



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.

SCHLAGEL

ENGINEERS, PLANNERS, SURVEYORS, LANDSCAPE ARCHITECTS

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Missouri State Certificate of Authority
#E2002003600-F #LAC2001005237 #LS2002008659-F

PREPARED BY:

STATE OF MISSOURI

JAMES L. LONG

NUMBER
PE-2016010495

PROFESSIONAL ENGINEER

8/1/2025

SCHLAGEL & ASSOCIATES, P.A.

CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN

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

DRAWN BY:	REVISION DATE:	DESCRIPTION
SF	08/01/2025	CITY COMMENTS
CHECKED BY:		
JLL		
DATE PREPARED:		
08/25/2025		
PROJ. NUMBER:		
25-041		

GENERAL LAYOUT

SHEET

2

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:

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(NAD) 1983, MISSOURI, WEST ZONE

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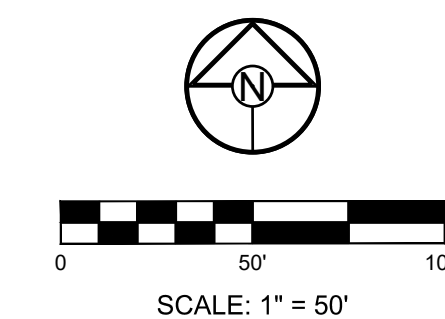
GRADING LEGEND:

- PR:000.00 DENOTES PROPOSED GRADE ELEVATION
EL:000.00 (EX) DENOTES EXISTING GRADE ELEVATION
HP 000.00 DENOTES HIGH POINT ELEVATION
1023 DENOTES PROPOSED MAJOR CONTOUR
1023 DENOTES PROPOSED MINOR CONTOUR
1023 DENOTES EXISTING MAJOR CONTOUR
1023 DENOTES EXISTING MINOR CONTOUR

NOTES:

- MBOE = MINIMUM BUILDING OPENING ELEVATION FOR HOUSES ADJACENT TO ENGINEERED OVERFLOW SWALES SHALL BE MINIMUM 2 FEET ABOVE THE 100-YEAR WATER SURFACE ELEVATION
- EGL = ENERGY GRADE LINE (100-YEAR)
- WSE = WATER SURFACE ELEVATION (100-YEAR)
- 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.
- MINIMUM BUILDING OPENING ELEVATIONS (MBOEs) ADJACENT TO SUMPED INLETS SHALL BE A MINIMUM OF 1' ABOVE TOP OF ADJACENT BERM

LOT TYPE TABLE		
LOT NUMBER	BASEMENT TYPE	MBOE
177	STANDARD	N/A
178	STANDARD	N/A
179	STANDARD	N/A
180	STANDARD	N/A
181	STANDARD	N/A
182	DAYLIGHT	N/A
183	STANDARD	N/A
184	STANDARD	N/A
185	STANDARD	N/A
186	DAYLIGHT	N/A
187	DAYLIGHT	N/A
188	DAYLIGHT	N/A
189	DAYLIGHT	N/A
190	DAYLIGHT	N/A
191	WALK OUT	N/A
192	WALK OUT	N/A
193	WALK OUT	N/A
194	WALK OUT	N/A
195	WALK OUT	N/A
233	STANDARD	N/A
234	STANDARD	N/A
235	STANDARD	N/A
236	STANDARD	N/A
237	STANDARD	N/A
238	STANDARD	N/A
239	STANDARD	N/A
240	STANDARD	N/A
241	STANDARD	N/A
242	STANDARD	N/A
243	STANDARD	N/A
244	STANDARD	N/A
245	STANDARD	N/A
246	STANDARD	N/A
247	STANDARD	N/A
248	STANDARD	N/A
249	STANDARD	N/A
250	STANDARD	N/A
251	STANDARD	N/A



SHEET

5

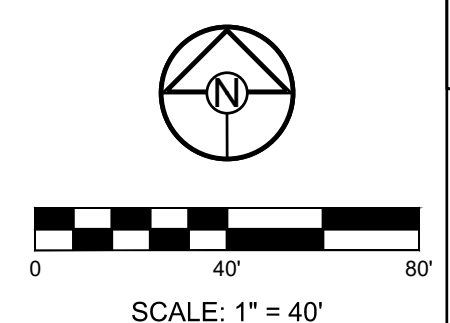
MISSOURI STATE PLANE COORDINATE SYSTEM
(NAD) 1983, MISSOURI, WEST ZONE

ELEV. = 1046.25

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

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

3





BASIS OF BEARINGS:

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

**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

NOTES:

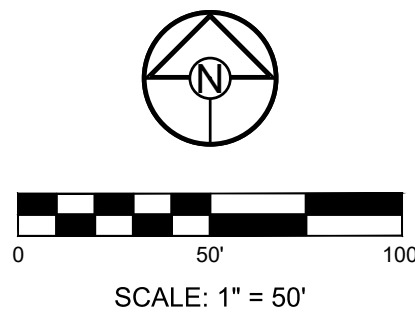
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Storm Sewer Construction Notes	
Structure	Notes
207	STA 6+44.81, LINE 200 INSTALL 6 X 4 CURB INLET N 993114.4964 E 2832861.1748
208	STA 8+29.30, LINE 200 INSTALL 6 X 4 CURB INLET N 993248.6935 E 2832987.7770
209	STA 9+00.38, LINE 200 INSTALL 6 X 6 JUNCTION BOX N 993288.2993 E 2833046.8070
210	STA 10+22.00, LINE 200 INSTALL 6 X 4 CURB INLET N 993303.8979 E 2833167.4227
211	STA 12+68.06, LINE 200 INSTALL 6 X 4 CURB INLET N 993292.0517 E 2833413.1988
212	STA 13+03.06, LINE 200 INSTALL 6 X 4 CURB INLET N 993326.9698 E 2833415.5917
301	STA 1+62.91, LINE 300 INSTALL 6 X 4 CURB INLET N 992943.5863 E 2833005.1676
302	STA 3+44.85, LINE 300 INSTALL 6 X 4 CURB INLET N 992987.4885 E 2833181.7291
303	STA 3+79.85, LINE 300 INSTALL 6 X 4 CURB INLET N 993021.4463 E 2833173.2513
401	STA 0+36.56, LINE 400 INSTALL 6 X 4 CURB INLET N 992980.1016 E 2833006.9582
501	STA 1+61.58, LINE 500 INSTALL 4 X 4 AREA INLET OPEN TO THE EAST AND WEST N 993110.2417 E 2833022.7004
502	STA 2+50.50, LINE 500 INSTALL 4 X 4 AREA INLET OPEN TO THE EAST N 993158.8178 E 2833097.1797
503	STA 3+18.95, LINE 500 INSTALL 4 X 4 AREA INLET OPEN TO THE EAST N 993176.4641 E 2833163.3129
504	STA 4+42.80, LINE 500 INSTALL 4 X 4 AREA INLET OPEN TO THE EAST N 993172.3952 E 2833287.0963
601	STA 0+36.84, LINE 600 INSTALL 6 X 4 CURB INLET N 993128.2249 E 2832826.9829
701	STA 0+35.05, LINE 700 INSTALL 6 X 4 CURB INLET N 993274.3181 E 2832963.8639

NOTE:

FLOWABLE FILL REQUIRED PER CITY SPECIFICATIONS AT ALL STORM STRUCTURES.



PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN

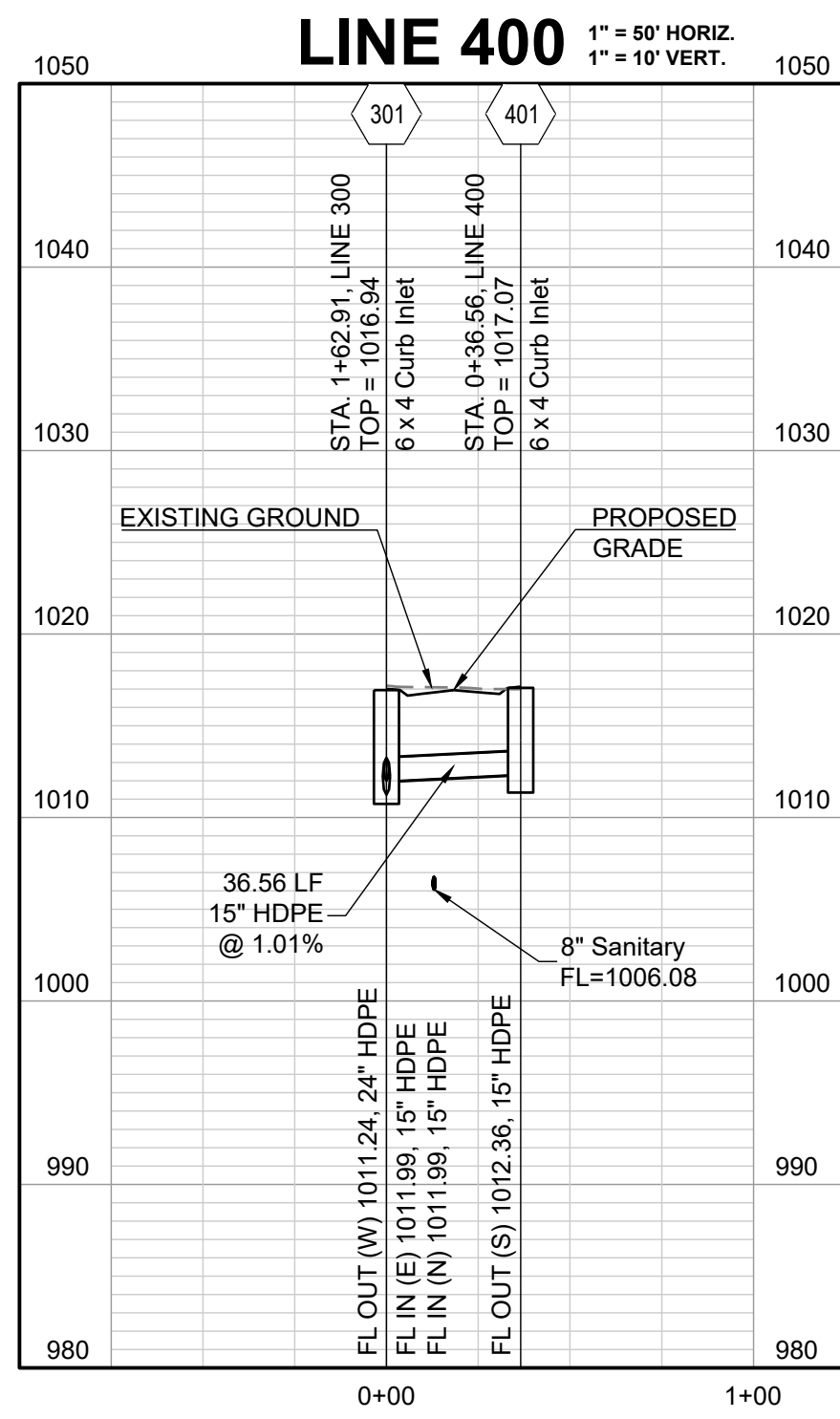
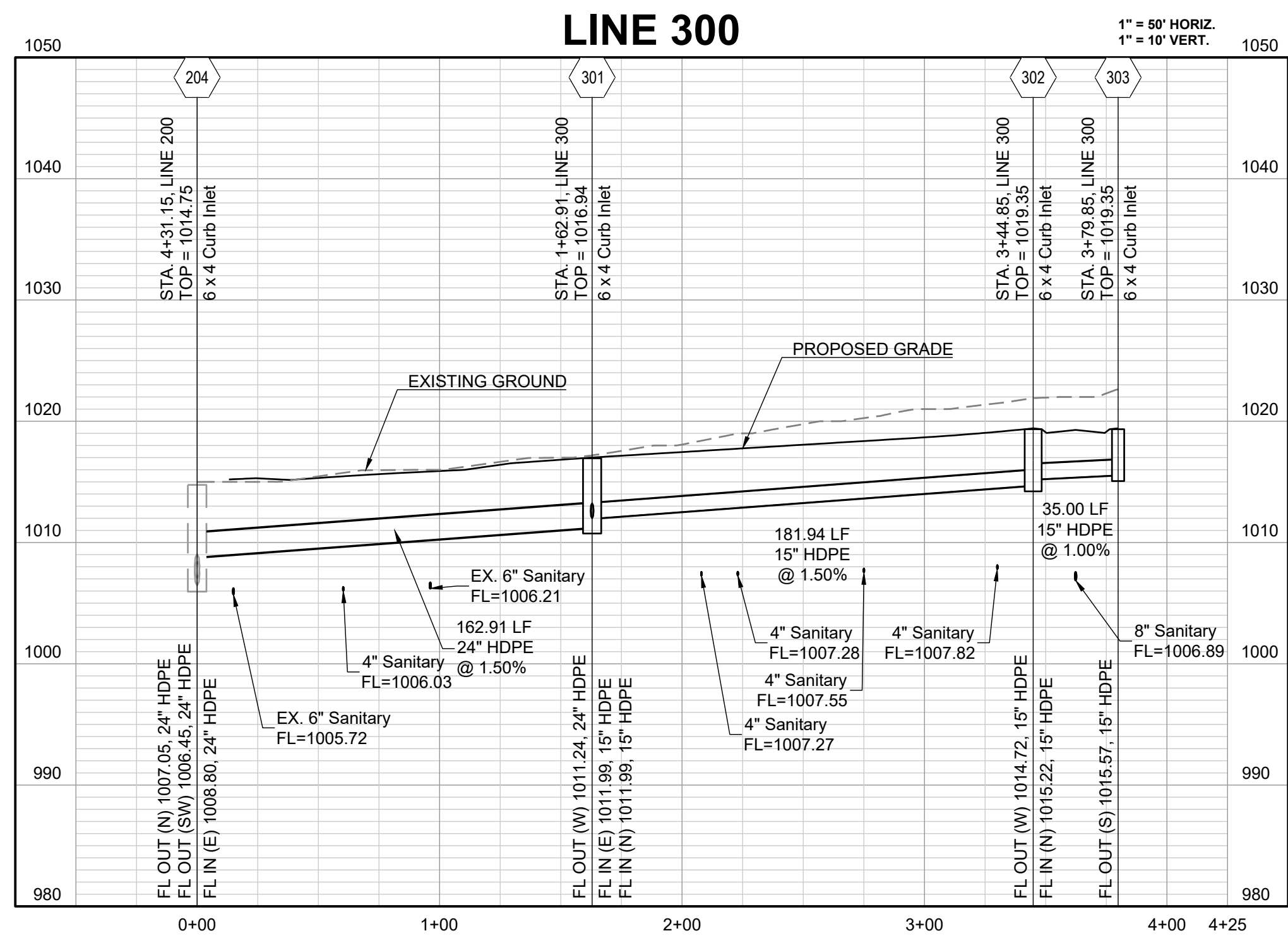
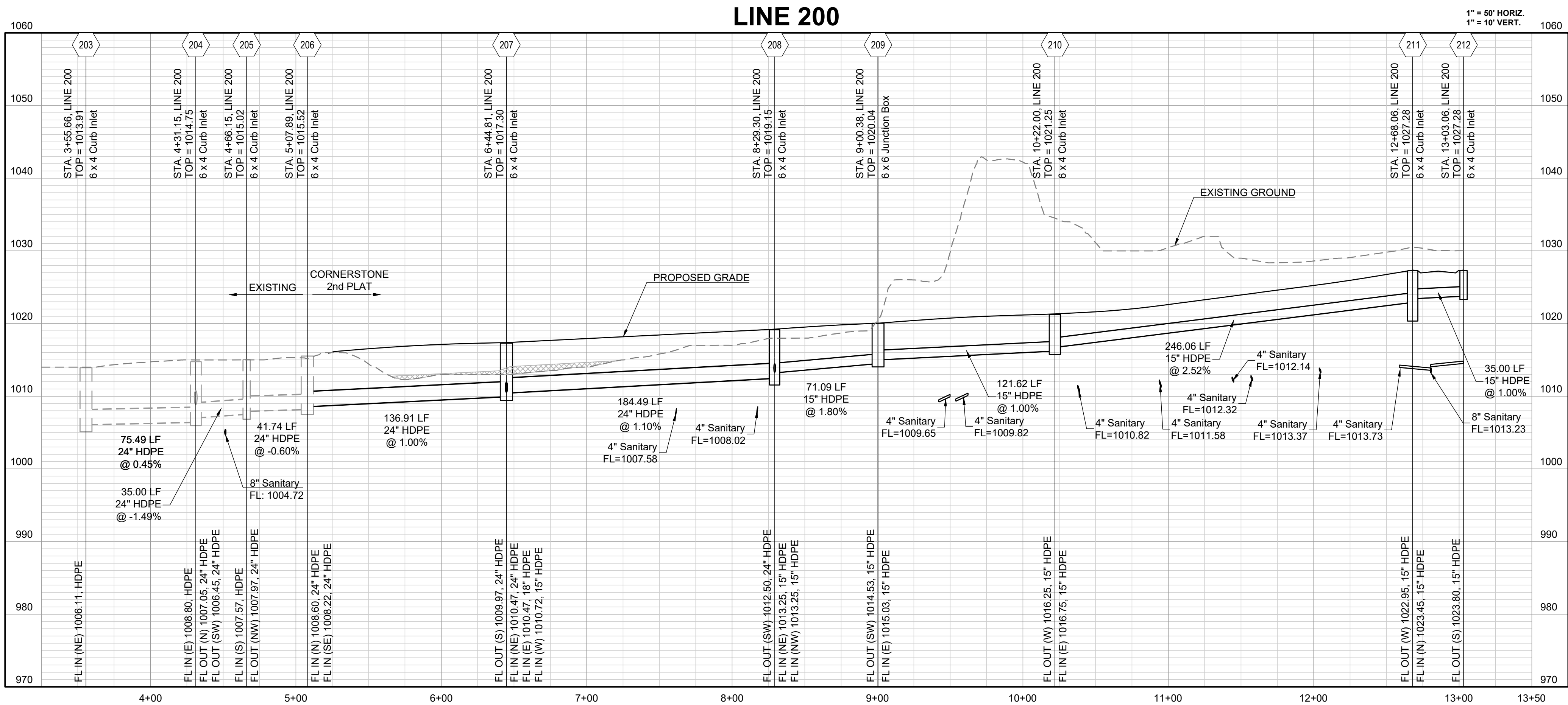
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
08/01/2025	CITY COMMENTS
08/01/2025	DATE PREPARED
08/25/2025	PROJ. NUMBER
25-541	

