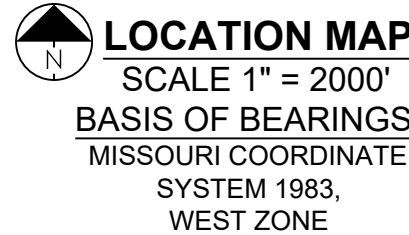
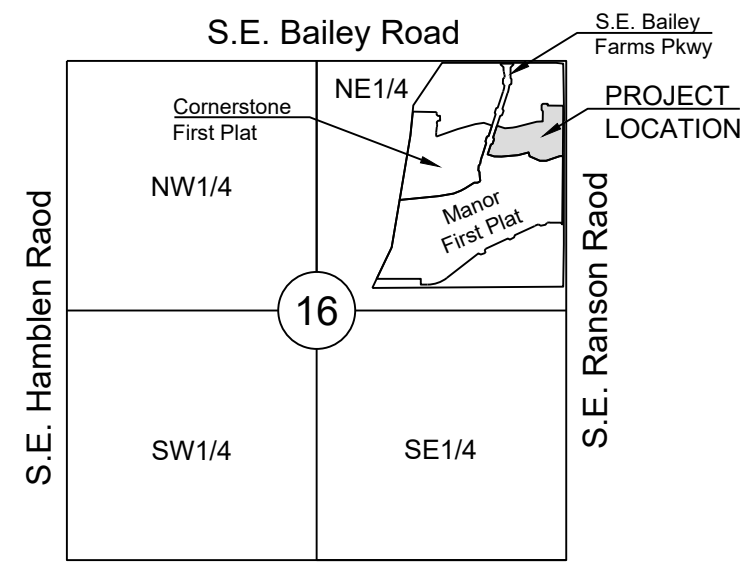


LEGEND:

- 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
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
STO - STORM SEWER
STO - STORM SEWER - EXISTING
CATV - CABLE TV - EXISTING
FOC - FIBER OPTIC CABLE - EXISTING
T - TELEPHONE LINE - EXIST.
E - ELECTRIC LINE - EXISTING
OHP - OVERHEAD POWER LINE - EXIST.
UG - UNDERGROUND ELECTRIC - EX.
G - GAS LINE - EXISTING
W - WATERLINE - EXISTING
LIGHT - EXISTING
EXISTING MANHOLE
CLEANOUT
EXISTING SANITARY MANHOLE
PROPOSED SANITARY MANHOLE
A/I - EXISTING AREA INLET
C/I - EXISTING CURB INLET
G/I - EXISTING GRATE INLET
J/B - EXISTING JUNCTION BOX
M - EXISTING STORM MANHOLE



UTILITY CONTACTS:

MISSOURI DEPARTMENT OF TRANSPORTATION (MODOT)
Steve Holloway
600 NE Colbern Road
Lee's Summit, MO 64086
(816) 399-2186

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 Dejamette
1300 NE Hamblin Road
Lee's Summit, MO 64081
Office: (816) 347-4318
Cell: (816) 810-5234
ron.dejamette@kcpcl.com

CITY OF LEE'S 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
John Meadows
4700 Little Blue Parkway
Independence, MO 64057
(816) 795-2257

CITY OF LEE'S SUMMIT WATER UTILITIES
Mark Schaffer
1200 SE Hamblin Road
Lee's Summit, MO 64081
(816) 969-1900

STREET, STORMWATER, AND MASTER DRAINAGE PLAN FOR RETREAT AT BAILEY FARMS, FIRST PLAT IN THE CITY OF LEE'S SUMMIT JACKSON COUNTY, MISSOURI

GENERAL NOTES:

- 1. ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
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. 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.
7. THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE.
8. CLEARING AND GRUBBING OPERATIONS AND DISPOSAL OF ALL DEBRIS THEREFROM SHALL BE PERFORMED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND ORDINANCES. ALL WASTE MATERIAL RESULTING FROM THE PROJECT SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR, OR AS DIRECTED BY THE OWNER.
9. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK EXCAVATION.
10. THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION, AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
11. ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
12. THE CONTRACTOR SHALL CONTACT DEVELOPMENT SERVICES INSPECTIONS AT: 816-969-1200 TO OBTAIN A DEVELOPMENT SERVICES CONSTRUCTION PERMIT. A MINIMUM 48 HOUR NOTICE SHALL BE GIVEN PRIOR TO PERMIT ISSUANCE.
13. THE CONTRACTOR SHALL CONTACT THE RIGHT OF WAY INSPECTOR AT 816-969-1800 PRIOR TO ANY LAND DISTURBANCE ACTIVITIES WITHIN THE RIGHT OF WAY. THESE ACTIVITIES MAY REQUIRE A PERMIT.
14. 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).

EARTHWORK:

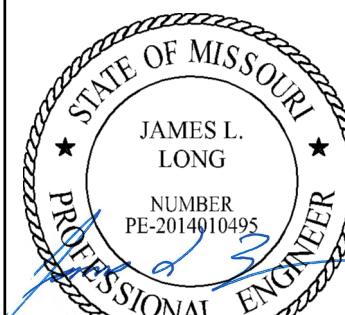
- 1. It is recommended that a Geotechnical Engineer observe and document all earthwork activities.
2. Contours have been shown at 1-foot or 2-foot intervals, as indicated. Grading shall consist of completing the earthwork required to bring the physical ground elevations of the existing site to the finished grade (or sub-grade) elevations provided on the plans as spot grades, contours or others means as indicated on the plans.
3. The existing site topography depicted on the plans by contouring has been established by aerial photography and field verified by p.s. observation near 2-20-19. The contour elevations provided may not be exact ground elevations, but rather interpretations of such. Accuracy shall be considered to be such that not more than 10 percent of spot elevation checks shall be in error by more than one-half the contour interval provided, as defined by the National Map Accuracy Standards. Any quantities provided for earthwork volumes are established using this topography contour accuracy, and therefore the inherent accuracy of any earthwork quantity is assumed from the topography accuracy.
4. Proposed contours are to approximate finished grade.
5. Unless otherwise noted, payment for earthwork shall include backfilling of the curb and gutter, sidewalk and further manipulation of utility trench spoils. The site shall be left in a movable condition and positive drainage maintained throughout.
6. Unless otherwise noted, all earthwork is considered Unclassified. No additional compensation will be provided for rock or shale excavation, unless specifically stated otherwise.
7. Prior to earthwork activities, pre-disturbance erosion and sediment control devices shall be in place per the Storm Water Pollution Prevention plan and/or the Erosion and Sediment Control Plan prepared for this site.
8. All topsoil shall be stripped from all areas to be graded and stockpiled adjacent to the site at an area specified by the project owner or his appointed representative. Vegetation, trash, trees, brush, tree roots and limbs, rock fragments greater than 6-inches and other deleterious materials shall be removed and properly disposed of offsite or as directed by the owner or his appointed representative.
9. Unless otherwise specified in the Geotechnical Report, all fills shall be placed in maximum 6-inch lifts and compacted to 95-percent of maximum density as defined using a standard proctor test (AASHTO T99/ASTM 698).
10. Fill materials shall be per Geotechnical Report and shall not include organic matter, debris or topsoil. All fills placed on slopes greater than 6:1 shall be benched.
11. The Contractor shall be responsible for redistributing the topsoil over proposed turf and landscaped areas to a minimum depth of 6-inches below final grade.
12. All areas shall be graded for positive drainage. Unless noted otherwise the following grades shall apply:
a. Turf Areas - 2.5% Minimum, 4H:1V Maximum
b. Paved Areas - 1.2% Minimum, 5% Maximum
13. All disturbed areas shall be fertilized, seeded and mulched immediately after earthwork activities have ceased. Seeding shall be per the Erosion and Sediment Control Plan and/or Landscape Plan. If not specified seeding shall be per APWA Section 2400, latest edition. Unless otherwise noted, seeding shall be subsidiary to the contract price for earthwork and grading activities.
14. All disturbed areas in the right-of-way shall be sodded.
15. Underdrains are recommended for all paved areas adjacent to irrigated turf and landscaped beds.
16. Contractor shall adhere to the reporting requirements outlined in the Storm Water Pollution Prevention Plan (SWPPP) prepared for this project. Erosion and Sediment control devices shall be properly maintained and kept clean of silt and debris and in good working order. Additional erosion and sediment control measures shall be installed as required.

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 sanitary sewer lines, manholes, and sanitary sewer service laterals, as measured from edge to edge. If minimum separations can not be obtained, concrete encasement of the sanitary line shall be required 10 feet in each direction of the conflict. Payment for trenching, backfilling, pipe embedment, flowable fill, backfill materials, clean up, seeding, sodding and any other items necessary for the construction of the utility line shall be included in the contract price for the utility installation.
5. The Contractor shall be responsible for contacting respective utility companies 48-hours in advance for the inspection of any proposed utility main extension or service line or service connection to any existing main. Trench spoils shall be neatly placed onsite adjacent to the trench, and compacted to prevent saturation and excess sediment runoff. Unsuitable materials, excess rock and shale, asphalt, concrete, trees, brush etc. shall be properly disposed of offsite. Materials may be wasted onsite at the direction of the Owner or his appointed representative.
6. All excavation is considered unclassified, unless noted otherwise. Unclassified excavation for utility trenching is subsidiary to the unit price provided for the pipe. Any quantity provided for rock excavation is estimated based on the best information provided to the Project Engineer. The Engineer has the authority to identify and define the physical characteristics to determine the classification. Unit price quantities for rock excavation will be paid at a trench width of the nominal pipe diameter of the installed main plus 18 inches. Contractor is required to dispose of excess rock from their trenches by disposing it in areas as specified by the Project Engineer.

Sheet List Table with columns for Sheet Number and Sheet Title, listing sheets 1 through 16 including Cover Sheet, General Layout, Master Drainage Plan, Storm Profile, Street Details, Storm Details, Storm Details, Storm Details, Storm Details, Storm Details, Storm Details, Storm Details, Storm Details, Storm Details, Storm Details, Storm Details, Storm Details.

PREPARED BY:



2/10/2022

SCHLAGEL & ASSOCIATES, P.A.

APPROVED BY:

CITY ENGINEER APPROVED FOR ONE YEAR FROM THIS DATE DATE

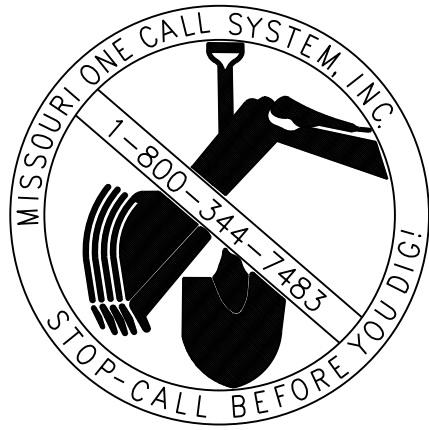
OWNER/DEVELOPER:

CLAYTON PROPERTIES GROUP INC., DBA SUMMIT HOMES
BRADLEY KEMPF
120 SE 30TH STREET
LEE'S SUMMIT, MO 64082
p (816) 246-6700
BRADLEY@SUMMITHOMESKC.COM

SUMMARY OF QUANTITIES table with columns for ITEM, QUANTITY, and UNITS, containing a grid for item entry.

PRELIMINARY

RETREAT AT BAILEY FARMS, FIRST PLAT STREET, STORMWATER, AND MASTER DRAINAGE PLAN
SE BAILEY ROAD AND SE RANSON ROAD LEE'S SUMMIT, MISSOURI



MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

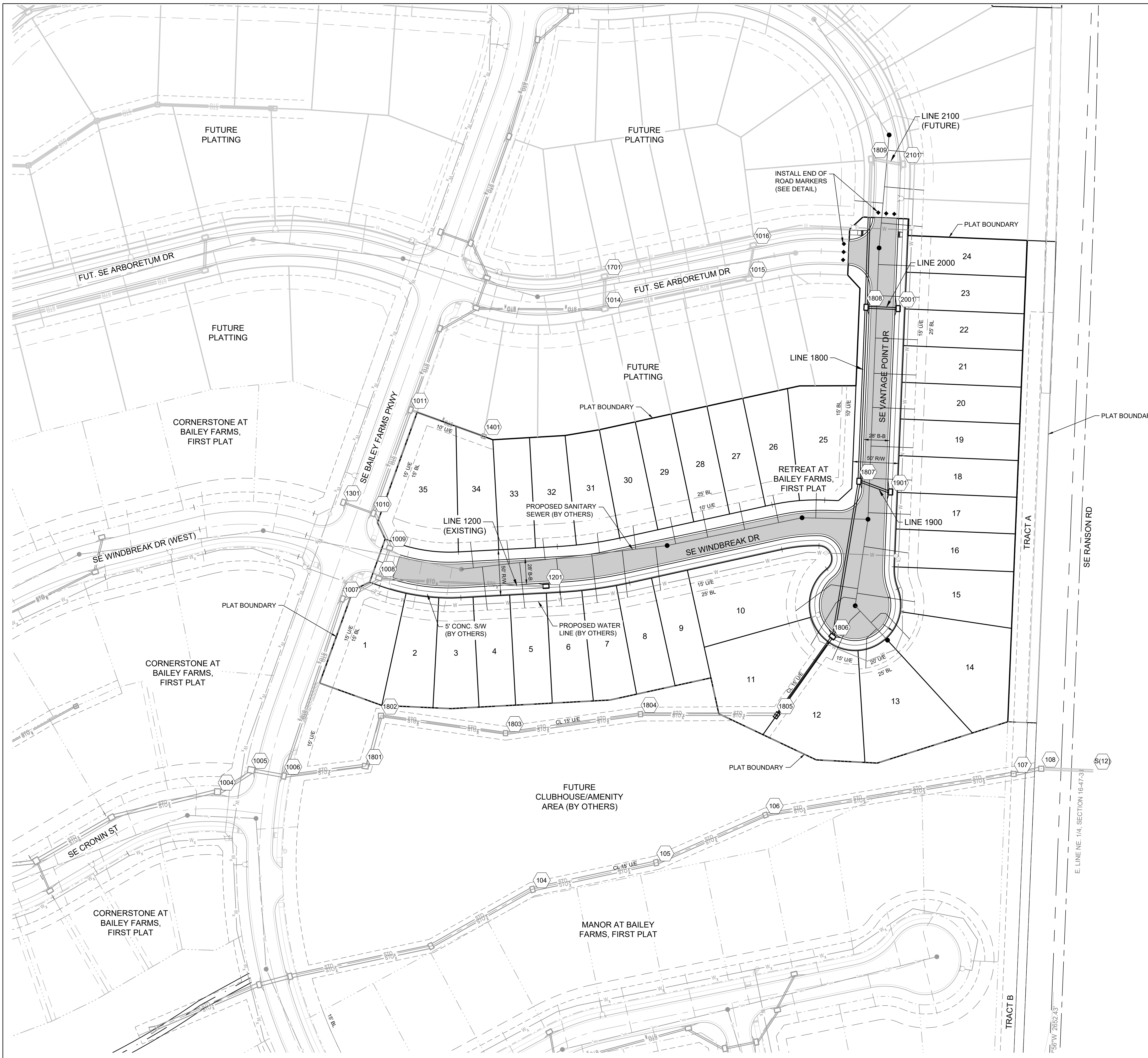
BM JA-45, IS A KC METRO ALUMINUM GRS DISK SET IN CONCRETE AND ABOUT 3 INCHES BELOW THE PAVEMENT ON THE SHOULDER OF SE RANSON ROAD. IT IS STAMPED JA45, 1987.

ELEV. = 1046.25

Table with columns for REVISION DATE, DESCRIPTION, DRAWN BY, CHECKED BY, DATE PREPARED, PROJ. NUMBER, containing revision history for the drawing.

COVER SHEET

SHEET



MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

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ELEV. = 1046.25

BASIS OF BEARINGS:

MISSOURI STATE PLANE COORDINATE SYSTEM (NAD) 1983, MISSOURI, WEST ZONE

NOTES:

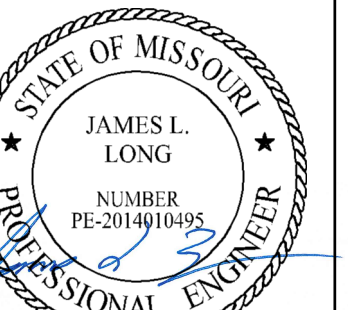
ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF LEES SUMMIT TECHNICAL SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.

STREET LEGEND:

RESIDENTIAL LOCAL

PREPARED BY:



2/10/2022

SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN
SE BAILEY ROAD AND SE RANSON ROAD
LEES SUMMIT, MISSOURI

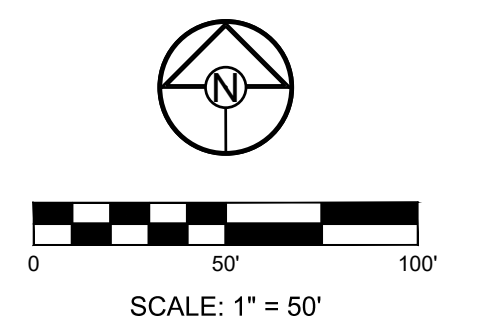
REVISION DATE	DESCRIPTION
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DRAWN BY: JRJ	CHECKED BY: JLL	DATE PREPARED: 02/09/2022	PROJ. NUMBER: 21-133
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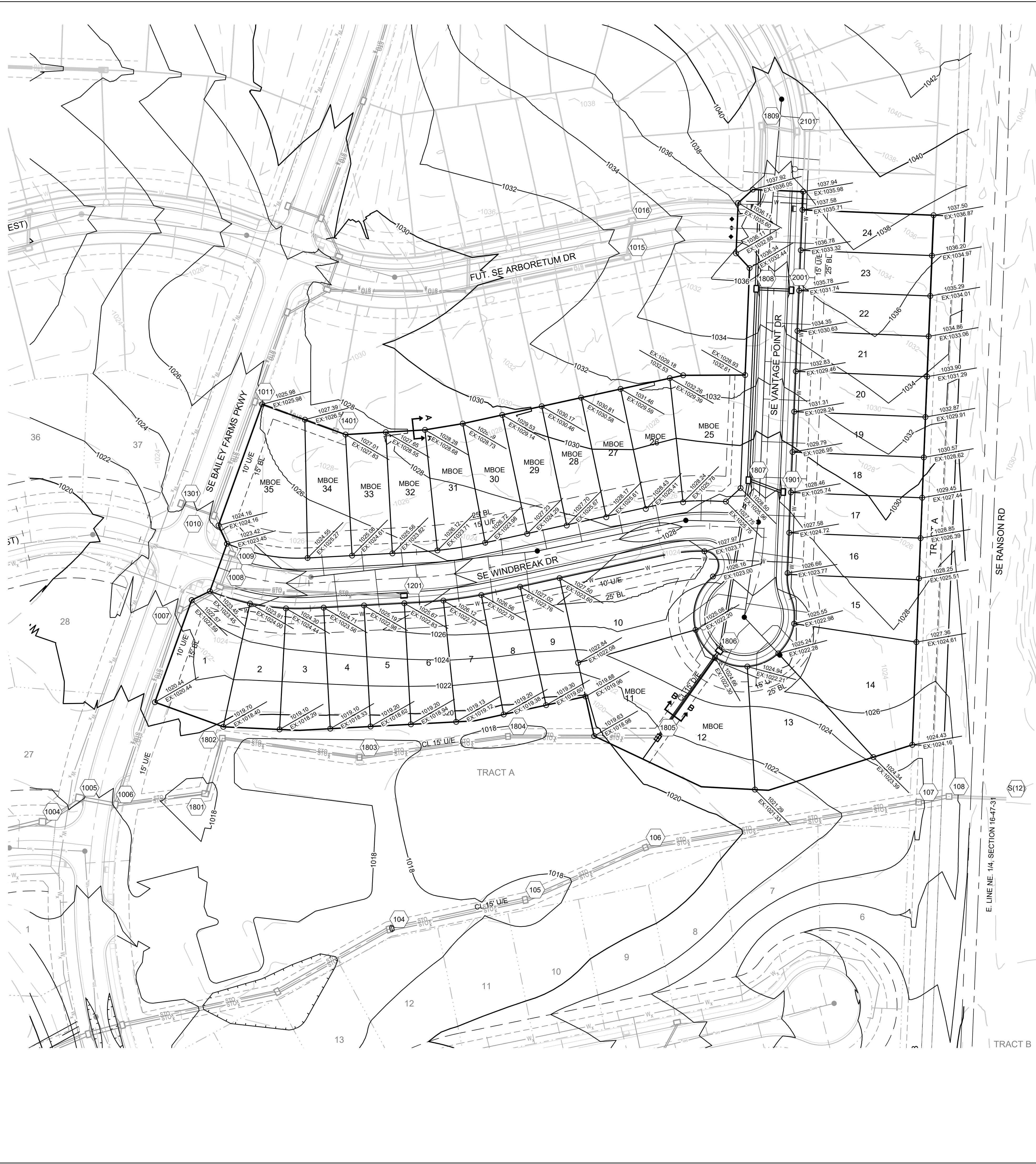
GENERAL LAYOUT

