EXISTING PLAT LINES —— P/L —— PROPERTY LINES — SANITARY SEWER MAIN —— SANITARY SEWER MAIN - EXIST. —— STO—— STORM SEWER STORM SEWER - EXISTING ---- CATV_x ---- CABLE TV - EXISTING FIBER OPTIC CABLE - EXISTING ——Ty—— TELEPHONE LINE - EXIST. ELECTRIC LINE - EXISTING ---- OHP_y ---- OVERHEAD POWER LINE - EXIST ----- UGE_x ----- UNDERGROUND ELECTRIC - EX. GAS LINE - EXISTING WATERLINE - EXISTING LIGHT - EXISTING **EXISTING MANHOLE** CLEANOUT

EXISTING SANITARY MANHOLE

EXISTING AREA INLET **EXISTING CURB INLET**

EXISTING GRATE INLET **EXISTING JUNCTION BOX**

EXISTING STORM MANHOLE

PROPOSED SANITARY MANHOLE



220 SE Green Street

(816) 969-1800

John Meadows

(816) 795-2257

Lee's Summit, MO 64063

Mark Manion or Marty Loper

500 E. 8th Street, Room 370

(816) 275-2341 or (816) 275-1550

Kansas City, MO 64106

COMCAST CABLE

4700 Little Blue Parkway

	SUMMARY OF QUANTITIES		
	ITEM	QUANTITY	UNI
1	2" TYPE 5 OR 6 ASPHALT PAVEMENT	4,644	SY
2	5.5" TYPE 5 ASPHALT PAVEMENT	4644	SY
3	6" TYPE 5 BASE	5,466	SY
4	9" SUBGRADE STABILIZATION	5,466	SY
5	TYPE CG-1 CURB AND GUTTER	2,183	LF
6	5' CONCRETE SIDEWALK	1769	LF
7	TYPE A SIDEWALK RAMPS	6	ΕA
8	TYPE B SIDEWALK RAMPS	4	EΑ
9	TYPE M SIDEWALK RAMPS	3	EΑ
10	"END OF ROAD" MARKERS (5 LOCATIONS)	15	EΑ
11	6 X 4 CURB INLET	8	ΕA
12	24" HDPE STORM SEWER PIPE	399	LF
13	18" HDPE STORM SEWER PIPE	62	LF
14	15" HDPE STORM SEWER PIPE	858	LF
15	TRENCHING UNDER FUTURE STREET	129	LF
16	CLEARING, GRUBBING & DISPOSAL	1	LS
17	EARTHWORK	1	LS
18	EROSION CONTROL	1	LS
19	SEEDING & MULCHING	1	LS
20	BONDS	1	LS

STREET, STORMWATER, MASTER DRAINAGE PLAN **AND EROSION & SEDIMENT CONTROL** RESIDENCES AT BLACKWELL

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

GENERAL NOTES

- ALL CONSTRUCTION TO FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.
- ALL WORKMANSHIP AND MATERIALS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE ENGINEERING DEPARTMENT OF THE CITY OF LEE'S SUMMIT, MISSOURI.
- LINEAL FOOT MEASUREMENTS SHOWN ON THE PLANS ARE HORIZONTAL MEASUREMENTS, NOT SLOPE MEASUREMENTS. ALL PAYMENTS SHALL BE MADE ON HORIZONTAL MEASUREMENTS.
- NO GEOLOGICAL INVESTIGATION HAS BEEN PERFORMED ON THE SITE 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.
- CALL SYSTEM, INC.": 1-800-DIG-RITE. THIS PHONE NUMBER IS APPLICABLE ANYWHERE WITHIN THE STATE OF 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
- THE CONTRACTOR SHALL PROTECT ALL MAJOR TREES FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE.
- 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. ALL EXCAVATIONS SHALL BE UNCLASSIFIED. NO SEPARATE PAYMENT WILL BE MADE FOR ROCK
- THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASED OF CONSTRUCTION,
- AND SHALL KEEP THE STREETS CLEAN OF MUD AND DEBRIS.
- ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE
- 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
- 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.
- 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).

STREET NOTES:

- 1. ALL STREET CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL, ALL APPLICABLE AASHTO STANDARDS HAVE BEEN MET.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION. 3. ALL INSPECTION OF STREET CONSTRUCTION TO BE PERFORMED BY THE CITY OF LEE'S SUMMIT
- DEVELOPMENT ENGINEERING. 4. CURB RETURN RADII SHALL BE 30' AT BACK OF CURB UNLESS OTHERWISE NOTED.
- SUBGRADE TO BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- ASSUMED DESIGN SPEED = 30 MPH (RESIDENTIAL COLLECTOR).
- MINIMUM STOPPING SIGHT DISTANCE = 200 FEET.
- 8. MINIMUM K, SAG CURVE = 37 (20 WITH LIGHTING), CREST CURVE = 19.
- 9. GRADE INTERSECTIONS TO DRAIN AS SHOWN.
- 10. SSD = STOPPING SIGHT DISTANCE.
- 11. ALL ADA SIDEWALK RAMPS SHALL BE CONSTRUCTED BY THE DEVELOPER WITH THE PUBLIC INFRASTRUCTURE.

DESIGN SPEED = 30 MPH

POSTED SPEED = 25 MPH

EARTHWORK:

- It is recommended that a Geotechnical Engineer observe and document all earthwork activities 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.
- The existing site topography depicted on the plans by contouring has been established by aerial photography and field verified by g.p.s. observation near 11/11/2021 .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.
- Proposed contours are to approximate finished grade 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 mowable condition and positive drainage maintained
- Unless otherwise noted, all earthwork is considered Unclassified. No additional compensation will be provided for rock or shale excavation, unless specifically stated otherwise.
- 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. 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
- then 6-inches and other deleterious materials shall be removed and properly disposed of offsite or as directed by the owner
- 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).
- Subgrade for pavements shall be proof-rolled prior to paving operations utilizing a fully loaded tandem axle dump truck. All areas exhibiting excessive pumping and heaving shall be removed, filled and compacted with suitable materials and retested until acceptable results are achieved and final approval has been obtained from the Geotechnical Engineer.
- 11. Subgrade for building pad shall include a minimum of 18-inches of Low Volume Change (LVC) material, or as identified in
- 12. Fill materials shall be per Geotechnical Report and shall not include organic matter, debris or topsoil. All fills placed on
- 13. 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
- 14. 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
- 15. A.D.A. parking stalls shall not be sloped greater then 2% in any direction and constructed per A.D.A. requirements.
- 16. 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
- 17. All disturbed areas in the right-of-way shall be sodded.
- 18. Underdrains are recommended for all paved areas adjacent to irrigated turf and landscaped beds.
- 19. 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. 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
- 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.
- 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.
- 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
Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL LAYOUT - OVERALL
3	GENERAL LAYOUT - HERITAGE STREET
4	MASTER DRAINAGE PLAN - GRADING
5	MASTER DRAINAGE PLAN - OVERALL DRAINAGE MAP
6	MASTER DRAINAGE PLAN - DRAINAGE MAP
7	PRE-CONSTRUCTION EROSION CONTROL PLAN
8	EROSION CONTROL PLAN
9	POST-CONSTRUCTION EROSION CONTROL PLAN
10	EROSION CONTROL DETAILS
11	HERITAGE STREET - PLAN & PROFILE
12	INTERSECTION DETAILS
13	INTERSECTION DETAILS
14	STORM PLAN
15	STORM CALCS
16	STORM PROFILES
17	STREET DETAILS
18	STREET DETAILS
19	STORM DETAILS
20	STORM DETAILS
21	STREET SIGN AND PAVEMENT MARKING PLAN
22	STREET SIGN DETAILS
23	PAVMENT MARKING DETAILS

APPROVED BY

CITY ENGINEER APPROVED FOR ONE YEAR FROM THIS DATE

OWNER/DEVELOPER

GRIFFIN RILEY PROPERTY GROUP JAKE LOVELESS, VICE PRESIDENT 21 SE 29TH TERRACE LEE'S SUMMIT p 816-366-7900 JAKE@GRIFFINRILEY.COM

PREPARED BY

BREUER PE-2009007268

SCHLAGEL & ASSOCIATES, P.A.

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MO GRS BENCHMARK:

STATION NAME - JA-90

KC METRO ALUMINUM GRS DISK SET IN CONCRETE STAMPED "JA-90, 1988" LOCATED NEAR THE INTERSECTION OF LANGSFORD ROAD AND OLD LANGSFORD ROAD, 43 FEET SOUTHEAST OF THE CENTER OF LANGSFORD ROAD AND 32 FEET NORTH OF THE CENTER OF OLD LANGSFORD ROAD. N:1001052.8503, E:2845604.8272

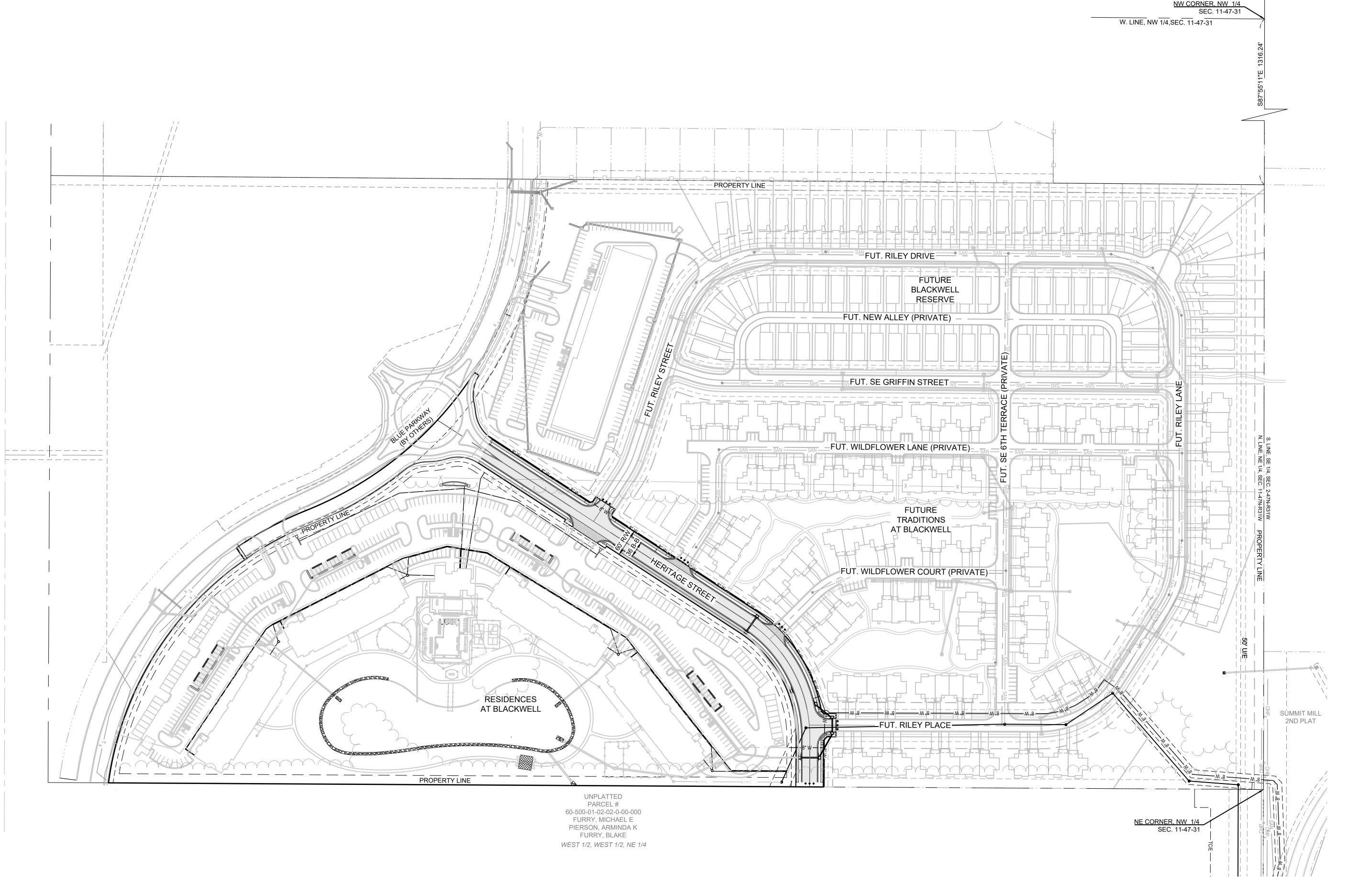
ELEV. 997.045

PROJECT BENCHMARK:

"SQUARE" CUT IN TOP OF CONCRETE STORM MANHOLE STORM MANHOLE IS LOCATED APPROX. 130 FEET EAST OF THE INTERSECTION OF SE JOEL AVE & BLUE PARKWAY AND 26 FEET SOUTH OF THE CENTERLINE OF BLUE PARKWAY. N:996874.9690, E:2840937.1365

ELEV. 1005.719

COVER SHEET



STREET NOTES:

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- MINIMUM STOPPING SIGHT DISTANCE = 200 FEET. 8. MINIMUM K, SAG CURVE = 37 (20 WITH LIGHTING), CREST CURVE = 19.
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MO GRS BENCHMARK:

STATION NAME - JA-90

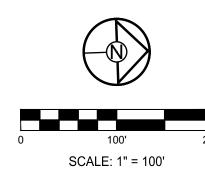
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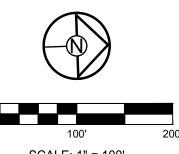
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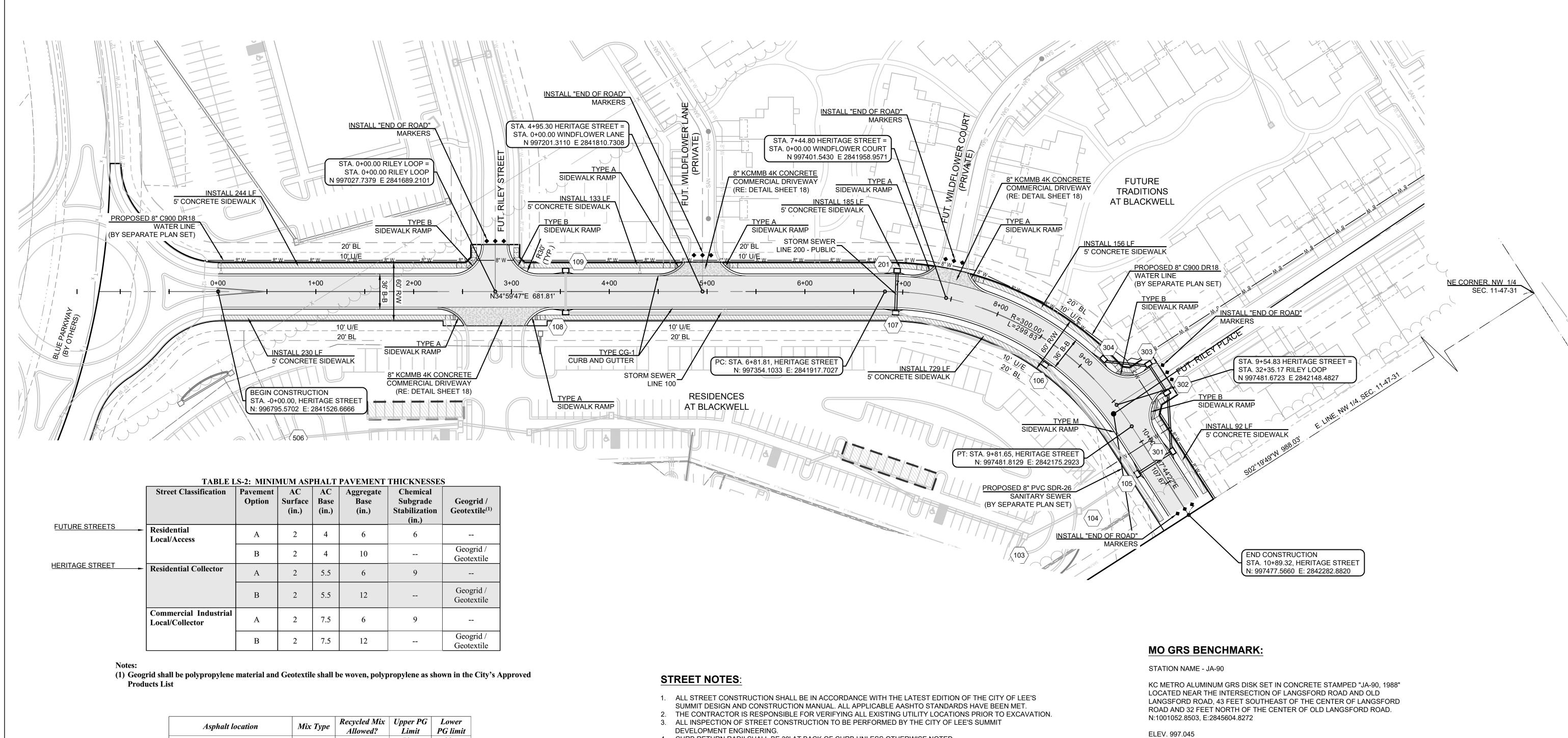


GENERAL LAYOUT -OVERALL

PREPARED BY:

SCHLAGEL & ASSOCIATES, P.A.

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Asphalt location	Mix Type	Recycled Mix Allowed?	Upper PG Limit	Lower PG limit
Industrial/Arterial surface	5 or 6	no	70 or greater	-22 or less
Base courses greater than 2 inches below the surface on industrial and arterial streets	5	yes	64 or greater	-22 or less
Local and Collector surface	5 or 6	no	64 or greater	-22 or less
Base courses greater than 2 inches below the surface on local and collector streets	5	yes	64 or greater	-22 or less

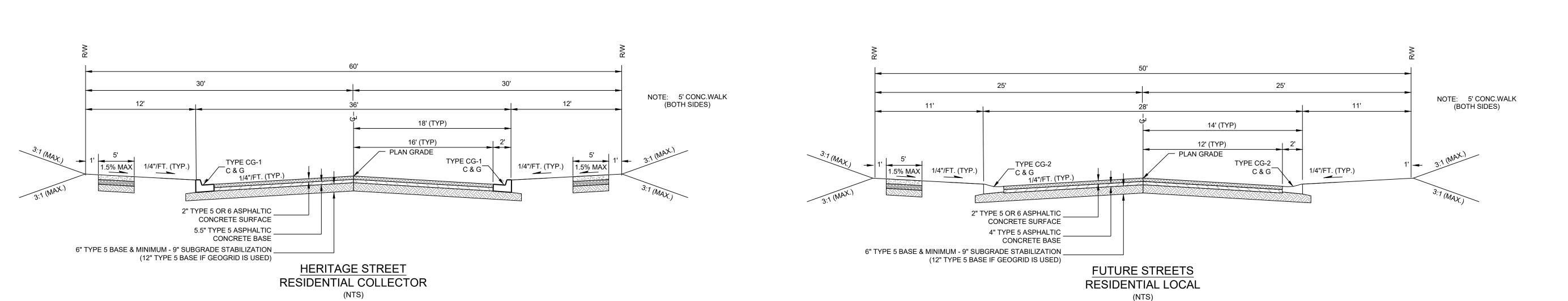
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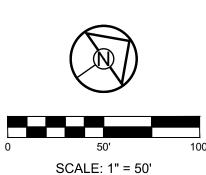
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N:996874.9690, E:2840937.1365 ELEV. 1005.719





PREPARED BY:

MARK ALLEN 'BREUER

MUMBER PE-2009007268

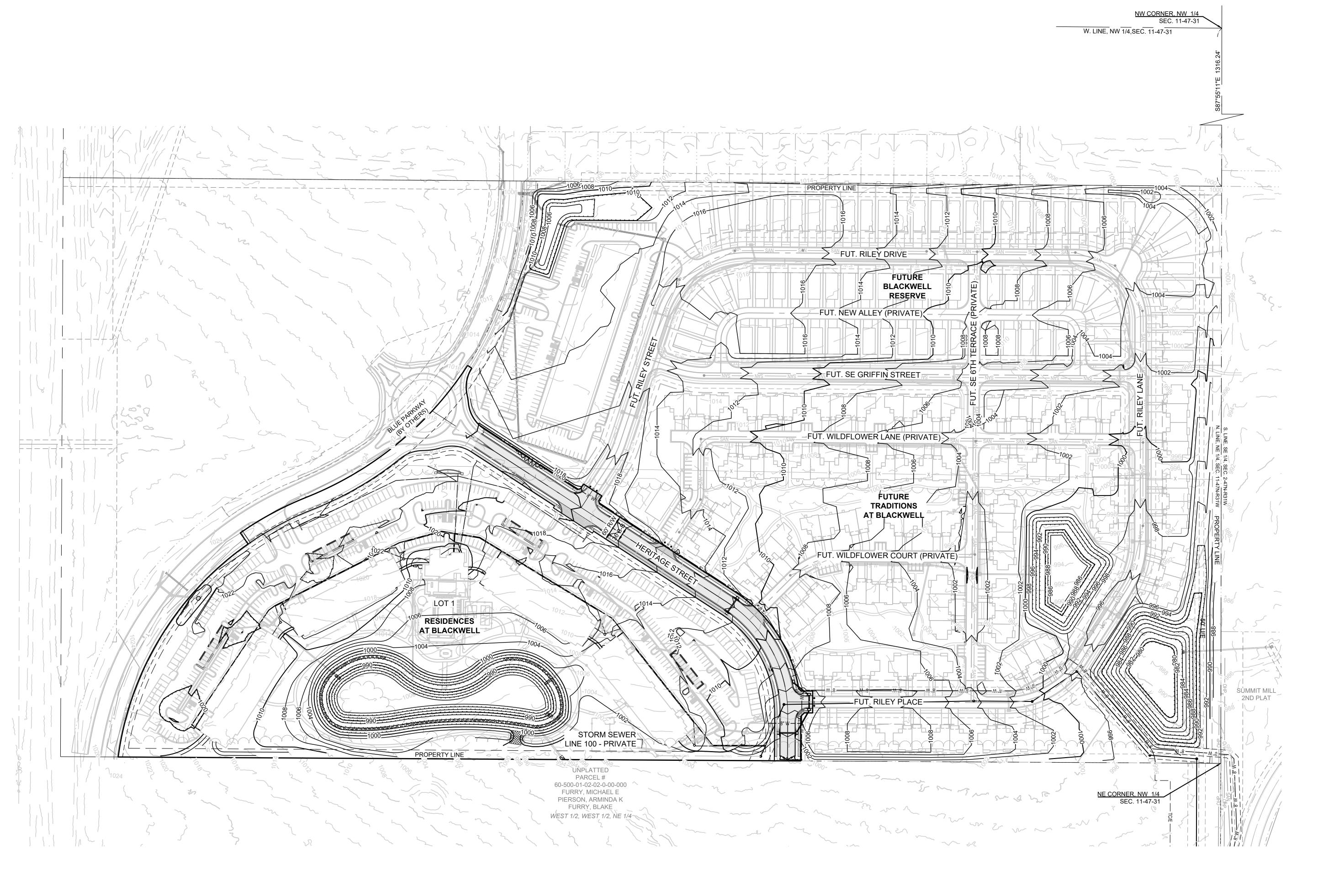
SCHLAGEL & ASSOCIATES, P.A.

