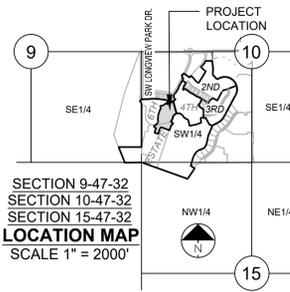


LEGEND:

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
PL	- PROPERTY LINE
PUB/E	- PUBLIC EASEMENT
RCP	- REINFORCED CONCRETE PIPE
ROW or RW	- RIGHT-OF-WAY
S/E	- SANITARY SEWER EASEMENT
SL	- SERVICE LINE
SW	- 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
	TREE LINE
	EXISTING LOT AND R/W LINES
	EXISTING PLAT LINES
	PROPERTY LINES
	RIGHT-OF-WAY
	SANITARY SEWER MAIN
	SANITARY SEWER MAIN - EXIST.
	STORM SEWER
	STORM SEWER - EXISTING
	CABLE TV - EXISTING
	FIBER OPTIC CABLE - EXISTING
	TELEPHONE LINE - EXIST.
	ELECTRIC LINE - EXISTING
	OVERHEAD POWER LINE - EXIST.
	UNDERGROUND ELECTRIC - EX.
	GAS LINE - EXISTING
	WATERLINE - EXISTING
	LIGHT - EXISTING
	EXISTING MANHOLE
	CLEANOUT
	EXISTING SANITARY MANHOLE
	PROPOSED SANITARY MANHOLE
	EXISTING AREA INLET
	EXISTING CURB INLET
	EXISTING GRATE INLET
	EXISTING JUNCTION BOX
	EXISTING STORM MANHOLE



UTILITY CONTACTS:

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

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

EVERGY
Ron Dejamette
1300 SE Hamblin Road
Lee's Summit, MO 64081
Office: (816) 347-4316
Cell: (816) 810-5234
ron.dejamette@evergy.com

CITY OF LEES SUMMIT PUBLIC WORKS
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 Schaufler
1200 SE Hamblin Road
Lee's Summit, MO 64081
(816) 969-1900



STREET, STORMWATER, MASTER DRAINAGE PLAN & EROSION AND SEDIMENT CONTROL

FOR PERGOLA PARK 5TH PLAT

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

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 PRIOR TO CONSTRUCTION.
- 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.
- 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.
- 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 EXCAVATION.
- THE CONTRACTOR SHALL CONTROL THE EROSION AND SILTATION DURING ALL PHASES 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 AS REQUIRED.
- THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.
- 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:

- 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.
- ALL INSPECTION OF STREET CONSTRUCTION TO BE PERFORMED BY THE CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING.
- CURB RETURN RADII SHALL BE 25' AT BACK OF CURB UNLESS OTHERWISE NOTED.
- SUBGRADE TO BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
- ASSUMED DESIGN SPEED = 25 MPH (COLLECTOR).
- MINIMUM STOPPING SIGHT DISTANCE = 155 FEET.
- MINIMUM K, SAG CURVE = 26 (14 WITH LIGHTING), CREST CURVE = 12.
- GRADE INTERSECTIONS TO DRAIN AS SHOWN.
- SSD = STOPPING SIGHT DISTANCE.
- ALL ADA SIDEWALK RAMPS SHALL BE CONSTRUCTED BY THE DEVELOPER WITH THE PUBLIC INFRASTRUCTURE.

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 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.
- 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 throughout.
- 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 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.
- 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).
- 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.
- 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.
- All areas shall be graded for positive drainage. Unless noted otherwise the following grades shall apply:
 - Turf Areas - 2.5% Minimum, 4H:1V Maximum
 - Paved Areas - 1.2% Minimum, 5% Maximum
- 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.
- All disturbed areas in the right-of-way shall be sodded.
- Underdrains are recommended for all paved areas adjacent to irrigated turf and landscaped beds.
- 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:

- 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.
- 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 the structures.
- 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
3	MASTER DRAINAGE PLAN - GRADING PLAN
4	MASTER DRAINAGE PLAN - LOT INFO
5	MASTER DRAINAGE PLAN - DRAINAGE MAP
6	MASTER DRAINAGE PLAN - DRAINAGE CALCS
7	MASTER DRAINAGE PLAN - DRAINAGE CALCS
8	PRE CONSTRUCTION EROSION CONTROL PLAN
9	EROSION CONTROL PLAN
10	POST CONSTRUCTION EROSION CONTROL
11	EROSION CONTROL DETAILS
12	PERGOLA PARK DR PLAN & PROFILE
13	SW MARY ST PLAN & PROFILE
14	ALLEY 11 PLAN & PROFILE
15	STREET A PLAN & PROFILE
16	ROUNDOABOUT INTERSECTION DETAIL
17	ALLEY 11 INTERSECTION DETAIL
18	STREET A INTERSECTION DETAIL SHEET
19	STORM PLAN
20	STORM PROFILES
21	STORM PROFILES CONT
22	STREET DETAIL SHEET
23	STREET DETAIL SHEET CONT
24	STORM DETAIL SHEET
25	ROUNDOABOUT PAVEMENT AND SIGNAGE
26	PAVEMENT MARKING DETAIL

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 Certificate of Authority #E200200360FC #LAC201005237 #LS200200895F

PREPARED BY:

SCHLAGEL & ASSOCIATES, P.A.

PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI

OWNER/DEVELOPER:

NLV DEVELOPMENT COMPANY LLC
RUSSELL PEARSON
3152 SW GRANDSTAND CIRCLE
LEE'S SUMMIT, MO 64081
p 816-589-4415
f -----
RPEARSON@BOXDEVCO.COM

MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.

ELEV. 935.18

PROJECT BENCHMARK:

CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 998893.4148
EASTING: 2803318.5413
ELEV. 1004.09

SUMMARY OF QUANTITIES			
	ITEM	QUANTITY	UNITS
1	CLEANING, GRUBBING, AND DISPOSAL	1	L.S.
2	GRADING	1	L.S.
3	SUBGRADE STABILIZATION (PUBLIC STREETS)	6494	S.Y.
4	6" ASPHALT	5697	S.Y.
5	6" CONCRETE	1103	S.Y.
6	DRIVABLE PAVERS	162	SY
7	TYPE CG-2 CURB	2256	L.F.
8	TYPE CG-2 DRY CURB	287	L.F.
9	TYPE CG-1 DRY CURB	342	L.F.
10	TYPE C1 CURB	517	L.F.
11	5' SIDEWALK	2504	L.F.
12	SIDEWALK RAMPS	11	EA.
13	15" HDPE	245	L.F.
14	18" HDPE	179	L.F.
15	24" HDPE	117	L.F.
16	30" HDPE	643	L.F.
17	36" HDPE	135	L.F.
18	36" RCP	243	L.F.
19	4' x 4' GRATE INLET	5	EA.
20	6' x 4' CURB INLET	6	EA.
21	6' x 5' CURB INLET	5	EA.
22	6' x 6' CURB INLET	1	EA.
23	7' x 4' CURB INLET	1	EA.
24	36" RCP END SECTION	1	EA.
25	UNDERDRAIN	35	L.F.
26	EROSION CONTROL	1	L.S.
27	SEEDING/MULCHING	1	L.S.
28	BONDS	1	L.S.

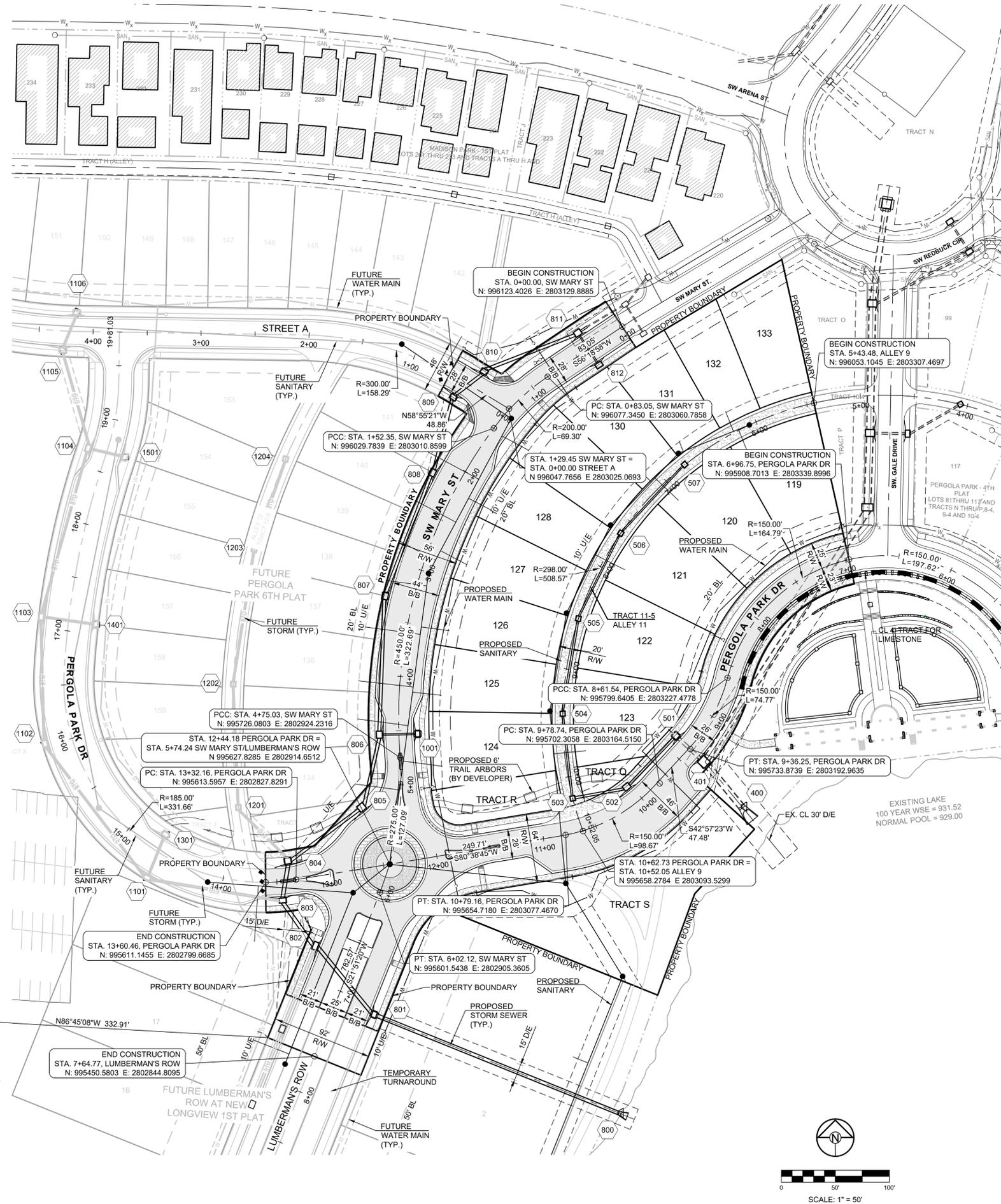
REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

DRAWN BY: ###	CHECKED BY: ###	DATE PREPARED: 11-8-2021	PROJ. NUMBER: 20-189
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COVER SHEET

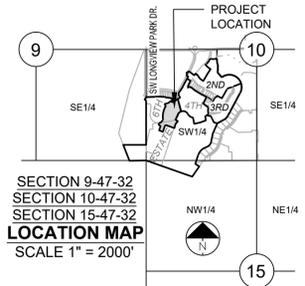
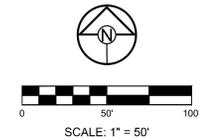
SHEET

1



SW CORNER, SW 1/4
 SEC. 10-47-32
 CORP. OF ENGINEERS
 3" ALUMINUM MONUMENT

WEST LINE, SW 1/4, SEC. 10-47-32
 N03°14'52"E 728.77'



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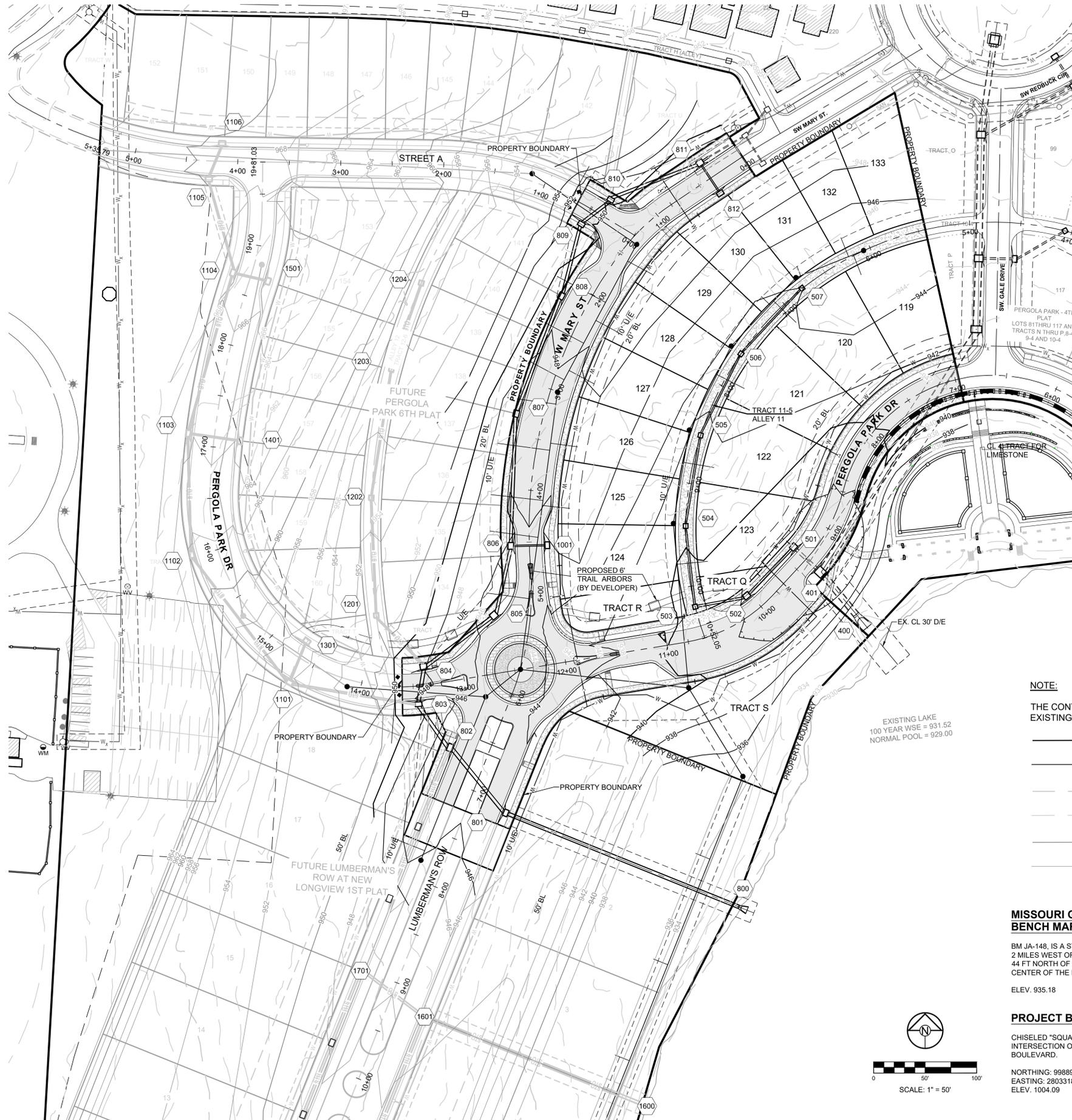
SURVEY NOTES
 The bases of bearing and coordinates are base on the Missouri Coordinate System of 1983, West Zone (2003 Adjustment) with a Grid Factor of 0.9999020.

**PERGOLA PARK 5TH PLAT
 STREET, STORMWATER, MASTER DRAINAGE
 PLAN & EROSION AND SEDIMENT CONTROL
 - LEE'S SUMMIT, MISSOURI**

REVISION	DATE	DESCRIPTION
1	2-4-22	CITY COMMENTS

DRAWN BY:	CHECKED BY:	DATE PREPARED:	PROJ. NUMBER:
BAL	MAB	11-8-2021	20-189

GENERAL LAYOUT	
SHEET	2



NOTE:

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

- DENOTES PROPOSED MAJOR CONTOUR
- DENOTES PROPOSED MINOR CONTOUR
- DENOTES EXISTING MAJOR CONTOUR
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- DENOTES FUTURE MAJOR CONTOUR
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MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

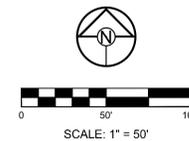
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PREPARED BY:



02.17.2022

SCHLAGEL & ASSOCIATES, P.A.

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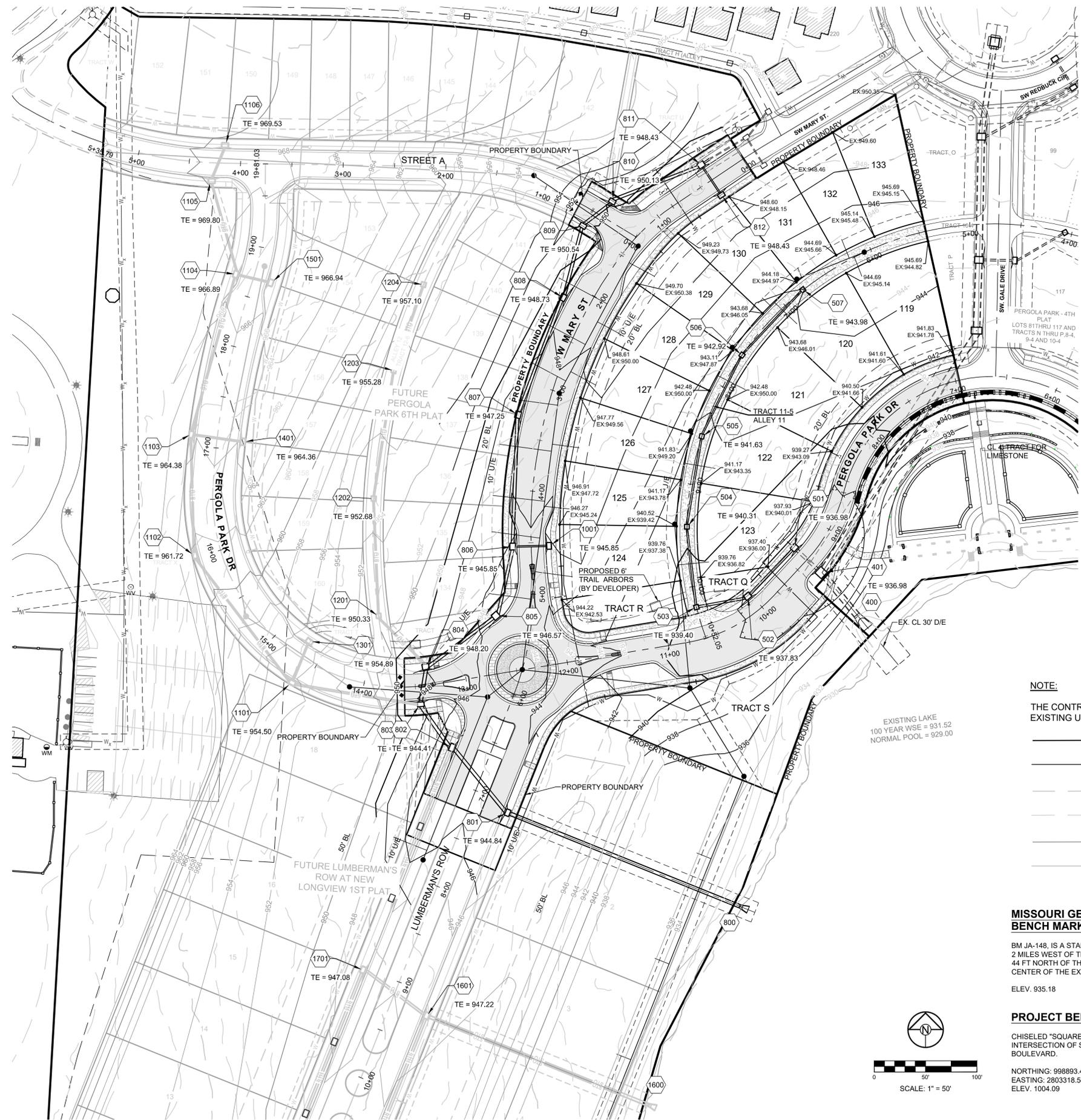
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2-4-22	CITY COMMENTS

DRAWN BY:	BAL
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PROJ. NUMBER:	20-189

MASTER DRAINAGE PLAN - GRADING PLAN

SHEET

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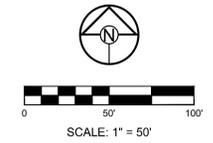
LOT TYPE TABLE			
LOT #	BASEMENT TYPE	FRONT MBOE	REAR MBOE
119	STANDARD	942.35	945.60
120	STANDARD	942.10	945.60
121	STANDARD	941.00	944.20
122	STANDARD	939.80	943.00
123	STANDARD	940.50	943.85
124	STANDARD	946.80	941.00
125	STANDARD	947.40	941.65
126	STANDARD	948.30	942.35
127	STANDARD	949.50	943.00
128	STANDARD	950.20	943.60
129	STANDARD	950.20	944.20
130	STANDARD	949.75	944.70
131	STANDARD	949.10	945.20
132	STANDARD	950.10	945.65
133	STANDARD	950.85	946.20