SHEET

2



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LOT TYPE TABLE

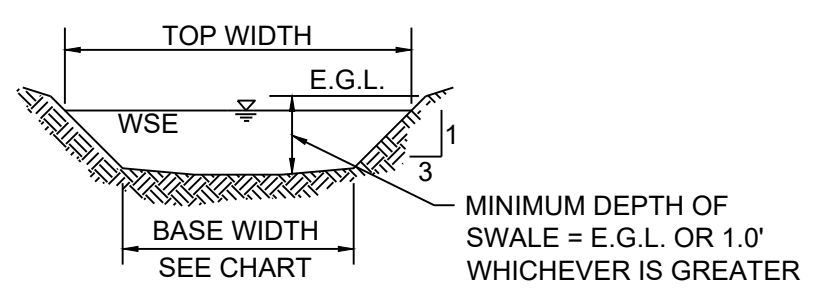
LOT NUMBER	BASEMENT TYPE	MBOE
1	DAYLIGHT	
2	DAYLIGHT	
3	DAYLIGHT	
4	DAYLIGHT	
5	DAYLIGHT	
6	DAYLIGHT	
7	DAYLIGHT	
8	DAYLIGHT	
9	DAYLIGHT	
10	DAYLIGHT	
11	DAYLIGHT	
12	STANDARD	
13	STANDARD	
14	STANDARD	
15	STANDARD	
16	STANDARD	
17	STANDARD	
18	STANDARD	
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21	STANDARD	
22	STANDARD	
23	STANDARD	
24	STANDARD	
25	STANDARD	
26	STANDARD	
27	STANDARD	
28	STANDARD	
29	STANDARD	
30	STANDARD	
31	STANDARD	
32	STANDARD	
33	STANDARD	
34	STANDARD	
35	STANDARD	

- NOTES:**
1. MBOE = MINIMUM BUILDING OPENING ELEVATION FOR HOUSES ADJACENT TO ENGINEERED OVERFLOW SWALES SHALL BE MINIMUM 2 FEET ABOVE THE 100 YR WATER SURFACE ELEVATION.
 2. EGL = ENERGY GRADE LINE (100 YR)
 3. WSE = WATER SURFACE ELEVATION (100 YR)
 4. ENGINEERED SWALES TO BE GRADED TO NORMAL DEPTH OF FLOW (WATER SURFACE ELEVATION) OR 1.0 FT. WHICHEVER IS GREATER. MINIMUM SLOPE OF ENGINEERED SWALES SHALL BE AS NOTED.
 5. MBOE'S ADJACENT TO SUMPED INLETS SHALL BE A MINIMUM OF 1 FOOT ABOVE TOP OF ADJACENT BERM.

100 YEAR OVERFLOW SWALES

SECTION	DRAINAGE AREA (AC.)	Q100 (CFS)	Q10 (CFS)	DESIGN OVERFLOW (CFS)	BED SLOPE (%)	BASE WIDTH (FT.)	SIDE SLOPE	TOP WIDTH (FT.)	NORMAL DEPTH (FT.)	VELOCITY (FPS)	VELOCITY HEAD (FT.)	EGL (FT.)
A-A	0.84	7.15	4.07	3.08	1.60	5	3:1	6.50	0.25	2.14	0.07	0.32
B-B	3.22	27.42	15.62	11.79	2.50	5	3:1	7.76	0.46	4.02	0.25	0.71

RUNOFF CALCULATIONS:
 $Q = K \cdot C \cdot I \cdot A$
 $K_{10} = 1.0 \quad K_{100} = 1.25 \quad C = 0.66 \quad I = \text{INTENSITY}$
 $\text{DESIGN OVERFLOW} = Q_{\text{OVERFLOW}} = Q_{100} - Q_{10}$
 MANNINGS "n" = 0.030 FOR SWALES



100 YEAR OVERFLOW SWALE SECTIONS
SECTION A-A

MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

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ELEV. = 1046.25

BASIS OF BEARINGS:

MISSOURI STATE PLANE COORDINATE SYSTEM (NAD) 1983, MISSOURI, WEST ZONE

NOTES:

ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF LEES SUMMIT TECHNICAL SPECIFICATIONS.

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GRADING LEGEND:

- - - 1023 - - - EXISTING CONTOUR
- 1023 ——— PROPOSED CONTOUR

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 (913) 492-5158 • Fax: (913) 492-8400
 WWW.SCHLAGELASSOCIATES.COM
 Missouri State Certificates of Authority
 #E2200203690F #LAC201005237 #LS200200895F

PREPARED BY:

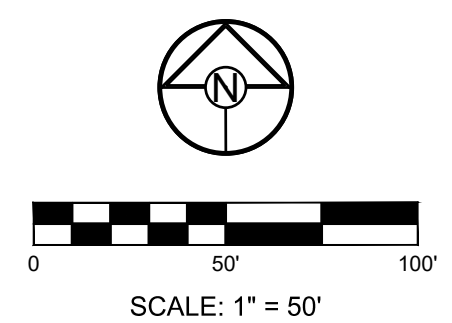
 JAMES L. LONG
 NUMBER PE-2014910495
 2/10/2022
 SCHLAGEL & ASSOCIATES, P.A.

**RETREAT AT BAILEY FARMS, FIRST PLAT
 STREET, STORMWATER, AND MASTER
 DRAINAGE PLAN**

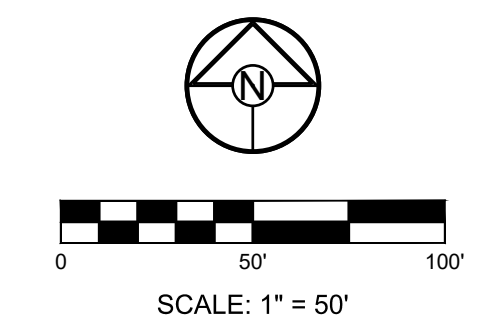
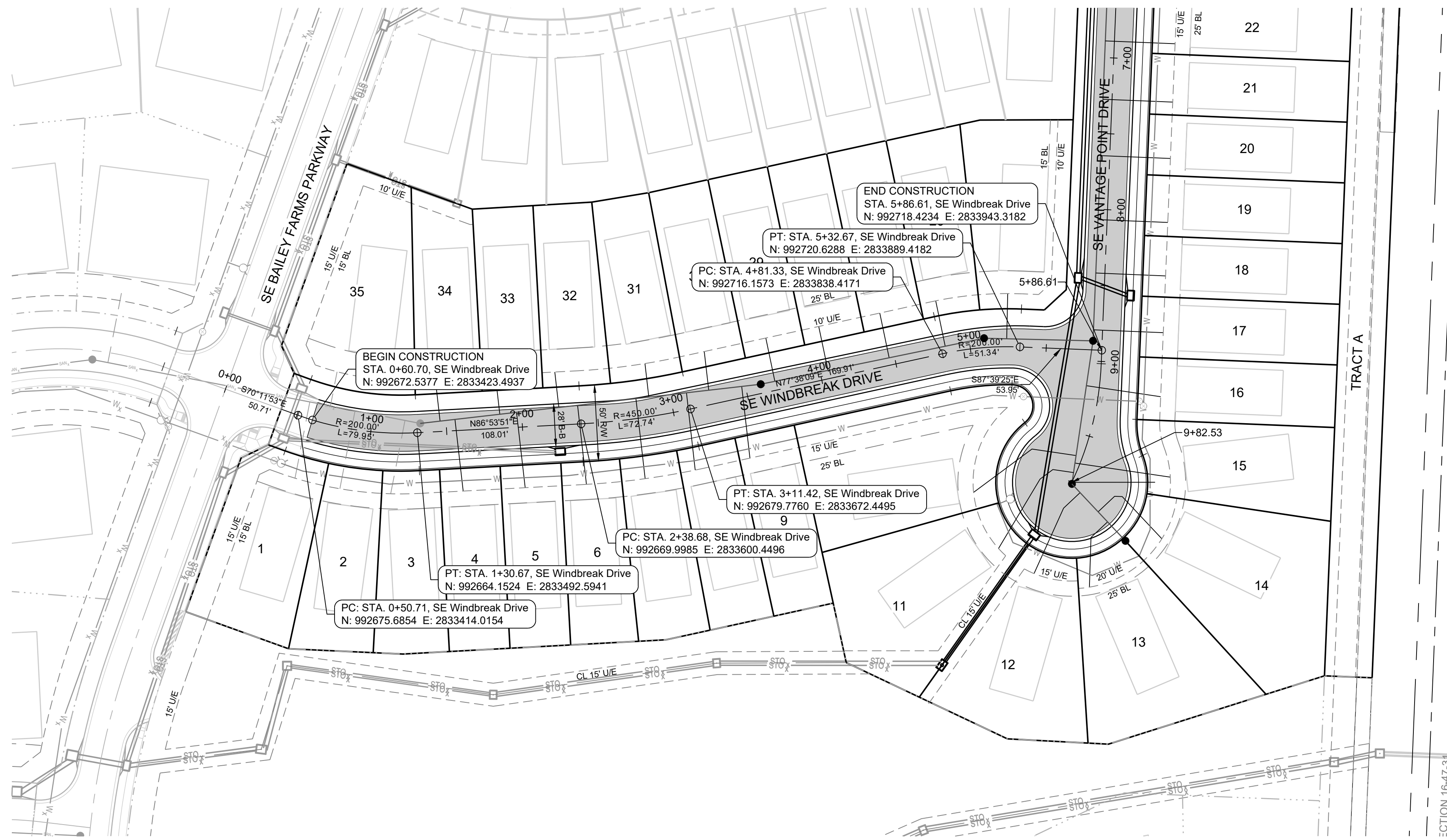
**SE BAILEY ROAD AND SE RANSON ROAD
 LEES SUMMIT, MISSOURI**

REVISION DATE	DESCRIPTION

MASTER DRAINAGE PLAN-GRADING PLAN



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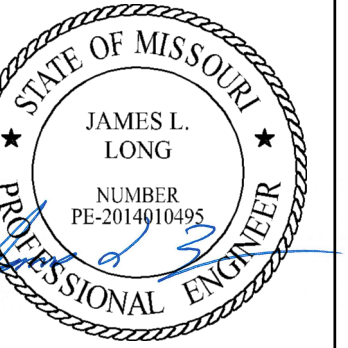
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PREPARED BY:



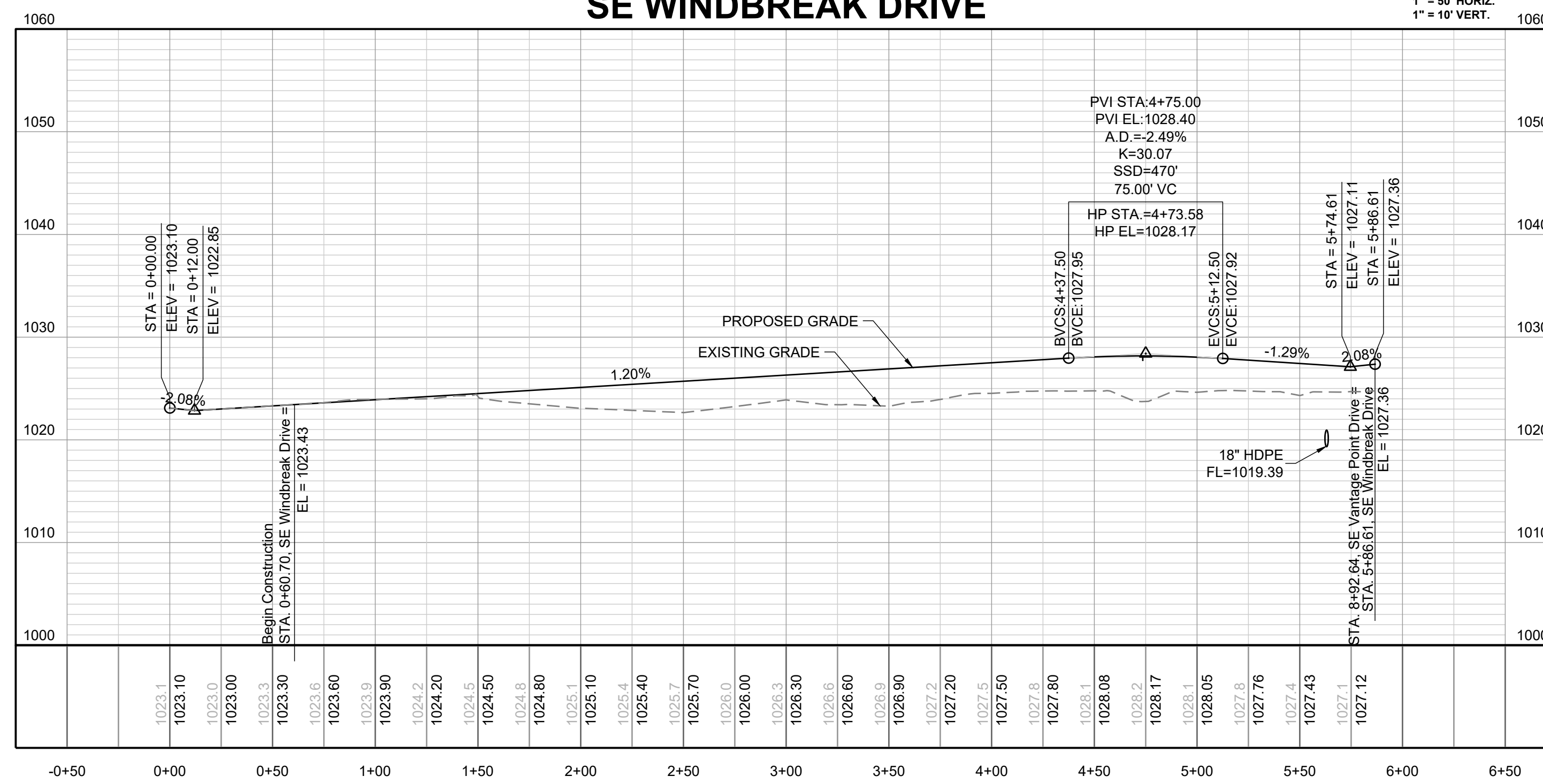
2/10/2022

SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT
STREET, STORMWATER, AND MASTER
DRAINAGE PLAN
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

SE WINDBREAK DRIVE

1" = 50' HORIZ.
1" = 10' VERT.

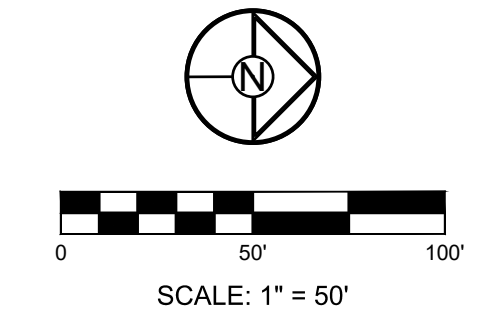
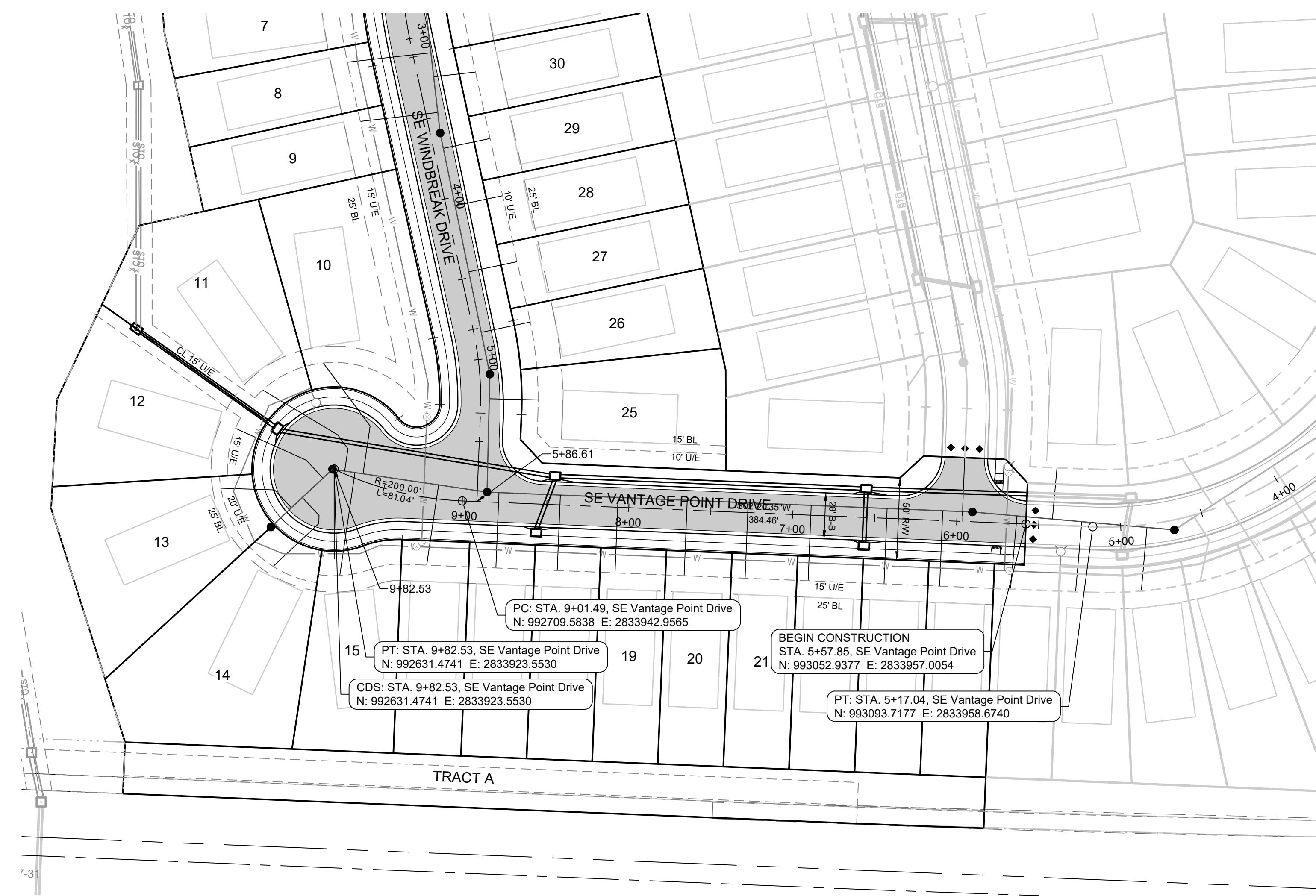


REVISION DATE	DESCRIPTION
2/10/2022	DR PLAN AND PROFILE

SE WINDBREAK
DR PLAN AND
PROFILE

SHEET

4



MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

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PREPARED BY:

