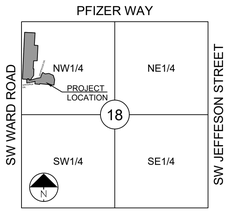
SANITARY SEWER MAIN EXTENSION
FOR
WOODLAND GLEN 2ND PLAT

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

LEGEND:

A/E	-	ACCESS EASEMENT
BC	-	BACK OF CURB
B/B	-	BACK TO BACK
BM	-	BENCHMARK
BL or B.L.	-	BUILDING LINE
CO	-	CLEANOUT
TJB	-	TELEPHONE JUNCTION BOX
C&G	-	CURB AND GUTTER
D/E	-	DRAINAGE EASEMENT
E/E	-	ELECTRICAL EASEMENT
EL	-	ELEVATION
FL	-	FLOW LINE
G/E	-	GAS LINE EASEMENT
HDPE	-	HIGH-DENSITY POLYETHYLENE
L/E	-	LANDSCAPE EASEMENT
MSFE	-	MINIMUM SERVICEABLE FLOOR ELEVATION
PVC	-	POLYVINYL CHLORIDE
P/L	-	PROPERTY LINE
PUB/E	-	PUBLIC EASEMENT
RCP	-	REINFORCED CONCRETE PIPE
ROW or R/W	-	RIGHT-OF-WAY
S/E	-	SANITARY SEWER EASEMENT
SL	-	SERVICE LINE
S/W	-	SIDEWALK
TE	-	TOP ELEVATION
U/E	-	UTILITY EASEMENT
WSE	-	WATER SURFACE ELEVATION
W/E	-	WATERLINE EASEMENT

ASPHALT PAVEMENT - EXISTING
ASPHALT PAVEMENT - PROPOSED
CONCRETE PAVEMENT - EXISTING
ASPHALT PAVEMENT - EXISTING
CONCRETE SIDEWALK - EXISTING
CONCRETE SIDEWALK - PROPOSED
CURB & GUTTER
CURB & GUTTER - EXISTING
TREELINE
EXISTING LOT AND R/W LINES
EXISTING PLAT LINES
P/L — PROPERTY LINES
ROW — RIGHT-OF-WAY
SANITARY SEWER MAIN
SANITARY SEWER MAIN - EXIST.
STO — STORM SEWER
STORM SEWER - EXISTING
$CATV_x$ — CABLE TV - EXISTING
FOC_x — FIBER OPTIC CABLE - EXISTING
T_x — TELEPHONE LINE - EXIST.
E_x — ELECTRIC LINE - EXISTING
OHP_x — OVERHEAD POWER LINE - EXIST.
UGE_x — UNDERGROUND ELECTRIC - EX.
G_x — GAS LINE - EXISTING
W_x — WATERLINE - EXISTING
LIGHT - EXISTING
EXISTING MANHOLE
CLEANOUT
EXISTING SANITARY MANHOLE
PROPOSED SANITARY MANHOLE
AI — EXISTING AREA INLET
CI — EXISTING CURB INLET
GI — EXISTING GRATE INLET
JB — EXISTING JUNCTION BOX
D — EXISTING STORM MANHOLE



SECTION 18-47N-31W

LOCATION MAP
SCALE 1" = 2000'

UTILITY CONTACTS:

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

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

KANSAS CITY POWER & LIGHT COMPANY (KCP&L)
Ron Dejarnette
1300 SE Hamblin Road
Lee's Summit, MO 64081
Office: (816) 347-4316
Cell: (816) 810-5234
ron.dejarnette@kcpl.com

CITY OF LEES SUMMIT PUBLIC WORKS
Dena Mezger
220 SE Green Street
Lee's Summit, MO 64063
(816) 969-1800

AT&T
Mark Manion or Marty Loper
500 E. 8th Street, Room 370
Kansas City, MO 64106
(816) 275-2341 or (816) 275-1550

COMCAST CABLE
Barbara Brown
3400 W. Duncan Road
Blue Springs, MO 64015
(816) 795-2255

PUBLIC WATER SUPPLY DISTRICT
Mark Schaufler
220 SE Green Street
Lee's Summit, MO 64063
(816) 969-1900

VICINITY MAP
N.T.S.

GENERAL NOTES:

1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
2. 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.
10. 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 AS REQUIRED.
14. THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES INSPECTOR AT: 816-969-1200 PRIOR TO OBTAIN A DEVELOPMENT SERVICES CONSTRUCTION PERMIT. A MINIMUM 48 HOUR NOTICE SHALL BE GIVEN PRIOR TO PERMIT ISSUANCE.
15. 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:

1. 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 STORM SEWER LINES. IF MINIMUM SEPARATIONS CAN NOT BE OBTAINED, CONCRETE ENCASEMENT OF THE STORM SEWER 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.
6. 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.
7. 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.

SUMMARY OF QUANTITIES

	ITEM	QUANTITY	UNITS
1	CONNECT TO EXISTING MANHOLE	2	EA
2	CONNECT TO EXISTING MAIN	1	EA
3	STANDARD 4' DIA. MANHOLE	13	EA
4	8" PVC SDR-26	2160	LF
5	6" PVC SDR-26	1618	LF
6	8" X 6" WYE CONNECTION	48	EA
7	EXTRA DEPTH IN MANHOLE	85	VF
8	CLEANOUT	1	EA
9	EROSION CONTROL	1	LS
10	BONDS	1	LS
11	ROCK EXCAVATION (ESTIMATION)	500	CY
12	CLEAR AND GRUB	1	LS
13	COMPACTION TESTING	1	LS
14	PREBLAST SURVEY (IF REQUIRED)	1	LS

NOTE:
TRENCH CHECKS TO BE INSTALL ON ALL SANITARY SEWER SERVICE LINES IN ACCORDANCE WITH CITY OF LEES SUMMIT STANDARDS.

