

WOODLAND OAKS

Lots 1 thru 42

STREET AND STORM SEWER CONSTRUCTION PLANS

Section 27, Township 48 North, Range 31 West
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

OIL - GAS WELLS

ACCORDING TO EDWARD ALTON MAY JR'S ENVIRONMENTAL IMPACT STUDY OF ABANDONED OIL AND GAS WELLS IN LEE'S SUMMIT, MISSOURI IN 1995, THERE ARE NOT OIL AND GAS WELLS WITHIN 185 FEET OF THE PROPERTY AS SURVEYED HEREON.

FLOOD INFORMATION:

THE SUBJECT PROPERTY SURVEYED LIES WITHIN A FLOOD ZONE DESIGNATED ZONE (X), AREAS LOCATED OUTSIDE THE 100 YEAR FLOOD PLAIN, PER F.E.M.A. MAP, COMMUNITY PANEL NO. 29095C0416G EFFECTIVE DATE: JANUARY 20, 2017.

CONSTRUCTION AND DESIGN NOTES:

STREET & STORM SEWERS:

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

RESIDENTIAL LOCAL STREET SEE BELOW FOR TYPICAL SECTION.

- OPTION 1) 4" TYPE 5 ASPHALT BASE AND 2" TYPE 5 OR 6 ASPHALT SURFACE OVER A 6" MoDOT TYPE 5 BASE AND A SUBGRADE MIXTURE OF 6" FLY ASH STABILIZED SUBGRADE IN ACCORDANCE WITH THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL.
- OPTION 2) 4" TYPE 5 ASPHALT BASE AND 2" TYPE 5 OR 6 ASPHALT SURFACE OVER 10" 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.

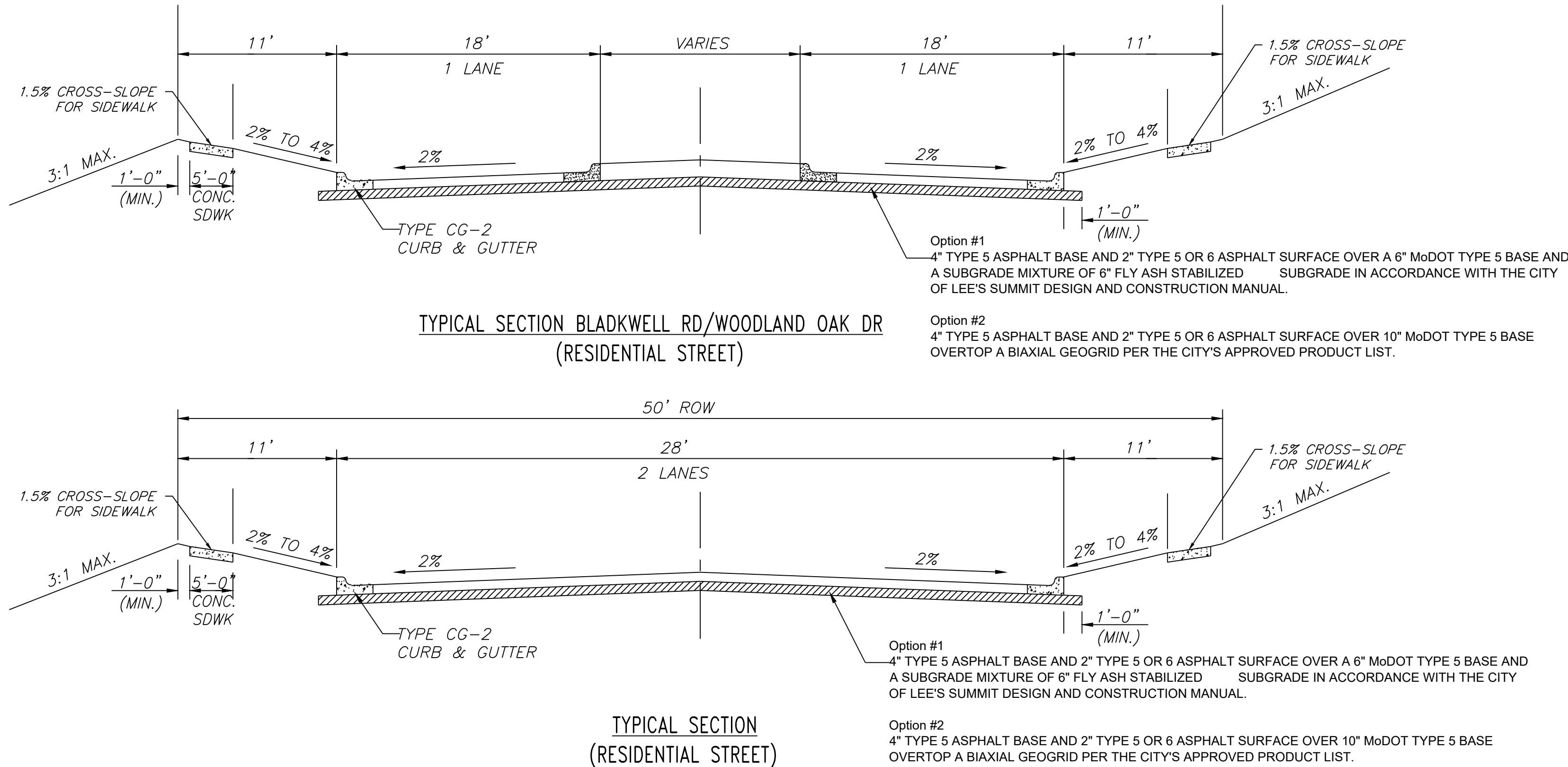
UTILITY COMPANIES:

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 ~ 298-1196
MISSOURI GAS ENERGY ~ 756-5261
SOUTHWESTERN BELL TELEPHONE ~ 761-5011
COMCAST CABLE ~ 795-1100
WILLIAMS PIPELINE ~ 422-6300
CITY OF LEE'S SUMMIT PUBLIC WORKS ~ 969-1800
CITY OF LEE'S SUMMIT 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



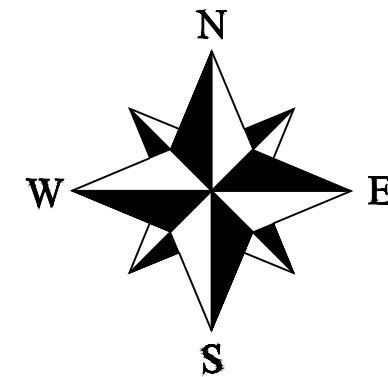
INDEX OF SHEETS:

- C.001 ~ STREET & STORM COVER SHEET
C.050 ~ ESC PHASE 1 - PRE CLEARING PLAN
C.051 ~ ESC PHASE 2 - INITIAL AREA STABILIZATION PLAN
C.052 ~ ESC PHASE 3 - FINAL RESTORATION PLAN
C.053 ~ ESC - STANDARD DETAILS
C.054 ~ ESC - STANDARD DETAILS
C.100 ~ SITE PLAN
C.200 ~ MASTER DRAINAGE PLAN SHEET 1 OF 3 GRADING PLAN - SWPPP
C.201 ~ MASTER DRAINAGE PLAN SHEET 2 OF 3 SPOT ELEVATIONS
C.202 ~ MASTER DRAINAGE PLAN SHEET 3 OF 3 DRAINAGE AREA MAP
C.203 ~ STREET PLAN & PROFILE
C.204 ~ STREET PLAN & PROFILE
C.205 ~ SIDEWALK AND INTERSECTION PLAN
C.206 ~ DETENTION BASIN PLAN
C.207 ~ BYPASS CHANNEL PLAN
C.208 ~ STREET SIGNAGE PLAN
C.300 ~ STORM SEWER GENERAL LAYOUT
C.301 ~ STORM SEWER PLAN & PROFILE
C.302 ~ STORM SEWER PLAN & PROFILE
C.303 ~ STORM SEWER PLAN & PROFILE
C.304 ~ STORM SEWER PLAN & PROFILE
C.305 ~ STORM SEWER TABLES - 10 YEAR
C.306 ~ STORM SEWER TABLES - 100 YEAR
C.600 ~ CONSTRUCTION DETAILS
C.601 ~ CONSTRUCTION DETAILS

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EVERGY ~ 298-1196
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CITY OF LEE'S SUMMIT WATER UTILITIES ~ 969-1900
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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

RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

09/01/2023

Gene Williams

Digitally signed by Gene Williams
DN: cn=Gene Williams, o=Development, ou=LS
email=Gene.Williams@leesummitmo.gov, c=US

Summary of Quantities:

ITEM AND DESCRIPTION	UNIT	ESTIMATED QUANTITY
ASPHALT PAVING	S.Y.	7,187.12
CURBING	FT	4643.65
MoDOT Type 5 Base	S.Y.	7,689.66
GEOGRID	S.Y.	7,689.66
CLEARING, GRADING & GRUBBING	LS	1.00
SILT FENCE	FT	12,550.00
INLET PROTECTION	UNIT	81.00
SEEDING / MULCHING/ FERTILIZING	AC	19.51
CONST. ENTRANCE	UNIT	1.00
RIP RAP W/ FABRIC	S.Y.	142.05
SEDIMENT TRAP ROCK	C.Y.	19.00
FAIRCLOTH SKIMMER ASSEMBLY	UNIT	1.00
5' SIDEWALK	S.F.	9,524
STREET SIGNAGE	UNIT	4
ADA SIDEWALK RAMP	UNIT	11
STORM		
15" HDPE	FT	1598.78
18" HDPE	FT	829.84
24" HDPE	FT	307.87
30" HDPE	FT	51.00
15" HDPE END SECTION / TOE WALL	LS	3.00
18" HDPE END SECTION / TOE WALL	LS	1.00
24" HDPE END SECTION / TOE WALL	LS	4.00
30" HDPE END SECTION / TOE WALL	LS	1.00
4' x 4' STORM FIELD INLET	EA	10.00
5' x 5' JUNCTION BOX	EA	2.00
5' x 4' STORM CURB INLET	EA	14.00
5' x 5' CONTROL STRUCTURE	EA	1.00
5' x 4' CONTROL STRUCTURE	EA	1.00

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.

Street, Stormwater, Master Drainage Plan, and Erosion and Sediment Control

PL2021073
PRSUBD20224825

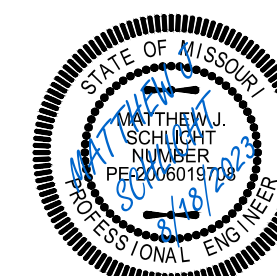


Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Part of the Southeast 1
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Project:
WOODLAND OAKS
LSMO
Issue Date:
February 25, 2021

Street & Storm Cover Sheet
Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri



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

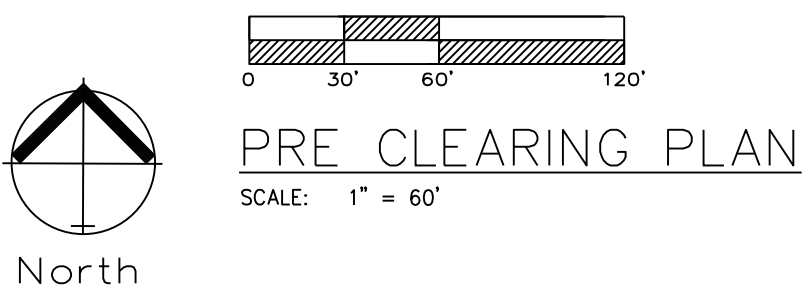
REVISIONS
REV. 5/5/2021
REV. 5/26/2021
REV. 6/22/2021
REV. 6/29/2021
Updated 6/16/2023
Updated 7/21/2023
Updated 8/18/2023



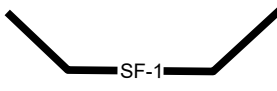
RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri

09/01/2023



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 511.3 SHALL BE
USED TO CONTROL EROSION AND SILTATION.

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

Part of the Southeast 1/4
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Project: WOODLAND OAKS
LSMO
Issue Date: February 25, 2021

ESC PHASE 1 - Pre Clearing Plan
Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri

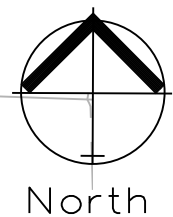
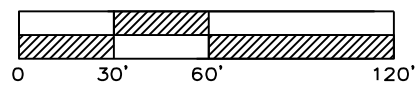
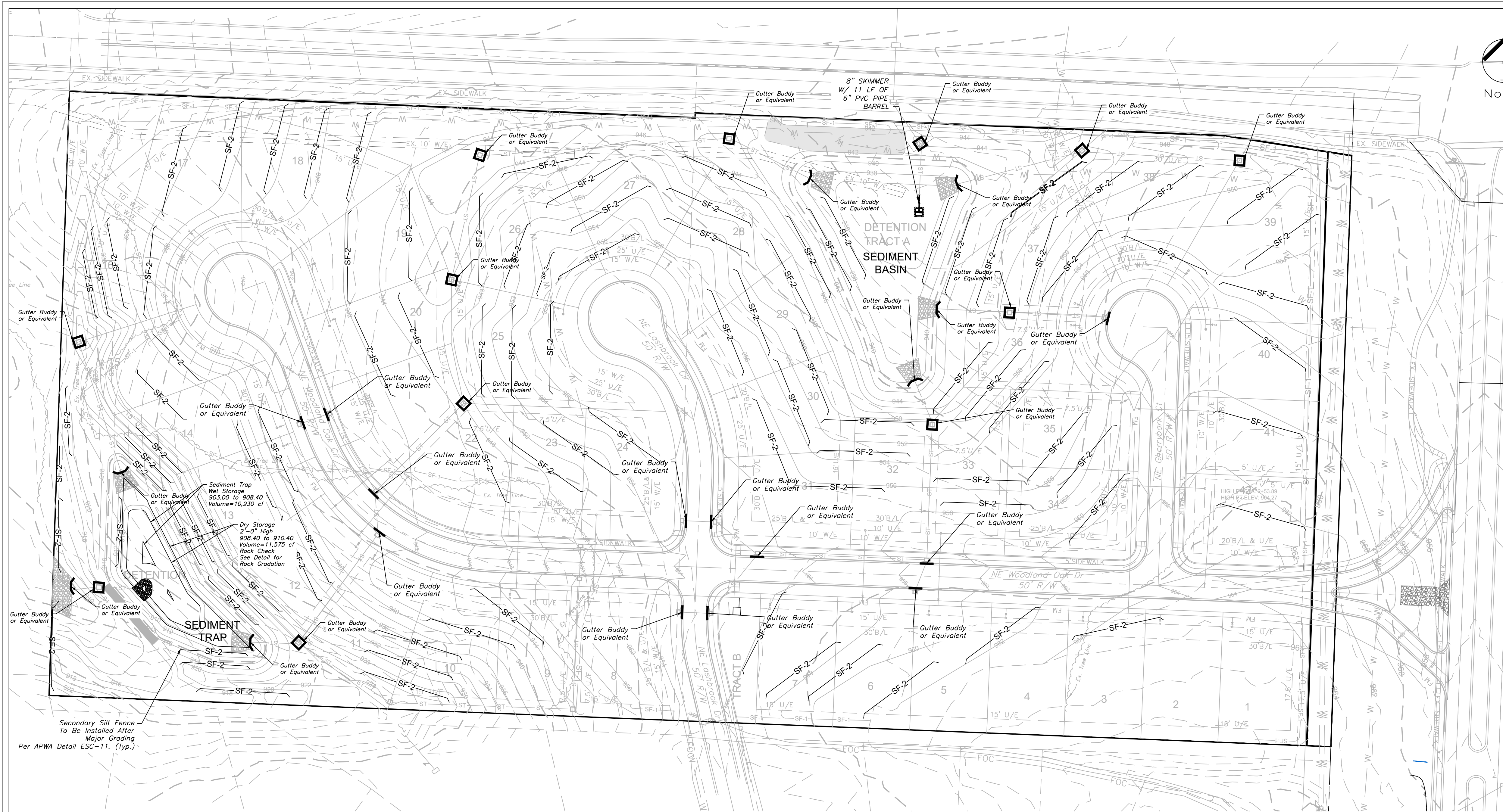
STATE OF MISSOURI
MATTHEW J. SCHLICHT
REGISTERED PROFESSIONAL ENGINEER
No. 25226
EXPIRATION DATE 12/31/2025

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

REVISIONS

REV.	5/5/2021
REV.	5/26/2021
REV.	6/22/2021
REV.	6/29/2021
Updated	6/16/2023
Updated	7/21/2023
Updated	8/18/2023

C.050



INACTIVE AREA STABILIZATION PLAN

SCALE: 1" = 60'

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

PHASE 2 SILT FENCE

SF-2

INLET PROTECTION
GUTTER BUDDY OR EQUIVALENT

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.

DURING ALL PHASES OF CONSTRUCTION,
INACTIVE AREA STABILIZATION METHODS AS
DESCRIBED IN APWA SECTION 511.3 SHALL BE
USED TO CONTROL EROSION AND SILTATION.

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Development Services Department
Lee's Summit, Missouri

09/01/2023

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 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 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 RESEED.

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

THE DEVELOPER WILL DESIGNATE A QUALIFIED PERSON OR PERSONS TO PERFORM THE FOLLOWING INSPECTIONS:
STABILIZATION MEASURES: DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER A PORTION OF THE SITE IS FINALLY STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.

STRUCTURAL CONTROLS: FILTER FABRIC FENCES AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER POSITIONING, ANCHORING, AND EFFECTIVENESS IN TRAPPING SEDIMENTS. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UPSLOPE SIDE OF THE FILTER FABRIC. CONTRACTOR CAN CONTACT ENGINEERING SOLUTIONS FOR COPIES OF THE INSPECTION FORM TO BE USED FOR STABILIZATION MEASURES.

DISCHARGE POINTS: DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM ENTERING RECEIVING WATERS.

CONSTRUCTION ENTRANCE: LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

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

EROSION CONTROL DESCRIPTION:
1.) SILT FENCE SHALL BE PLACED AT THE PERIMETER OF THE GRADING AND AT INTERMEDIATE AREAS THROUGHOUT THE SITE AS SHOWN ON THE PLAN.
2.) INLET SEDIMENT TRAPS SHALL BE PLACED SURROUNDING ALL STORM INLETS.
3.) INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON PLAN.
4.) INSTALL SEDIMENT BASINS AND/OR TRAPS AS EARLY AS POSSIBLE DURING PHASE 3 INITIAL AREA STABILIZATION MASS GRADING AS SHOWN ON PLAN. SEDIMENT TRAPS TO BE INCORPORATED INTO PERMANENT DETENTION BASIN.

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.
2.) SEDIMENT BASINS AND/OR TRAPS SHALL BE CLEANED OUT WHEN THE SEDIMENT CAPACITY HAS BEEN REDUCED BY 20% OF ITS ORIGINAL DESIGN VOLUME. REMOVE SEDIMENT BASINS AND/OR TRAPS DURING PHASE 3 INACTIVE AREA STABILIZATION AS THE FINAL STEP IN MASS GRADING ACTIVITIES. IF A SEDIMENTATION BASIN IS EMPLOYED THE SKIMMER SHALL REMAIN IN SERVICE UNTIL ALL AREAS CONTRIBUTING RUNOFF HAVE BEEN STABILIZED WITH THE ESTABLISHMENT OF VEGETATION 90% MINIMUM.

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 EXCEEDS 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.

TEMPORARY CONSTRUCTION ENTRANCE NOTES (CONT'D):

- 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.) REPAIR 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

TEMPORARY SEDIMENT TRAP CALCULATIONS: (AREA D1)

1. TRIBUTARY AREA = 6.00 ac
2. REQUIRED WET VOLUME OF TRAP = 67 cy/ac
= 6.00 X 67 = 402 cy = 10,854 cf
3. REQUIRED DRY VOLUME OF TRAP = 67 cy/ac
= 6.00 X 67 = 402 cy = 10,854 cf
4. WET VOLUME OF PROPOSED TRAP = 10,930 cf
4. DRY VOLUME OF PROPOSED TRAP = 11,585 cf

TEMPORARY SEDIMENT BASIN CALCULATIONS:

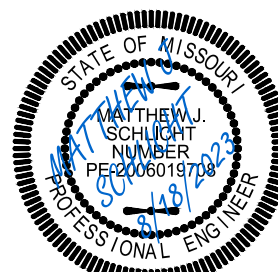
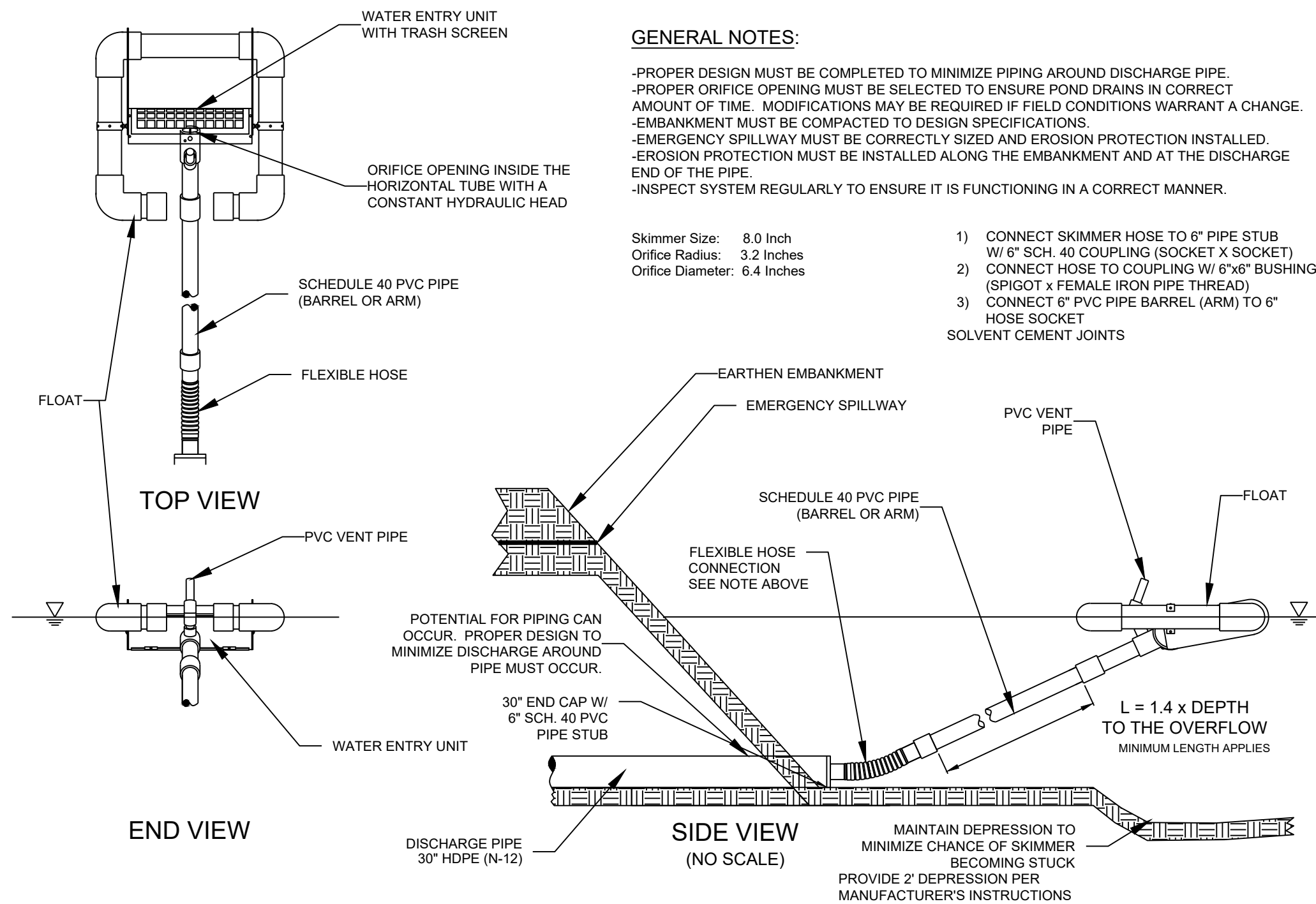
1. TOTAL AREA DRAINING TO BASIN = 11.0 ac
2. REQUIRED VOLUME OF TRAP = 3,600cft PER acre
= 11.0 X 3,600 = 39,600 cft
3. VOLUME OF PROPOSED TRAP = 129,219 cft

GENERAL NOTES:

- PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
- PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
- EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
- EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
- EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
- INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.

Skimmer Size: 8.0 Inch
Orifice Radius: 3.2 Inches
Orifice Diameter: 6.4 Inches

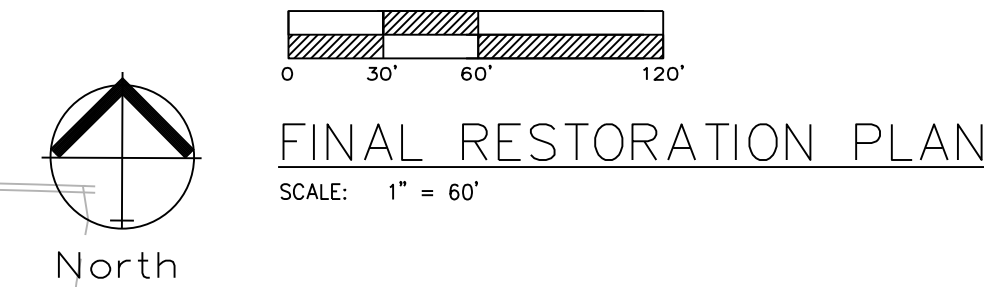
- 1) CONNECT SKIMMER HOSE TO 6" PIPE STUB W/ 6" SCH. 40 COUPLING (SOCKET X SOCKET)
- 2) CONNECT HOSE TO COUPLING W/ 6"x6" BUSHING (SPIGOT x FEMALE IRON PIPE THREAD)
- 3) CONNECT 6" PVC PIPE BARREL (ARM) TO 6" HOSE SOCKET
SOLVENT CEMENT JOINTS



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

REVISIONS

- | | |
|---------|----------------|
| REV. | 5/5/2021 |
| Δ | REV. 5/26/2021 |
| Δ | REV. 6/22/2021 |
| Δ | REV. 6/29/2021 |
| Updated | 6/16/2023 |
| Updated | 7/21/2023 |
| Updated | 8/18/2023 |



- 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:

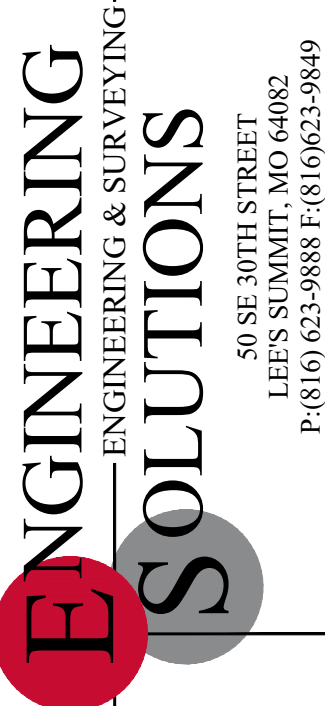
Lime - 100% of specified quantity
Fertilizer - 75% of the specified quantity
Seed - 50% of the specified quantity
Mulch - 100% of the specified quantity

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

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Lee's Summit, Missouri
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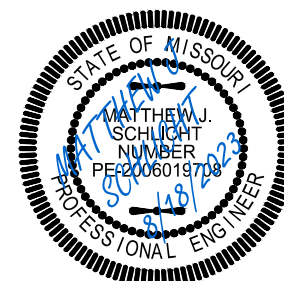


Professional Registration
Missouri
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Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Part of the Southeast 1
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Project:
WOODLAND OAKS
LSMO
Issue Date:
February 25, 2021

ESC PHASE 3 - Final Restoration Plan
Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri



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

REVISIONS

REV. 5/5/2021

REV. 5/26/2021

REV. 6/22/2021

REV. 6/29/2021

Updated 6/16/2023

Updated 7/21/2023

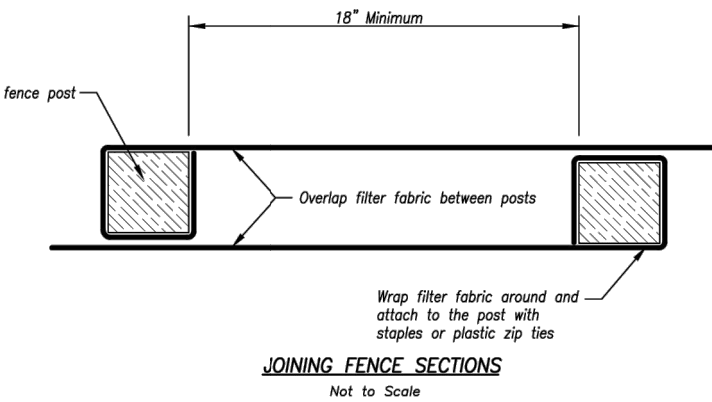
Updated 8/18/2023

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.



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.

