

The Manor at Stoney Creek - 4th Plat

Lots 109 Thru 136 & Tract Q CONSTRUCTION PLANS

Part of the SW 1/4 Section 36, Township 47 N, Range 32 W LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

CONSTRUCTION AND DESIGN NOTES:

STREET & STORM SEWERS:

1 ~ STREET PAVEMENT SHALL CONSIST OF TYPE CG-2 CURBS WITH PAVEMENT PER TABLE LS-2 OF THE LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL

RESIDENTIAL LOCAL STREET FOR SW MERRYMAN DRIVE AND SW GRINDSTONE CIRCLE. SEE THIS SHEET FOR TYPICAL SECTION.

OPTION 1) 4" TYPE II ASPHALT BASE AND 2" TYPE III ASPHALT SURFACE OVER A 6" MoDOT TYPE 5 BASE AND A SUBGRADE MIXTURE OF 6" FLY ASH STABILIZED SUBGRADE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.

OPTION 2) 4" TYPE II ASPHALT BASE AND 2" TYPE III ASPHALT SURFACE OVER 8" MoDOT TYPE 5 BASE OVERTOP A BIAXIAL GEOGRID MEETING THE REQUIREMENTS OF TABLE 2201.6-1

2 ~ RESIDENTIAL LOCAL STREETS SHALL BE PER APWA STANDARD FOR 50' R/W TYPICAL SECTION TABLE LS-2 SECTION 5200 (RESIDENTIAL LOCAL STREET).

3 ~ STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) AS APPROVED BY CITY OF LEES SUMMIT DESIGN AND CONSTRUCTION MANUAL.

4 ~ CURB INLETS SHALL BE PER CITY OF LEES SUMMIT DRAWING NO. ST-1. FIELD INLETS SHALL BE PER CITY OF LEES SUMMIT STANDARD DRAWING STM-2.

WATER:

1 ~ THE CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT WATER UTILITIES DEPARTMENT AT 816.969.1900 AT LEAST 48 HOURS PRIOR TO CONNECTING TO ANY EXISTING WATER MAIN.

2 ~ ALL WATER MAINS SHALL COMPLY WITH ANSI/AWWA C150/A21.50 AND C151/A21.51, AND CITY OF LEES SUMMIT STANDARDS.

3 ~ FIRE HYDRANTS SHALL BE OPTIC YELLOW WATEROUS "PACER" MODEL NO. WB-67-250 WITH NON-RISING STEM OR CITY ENGINEER APPROVED EQUAL. HYDRANTS SHALL HAVE A 5 1/4" VALVE WITH A 4 1/2" PUMPER NOZZLE AND 2 - 2 1/2" HOSE NOZZLES (LEFT HAND OPENING).

4 ~ GATE VALVES SHALL BE MUELLER NO. A 2380-5 HUB END "O" RING SEAL NON-RISING STEM. VALVES 12" OR LARGER SHALL BE BUTTERFLY VALVES MANUFACTURED BY THE HENRY PRATT COMPANY OR CITY ENGINEER APPROVED EQUAL. LEFT HAND OPENING. MINIMUM 200# TESTING AWWA.

5 ~ VALVE BOXES SHALL BE CLAY & BAILEY NO. P-108 OR CITY ENGINEER APPROVED EQUAL. ALL VALVE BOXES SHALL BE LOCATED OUT OF EXISTING OR PROPOSED PAVEMENT AREAS.

6 ~ ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF 42 INCHES. STREET GRADING SHALL BE COMPLETED PRIOR TO BEGINNING CONSTRUCTION OF WATER MAINS.

7 ~ ALL BENDS, TEES AND FIRE HYDRANTS SHALL BE INSTALLED WITH SUITABLE CONCRETE THRUST BLOCKS POURED IN PLACE AGAINST UNDISTURBED EARTH AND PER CITY OF LEES SUMMIT AND APWA STANDARDS.

8 ~ THE MINIMUM SEPARATION BETWEEN THE PROPOSED WATER MAIN AND SANITARY OR STORM SEWERS IS AS FOLLOWS:

A ~ SANITARY SEWERS: HORIZONTAL = 10 FEET - VERTICAL = 18 INCHES

B ~ STORM SEWERS: HORIZONTAL = 5 FEET - VERTICAL = 18 INCHES

THESE SEPARATIONS SHALL PREVAIL OVER ANY DATA SHOWN IN THESE PLANS AND THE CONTRACTOR SHALL INSTALL BENDS OR OTHER FITTINGS AS NECESSARY TO ACHIEVE THE REQUIRED SEPARATIONS.

GENERAL NOTES:

1 ~ ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.

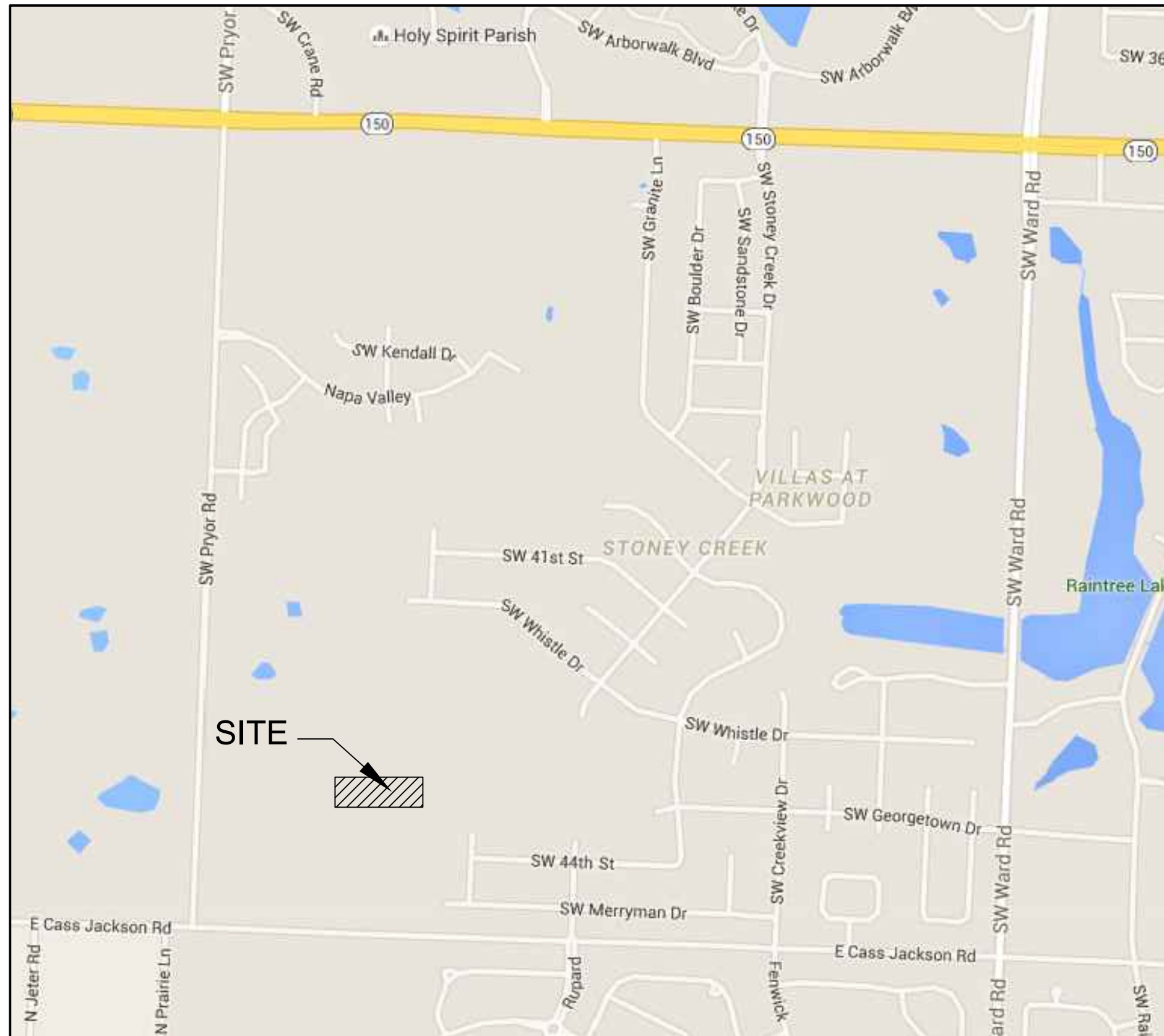
2 ~ ALL REQUIRED EASEMENTS WITHIN THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR ON THE FINAL PLAT.

3 ~ ANY REQUIRED EASEMENT LOCATED OUTSIDE OF THE BOUNDARY OF THIS PROJECT SHALL BE PROVIDED FOR BY SEPARATE INSTRUMENT PRIOR TO ISSUANCE OF CONSTRUCTION PERMITS.

4 ~ THE CONTRACTOR SHALL NOTIFY THE CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200 AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

5 ~ THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH THE IMPROVEMENTS PROPOSED BY THESE PLANS AND SITE CONDITIONS.

6 ~ THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND OBTAIN THE APPROPRIATE BLASTING PERMITS FOR A REQUIRED BLASTING. IF BLASTING IS ALLOWED, ALL BLASTING SHALL CONFORM TO STATE REGULATIONS AND LOCAL ORDINANCES.



SITE LOCATION MAP

INDEX OF SHEETS:

C.001 ~ COVER SHEET
C.050 ~ ESC PHASE 1 - Pre Clearing Plan
C.051 ~ ESC PHASE 2 - Inactive Area Stabilization Plan
C.052 ~ ESC PHASE 3 - Final Restoration Plan
C.053 ~ ESC - Standard Details
C.100 ~ SITE PLAN
C.200 ~ MASTER DRAINAGE PLAN SHEET 1 OF 3 GRADING PLAN - SWPPP
C.201 ~ MASTER DRAINAGE PLAN SHEET 2 OF 3 SPOT ELEVATIONS
C.202 ~ MASTER DRAINAGE PLAN SHEET 3 OF 3 DRAINAGE AREA MAP
C.203 ~ STREET PLAN & PROFILE
C.204 ~ STREET SIGNAGE PLAN
C.300 ~ STORM SEWER GENERAL LAYOUT
C.301 ~ STORM SEWER PLAN & PROFILE
C.302 ~ STORM SEWER PLAN & PROFILE
C.303 ~ Storm Sewer Tables 10 and 100 Year
C.600 ~ CONSTRUCTION DETAILS
C.601 ~ CONSTRUCTION DETAILS

UTILITY COMPANIES:

THE FOLLOWING LIST OF UTILITY COMPANIES IS PROVIDED FOR INFORMATION ONLY. WE DO NOT OFFER ANY GUARANTEE OR WARRANTY THAT THIS LIST IS COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES THAT MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION AND VERIFYING THE ACTUAL LOCATION OF EACH UTILITY LINE. THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH PROPOSED IMPROVEMENTS.

KCP&L ~ 298-1196
MISSOURI GAS ENERGY ~ 756-5261
SOUTHWESTERN BELL TELEPHONE ~ 761-5011
COMCAST CABLE ~ 795-1100
WILLIAMS PIPELINE ~ 422-6300
CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800
CITY OF LEE'S SUMMIT DEVELOPMENT ENGINEERING INSPECTION AT 816.969.1200
CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900
MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483

CORRECTED NOTE
DEVELOPMENT ENGINEERING
INSPECTION AT 816.969.1200

LEGEND:

B/L ~ BUILDING SET-BACK
C/A ~ COMMON AREA
D/E ~ DRAINAGE EASEMENT
FND. ~ FOUND
L/E ~ LANDSCAPE EASEMENT
L.N.A. ~ LIMITS OF NO ACCESS
R/W ~ RIGHT OF WAY
SAN ~ SANITARY SEWER LINE
S/W ~ SIDEWALK
U/E ~ UTILITY EASEMENT
W ~ WATER LINE
ST ~ STORM SEWER LINE

BENCHMARK:

CENTER OF SANITARY SEWER
MANHOLE LOCATED IN THE SE
CORNER OF THE LOT 123, FOXWOOD
EAST 5TH PLAT.

ELEVATION 945.69

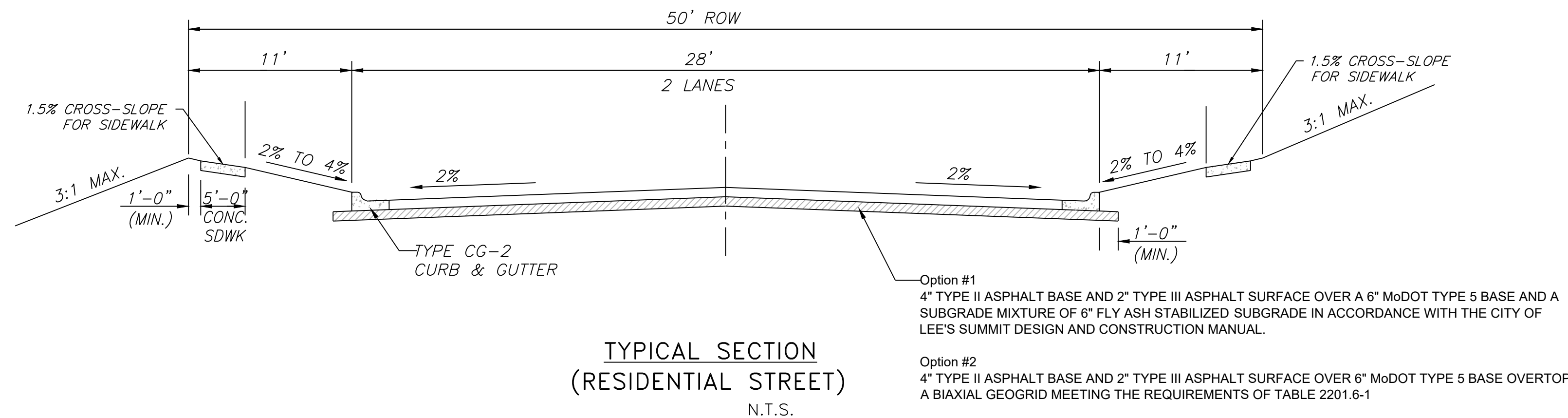
ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PROJECT HAS BEEN DESIGNED AND THESE PLANS PREPARED IN ACCORDANCE WITH THE CURRENT DESIGN CRITERIA OF THE CITY OF LEE'S SUMMIT, MISSOURI AND THE STATE OF MISSOURI. I FURTHER CERTIFY THAT THESE PLANS WERE DESIGNED IN ACCORDANCE TO AASHTO STANDARDS.

CITY OF LEE'S SUMMIT, MISSOURI

APPROVED: _____ DATE: _____

BY: _____
CITY ENGINEER



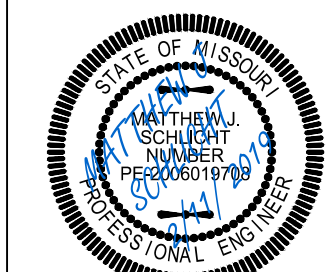
Option #1
4" TYPE II ASPHALT BASE AND 2" TYPE III ASPHALT SURFACE OVER A 6" MoDOT TYPE 5 BASE AND A SUBGRADE MIXTURE OF 6" FLY ASH STABILIZED SUBGRADE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.

Option #2
4" TYPE II ASPHALT BASE AND 2" TYPE III ASPHALT SURFACE OVER 6" MoDOT TYPE 5 BASE OVERTOP A BIAXIAL GEOGRID MEETING THE REQUIREMENTS OF TABLE 2201.6-1

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005000189-D
Kansas
Engineering E-1895
Surveying LS-219
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Project: MANOR AT
STONEY CREEK
4TH PLAT
Issue Date:
August 29, 2018

Cover Sheet
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

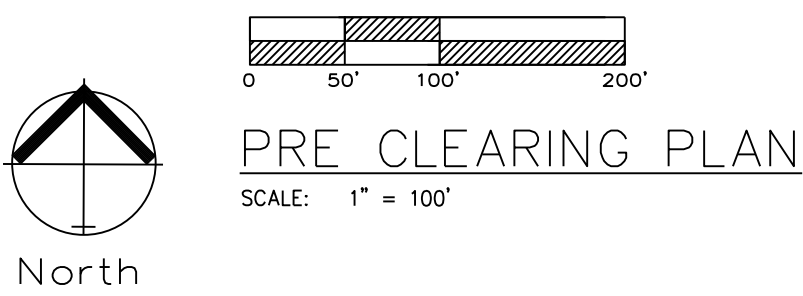


Matthew J. Schlicht
MO PE 2006019708
KS PE 190071
OK PE 255226

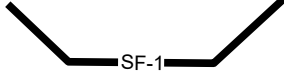
REVISIONS

REV. 1-4-19
REV. 2-11-19

C.001



NOTES: The Land Disturbance Plans indicates the Final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

 **SILT FENCE PROTECTION**
TO BE MAINTAINED BY CONTRACTOR

LEGEND	
PHASE 1 SILT FENCE	 SF-1  SF-1
PHASE 2 SILT FENCE	 SF-2  SF-2
INLET PROTECTION	

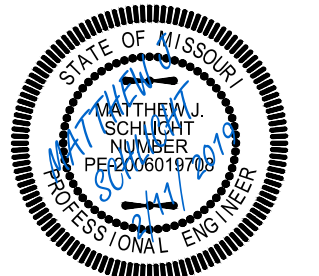
DURING ALL PHASES OF CONSTRUCTION, INACTIVE AREA STABILIZATION METHODS AS DESCRIBED IN APWA SECTION 5111.3 SHALL BE USED TO CONTROL EROSION AND SILTATION.

Professional Registration
Missouri
Engineering 2005002185-D
Surveying 200500019-D
Kansas
Engineering E-1895
Surveying LS-219
Oklahoma
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Nebraska
Engineering CA2821

The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

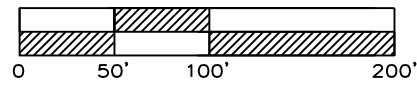
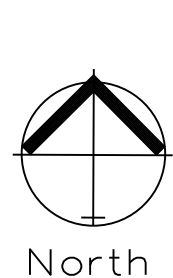
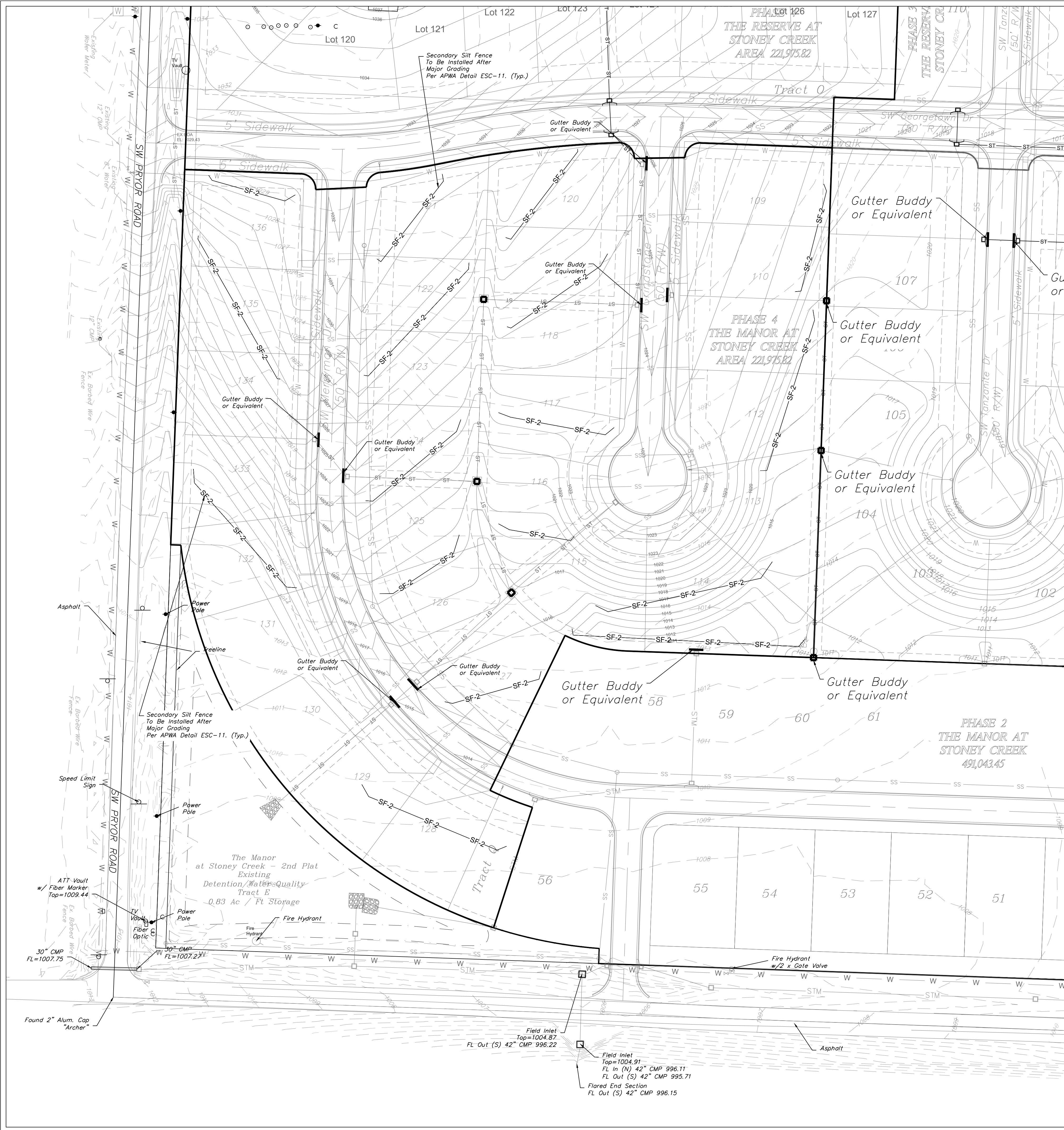
Project: MANOR AT STONEY CREEK 4TH PLAT
Issue: 1
Date: August 29, 2018

ESC PHASE 1 - Pre Clearing Plan
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

REVISIONS	
	REV. 1-4-19
	REV. 2-11-19



INACTIVE AREA STABILIZATION PLAN

SCALE: 1" = 100'

NOTES: The Land Disturbance Plans indicates the Final placement of erosion control devices. The contractor(s) may proceed with construction prior to the final placement of these devices by providing additional devices to control erosion on their items of work. These devices shall be maintained until the final devices are in place.

SILT FENCE PROTECTION
TO BE MAINTAINED BY CONTRACTOR

LEGEND

PHASE 1 SILT FENCE — SF-1 — SF-1 —
PHASE 2 SILT FENCE — SF-2 — SF-2 —
INLET PROTECTION
GUTTER BUDDY OR EQUIVALENT —

DURING ALL PHASES OF CONSTRUCTION,
INACTIVE AREA STABILIZATION METHODS AS
DESCRIBED IN APWA SECTION 5111.3 SHALL BE
USED TO CONTROL EROSION AND SILTATION.

MAINTENANCE:
TO MAINTAIN THE EROSION AND SEDIMENT CONTROLS, THE FOLLOWING PROCEDURES WILL BE PERFORMED:
SEDIMENT CAPTURE DEVICES: SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC FENCES, WHEN THE DEPTH OF ACCUMULATED SEDIMENT REACHES ABOUT ONE-THIRD THE HEIGHT OF THE STRUCTURE.
STORM SEWER INLETS: ANY SEDIMENT IN THE STORM SEWER INLETS WILL BE REMOVED AND DISPOSED OF PROPERLY.
TEMPORARY CONTROLS: ALL TEMPORARY CONTROLS WILL BE REMOVED AFTER THE DISTURBED AREAS HAVE BEEN STABILIZED.

INSPECTION PROCEDURES:
INSPECTIONS WILL BE DONE BY THE RESPONSIBLE PERSON(S) AT LEAST ONCE EVERY WEEK AND WITHIN 24 HOURS EACH STORM EVENT PRODUCING ANY AMOUNT OF RAINFALL. AREAS THAT HAVE BEEN RESEDED WILL BE INSPECTED REGULARLY AFTER SEED GERMINATION TO ENSURE COMPLETE COVERAGE OF EXPOSED AREAS. DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED SHALL HAVE ALL POLLUTION CONTROL MEASURES INSPECTED FOR PROPER INSTALLATION, OPERATION AND MAINTENANCE. LOCATIONS WHERE STORM WATER LEAVES THE SITE SHALL BE INSPECTED FOR EVIDENCE OF EROSION OR SEDIMENT DEPOSITION. ANY DEFICIENCIES SHALL BE NOTED IN A REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE PERMITTEE SHALL PROMPTLY NOTIFY THE SITE CONTRACTORS RESPONSIBLE FOR OPERATION AND MAINTENANCE OF POLLUTION CONTROL DEVICES OF DEFICIENCIES.

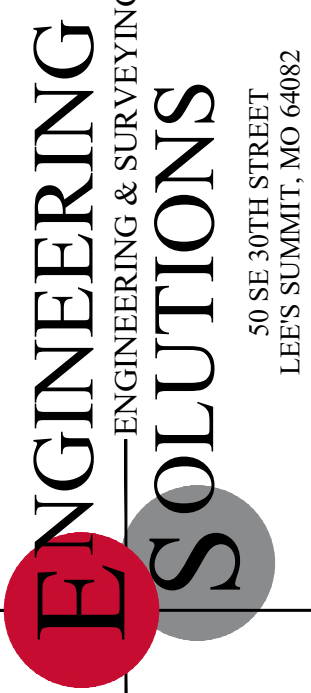
IF THE EXISTING GROUND COVER IS NATURAL GRASS, DISTURBED AREAS SHALL BE TEMPORARILY SEEDDED WITH WHEAT/RYE AT A RATE OF 1.5 POUNDS PER 1000 SQUARE FEET. PERMANENT SEEDING SHALL CONSIST OF 80% IN THREE EQUAL PARTS OF THIN BLADE, TURF-TYPE, TALL FESCUE AND 10% BLUEGRASS SEED AT A RATE OF 10 POUNDS PER 1000 SQUARE FEET. BOTH TEMPORARY AND PERMANENT SEEDS SHALL BE MULCHED AND WATERED TO MAINTAIN THE PROPER MOISTURE LEVEL OF THE SOIL TO ESTABLISH GRASS. NEW GRASS SHALL BE WATERED AND MAINTAINED UNTIL IT REACHES A HEIGHT OF 3 INCHES. ANY BARE AREAS SHALL BE RESEDED.