APPROVED BY:

CITY ENGINEER — DATE
APPROVED FOR ONE YEAR FROM THIS DATE

OWNER/DEVELOPER:

ABP FUNDING, LLC
JOHN
9101 W. 110TH STREET, SUITE 200
OVERLAND PARK, KANSAS 66210
p 913-208-2283
f -
-

PROJECT BENCHMARK:

SW. CORNER NW. ¼ SEC. 18-47N-31W, JACKSON COUNTY, MO.
3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
M.D.N.R. DOC. NO. 600-65374

ELEV. 1036.41

Sheet List Table	
Sheet Number	Sheet Title
1	COVER
2	GENERAL LAYOUT
3	GRADING PLAN
4	LINE A PLAN AND PROFILE
5	LINE B PLAN AND PROFILE
6	LINE C-D PLAN AND PROFILE
7	SANITARY DETAILS

SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 W. 107TH STREET • LENEXA, KANSAS 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E2002003800-F #LA2001005237 #LS2002008859-F

STATE OF MISSOURI
MARK ALLEN BREUER
NUMBER PE-2003007268
PROFESSIONAL ENGINEER
05.05.2020

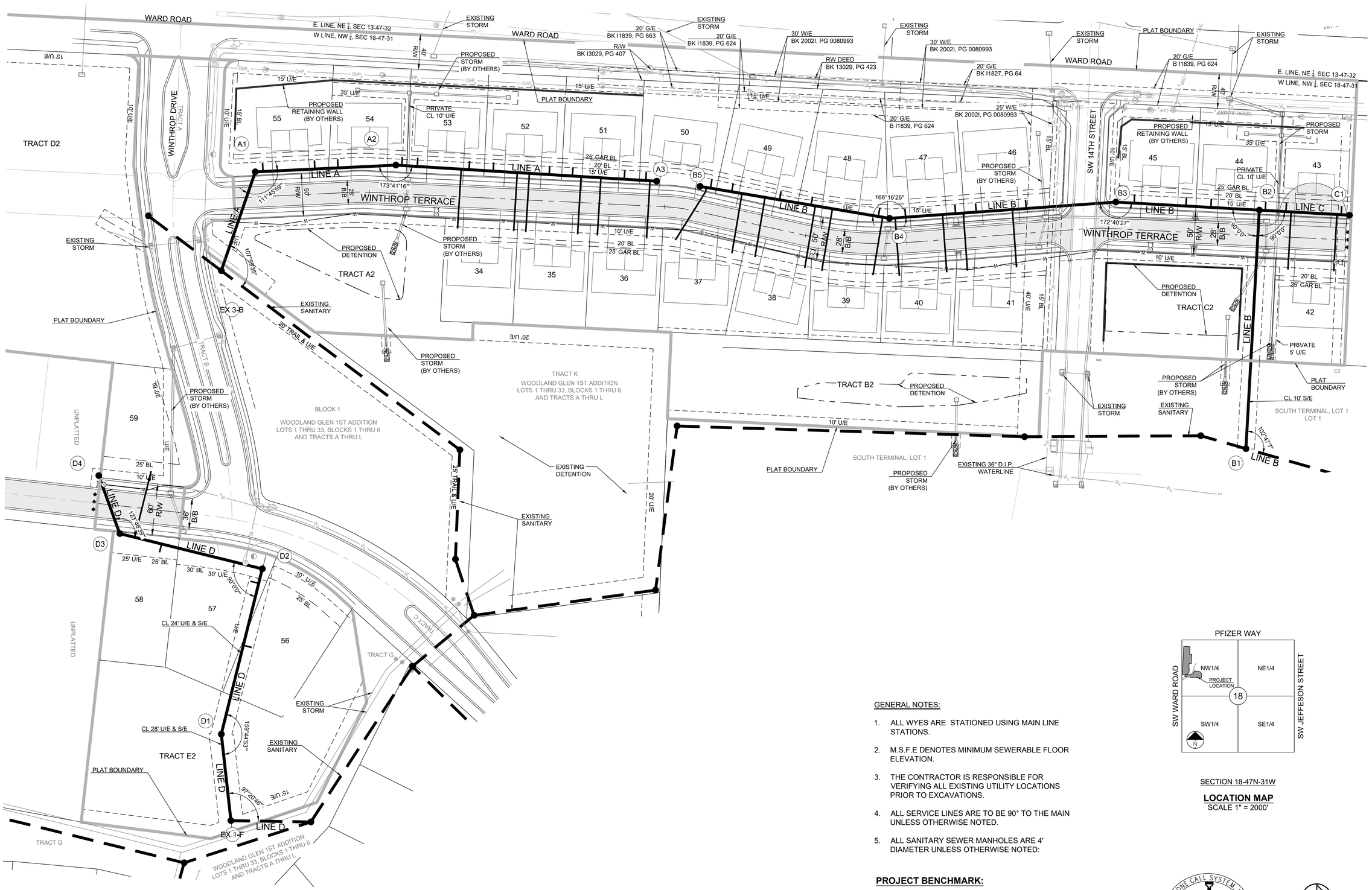
WOODLAND GLEN 2ND PLAT
SANITARY SEWER MAIN EXTENSION
WARD ROAD AND WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
1 4-21-2020	CITY COMMENTS
2	
3	
4	
5	
6	
7	
8	

DRAWN BY: BAL
CHECKED BY: MAB
DATE PREPARED: 2-20-2020
PROJ. NUMBER: 18-017

COVER

SHEET
1



GENERAL NOTES:

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

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SECTION 18-47N-31W

LOCATION MAP
SCALE 1" = 2000'

MISSOURI ONE CALL SYSTEM, INC.
1-800-344-7483
STOP-CALL BEFORE YOU DIG!