NOTE:
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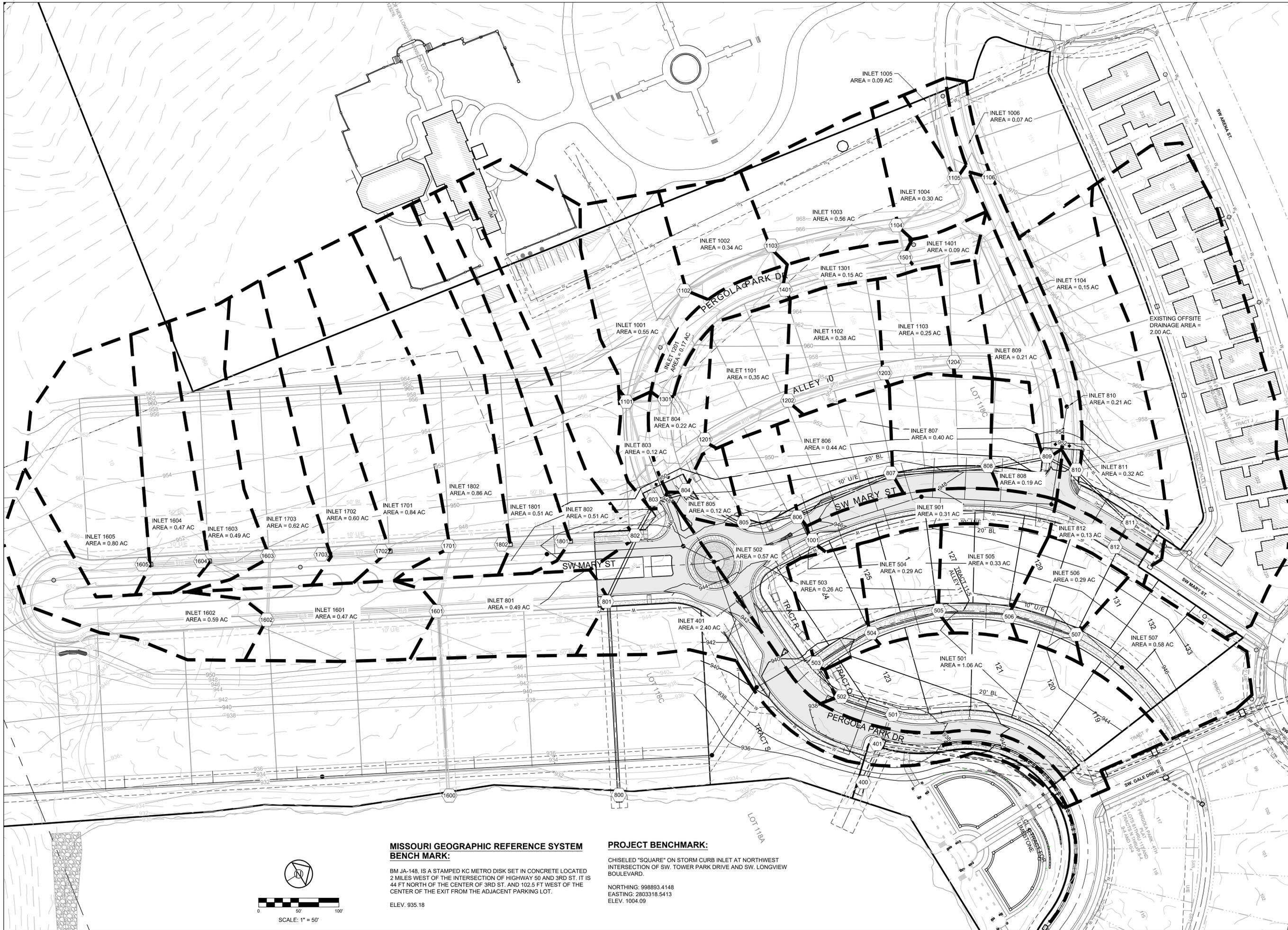


**PERGOLA PARK 5TH PLAT
 STREET, STORMWATER, MASTER DRAINAGE
 PLAN & EROSION AND SEDIMENT CONTROL
 - LEE'S SUMMIT, MISSOURI**

REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

MASTER DRAINAGE PLAN - LOT INFO

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**MISSOURI GEOGRAPHIC REFERENCE SYSTEM
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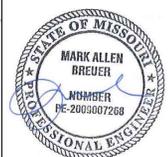
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**PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
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- LEE'S SUMMIT, MISSOURI**

REVISION DATE	DESCRIPTION
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MASTER DRAINAGE PLAN - DRAINAGE MAP

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**PERGOLA PARK 5TH PLAT
 STREET, STORMWATER, MASTER DRAINAGE
 PLAN & EROSION AND SEDIMENT CONTROL
 - LEE'S SUMMIT, MISSOURI**

REVISION	DATE	DESCRIPTION
1	2-4-22	CITY COMMENTS
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10-YEAR RUNOFF CALCULATIONS

Design Storm: 10																											
"K" Value: 1.00																											
"F" Factor: 1.00																											
Runoff Calculations																											
Inlet #	Area (acres)	"C" Value	Cumul. Area (acres)	Cumul. Cx	Intensity	To Inlet	Cumul. Runoff	Pipe Cap.	Pipe Vel.	Pipe Properties	Up Inlet 1	Up Inlet 2	Up Area (acres)	Up Cx	Up Inlet	Down Inlet	Pipe Type	"n"	Pipe Size	Length	Slope %	Drop In Inlet	FL Up	FL Down	Inlet Top	HGL Elev.	
EXISTING LINE 400																											
401	2.40	0.66	46.76	30.86	5.7	7.13	11.29	220.00	220.20	9.27	501		3.38	2.23	401	400	RCP	0.013	66	53.87	0.43	0.50	927.98	927.75	DS TAILWATER @ STR #400	939.00	933.27
402	0.04	0.66	40.98	27.05	5.4	7.24	0.19	195.88	286.92	12.08			0.00	0.00	402	401	RCP	0.013	66	279.37	0.73	0.50	930.42	928.38		941.97	935.25
403	0.07	0.66	40.94	27.02	5.3	7.27	0.34	196.43	300.36	12.64	601		0.90	0.59	403	402	RCP	0.013	66	68.66	0.80	0.50	931.17	930.62		944.37	936.00
404	0.06	0.66	39.97	26.38	5.1	7.32	0.29	193.18	270.74	11.40	701		1.41	0.93	404	403	RCP	0.013	66	119.40	0.65	1.00	932.35	931.57		948.40	937.14
405	38.50	0.66	38.50	25.41	5.0	7.35	186.84	186.84	251.06	15.79			0.00	0.00	405	404	RCP	0.013	54	92.89	1.63	N/A	934.86	933.35		947.96	940.04
EXISTING LINE 600																											
601	0.36	0.66	0.90	0.59	5.1	7.33	1.74	4.35	19.45	11.00			0.00	0.00	601	403	HDPE	0.012	18	36.00	2.92	0.50	936.02	934.97		944.39	937.04
602	0.54	0.66	0.54	0.36	5.0	7.35	2.62	2.62	13.70	11.16			0.00	0.00	602	601	HDPE	0.012	15	55.86	3.83	N/A	938.53	936.39		946.23	939.31
EXISTING LINE 700																											
701	1.14	0.66	1.41	0.93	5.1	7.32	5.51	6.82	9.26	7.54			0.00	0.00	701	404	PEP	0.012	15	102.48	1.75	0.50	941.69	939.90		949.19	943.04
702	0.27	0.66	0.27	0.18	5.0	7.35	1.31	1.31	7.00	5.79			0.00	0.00	702	701	PEP	0.012	15	33.00	1.03	N/A	942.48	942.14		949.13	943.04
LINE 500																											
501	1.06	0.66	3.38	2.23	6.2	7.01	4.90	15.64	28.10	5.73			0.00	0.00	501	401	PEP	0.012	30	35.50	0.40	0.45	931.12	930.98		936.98	933.39
502	0.57	0.66	2.32	1.53	6.0	7.05	2.65	10.79	24.51	7.80			0.00	0.00	502	501	PEP	0.012	24	65.53	1.00	0.50	932.23	931.57		937.83	933.65
503	0.26	0.66	1.75	1.16	5.9	7.08	1.22	8.18	24.51	7.80			0.00	0.00	503	502	PEP	0.012	24	51.05	1.00	0.50	933.24	932.73		939.40	934.46
504	0.29	0.66	1.49	0.98	5.7	7.13	1.37	7.02	12.47	7.05			0.00	0.00	504	503	PEP	0.012	18	78.60	1.20	0.50	934.68	933.74		940.30	935.94
505	0.33	0.66	1.20	0.79	5.5	7.20	1.57	5.70	11.38	6.44			0.00	0.00	505	504	PEP	0.012	18	88.86	1.00	0.50	936.07	935.18		941.62	937.19
506	0.29	0.66	0.87	0.57	5.3	7.28	1.39	4.18	7.34	5.98			0.00	0.00	506	505	PEP	0.012	15	87.96	1.10	0.50	937.54	936.57		942.92	938.55
507	0.58	0.66	0.58	0.38	5.0	7.35	2.81	2.81	7.00	5.70			0.00	0.00	507	506	PEP	0.012	15	86.70	1.00	N/A	938.90	938.04		943.98	939.71
LINE 800																											
801	0.49	0.51	7.40	4.80	6.6	6.89	1.72	31.72	66.70	9.44			0.00	0.00	801	800	RCP	0.013	36	243.24	1.00	2.50	930.93	928.50	DS TAILWATER @ STR #800	944.84	934.14
802	1.38	0.51	6.91	4.35	6.5	6.93	4.88	30.17	68.55	9.70			0.00	0.00	802	801	PEP	0.012	36	83.38	0.90	0.50	934.16	933.43		944.41	936.33
803	0.12	0.66	5.53	3.65	6.3	6.96	0.55	25.41	51.09	7.23	1101		2.32	1.53	803	802	PEP	0.012	36	51.75	0.50	0.50	934.94	934.68		948.20	936.90
804	0.22	0.66	3.09	2.04	6.2	6.99	1.01	14.25	31.42	6.40	1201		1.13	0.75	804	803	PEP	0.012	30	36.23	0.50	0.50	935.62	935.44		948.20	938.03
805	0.12	0.66	1.74	1.15	6.0	7.05	0.56	8.10	31.42	6.40			0.00	0.00	805	804	PEP	0.012	30	84.51	0.50	0.50	936.55	936.12		946.57	938.19
806	0.40	0.66	1.62	1.07	5.8	7.10	1.88	7.59	31.42	6.40	1001		0.31	0.20	806	805	PEP	0.012	30	69.15	0.50	0.50	937.39	937.05		945.85	938.88
807	0.40	0.66	0.91	0.60	5.5	7.20	1.90	4.32	31.42	6.40			0.00	0.00	807	806	PEP	0.012	30	127.94	0.50	0.50	938.53	937.89		947.25	939.34
808	0.19	0.66	0.51	0.34	5.2	7.30	0.91	2.46	31.42	6.40			0.00	0.00	808	807	PEP	0.012	30	121.88	0.50	0.50	939.64	939.03		948.73	940.24
809	0.32	0.66	0.32	0.21	5.0	7.35	1.55	1.55	31.42	6.40			0.00	0.00	809	808	PEP	0.012	30	72.14	0.50	0.50	940.50	940.14		950.54	941.13
810	0.21	0.66	0.21	0.14	5.0	7.35	1.02	1.02	31.42	6.40			0.00	0.00	810	809	PEP	0.012	30	37.09	0.50	0.50	941.19	941.00		950.13	941.70
811	2.32	0.66	2.63	1.74	5.1	7.31	11.19	12.69	31.42	6.40			0.00	0.00	811	810	PEP	0.012	30	93.67	0.50	1.25	942.15	941.69		948.43	944.11
812	0.13	0.66	0.13	0.09	5.0	7.35	0.63	0.63	4.95	4.03			0.00	0.00	812	811	PEP	0.012	15	35.50	0.50	N/A	943.58	943.40		948.43	944.15
LINE 1000																											
1001	0.31	0.66	0.31	0.20	5.0	7.35	1.50	1.50	4.95	4.03			0.00	0.00	1001	806	PEP	0.012	15	35.00	0.50	N/A	938.82	938.64		945.85	939.60
LINE 1100																											
1101	0.55	0.66	2.32	1.53	6.0	7.05	2.56	10.79	30.32	17.16	1301		0.17	0.11	1101	803	PEP	0.012	18	127.32	1.10	0.50	945.48	936.44		954.50	947.88
1102	0.34	0.66	1.60	1.06	5.8	7.11	1.60	7.51	13.28	10.82			0.00	0.00	1102	1101	PEP	0.012	15	155.72	3.60	0.50	951.59	945.98		961.72	954.32
1103	0.56	0.66	1.26	0.83	5.6	7.17																					



EROSION AND SEDIMENT CONTROL STAGING CHART

PROJECT STAGE	BMP PLAN REF. NO	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
PRE-CLEARING PHASE A - PRIOR TO LAND DISTURBANCE	1	CONSTRUCTION ENTRANCE & STAGING AREA	D	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY
	2	SILT FENCE WITH WOVEN WIRE FENCING	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	3	EXISTING INLET PROTECTION	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
CONSTRUCTION PHASE B - MASS GRADING	4	SILT FENCE (DURING CONSTRUCTION)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	5	CONCRETE WASHOUT AREA	E	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY
CONSTRUCTION PHASE C - UTILITY CONSTRUCTION	6	INLET PROTECTION (SILT FENCE)	D/E	PLACE SILT FENCE AROUND ALL STORM SEWER STRUCTURES / YARD AREA STORM STRUCTURES TO HAVE SILT FENCE REMOVED ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	7	INLET PROTECTION (GRAVEL FILTER BAGS)	E	BOARDS SHALL BE PLACED IN FRONT OF INLET OPENING FROM THE TIME SILT FENCE IS REMOVED UNTIL SUCH TIME THAT THE CURB / THROAT IS POURED. PLACE GRAVEL FILTER BAGS AT THE OPENING OF ALL CURB INLETS IMMEDIATELY AFTER THE INLET THROATS ARE POURED
FINAL STABILIZATION PHASE D - AFTER PAVING OPERATIONS	8	SEEDING AND MULCHING	E	ALL DISTURBED AREAS AFTER 14 DAYS OF CONSTRUCTION INACTIVITY
				ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED ANY TIME CURRENT MEASURES ARE FOUND TO BE INEFFECTIVE.

LEGEND	
	TEMP. CONSTRUCTION ENTRANCE AND STAGING AREA
	CONCRETE WASHOUT AREA
	SILT FOAM DIKE - STAKED & INSTALL PER MFR'S RECOMMENDATIONS
	BMP PLAN REF. NO.
	SILT FENCE FOR INLET PROTECTION PRIOR TO STRUCTURE TOP
	SILT FENCE WITH WOVEN WIRE FENCING
	SILT FENCE (PRIOR TO LAND DISTURBANCE)
	SILT FENCE (DURING CONSTRUCTION)
	LIMITS OF DISTURBANCE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	GRAVEL FILTER FOR STORM SEWER STRUCTURES ONLY

DISTURBED AREA = 6.27 A.C.

SITE SPECIFIC NOTES:

- 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 AREA.
- NO PART OF THE PROJECT LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBER 29095C0414G DATED JANUARY 20TH, 2017.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED ACCORDING TO THE BMP STAGING CHART.
- ADDITIONAL EROSION CONTROL MAY BE REQUIRED BY THE CITY ENGINEER AT ANY TIME EXISTING MEASURES ARE FOUND TO BE INEFFECTIVE OR PROBLEMATIC AREAS ARE 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 BMP'S. INITIAL STABILIZATION ACTIVITIES MUST BE COMPLETED WITHIN 14 DAYS AFTER SOIL DISTURBING ACTIVITIES CEASE.
- ALL PERIMETER SILT FENCE, EARTH DIKES, SEDIMENT BASINS, AND ROCK CONSTRUCTION ENTRANCES WILL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN.
- 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.

MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.
ELEV. 935.18

PROJECT BENCHMARK:

CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.
NORTHING: 998893.4148
EASTING: 2803318.5413
ELEV. 1004.09

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PREPARED BY:

SCHLAGEL & ASSOCIATES, P.A.

**PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI**

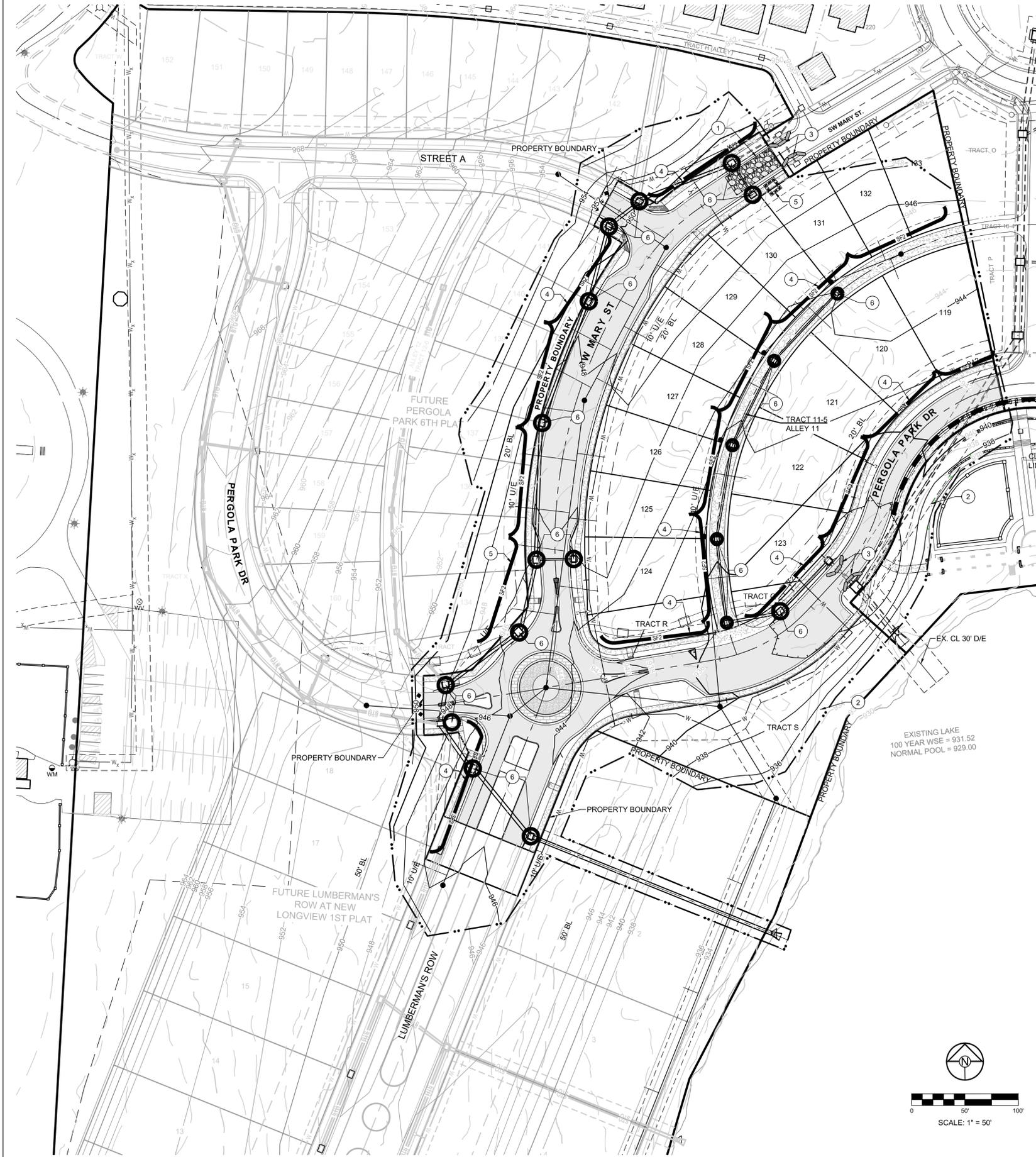
REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

DRAWN BY: BAL	CHECKED BY: MAB	DATE PREPARED: 11-8-2021	PROJ. NUMBER: 20-189
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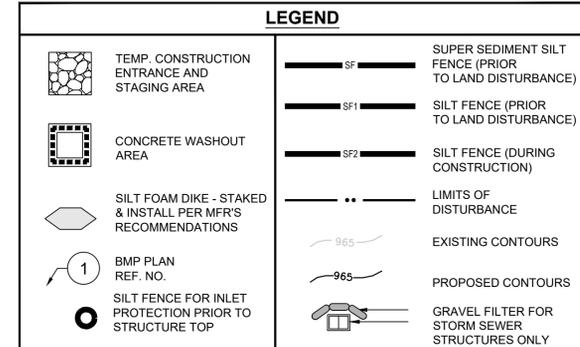
PRE CONSTRUCTION EROSION CONTROL PLAN SHEET

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EROSION AND SEDIMENT CONTROL STAGING CHART				
PROJECT STAGE	BMP PLAN REF. NO	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
A - PRIOR TO LAND DISTURBANCE	1	CONSTRUCTION ENTRANCE & STAGING AREA	D	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY
	2	SILT FENCE WITH WOVEN WIRE FENCING	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	3	EXISTING INLET PROTECTION	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
B - MASS GRADING	4	SILT FENCE (DURING CONSTRUCTION)	E	PLACE WHERE INDICATED, REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	5	CONCRETE WASHOUT AREA	E	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY
C - UTILITY CONSTRUCTION	6	INLET PROTECTION (SILT FENCE)	D/E	PLACE SILT FENCE AROUND ALL STORM SEWER STRUCTURES / YARD AREA STORM STRUCTURES TO HAVE SILT FENCE REMOVED ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	7	INLET PROTECTION (GRAVEL FILTER BAGS)	E	BOARDS SHALL BE PLACED IN FRONT OF INLET OPENING FROM THE TIME SILT FENCE IS REMOVED UNTIL SUCH TIME THAT THE CURB / THROAT IS POURED. PLACE GRAVEL FILTER BAGS AT THE OPENING OF ALL CURB INLETS IMMEDIATELY AFTER THE INLET THROATS ARE POURED
D - AFTER PAVING OPERATIONS	8	SEEDING AND MULCHING	E	ALL DISTURBED AREAS AFTER 14 DAYS OF CONSTRUCTION INACTIVITY
				ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED ANY TIME CURRENT MEASURES ARE FOUND TO BE INEFFECTIVE.
E - UNTIL CLOSURE OF LAND DISTURBANCE PERMIT				

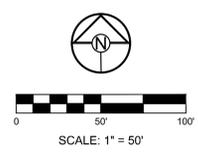


DISTURBED AREA = 6.27 A.C.