STORM PLAN

SHEET

7



NOTE:

CONTRACTOR SHALL FILL AND COMPACT TO 95%
STANDARD DENSITY TO A POINT 18 INCHES
MINIMUM ABOVE THE TOP OF THE PIPE PRIOR TO
EXCAVATION OF THE PIPE.

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN

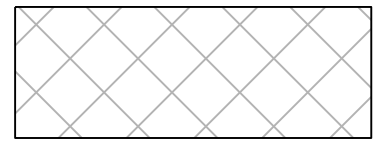
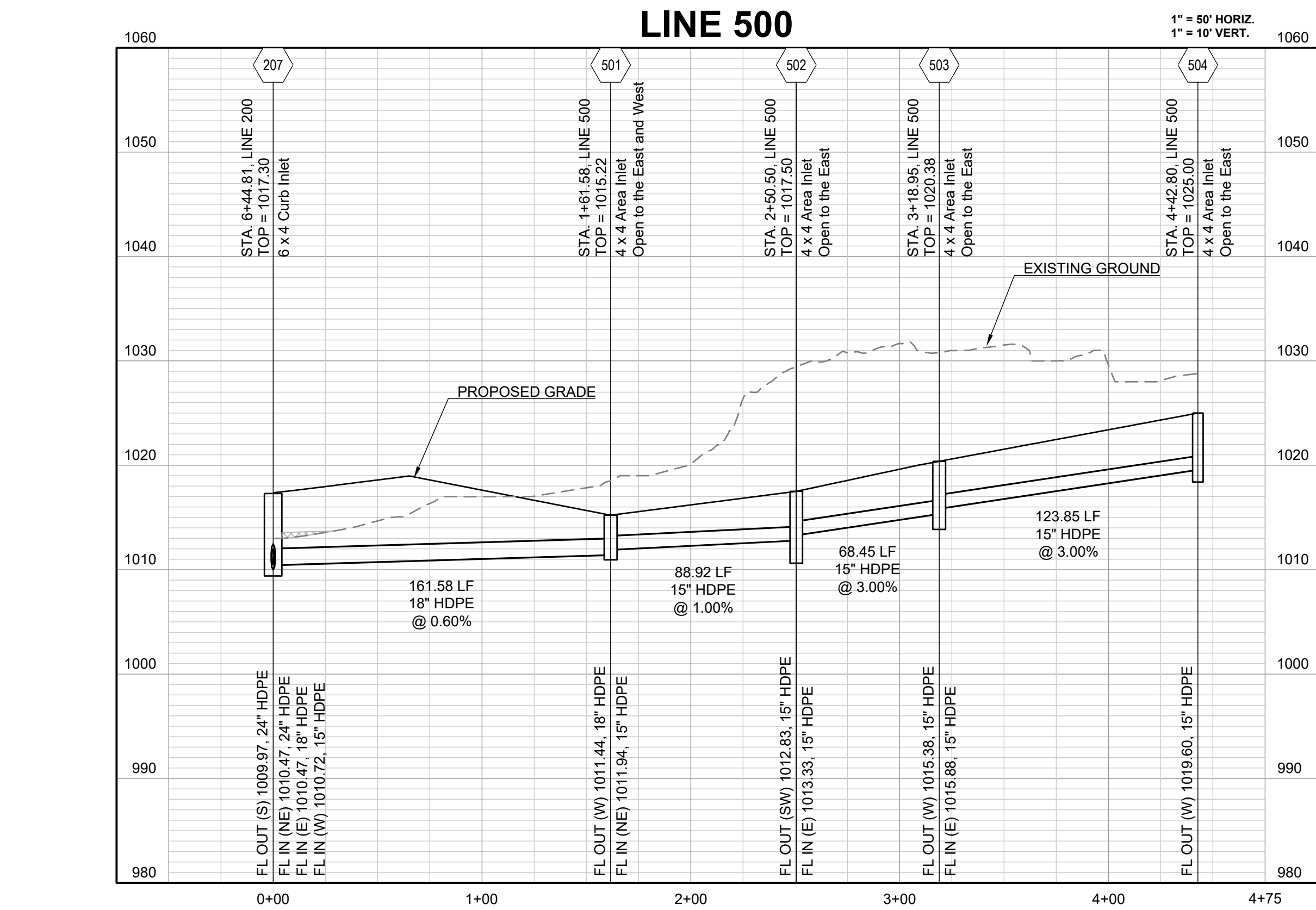
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

DRAWN BY:	REVISION DATE:	DESCRIPTION
SF	08/01/2025	CITY COMMENTS
JLL		
DATE PREPARED:		
08/25/2025		
PROJ. NUMBER:		
25-541		

STORM PROFILE
1

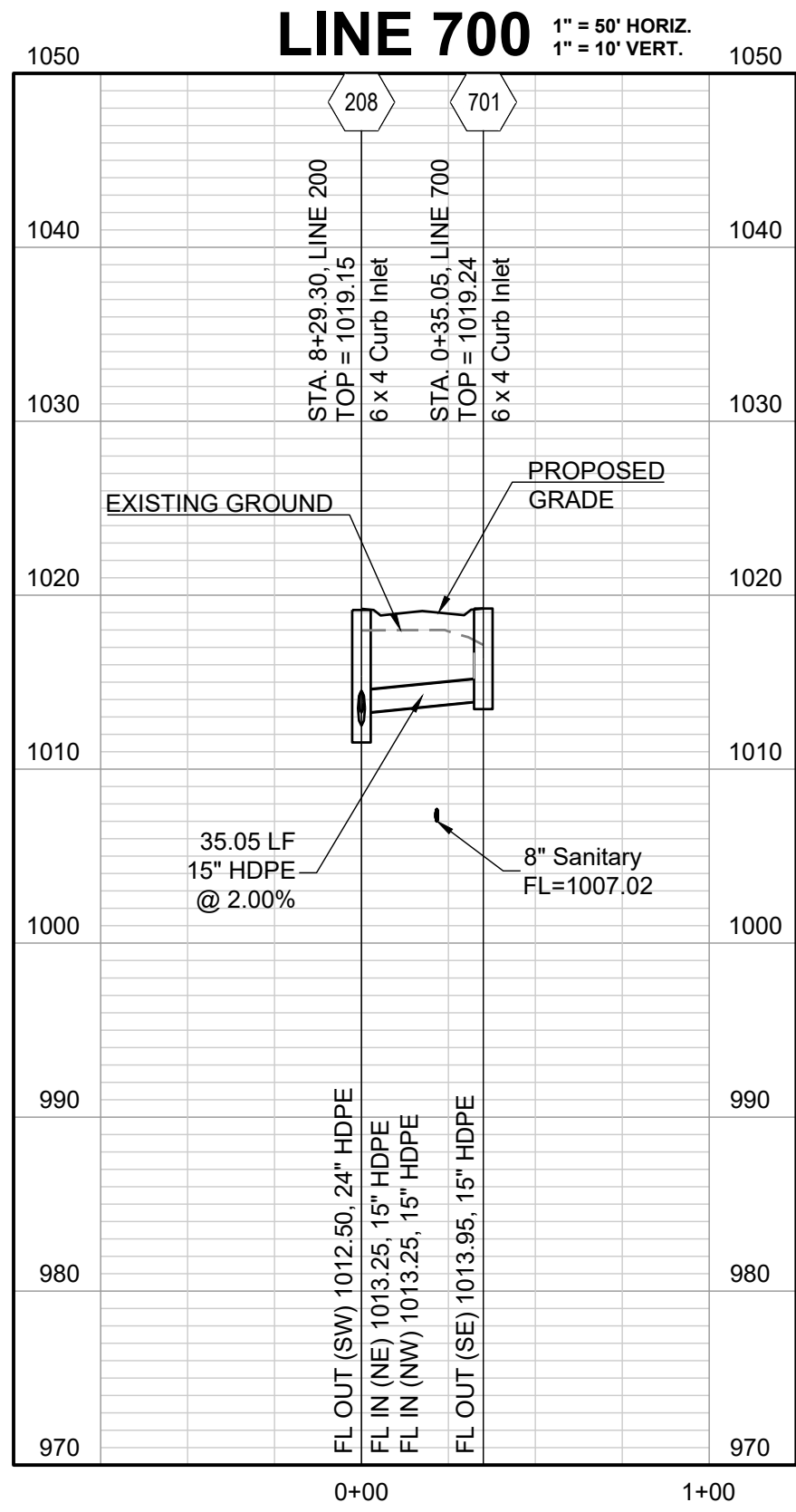
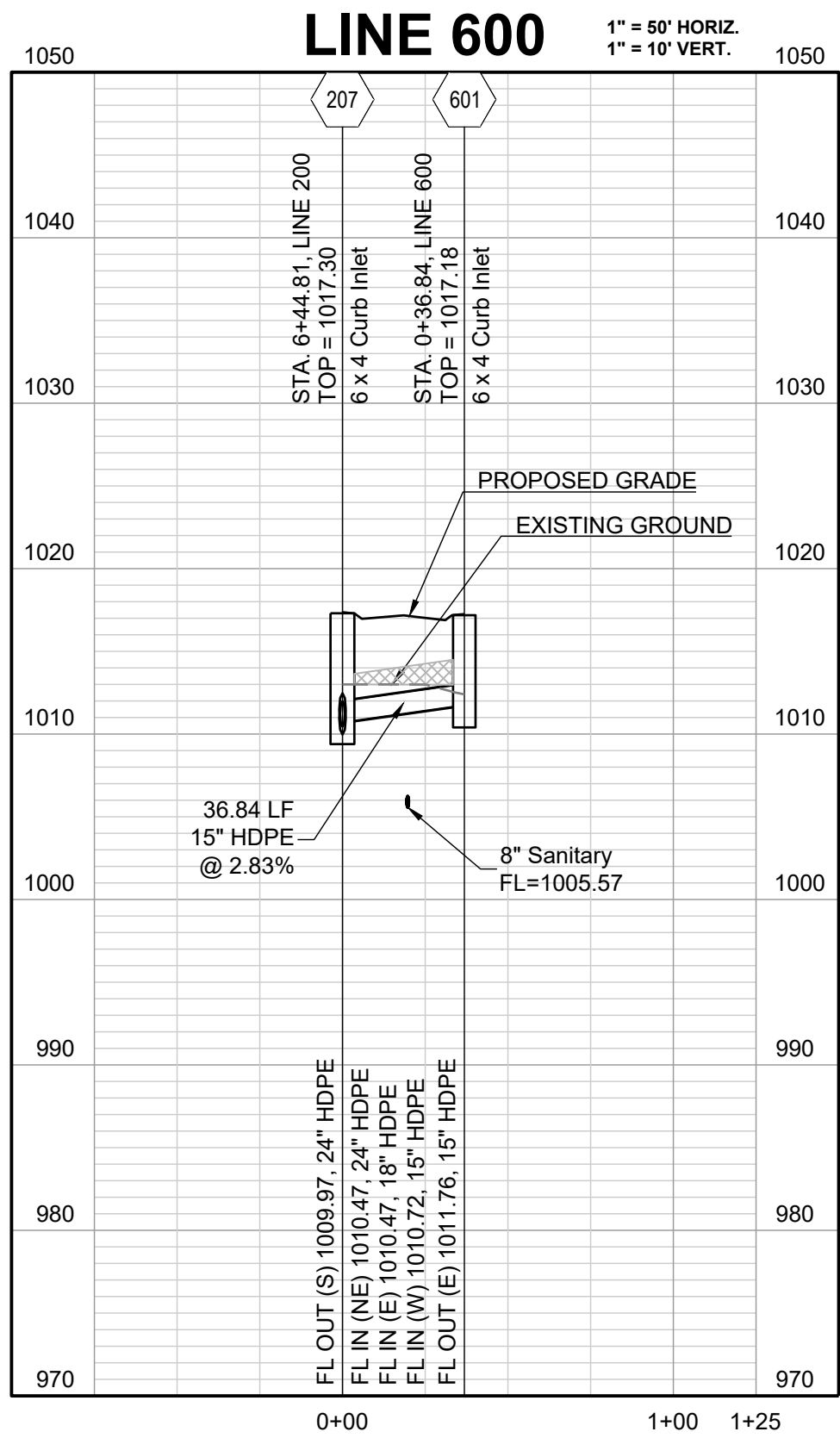
SHEET

8



NOTE:

CONTRACTOR SHALL FILL AND COMPACT TO 95%
STANDARD DENSITY TO A POINT 18 INCHES
MINIMUM ABOVE THE TOP OF THE PIPE PRIOR TO
EXCAVATION OF THE PIPE.