0 50' 100'
SCALE: 1" = 50'

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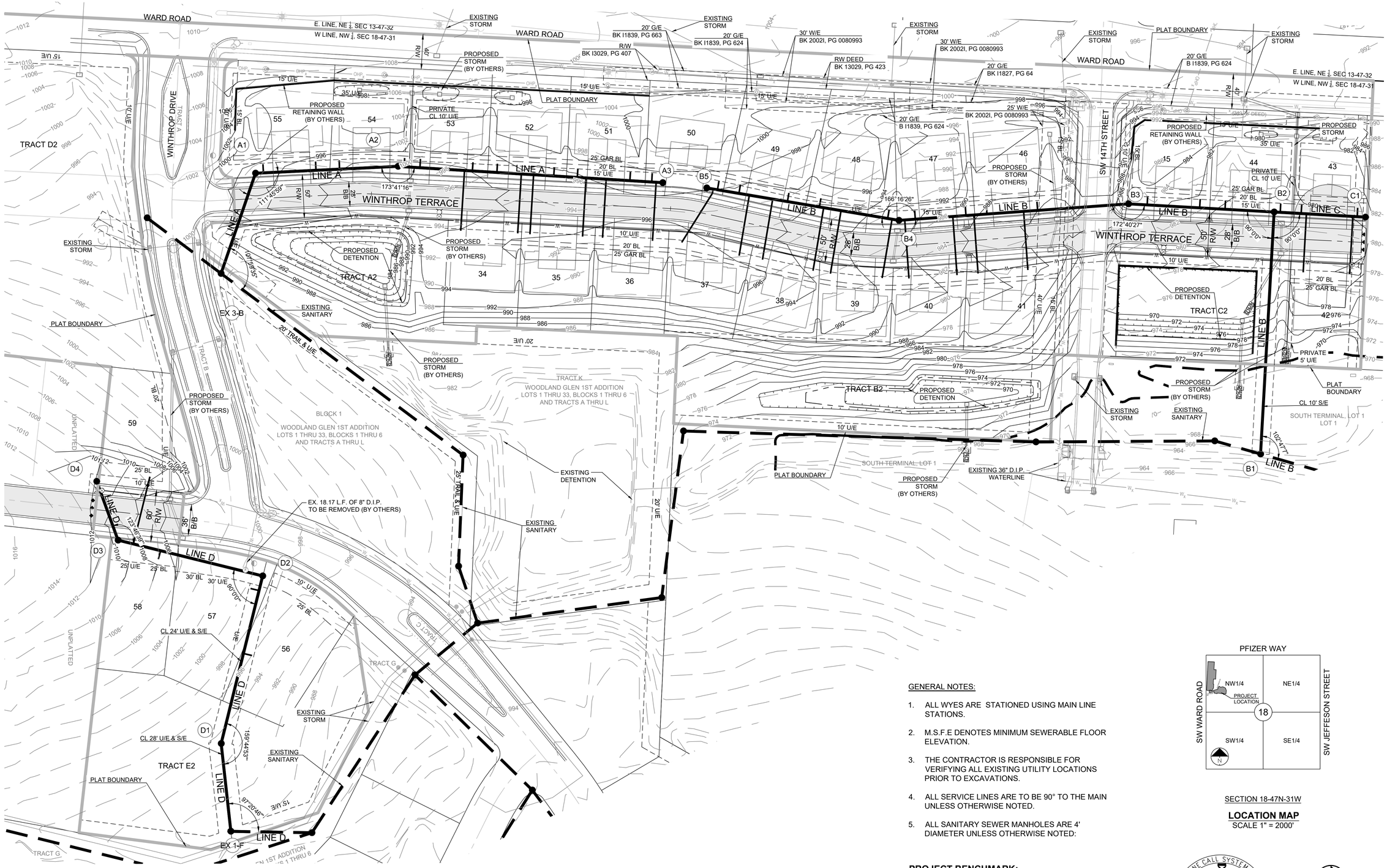
GENERAL LAYOUT

SHEET
2



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SECTION 18-47N-31W

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0 50' 100'
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MARK ALLEN BREUER
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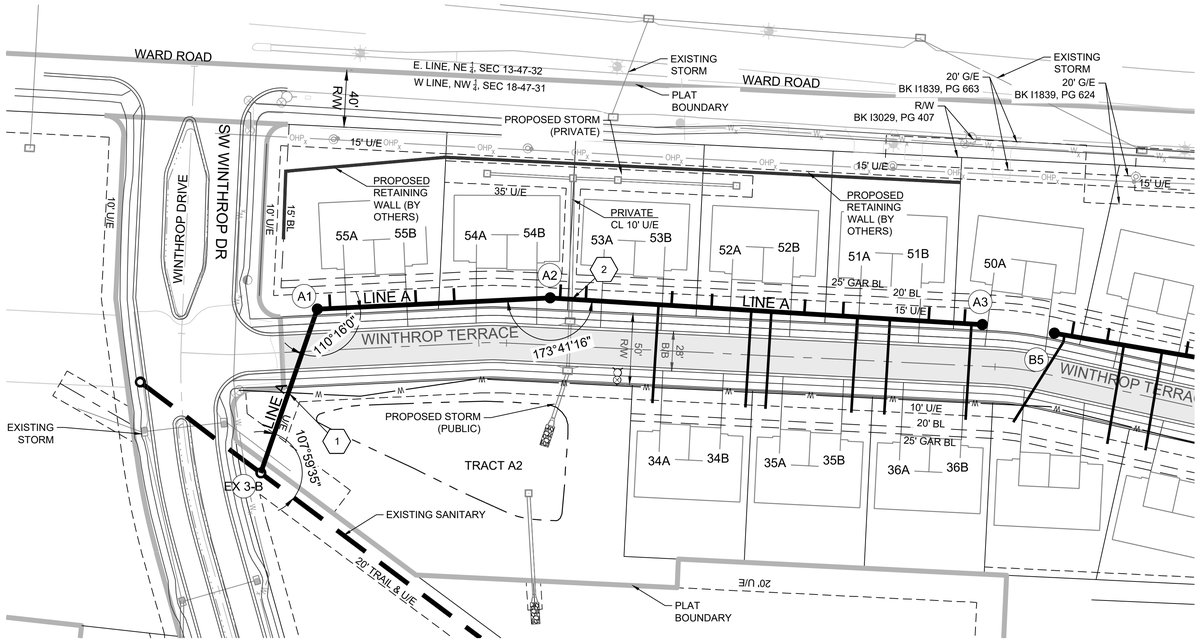
GRADING PLAN