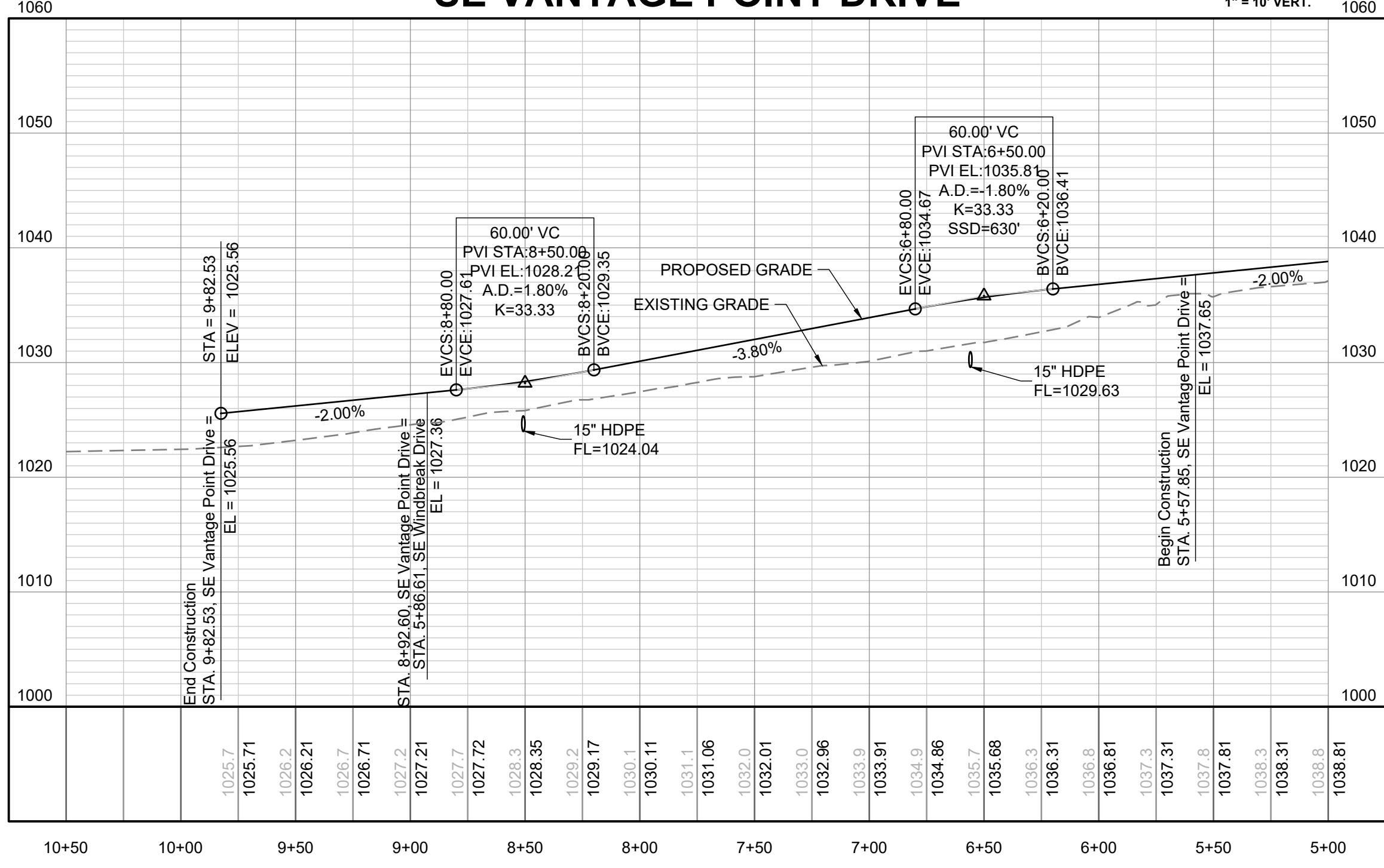


2/10/2022
 SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT
 STREET, STORMWATER, AND MASTER
 DRAINAGE PLAN
 SE BAILEY ROAD AND SE RANSON ROAD
 LEE'S SUMMIT, MISSOURI

SE VANTAGE POINT DRIVE

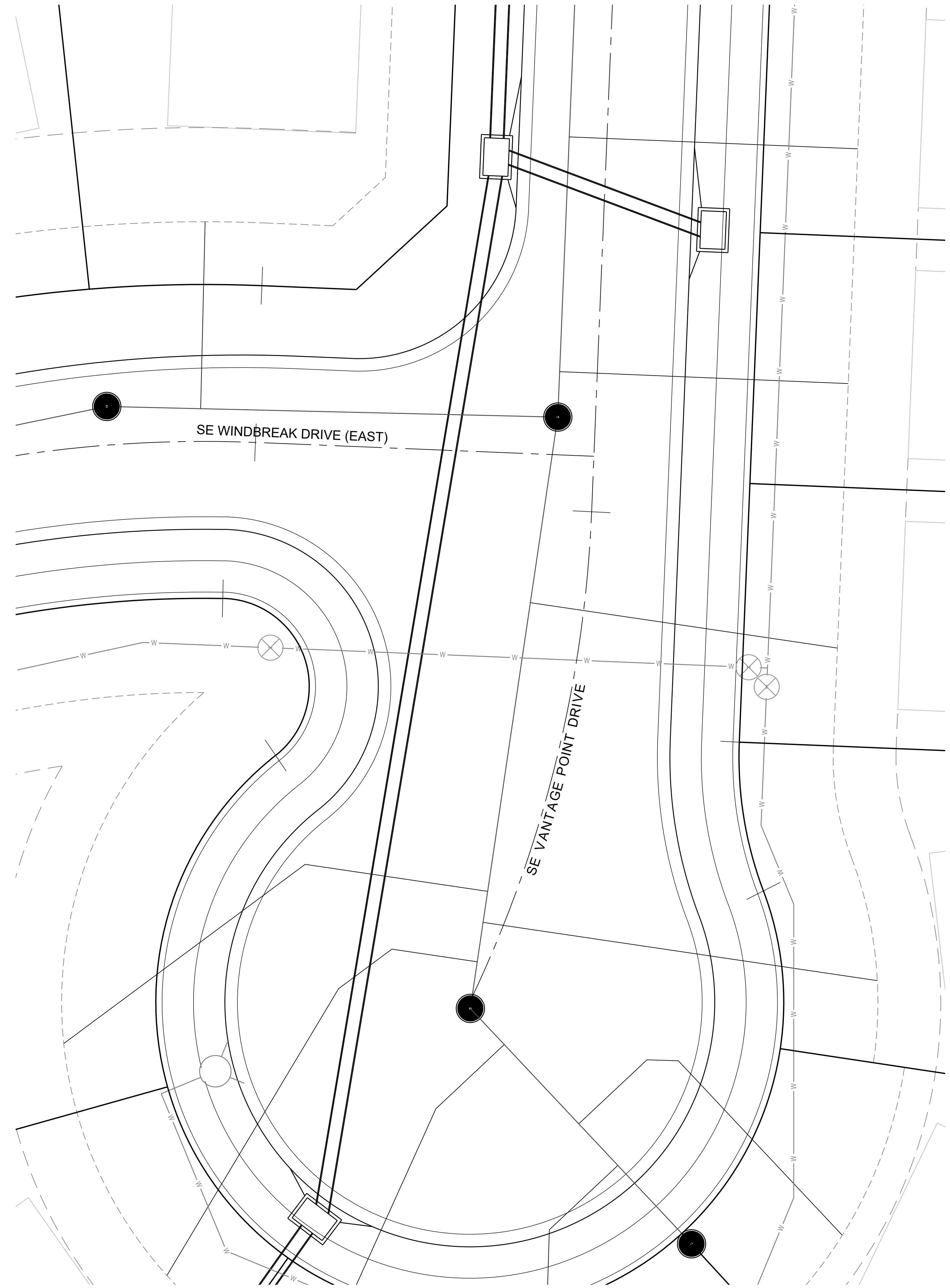
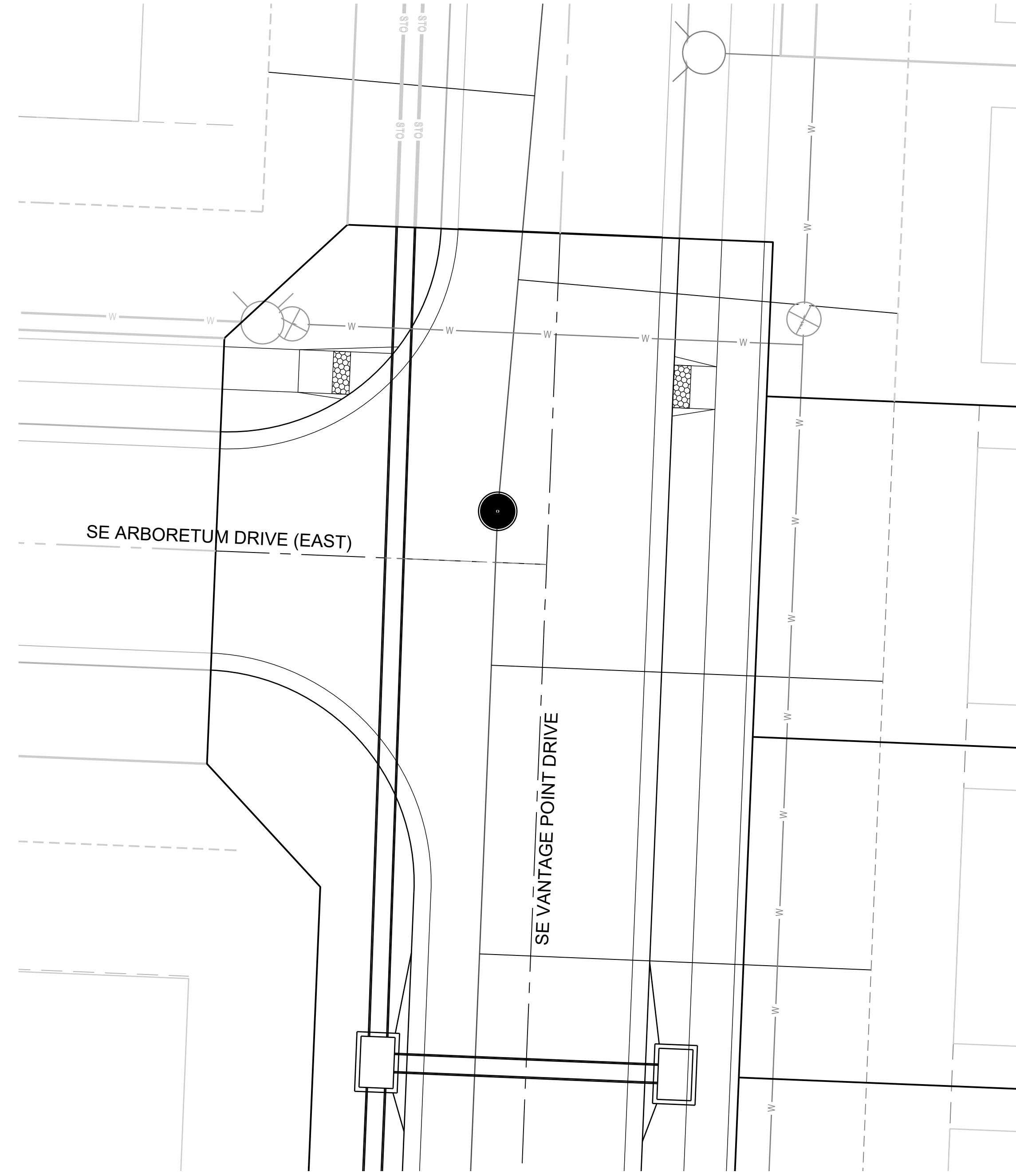
1" = 50' HORIZ.
 1" = 10' VERT.



REVISION DATE	DESCRIPTION

SE VANTAGE POINT DR PLAN AND PROFILE

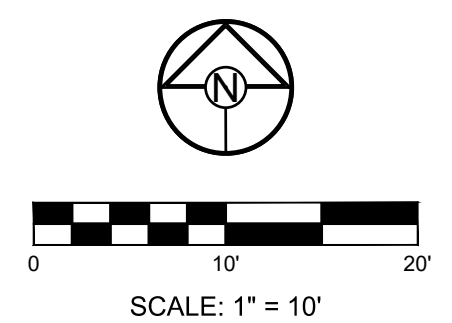
SHEET



NOTE:
 INTERSECTION DETAILS TO BE COMPLETED
 WITH SECOND SUBMITTAL.

CURB LEGEND

	CURB & GUTTER - EXISTING
	TYPE "CG-2" CURB & GUTTER
	TYPE "CG-2" DRY CURB & GUTTER
	TRANSITION "CG-2" TO "CG-2 DRY"



REVISION DATE	DESCRIPTION

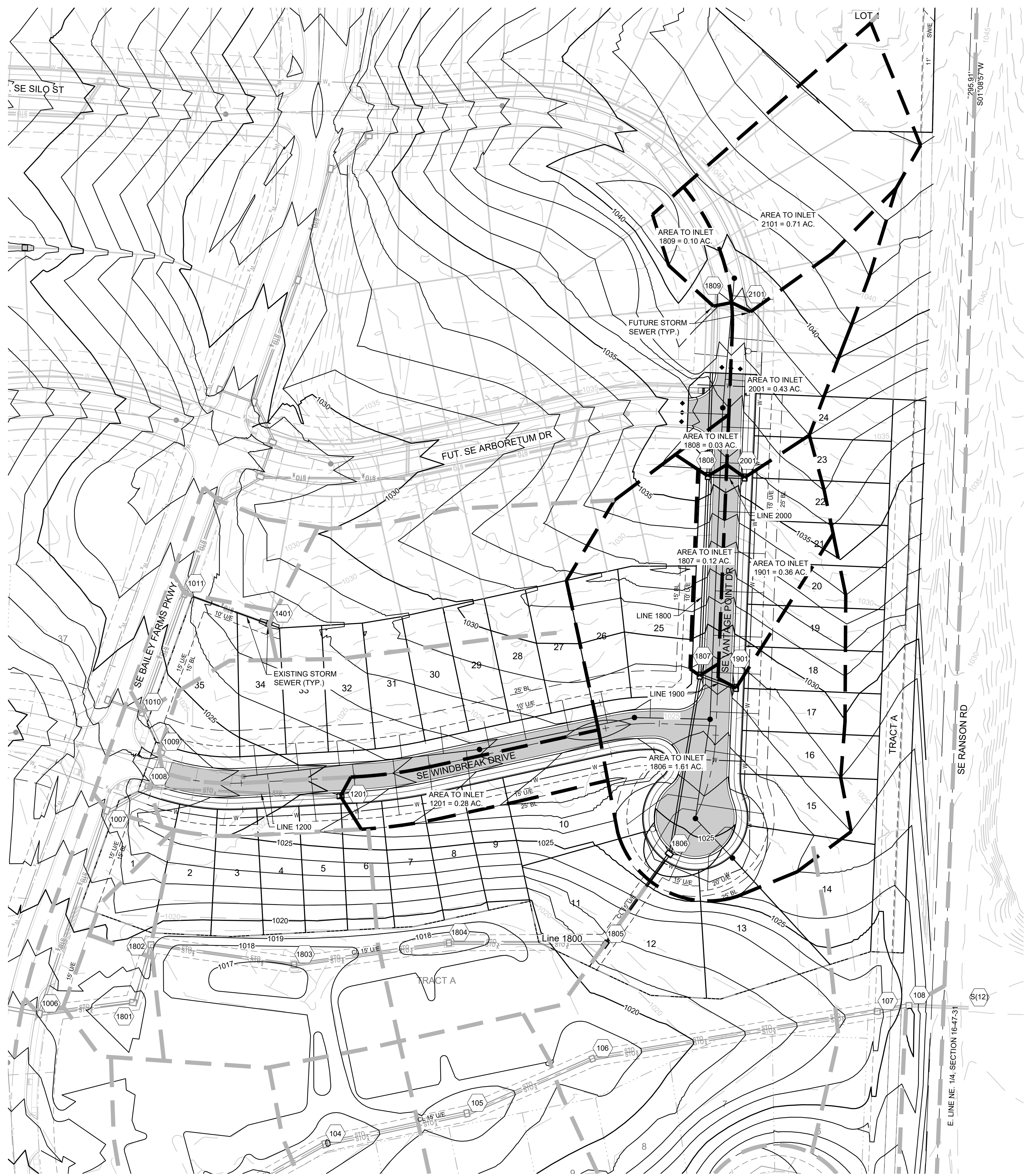
INTERSECTION
 DETAILS
 SHEET
6

RETREAT AT BAILEY FARMS, FIRST PLAT
 STREET, STORMWATER, AND MASTER
 DRAINAGE PLAN
 SE BAILEY ROAD AND SE RANSON ROAD
 LEE'S SUMMIT, MISSOURI

PREPARED BY:

 2/10/2022
 SCHLAGEL & ASSOCIATES, P.A.

SCHLAGEL
 ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
 14920 West 107th Street • Lenexa, Kansas 66215
 (913) 492-5158 • Fax: (913) 492-8400
 WWW.SCHLAGELASSOCIATES.COM
 Missouri State Certificates of Authority
 #E2002003690-F #LAC201005237 #LS200200869-F



MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

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

ELEV. = 1046.25

BASIS OF BEARINGS:

MISSOURI STATE PLANE COORDINATE SYSTEM (NAD) 1983, MISSOURI, WEST ZONE

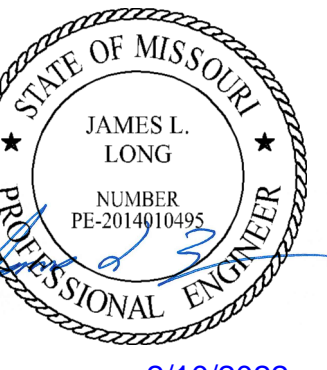
NOTES:

ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF LEES SUMMIT TECHNICAL SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.



PREPARED BY:



2/10/2022

SCHLAGEL & ASSOCIATES, P.A.