ALL EROSION CONTROL DEVICES SHALL BE REMOVED BY GENERAL CONTRACTOR AFTER SITE STABILIZATION IS COMPLETE AND APPROVED BY ENGINEER.

THE DEVELOPER WILL DESIGNATE A QUALIFIED PERSON OR PERSONS TO PERFORM THE FOLLOWING INSPECTIONS:
STABILIZATION MEASURES: DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER A PORTION OF THE SITE IS FINALLY STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.
STRUCTURAL CONTROLS: FILTER FABRIC FENCES AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER POSITIONING, ANCHORING, AND EFFECTIVENESS IN TRAPPING SEDIMENTS. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.
DISCHARGE POINTS: DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM ENTERING RECEIVING WATERS.
CONSTRUCTION ENTRANCE: LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

A LOG OF EACH INSPECTION SHALL BE KEPT. THE INSPECTION REPORT IS TO INCLUDE THE FOLLOWING MINIMUM INFORMATION: INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS RELATIVE TO THE EFFECTIVENESS OF THE POLLUTION CONTROL DEVICES, ACTIONS TAKEN OR NECESSARY TO CORRECT DEFICIENCIES, AND LISTING OF AREAS WHERE LAND DISTURBANCE OPERATIONS HAVE PERMANENTLY OR TEMPORARILY STOPPED. THE INSPECTION REPORT SHALL BE SIGNED BY THE PERMITTEE OR BY THE PERSON PERFORMING THE INSPECTION IF DULY AUTHORIZED TO DO SO.

- EROSION CONTROL DESCRIPTION:**
- 1) SILT FENCE SHALL BE PLACED AT THE PERIMETER OF THE GRADING AND AT INTERMEDIATE AREAS THROUGHOUT THE SITE AS SHOWN ON THE PLAN. INLET SEDIMENT TRAPS SHALL BE PLACED SURROUNDING ALL STORM INLETS
 - 2) INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PLAN
- EROSION CONTROL PROCEDURE:**
- 1) SILT FENCE AND TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE PERIMETER OF THE GRADED AREAS PRIOR TO BEGINNING OF CLEARING OR DEMOLITION OPERATIONS. THE CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLANS AS GRADING PROGRESSES.
- TEMPORARY CONSTRUCTION ENTRANCE NOTES:**
- A) INSTALLATION
- 1) AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC STREETS. IF POSSIBLE, LOCATE WHERE PERMANENT ROADS WILL EVENTUALLY BE CONSTRUCTED
 - 2) REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE AND CROWN FOR POSITIVE DRAINAGE
 - 3) IF SLOPE TOWARDS THE PUBLIC ROAD EXCEED 2% CONSTRUCT A 6 TO 8 INCH HIGH RIDGE WITH 3H : 1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE EDGE OF THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT.
 - 4) INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS
 - 5) PLACE STONE TO DIMENSIONS AND GRADES AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE
 - 6) DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE
 - 7) IF WET CONDITIONS ARE ANTICIPATED PLACE GEOTEXTILE FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY
- B) TROUBLESHOOTING
- 1) CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:
 - INADEQUATE RUNOFF CONTROLS TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROADS
 - INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES
 - SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL - INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC
 - PAD TOO SHORT FOR HEAVY CONSTRUCTION TRAFFIC - EXTEND PAD BEYOND THE MINIMUM 50 FOOT LENGTH AS NECESSARY
- C) INSPECTION AND MAINTENANCE
- 1) INSPECT STONE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER ANY RAIN EVENT
 - 2) RESHAPE PAD AS NEEDED FOR PROPER DRAINAGE AND RUNOFF CONTROL
 - 3) TOP DRESS WITH CLEAN 2 AND 3 INCH STONE AS NEEDED
 - 4) IMMEDIATELY REMOVE MUD OR SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADWAY. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY
 - 5) REMOVE ALL TEMPORARY ROAD MATERIALS FROM AREAS WHERE PERMANENT VEGETATION WILL BE ESTABLISHED

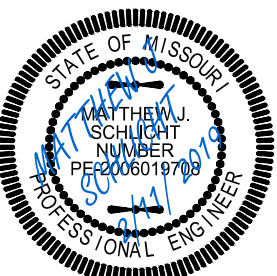


Professional Registration
Missouri
Engineering 2005002188-D
Surveying 2005002189-D
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Oklahoma
Engineering 6254
Nebraska
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The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

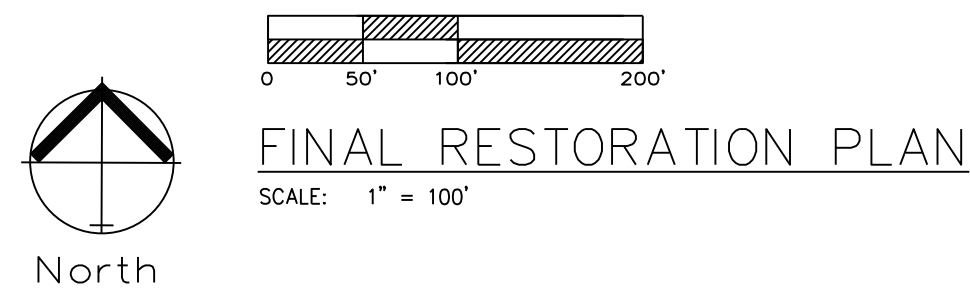
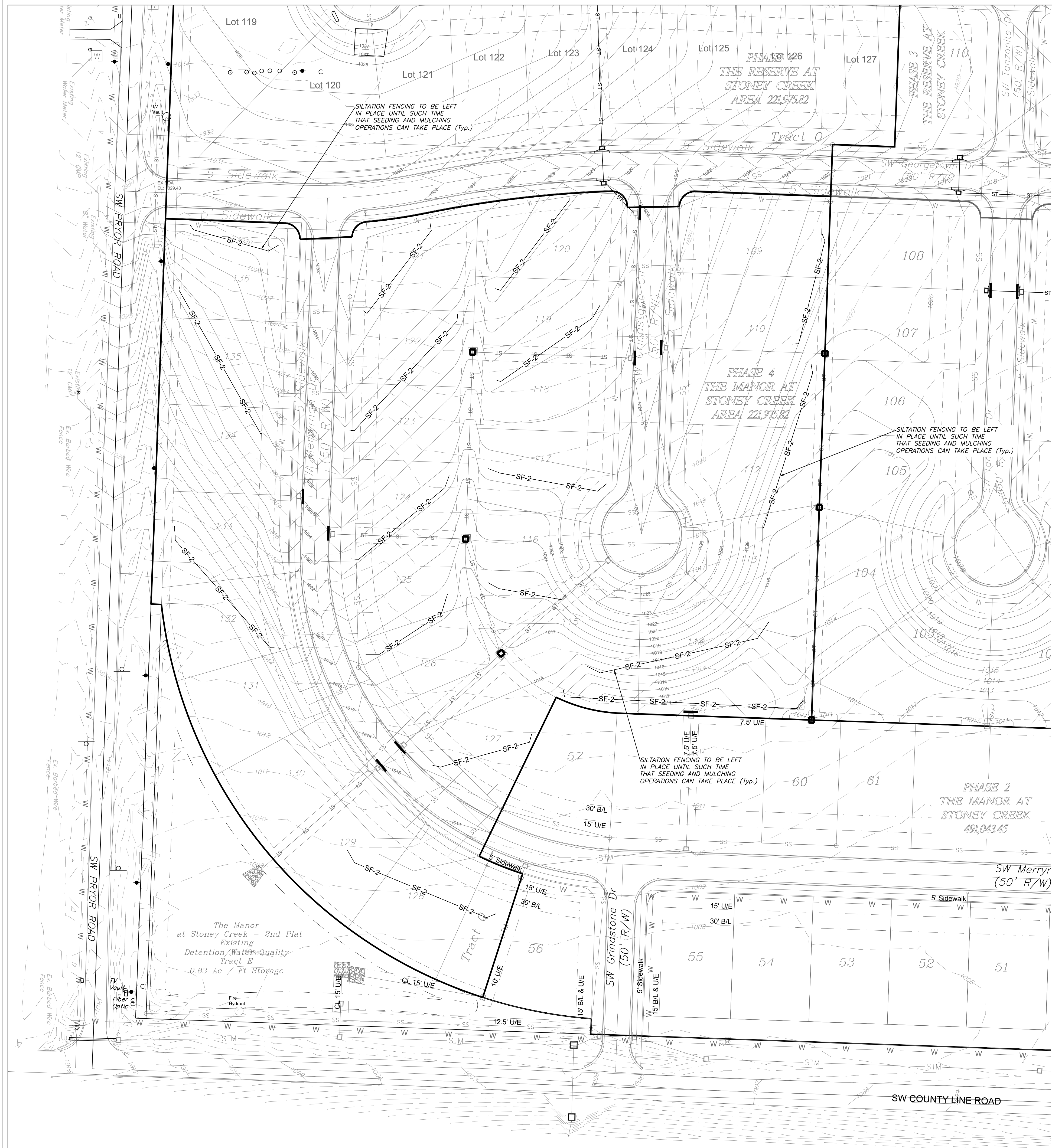
Project: THE MANOR AT STONEY CREEK 4TH PLAT
Map Date: August 29, 2018

ESC PHASE 2 - Inactive Area Stabilization Plan
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 255226

REVISIONS	
REV. 1-4-19	
REV. 2-11-19	



SILT FENCE PROTECTION
TO BE MAINTAINED BY CONTRACTOR

LEGEND

PHASE 1 SILT FENCE ——— SF-1 ——— SF-1 ———
PHASE 2 SILT FENCE ——— SF-2 ——— SF-2 ———
INLET PROTECTION
GUTTER BUDDY OR EQUIVALENT ———

DURING ALL PHASES OF CONSTRUCTION,
INACTIVE AREA STABILIZATION METHODS AS
DESCRIBED IN APWA SECTION 5111.3 SHALL BE
USED TO CONTROL EROSION AND SILTATION.

NOTES: The Land Disturbance Plans indicates the Final placement of
erosion control devices. The contractor(s) may proceed with
construction prior to the final placement of these devices by providing
additional devices to control erosion on their items of work. These
devices shall be maintained until the final devices are in place.

SEED AND MULCH NOTES:

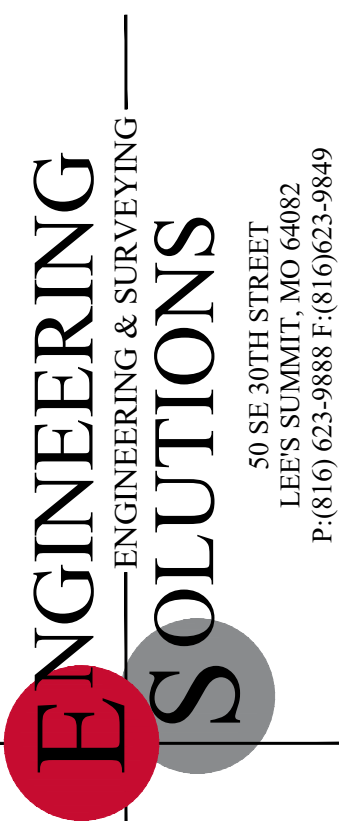
All areas disturbed by construction activities shall be seeded and
mulched. Seeding shall be done before the proposed seeded
becomes eroded, crusted over, or dried out and shall not be done when
the ground is frozen, or covered with snow. The seed shall comply with
the requirements of the Missouri Seed Law and the Federal Seed Act.
Also, it shall contain no seed of any plant on the Federal Noxious Weed
List. Other weed seeds shall not exceed one percent by weight of mix

Seed and Fertilizer Rate:
Mix I - Rye Grass / Blue Grass 100 lbs. per Acre
Mix II - Tall Fescue / Blue Grass 195 lbs. per Acre
Lime 2000 lbs per Acre (50
lbs. per 1000 sq. ft.)
Fertilizer 800 to 1200 lbs per
Acre (25 lbs per 1000 sq. ft.)

During the dates December 15th through May 31 ALL lime fertilizer,
seed and mulch shall be applied to finished slopes of disturbed areas.
During the months of June, July, October and November 1st through
December 15th, lime fertilizer, seed and mulch shall be applied at the
following rates:
Lime - 100% of specified quantity
Fertilizer - 75% of the specified quantity
Seed - 50% of the specified quantity
Mulch - 100% of the specified quantity

Mulch shall be Vegetative type, cereal straw from stalks of oats, rye, or
barley, or approved equal. The straw shall be free of prohibited weed
seed and relatively free of all other noxious and undesirable seed.
Mulch shall be applied at the rate of 2 tons per acre, (70 to 90 lbs per
1000 sq. ft.). Mulch shall be embedded by a mulch anchoring tool or
disk type roller having flat serrated disks spaced not more than 10
inches apart and cleaning scrapers shall be provided

ONCE SITE IS 90% VEGETATED ALL ESC DEVICES
SHALL BE REMOVED AND ANY DISTURBED AREAS
SHALL BE RESTORED

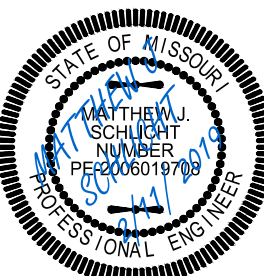


Professional Registration
Missouri
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Kansas
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Lee's Summit, Jackson County, Missouri

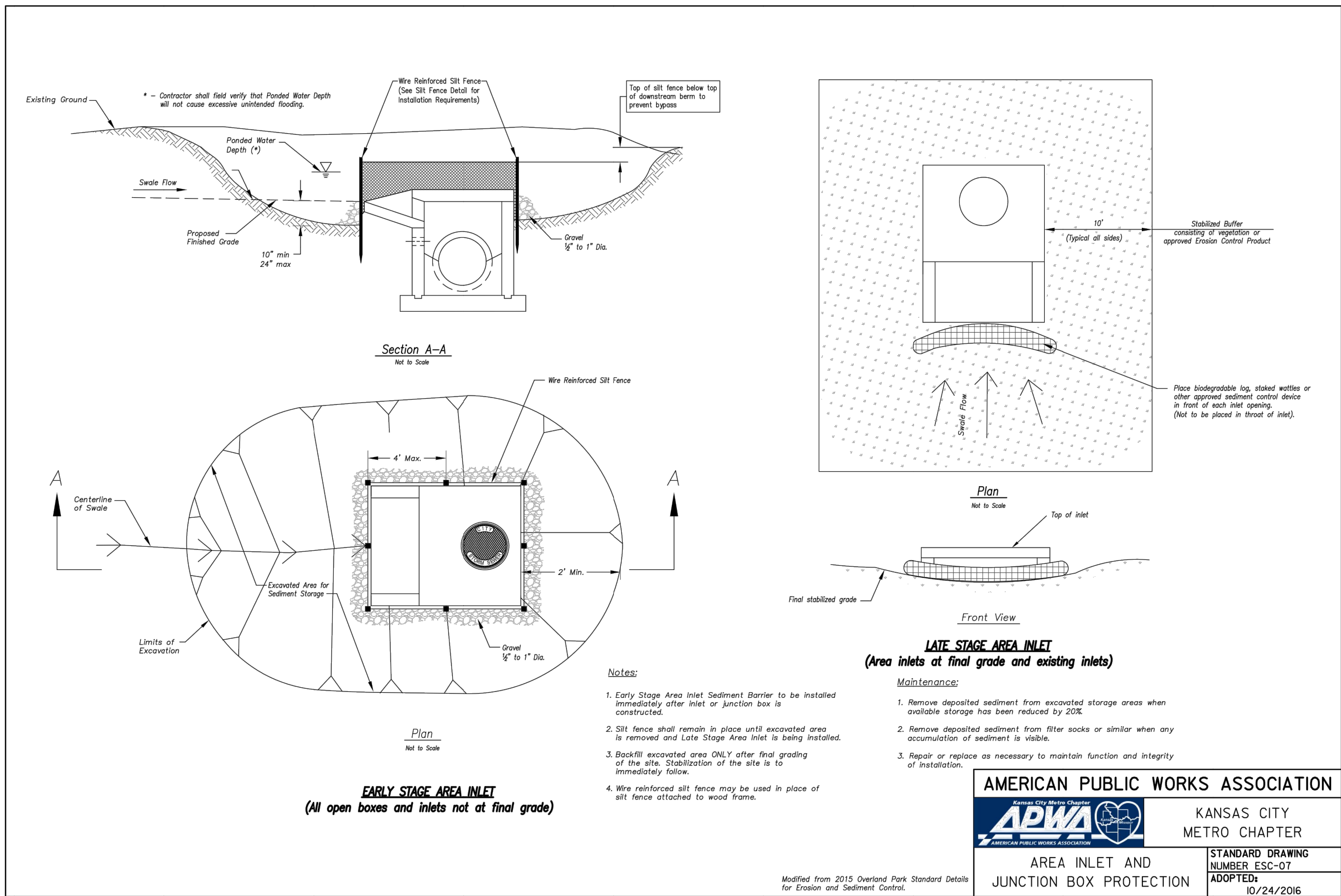
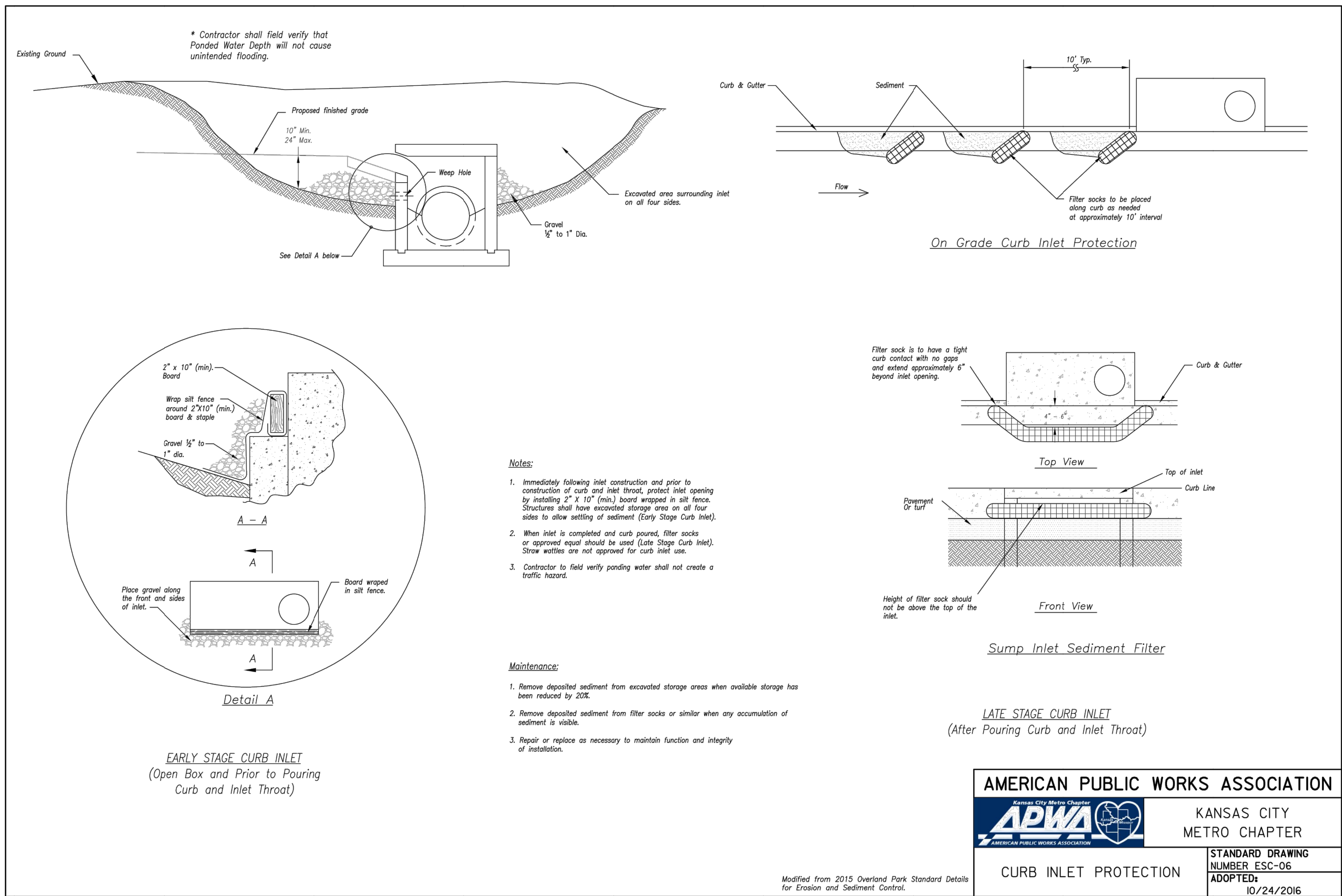
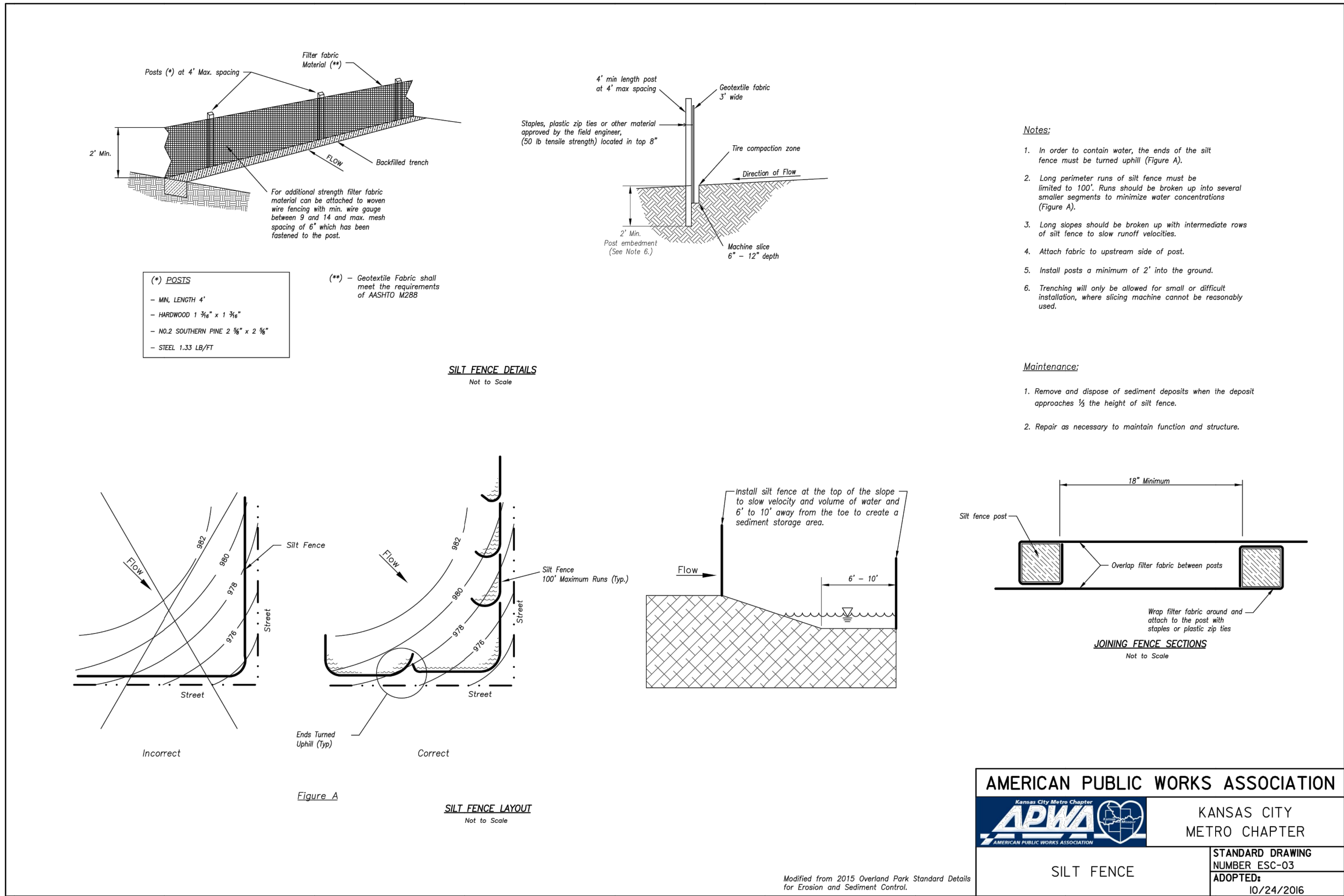
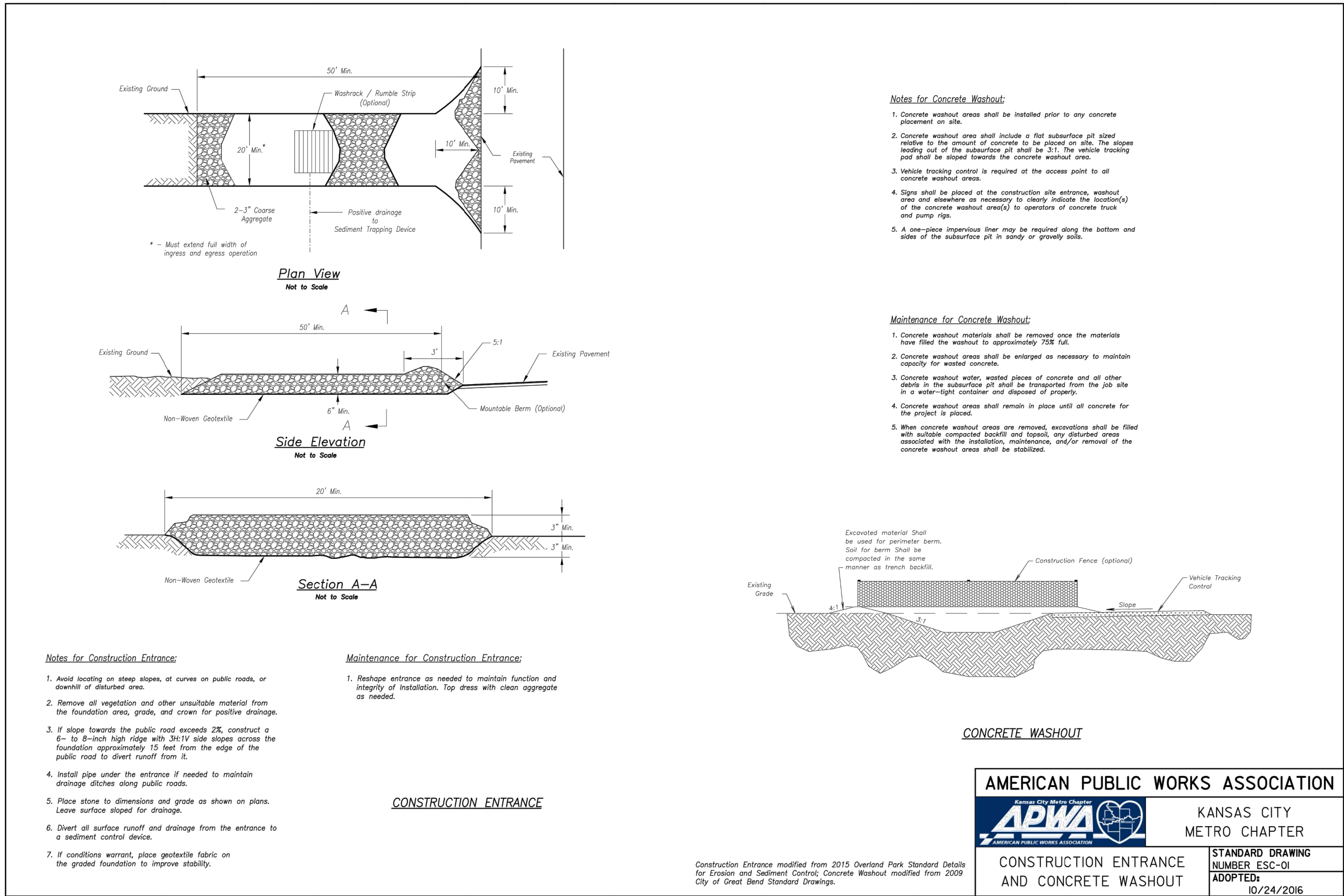
Project: MANOR AT
STONEY CREEK
4TH PLAT
Issue Date:
August 29, 2018