SHEET
3

Lot No.	WYE STA	Stub Length (L.F.)	Stub Slope (%)	Riser Length (L.F.)	EOS Elev	MSFE Elev	Cleanout
34A	359.84	69	1.30	0.00	984.76	987.76	NO
34B	424.84	68	1.30	0.00	985.33	988.33	NO
35A	438.84	68	1.30	0.00	985.46	988.46	NO
35B	498.84	67	1.30	0.00	985.99	988.99	NO
36A	521.84	67	1.30	0.00	986.19	989.19	NO
36B	578.84	67	1.30	0.00	986.71	989.71	NO
50A	573.84	10	1.30	0.00	985.92	988.92	NO
51B	548.84	10	1.30	0.00	985.69	988.69	NO
51A	488.84	10	1.30	0.00	985.15	988.15	NO
52B	461.84	10	1.30	0.00	984.91	987.91	NO
52A	396.84	10	1.30	0.00	984.33	987.33	NO
53B	368.84	10	1.30	0.00	984.07	987.07	NO
53A	308.84	10	1.30	0.00	983.53	986.53	NO
54B	290.84	10	1.30	0.00	983.37	986.37	NO
54A	217.03	9	1.30	1.00	983.11	986.11	NO
55B	190.03	9	1.30	2.00	983.53	986.53	NO
55A	130.03	6	1.30	6.00	985.70	988.70	NO

SANITARY CROSSING TABLE

ID	SAN ELEV.	STORM/WATER ELEV.	SAN SIZE	STORM\WATER SIZE	VERTICAL SEPARATION	RCE/CRCE REQUIRED?
1	978.97	991.38	8" PCV	8" PVC	11.68	NO
2	982.58	988.78	8" PCV	15" HDPE	5.49	NO



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ELEV. 1036.41

0 50' 100'
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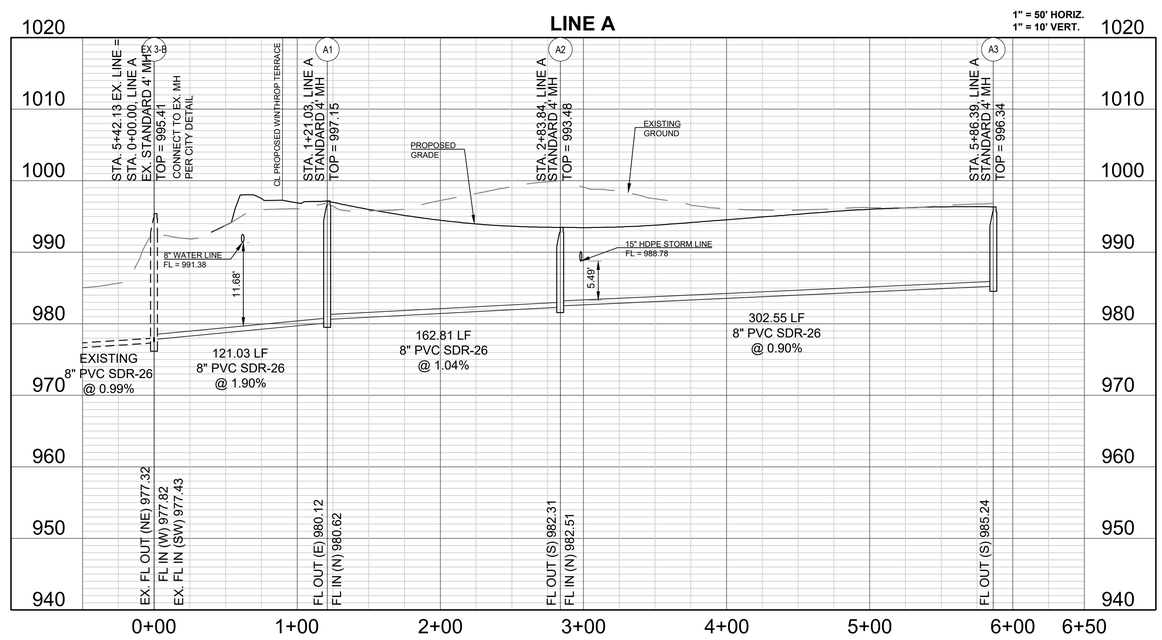
Structure Table		
Structure Name	Structure Northing	Structure Easting
A1	992504.4316	2818397.8530
A2	992667.0525	2818389.9810
A3	992969.0240	2818408.6667
EX 3-B	992465.0382	2818512.2921