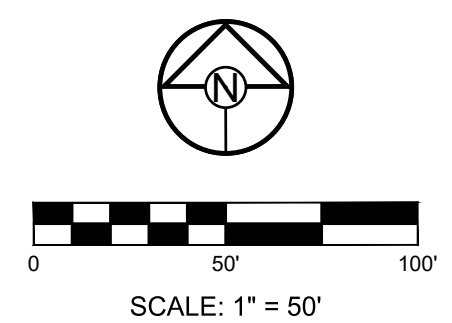
RETREAT AT BAILEY FARMS, FIRST PLAT STREET, STORMWATER, AND MASTER DRAINAGE PLAN
SE BAILEY ROAD AND SE RANSON ROAD
LEES SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION

MASTER DRAINAGE PLAN-DRAINAGE MAP

SHEET

7

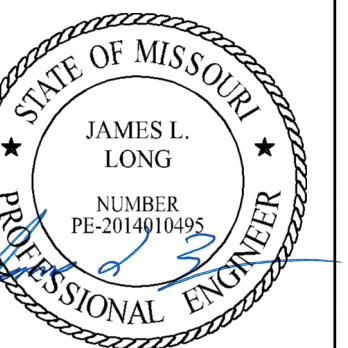


MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

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

ELEV. = 1046.25

PREPARED BY:



2/10/2022

SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT
 STREET, STORMWATER, AND MASTER
 DRAINAGE PLAN
 SE BAILEY ROAD AND SE RANSON ROAD
 LEE'S SUMMIT, MISSOURI

REVISION	DATE	DESCRIPTION
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DRAWN BY: JRJ
 CHECKED BY: JLL
 DATE PREPARED: 02/09/2022
 PROJ. NUMBER: 21-133

MASTER DRAINAGE PLAN-DRAINAGE CALCS
 SHEET

10-YEAR RUNOFF CALCULATIONS

Design Storm:	10
"K" Value:	1.00
"F" Factor:	1.00

Runoff Calculations													Pipe Properties														
Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. CxA	Tc	Intensity	Runoff To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.	Up Piped Inlet 1	Up Piped Inlet 2	Up Area (acres)	Up CxA	Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top		
LINE 1200																											
1201	0.28	0.66	0.28	0.18	5.0	7.35	1.36	1.36	10.50	8.55			0.00	0.00	1201	1008	HDPE	0.012	15	182.31	2.25	Drop in Inlet 1008	0.75	N/A	1019.09	1014.99	1025.52
LINE 1800																											
1805	0.00	0.66	3.36	2.22	6.5	6.93	0.00	15.37	34.66	11.03			0.00	0.00	1805	1804	HDPE	0.012	24	148.37	2.00	Drop in Inlet 1006	0.30		1016.05	1013.08	1021.69
1806	1.61	0.66	3.36	2.22	6.2	7.01	7.45	15.54	10.80	6.11			0.00	0.00	1806	1805	HDPE	0.012	18	105.15	0.90	0.50		1017.50	1016.55	1024.51	
1807	0.12	0.66	1.75	1.16	5.8	7.13	0.56	8.23	12.04	6.82	1901		0.36	0.24	1807	1806	HDPE	0.012	18	171.66	1.12	2.31		1019.92	1018.00	1028.70	
1808	0.03	0.66	1.27	0.84	5.4	7.22	0.14	6.05	12.12	9.88	2001		0.43	0.28	1808	1807	HDPE	0.012	15	189.72	3.00	0.50		1027.92	1022.23	1035.54	
1809	0.10	0.66	0.81	0.53	5.0	7.35	0.49	3.93	7.67	6.25	2101		0.71	0.47	1809	1808	HDPE	0.012	15	161.32	1.20	N/A		1030.36	1028.42	1039.10	
LINE 1900																											
1901	0.36	0.66	0.36	0.24	5.0	7.35	1.75	1.75	6.06	4.94			0.00	0.00	1901	1806	PEP	0.012	15	36.46	0.75	Drop in Inlet 1806	0.50	N/A	1018.27	1018.00	1028.40
LINE 2000																											
2001	0.43	0.66	0.43	0.28	5.0	7.35	2.09	2.09	11.06	9.02			0.00	0.00	2001	1807	PEP	0.012	15	35.00	2.50	Drop in Inlet 1807	0.50	N/A	1021.29	1020.42	1035.54
LINE 2100																											
2101	0.71	0.66	0.71	0.47	5.0	7.35	3.45	3.45	7.00	5.70			0.00	0.00	2101	1808	PEP	0.012	15	35.80	1.00	Drop in Inlet 1808	0.50	N/A	1028.78	1028.42	1038.95

100-YEAR RUNOFF CALCULATIONS

Design Storm:	100
"K" Value:	1.25
"F" Factor:	1.00

Runoff Calculations													Pipe Properties														
Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. CxA	Tc	Intensity	Runoff To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.	Up Piped Inlet 1	Up Piped Inlet 2	Up Area (acres)	Up CxA	Up Inlet	Down Inlet	Pipe Type	"n" Value	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top		
LINE 1200																											
1201	0.28	0.66	0.28	0.18	5.0	10.32	2.38	2.38	10.50	8.55			0.00	0.00	1201	1008	HDPE	0.012	15	182.31	2.25	Drop in Inlet 1008	0.75	N/A	1019.09	1014.99	1025.52
LINE 1800																											
1805	0.00	0.66	3.36	2.22	6.5	9.75	0.00	27.03	34.66	11.03			0.00	0.00	1805	1804	HDPE	0.012	24	148.37	2.00	Drop in Inlet 1006	0.30		1016.05	1013.08	1021.69
1806	1.61	0.66	3.36	2.22	6.2	9.86	13.09	27.32	10.80	6.11			0.00	0.00	1806	1805	HDPE	0.012	18	105.15	0.90	0.50		1017.50	1016.55	1024.51	
1807	0.12	0.66	1.75	1.16	5.8	10.02	0.99	14.47	12.04	6.82	1901		0.36	0.24	1807	1806	HDPE	0.012	18	171.66	1.12	2.31		1019.92	1018.00	1028.70	
1808	0.03	0.66	1.27	0.84	5.4	10.15	0.25	10.63	12.12	9.88	2001		0.43	0.28	1808	1807	HDPE	0.012	15	189.72	3.00	0.50		1027.92	1022.23	1035.54	
1809	0.10	0.66	0.81	0.53	5.0	10.32	0.85	6.90	7.67	6.25	2101		0.71	0.47	1809	1808	HDPE	0.012	15	161.32	1.20	N/A		1030.36	1028.42	1039.10	
LINE 1900																											
1901	0.36	0.66	0.36	0.24	5.0	10.32	3.07	3.07	6.06	4.94			0.00	0.00	1901	1806	PEP	0.012	15	36.46	0.75	Drop in Inlet 1806	0.50	N/A	1018.27	1018.00	1028.40
LINE 2000																											
2001	0.43	0.66	0.43	0.28	5.0	10.32	3.66	3.66	11.06	9.02			0.00	0.00	2001	1807	PEP	0.012	15	35.00	2.50	Drop in Inlet 1807	0.50	N/A	1021.29	1020.42	1035.54
LINE 2100																											
2101	0.71	0.66	0.71	0.47	5.0	10.32	6.05	6.05	7.00	5.70			0.00	0.00	2101	1808	PEP	0.012	15	35.80	1.00	Drop in Inlet 1808	0.50	N/A	1028.78	1028.42	1038.95

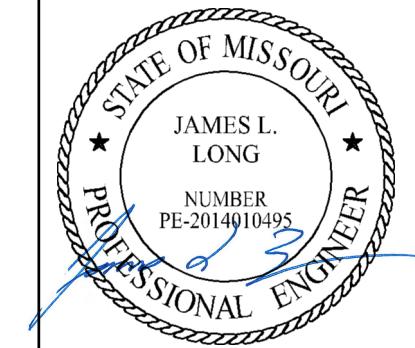
GUTTER SPREAD AND INLET CAPACITY CALCULATIONS - RETREAT AT BAILEY FARMS, FIRST PLAT

DESIGN STORM	10	CURB TYPE "A" = LAZY BACK
"K" FACTOR	1.00	CURB TYPE "B" = HIGH BACK

RUNOFF CALCULATIONS												INLET DESIGN								GUTTER DESIGN				
INLET #	COMPOSITE "C"	AREA	INLET Tc	INTENSITY	RUNOFF	UPSTREAM INLET	UPSTREAM INLET	UPSTREAM INLET	UPSTREAM INLET	BYPASS FROM UPSTREAM INLET	TOTAL RUNOFF	STREET GRADE	STREET CROSS SLOPE	CURB TYPE	INLET LENGTH	EFFECTIVE LENGTH 80% CAP	INLET INTERCEPTION	BYPASS TO DOWNSTREAM INLET	STREET GRADE	STREET CROSS SLOPE	DEPTH AT CURB	SPREAD OF FLOW		
LINE 1200																								
1201	0.66	0.28	5	7.35	1.36					0.00	1.36	1.20	2.08	A	6	4.8	1.24	0.12	1.20	2.08	0.15	7.75		
LINE 1800																								
1806	0.66	1.61	5	7.35	7.81	1807	1901	2001		2.04	9.85	SUMP	2.08	A	6	4.8	13.44	0.00	SUMP	2.08	< 0.21	< 10.50		
1807	0.66	0.12	5	7.35	0.58	1808				0.00	0.58	3.80	2.08	A	6	4.8	0.53	0.05	3.80	2.08	0.09	4.75		
1808	0.66	0.03	5	7.35	0.15					0.00	0.15	2.00	2.08	A	6	4.8	0.14	0.00	2.00	2.08	0.06	3.35		
1809	0.66	0.10	5	7.35	0.49					0.00	0.49	2.00	2.08	A	6	4.8	0.46	0.02	2.00	2.08	0.09	4.98		
LINE 1900																								
1901	0.66	0.36	5	7.35	1.75	2001				1.02	2.76	3.80	2.08	A	6	4.8	1.79	0.97	3.80	2.08	0.16	8.13		
LINE 2000																								
2001	0.66	0.71	5	7.35	3.44					0.00	3.44	2.00	2.08	A	6	4.8	2.43	1.02	2.00	2.08	0.19	9.84		

NOTES:
 1. CAPACITY OF INLETS ON GRADE DETERMINED USING ROUTINE OUTLINED ON PGS 56-95 TO 56-97, SECTION 5600 APWA
 2. CAPACITY OF SUMP INLETS CALCULATED USING FIGURE 5604-21, SECTION 5600 APWA
 3. MANNINGS "n" VALUE FOR COMBINED ASPHALT PAVEMENT AND CONCRETE CURB - 0.014

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

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

ELEV. = 1046.25

BASIS OF BEARINGS:

MISSOURI STATE PLANE COORDINATE SYSTEM (NAD) 1983, MISSOURI, WEST ZONE

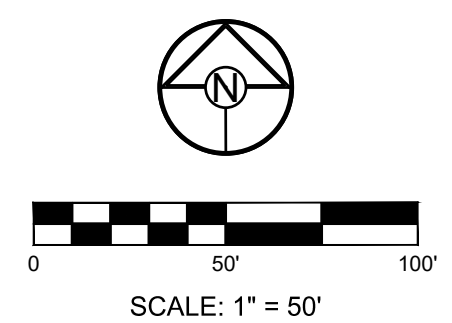
NOTES:

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Storm Sewer Construction Notes	
Structure	Notes
1201	STA 1+82.31, LINE 1200 INSTALL 6 X 4 CURB INLET N 992651.7271 E 2833586.6905
1805	STA 5+80.78, LINE 1800 INSTALL 4 X 4 JUNCTION BOX N 992511.0888 E 2833838.0784
1806	STA 6+85.93, LINE 1800 INSTALL 6 X 4 CURB INLET N 992596.8865 E 2833898.8588
1807	STA 8+57.59, LINE 1800 INSTALL 6 X 4 CURB INLET N 992766.0995 E 2833927.7543
1808	STA 10+47.31, LINE 1800 INSTALL 6 X 4 CURB INLET N 992955.6599 E 2833935.5105
1901	STA 0+36.46, LINE 1900 INSTALL 6 X 4 CURB INLET N 992754.4673 E 2833962.3077
2001	STA 0+35.00, LINE 2000 INSTALL 6 X 4 CURB INLET N 992954.2290 E 2833970.4812



RETREAT AT BAILEY FARMS, FIRST PLAT
 STREET, STORMWATER, AND MASTER
 DRAINAGE PLAN
 SE BAILEY ROAD AND SE RANSON ROAD
 LEES SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION

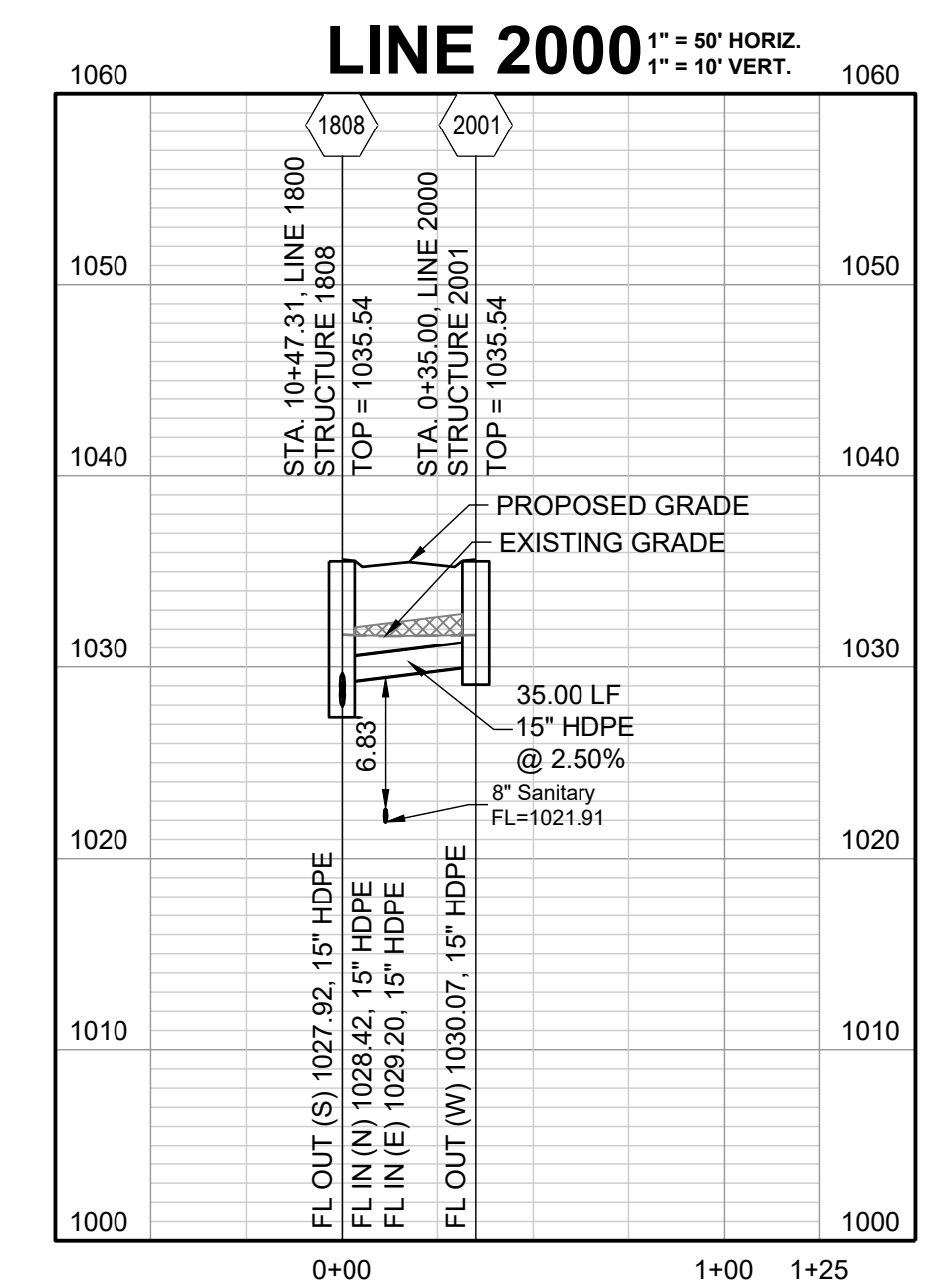
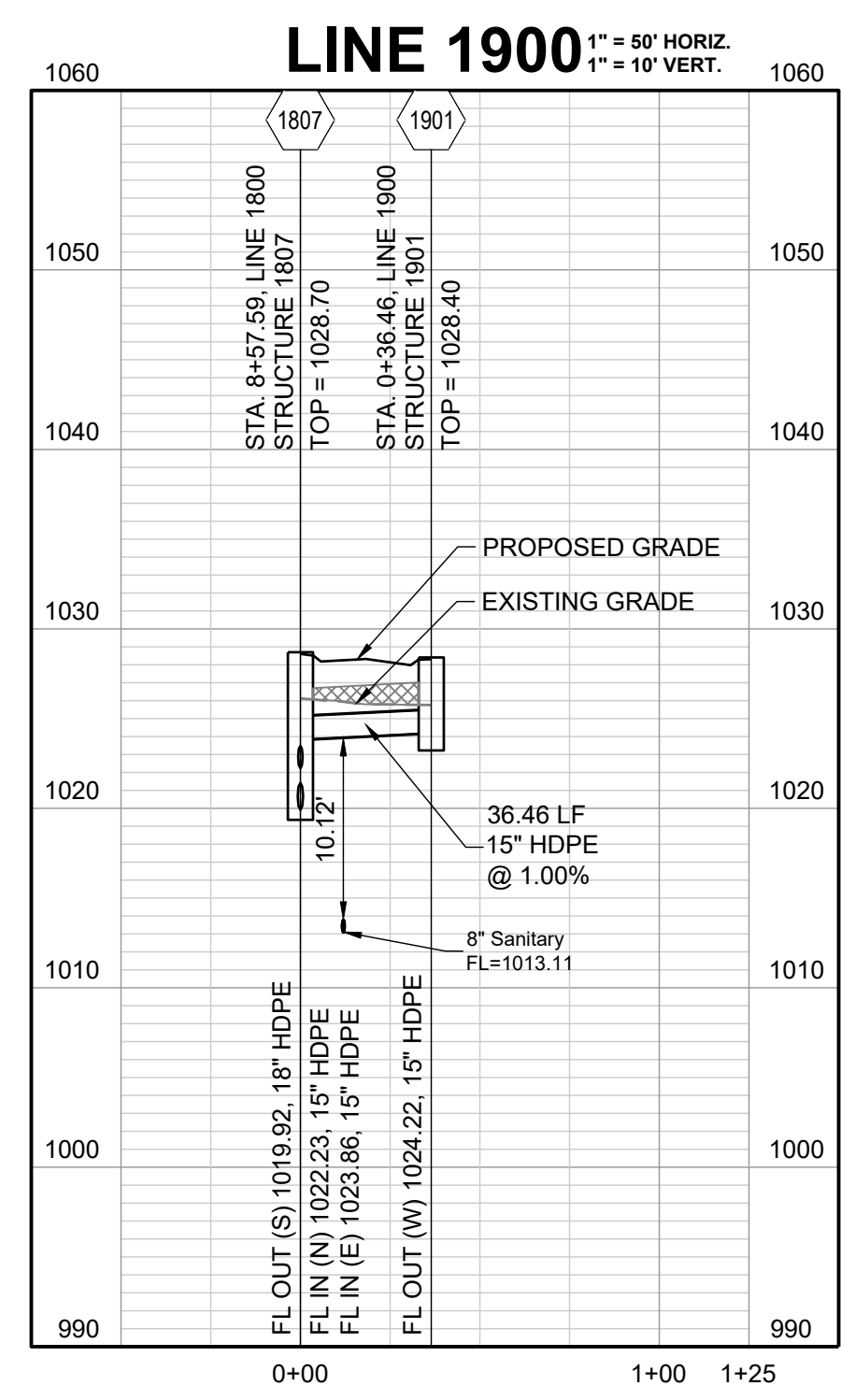
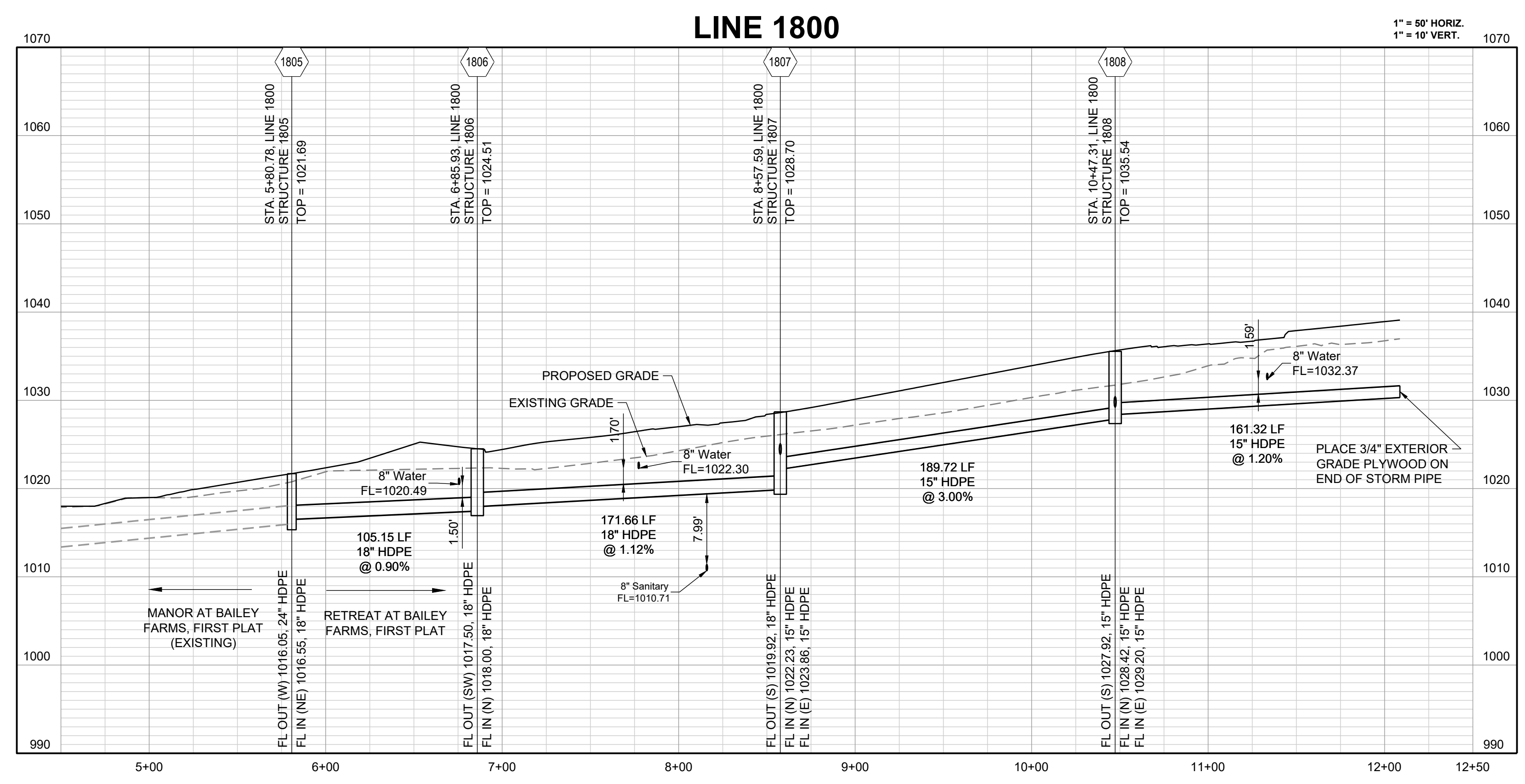
STORM PLAN

SHEET

9

REVISION DATE	DESCRIPTION
1/11/22	1.00
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1/11/22	1.02
1/11/22	1.03
1/11/22	1.04
1/11/22	1.05
1/11/22	1.06
1/11/22	1.07
1/11/22	1.08
1/11/22	1.09
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1/11/22	1.94
1/11/22	1.95
1/11/22	1.96
1/11/22	1.97
1/11/22	1.98
1/11/22	1.99
1/11/22	2.00

STORM PROFILE



COMPACTED FILL TO BE PLACED A MINIMUM OF 1.5 FEET ABOVE TOP OF PIPE ELEVATION PRIOR TO PIPE INSTALLATION.