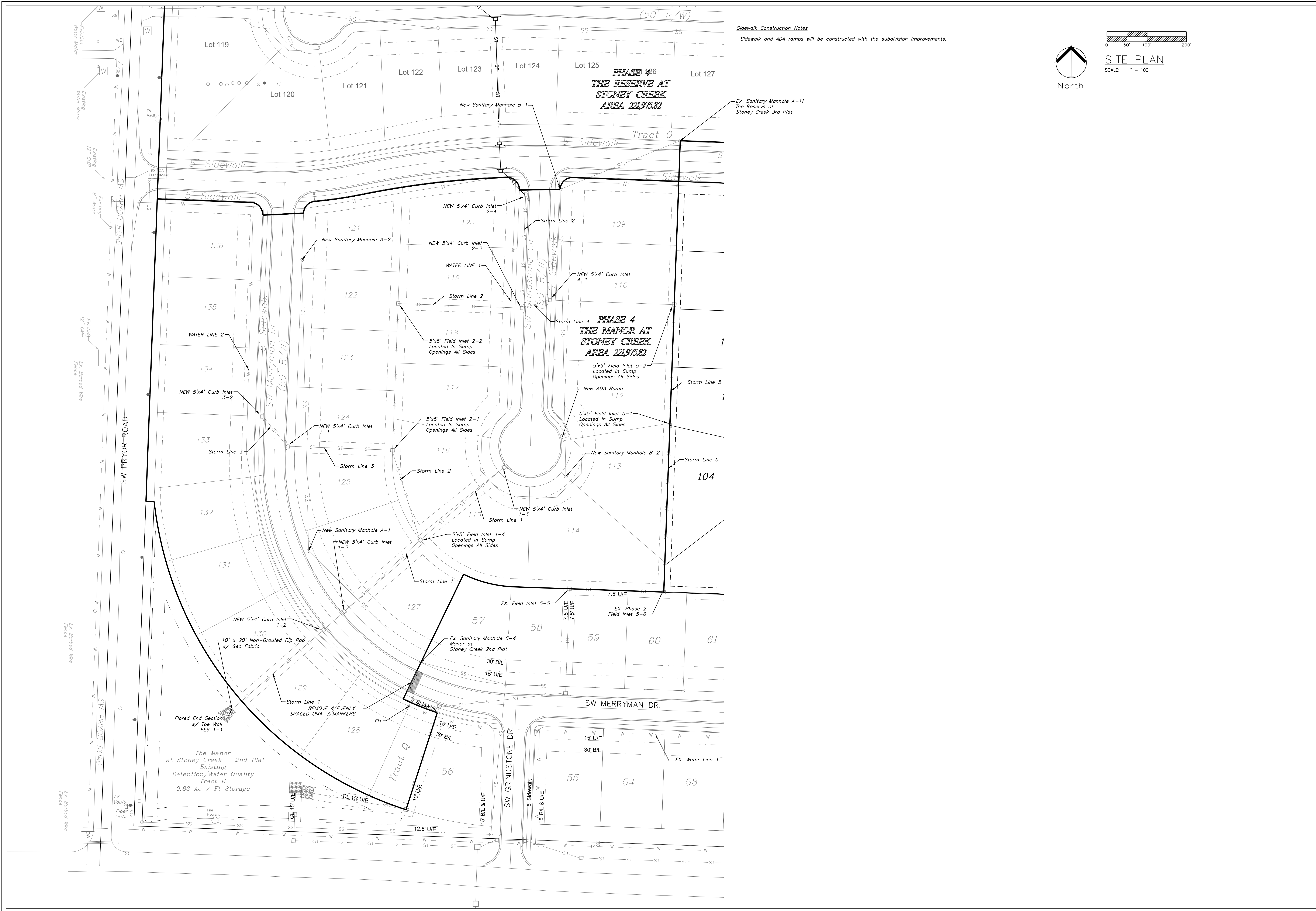
ESC PHASE 3 - Final Restoration Plan
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

REVISIONS
REV. 1-4-19
REV. 2-11-19





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50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849

Professional Registration

Missouri
Engineering 2005002185-D
Surveying 200500319-D
Kansas
Engineering E-1895
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Site Plan

Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

Project: MANOR AT STONEY CREEK 4TH PLAT
Issue: 1
Date: August 23, 2018

STATE OF MISSOURI
MATTHEW J. SCHLICHT
REGISTERED PROFESSIONAL ENGINEER
No. 0000019708
Exp. 08/23/2026

REVISIONS
REV. 1-4-19
REV. 2-11-19

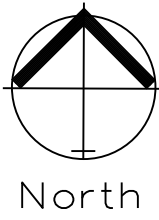
C.100

Notes

1. Contractor is responsible for verifying all existing utility locations prior to excavation
2. There are no known natural or artificial water storage detention areas, or wetlands in the area designated for construction
3. No part of the project lies within the 100 year flood plain
4. All erosion and sediment control measures need to be implemented prior to construction
5. Additional erosion control may be required by the City Engineer, Design Engineer or Owner at any time problematic areas are noted in the field or existing measures are found to be ineffective
6. Soil Stabilization of disturbed areas shall be completed within 14 days of construction inactivity
7. Contractor responsible for all density testing of roadway subgrade and granular base.



Grading Plan
SCALE: 1" = 50'

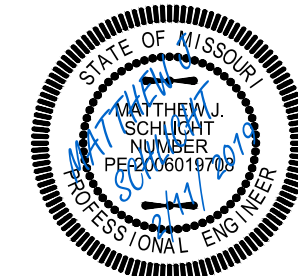


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The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

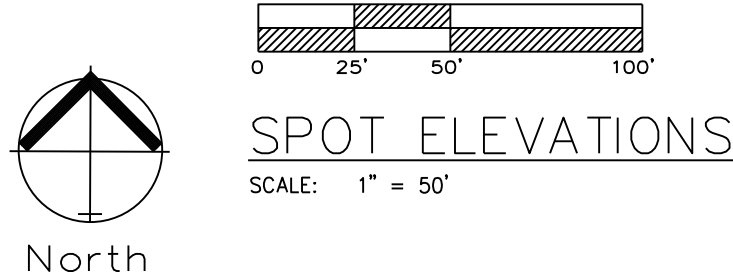
Project: MANOR AT STONEY CREEK 4TH PLAT
Issue: 1
Date: August 29, 2018

Master Drainage Plan 1 of 3:
Grading Plan
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
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REVISIONS	
REV. 1-4-19	
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Order Number	Basement Type	MBOE Lt.	MBOE Rt.
109	Walkout	1022.00	1022.00
110	Walkout	1022.00	1021.10
111	Walkout	1021.10	1020.30
112	Walkout	1020.30	1018.15
113	Walkout	1018.15	1012.65
114	Walkout	1012.50	1015.50
115	Walkout	1015.50	1017.16
116	Daylight/Walkout	1017.60	1021.25
117	Daylight	1021.25	1025.75
118	Daylight	1025.75	1027.75
119	Full	1027.75	1030.25
120	Full	1030.25	1030.25
121	Walkout	1029.60	1029.60
122	Walkout	1029.60	1027.25
123	Walkout	1027.25	1027.25
124	Walkout	1024.55	1021.25
125	Walkout	1021.25	1019.00
126	Full	1019.00	1017.20
127	Full	1017.20	1016.25
128	Walkout	1012.82	1012.82
129	Walkout	1012.82	1012.82
130	Walkout	1012.82	1012.82
131	Walkout	1012.82	1014.75
132	Walkout	1014.75	1018.75
133	Walkout	1018.35	1020.65
134	Walkout	1020.65	1024.00
135	Walkout	1024.00	1027.70
136	Daylight	1027.70	1027.70



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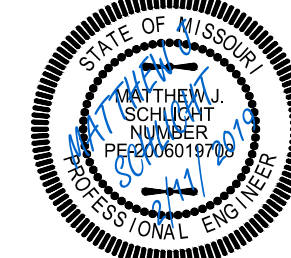
Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
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Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

Project: THE MANDOR AT STONEY CREEK 4TH PLAT

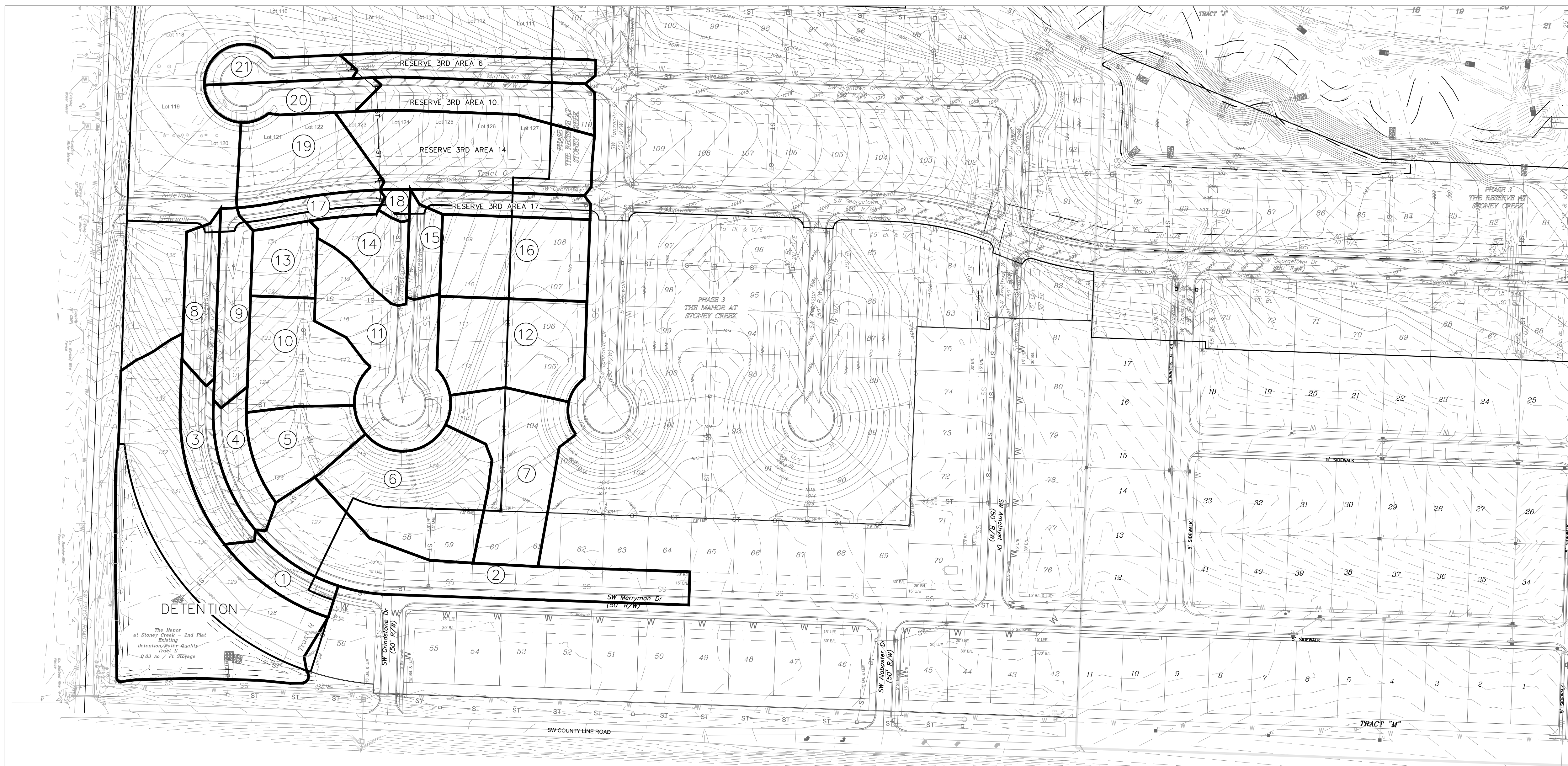
Issue Date: August 29, 2018

Master Drainage Plan 2 of 3:
Spot Elevations
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlich
MO PE 200601970
KS PE 19071
OK PE 25226

REVISIONS	
1	REV. 1-4-19
2	REV. 2-11-19



Drainage Area	Area Sq. Ft.	Area Ac.
1	10057.25	0.23
2	56598.12	1.30
3	16170.5	0.37
4	11883.94	0.27
5	20519.85	0.47
6	43928.99	1.01
7	37720.92	0.87
8	13781.71	0.32
9	16826.56	0.39
10	29334.69	0.67
11	44019.84	1.01
12	37589.96	0.86
13	12668.28	0.29
14	14547.61	0.33
15	8364.55	0.19
16	33381.6	0.77
17	9224.51	0.21
18	2238.52	0.05
19	28448.12	0.65
20	15039.79	0.35
21	11369.09	0.26
Detention	102259.96	2.35

APWA STORM DRAINAGE "TC" COMPUTATIONS FOR : The Manor at Stoney Creek - 4th Plat																										
yellow areas are self computing overwrite if necessary		Surface types: Asph/ConcBus/Com Dirt Grass/Park Lake MultFam SnglFam Undev Other																								
		SURFACE CODES A B D G L M S U Z																								
		"C" Values 0.90 0.87 0.60 0.30 0.90 0.66 0.51 0.3																								
		P=Paaved U=Unpaved if necessary																								
TOTAL WATERSHED		OVERLAND FLOW - 100' MAX										SURFACE CODE		CHANNEL FLOW - FIRST REACH							TC COMPUTATION					
AREA ID	TOTAL ACRES	WTRSHD LENGTH	UP ELEV	DN ELEV	SURFACE CODE	"C" VALUE	OVRLND LENGTH	UP ELEV	DN ELEV	SLOPE %	P or U	CHANNEL LENGTH	UP ELEV	DN ELEV	SLOPE %	VELOCITY F/S	Cal Flow T(I)	Used Min 5 T(I)	Cal Channel One T(T)	Cal Channel Two T(T)	Total T(T)					
1	0.23	212.0	1016.0	1013.0	S	0.51	50.0	1016.0	1015.0	2.0	P	162.0	1015.0	1013.0	1.23	2.3	6.0	6.0	1.2	0.0	7.2	1.0				
2	1.20	475.0	1015.5	1012.3	S	0.51	42.0	1015.5	1014.7	2.0	P	433.0	1014.7	1012.3	0.54	1.5	5.4	5.4	4.8	0.0	10.3	2.0				
3	0.37	329.0	1026.2	1015.0	S	0.51	59.0	1026.2	1025.0	2.0	P	270.0	1025.0	1015.0	3.70	3.9	6.4	6.4	1.2	0.0	7.6	3.0				
4	0.27	269.0	1025.1	1015.0	S	0.51	54.0	1025.1	1024.0	2.0	P	215.0	1024.0	1015.0	4.19	4.2	6.2	6.2	0.9	0.0	7.1	4.0				
5	0.47	202.0	1022.0	1017.0	S	0.51	90.0	1022.0	1020.0	2.2	U	112.0	1020.0	1017.0	2.68	2.6	7.7	7.7	0.7	0.0	8.4	5.0				
6	1.01	261.0	1021.0	1010.0	S	0.51	100.0	1021.0	1016.1	4.9	U	161.0	1016.1	1010.0	3.79	3.1	6.3	6.3	0.9	0.0	7.1	6.0				
7	0.87	246.0	1023.0	1010.0	S	0.51	100.0	1023.0	1015.5	7.5	U	146.0	1015.5	1010.0	3.77	3.1	5.4	5.4	0.8	0.0	6.2	7.0				
8	0.32	281.0	1032.8	1025.5	S	0.51	42.0	1032.8	1032.0	2.0	P	239.0	1032.0	1025.5	2.72	3.4	5.5	5.5	1.2	0.0	6.7	8.0				
9	0.39	319.0	1032.9	1024.2	S	0.51	44.0	1032.9	1032.0	2.0	P	275.0	1032.0	1024.2	2.84	3.4	5.6	5.6	1.3	0.0	6.9	9.0				
10	0.67	247.0	1030.3	1020.0	S	0.51	92.0	1030.3	1024.3	6.5	U	155.0	1024.3	1020.0	2.77	2.7	5.5	5.5	1.0	0.0	6.4	10.0				
11	1.01	367.0	1030.3	1022.0	S	0.51	100.0	1030.3	1026.5	3.8	P	267.0	1026.5	1022.0	1.69	2.6	6.8	6.8	1.7	0.0	8.5	11.0				
12	0.86	232.0	1024.2	1017.0	S	0.51	100.0	1024.2	1019.9	4.3	U	132.0	1019.9	1017.0	2.20	2.4	6.5	6.5	0.9	0.0	7.5	12.0				
13	0.29	162.0	1031.9	1026.4	S	0.51	99.0	1031.9	1028.6	3.3	U	63.0	1028.6	1026.4	3.49	3.0	7.1	7.1	0.3	0.0	7.4	13.0				
14	0.33	239.0	1030.9	1024.5	S	0.51	100.0	1030.9	1028.0	2.9	P	139.0	1028.0	1024.5	2.52	3.2	7.4	7.4	0.7	0.0	8.2	14.0				
15	0.19	162.0	1026.9	1024.5	S	0.51	46.0	1026.9	1026.0	2.0	P	116.0	1026.0	1024.5	1.29	2.3	5.7	5.7	0.8	0.0	6.6	15.0				
16	0.77	222.0	1026.9	1019.9	S	0.51	100.0	1026.9	1021.7	5.2	P	122.0	1021.7	1019.9	1.48	2.5	6.1	6.1	0.8	0.0	6.9	16.0				
17	0.21	265.0	1033.4	1027.5	S	0.51	33.0	1033.4	1032.7	2.0	P	232.0	1032.7	1027.5	2.24	3.0	4.8	5.0	1.3	0.0	6.3	17.0				
18	0.05	72.0	1027.8	1026.0	S	0.51	23.0	1027.8	1027.3	2.0	P	49.0	1027.3	1026.0	2.65	3.3	4.0	5.0	0.2	0.0	5.2	18.0				
19	0.65	360.0	1037.2	1027.5	S	0.51	100.0	1037.2	1033.5	3.7	P	260.0	1033.5	1027.5	2.31	3.1	6.9	6.9	1.4	0.0	8.3	19.0				
20	0.35	315.0	1038.0	1032.0	S	0.51	26.0	1038.0	1037.5	2.0	P	289.0	1037.5	1032.0	1.89	2.8	4.3	5.0	1.7	0.0	6.7	20.0				
21	0.26	276.0	1038.0	1033.0	S	0.51	26.0	1038.0	1037.5	2.0	P	250.0	1037.5	1033.0	1.78	2.7	4.3	5.0	1.5	0.0	6.5	21.0				
Detention	2.35	N/A			Z	0.42																Detention				

AREAS 19, 20 AND 21 ARE LOCATED IN THE RESERVE AT STONEY CREEK 4TH PLAT

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Kansas
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The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

Project MANOR AT STONEY CREEK 4TH PLAT
Issue Date August 29, 2018

Master Drainage Map 3 of 3:
Drainage Area Map
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

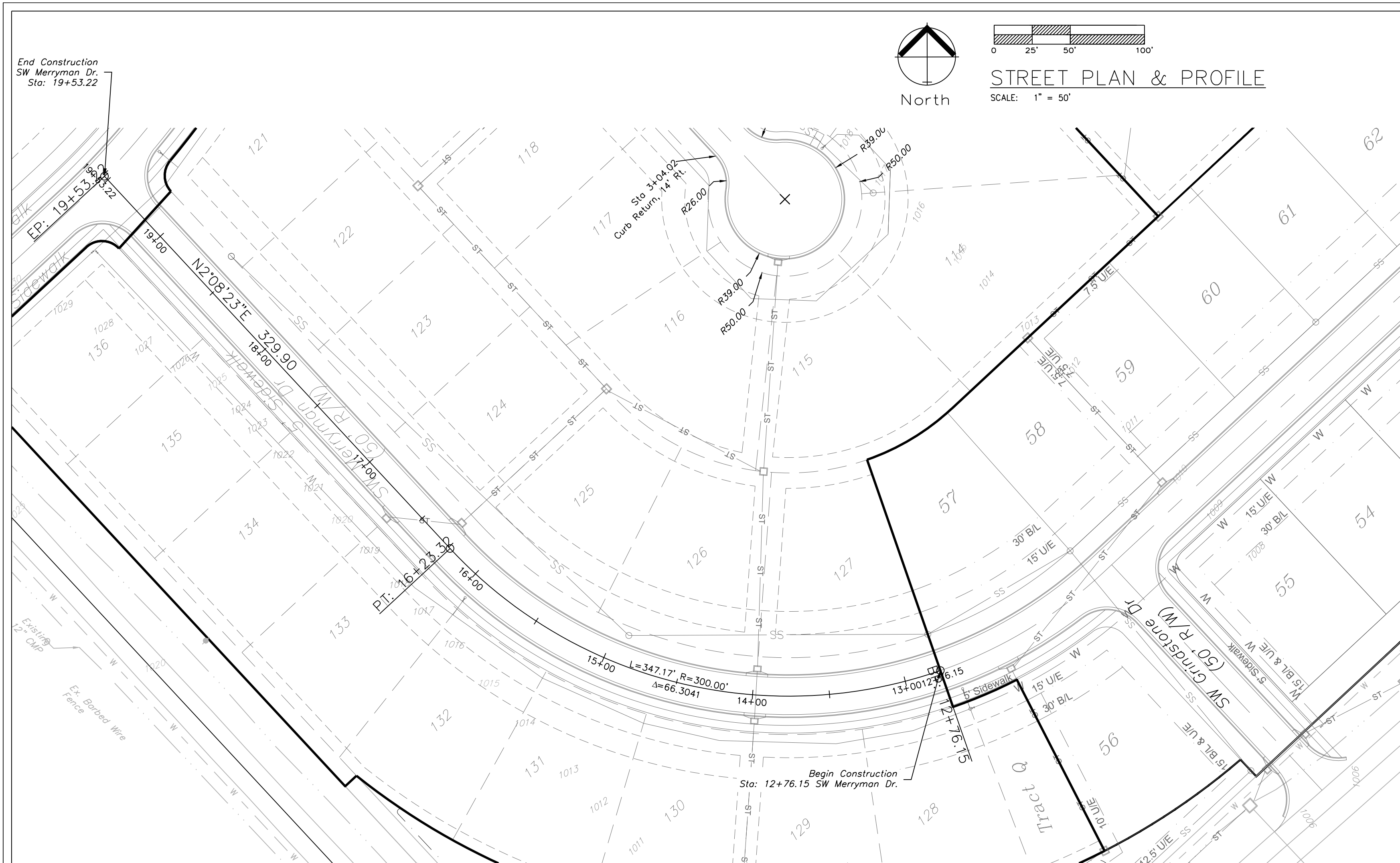
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 255226

REVISIONS

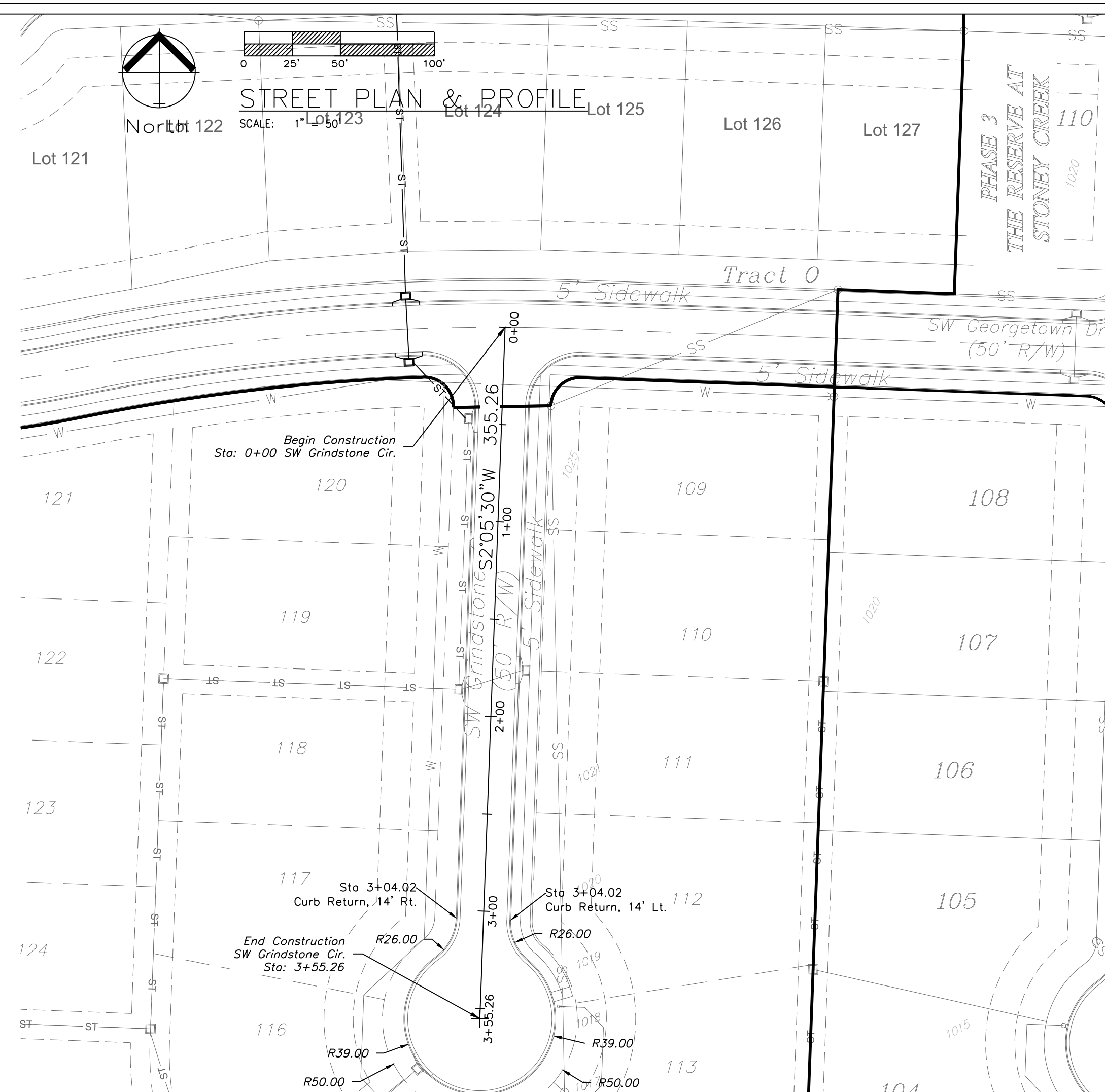
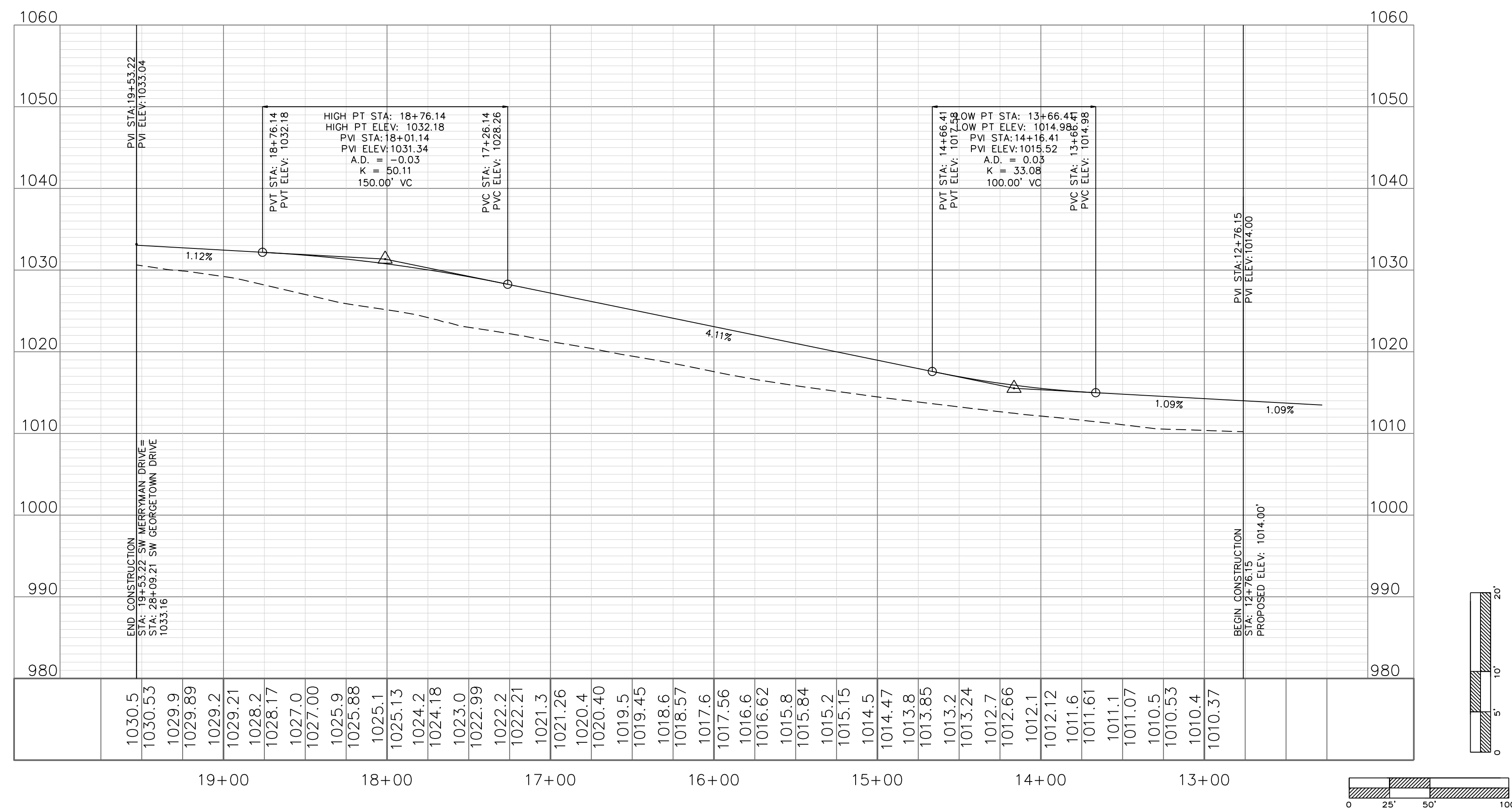
REV. 1-4-19

REV. 2-11-19

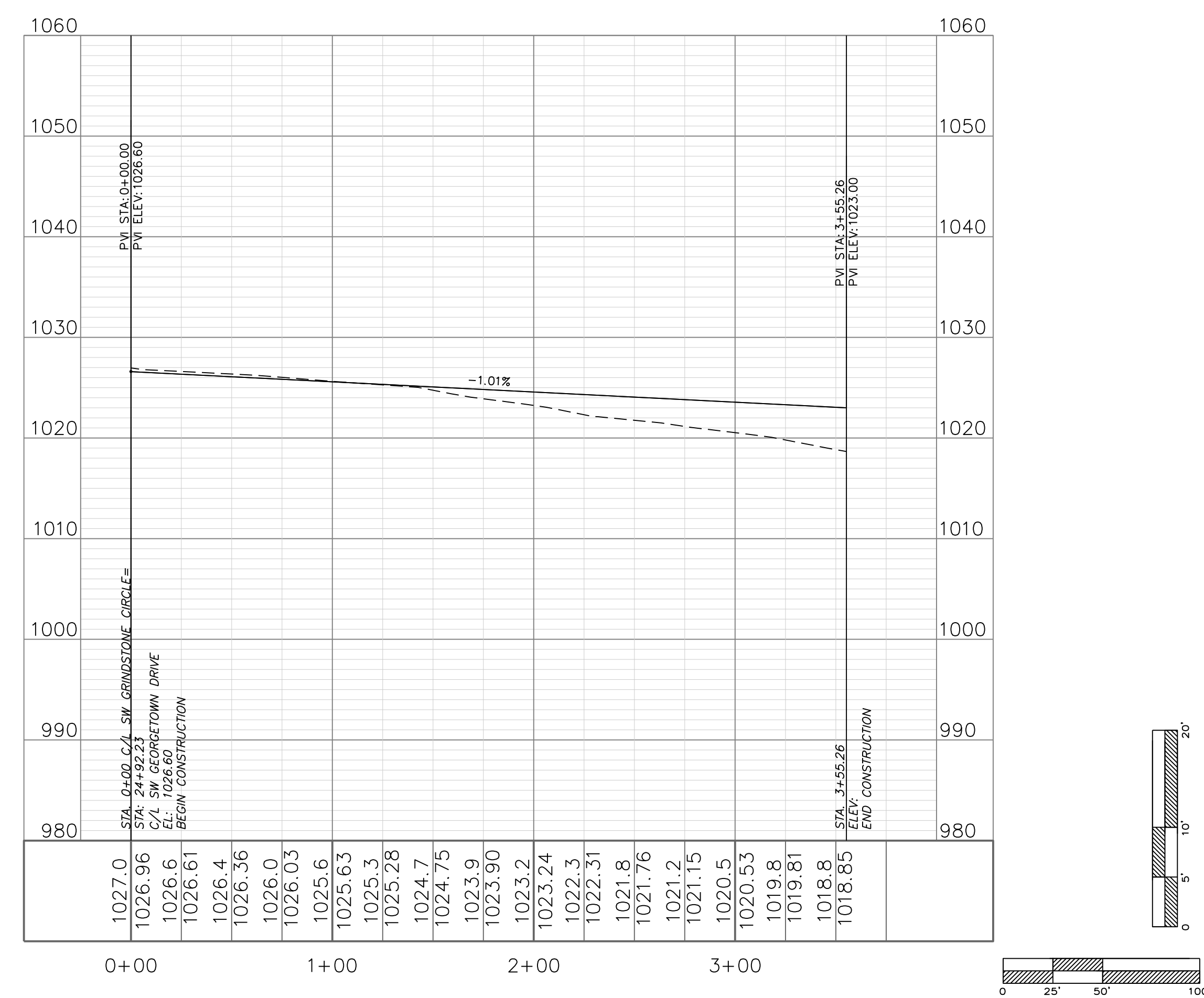
C. 202



SW MERRYMAN DRIVE



SW GRINDSTONE CIR



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The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

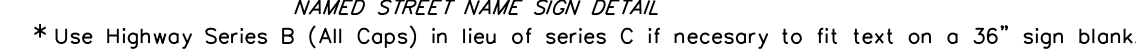
Project: MANOR AT STONEY CREEK 4TH PLAT
Issue Date: August 29, 2018

Street Plan and Profile
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

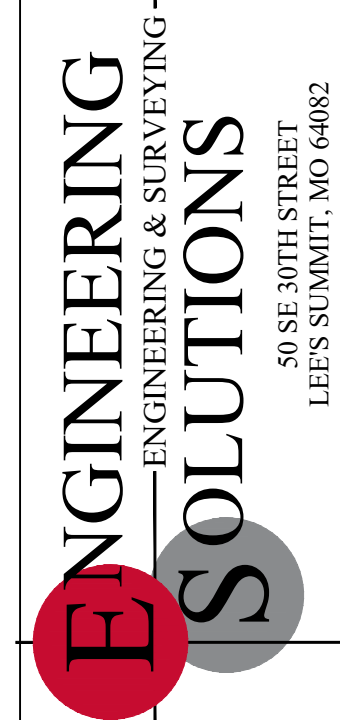
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C.203



* The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.



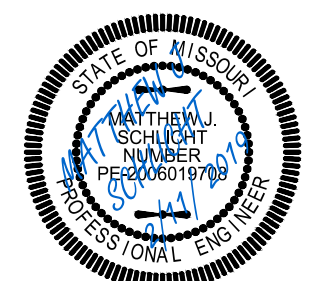
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Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying L.S.-218
Oklahoma
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Nebraska
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The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

Project:
THE MANOR AT
STONE CREEK
4TH PLAT

Issue Date:
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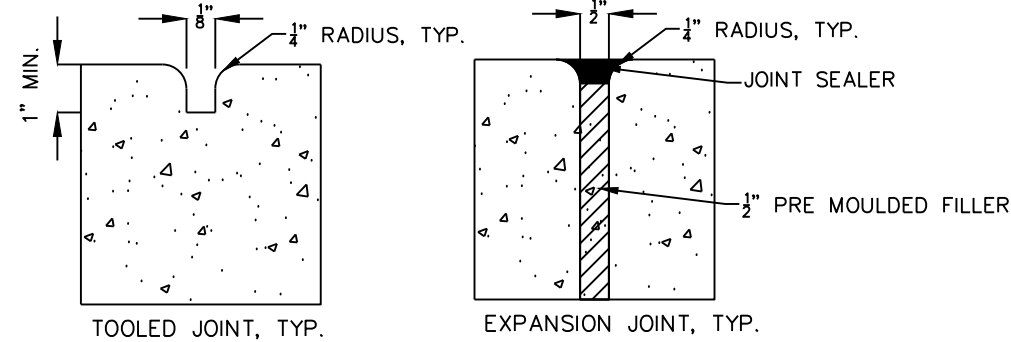
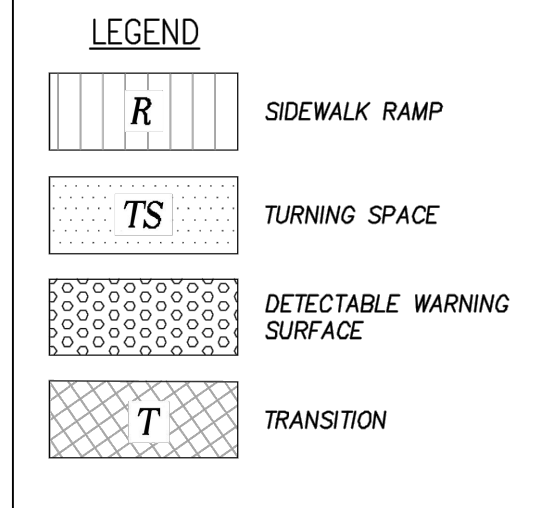
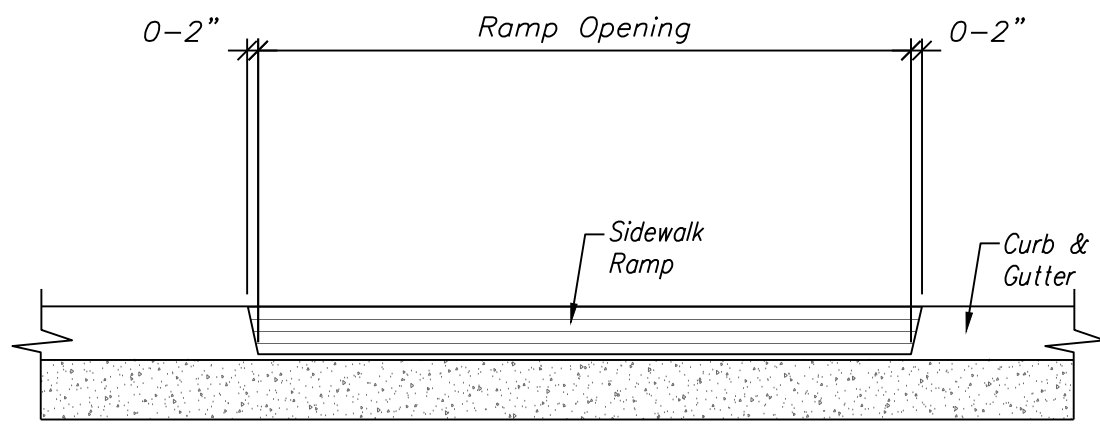
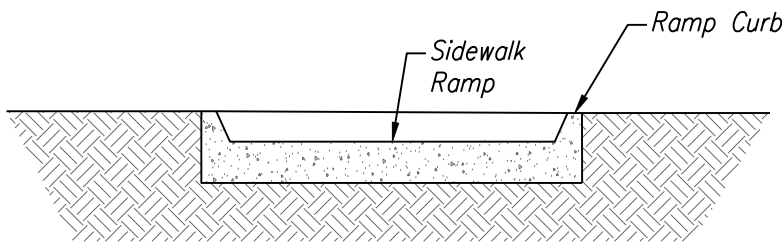
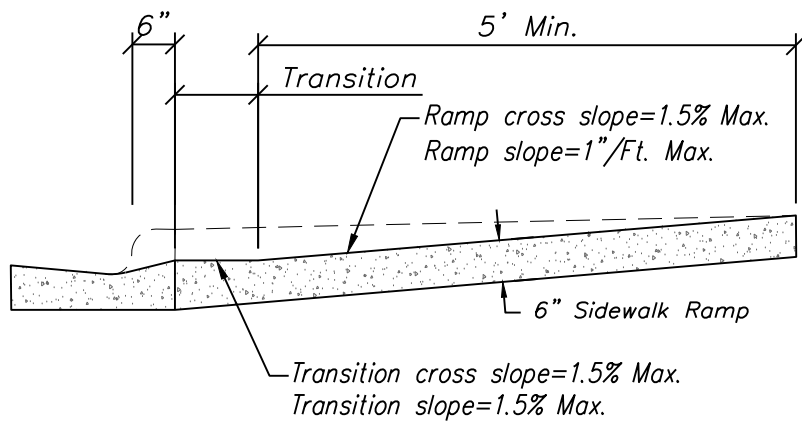
Street Signage Plan
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226

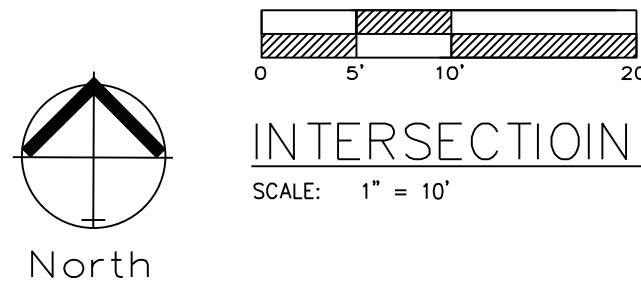
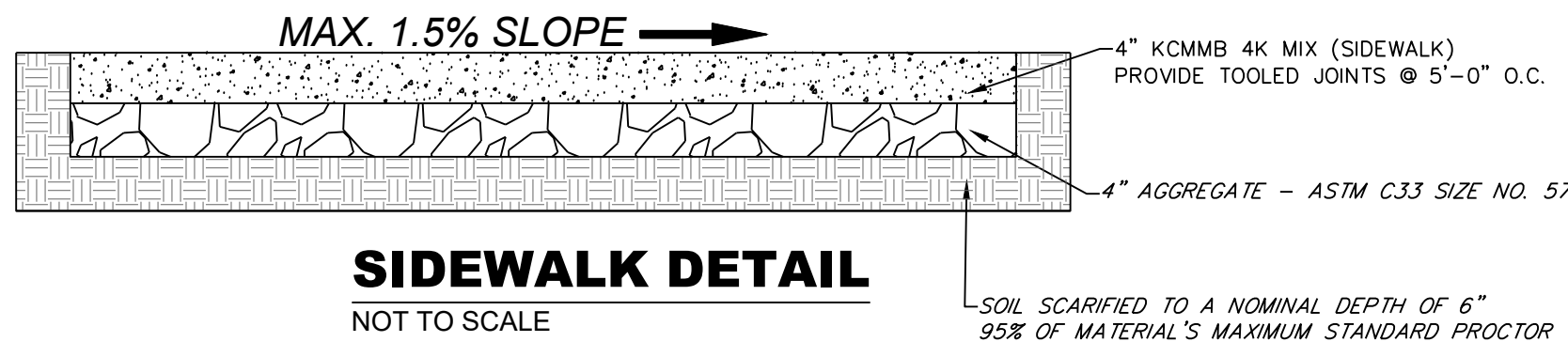
REVISIONS	
1	REV. 1-4-19
2	REV. 2-11-19

- NOTE:
1. ADA ACCESSIBLE RAMPS SHALL BE CONSTRUCTED ALONG WITH SUBDIVISION IMPROVEMENTS.

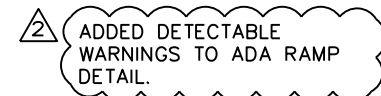
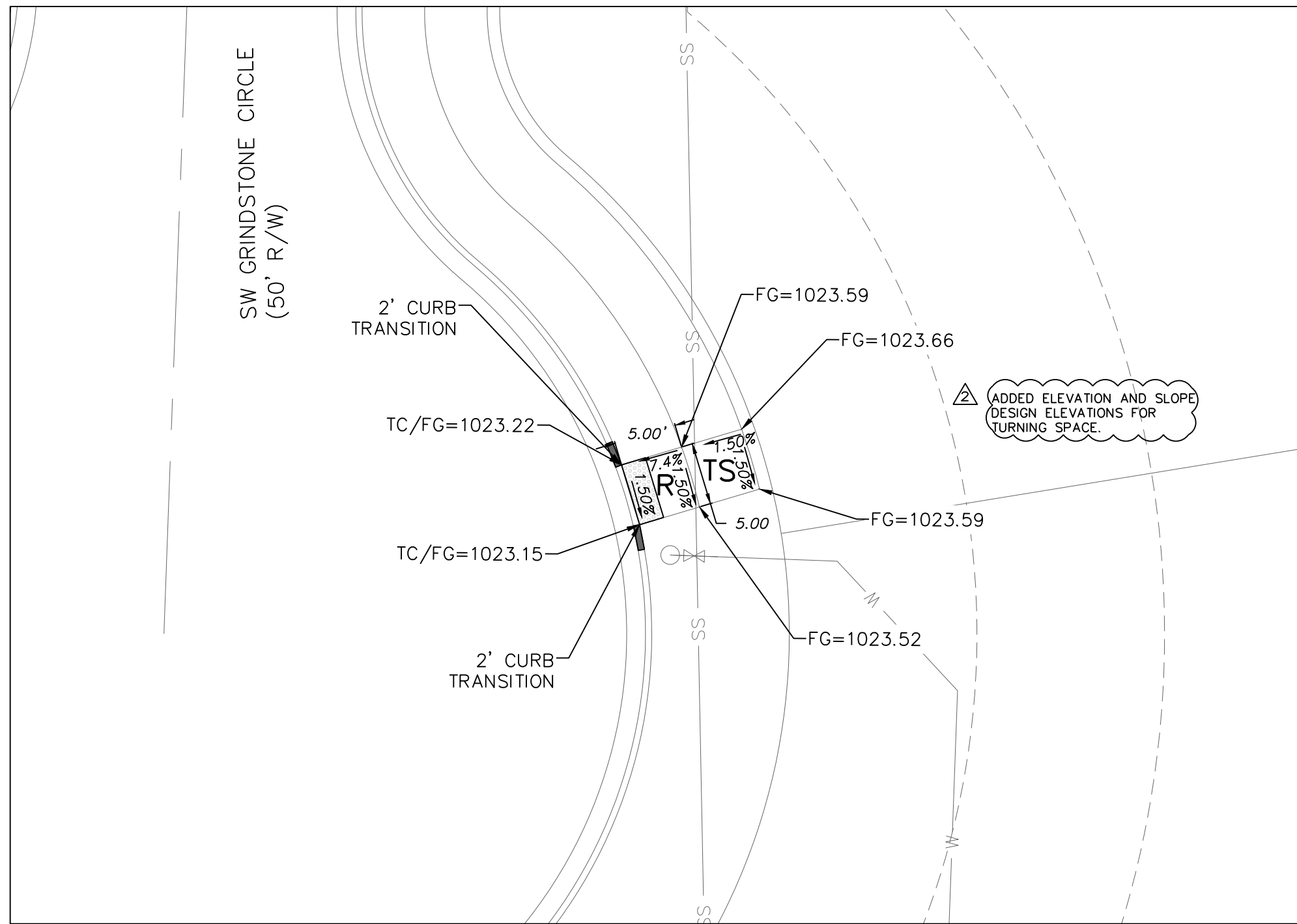


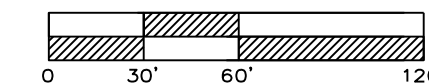
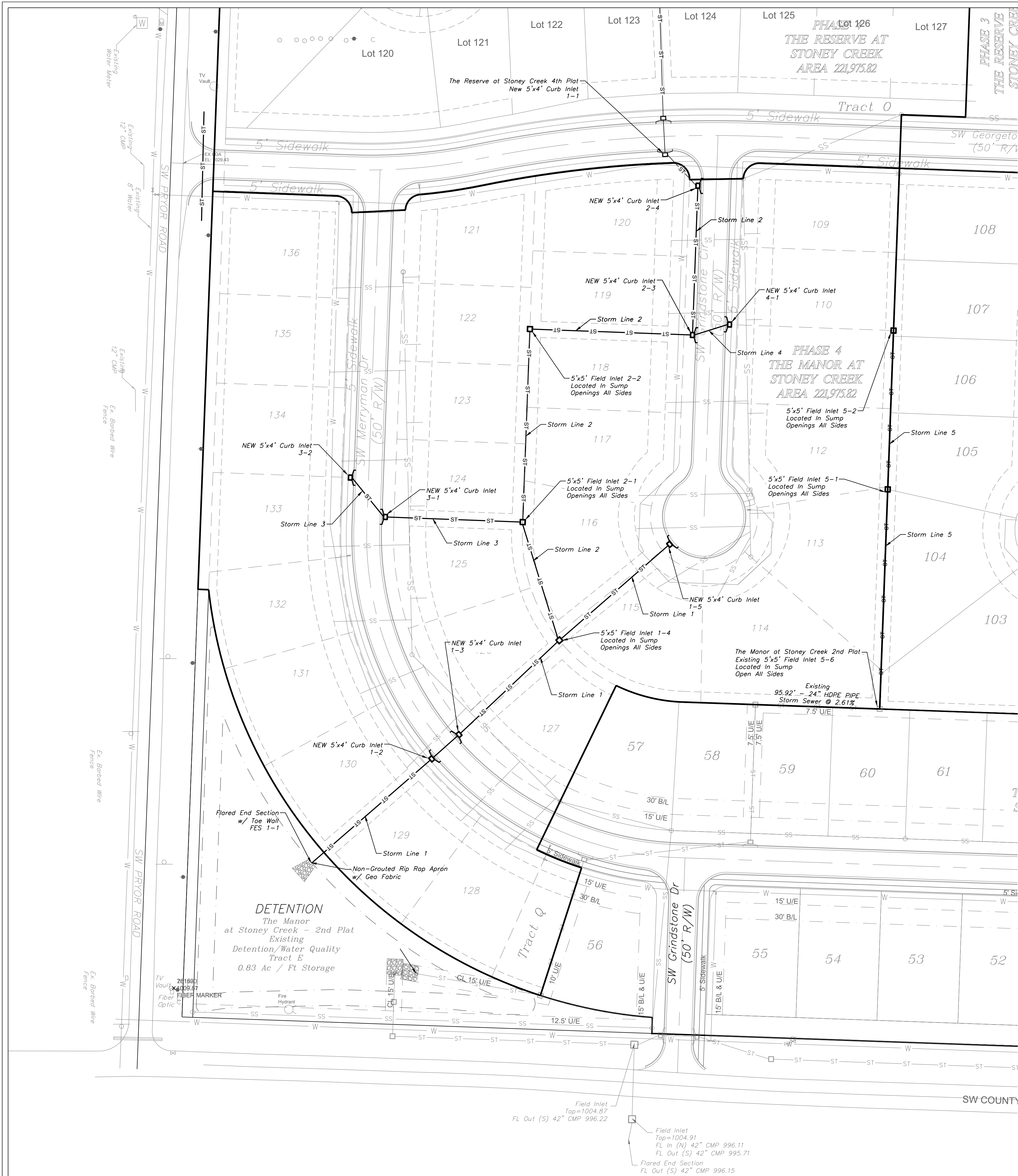
SIDEWALK NOTES:

1. CONCRETE SHALL BE CLASS A CONCRETE AIR ENTRAINED AGGREGATE SPECIFICATIONS PROVIDE 3000LB AIR ENTRAINED CONCRETE (6% AIR PLUS OR MINUS 1%)
2. 3" PRE MOULDED EXPANSION JOINTS SHALL BE PLACED AT 30'-0" CENTERS OR WHEN ABUTTING EXISTING CONCRETE/BRICK. PROVIDE SELF LEVELING SEALANT ABOVE JOINT
3. 1/2" x 1" CONTRACTION JOINTS SHALL BE PLACED AS SHOWN ON THE DRAWINGS OR AT DISTANCE NOT EXCEEDING THE WIDTH OF THE SIDEWALK IF NOT SHOWN, SAW CUT ALL JOINTS AND PROVIDE A SMOOTH FINISH.
4. KEY ALL CONSTRUCTION JOINTS.



INTERSECTION / ADA RAMP ELEVATIONS





STORM SEWER GENERAL LAYOUT

SCALE: 1" = 60'

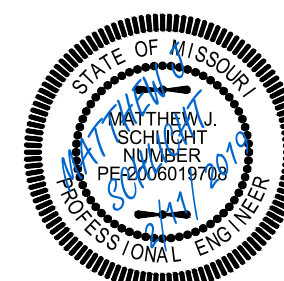


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The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

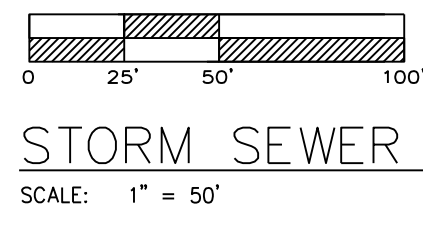
Project: MANOR AT STONEY CREEK 4TH PLAT
Issue: 1
Date: August 29, 2018

Storm Sewer General Layout
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



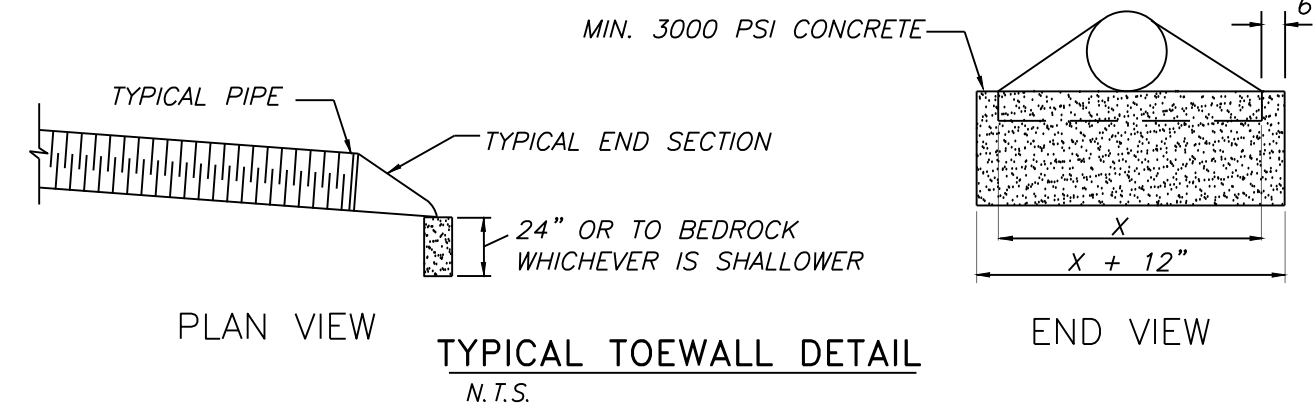
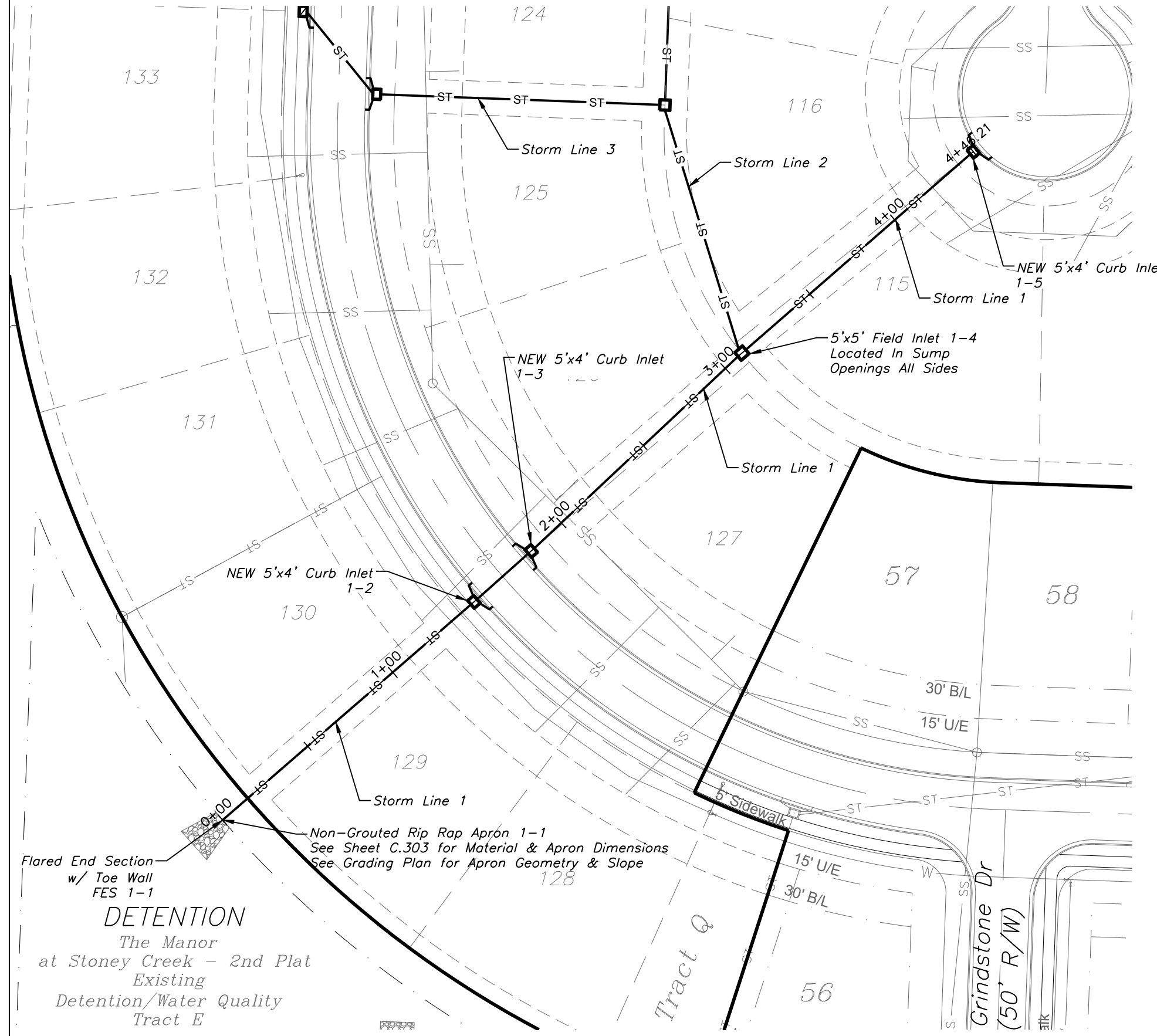
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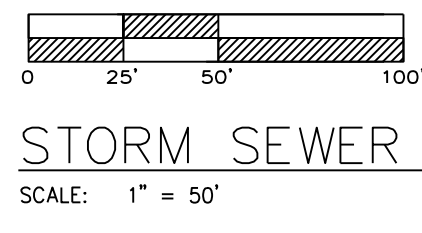
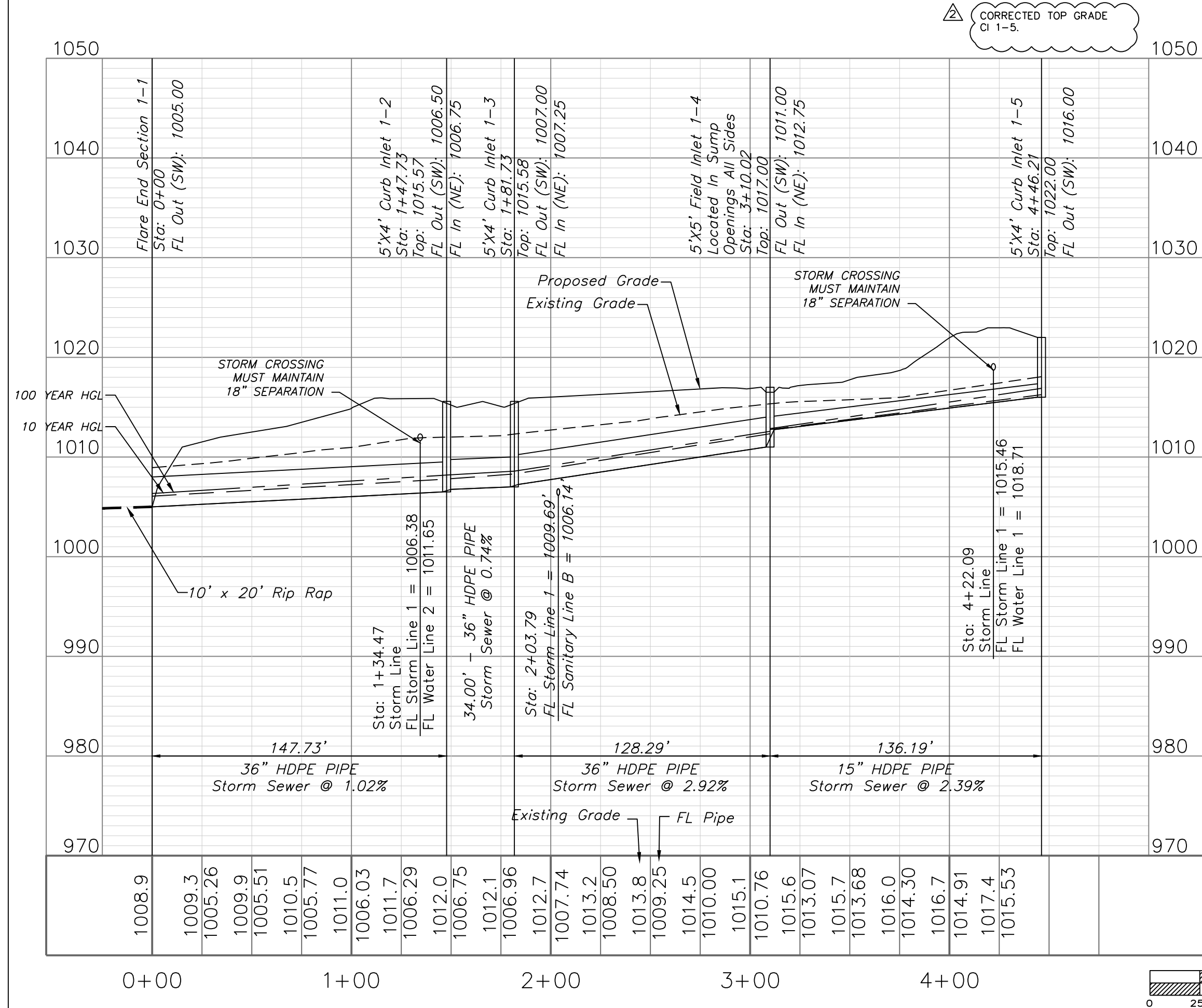


STORM SEWER PLAN & PROFILE

SCALE: 1" = 50'

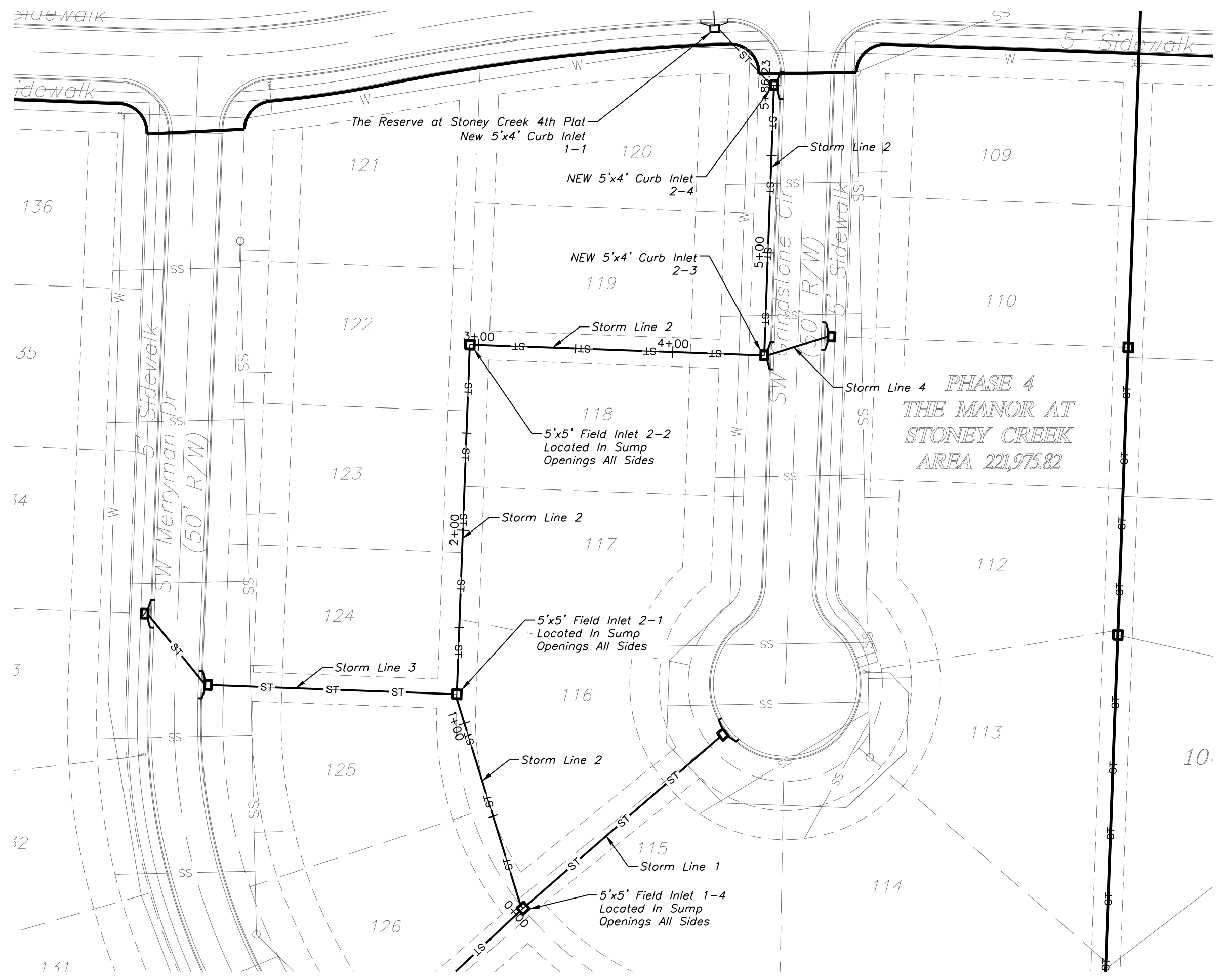


STORM LINE 1

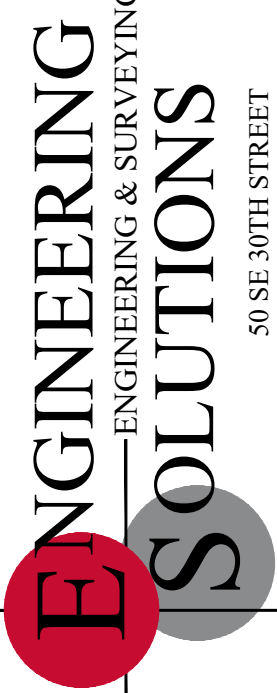
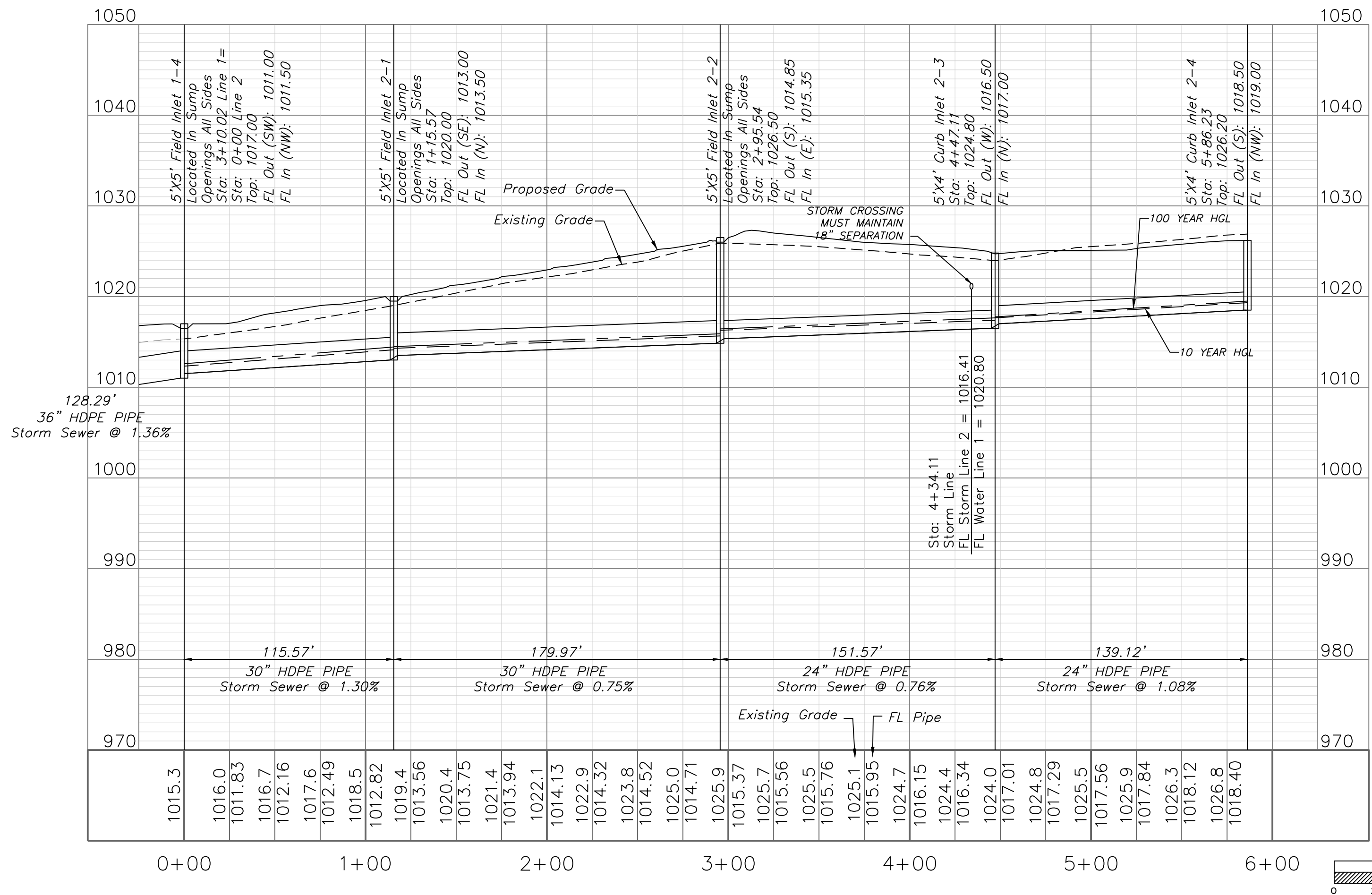


STORM SEWER PLAN & PROFILE

SCALE: 1" = 50'



STORM LINE 2

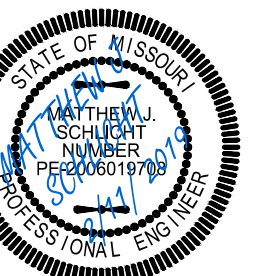


Professional Registration
Missouri
Engineering 2005002188-D
Surveying 200500319-D
Kansas
Engineering E-1895
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

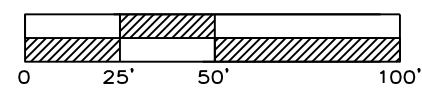
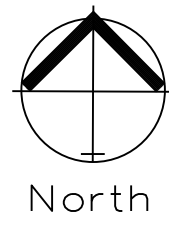
Project: MANOR AT STONEY CREEK 4TH PLAT
Issue: 1
Date: August 29, 2018

Storm Sewer Plan and Profile
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



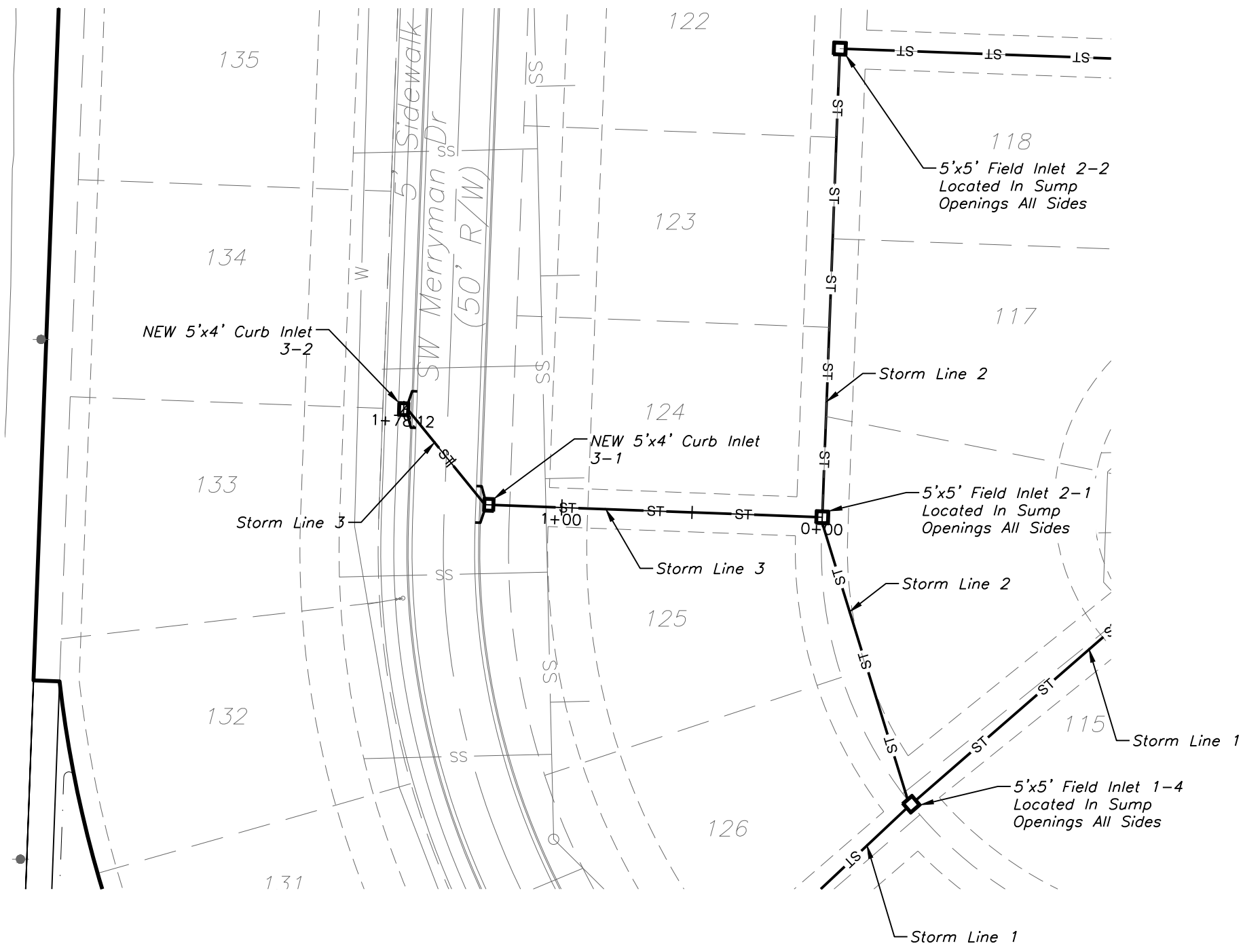
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25526

REVISIONS
REV. 1-4-19
REV. 2-11-19

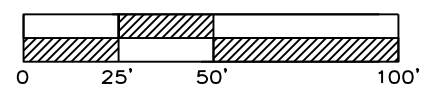
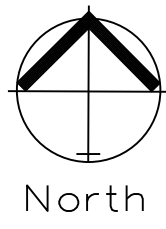
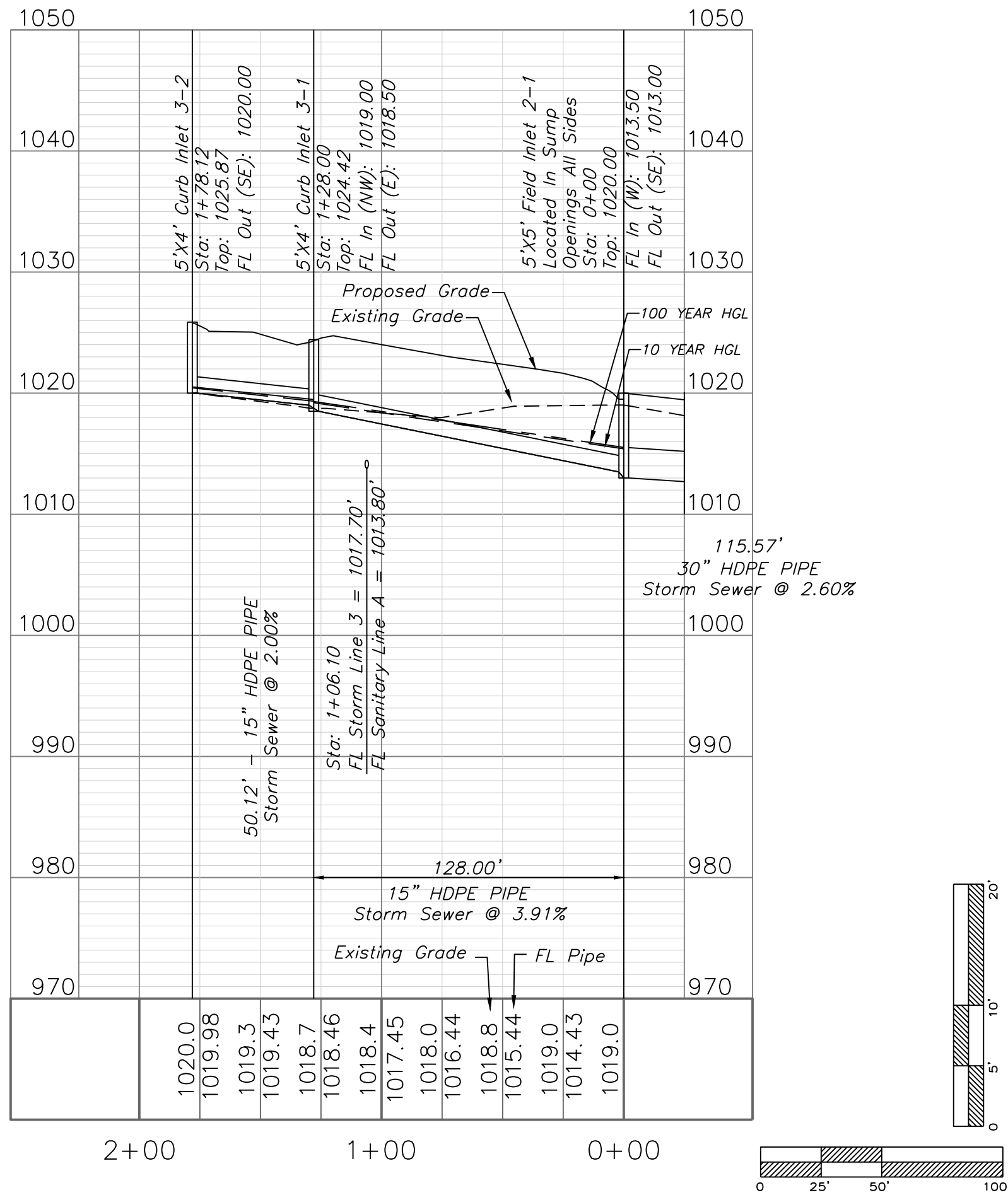


STORM SEWER PLAN & PROFILE

SCALE: 1" = 50'

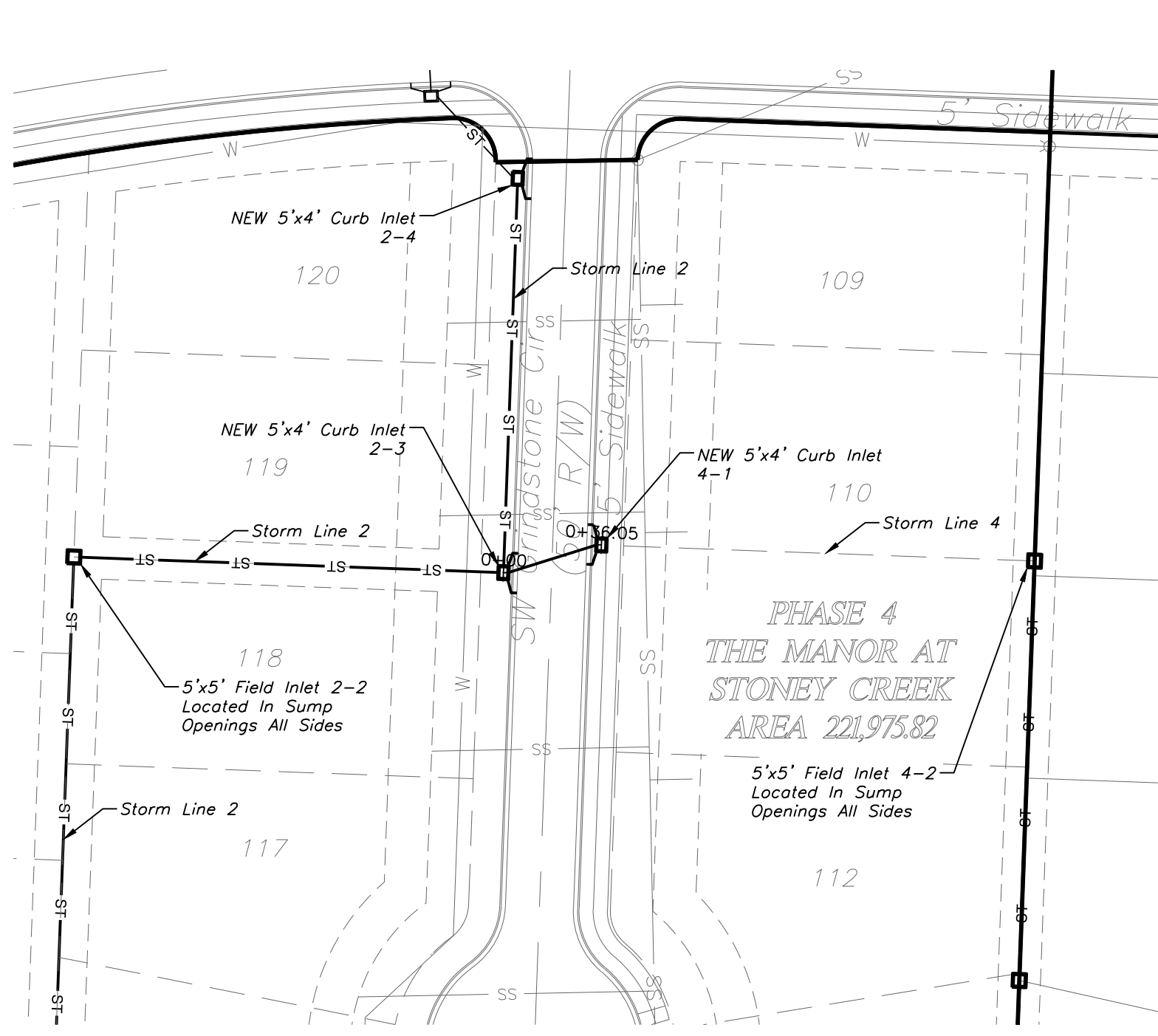


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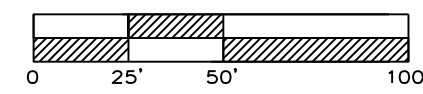
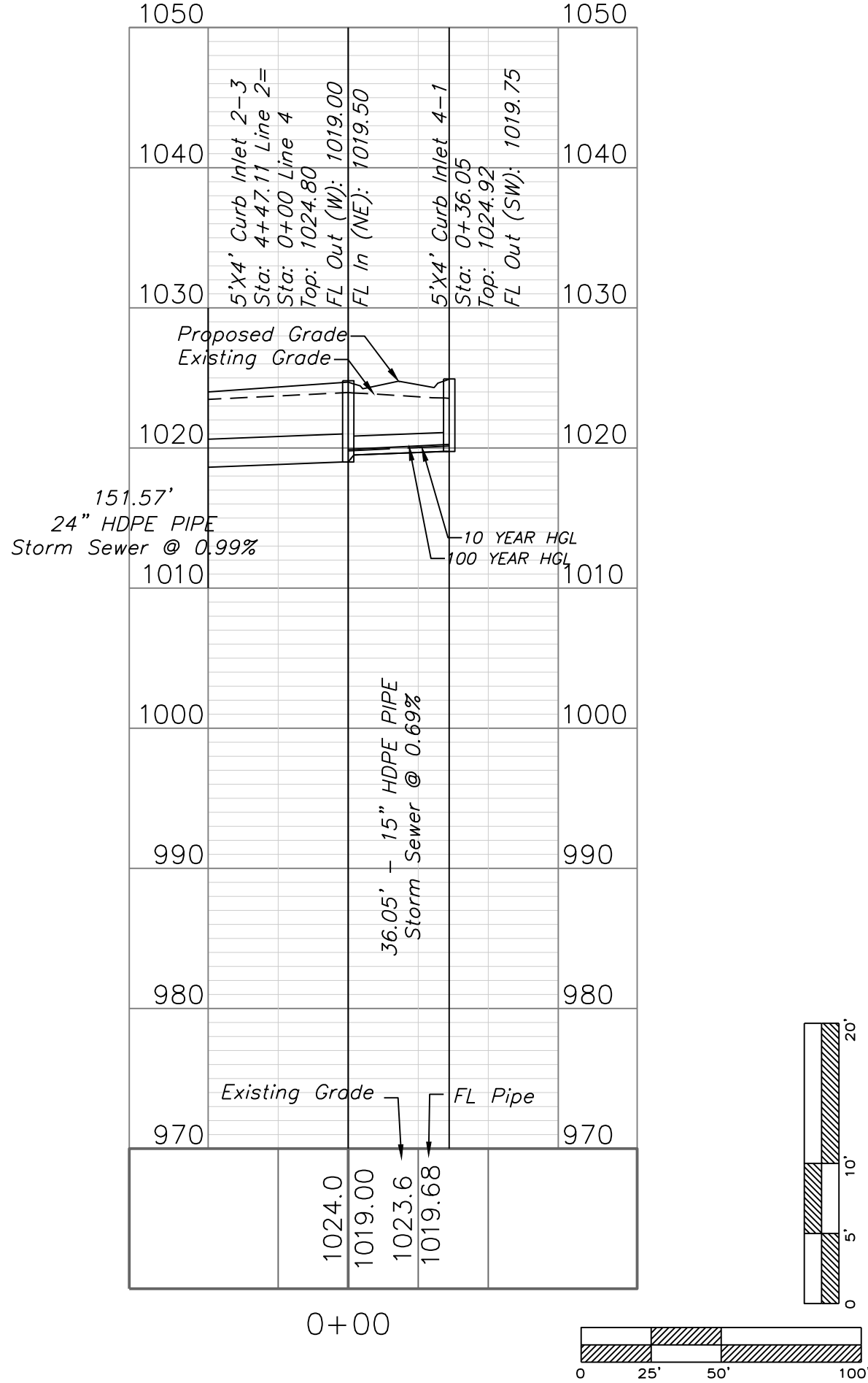


STORM SEWER PLAN & PROFILE

SCALE: 1" = 50'

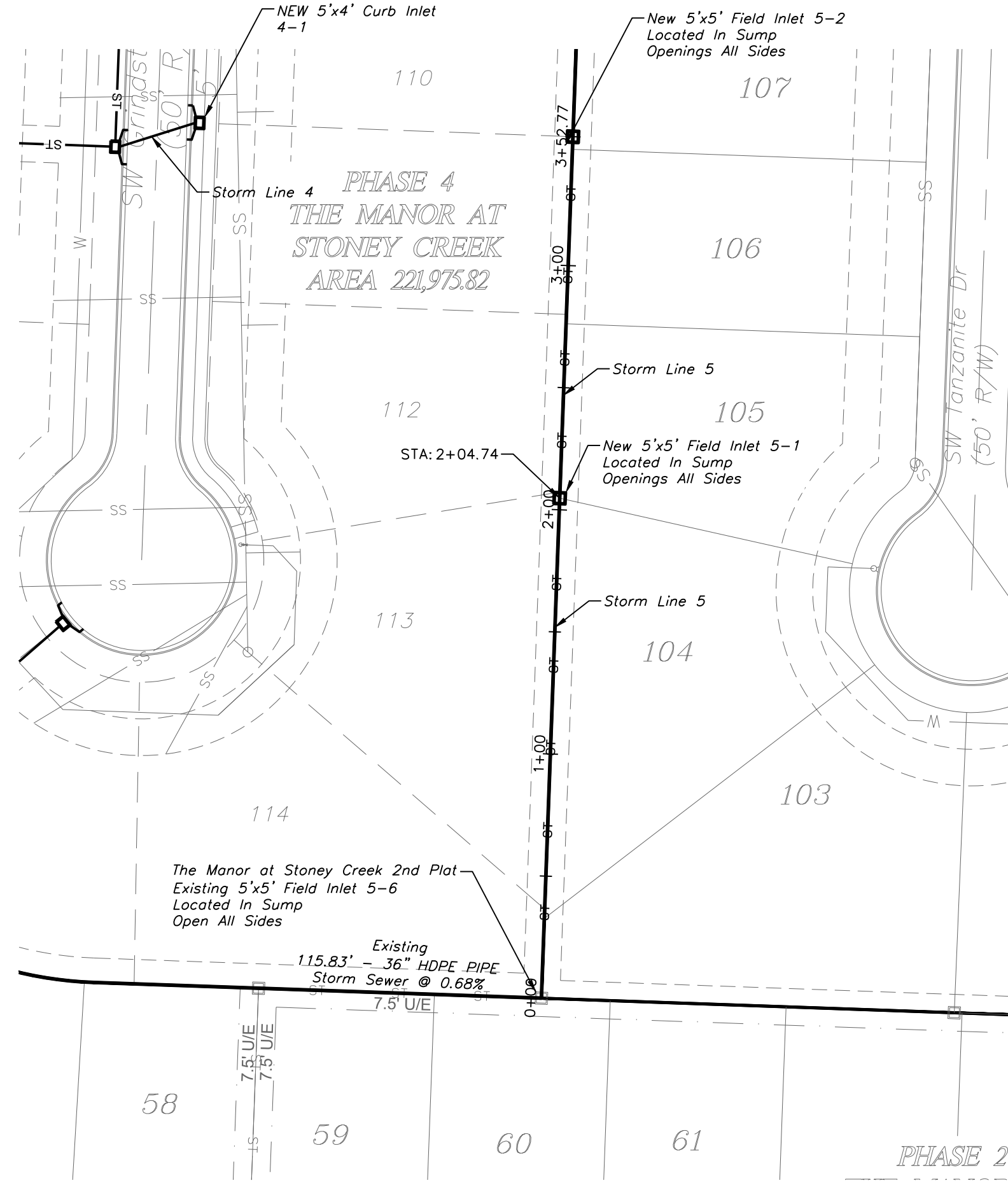


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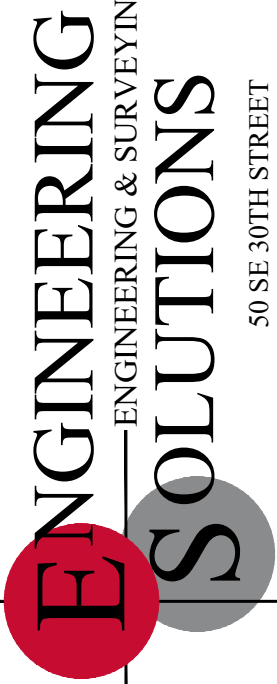
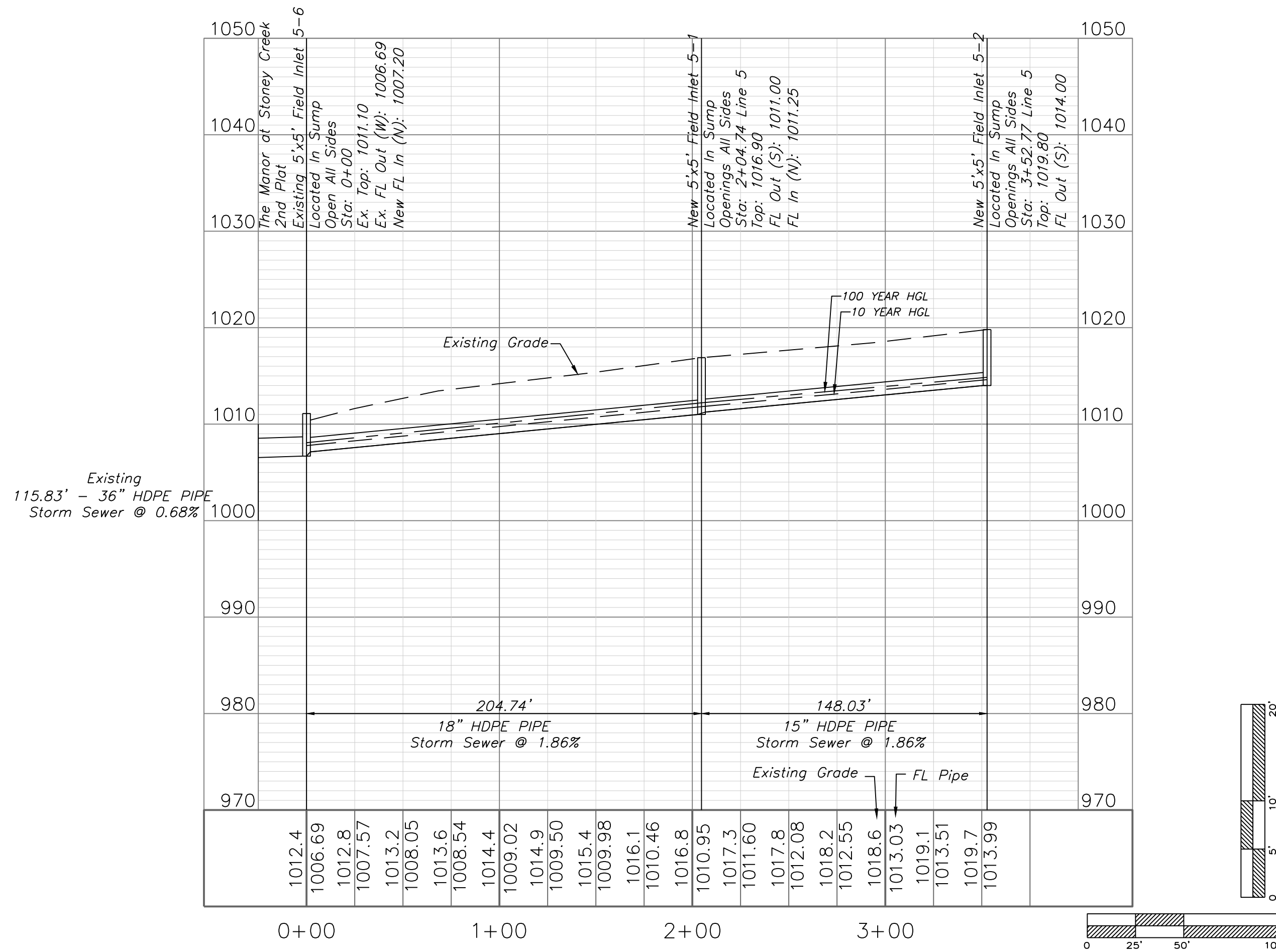


STORM SEWER PLAN & PROFILE

SCALE: 1" = 50'



STORM LINE 5

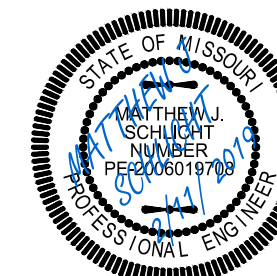


Professional Registration
Missouri
Engineering 2005002188-D
Surveying 200500019-D
Kansas
Engineering E-1895
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

Project: MANOR AT STONEY CREEK 4TH PLAT
Issue: 1
Date: August 29, 2018

Storm Sewer Plan and Profile
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
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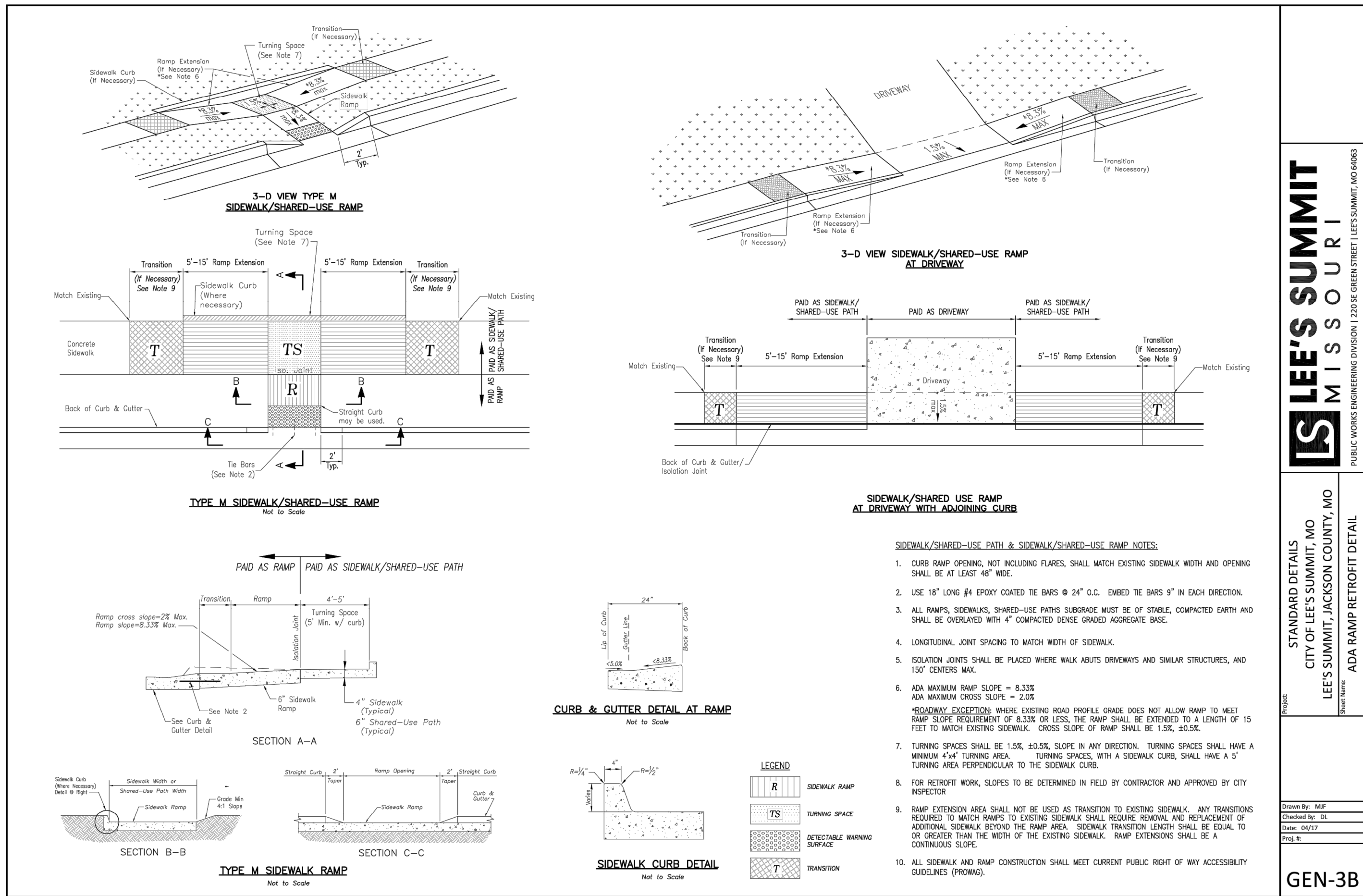
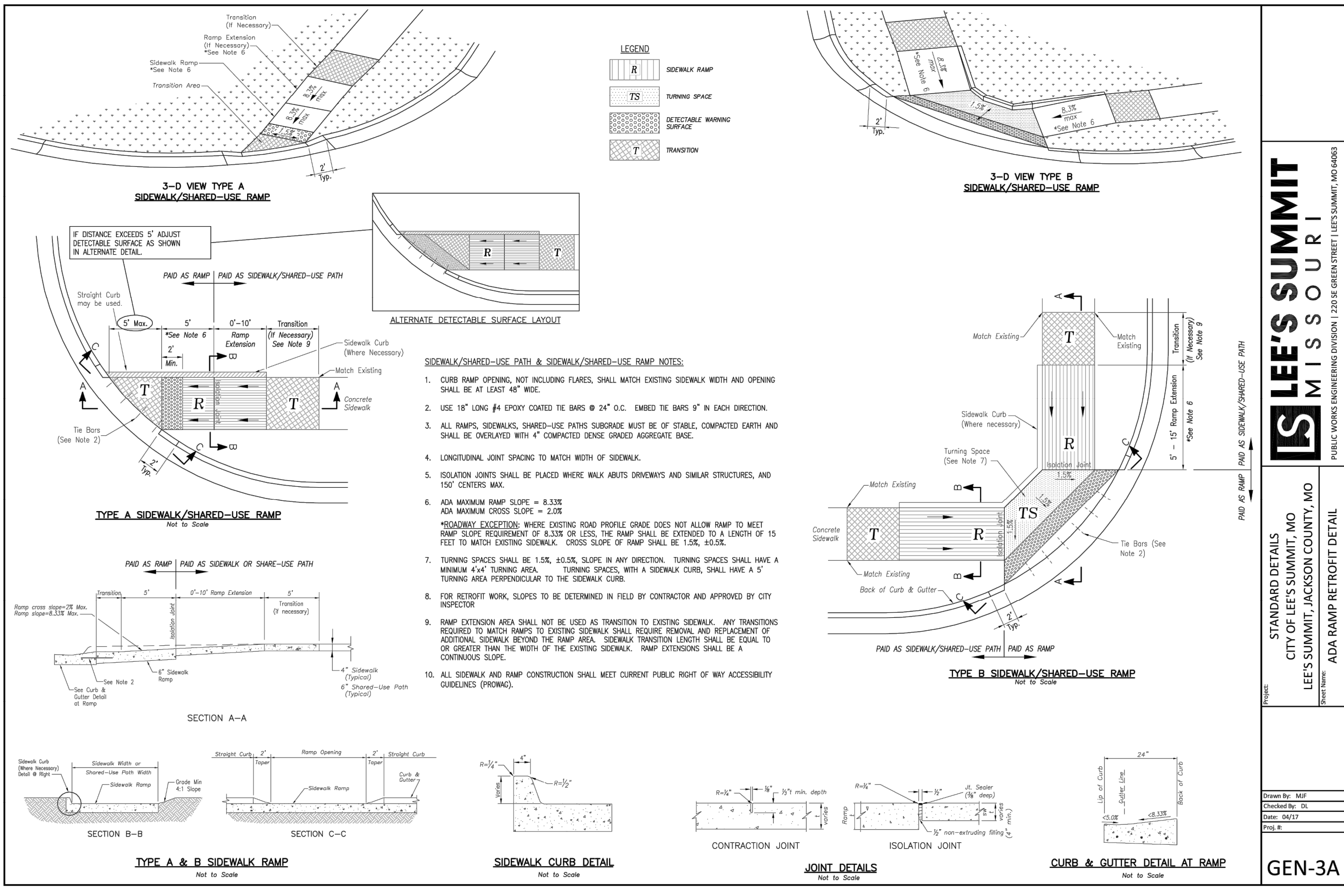
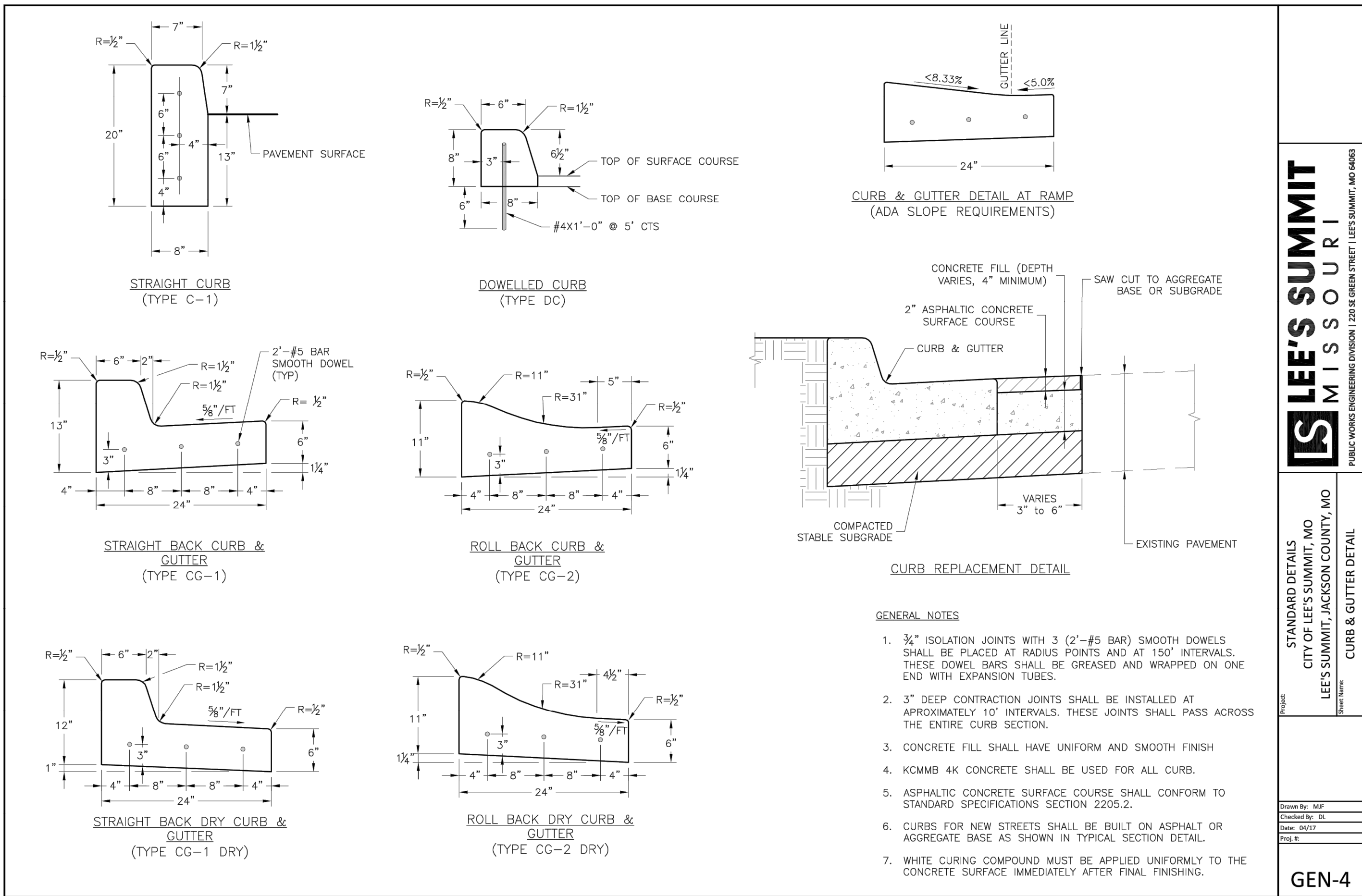
REVISIONS
REV. 1-4-19
REV. 2-11-19

10 YEAR INLET																				
D.S. Line	U.S. Line	Area (ac)	InletTime (min)	Int. (in/hr)	RunoffCoeff. (C)	Q=CIA (cfs)	Q Carry-over (cfs)	QCaptured (cfs)	QBypassed (cfs)	JunctType	CurbHeight (in)	CurbLength (ft)	GutterSlope (ft/ft)	GutterWidth (ft)	CrossSlope, Sw (ft/ft)	CrossSlope, Sx (ft/ft)	InletDepth (ft)	GutterDepth (ft)	GutterSpread (ft)	BypassLine No.
5-5	5-6	0.87	6.2	6.94	0.51	3.08	0	3.08	0	Dp-Curb	10	12	Sag	.....	0.02	0.02	0.19	0.19	9.7	Sag
5-6	M4 5-1	0.86	7.5	6.63	0.51	2.91	0	2.91	0	Dp-Curb	10	12	Sag	.....	0.02	0.02	0.19	0.19	9.33	Sag
M4 5-1	M4 5-2	0.77	6.9	6.77	0.51	2.66	0	2.66	0	Dp-Curb	10	12	Sag	.....	0.02	0.02	0.18	0.18	8.79	Sag
M4 1-1	M4 1-2	0.37	7.6	6.6	0.51	1.25	0.67	0.56	1.36	Curb	10	5	0.011	2	0.02	0.02	0.17	0.17	8.37	16
M4 1-2	M4 1-3	0.27	7.1	6.72	0.51	0.93	0.86	0.77	1.01	Curb	10	5	0.011	2	0.05	0.02	0.21	0.21	7.5	17
M4 1-3	M4 1-4	0.47	8.4	6.42	0.51	1.54	0	1.54	0	Dp-Curb	10	12	Sag	.....	0.02	0.02	0.12	0.12	6.11	Sag
M4 1-4	M4 1-5	1.01	8.5	6.4	0.51	3.3	0.82	4.12	0	Curb	10	5	Sag	2	0.05	0.02	0.42	0.42	18.11	Sag
M4 1-5	M4 2-1	0.67	6.4	6.89	0.51	2.36	0	2.36	0	Dp-Curb	10	12	Sag	.....	0.02	0.02	0.16	0.16	8.11	Sag
M4 2-1	M4 2-2	0.29	7.4	6.65	0.51	0.98	0	0.98	0	Dp-Curb	10	12	Sag	.....	0.02	0.02	0.09	0.09	4.53	Sag
M4 2-2	M4 2-3	0.33	8.2	6.47	0.51	1.09	0.15	0.64	0.6	Curb	10	5	0.01	2	0.05	0.02	0.19	0.19	6.51	34
M4 2-3	M4 2-4	0.05	5.2	7.21	0.51	0.18	0.35	0.39	0.15	Curb	10	5	0.01	2	0.05	0.02	0.15	0.15	4.27	37
M4 2-4	R4 1-1	0.21	6.3	6.92	0.51	0.74	0	0.39	0.35	Curb	10	5	0.026	2	0.05	0.02	0.14	0.14	3.92	38
R4 1-1	R4 1-2	0.65	8.3	6.44	0.51	2.14	0	0.7	1.44	Curb	10	5	0.026	2	0.05	0.02	0.19	0.19	6.73	Offsite
R4 1-2	R4 1-3	0.35	6.7	6.82	0.51	1.22	0	0.46	0.76	Curb	10	5	0.042	2	0.05	0.02	0.15	0.15	4.52	Offsite
R4 1-3	R4 1-4	0.26	6.5	6.87	0.51	0.91	0	0.42	0.49	Curb	10	5	0.032	2	0.05	0.02	0.14	0.14	4.15	Offsite
R4 1-4	M4 3-1	0.39	6.9	6.77	0.51	1.35	0	0.49	0.86	Curb	10	5	0.041	2	0.05	0.02	0.16	0.16	4.8	32
M4 3-1	M4 3-2	0.32	6.7	6.82	0.51	1.11	0	0.44	0.67	Curb	10	5	0.041	2	0.05	0.02	0.15	0.15	4.33	31
M4 3-2	M4 4-1	0.19	6.6	6.84	0.51	0.66	0	0.44	0.22	Curb	10	5	0.01	2	0.05	0.02	0.16	0.16	4.79	34

10 YEAR STORM PIPE																						
U.S. Line	D.S. Line	LineLength (ft)	Incr.Area (ac)	TotalArea (ac)	RunoffCoeff. (C)	IncrC x A	TotalC x A	InletTime (min)	TimeConc (min)	RnfallInt (in/hr)	TotalRunoff (cfs)	TotalFlow (cfs)	CapacFull (cfs)	Veloc (ft/s)	PipeSize (in)	PipeSlope (%)	Inv ElevDn (ft)	Inv ElevUp (ft)	HGLDn (ft)	HGLUp (ft)	Grnd/RimDn (ft)	Grnd/RimUp (ft)
5-5	5-6	115.83	0.87	2.5	0.51	0.44	1.28	6.2	8	6.5	8.29	8.29	51.85	4.98	36	0.6	1005.95	1006.65	1006.76	1007.56	1011	1011.1
5-6	M4 5-1	204.74	0.86	1.63	0.51	0.44	0.83	7.5	7.5	6.6	5.51	5.51	14.31	6.26	18	1.86	1007.2	1011	1007.85	1011.9	1011.1	1016.9
M4 5-1	M4 5-2	148.03	0.77	0.77	0.51	0.39	0.39	6.9	6.9	6.8	2.66	2.66	8.8	4.09	15	1.86	1011.25	1014	1011.9	1014.65	1016.9	1019.8
M4 1-1	M4 1-2	147.73	0.37	5.83	0.51	0.19	2.97	7.6	10.7	6	17.7	17.7	67.2	6.89	36	1.02	1005	1006.5	1006.05	1007.85	1008	1015.57
M4 1-2	M4 1-3	34	0.27	5.46	0.51	0.14	2.78	7.1	10.6	6	16.63	16.63	57.19	6.33	36	0.74	1006.75	1007	1007.86	1008.3	1015.57	1015.58
M4 1-3	M4 1-4	128.29	0.47	5.19	0.51	0.24	2.65	8.4	10.3	6	15.97	15.97	114.03	6.4	36	2.92	1007.25	1011	1008.3	1012.28	1015.58	1017
M4 1-4	M4 1-5	136.19	1.01	1.01	0.51	0.52	0.52	8.5	8.5	6.4	3.3	3.3	10.72	6.05	15	2.75	1012.25	1016	1012.73	1016.73	1017	1023.3
M4 1-5	M4 2-1	115.57	0.67	3.71	0.51	0.34	1.89	6.4	10	6.1	11.52	11.52	46.72	6.59	30	1.3	1011.5	1013	1012.35	1014.14	1017	1020
M4 2-1	M4 2-2	179.97	0.29	2.33	0.51	0.15	1.19	7.4	9.4	6.2	7.38	7.38	35.52	5.17	30	0.75	1013.5	1014.85	1014.27	1015.75	1020	1026.5
M4 2-2	M4 2-3	151.57	0.33	2.04	0.51	0.17	1.04	8.2	8.9	6.3	6.56	6.56	19.7	5.19	24	0.76	1015.35	1016.5	1016.15	1017.41	1026.5	1024.8
M4 2-3	M4 2-4	139.12	0.05	1.52	0.51	0.03	0.78	5.2	8.5	6.4	4.96	4.96	23.49	5.13	24	1.08	1017	1018.5	1017.63	1019.28	1024.8	1026.2
M4 2-4	R4 1-1	43.15	0.21	1.47	0.51	0.11	0.75	6.3	8.4	6.4	4.82	4.82	48.69	7.09	24	4.63	1019	1021	1019.43	1021.77	1026.2	1028.03
R4 1-1	R4 1-2	33.95	0.65	1.26	0.51	0.33	0.64	8.3	8.3	6.4	4.14	4.14	47.54	6.7	24	4.42	1021.5	1023	1021.9	1023.71	1028.03	1028.03
R4 1-2	R4 1-3	152.68	0.35	0.61	0.51	0.18	0.31	6.7	6.7	6.8	2.12	2.12	17	4.09	18	2.62	1023.25	1027.25	1023.71	1027.8	1028.03	1032.28
R4 1-3	R4 1-4	52.3	0.26	0.26	0.51	0.13	0.13	6.5	6.5	6.9	0.91	0.91	7.73	3.59	15	1.43	1027.75	1028.5	1028.04	1028.87	1032.28	1033.72
R4 1-4	M4 3-1	128	0.39	0.71	0.51	0.2	0.36	6.9	6.9	6.8	2.45	2.45	10.68	5.52	15	2.73	1015	1018.5	1015.41	1019.13	1020	1024.42
M4 3-1	M4 3-2	50.12	0.32	0.32	0.51	0.16	0.16	6.7	6.7	6.8	1.11	1.11	9.12	4.08	15	2	1019	1020	1019.3	1020.42	1024.42	1025.87
M4 3-2	M4 4-1	36.05	0.19	0.19	0.51	0.1	0.1	6.6	6.6	6.8	0.66	0.66	5.38	2.84	15	0.69	1019.5	1019.75	1019.8	1020.07	1024.8	1024.92

100 YEAR INLET																				
D.S. line	U.S. line	Area (ac)	InletTime (min)	Int. (in/hr)	RunoffCoeff. (C)	Q=CIA (cfs)	Q Carry-over (cfs)	QCaptured (cfs)	QBypassed (cfs)	JunctType	CurbHeight (in)	CurbLength (ft)	GutterSlope (ft/ft)	GutterWidth (ft)	CrossSlope, Sw (ft/ft)	CrossSlope, Sx (ft/ft)	InletDepth (ft)	GutterDepth (ft)	GutterSpread (ft)	BypassLine No.
5-5	5-6	0.87	6.2	10.5	0.51	4.66	0	4.66	0	Dp-Curb	10	12	Sag	....	0.02	0.02	0.26	0.26	12.79	Sag
5-6	M4 5-1	0.86	7.5	10.02	0.51	4.4	0	4.4	0	Dp-Curb	10	12	Sag	....	0.02	0.02	0.25	0.25	12.3	Sag
M4 5-1	M4 5-2	0.77	6.9	10.24	0.51	4.02	0	4.02	0	Dp-Curb	10	12	Sag	....	0.02	0.02	0.23	0.23	11.59	Sag
M4 1-1	M4 1-2	0.37	7.6	9.99	0.51	1.88	1.13	0.73	2.28	Curb	10	5	0.011	2	0.02	0.02	0.2	0.2	9.91	16
M4 1-2	M4 1-3	0.27	7.1	10.17	0.51	1.4	1.42	0.98	1.84	Curb	10	5	0.011	2	0.05	0.02	0.24	0.24	9.14	17
M4 1-3	M4 1-4	0.47	8.4	9.71	0.51	2.33	0	2.33	0	Dp-Curb	10	12	Sag	....	0.02	0.02	0.16	0.16	8.05	Sag
M4 1-4	M4 1-5	1.01	8.5	9.68	0.51	4.99	1.62	6.6	0	Curb	10	5	Sag	2	0.05	0.02	0.58	0.58	25.93	Sag
M4 1-5	M4 2-1	0.67	6.4	10.43	0.51	3.56	0	3.56	0	Dp-Curb	10	12	Sag	....	0.02	0.02	0.21	0.21	10.69	Sag
M4 2-1	M4 2-2	0.29	7.4	10.06	0.51	1.49	0	1.49	0	Dp-Curb	10	12	Sag	....	0.02	0.02	0.12	0.12	5.97	Sag
M4 2-2	M4 2-3	0.33	8.2	9.78	0.51	1.65	0.37	0.84	1.18	Curb	10	5	0.01	2	0.05	0.02	0.22	0.22	8.09	34
M4 2-3	M4 2-4	0.05	5.2	10.91	0.51	0.28	0.63	0.53	0.37	Curb	10	5	0.01	2	0.05	0.02	0.17	0.17	5.61	37
M4 2-4	R4 1-1	0.21	6.3	10.47	0.51	1.12	0	0.49	0.63	Curb	10	5	0.026	2	0.05	0.02	0.16	0.16	4.93	38
R4 1-1	R4 1-2	0.65	8.3	9.75	0.51	3.23	0	0.87	2.36	Curb	10	5	0.026	2	0.05	0.02	0.22	0.22	8.09	Offsite
R4 1-2	R4 1-3	0.35	6.7	10.31	0.51	1.84	0	0.58	1.26	Curb	10	5	0.042	2	0.05	0.02	0.17	0.17	5.59	Offsite
R4 1-3	R4 1-4	0.26	6.5	10.39	0.51	1.38	0	0.52	0.85	Curb	10	5	0.032	2	0.05	0.02	0.16	0.16	5.17	Offsite
R4 1-4	M4 3-1	0.39	6.9	10.24	0.51	2.04	0	0.61	1.42	Curb	10	5	0.041	2	0.05	0.02	0.18	0.18	5.9	32
M4 3-1	M4 3-2	0.32	6.7	10.31	0.51	1.68	0	0.55	1.13	Curb	10	5	0.041	2	0.05	0.02	0.17	0.17	5.38	31
M4 3-2	M4 4-1	0.19	6.6	10.35	0.51	1	0	0.57	0.44	Curb	10	5	0.01	2	0.05	0.02	0.18	0.18	5.89	34

100 YEAR STORM PIPE																						
U.S. Line	D.S. Line	LineLength	Incr.Area	TotalArea	RunoffCoeff.	IncrC x A	TotalC x A	InletTime	TimeConc	RnfallInt	TotalRunoff	TotalFlow	CapacFull	Veloc	PipeSize	PipeSlope	Inv ElevDn	Inv ElevUp	HGLDn	HGLUp	Grnd/RimDn	Grnd/RimUp
5-5	5-6	115.83	0.87	2.5	0.51	0.44	1.28	6.2	8	9.9	12.57	12.57	51.85	5.61	36	0.6	1005.95	1006.65	1006.96	1007.78	1011	1011.1
5-6	M4 5-1	204.74	0.86	1.63	0.51	0.44	0.83	7.5	7.5	10	8.33	8.33	14.31	7.15	18	1.86	1007.2	1011	1008.02	1012.12	1011.1	1016.9
M4 5-1	M4 5-2	148.03	0.77	0.77	0.51	0.39	0.39	6.9	6.9	10.2	4.02	4.02	8.8	4.6	15	1.86	1011.25	1014	1012.12	1014.81	1016.9	1019.8
M4 1-1	M4 1-2	147.73	0.37	5.83	0.51	0.19	2.97	7.6	10.5	9.1	27	27	67.2	7.81	36	1.02	1005	1006.5	1006.32	1008.18	1008	1015.57
M4 1-2	M4 1-3	34	0.27	5.46	0.51	0.14	2.78	7.1	10.4	9.1	25.35	25.35	57.19	7.07	36	0.74	1006.75	1007	1008.18	1008.62	1015.57	1015.58
M4 1-3	M4 1-4	128.29	0.47	5.19	0.51	0.24	2.65	8.4	10.1	9.2	24.33	24.33	114.03	7.06	36	2.92	1007.25	1011	1008.62	1012.59	1015.58	1017
M4 1-4	M4 1-5	136.19	1.01	1.01	0.51	0.52	0.52	8.5	8.5	9.7	4.99	4.99	10.72	6.91	15	2.75	1012.25	1016	1012.85	1016.91	1017	1023.3
M4 1-5	M4 2-1	115.57	0.67	3.71	0.51	0.34	1.89	6.4	9.8	9.3	17.54	17.54	46.72	7.33	30	1.3	1011.5	1013	1012.59	1014.42	1017	1020
M4 2-1	M4 2-2	179.97	0.29	2.33	0.51	0.15	1.19	7.4	9.3	9.4	11.2	11.2	35.52	5.84	30	0.75	1013.5	1014.85	1014.47	1015.97	1020	1026.5
M4 2-2	M4 2-3	151.57	0.33	2.04	0.51	0.17	1.04	8.2	8.9	9.6	9.95	9.95	19.7	5.87	24	0.76	1015.35	1016.5	1016.36	1017.63	1026.5	1024.8
M4 2-3	M4 2-4	139.12	0.05	1.52	0.51	0.03	0.78	5.2	8.5	9.7	7.51	7.51	23.49	5.8	24	1.08	1017	1018.5	1017.78	1019.47	1024.8	1026.2
M4 2-4	R4 1-1	43.15	0.21	1.47	0.51	0.11	0.75	6.3	8.4	9.7	7.29	7.29	48.69	8.01	24	4.63	1019	1021	1019.52	1021.96	1026.2	1028.03
R4 1-1	R4 1-2	33.95	0.65	1.26	0.51	0.33	0.64	8.3	8.3	9.7	6.26	6.26	47.54	7.58	24	4.42	1021.5	1023	1021.99	1023.89	1028.03	1028.03
R4 1-2	R4 1-3	152.68	0.35	0.61	0.51	0.18	0.31	6.7	6.7	10.3	3.21	3.21	17	4.31	18	2.62	1023.25	1027.25	1023.89	1027.93	1028.03	1032.28
R4 1-3	R4 1-4	52.3	0.26	0.26	0.51	0.13	0.13	6.5	6.5	10.4	1.38	1.38	7.73	4.04	15	1.43	1027.75	1028.5	1028.11	1028.96	1032.28	1033.72
R4 1-4	M4 3-1	128	0.39	0.71	0.51	0.2	0.36	6.9	6.9	10.2	3.71	3.71	10.68	6.27	15	2.73	1015	1018.5	1015.51	1019.28	1020	1024.42
M4 3-1	M4 3-2	50.12	0.32	0.32	0.51	0.16	0.16	6.7	6.7	10.3	1.68	1.68	9.12	4.6	15	2	1019	1020	1019.36	1020.51	1024.42	1025.87
M4 3-2	M4 4-1	36.05	0.19	0.19	0.51	0.1	0.1	6.6	6.6	10.4	1	1	5.38	3.19	15	0.69	1019.5	1019.75	1019.87	1020.14	1024.8	1024.92



ENGINEERING & SURVEYING SOLUTIONS

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Nebraska
Engineering CA2821

The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

Project: MANOR AT STONEY CREEK 4TH PLAT
Issue & Date: Issue 4 Date: August 23, 2018

Construction Details
Construction Plans for:
The Manor at Stoney Creek - 4th Plat
Lee's Summit, Jackson County, Missouri

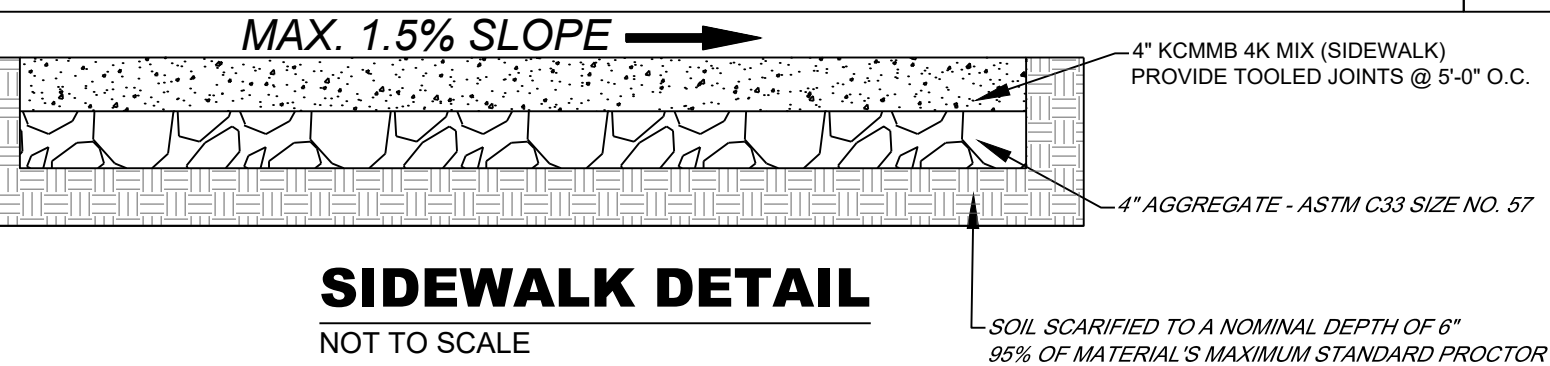
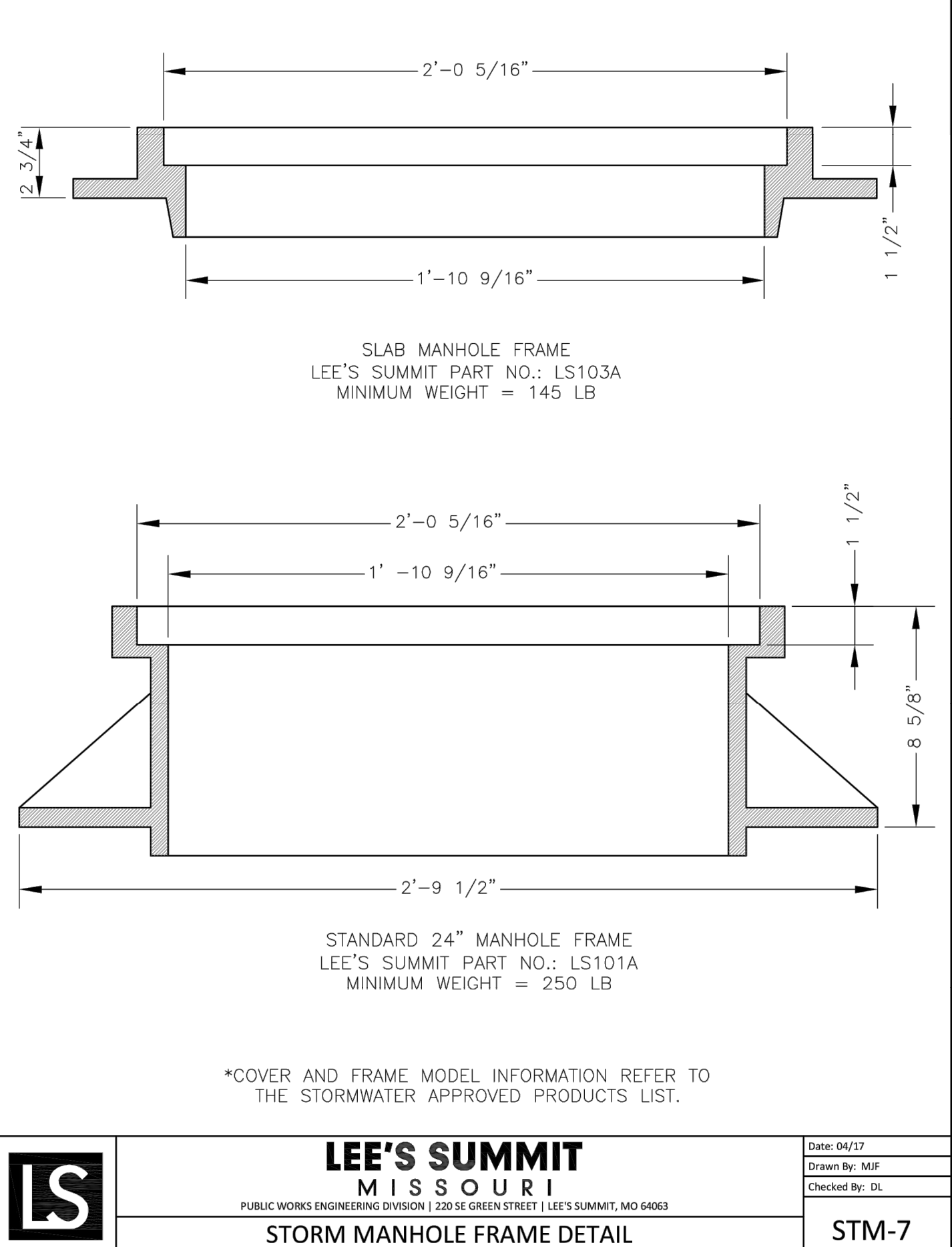
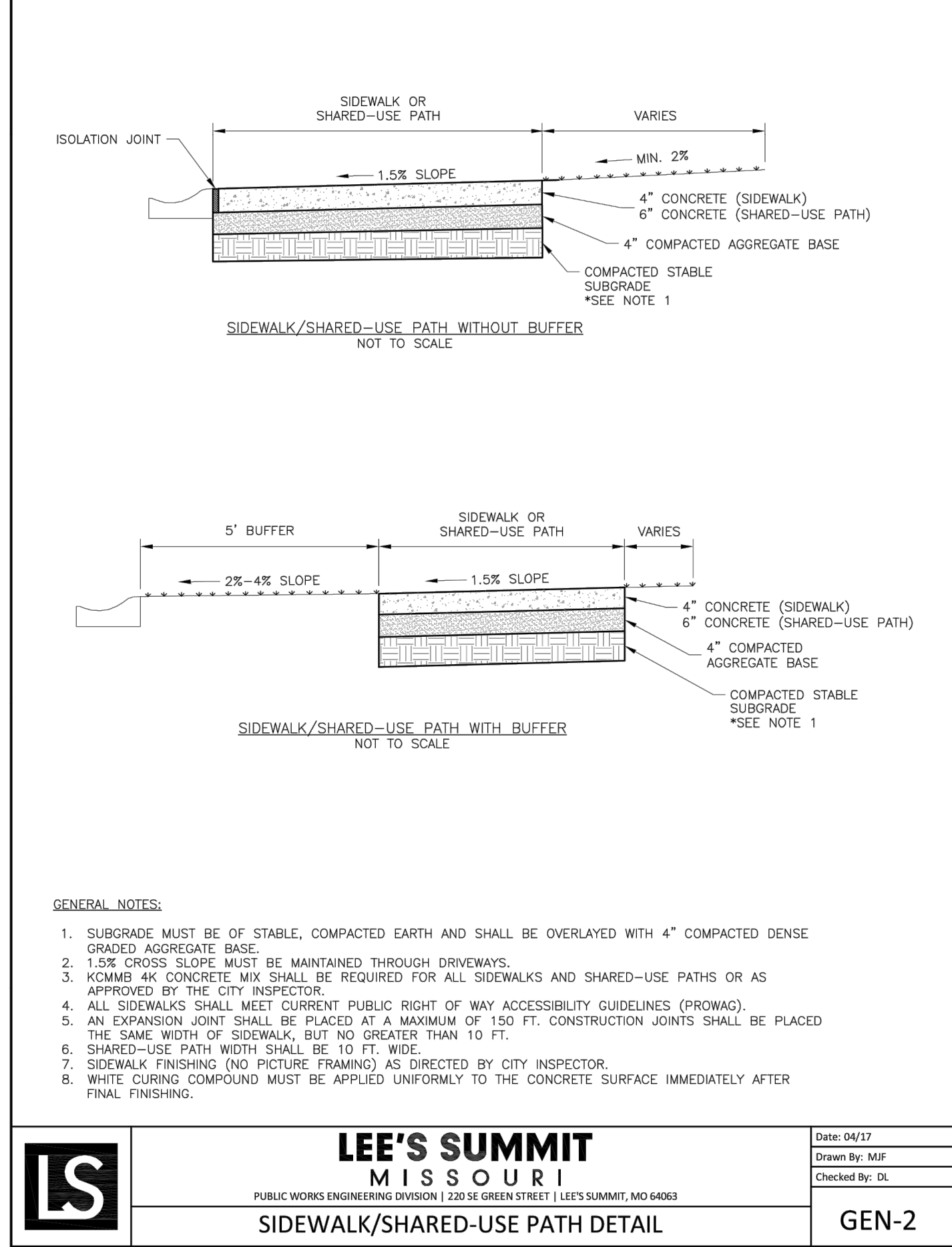
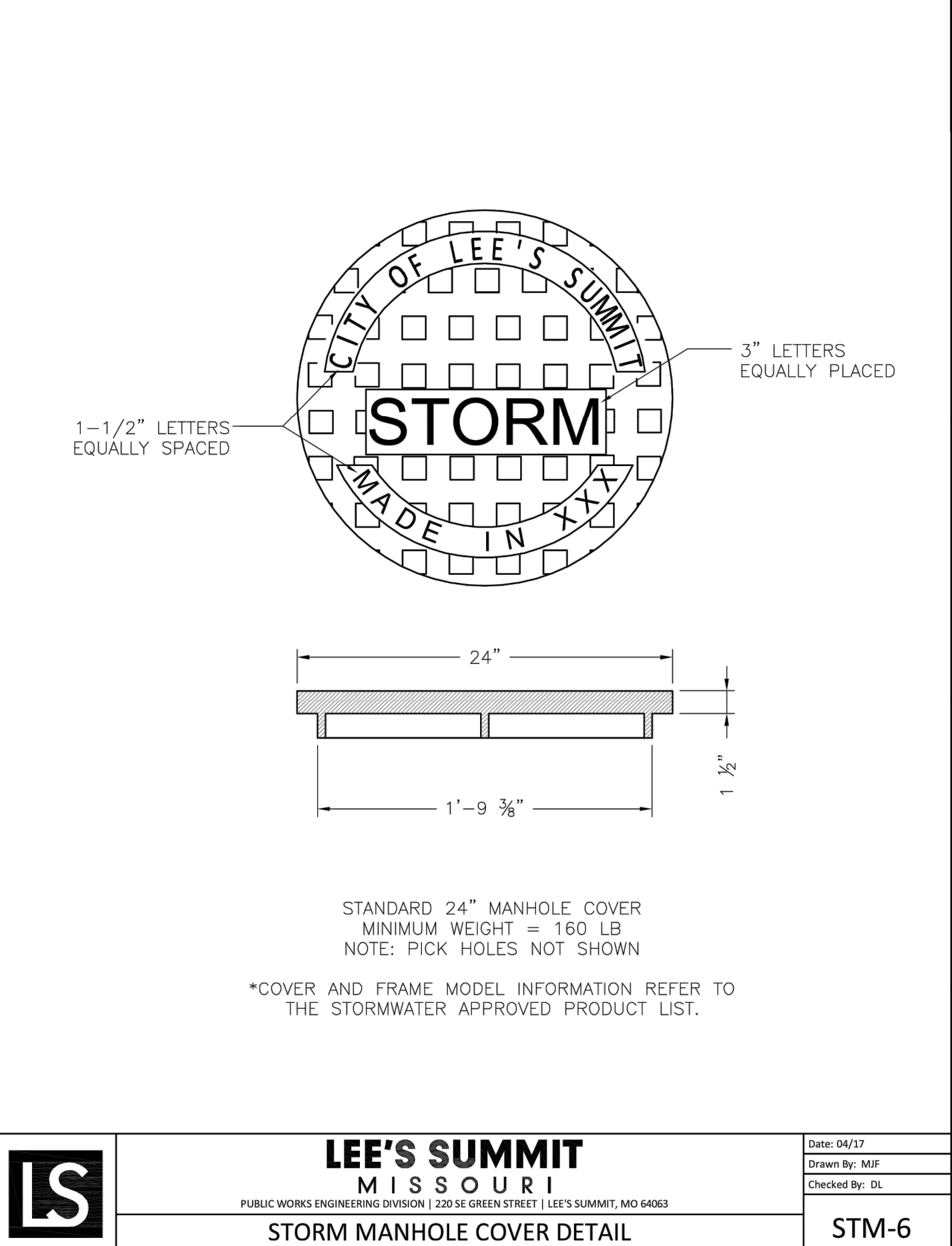
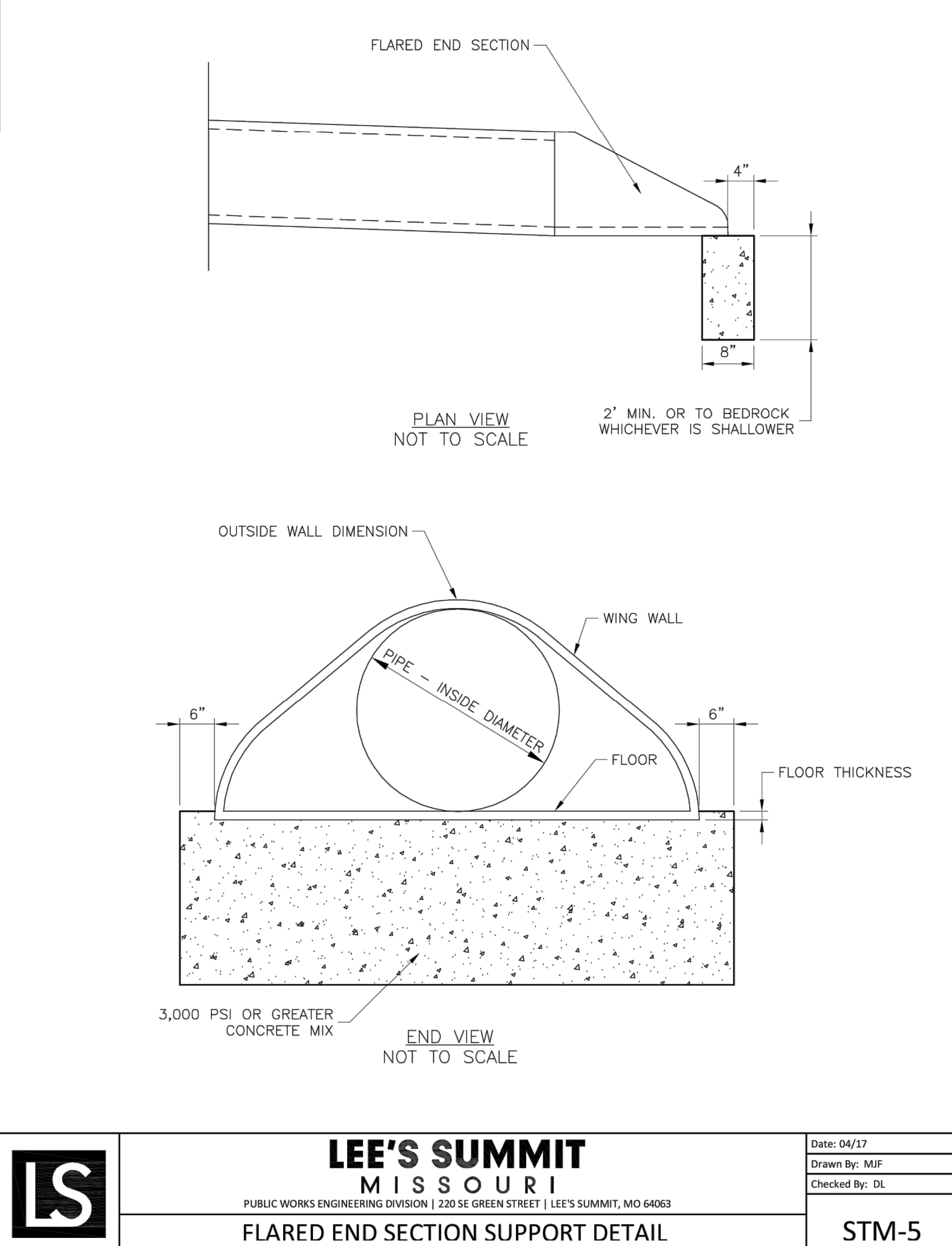
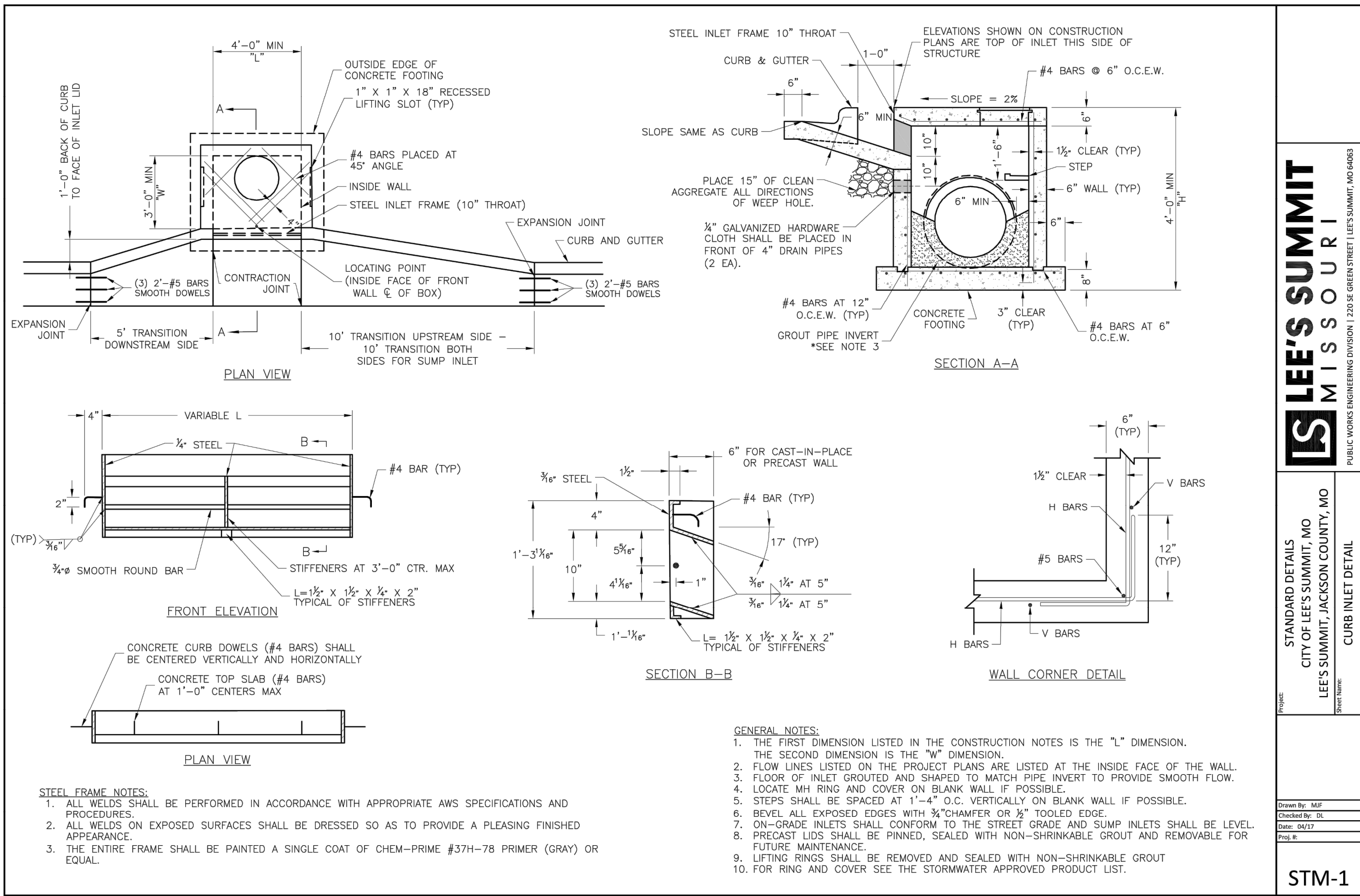
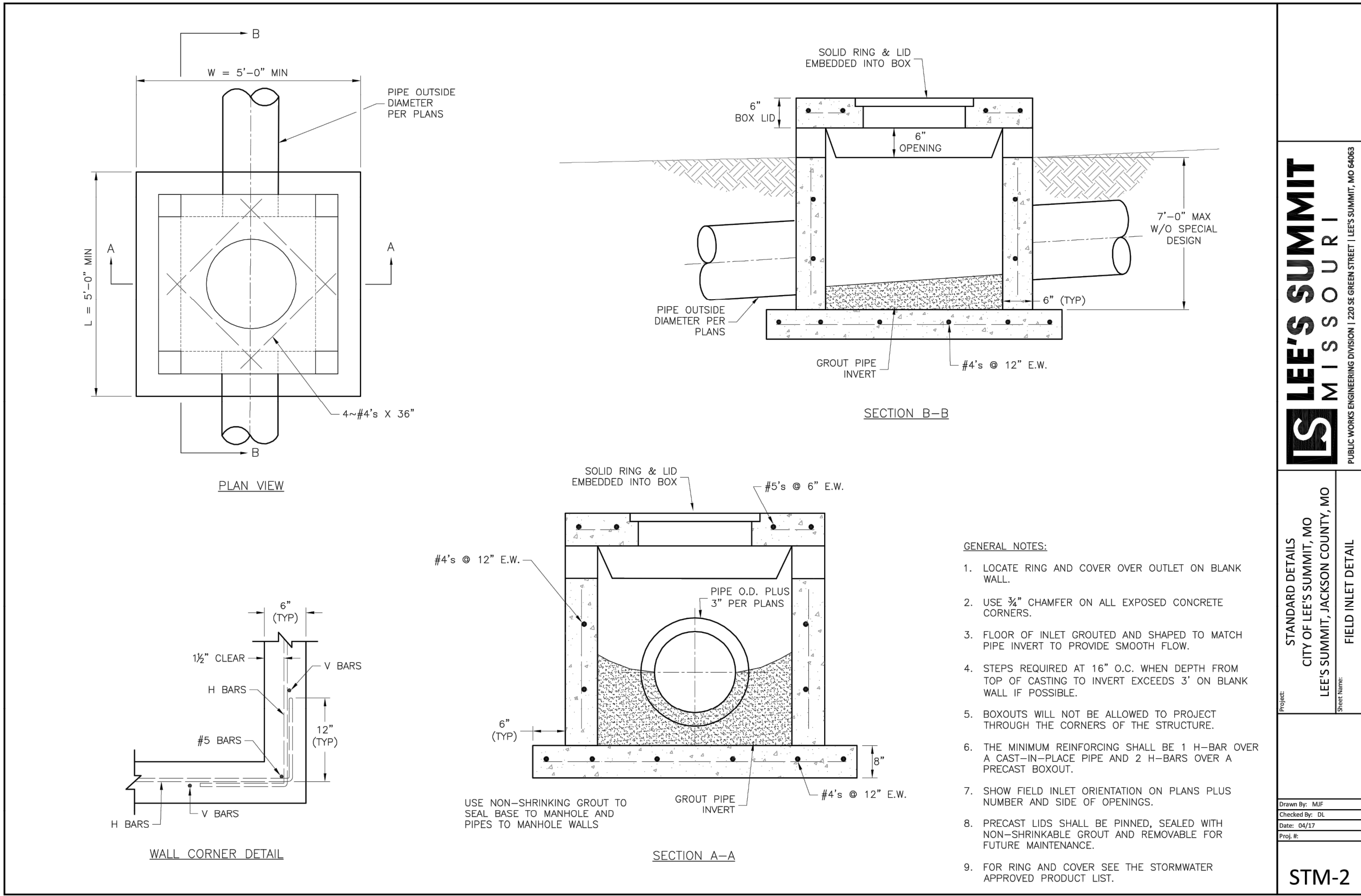
Matthew J. Schlicht
NO. PE 2006019708
K.S. PE 19071
OK PE 245226

REVISIONS

REV. 1-4-19
REV. 2-11-19

C.600

GENERAL NOTE:
1 ~ ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813.



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