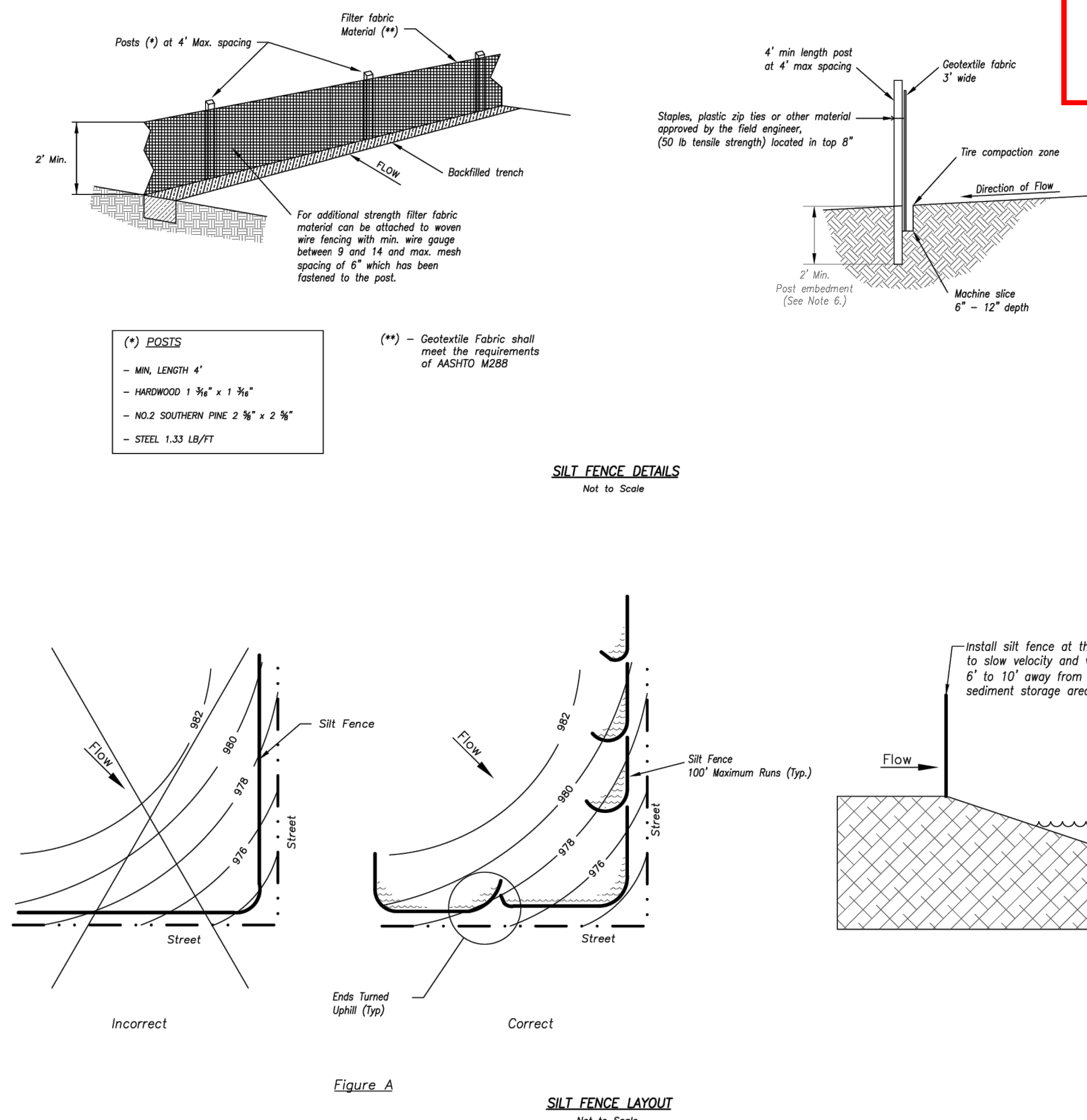


Figure A

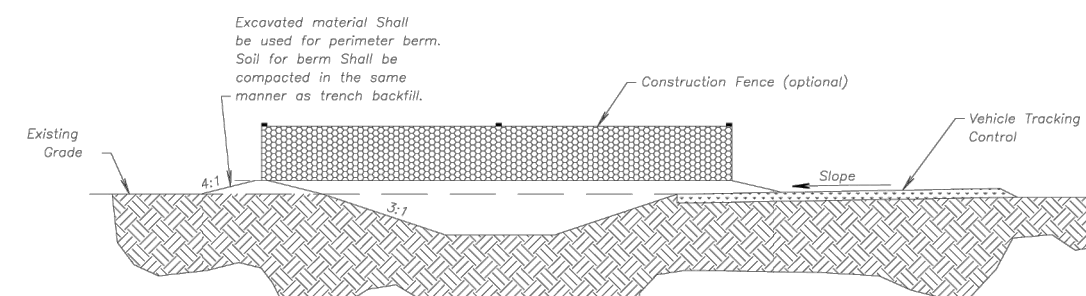
Not to Scale

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 1/2" subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 2:1. 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:

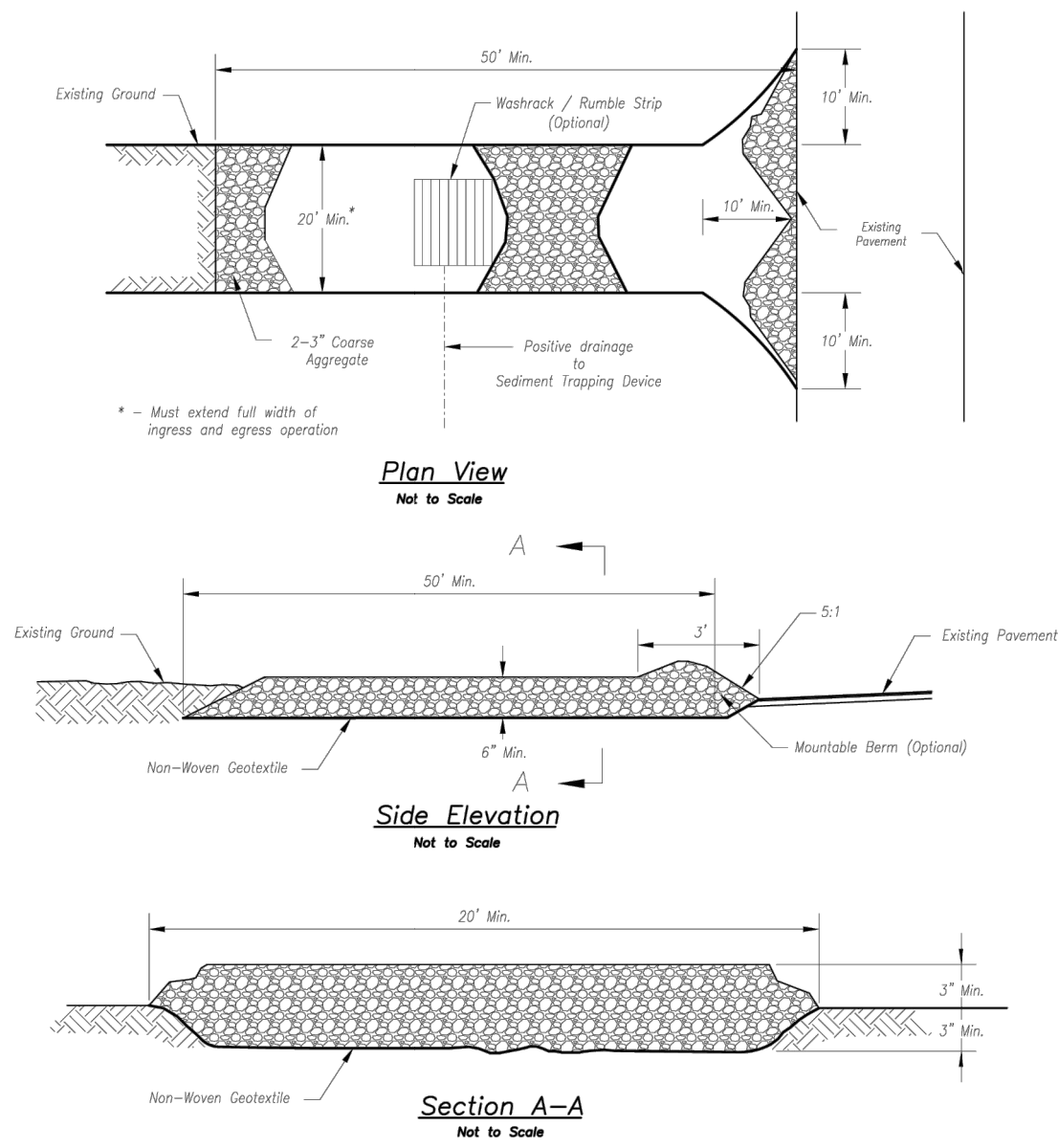
1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, wasted pieces of concrete and all other debris in the subsurface 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 topped with a disturbed area associated with the installation, maintenance, and/or removal of the concrete washout areas shall be established.



CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION Kansas City Metro Chapter	
KANSAS CITY METRO CHAPTER	
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.



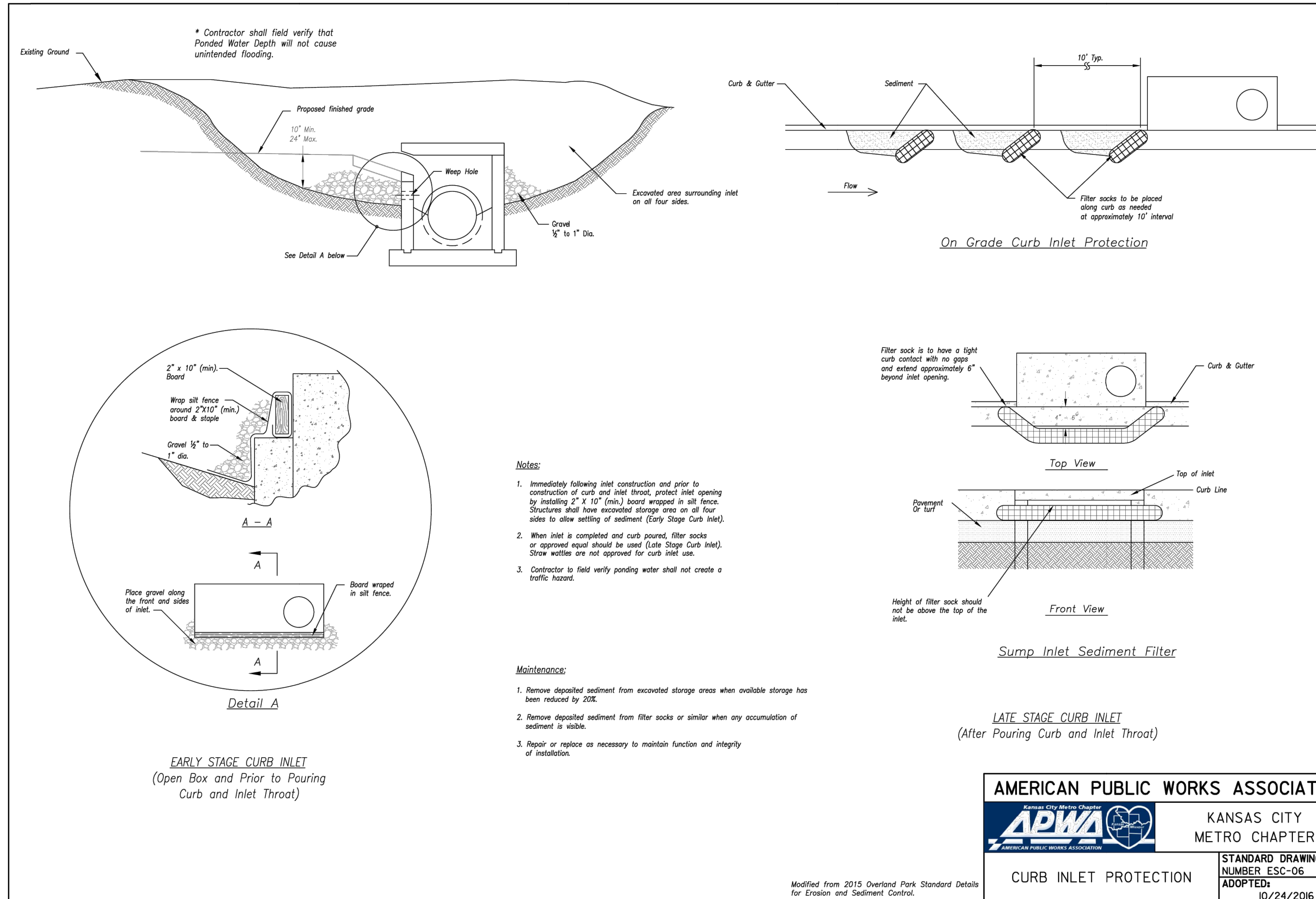
Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or adjacent to railroad area.
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



EARLY STAGE CURB INLET
(Open Box and Prior to Pouring Curb and Inlet Throat)

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 silt 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.

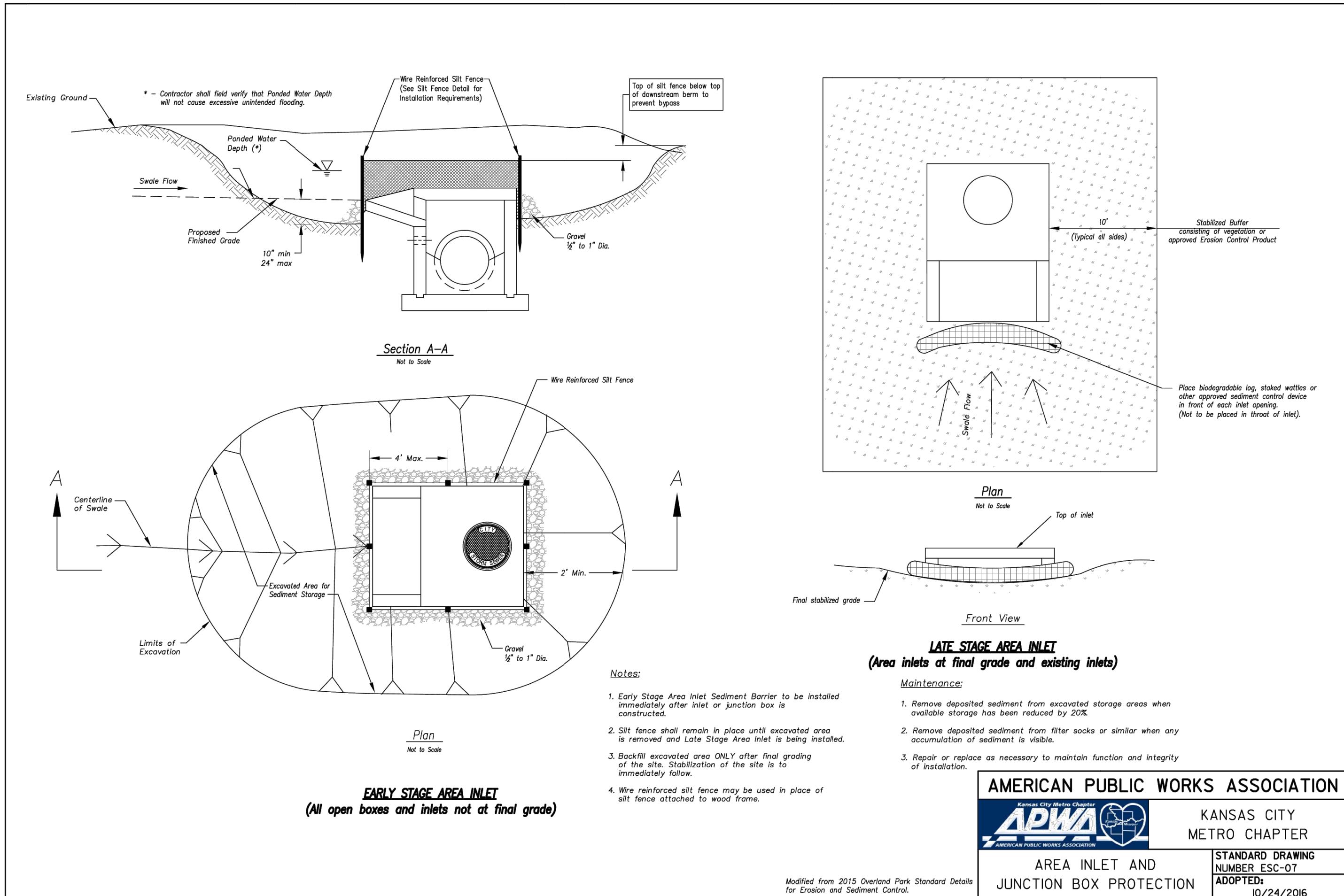
Maintenance:

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.



EARLY STAGE AREA INLET
(All open boxes and inlets not at final grade)

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.

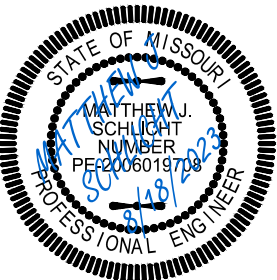
LATE STAGE AREA INLET
(Area inlets at final grade and existing inlets)

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.



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

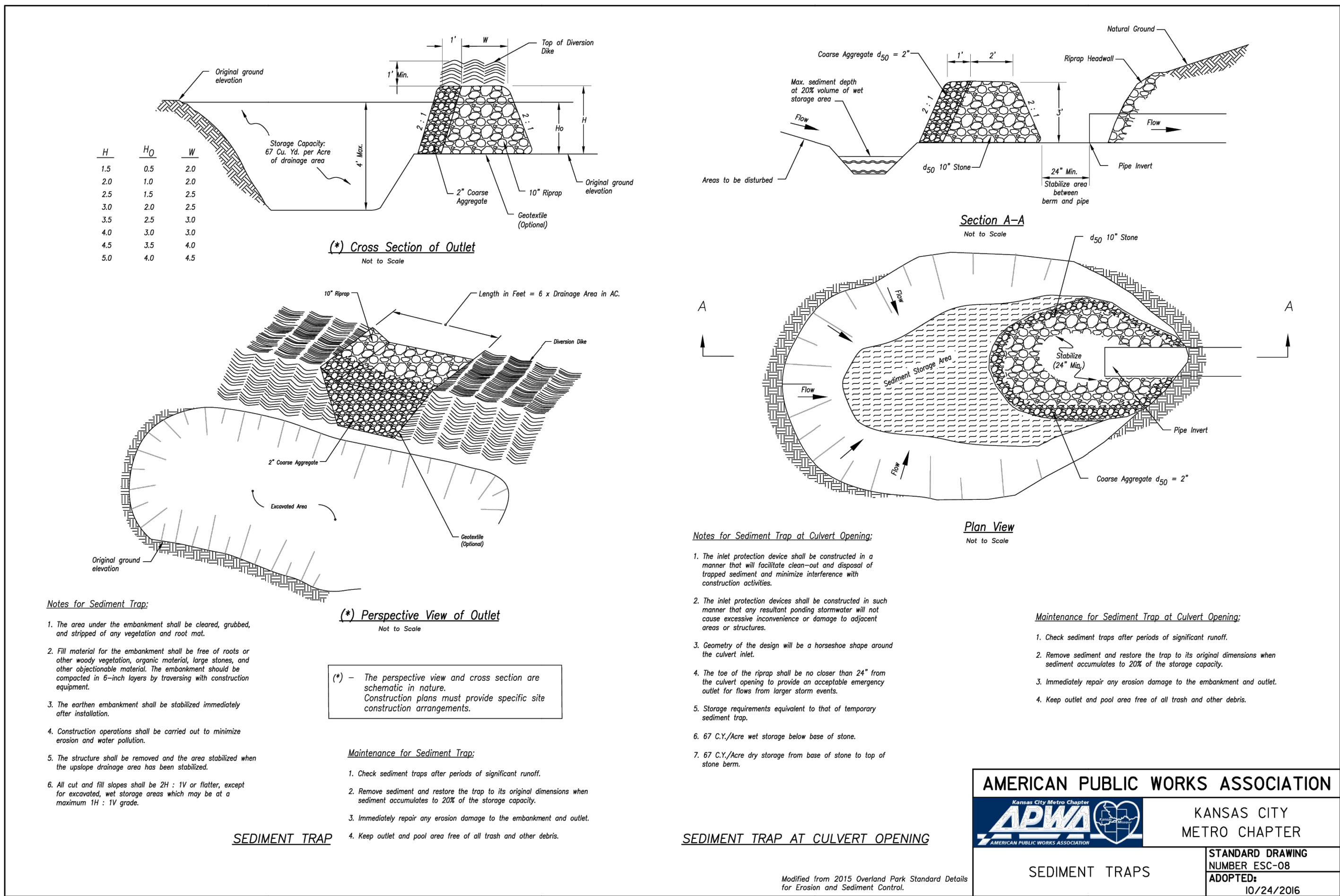
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REV. 6/22/2021
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Updated 7/21/2023
Updated 8/18/2023

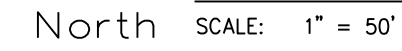
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Professional Registration
Missouri
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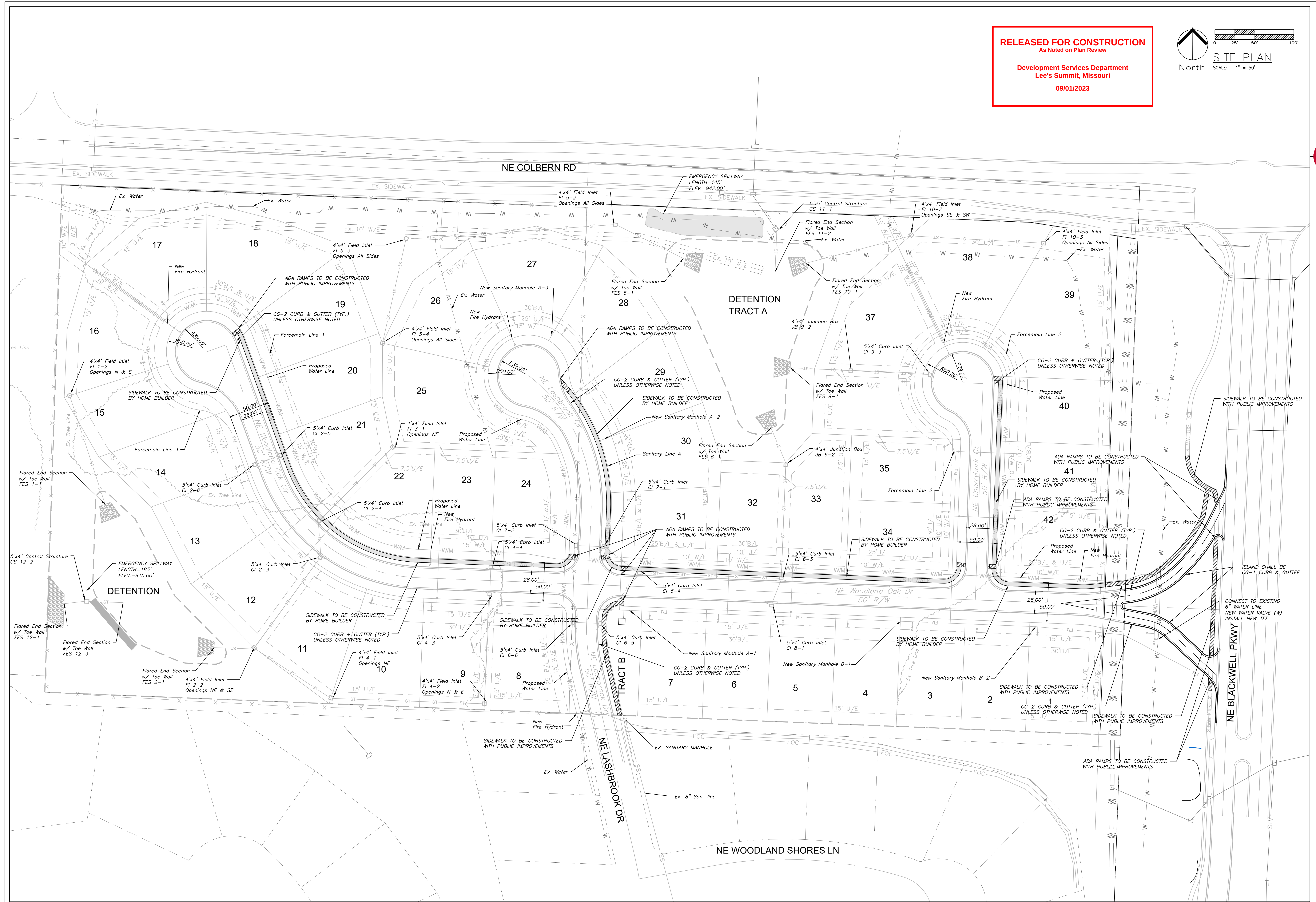
Project: WOODLAND OAKS
LSMO
Issue Date: February 25, 2021

STATE OF MISSOURI
MATTHEW J. SCHLUCHT
NUMBER
PE2006019708
PROFESSIONAL ENGINEER

REVISIONS

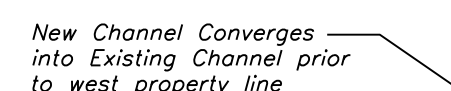
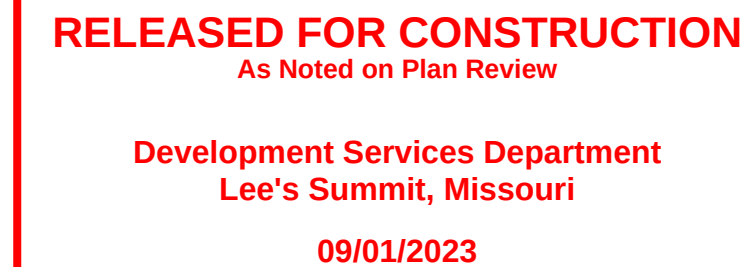
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Δ	<u>REV. 5/26/2021</u>
Δ	<u>REV. 6/22/2021</u>
Δ	<u>REV. 6/29/2021</u>
	<u>Updated 6/16/2023</u>
	<u>Updated 7/21/2023</u>
	<u>Updated 8/18/2023</u>

100





NOTE: Swale should be lined with "Straw with Net" turf reinforcement (Curlex Blanket or Eqv.). Per Table 5607-1 in APWA Manual



ER DRAINAGE PLAN SHEET
GRADING PLAN - SWPPP

Part of the Southeast $\frac{1}{4}$
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Professional Registration
Missouri
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Kansas
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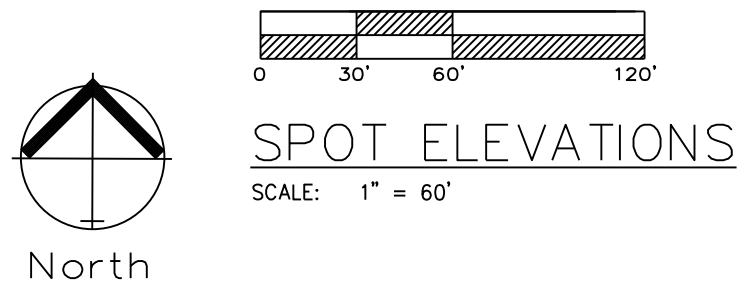
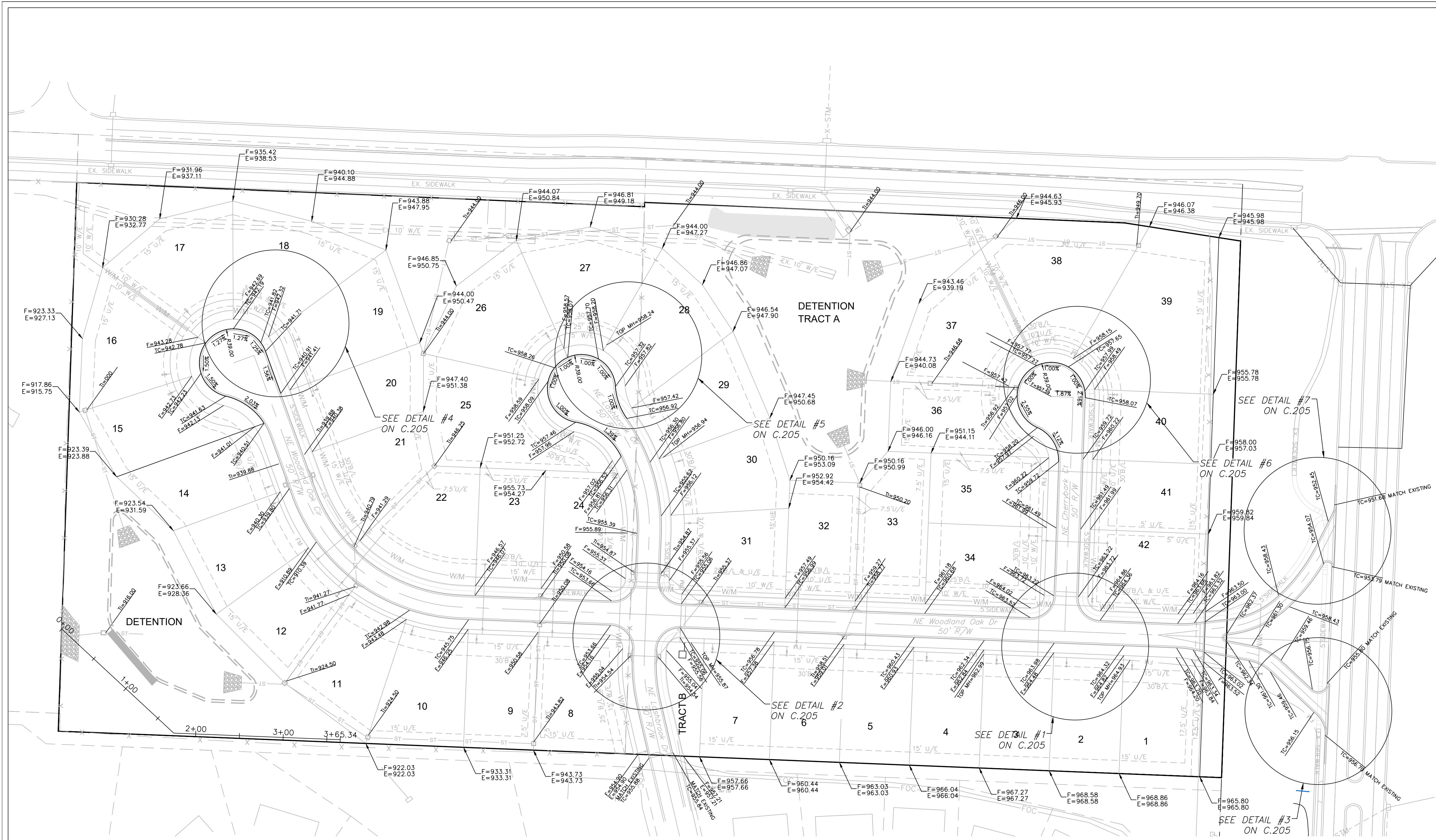
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③	REV. 6/22/2021
④	REV. 6/29/2021
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	Updated 8/18/2023

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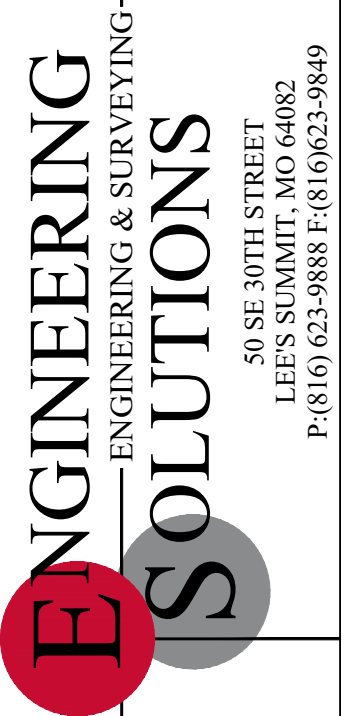


Lot Number	Bosement Type	MBOE
1	Standard	
2	Standard	
3	Standard	
4	Standard	
5	Standard	
6	Standard	
7	Standard	
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9	Walkout	945.58
10	Walkout	925.86
11	Walkout	925.65
12	Walkout	925.65
13	Walkout	917.4
14	Walkout	917.4
15	Walkout	919.77
16	Daylight	919.77
17	Standard	
18	Standard	
19	Standard	945.15
20	Standard	945.14
21	Standard	947.42
22	Standard	947.42
23	Standard	
24	Standard	
25	Walkout	945.14
26	Walkout	945.15
27	Walkout	945.12
28	Walkout	943.49
29	Walkout	943.49
30	Daylight	943.49
31	Standard	
32	Walkout	943.49
33	Walkout	943.49
34	Daylight	
35	Daylight	
36	Walkout	943.49
37	Walkout	943.49
38	Daylight	
39	Daylight	950.93
40	Daylight	
41	Daylight	
42	Standard	

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Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

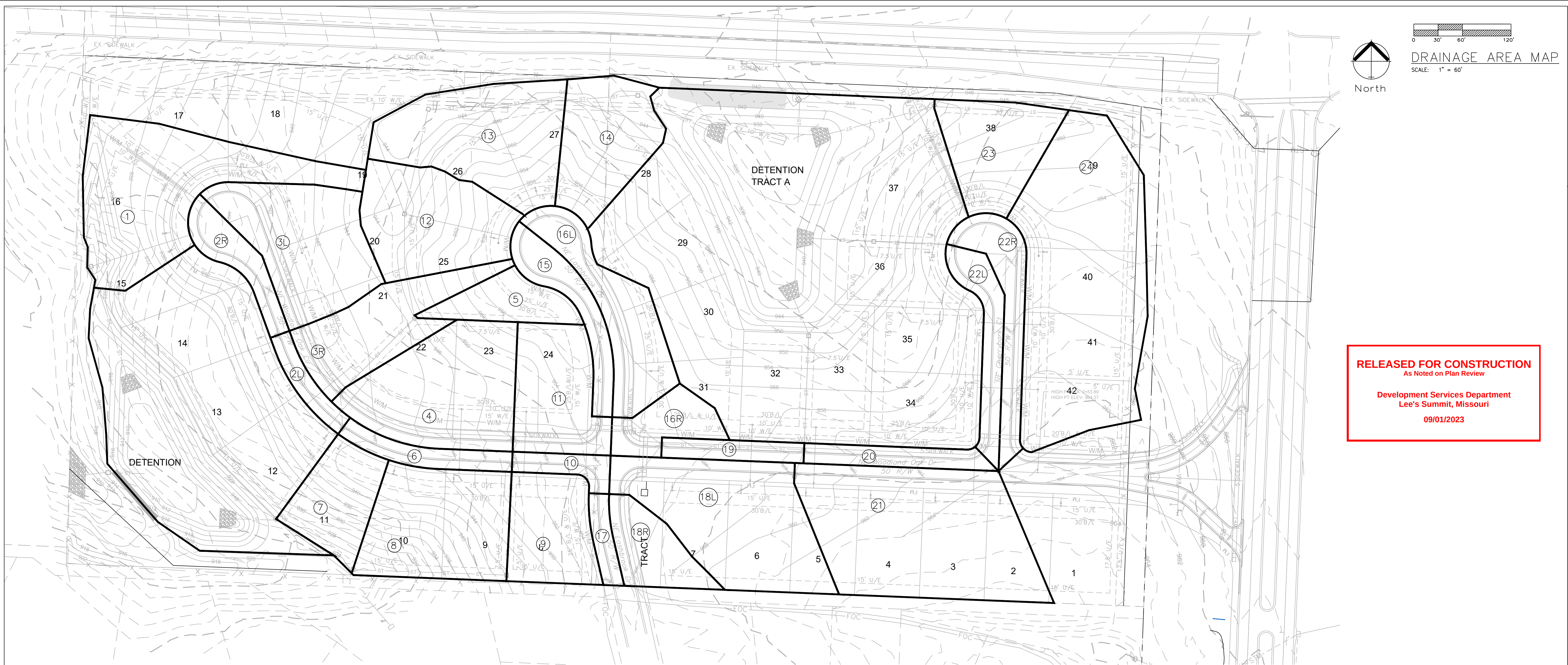
Project:
WOODLAND OAKS
LSMO
Issue Date:
February 25, 2021

MASTER DRAINAGE PLAN SHEET 2 OF 3
SPOT ELEVATIONS
Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri



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MO PE 0006019708
KS PE 19071
OK PE 25226
NE PE E-14335