10-YEAR HGL ————
 100-YEAR HGL - - - - -

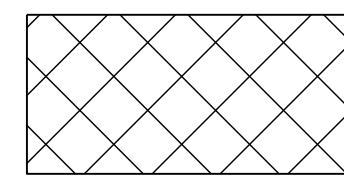
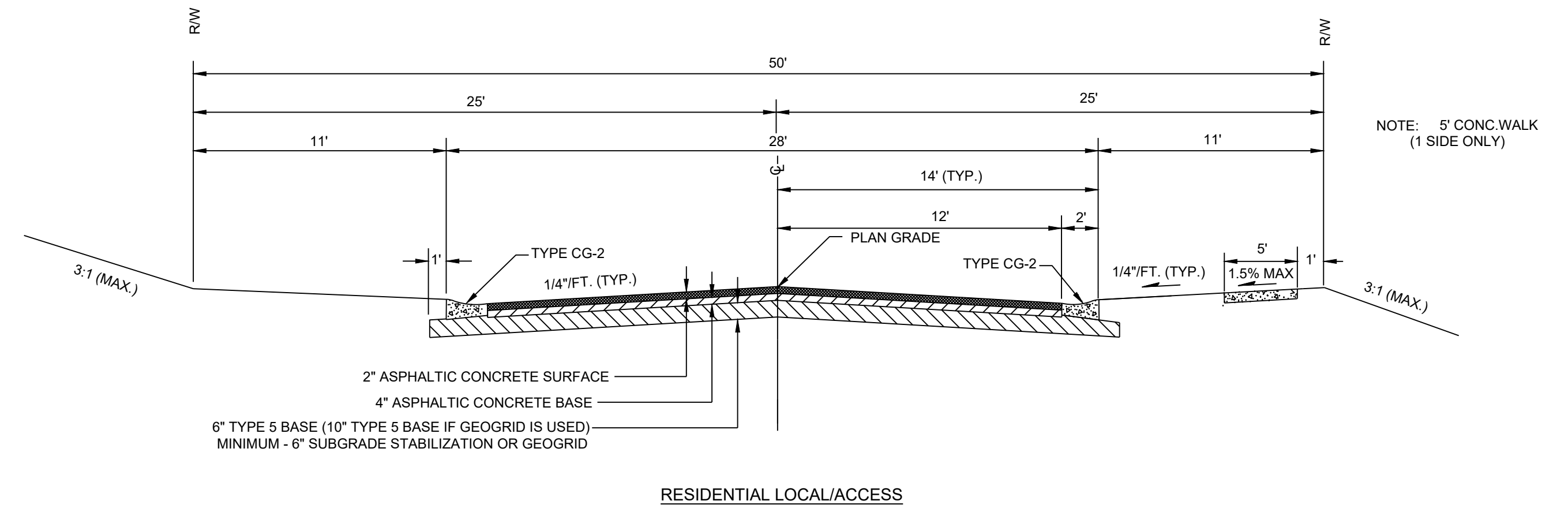


TABLE LS-2: MINIMUM ASPHALT PAVEMENT THICKNESSES

Street Classification	Pavement Option	AC Surface (in.)	AC Base (in.)	Aggregate Base (in.)	Chemical Subgrade Stabilization (in.)	Geogrid / Geotextile ⁽¹⁾
Residential Local/Access	A	2	4	6	6	--
	B	2	4	10	--	Geogrid / Geotextile
Residential Collector	A	2	5.5	6	9	--
	B	2	5.5	12	--	Geogrid / Geotextile
Commercial Industrial Local/Collector	A	2	7.5	6	9	--
	B	2	7.5	12	--	Geogrid / Geotextile

Notes:
(1) Geogrid shall be polypropylene material and Geotextile shall be woven, polypropylene as shown in the City's Approved Products List

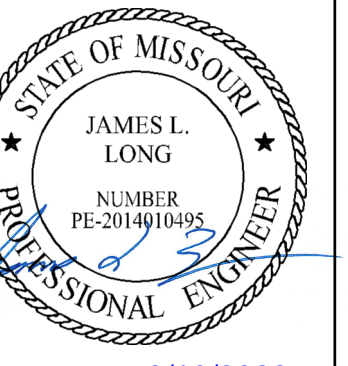


LS5200

17

July 2020

PREPARED BY:



2/10/2022

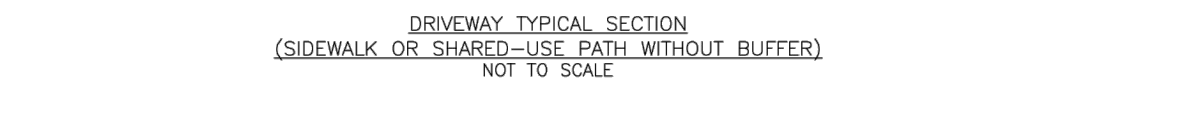
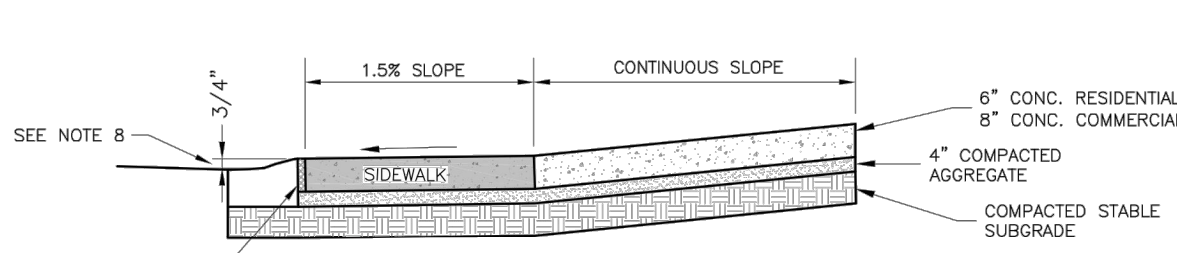
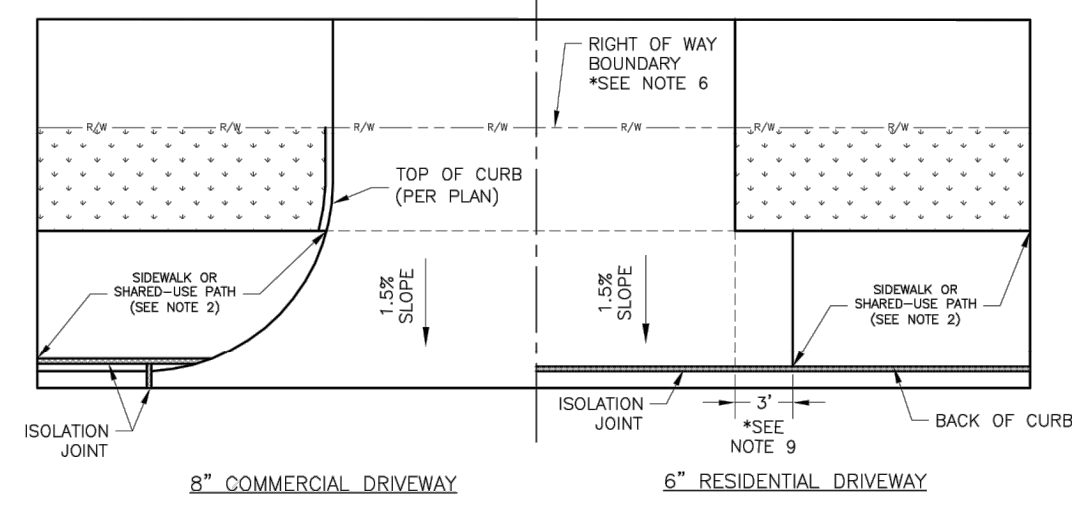
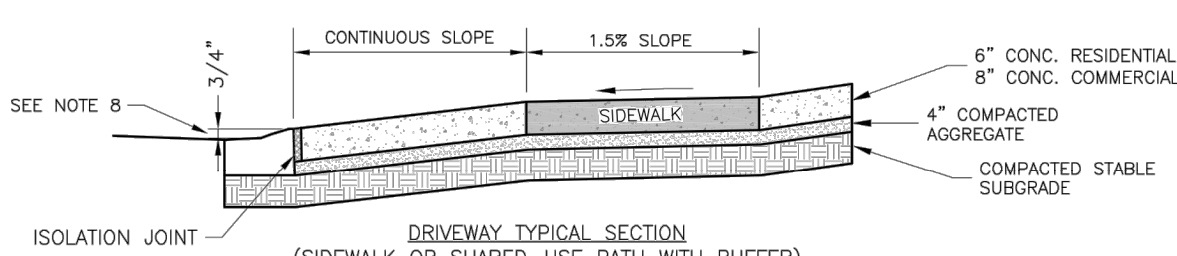
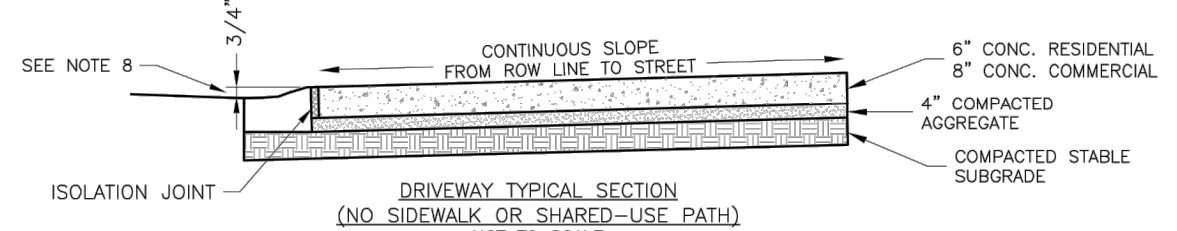
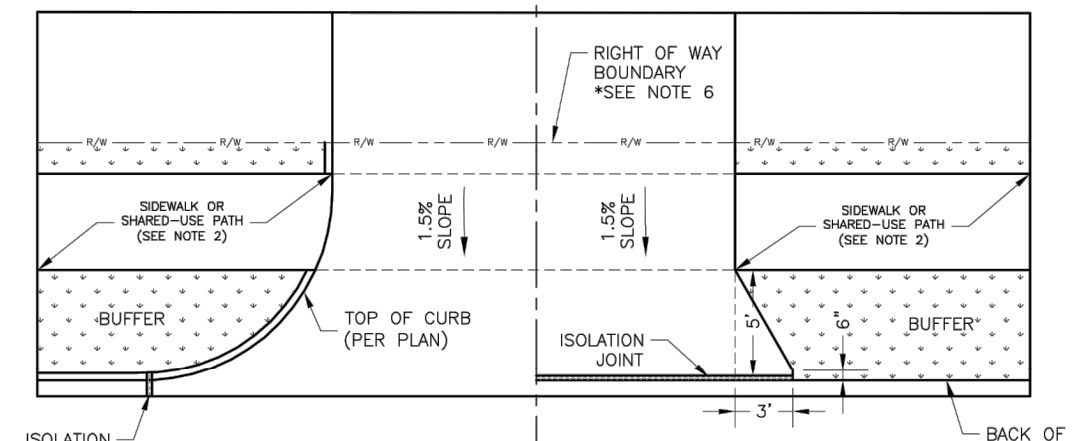
SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT
 STREET, STORMWATER, AND MASTER
 DRAINAGE PLAN
 SE BAILEY ROAD AND SE RANSON ROAD
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
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STREET DETAILS

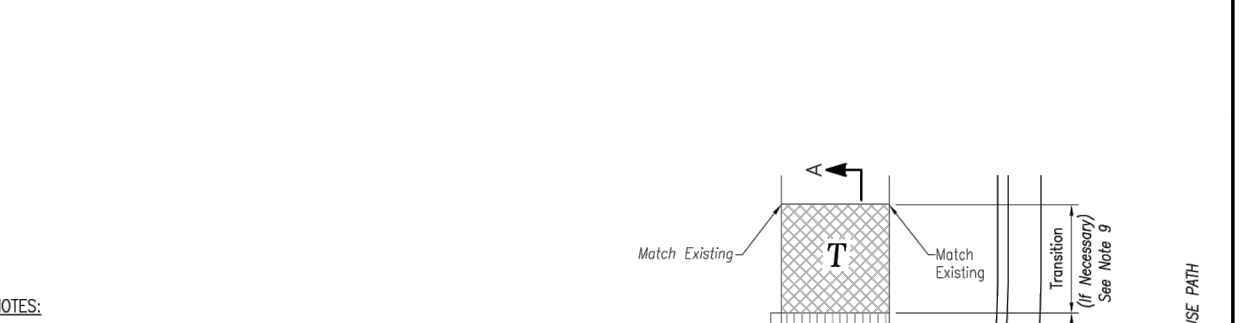
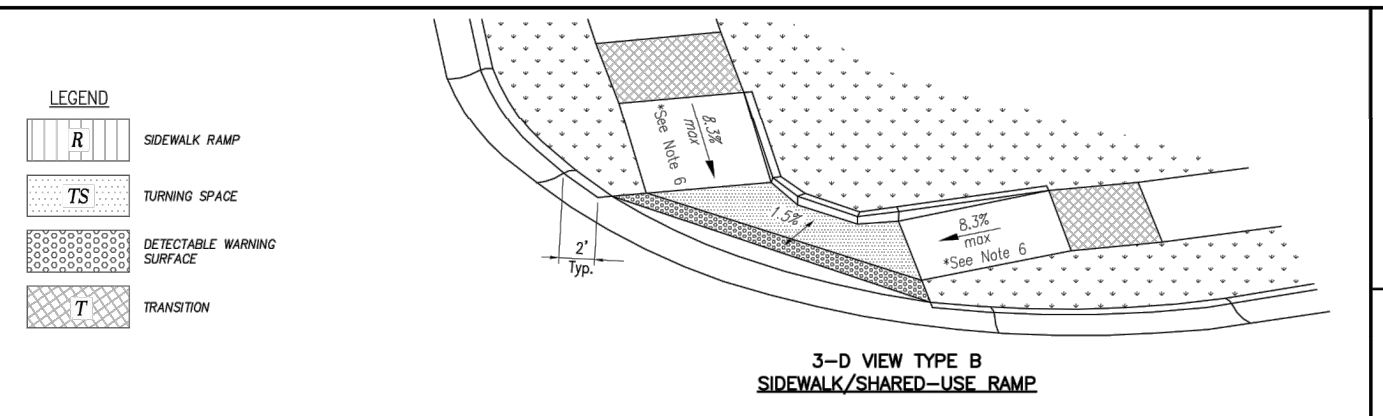
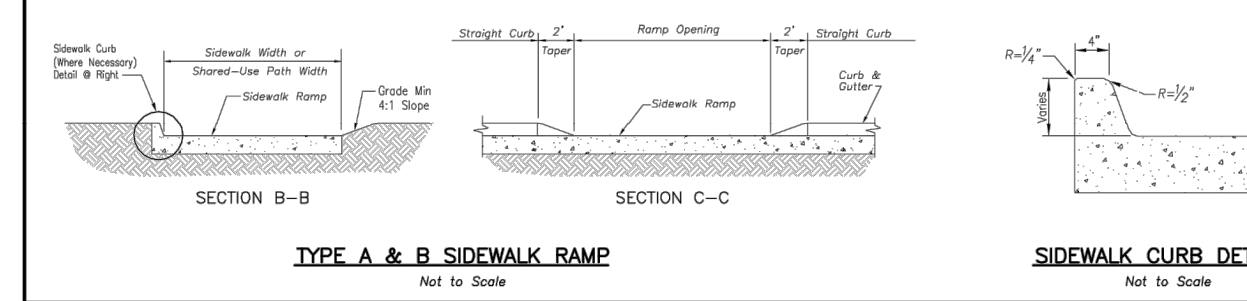
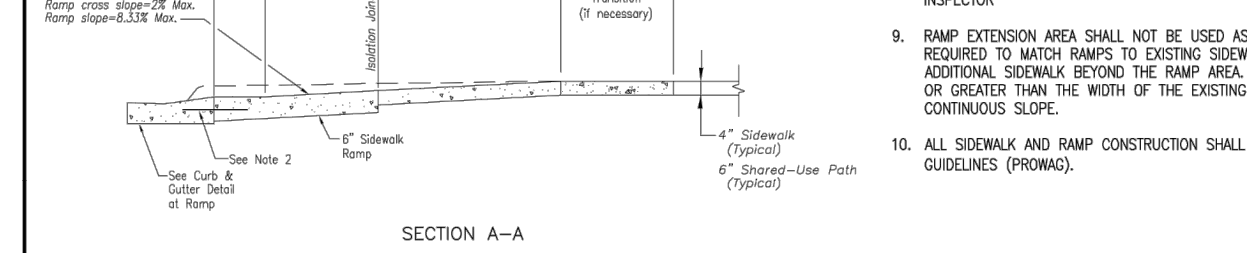
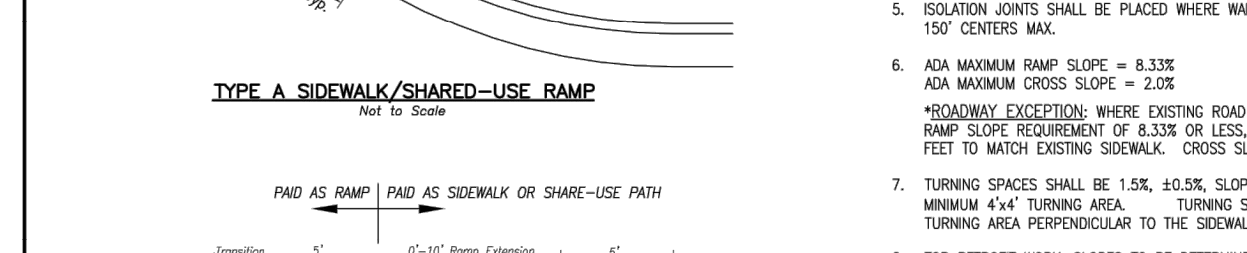
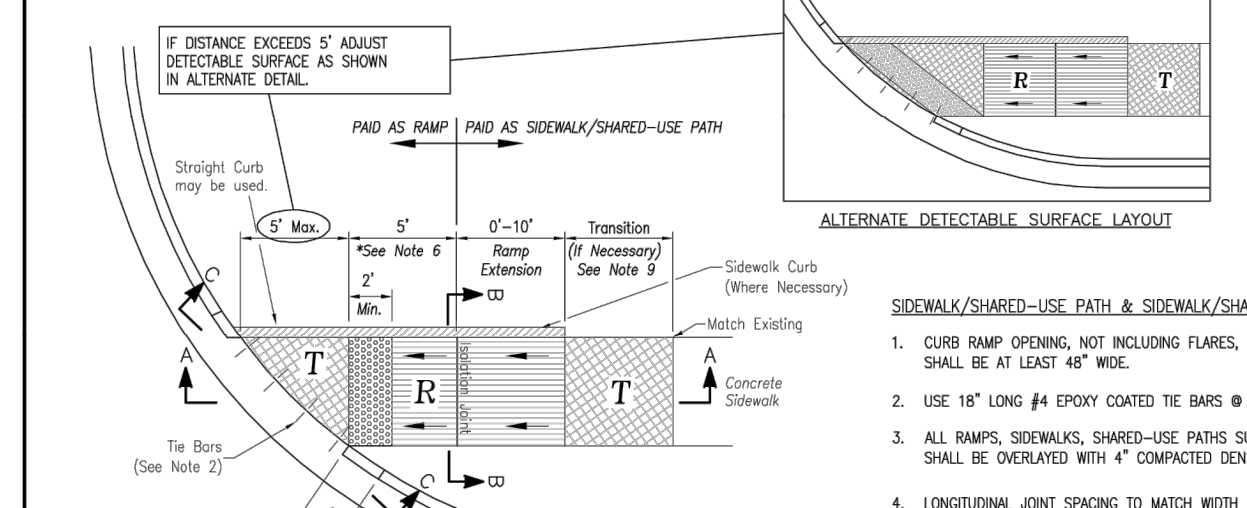
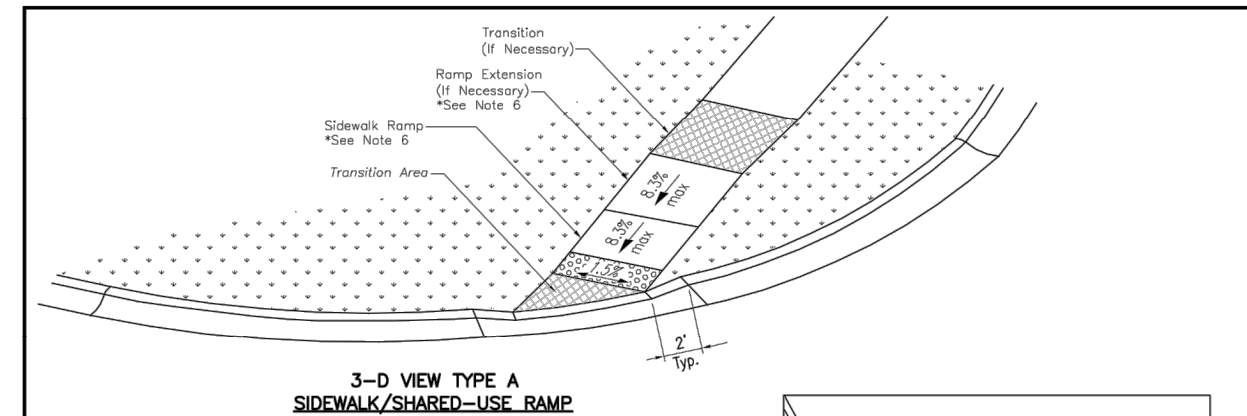
SHEET
11