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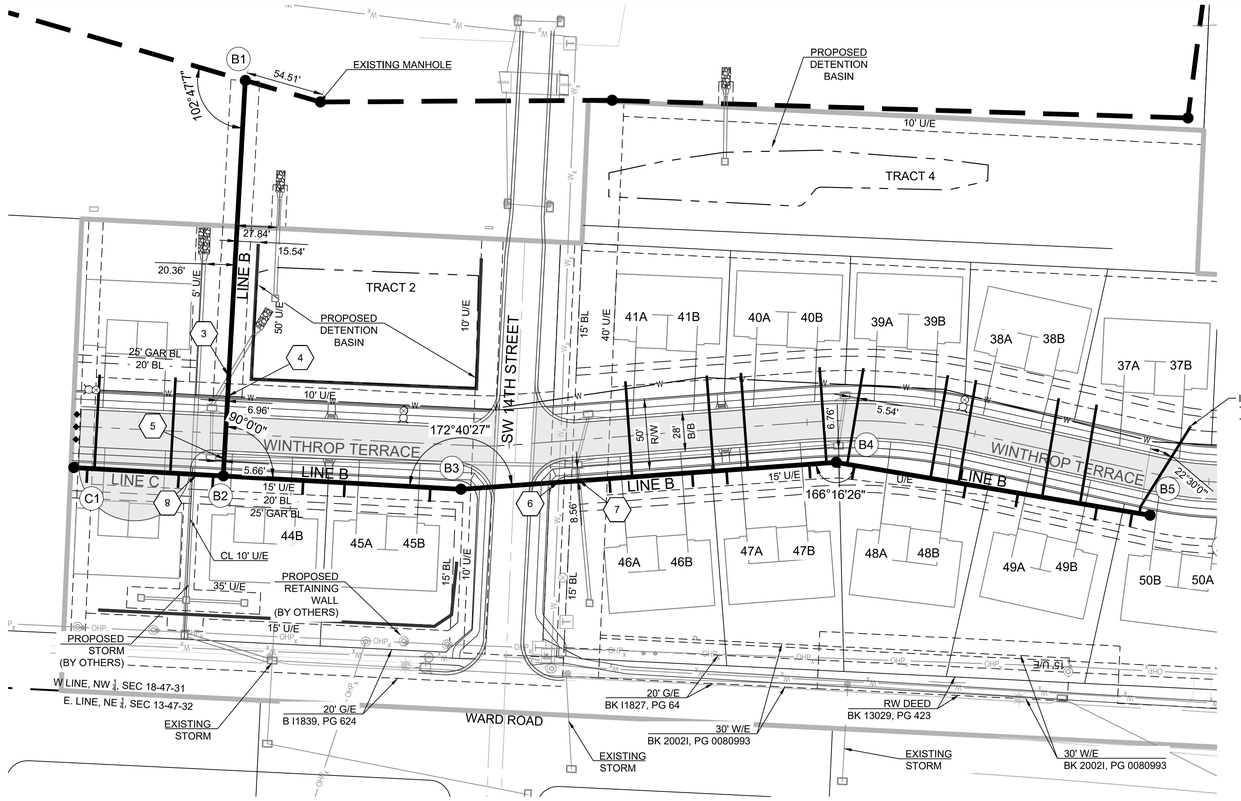
LINE A PLAN AND PROFILE

SHEET
4

Lot No.	WYE STA	Stub Length (L.F.)	Stub Slope (%)	Riser Length (L.F.)	EOS Elev	MSFE Elev	Cleanout
37B	920.89	70	1.30	1.00	984.28	987.28	NO
37A	878.89	69	1.30	2.00	983.71	986.71	NO
38B	851.89	68	1.30	3.00	983.60	986.60	NO
38A	792.89	71	1.30	3.00	981.86	984.86	NO
39B	772.89	73	1.30	0.00	979.17	982.17	NO
39A	713.89	67	1.30	2.00	978.73	981.73	NO
40B	699.18	65	1.30	3.00	978.91	981.91	NO
40A	644.18	66	1.30	2.00	977.66	980.66	NO
41B	620.18	67	1.30	0.00	976.03	979.03	NO
41A	563.18	67	1.30	0.00	975.46	978.46	NO
44B	332.84	10	1.30	0.00	969.40	972.40	NO
45A	361.84	10	1.30	0.00	970.43	973.43	NO
45B	421.84	10	1.30	0.00	972.56	975.56	NO
46A	547.18	10	1.30	0.00	974.55	977.55	NO
46B	605.18	9	1.30	2.00	976.53	979.53	NO
47A	629.18	7	1.30	4.00	978.17	981.17	NO
47B	687.18	7	1.30	4.00	978.75	981.75	NO
48A	718.89	6	1.30	5.00	980.22	983.22	NO
48B	797.89	6	1.30	5.00	982.59	985.59	NO
49A	834.89	6	1.30	5.00	983.70	986.70	NO
49B	890.89	7	1.30	4.00	984.68	987.68	NO
50B	915.89	8	1.30	3.00	984.74	987.74	NO

SANITARY CROSSING TABLE

ID	SAN ELEV.	STORM/WATER ELEV.	SAN SIZE	STORM\WATER SIZE	VERTICAL SEPARATION	RCE/CRCE REQUIRED?
3	964.33	970.18	8" PCV	24" HDPE	5.14	NO
4	964.67	974.85	8" PCV	8" PVC	9.46	NO
5	965.88	971.53	8" PCV	18" HDPE	4.94	NO
6	973.42	978.16	8" PCV	36" DIP	4.03	NO
7	973.56	978.65	8" PCV	15"HDPE	4.38	NO



PROJECT BENCHMARK:

SW. CORNER NW. ¼ SEC. 18-47N-31W, JACKSON COUNTY, MO.
3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
M.D.N.R. DOC. NO. 600-65374

ELEV. 1036.41

GENERAL NOTES:

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

0 50' 100'
SCALE: 1" = 50'