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GENERAL LAYOUT -HERITAGE STREET

SHEET



GRADING LEGEND:

- — - 1000 — —

EXISTING CONTOUR PROPOSED CONTOUR (FINISHED GRADE)

1. ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF LEE'S SUMMIT TECHNICAL SPECIFICATIONS.

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

MO GRS BENCHMARK:

STATION NAME - JA-90

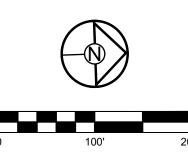
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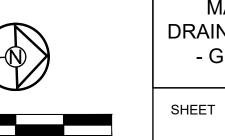
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ELEV. 1005.719



SCALE: 1" = 100'



MASTER DRAINAGE PLAN - GRADING

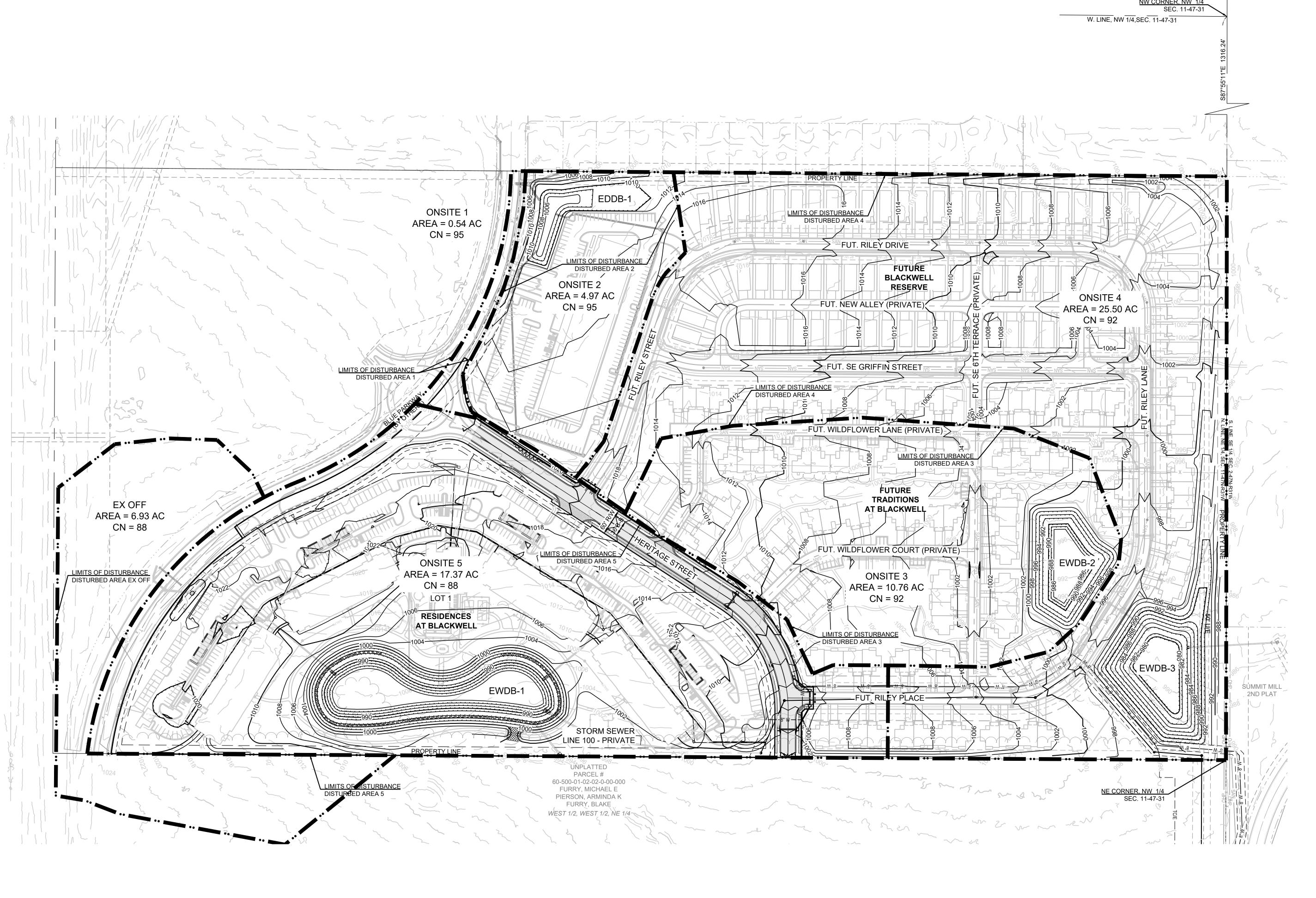
PREPARED BY:

SCHLAGEL & ASSOCIATES, P.A.

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ESIDENCES STORMWATI

STREE PLAN



GRADING LEGEND:

_____1000 ____

EXISTING CONTOUR
PROPOSED CONTOUR
(FINISHED GRADE)

NOTES:

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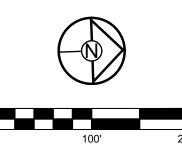
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ELEV. 1005.719



SCALE: 1" = 100'

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MASTER
DRAINAGE PLAN
- OVERALL
DRAINAGE MAP

PREPARED BY:

PE-2009007268

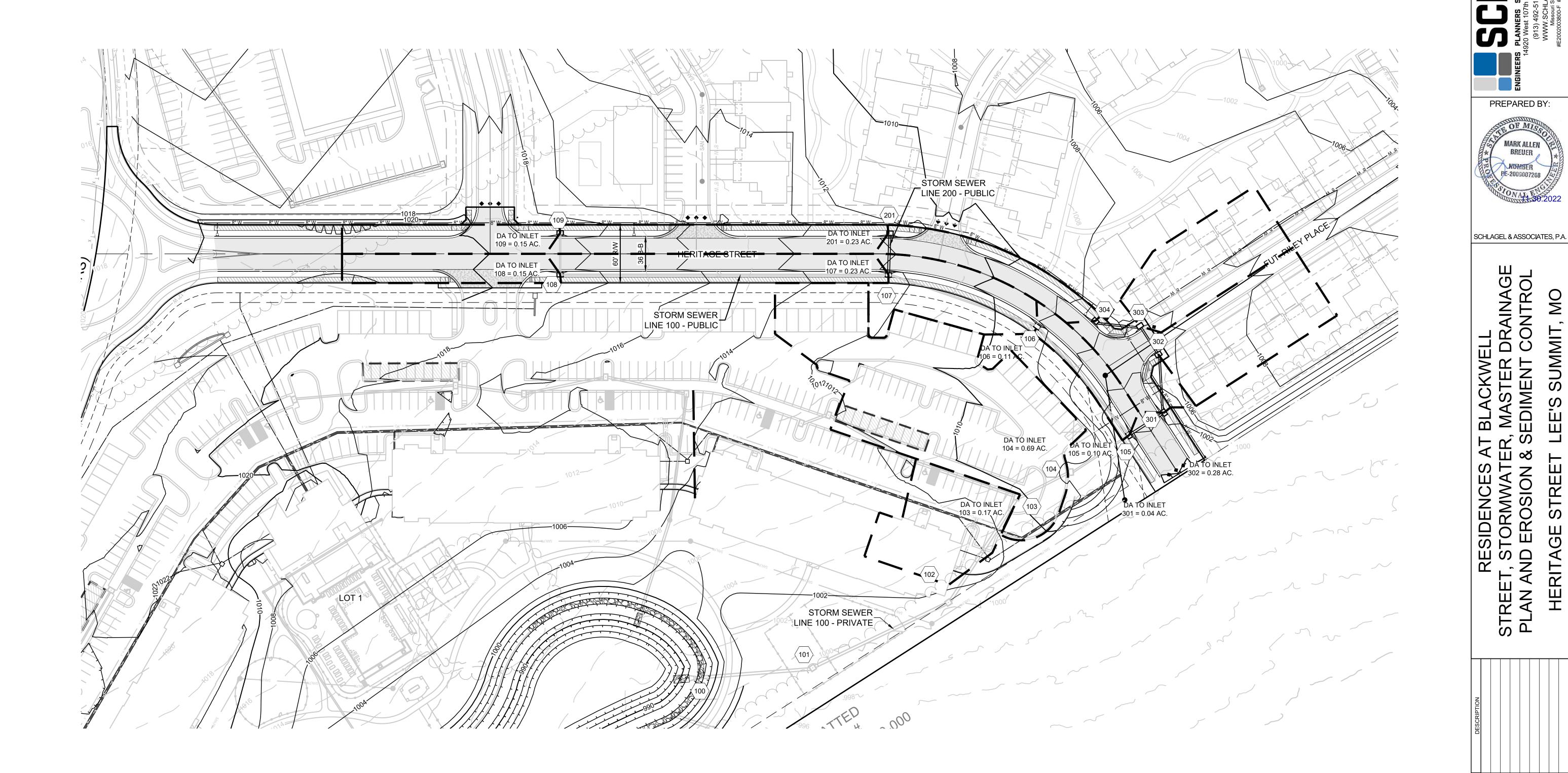
SCHLAGEL & ASSOCIATES, P.A.

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ESIDENCES STORMWATE SEROSION 8

ET, S' AND

STREE PLAN



GRADING LEGEND:

- — - 1000 — —

EXISTING CONTOUR PROPOSED CONTOUR (FINISHED GRADE)

NOTES:

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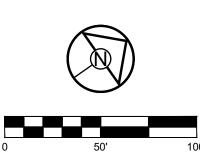
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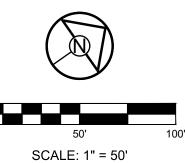
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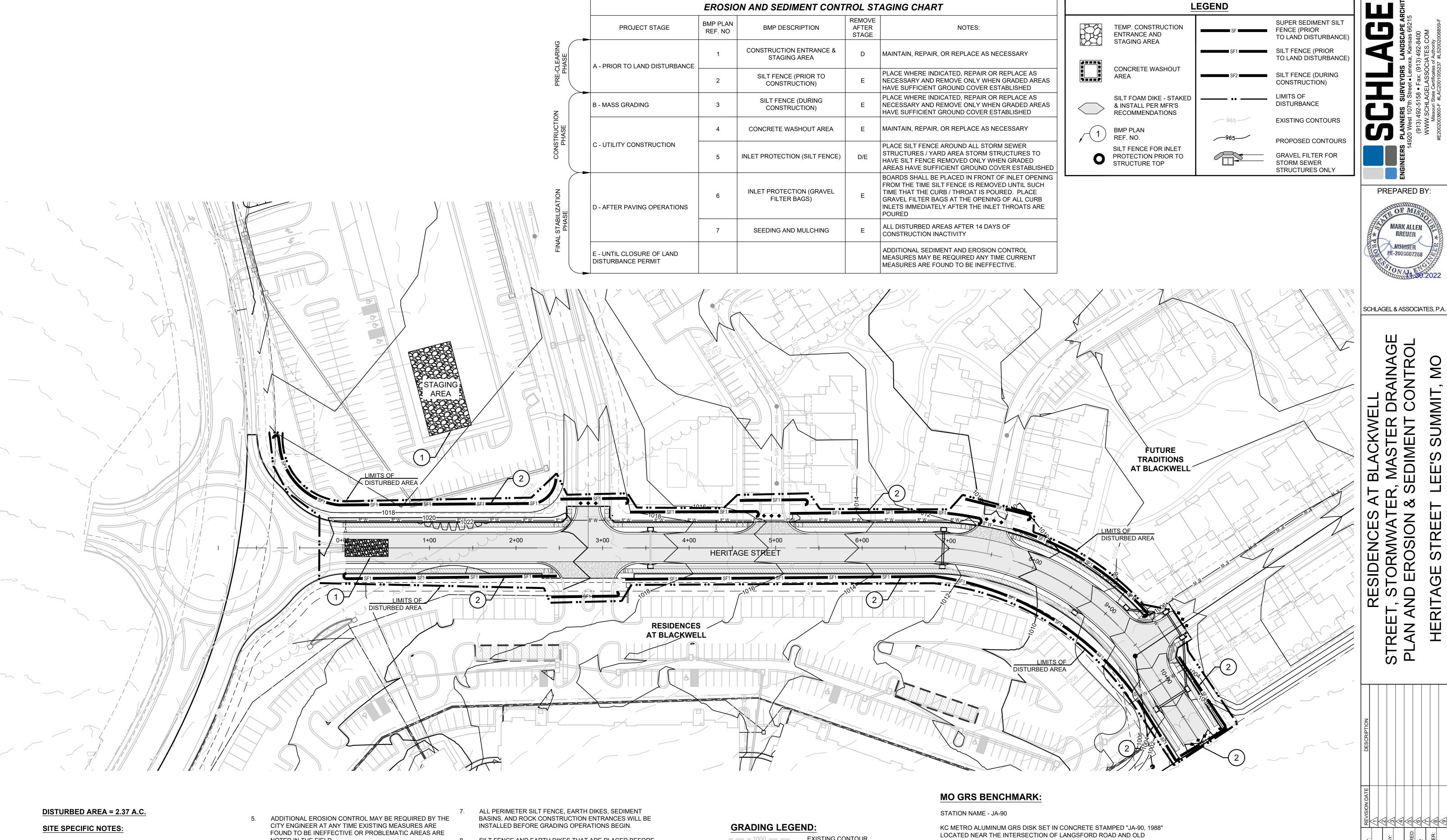


MASTER DRAINAGE PLAN - DRAINAGE MAP

PREPARED BY:

SUMMIT, MO





- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- THERE ARE NO WETLANDS, NATURAL OR ARTIFICIAL WATER STORAGE DETENTION AREAS IN THE PROJECT
- NO PART OF THE PROJECT LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBERS 29095C0441G, 29095C0445G, 29095C0437G AND 29095C0439G DATED JANUARY 20TH, 2017.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED ACCORDING TO THE BMP STAGING CHART.
- NOTED IN THE FIELD.
- STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING, OR OTHER SOIL DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. THE DISTURBED AREAS SHALL BE PROTECTED FROM EROSION BY STABILIZING THE AREA WITH MULCH OR OTHER SIMILARLY EFFECTIVE SOIL STABILIZING BMPS. INITIAL STABILIZATION ACTIVITIES MUST BE COMPLETED WITHIN 14 DAYS AFTER SOIL DISTURBING ACTIVITIES CEASE.
- 8. SILT FENCE AND EARTH DIKES THAT ARE PLACED BEFORE GRADING BEGINS WILL BE MAINTAINED BY THE GRADING CONTRACTOR.
- AREAS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE SODDED IMMEDIATELY AFTER CONSTRUCTION IS COMPLETE.

EXISTING CONTOUR

PROPOSED CONTOUR (FINISHED GRADE)

NOTES:

- 1. ALL CONSTRUCTION ON THIS PROJECT SHALL CONFORM TO THE CITY OF LEE'S SUMMIT TECHNICAL SPECIFICATIONS.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.

LANGSFORD ROAD, 43 FEET SOUTHEAST OF THE CENTER OF LANGSFORD ROAD AND 32 FEET NORTH OF THE CENTER OF OLD LANGSFORD ROAD. N:1001052.8503, E:2845604.8272

ELEV. 997.045

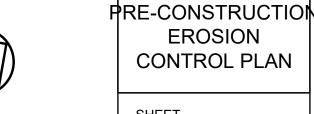
PROJECT BENCHMARK:

"SQUARE" CUT IN TOP OF CONCRETE STORM MANHOLE STORM MANHOLE IS LOCATED APPROX. 130 FEET EAST OF THE INTERSECTION OF SE JOEL AVE & BLUE PARKWAY AND 26 FEET SOUTH OF THE CENTERLINE OF BLUE PARKWAY. N:996874.9690, E:2840937.1365

ELEV. 1005.719



SCALE: 1" = 50'



SHEET

PREPARED BY:

MARK ALLEN

BREUER

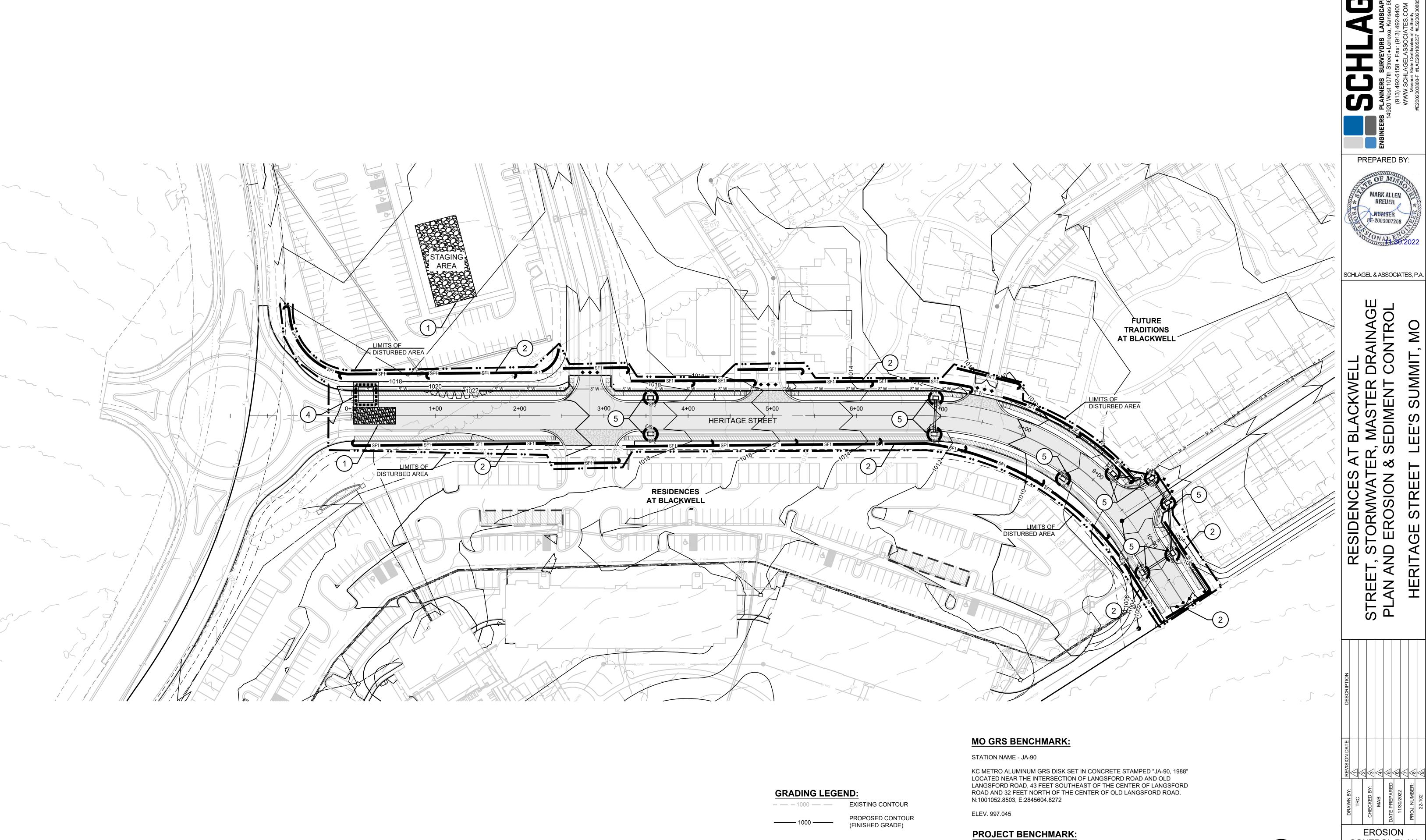
NUMBER

PE-2009007268

DRAINAGE CONTROL

ST PL

UMMIT



"SQUARE" CUT IN TOP OF CONCRETE STORM MANHOLE

OF THE CENTERLINE OF BLUE PARKWAY.