- GENERAL NOTES**
- SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
 - ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT DETAIL).
 - JOINT AT BACK OF CURB LINE SHALL BE AN ISOLATION JOINT FOR RESIDENTIAL DRIVEWAYS.
 - KCMBB 4K CONCRETE MIX IS REQUIRED FOR ALL CURBS.
 - COMMERCIAL DRIVEWAYS AND DRIVEWAY APPROACHES IN THE PUBLIC RIGHT OF WAY, SHALL BE KCMBB 4K CONCRETE MIX. A JOINT MUST BE INSTALLED AT THE RIGHT OF WAY BOUNDARY FOR PROPERTY DELINEATION.
 - WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
 - 3/4" FROM TOP OF CURB TO FLOWLINE AT DRIVEWAY (TYPE CG-1 CURB ONLY). MUST MAINTAIN ORIGINAL FLOWLINE OF CURB.
 - SIDEWALK ADJOINING CURB SHALL BE 6" THICK, EXTENDING 3" FROM THE DRIVEWAY.
 - THE MAXIMUM WIDTH OF A RESIDENTIAL DRIVEWAY IS 36 FEET WITHIN THE RIGHT OF WAY.

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

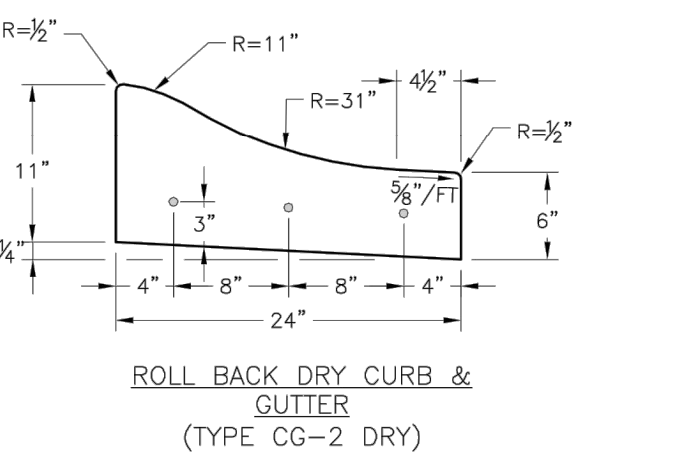
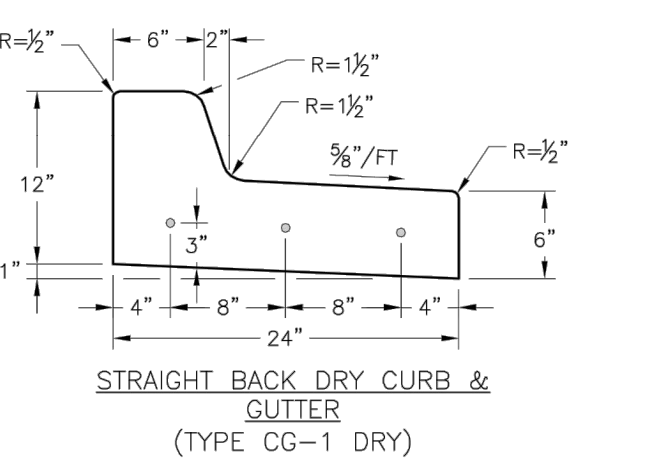
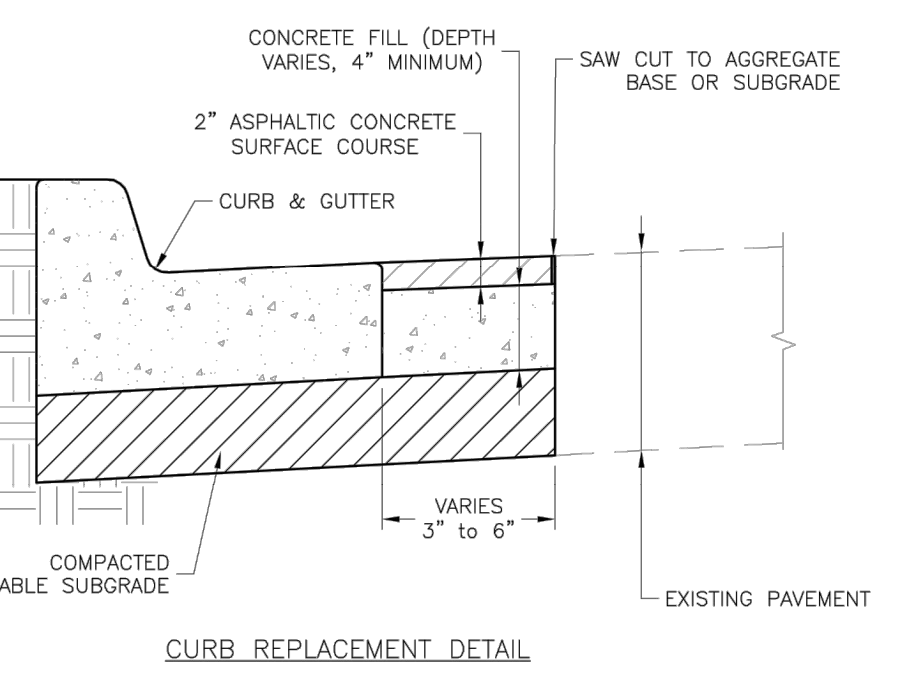
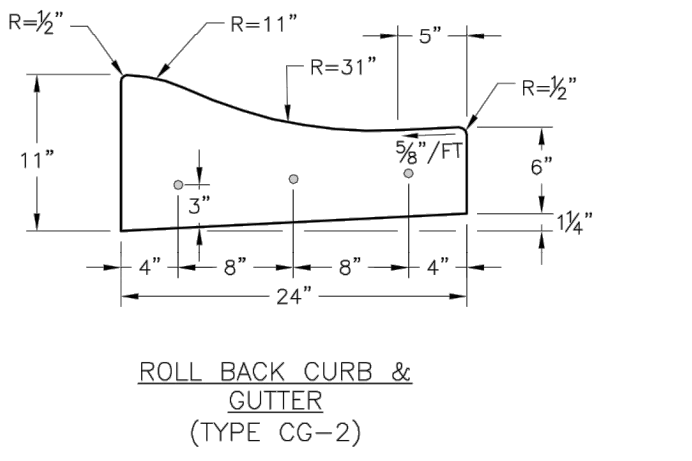
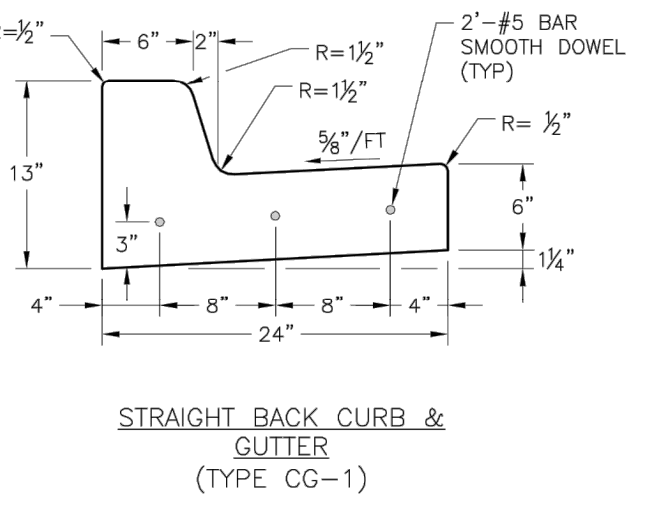
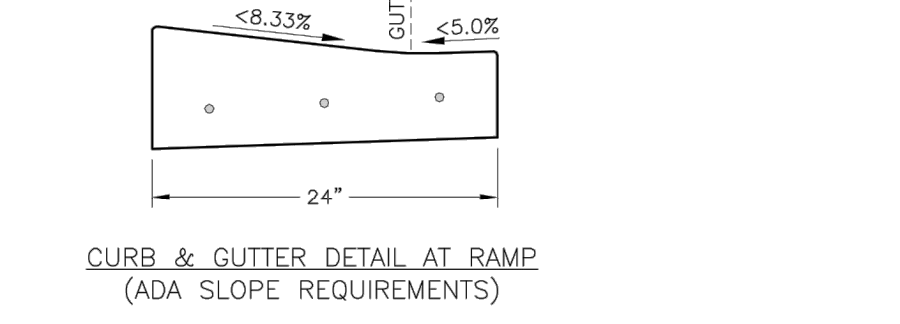
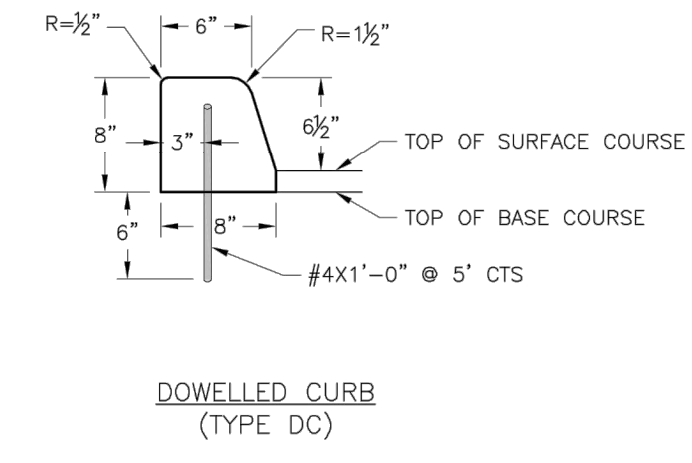
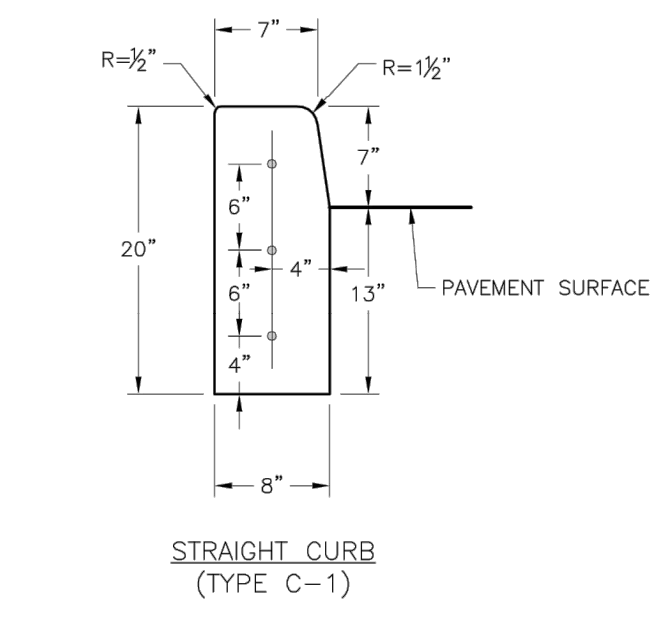
GEN-1



- SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:**
- CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
 - USE 18" LONG #4 EPOXY COATED BARS @ 24" O.C. EMBED THE BARS 3" IN EACH DIRECTION.
 - ALL RAMP, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
 - LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
 - ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 10' CENTER TO CENTER.
 - ADA MINIMUM RAMP SLOPE = 0.33% ADA MAXIMUM CROSS SLOPE = 2.0%
 - *ROADWAY EXCEPTION:** WHERE EXISTING ROAD PROFILE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 0.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, +/- 0.5%.
 - TURNING SPACES SHALL BE 1.5% +/- 0.5% SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 5'x4' TURNING AREA. TURNING SPACES WITH A SIDEWALK CURB SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
 - FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR.
 - RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMP TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF EXISTING SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE 5' OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
 - ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

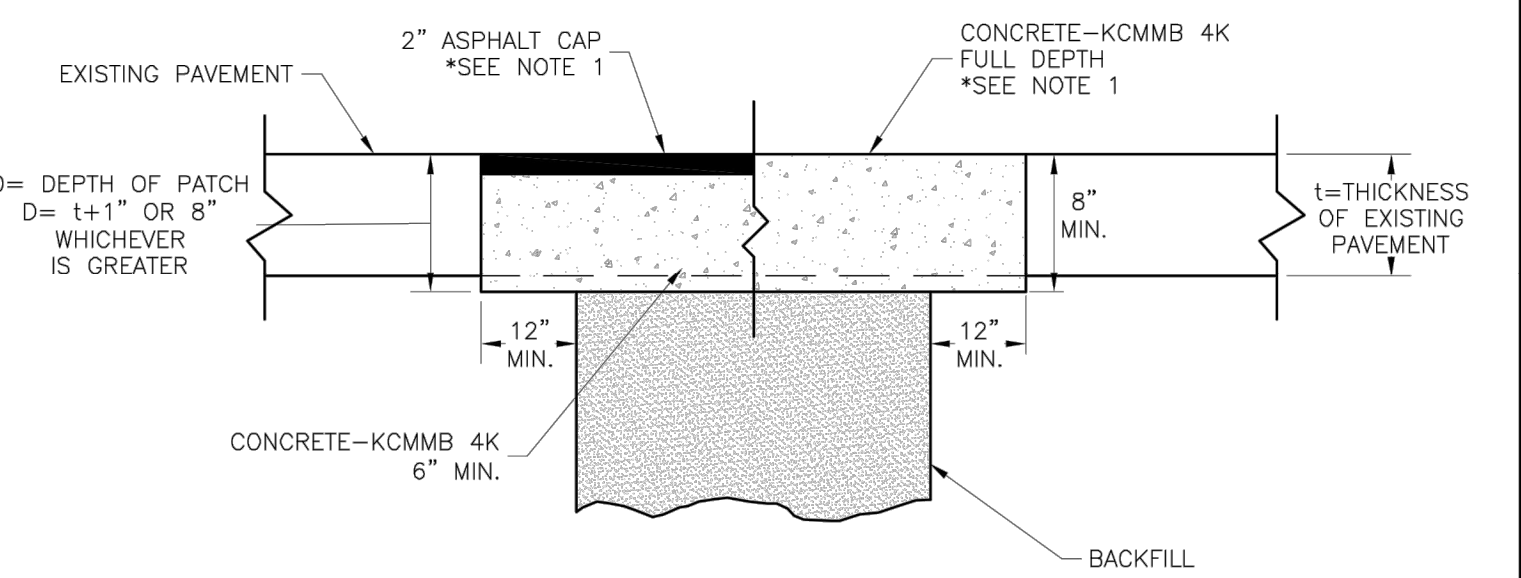
GEN-3A



- GENERAL NOTES**
- 3/4" ISOLATION JOINTS WITH 3 (2" #5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 15' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
 - 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
 - CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH.
 - KCMBB 4K CONCRETE SHALL BE USED FOR ALL CURB.
 - ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
 - CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
 - WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
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GEN-4



REVISION DATE	DESCRIPTION

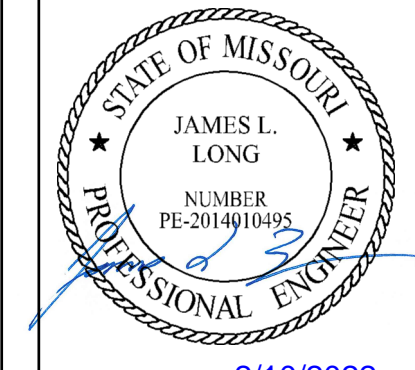
NOTE:
1. ASPHALT CAP OR FULL DEPTH CONCRETE SHALL BE DETERMINED BY CITY INSPECTOR.