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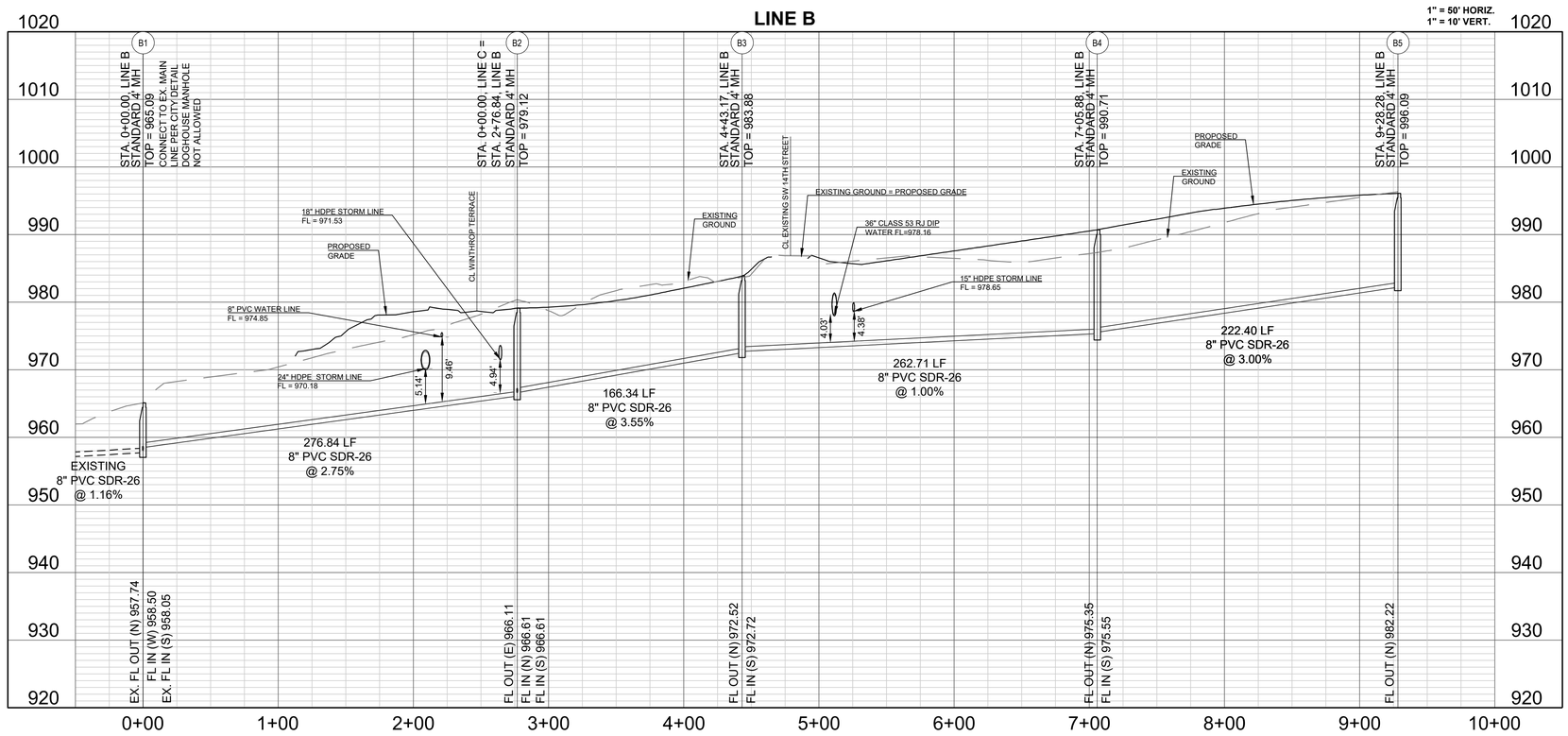
Missouri State Certificates of Authority
#E2000003800-F #LA2001005237 #LS2000008859-F

STATE OF MISSOURI
MARK ALLEN BREUER
NUMBER PE-2005007268
PROFESSIONAL ENGINEER
05.05.2020



Structure Table		
Structure Name	Structure Northing	Structure Easting
B1	993651.2313	2818718.4949
B2	993666.6637	2818442.0890
B3	993500.5868	2818432.8165
B4	993238.5614	2818451.7377
B5	993019.2687	2818414.6635

WOODLAND GLEN 2ND PLAT
SANITARY SEWER MAIN EXTENSION
WARD ROAD AND WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
1 4-21-2020	CITY COMMENTS
2	
3	
4	
5	
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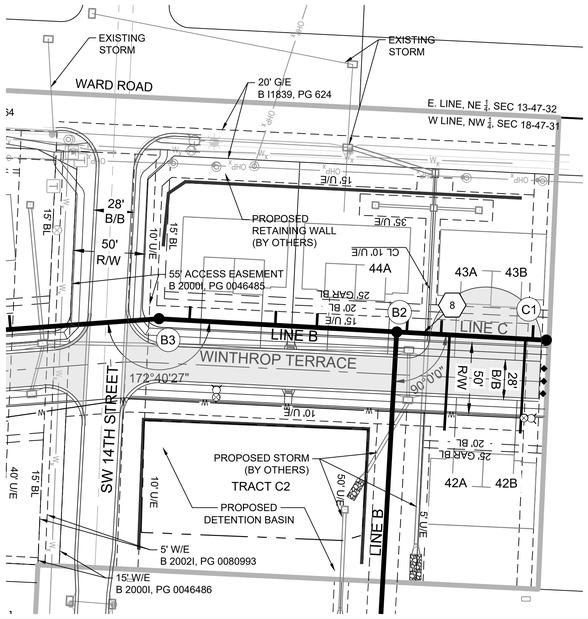
7	
8	