N:996874.9690, E:2840937.1365

ELEV. 1005.719

STORM MANHOLE IS LOCATED APPROX. 130 FEET EAST OF THE

INTERSECTION OF SE JOEL AVE & BLUE PARKWAY AND 26 FEET SOUTH

EROSION CONTROL NOTE:

SEE SHEET 7 FOR EROSION AND SEDIMENT LEGEND, NOTES AND STAGING CHART.

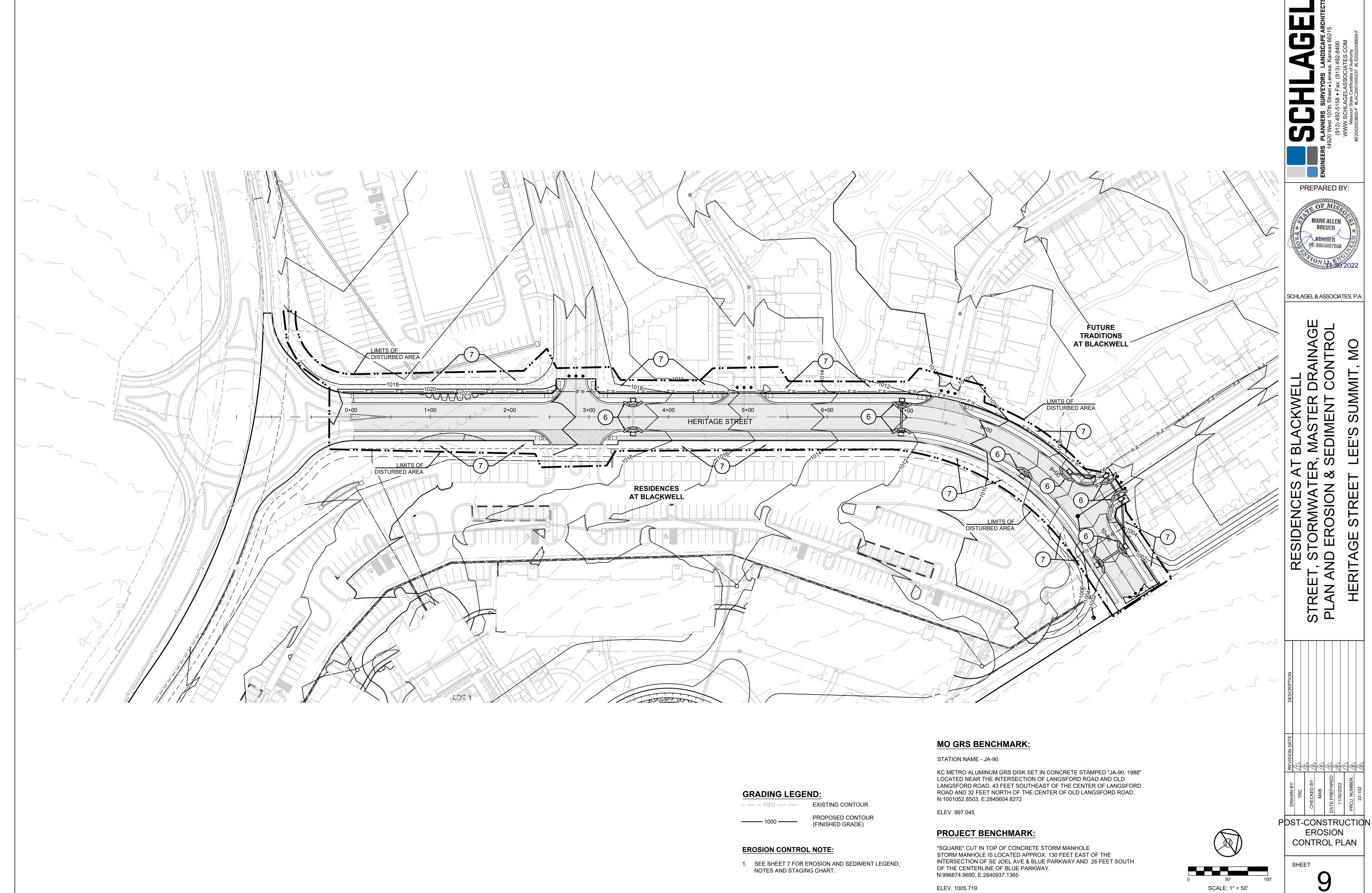
STI

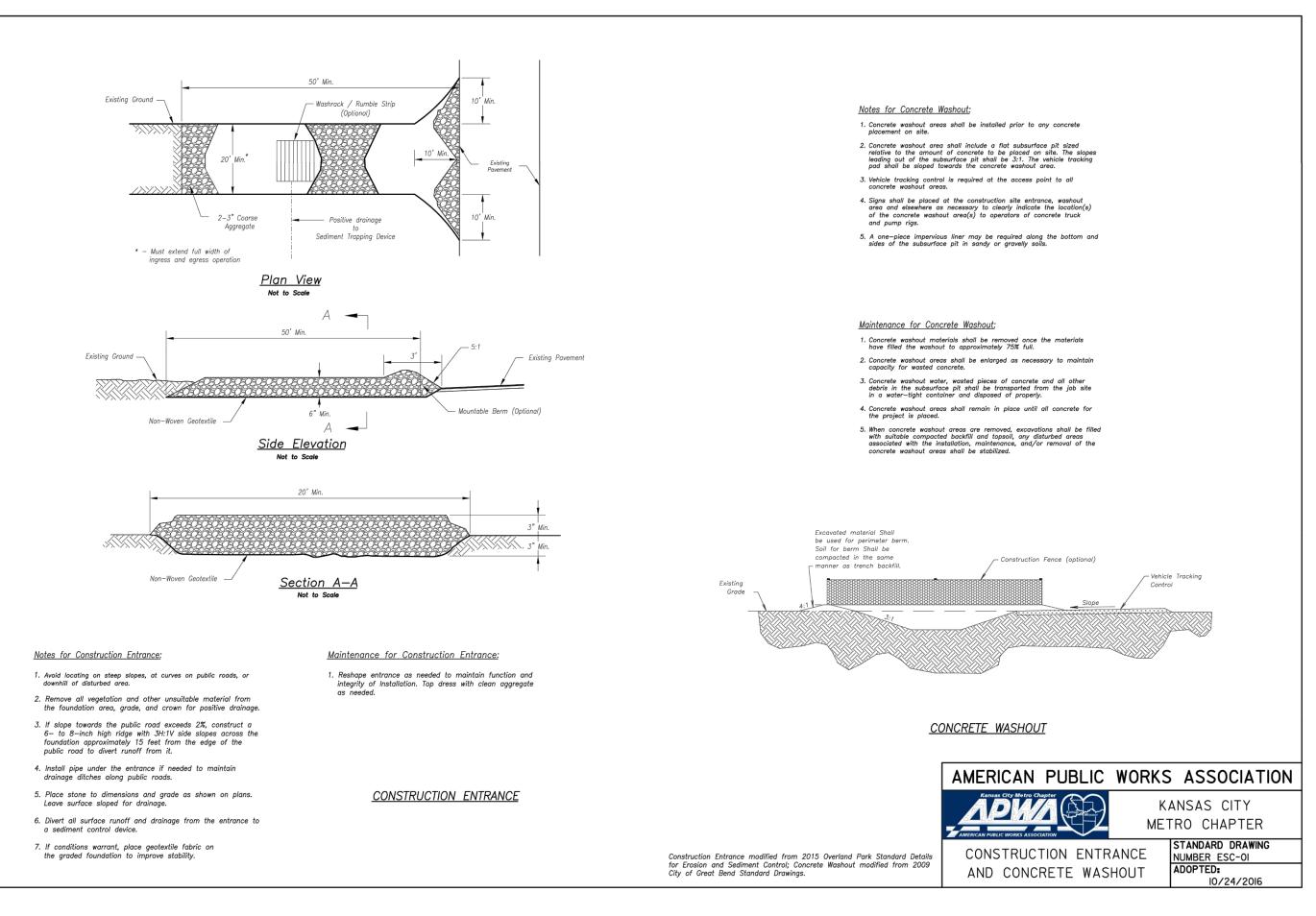
EROSION

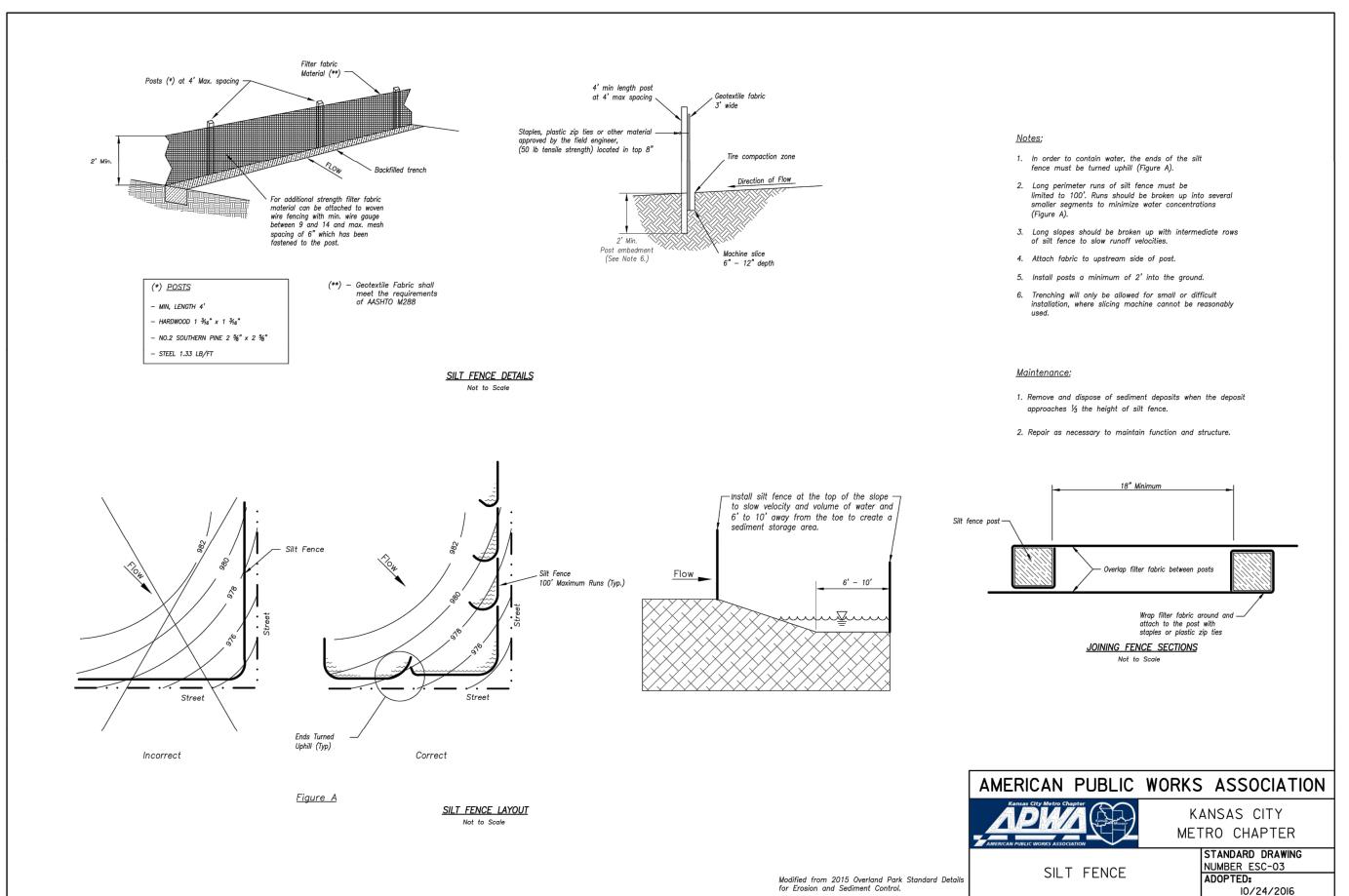
CONTROL PLAN

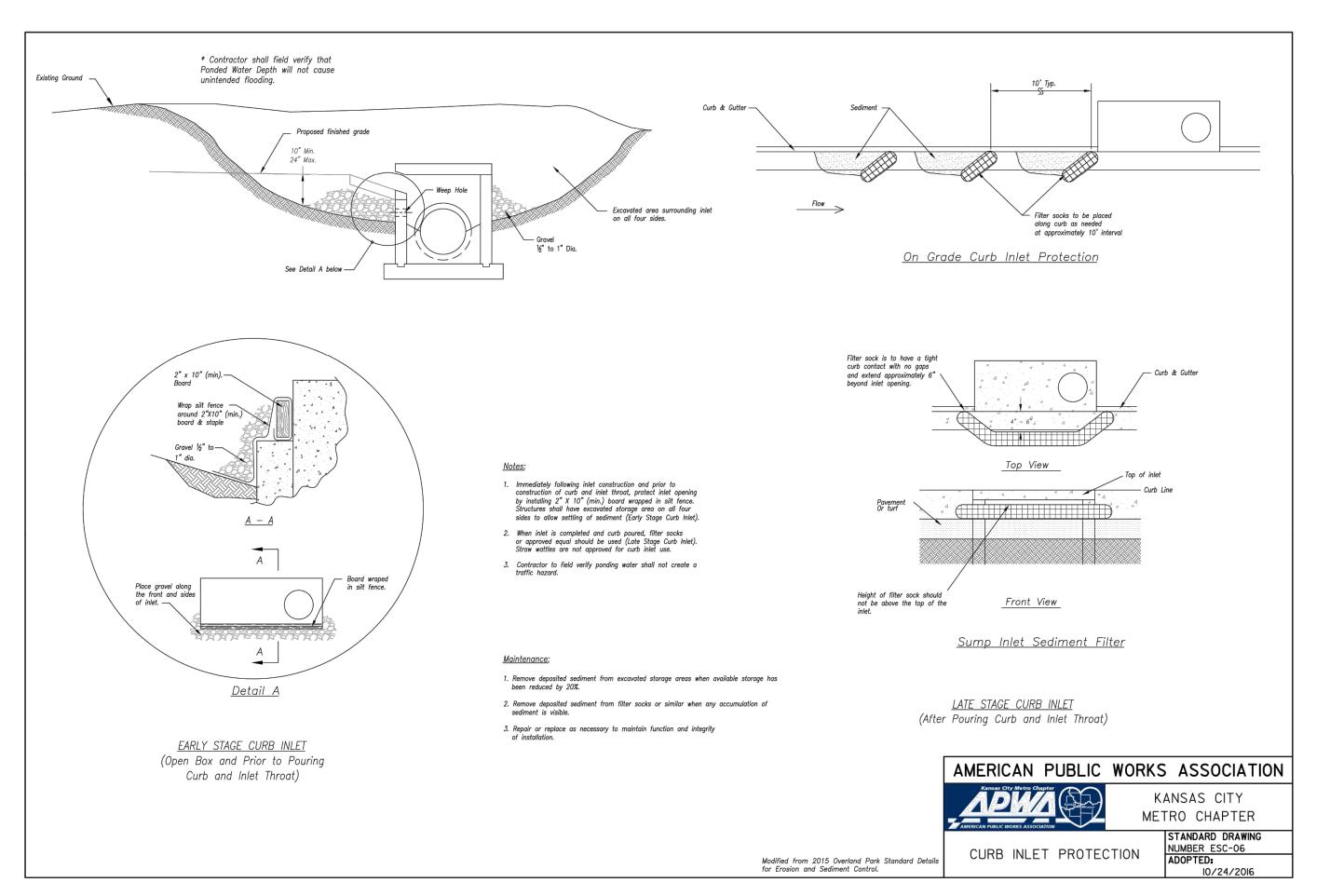
SHEET

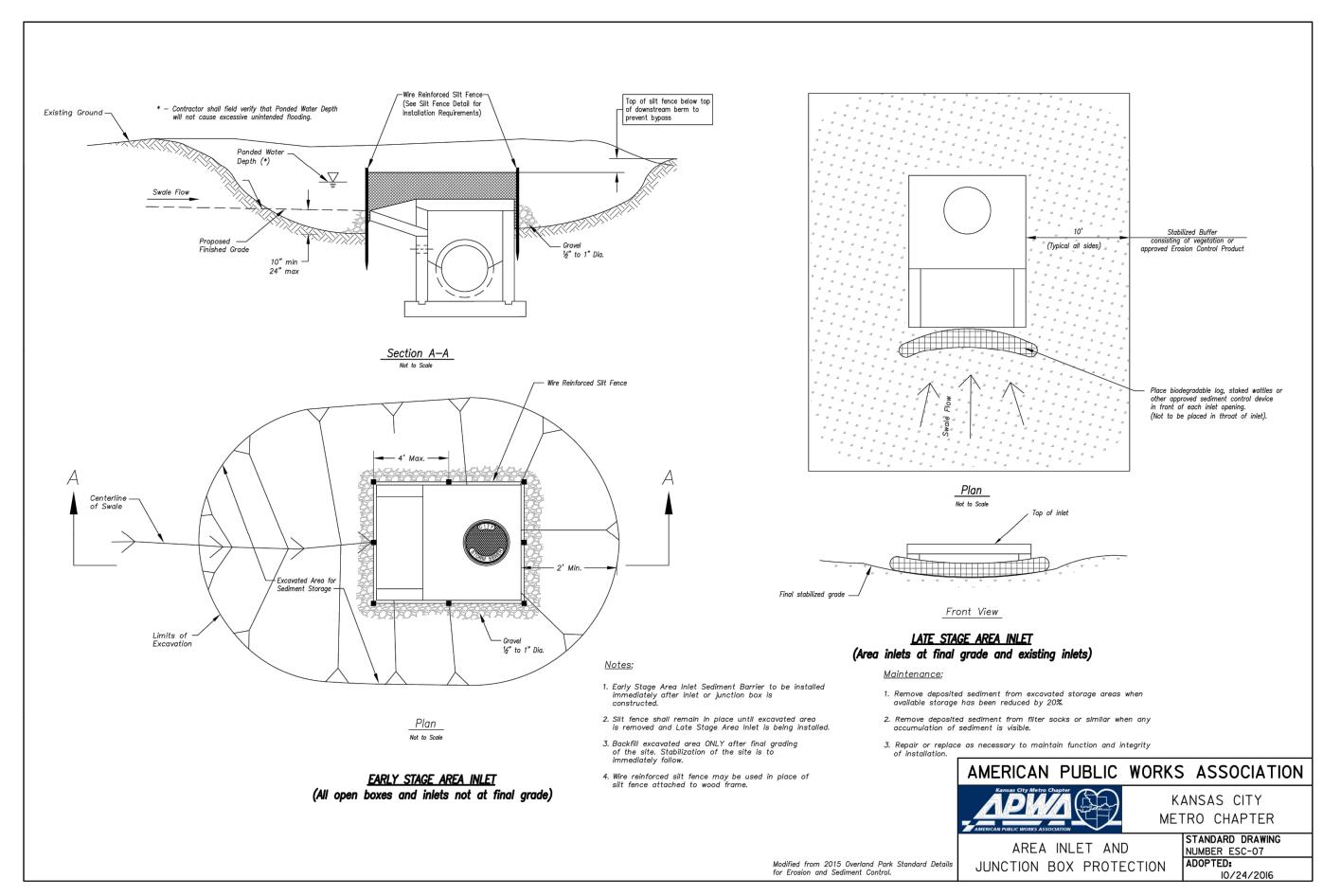
SCALE: 1" = 50'













PREPARED BY: MARK ALLEN BREUER MUMBER PE-2000007268

SCHLAGEL & ASSOCIATES, P.A.