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Updated 8/18/2023



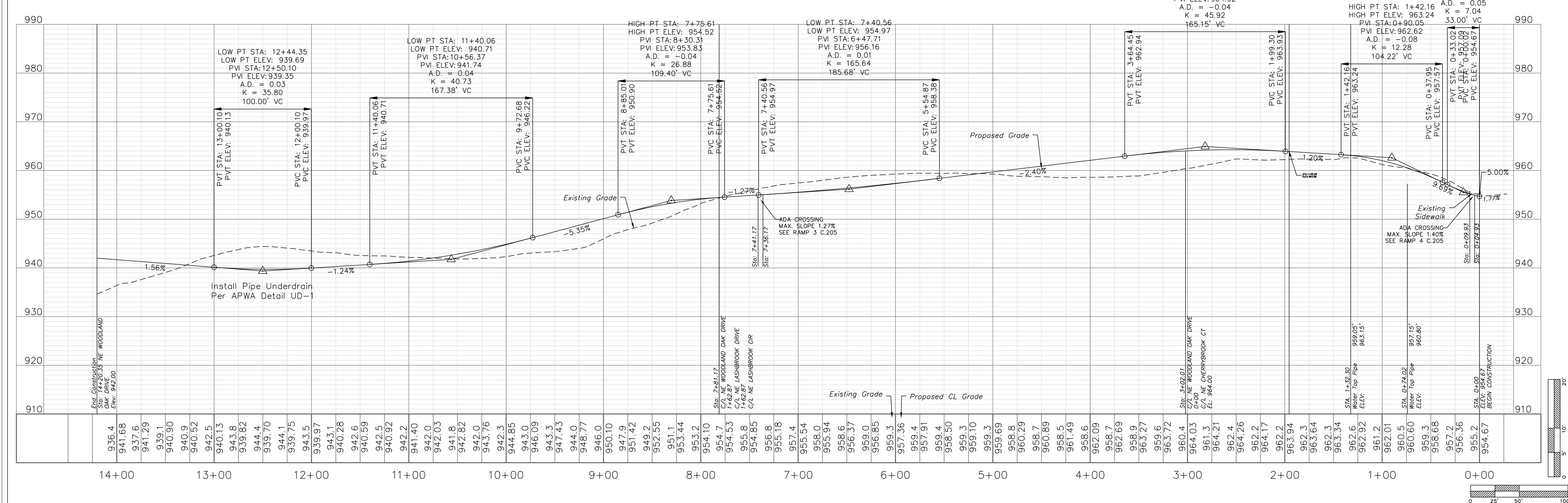
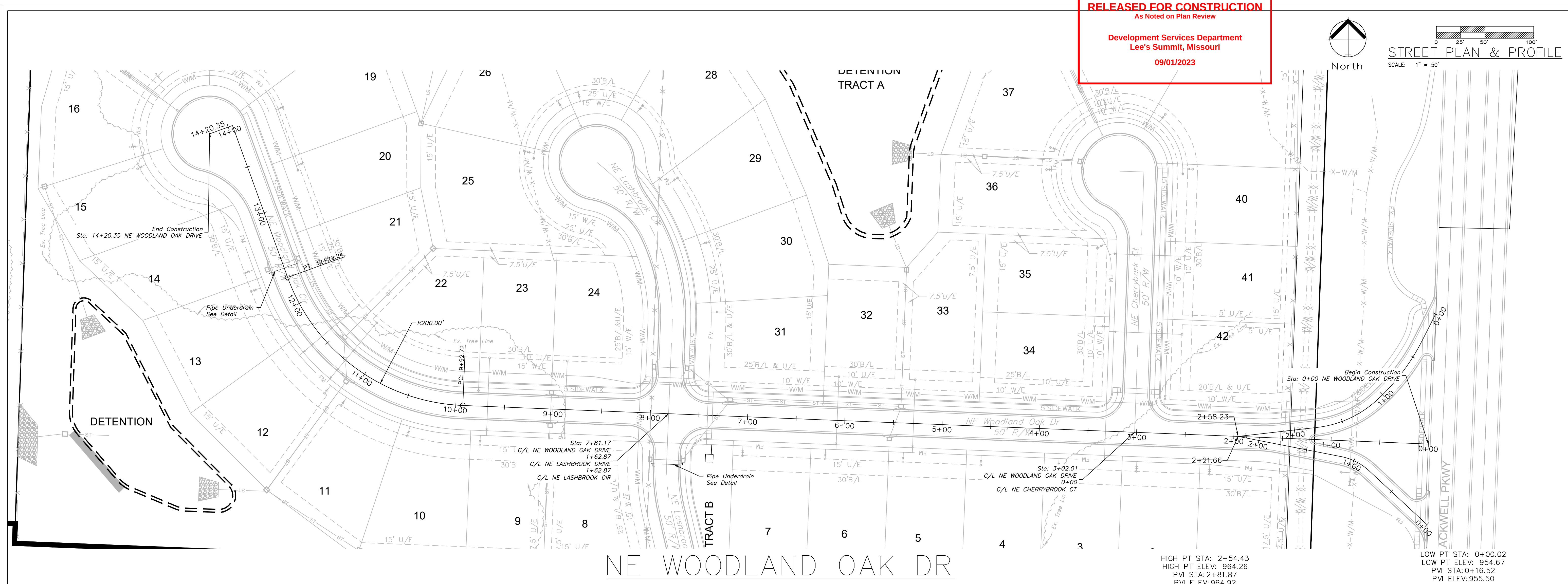
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APWA STORM DRAINAGE "TC" COMPUTATIONS FOR : WOODLAND OAKS (COLBERN & BLACKWELL)																									
yellow areas are self computing overwrite if necessary					Surface types: SURFACE CODES *C" Values																				AREA ID
					A B D G L M S U Z																				
					0.90 0.87 0.60 0.30 0.90 0.66 0.51 0.3																				
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Kansas
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Oklahoma
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Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

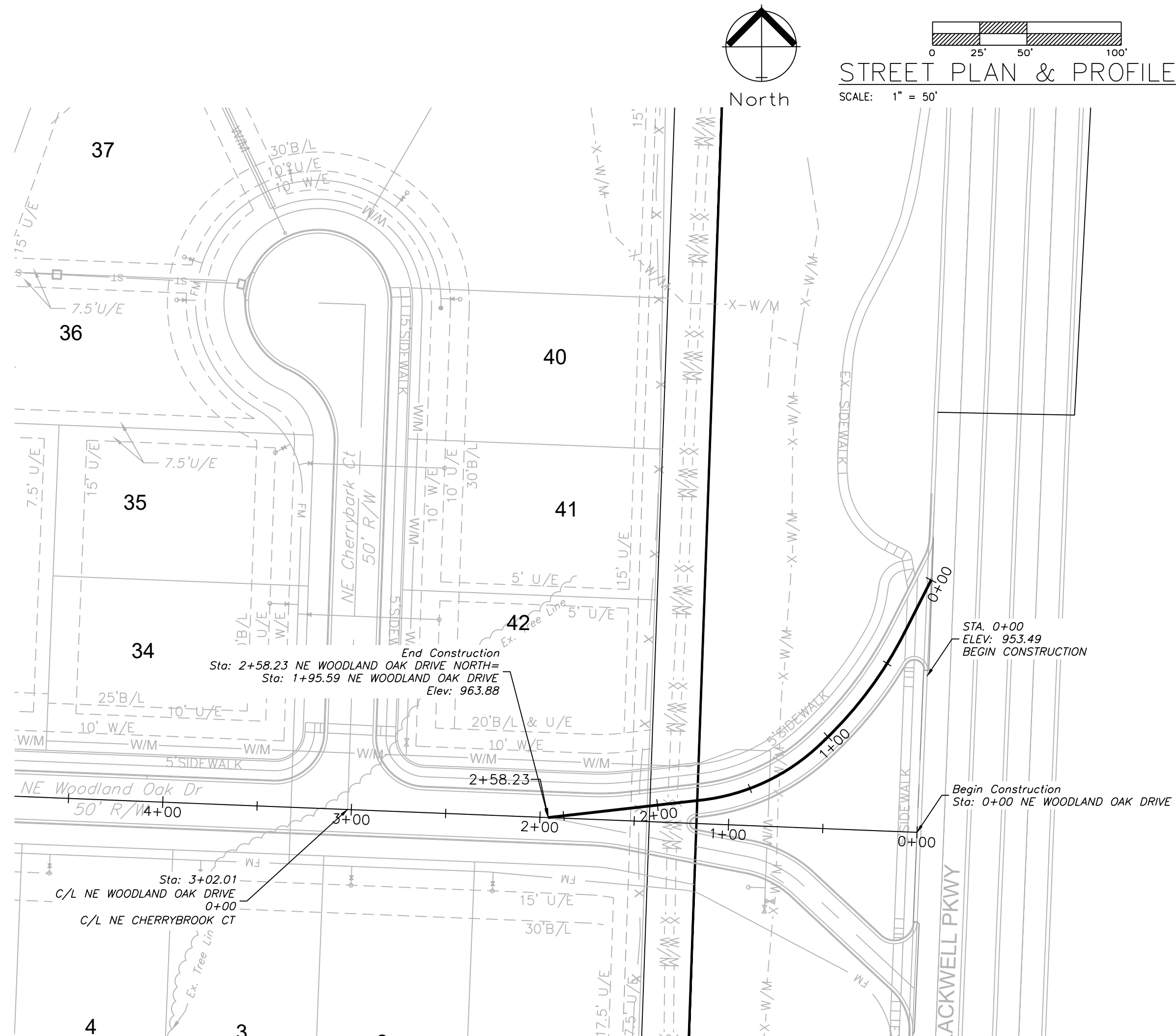
Project: WOODLAND OAKS
LSMO
Issue Date: February 25, 2021

Street Plan and Profile
Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri

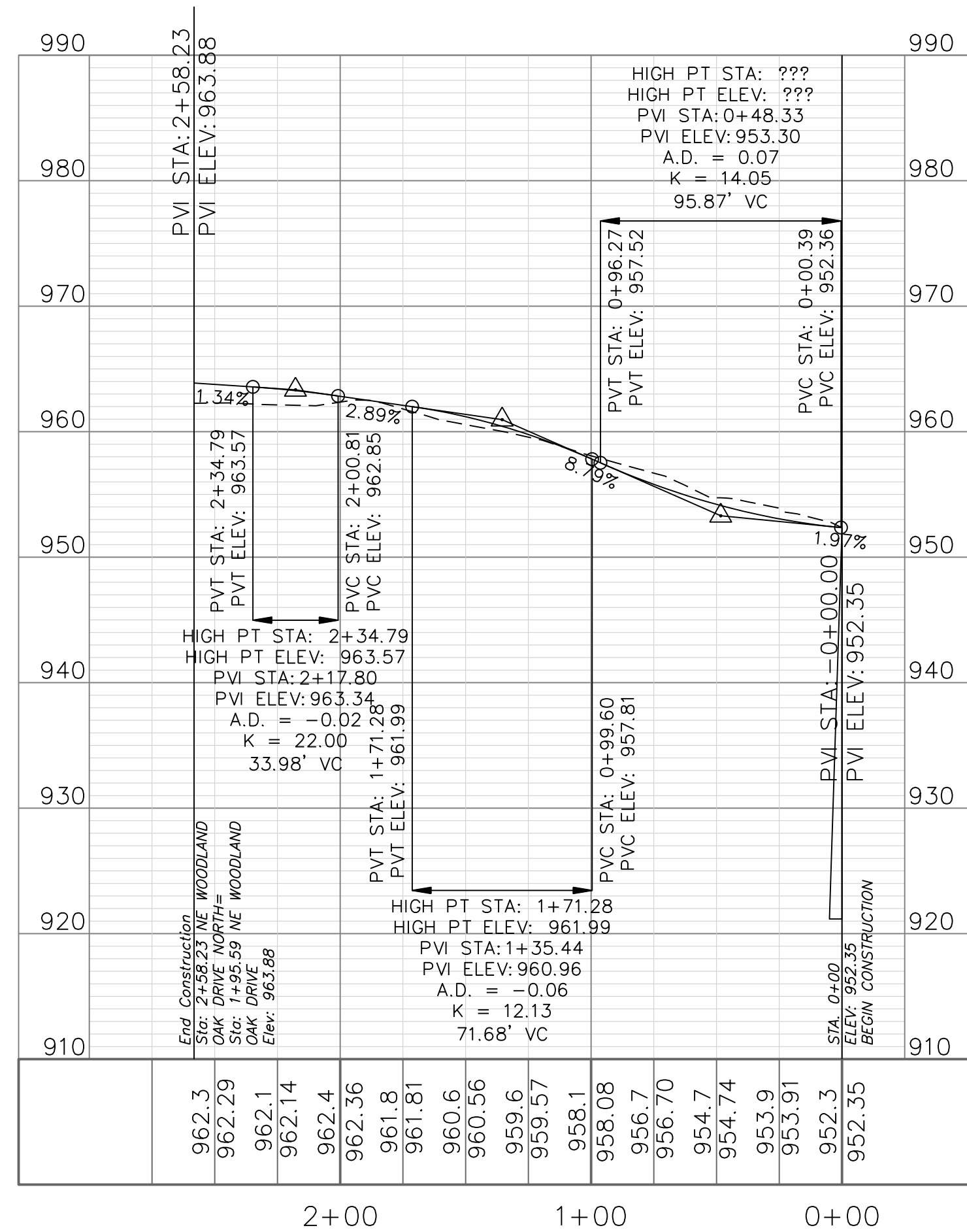
Matthew J. Schlacht
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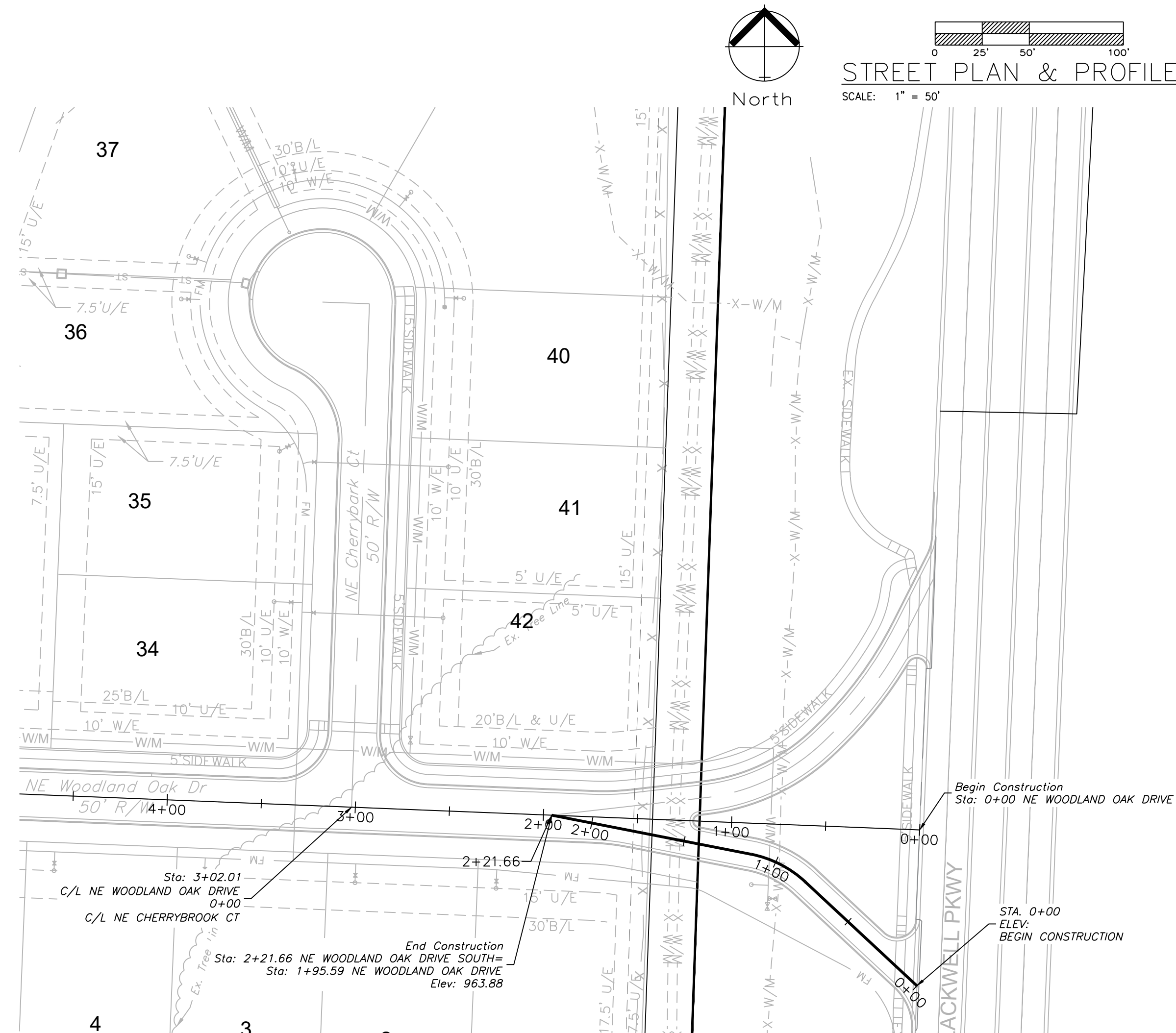


NE WOODLAND OAK DR NORTH

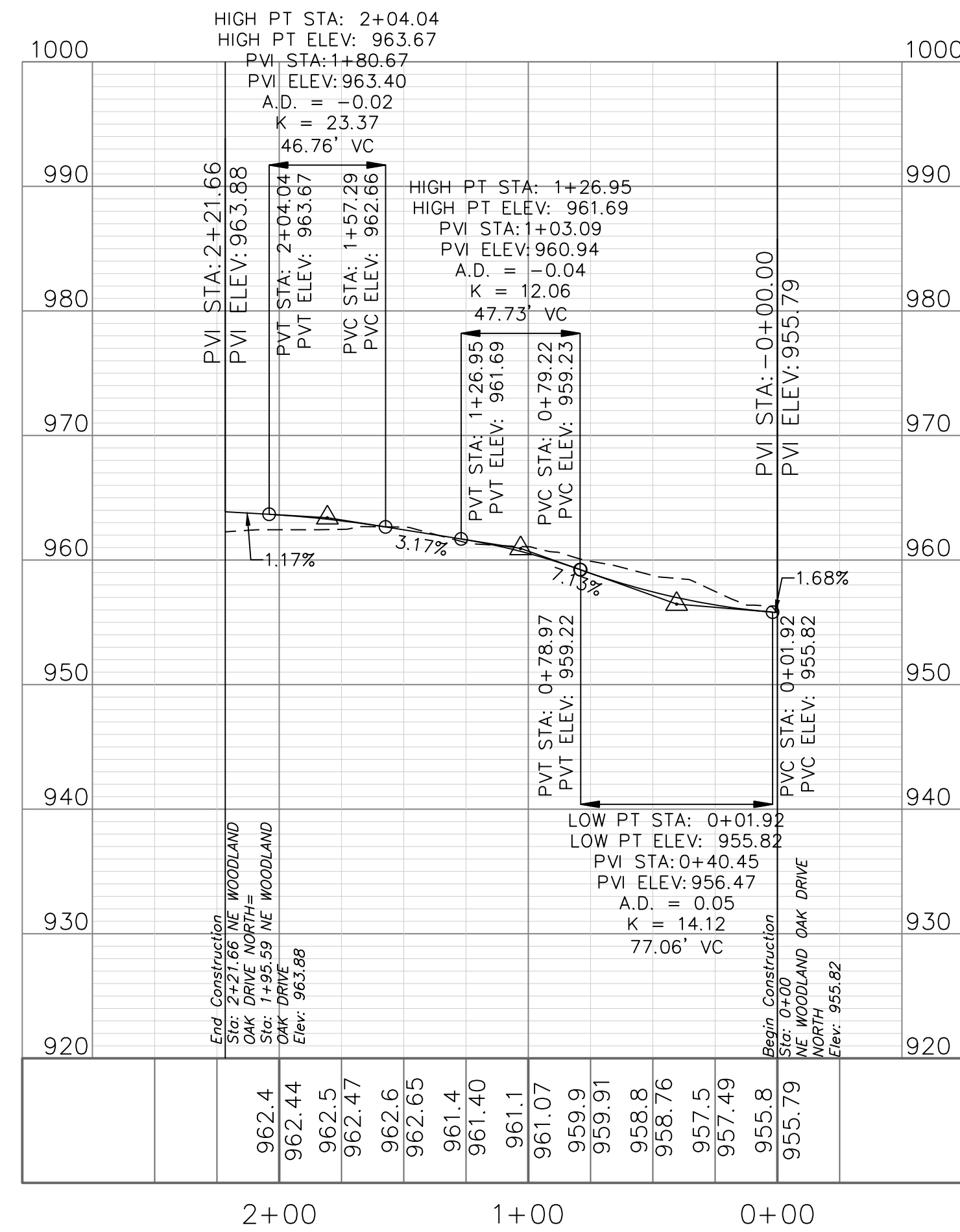


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Lee's Summit, Missouri
09/01/2023

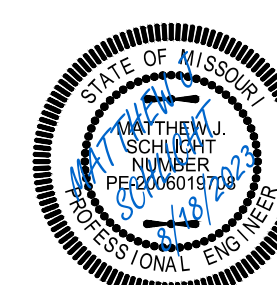


NE WOODLAND OAK DR SOUTH



Street Plan and Profile

Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri



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

REVISIONS

REV. 5/5/2021
REV. 5/26/2021
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Updated 6/16/2023
Updated 7/21/2023
Updated 8/18/2023

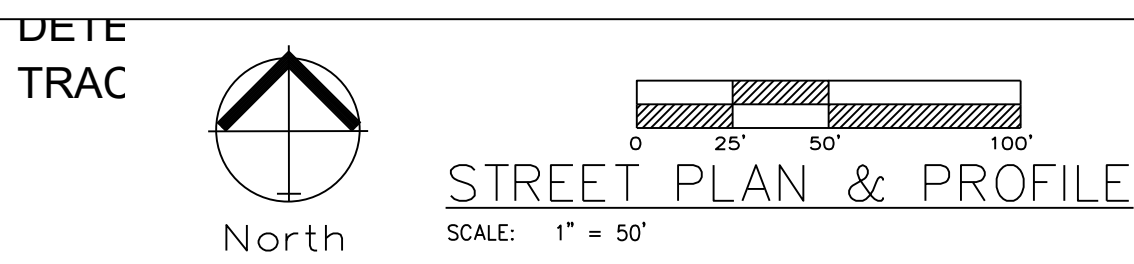
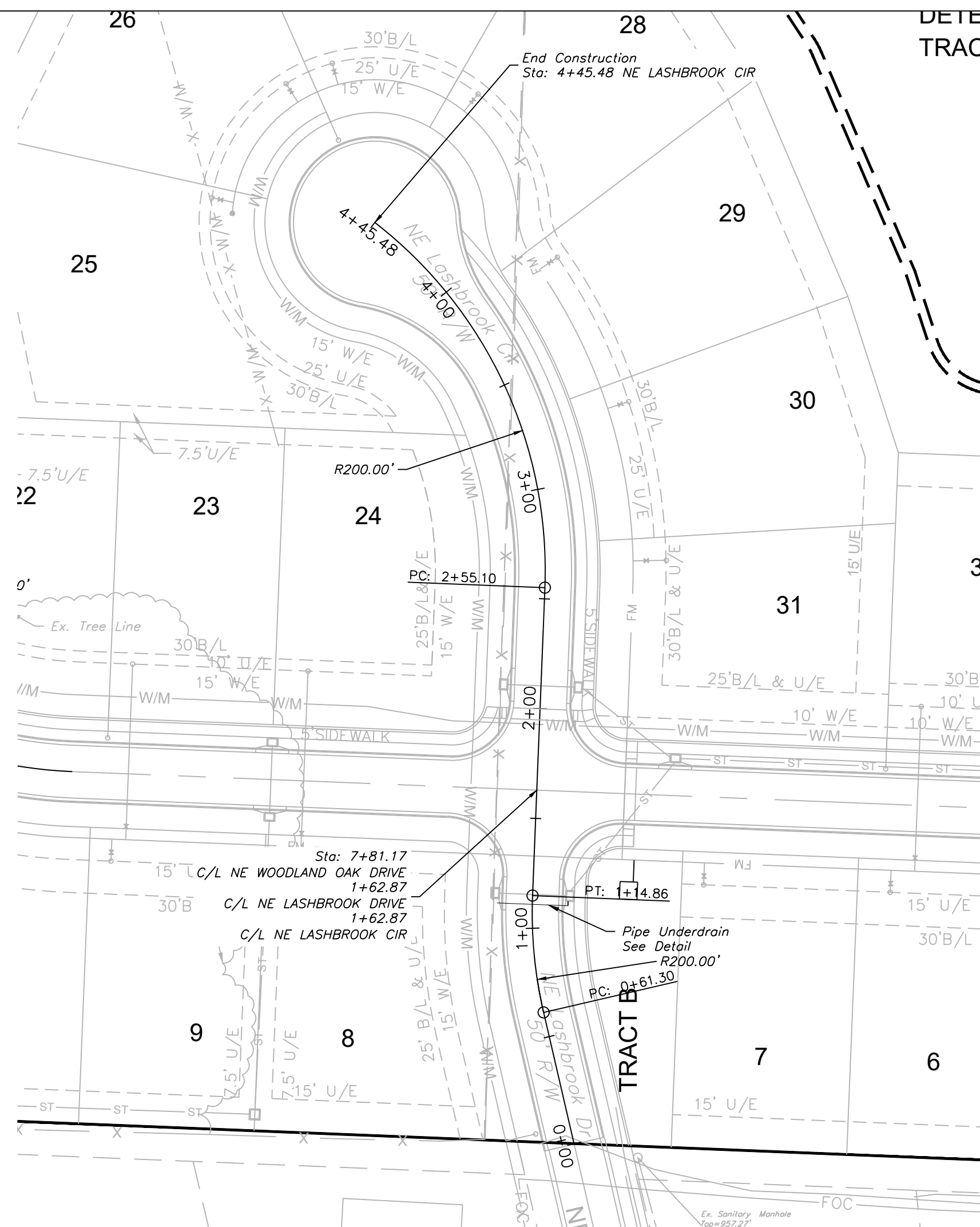
C. 203A

Project:
WOODLAND OAKS
LSMO
Issue Date:
February 25, 2021

Part of the Southeast 1/4
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1685
Surveying LS-218
Oklahoma
Engineering 6284
Nebraska
Engineering CA2821

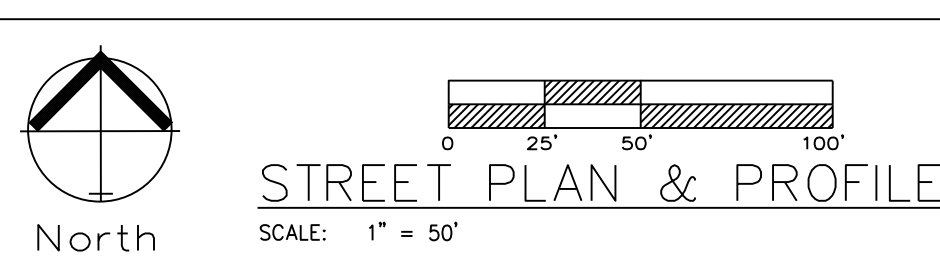
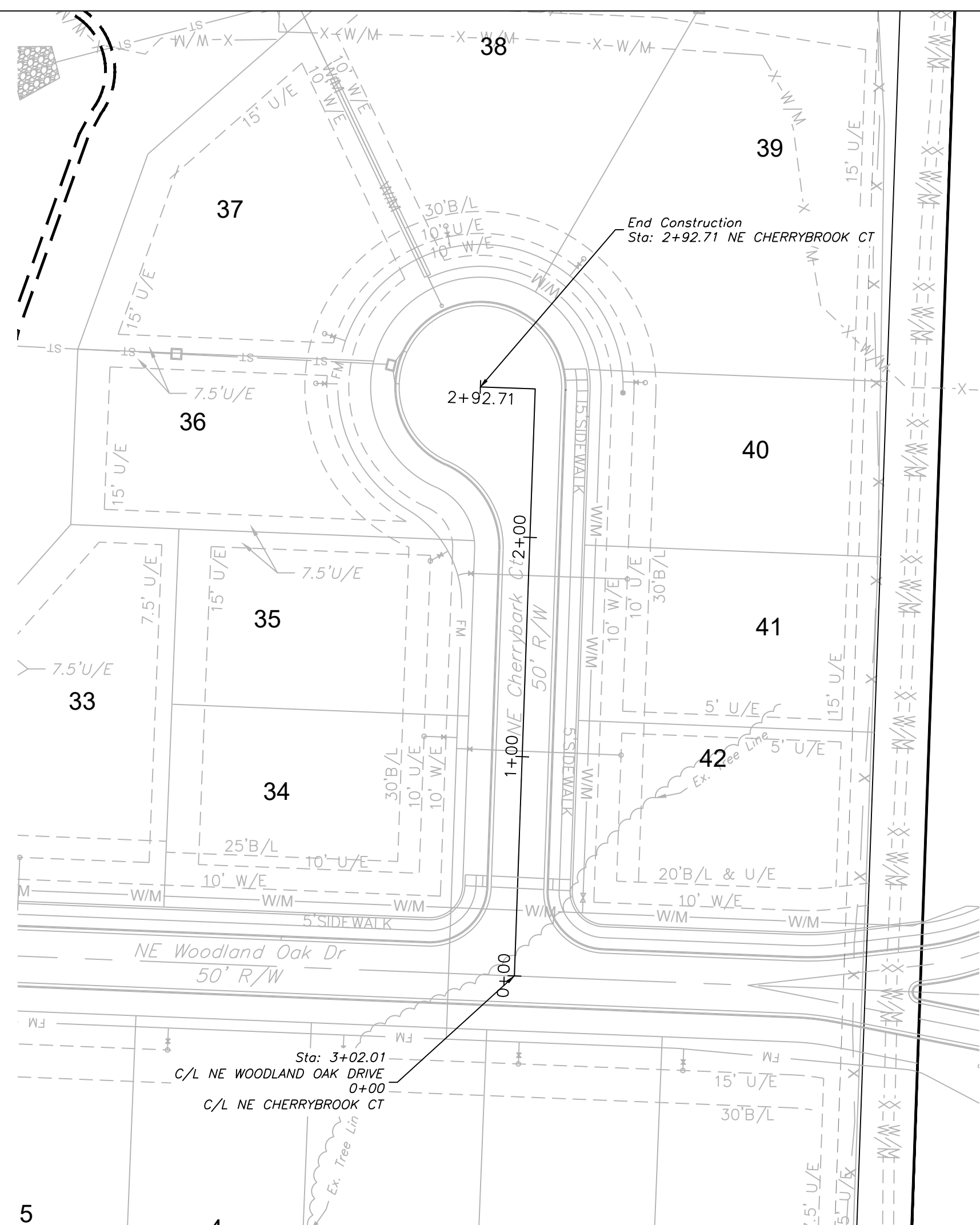
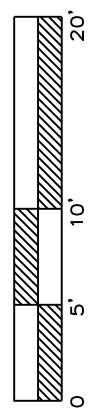
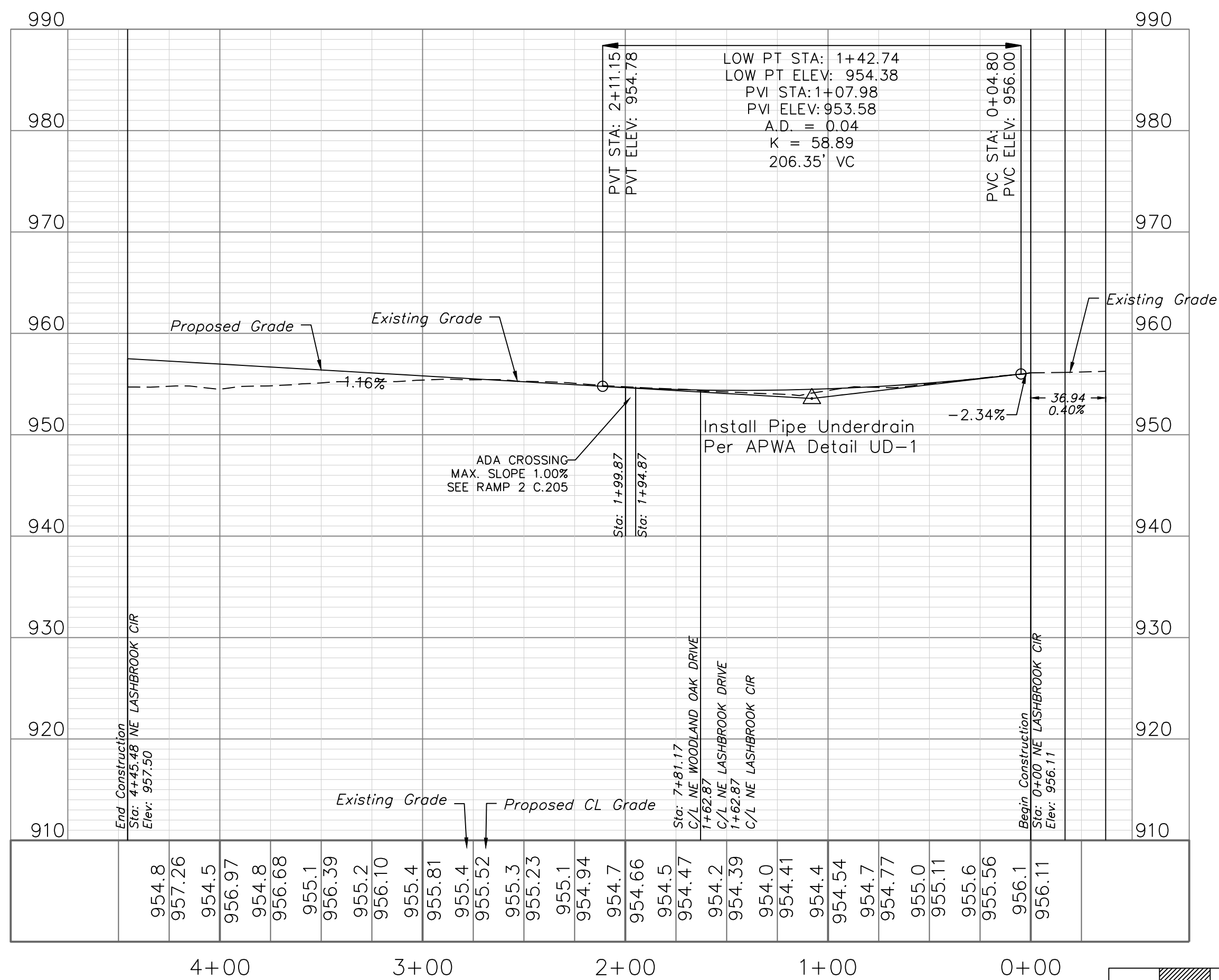
ENGINEERING SOLUTIONS
ENGINEERING & SURVEYING
50 SE 30TH STREET
LEE'S SUMMIT, MO 64082
P: (816) 623-9888 F: (816) 623-9849