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STREET, STORMWATER, AND MASTER DRAINAGE PLAN

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SF	08/01/2025	CITY COMMENTS
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08/25/2025		
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25-541		

STORM PROFILE
2

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	Pipe Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.
LINE 200																										
207	0.33	0.66	3.72	2.46	6.4	6.93	1.51	17.02	24.51	7.80	501	401	1.89	1.25	207	206	HDPE	0.012	24	136.91	1.00	0.50	DS TAILWATER @ STR #206			FREE
208	0.32	0.66	1.50	0.99	6.1	7.04	1.49	6.97	25.70	8.18	601		0.24	0.16	208	207	HDPE	0.012	24	184.49	1.10	0.75	1009.97	1008.60	1017.37	1011.81
209	0.00	0.66	0.94	0.62	5.9	7.08	0.00	4.39	9.39	7.65			0.00	0.00	209	208	HDPE	0.012	15	71.10	1.80	0.50	1014.53	1013.25	1020.03	1015.57
210	0.48	0.66	0.94	0.62	5.6	7.19	2.28	4.46	7.00	5.70			0.00	0.00	210	209	HDPE	0.012	15	121.62	1.00	0.50	1016.24	1015.03	1021.25	1017.29
211	0.18	0.66	0.46	0.30	5.1	7.32	0.87	2.22	11.11	9.05			0.00	0.00	211	210	HDPE	0.012	15	246.06	2.52	0.50	1022.95	1016.74	1027.28	1023.66
212	0.28	0.66	0.28	0.18	5.0	7.35	1.36	1.36	7.00	5.70			0.00	0.00	212	211	HDPE	0.012	15	35.00	1.00	N/A	1023.80	1023.45	1027.35	1024.34
LINE 300																										
301	0.56	0.66	2.32	1.49	5.5	7.19	2.66	10.70	30.02	9.55	4301		0.29	0.15	301	204	HDPE	0.012	24	162.91	1.50	0.75	1011.24	1008.80	1017.01	1012.66
302	0.69	0.66	1.47	0.97	5.1	7.32	3.33	7.10	8.57	6.98			0.00	0.00	302	301	HDPE	0.012	15	181.94	1.50	0.50	1014.72	1011.99	1019.42	1016.10
303	0.78	0.66	0.78	0.51	5.0	7.35	3.79	3.79	7.00	5.70			0.00	0.00	303	302	HDPE	0.012	15	35.00	1.00	N/A	1015.57	1015.22	1019.42	1016.53
LINE 400																										
401	0.29	0.66	0.29	0.19	5.0	7.35	1.41	1.41	7.00	5.70			0.00	0.00	401	301	HDPE	0.012	15	36.84	1.00	N/A	1012.36	1011.99	1017.07	1012.91
LINE 500																										
501	0.57	0.66	1.60	1.06	5.6	7.18	2.70	7.58	8.81	4.99			0.00	0.00	501	207	PEP	0.012	18	161.58	0.60	0.50	1011.44	1010.47	1015.22	1012.75
502	0.26	0.66	1.03	0.68	5.3	7.25	1.24	4.93	7.00	5.70			0.00	0.00	502	501	PEP	0.012	15	88.92	1.00	0.50	1012.83	1011.94	1017.50	1013.94
503	0.24	0.66	0.77	0.51	5.2	7.29	1.15	3.70	12.12	9.88			0.00	0.00	503	502	PEP	0.012	15	68.45	3.00	0.50	1015.38	1013.33	1020.38	1016.33
504	0.53	0.66	0.53	0.35	5.0	7.35	2.57	2.57	12.12	9.88			0.00	0.00	504	503	PEP	0.012	15	123.85	3.00	N/A	1019.60	1015.88	1025.00	1020.37
LINE 600																										
601	0.24	0.66	0.24	0.16	5.0	7.35	1.16	1.16	12.12	9.88			0.00	0.00	601	207	HDPE	0.012	15	36.84	3.00	N/A	1011.82	1010.72	1017.18	1012.33
LINE 700																										

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"	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.				
LINE 200																														
207	0.33	0.66	3.72	2.46	6.4	9.76	2.66	29.94	24.51	7.80	501	401	1.89	1.25	207	206	HDPE	0.012	24	136.91	1.00	0.50	1009.97	DS TAILWATER @ STR #206 1008.60	1017.37	FREE 1013.27				
208	0.32	0.66	1.50	0.99	6.1	9.90	2.61	12.25	25.70	8.18	601		0.24	0.16	208	207	HDPE	0.012	24	184.49	1.10	0.75	1012.50	1010.47	1019.22	1014.03				
209	0.00	0.66	0.94	0.62	5.9	9.96	0.00	7.72	9.39	7.65			0.00	0.00	209	208	HDPE	0.012	15	71.10	1.80	0.50	1014.53	1013.25	1020.03	1015.98				
210	0.48	0.66	0.94	0.62	5.6	10.10	4.00	7.83	7.00	5.70			0.00	0.00	210	209	HDPE	0.012	15	121.62	1.00	0.50	1016.24	1015.03	1021.25	1018.01				
211	0.18	0.66	0.46	0.30	5.1	10.28	1.53	3.90	11.11	9.05			0.00	0.00	211	210	HDPE	0.012	15	246.06	2.52	0.50	1022.95	1016.74	1027.28	1023.92				
212	0.28	0.66	0.28	0.18	5.0	10.32	2.38	2.38	7.00	5.70			0.00	0.00	212	211	HDPE	0.012	15	35.00	1.00	N/A	1023.80	1023.45	1027.35	1024.53				
LINE 300																														
301	0.56	0.66	2.32	1.49	5.5	10.10	4.67	18.79	30.02	9.55	4301		0.29	0.15	301	204	HDPE	0.012	24	162.91	1.50	0.75	1011.24	DS TAILWATER @ STR #204 1008.80	1017.01	FREE 1013.20				
302	0.69	0.66	1.47	0.97	5.1	10.28	5.85	12.47	8.57	6.98			0.00	0.00	302	301	HDPE	0.012	15	181.94	1.50	0.50	1014.72	1011.99	1019.42	1019.82				
303	0.78	0.66	0.78	0.51	5.0	10.32	6.64	6.64	7.00	5.70			0.00	0.00	303	302	HDPE	0.012	15	35.00	1.00	N/A	1015.57	1015.22	1019.42	1019.97				
LINE 400																														
401	0.29	0.66	0.29	0.19	5.0	10.32	2.47	2.47	7.00	5.70			0.00	0.00	401	301	HDPE	0.012	15	36.84	1.00	0.75 N/A	Drop in Inlet 301 1012.36	1011.99	1017.07	1013.25				
LINE 500																														
501	0.57	0.66	1.60	1.06	5.6	10.08	4.74	13.31	8.81	4.99			0.00	0.00	501	207	PEP	0.012	18	161.58	0.60	0.50	1011.44	Drop in Inlet 207 1010.47	1015.22	1015.93				
502	0.26	0.66	1.03	0.68	5.3	10.19	2.19	8.66	7.00	5.70			0.00	0.00	502	501	PEP	0.012	15	88.92	1.00	0.50	1012.83	1011.94	1017.50	1016.97				
503	0.24	0.66	0.77	0.51	5.2	10.24	2.03	6.50	12.12	9.88			0.00	0.00	503	502	PEP	0.012	15	68.45	3.00	0.50	1015.38	1013.33	1020.38	1017.78				
504	0.53	0.66	0.53	0.35	5.0	10.32	4.51	4.51	12.12	9.88			0.00	0.00	504	503	PEP	0.012	15	123.85	3.00	N/A	1019.60	1015.88	1025.00	1020.65				
LINE 600																														
601	0.24	0.66	0.24	0.16	5.0	10.32	2.04	2.04	12.12	9.88			0.00	0.00	601	2														



CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN

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

MASTER DRAINAGE PLAN-DRAINAGE CALCS		REVISION	DATE	DESCRIPTION
DRAWN BY:	SF	1	08/01/2025	CITY COMMENTS
CHECKED BY:		2		
		3		
	JUL	4		
DATE PREPARED:		5		
06/25/2025		6		
PROJ. NUMBER:		7		
		8		
		9		

SHEET
10

10 YEARS GUTTER SPREAD AND INLET CAPACITY CALCULATIONS

DESIGN STORM10

"K" FACTOR1.00

CURB TYPE "A" = LAZY BACK

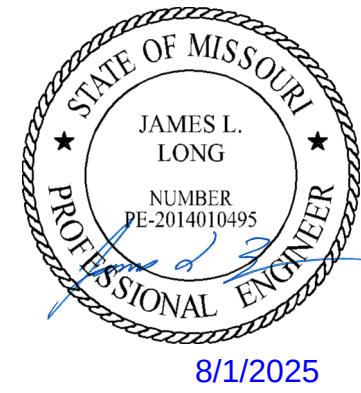
CURB TYPE "B" = HIGH BACK

RUNOFF CALCULATIONS

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 200																						
207	0.51	0.33	5	7.35	1.24	208				0.06	1.30	1.00	2.08	A	6	6	1.23	0.07	1.00	2.08	0.15	7.87
208	0.51	0.32	5	7.35	1.20	209				0.00	1.20	1.00	2.08	A	6	6	1.14	0.06	1.00	2.08	0.15	7.66
209	0.51	0.00	5	7.35	0.00	210				0.16	0.16	1.00	2.08	A	6	6	0.16	0.00	1.00	2.08	0.07	3.84
210	0.51	0.48	5	7.35	1.80	211				0.05	1.85	1.00	2.08	A	6	6	1.69	0.16	1.00	2.08	0.18	8.92
211	0.51	0.18	5	7.35	0.67					0.00	0.67	3.35	2.08	A	6	6	0.63	0.05	3.35	2.08	0.10	5.10
212	0.51	0.28	5	7.35	1.05					0.00	1.05	3.35	2.08	A	6	6	0.93	0.12	3.35	2.08	0.11	5.93
LINE 300																						
301	0.51	0.56	5	7.35	2.10	302				0.67	2.77	1.21	2.08	A	6	6	2.35	0.42	1.21	2.08	0.20	9.96
302	0.51	0.69	5	7.35	2.59					0.00	2.59	3.02	2.08	A	6	6	1.91	0.67	3.02	2.08	0.16	8.27
303	0.51	0.78	5	7.35	2.92					0.00	2.92	3.02	2.08	A	6	6	2.08	0.85	3.02	2.08	0.17	8.63
LINE 400																						
401	0.51	0.29	5	7.35	1.09	303				0.85	1.93	1.21	2.08	A	6	6	1.73	0.20	1.21	2.08	0.17	8.77
LINE 600																						
601	0.51	0.24	5	7.35	0.90	701				0.73	1.63	1.00	2.08	A	6	6	1.51	0.12	1.00	2.08	0.17	8.54
LINE 700																						
701	0.51	1.01	5	7.35	3.79	212				0.12	3.91	1.00	2.08	A	6	6	3.18	0.73	1.00	2.08	0.23	11.65

- NOTES:
- CAPCITY OF INLETS ON GRADE DETERMINED USING ROUTINE OUTLINED ON PGS 56-95 TO 56-97, SECTION 5600 APWA
 - CAPACITY OF SUMP INLETS CALCULATED USING FIGURE 5604-21, SECTION 5600 APWA
 - MANNINGS "n" VALUE FOR COMBINED ASPHALT PAVEMENT AND CONCRETE CURB - 0.014
 - MAX. GUTTER SPREAD OF 12.0 FEET PER APWA 5604.2

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN

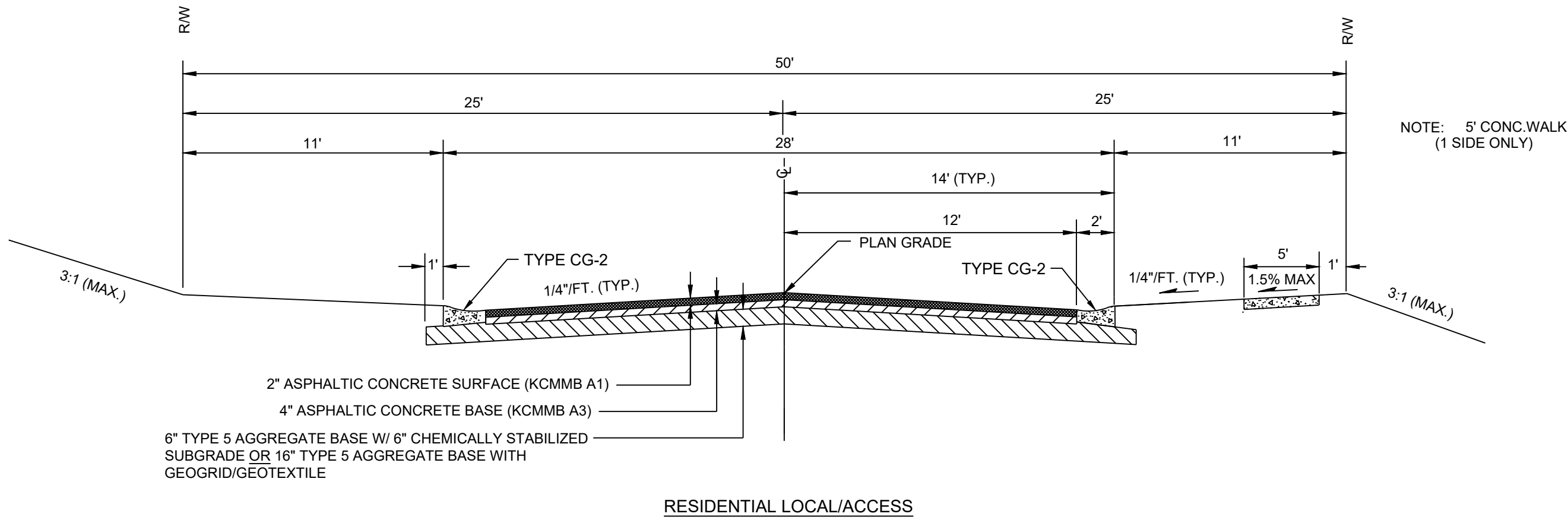
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION	CITY COMMENTS
11 08/01/2025		
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GUTTER SPREAD
CALC

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	12	--	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



PAVEMENT SHALL BE PER KCMMB SPECIFICATIONS:

- SURFACE - KCMMB A1
- BASE - KCMMB A3

- ALL ASPHALT MATERIALS SHALL CONFORM TO THE KCMMB ASPHALT MATERIAL SPECIFICATION, CURRENT EDITION.

- ALL CONCRETE MATERIALS FOR PAVING CURB AND GUTTER, SIDEWALKS, PATHS, COMMERCIAL DRIVEWAYS AND OTHER PAVEMENTS IN THE RIGHT OF WAY SHALL CONFORM TO THE KCMMB SPECIFICATIONS.

LS5200

17

July 2020

PREPARED BY:



8/1/2025

SCHLAGEL & ASSOCIATES, P.A.