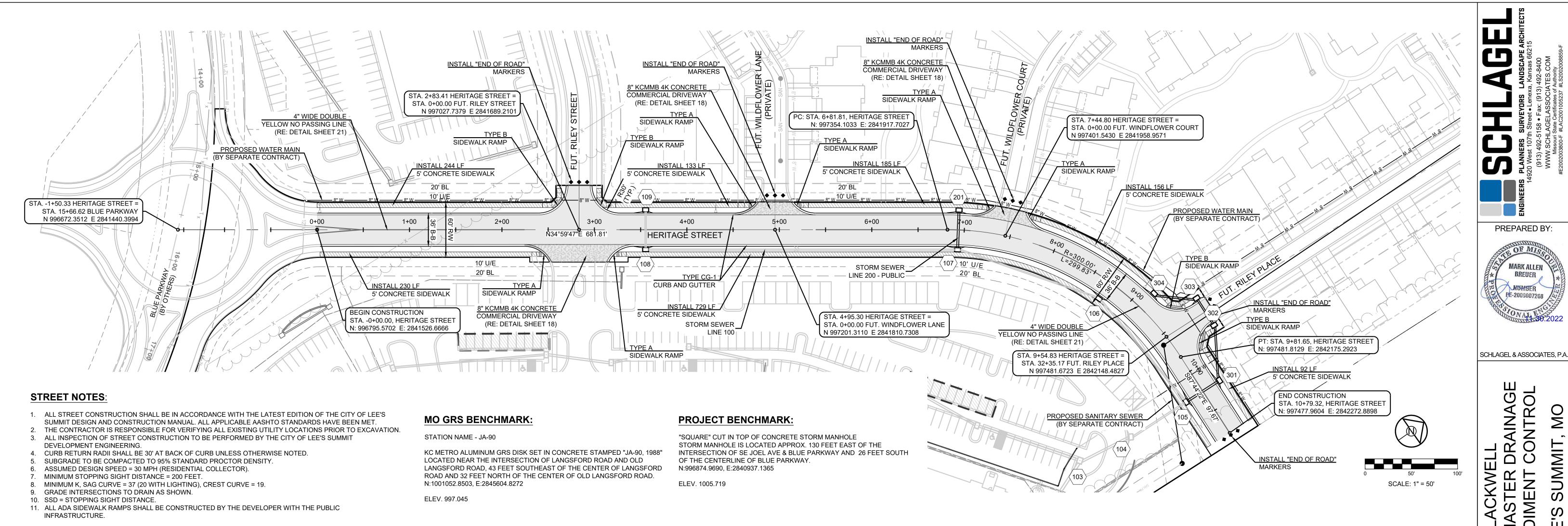
AINA

ONTRO

BLACKWELL

DIME ⋖ѿҩ ESIDENCES STORMWATI RE AND AND ス 、 、 、 、 、 RIT, RE

EROSION CONTROL **DETAILS**



MARK ALLEN

BREUER

ONTRO

DIMENT

TREE

HERITAGE

AINA

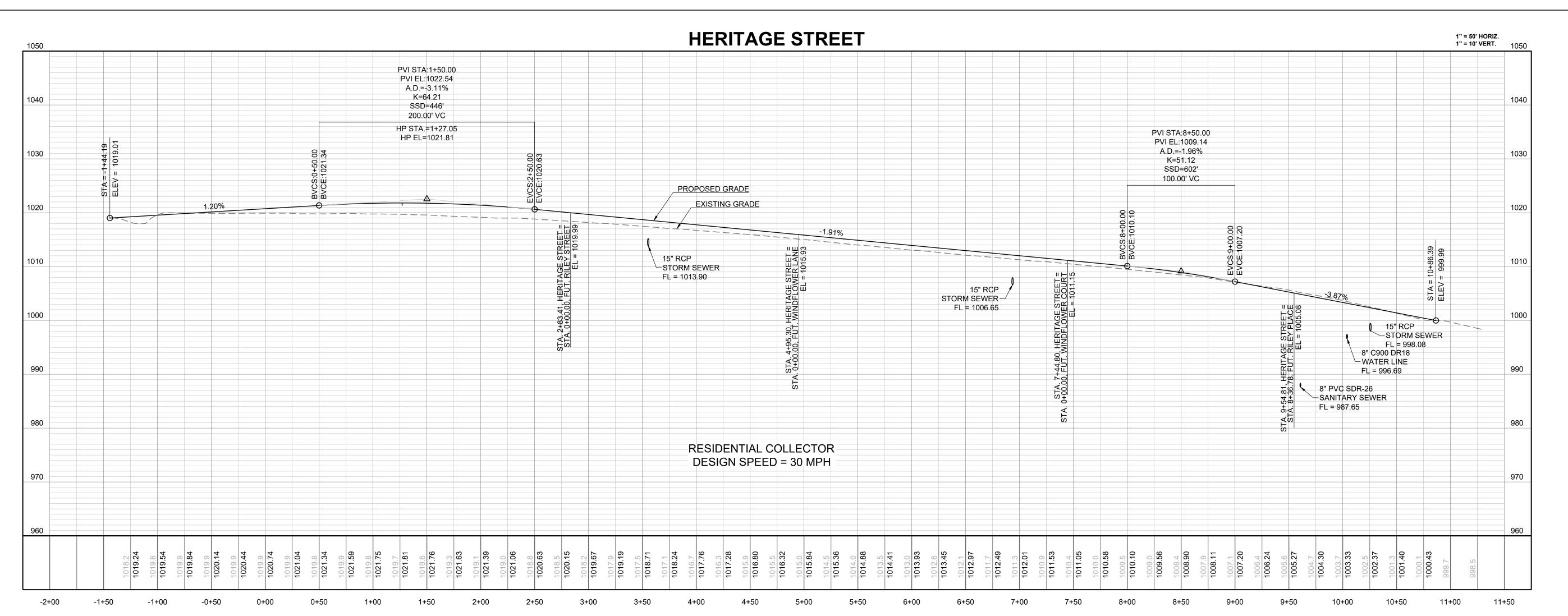
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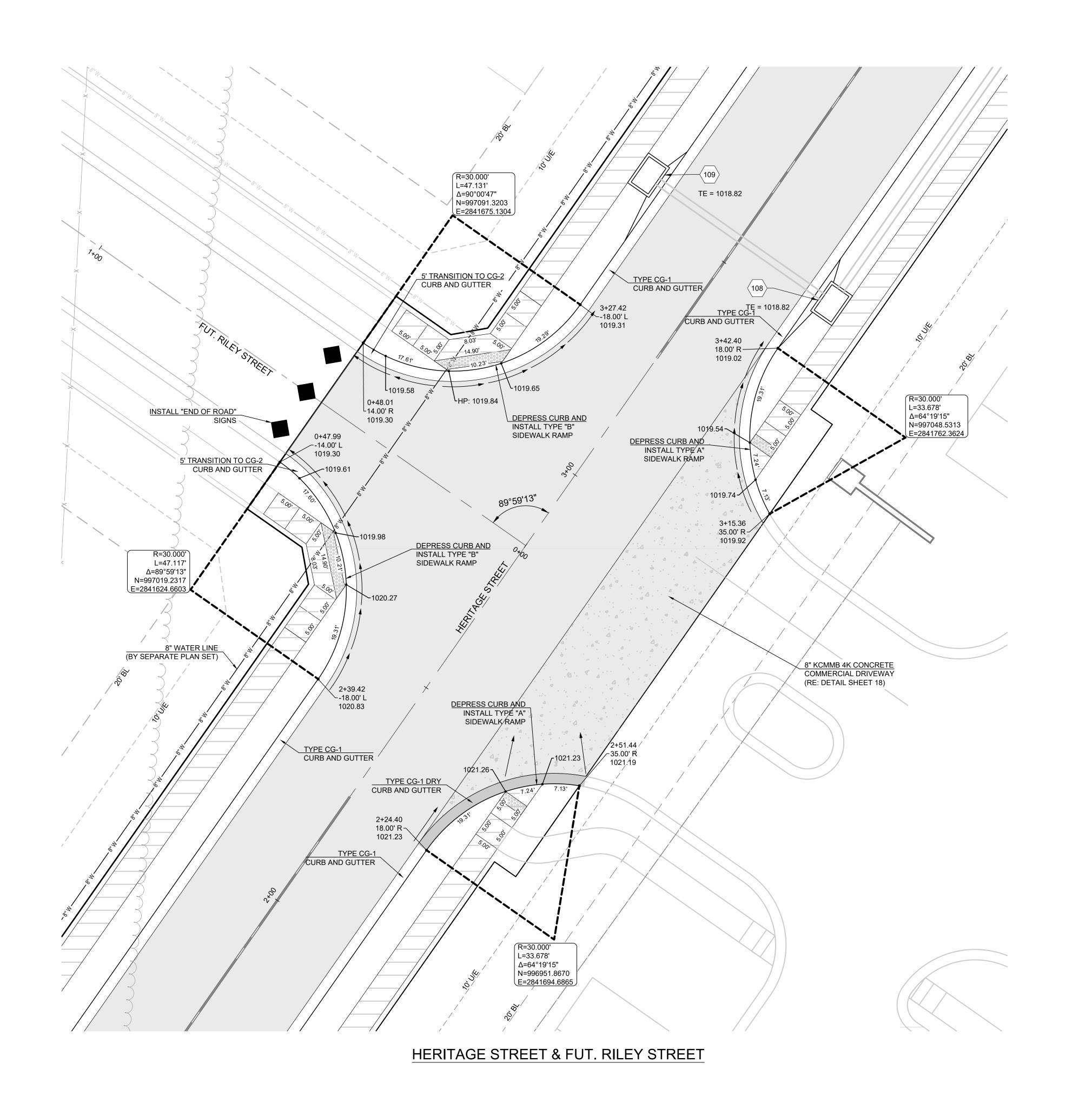
RESIDENCES, T, STORMWATE AND EROSION 8

ET, S' AND

STREE PLAN A

HERITAGE STREET - PLAN & **PROFILE**





AT BLACKWELL ER, MASTER DRAINAGE & SEDIMENT CONTROL SUMMIT, RESIDENCES AT T, STORMWATER AND EROSION & (STREE HERITAGE EI, S AND

PREPARED BY:

BREUER

MOMBER
PE-2009007268

ONALL

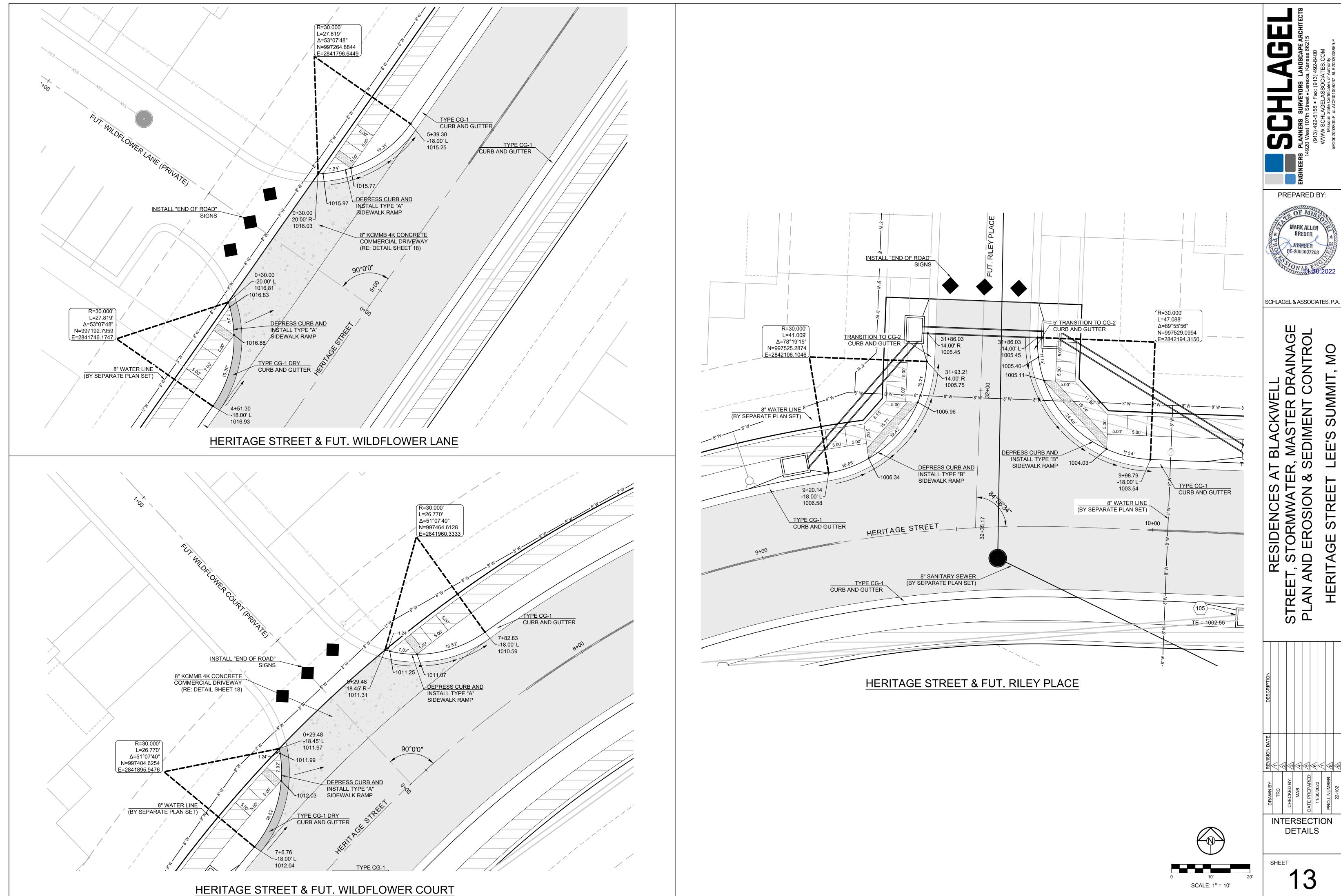
SO 2022

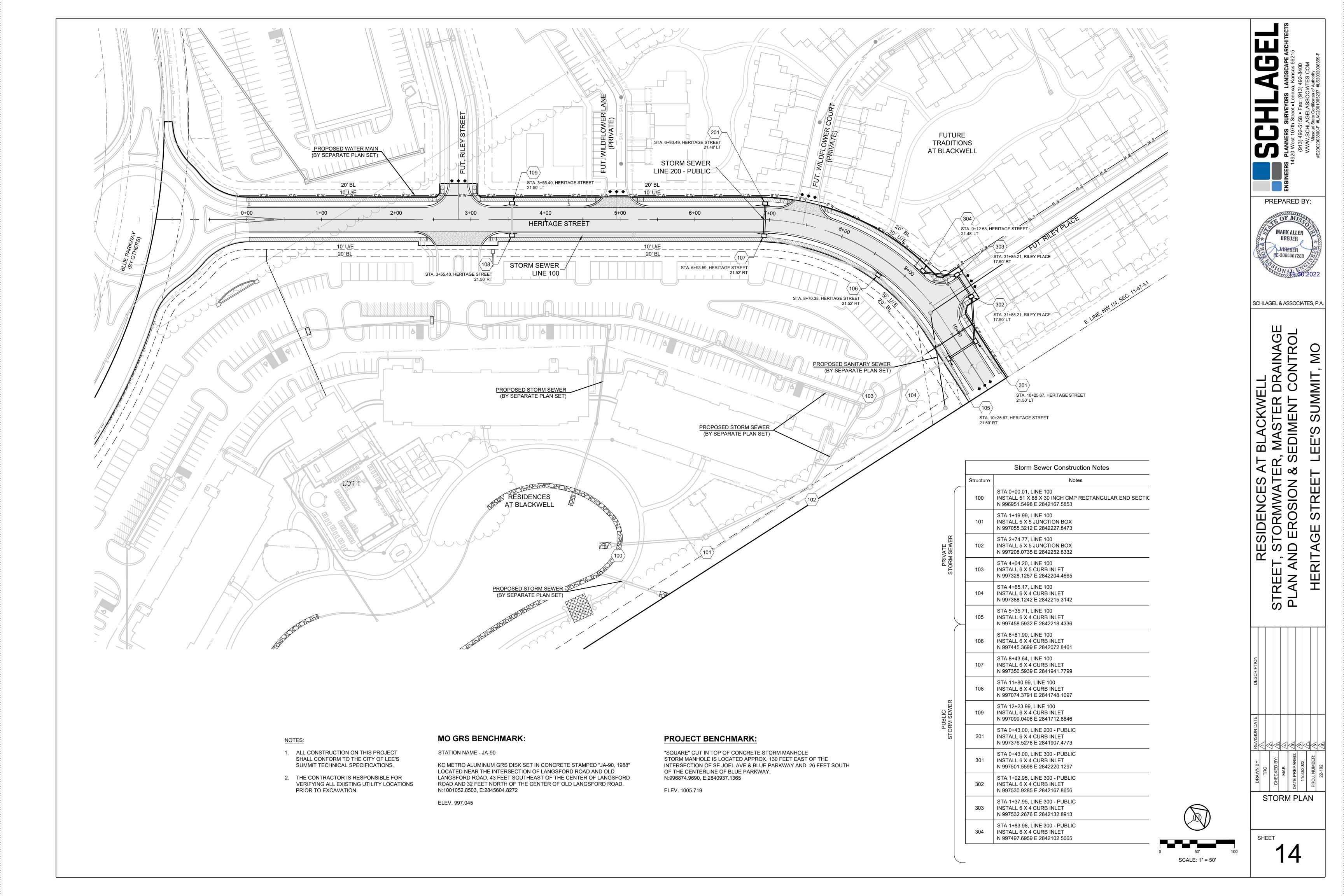
SCHLAGEL & ASSOCIATES, P.A.

MARK ALLEN

DETAILS SHEET SCALE: 1" = 10'

INTERSECTION





	Desig	gn Storm:		25																							
		K" Value:		1.10																							
	"F	" Factor:		1.00																							
	Dun off C	Calculatio		-												Dina Di	va na udi a a										
	Runon	Jaiculatio	118	Cumul.				Runoff				Up	Up	Up		Pipe Pi	roperties	5					Drop				
	Inlet	Area	"C"	Area	Cumu	il		To	Cumul.	Pipe	Pipe	Piped	Piped	Area	Up	Up	Down	Pipe	"n"	Pipe		Slope	In			Inlet	HGL
	#	(acres)	Value				Intensity	Inlet	Runoff	Cap.	Vel.	Inlet 1	Inlet 2	(acres)	СхА	Inlet	Inlet	Туре	Value		Length		Inlet	FL Up	FL Down	Top	Elev.
		, ,												,							-					,	
	LINE 10	0																						DS TAILW	ATER @ S	TR #100	FREE
Ş│	101	0.00	0.66	3.92	2.88			0.00	24.52	31.42	6.40			0.00	0.00	101	100		0.012	30	114.51	0.50	0.50	992.57	992.00	999.50	994.64
STORM	102	0.00	0.66	3.92	2.88		7.85	0.00	24.90	32.04	6.53			0.00	0.00	102	101	HDPE	0.012	30	154.78		0.50	993.88	993.07	1000.21	995.96
ر ا	103	0.27	0.66	3.92	2.88			1.56	25.21	32.65	6.65	401		1.18	0.78	103	102	HDPE	0.012	30	129.43	0.54	0.50	995.08	994.38	1010.54	997.17
	104	0.90	0.66	2.47	1.93			5.23	16.95	19.91	6.34			0.00	0.00	104	103	HDPE	0.012	24	60.97	0.66	0.50	995.98	995.58	1007.82	997.82
	105	0.10	0.66	1.57	1.33			0.58	11.81	20.65	6.57	301		0.48	0.61	105	104	HDPE	0.012	24	70.54	0.71	0.75	996.98	996.48	1002.55	998.48
	106	0.23	0.66	0.99	0.65			1.36	5.86	9.60	7.82			0.00	0.00	106	105	HDPE	0.012	15	146.19		0.50	1000.48	997.73	1008.48	1001.71
	107	0.23	0.66	0.76	0.50			1.38	4.55	12.22	9.96	201		0.23	0.15	107	106	HDPE	0.012	15	161.74	3.05	0.50	1005.91	1000.98	1012.35	1006.97
	108	0.15	0.66	0.30	0.20			0.92	1.85	9.90	8.06			0.00	0.00	108	107	HDPE	0.012	15	337.35	2.00	0.50	1013.16	1006.41	1018.81	1013.80
<u> </u>	109	0.15	0.66	0.15	0.10	5.0	8.53	0.93	0.93	7.00	5.70			0.00	0.00	109	108	HDPE	0.012	15	43.00	1.00	N/A	1014.09	1013.66	1018.82	1014.53
5	LINE 20	0																			Dran in In	lot 107	0.50				
N C K M		0.23	0.66	0.22	0.15	5.0	8.53	1 12	1 12	7.00	5.70			0.00	0.00	201	107	HDPE	0.012		Drop in In		0.50 N/A	1006.04	1006 41	1012.25	1007.40
	201	0.23	0.66	0.23	0.15	5.0	0.00	1.42	1.42	7.00	5.70			0.00	0.00	201	107	пире	0.012	15	43.00	1.00	IN/A	1006.84	1006.41	1012.35	1007.40
	LINE 30	0																			Drop in In	lot 105	0.75				
	301	0.15	0.66	0.48	0.61	5.1	8.48	0.92	5.72	8.60	7.01			0.00	0.00	301	105	HDPE	0.012	15	43.00	1.51	0.73	998.38	997.73	1002.55	999.59
	302	0.13	0.66	0.48	0.51			2.04	4.83	8.57	6.98			0.00	0.00	302	301	HDPE	0.012	15	59.95	1.50	0.50	999.78	998.88	1002.53	1000.88
	303	0.29	0.66	0.29	0.30			1.80	2.79	8.37	6.82			0.00	0.00	303	302	HDPE		15	35.00	1.43	0.50	1000.78	1000.28	1005.52	1000.58
	304	0.16	0.66	1.34	0.11			0.98	0.98	8.63	7.03			0.00	0.00	304	303	HDPE		15	46.03	1.52	N/A	1000.76	1000.28	1006.93	1001.33
	_ 504	0.10	0.00	1.54	0.11	0.0	0.42	0.50	0.50	0.00	7.00			0.00	0.00	304	303	TIDI L	0.012	10	40.00	1.02	INIA	1001.00	1001.20	1000.00	1002.40
	LINE 40	0																			Drop in In	let 103	0.50				
	401	0.29	0.66	1.18	0.78	5.2	8.47	1.78	7.25	17.61	14.35			0.00	0.00	401	103	HDPE	0.012	15	113.00		0.50	1002.73	995.58	1011.94	1004.13
	402	0.60	0.66	0.89	0.59			3.71	5.50	15.90	12.95			0.00	0.00	402	401	HDPE	0.012	15	98.48	5.16	0.50	1008.31	1003.23	1012.47	1009.49
	403	0.29	0.66	0.29	0.19			1.80	1.80	12.81	10.44			0.00	0.00	403	402			15	29.41	3.35	N/A	1009.80	1008.81	1013.40	1010.43
										10.45000 00.50				2 500 10			N. 45 300		12,000		30.00.00.00	130 31 30 1 30		1		10 to 10 to 10 to 10	
	LINE 50	0																						DS TAILW	ATER @ S	TR #500	FREE
	501	0.00	0.66	3.35	2.21	6.0	8.17	0.00	19.88	32.42	10.32			0.00	0.00	501	500	HDPE	0.012	24	95.00	1.75	0.50	996.66	995.00	1003.41	998.69
	502	0.39	0.66	3.35	2.21	5.9	8.21	2.32	19.96	68.88	21.93			0.00	0.00	502	501	HDPE	0.012	24	130.82	7.90	0.50	1007.50	997.16	1014.88	1009.53
_	503	0.24	0.66	2.96	1.95	5.8	8.27	1.44	17.76	25.11	7.99			0.00	0.00	503	502	HDPE	0.012	24	84.77	1.05	0.50	1008.89	1008.00	1015.55	1010.78
SE1)	504	0.34	0.66	2.72	1.80	5.6	8.33	2.06	16.45	24.51	7.80			0.00	0.00	504	503	HDPE	0.012	24	85.59	1.00	0.50	1010.24	1009.39	1015.36	1012.05
2	505	0.81	0.66	2.38	1.57	5.4	8.38	4.93	14.48	24.51	7.80			0.00	0.00	505	504	HDPE	0.012	24	70.28	1.00	0.50	1011.45	1010.74	1016.58	1013.13
[]	506	1.57	0.66	1.57	1.04	5.0	8.53	9.72	9.72	11.38	6.44			0.00	0.00	506	505	HDPE	0.012	18	163.59	1.00	N/A	1013.58	1011.95	1019.12	1015.10
-																											
-	LINE 60							_							_	_								DS TAILW			FREE
SELANATE LENING	601	0.00	0.66	8.08	5.33			0.00	48.35	70.43	9.96		200	0.00	0.00	601	600	HDPE		36	95.00	0.95	2.20	995.60	994.70	1009.43	998.42
<u> </u>	602	0.00	0.66	8.08	5.33			0.00	48.46	76.21	24.26	701	801	6.21	4.10	602		HDPE		24	78.57	9.67	0.75	1005.40	997.80	1021.23	1009.25
5	603	1.19	0.66		1.23			7.17	11.27	17.23	14.04			0.00	0.00	603		HDPE		15	94.25	6.06	0.50	1011.86	1006.15		1013.77
]	604	0.00	0.66	_	0.45			0.00	4.15	7.07	5.76			0.00	0.00	604		HDPE		15	110.50		0.50	1013.49	1012.36		1014.50
	605	0.68	0.66	0.68	0.45	5.0	8.53	4.21	4.21	7.00	5.70			0.00	0.00	605	604	HDPE	0.012	15	117.31	1.00	N/A	1015.16	1013.99	1019.42	1016.18
	LINIE 70	0																			Drop in In	lot 600	0.75				
	LINE 70		0.66	0.00	0.57	F	0.40	2.54	5.00	17.04	12.00			0.00	0.00	704	602	HDDE	0.042		Drop in In		0.75	1016.01	1006 45	1024 46	1017.10
	701	0.58	0.66		0.57			3.54	5.26	17.01	13.86			0.00	0.00	701	602 701	HDPE		15	166.79		0.50	1016.01		1021.46	1017.16
	702	0.28	0.66	0.28	0.18	5.0	8.53	1.73	1.73	6.89	5.62			0.00	0.00	702	701	HDPE	0.012	15	107.00	0.97	N/A	1017.55	10.010.51	1021.33	1018.17
	LINE 80	n																			Drop in In	let 602	0.50				
	801	0.12	0.66	5.35	3.53	5.1	8.50	0.74	33.00	34.22	10.89			0.00	0.00	801	602	HDPE	0.012	24	163.48		0.50	1009.09	1005.90	1020.93	1013.07
	802	5.23	0.66			5.0		32.39	32.39	34.49	10.09			0.00	0.00	802		HDPE		24	61.13		N/A	1010.80	1003.90		1013.07
		0.20	0.00	0.20	0.70	J. C	0.00	02.00	02.00	UT.TU	10.00			0.00	0.00	002	001	TIDIL	0.012	47	01.13	1.50	14//	10 10.00	1000.00	1010.00	1017.31