DRAWN BY:	BAL
CHECKED BY:	MAB
DATE PREPARED:	2-20-2020
PROJ. NUMBER:	18-017

LINE B PLAN AND PROFILE

SHEET
5

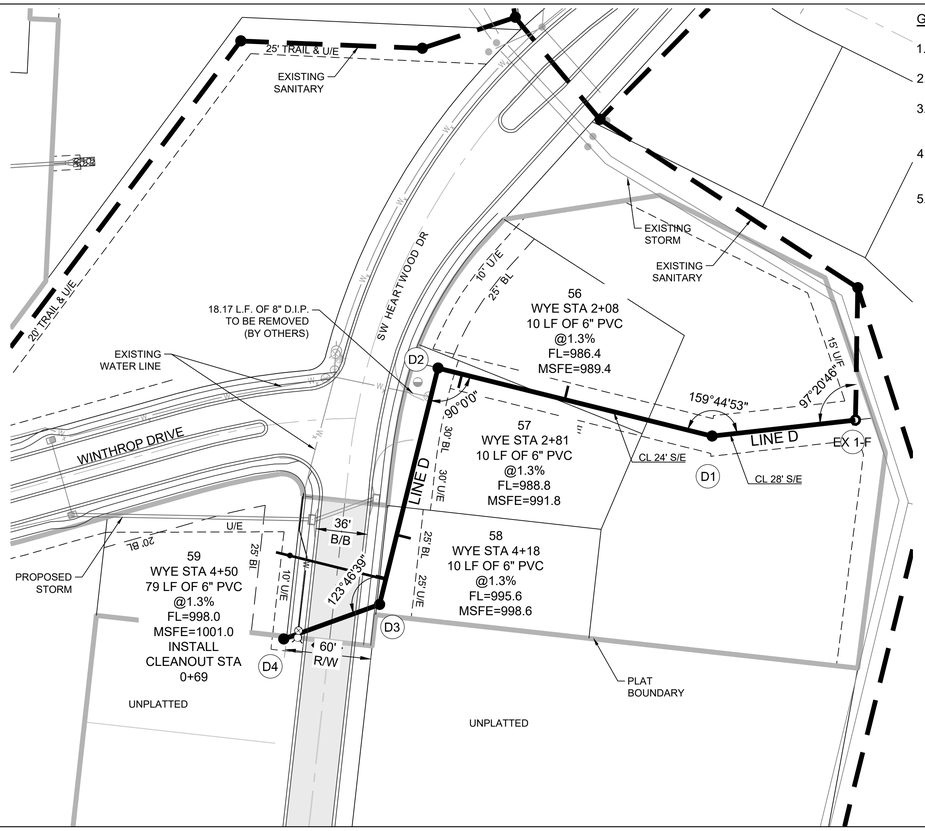


Lot No.	WYE STA	Stub Length (L.F.)	Stub Slope (%)	Riser Length (L.F.)	EOS Elev	MSFE Elev	Cleanout
42A	37.00	67	1.30	0.00	968.52	971.52	NO
42B	90.00	66	1.30	0.00	969.03	972.03	NO
43B	95.00	10	1.30	0.00	968.36	971.36	NO
43A	31.00	10	1.30	0.00	967.72	970.72	NO
44A	7.00	10	1.30	0.00	967.48	970.48	NO

SANITARY CROSSING TABLE

ID	SAN ELEV.	STORM/WATER ELEV.	SAN SIZE	STORM\WATER SIZE	VERTICAL SEPARATION	RCE/CRCE REQUIRED?
8	966.71	971.97	8" PCV	30" HDPE	4.54	NO

SCALE: 1" = 50'



GENERAL NOTES:

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

PROJECT BENCHMARK:

SW. CORNER NW. ¼ SEC. 18-47N-31W, JACKSON COUNTY, MO.
3" DIAMETER ALUMINUM DISK IN MONUMENT BOX
M.D.N.R. DOC. NO. 600-65374

ELEV. 1036.41

SCALE: 1" = 50'

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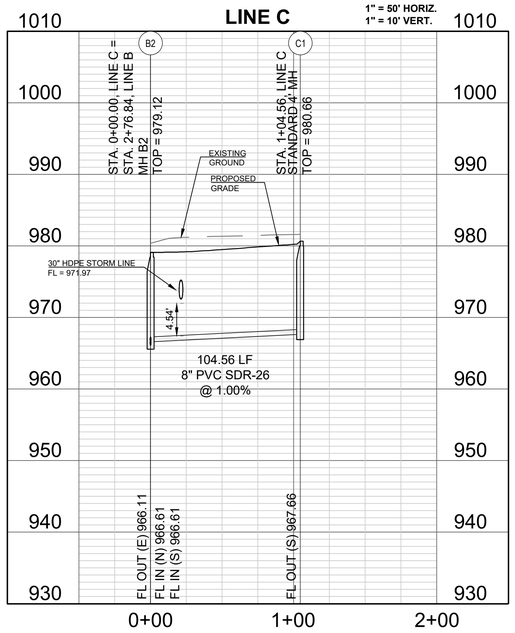
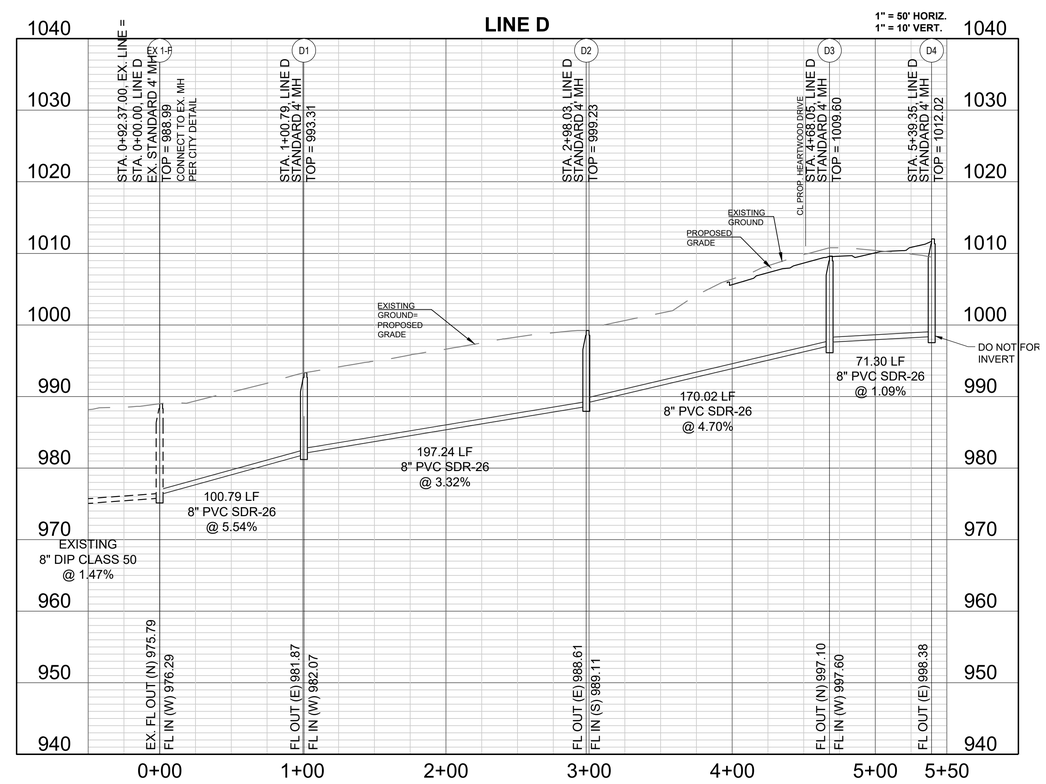
MARK ALLEN BREUER NUMBER PE-2003007260 STATE OF MISSOURI PROFESSIONAL ENGINEER
05.05.2020