SITE SPECIFIC NOTES:

- 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 AREA.
- NO PART OF THE PROJECT LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBER 29095C0414G DATED JANUARY 20TH, 2017.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED ACCORDING TO THE BMP STAGING CHART.
- ADDITIONAL EROSION CONTROL MAY BE REQUIRED BY THE CITY ENGINEER AT ANY TIME EXISTING MEASURES ARE FOUND TO BE INEFFECTIVE OR PROBLEMATIC AREAS ARE 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 BMP'S. INITIAL STABILIZATION ACTIVITIES MUST BE COMPLETED WITHIN 14 DAYS AFTER SOIL DISTURBING ACTIVITIES CEASE.
- ALL PERIMETER SILT FENCE, EARTH DIKES, SEDIMENT BASINS, AND ROCK CONSTRUCTION ENTRANCES WILL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN.
- 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 LAKE
100 YEAR WSE = 931.52
NORMAL POOL = 929.00



MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.

ELEV. 935.18

PROJECT BENCHMARK:

CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.

NORTHING: 988893.4148
EASTING: 2803318.5413
ELEV. 1004.09

REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

DRAWN BY: BAL	CHECKED BY: MAB	DATE PREPARED: 11-8-2021	PROJ. NUMBER: 20-188
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EROSION CONTROL PLAN

SHEET

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EROSION AND SEDIMENT CONTROL STAGING CHART				
PROJECT STAGE	BMP PLAN REF. NO	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
PRE-CLEARING PHASE A - PRIOR TO LAND DISTURBANCE	1	CONSTRUCTION ENTRANCE & STAGING AREA	D	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY
	2	SILT FENCE WITH WOVEN WIRE FENCING	E	PLACE WHERE INDICATED. REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	3	EXISTING INLET PROTECTION	E	PLACE WHERE INDICATED. REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
CONSTRUCTION PHASE B - MASS GRADING C - UTILITY CONSTRUCTION	4	SILT FENCE (DURING CONSTRUCTION)	E	PLACE WHERE INDICATED. REPAIR OR REPLACE AS NECESSARY AND REMOVE ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	5	CONCRETE WASHOUT AREA	E	MAINTAIN, REPAIR, OR REPLACE AS NECESSARY
FINAL STABILIZATION PHASE D - AFTER PAVING OPERATIONS E - UNTIL CLOSURE OF LAND DISTURBANCE PERMIT	6	INLET PROTECTION (SILT FENCE)	D/E	PLACE SILT FENCE AROUND ALL STORM SEWER STRUCTURES / YARD AREA STORM STRUCTURES TO HAVE SILT FENCE REMOVED ONLY WHEN GRADED AREAS HAVE SUFFICIENT GROUND COVER ESTABLISHED
	7	INLET PROTECTION (GRAVEL FILTER BAGS)	E	BOARDS SHALL BE PLACED IN FRONT OF INLET OPENING FROM THE TIME SILT FENCE IS REMOVED UNTIL SUCH TIME THAT THE CURB / THROAT IS POURED. PLACE GRAVEL FILTER BAGS AT THE OPENING OF ALL CURB INLETS IMMEDIATELY AFTER THE INLET THROATS ARE POURED
	8	SEEDING AND MULCHING	E	ALL DISTURBED AREAS AFTER 14 DAYS OF CONSTRUCTION INACTIVITY
				ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED ANY TIME CURRENT MEASURES ARE FOUND TO BE INEFFECTIVE.

LEGEND	
	TEMP. CONSTRUCTION ENTRANCE AND STAGING AREA
	CONCRETE WASHOUT AREA
	SILT FOAM DIKE - STAKED & INSTALL PER MFR'S RECOMMENDATIONS
	BMP PLAN REF. NO.
	SILT FENCE FOR INLET PROTECTION PRIOR TO STRUCTURE TOP
	SUPER SEDIMENT SILT FENCE (PRIOR TO LAND DISTURBANCE)
	SILT FENCE (PRIOR TO LAND DISTURBANCE)
	SILT FENCE (DURING CONSTRUCTION)
	LIMITS OF DISTURBANCE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	GRAVEL FILTER FOR STORM SEWER STRUCTURES ONLY

DISTURBED AREA = 6.27 A.C.

SITE SPECIFIC NOTES:

- 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 AREA.
- NO PART OF THE PROJECT LIES WITHIN THE 100 YEAR FLOOD PLAIN PER FEMA FLOOD INSURANCE RATE MAP NUMBER 29095C0414G DATED JANUARY 20TH, 2017.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED ACCORDING TO THE BMP STAGING CHART.
- ADDITIONAL EROSION CONTROL MAY BE REQUIRED BY THE CITY ENGINEER AT ANY TIME EXISTING MEASURES ARE FOUND TO BE INEFFECTIVE OR PROBLEMATIC AREAS ARE 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 BMP'S. INITIAL STABILIZATION ACTIVITIES MUST BE COMPLETED WITHIN 14 DAYS AFTER SOIL DISTURBING ACTIVITIES CEASE.
- ALL PERIMETER SILT FENCE, EARTH DIKES, SEDIMENT BASINS, AND ROCK CONSTRUCTION ENTRANCES WILL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN.
- 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.

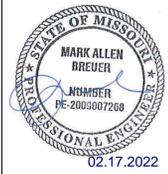
MISSOURI GEOGRAPHIC REFERENCE SYSTEM BENCH MARK:

BM JA-148, IS A STAMPED KC METRO DISK SET IN CONCRETE LOCATED 2 MILES WEST OF THE INTERSECTION OF HIGHWAY 50 AND 3RD ST. IT IS 44 FT NORTH OF THE CENTER OF 3RD ST. AND 102.5 FT WEST OF THE CENTER OF THE EXIT FROM THE ADJACENT PARKING LOT.
ELEV. 935.18

PROJECT BENCHMARK:

CHISELED "SQUARE" ON STORM CURB INLET AT NORTHWEST INTERSECTION OF SW. TOWER PARK DRIVE AND SW. LONGVIEW BOULEVARD.
NORTHING: 988893.4148
EASTING: 2803318.5413
ELEV. 1004.09

PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

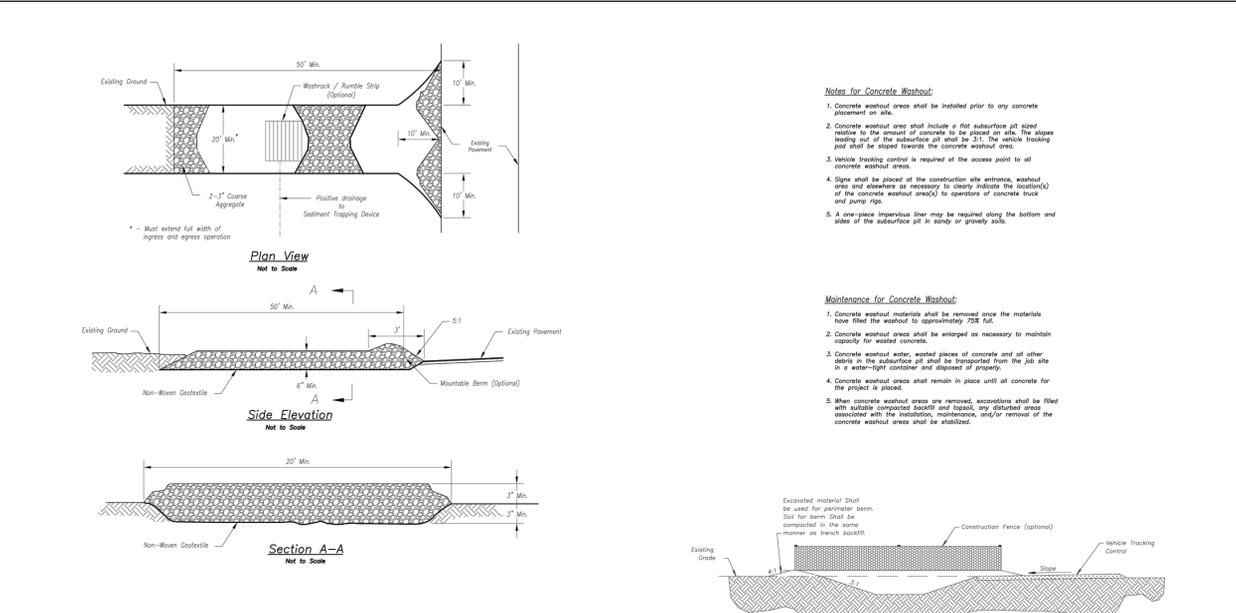
**PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI**

REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

DRAWN BY:	CHECKED BY:	DATE PREPARED:	PROJ. NUMBER:
BAL	MAB	11-8-2021	20-189

POST CONSTRUCTION EROSION CONTROL

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Notes for Concrete Washout:

- Concrete washout areas shall be installed prior to any concrete placement on site.
- Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slope leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be placed towards the concrete washout area.
- Vehicle tracking control is required at the access point to all concrete washout areas.
- Slope shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
- A one-piece impervious door may be required along the bottom and sides of the subsurface pit in ramp or gravity walk.

Maintenance for Concrete Washout:

- Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
- Concrete washout areas shall be enlarged as necessary to maintain capacity for washed concrete.
- Concrete washout water, washed pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a weather-tight container and disposed of properly.
- Concrete washout areas shall remain in place until all concrete for the project is placed.
- When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topped, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.

Notes for Construction Entrance:

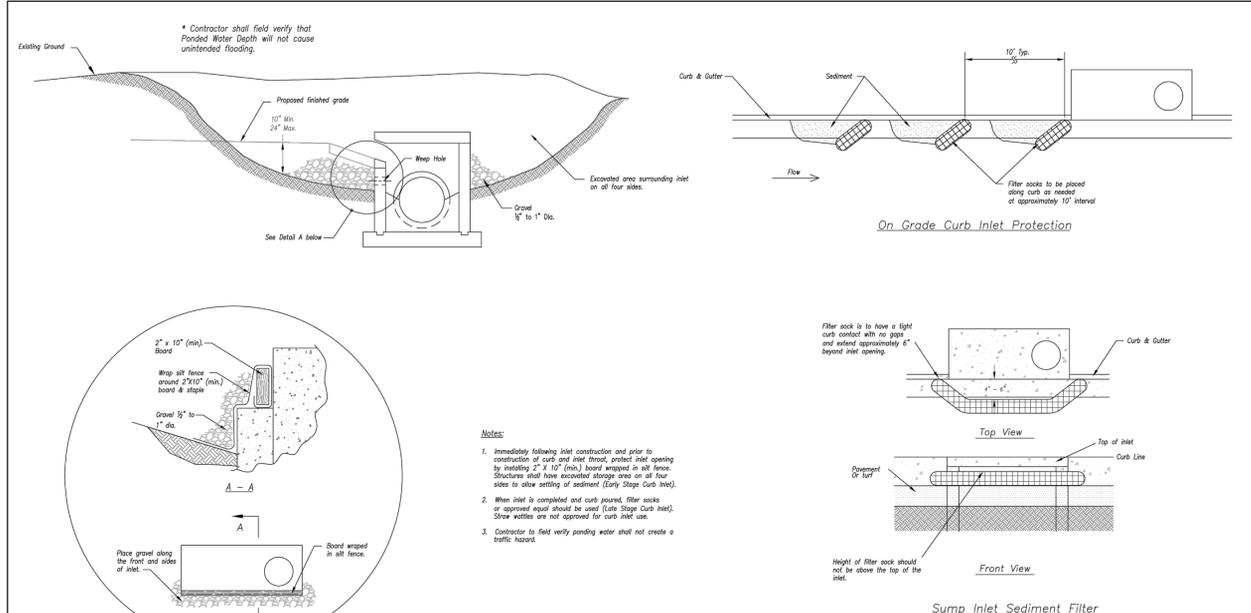
- Avoid loading on steep slopes, at curves on public roads, or downhills of disturbed areas.
- Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
- If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 3:1 V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
- Install pipe under the entrance if needed to maintain drainage distance along public roads.
- Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
- Divert all surface runoff and drainage from the entrance to a sediment control device.
- If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

- Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION
 KANSAS CITY METRO CHAPTER
 STANDARD DRAWING NUMBER ESC-01
 ADOPTED: 10/24/2016



* Contractor shall field verify that Ponded Water Depth will not cause unintended flooding.

Notes:

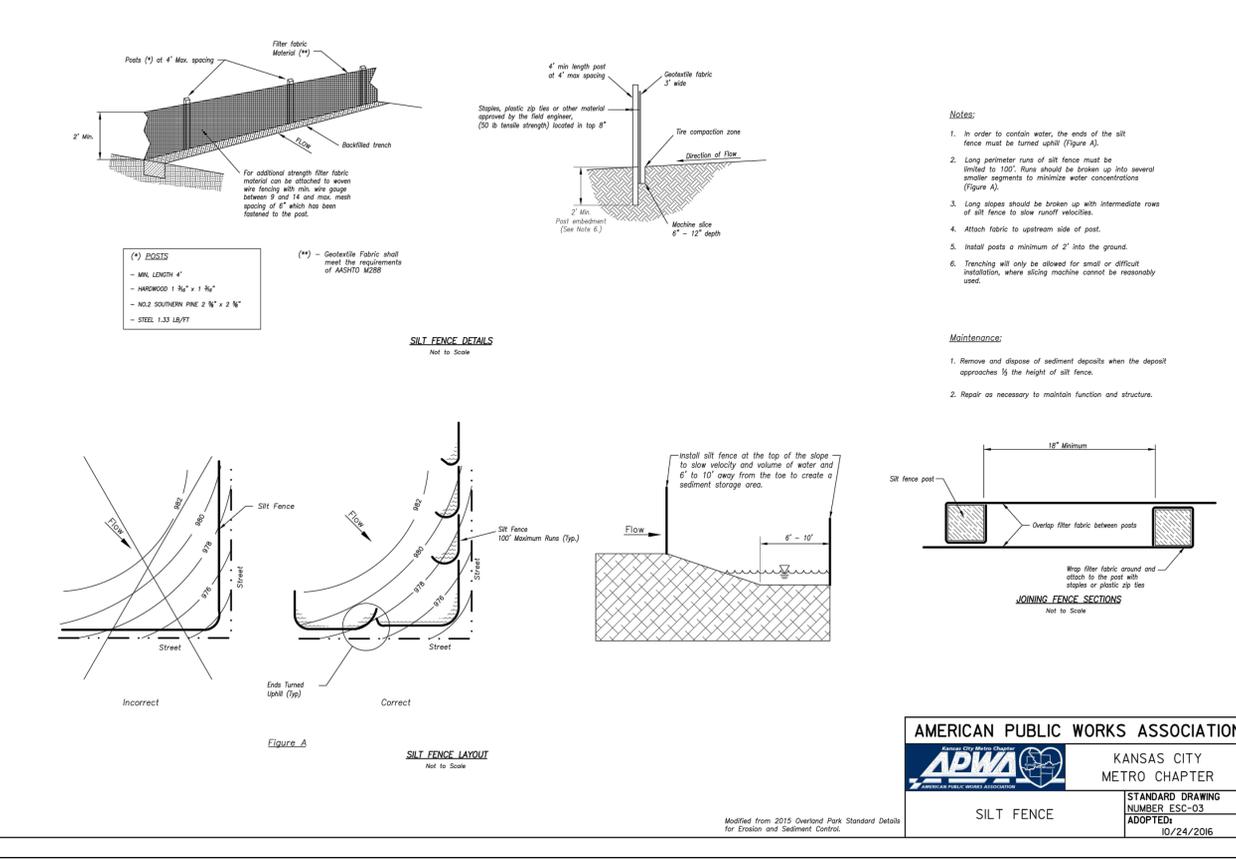
- Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2' x 10' (min.) board wrapped in silt fence. Structure shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
- When inlet is completed and curb poured, filter socks or approved equal should be used (Late Stage Curb Inlet). Straw wattles are not approved for curb inlet use.
- Contractor shall field verify ponding water shall not create a traffic hazard.

Maintenance:

- Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
- Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
- Repair or replace as necessary to maintain function and integrity of installation.

CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION
 KANSAS CITY METRO CHAPTER
 STANDARD DRAWING NUMBER ESC-06
 ADOPTED: 10/24/2016



Notes:

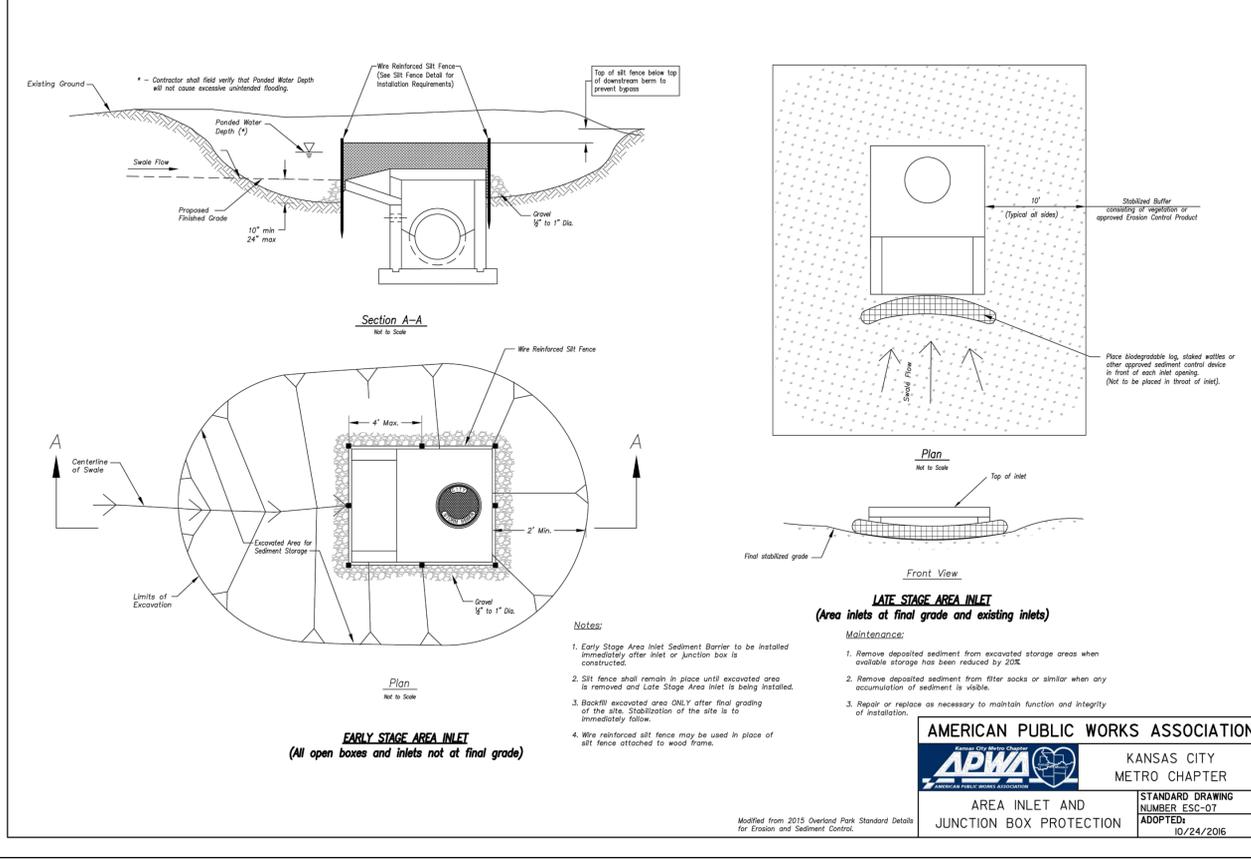
- In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
- Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
- Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
- Attach fabric to upstream side of post.
- Install posts a minimum of 2' into the ground.
- Trenching will only be allowed for small or difficult installation, where sloping machine cannot be reasonably used.

Maintenance:

- Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of silt fence.
- Repair as necessary to maintain function and structure.

CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION
 KANSAS CITY METRO CHAPTER
 STANDARD DRAWING NUMBER ESC-03
 ADOPTED: 10/24/2016



* Contractor shall field verify that Ponded Water Depth will not cause excessive unintended flooding.

Notes:

- Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
- Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
- Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
- Wire reinforced silt fence may be used in place of silt fence attached to wood frame.

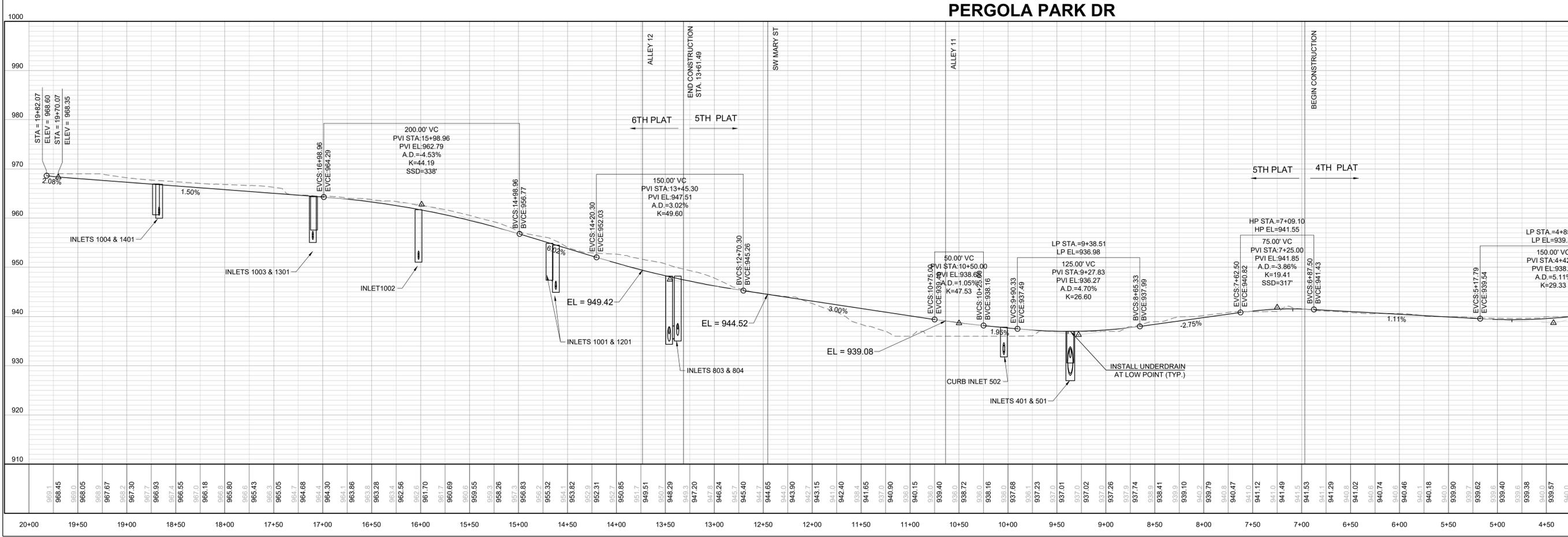
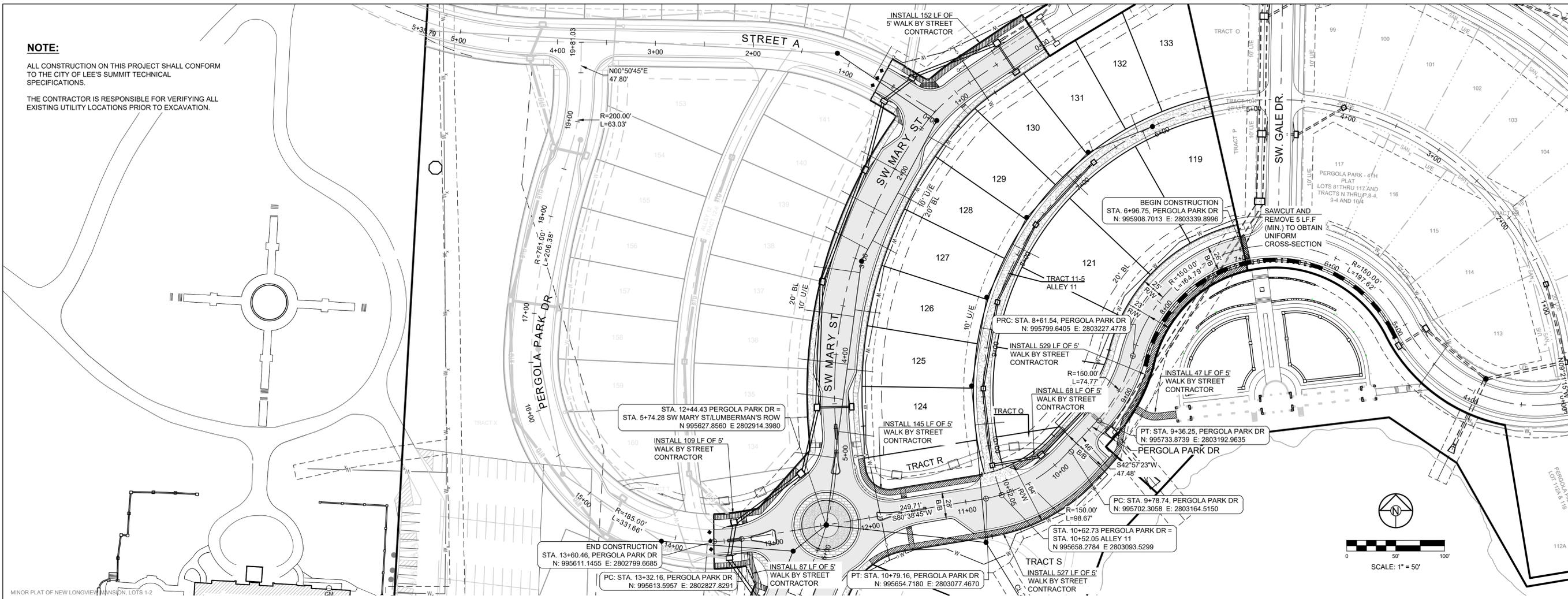
Maintenance:

- Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
- Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
- Repair or replace as necessary to maintain function and integrity of installation.

CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION
 KANSAS CITY METRO CHAPTER
 STANDARD DRAWING NUMBER ESC-07
 ADOPTED: 10/24/2016

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PREPARED BY:

 02.17.2022
 SCHLAGEL & ASSOCIATES, P.A.

**PERGOLA PARK 5TH PLAT
 STREET, STORMWATER, MASTER DRAINAGE
 PLAN & EROSION AND SEDIMENT CONTROL**
 - LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
2-4-22	

DRAWN BY:	CHECKED BY:	DATE PREPARED:	PROJ. NUMBER:
BAL	MAB	11-8-2021	20-189

**PERGOLA PARK
 DR PLAN &
 PROFILE**

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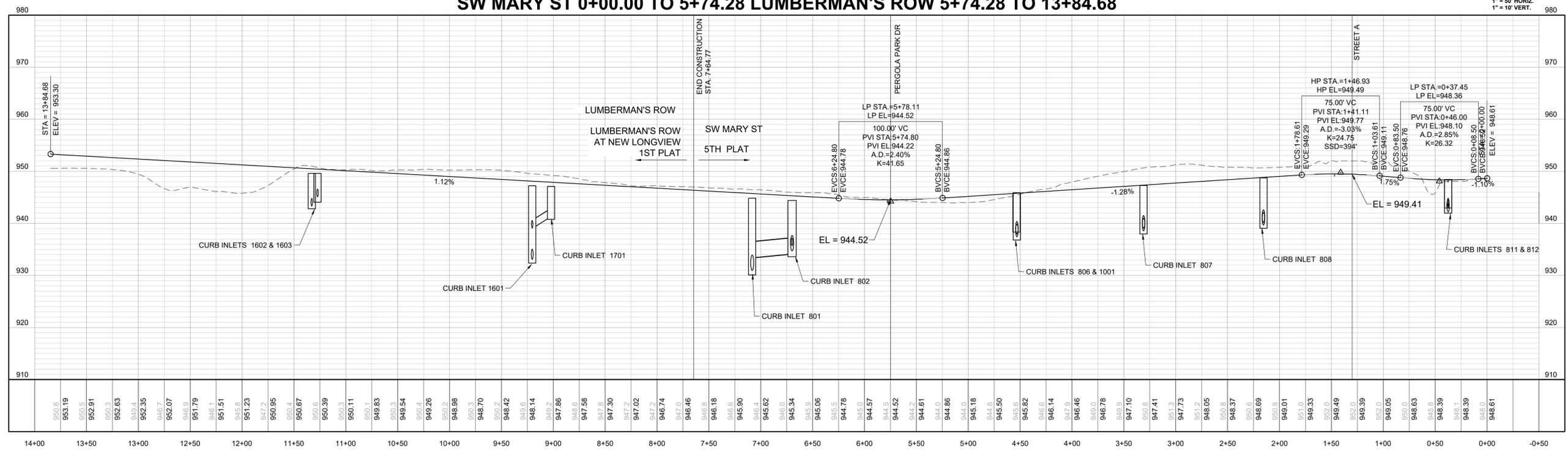
REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

DRAWN BY: BAL	CHECKED BY: MAB	DATE PREPARED: 11-8-2021	PROJ. NUMBER: 20-188
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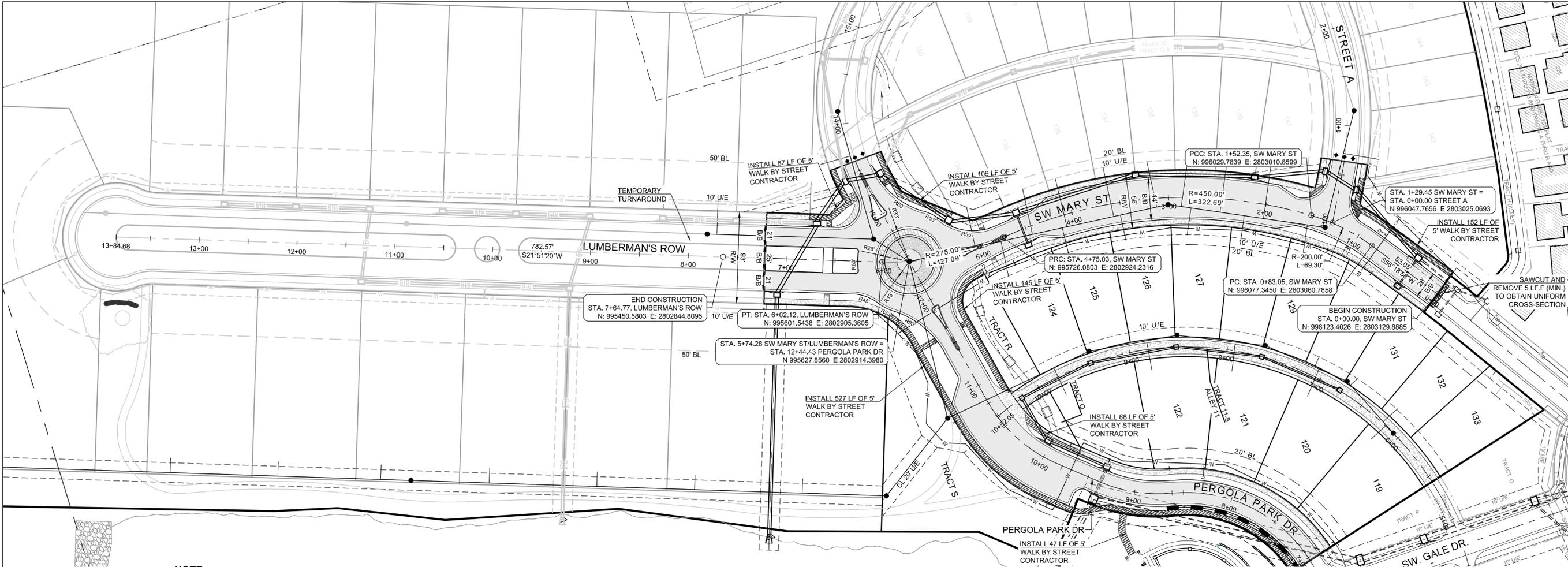
SW MARY ST PLAN & PROFILE	
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SHEET
13

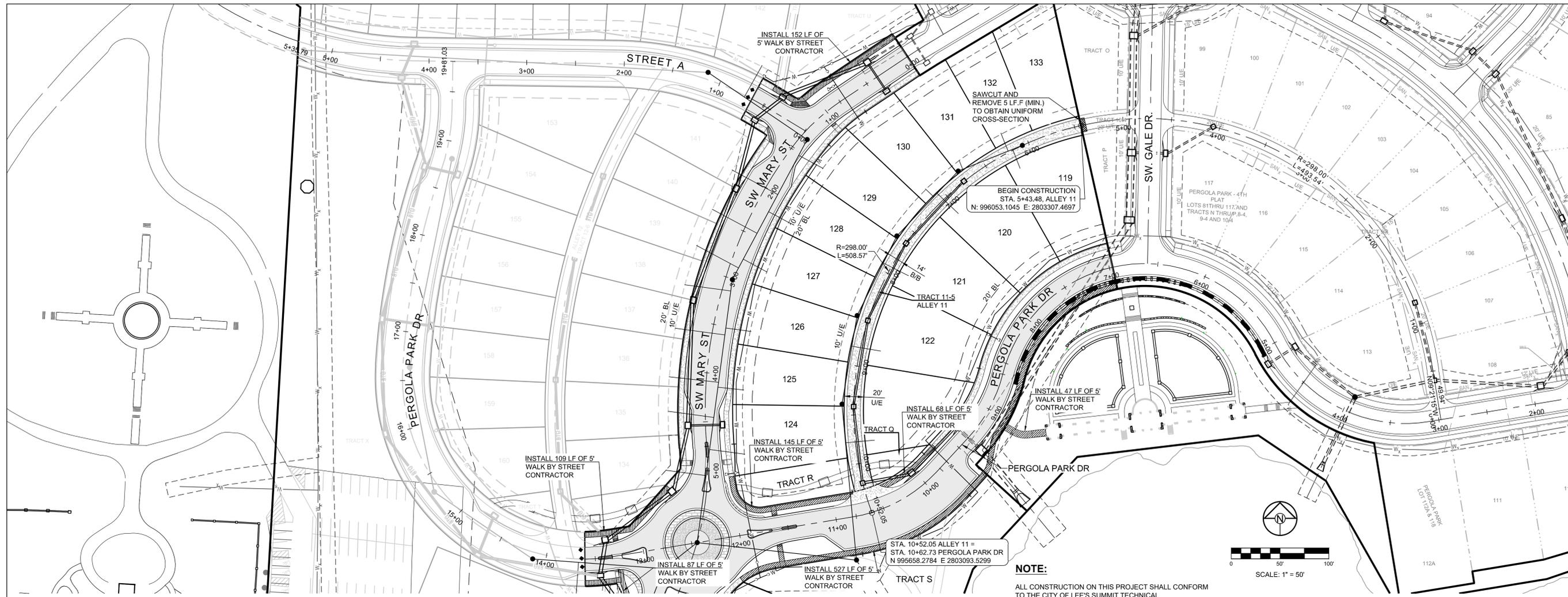
SW MARY ST 0+00.00 TO 5+74.28 LUMBERMAN'S ROW 5+74.28 TO 13+84.68



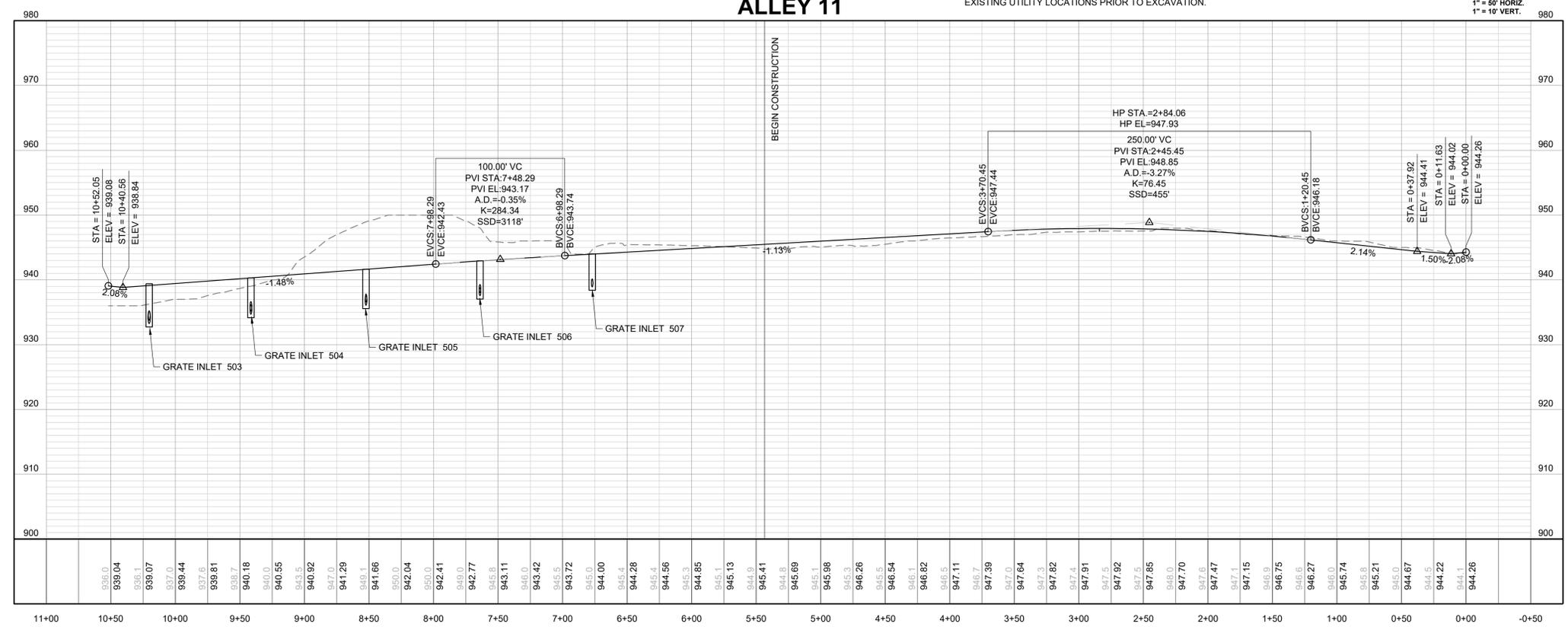
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ALLEY 11



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PREPARED BY:

 MARK ALLEN BREUER
 MEMBER
 PROFESSIONAL ENGINEER
 02.17.2022

SCHLAGEL & ASSOCIATES, P.A.

PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
 - LEE'S SUMMIT, MISSOURI

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2-4-22	CITY COMMENTS

DRAWN BY: BAL	CHECKED BY: MAB	DATE PREPARED: 11-8-2021	PROJ. NUMBER: 20-189
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ALLEY 11 PLAN & PROFILE

SHEET **14**

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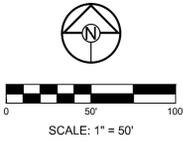
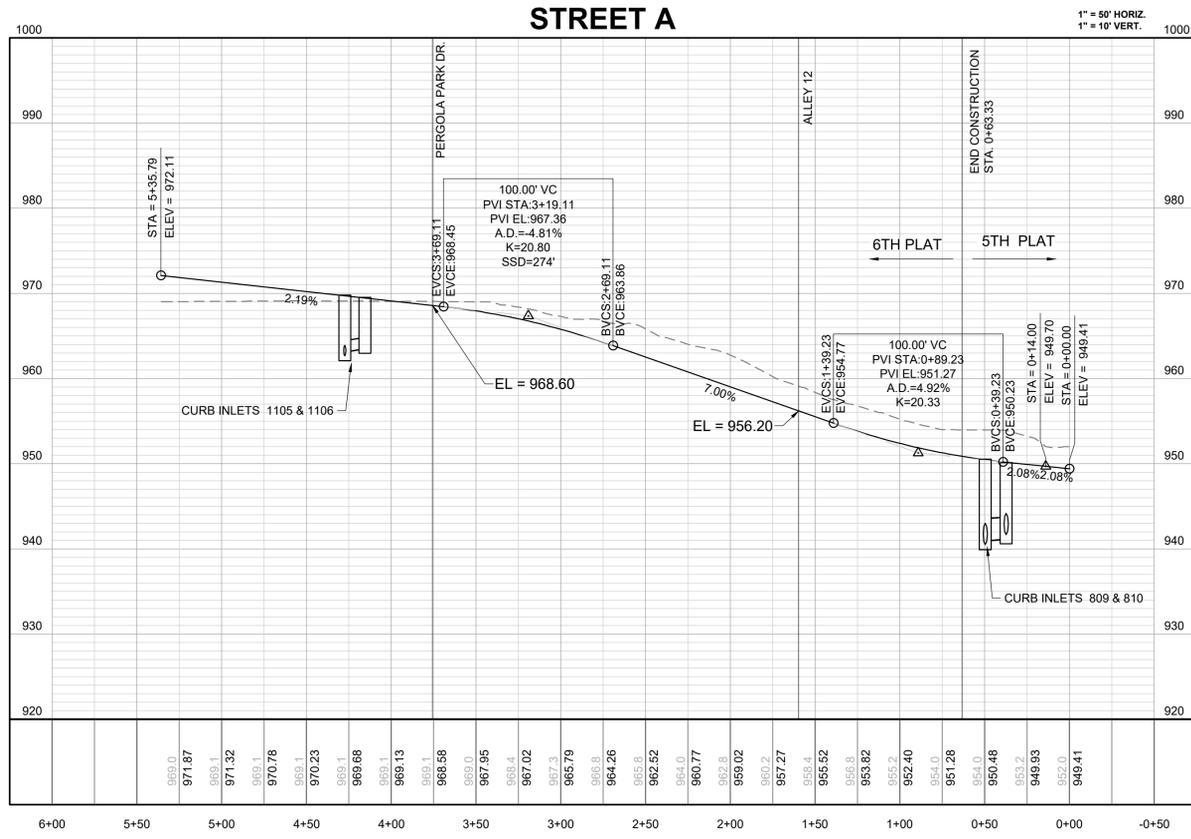
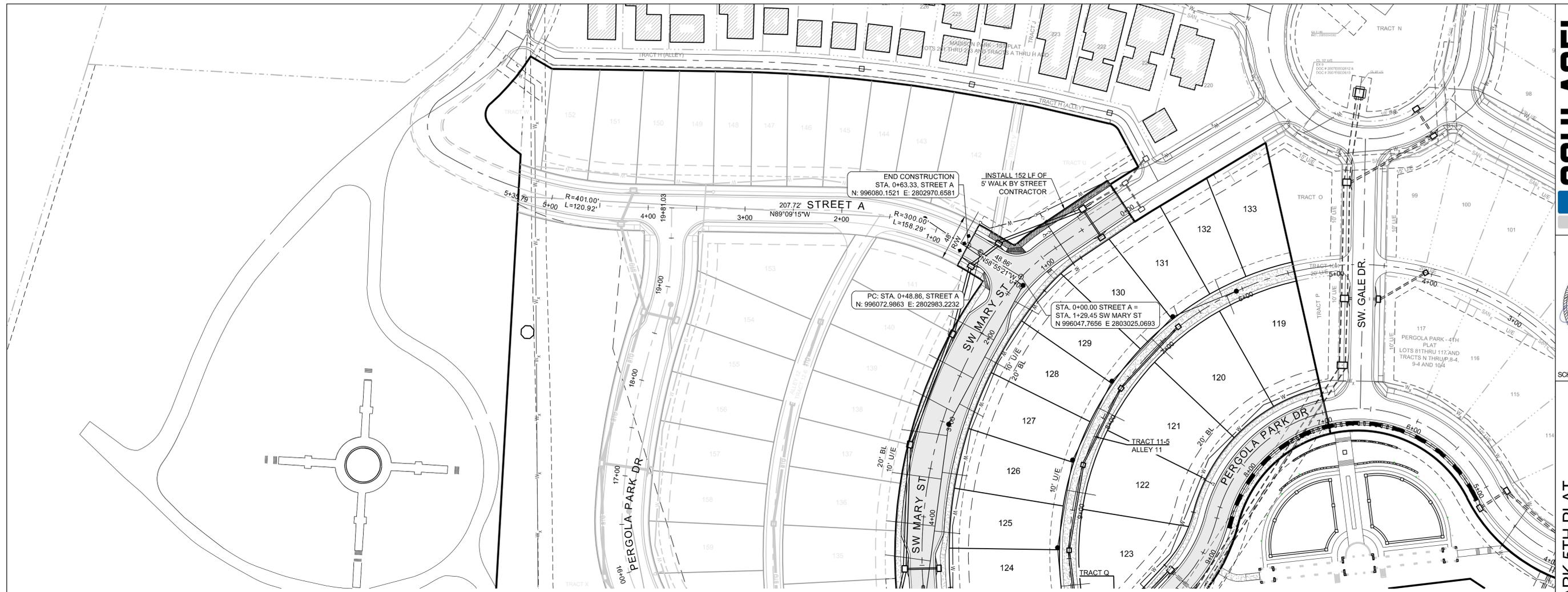
PREPARED BY:



02.17.2022

SCHLAGEL & ASSOCIATES, P.A.

**PERGOLA PARK 5TH PLAT
 STREET, STORMWATER, MASTER DRAINAGE
 PLAN & EROSION AND SEDIMENT CONTROL
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SHEET	
15	

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**PERGOLA PARK 5TH PLAT
 STREET, STORMWATER, MASTER DRAINAGE
 PLAN & EROSION AND SEDIMENT CONTROL
 - LEE'S SUMMIT, MISSOURI**

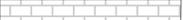
REVISION	DATE	DESCRIPTION
1	2-4-22	CITY COMMENTS

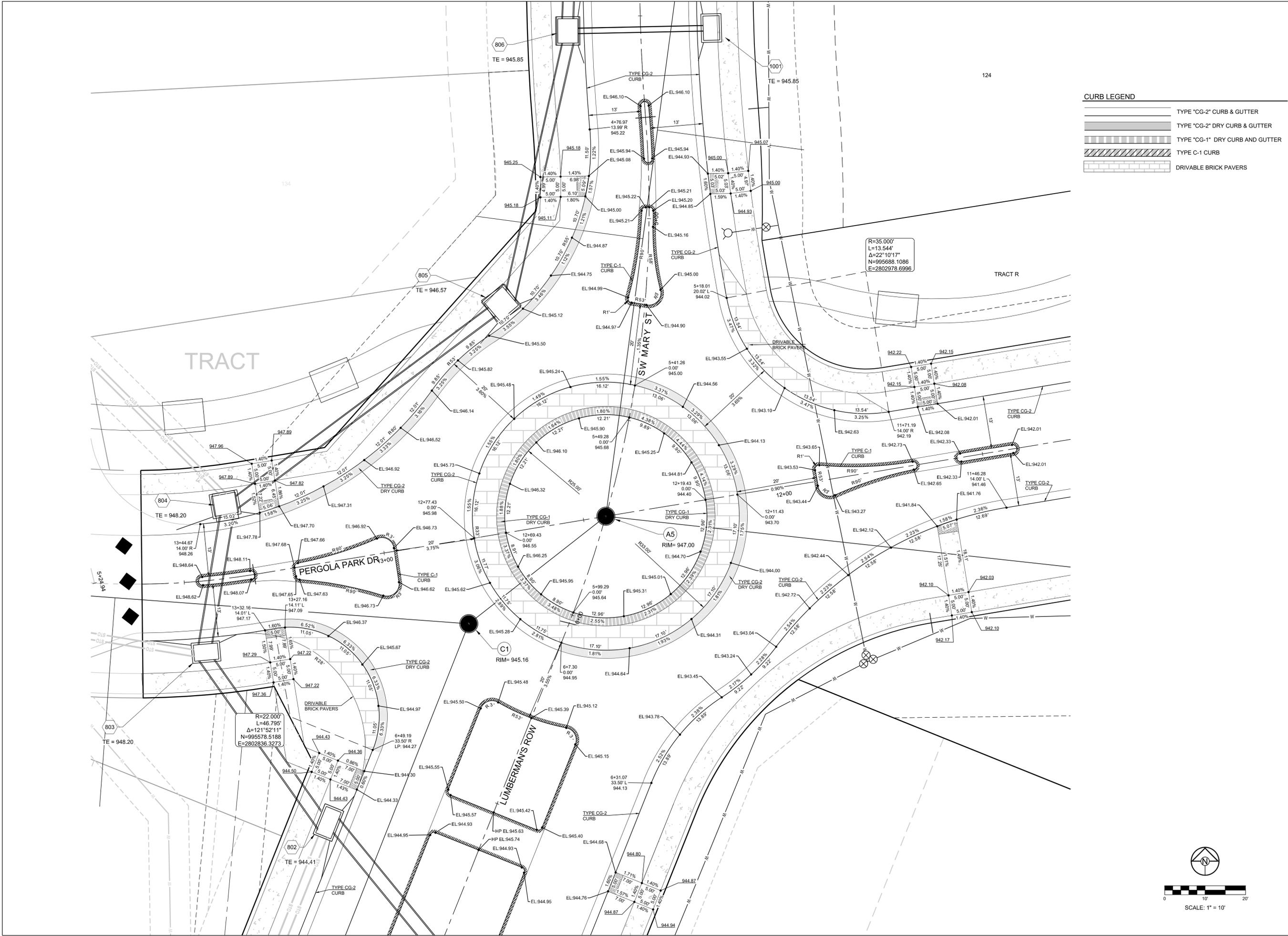
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DATE PREPARED:	11-8-2021
PROJ. NUMBER:	20-189

ROUNDABOUT INTERSECTION DETAIL

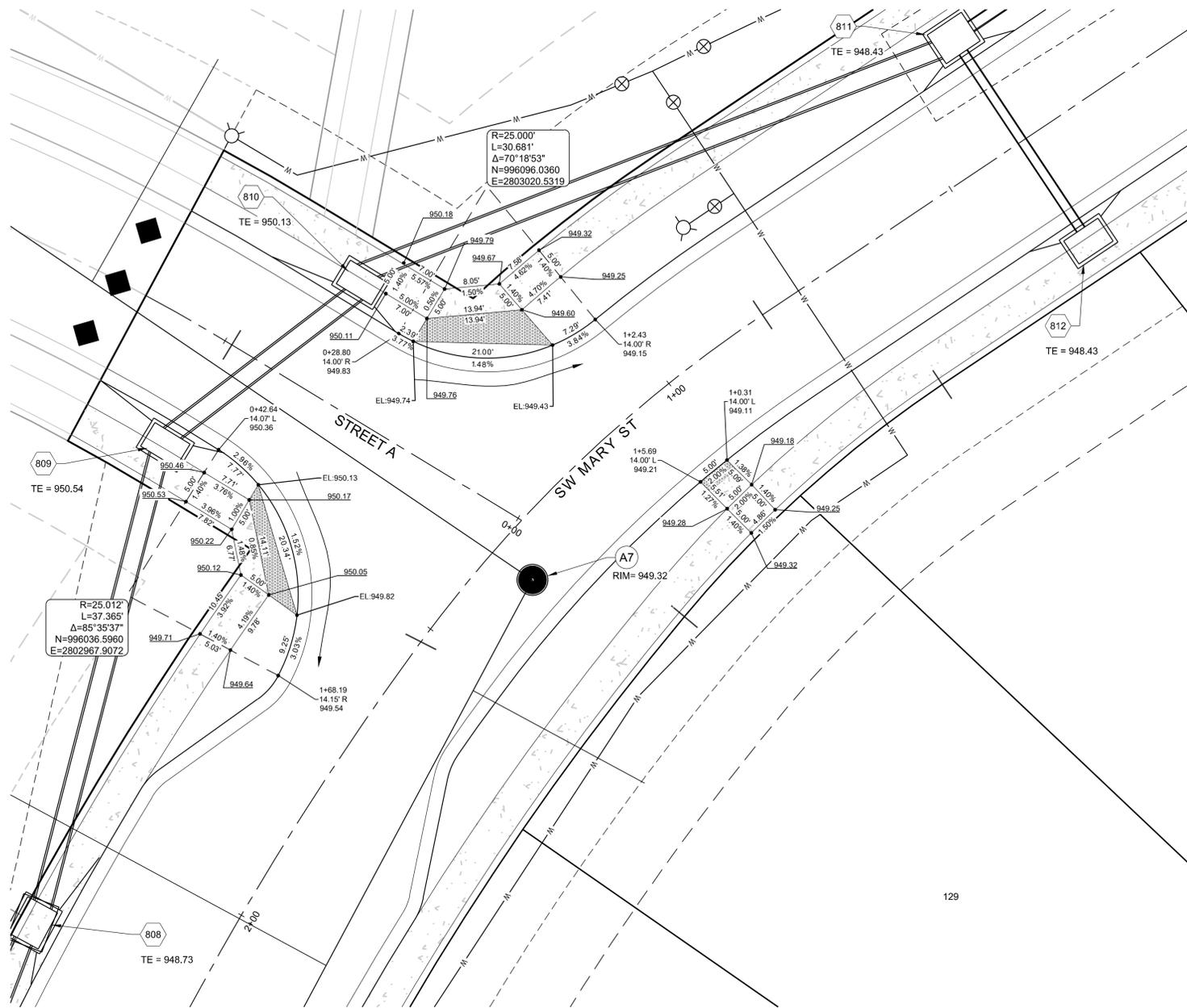
SHEET **16**

CURB LEGEND

	TYPE "CG-2" CURB & GUTTER
	TYPE "CG-2" DRY CURB & GUTTER
	TYPE "CG-1" DRY CURB AND GUTTER
	TYPE C-1 CURB
	DRIVABLE BRICK PAVERS

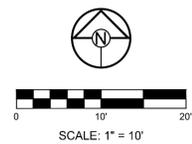


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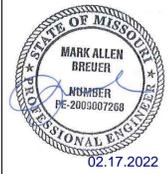


CURB LEGEND

	TYPE "CG-2" CURB & GUTTER
	TYPE "CG-2" DRY CURB & GUTTER
	TYPE "CG-1" DRY CURB AND GUTTER
	TYPE C-1 CURB
	DRIVABLE BRICK PAVERS



PREPARED BY:



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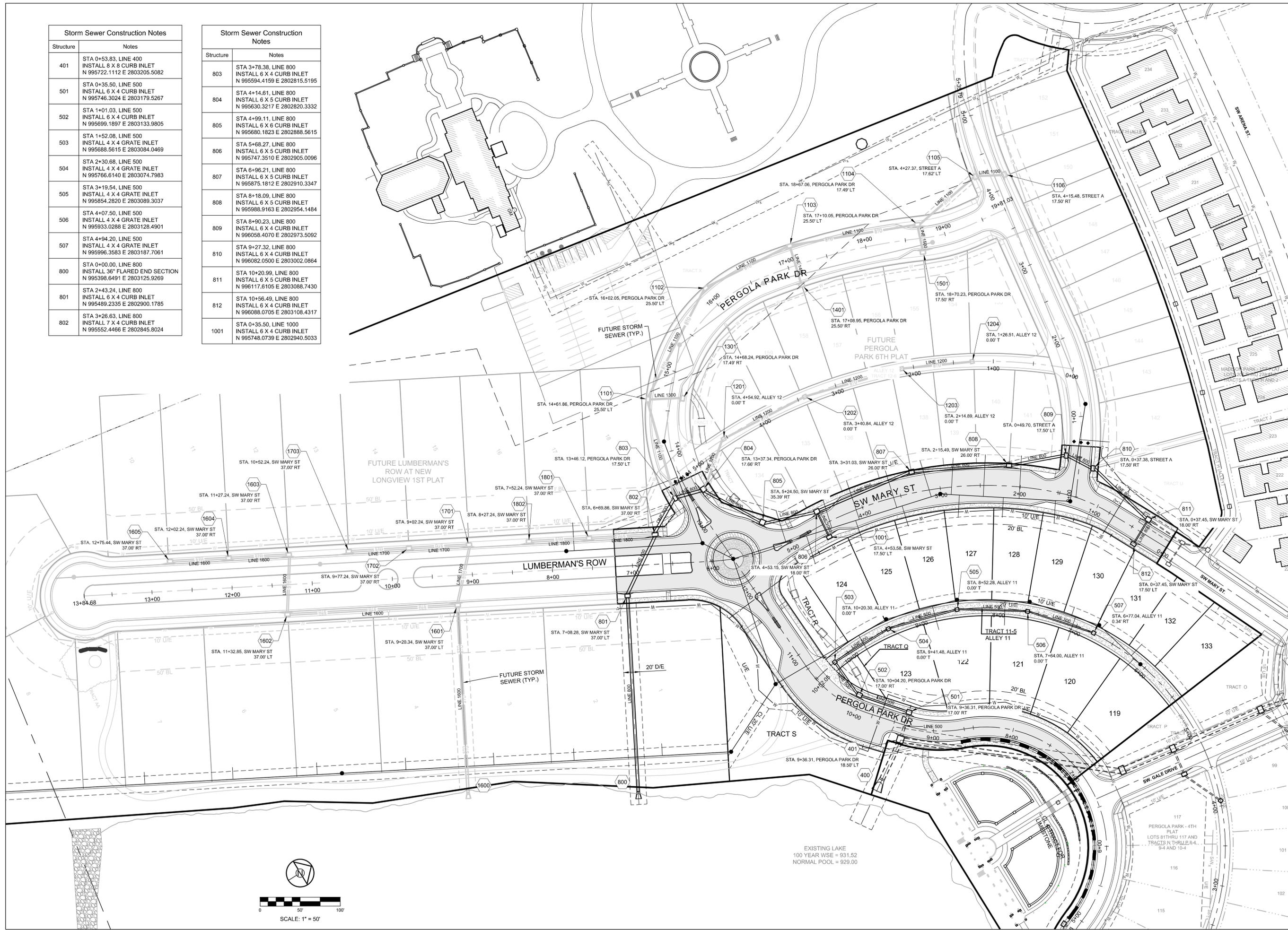
STREET A
 INTERSECTION
 DETAIL SHEET

SHEET
18

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Structure	Notes
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501	STA 0+35.50, LINE 500 INSTALL 6 X 4 CURB INLET N 995746.3024 E 2803179.5267
502	STA 1+01.03, LINE 500 INSTALL 6 X 4 CURB INLET N 995699.1897 E 2803133.9805
503	STA 1+52.08, LINE 500 INSTALL 4 X 4 GRATE INLET N 995688.5615 E 2803084.0469
504	STA 2+30.68, LINE 500 INSTALL 4 X 4 GRATE INLET N 995766.6140 E 2803074.7983
505	STA 3+19.54, LINE 500 INSTALL 4 X 4 GRATE INLET N 995854.2820 E 2803089.3037
506	STA 4+07.50, LINE 500 INSTALL 4 X 4 GRATE INLET N 995933.0288 E 2803128.4901
507	STA 4+94.20, LINE 500 INSTALL 4 X 4 GRATE INLET N 995996.3583 E 2803187.7061
800	STA 0+00.00, LINE 800 INSTALL 36" FLARED END SECTION N 995398.6491 E 2803125.9269
801	STA 2+43.24, LINE 800 INSTALL 6 X 4 CURB INLET N 995489.2335 E 2802900.1785
802	STA 3+26.63, LINE 800 INSTALL 7 X 4 CURB INLET N 995552.4466 E 2802845.8024

Structure	Notes
803	STA 3+78.38, LINE 800 INSTALL 6 X 4 CURB INLET N 995594.4159 E 2802815.5195
804	STA 4+14.61, LINE 800 INSTALL 6 X 5 CURB INLET N 995630.3217 E 2802820.3332
805	STA 4+99.11, LINE 800 INSTALL 6 X 6 CURB INLET N 995680.1823 E 2802888.5615
806	STA 5+68.27, LINE 800 INSTALL 6 X 5 CURB INLET N 995747.3510 E 2802905.0096
807	STA 6+96.21, LINE 800 INSTALL 6 X 5 CURB INLET N 995875.1812 E 2802910.3347
808	STA 8+18.09, LINE 800 INSTALL 6 X 5 CURB INLET N 995986.9163 E 2802954.1484
809	STA 8+90.23, LINE 800 INSTALL 6 X 4 CURB INLET N 996058.4070 E 2802973.5092
810	STA 9+27.32, LINE 800 INSTALL 6 X 4 CURB INLET N 996082.0500 E 2803002.0864
811	STA 10+20.99, LINE 800 INSTALL 6 X 5 CURB INLET N 996117.6105 E 2803088.7430
812	STA 10+56.49, LINE 800 INSTALL 6 X 4 CURB INLET N 996088.0705 E 2803108.4317
1001	STA 0+35.50, LINE 1000 INSTALL 6 X 4 CURB INLET N 995748.0739 E 2802940.5033



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PREPARED BY:
MARK ALLEN BREUER
MEMBER
PROFESSIONAL ENGINEER
02.17.2022
SCHLAGEL & ASSOCIATES, P.A.

**PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI**

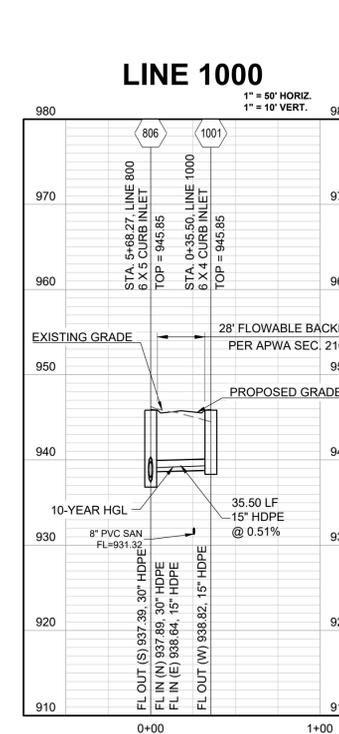
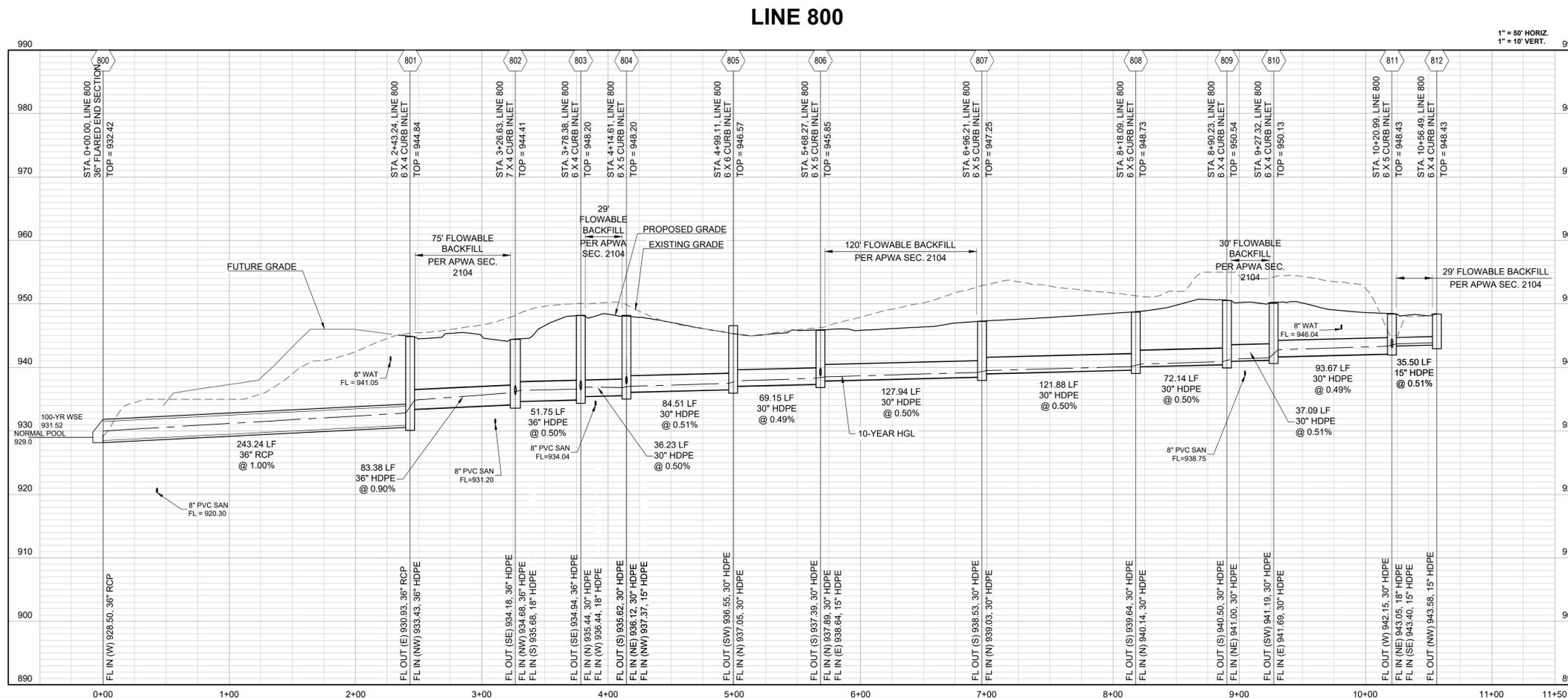
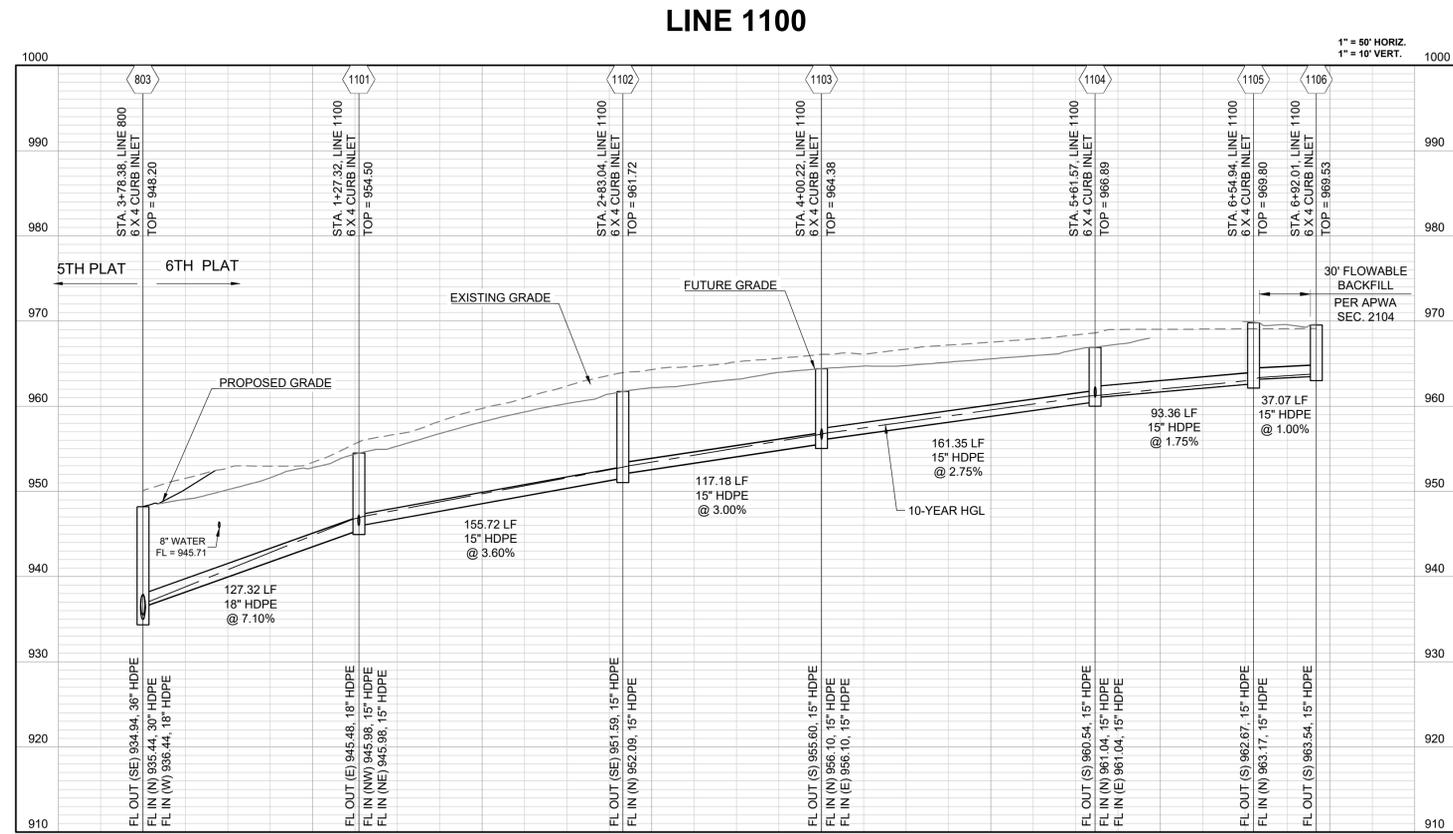
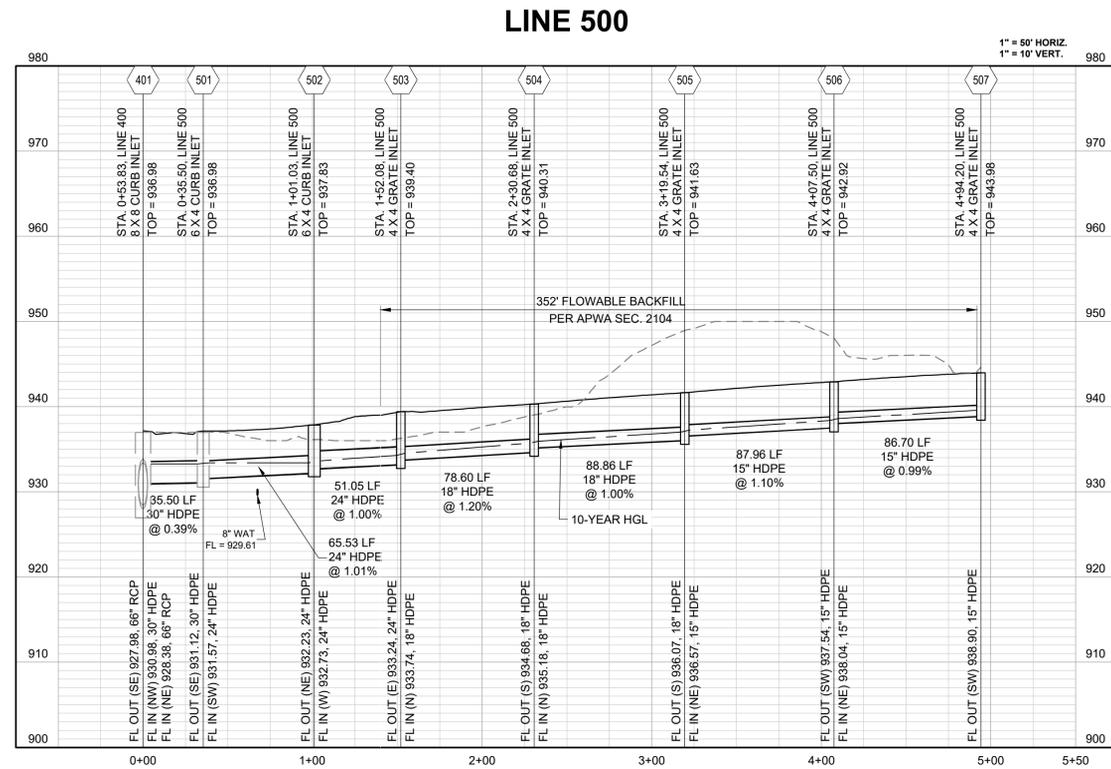
REVISION	DATE	DESCRIPTION
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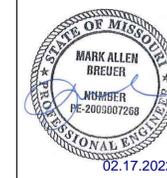
STORM PLAN

SHEET
19

I:\PROJECTS\2020\20-188\3.0 DWG Plans\6.0 SS\20-188-SS-STORM PP.dwg, 2/12/2022, 4:43:51 PM, 1:1



PREPARED BY:



SCHLAGEL & ASSOCIATES, P.A.

**PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI**

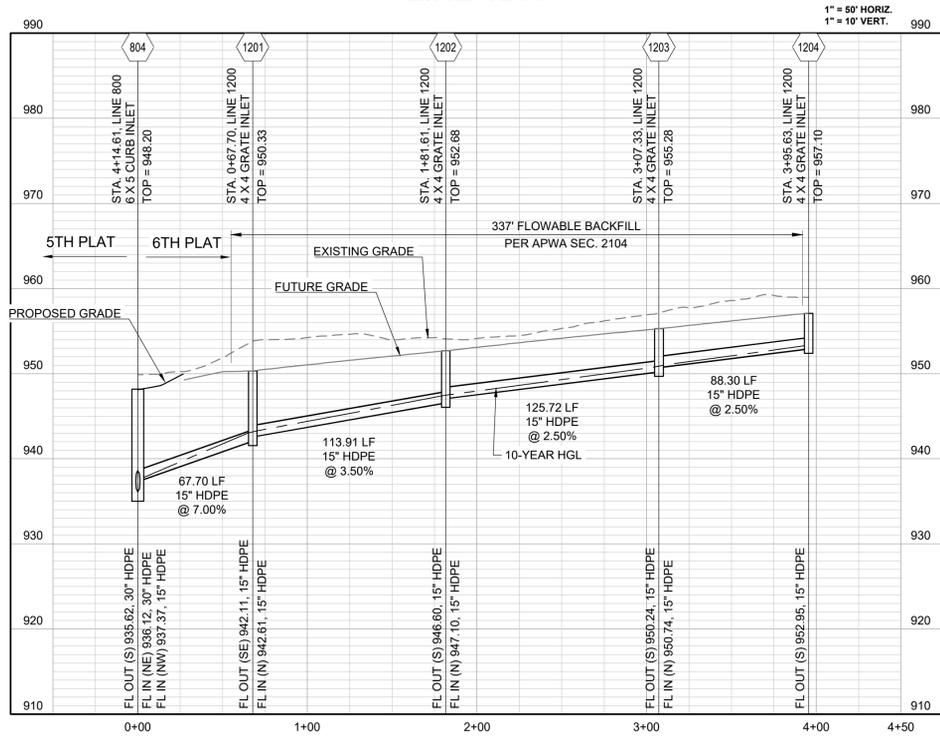
REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

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CHECKED BY:	MAB
DATE PREPARED:	11-8-2021
PROJ. NUMBER:	20-189

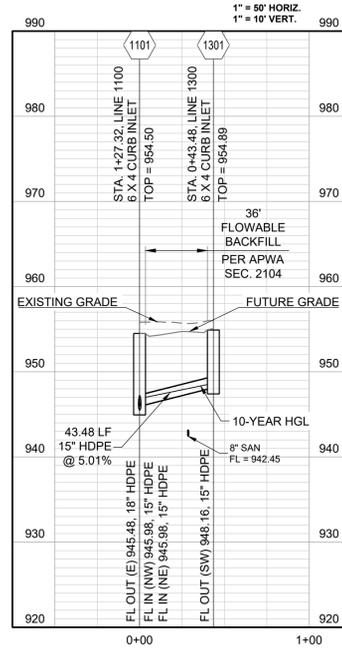
**STORM
PROFILES**

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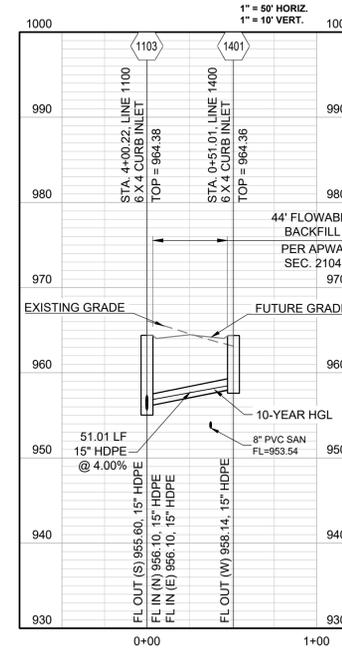
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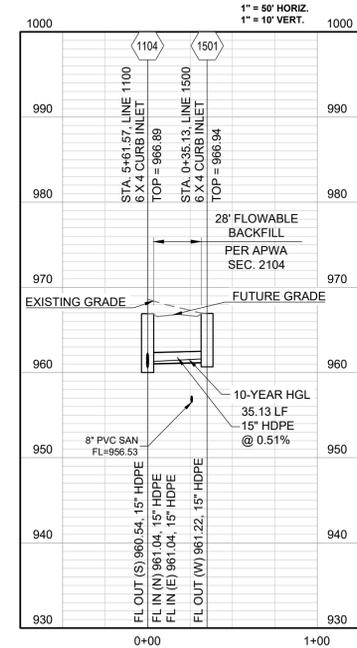
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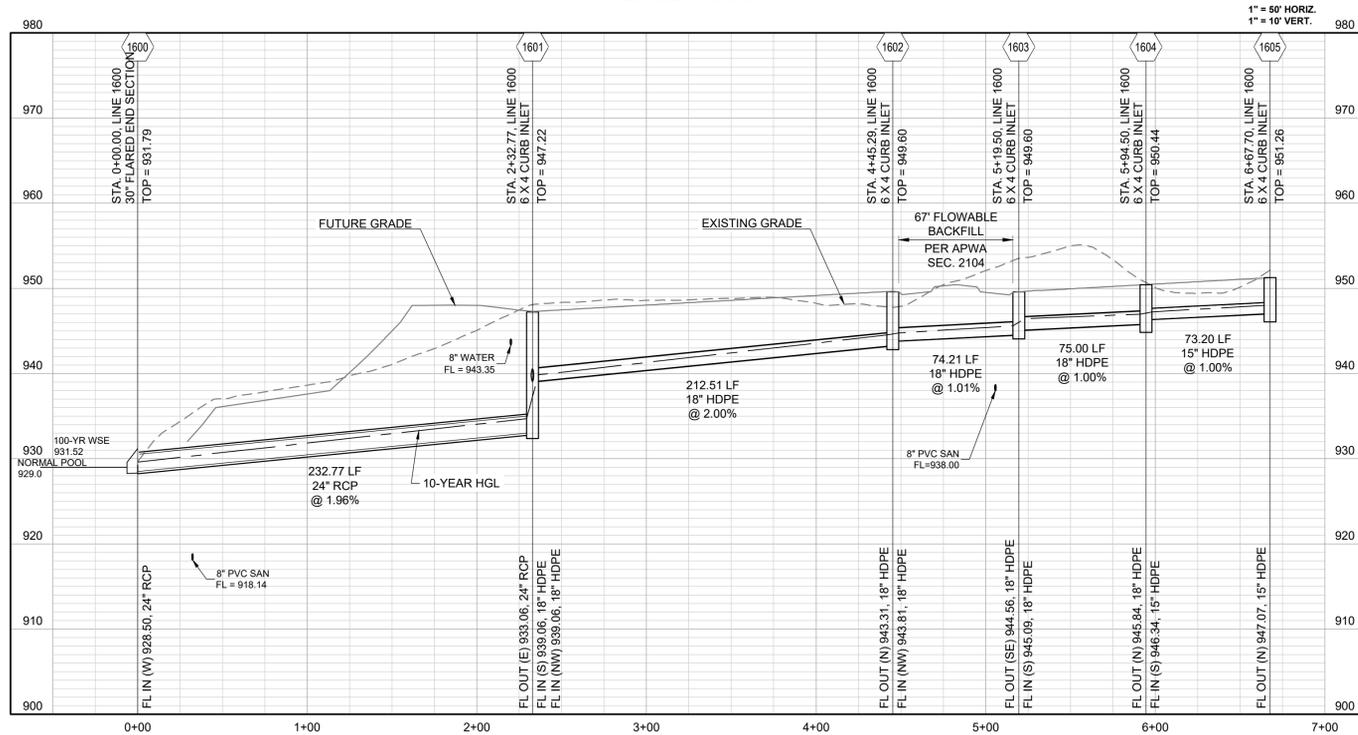
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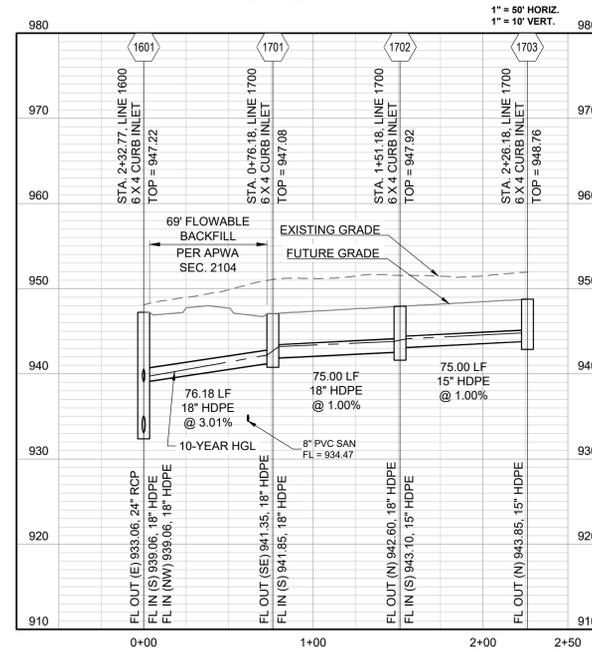
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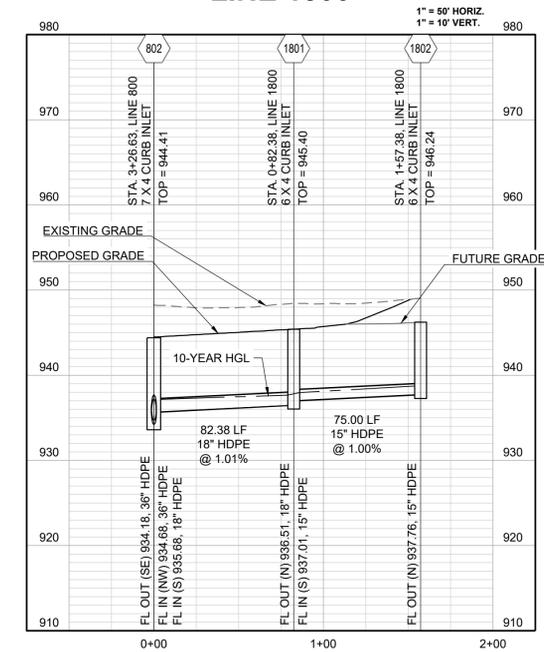
LINE 1600



LINE 1700



LINE 1800



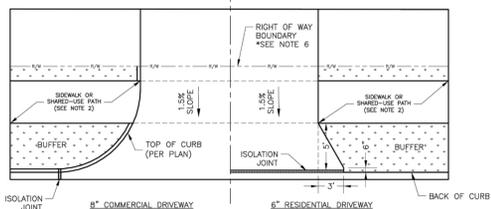
**PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI**

REVISION	DATE	DESCRIPTION
1	2-4-22	CITY COMMENTS

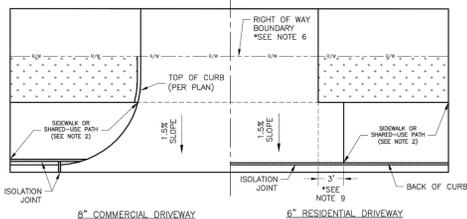
DRAWN BY:	BAL
CHECKED BY:	MAB
DATE PREPARED:	11-8-2021
PROJ. NUMBER:	20-188

**STORM
PROFILES CONT**

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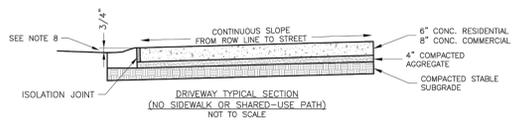


DRIVEWAY WITH BUFFER
NOT TO SCALE

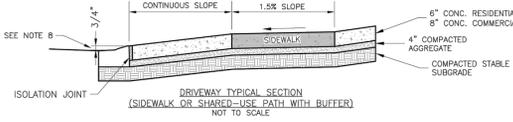


DRIVEWAY WITHOUT BUFFER
NOT TO SCALE

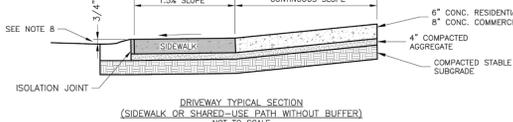
- GENERAL NOTES**
- SUBGRADE SHALL BE STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
 - ALL DRIVE APPROACHES SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG) FOR SLOPE REQUIREMENTS WHEN SIDEWALK IS REQUIRED (SEE ADA RAMP RETROFIT 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.