Desig	n Storm:		100																							
"ŀ	Value:		1.25																							
"F	" Factor:		1.00																							
Runoff (alculatio	ns													Pipe Pr	roperties	3									
			Cumul.				Runoff				Up l	Jp	Up									Drop				
Inlet	Area	"C"	Area	Cumul.			То	Cumul.	Pipe	Pipe	Piped Pi	ped	Area	Up	Up	Down	Pipe	"n"	Pipe		Slope	ln			Inlet	HGL
#	(acres)	Value	(acres)	CxA	Tc	Intensity	Inlet	Runoff	Cap.	Vel.	Inlet 1 Inl	et 2 ((acres)	CxA	Inlet	Inlet	Type	Value	Size	Length	%	Inlet	FL Up	FL Down	Тор	Elev.
INE 100	0																						DS TAILW	ATER @ S	TR #100	FREE
101	0.00	0.66	3.92	2.88	7.5	9.39	0.00	33.85	31.42	6.40			0.00	0.00	101	100	HDPE	0.012	30	114.51	0.50	0.50	992.57	992.00	999.50	995.20
102	0.00	0.66	3.92	2.88	7.1	9.53	0.00	34.35	32.04	6.53			0.00	0.00	102	101	HDPE	0.012	30	154.78	0.52	0.50	993.88	993.07	1000.21	996.53
103	0.27	0.66	3.92	2.88	6.7	9.64	2.15	34.77	32.65	6.65	401		1.18	0.78	103	102	HDPE	0.012	30	129.43	0.54	0.50	995.08	994.38	1010.54	997.73
104	0.90	0.66	2.47	1.93	6.6	9.70	7.20	23.37	19.91	6.34			0.00	0.00	104	103	HDPE	0.012	24	60.97	0.66	0.50	995.98	995.58	1007.82	998.72
105	0.10	0.66	1.57	1.33	6.4	9.77	0.81	16.28	20.65	6.57	301		0.48	0.61	105	104	HDPE	0.012	24	70.54	0.71	0.75	996.98	996.48	1002.55	999.24
106	0.23	0.66	0.99	0.65	6.1	9.89	1.88	8.07	9.60	7.82			0.00	0.00	106	105	HDPE	0.012	15	146.19	1.88	0.50	1000.48	997.73	1008.48	1001.97
107	0.23	0.66	0.76	0.50	5.8	9.99	1.90	6.26	12.22	9.96	201		0.23	0.15	107	106	HDPE	0.012	15	161.74	3.05	0.50	1005.91	1000.98	1012.35	1007.19
108	0.15	0.66	0.30	0.20	5.1	10.27	1.27	2.54	9.90	8.06			0.00	0.00	108	107	HDPE	0.012	15	337.35	2.00	0.50	1013.16	1006.41	1018.81	1013.92
109	0.15	0.66	0.15	0.10	5.0	10.32	1.28	1.28	7.00	5.70			0.00	0.00	109	108	HDPE	0.012	15	43.00	1.00	N/A	1014.09	1013.66	1018.82	1014.62
LINE 200	0																			Drop in Inl	ot 107	0.50				
201	0.23	0.66	0.23	0.15	5.0	10.32	1.96	1.96	7.00	5.70			0.00	0.00	201	107	HDPE	0.012	15		1.00	N/A	1006.84	1006.41	1012.35	1007.50
201	0.20	0.00	0.20	0.10	0.0	10.02	1.00	1.00	7.00	0.70			0.00	0.00	201	101	TIDI L	0.012	10	40.00	1.00	14//	1000.04	1000.41	1012.00	1007.00
LINE 300	0																			Drop in Inl	et 105	0.75				
301	0.15	0.66	0.48	0.61	5.1	10.26	1.27	7.87	8.60	7.01			0.00	0.00	301	105	HDPE	0.012	15	43.00	1.51	0.50	998.38	997.73	1002.55	1000.11
302	0.33	0.66	0.33	0.51	5.0	10.32	2.81	6.64	8.57	6.98			0.00	0.00	302	301	HDPE	0.012	15	59.95	1.50	0.50	999.78	998.88	1005.52	1001.10
303	0.29	0.66	0.29	0.30	5.0	10.32	2.47	3.83	8.37	6.82			0.00	0.00	303	302	HDPE	0.012	15	35.00	1.43	0.50	1000.78	1000.28	1005.52	1001.74
304	0.16	0.66	1.34	0.11	5.3	10.20	1.35	1.35	8.63	7.03			0.00	0.00	304	303	HDPE	0.012	15	46.03	1.52	N/A	1001.98	1001.28	1006.93	1002.52
LINE 400	n																			Drop in Inl	et 103	0.50				
401	0.29	0.66	1.18	0.78	5.2	10.25	2.45	9.98	17.61	14.35			0.00	0.00	401	103	HDPE	0.012	15	113.00	6.33	0.50	1002.73	995.58	1011.94	1004.45
402	0.60	0.66	0.89	0.59	5.0		5.10	7.57	15.90	12.95			0.00	0.00	402	401	HDPE	0.012	15	98.48	5.16	0.50	1008.31	1003.23	1012.47	1009.75
403	0.29	0.66	0.29	0.19	5.0		2.47	2.47	12.81	10.44			0.00	0.00	403	402	HDPE	0.012	15	29.41	3.35	N/A	1009.80	1008.81	1013.40	1010.55
LINE 50	•																						DO TAULA	A TED 0 0	TD #500	FDEE
LINE 500		0.66	2.25	2.24	6.0	0.01	0.00	27.20	22.42	10.22			0.00	0.00	E01	500	LIDDE	0.012	24	05.00	4 75	0.50	DS TAILW	_		FREE
501 502	0.00	0.66	3.35 3.35	2.21 2.21	6.0 5.9		0.00 3.20	27.39 27.49	32.42 68.88	10.32 21.93			0.00	0.00	501 502	500 501	HDPE HDPE		24 24	95.00 130.82	1.75 7.90	0.50	996.66 1007.50	995.00 997.16	1003.41 1014.88	999.13 1009.97
503	0.24	0.66	2.96	1.95	5.8		1.98	24.46	25.11	7.99			0.00	0.00	503	502	HDPE		24	84.77	1.05	0.50	1007.30	1008.00	1014.00	1011.18
504	0.34	0.66	2.72	1.80			2.83	22.64	24.51	7.80			0.00	0.00	504	503	HDPE		24	85.59	1.00	0.50	1010.24	1009.39	1015.36	1012.43
505	0.81	0.66	2.38	1.57			6.78	19.93	24.51	7.80			0.00	0.00	505	504	HDPE		24	70.28	1.00	0.50	1011.45	1010.74	1016.58	1013.47
506	1.57	0.66	1.57	1.04	5.0	10.32	13.37	13.37	11.38	6.44			0.00	0.00	506	505	HDPE		18	163.59	1.00	N/A	1013.58	1011.95		1016.18
LINIE CO	0																						DO TAILA	ATED®	TD #600	FDFF
LINE 600		0.66	9.09	5 22	5.0	0.00	0.00	66 50	70.42	0.06			0.00	0.00	601	600	HDDE	0.012	26	05.00	0.05	2.20	DS TAILW		1009.43	FREE
601 602	0.00	0.66	8.08 8.08	5.33 5.33	5.8 5.8		0.00 0.00	66.59 66.73	70.43 76.21	9.96 24.26	701 8		0.00 6.21	0.00 4.10	601 602	600 601	HDPE		36 24	95.00 78.57	0.95 9.67	2.20 0.75	995.60 1005.40	997.80	1009.43	999.02 1010.90
603	1.19	0.66	1.87	1.23	5.7	10.01	9.87	15.51	17.23	14.04	701 0		0.00	0.00	603	602	HDPE		15	94.25	6.06	0.73	1003.40	1006.15	1021.23	1016.90
604	0.00	0.66	0.68	0.45			0.00	5.71	7.07	5.76			0.00	0.00	604	603	HDPE		15	110.50	1.02	0.50	1013.49	1012.36	1021.06	1017.68
605	0.68	0.66	0.68	0.45			5.79	5.79	7.00	5.70			0.00	0.00	605		HDPE		15	117.31			1015.16		1019.42	1018.66
																						2				
LINE 700			0.00	0.5-		10.15			4= - :	40.00			0.05	0.0-				0.015		Drop in Inl		0.75	10.10.5	1000 :-	1001 :-	10.17
701	0.58	0.66	0.86	0.57			4.88	7.23	17.01	13.86			0.00	0.00	701	602	HDPE		15	166.79		0.50	1016.01	1006.15		1017.40
702	0.28	0.66	0.28	0.18	5.0	10.32	2.38	2.38	6.89	5.62			0.00	0.00	702	/01	HDPE	0.012	15	107.00	0.97	N/A	1017.55	1016.51	1021.33	1018.28
LINE 800	0																			Drop in Inl	et 602	0.50				
	0.12	0.66	5.35	3.53	5.1	10.28	1.02	45.39	34.22	10.89			0.00	0.00	801	602	HDPE	0.012	24	163.48		0.50	1009.09	1005.90	1020.93	1018.14
801	U. IZ																									

DESIGN		10								A" = LAZY BACK												
K" FACT	OR .	1.00							CURB TYPE "	B" = HIGH BACK												
UNOFF	CALCULATIONS											INLET DE	SIGN						GUTTER D	DESIGN		
tortort										BYPASS FROM		"TEET BE	STREET			EFFECTIVE		BYPASS TO	COTTENT	STREET		
INLET	COMPOSITE		INLET			UPSTREAM	UPSTREAM	UPSTREAM	UPSTREAM	UPSTREAM	TOTAL	STREET		CURB	INLET	LENGTH	INLET	DOWNSTREAM	STREET	CROSS	DEPTH AT	SPREAD OF
#	"C"	AREA	Tc	INTENSITY	RUNOFF	INLET	INLET	INLET	INLET	INLET	RUNOFF			TYPE	LENGTH	80% CAP	INTERCEPTION	INLET	GRADE	SLOPE	CURB	FLOW
LINE 1																						
101	0.66	0.00	5	7.35	0.00					0.00	0.00	N/A	N/A	В	6	4.8	N/A	N/A	N/A	N/A	N/A	N/A
102	0.66	0.00	5	7.35	0.00	103				0.00	0.00	N/A	N/A	В	6	4.8	N/A	N/A	N/A	N/A	N/A	N/A
103	0.66	0.27	5	7.35	1.31	104				0.00	1.31	SUMP	N/A	В	6	4.8	12.00	0.00	SUMP	N/A	< 0.21	< 10.50
104	0.66	0.90	5	7.35	4.37	105				0.00	4.37	SUMP	2.08	В	6	4.8	12.00	0.00	SUMP	2.08	< 0.21	< 10.50
105	0.66	0.10	5	7.35	0.49	106	301			0.03	0.52	3.87	2.08	В	8	6.4	0.52	0.00	3.87	2.08	0.08	4.56
106	0.66	0.23	5	7.35	1.12	107				0.01	1.13	3.87	2.08	В	6	4.8	1.09	0.03	3.87	2.08	0.11	5.93
107	0.66	0.23	5	7.35	1.12	108	201			0.01	1.13	1.91	2.08	В	6	4.8	1.12	0.01	1.91	2.08	0.13	6.70
108	0.66	0.15	5	7.35	0.73	109				0.00	0.73	1.91	2.08	В	6	4.8	0.73	0.00	1.91	2.08	0.11	5.76
109	0.66	0.15	5	7.35	0.73					0.00	0.73	1.91	2.08	В	6	4.8	0.73	0.00	1.91	2.08	0.11	5.76
LINE 2																						
201	0.66	0.23	5	7.35	1.12					0.00	1.12	1.91	2.08	В	6	4.8	1.11	0.01	1.91	2.08	0.13	6.67
LINE 3																						
301	0.66	0.04	5	7.35	0.19	302				0.07	0.26	3.87	2.08	В	6	4.8	0.26	0.00	3.87	2.08	0.07	3.63
302	0.66	0.28	5	7.35	1.36					0.00	1.36	3.87	2.08	В	6	4.8	1.29	0.07	3.87	2.08	0.12	6.32
IOTES:																						
	Y OF INLETS O	AL ODADE	DETERM	NED HOING DO	LITINE OUT IN	TD 011 D00 F0	05 TO 50 07 O	EOTION FOOD	D1444													+

PREPARED BY: MARK ALLEN
BREUER

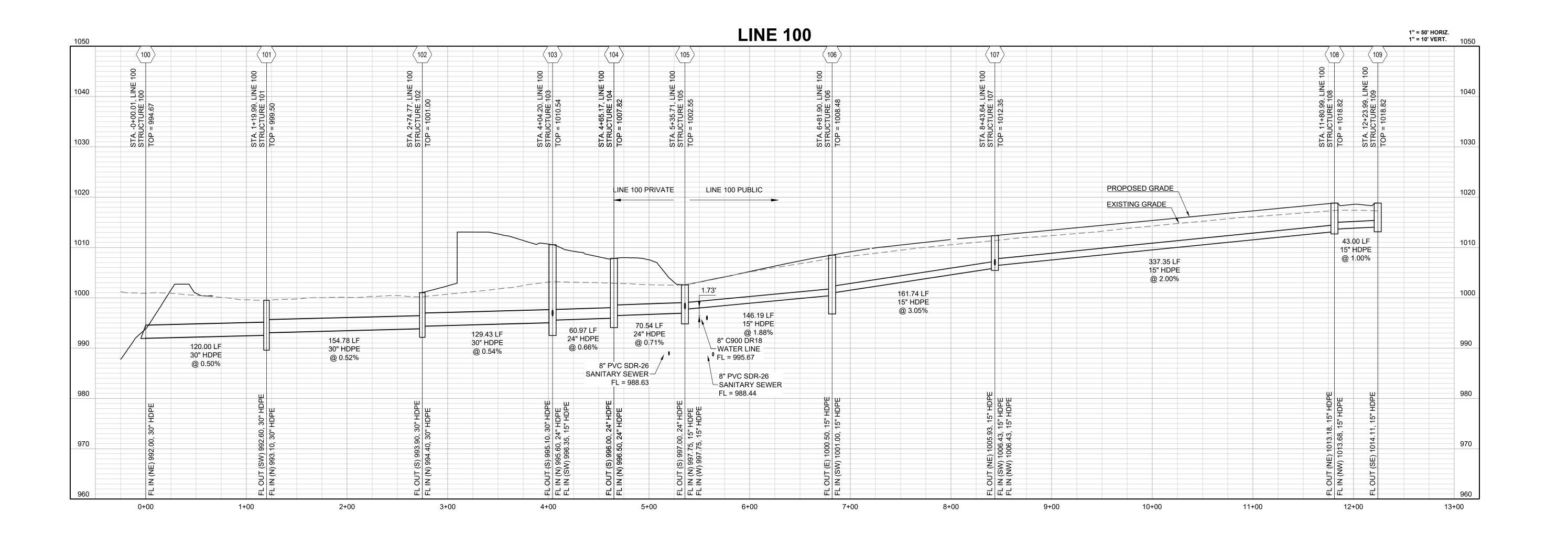
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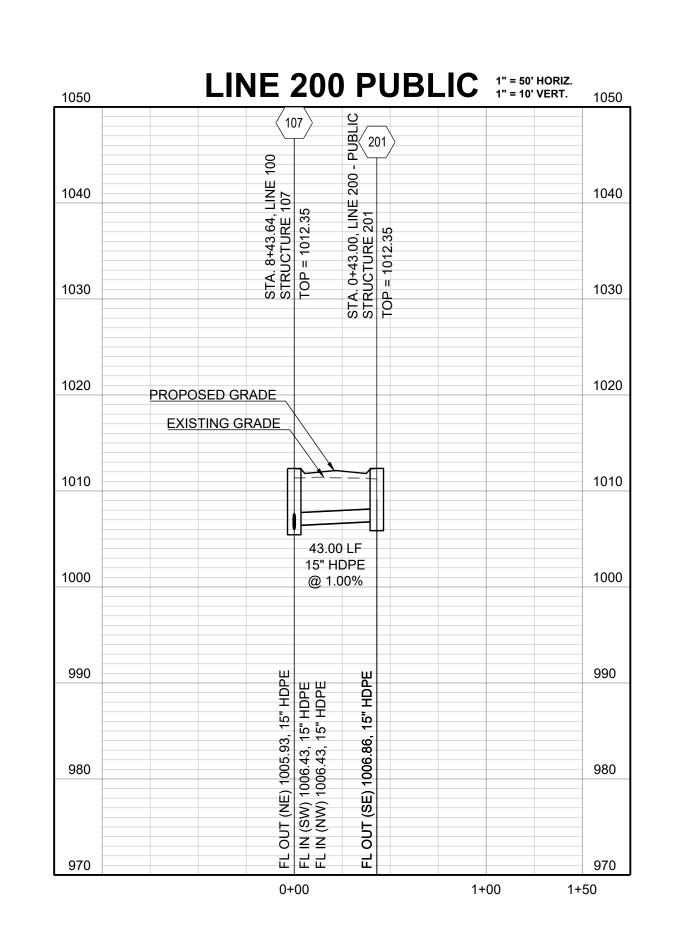
SCHLAGEL & ASSOCIATES, P.A.