Structure Table		
Structure Name	Structure Northing	Structure Easting
B2	993666.6637	2818442.0890
C1	993771.0575	2818447.9175



Structure Table		
Structure Name	Structure Northing	Structure Easting
D1	992465.1668	2819049.0765
D2	992512.5490	2818857.6124
D3	992347.5106	2818816.7699
D4	992323.2667	2818749.7146
EX 1-F	992476.3180	2819149.2468

WOODLAND GLEN 2ND PLAT
SANITARY SEWER MAIN EXTENSION
WARD ROAD AND WINTHROP DRIVE
LEE'S SUMMIT, MISSOURI

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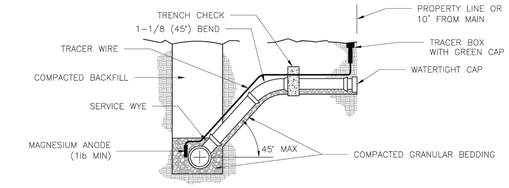
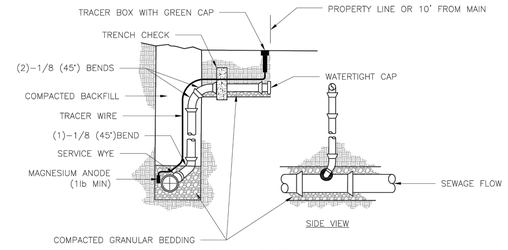
DRAWN BY:	BAL
CHECKED BY:	MAB
DATE PREPARED:	2-20-2020
PROJ. NUMBER:	18-017

LINE C-D PLAN AND PROFILE

SHEET 6



STANDARD INSTALLATION
NOT TO SCALE



VERTICAL RISER
NOT TO SCALE

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 LOCKABLE 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.

LEE'S SUMMIT
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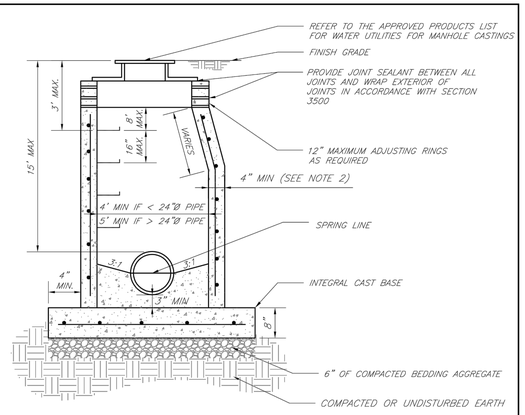
BUILDING SEWER STUB AND RISER (N.T.S.)

Date: 12/13	
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 WHEN THE MANHOLE DEPTH IS LESS THEN 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.

(N.T.S.)

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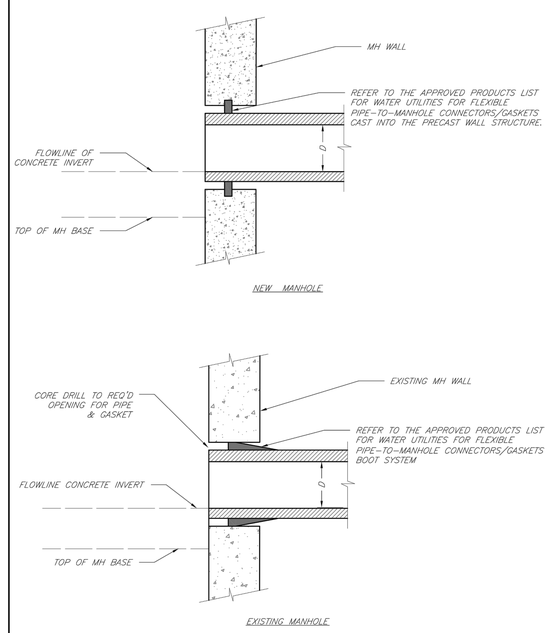
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

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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MANHOLE WALL CONNECTIONS (N.T.S.)

Date: 02/13	
Drawn By: JN	
Checked By: DL	
FILE: SAN-5	
Rev: 1/14	
Rev:	

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SANITARY DETAILS

SHEET
7