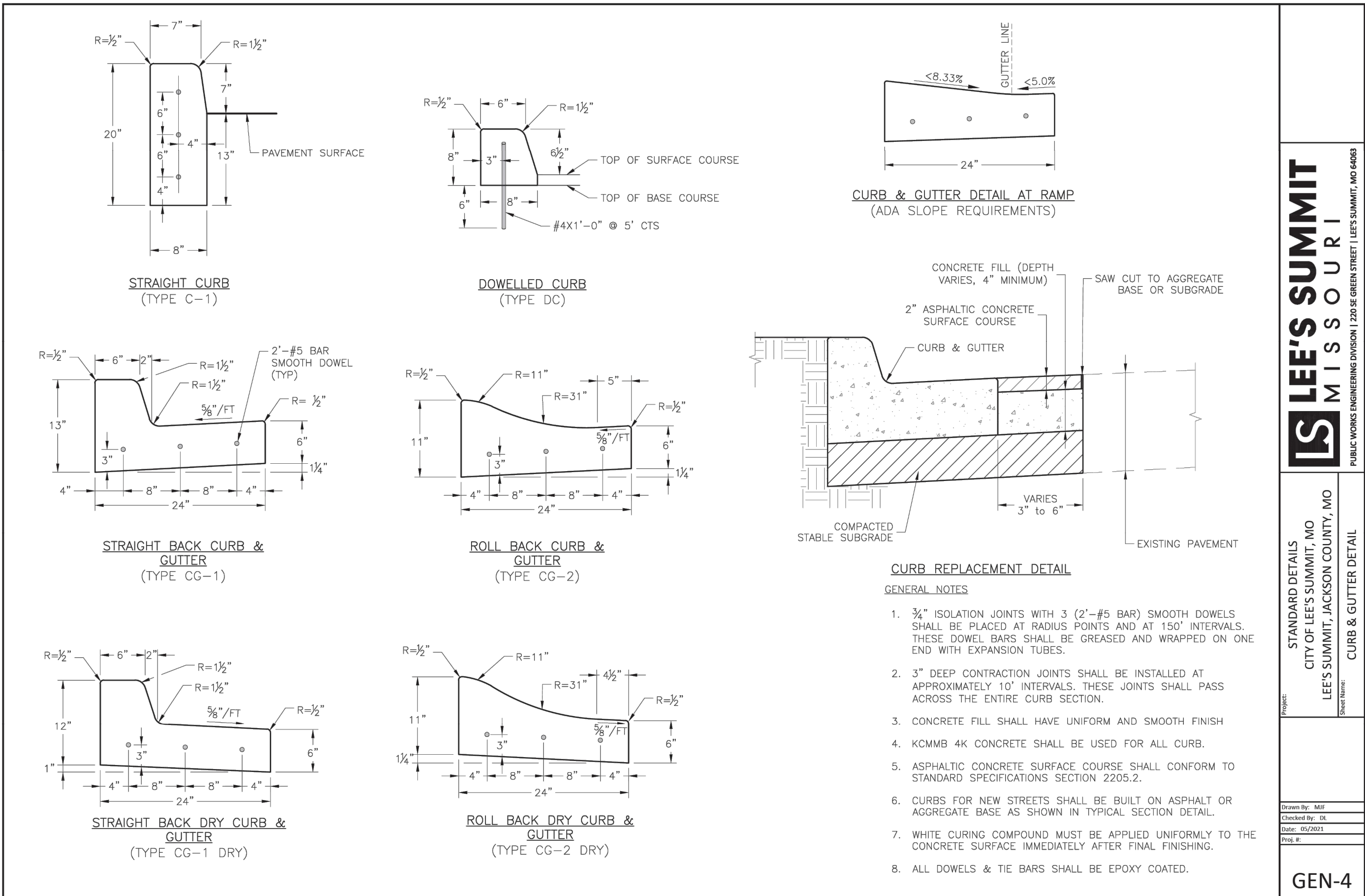
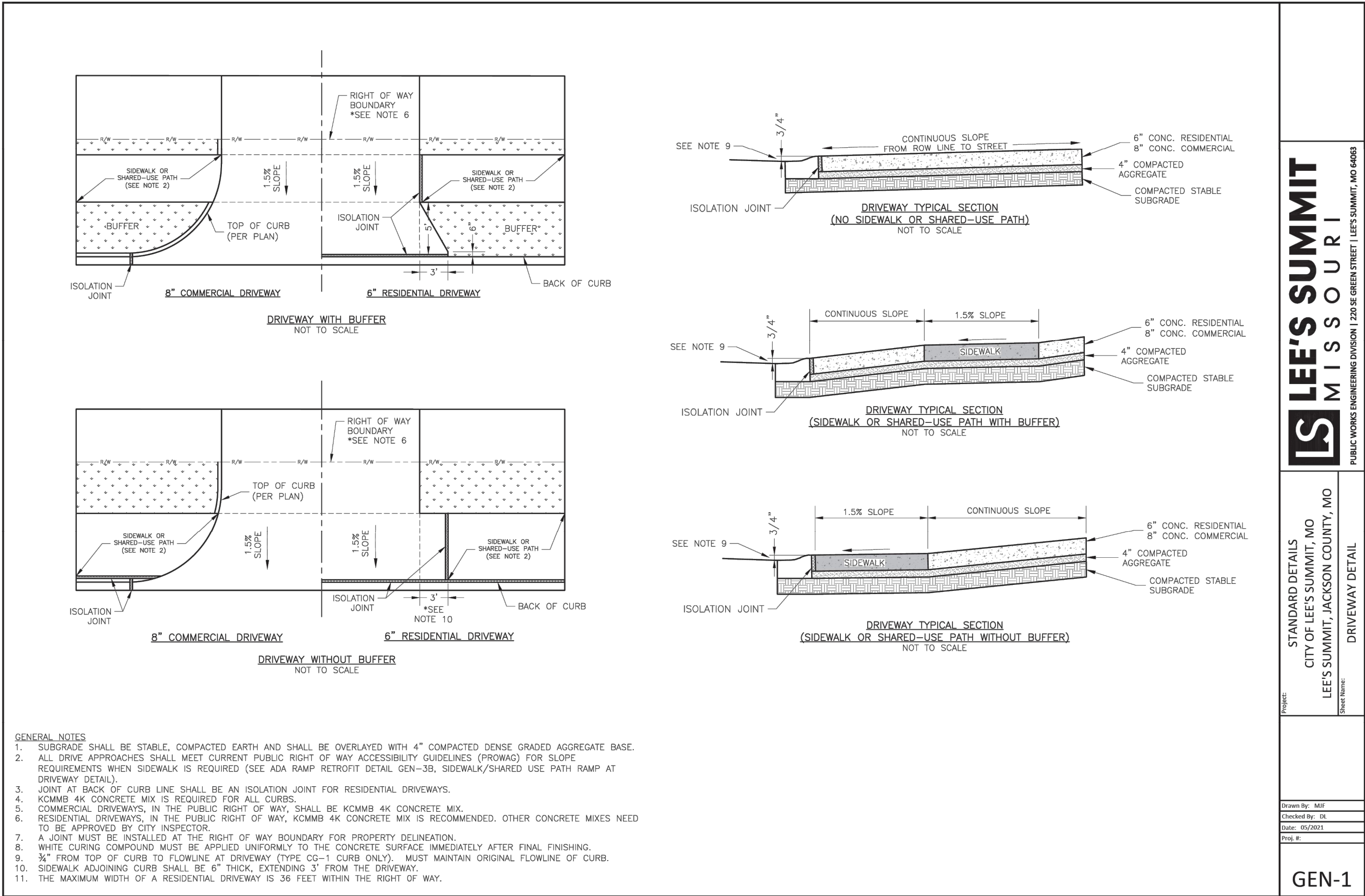
CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION	CITY COMMENTS
1 08/01/2025		
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DRAWN BY:	DATE PREPARED:	PROJ. NUMBER:
SF	08/25/2025	25-541
CHECKED BY:		
JLL		

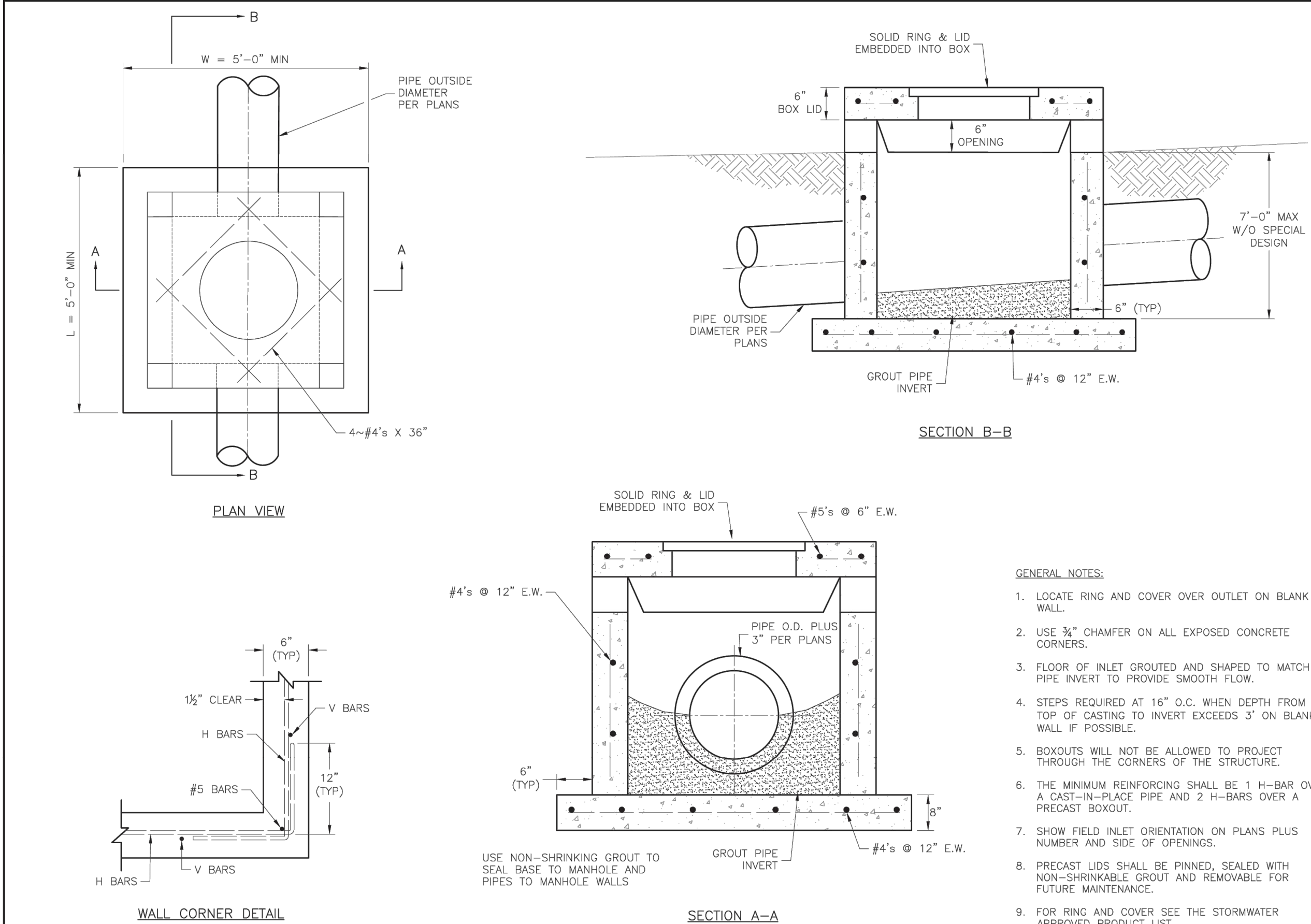
STREET DETAILS
1

SHEET
12



REVISION	DATE	DESCRIPTION
1	08/01/2025	CITY COMMENTS
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DRAWN BY: SF	CHECKED BY: JLL	DATE PREPARED: 08/25/2025	PROJ. NUMBER: 25-541
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LEE'S SUMMIT
MISSOURI

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

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

FIELD INLET DETAIL

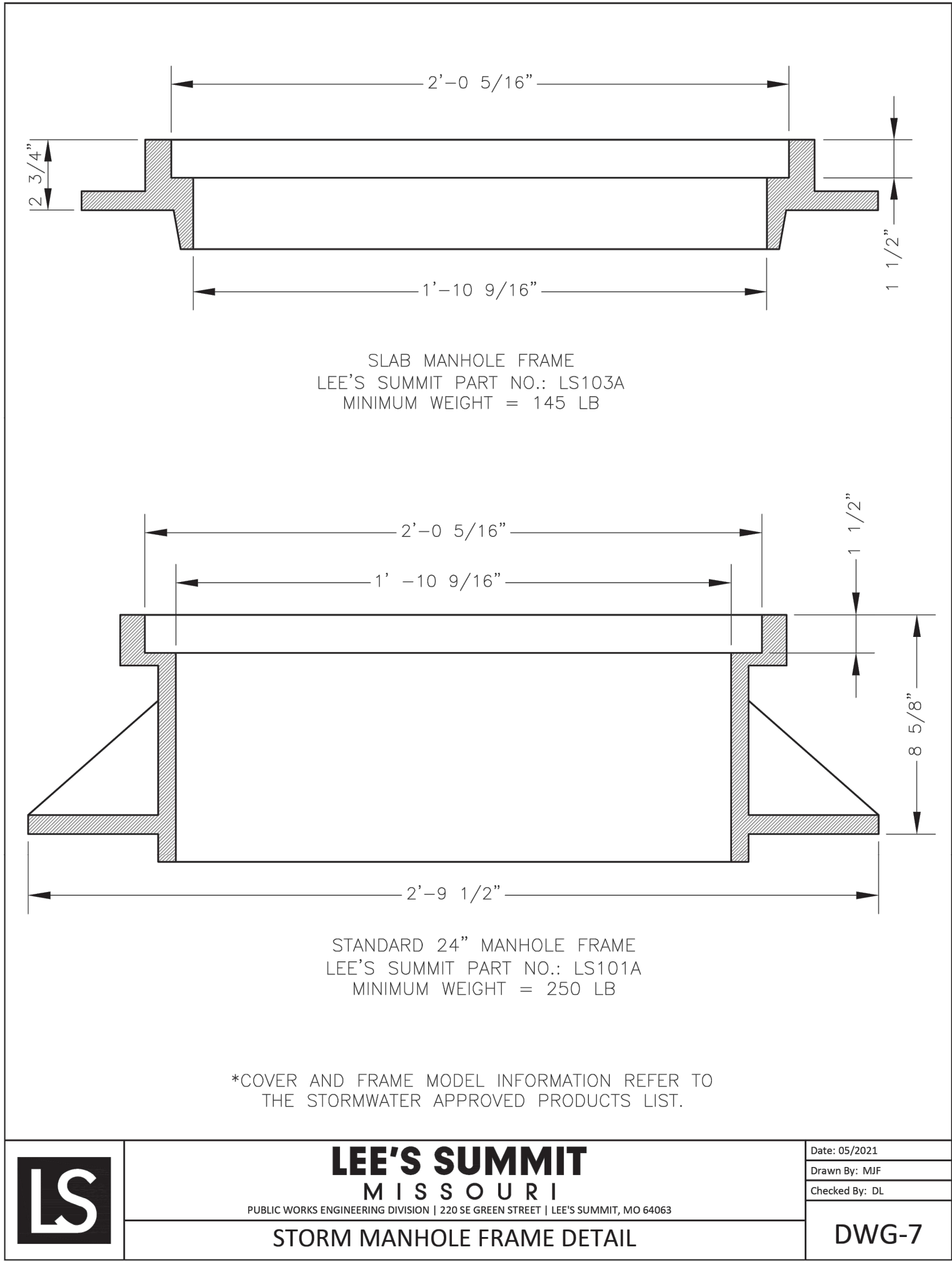
Drawn By: MIF

Checked By: DL

Date: 05/2021

File #

STM-2



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
#E2002003600-F #LAC2001006237 #LS2002008659-F

PREPARED BY:

STATE OF MISSOURI

JAMES L. LONG

NUMBER
PE-2014010495

PROFESSIONAL ENGINEER

8/1/2025

SCHLAGEL & ASSOCIATES, P.A.

CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN

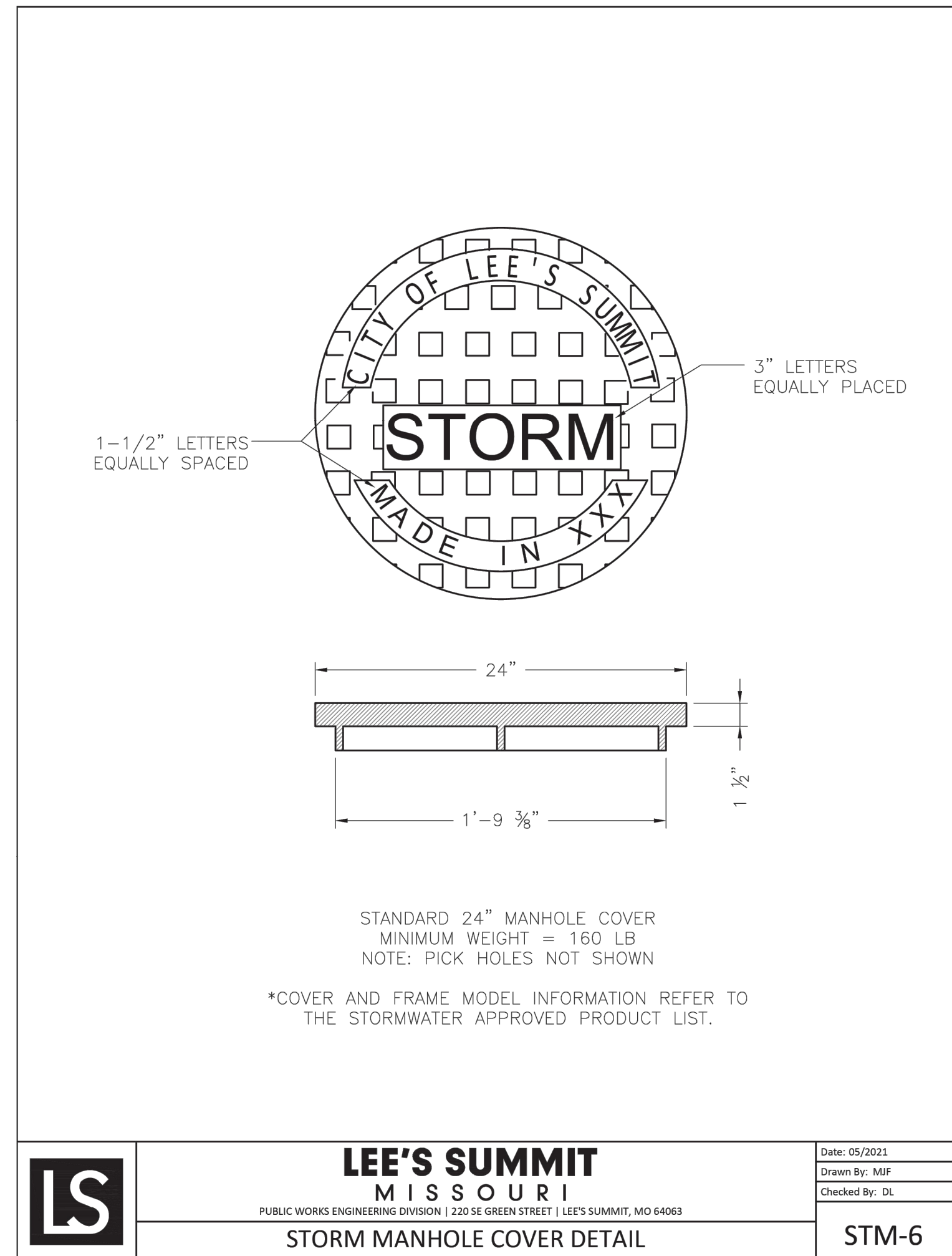
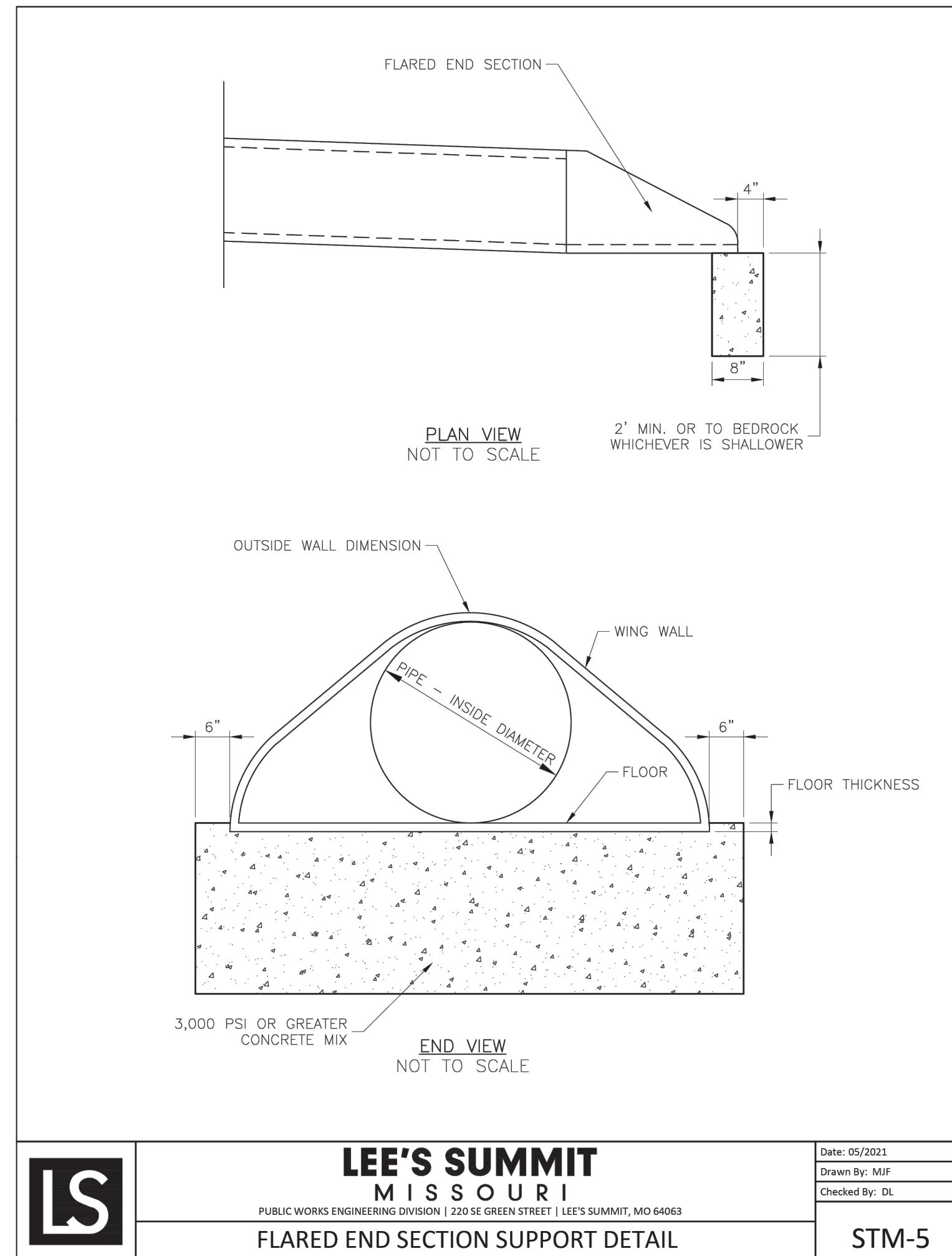
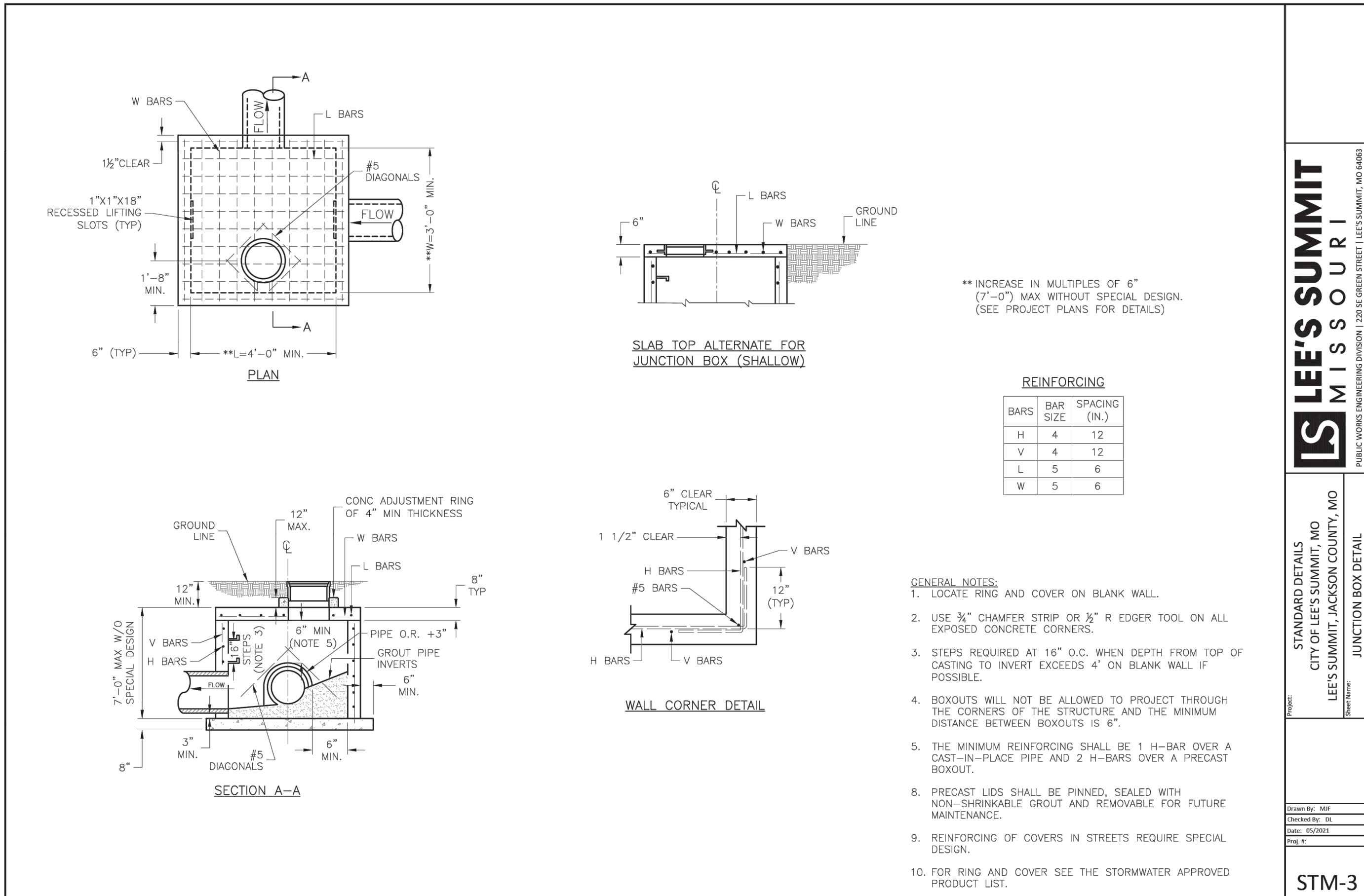
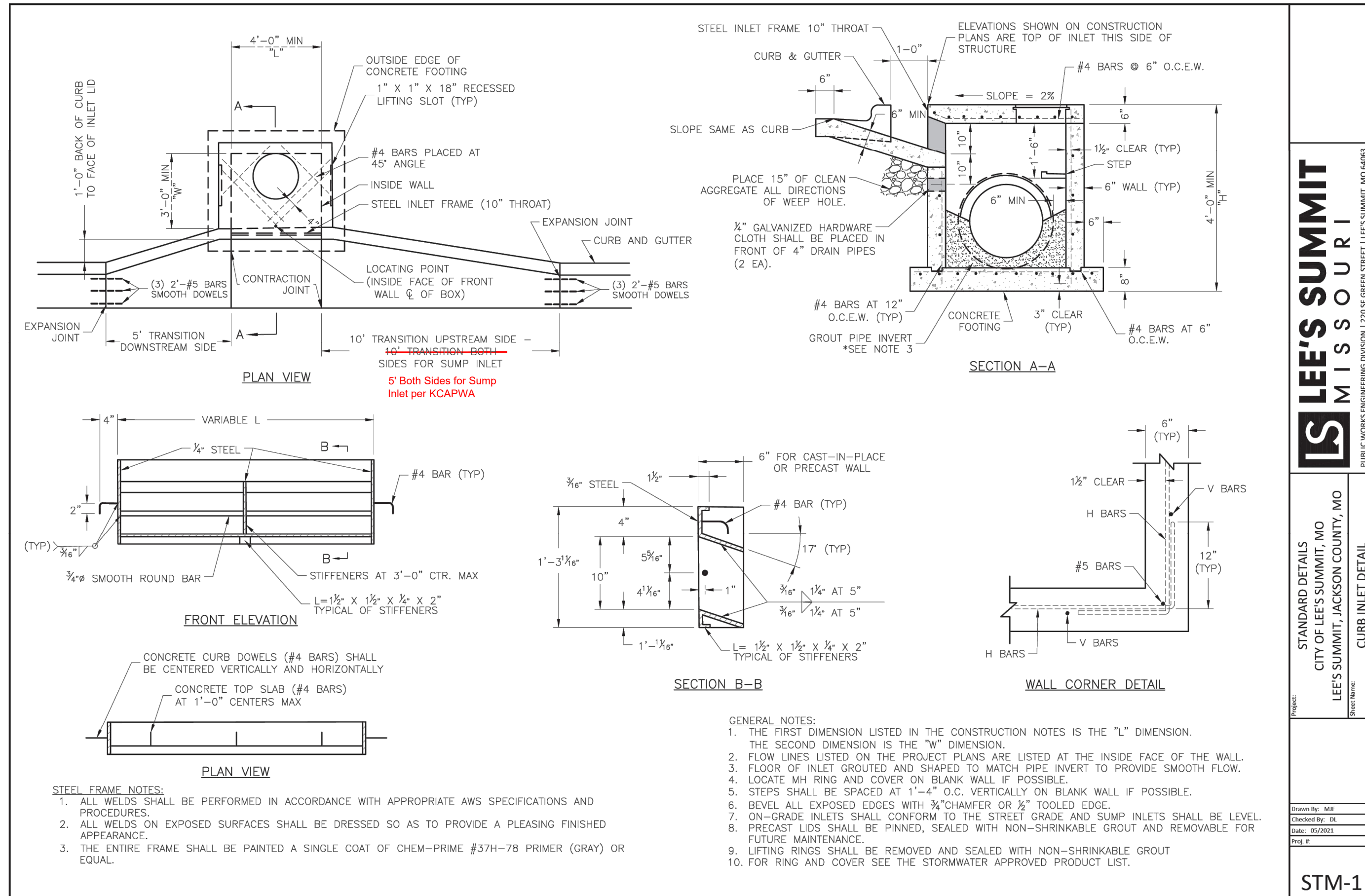
SE BAILEY ROAD AND SE RANSON ROAD
LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION	CITY COMMENTS
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DRAWN BY: SF	CHECKED BY: JLL	DATE PREPARED: 06/25/2025	PROJ. NUMBER: 25-541
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STORM DETAILS
1

SHEET
14



PREPARED BY:



8/1/2025

SCHLAGEL & ASSOCIATES, P.A.

CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN

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

DRAWN BY:	REVISION DATE	DESCRIPTION
SF	08/01/2025	CITY COMMENTS
	2	
CHECKED BY:	3	
JLL	4	
	5	
DATE PREPARED:	6	
06/25/2025	7	
	8	
PROJ. NUMBER:		
25-041		

STORM DETAILS

SHEET

15

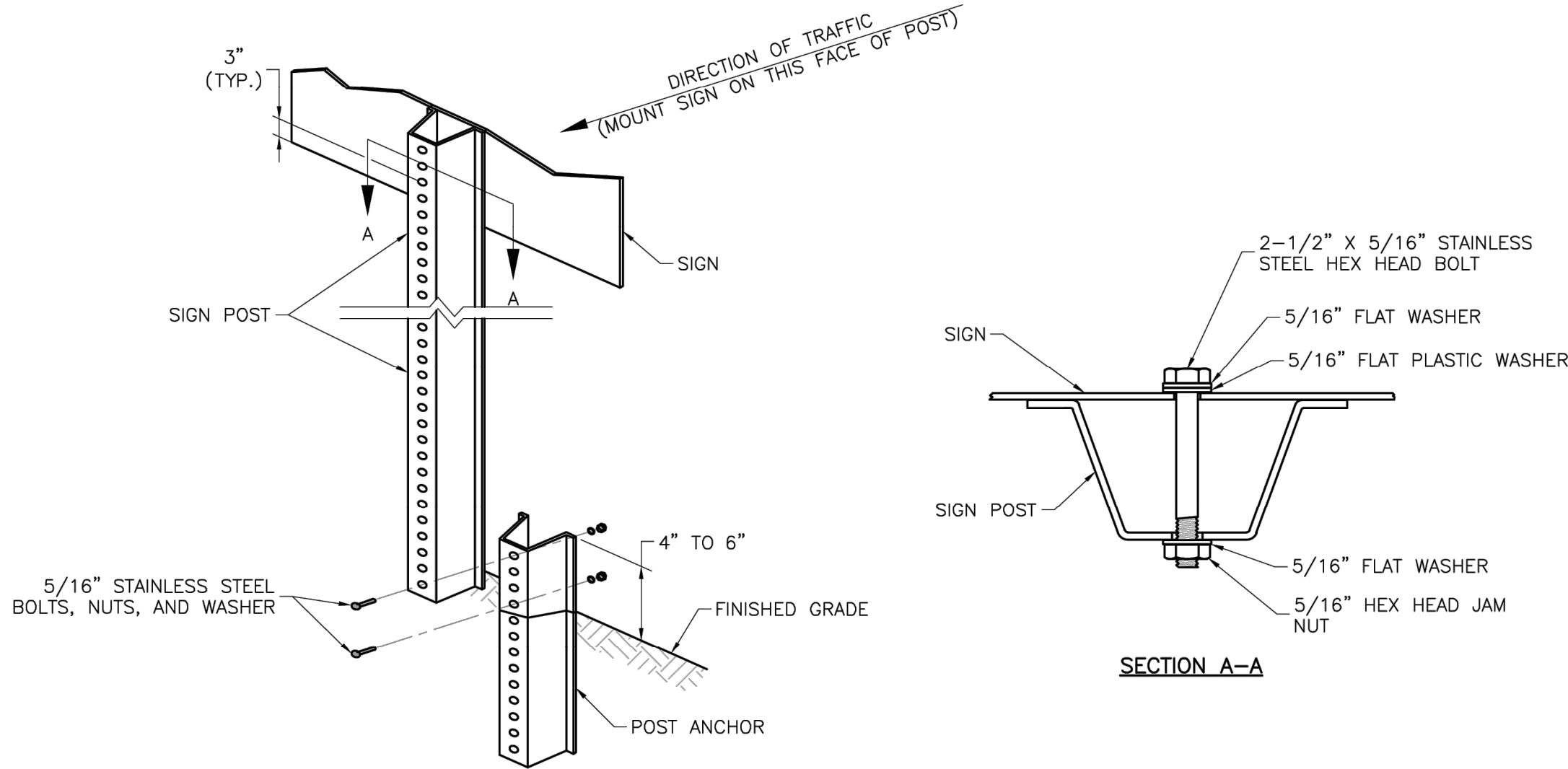
ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF LEES SUMMIT TECHNICAL SPECIFICATIONS.

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

INSTALL R1-1 STOP SIGN
WITH STREET NAME SIGNS
D3-1 (SP-1) AND D3-1 (SP-6)
(SEE DETAIL SHEET 17-19)

INSTALL R1-1 STOP SIGN
WITH STREET NAME SIGNS
D3-1 (SP-1) AND D3-1 (SP-3)
(SEE DETAIL SHEETS (17-19))

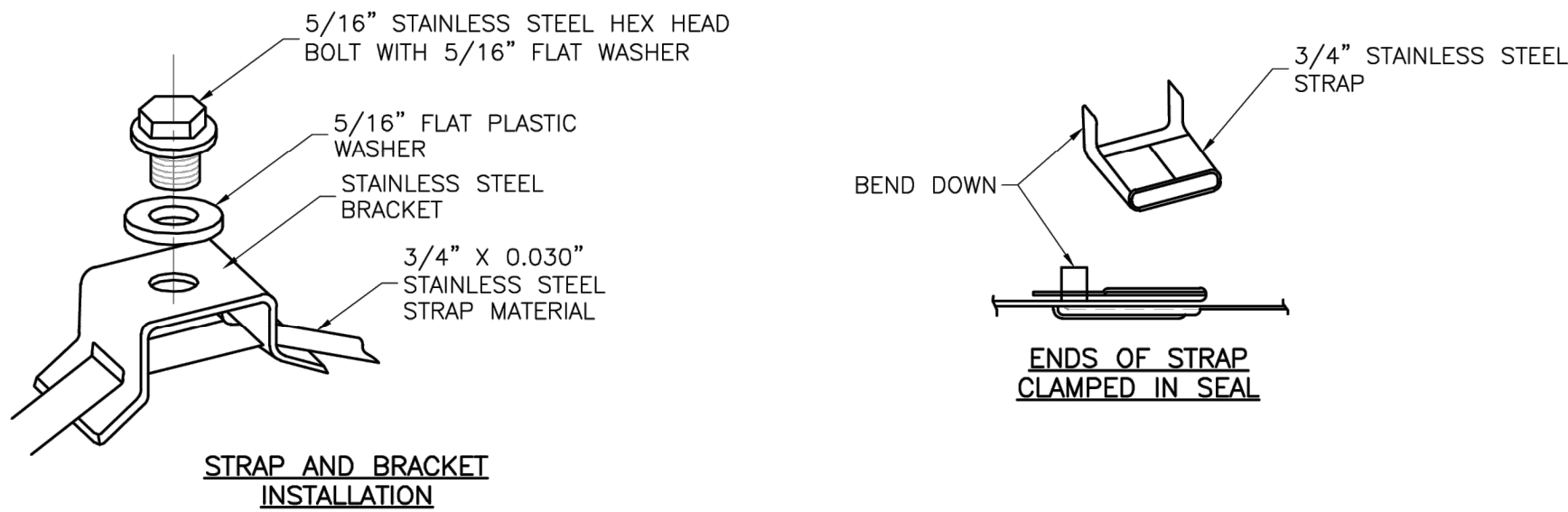
SIGNAGE PLAN	
SHEET	
16	



U-STEEL POST DETAILS

NOTES:

1. SPLICE SHALL BE POSITIONED ENTIRELY BETWEEN FINISHED GRADE LINE AND 18" ABOVE FINISHED GRADE LINE. ONLY ONE SPLICE WILL BE ALLOWED PER POST.
2. U-STEEL POST SHALL BE 3 LB./FT., GALVANIZED ACCORDING TO ASTM A123.
3. U-STEEL POST CAN BE USED FOR INSTALLATION OF SIGNS WITH AN AREA OF LESS THAN 2.5 SQUARE FEET.
4. ALL POSTS SHALL BE EMBEDDED A MINIMUM OF 3 FEET.



STRAP TYPE SIGN SUPPORT DETAILS

NOTES:

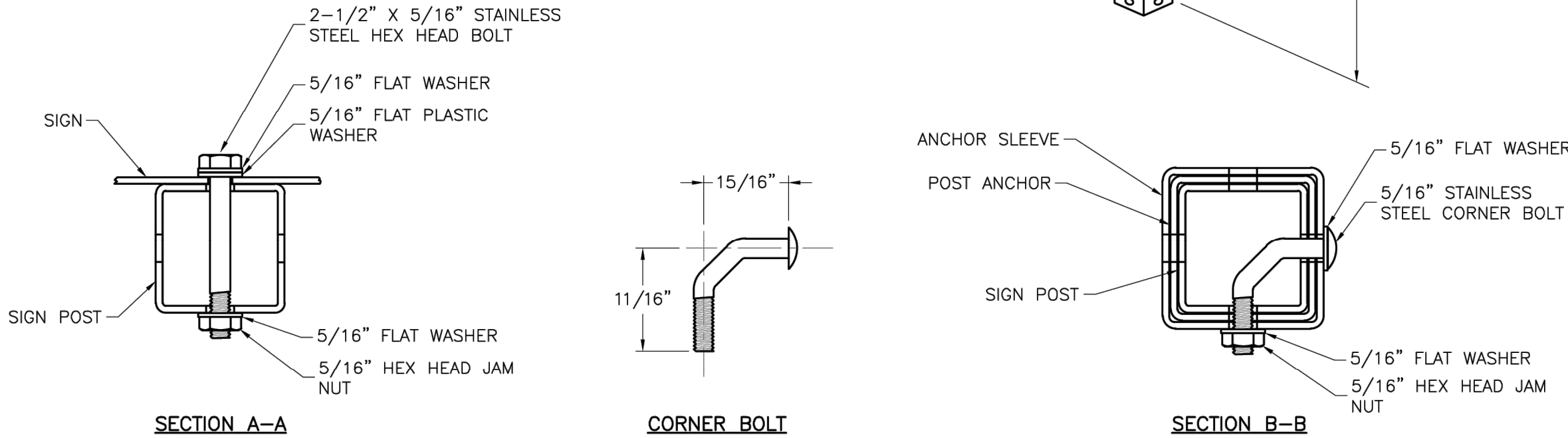
1. SIGNS ON METAL POLES SHALL BE ATTACHED WITH TWO BRACKETS AND STAINLESS STEEL BANDS.
2. HOLES IN SIGN FOR ATTACHMENT TO THE MOUNTING BRACKETS SHALL BE OFFSET A MINIMUM OF 2 INCHES FROM THE EDGE OF THE SIGN.
3. HOLES IN SIGN SHALL BE LOCATED SUCH THAT THE SIGN IS LEVEL.
4. ALL STRAP, BRACKET, AND SEAL MATERIALS SHOULD BE TYPE 201 STAINLESS STEEL.

PERMANENT SIGNING GENERAL NOTES:

1. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. THE CONTRACTOR IS RESPONSIBLE FOR AVOIDING ANY AND ALL UTILITIES WHEN INSTALLING SIGN POSTS, WHETHER THE UTILITY IS INDICATED ON THE PLANS OR NOT.
3. ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE PUBLIC WORKS DEPARTMENT OF THE CITY OF LEE'S SUMMIT.
4. THE CONTRACTOR SHALL STAKE THE LOCATION OF ALL SIGN POSTS TO BE INSTALLED. THE CITY INSPECTOR SHALL INSPECT THE STAKING PRIOR TO INSTALLATION. MINOR RELOCATION TO AVOID CONFLICTS MAY BE ALLOWED WITH THE APPROVAL OF THE CITY TRAFFIC ENGINEER.
5. SIGNS SHOWN TO BE INSTALLED ON THE SIDE OF METAL POLES SHALL BE MOUNTED WITH STAINLESS STEEL STRAPS OR WING BRACKETS AS DETAILED. NO SIGNS ARE TO BE INSTALLED ON WOOD POLES. SEE TRAFFIC SIGNAL STANDARD DRAWINGS FOR THE INSTALLATION OF SIGNS ON MAST ARMS.
6. ALL POST MOUNTED SIGNS SHALL BE INSTALLED WITH BREAKAWAY ANCHORS ACCORDING TO THE STANDARD DRAWINGS.
7. ALL EXISTING SIGNS WILL BE USED IN PLACE DURING CONSTRUCTION AND PROTECTED FROM DAMAGE UNLESS OTHERWISE INDICATED IN THE PLANS. IF THE CONTRACTOR DAMAGES ANY EXISTING SIGN OR POSTS DURING CONSTRUCTION, THE CONTRACTOR WILL BE REQUIRED TO REPLACE THE DAMAGED MATERIALS WITH NEW SIGNS OR POSTS AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND STORING ANY SIGNS THAT ARE TO BE REINSTALLED ON THE PROJECT. ALL EQUIPMENT SHALL BE REINSTALLED IN GOOD CONDITION.
8. EXISTING PERMANENT SIGNS AND POSTS REMOVED BY THE CONTRACTOR FOR CONSTRUCTION PURPOSES WHICH ARE NOT TO BE REINSTALLED SHALL BE DELIVERED TO THE CITY'S PUBLIC WORKS MAINTENANCE FACILITY (1971 SE HAMBLEN ROAD). THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND STORING EQUIPMENT IN GOOD CONDITION AND IS FULLY RESPONSIBLE FOR THE EQUIPMENT UNTIL IT IS DELIVERED.
9. ALL STOP, YIELD, OR STREET NAME SIGNS SHALL BE MAINTAINED IN A CONSPICUOUS LOCATION FOR THE DRIVING PUBLIC. ALL STOP AND YIELD SIGNS REMOVED FOR CONSTRUCTION PURPOSES CAN BE TEMPORARILY ERECTED IN REFLECTORIZED DRUMS (NO LESS THAN 7 FEET ABOVE THE PAVEMENT SURFACE) UNTIL THEY CAN BE REINSTALLED. ANY TEMPORARY STOP OR YIELD SIGN INSTALLATION TO BE LEFT IN PLACE OVERNIGHT WILL REQUIRE PRIOR APPROVAL FROM THE CITY INSPECTOR.

SQUARE STEEL POST INSTALLATION SEQUENCE:

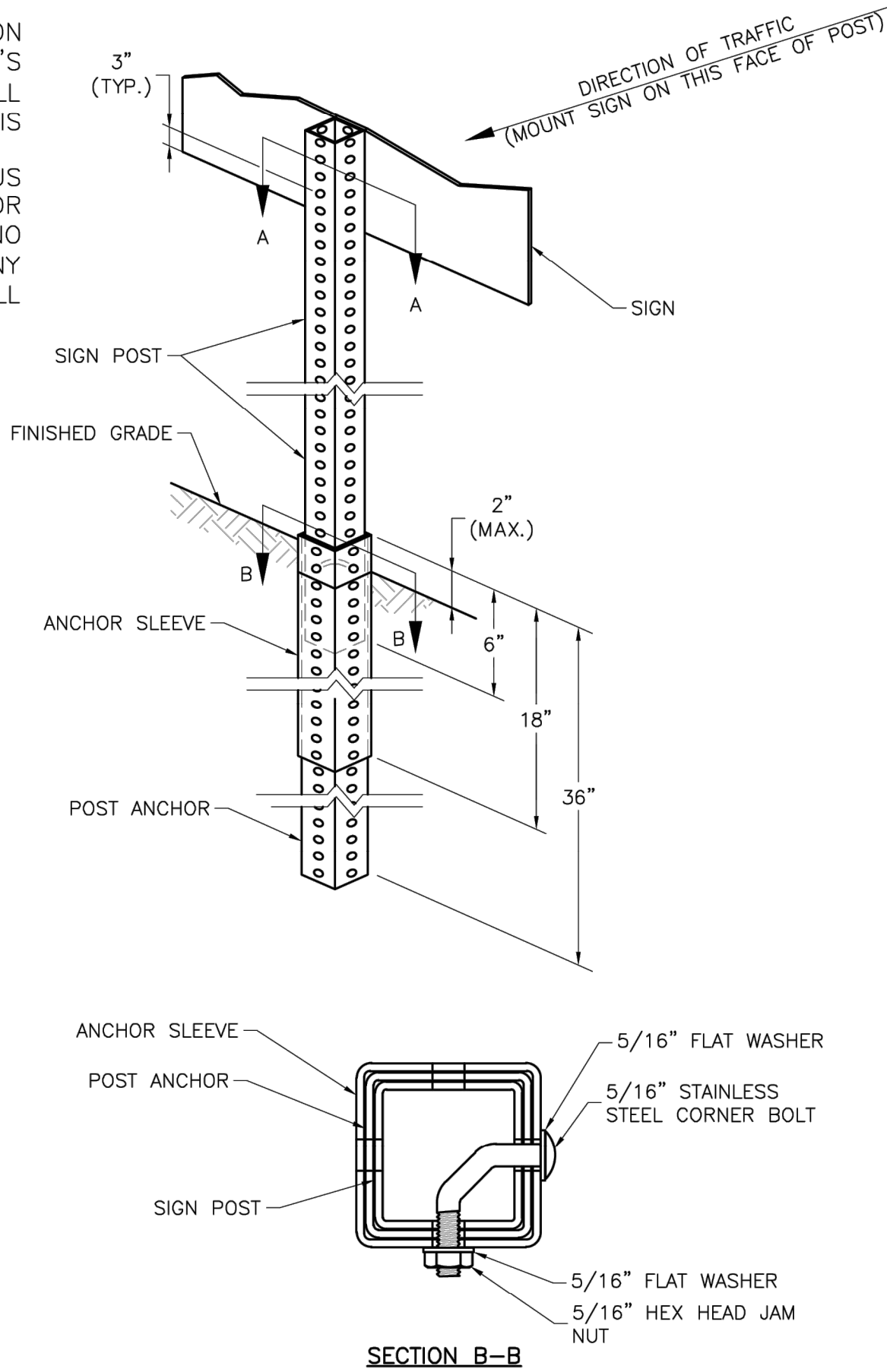
1. SIGN POST ANCHOR DRIVEN PARTIALLY INTO THE GROUND USING A DRIVE CAP WITH A SLEDGE OR POWER EQUIPMENT.
2. ANCHOR SLEEVE SLIPPED OVER ANCHOR AND DRIVE INTO THE GROUND TOGETHER WITH THE SIGN POST ANCHOR.
3. INSERT SIGN POST INTO THE POST ANCHOR AND BOLT IN PLACE.