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

GEN-5

SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5159 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certified of Authority
#E2200203690F #LAC001005237 #LS2002008895F

PREPARED BY:



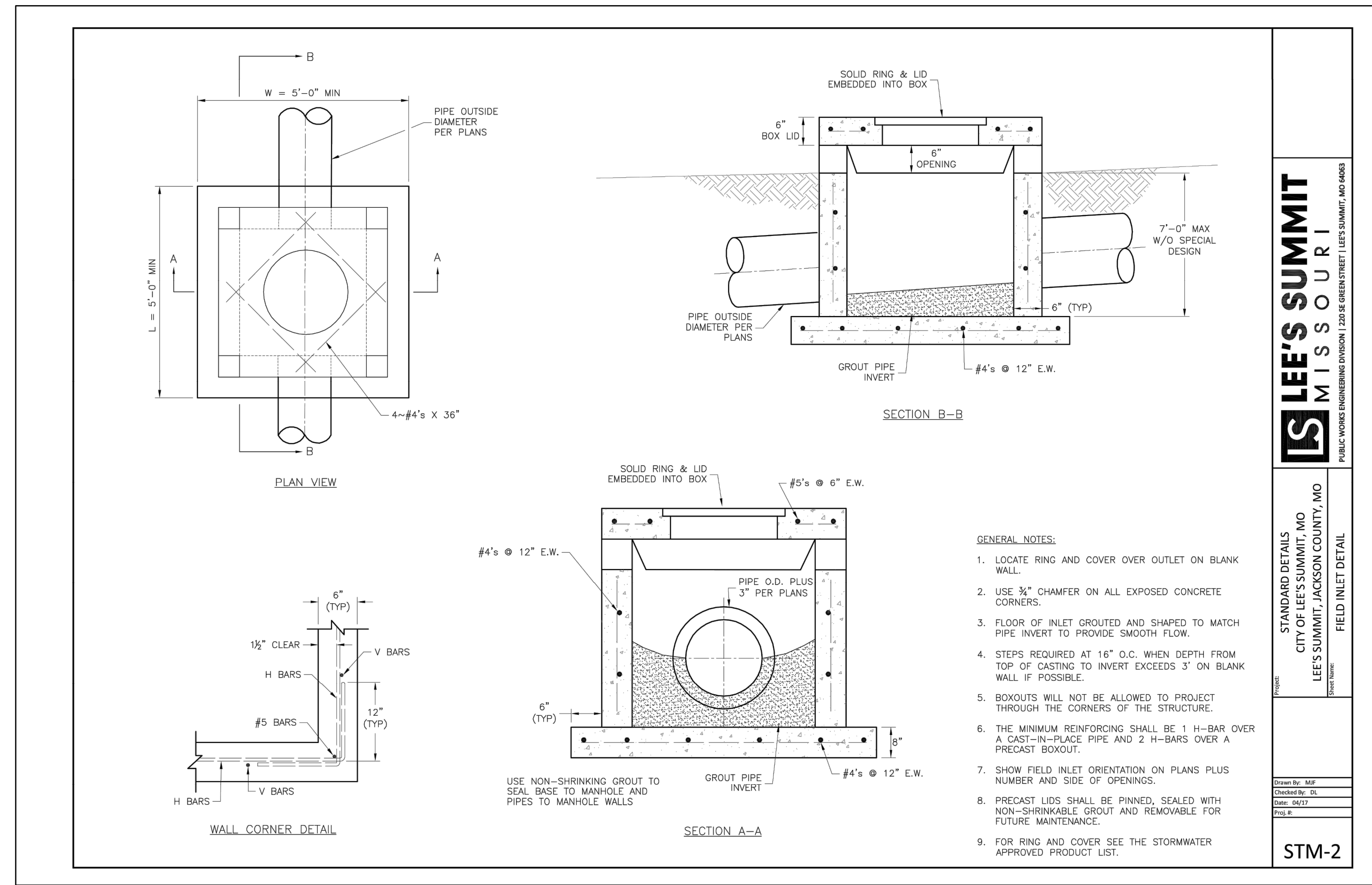
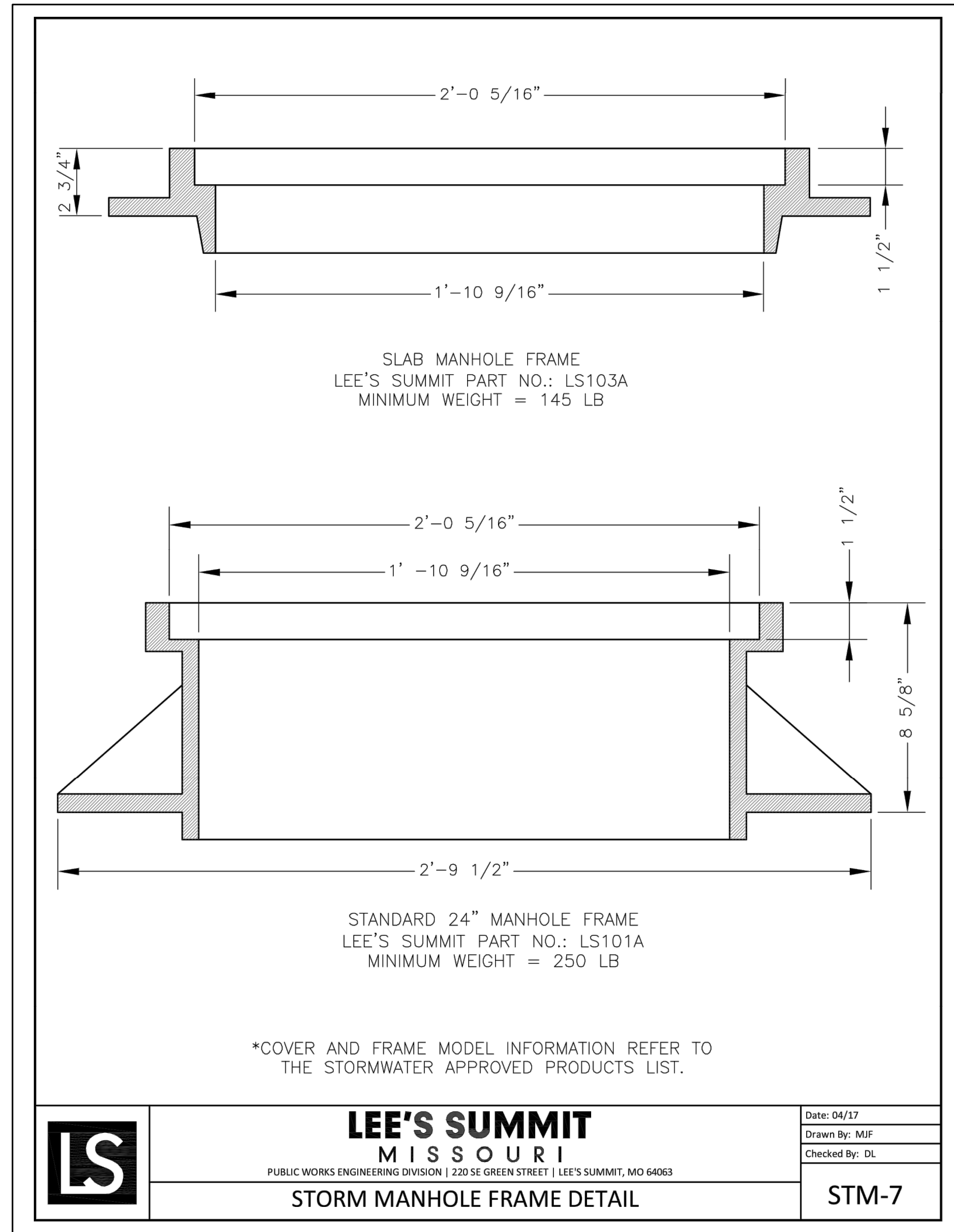
2/10/2022
SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT STREET, STORMWATER, AND MASTER DRAINAGE PLAN
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

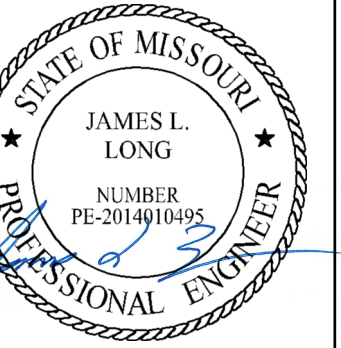
REVISION DATE	DESCRIPTION

STREET DETAILS

SHEET
12



PREPARED BY:



2/10/2022

SCHLAGEL & ASSOCIATES, P.A.

RETREAT AT BAILEY FARMS, FIRST PLAT
STREET, STORMWATER, AND MASTER
DRAINAGE PLAN

SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

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PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

FIELD INLET DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Page #

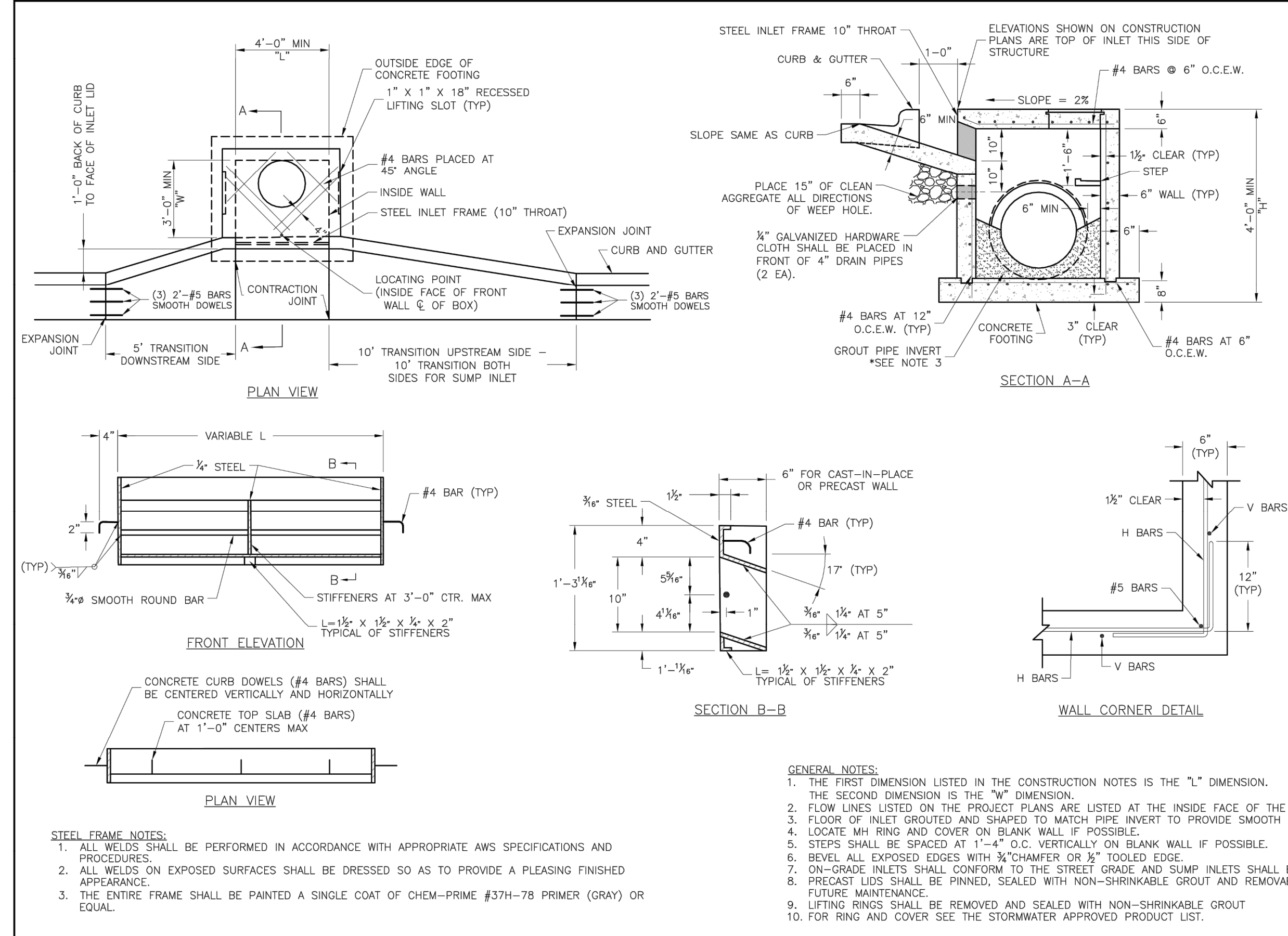
STM-2

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9	

STORM DETAILS

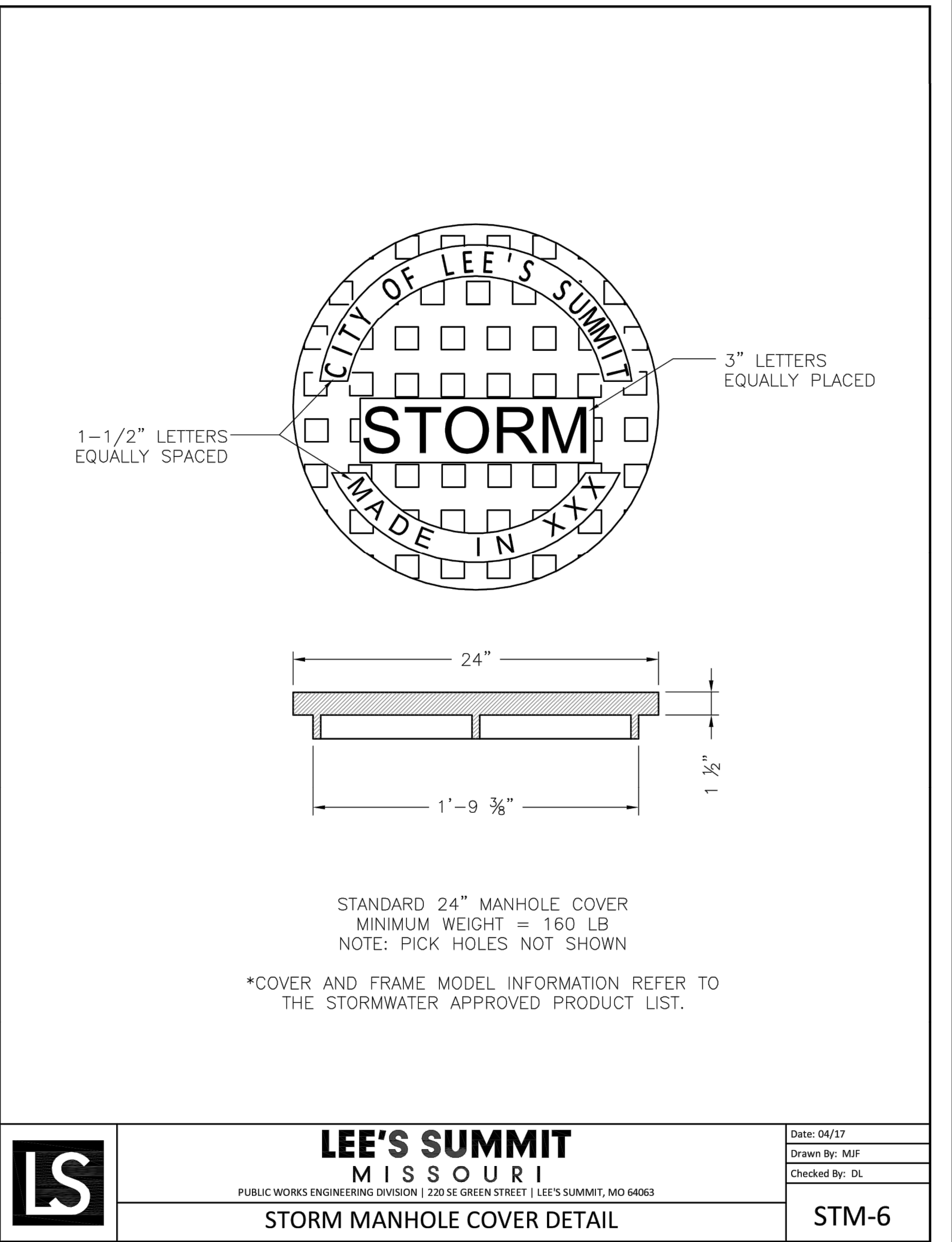
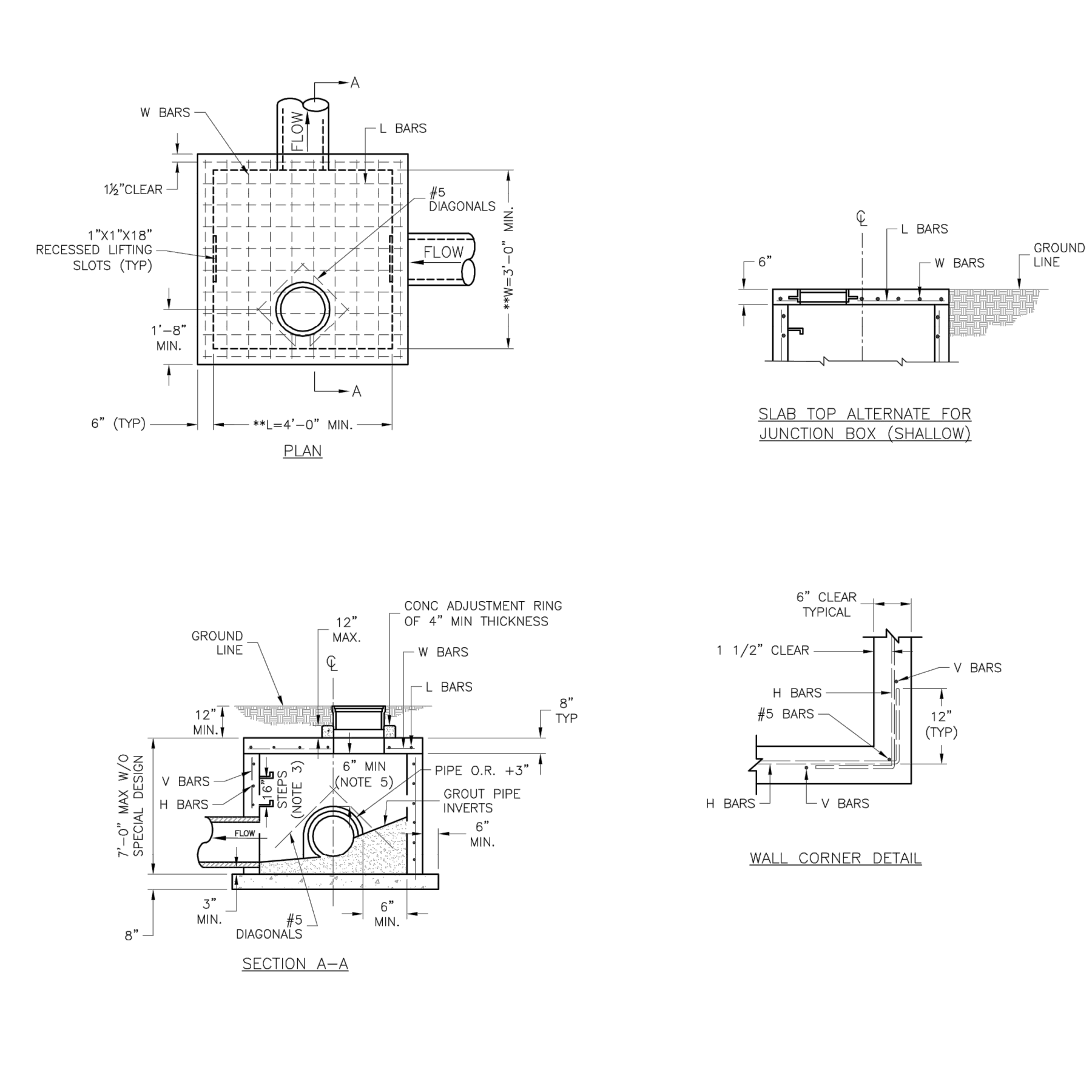
DRAWN BY: JRJ
CHECKED BY: JLL
DATE PREPARED: 02/09/2022
PROJ. NUMBER: 21-133

SHEET
13



LEE'S SUMMIT MISSOURI
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STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
CURB INLET DETAIL
STM-1



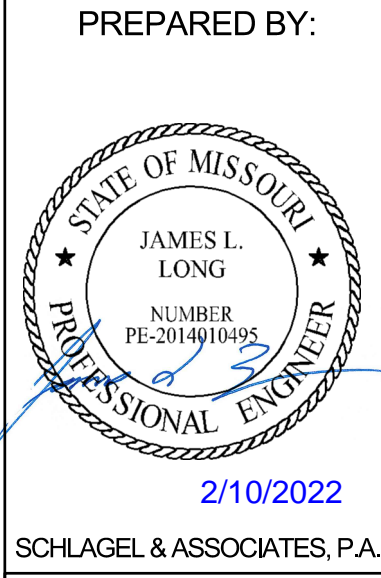
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
JUNCTION BOX DETAIL
STM-3

REINFORCING

BARS	BAR SIZE	SPACING (IN.)
H	4	12
V	4	12
L	5	6
W	5	6

GENERAL NOTES:
1. LOCATE RING AND COVER ON BLANK WALL.
2. USE 3/8" CHAMFER STRIP OR 1/2" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
6. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
7. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
8. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.