STREET PLAN & PROFILE

SCALE: 1" = 50'

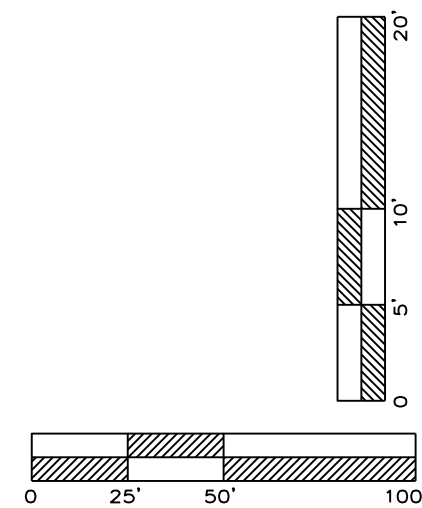
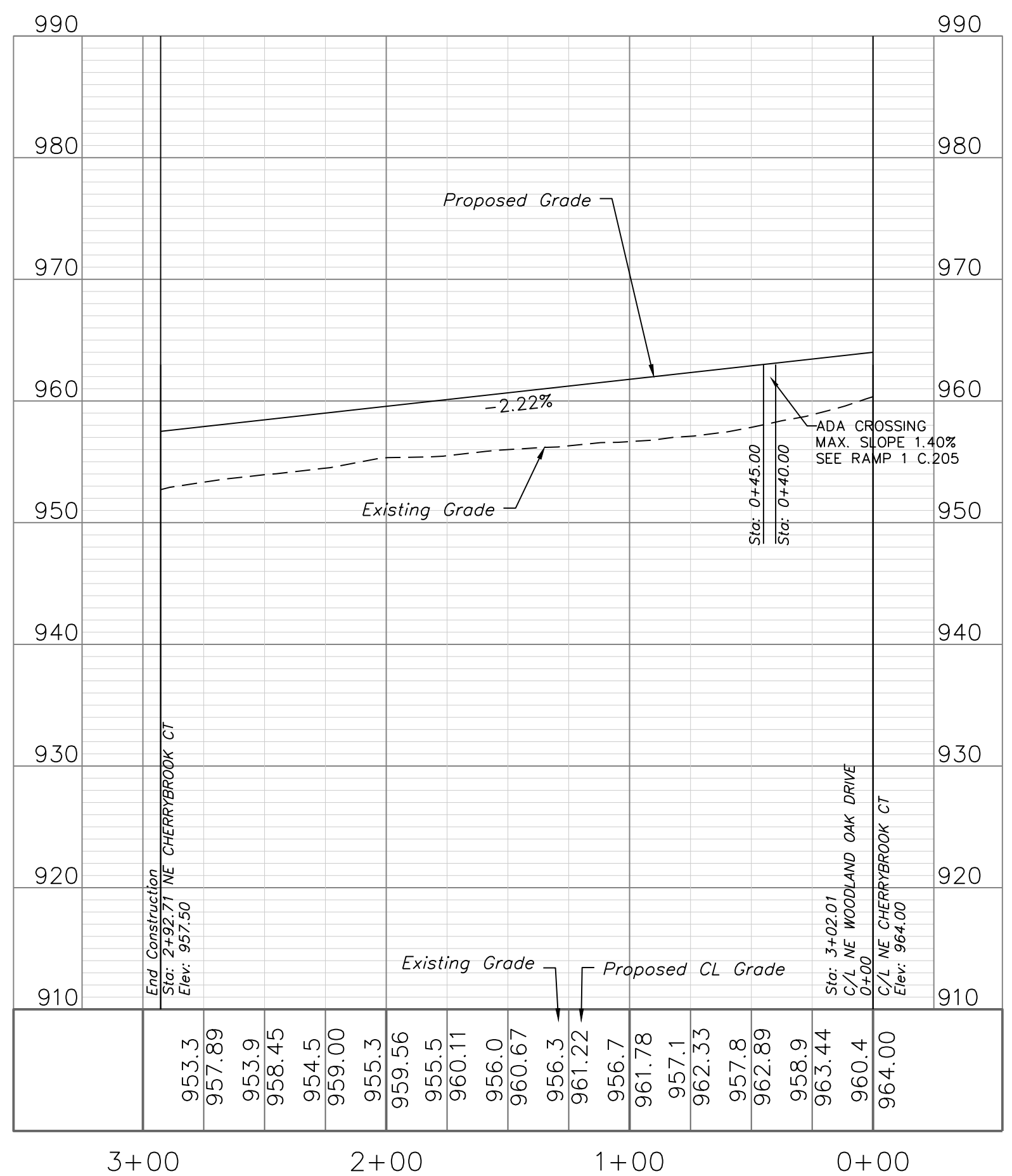
NE LASHBROOK DR



STREET PLAN & PROFILE

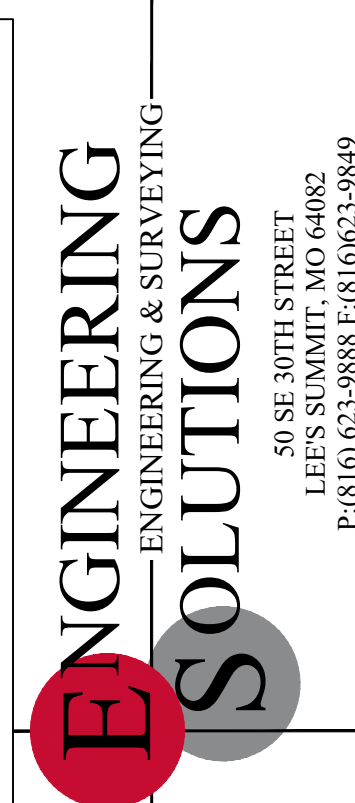
SCALE: 1" = 50'

NE CHERRYBARK CT



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Lee's Summit, Missouri
09/01/2023

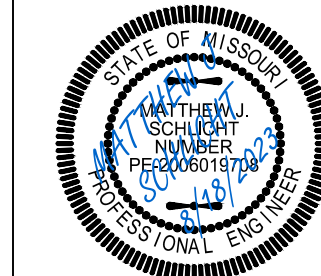


Professional Registration
Missouri
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Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2821

Part of the Southeast
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Project:
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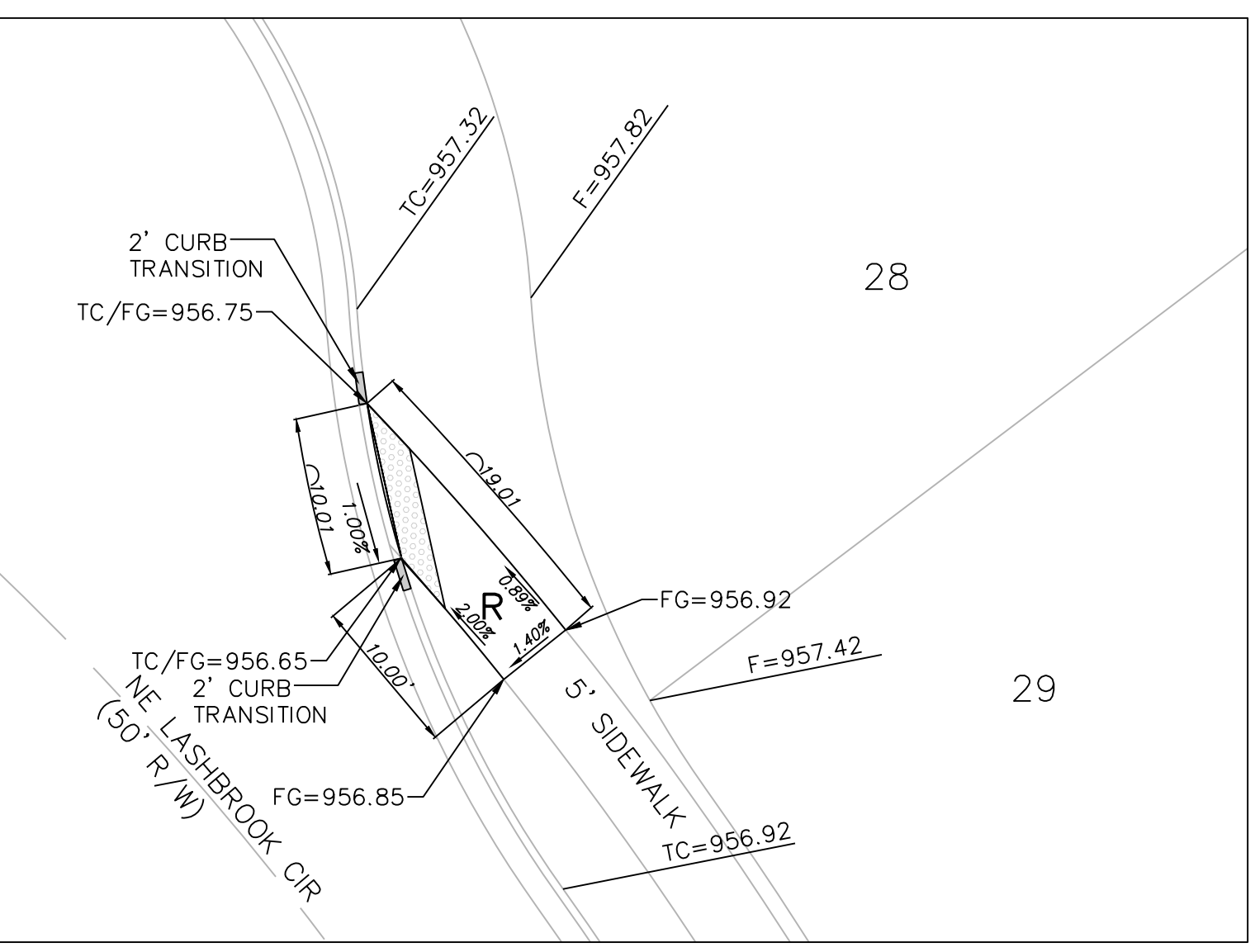
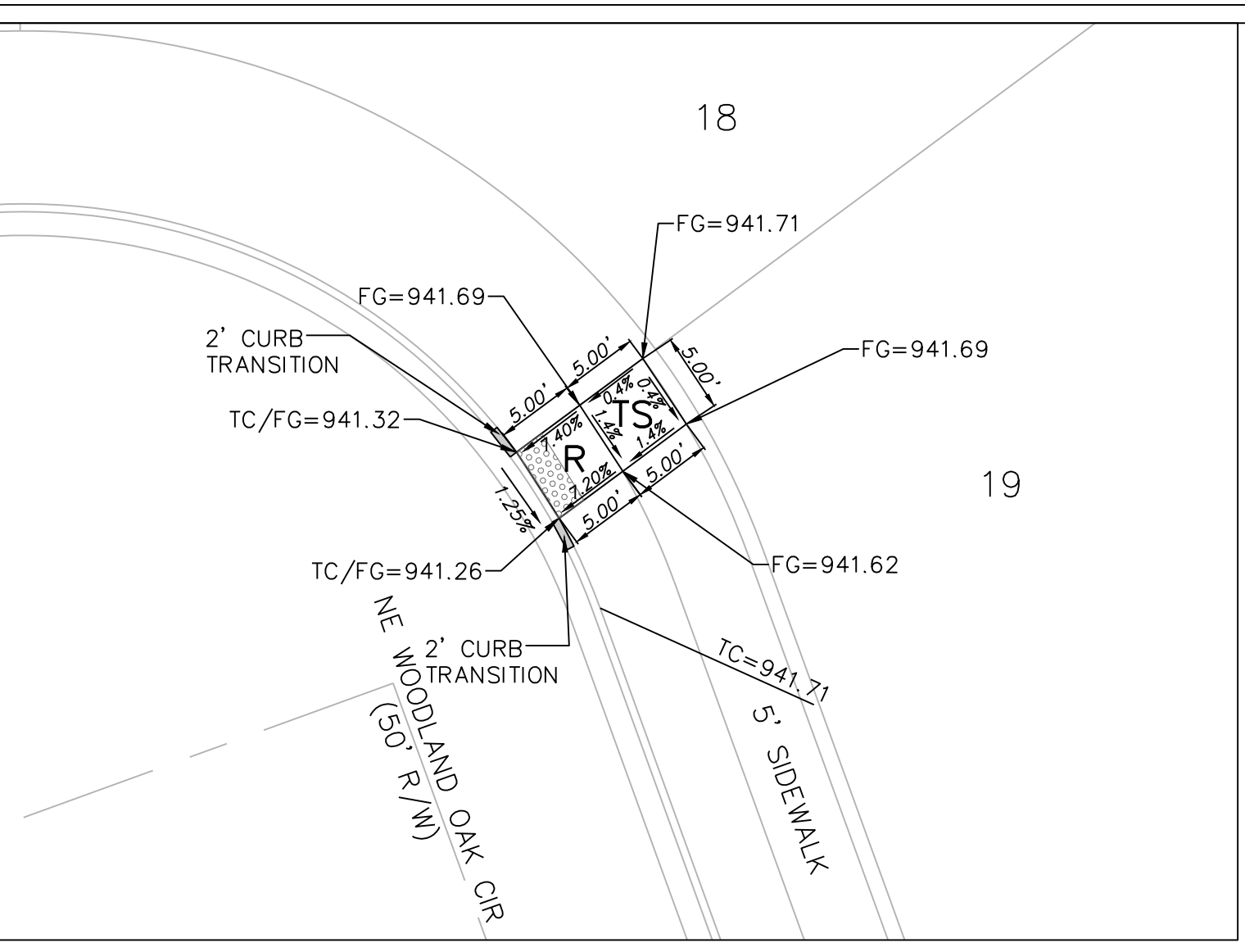
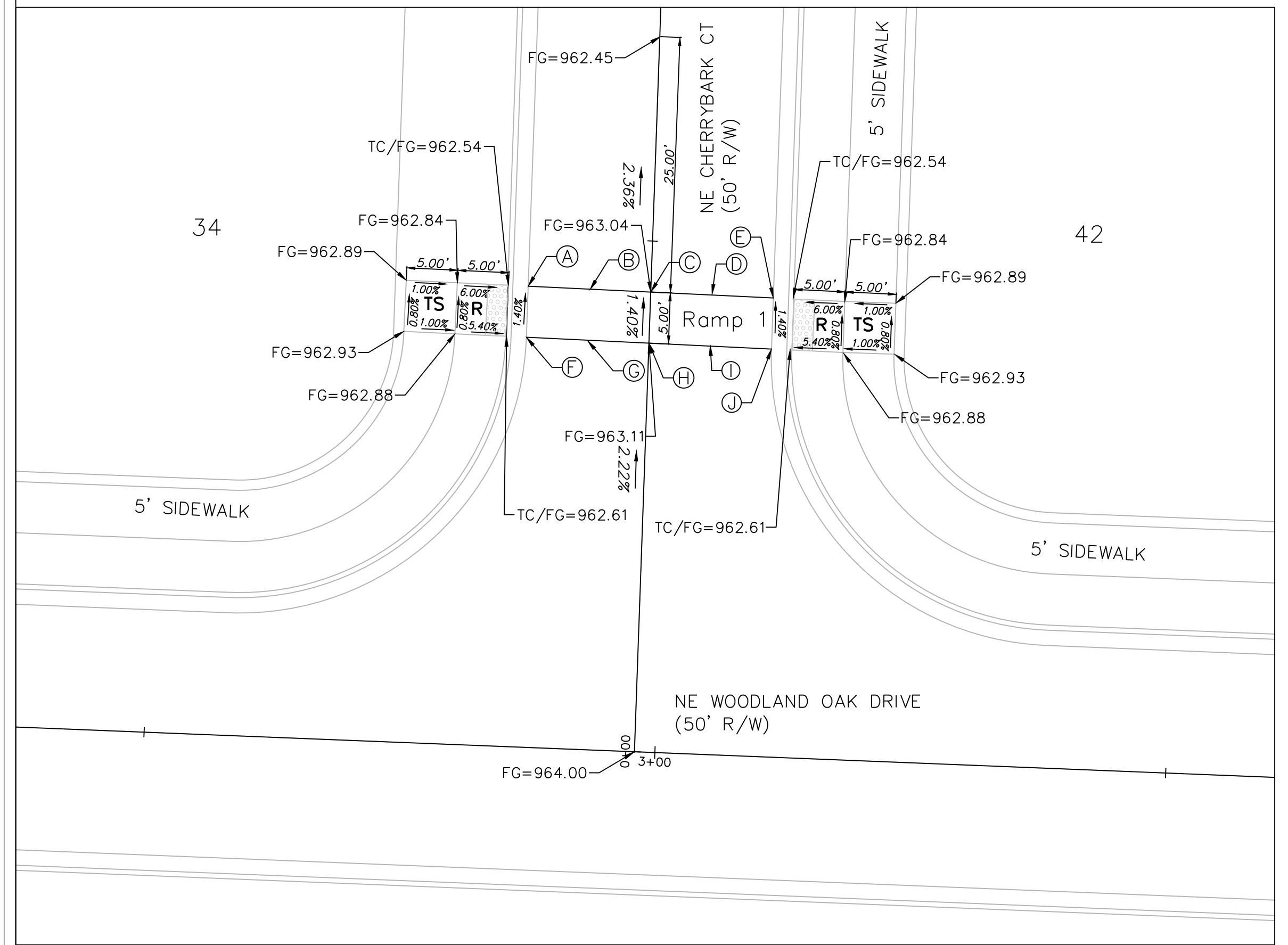
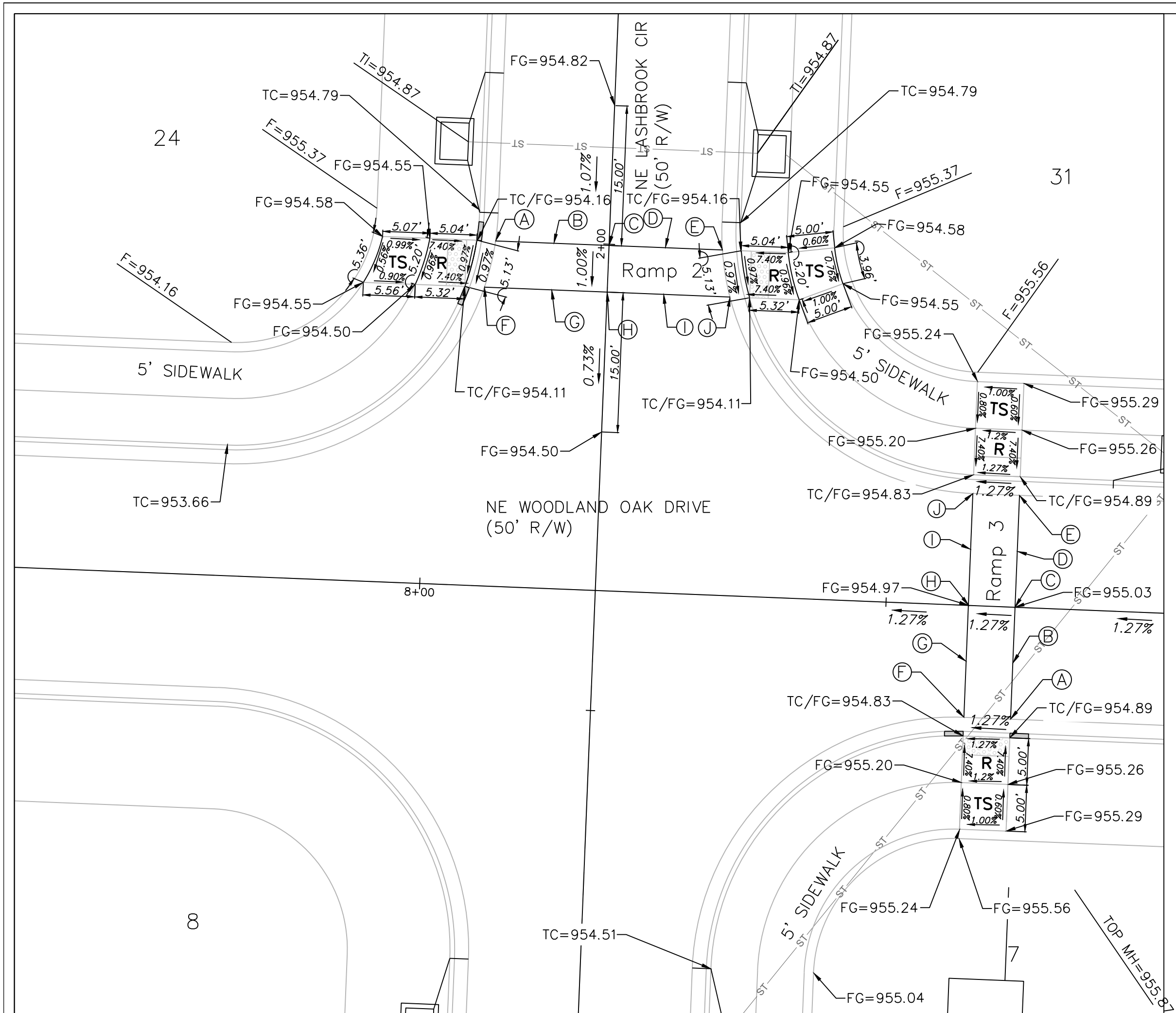
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WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri



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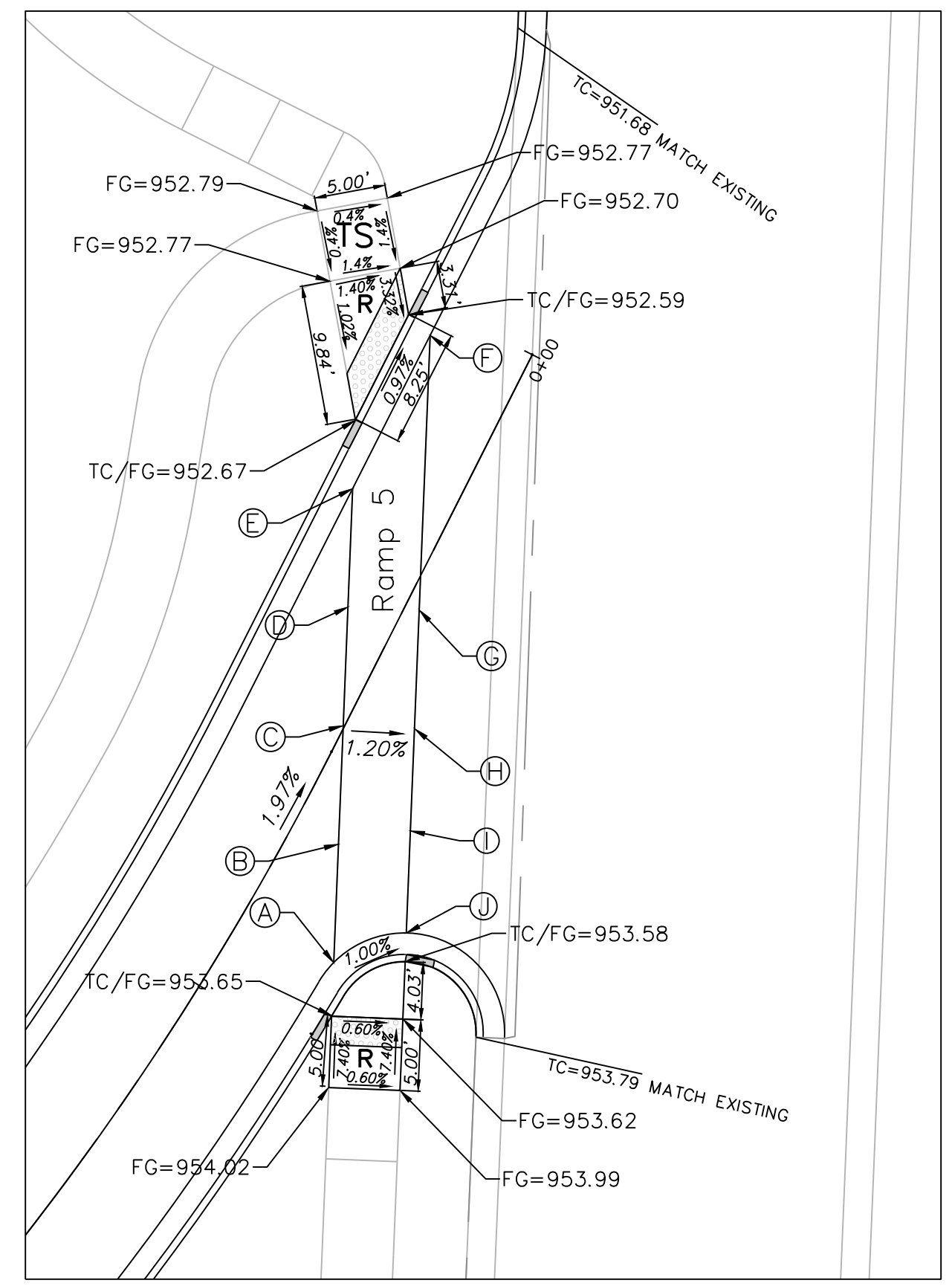
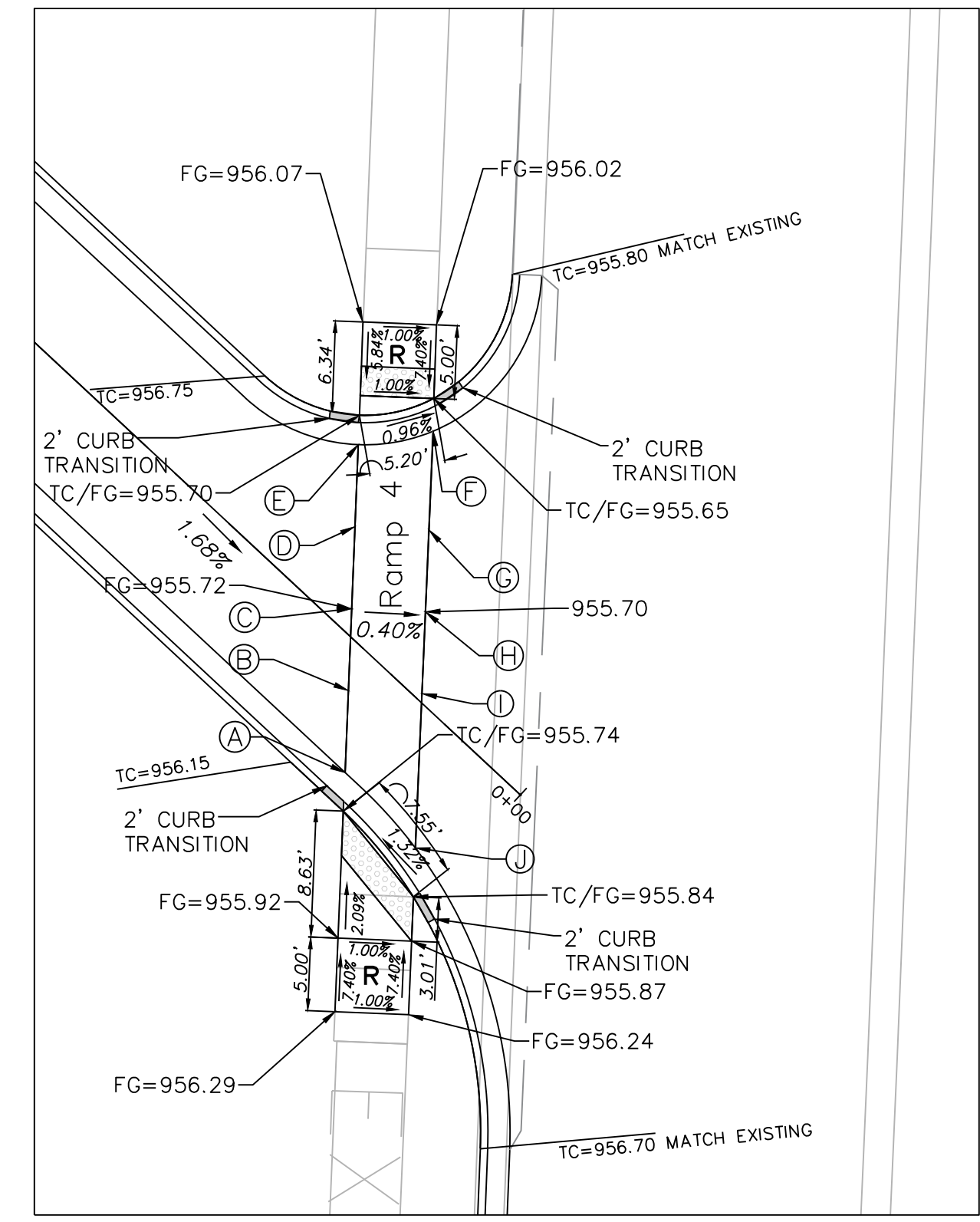
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C.204

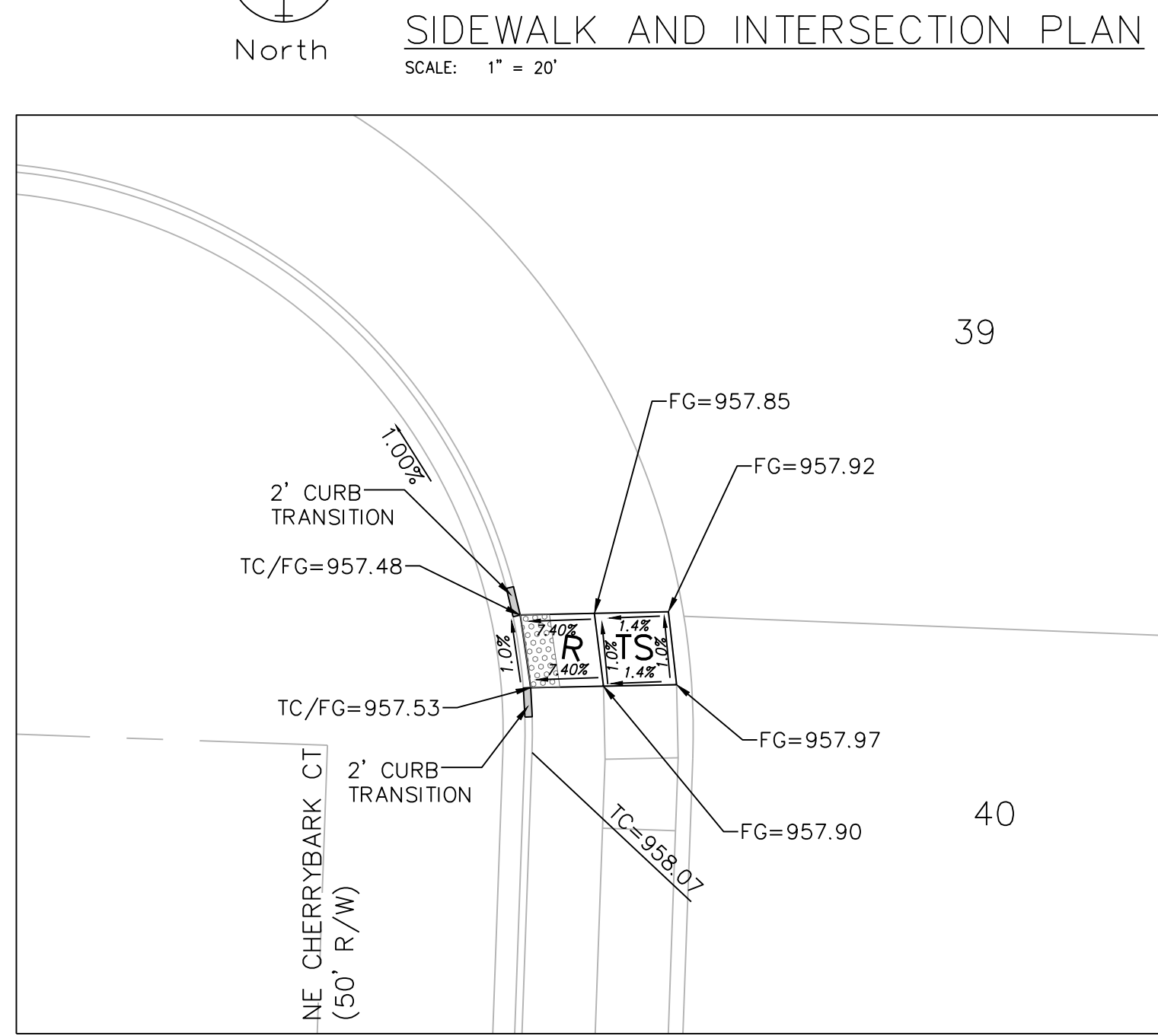
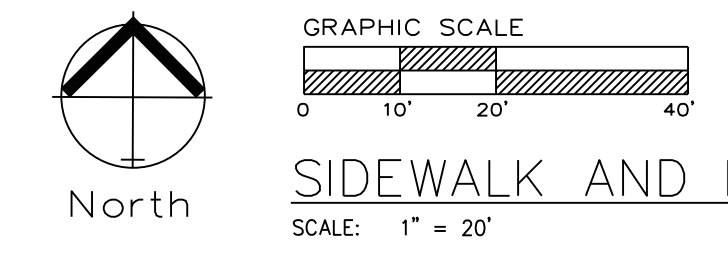


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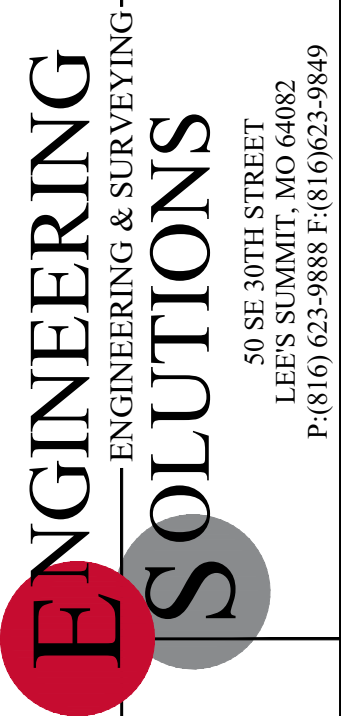
Development Services Department
Lee's Summit, Missouri
09/01/2023



Legend:
EX TC = Existing Top of Curb
EX FG = Existing Finished Grade
FG = Finished Grade
TC = Top of Curb
TC/FG = Top of Curb/Finished Grade
Detectable Warning



SPOT ELEVATION TABLE					
Spot	Ramp 1	Ramp 2	Ramp 3	Ramp 4	Ramp 5
A	962.54	954.16	954.89	955.74	953.65
B	962.92	954.54	954.91	955.73	953.44
C	963.04	954.66	955.03	955.72	953.23
D	962.92	954.54	954.91	955.71	953.11
E	962.54	954.16	954.89	955.70	952.67
F	962.61	954.11	954.83	955.65	952.59
G	962.99	954.49	954.85	955.68	953.05
H	963.11	954.61	954.97	955.70	953.17
I	962.99	954.49	954.85	955.75	953.38
J	962.61	954.11	954.83	955.84	953.58



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Part of the Southeast 1
Section 27, Township 48 North, Range 31 West
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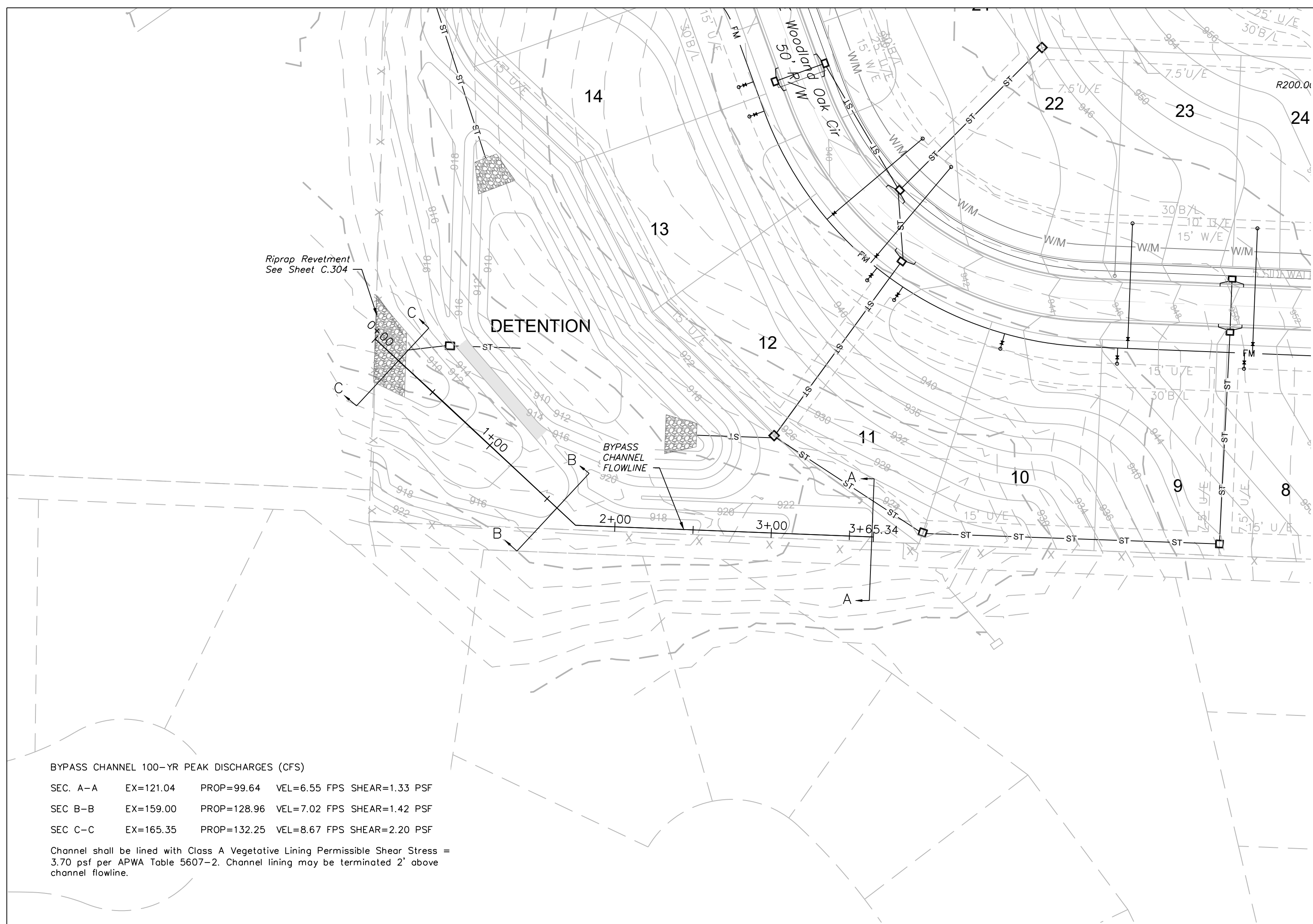
Project:
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Sidewalk and
Intersection Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri



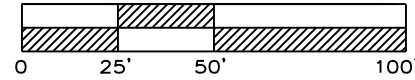
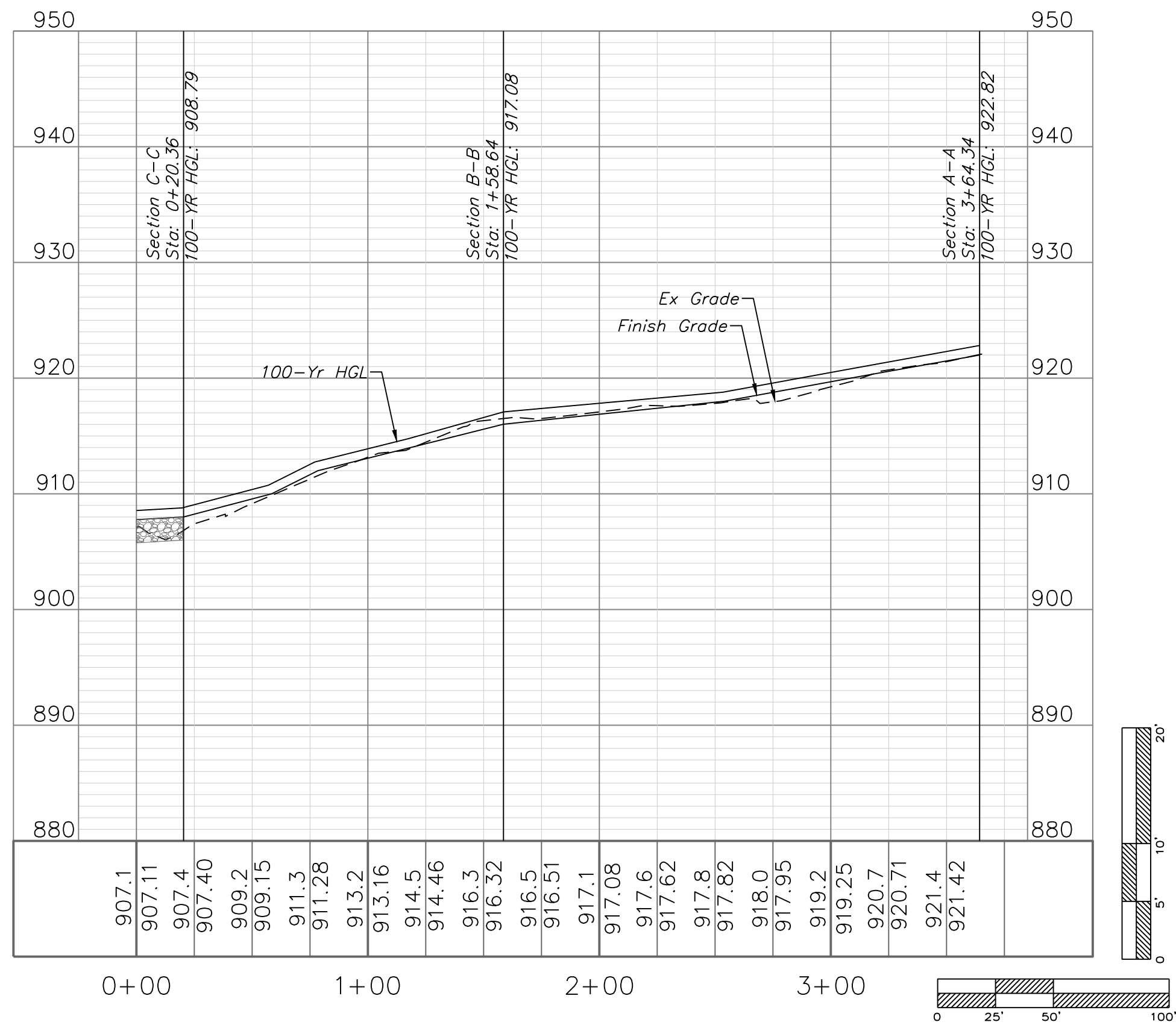
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BYPASS CHANNEL 100-YR PEAK DISCHARGES (CFS)				
SEC. A-A	EX=121.04	PROP=99.64	VEL=6.55 FPS	SHEAR=1.33 PSF
SEC B-B	EX=159.00	PROP=128.96	VEL=7.02 FPS	SHEAR=1.42 PSF
SEC C-C	EX=165.35	PROP=132.25	VEL=8.67 FPS	SHEAR=2.20 PSF
Channel shall be lined with Class A Vegetative Lining Permissible Shear Stress = 3.70 psf per APWA Table 5607-2. Channel lining may be terminated 2' above channel flowline.				

BYPASS CHANNEL FLOWLINE



BYPASS CHANNEL PLAN

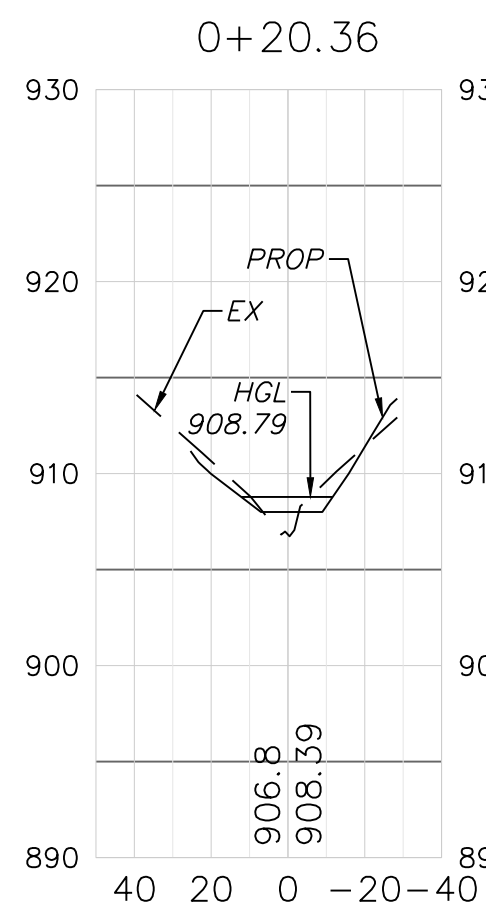
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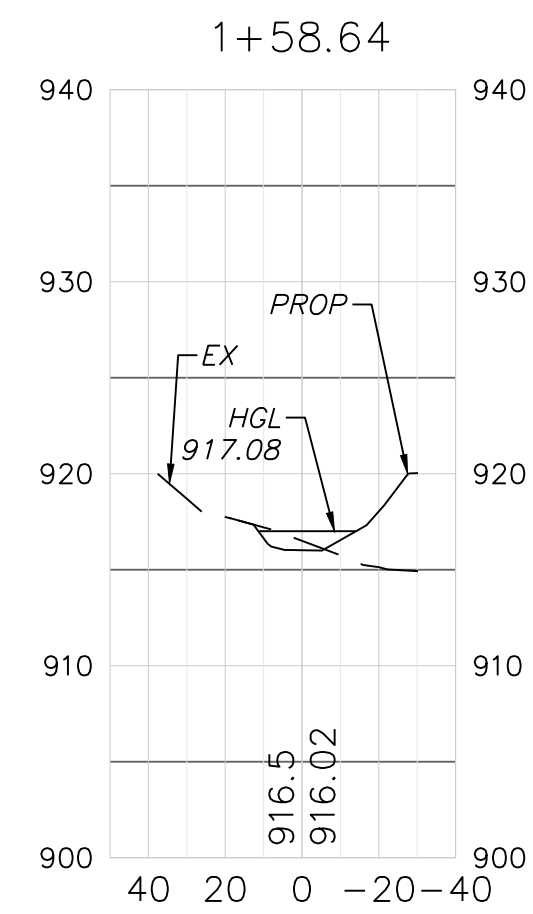
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Lee's Summit, Missouri

09/01/2023

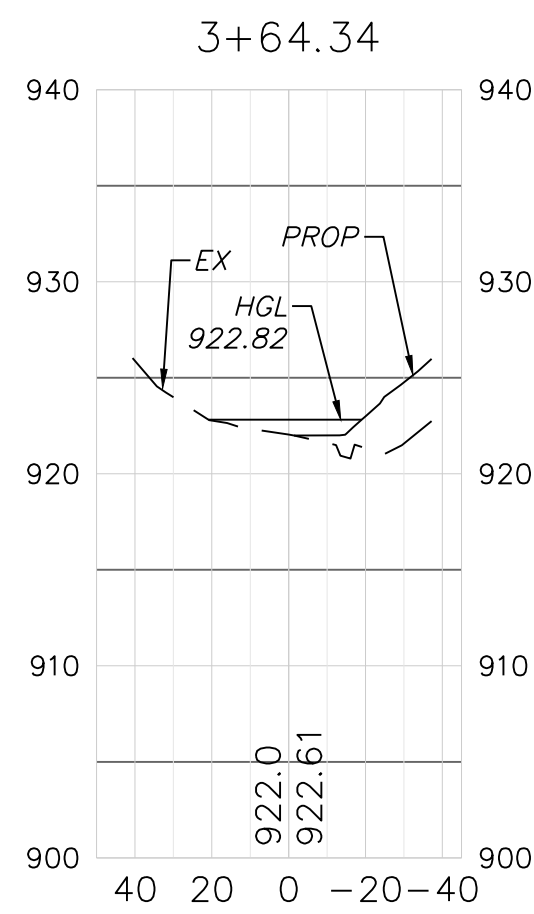
SECTION C-C



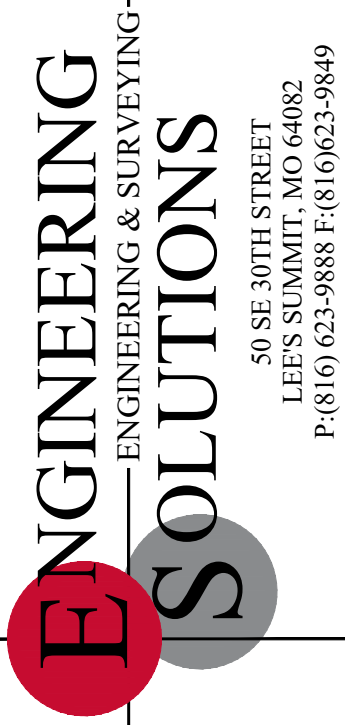
SECTION B-B



SECTION A-A



HGL = 100 YEAR
SEE MACRO DRAINAGE STUDY FOR COMPLETE
HYDRAULIC DATA FOR EACH CROSS SECTION.



Professional Registration
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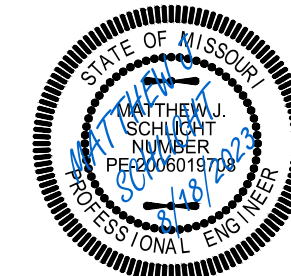
Part of the Southeast
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Bypass Channel Plan

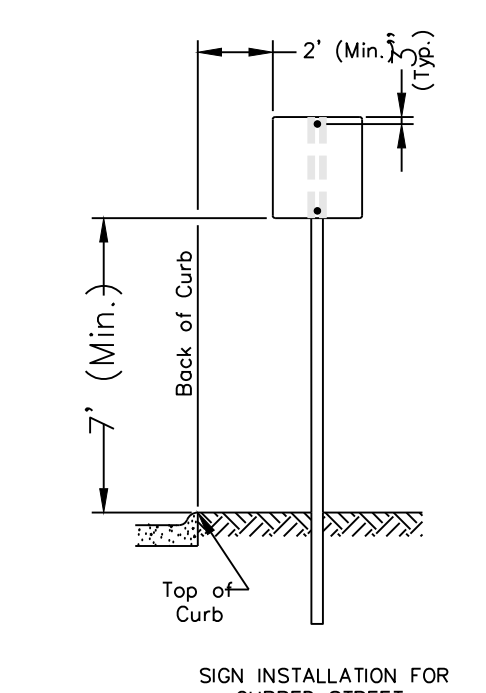
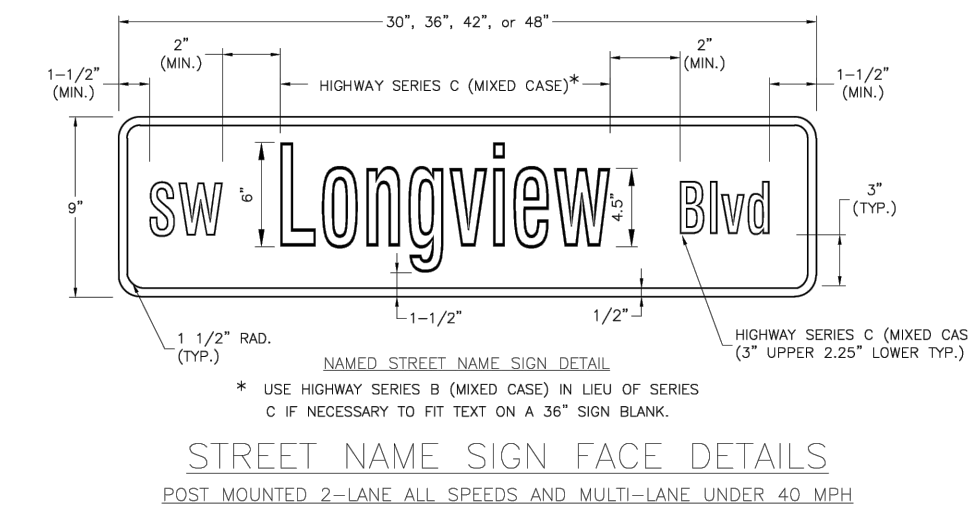
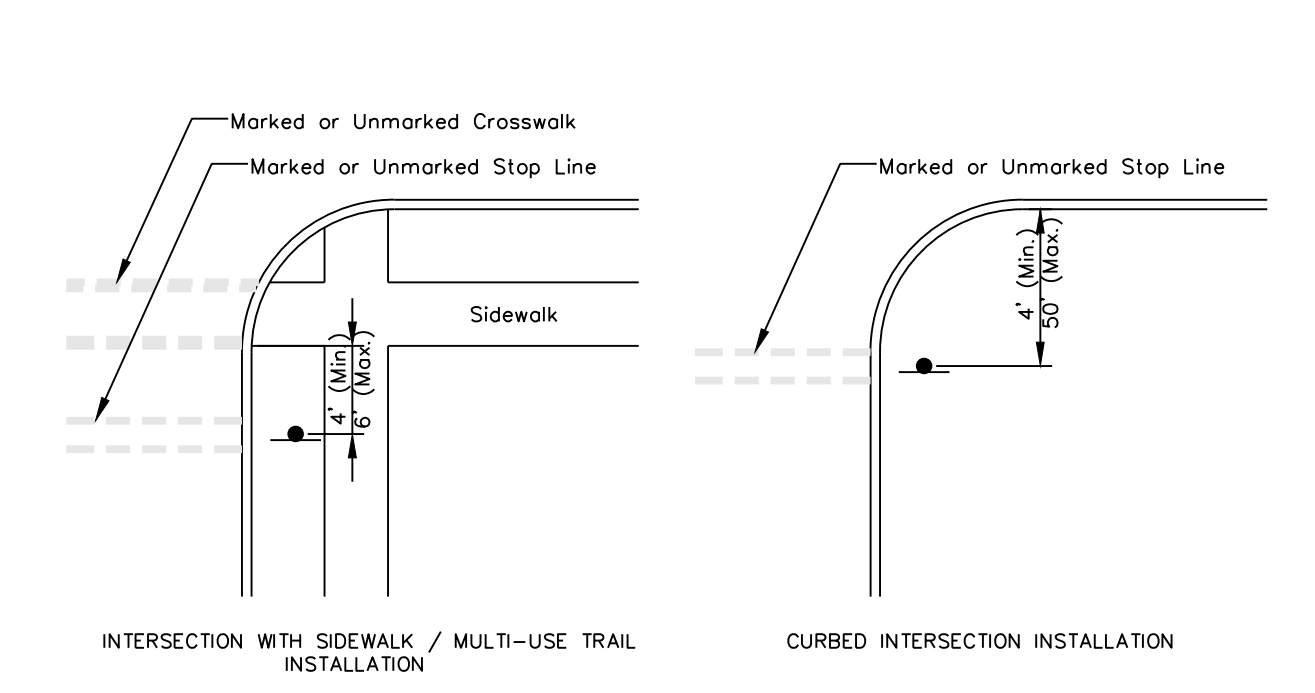
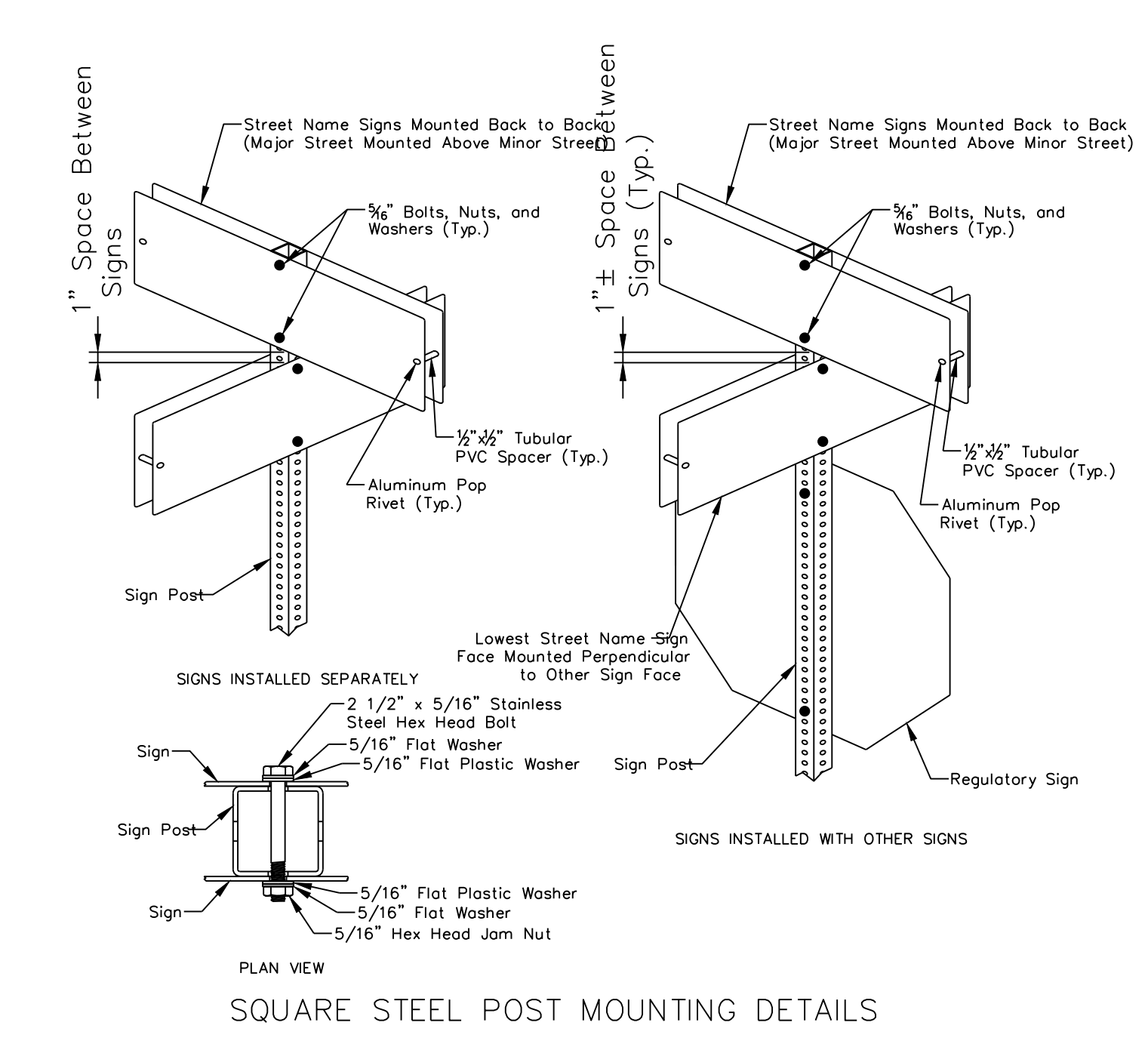
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WOODLAND OAKS
Lots 1 thru 42

Lee's Summit, Jackson County, Missouri



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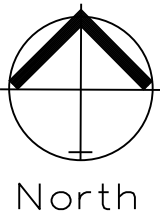
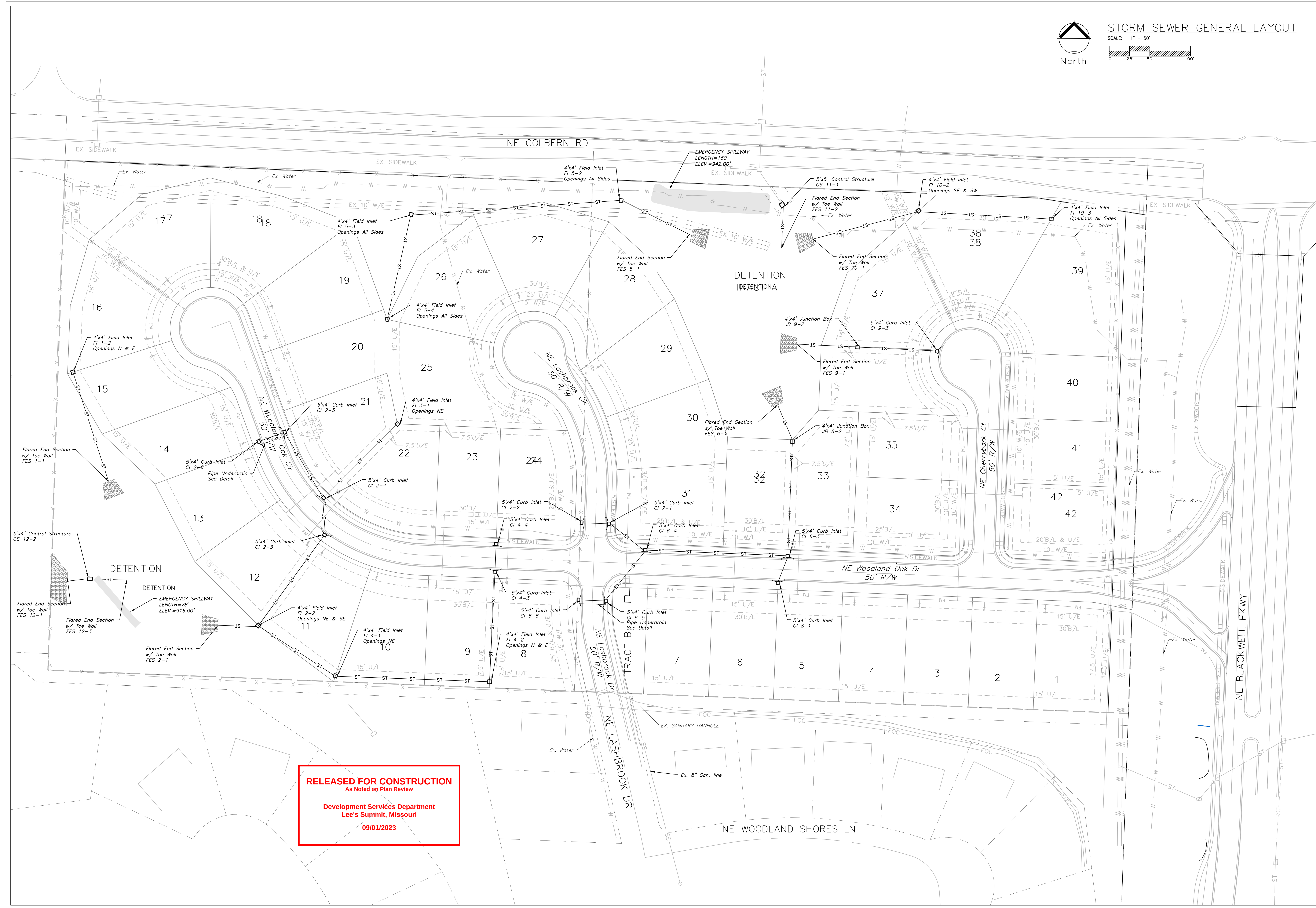
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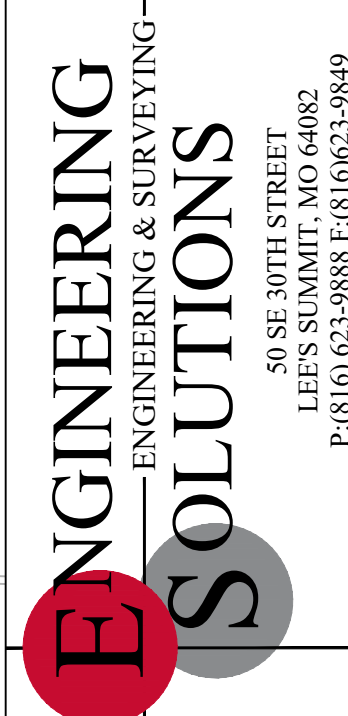
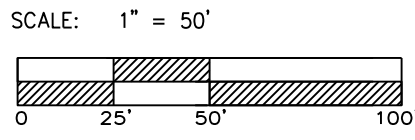
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Lee's Summit, Missouri
09/01/2023

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



STORM SEWER GENERAL LAYOUT

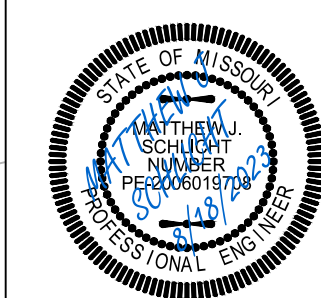


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Part of the Southeast 1
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

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Storm Sewer General Layout
Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri



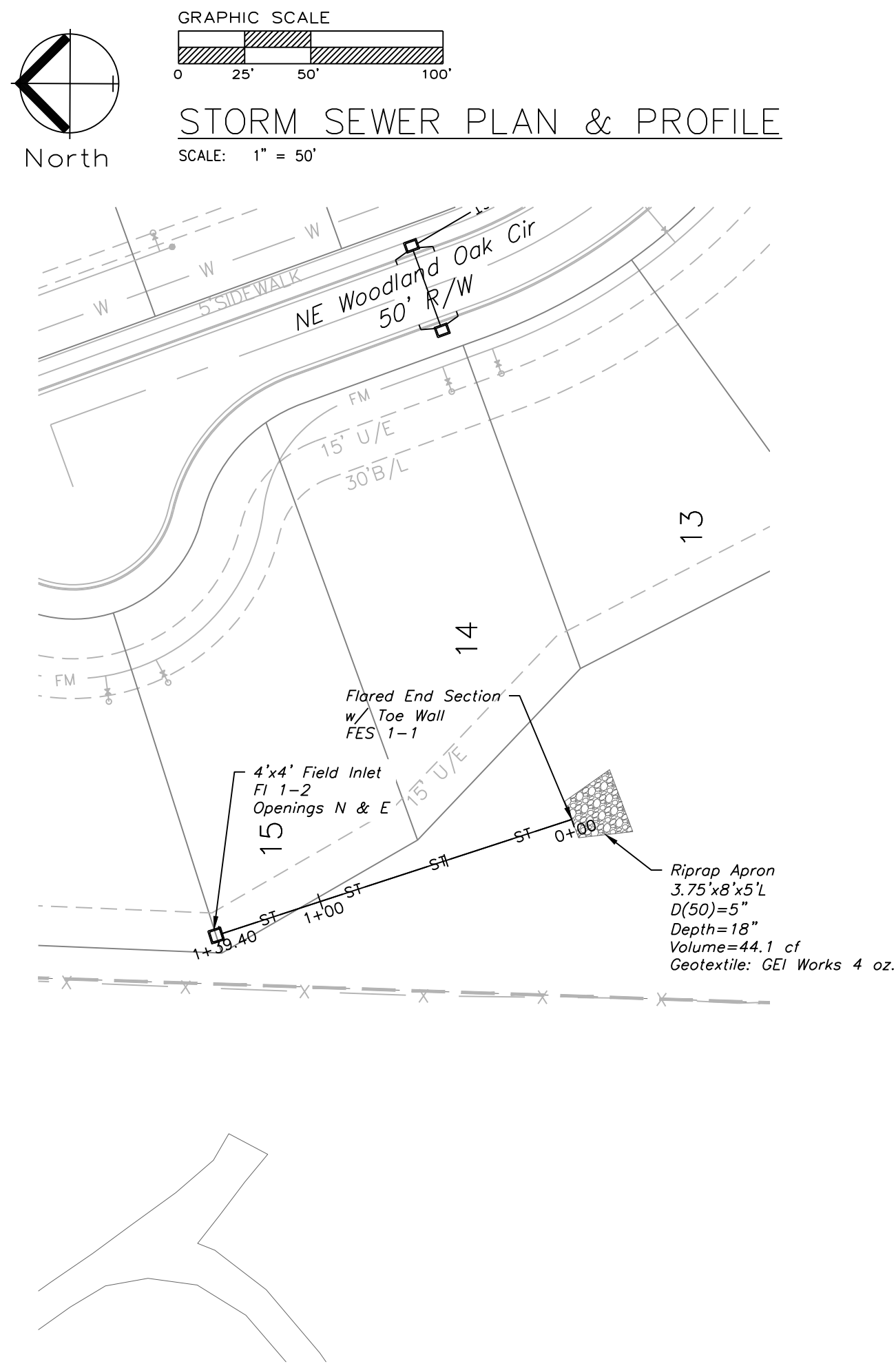
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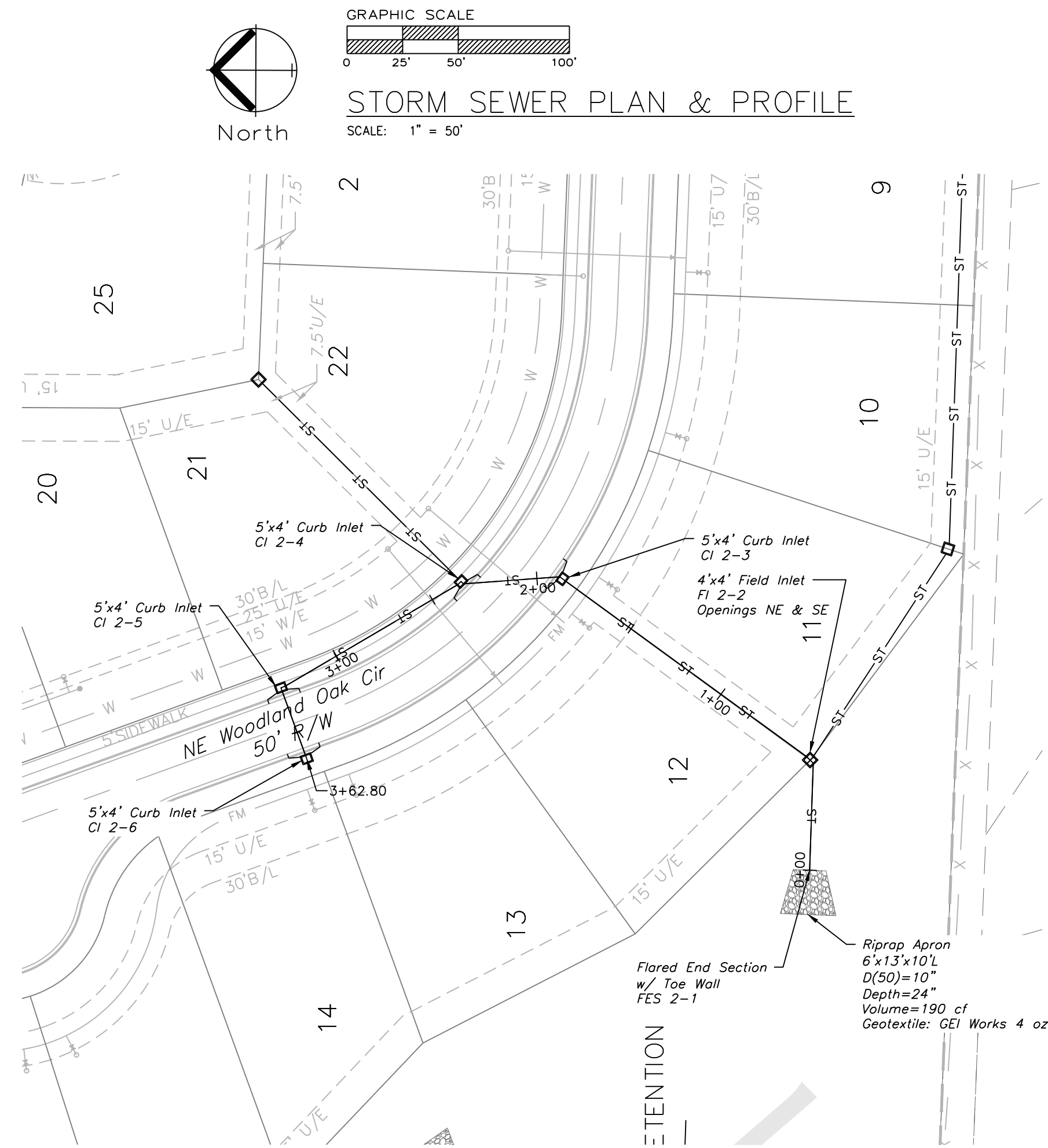
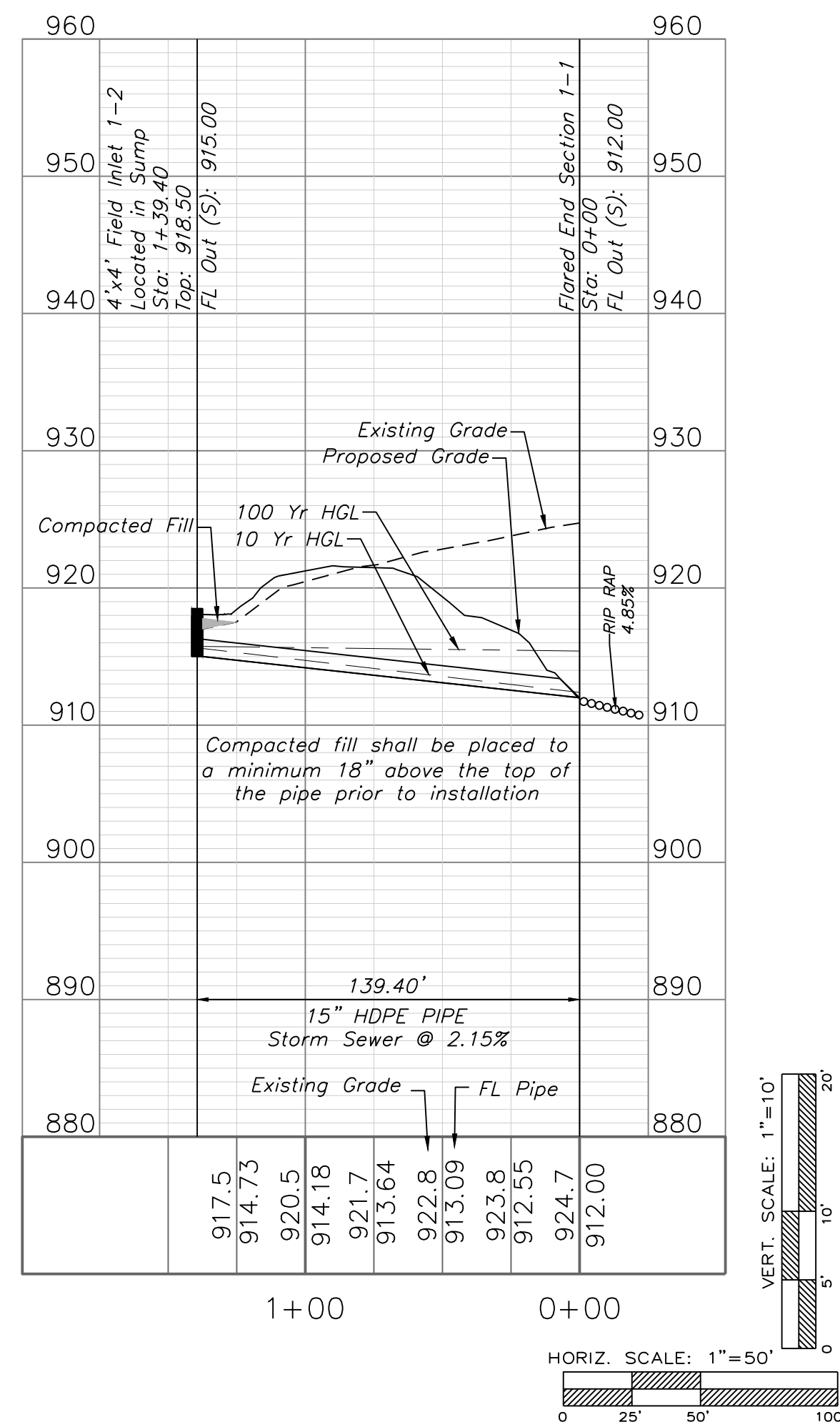
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Lee's Summit, Missouri

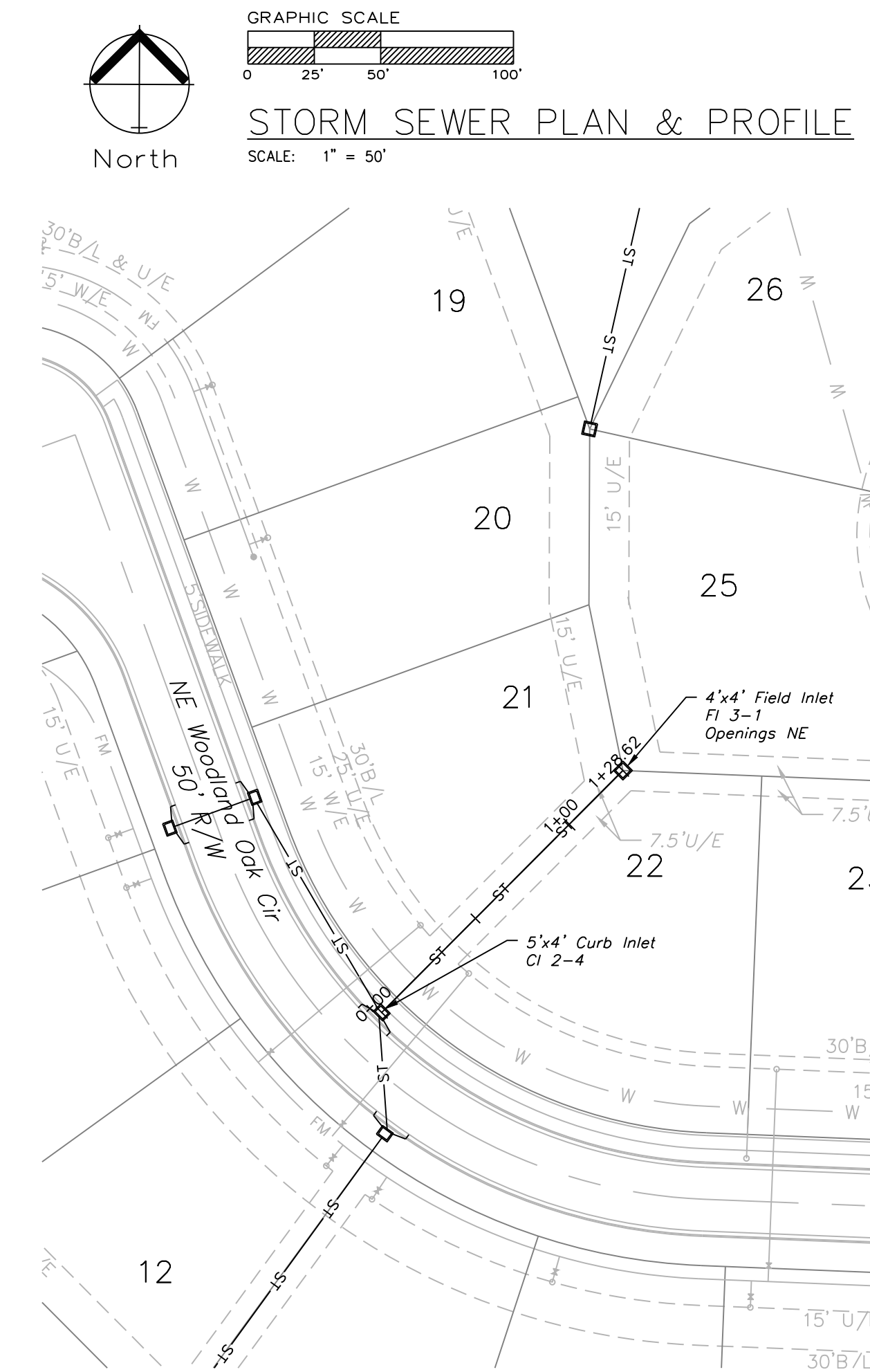
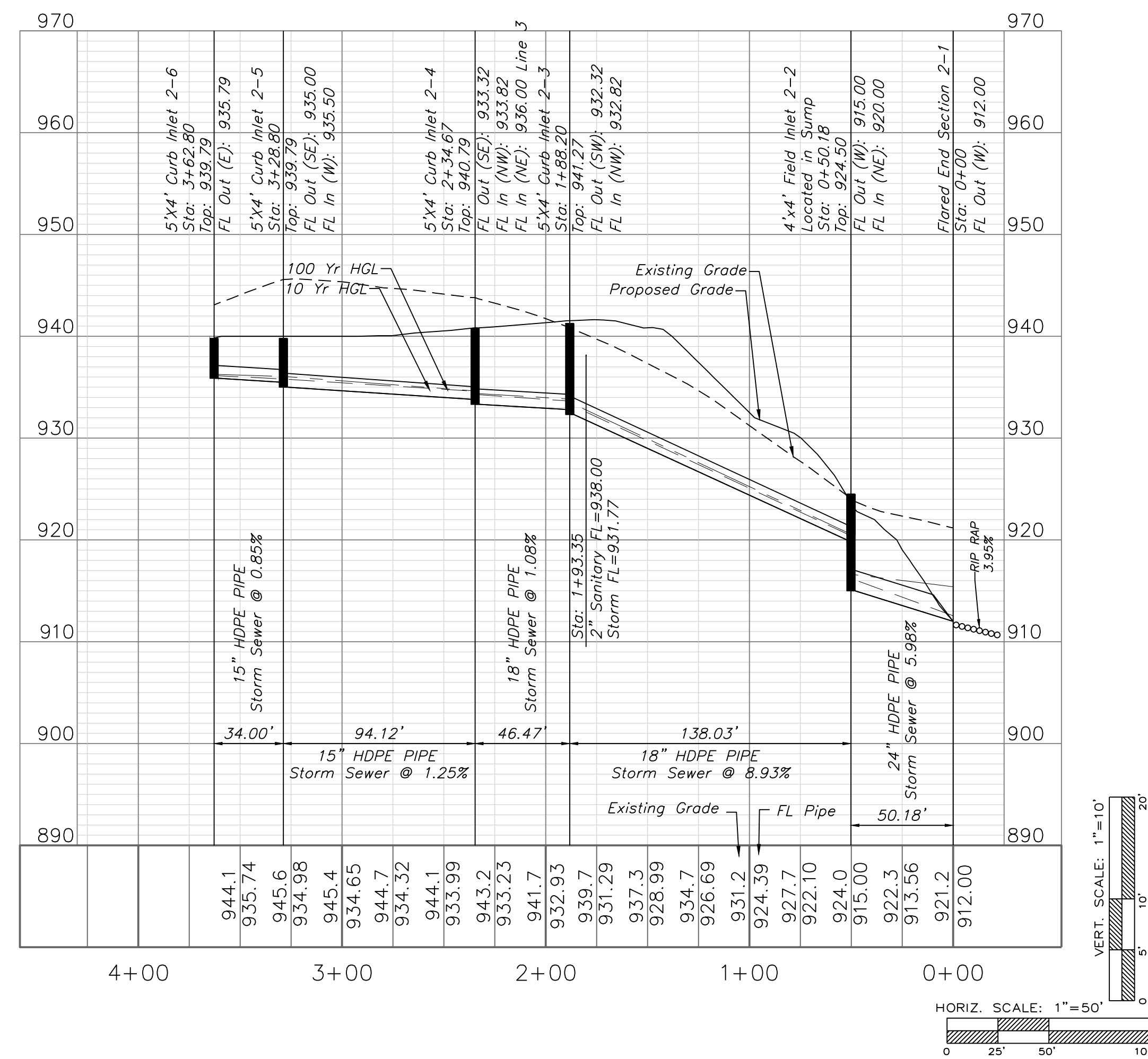
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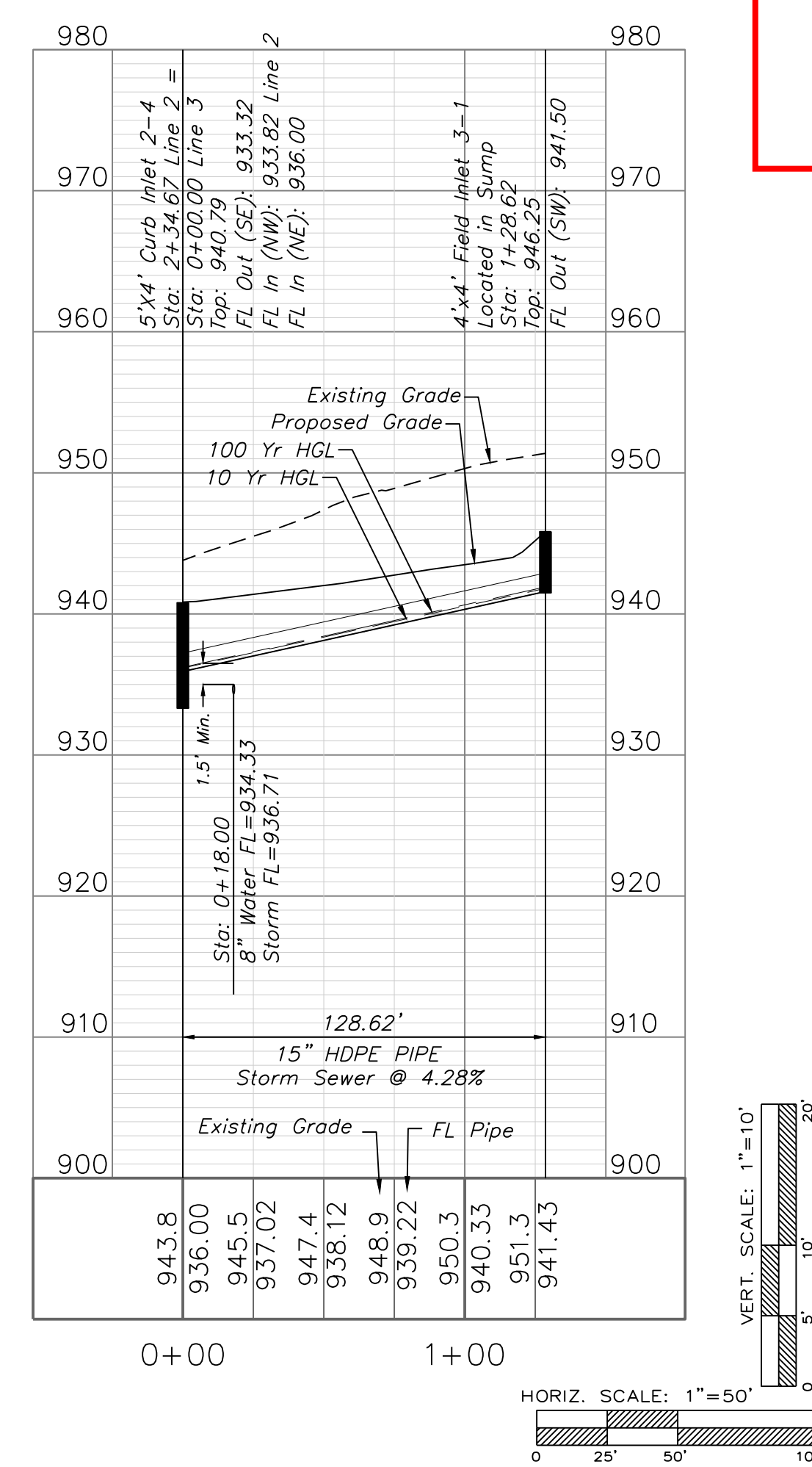
STORM LINE 1



STORM LINE 2



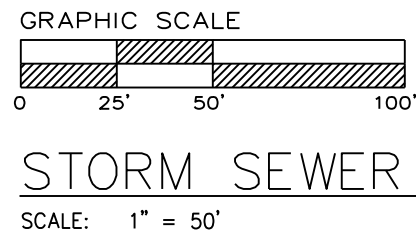
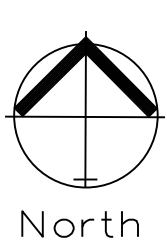
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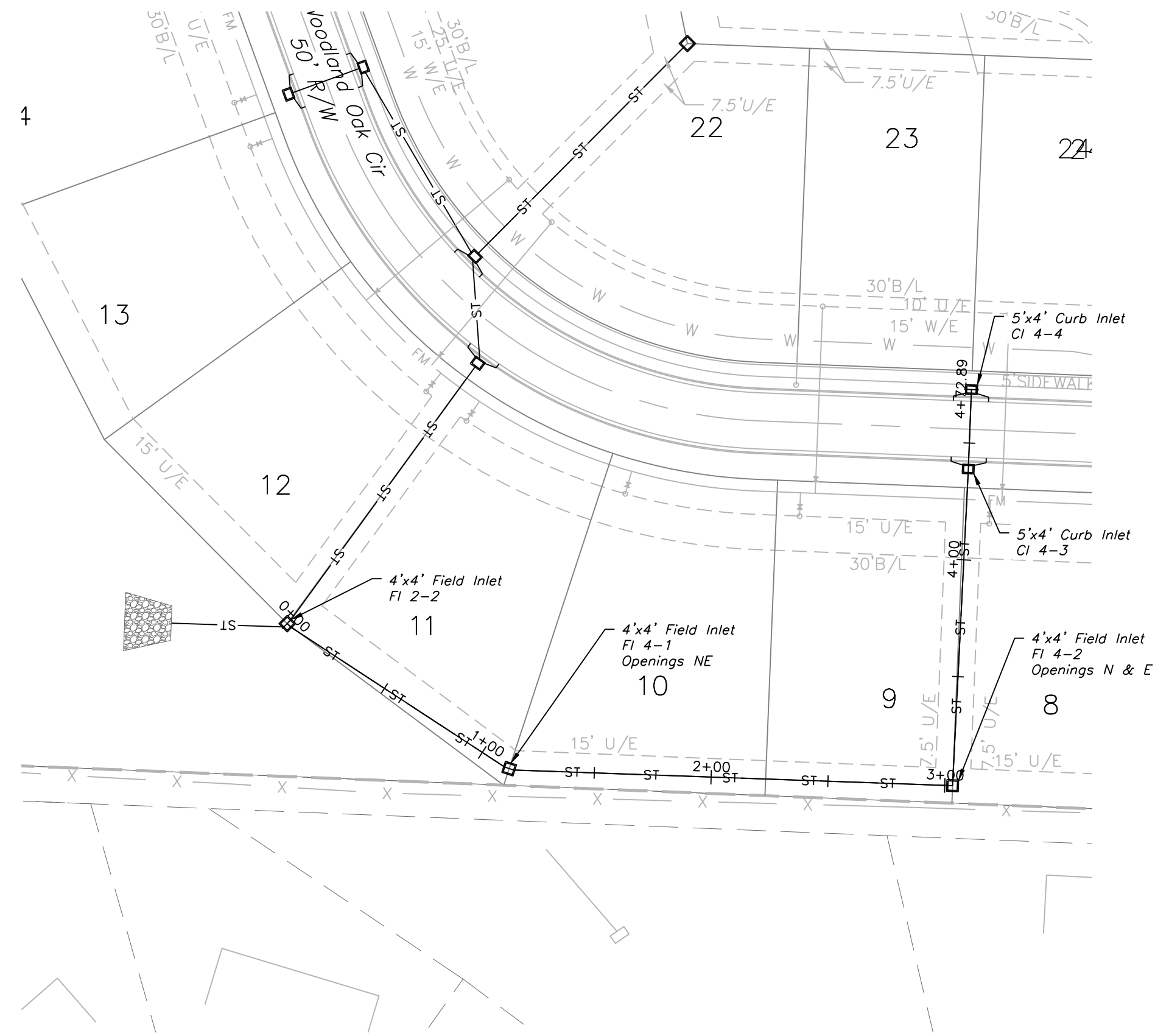
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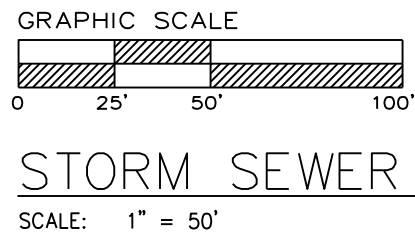
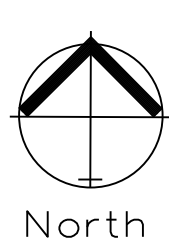
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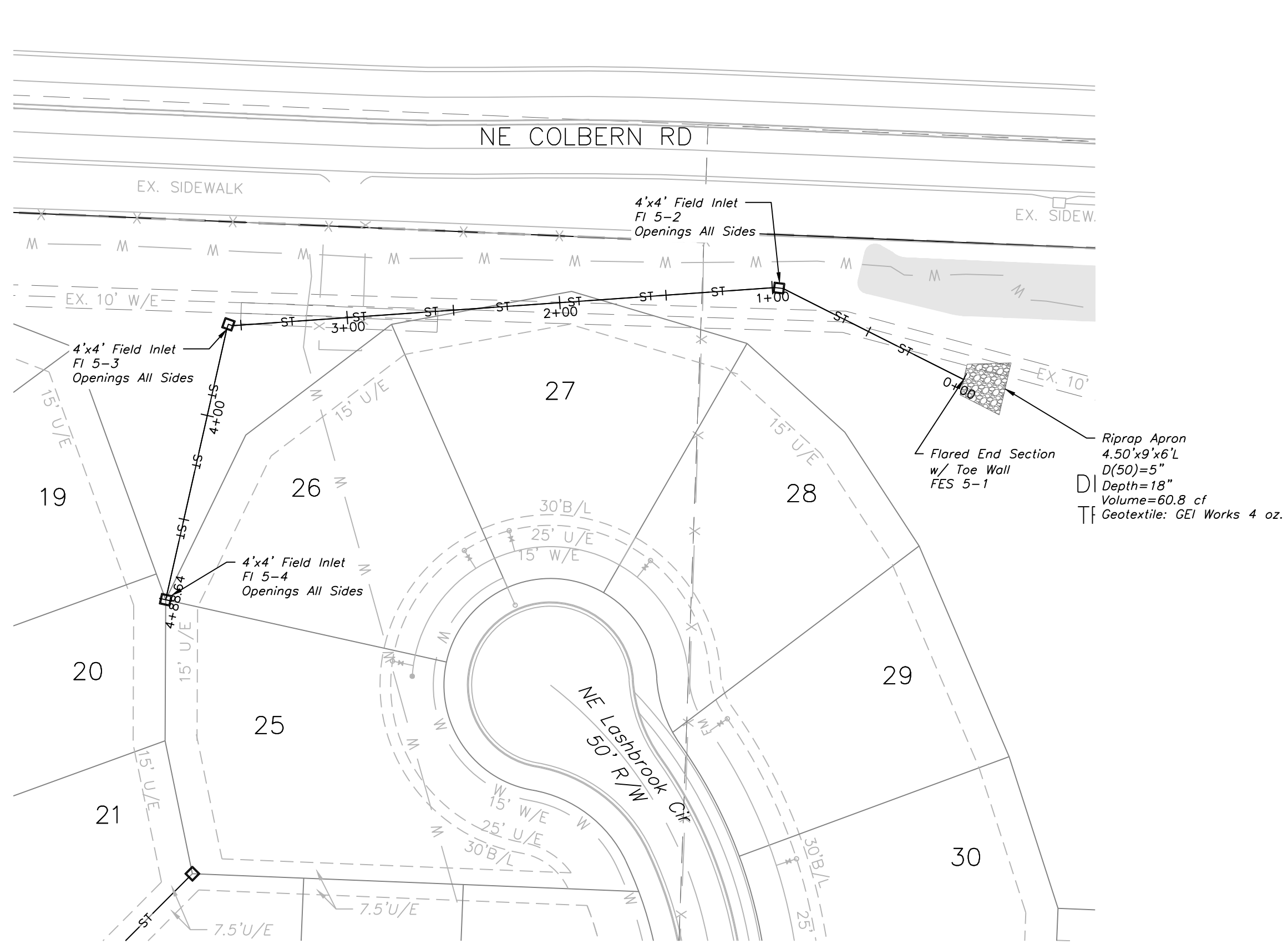
STORM SEWER PLAN & PROFILE



