

THE VILLAS OF CHAPEL RIDGE-2ND PLAT

LOTS 43-74 and Tracts C-1 & D-1 STREET AND STORM CONSTRUCTION PLANS

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

CONSTRUCTION AND DESIGN NOTES:

STREET & STORM SEWERS:

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

RESIDENTIAL LOCAL STREET SEE BELOW FOR TYPICAL SECTION.

4" ASPHALT BASE KCMMB MIX AND 2" TYPE ASPHALT KCMMB MIX SURFACE OVER 10" MoDOT TYPE 5 BASE OVERTOP A BIAXIAL GEOGRID PER THE CITY'S APPROVED PRODUCT LIST.

RESIDENTIAL COLLECTOR STREET FOR SW ARBORWALK BLVD SEE BELOW FOR TYPICAL SECTION.

4" ASPHALT BASE KCMMB MIX AND 2" TYPE ASPHALT KCMMB MIX SURFACE OVER 12" MoDOT TYPE 5 BASE OVERTOP A BIAXIAL GEOGRID PER THE CITY'S APPROVED PRODUCT LIST.

2 ~ STORM SEWER PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) AS APPROVED BY CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.

3 ~ JUNCTION BOXES SHALL BE PER CITY OF LEE'S SUMMIT STANDARD DRAWING NO. STM-3. FIELD INLETS SHALL BE PER CITY OF LEE'S SUMMIT STANDARD DRAWING STM-2. TOEWALLS SHALL BE PER CITY OF LEE'S SUMMIT DRAWING NO. STM-5. JUNCTION BOXES SHALL BE PER CITY OF LEE'S SUMMIT STM-3. ROCK LINING AND RIP RAP SHALL BE PER CITY OF LEE'S SUMMIT.

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 CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

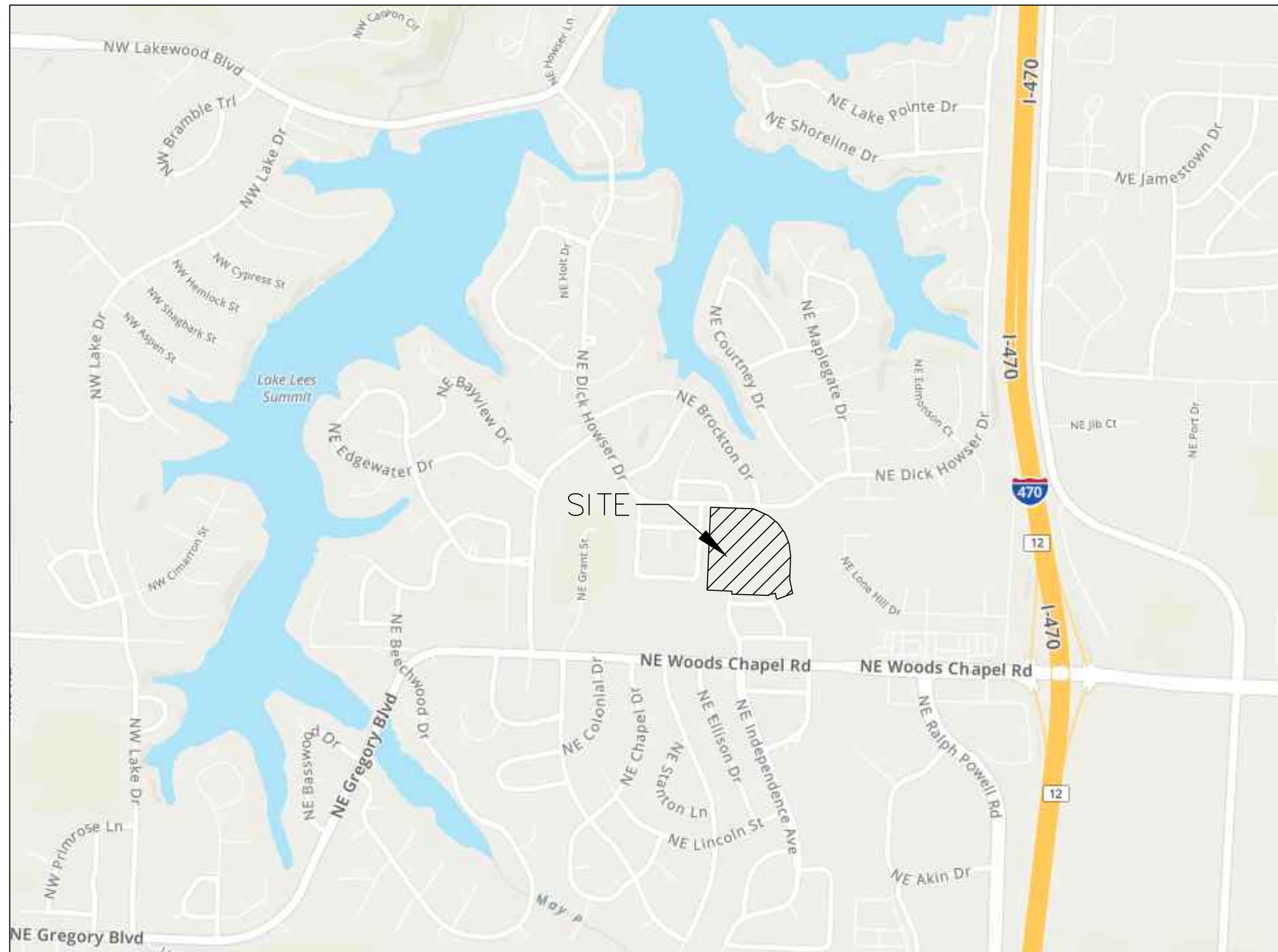
5 ~ THE CONTRACTOR SHALL NOTIFY ENGINEERING SOLUTIONS AT 816.623.9888 OF ANY CONFLICT WITH THE IMPROVEMENTS PROPOSED BY THESE PLANS AND SITE CONDITIONS.

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.

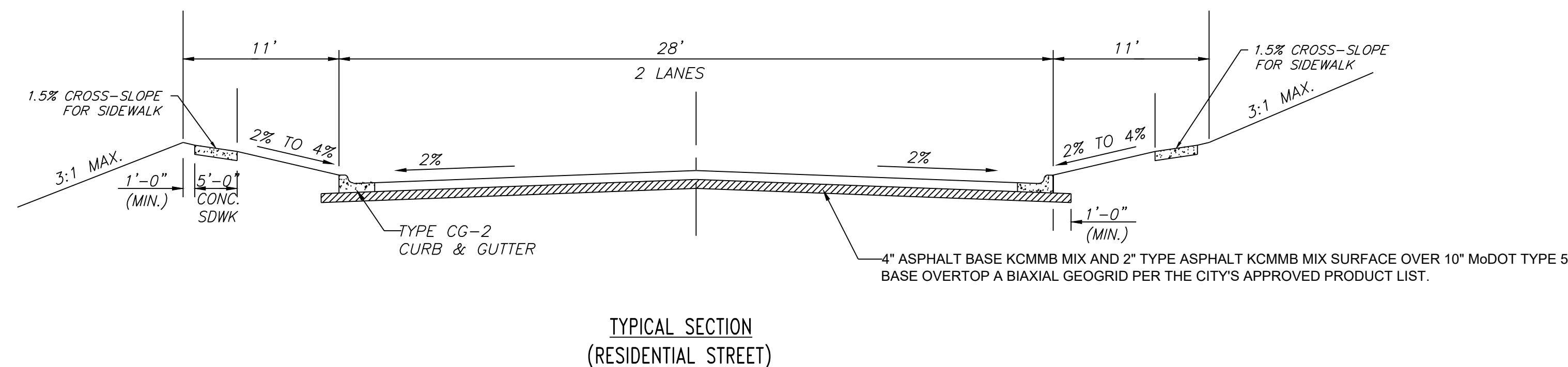
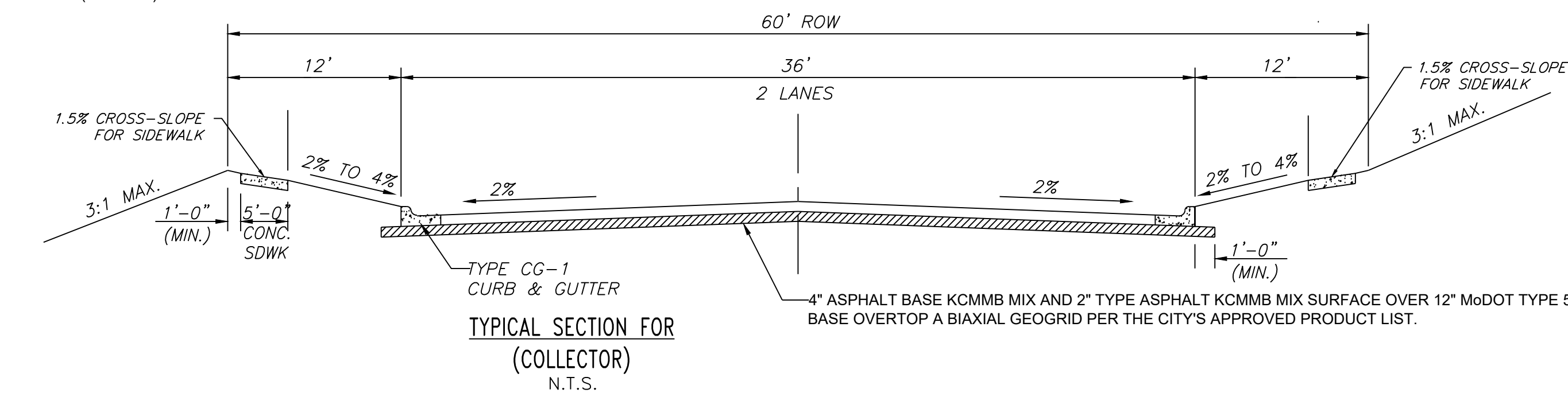
UTILITY COMPANIES:

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.

EVERGY ~ 298-1198
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 PUBLIC WORKS INSPECTIONS ~ 969-1800
CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900
MISSOURI ONE CALL (DIG RITE) ~ 1-800-344-7483



SITE LOCATION MAP



Summary of Quantities:

ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
ASPHALT PAVING	S.Y.	4,246.00
CURBING	FT	2,683.00
5' SIDEWALK	S.F.	9,510.00
MoDOT Type 5 Base	S.Y.	5,108.00
GEOGRID	S.Y.	5,108.00
ADA SIDEWALK RAMP	UNIT	4
CLEARING, GRADING & GRUBBING	LS	1
SILT FENCE	FT	8,400.00
INLET PROTECTION	UNIT	30.00
SEEDING / MULCHING/ FERTILIZING	AC	8.27
CONST. ENTRANCE	UNIT	2.00
STORM		
30" HDPE	FT	83.98
24" HDPE	FT	108.75
24" RCP	FT	83.05
18" HDPE	FT	425.31
15" HDPE	FT	899.97
18" RCP	FT	43.26
15" RCP	FT	196.36
4' x 4' STORM FIELD INLET	EA	5.00
5' x 5' JUNCTION BOX	EA	1.00
5' x 4' STORM CURB INLET	EA	13.00
SILT FENCE	FT	8,400.00
INLET PROTECTION	UNIT	19.00
SEEDING / MULCHING/ FERTILIZING	AC	8.27
CONST. ENTRANCE	UNIT	2.00

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

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.

PL2022248
PRSUBD20224251

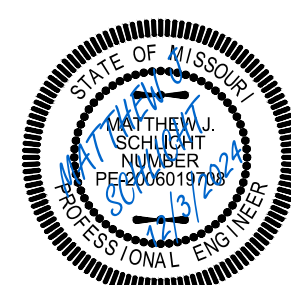


Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

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

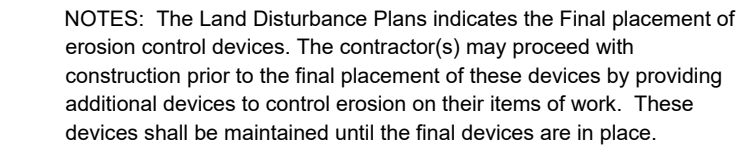
Street & Storm Cover Sheet
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



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

12/17/2024



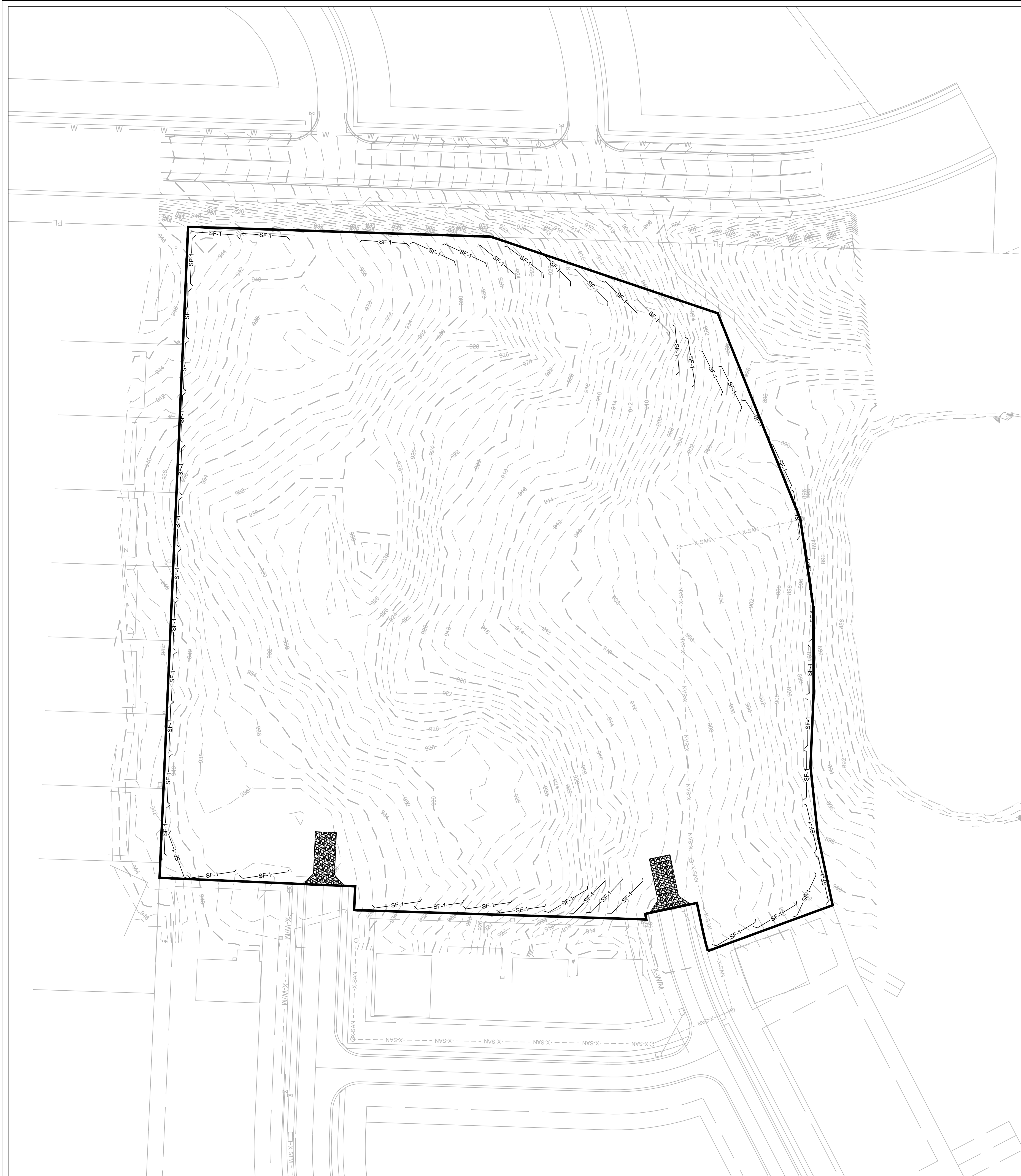
SILT FENCE PROTECTION
TO BE MAINTAINED BY CONTRACTOR

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.



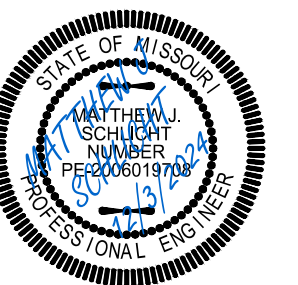
Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

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
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NE PE E-14335

REVISIONS

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REV. 4/26/2023
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REV. 10/29/2024
REV. 12/3/2024

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 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 DEFICIENCIES SHALL BE NOTED IN A REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE INSPECTION. THE PERMITEE 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 SEEDED WITH WHEAT/RYE AT A RATE OF 1.5 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 SEEDED 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 RESEEDED.

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 LISTINGS OF AREAS WHERE LAND DISTURBANCE OPERATIONS HAVE PERMANENTLY OR TEMPORARILY STOPPED. THE INSPECTION REPORT SHALL BE SIGNED BY THE PERMITEE 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

Secondary Silt Fence
To Be Installed After
Major Grading
Per APWA Detail ESC-03. (Typ.)

Secondary Silt Fence
To Be Installed After
Major Grading
Per APWA Detail ESC-03. (Typ.)

Normal Pool
WSE = 895.75

Secondary Silt Fence
To Be Installed After
Major Grading
Per APWA Detail ESC-03. (Typ.)

Secondary Silt Fence
To Be Installed After
Major Grading
Per APWA Detail ESC-03. (Typ.)

Temporary Construction Entrance
Must Be Installed Prior to
Any Land Disturbance Activities
Per APWA Detail ESC-01.

Temporary Construction Entrance
Must Be Installed Prior to
Any Land Disturbance Activities
Per APWA Detail ESC-01.



ENGINEERING
ENGINEERING & SURVEYING
SOLUTIONS

50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 653-9888 F: (816) 653-9849

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

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

STATE OF MISSOURI
MATTHEW J. SCHLICHT
REGISTERED PROFESSIONAL ENGINEER
NUMBER
600019708

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

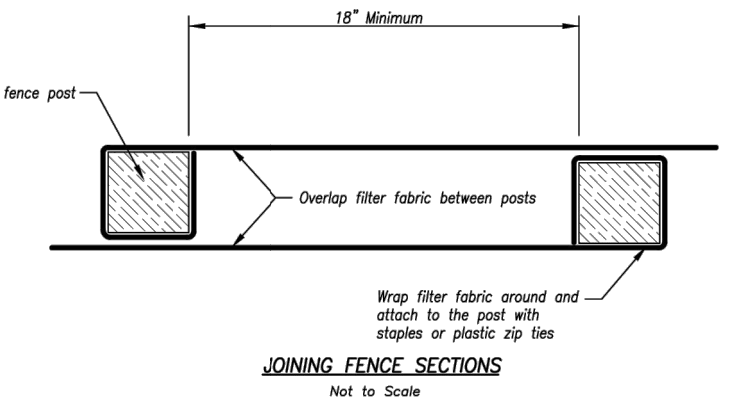
REVISIONS
REV. 8/12/2022
REV. 10/3/2022
REV. 4/26/2023
REV. 5/29/2024
REV. 10/29/2024
REV. 12/3/2024

Notes:

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

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches $\frac{1}{2}$ the height of silt fence.
2. Repair as necessary to maintain function and structure.



JOINING FENCE SECTIONS
Not to Scale

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter	
KANSAS CITY METRO CHAPTER	
SILT FENCE	STANDARD DRAWING NUMBER ESC-03 ADOPTED: 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

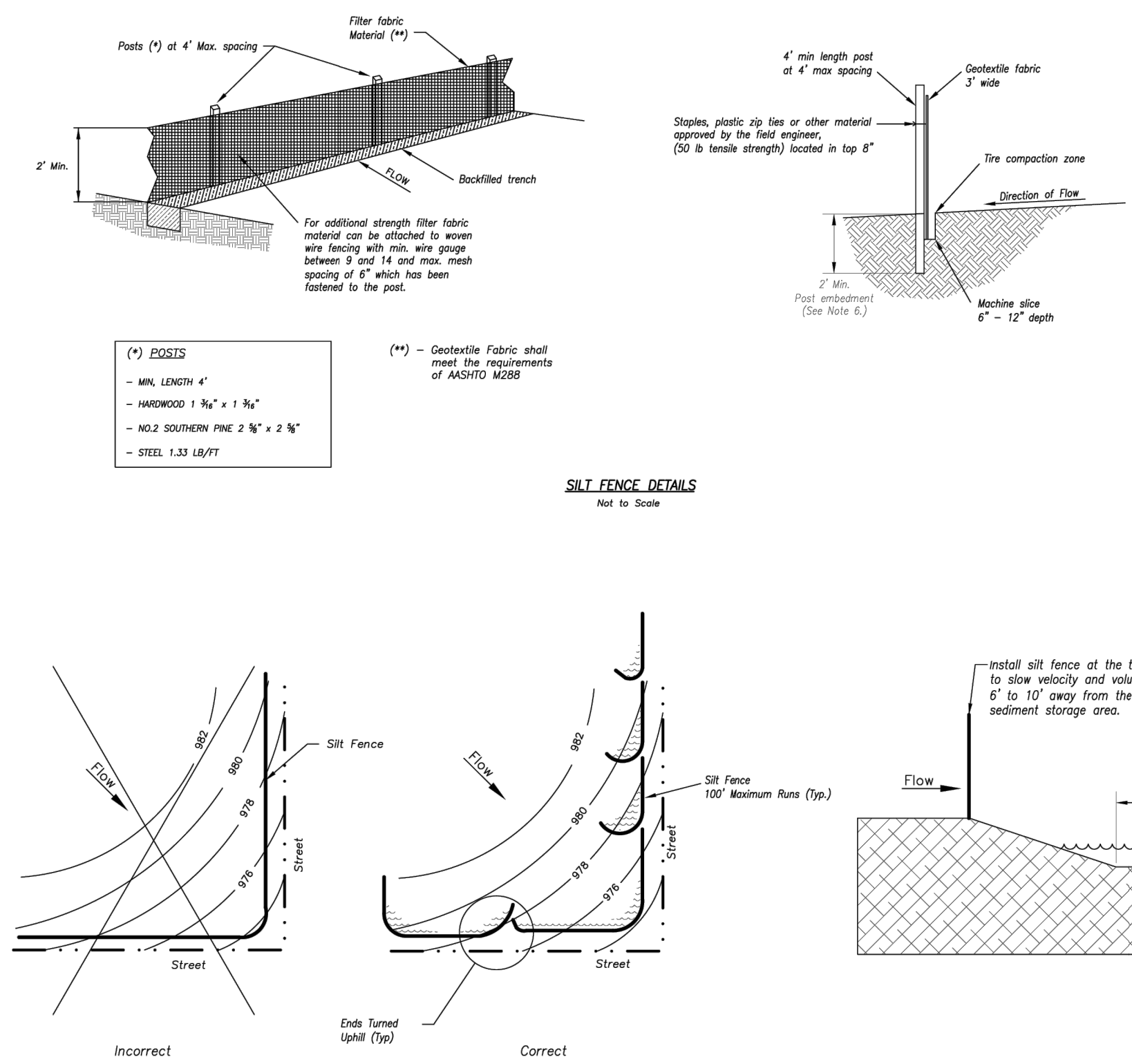


Figure A
SILT FENCE LAYOUT
Not to Scale

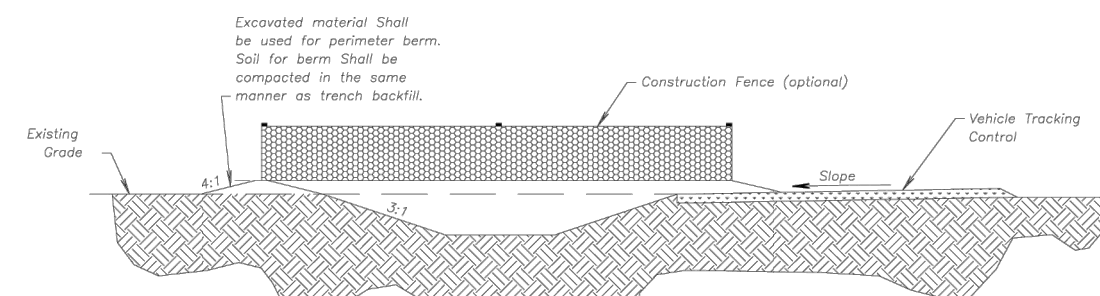
Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout areas shall include a full subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking post shall be shaped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and dump rigs.
5. A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

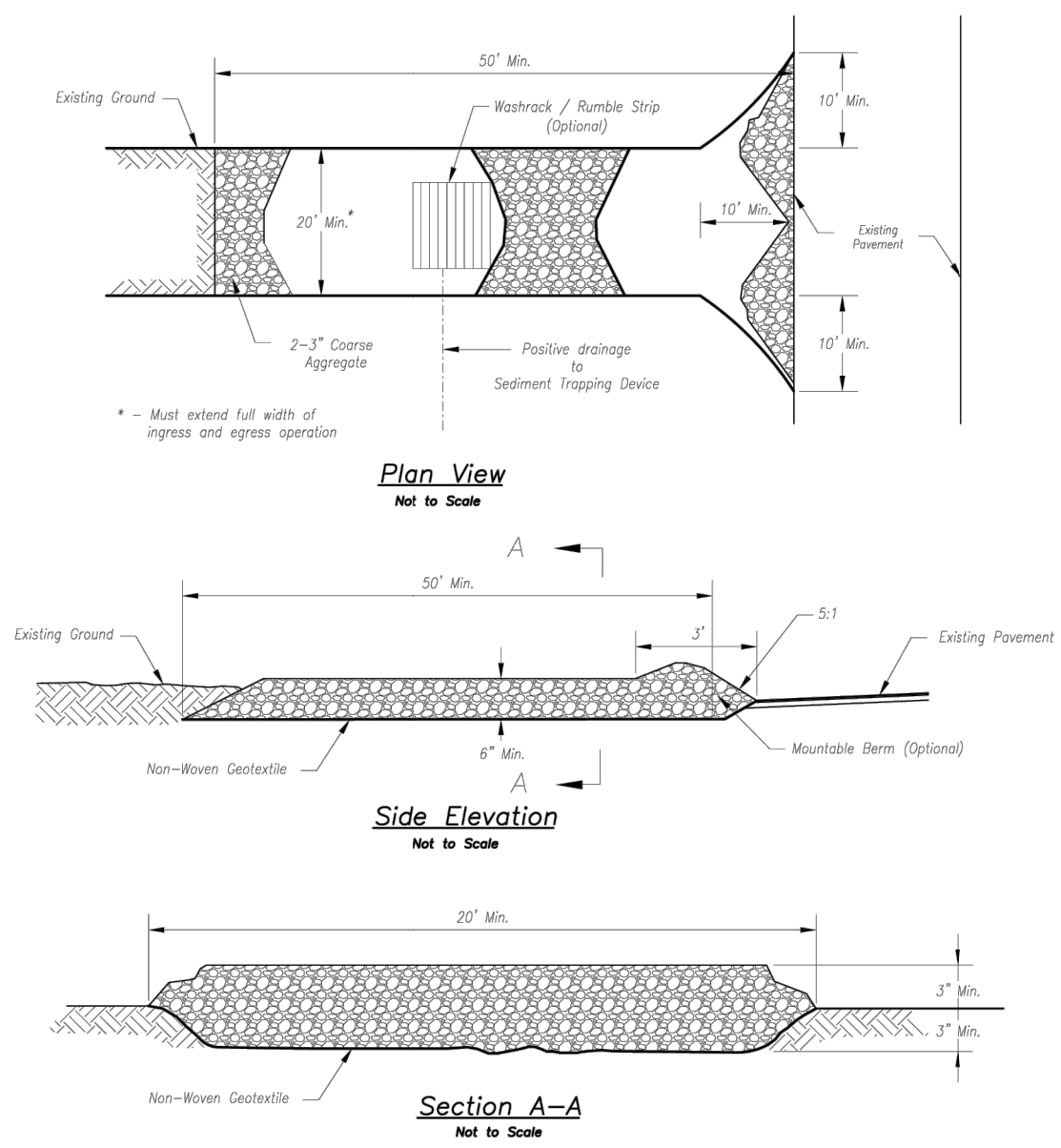
1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, wasted pieces of concrete and all other debris in the subsurface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



CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter	
KANSAS CITY METRO CHAPTER	
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT	STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control. Concrete Washout modified from 2008 City of Great Bend Standard Drawings.



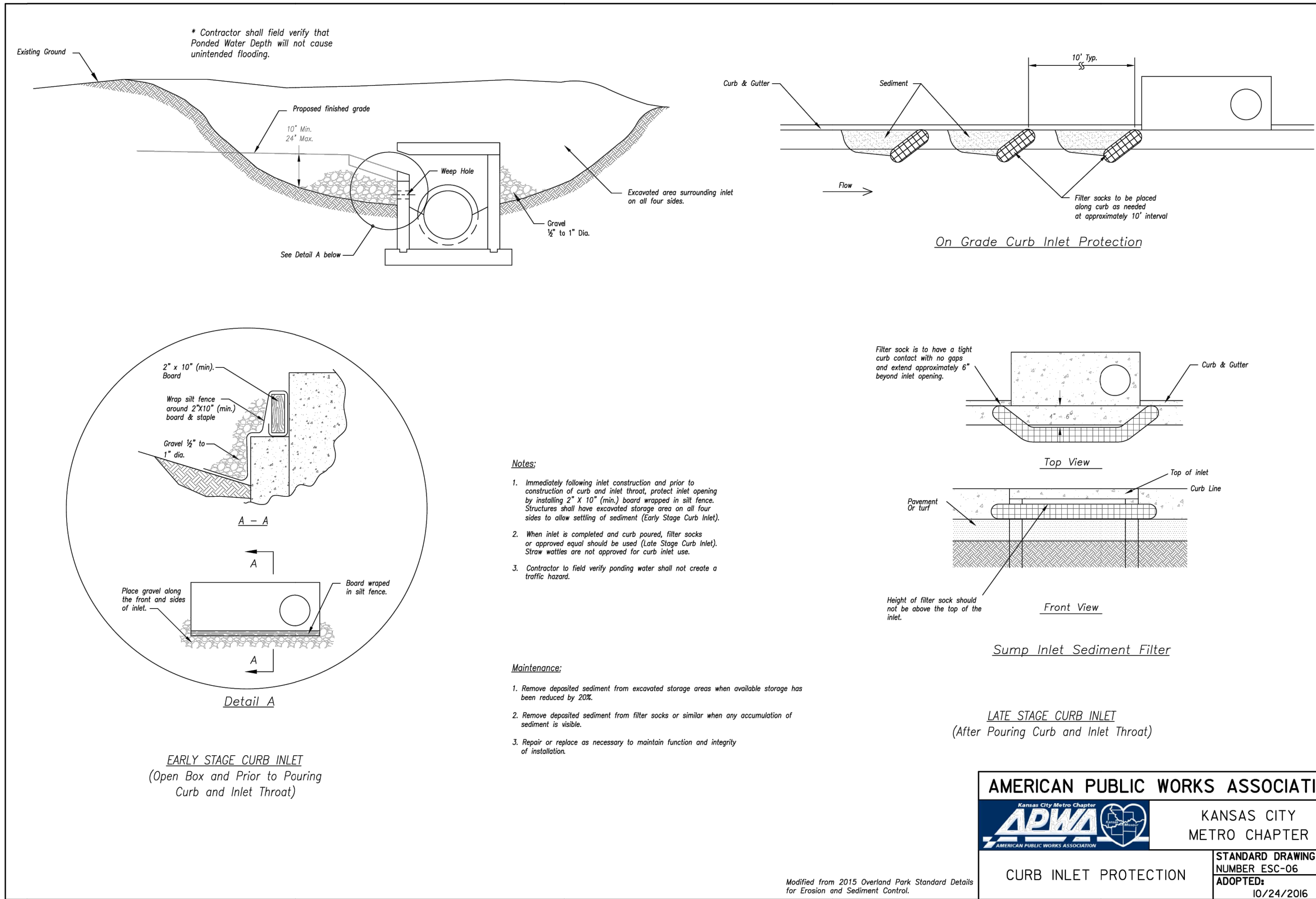
Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or adjacent to disturbed areas.
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 exceeds 2%, construct a 6" to 8-inch high ridge with 30:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
6. Direct all surface runoff and drainage from the entrance to a sediment control device.
7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

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

CONSTRUCTION ENTRANCE



Notes:

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

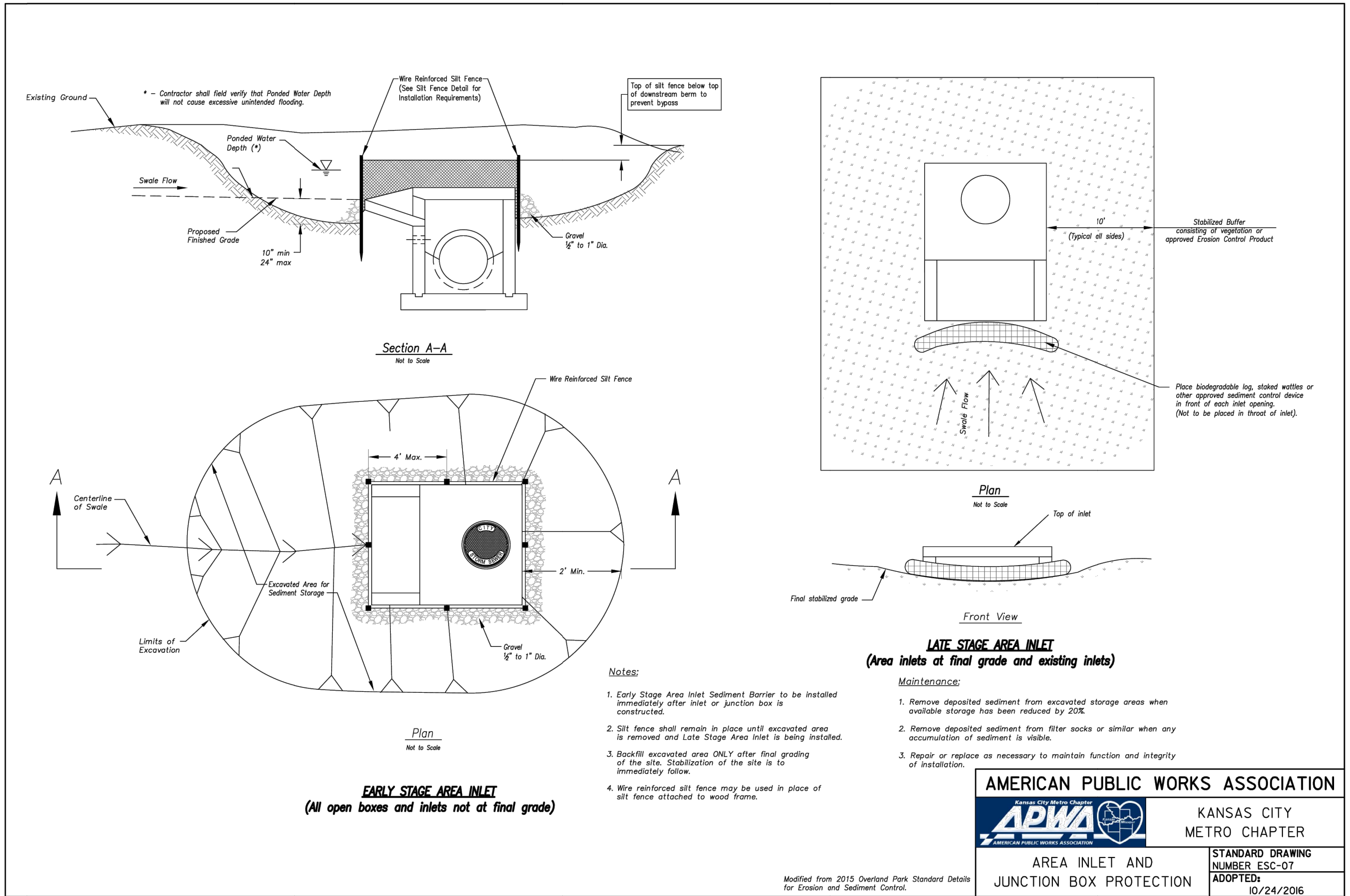
Maintenance:

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

LATE STAGE CURB INLET
(After Pouring Curb and Inlet Throat)

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter	
KANSAS CITY METRO CHAPTER	
CURB INLET PROTECTION	STANDARD DRAWING NUMBER ESC-06 ADOPTED: 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.



Notes:

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

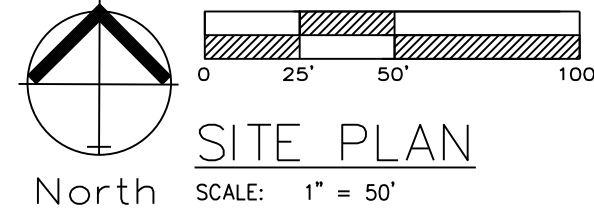
LATE STAGE AREA INLET
(Area inlets at final grade and existing inlets)

Maintenance:

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

AMERICAN PUBLIC WORKS ASSOCIATION	
Kansas City Metro Chapter	
KANSAS CITY METRO CHAPTER	
AREA INLET AND JUNCTION BOX PROTECTION	STANDARD DRAWING NUMBER ESC-07 ADOPTED: 10/24/2016

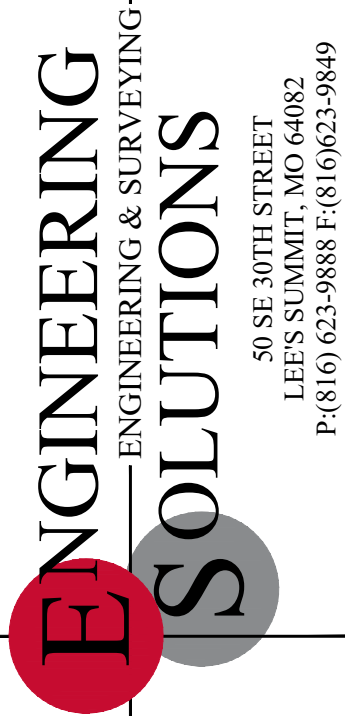
Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.



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Lee's Summit, Missouri

12/17/2024



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Kansas
Engineering E-1895
Surveying L-S-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, LSWO
Issue Date:
June 24, 2022

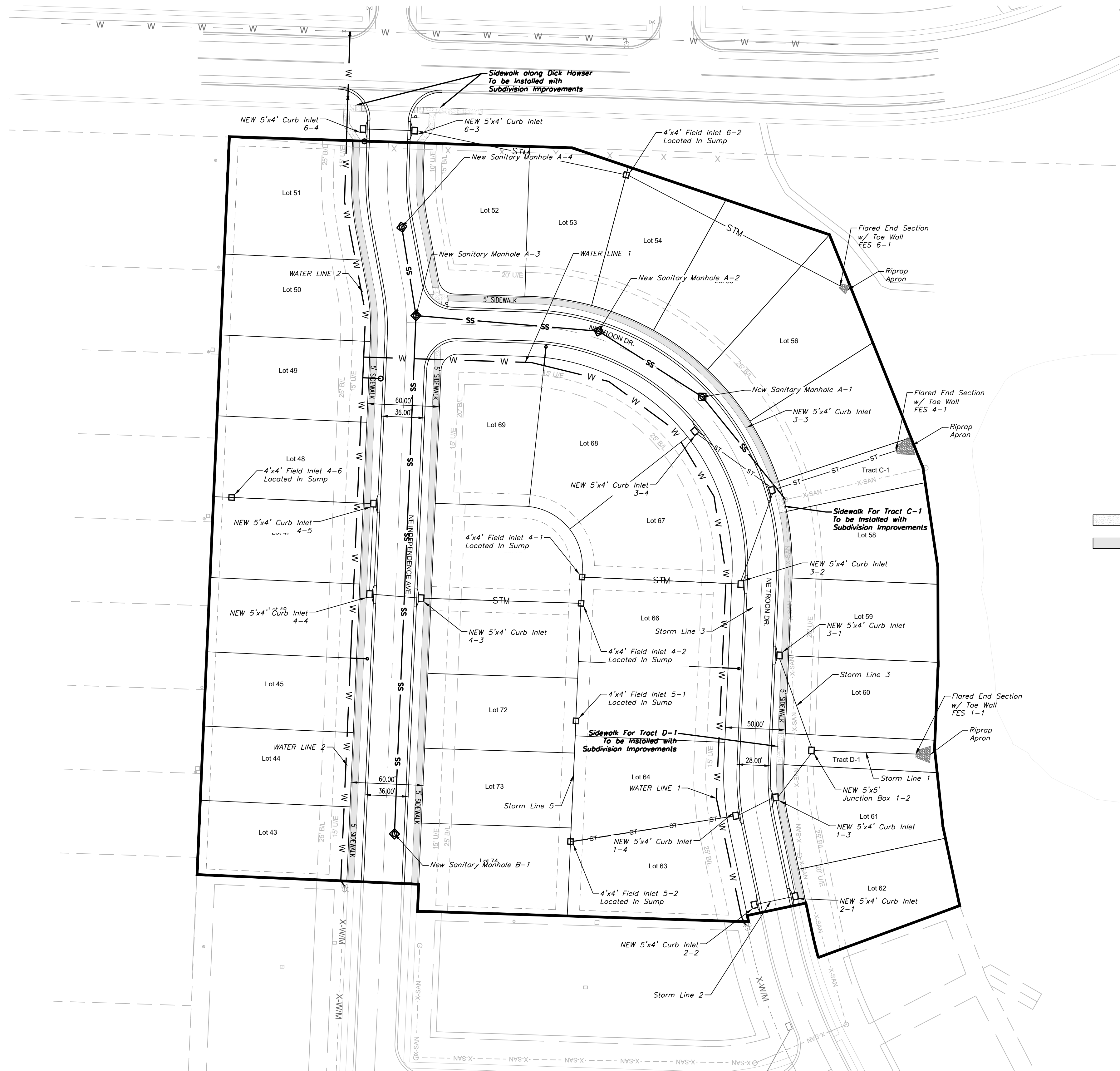
Site Plan
Construction Plans for:
THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri



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

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

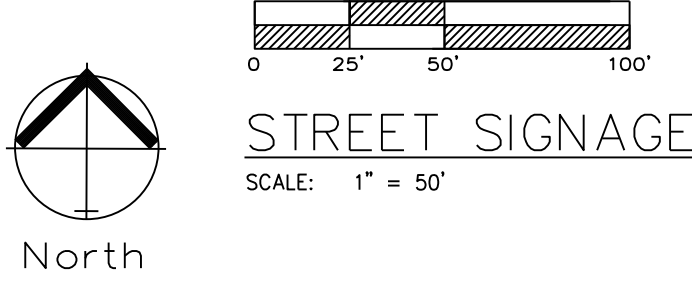
Contractor is Responsible to Remove
All Existing Onsite Fence and
Structures and properly dispose of
these items offsite



Legend:

- Sidewalk To be Installed with Subdivision Improvements
- Sidewalk To be Installed by Individual Lot Owner

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

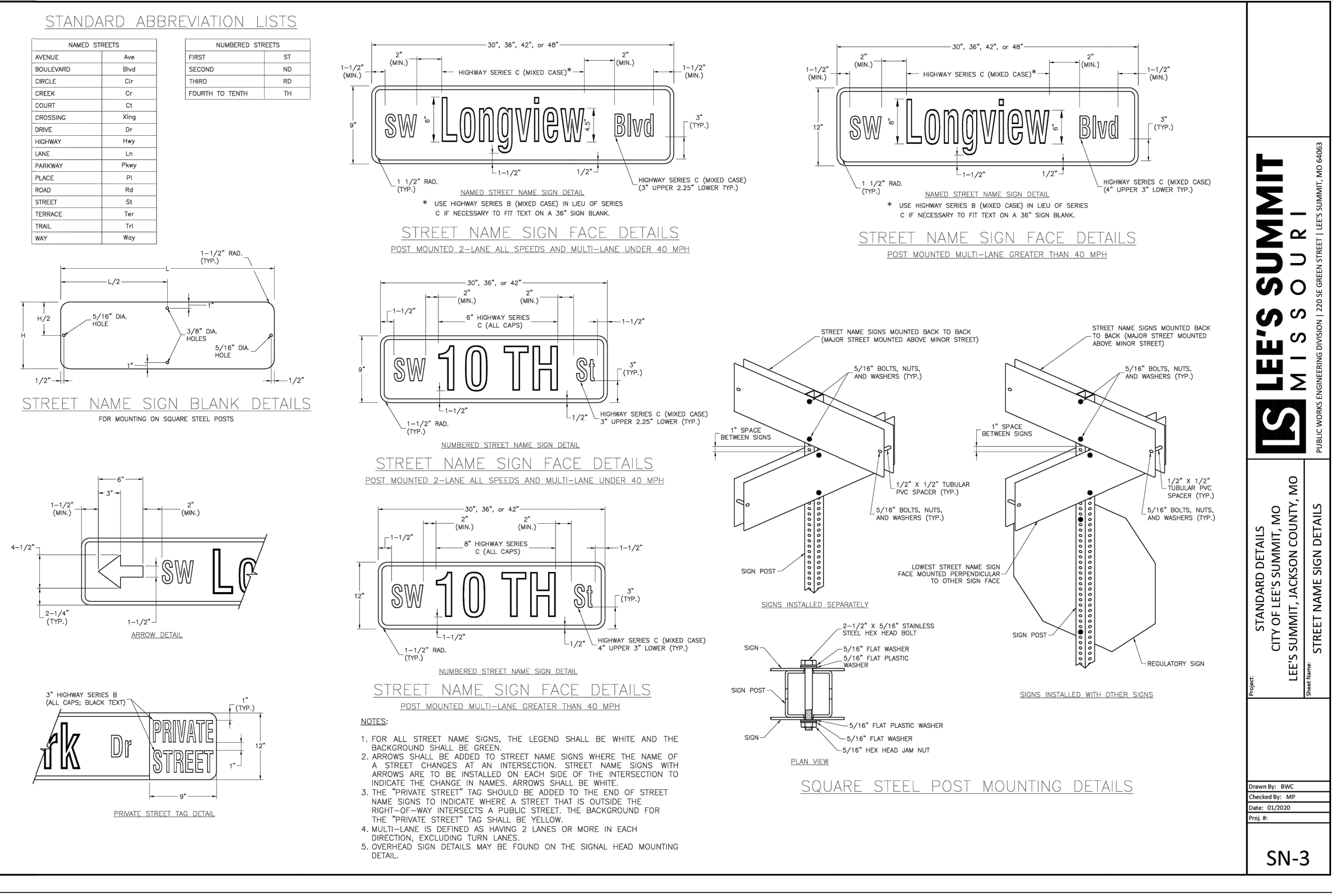
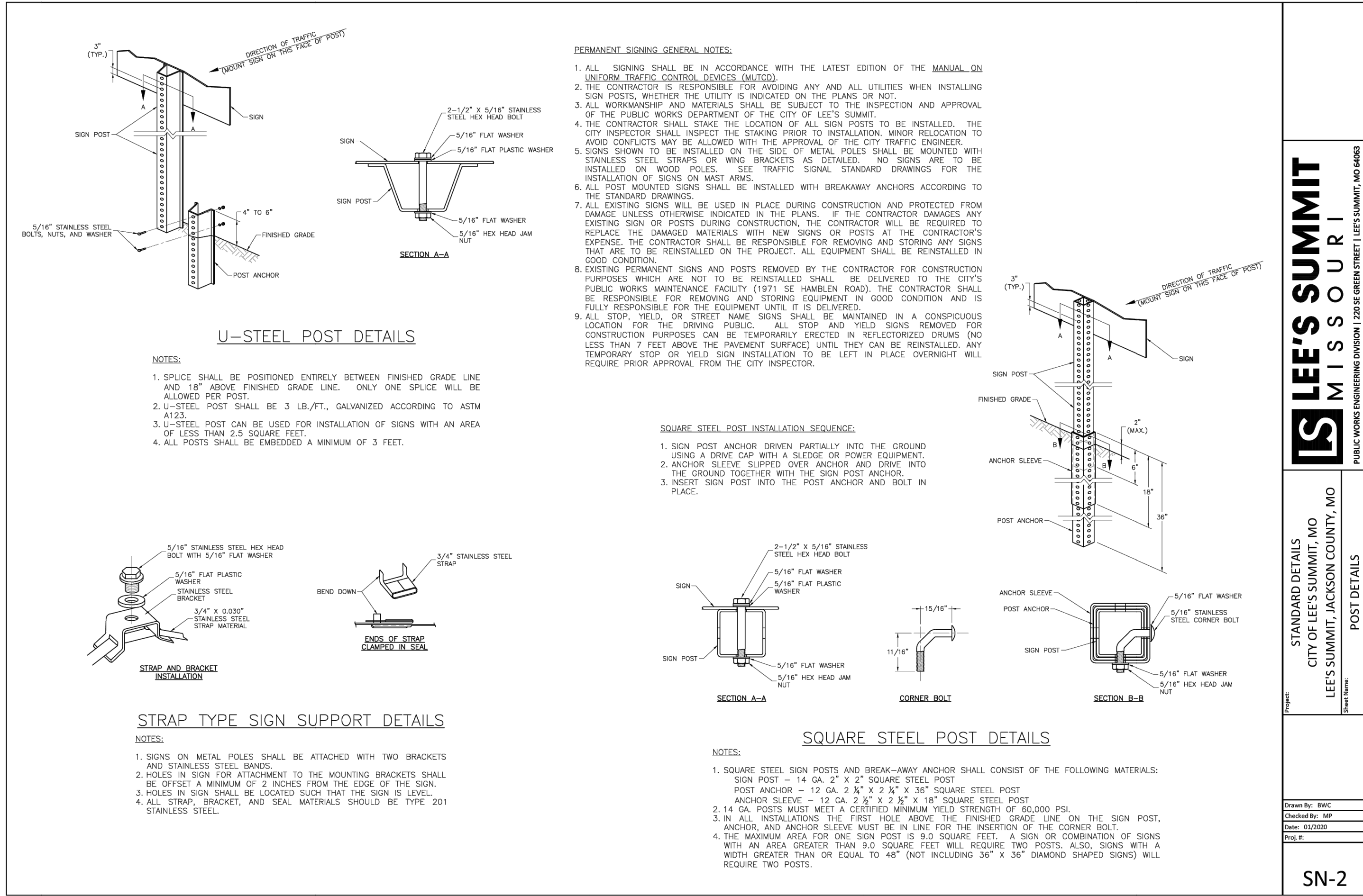
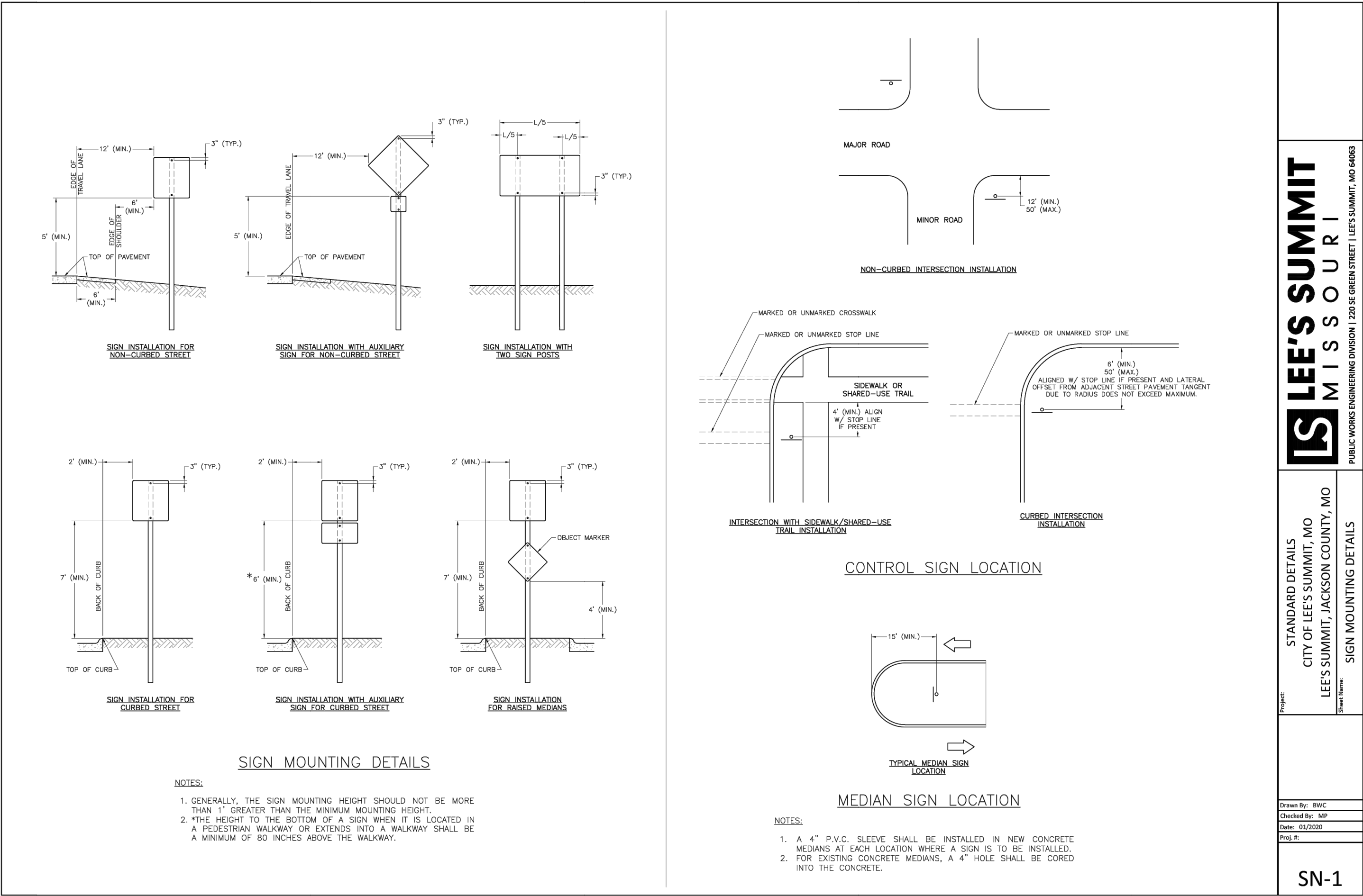
Project: VILLAS OF CHAPEL RIDGE-LSMO
Issue Date: June 24, 2022

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

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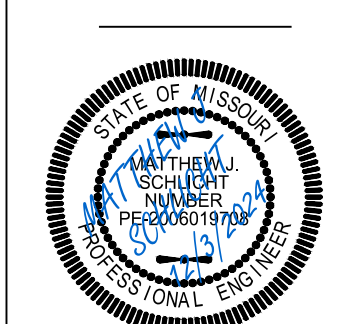


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Surveying LS-218
Oklahoma
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Nebraska
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THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

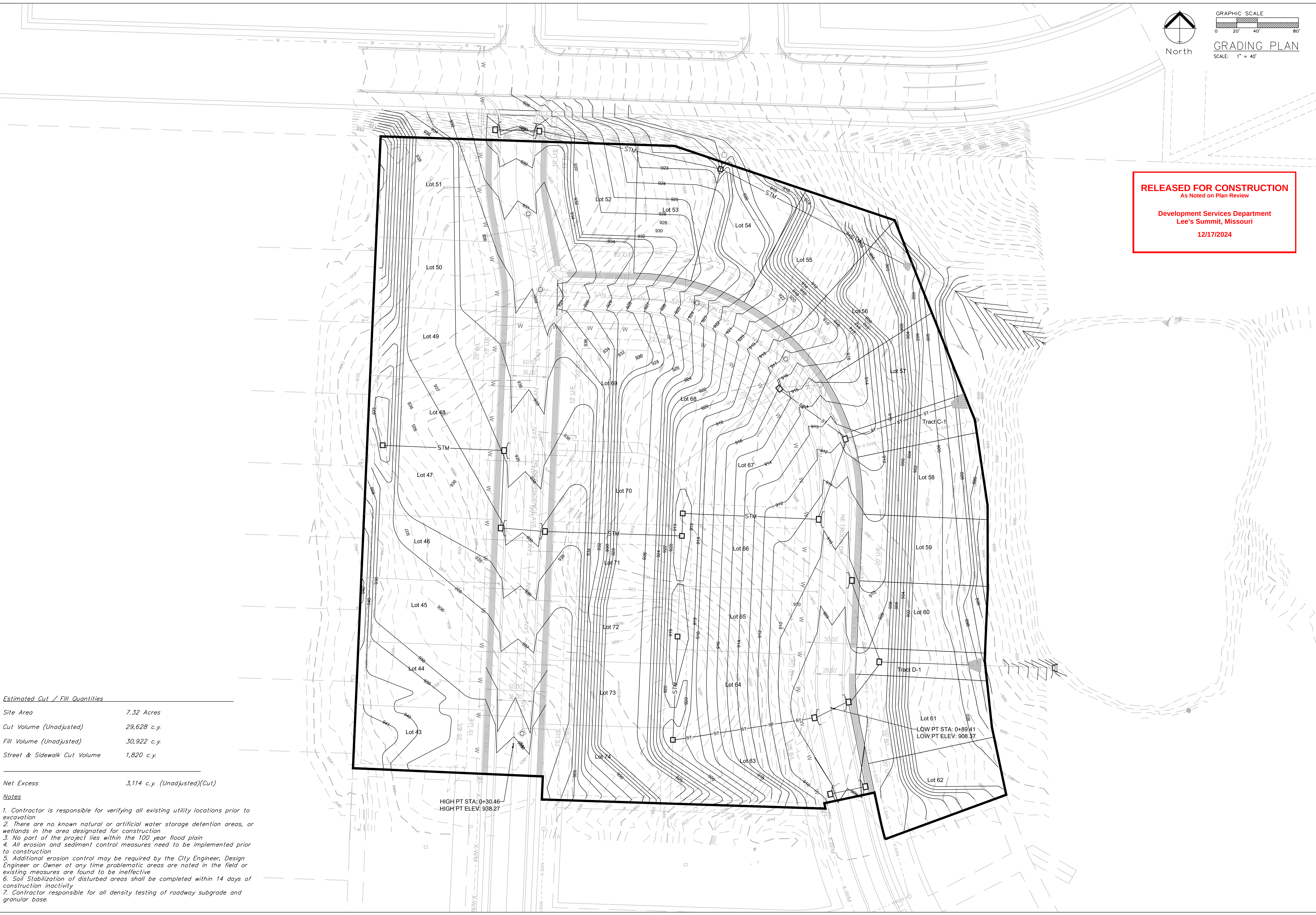
Project: VILLAS OF CHAPEL RIDGE-LSMO
Issue Date: June 24, 2022

Street Signage Details
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



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KS PE 19071
OK PE 25226
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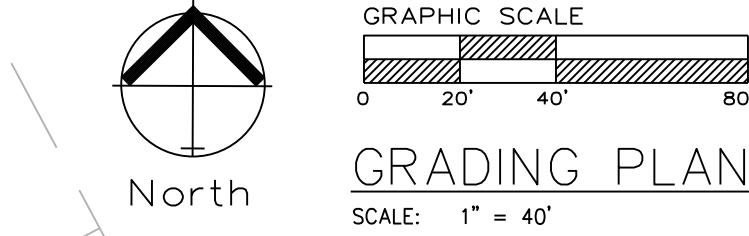
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REV. 4/26/2023
REV. 5/29/2024
REV. 10/29/2024
REV. 12/3/2024



Estimated Cut / Fill Quantities	
Site Area	7.32 Acres
Cut Volume (Unadjusted)	29,628 c.y.
Fill Volume (Unadjusted)	30,922 c.y.
Street & Sidewalk Cut Volume	1,820 c.y.

Net Excess 3,114 c.y. (Unadjusted)(Cut)

- Notes
- Contractor is responsible for verifying all existing utility locations prior to excavation
 - There are no known natural or artificial water storage detention areas, or wetlands in the area designated for construction
 - No part of the project lies within the 100 year flood plain
 - All erosion and sediment control measures need to be implemented prior to construction
 - 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
 - Soil Stabilization of disturbed areas shall be completed within 14 days of construction inactivity
 - Contractor responsible for all density testing of roadway subgrade and granular base.



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Oklahoma
Engineering 6254
Nebraska
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Project:
VILLAS OF CHAPEL
RIDGE L3MO
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
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C.200





North

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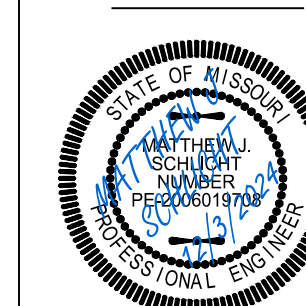
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Surveying 2005008319-D
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THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

Project: VILLAS OF CHAPEL
RIDGE, LSMO

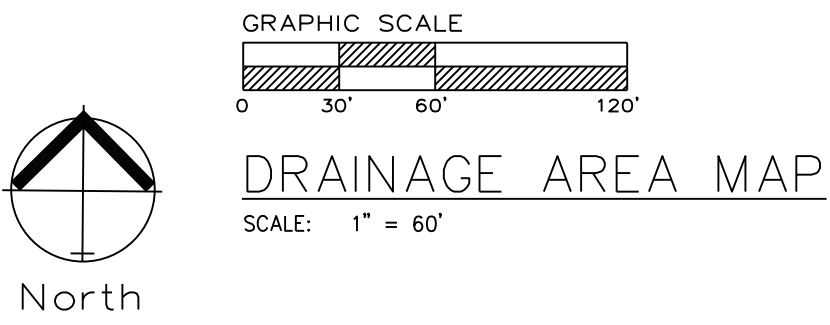
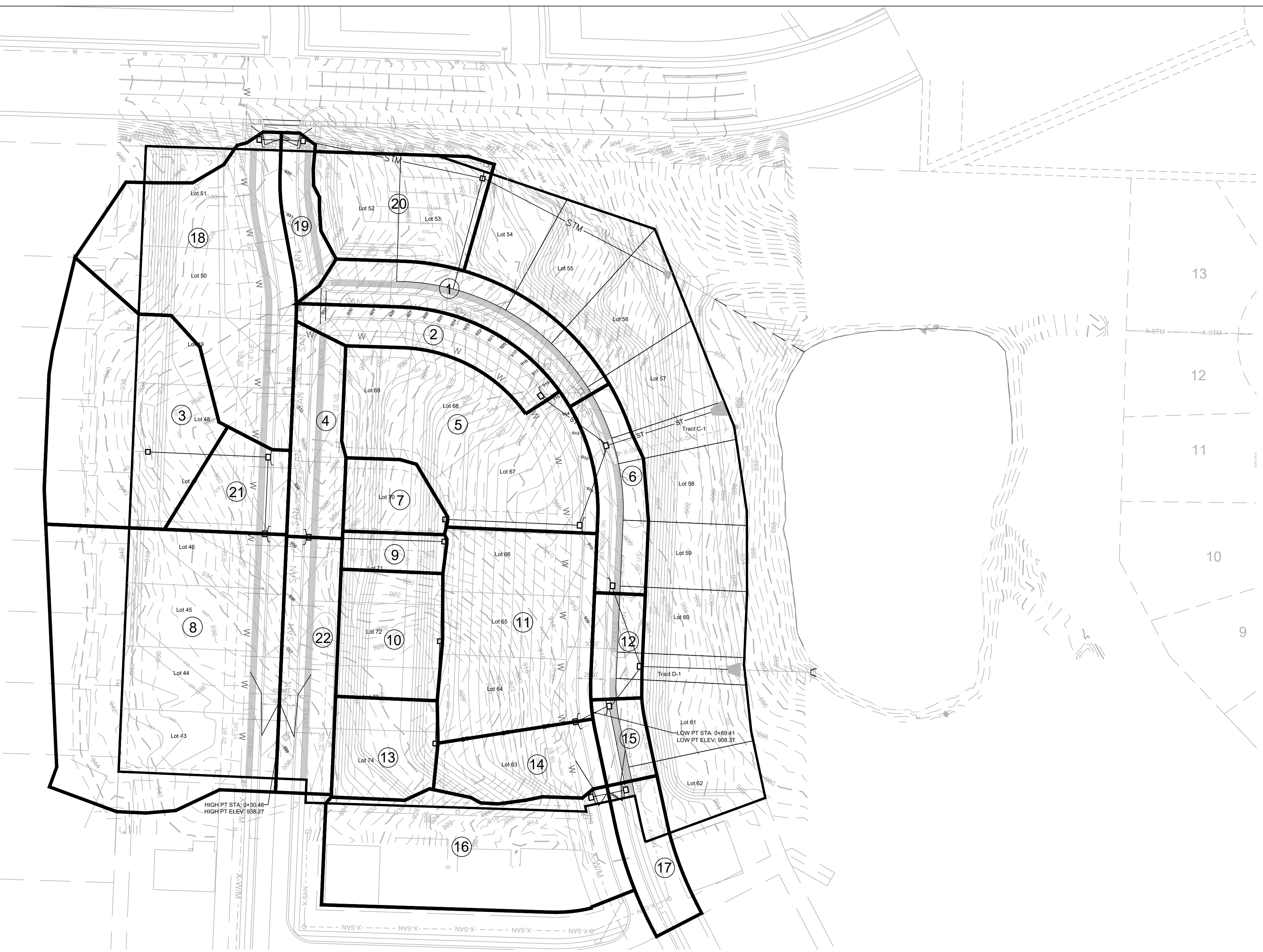
Issue Date: June 24, 2022

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. Schlick
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KS PE 19071
OK PE 25226
NE PE E-14335

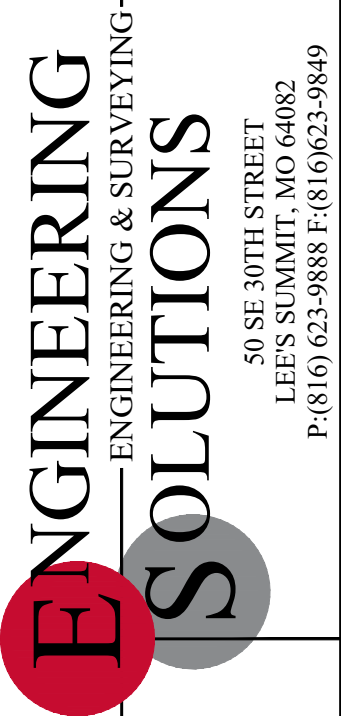
REVISIONS	
1	REV. 8/12/2022
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	REV. 5/29/2024
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Engineering CA2821

Project:
THE VILLAS OF CHAPEL
RIDGE 2ND PLAT
Issue Date:
June 24, 2022

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

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



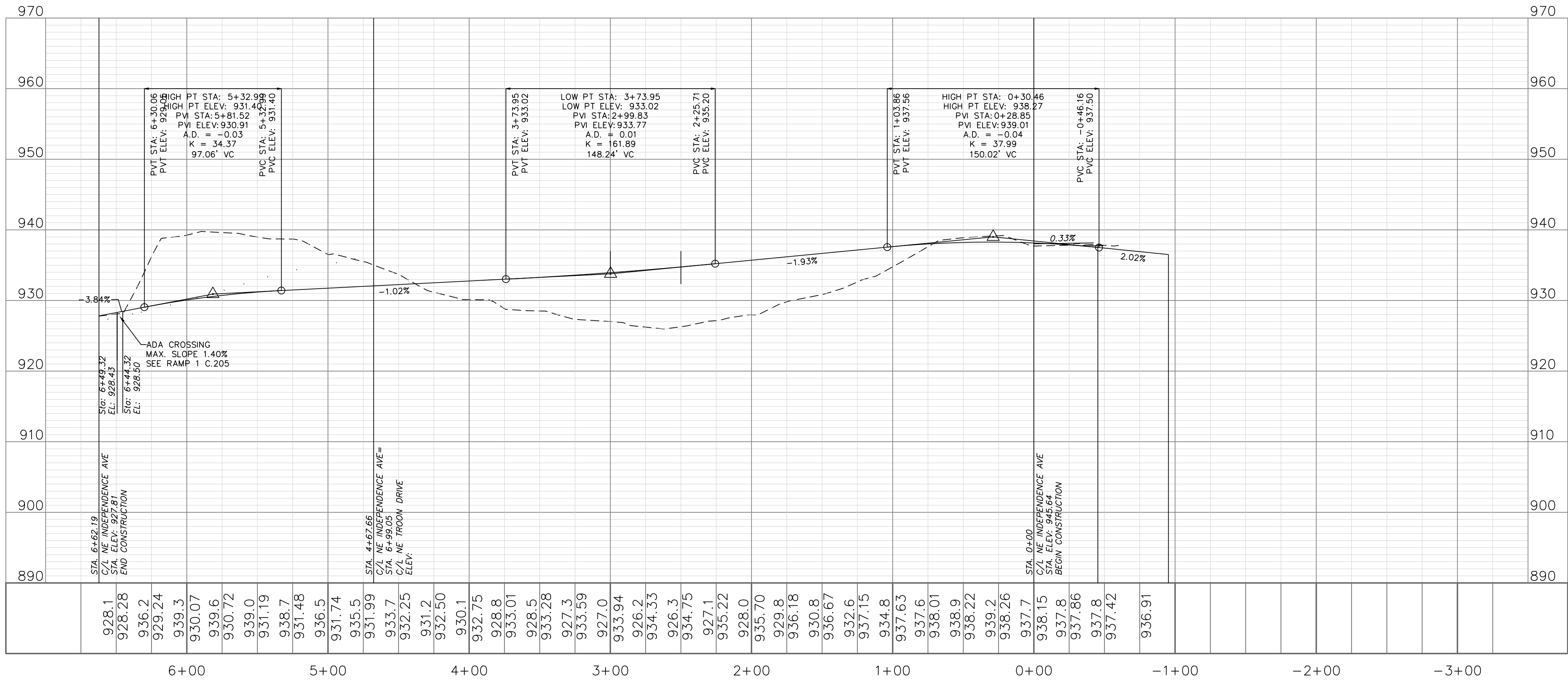
Matthew J. Schlacht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

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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: SURFACE CODES "C" Values		Asph/ConcBus/Com A B D G		Dirt 0.87 0.60 0.30		Grass/Park 0.90 0.66 0.51 0.3		Lake L		MultFam M		SnglFam S		Undev U		Other Z																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</	



NE INDEPENDENCE AVE



GRAPHIC SCALE
0 25' 50' 100'

North

STREET PLAN & PROFILE
SCALE: 1" = 50'

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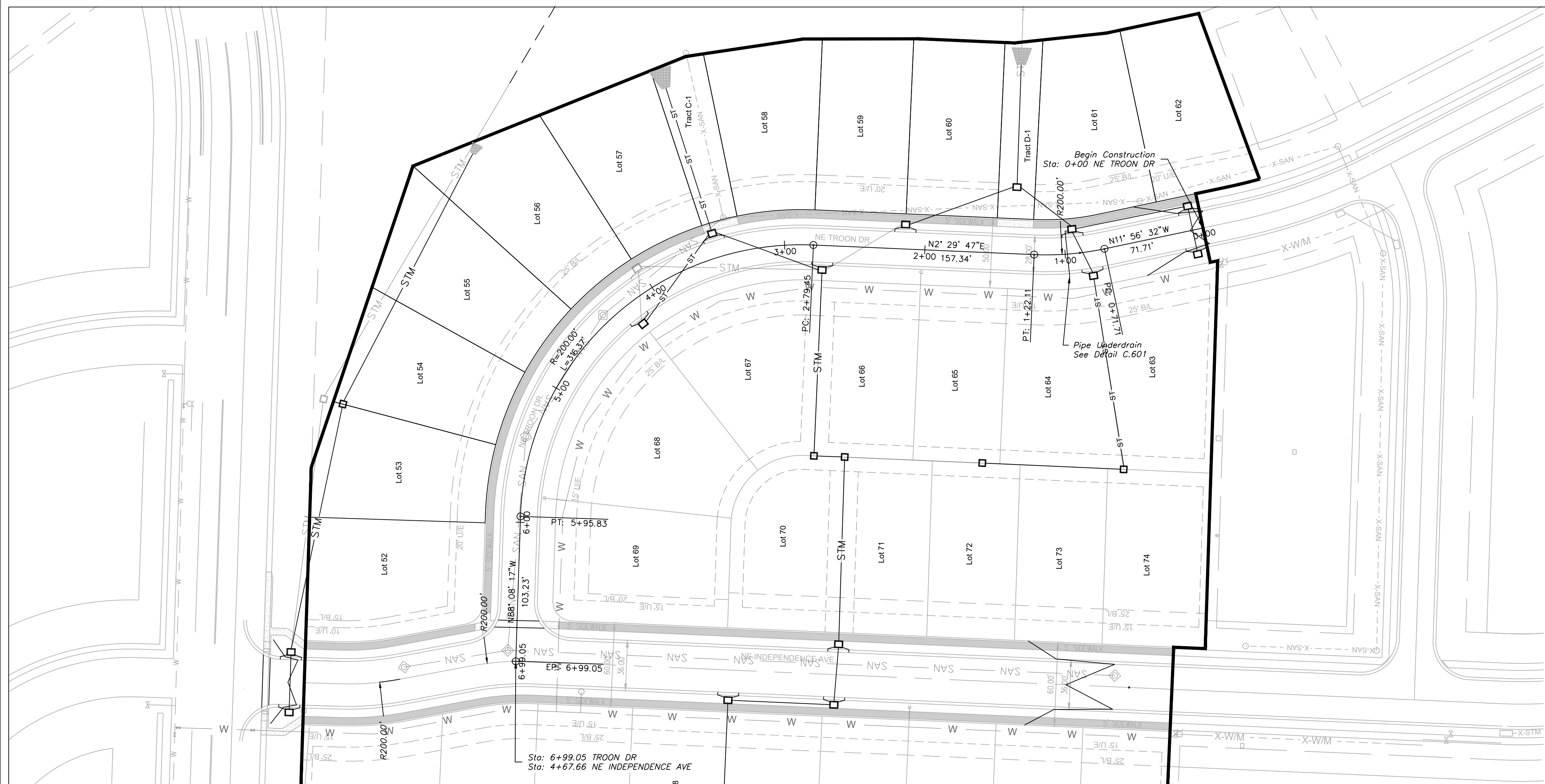
Project:
VILLAS OF CHAPEL
RIDGE, L3MO
Issue Date:
June 24, 2022

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

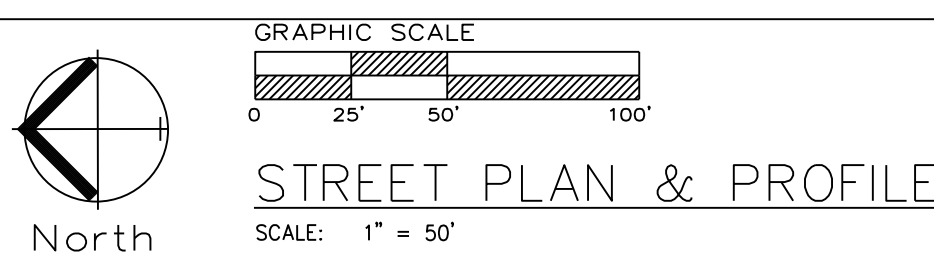
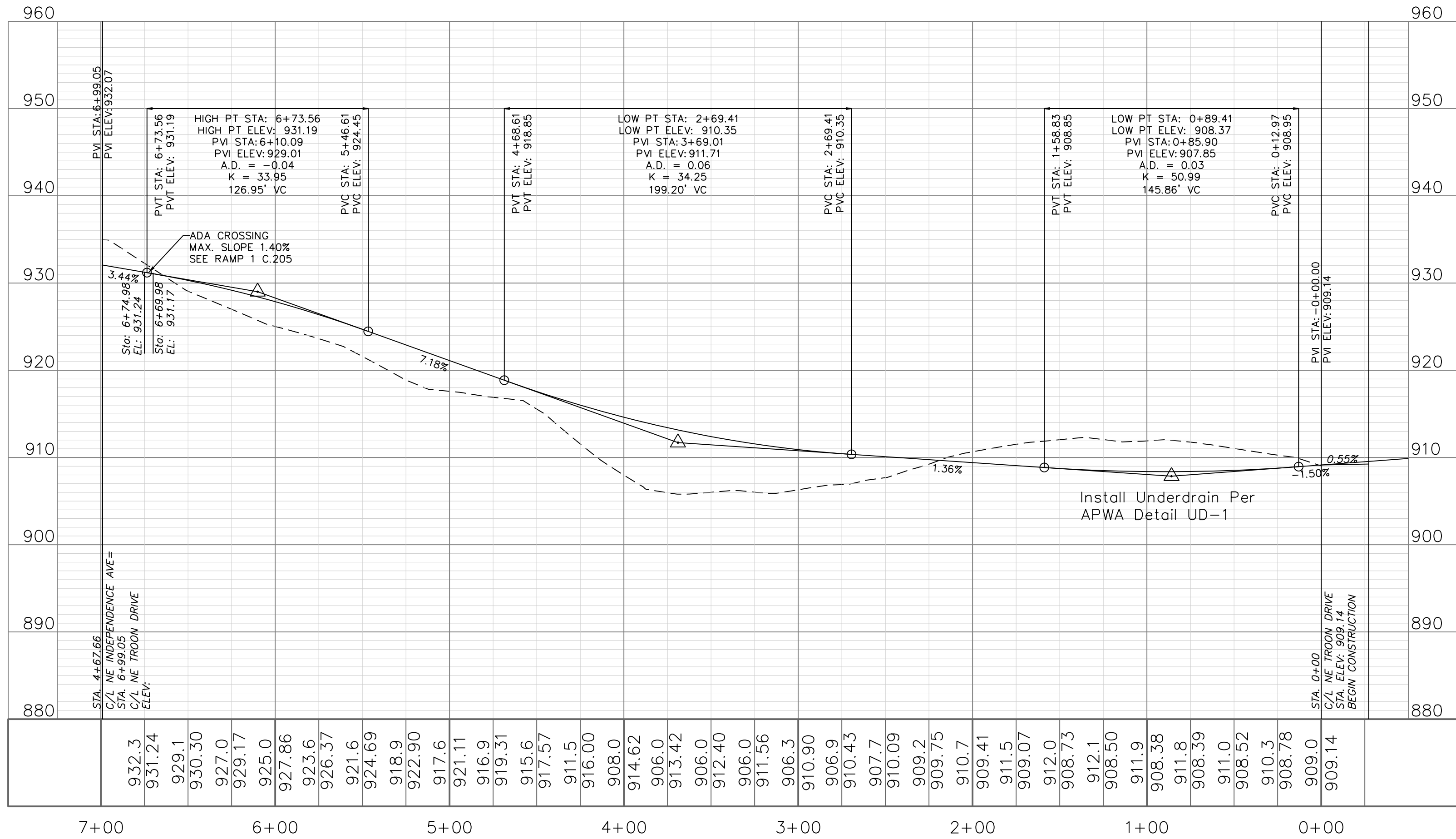
Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

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C.203



NE TROON DRIVE



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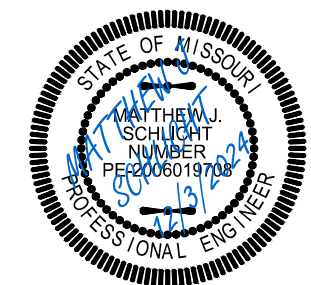
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THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

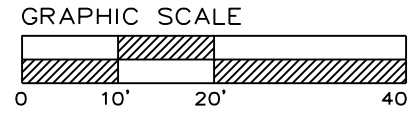
Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

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

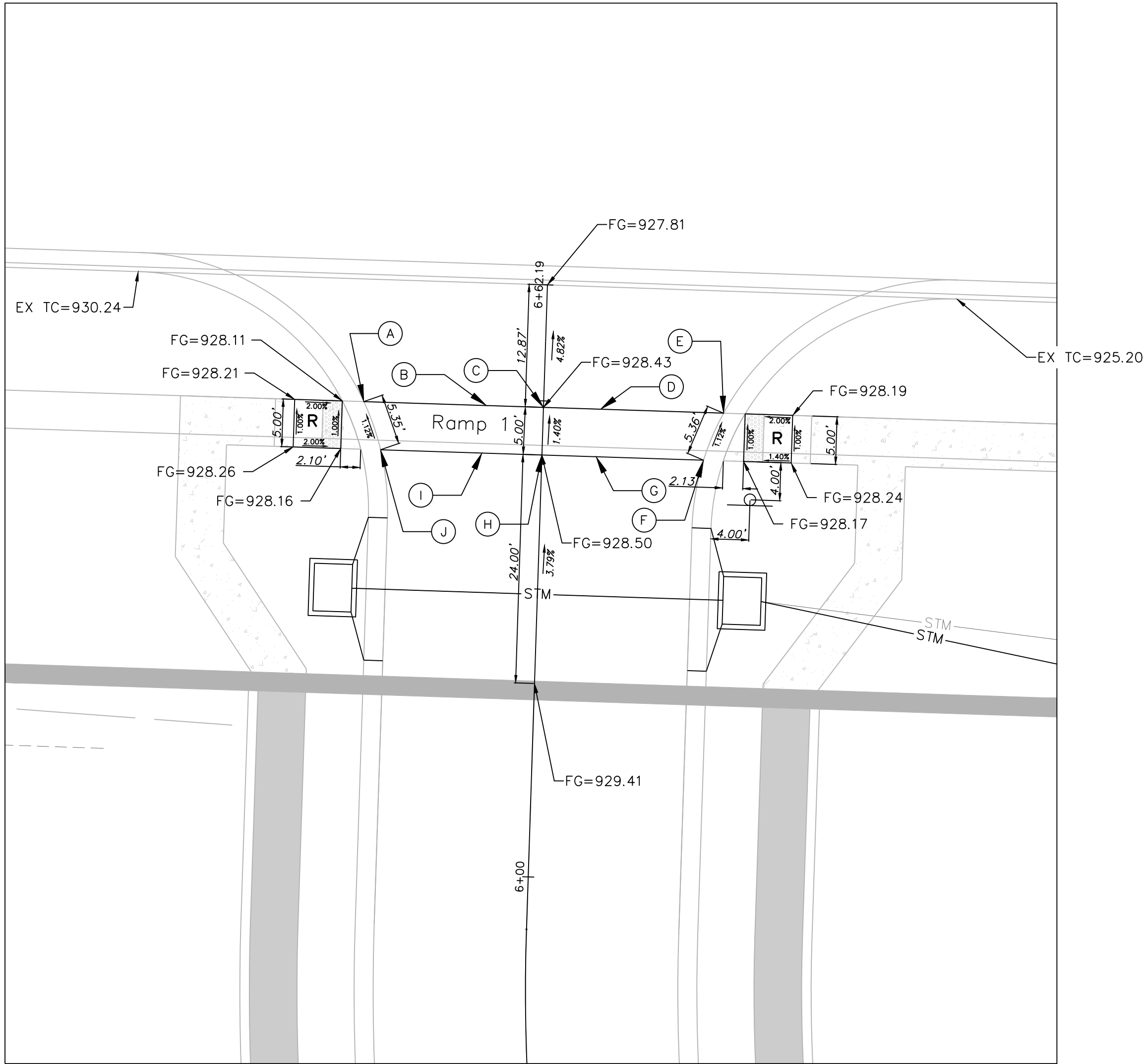


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REV. 10/29/2024	
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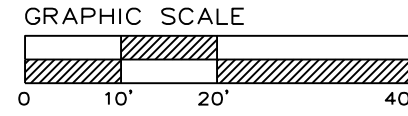


SIDEWALK AND INTERSECTION PLAN
SCALE: 1" = 20'

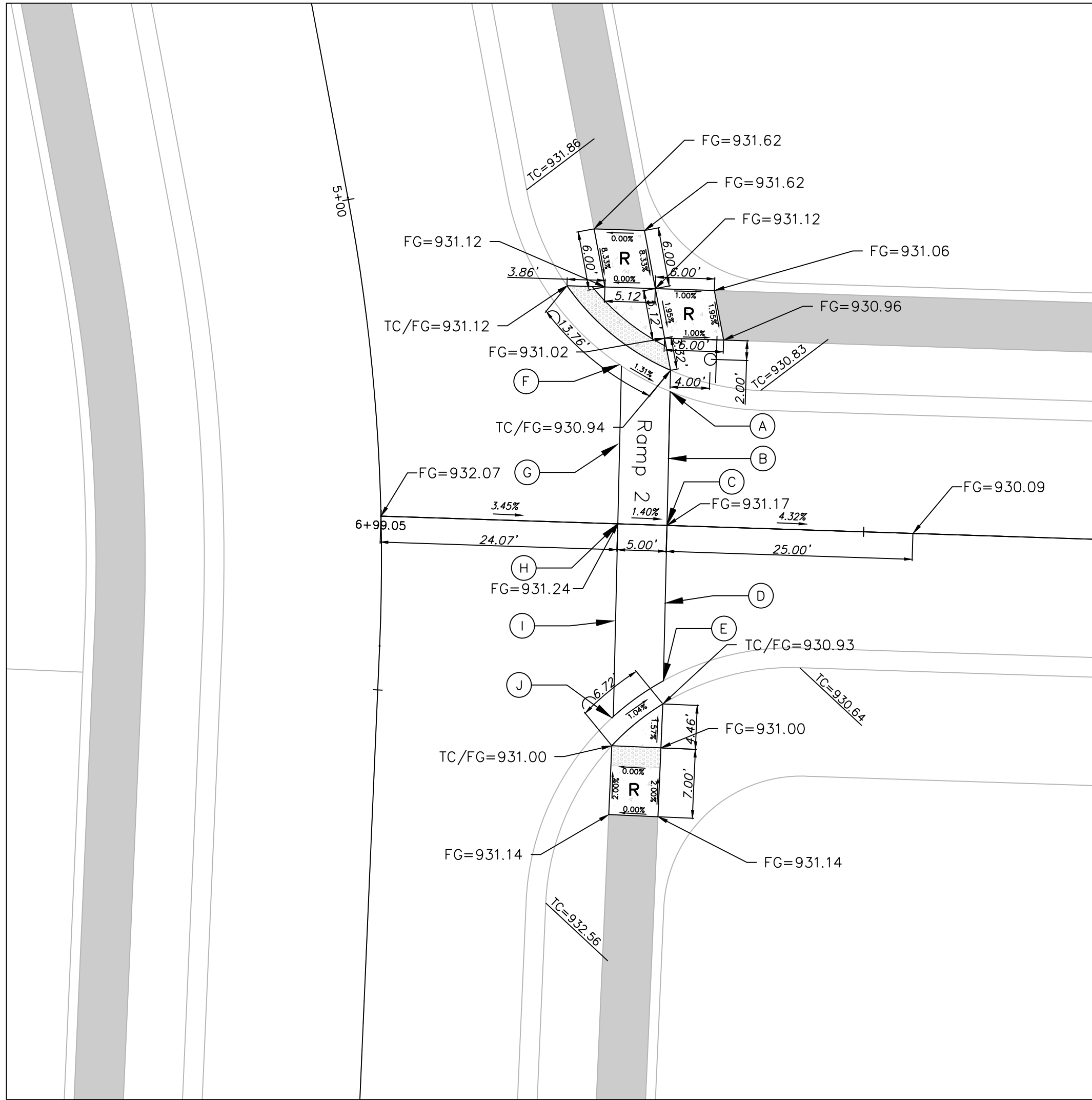


DETAIL 1

SPOT ELEVATION TABLE				
Spot	Ramp 1 Elevation	Ramp 2 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		



SIDEWALK AND INTERSECTION PLAN
SCALE: 1" = 20'



DETAIL 2

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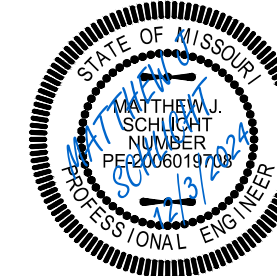


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THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

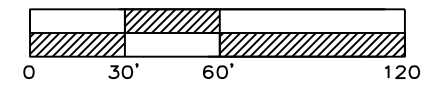
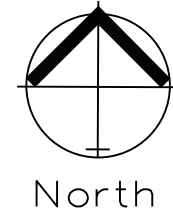
Project:
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RIDGE-LSMO
Issue Date:
June 24, 2022

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
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CONCEPTUAL STORM SEWER GENERAL LAYOUT

SCALE: 1" = 60'

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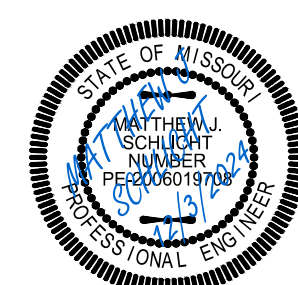


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THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

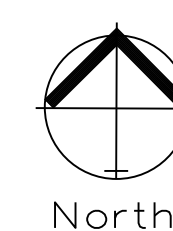
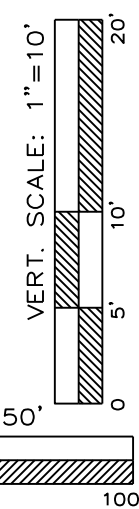
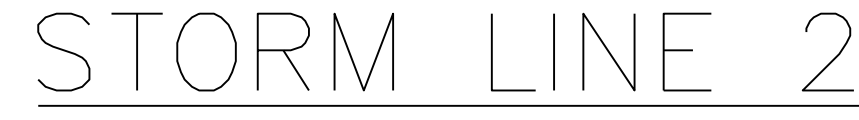
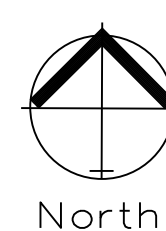
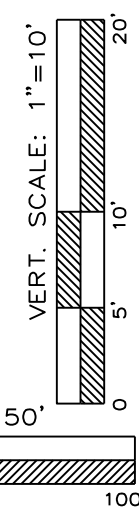
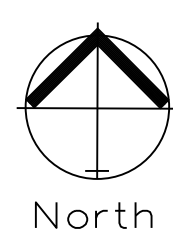
Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

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

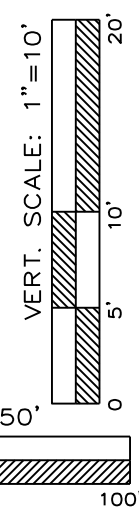


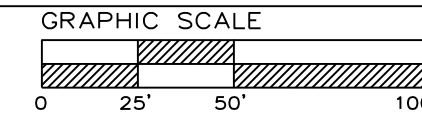
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MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

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STORM LINE 3



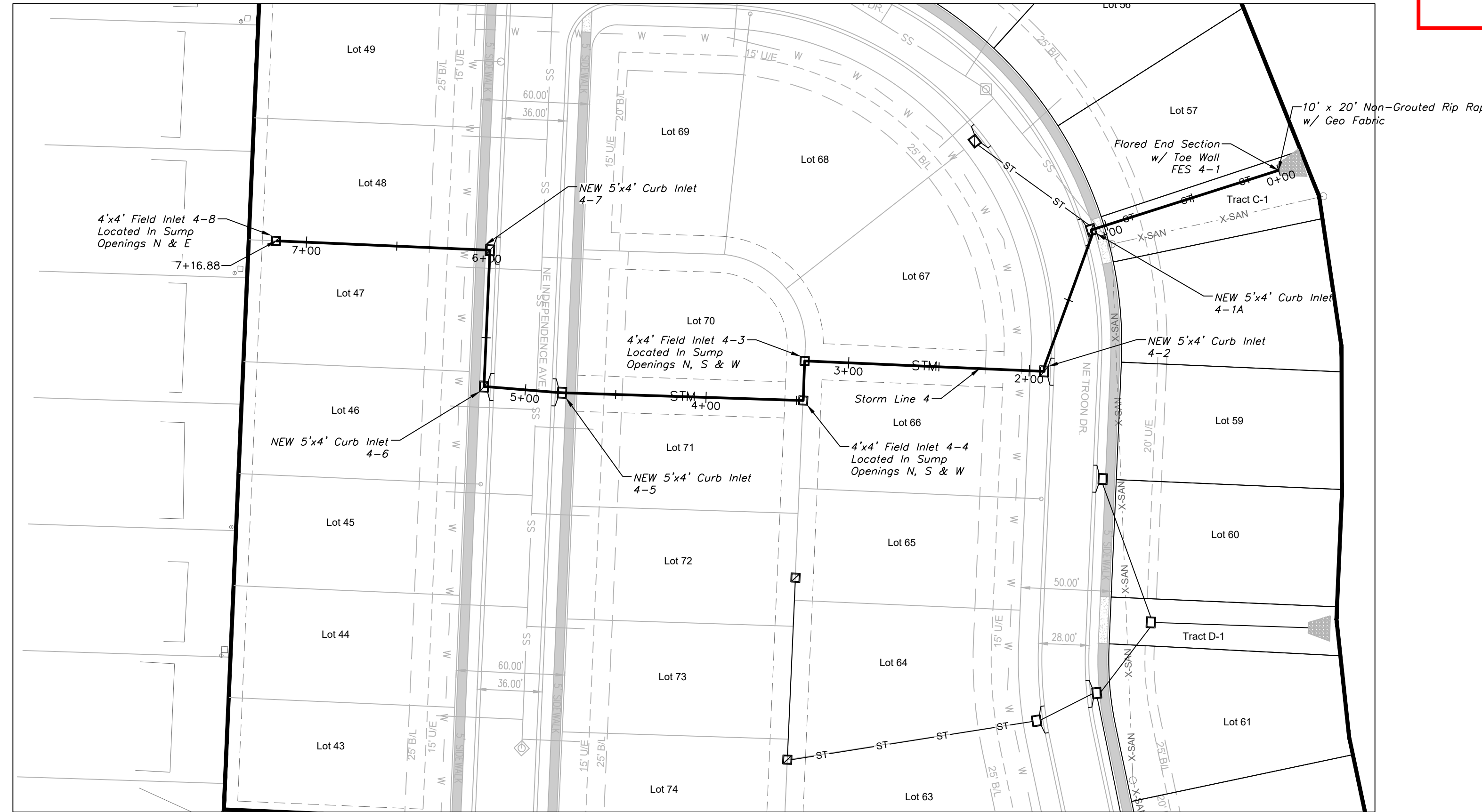


STORM SEWER PLAN & PROFILE

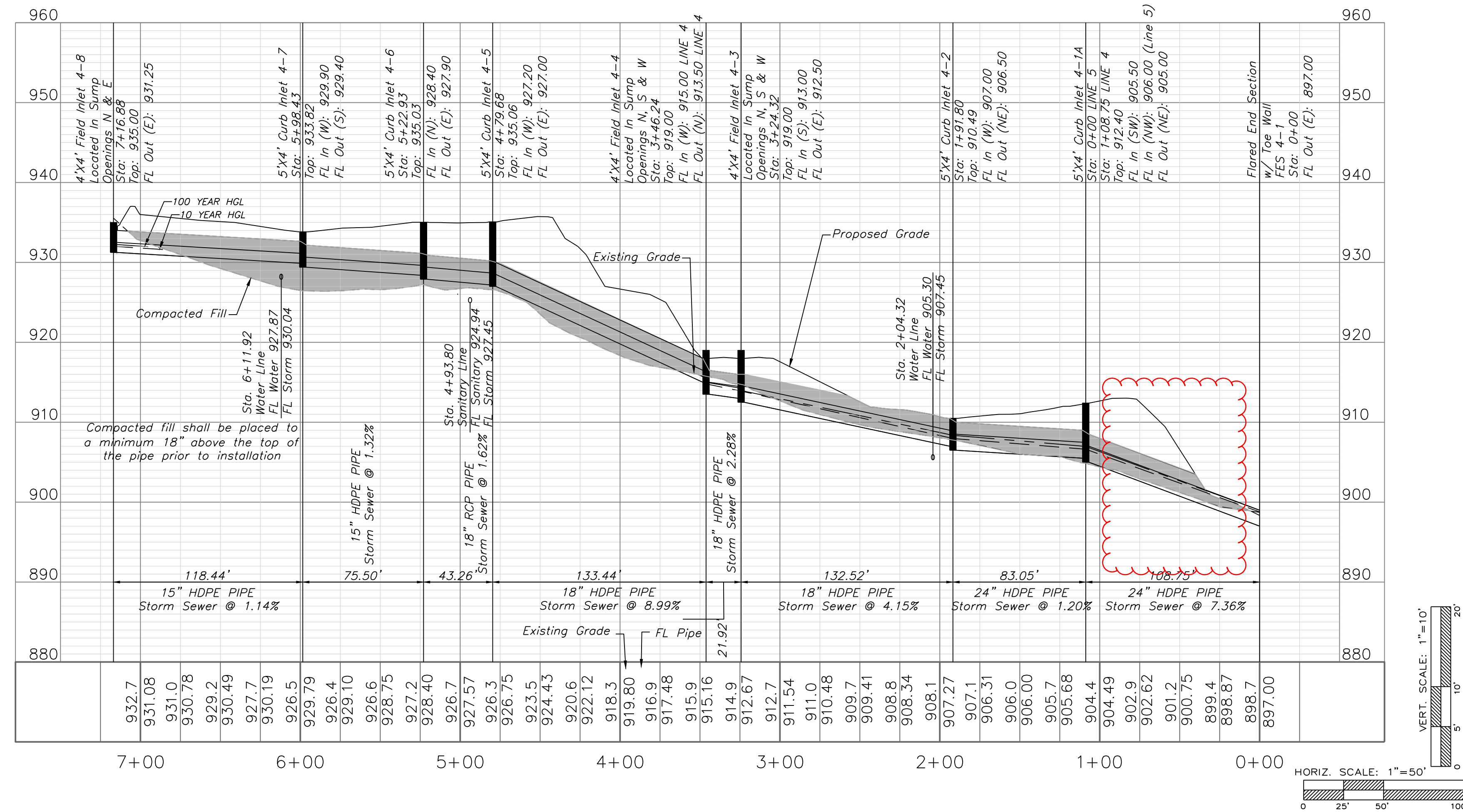
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12/17/2024



STORM LINE 4



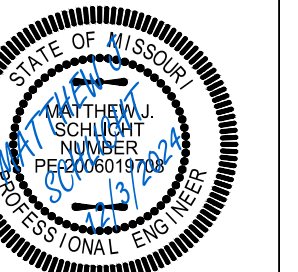
ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849

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

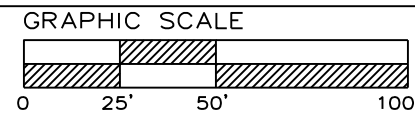
Project:
VILLAS OF CHAPEL
RIDGE-LSMO
Issue Date:
June 24, 2022

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

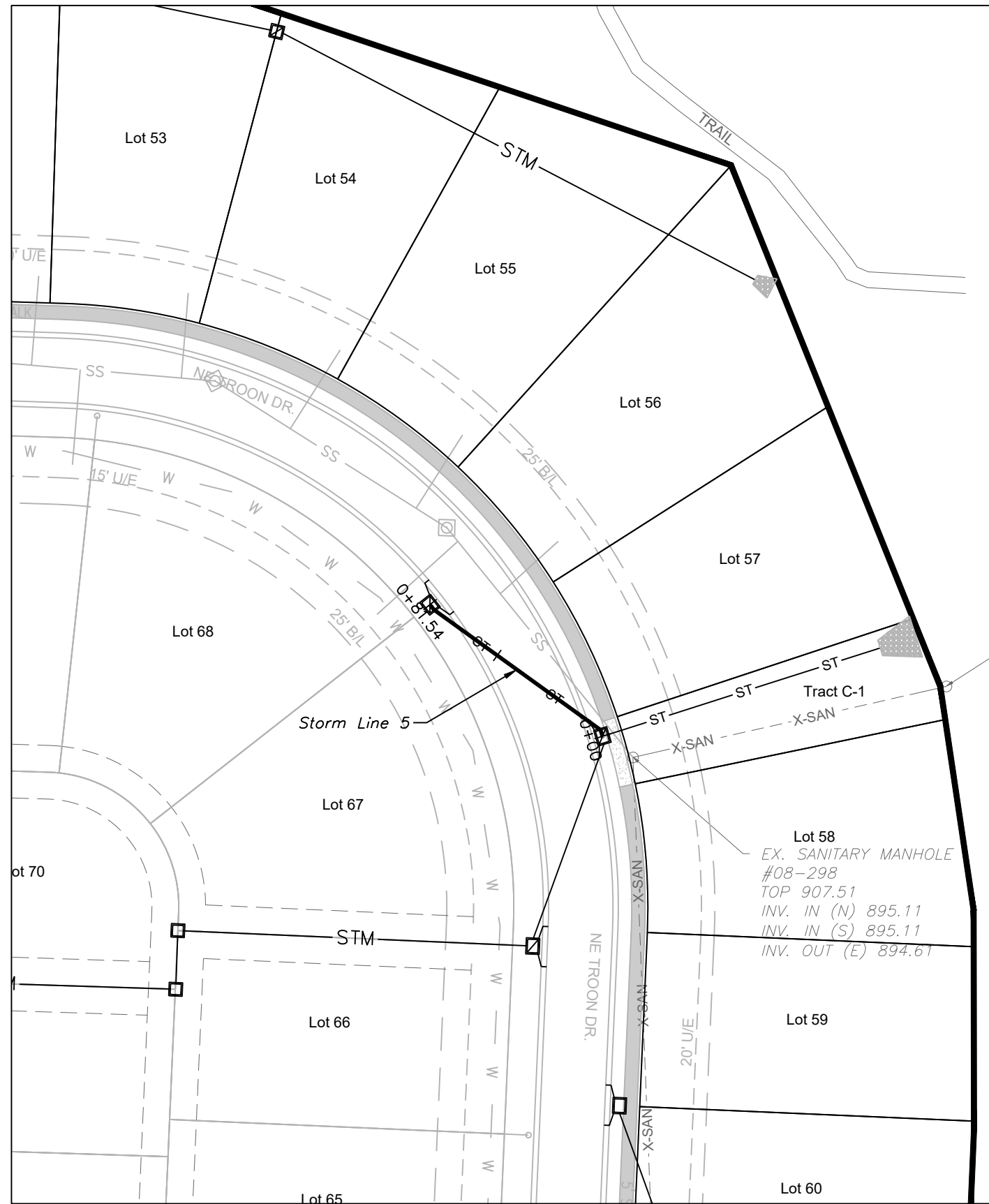


Matthew J. Schlacht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

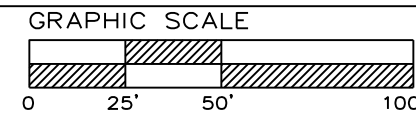
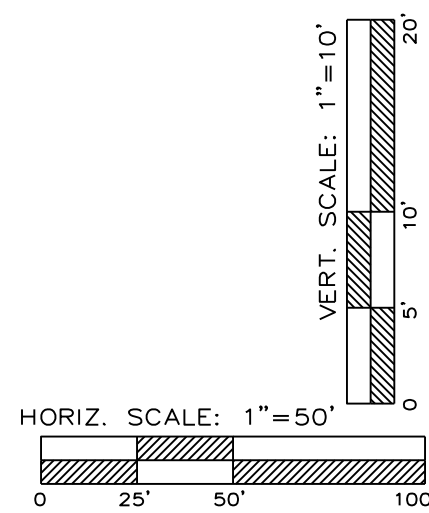
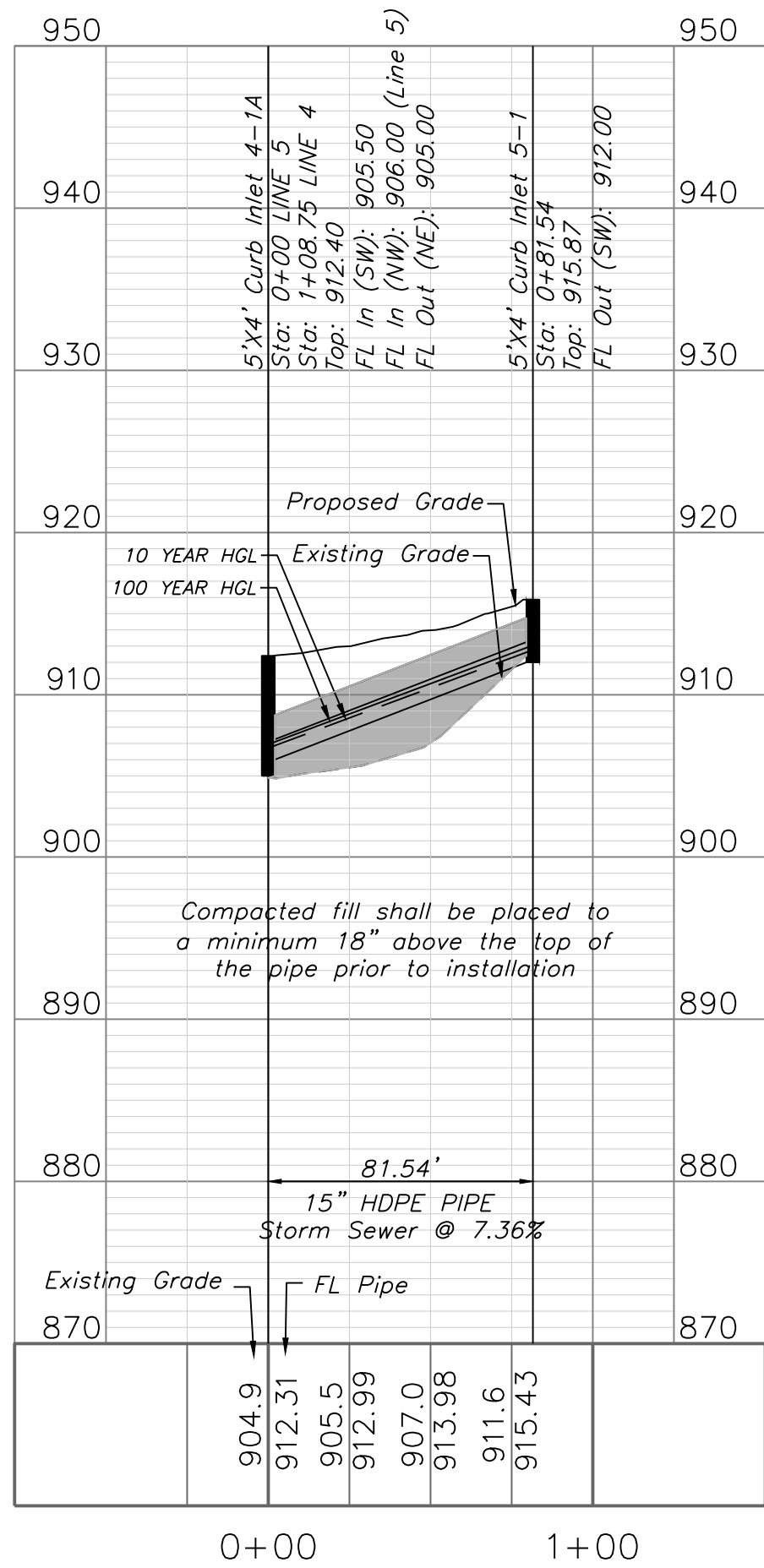
REVISIONS
REV. 8/12/2022
REV. 10/3/2022
REV. 4/26/2023
REV. 5/29/2024
REV. 10/29/2024
REV. 12/3/2024



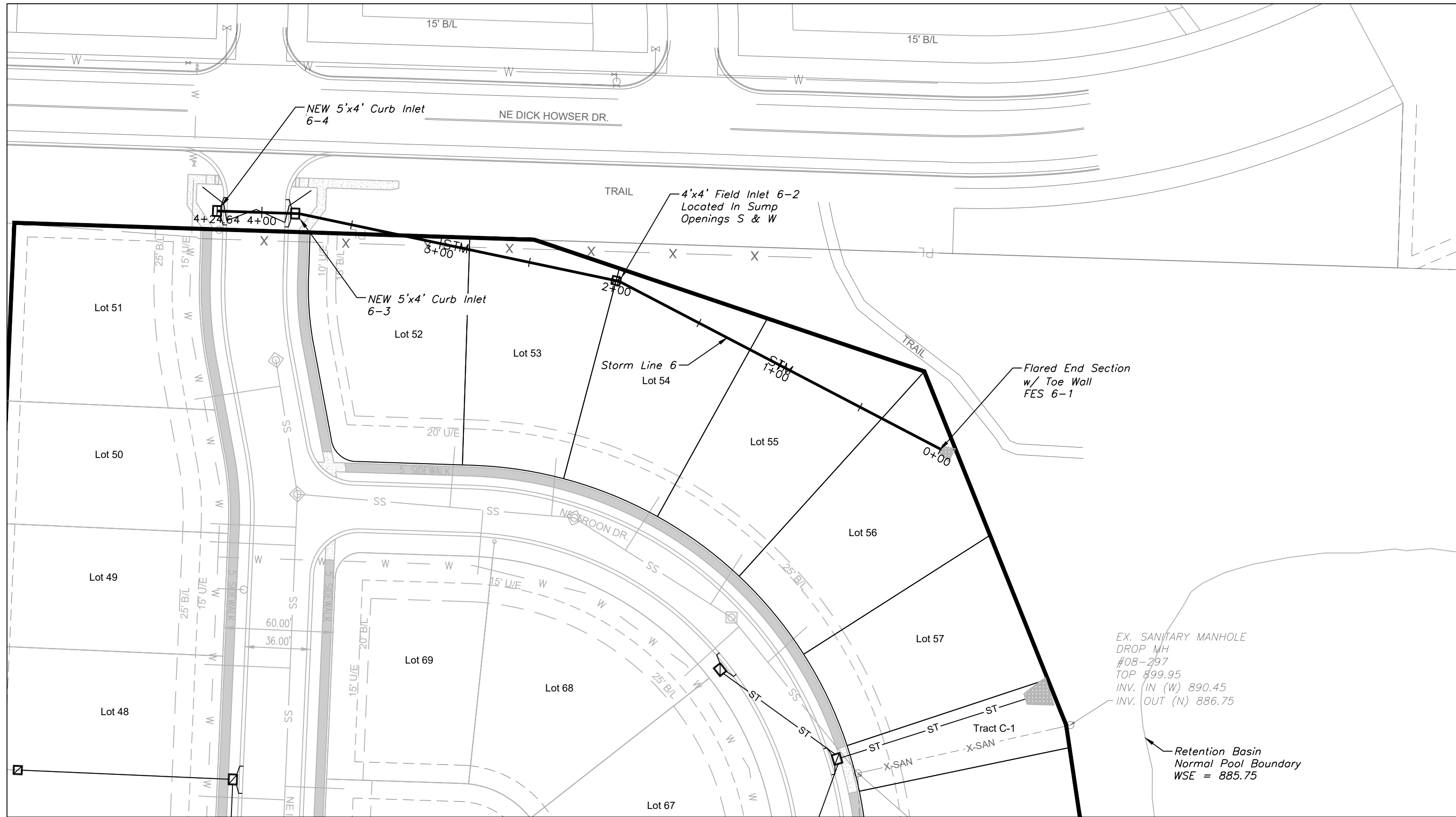
STORM SEWER PLAN & PROFILE
SCALE: 1" = 50'



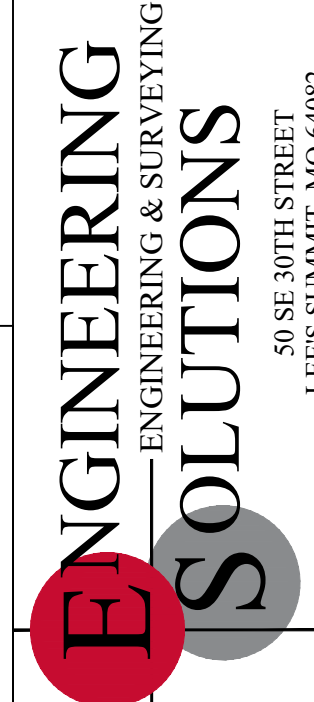
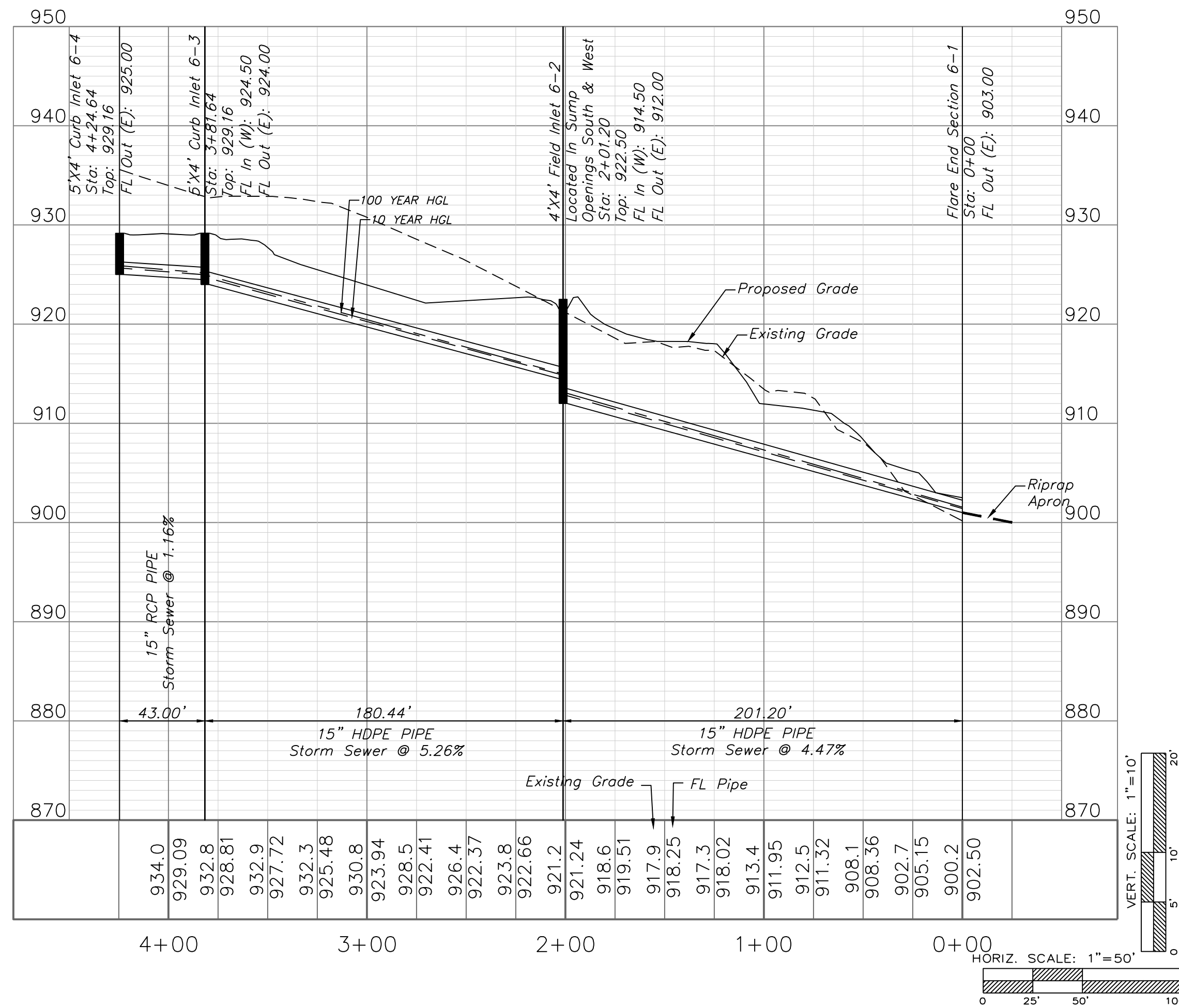
STORM LINE 5



STORM SEWER PLAN & PROFILE
SCALE: 1" = 50'



STORM LINE 6

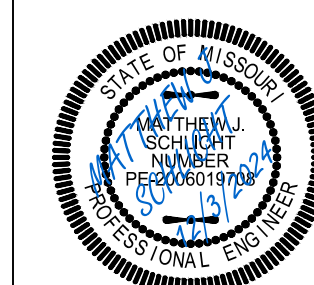


Professional Registration
Missouri
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Kansas
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THE VILLAS OF CHAPEL RIDGE-2ND PLAT
LOTS 43-74 and Tracts C-1 & D-1
Lee's Summit, Jackson County, Missouri

Project: VILLAS OF CHAPEL RIDGE-2ND PLAT
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. 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

C.303

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

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

12/17/2024

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	914.89	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

STRAIGHT CURE
(TYPE C-1)

STRAIGHT BACK CURB &
GUTTER
(TYPE CG-1)

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

DOWELLED CURE
(TYPE DC)

ROLL BACK CURB &
GUTTER
(TYPE CG-2)

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

CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)

CURB REPLACEMENT DETAIL

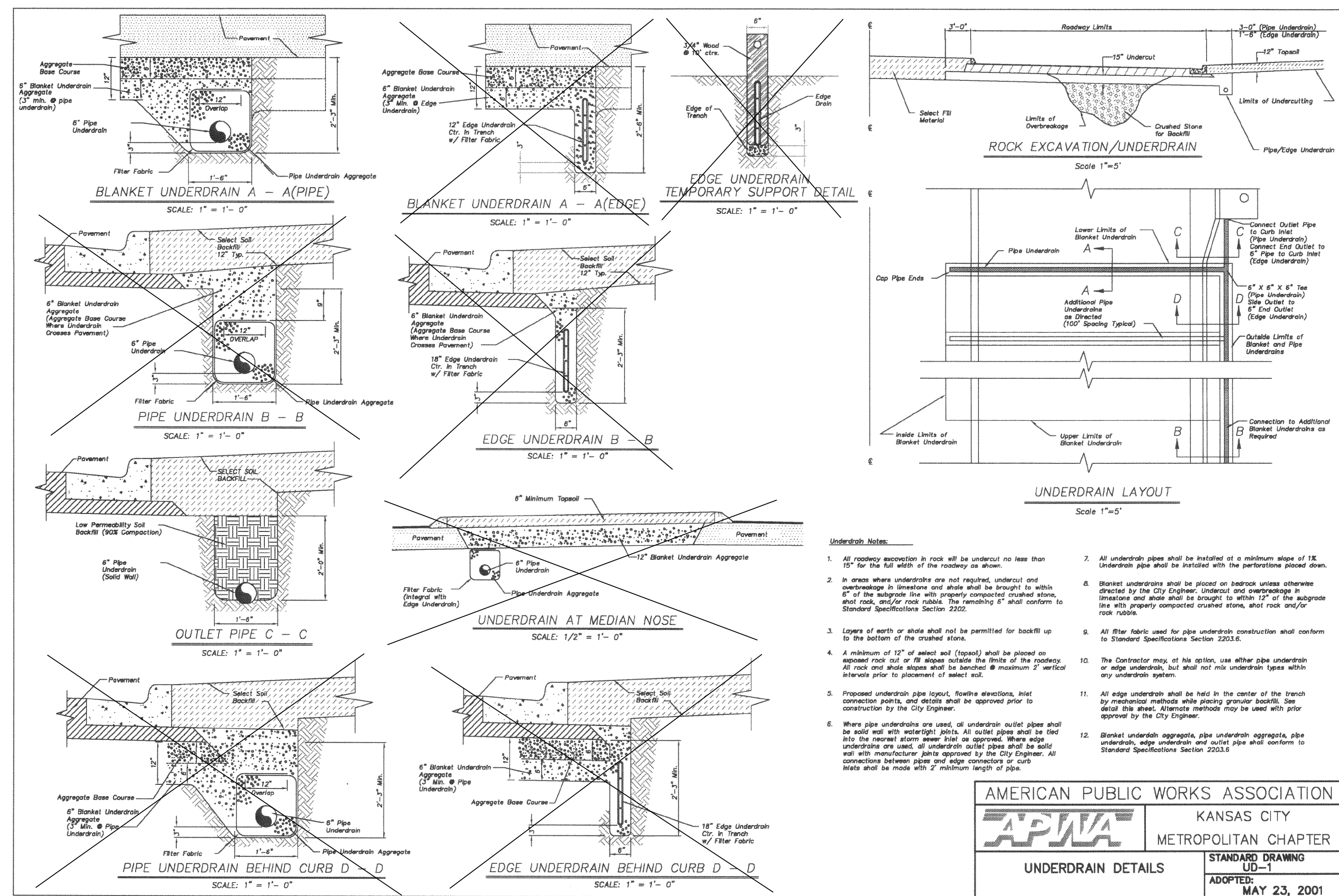
GENERAL NOTES

1. 3/4" ISOLATION JOINTS SHALL BE 3" (2"-#5 BARS) SMOOTH DOWELS SHALL BE PLACED AT RADIIUS POINTS AND AT 150" INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT 120" INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURBS.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR ACQUEDAS BASE AS SHOWN IN THE CONSTRUCTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

LS LEE'S SUMMIT
MISSOURI

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

GEN-4



GENERAL NOTE:

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

2 ADDED UNDERDRAIN DETAILS.

Construction Details

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
BRIDGE, LSMO

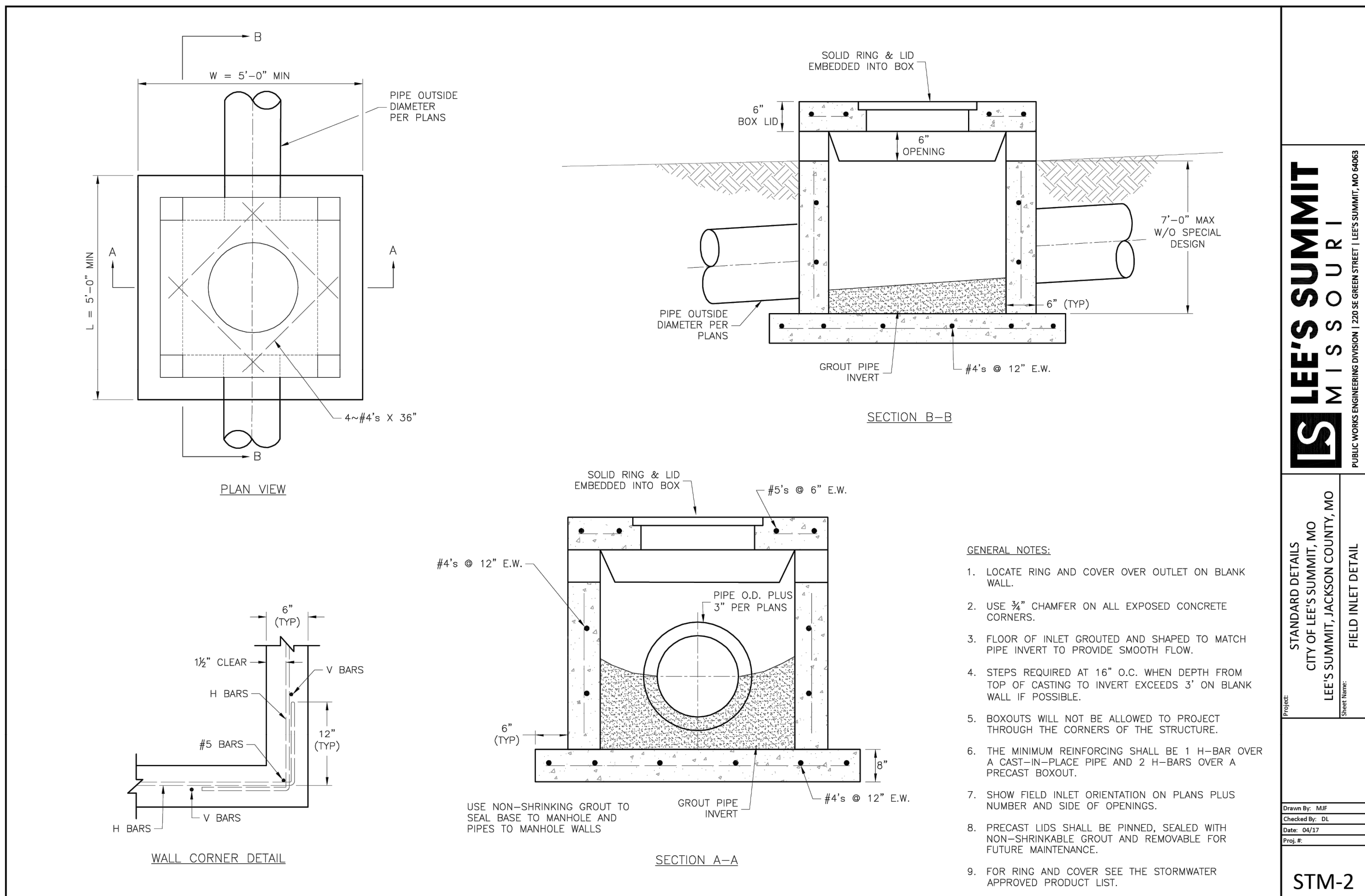
Issue Date: June 24, 2022

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

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

ENGINEERING
—ENGINEERING & SURVEYING—
SOLUTIONS

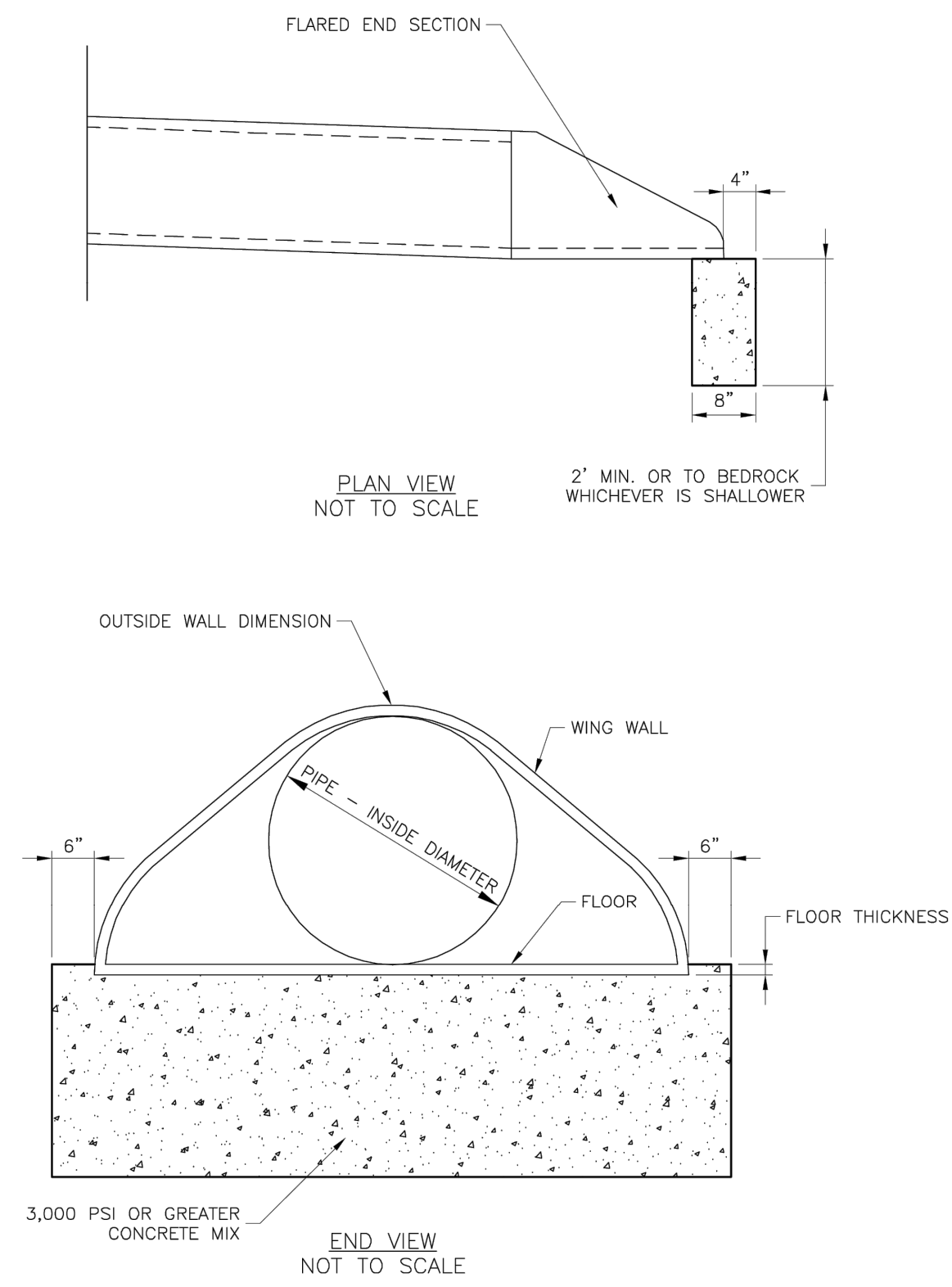
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849



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

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

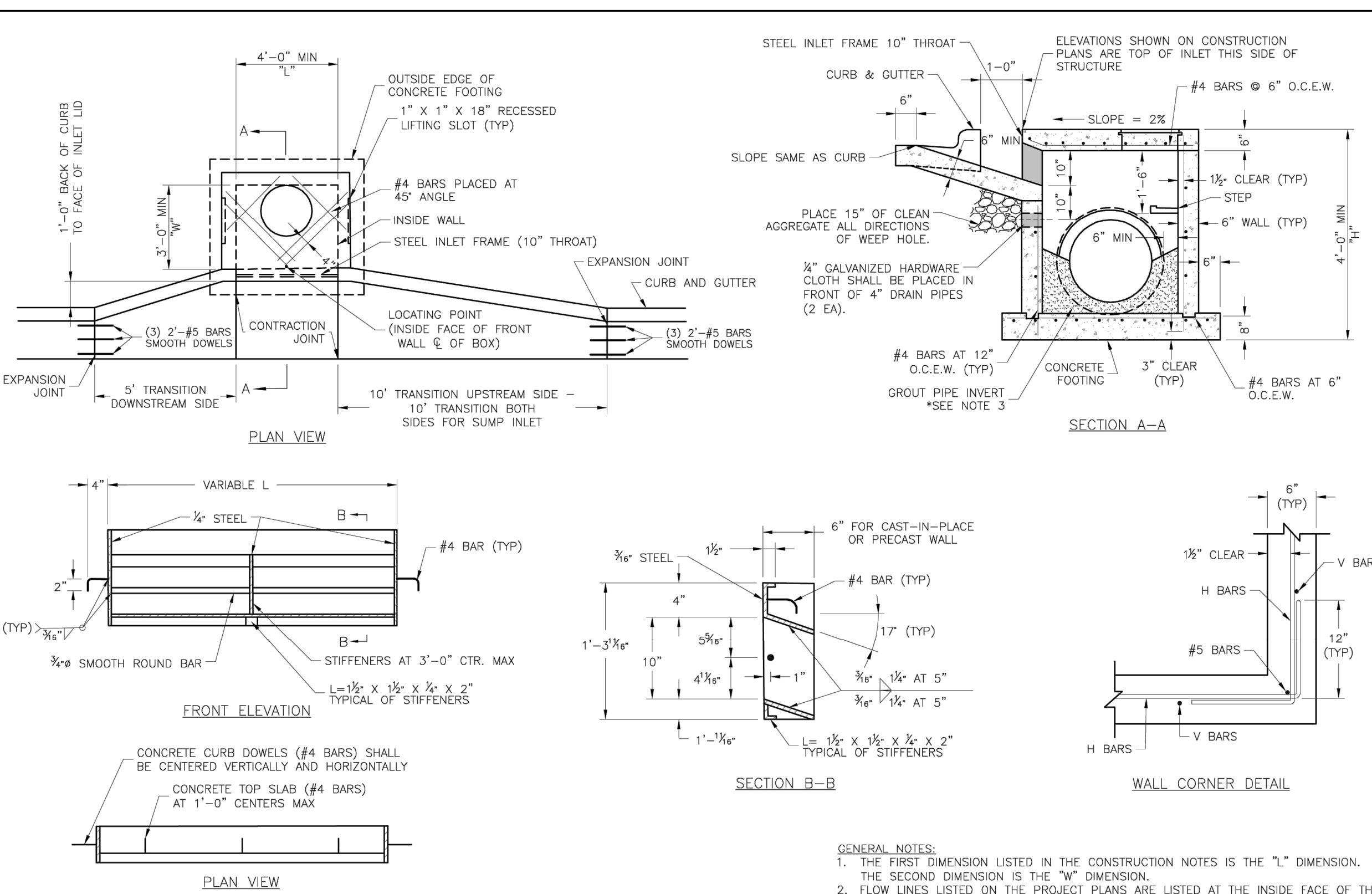
STM-2



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

FLARED END SECTION SUPPORT DETAIL

STM-5

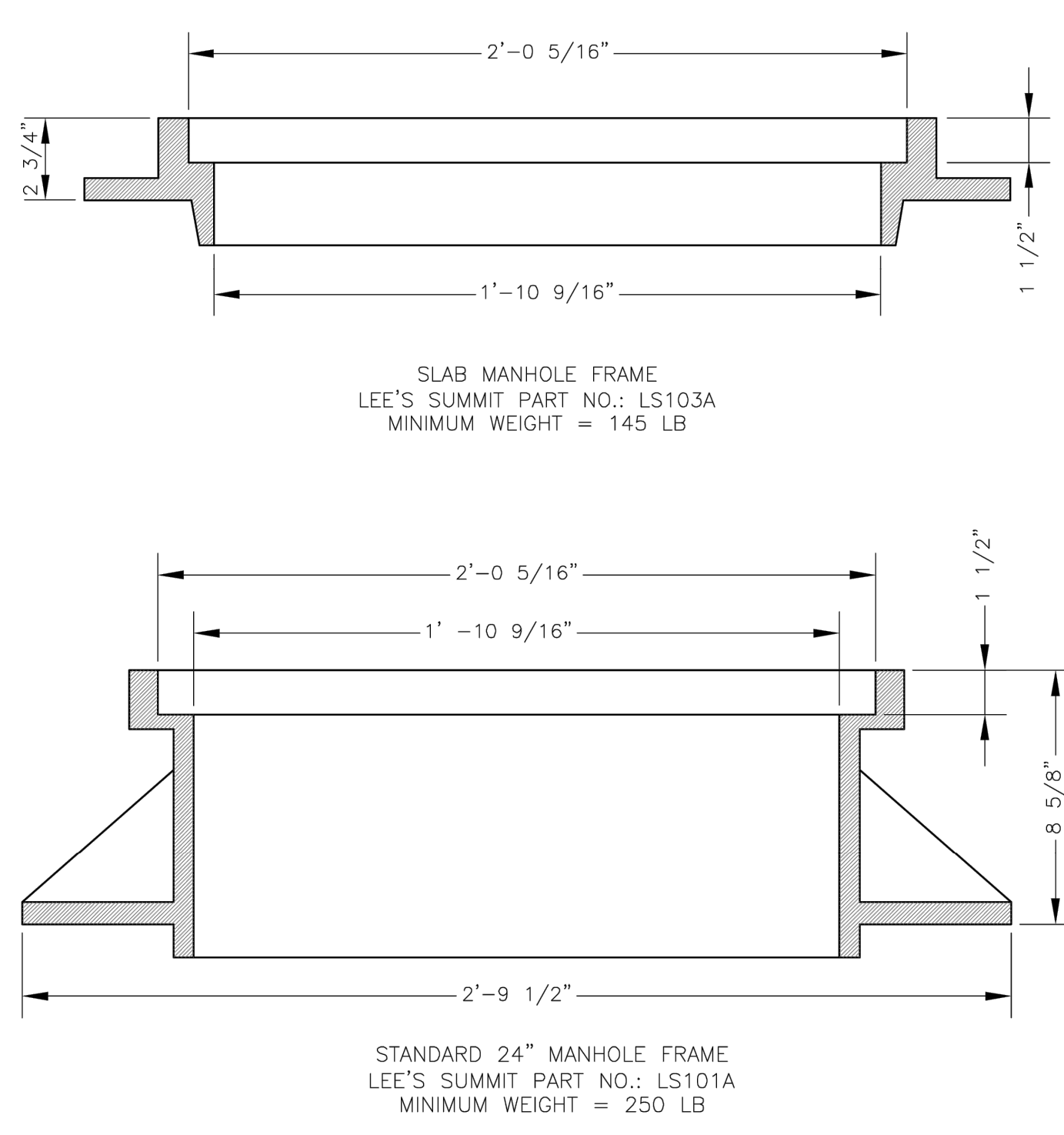


LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

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

STM-1

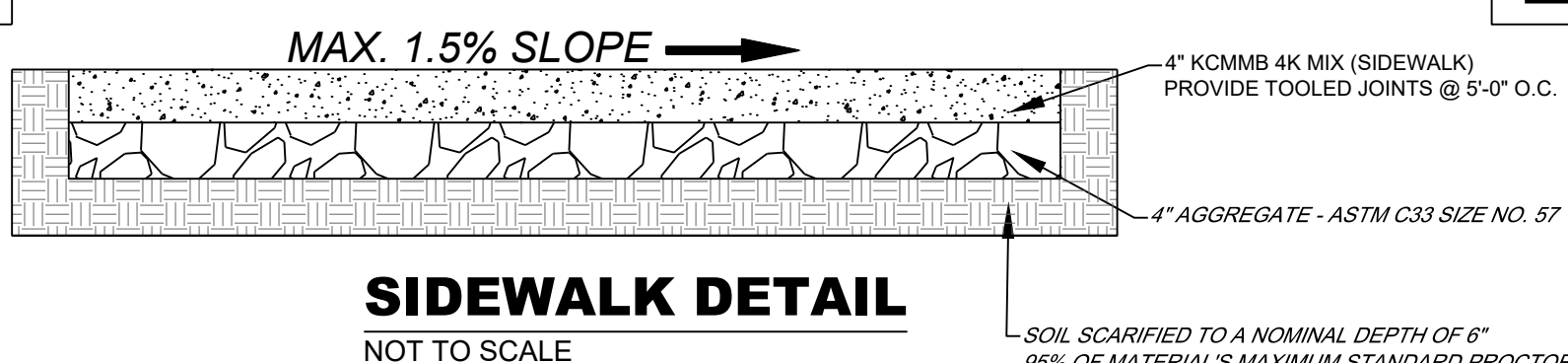
RELEASED FOR CONSTRUCTION
As Noted on Plan Review
Development Services Department
Lee's Summit, Missouri
12/17/2024



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

STORM MANHOLE FRAME DETAIL

STM-7



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

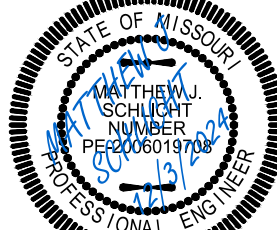
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

STORM MANHOLE COVER

STM-6

Construction Details

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. Schlich
MO PE 2006019706
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	