SQUARE STEEL POST DETAILS

NOTES:

1. SQUARE STEEL SIGN POSTS AND BREAK-AWAY ANCHOR SHALL CONSIST OF THE FOLLOWING MATERIALS:
SIGN POST - 14 GA. 2" X 2" SQUARE STEEL POST
POST ANCHOR - 12 GA. 2 1/4" X 2 1/4" X 36" SQUARE STEEL POST
ANCHOR SLEEVE - 12 GA. 2 1/2" X 2 1/2" X 18" SQUARE STEEL POST
2. 14 GA. POSTS MUST MEET A CERTIFIED MINIMUM YIELD STRENGTH OF 60,000 PSI.
3. IN ALL INSTALLATIONS THE FIRST HOLE ABOVE THE FINISHED GRADE LINE ON THE SIGN POST, ANCHOR, AND ANCHOR SLEEVE MUST BE IN LINE FOR THE INSERTION OF THE CORNER BOLT.
4. THE MAXIMUM AREA FOR ONE SIGN POST IS 9.0 SQUARE FEET. A SIGN OR COMBINATION OF SIGNS WITH AN AREA GREATER THAN 9.0 SQUARE FEET WILL REQUIRE TWO POSTS. ALSO, SIGNS WITH A WIDTH GREATER THAN OR EQUAL TO 48" (NOT INCLUDING 36" X 36" DIAMOND SHAPED SIGNS) WILL REQUIRE TWO POSTS.



LEE'S SUMMIT MISSOURI

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

STANDARD DETAILS

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

POST DETAILS

Project:

Sheet Name:

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

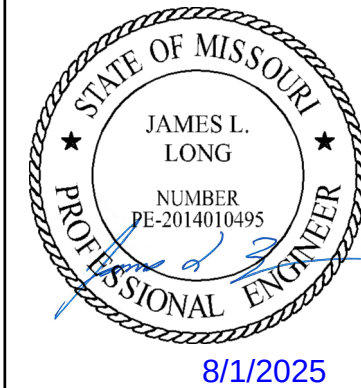
SN-2

RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

Date: 3/28/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlager and Associates, P.A.

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

CORNERSTONE AT BAILEY FARMS, SECOND PLAT
STREET, STORMWATER, AND MASTER DRAINAGE PLAN

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

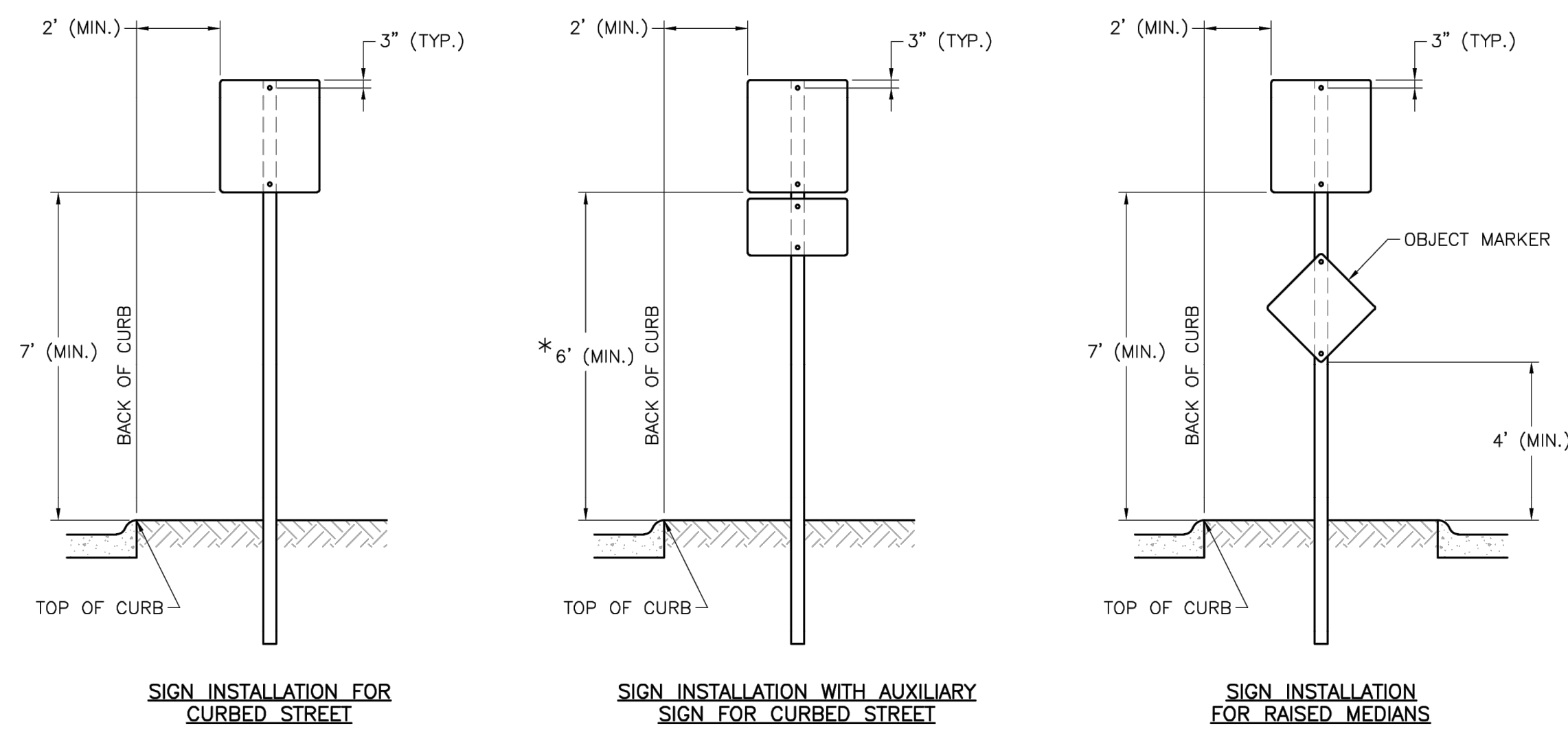
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DRAWN BY:	DATE PREPARED:
SF	08/25/2025
CHECKED BY:	PROJ. NUMBER:
JLL	25-041

SIGN POST DETAILS

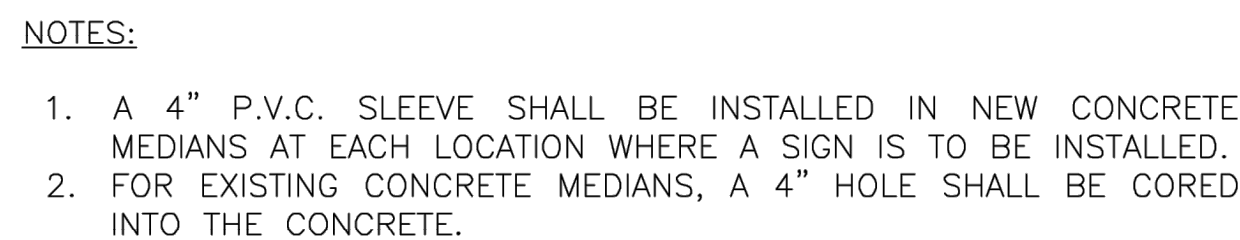
SHEET

17



NOTES:

1. GENERALLY, THE SIGN MOUNTING HEIGHT SHOULD NOT BE MORE THAN 1' GREATER THAN THE MINIMUM MOUNTING HEIGHT.
2. *THE HEIGHT TO THE BOTTOM OF A SIGN WHEN IT IS LOCATED IN A PEDESTRIAN WALKWAY OR EXTENDS INTO A WALKWAY SHALL BE A MINIMUM OF 80 INCHES ABOVE THE WALKWAY.



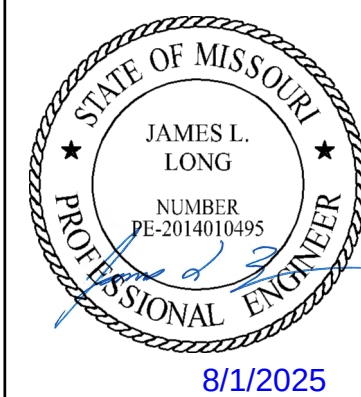
RECORD DRAWING

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"100.00 100.13, "0.00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. A other data is as designed and has not been field verified.

Date: 3/28/2025
Certified by: JLL
Title: Senior Project Engineer
Firm: Schlagel and Associates, P.A.

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

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

DRAWN BY:	REVISION DATE	DESCRIPTION
SF	08/01/2025	CITY COMMENTS
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JLL	6	
	7	
DATE PREPARED:	8	
06/25/2025	9	
	10	
PROJ. NUMBER:	11	
	12	

SIGN MOUNTING DETAILS

SHEET

18

NAMED STREETS	
AVENUE	Ave
BOULEVARD	Blvd
CIRCLE	Cir
CREEK	Cr
COURT	Ct
CROSSING	Xing
DRIVE	Dr
HIGHWAY	Hwy
LANE	Ln
PARKWAY	Pkwy
PLACE	Pl
ROAD	Rd
STREET	St
TERRACE	Ter
TRAIL	Trl
WAY	Way

NUMBERED STREETS	
FIRST	ST
SECOND	ND
THIRD	RD
FOURTH TO TENTH	TH

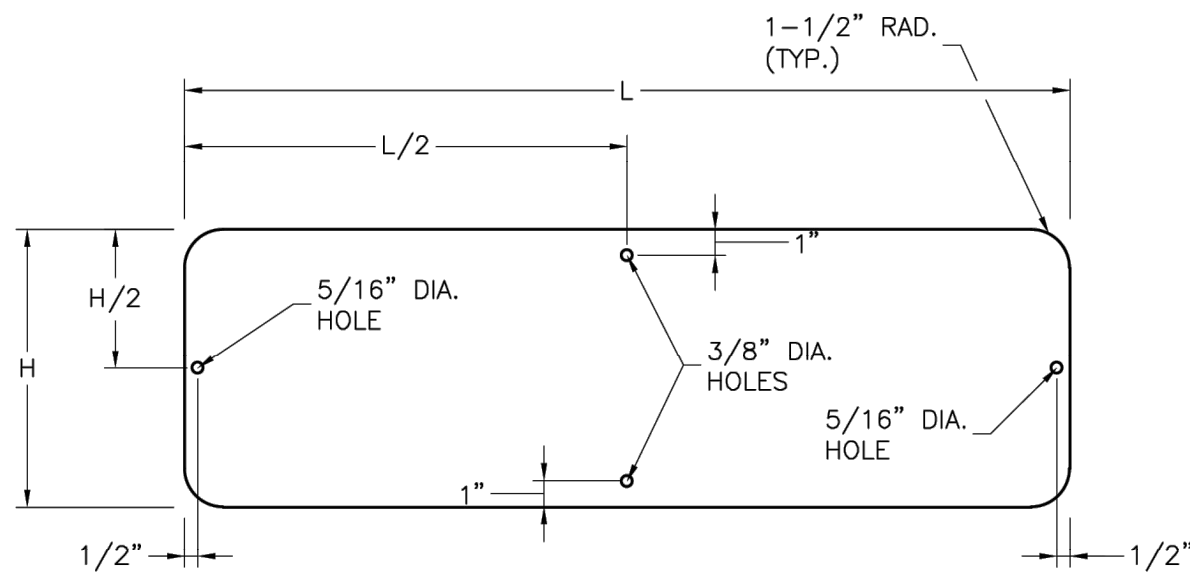
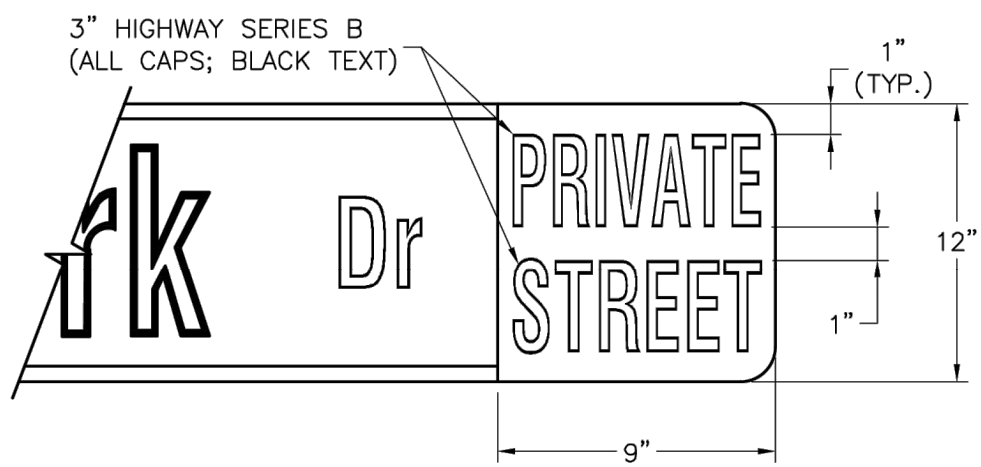


Diagram of a 'SW L' arrow sign with dimensions:

- Overall width: 6"
- Arrow width: 3"
- Arrow height: 1-1/2" (MIN.)
- Text 'SW' height: 2" (MIN.)
- Text 'L' height: 4-1/2"
- Text 'L' width: 2-1/4" (TYP.)
- Text 'L' height: 1-1/2"

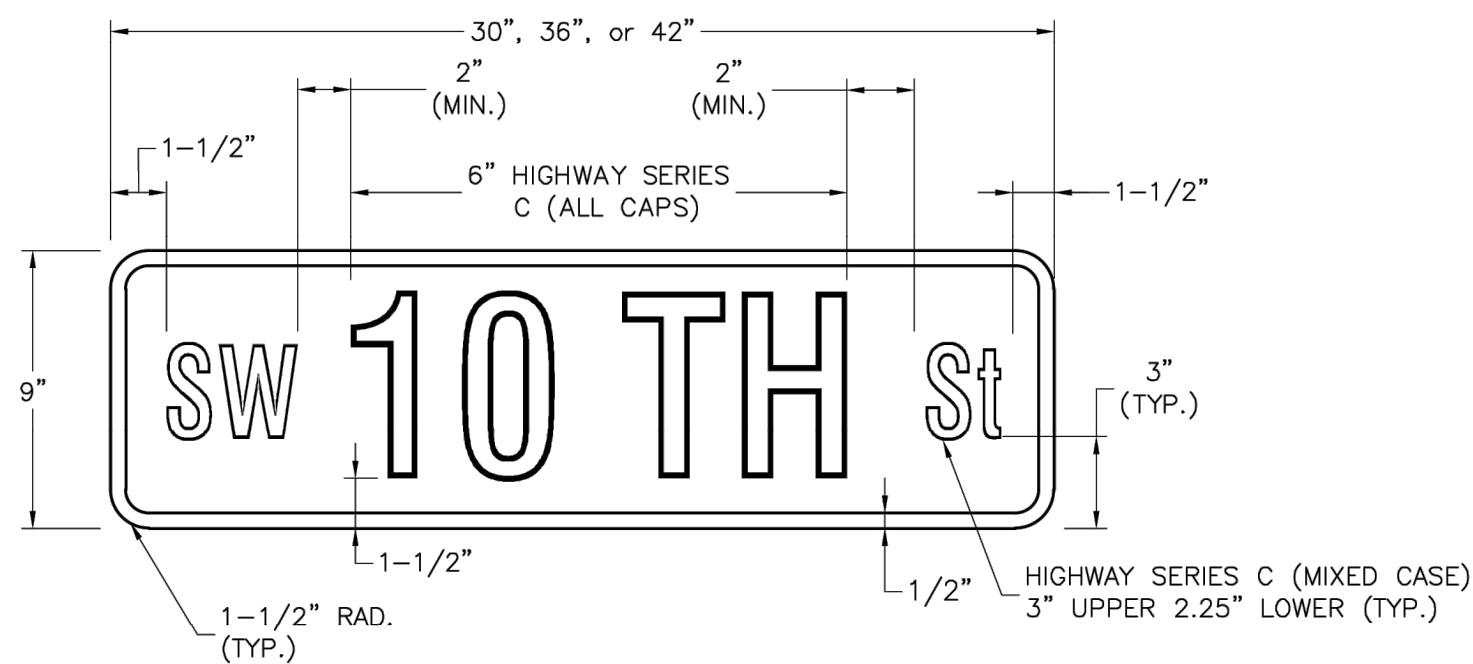
ARROW DETAIL



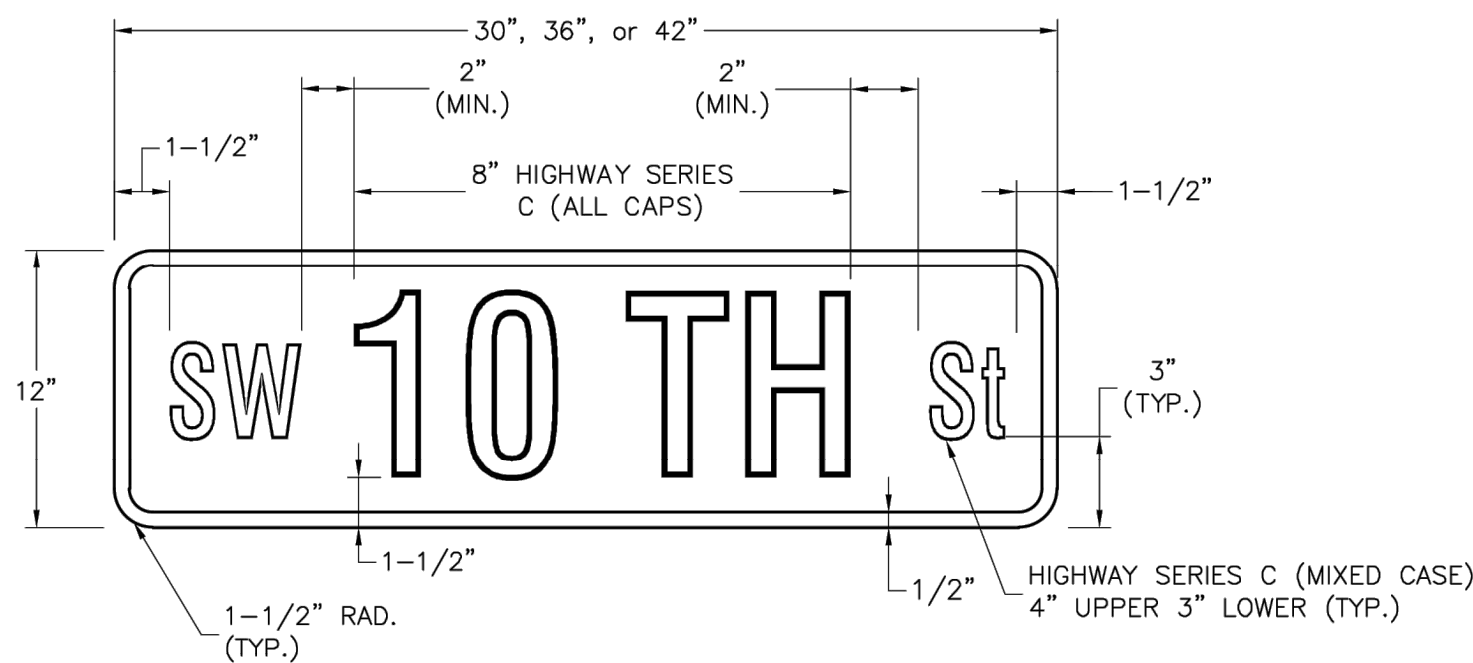
Technical drawing of a "NAMED STREET NAME SIGN DETAIL". The sign is rectangular with rounded corners and a double border. The text "sw Longview Blvd" is displayed in a stylized font. Dimensions and specifications are provided:

- Overall width: 30", 36", 42", or 48"
- Left side margin: 1-1/2" (MIN.)
- Right side margin: 1-1/2" (MIN.)
- Top margin: 2" (MIN.)
- Bottom margin: 1-1/2"
- Sign height: 9"
- Text height: 6" (for "sw"), 4-1/2" (for "Longview"), 3" (TYP.) (for "Blvd")
- Corner radius: 1 1/2" RAD. (TYP.)
- Font: HIGHWAY SERIES C (MIXED CASE)*
- Lettering: 3" UPPER 2.25" LOWER TYP.)

STREET NAME SIGN FACE DETAILS



STREET NAME SIGN FACE DETAILS

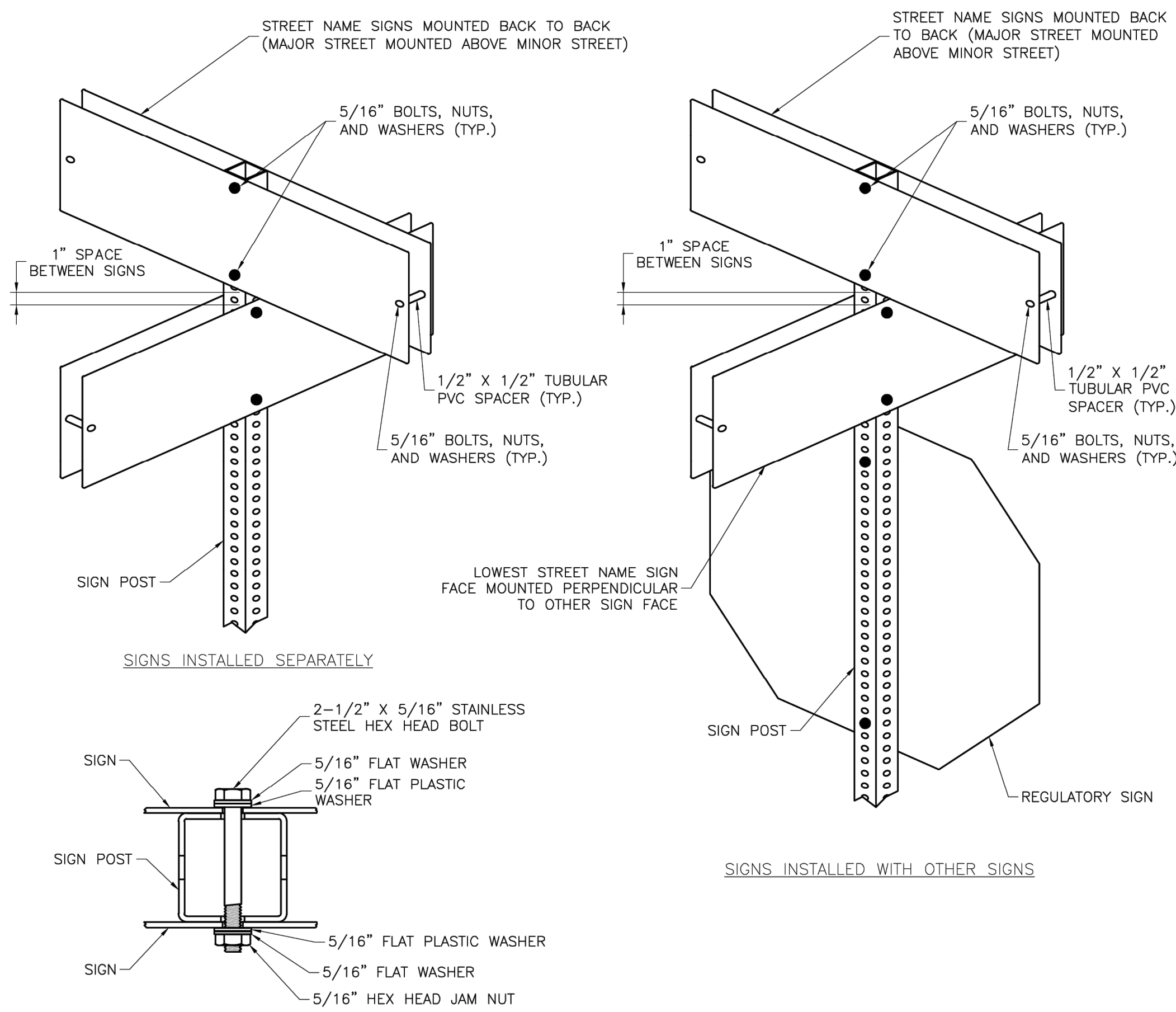


STREET NAME SIGN FACE DETAILS

Technical drawing of a "NAMED STREET NAME SIGN" with the following specifications:

- Overall Dimensions:** 30", 36", 42", or 48" (width) and 12" (height).
- Lettering:** "sw Longview Blvd". The letters "Longview" are significantly larger than "sw" and "Blvd".
- Dimensions and Spacing:**
 - Top horizontal spacing: 1-1/2" (MIN.) on the left, 2" (MIN.) between "sw" and "Longview", 2" (MIN.) between "Longview" and "Blvd", and 1-1/2" (MIN.) on the right.
 - Vertical spacing: 6" between "sw" and "Longview", and 6" between "Longview" and "Blvd".
 - Bottom horizontal spacing: 1-1/2" between the bottom of "sw" and "Longview", and 1/2" between the bottom of "Longview" and "Blvd".
 - Right vertical spacing: 3" (TYP.) from the bottom of "Blvd" to the bottom edge of the sign.
- Corner Radius:** 1 1/2" RAD. (TYP.) at the bottom corners.
- Material:** HIGHWAY SERIES C (MIXED CASE)*.
- Text at Bottom:** NAMED STREET NAME SIGN DETAIL. HIGHWAY SERIES C (MIXED CASE) (4" UPPER 3" LOWER TYP.)

STREET NAME SIGN FACE DETAILS



LEE'S SUMMIT
MISSOURI

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

STANDARD DETAILS

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

STREET NAME SIGN DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #:

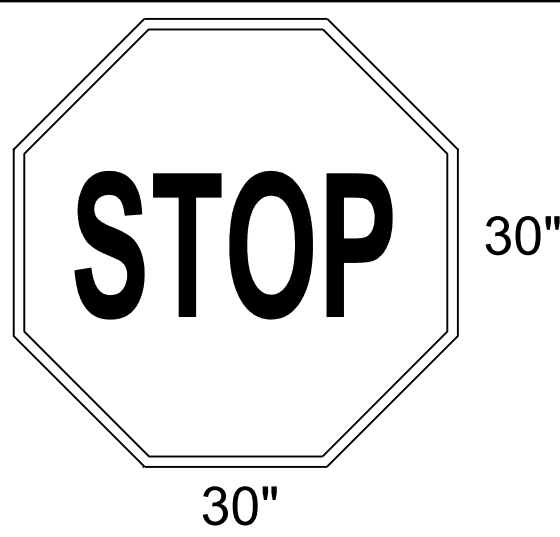
SN-3

REVISION DATE	DESCRIPTION
08/01/2025	CITY COMMENTS
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STREET NAME
SIGN DETAILS

SHEET

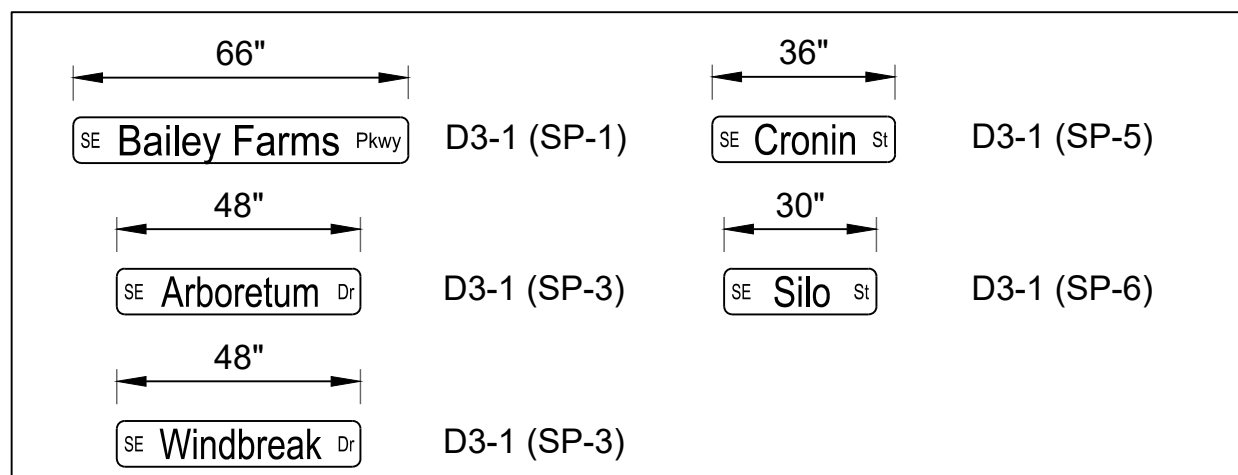
19



R1-1

STOP SIGN

STREET NAME SIGN INVENTORY



RECORD DRAWING

The information provided on this drawing conforms to construction records; it is not intended for construction, implementation or recording purposes; and it is solely based on information obtained by Schlager and Associates.

"100.00 100.10", "1.00% 1.15% slope", or "8-inch HDPE PVC pipe" are all typical examples of revisions that indicate that design data has been replaced with "as-built" information. A other data is as designed and has not been field verified.

Date: 3/28/2025
 Certified by: JLL
 Title: Senior Project Engineer
 Firm: Schlagel and Associates, P.A.