DRIVEWAY TYPICAL SECTION
(NO SIDEWALK OR SHARED-USE PATH)
NOT TO SCALE



DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITH BUFFER)
NOT TO SCALE

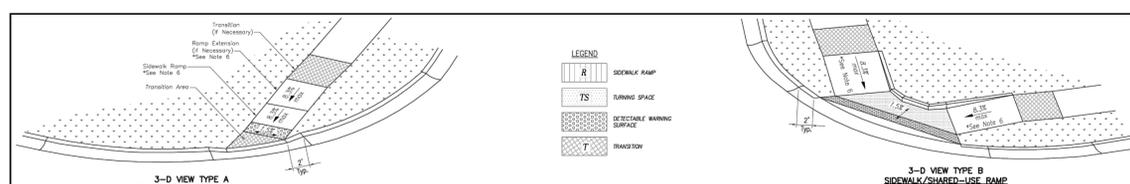


DRIVEWAY TYPICAL SECTION
(SIDEWALK OR SHARED-USE PATH WITHOUT BUFFER)
NOT TO SCALE

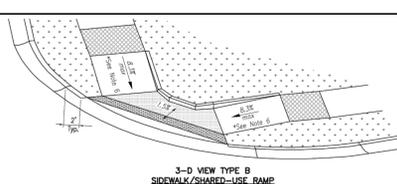
LEE'S SUMMIT
MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

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

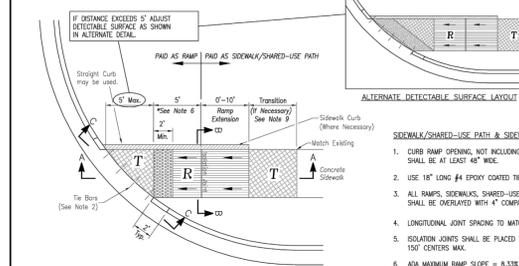
GEN-1



3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP



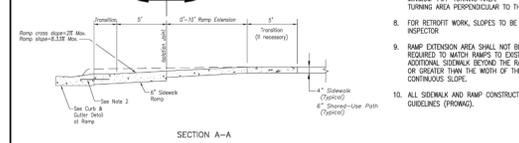
3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP



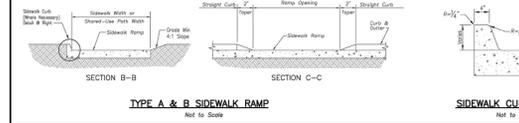
TYPE A SIDEWALK/SHARED-USE RAMP
NOT TO SCALE

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 TIE BARS @ 24" O.C. EMBED THE BARS 9" 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 150' CENTERS MAX.
- ADA MAXIMUM RAMP SLOPE = 8.33%
ADA MAXIMUM CROSS SLOPE = 2.08%
- ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% 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 CURBS.
- 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 ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO 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).



SECTION A-A



TYPE A & B SIDEWALK RAMP
NOT TO SCALE

SIDEWALK CURB DETAIL
NOT TO SCALE

CONTRACTION JOINT
NOT TO SCALE

ISOLATION JOINT
NOT TO SCALE

CURB & GUTTER DETAIL AT RAMP
NOT TO SCALE

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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
ADA RAMP RETROFIT DETAIL

GEN-3A

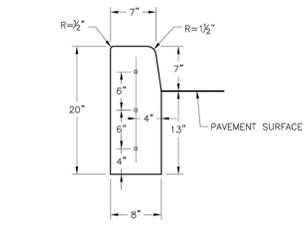
SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 West 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E2002003860F #LAC2001005237 #LS200200889F

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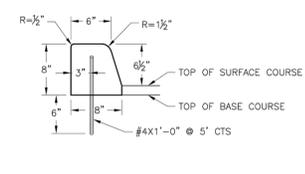


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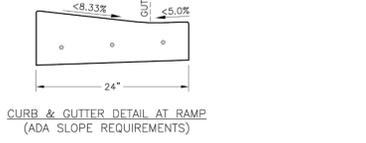
PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI



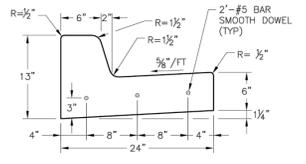
STRAIGHT CURB
(TYPE C-1)



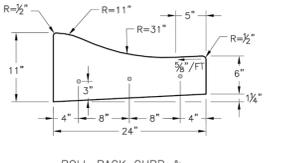
DOWELLED CURB
(TYPE DC)



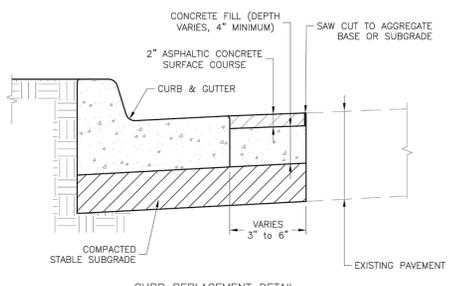
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



STRAIGHT BACK CURB & GUTTER
(TYPE CG-1)

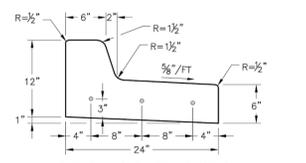


ROLL BACK CURB & GUTTER
(TYPE CG-2)

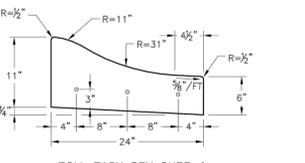


CURB REPLACEMENT DETAIL

- GENERAL NOTES**
- 3/4" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' 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.



STRAIGHT BACK DRY CURB & GUTTER
(TYPE CG-1 DRY)

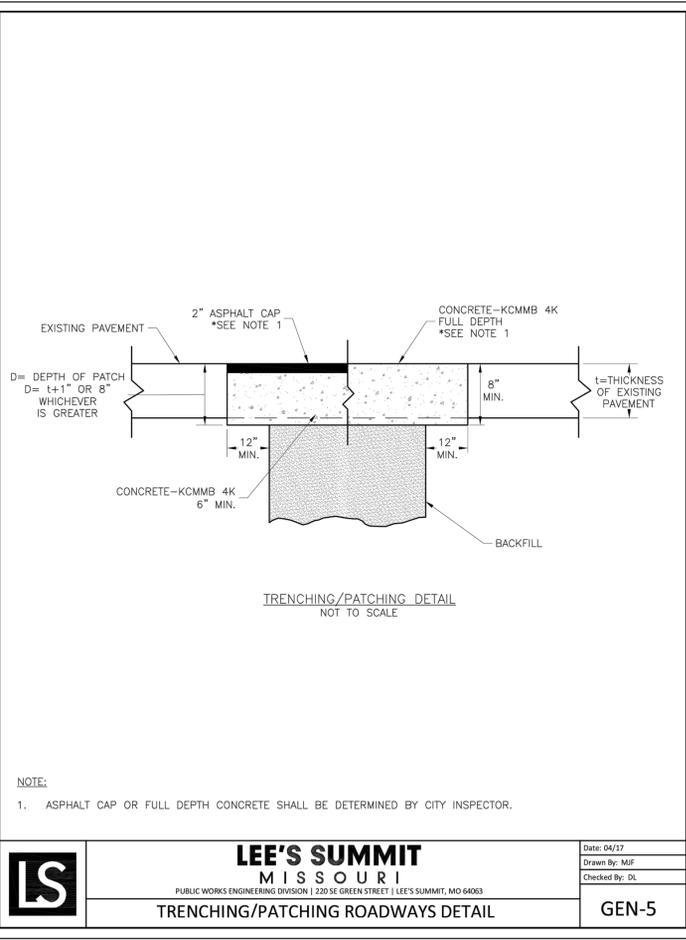


ROLL BACK DRY CURB & GUTTER
(TYPE CG-2 DRY)

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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
CURB & GUTTER DETAIL

GEN-4



TRENCHING/PATCHING DETAIL
NOT TO SCALE

- NOTE:**
- 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

Drawn By: MIF
Checked By: DL
Date: 04/17

Drawn By: MIF
Checked By: DL

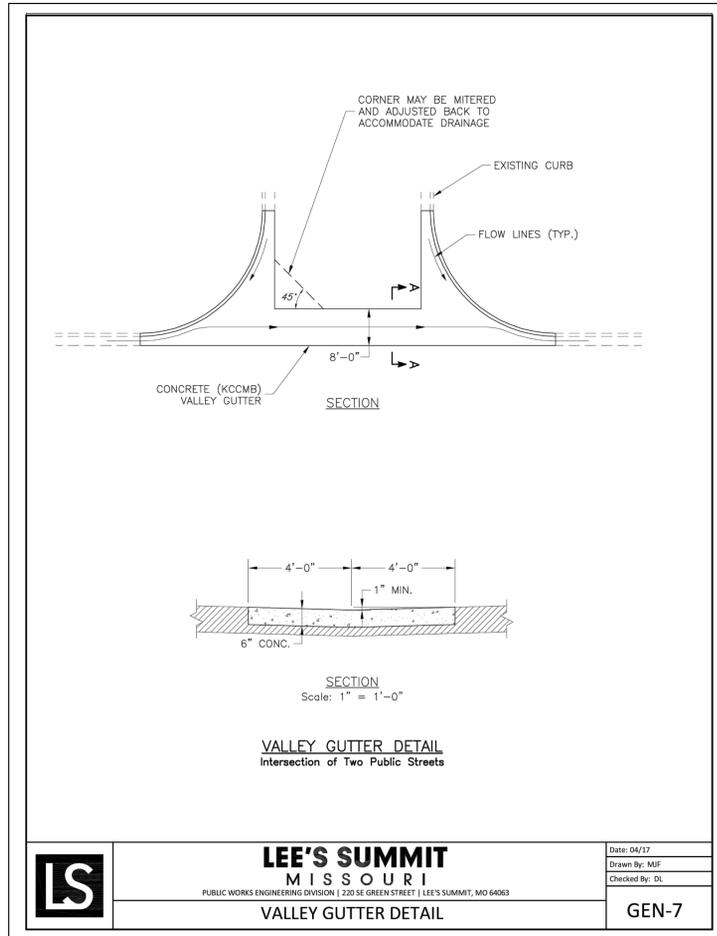
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REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

STREET DETAIL SHEET

SHEET

22



LEE'S SUMMIT
MISSOURI

PUBLIC WORKS ENGINEERING DIVISION | 2301 N. GREEN STREET | LEE'S SUMMIT, MO 64063

VALLEY GUTTER DETAIL

Date: 04/17

Drawn By: MIF

Checked By: DL

GEN-7

USE FOR
RESIDENTIAL
STREETS

TABLE LS-2: MINIMUM ASPHALT PAVEMENT THICKNESSES

Street Classification	Pavement Option	AC Surface (in.)	AC Base (in.)	MoDOT Type 5 Base (in.)	Geogrid(1)	Chemical Subgrade Stabilization(2) (in.)
Residential Local/Access	A	2	4	6	--	6
	B	2	4	10	Geogrid	--
Residential Collector	A	2	5.5	6	--	9
	B	2	5.5	12	Geogrid	--
Commercial Industrial Local/Collector	A	2	7.5	6	--	9
	B	2	7.5	12	Geogrid	--

USE FOR
PRIVATE
ALLEYS

TABLE LS-3: MINIMUM PCC PAVEMENT THICKNESSES

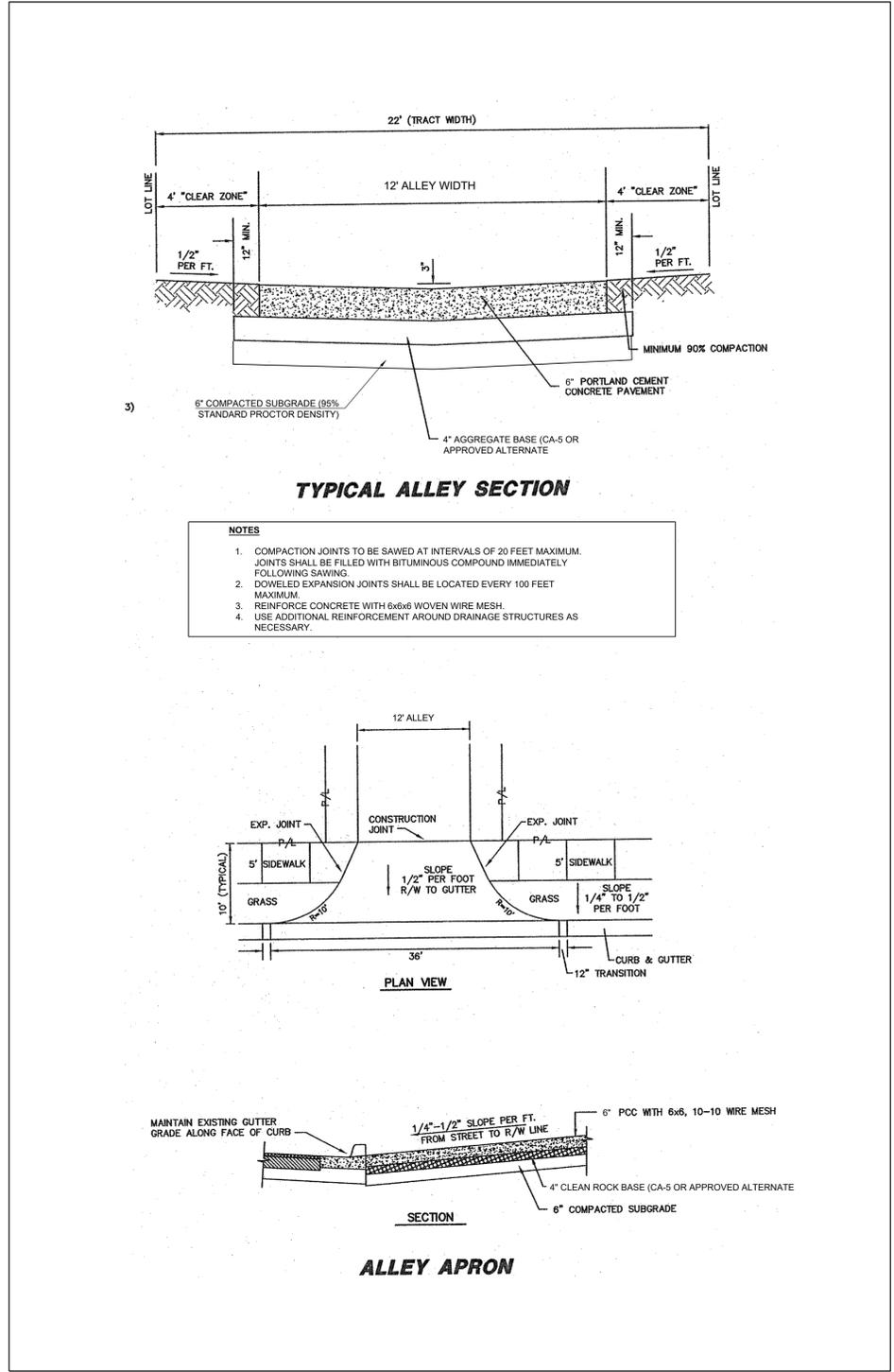
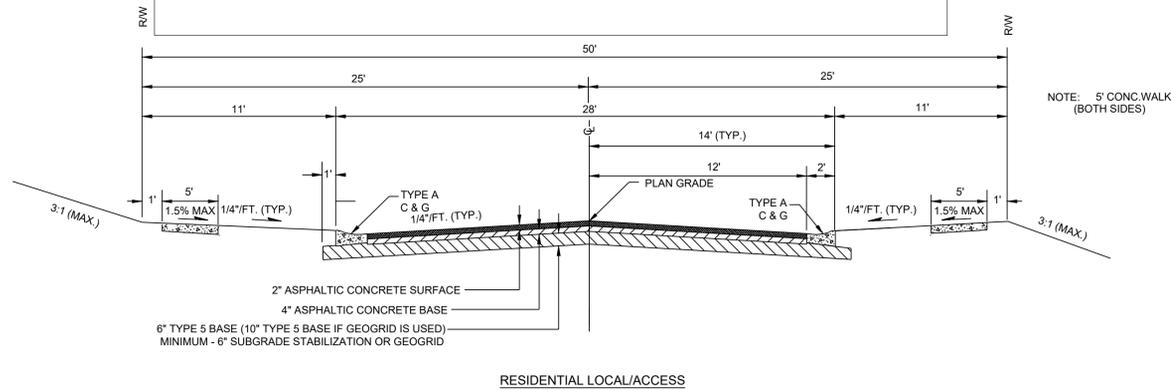
Street Classification	PCC (in.)	Aggregate Base (in.)	Subgrade Stabilization(1) (in.)
Residential Local/Access	6	4	--
Residential Collector	6	4	6
Commercial Industrial Local/Collector	8	4	9

(1) Subgrade Stabilization and 4" aggregate base may be replaced by approved geogrid and 6" of aggregate base

LS5200

16

October 2016



PREPARED BY:

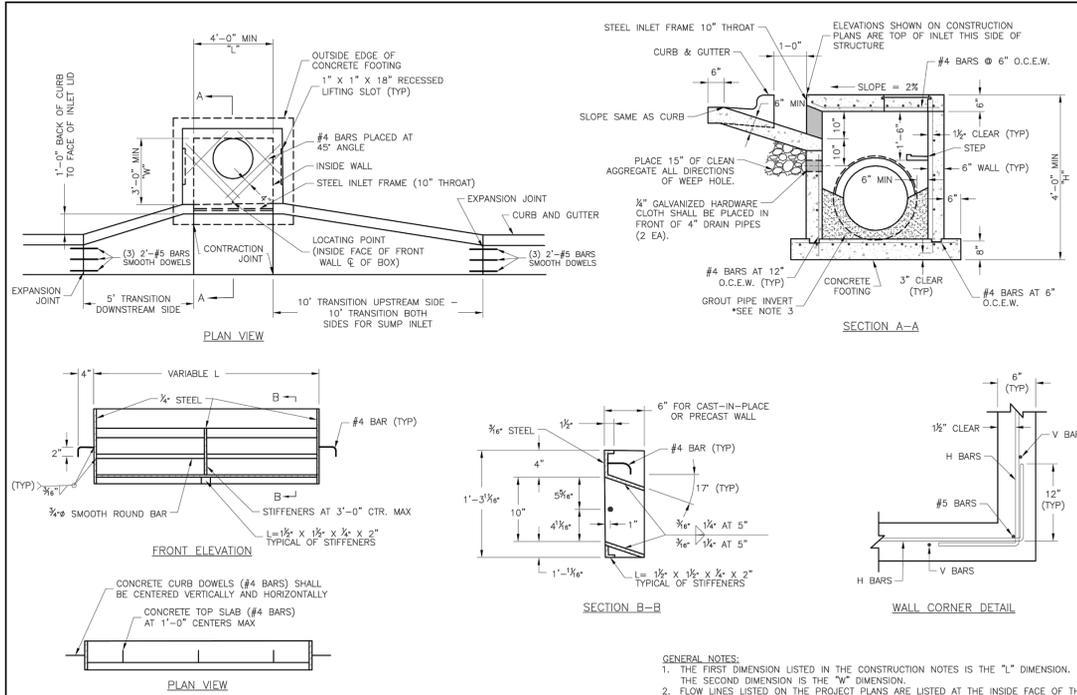


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PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

STREET DETAIL
SHEET CONT

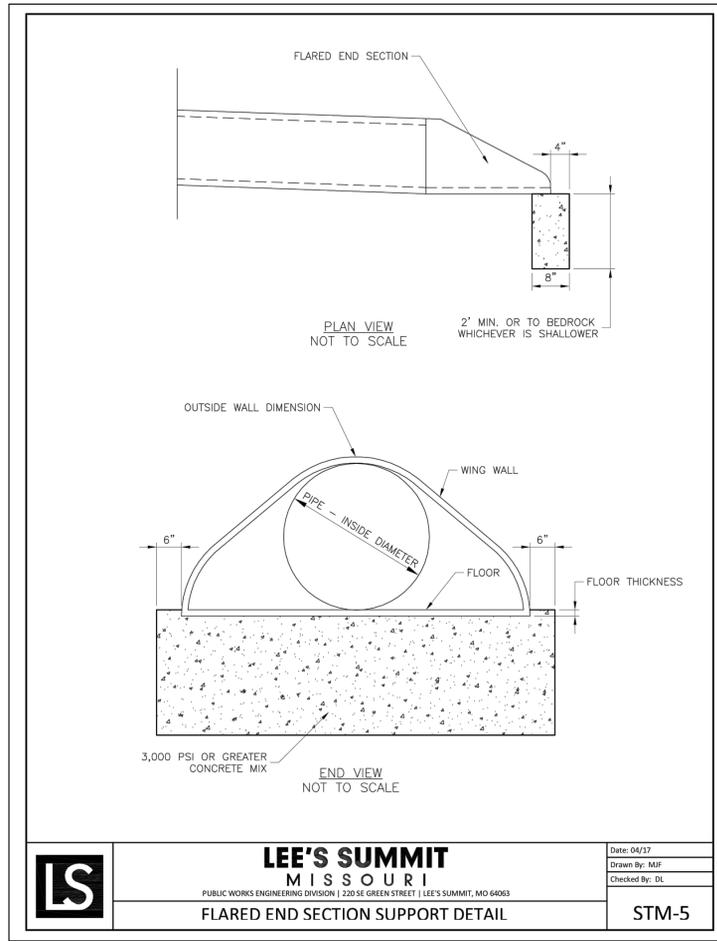


LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64083

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

STM-1

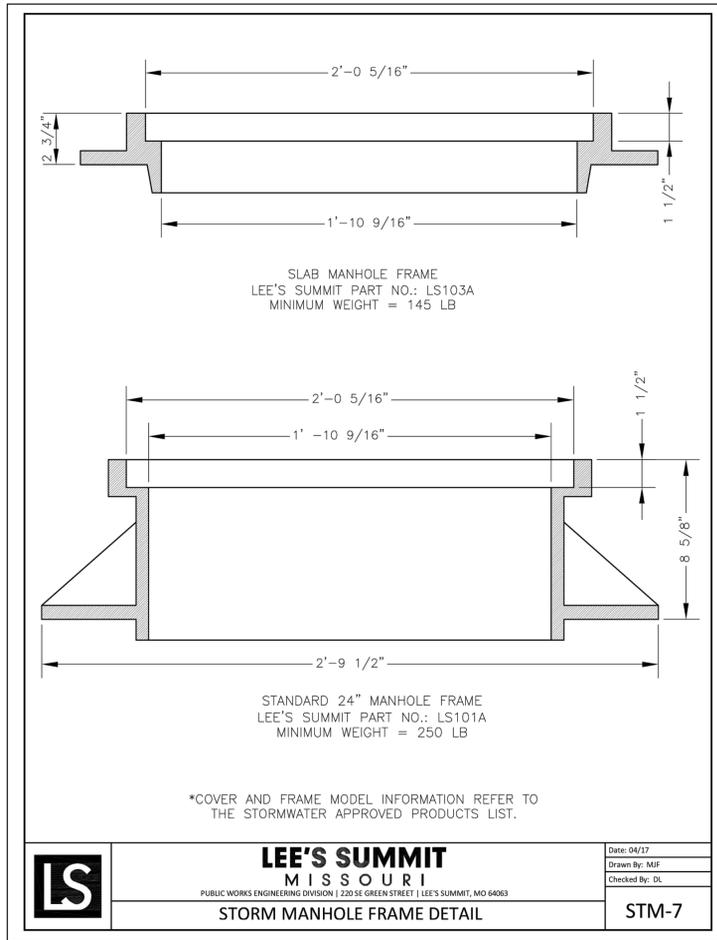
- GENERAL NOTES:**
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
 2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
 3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
 4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
 5. STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
 6. BEVEL ALL EXPOSED EDGES WITH 1/4" CHAMFER OR 1/4" TOOLED EDGE.
 7. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
 8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
 9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON-SHRINKABLE GROUT.
 10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.



LS

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

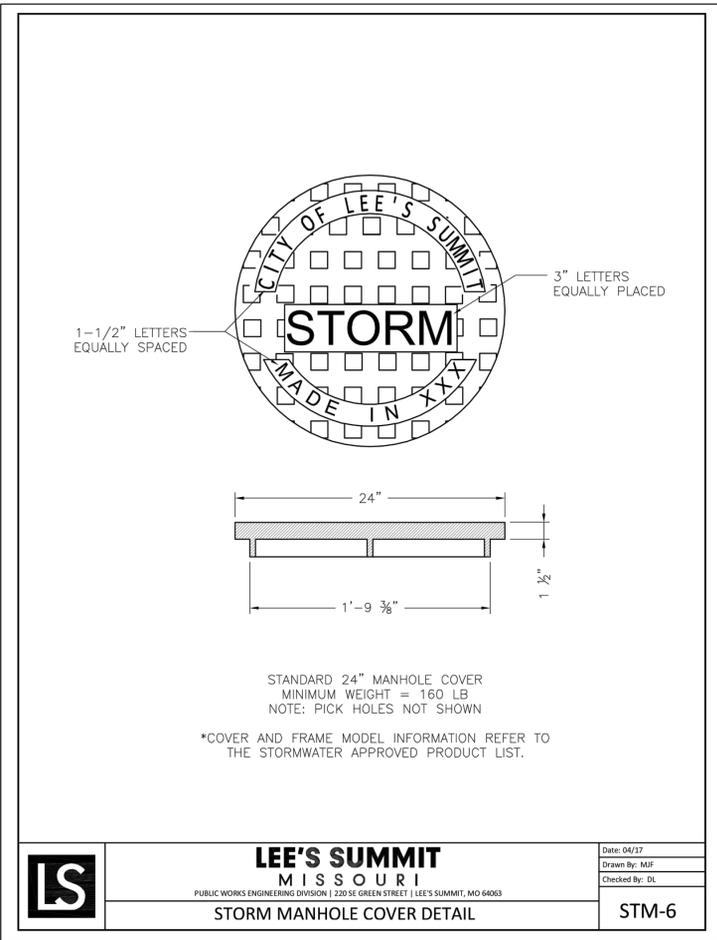
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LS

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

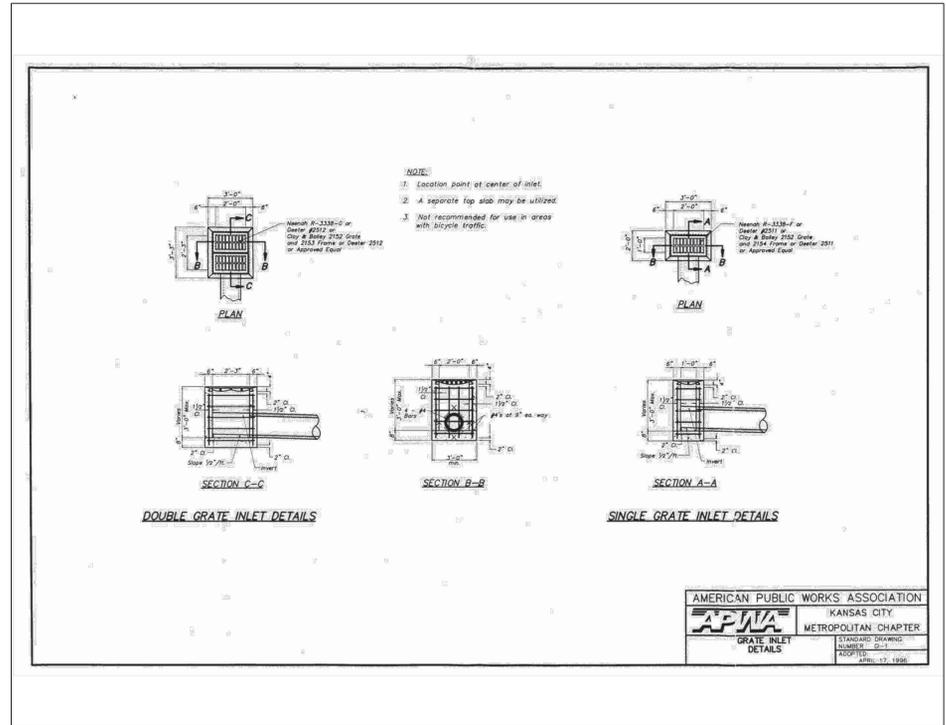
STM-7



LS

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

STM-6



AMERICAN PUBLIC WORKS ASSOCIATION
KANSAS CITY METROPOLITAN CHAPTER
APWA GRADEABLE DETAILS
STANDARD DRAWING NUMBER: 2-11-11-18-2021
PROJECT: APRIL 17, 1998

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ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
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(913) 492-5158 • Fax: (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificate of Authority
#E200203690F #LAC201005237 #S200200899F

PREPARED BY:
MARK ALLEN BREUER
MEMBER
PE-2003007268
02.17.2022

SCHLAGEL & ASSOCIATES, P.A.

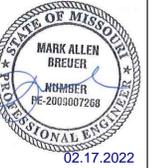
PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

STORM DETAIL SHEET

SHEET
24

PREPARED BY:



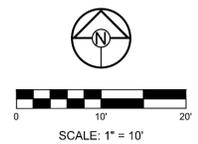
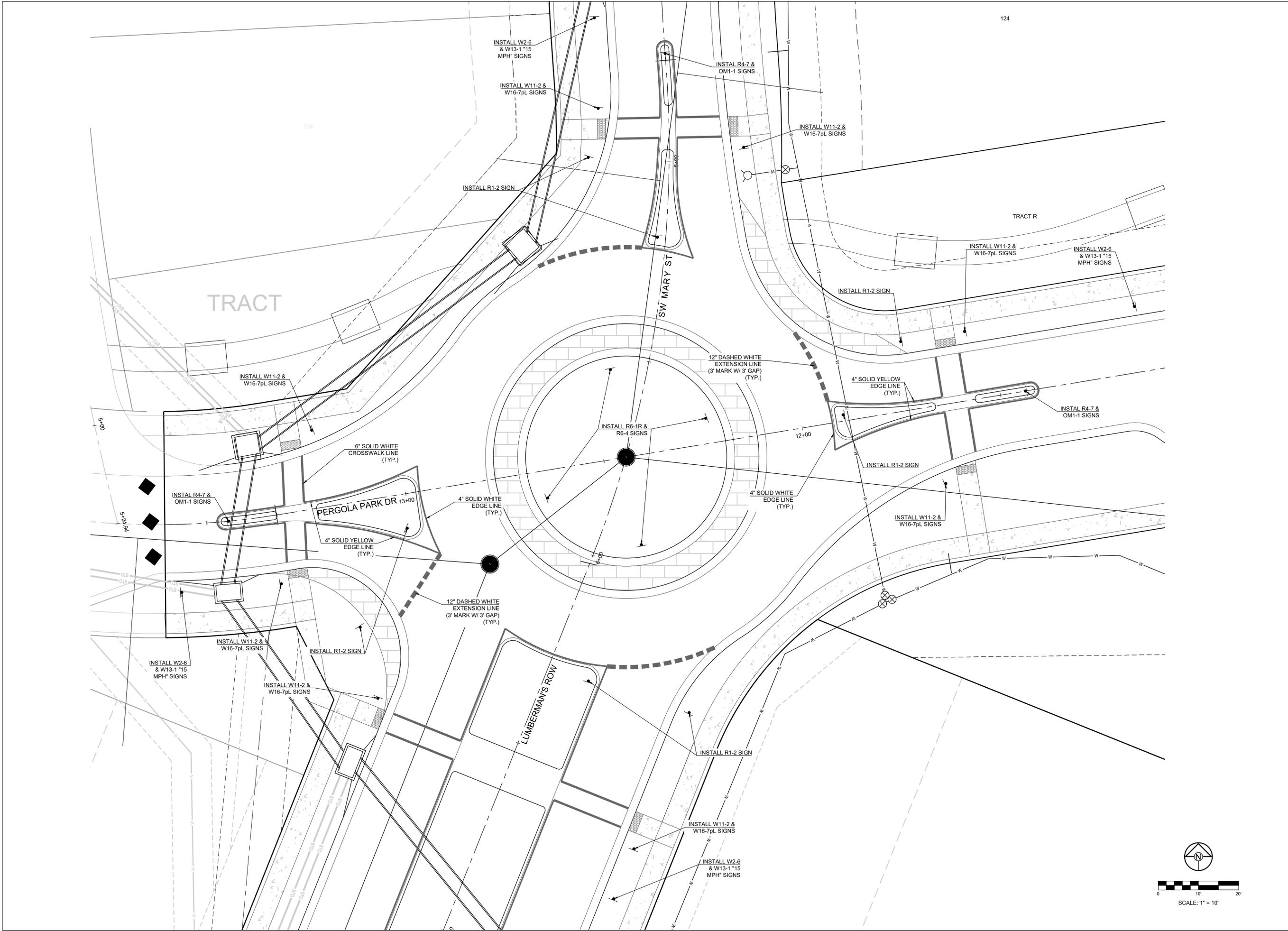
SCHLAGEL & ASSOCIATES, P.A.

PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
 - LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

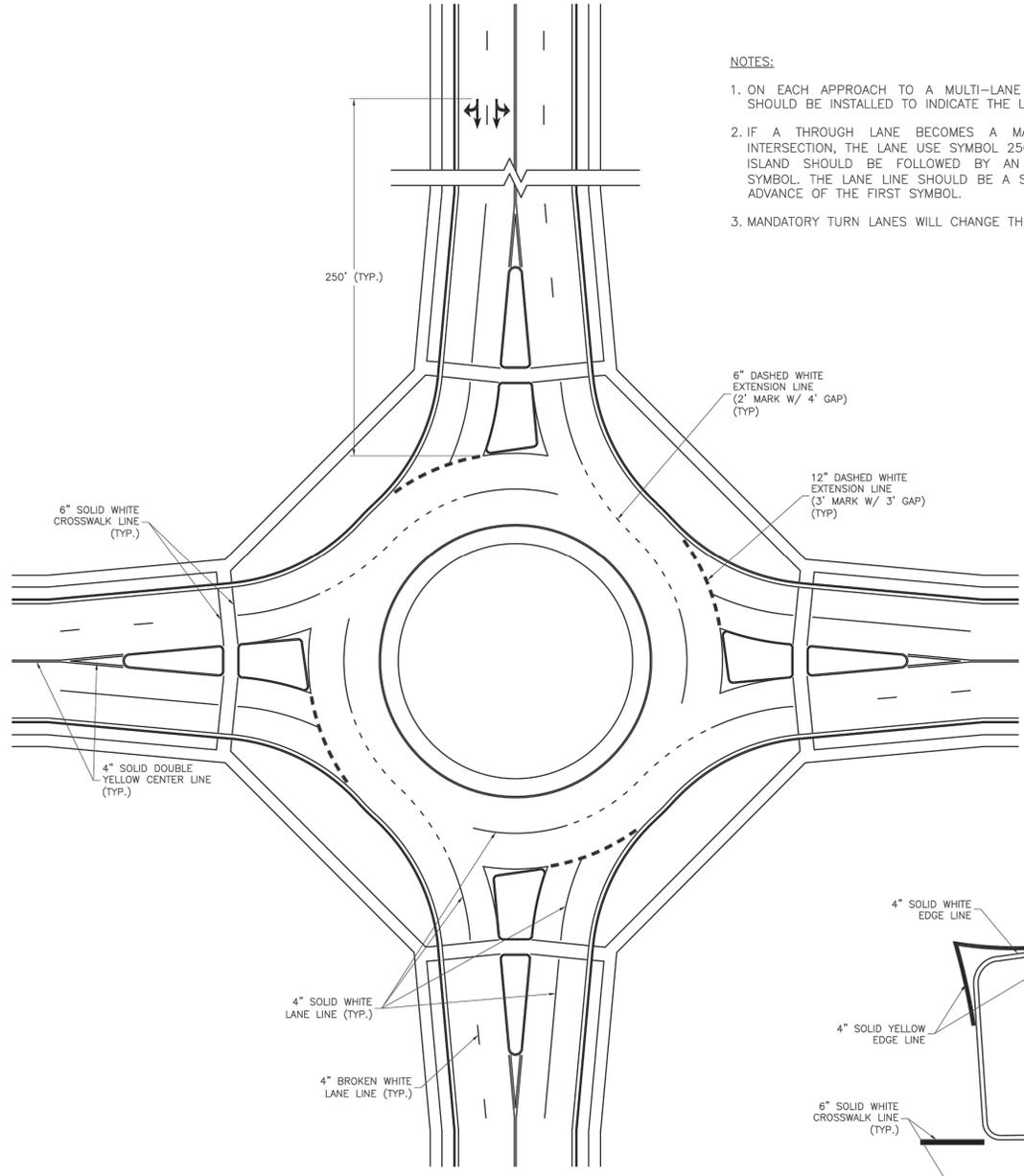
ROUNDABOUT
 PAVEMENT AND
 SIGNAGE

SHEET
25



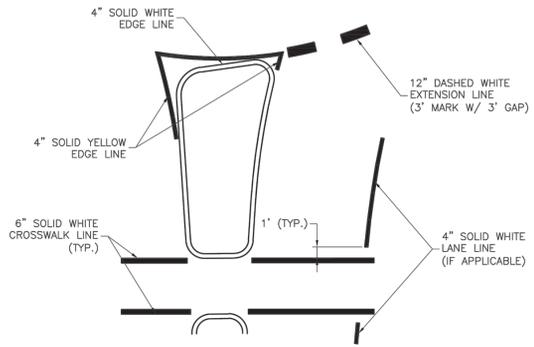
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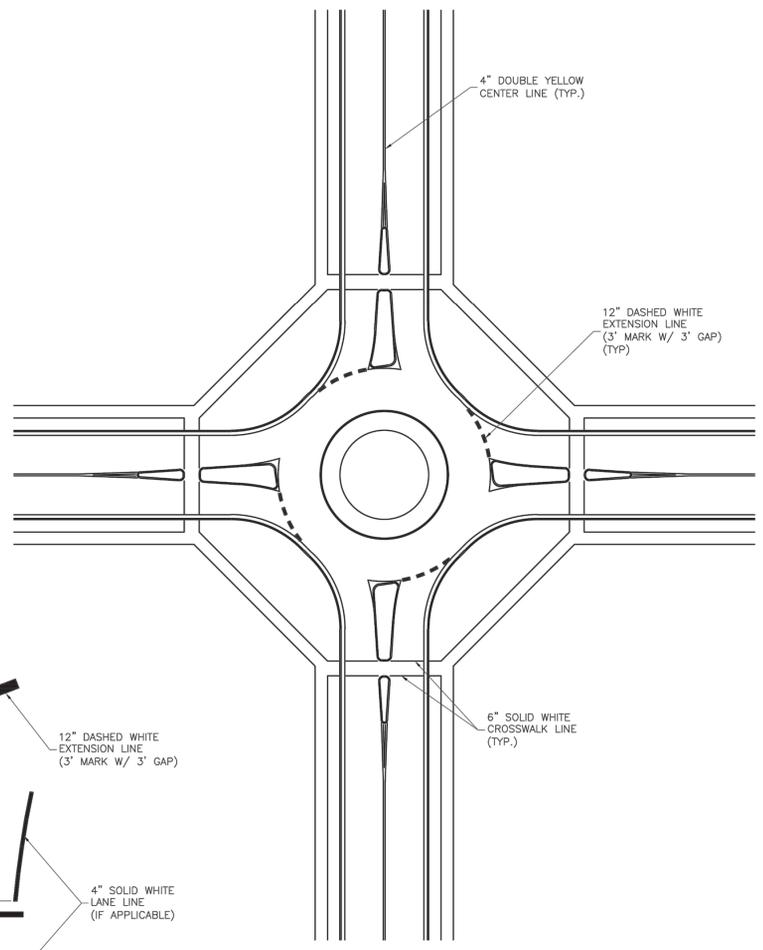


TYPICAL MULTI-LANE ROUNDABOUT MARKINGS

- NOTES:**
1. ON EACH APPROACH TO A MULTI-LANE ROUNDABOUT, PAVEMENT MARKING SYMBOLS SHOULD BE INSTALLED TO INDICATE THE LANE USE CONFIGURATION.
 2. IF A THROUGH LANE BECOMES A MANDATORY TURN LANE AT A ROUNDABOUT INTERSECTION, THE LANE USE SYMBOL 250' IN ADVANCE OF THE END OF THE SPLITTER ISLAND SHOULD BE FOLLOWED BY AN "ONLY" SYMBOL AND ANOTHER LANE USE SYMBOL. THE LANE LINE SHOULD BE A SOLID WHITE LINE FOR A DISTANCE OF 10' IN ADVANCE OF THE FIRST SYMBOL.
 3. MANDATORY TURN LANES WILL CHANGE THE MARKINGS WITHIN THE CIRCULAR ROADWAY.



TYPICAL SPLITTER ISLAND DETAIL

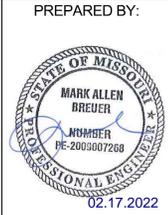


TYPICAL SINGLE LANE ROUNDABOUT MARKINGS

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

Project: STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: ROUNDABOUT MARKING DETAILS

Drawn By: BWC
Checked By: MP
Date: 01/2020
Proj. #: PM-3



SCHLAGEL & ASSOCIATES, P.A.

PERGOLA PARK 5TH PLAT
STREET, STORMWATER, MASTER DRAINAGE
PLAN & EROSION AND SEDIMENT CONTROL
- LEE'S SUMMIT, MISSOURI

REVISION DATE	DESCRIPTION
2-4-22	CITY COMMENTS

DRAWN BY:	BAL
CHECKED BY:	MAB
DATE PREPARED:	11-8-2021
PROJ. NUMBER:	20-188

PAVEMENT MARKING DETAIL

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