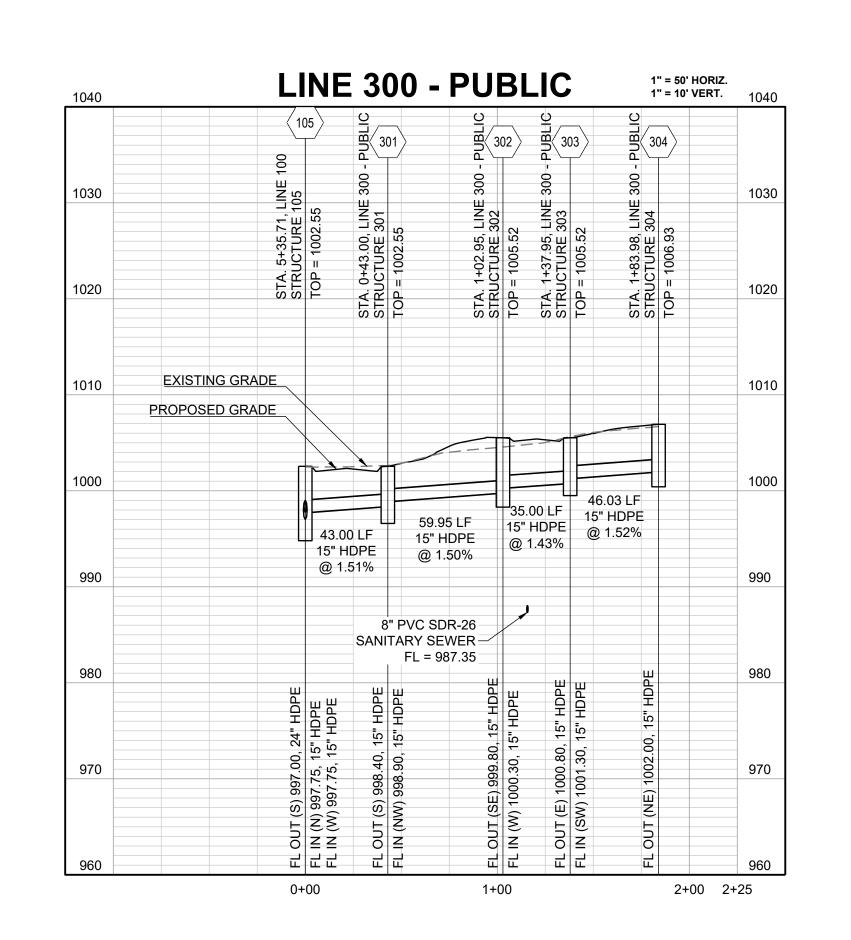
RESIDENCES AT BLACKWELL STREET, STORMWATER, MASTER DRAINAGE PLAN AND EROSION & SEDIMENT CONTROL SUMMIT, MO HERITAGE STREET

STORM CALCS

SHEET









MARK ALLEN
BREUER

MOMBER
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SCHLAGEL & ASSOCIATES, P.A.

RESIDENCES AT BLACKWELL
STREET, STORMWATER, MASTER DRAINAGE
PLAN AND EROSION & SEDIMENT CONTROL
HERITAGE STREET LEE'S SUMMIT, MO

1 BY: REVISION DATE DESCRIPTION

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1 D BY: 3

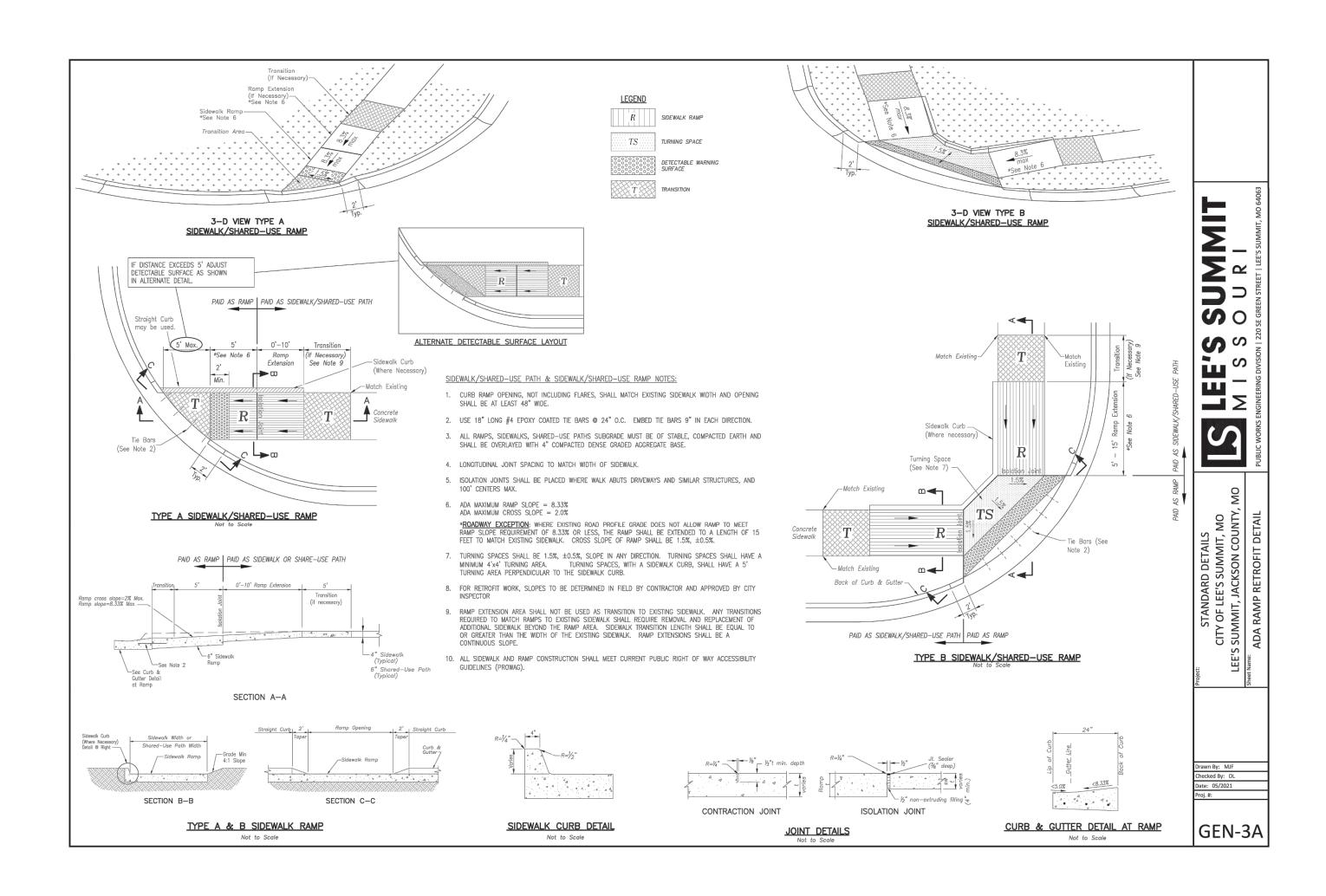
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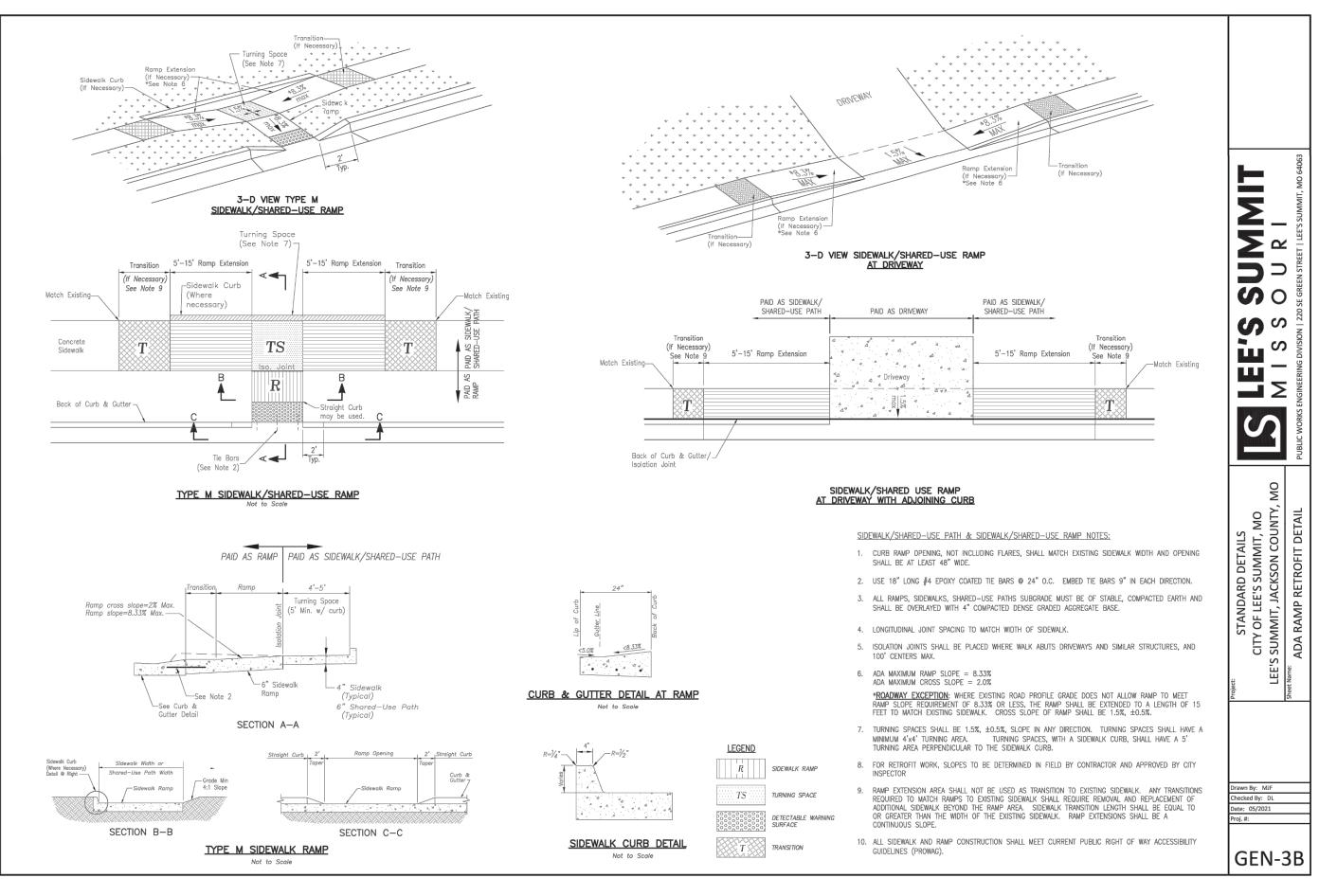
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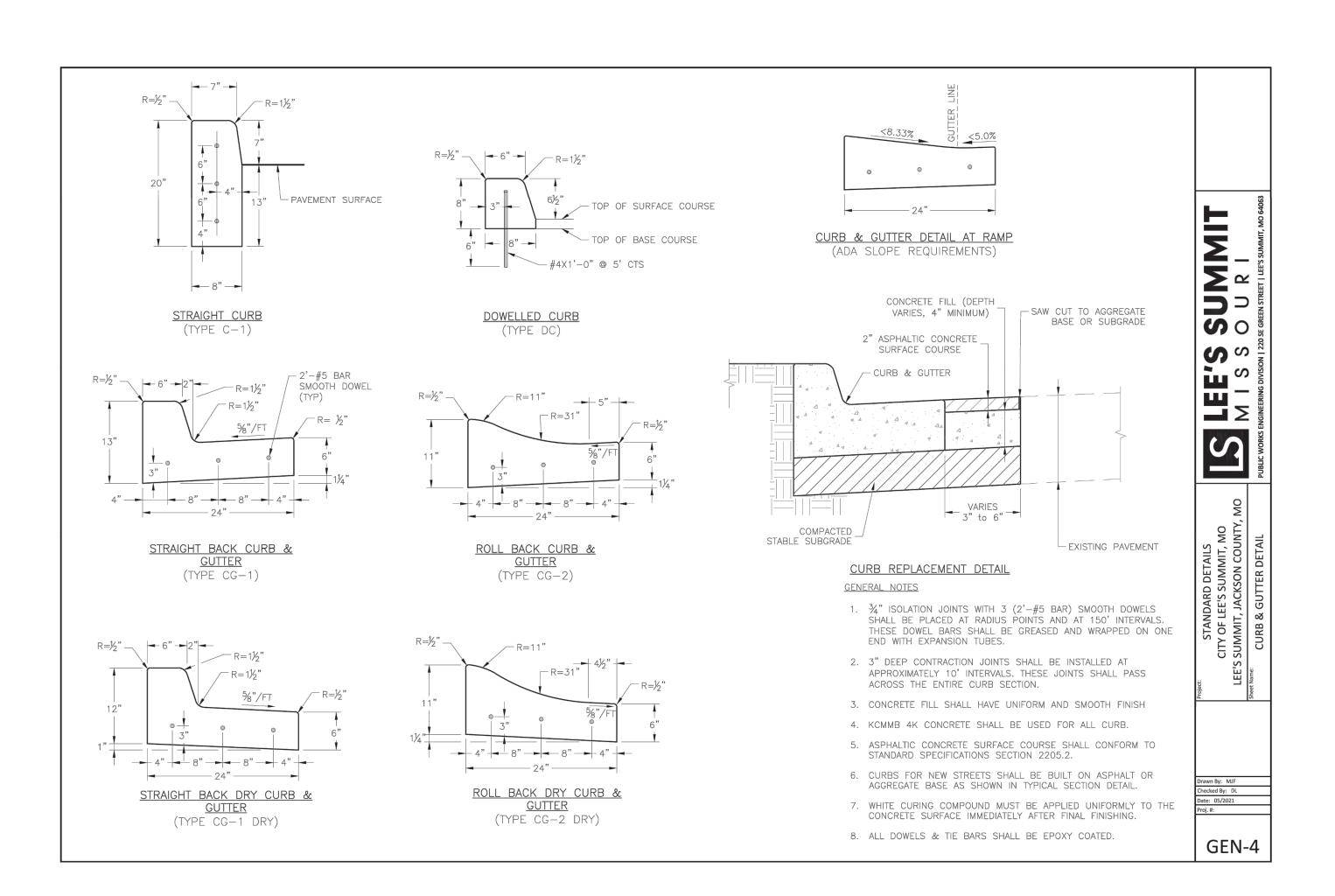
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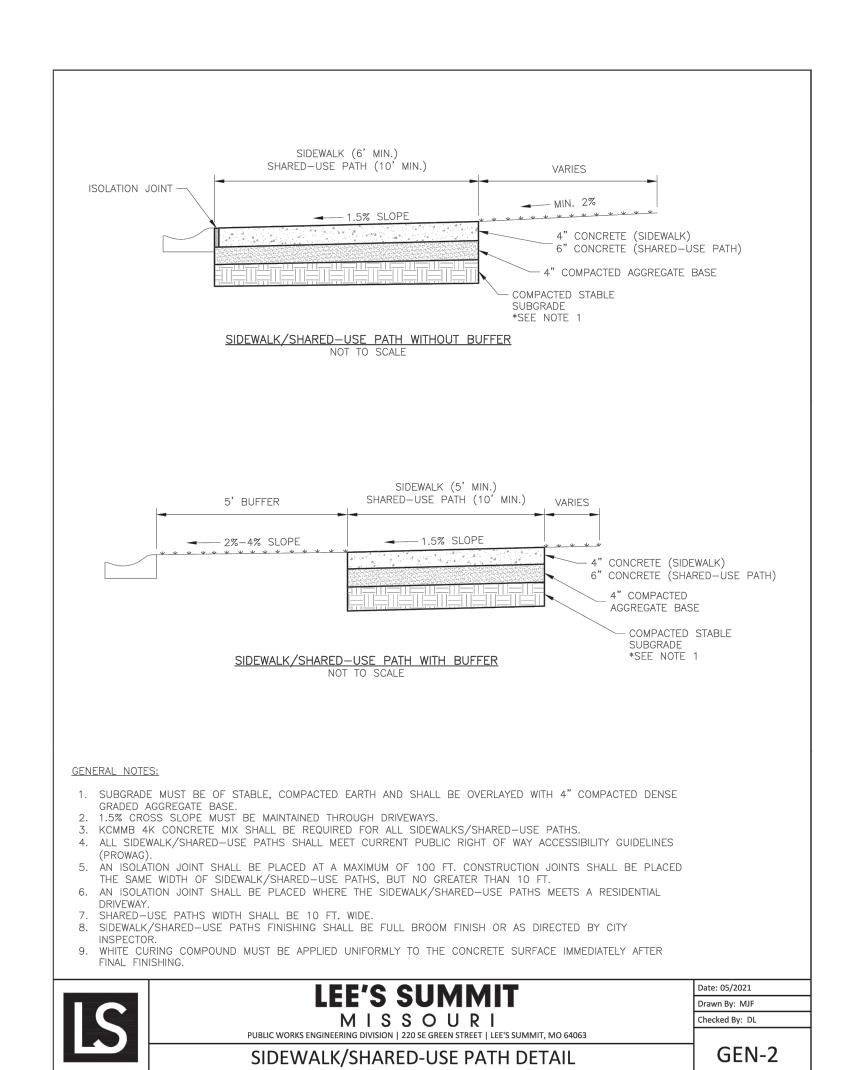
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STORM
PROFILES







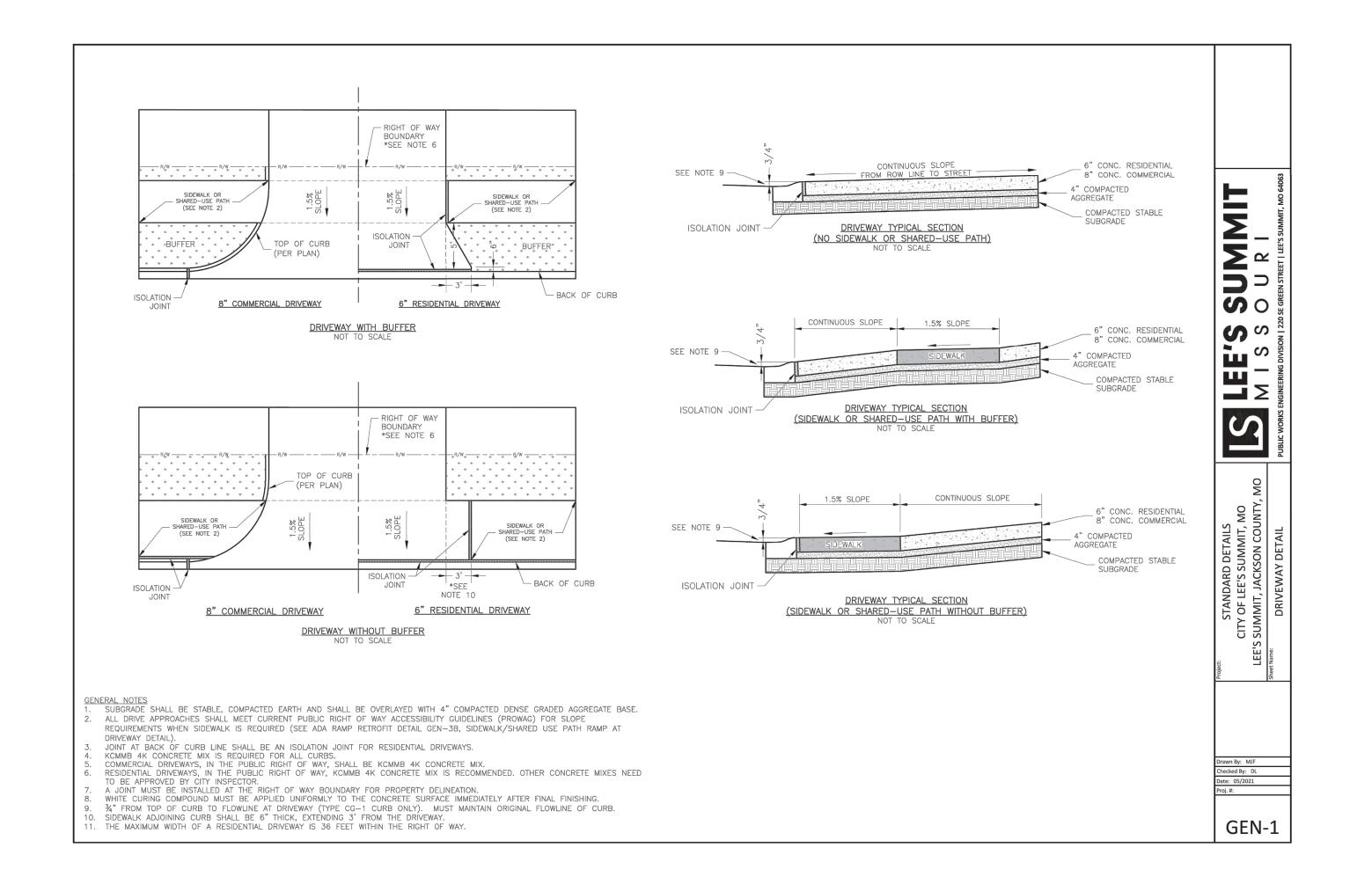


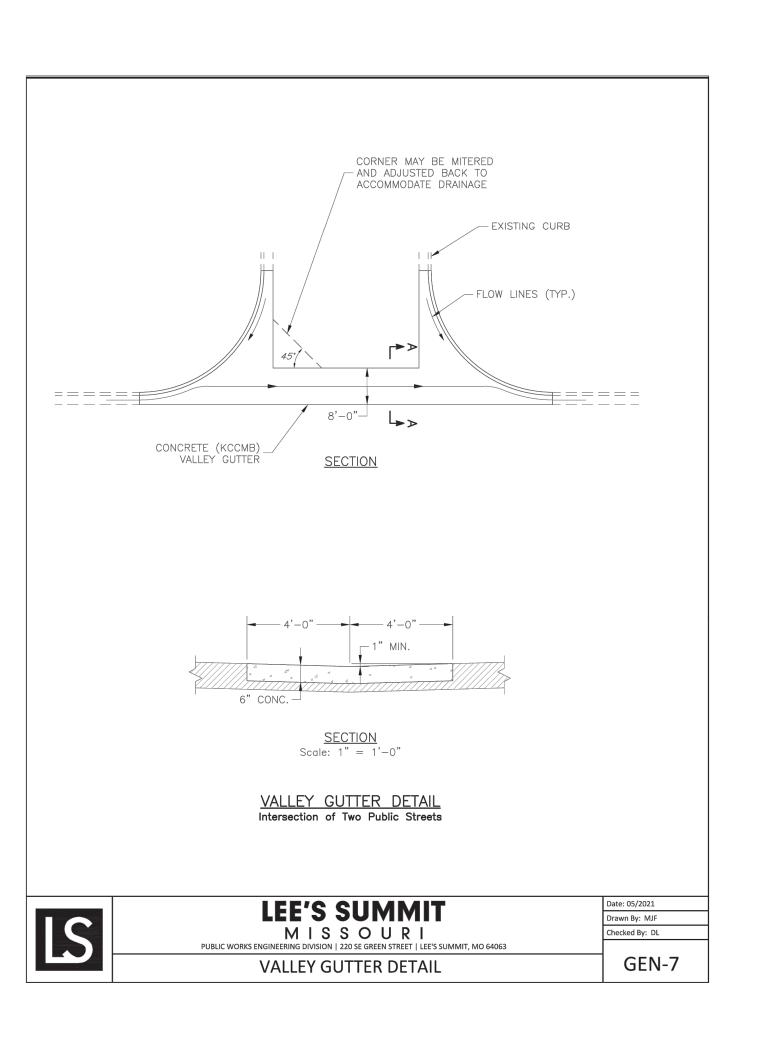


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RAINAGE , ⋖ ⊞ ∞ SIDENCES STORMWATI

STREET DETAILS







BREUER NOMBER PE-2009007268 SCHLAGEL & ASSOCIATES, P.A.