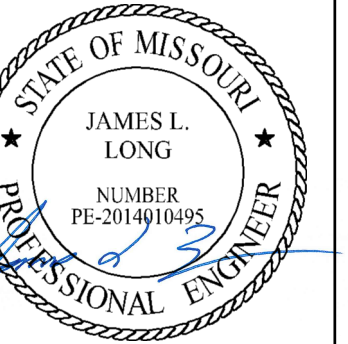
RETREAT AT BAILEY FARMS, FIRST PLAT
STREET, STORMWATER, AND MASTER
DRAINAGE PLAN
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION

DRAWN BY: JRJ
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DATE PREPARED: 02/09/2022
PROJ. NUMBER: 21-133

STORM DETAILS

PREPARED BY:



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RETREAT AT BAILEY FARMS, FIRST PLAT
 STREET, STORMWATER, AND MASTER
 DRAINAGE PLAN
 SE BAILEY ROAD AND SE RANSON ROAD
 LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION

DRAWN BY: JRJ
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 PROJ. NUMBER: 21-133

SIGN PLAN

SHEET
15

MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCHMARK:

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

ELEV. = 1046.25

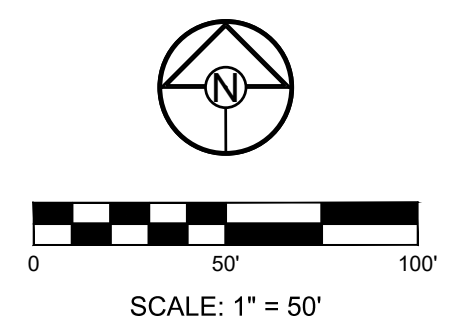
BASIS OF BEARINGS:

MISSOURI STATE PLANE COORDINATE SYSTEM (NAD) 1983, MISSOURI, WEST ZONE

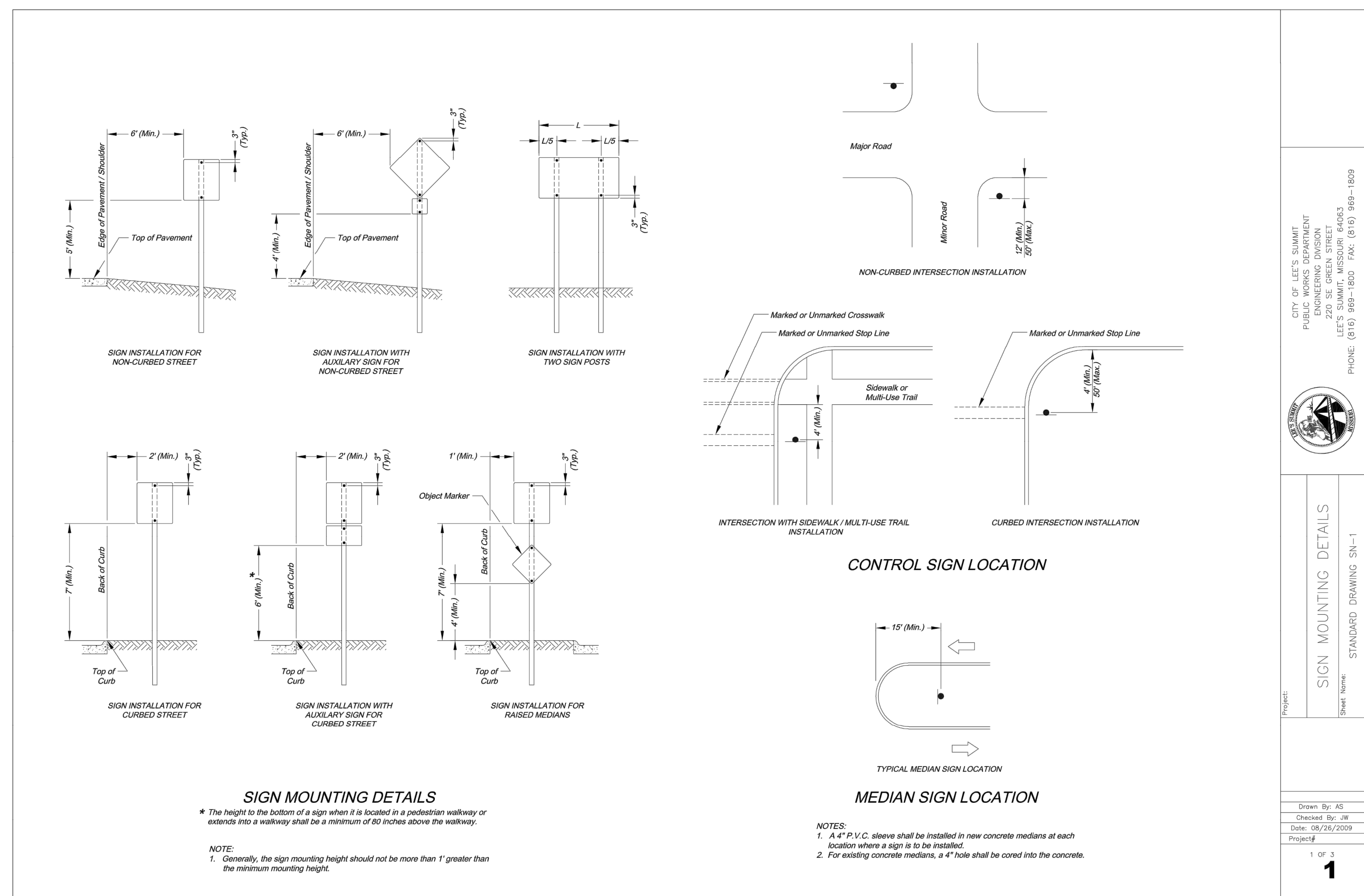
NOTES:

ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF LEES SUMMIT TECHNICAL SPECIFICATIONS.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.



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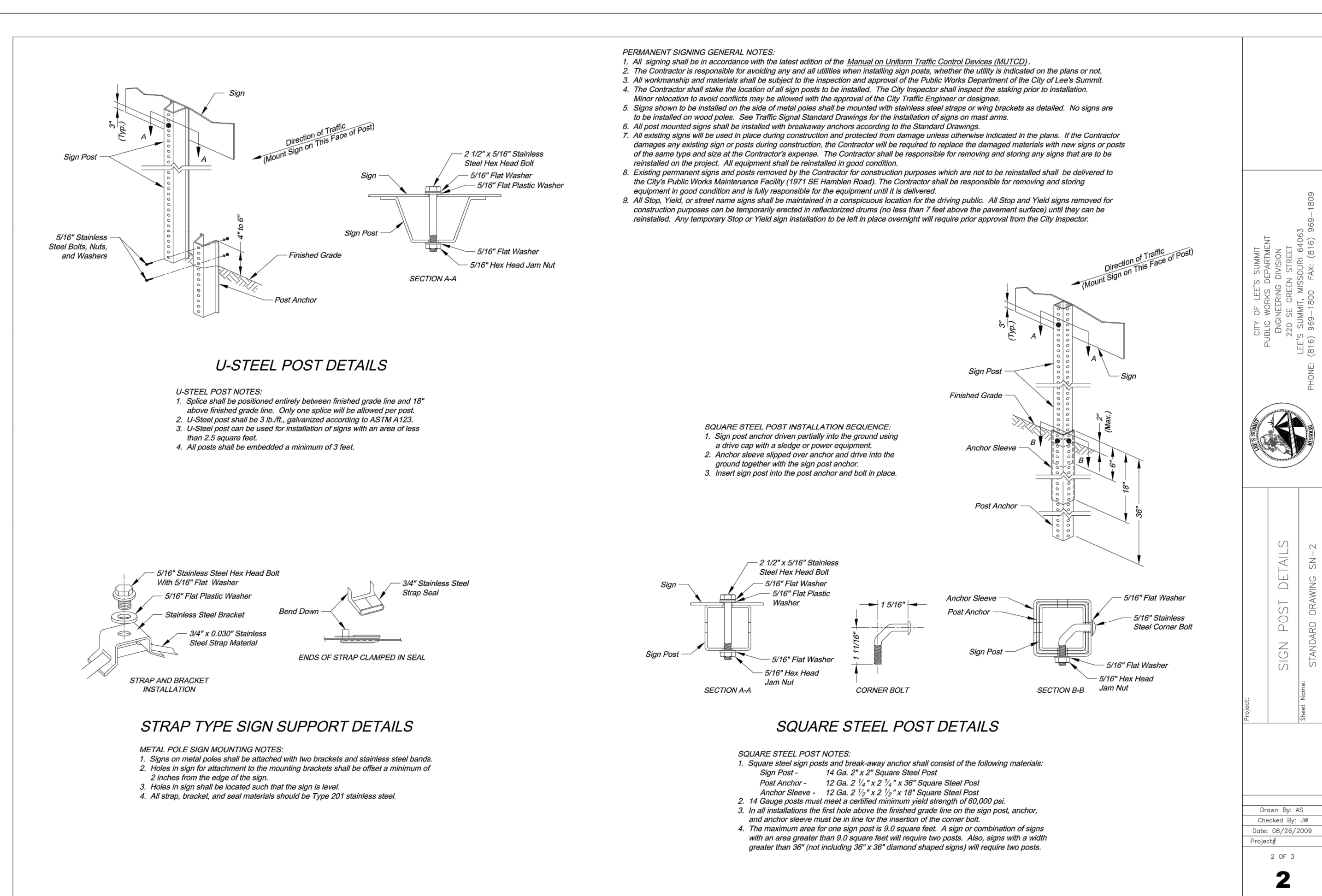


CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 999-1800 FAX: (816) 999-1809

Project: LEE'S SUMMIT
Sheet Name: SIGN MOUNTING DETAILS
Standard Drawing: SN-1

Drawn By: AS
Checked By: JH
Date: 08/26/2009
Project#

1 OF 3

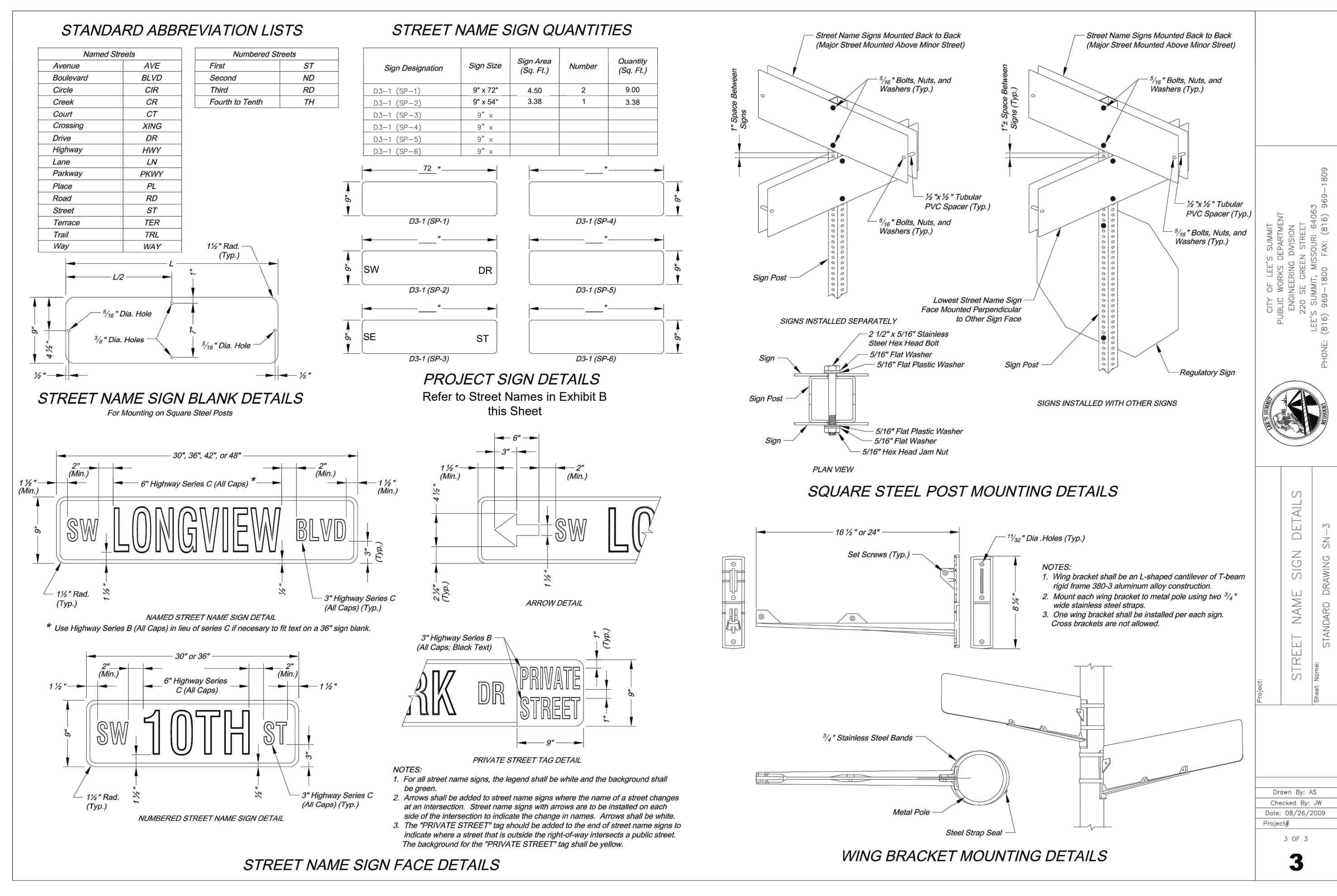


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220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
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Project: LEE'S SUMMIT
Sheet Name: SIGN POST DETAILS
Standard Drawing: SN-2

Drawn By: AS
Checked By: JH
Date: 08/26/2009
Project#

2 OF 3

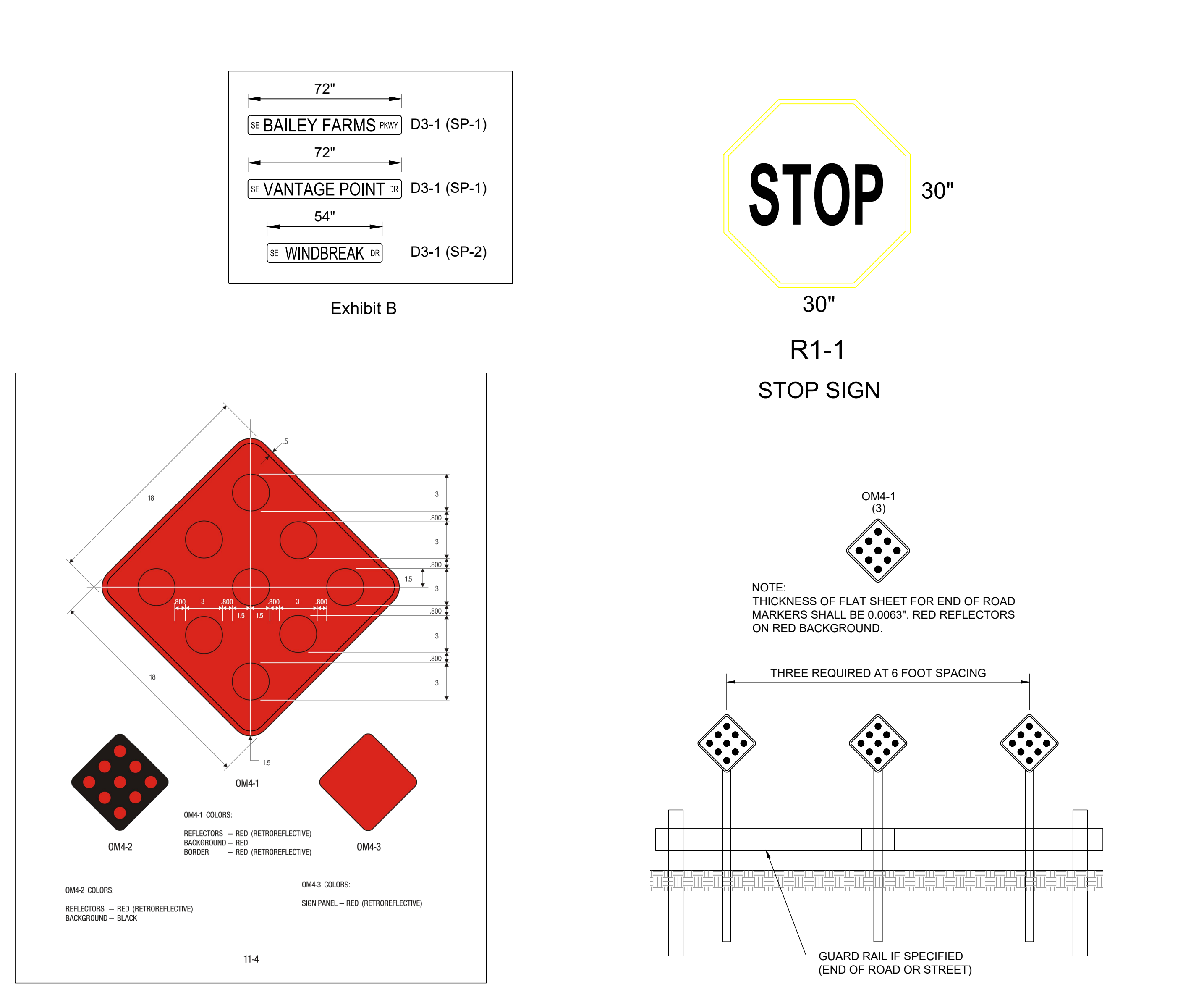


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LEE'S SUMMIT, MISSOURI 64063
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Project: LEE'S SUMMIT
Sheet Name: STREET NAME SIGN DETAILS
Standard Drawing: SN-3

Drawn By: AS
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Date: 08/26/2009
Project#

3 OF 3



CITY OF LEE'S SUMMIT
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220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 999-1800 FAX: (816) 999-1809

Project: LEE'S SUMMIT
Sheet Name: SIGN DETAILS
Standard Drawing: SN-4

Drawn By: AS
Checked By: JH
Date: 08/26/2009
Project#

4 OF 4

SIGN DETAILS

SHEET

16

SCHLAGEL & ASSOCIATES, P.A.
Engineers • Planners • Surveyors • Landscape Architects
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E2002003600-F #LAC201003237 #LS200200859-F

JAMES L. LONG
Professional Engineer
Number PE-01018995
2/10/2022

RETRAIT AT BAILEY FARMS, FIRST PLAT STREET, STORMWATER, AND MASTER DRAINAGE PLAN
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI