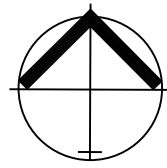
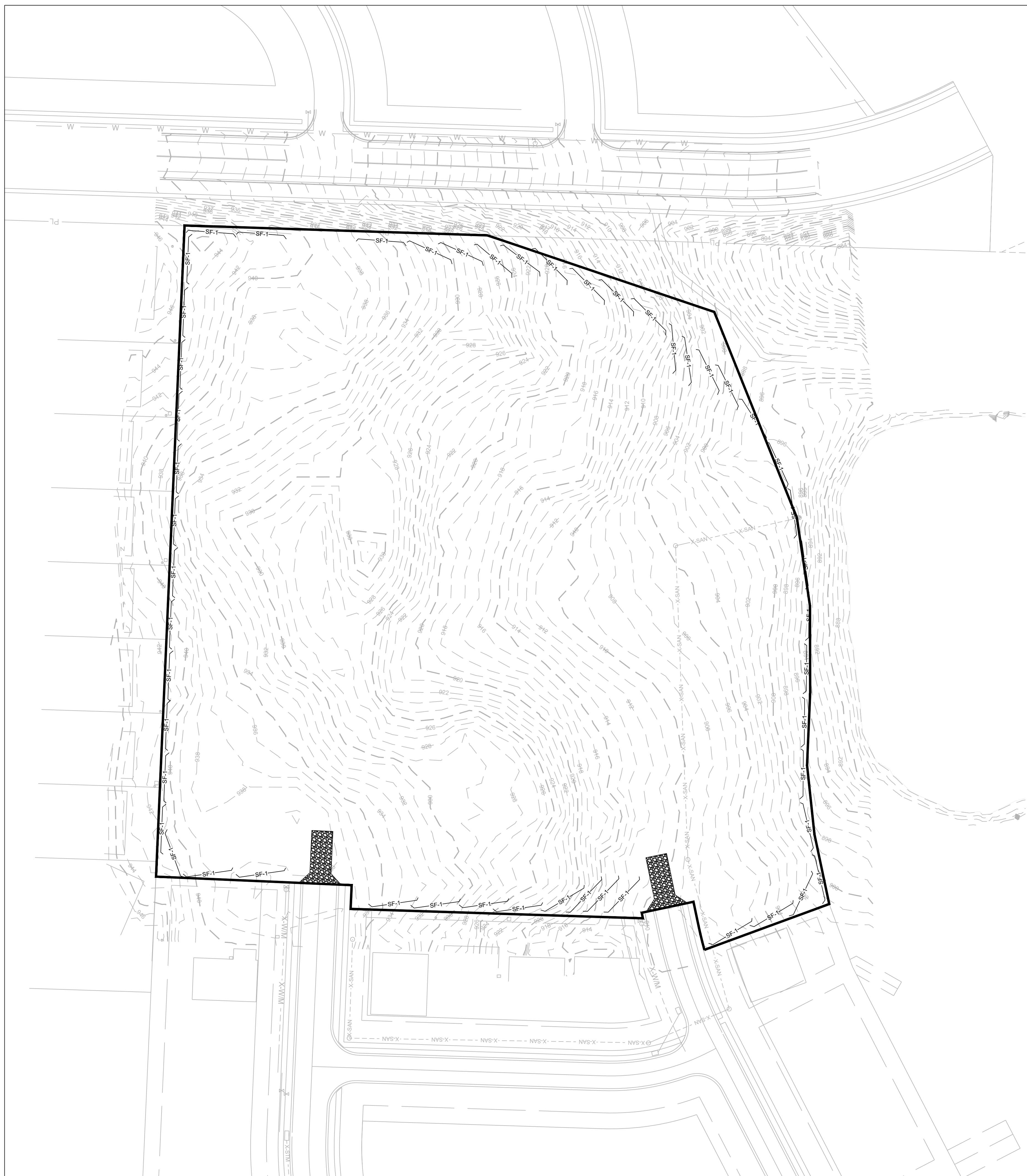


Section 8, Township 48 North, Range 31 West
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

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.

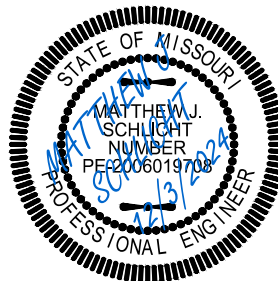


Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

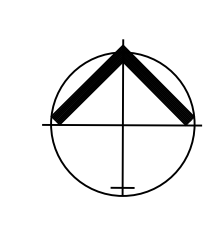
Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

ESC PHASE 1 - Pre Clearing Plan
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS	
REV.	8/12/2022
REV.	10/3/2022
REV.	4/26/2023
REV.	5/29/2024
REV.	10/29/2024
REV.	12/3/2024



SILT FENCE PROTECTION
TO BE MAINTAINED BY CONTRACTOR

PHASE 1 SILT FENCE

PHASE 2 SILT FENCE

INLET PROTECTION
GUTTER BUDDY OR EQUIVALENT

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.

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 RESEEDED 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 DEFICIENCY 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 SEEDING WITH WHEAT/RYE AT A RATE OF 15 POUNDS PER 1000 SQUARE FEET. PERMANENT SEEDING SHALL CONSIST OF 90% 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 SEEDING AREAS 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 RESEEDING.

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

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 EROSION 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.

- 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

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.

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.

EDGE OF

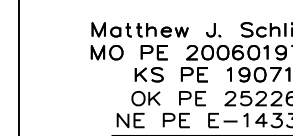
- 3.) IF SLOPE TOWARDS THE PUBLIC ROAD EXCEEDS 2% CONSTRUCT A 6 TO 8 INCH HIGH RIDGE WITH 3H : 1V SIDE SLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE
- 4.) THE PUBLIC ROAD TO DIVERT RUNOFF AWAY FROM IT
- 4.) INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES ALONG PUBLIC ROADS
- 5.) PLACE STONE TO DIMENSIONS AND GRADES AS SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPED FOR DRAINAGE
- 6.) PERFECT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE
- 7.) IF WET CONDITIONS ARE ANTICIPATED PLACE SPECIFIC FABRIC ON THE GRADED FOUNDATION TO IMPROVE STABILITY

1.) CONSULT WITH A QUALIFIED DESIGN PROFESSIONAL IF ANY OF THE FOLLOWING OCCUR:

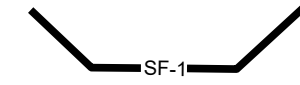
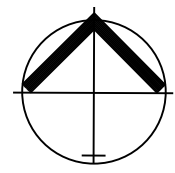
- INADEQUATE RUNOFF CONTROLS TO THE EXTENT THAT SEDIMENT WASHES ONTO PUBLIC ROADS
- INSTALL DIVERSIONS OR OTHER RUNOFF CONTROL MEASURES
- SMALL STONE, THIN PAD, OR ABSENCE OF GEOTEXTILE FABRIC RESULTS IN RUTS AND MUDDY CONDITIONS AS STONE IS PRESSED INTO SOIL - INCREASE STONE SIZE OR PAD THICKNESS OR ADD GEOTEXTILE FABRIC

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



REVISIONS	
①	REV. 8/12/2022
②	REV. 10/3/2022
	REV. 4/26/2023
	REV. 5/29/2023
	REV. 10/29/2023
	REV. 12/3/2023



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 seedbed 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.)

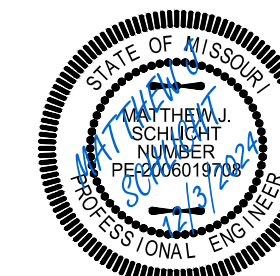
During the dates December 15th through May 31 ALL lime fertilizer, seed and mulch shall be applied to finished slopes of disturbed areas. During the months of June, July, October and November 1st through December 15th, lime fertilizer, seed and mulch shall be applied at the following rates:

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

ESC PHASE 3 - Final Restoration Plan
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

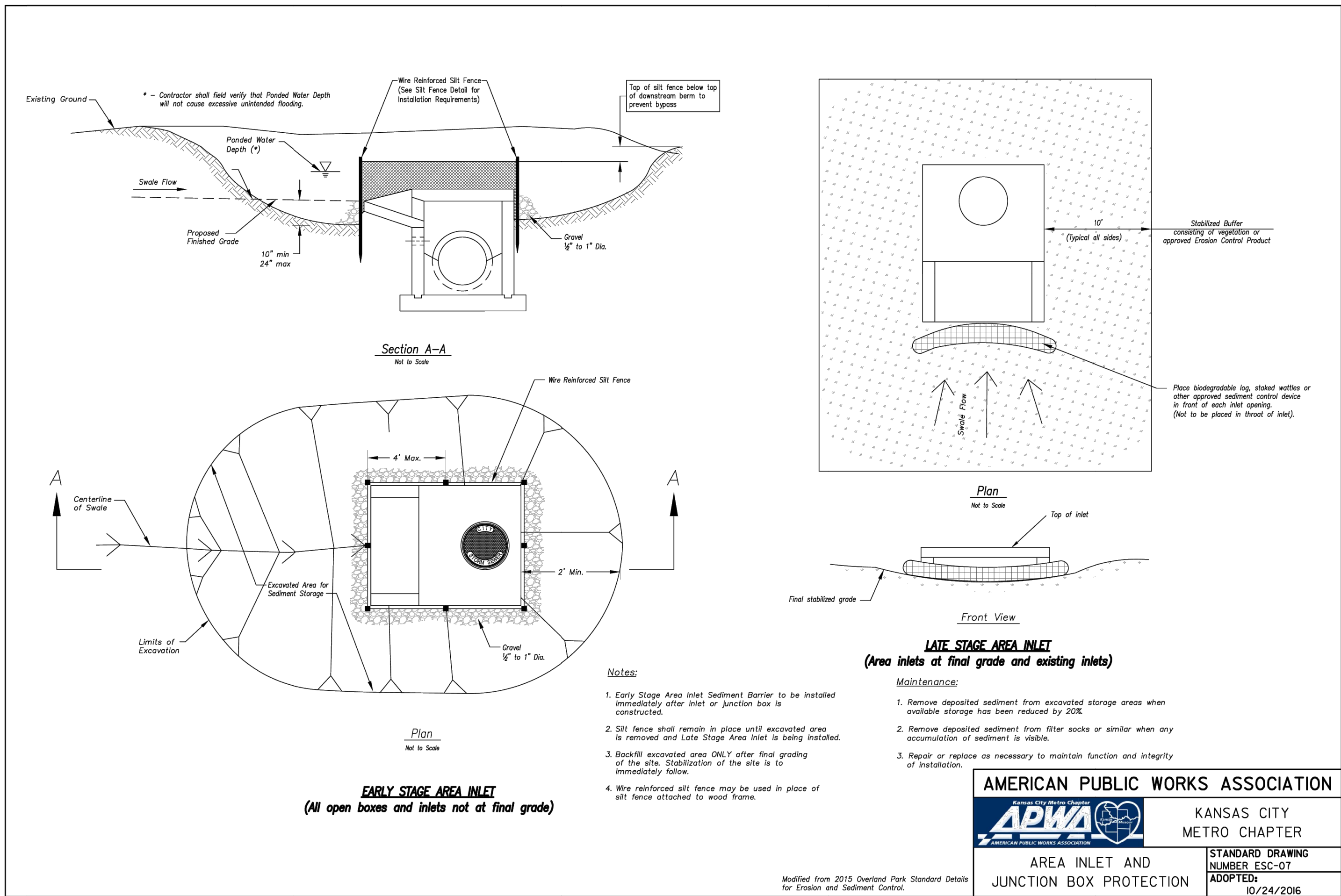
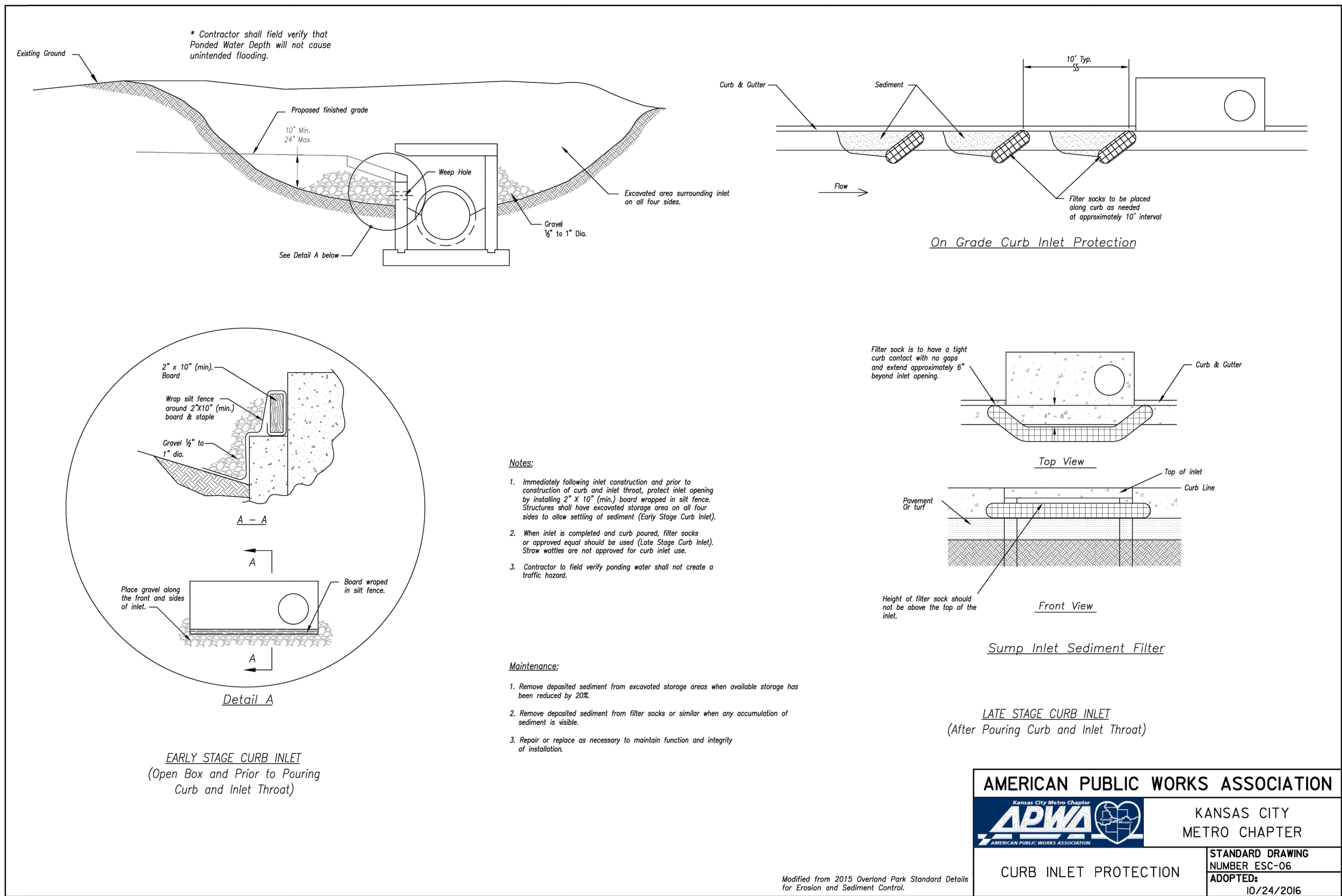
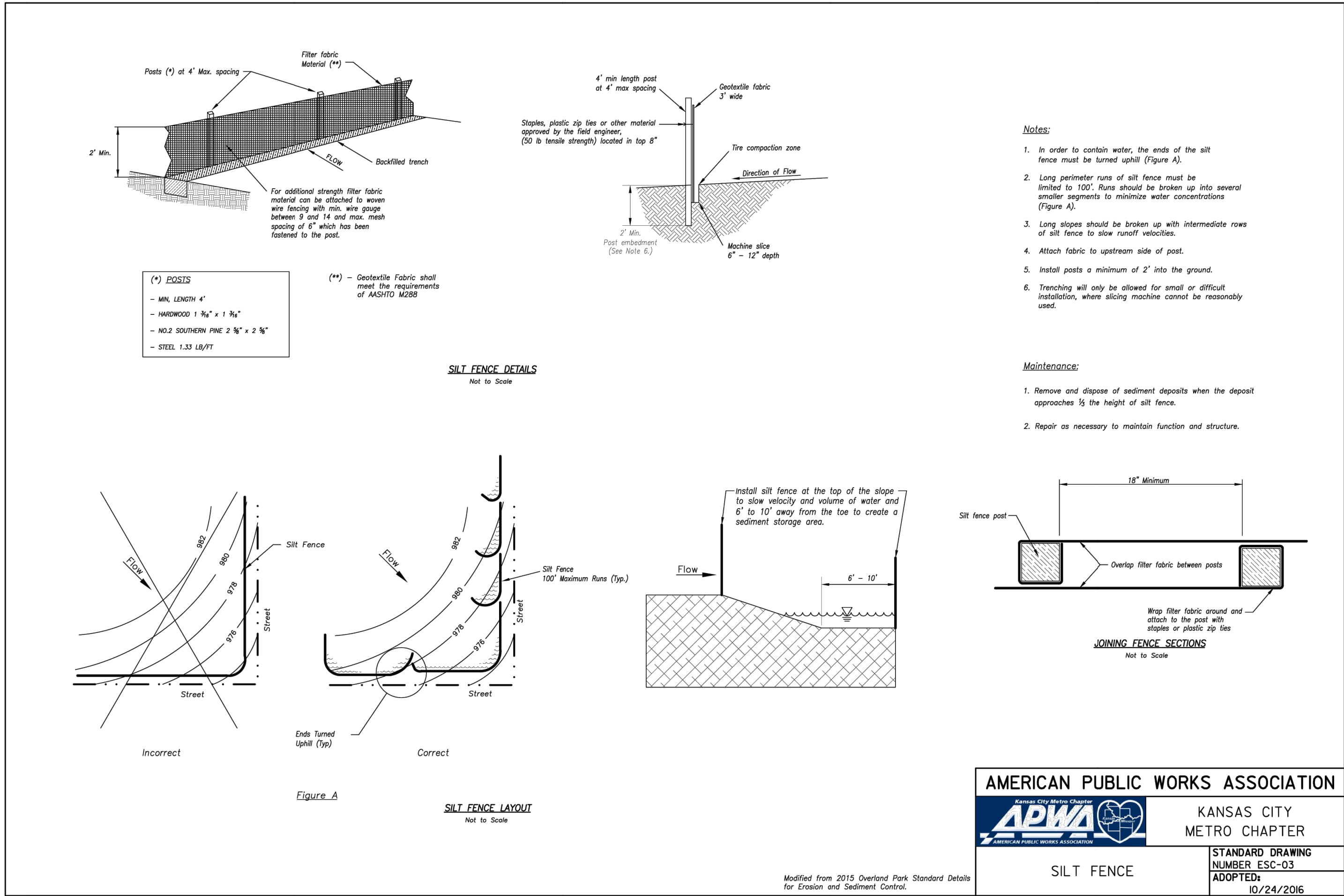
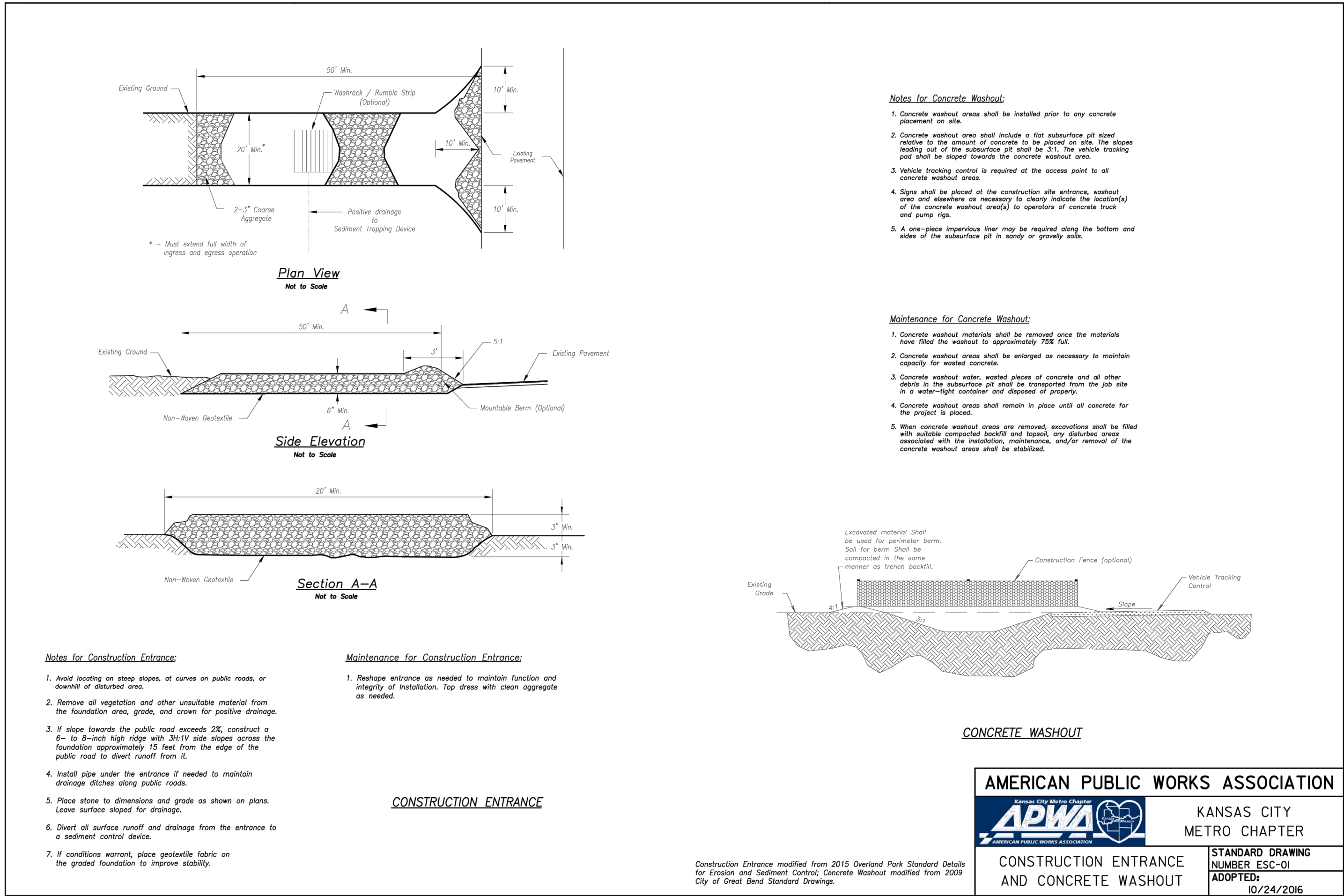
REVISIONS
REV. 8/12/2022
REV. 10/3/2022
REV. 4/26/2023
REV. 5/29/2024
REV. 10/29/2024
REV. 12/3/2024

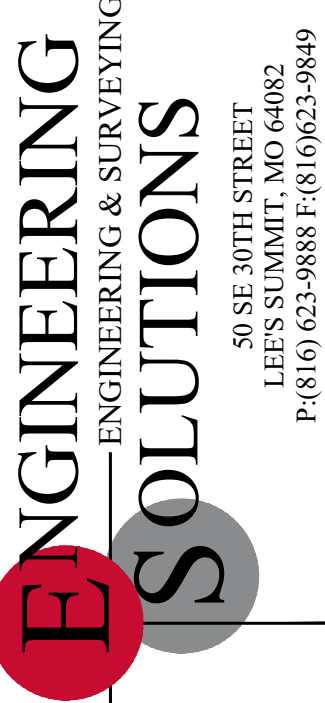
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

Project:
VILLAS OF CHAPEL RIDGE-LSMO
Issue Date:
June 24, 2022

ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 651-9888 F: (816) 652-9849



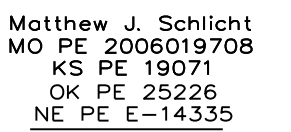




THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

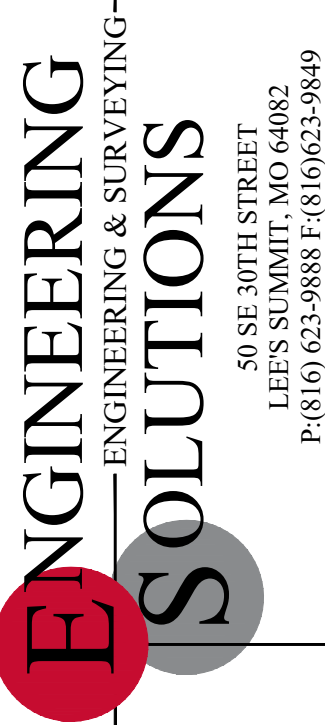
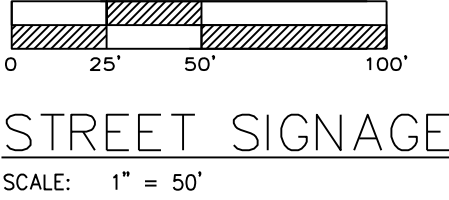
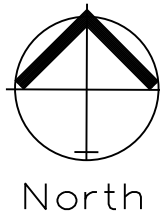
Site Plan

Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



C.100



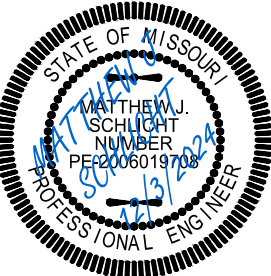


Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

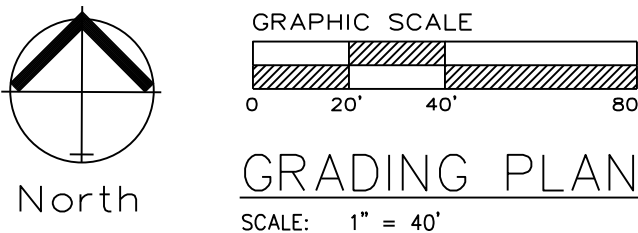
Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

Street Signage
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS	
REV. 8/12/2022	
REV. 10/3/2022	
REV. 4/26/2023	
REV. 5/29/2024	
REV. 10/29/2024	
REV. 12/3/2024	



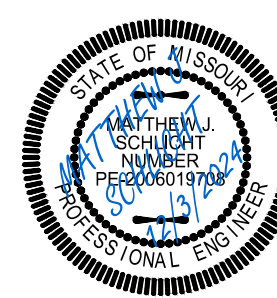
Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

Project: VILLAS OF CHAPEL
RIDGE, LSMO

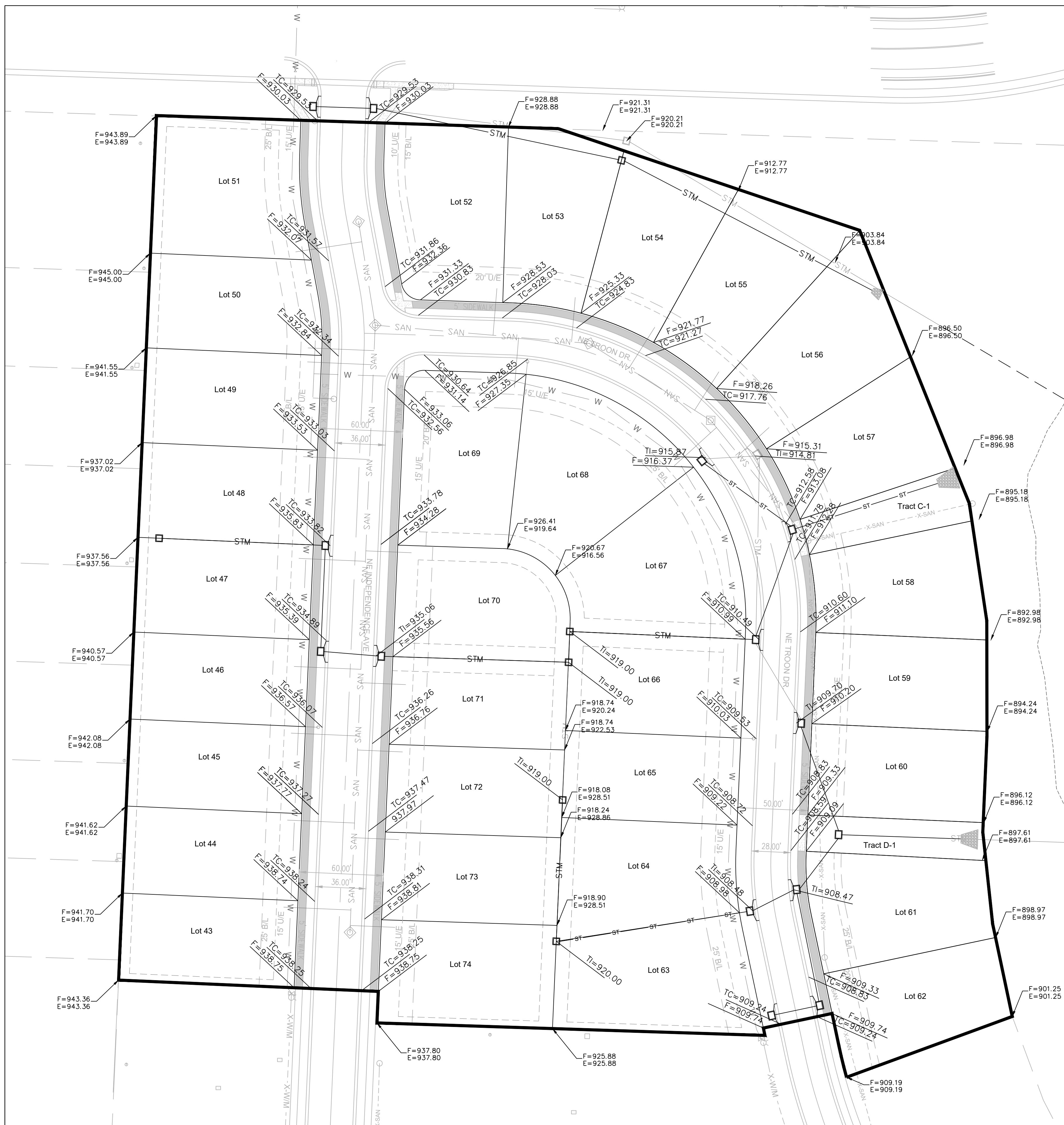
Issue Date: June 24, 2022

Master Drainage Plan 1 of 3:
Grading Plan
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

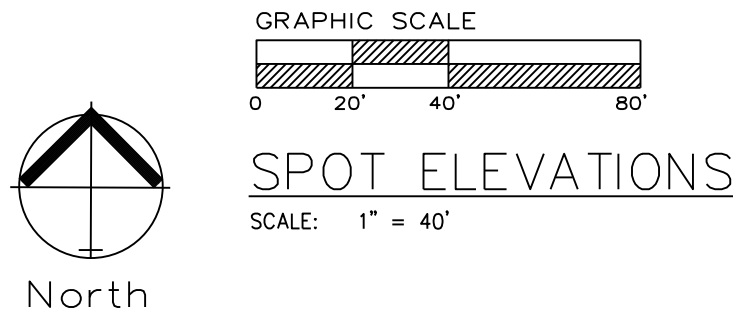


Matthew J. Schlicht
MO PE 200601970
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS	
1	REV. 8/12/2022
2	REV. 10/3/2022
	REV. 4/26/2023
	REV. 5/29/2024
	REV. 10/29/2024
	REV. 12/3/2024



Note:
AS GRADED PLOT PLAN REQUIRED FOR EACH LOT.



Lot Number	Basement Type	MBOE
43	Full	942.00
44	Full	941.00
45	Full	940.00
46	Full	939.00
47	Full	939.00
48	Full	940.00
49	Full	941.00
50	Full	942.00
51	Full	N/A
52	Daylight	N/A
53	Walkout	N/A
54	Walkout	N/A
55	Walkout	N/A
56	Walkout	N/A
57	Walkout	N/A
58	Walkout	N/A
59	Walkout	N/A
60	Walkout	N/A
61	Walkout	N/A
62	Walkout	N/A
63	Full	913.00
64	Full	913.00
65	Full	913.00
66	Full	914.00
67	Full	920.00
68	Full	N/A
69	Walkout	N/A
70	Walkout	N/A
71	Walkout	N/A
72	Walkout	N/A
73	Walkout	N/A
74	Walkout	N/A

Drainage Notes
Side yard swales for individual lots shall be graded during the plot plan process.

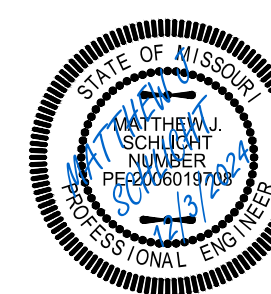
ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

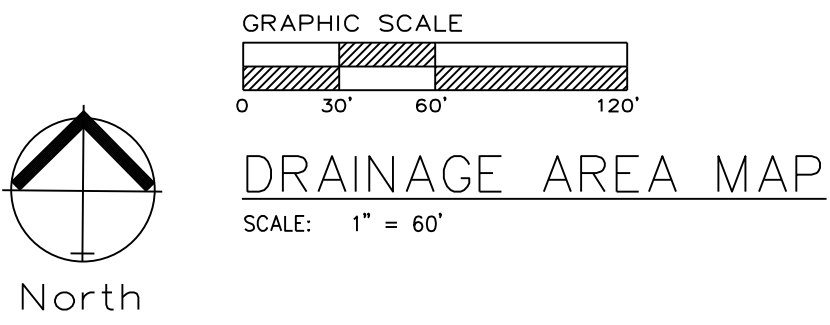
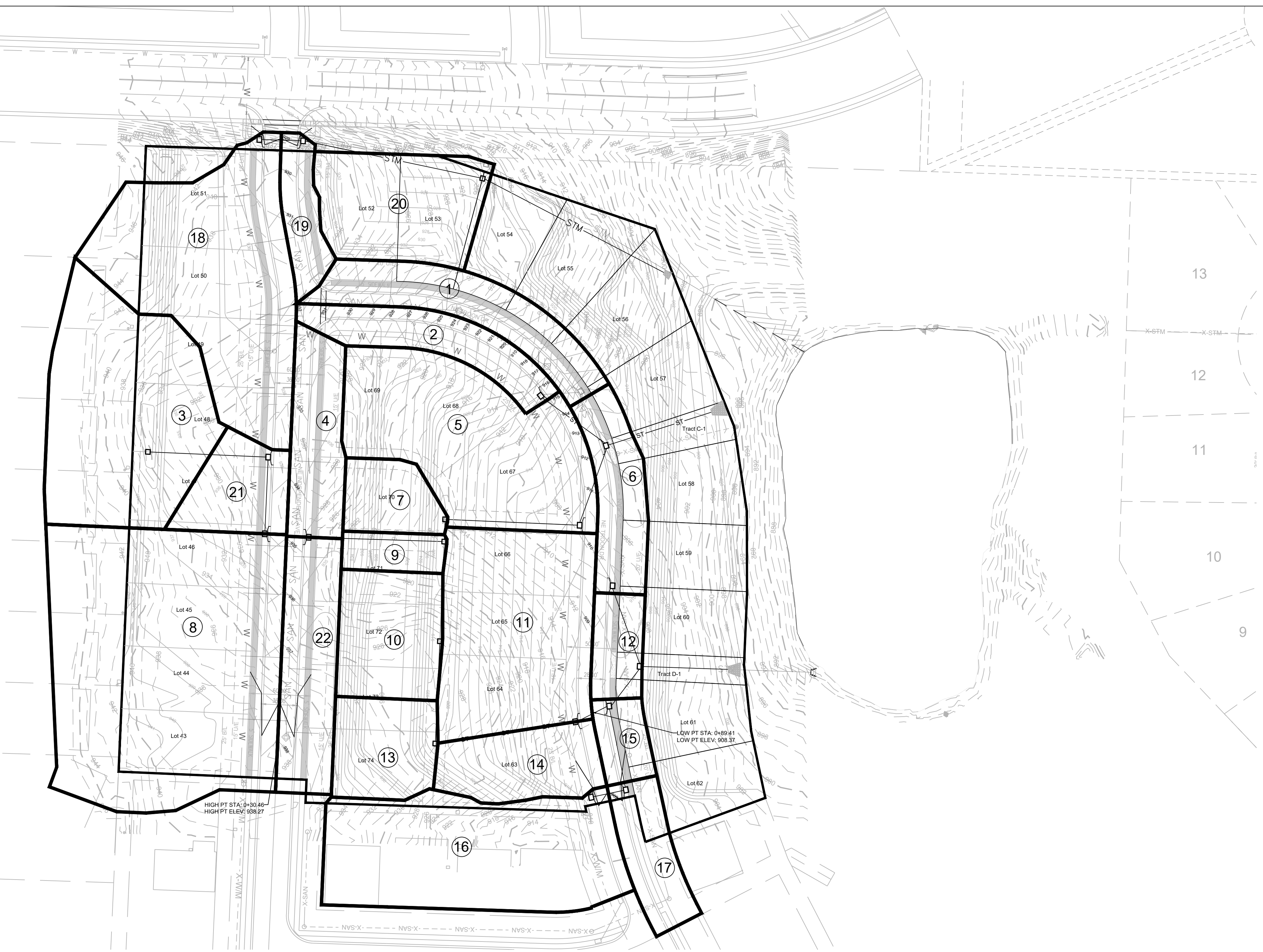
Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

Master Drainage Plan 2 of 3:
Spot Elevations
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

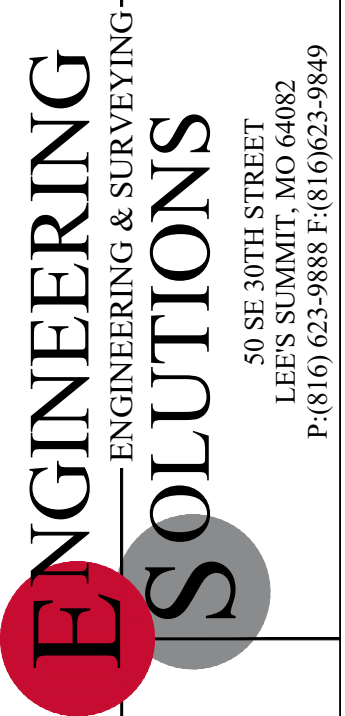


Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REV.	REVISIONS
8/12/2022	REV. 8/12/2022
10/3/2022	REV. 10/3/2022
4/26/2023	REV. 4/26/2023
5/29/2024	REV. 5/29/2024
10/29/2024	REV. 10/29/2024
12/3/2024	REV. 12/3/2024



APWA STORM DRAINAGE "TC" COMPUTATIONS FOR: VILLAS OF CHAPEL RIDGE 2ND PLAT																													
yellow areas are self computing overwrite if necessary					Surface types: Asph/ConcBus/Com SURFACE CODES "C" Values 0.90 0.87 0.60 0.30 0.90 0.66 0.51 0.3 0.90 0																								



Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

Master Drainage Map 3 of 3:
Drainage Area Map
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

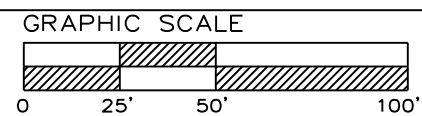
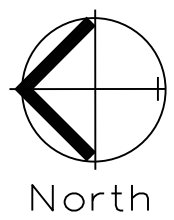
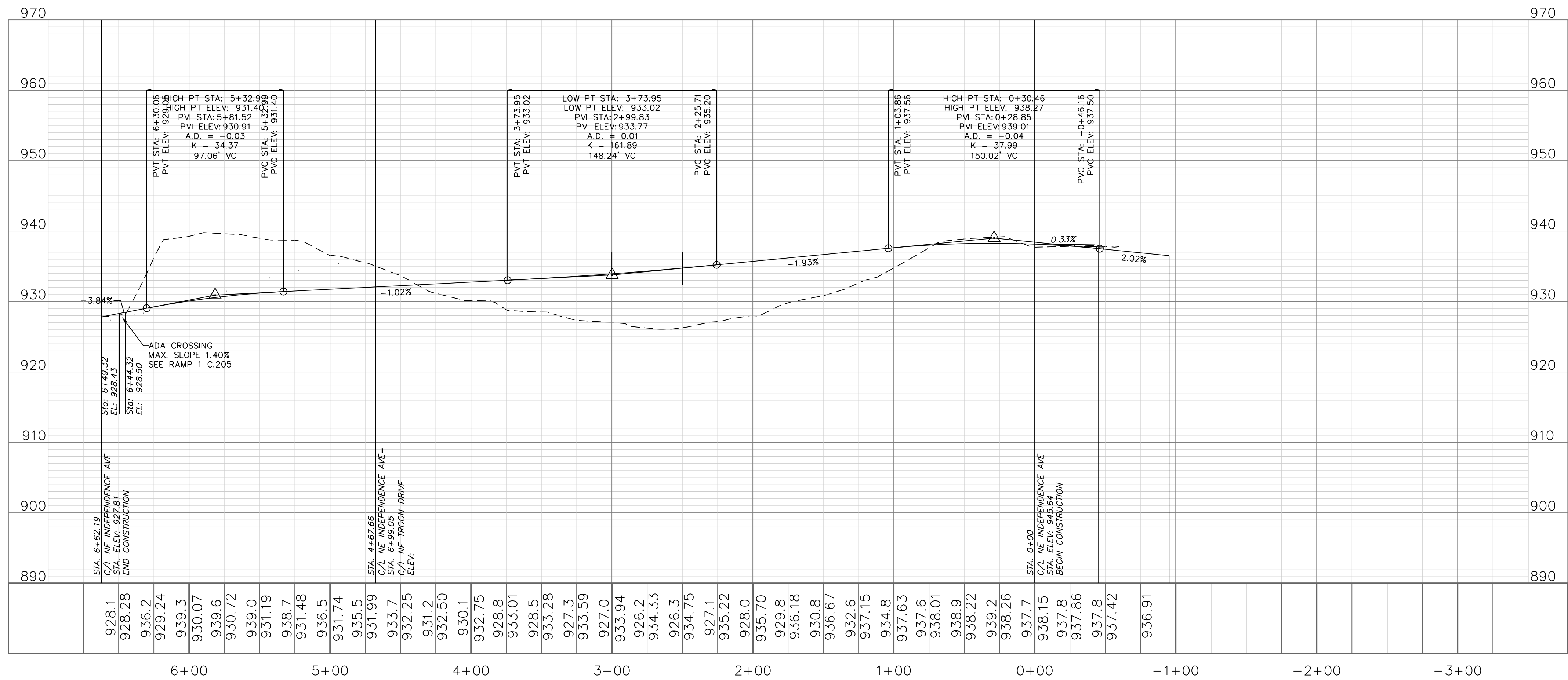


Matthew J. Schlacht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

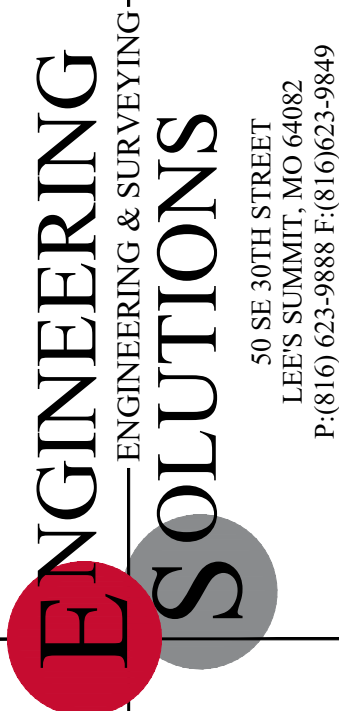
REVISIONS	
REV. 8/12/2022	
REV. 10/3/2022	
REV. 4/26/2023	
REV. 5/29/2024	
REV. 10/29/2024	
REV. 12/3/2024	



NE INDEPENDENCE AVE



STREET PLAN & PROFILE
SCALE: 1" = 50'

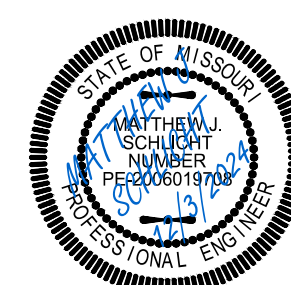


Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

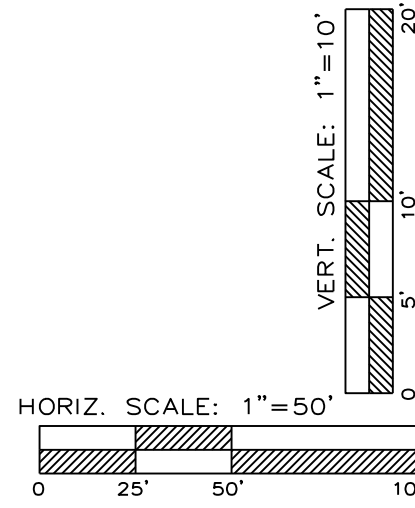
Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

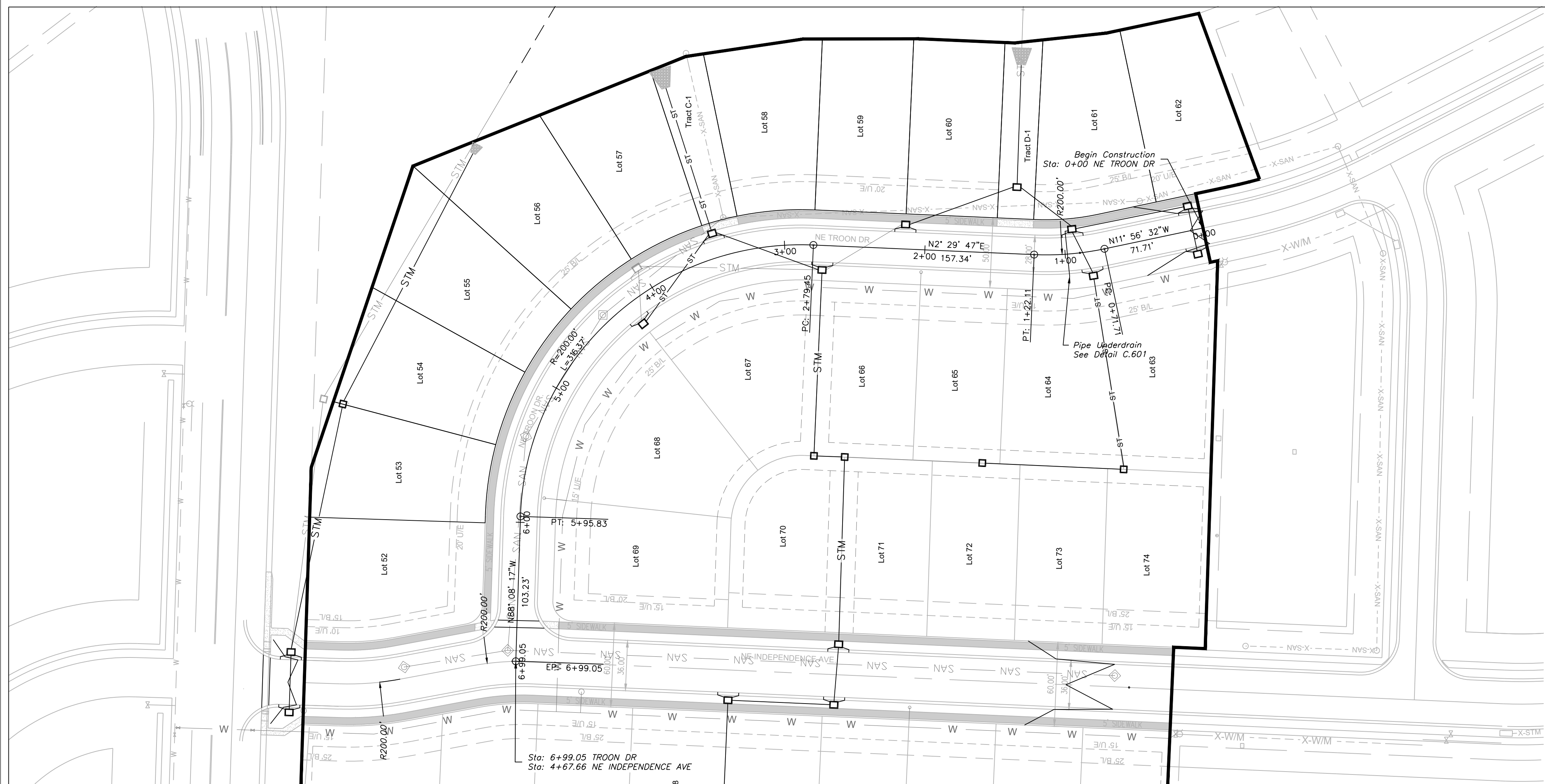
Street Plan and Profile
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



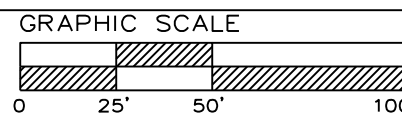
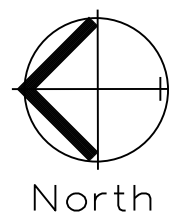
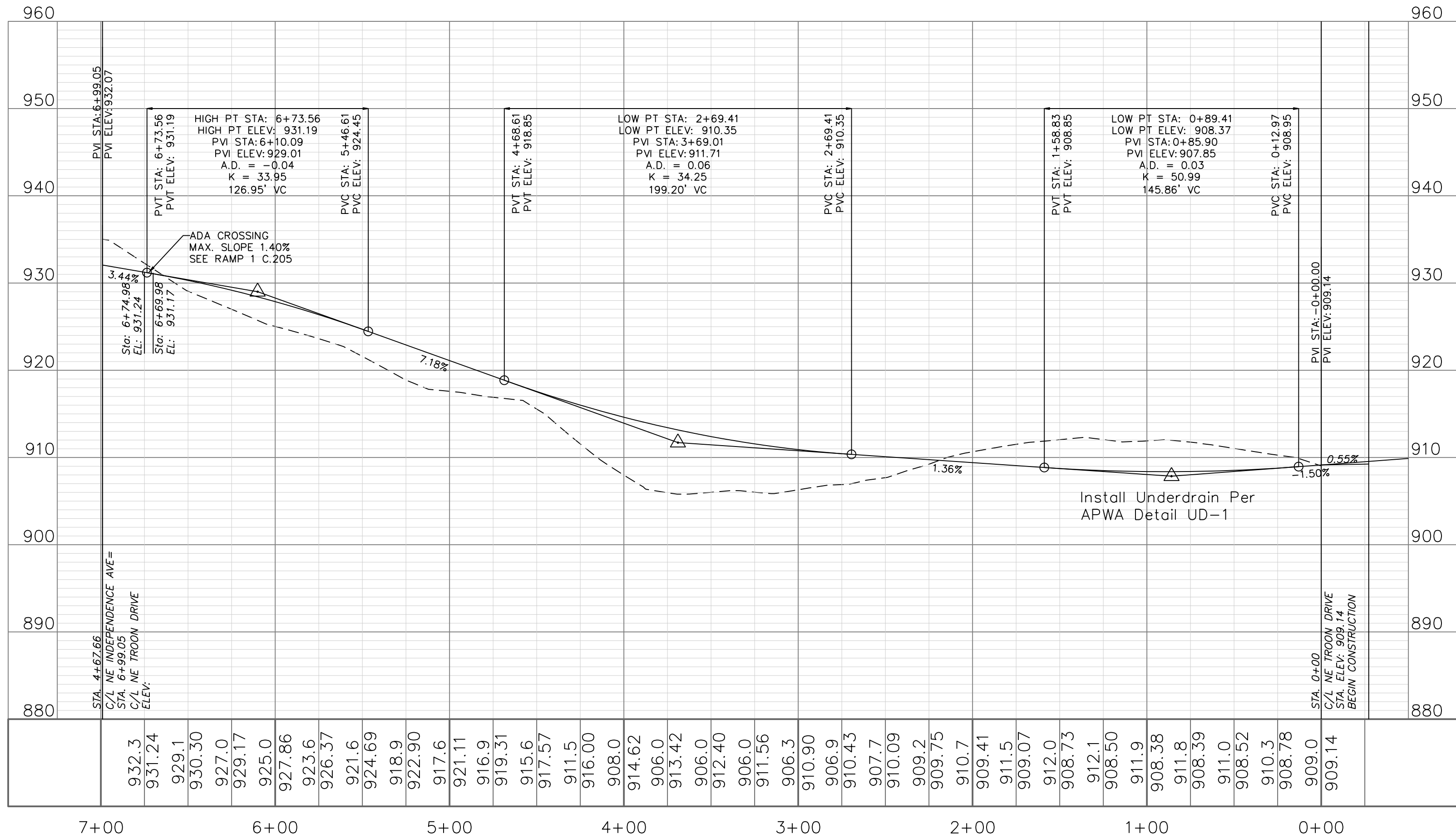
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS
REV. 8/12/2022
REV. 10/3/2022
REV. 4/26/2023
REV. 5/29/2024
REV. 10/29/2024
REV. 12/3/2024

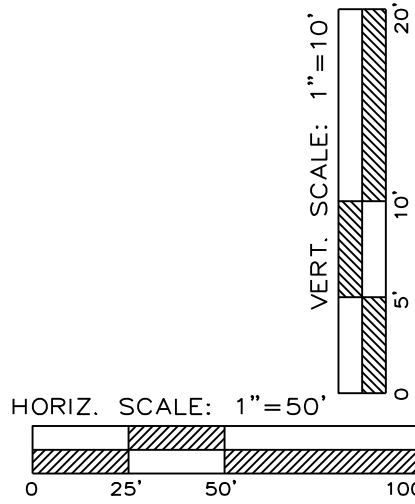




NE TROON DRIVE



STREET PLAN & PROFILE
SCALE: 1" = 50'



Street Plan and Profile

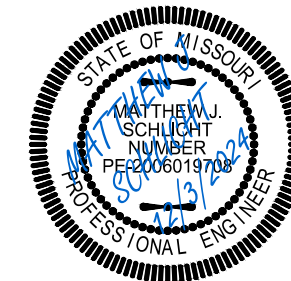
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

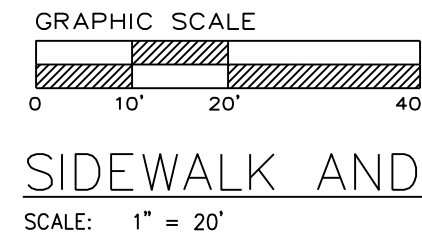


50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

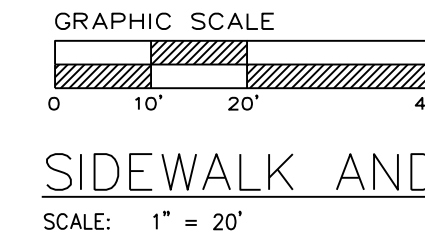
REVISIONS
REV. 8/12/2022
REV. 10/3/2022
REV. 4/26/2023
REV. 5/29/2024
REV. 10/29/2024
REV. 12/3/2024



SCALE: 1" = 20'



SPOT ELEVATION TABLE				
	Ramp 1	Ramp 2		
Spot	Elevation	Elevation		
A	928.11	930.84		
B	928.31	931.00		
C	928.43	931.17		
D	928.31	931.00		
E	928.09	930.83		
F	928.15	930.92		
G	928.39	931.08		
H	928.50	931.24		
I	928.39	931.07		
J	928.17	930.90		



SCALE: 1" = 20'



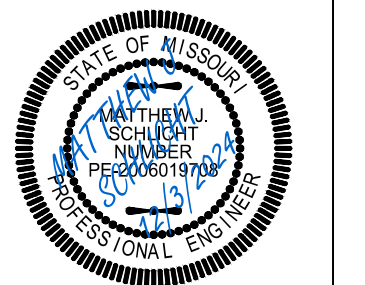
Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

Project: VILLAS OF CHAPEL
RIDGE, LSMO

Issue Date: June 24, 2022

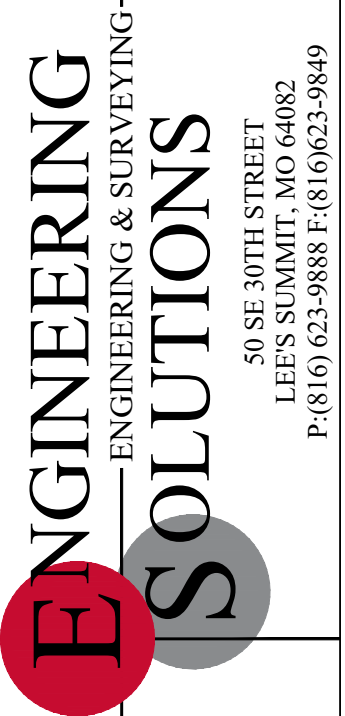
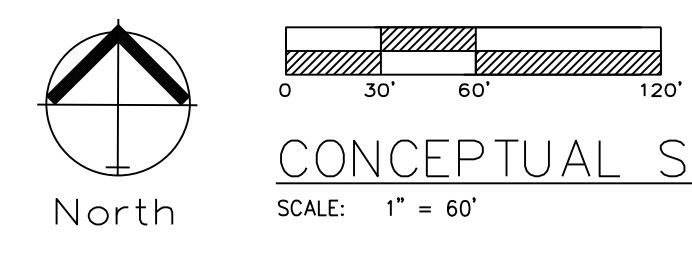
**Sidewalk and
Intersection Plan**
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

1 REV. 8/12/2022
 2 REV. 10/3/2022
 REV. 4/26/2023
 REV. 5/29/2024
 REV. 10/29/2024
 REV. 12/3/2024



Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

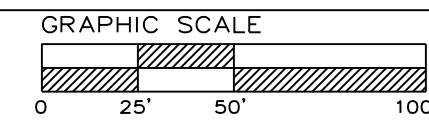
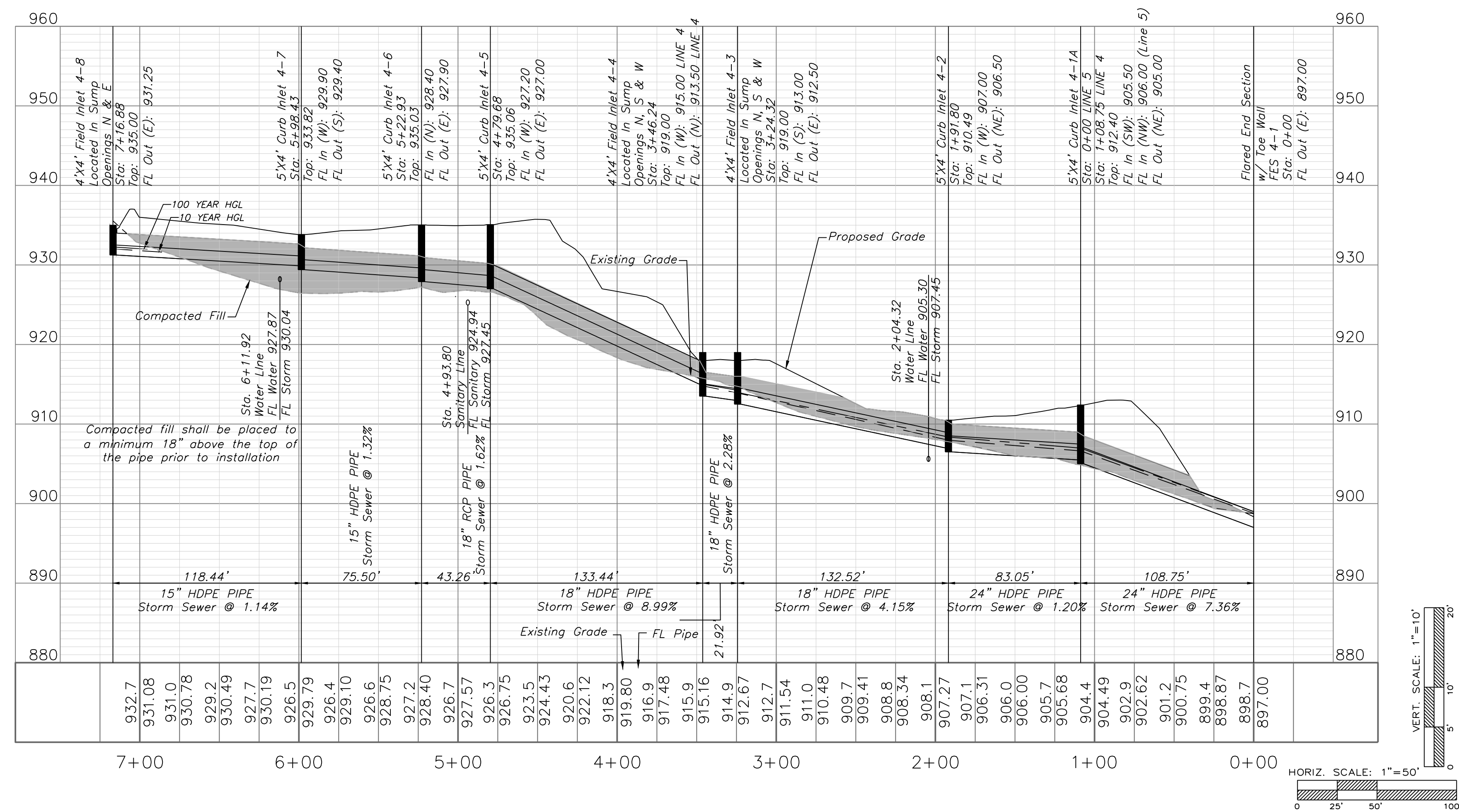
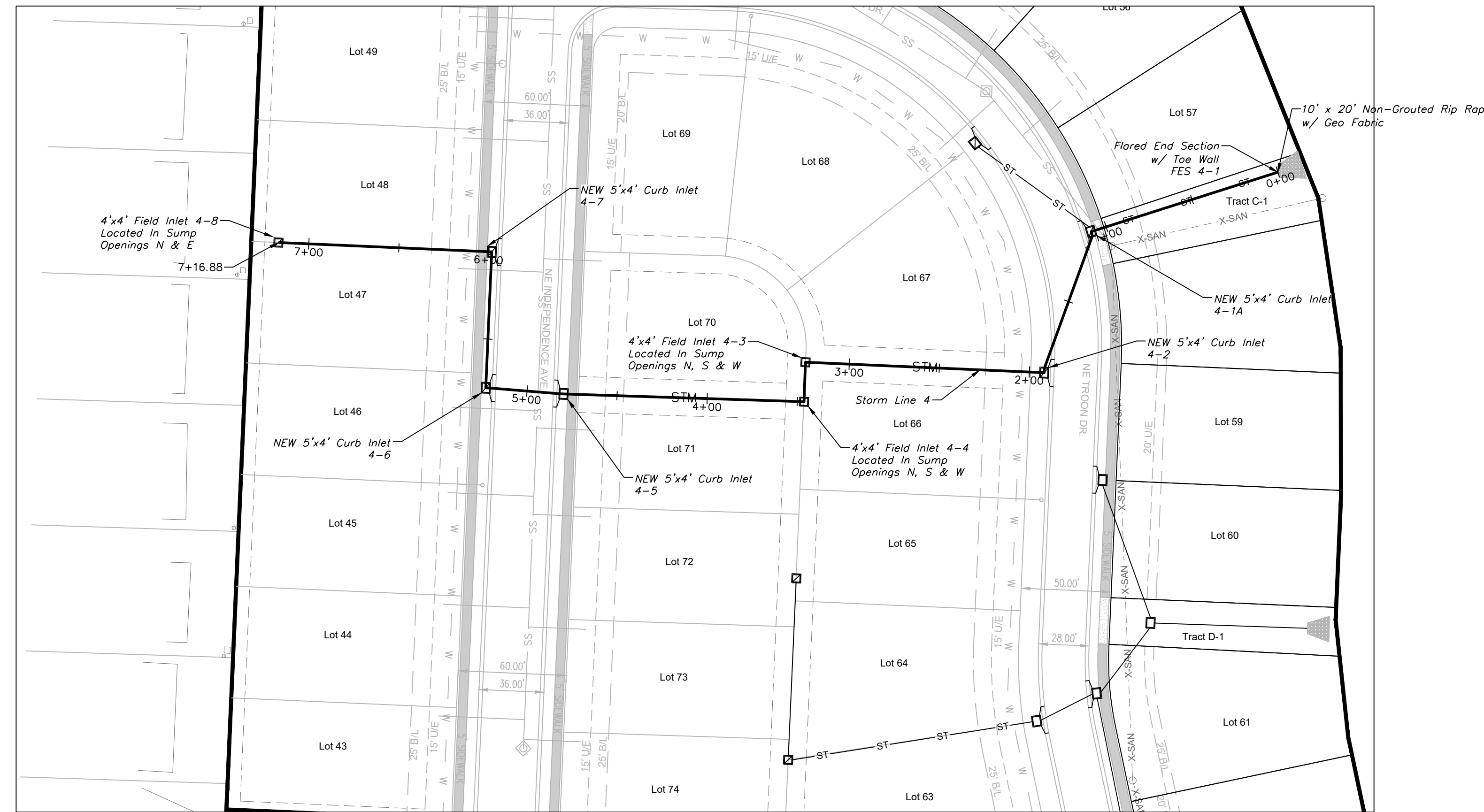
Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

Conceptual Storm Sewer General Layout
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS	
REV. 8/12/2022	
REV. 10/3/2022	
REV. 4/26/2023	
REV. 5/29/2024	
REV. 10/29/2024	
REV. 12/3/2024	



STORM SEWER PLAN & PROFILE

SCALE: 1" = 50'

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

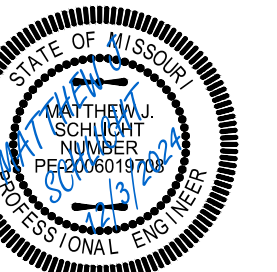
VILLAS OF CHAPEL
RIDGE, LSMO

Issue Date:
June 24, 2022

Storm Sewer Plan and Profile

Construction Plans for:

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
 LOTS 43-74 and Tracts C-1 & D-1
 Lee's Summit, Jackson County, Missouri

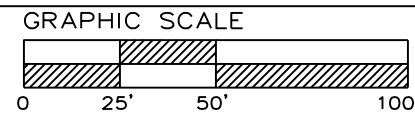
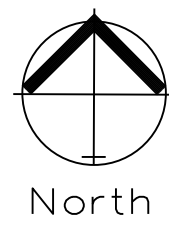


Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS

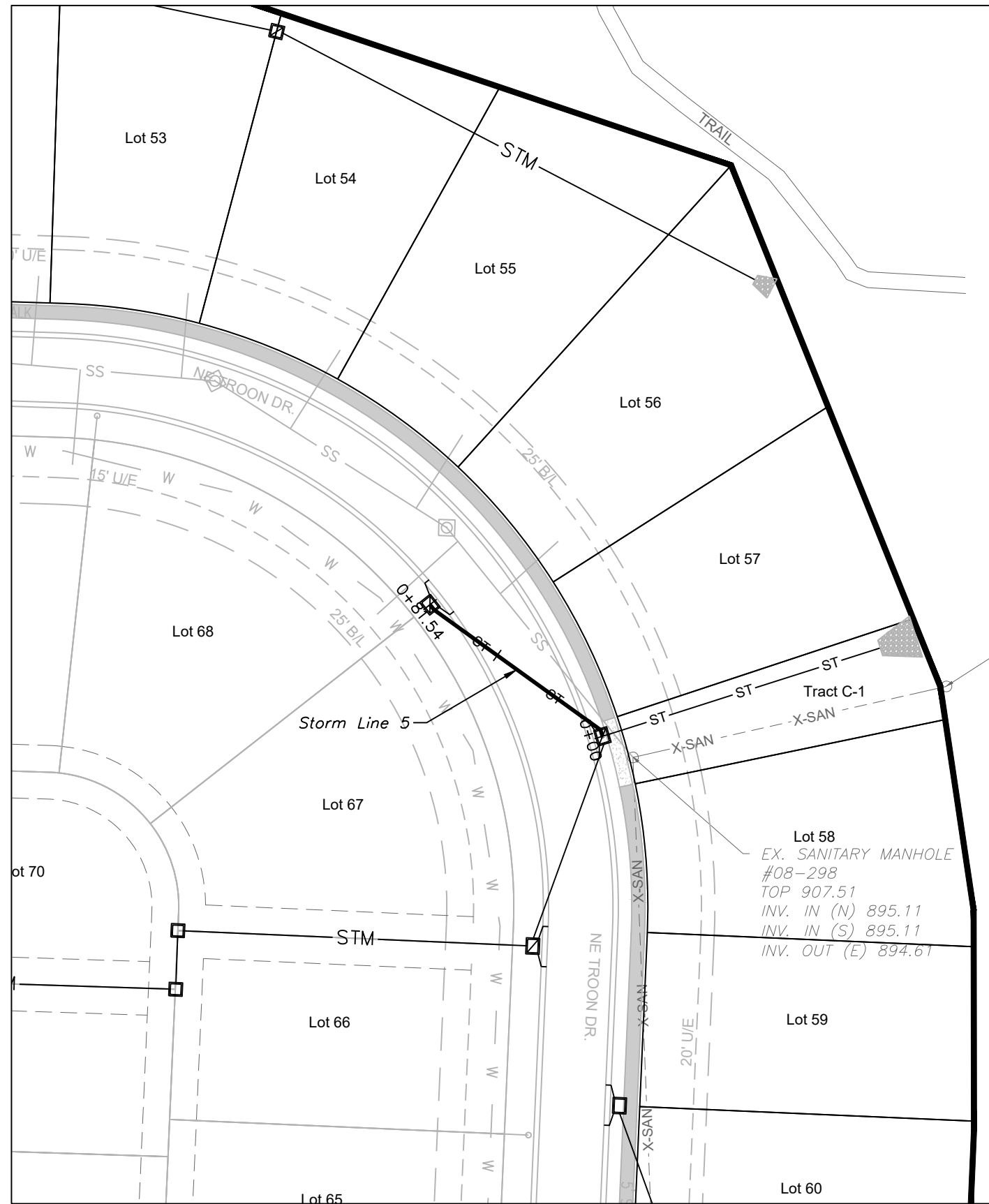
REV. 8/12/2022
REV. 10/3/2022
REV. 4/26/2023
REV. 5/29/2024
REV. 10/29/2024
REV. 12/3/2024

c.302

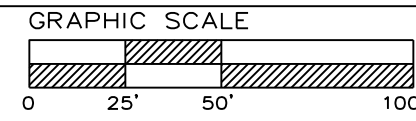
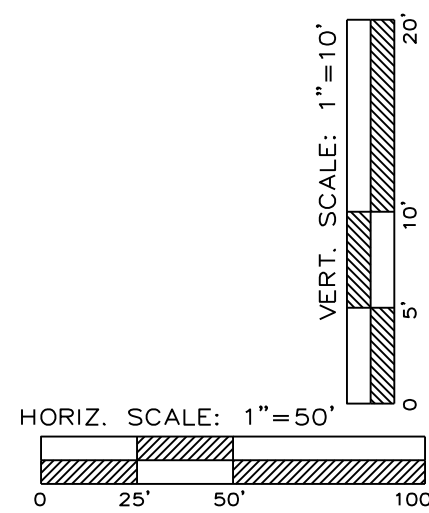
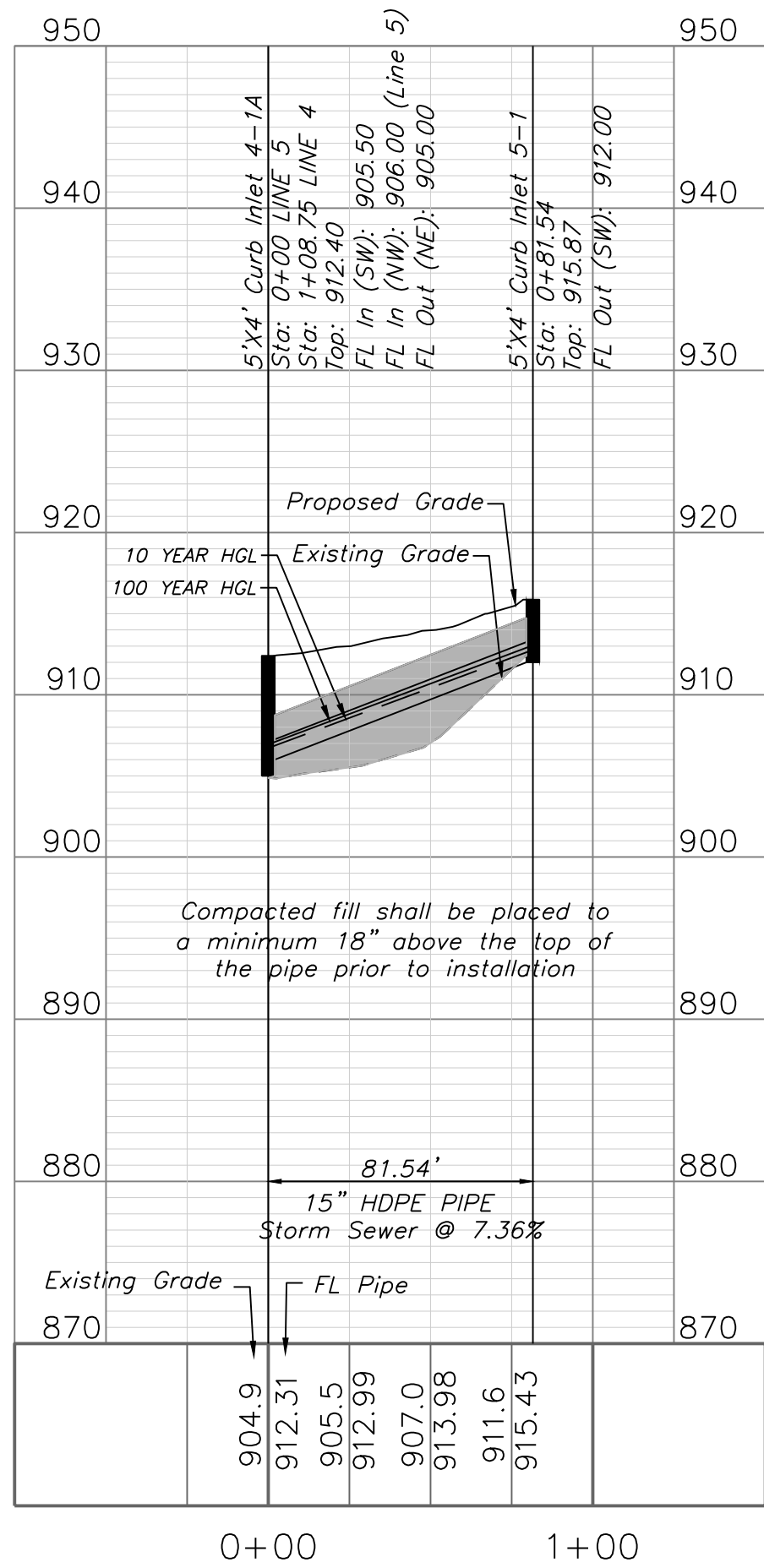


STORM SEWER PLAN & PROFILE

SCALE: 1" = 50'

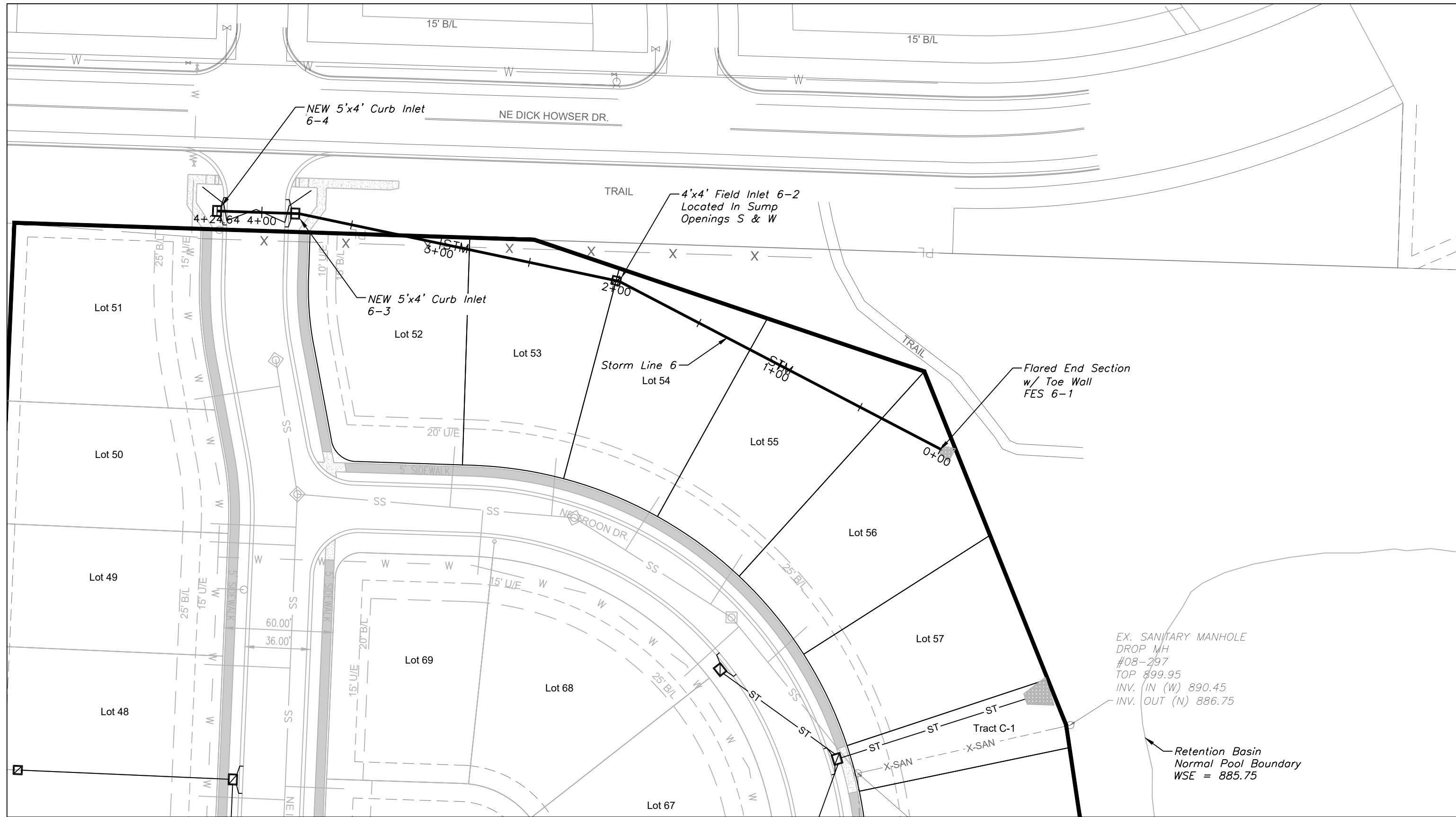


STORM LINE 5

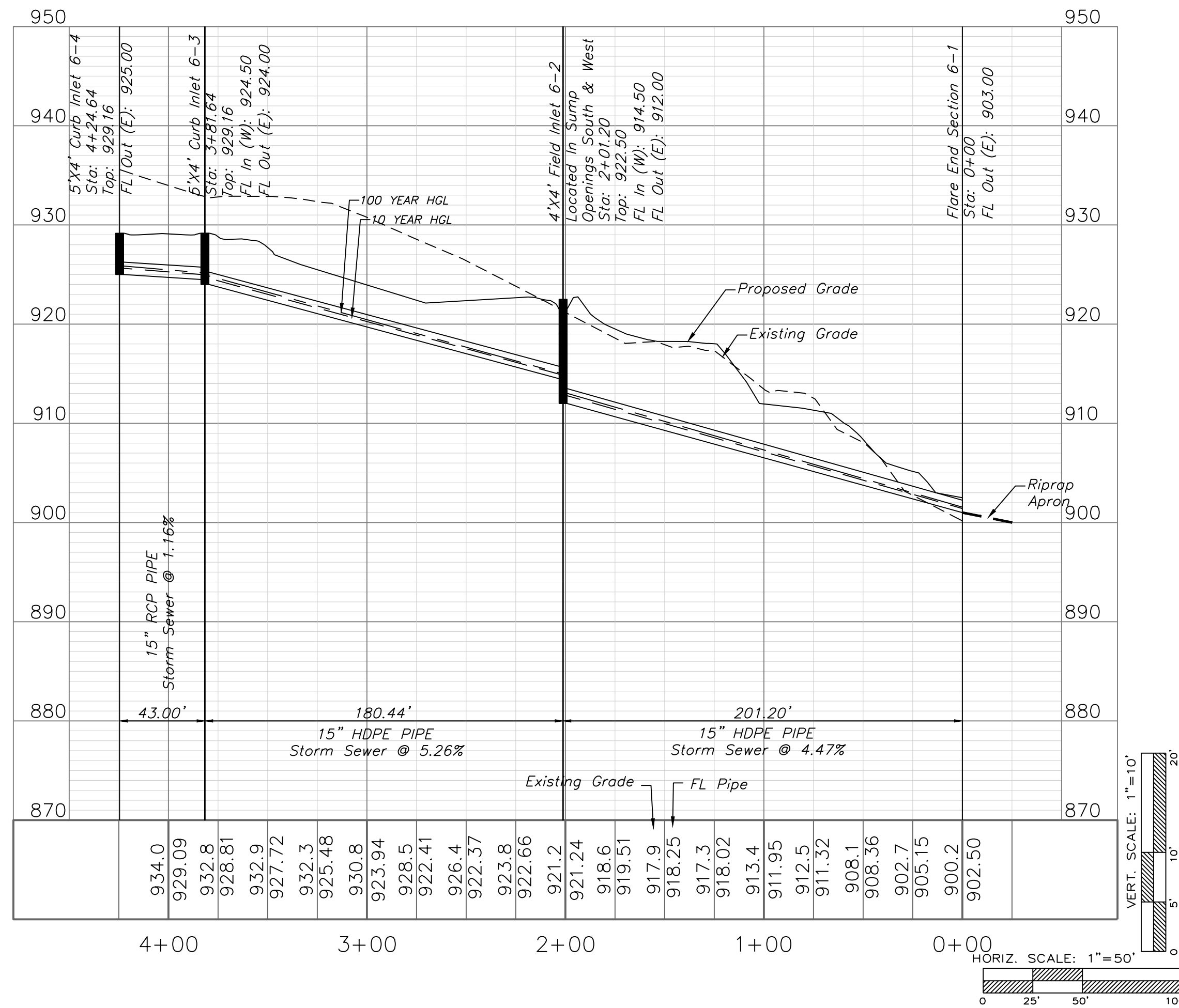


STORM SEWER PLAN & PROFILE

SCALE: 1" = 50'



STORM LINE 6



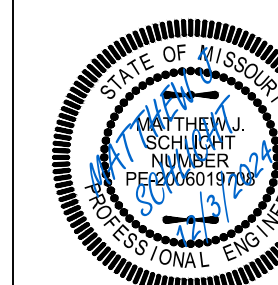
ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

Storm Sewer Plan and Profile
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



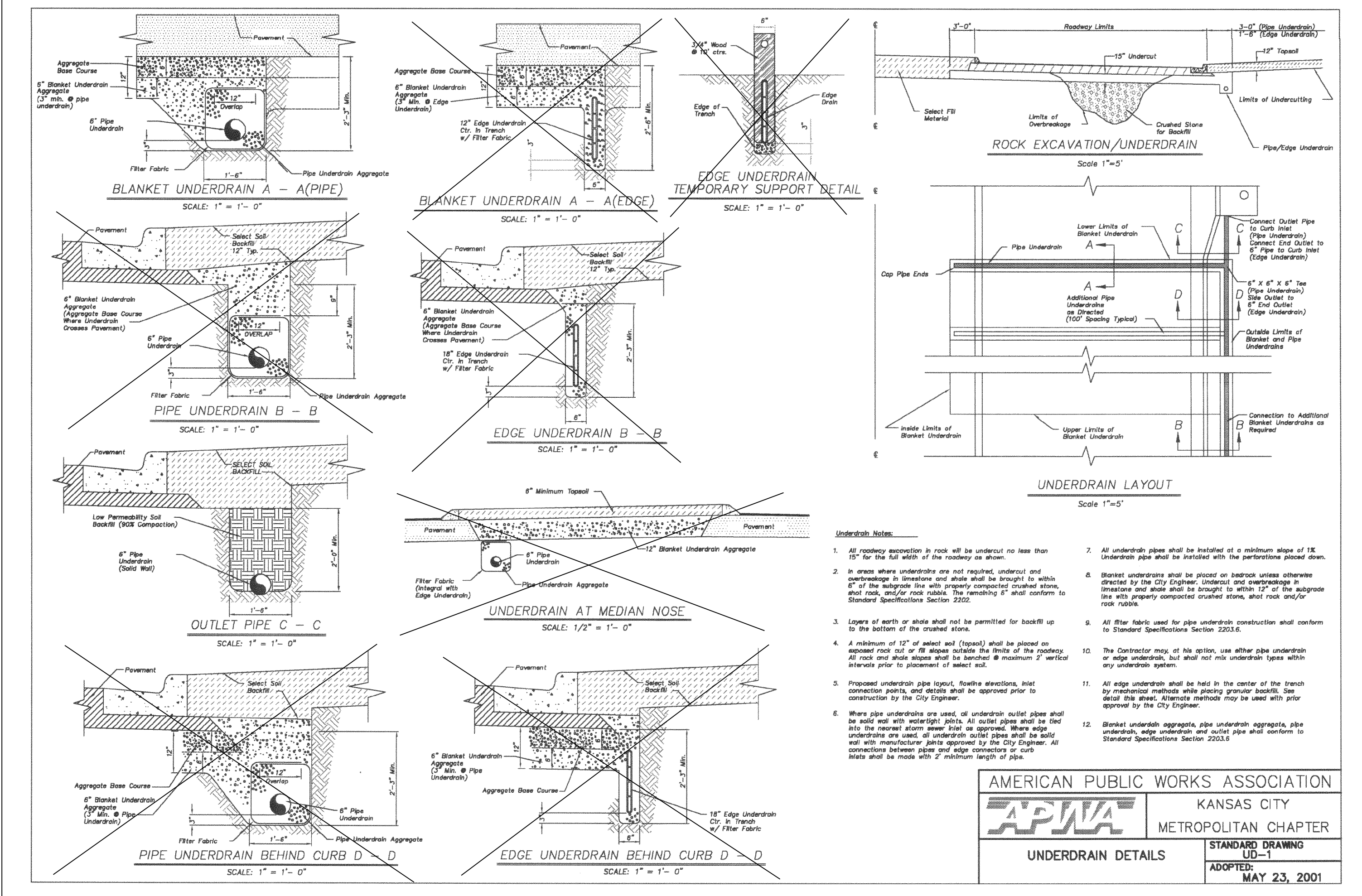
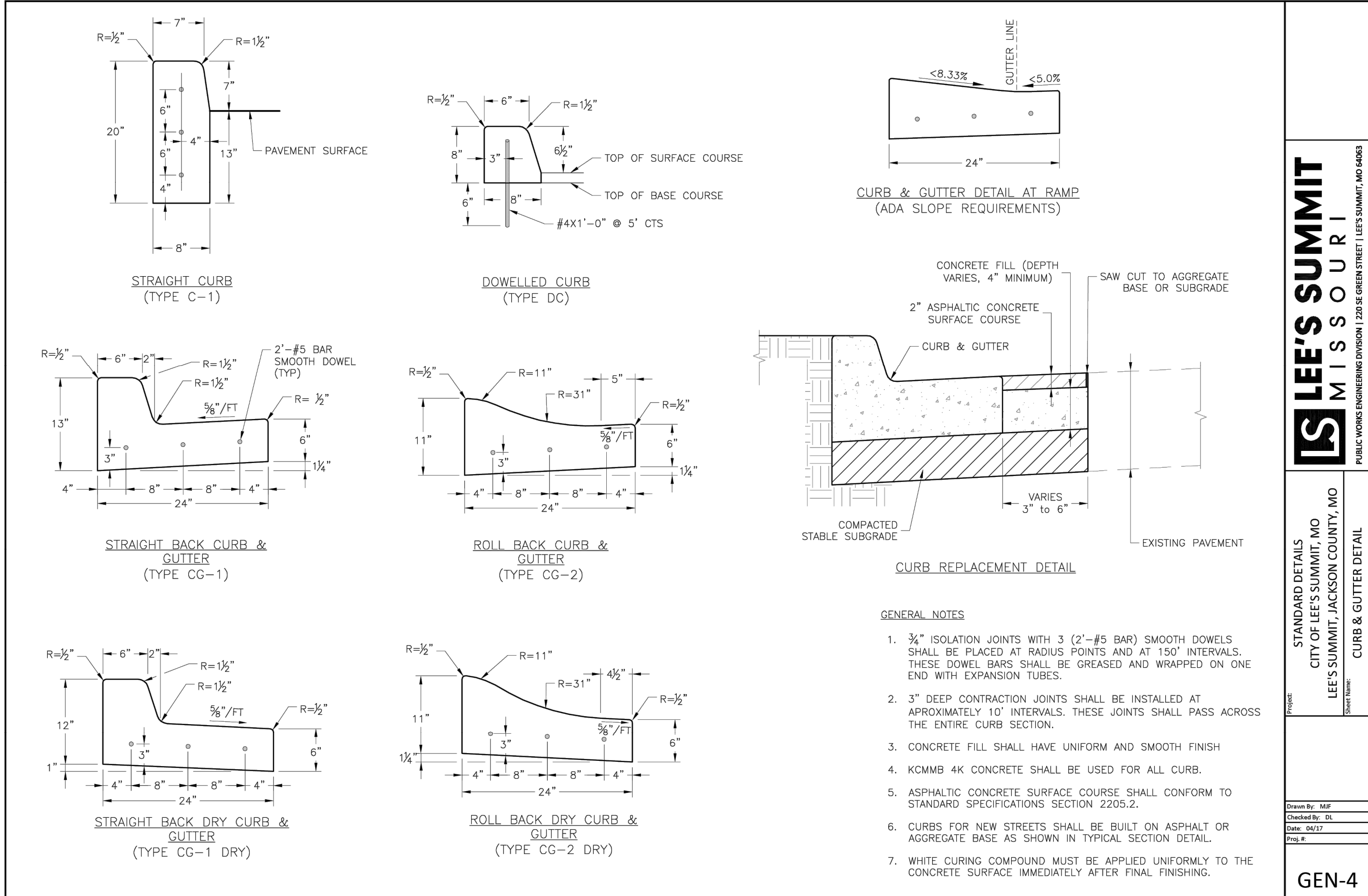
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

REVISIONS	
REV. 8/12/2022	
REV. 10/3/2022	
REV. 4/26/2023	
REV. 5/29/2024	
REV. 10/29/2024	
REV. 12/3/2024	

10-YR STRUCTURE																							
D.S. Str.	Str. No.	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)	LocalDepr. (in)	InletDepth (ft)	BypassDepth (ft)	BypassSpread (ft)	GutterDepth (ft)	GutterSpread (ft)	BypassLine No.
1-1	1-2	0	0	0	0	0	....	....	....	MH	....	....	....	....	....	....	....	....	....	....	....	....	....
1-2	1-3	0.21	5.8	7.11	0.66	0.99	0	0.99	0	Curb	3.8	5	Sag	2	0.05	0.02	9	0.95	n/a	n/a	0.2	6.77	Sag
1-3	1-4R	0.68	6.6	6.9	0.66	3.09	2.74	5.84	0	Curb	3.8	5	Sag	2	0.05	0.02	9	1.25	n/a	n/a	0.5	22.15	Sag
1-4R	1-4L	0.24	5.4	7.23	0.66	1.14	0	1.14	0	Curb	3.8	5	Sag	2	0.05	0.02	9	0.96	n/a	n/a	0.21	7.47	Sag
1-4	1-5	0.23	5.1	7.31	0.66	1.11	0	1.11	0	Dp-Curb	6	8	Sag	....	0.02	0.02	....	0.13	n/a	n/a	0.13	6.44	Sag
1-5	1-6	0.29	5.3	7.26	0.66	1.39	0.81	2.2	0	Dp-Curb	6	12	Sag	....	0.02	0.02	....	0.15	n/a	n/a	0.15	7.74	Sag
1-3	2-1	0.17	6.4	6.95	0.66	0.78	0	0.78	0	Curb	3.8	5	0.015	2	0.05	0.02	9	0.9	0	0	0.15	4.69	1-3
2-1	2-2	0.73	5.8	7.11	0.66	3.43	0	2.62	0.81	Curb	3.8	5	0.015	2	0.05	0.02	9	1	0.16	4.78	0.25	9.29	1-4
1-2	3-1	0.22	5.7	7.14	0.66	1.04	0.2	1.24	0	Curb	3.8	5	0.017	2	0.05	0.02	9	0.92	0.01	0.16	0.17	5.73	1-3
4-1	4-1A	0.31	5.6	7.17	0.66	1.47	0	1.27	0.2	Curb	3.8	5	0.062	2	0.05	0.02	9	0.9	0.07	1.46	0.15	4.5	3-1
4-1A	4-2	0.72	5.8	7.11	0.66	3.38	2.92	3.56	2.74	Curb	3.8	5	0.017	2	0.05	0.02	9	1.04	0.22	8.23	0.29	11.61	1-4
4-2	4-3	0.15	5	7.34	0.66	0.73	0	0.73	0	Dp-Curb	6	12	Sag	....	0.02	0.02	....	0.07	n/a	n/a	0.07	3.7	Sag
4-3	4-4	0.09	5.1	7.31	0.66	0.43	0	0.43	0	Dp-Curb	6	12	Sag	....	0.02	0.02	....	0.05	n/a	n/a	0.05	2.63	Sag
4-4	4-5	0.32	5.8	7.11	0.66	1.5	0	1.46	0.04	Curb	3.8	5	0.019	2	0.05	0.02	9	0.93	0.05	1.02	0.18	6.13	5-1
4-5	4-6	1.38	7.1	6.77	0.66	6.16	0	3.46	2.71	Curb	3.8	5	0.019	2	0.05	0.02	9	1.04	0.22	7.99	0.29	11.26	4-7
4-6	4-7	0.2	6.8	6.84	0.66	0.9	2.71	2.44	1.17	Curb	3.8	5	0.015	2	0.02	0.02	9	0.95	0.13	6.57	0.2	10.01	6-4
4-7	4-8	0.76	5.6	7.17	0.66	3.6	0	3.6	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.18	n/a	n/a	0.18	8.88	Sag
4-1A	5-1	0.79	6.7	6.87	0.66	3.58	0.04	0.7	2.92	Curb	3.8	5	0.08	2	0.05	0.02	0	0.19	0.18	5.98	0.19	6.61	4-2
6-1	6-2	0.38	7.2	6.74	0.66	1.69	0	1.69	0	Dp-Curb	6	8	Sag	....	0.02	0.02	....	0.17	n/a	n/a	0.17	8.52	Sag
6-2	6-3	0.13	7.2	6.74	0.66	0.58	1.17	1.52	0.23	Curb	3.8	5	0.038	2	0.05	0.02	9	0.92	0.08	1.68	0.17	5.59	Offsite
6-3	6-4	0.61	7.2	6.74	0.66	2.71	0	2	0.71	Curb	3.8	5	0.038	2	0.05	0.02	9	0.95	0.13	3.39	0.2	6.86	Offsite

10-YR PIPE																						
D.S. Str.	U.S. Str.	LineLength (ft)	Incr.Area (ac)	TotalArea (ac)	RunoffCoeff. (C)	IncrC x A	TotalC x A	InletTime (min)	TimeConc (min)	RnfalInt (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)
1-1	1-2	85.16	0	2.77	0	0	1.83	0	6.8	6.8	12.52	12.52	26.67	7.4	18	3.82	898.00	901.25	899.42	902.58	0.00	908.00
1-2	1-3	50.27	0.21	2.55	0.66	0.14	1.68	5.8	6.7	6.9	11.57	11.57	19.25	9.26	18	1.99	901.75	902.75	902.59	904.05	908.00	908.47
1-3	1-4R	36.85	0.68	1.44	0.66	0.45	0.95	6.6	6.6	6.9	6.55	6.55	13.83	7.01	15	2.71	903.25	904.25	904.05	905.28	908.47	908.48
1-4R	1-4L	1	0.24	0.24	0.66	0.16	0.16	5.4	5.4	7.2	1.14	1.14	59.36	2.1	15	50	904.25	904.75	905.28	905.17	908.48	908.48
1-4	1-5	135.56	0.23	0.52	0.66	0.15	0.34	5.1	5.7	7.1	2.45	2.45	21.33	4.47	15	6.45	904.75	913.50	905.28	914.13	908.48	920.00
1-5	1-6	96.77	0.29	0.29	0.66	0.19	0.19	5.3	5.3	7.3	1.39	1.39	8.53	4.23	15	1.03	914.00	915.00	914.34	915.47	920.00	919.00
1-3	2-1	84.05	0.17	0.9	0.66	0.11	0.59	6.4	6.4	6.9	4.13	4.13	6.47	5.21	15	0.59	903.75	904.25	904.48	905.07	908.47	909.13
2-1	2-2	34.97	0.73	0.73	0.66	0.48	0.48	5.8	5.8	7.1	3.43	3.43	7.1	5.11	15	0.71	904.75	905.00	905.36	905.75	909.13	909.13
1-2	3-1	78.98	0.22	0.22	0.66	0.15	0.15	5.7	5.7	7.1	1.04	1.04	18.29	2.13	15	4.75	901.75	905.50	902.58	905.90	908.00	909.70
4-1	4-1A	106.75	0.31	4.72	0.66	0.2	3.12	5.6	7.8	6.6	20.55	20.55	80.49	7.19	24	7.49	897.00	905.00	898.81	906.62	0.00	912.40
4-1A	4-2	78.04	0.72	3.62	0.66	0.48	2.39	5.8	7.6	6.6	15.85	15.85	33.28	7.64	24	1.28	905.50	906.50	906.62	907.93	912.40	910.49
4-2	4-3	132.52	0.15	2.9	0.66	0.1	1.91	5	7.4	6.7	12.81	12.81	27.81	9.37	18	4.15	907.00	912.50	907.93	913.84	910.49	919.00
4-3	4-4	21.92	0.09	2.75	0.66	0.06	1.82	5.1	7.4	6.7	12.16	12.16	20.62	9.63	18	2.28	913.00	913.50	913.84	914.82	919.00	919.00
4-4	4-5	133.44	0.32	2.66	0.66	0.21	1.76	5.8	7.2	6.7	11.84	11.84	40.94	13.64	18	8.99	915.00	927.00	915.55	928.31	919.00	935.06
4-5	4-6	43.26	1.38	2.34	0.66	0.91	1.54	7.1	7.1	6.8	10.45	10.45	17.37	7.08	18	1.62	927.20	927.90	928.31	929.14	935.06	935.03
4-6	4-7	75.5	0.2	0.96	0.66	0.13	0.63	6.8	6.8	6.8	4.34	4.34	9.66	5.32	15	1.32	928.40	929.40	929.14	930.24	935.03	933.82
4-7	4-8	118.44	0.76	0.76	0.66	0.5	0.5	5.6	5.6	7.2	3.6	3.6	8.96	5.73	15	1.14	929.90	931.25	930.45	932.02	933.82	935.00
4-1A	5-1	76.54	0.79	0.79	0.66	0.52	0.52	6.7	6.7	6.9	3.58	3.58	23.5	5.2	15	7.84	906.00	912.00	906.62	912.76	912.40	915.87
6-1	6-2	199.2	0.38	1.12	0.66	0.25	0.74	7.2	7.7	6.6	4.89	4.89	17.84	4.78	15	4.52	903.00	912.00	904.07	912.90	0.00	922.50
6-2	6-3	176.44	0.13	0.74	0.66	0.09	0.49	7.2	7.4	6.7	3.27	3.27	19.48	8.1	15	5.38	914.50	924.00	914.85	924.73	922.50	929.16
6-3	6-4	50	0.61	0.61	0.66	0.4	0.4	7.2	7.2	6.7	2.71	2.71	8.39	5.11	15	1	924.50	925.00	924.99	925.66	929.16	929.16

100-YR STRUCTURE																							
D.S. Str.	Str. No.	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)	LocalDepr. (in)	InletDepth (ft)	BypassDepth (ft)	BypassSpread (ft)	GutterDepth (ft)	GutterSpread (ft)	BypassLine No.
1-1	1-2	0	0	0	0	0	....	....	....	MH	....	....	....	....	....	....	....	....	....	....	....	....	....
1-2	1-3	0.21	5.8	12.52	0.66	1.74	0.43	2.16	0	Curb	3.8	5	Sag	2	0.05	0.02	9	1.04	n/a	n/a	0.29	11.42	Sag
1-3	1-4R	0.68	6.6	12.17	0.66	5.46	6.99	12.45	0	Curb	3.8	5	Sag	2	0.05	0.02	9	1.54	n/a	n/a	0.79	36.72	Sag
1-4R	1-4L	0.24	5.4	12.71	0.66	2.01	0	2.01	0	Curb	3.8	5	Sag	2	0.05	0.02	9	1.03	n/a	n/a	0.28	10.89	Sag
1-4	1-5	0.23	5.1	12.85	0.66	1.95	0	1.95	0	Dp-Curb	6	8	Sag	....	0.02	0.02	....	0.19	n/a	n/a	0.19	9.37	Sag
1-5	1-6	0.29	5.3	12.75	0.66	2.44	2.48	4.92	0	Dp-Curb	6	12	Sag	....	0.02	0.02	....	0.27	n/a	n/a	0.27	13.25	Sag
1-3	2-1	0.17	6.4	12.26	0.66	1.38	0	1.37	0	Curb	3.8	5	0.015	2	0.05	0.02	9	0.93	0.02	0.47	0.18	6.22	1-3
2-1	2-2	0.73	5.8	12.52	0.66	6.03	0	3.55	2.48	Curb	3.8	5	0.015	2	0.05	0.02	9	1.04	0.22	8.09	0.29	11.7	1-4
1-2	3-1	0.22	5.7	12.57	0.66	1.82	0.78	2.18	0.42	Curb	3.8	5	0.017	2	0.05	0.02	9	0.97	0.12	3.12	0.22	8.05	1-3
4-1	4-1A	0.31	5.6	12.61	0.66	2.58	0	1.8	0.78	Curb	3.8	5	0.062	2	0.05	0.02	9	0.93	0.12	3.05	0.18	5.99	3-1
4-1A	4-2	0.72	5.8	12.52	0.66	5.95	5.83	4.79	6.99	Curb	3.8	5	0.017	2	0.05	0.02	9	1.11	0.3	12.11	0.36	14.89	1-4
4-2	4-3	0.15	5	12.9	0.66	1.28	0	1.28	0	Dp-Curb	6	12	Sag	....	0.02	0.02	....	0.11	n/a	n/a	0.11	5.39	Sag
4-3	4-4	0.09	5.1	12.85	0.66	0.76	0	0.76	0	Dp-Curb	6	12	Sag	....	0.02	0.02	....	0.08	n/a	n/a	0.08	3.82	Sag
4-4	4-5	0.32	5.8	12.52	0.66	2.64	0	2.17	0.47	Curb	3.8	5	0.019	2	0.05	0.02	9	0.97	0.13	3.25	0.22	7.91	5-1
4-5	4-6	1.38	7.1	11.96	0.66	10.89	0	4.53	6.36	Curb	3.8	5	0.019	2	0.05	0.02	9	1.09	0.29	11.4	0.34	14.13	4-7
4-6	4-7	0.2	6.8	12.08	0.66	1.6	6.36	3.68	4.27	Curb	3.8	5	0.015	2	0.02	0.02	9	1.02	0.21	10.66	0.27	13.46	6-4
4-7	4-8	0.76	5.6	12.61	0.66	6.33	0	6.33	0	Dp-Curb	6	16	Sag	....	0.02	0.02	....	0.26	n/a	n/a	0.26	12.94	Sag
4-1A	5-1	0.79	6.7	12.13	0.66	6.32	0.47	0.97	5.83	Curb	3.8	5	0.08	2	0.05	0.02	0	0.23	0.22	8.16	0.23	8.71	4-2
6-1	6-2	0.38	7.2	11.92	0.66	2.99	0	2.99	0	Dp-Curb	6	8	Sag	....	0.02	0.02	....	0.25	n/a	n/a	0.25	12.46	Sag
6-2	6-3	0.13	7.2	11.92	0.66	1.02	4.27	2.86	2.44	Curb	3.8	5	0.038	2	0.05	0.02	9	0.99	0.19	6.54	0.24	9.17	Offsite
6-3	6-4	0.61	7.2	11.92	0.66	4.8	0	2.72	2.08	Curb	3.8	5	0.038	2	0.05	0.02	9	0.99	0.18	6.07	0.24	8.8	Offsite



GENERAL NOTE:

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

ADDED UNDERDRAIN DETAILS.

Construction Details

Construction Plans for:

THE VILLAGES OF CHAPEL RIDGE-2ND PLAT

LOTS 43-74 and Tracts C-1 & D-1

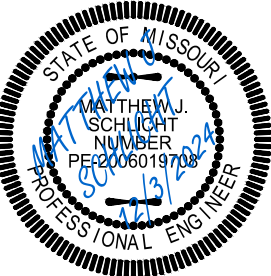
Lee's Summit, Jackson County, Missouri

Project:

VILLAGES OF CHAPEL RIDGE, LSUMO

Issue Date:

June 24, 2022



Matthew J. Schlicht

MO PE 2006019708

KS PE 19071

OK PE 25226

NE PE E-14335

REVISIONS

REV. 8/12/2022

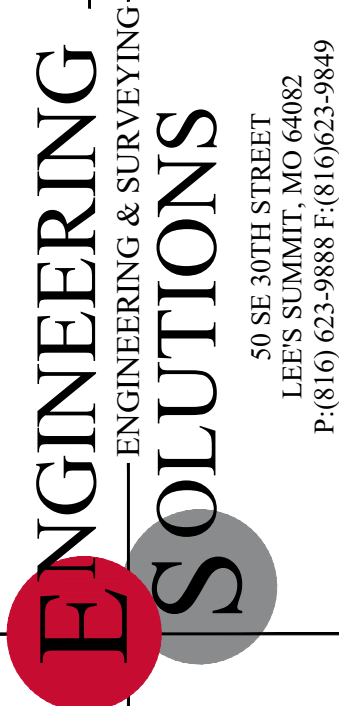
REV. 10/3/2022

REV. 4/26/2023

REV. 5/29/2024

REV. 10/29/2024

REV. 12/3/2024



Professional Registration

Missouri

Engineering 2005002186-D

Surveying 2005008319-D

Kansas

Engineering E-1695

Surveying LS-218

Oklahoma

Engineering 6254

Nebraska

Engineering CA2821

THE VILLAGES OF CHAPEL RIDGE-2ND PLAT

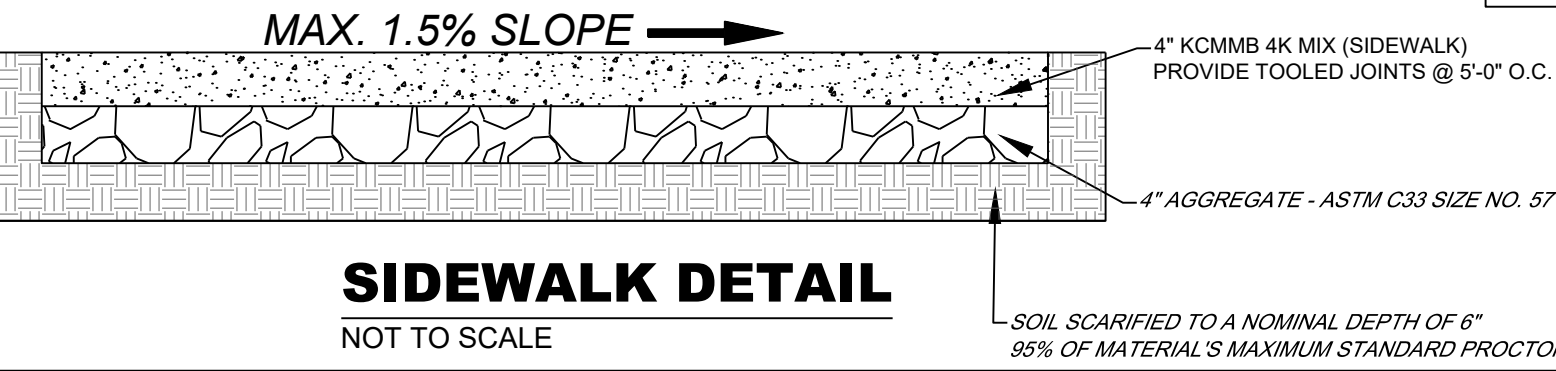
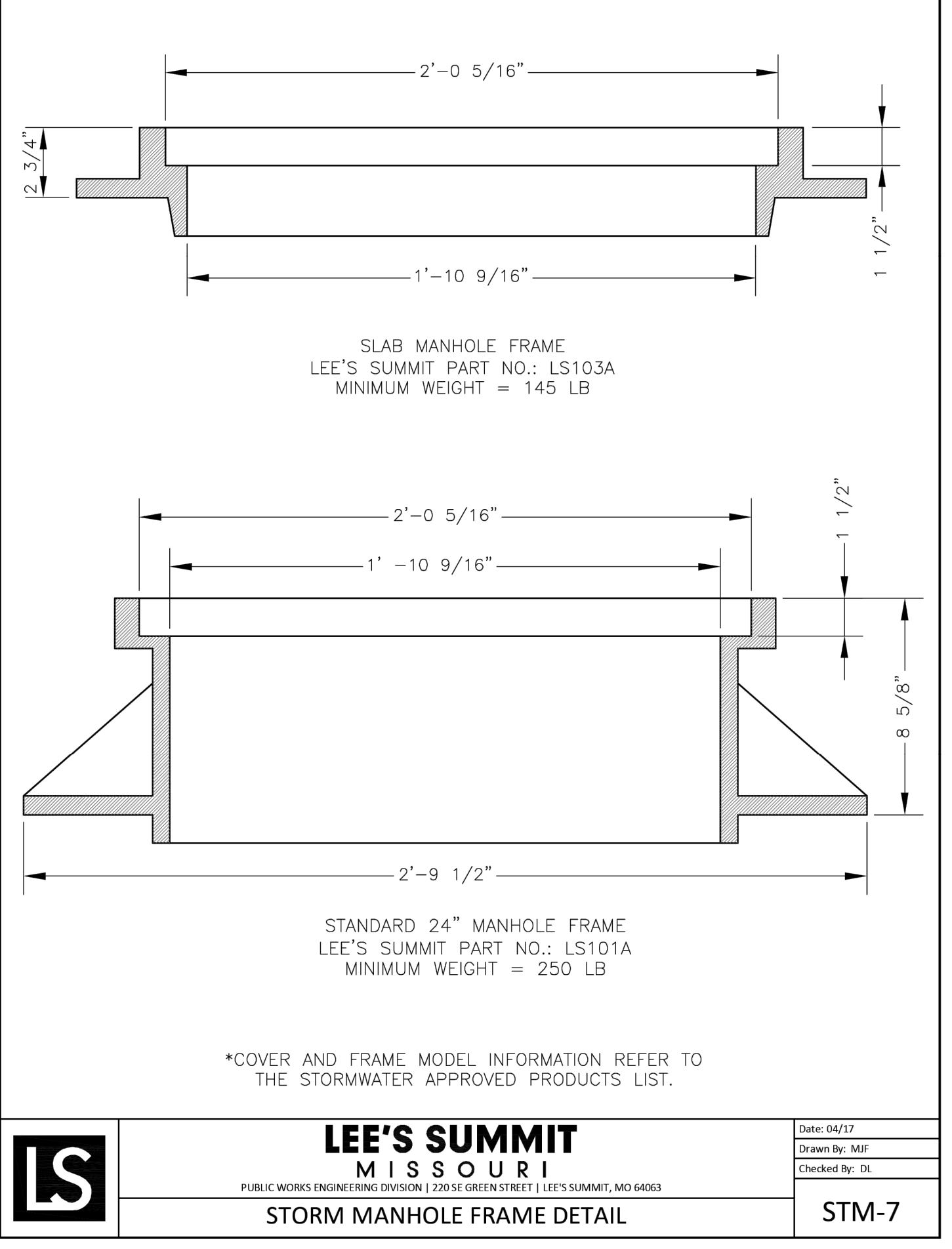
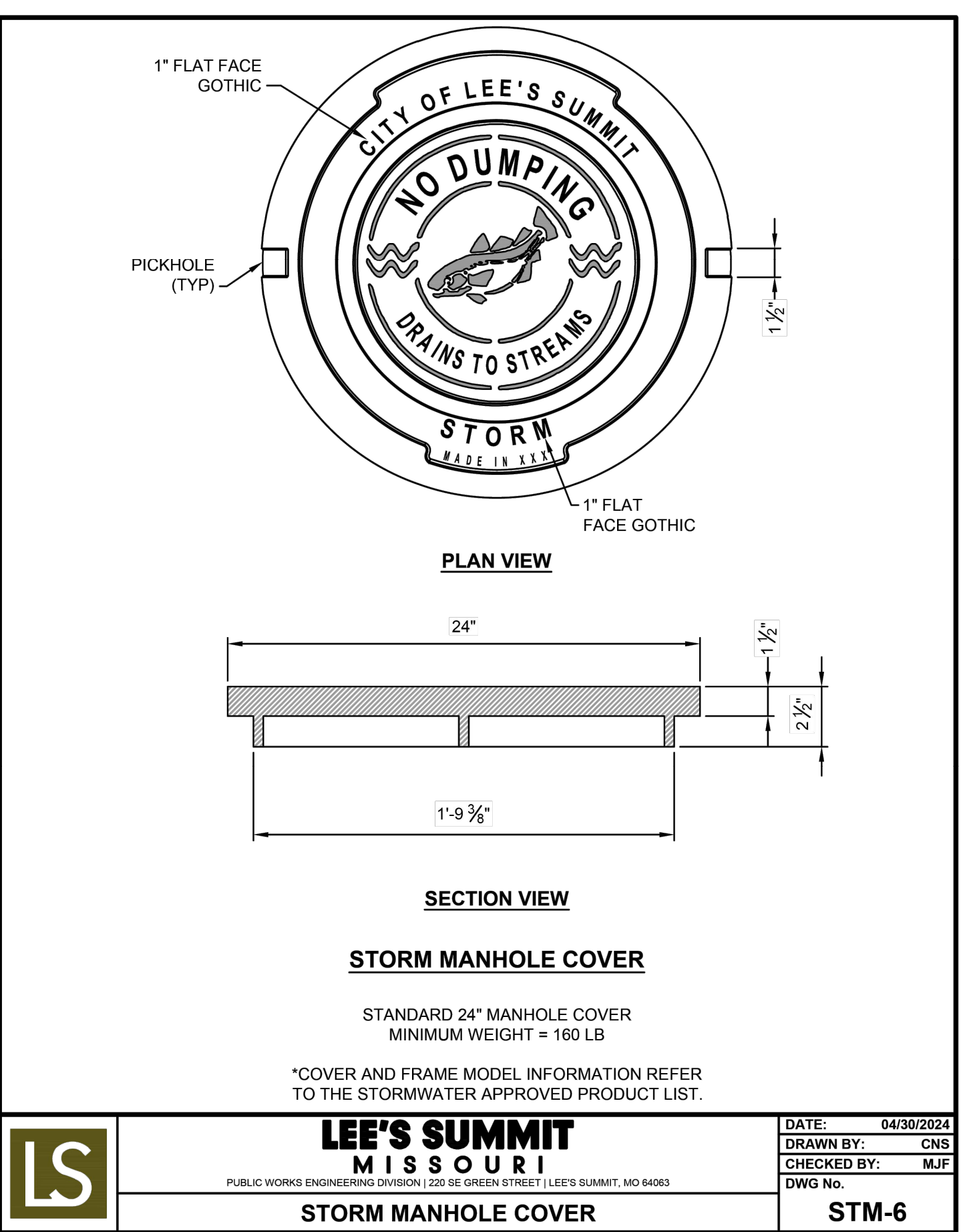
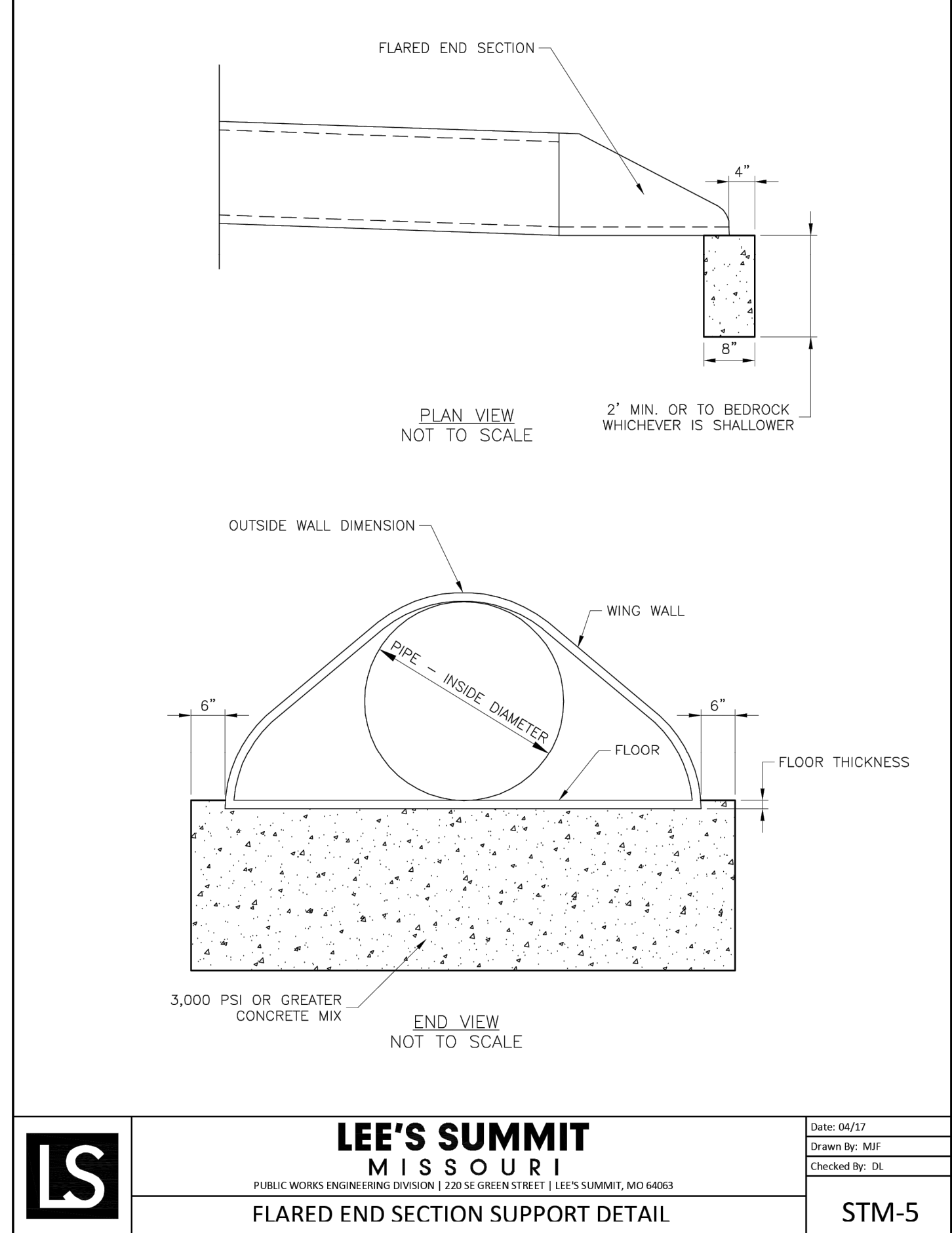
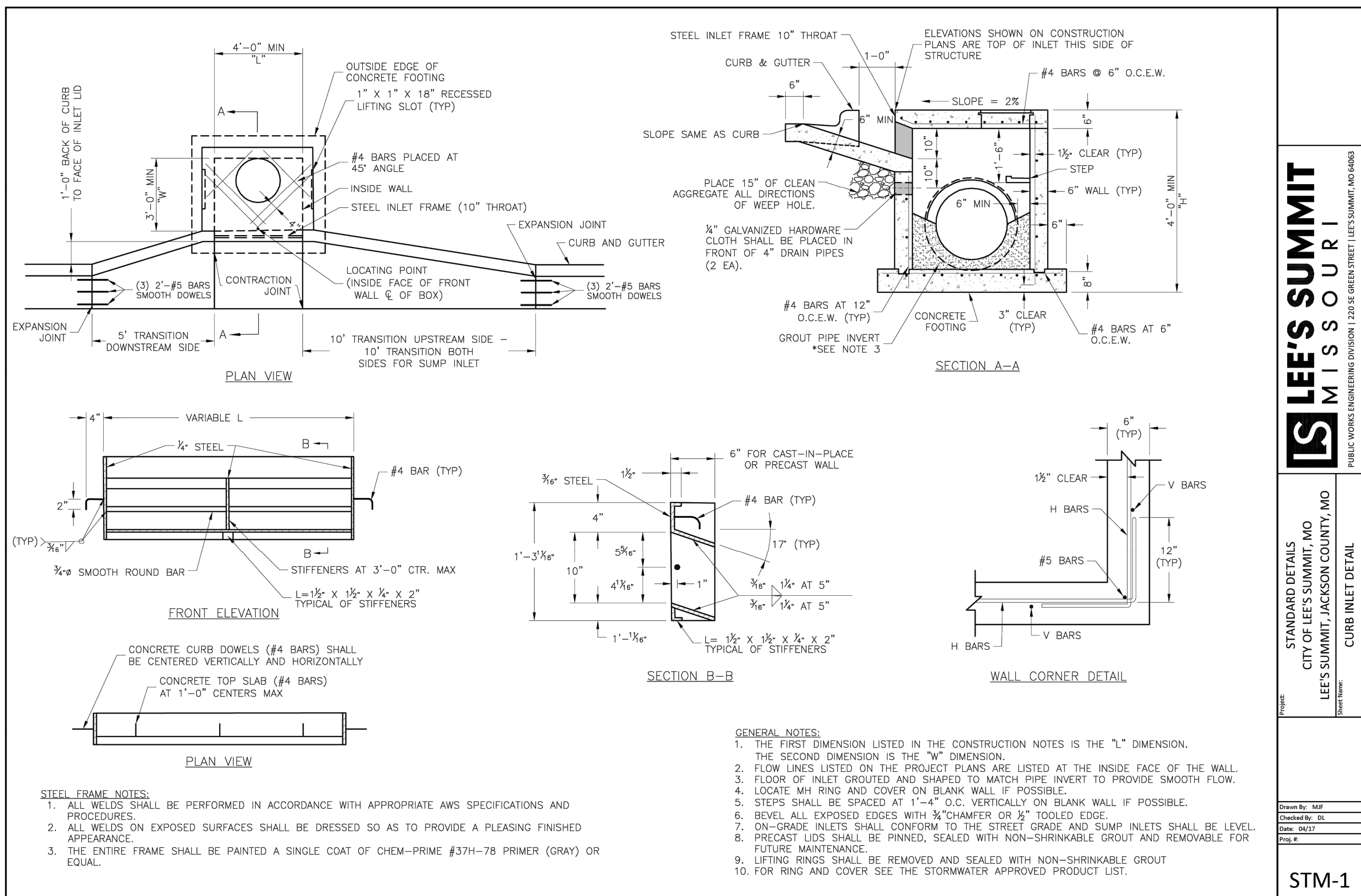
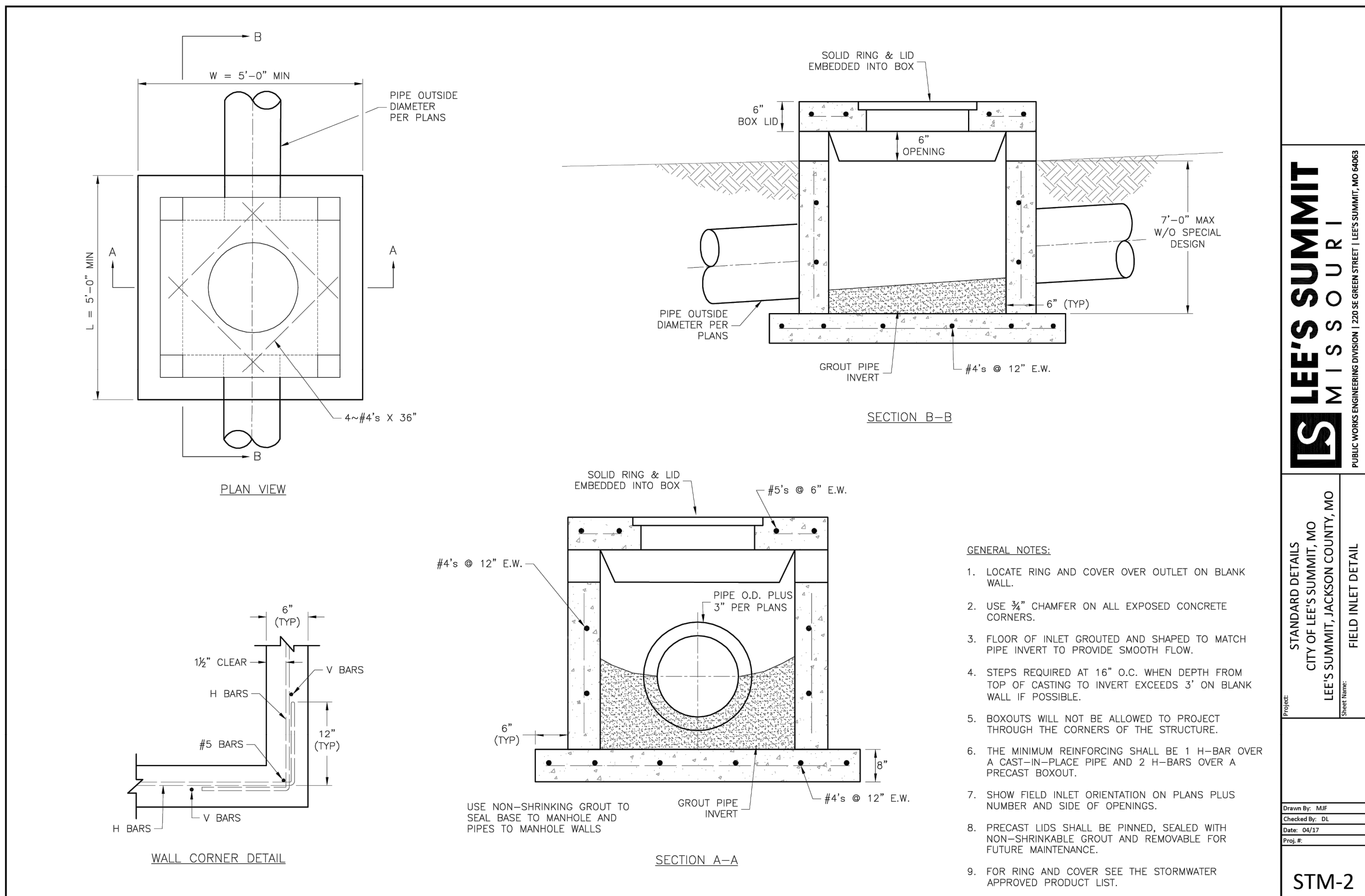
LOTS 43-74 and Tracts C-1 & D-1

Lee's Summit, Jackson County, Missouri

50 SE 30TH STREET

LEE'S SUMMIT, MO 64082

PH (816) 623-9888 F (816) 623-9849



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