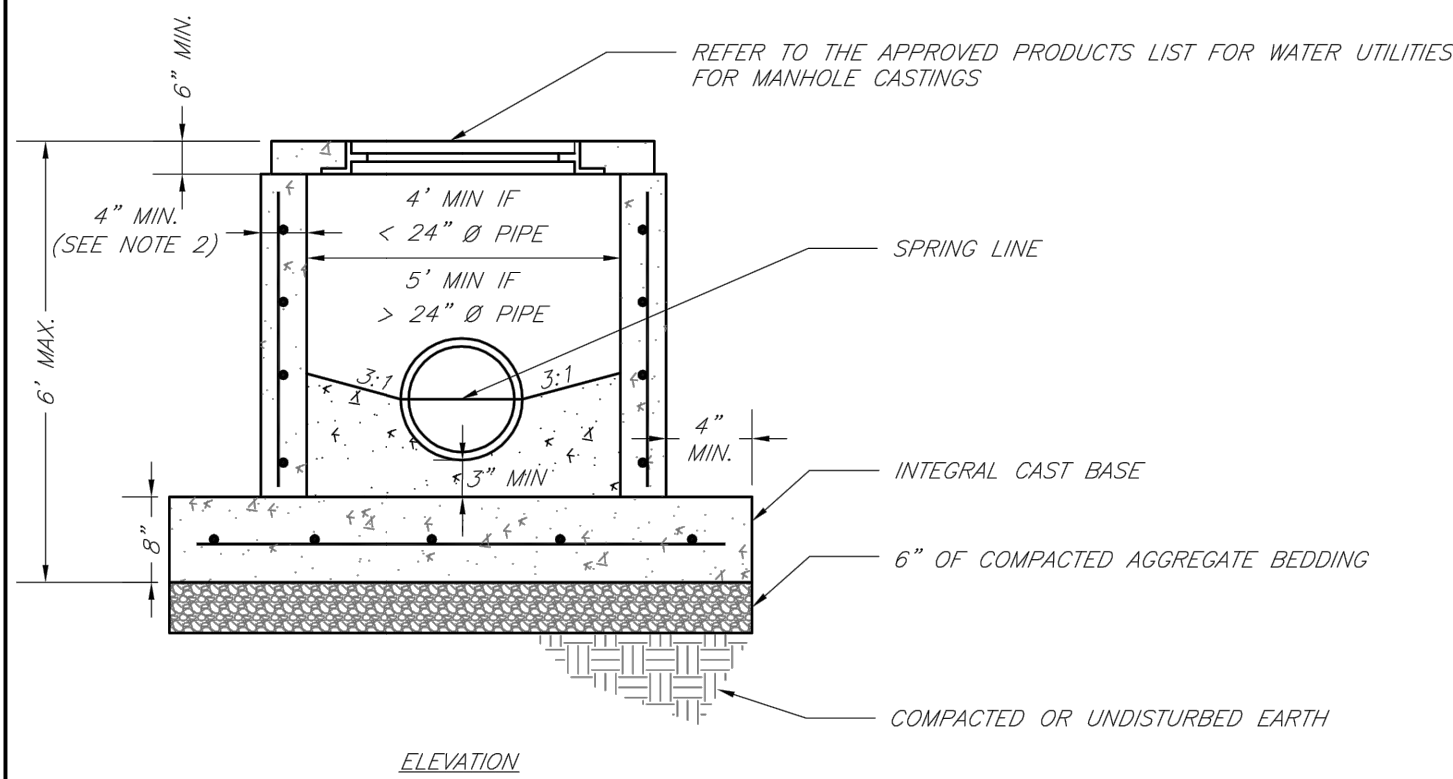
Drawn By: SC

Checked By: DL

FILE: SAN-1

Rev: 10/15

Rev: 12/15



- 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 (1/12) OF THE INSIDE DIAMETER OR 4", WHICHEVER IS GREATER SHALL BE USED.
 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. THE FILL CONCRETE FLOW CHANNEL FOR SIDE BRANCHES SHALL BE PLACED TO PROVIDE A SMOOTH TRANSITION INTO THE FLOW LINE.
 5. REFER TO THE APPROVED PRODUCTS LIST FOR WATER UTILITIES FOR MANHOLE GASKET MODELS.
 6. PROVIDE STEPS AS SHOWN ON THE APPROVED PRODUCTS LIST FOR MANHOLE DEPTHS GREATER THAN 4'.