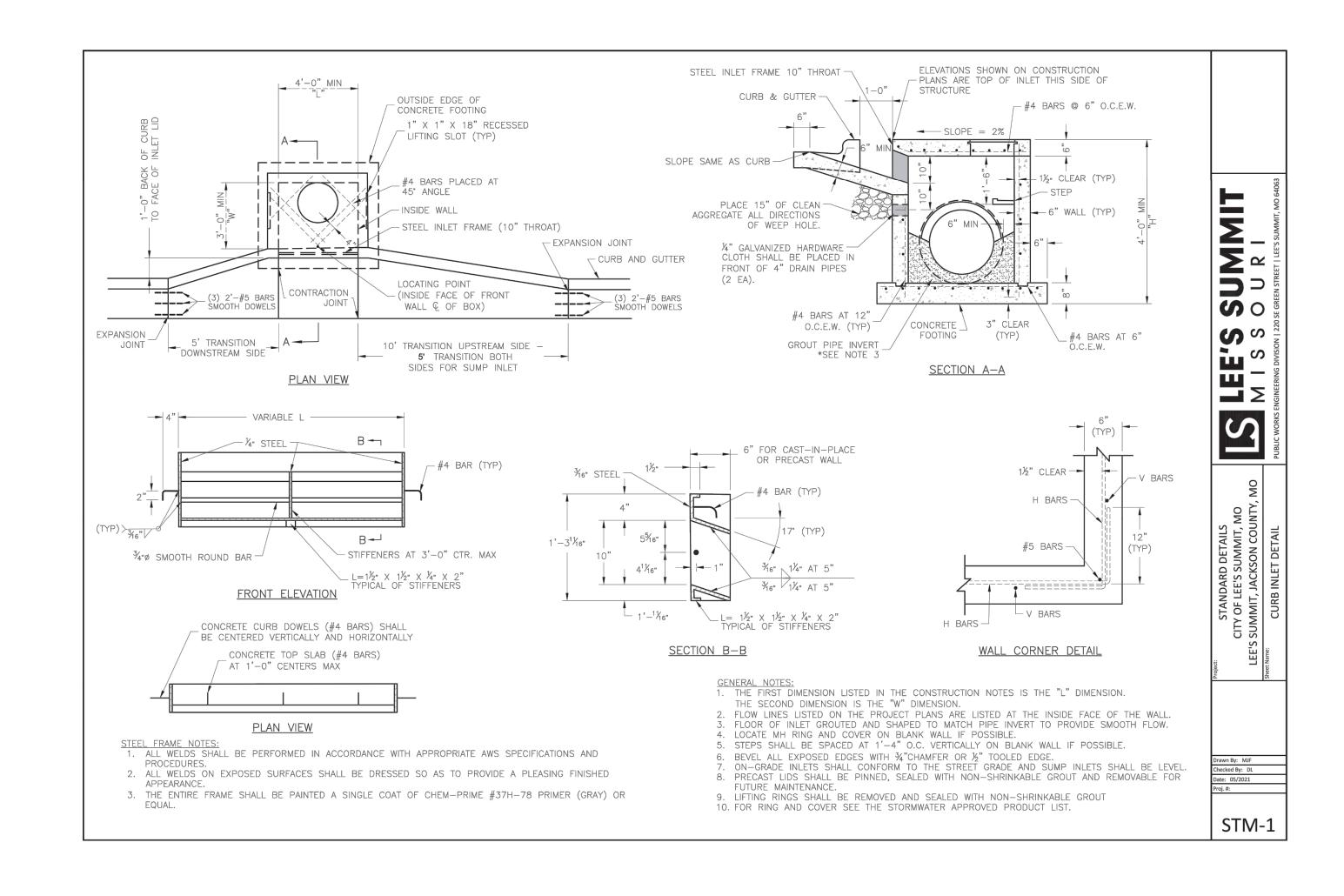
AT BLACKWELL ER, MASTER DRAINAGE TIMENT CONTROL SUMMIT, RESIDENCES ATT, STORMWATERAND EROSION & (STREE

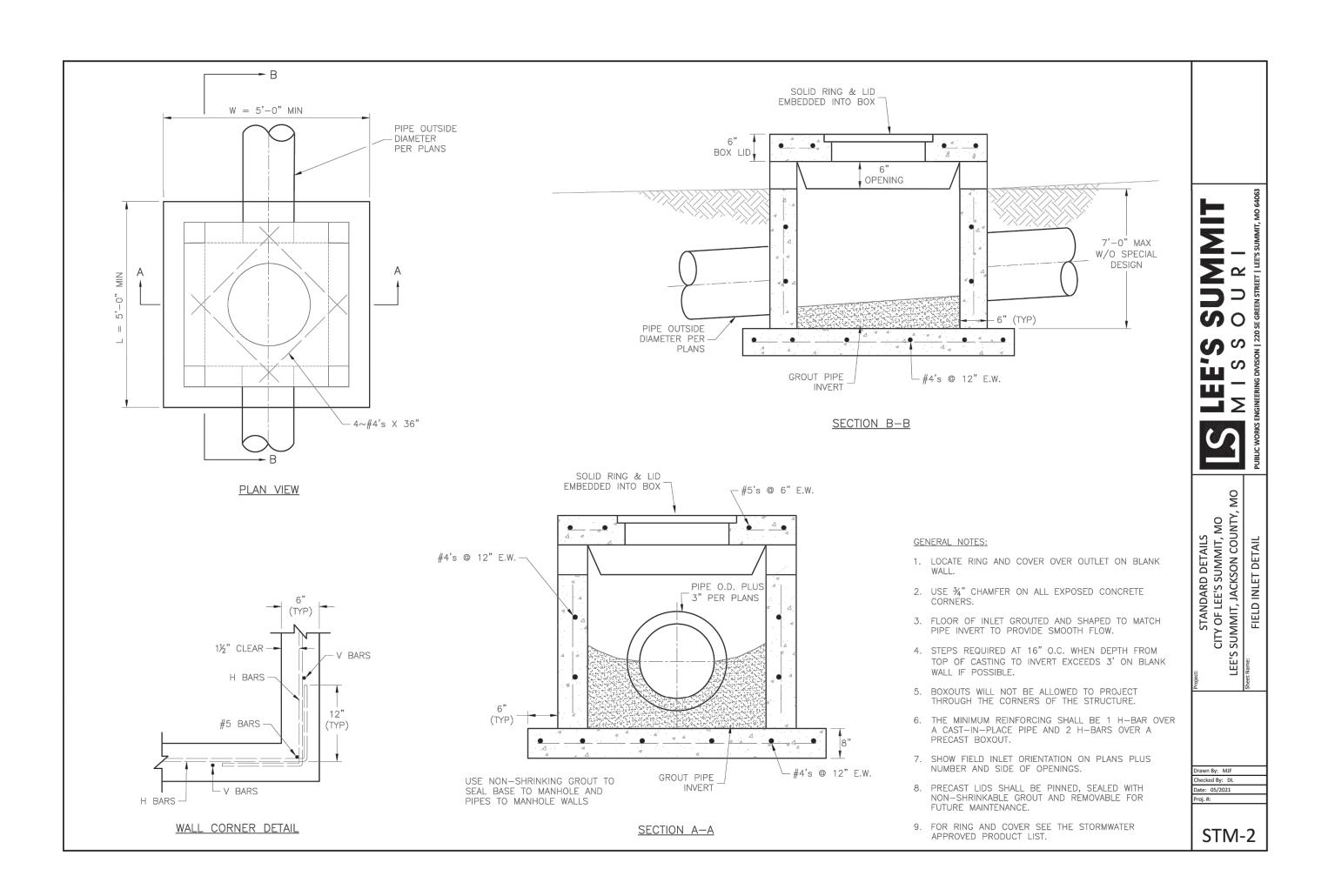
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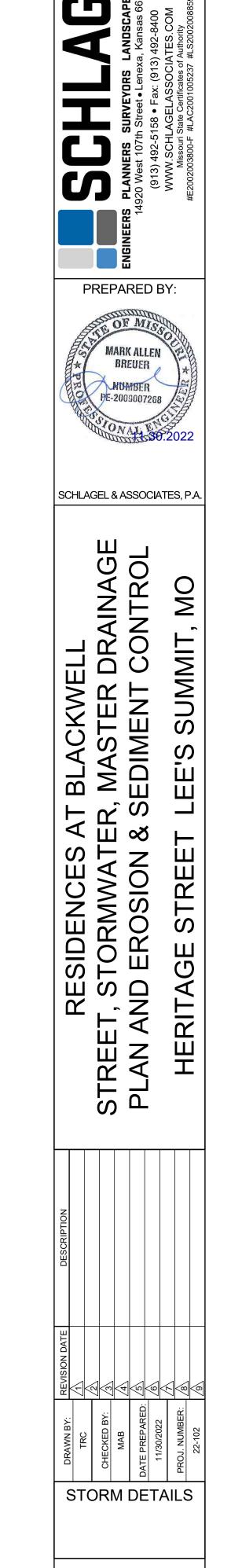
STREE PLAN A

STREET DETAILS

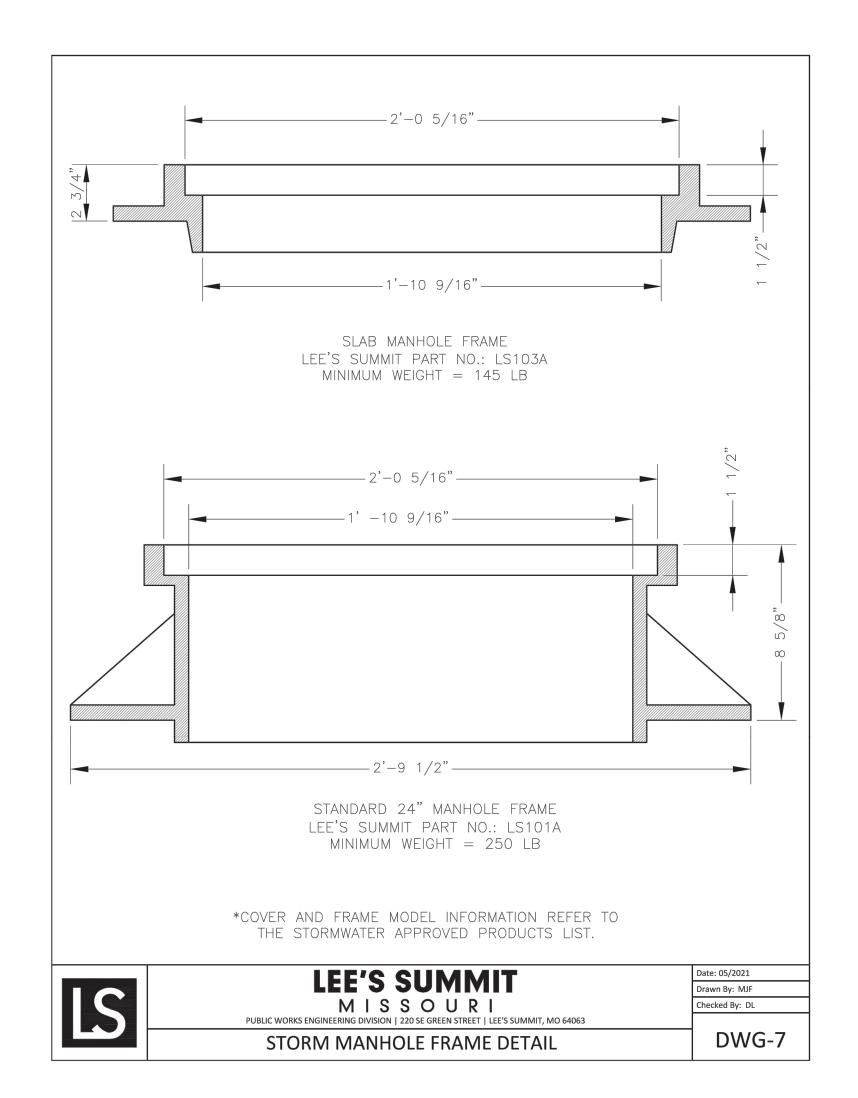
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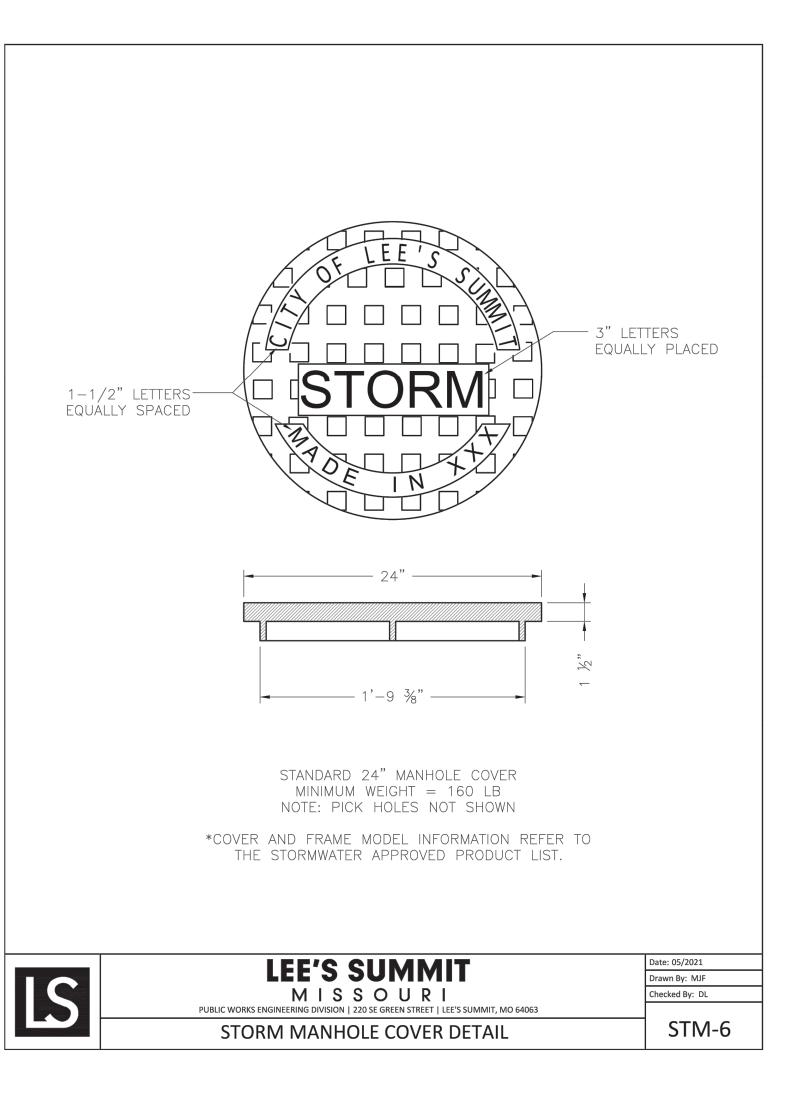


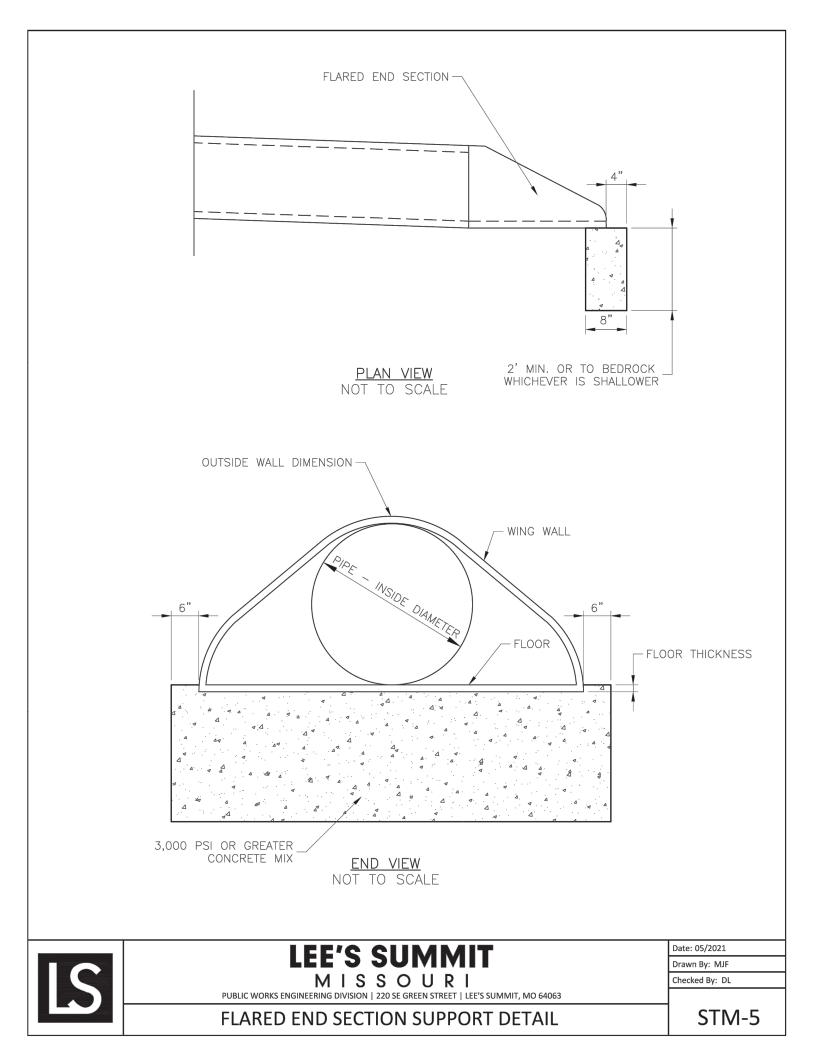




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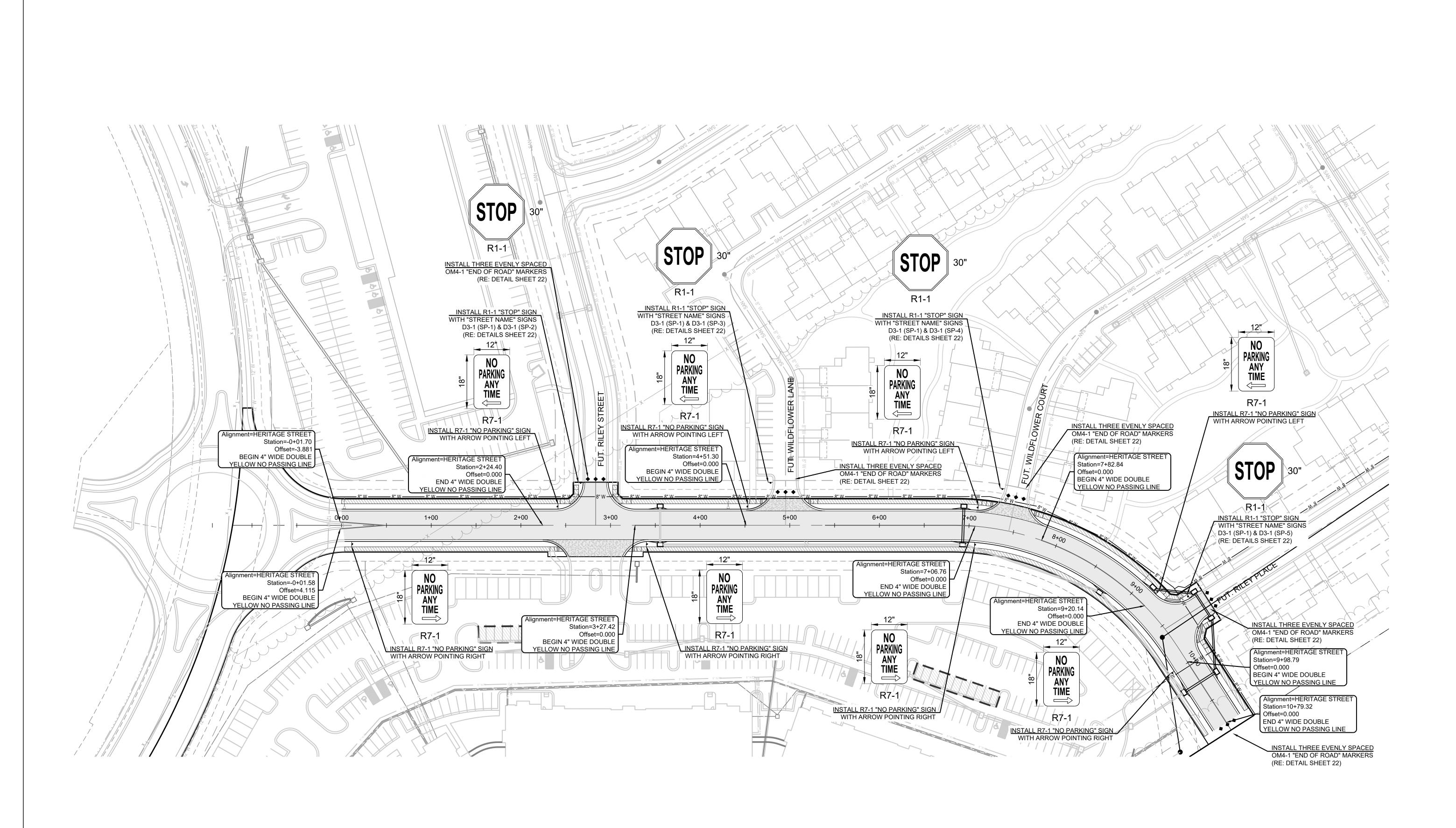


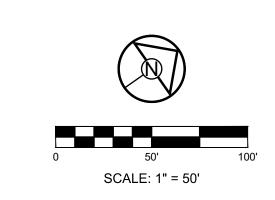


STREE PLAN A

STREE

STORM DETAILS





STREET, STORMWATER, MASTER DRAINAGE
PLAN AND EROSION & SEDIMENT CONTROL
HERITAGE STREET LEE'S SUMMIT, MO

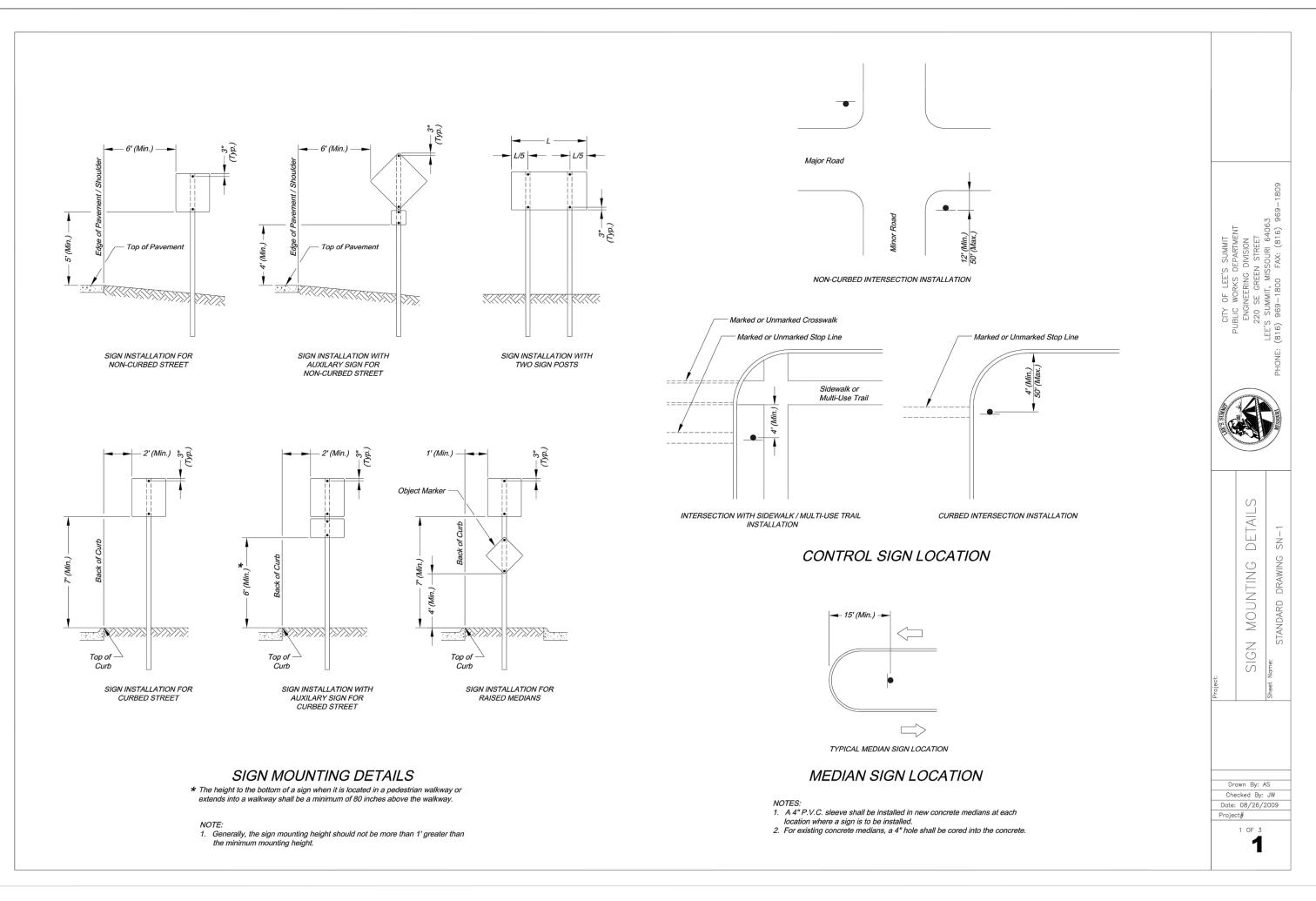
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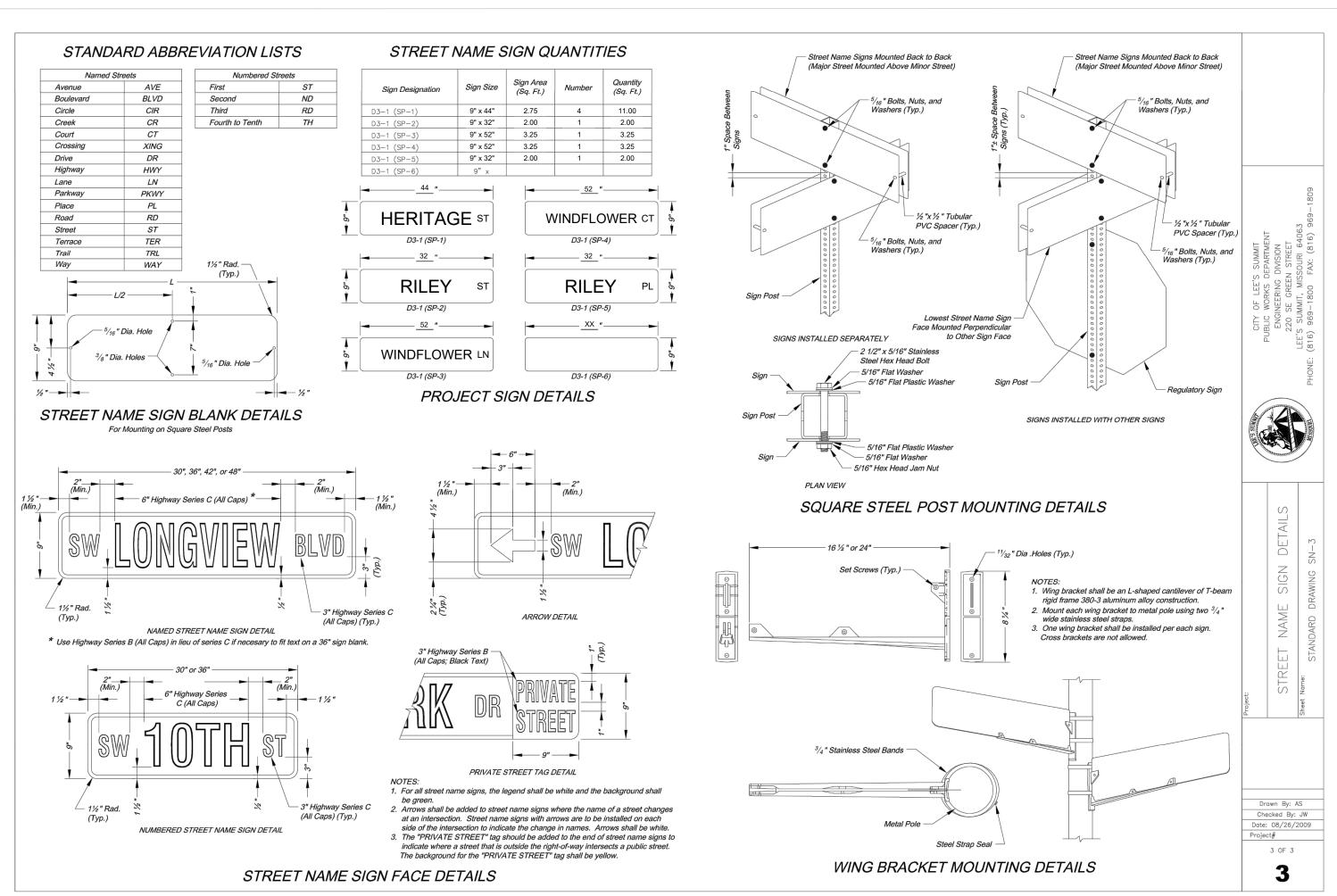
MARK ALLEN BREUER

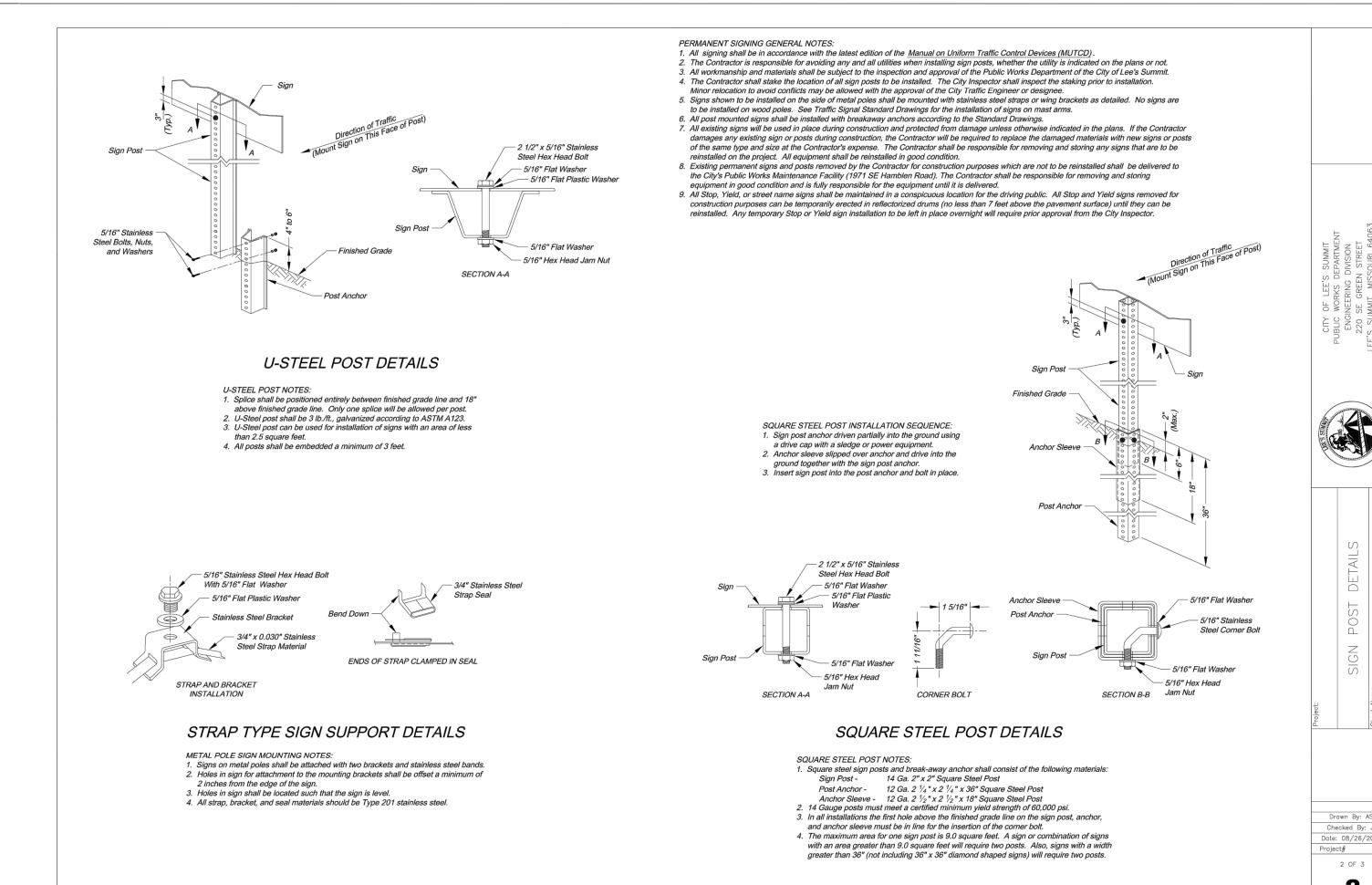
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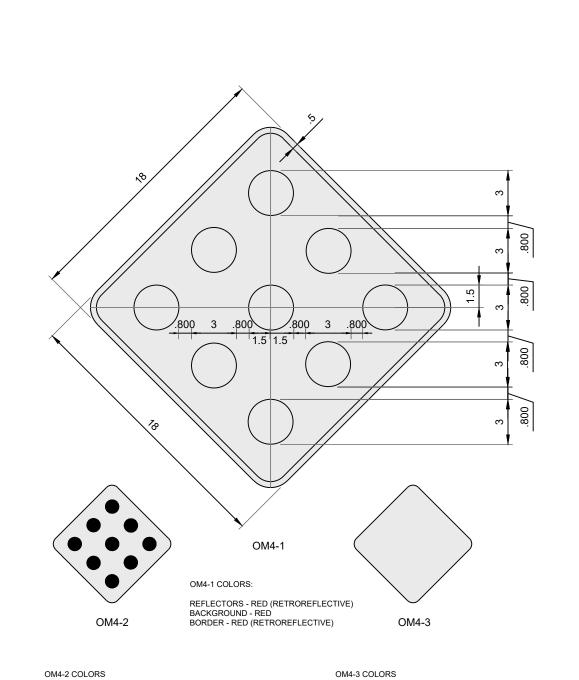
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STREET SIGN AND PAVEMENT MARKING PLAN





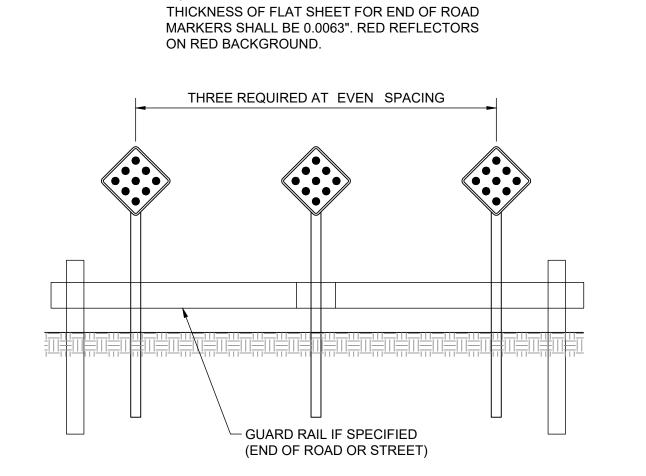


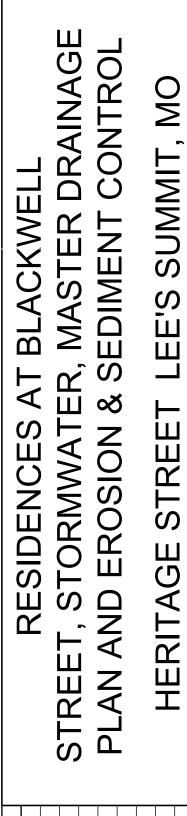


REFLECTORS - RED (RETROREFLECTIVE)

REFLECTORS - RED (RETROREFLECTIVE)

BACKGROUND - BLACK





PREPARED BY:

BREUER

MUMBER

PE-2009007268

SCHLAGEL & ASSOCIATES, P.A.

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 REVISION DATE
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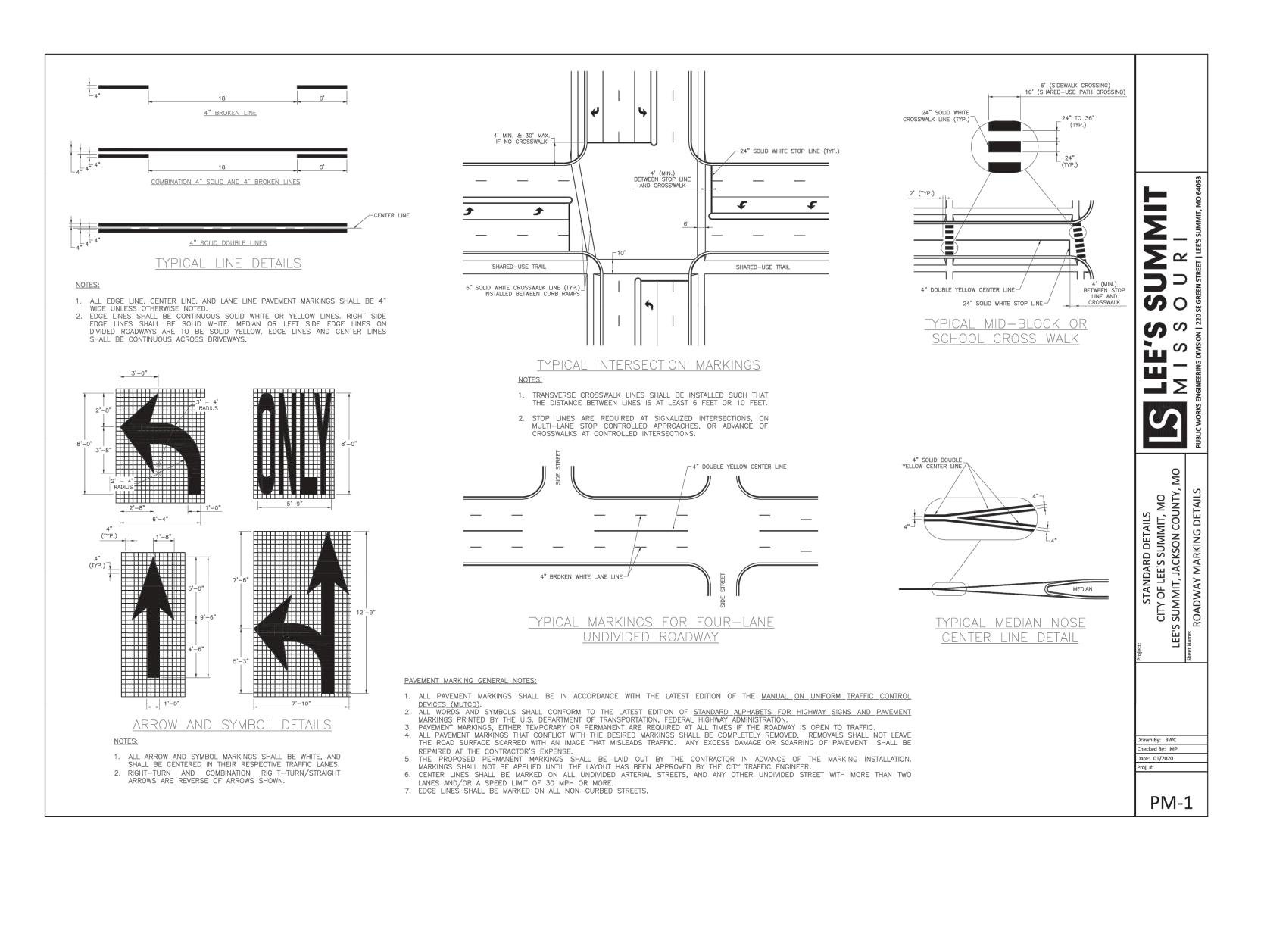
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STREET SIGN DETAILS



STREET, STORMWATER, MASTER DRAINAGE
PLAN AND EROSION & SEDIMENT CONTROL
HERITAGE STREET LEE'S SUMMIT, MO

PREPARED BY:

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MARK ALLEN BREUER

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