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SHALLOW PRECAST MANHOLE - SANITARY SEWER

Date: 02/13

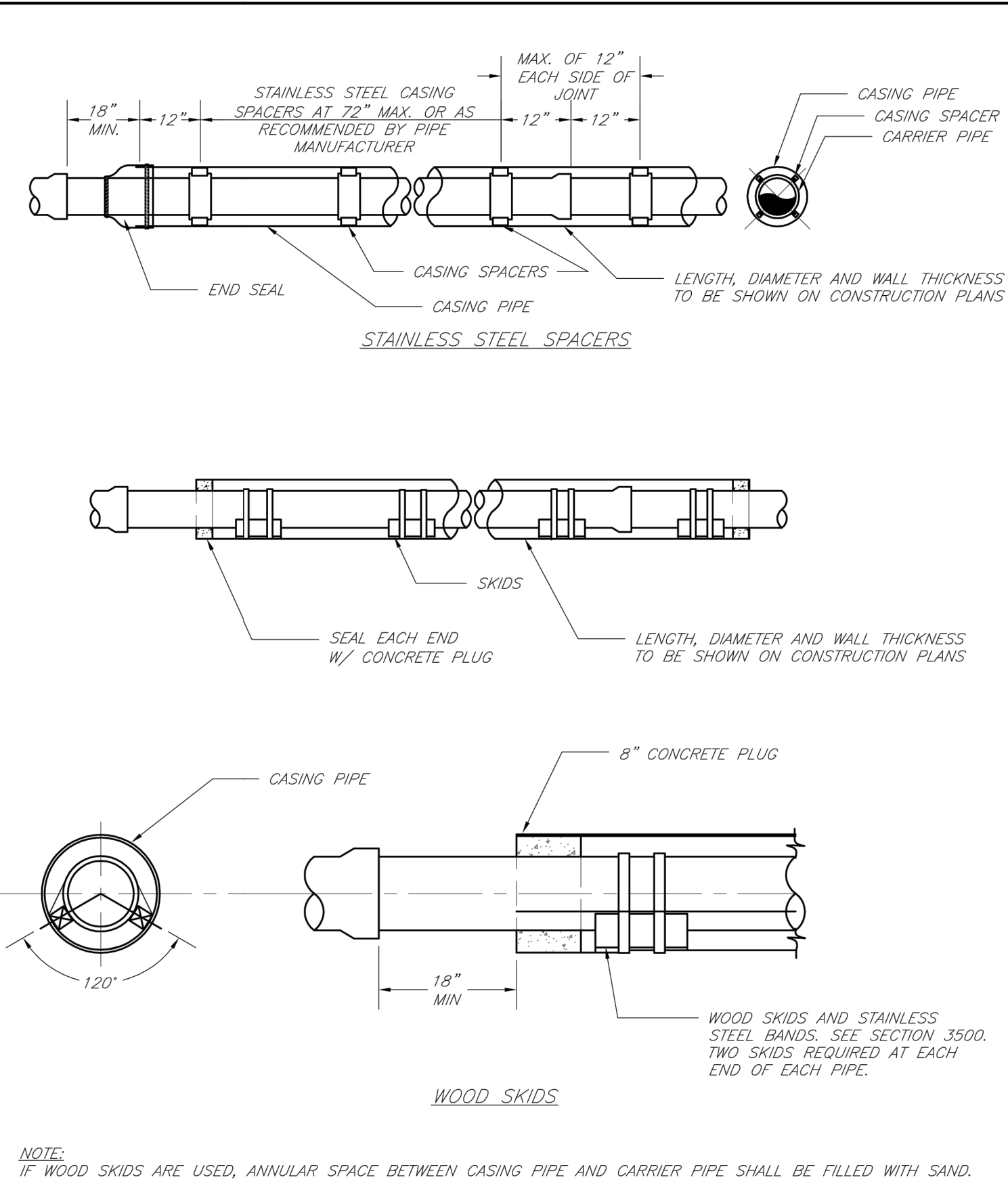
Drawn By: JN

Checked By: DL

FILE: SAN-3

Rev: 1/14

Rev:



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CASING PIPE DETAIL

Date: 02/13

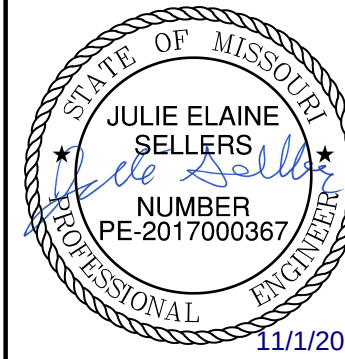
Drawn By: JN

Checked By: DL

FILE: SAN-6

Rev: 1/14

Rev:



NO. REV.	DATE	REVISIONS DESCRIPTION
1	03/12/2019	REVISED PER CITY COMMENTS

DETAIL SHEET
SANITARY SEWER PLANS

WOODSIDE RIDGE
FIRST PLAT

LEE'S SUMMIT, MO

drawn by: D.A.H.O.
checked by: J.E.S.
designed by: S.M.S.
QA/QC by: M.G.B.
project no.: A18-1140
date: 2019.03.12