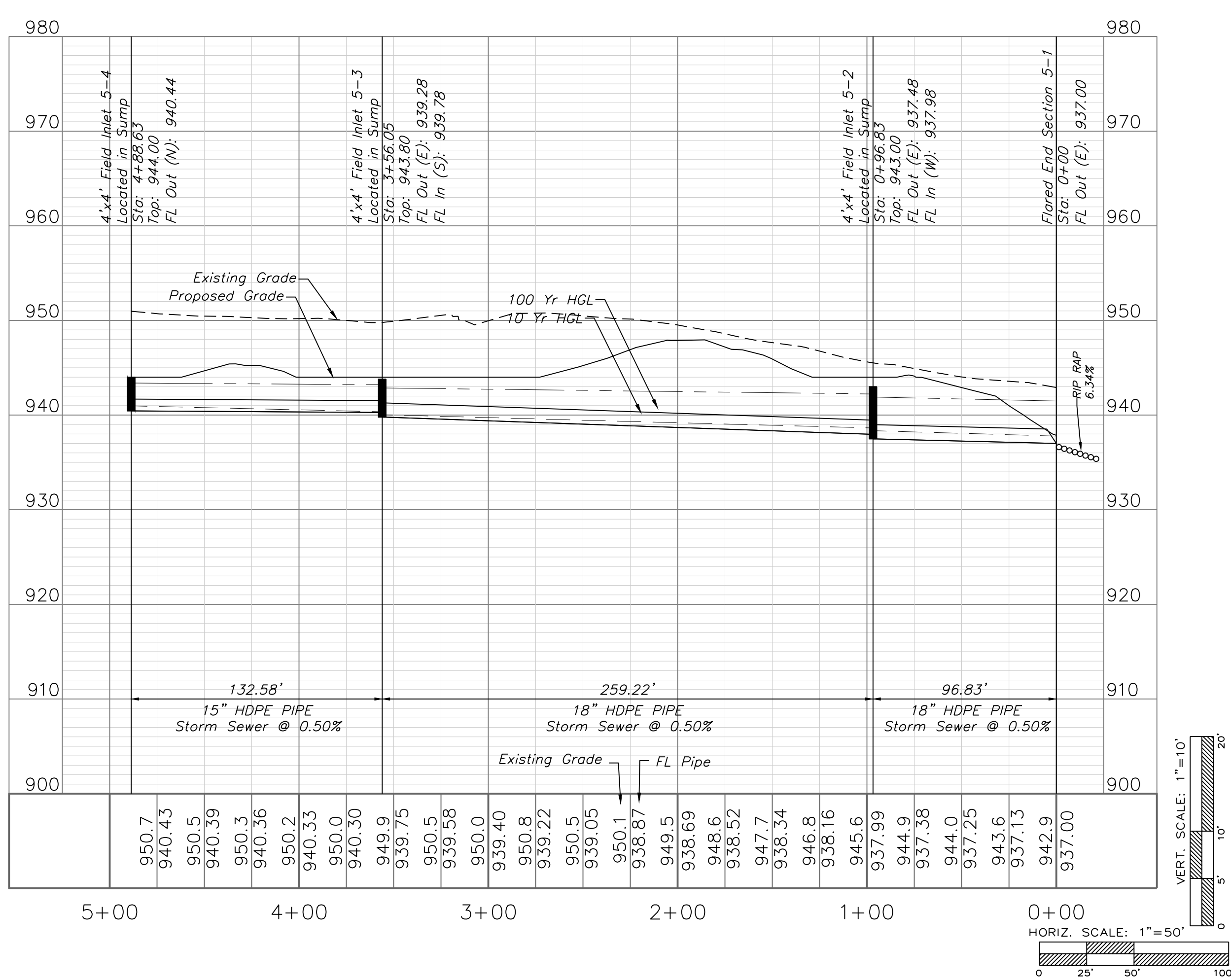
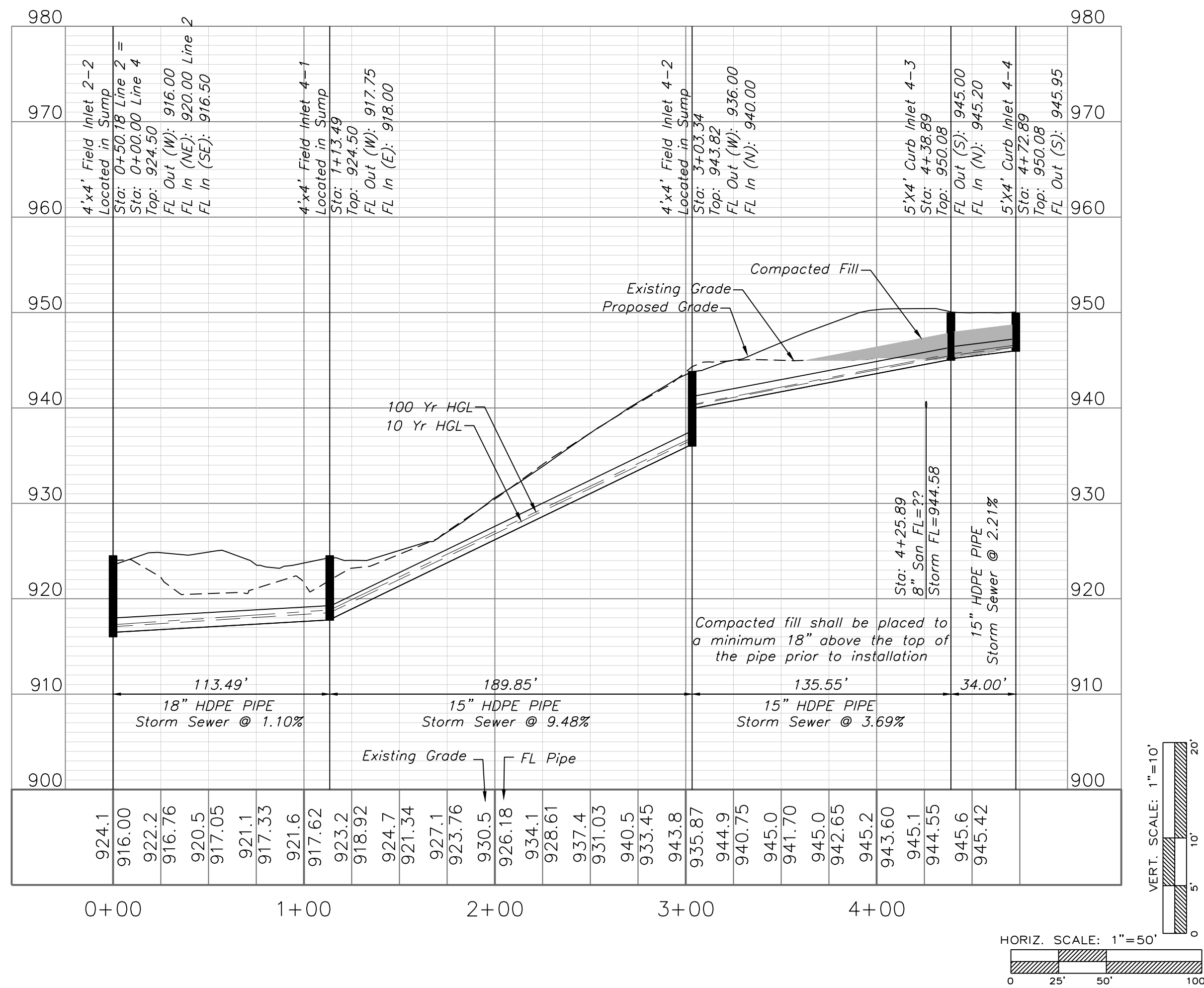
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STORM SEWER PLAN & PROFILE

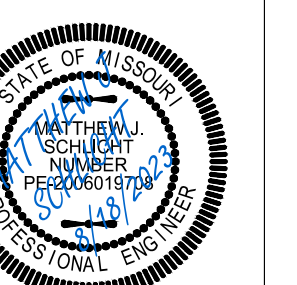


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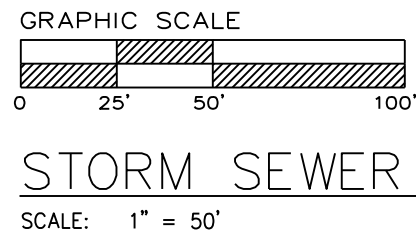
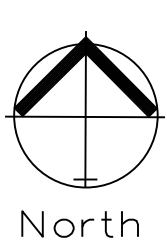
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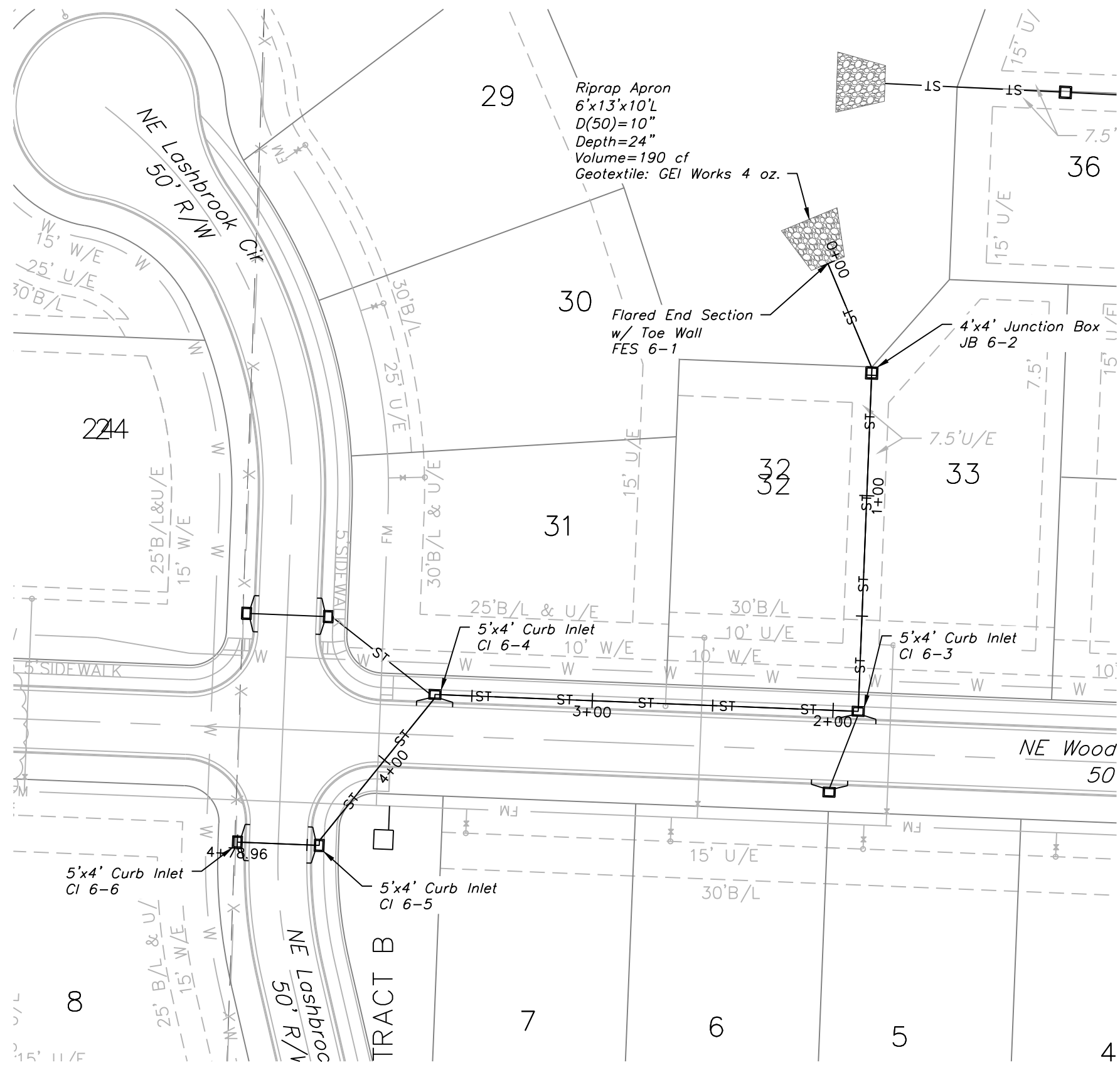


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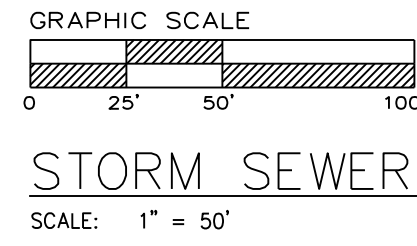
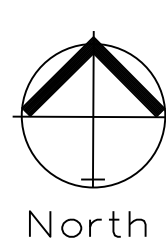
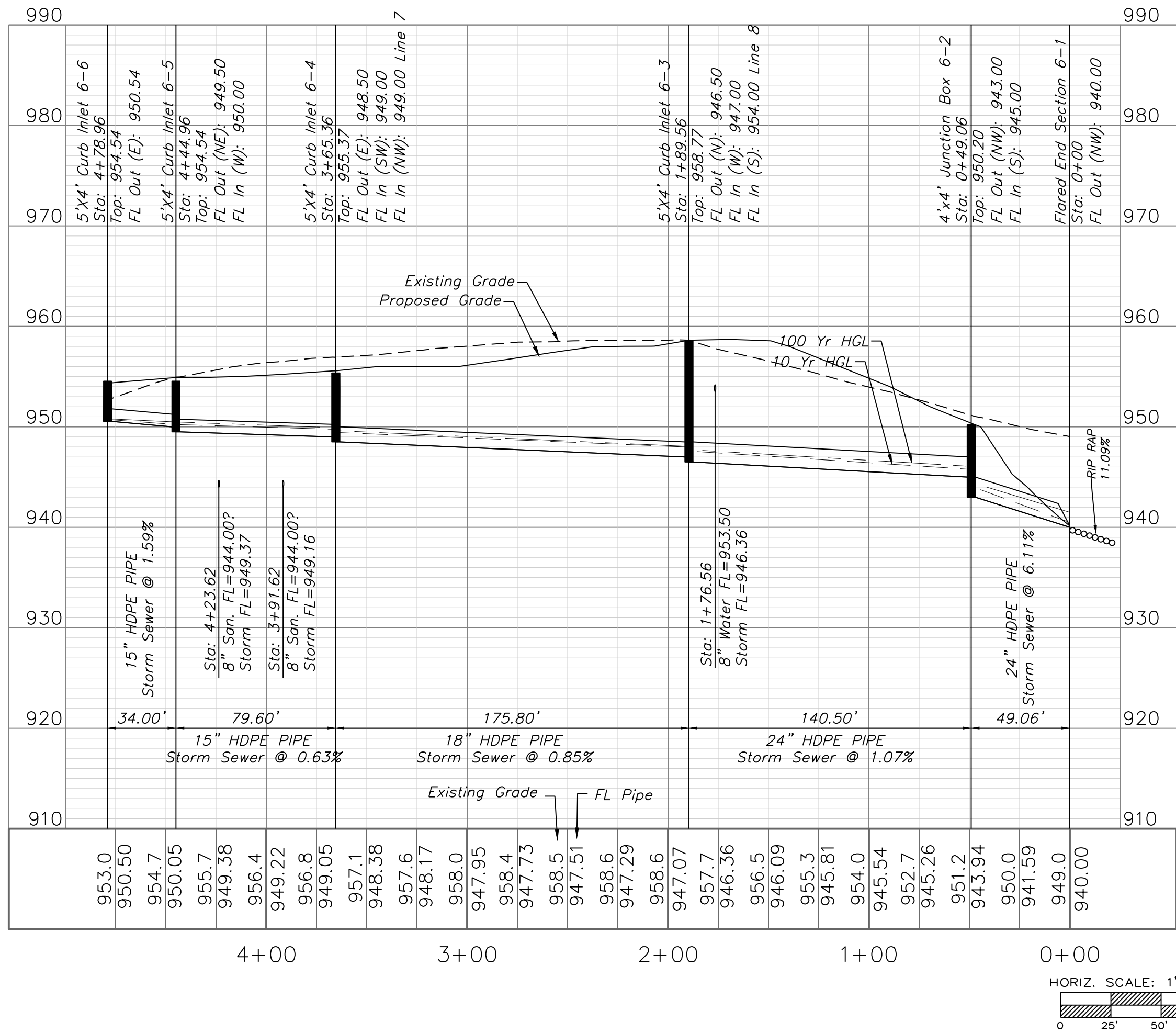
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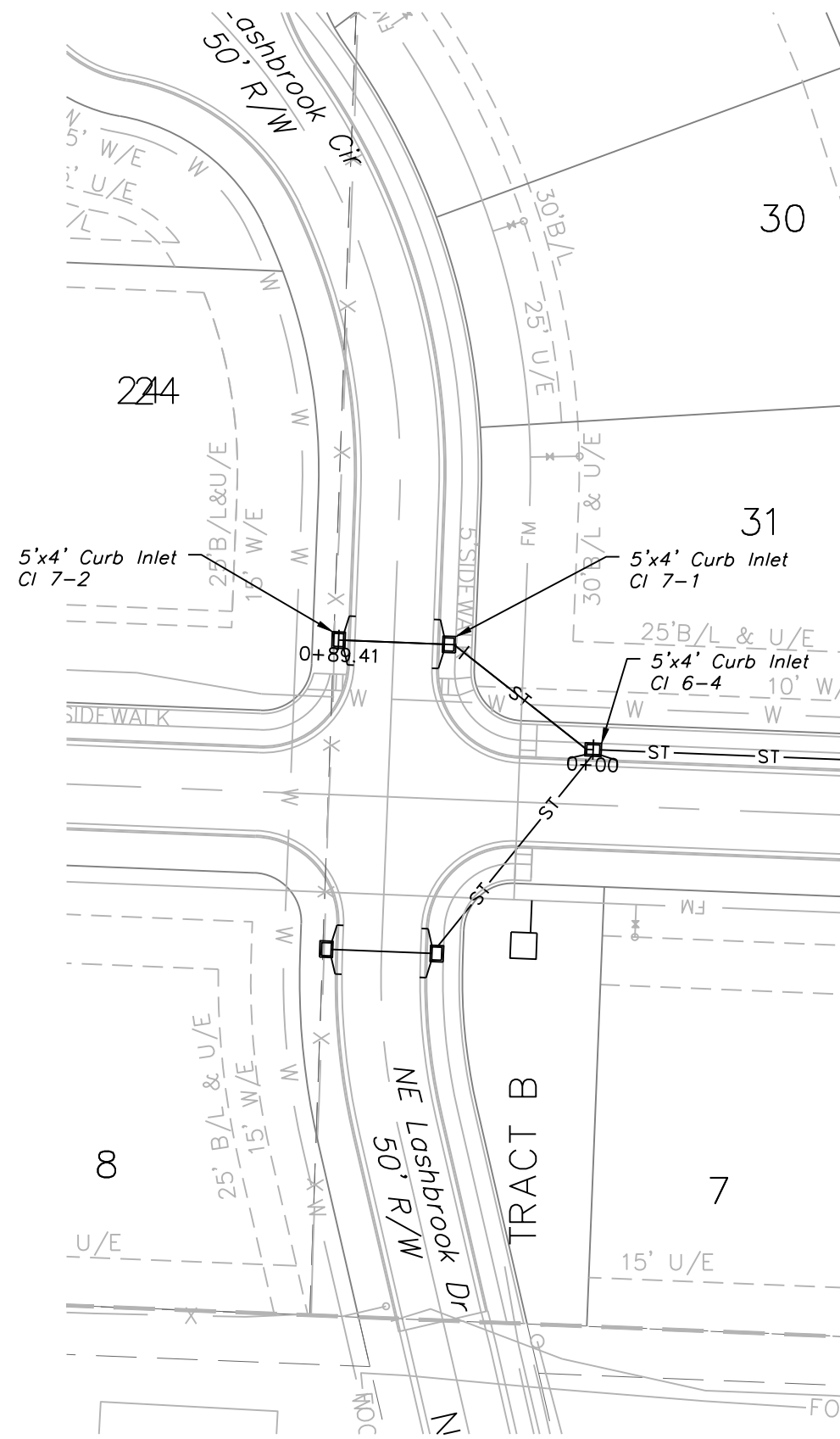
STORM SEWER PLAN & PROFILE



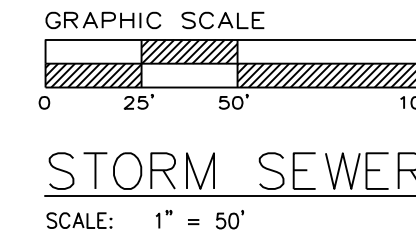
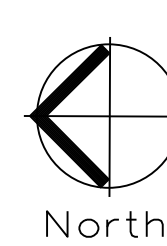
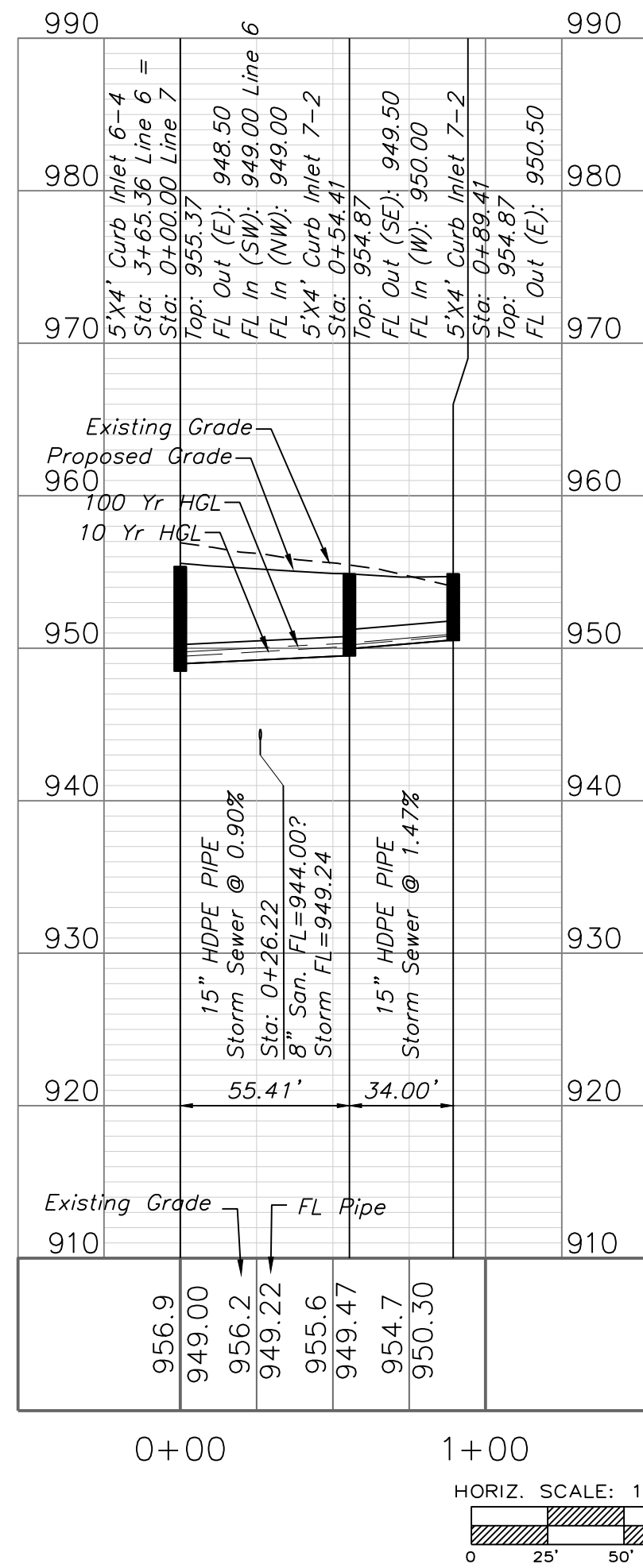
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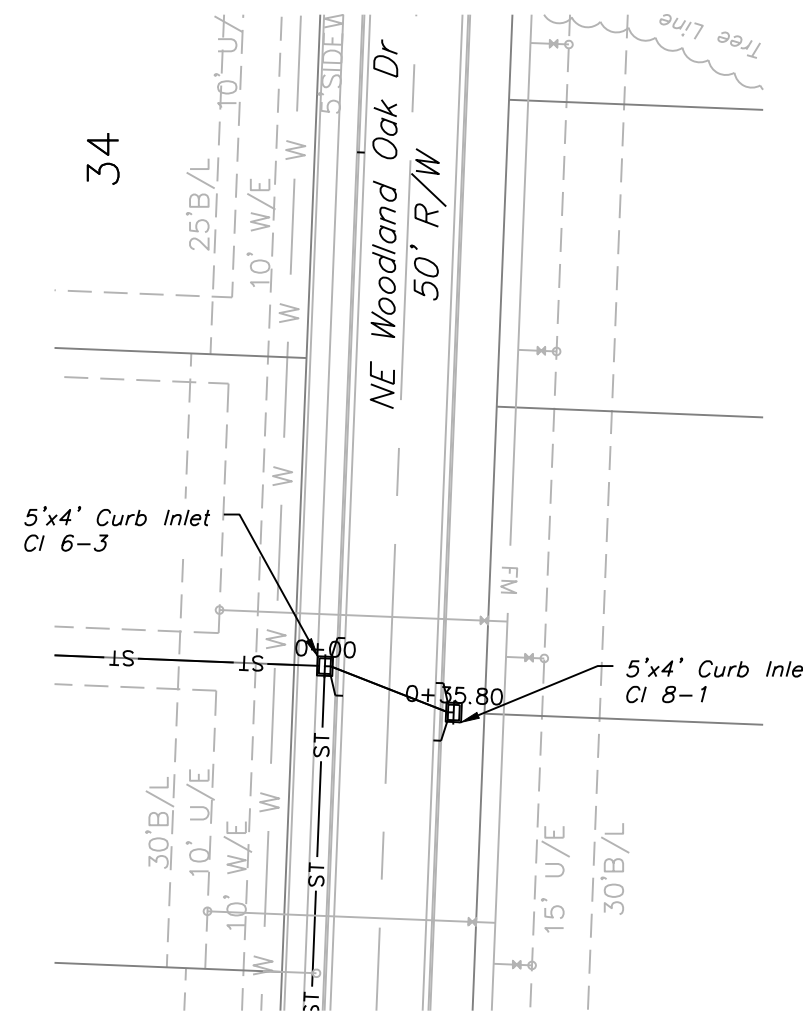
STORM SEWER PLAN & PROFILE



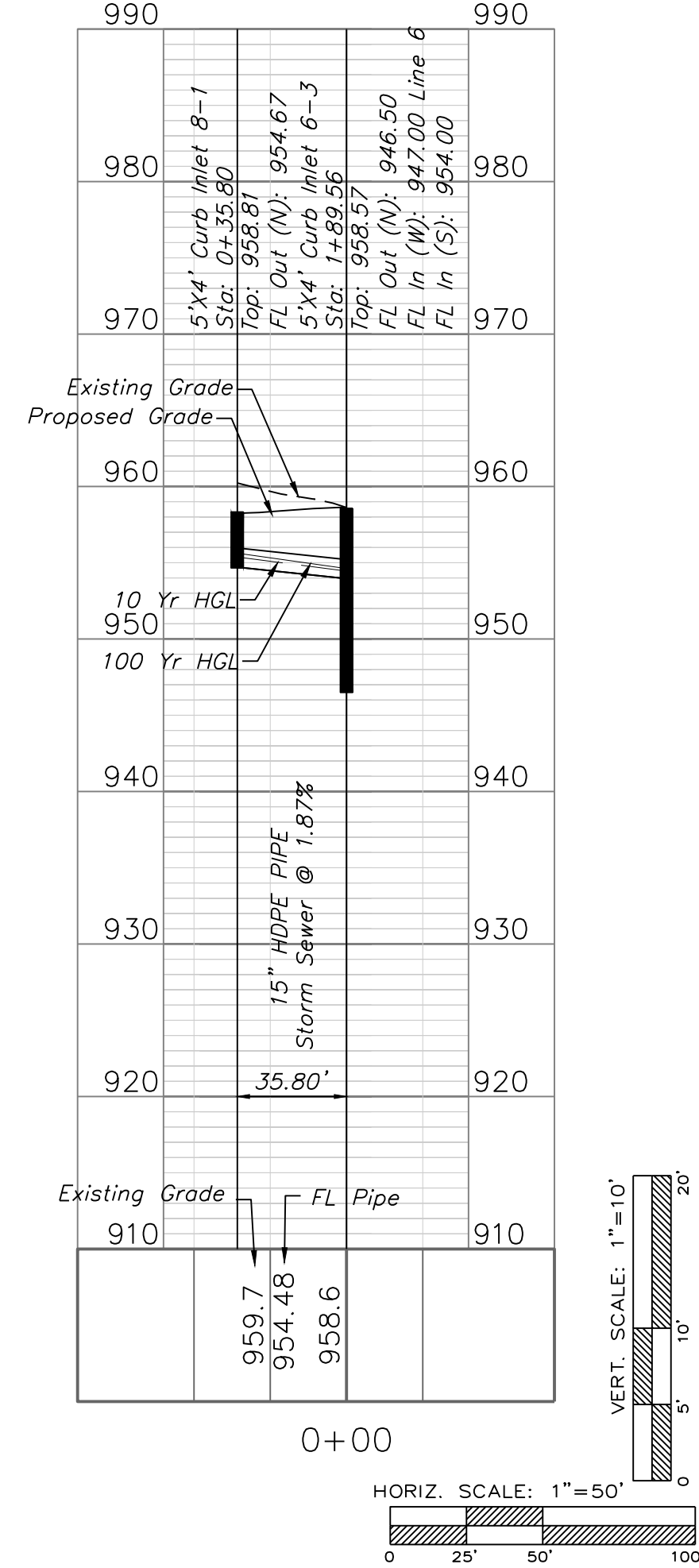
STORM LINE 7



STORM SEWER PLAN & PROFILE



STORM LINE 8



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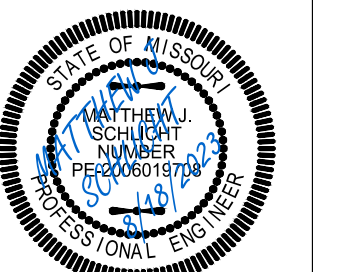


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Issue Date:
February 25, 2021

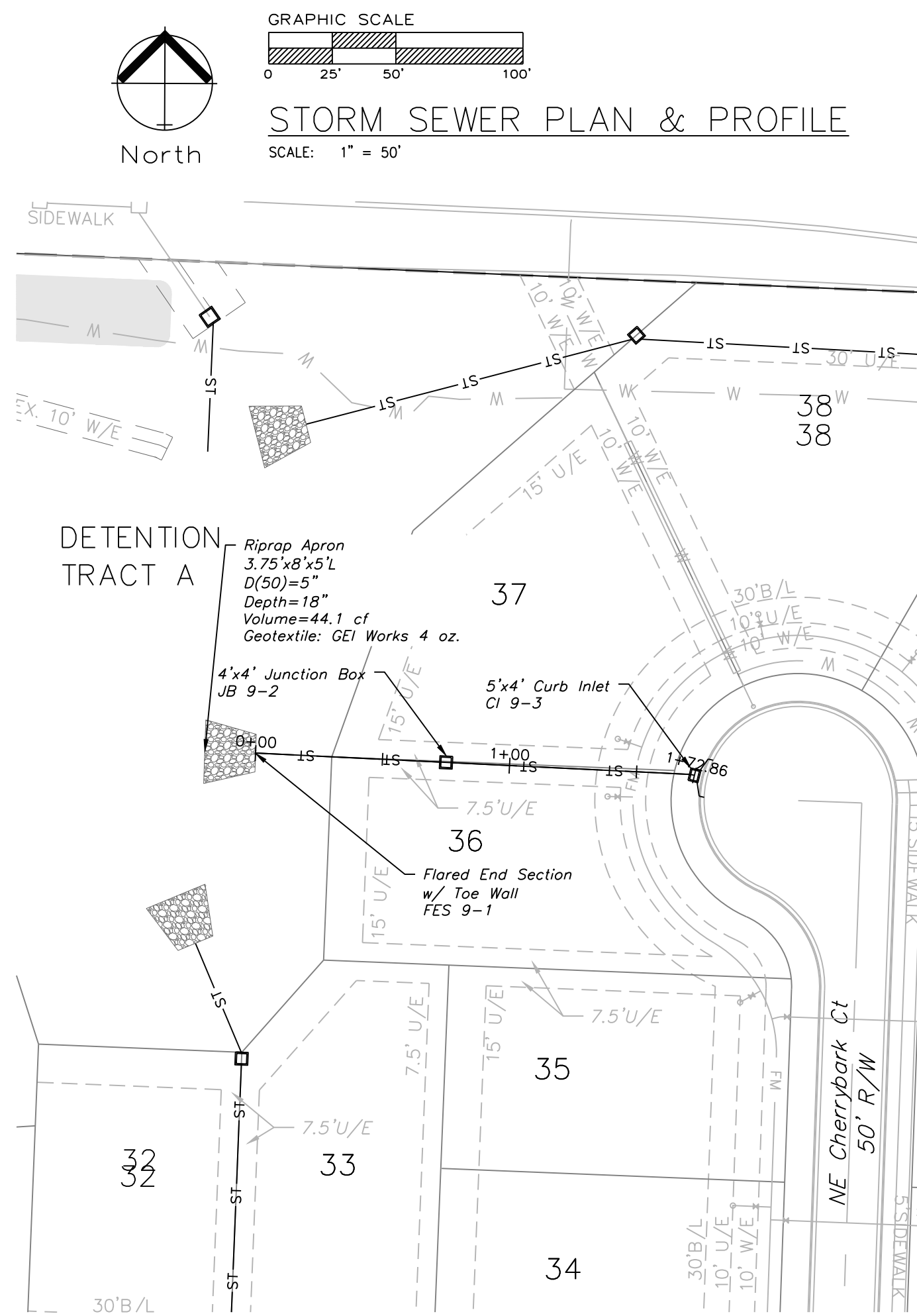
Storm Sewer Plan & Profile
Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri

Part of the Southeast 1
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

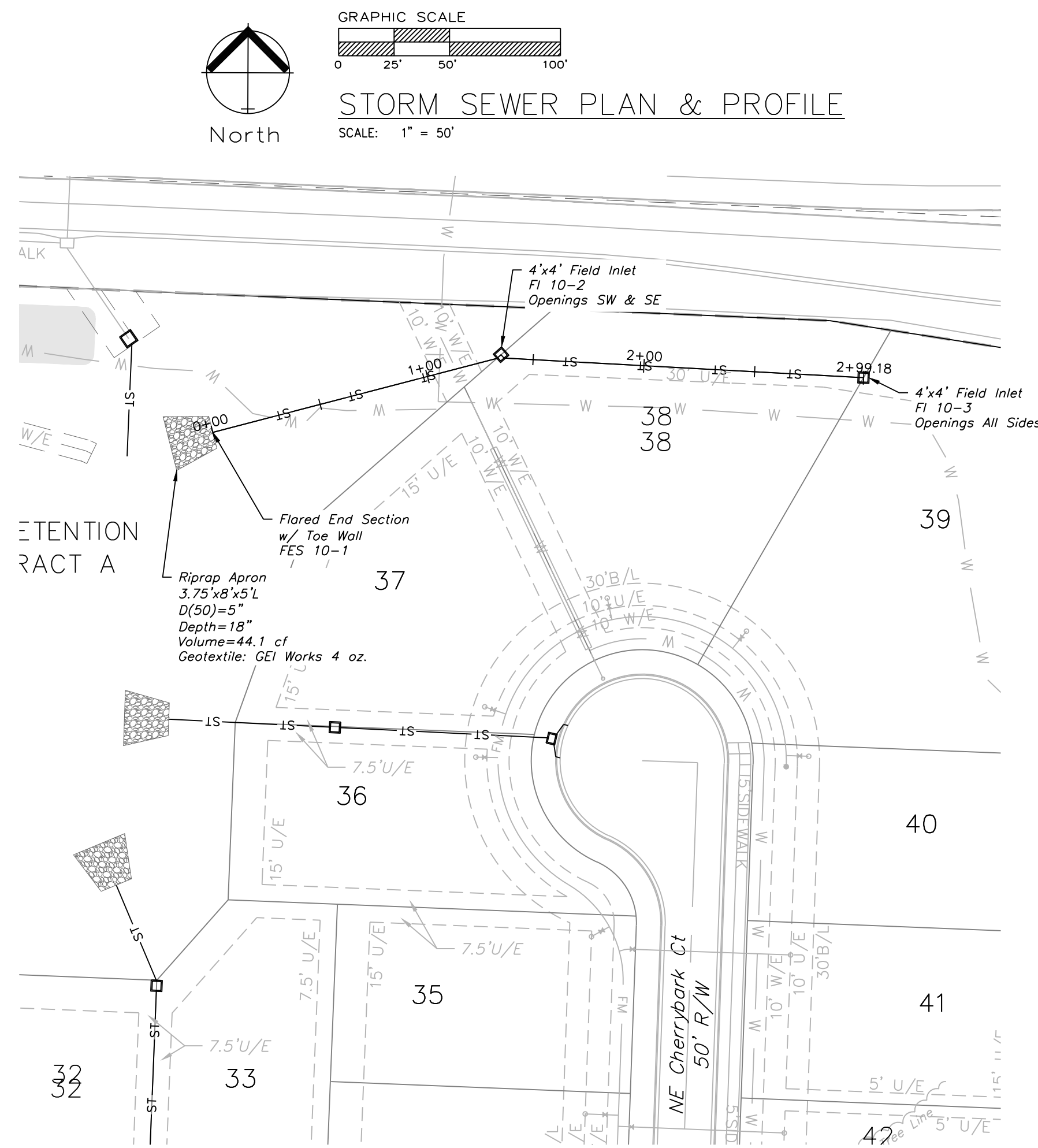
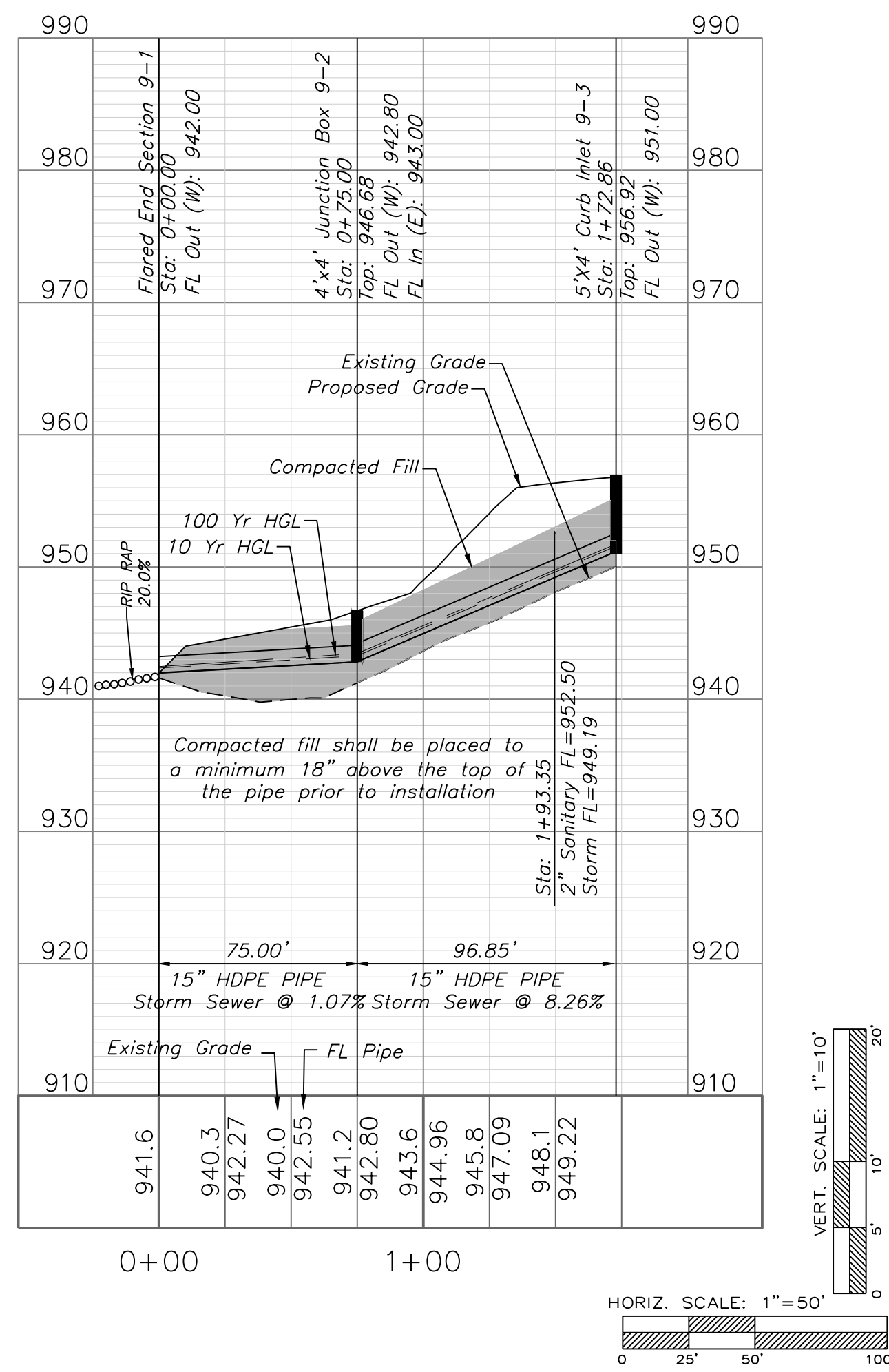


Matthew J. Schlicht
MO PE 2006019708
KS PE 19071
OK PE 25226
NE PE E-14335

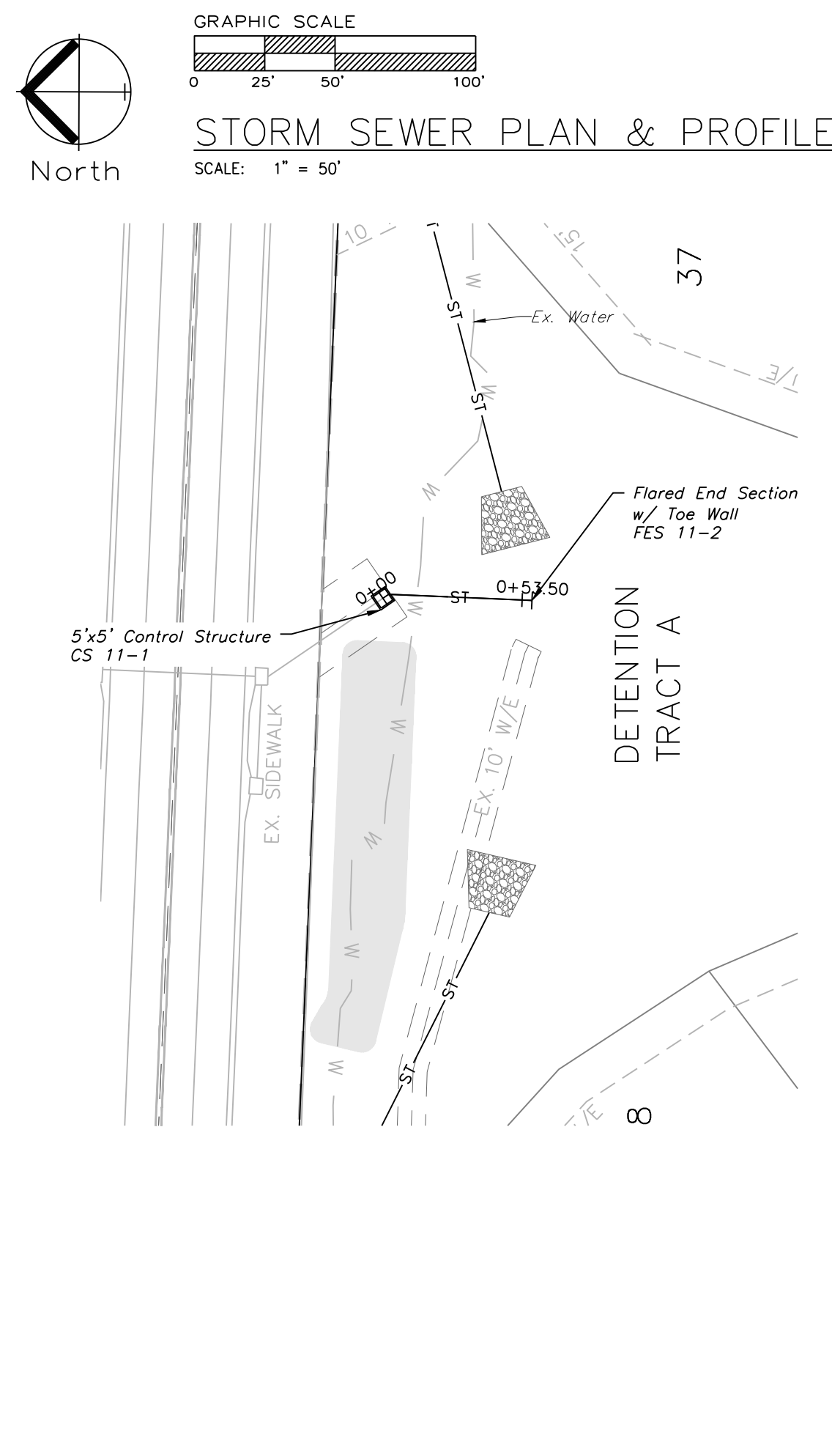
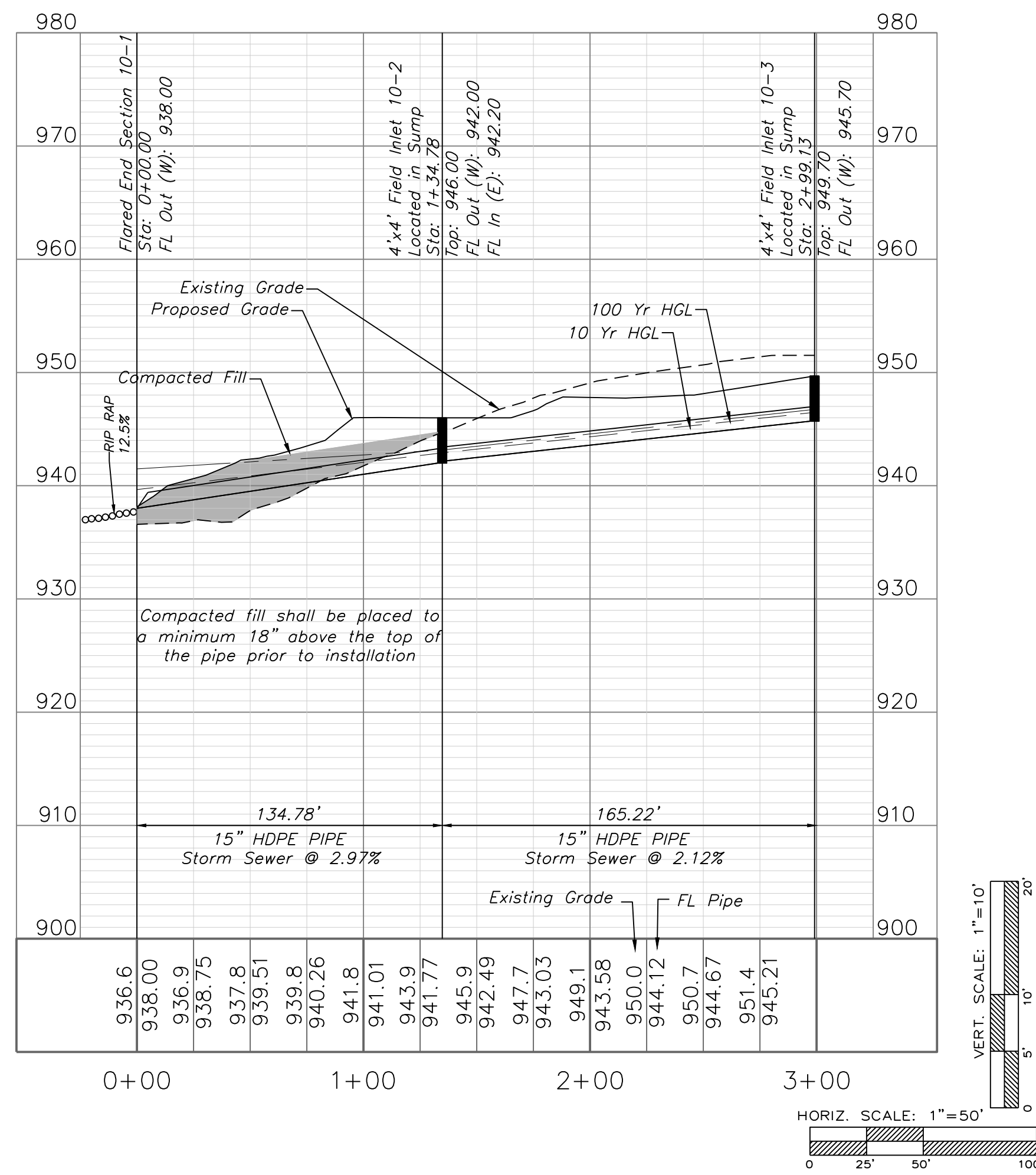
REVISIONS
REV. 5/5/2021
REV. 5/26/2021
REV. 6/22/2021
REV. 6/29/2021
Updated 6/16/2023
Updated 7/21/2023
Updated 8/18/2023



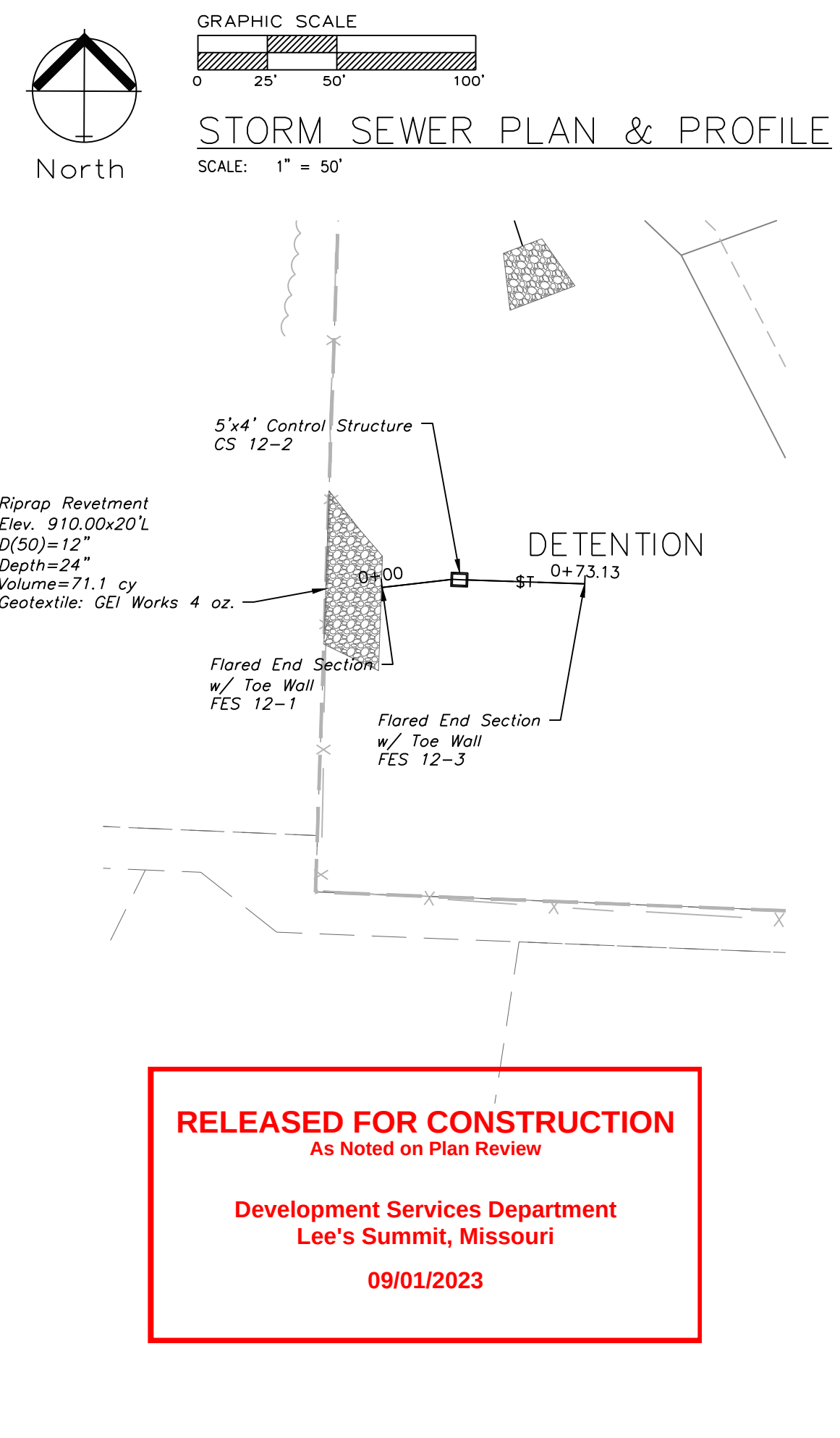
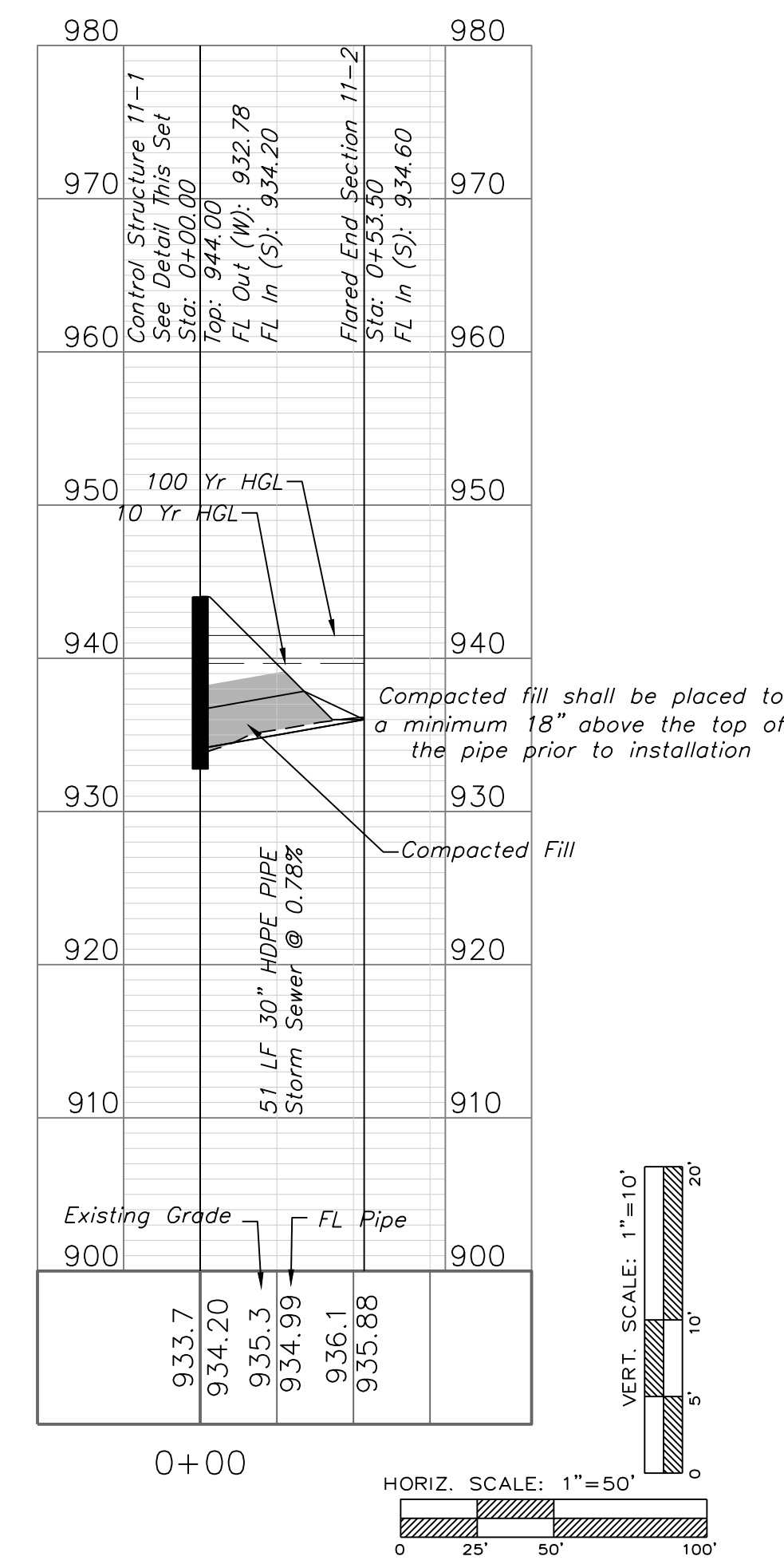
STORM LINE 9



STORM LINE 10



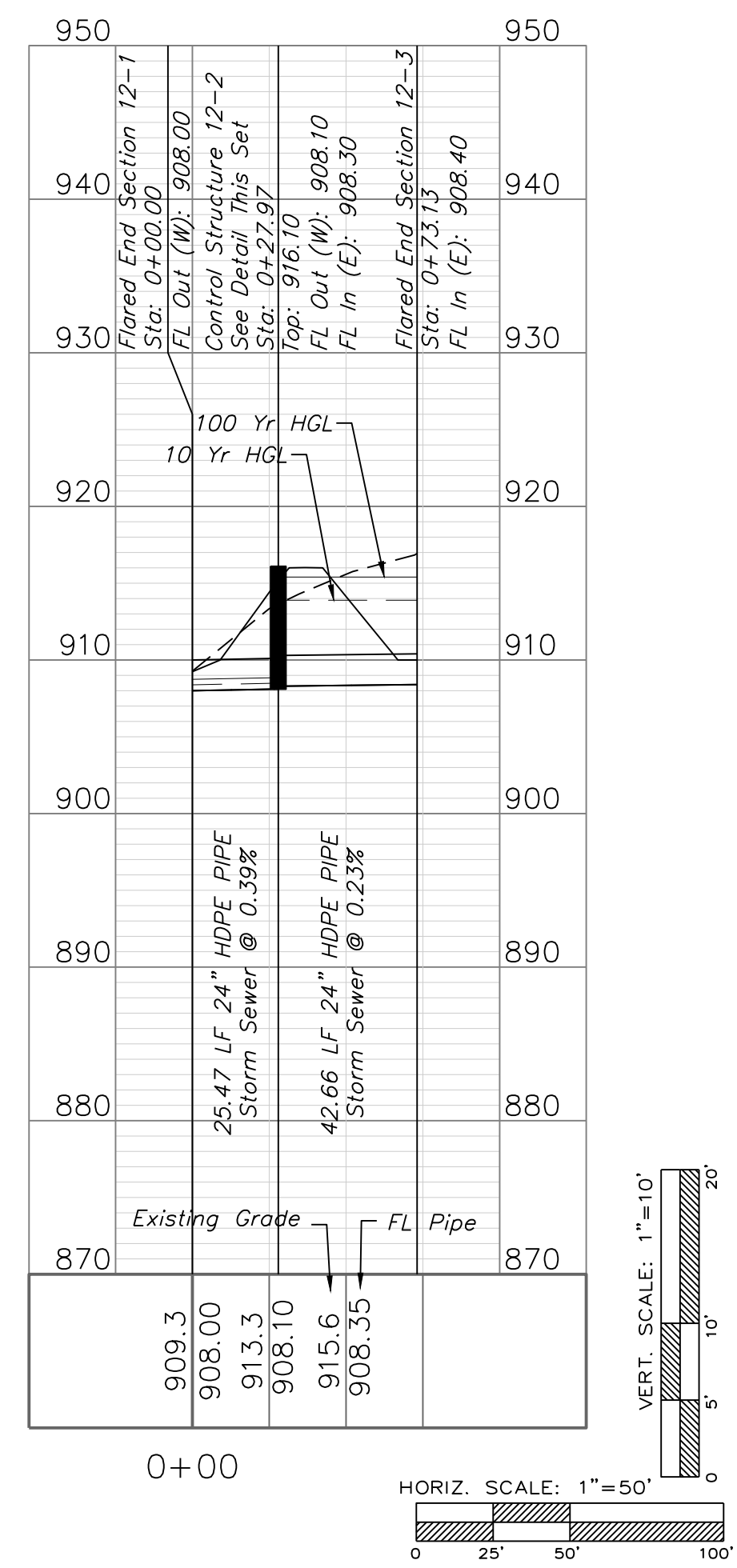
STORM LINE 11



RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
09/01/2023

STORM LINE 12



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

Part of the Southeast 1
Section 27, Township 48 North, Range 31 West
Lee's Summit, Jackson County, Missouri

Project: WOODLAND OAKS
LSMO
Issue Date: February 25, 2021

Storm Sewer Plan & Profile
Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42
Lee's Summit, Jackson County, Missouri

STATE OF MISSOURI
MATTHEW J. SCHLICHT
REGISTERED PROFESSIONAL ENGINEER
No. 19071
Exp. 12/31/2025
NE PE E-14335

REVISIONS
REV. 5/5/2021
REV. 5/26/2021
REV. 6/22/2021
REV. 6/29/2021
Updated 6/16/2023
Updated 7/21/2023
Updated 8/18/2023

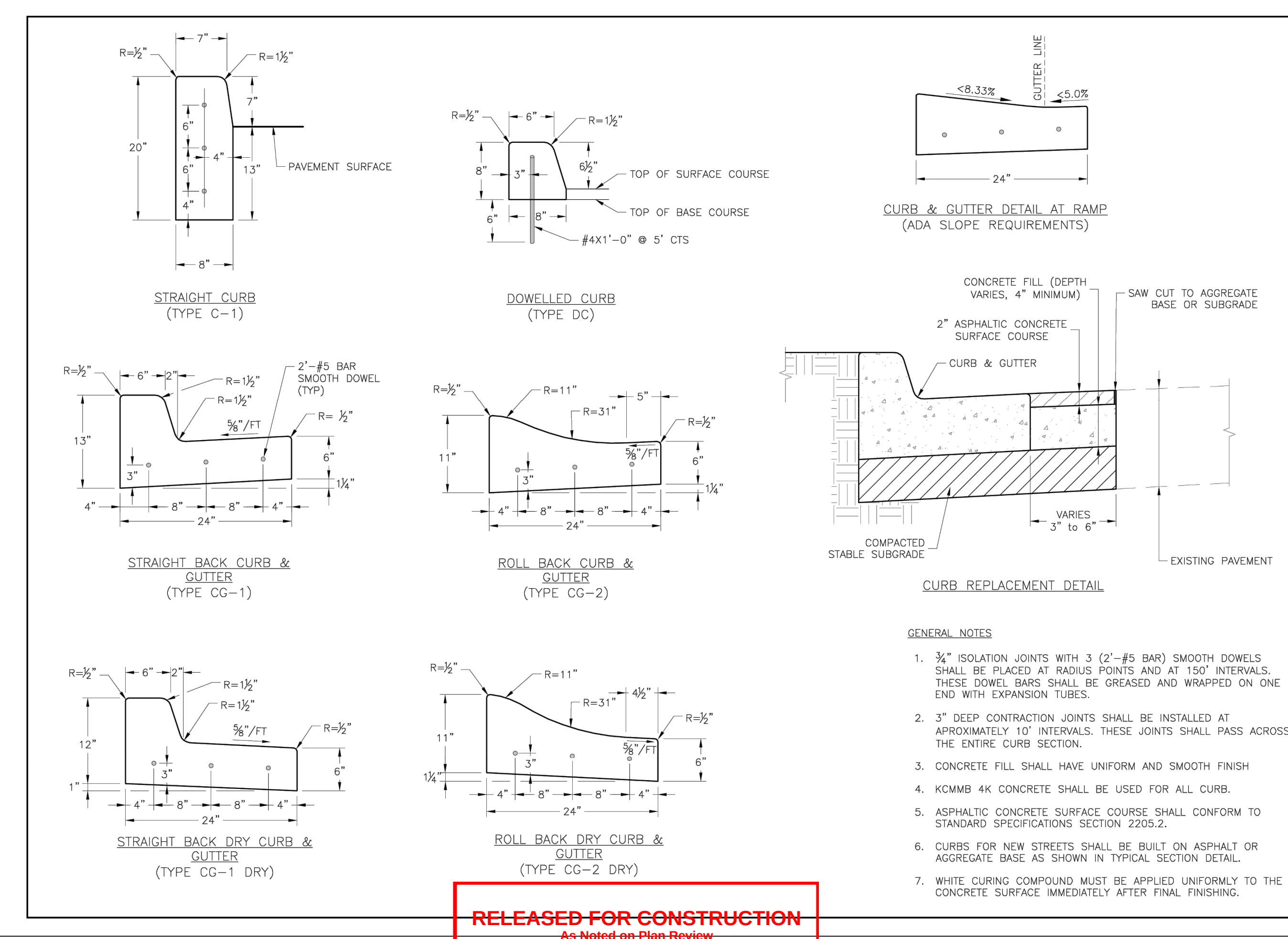
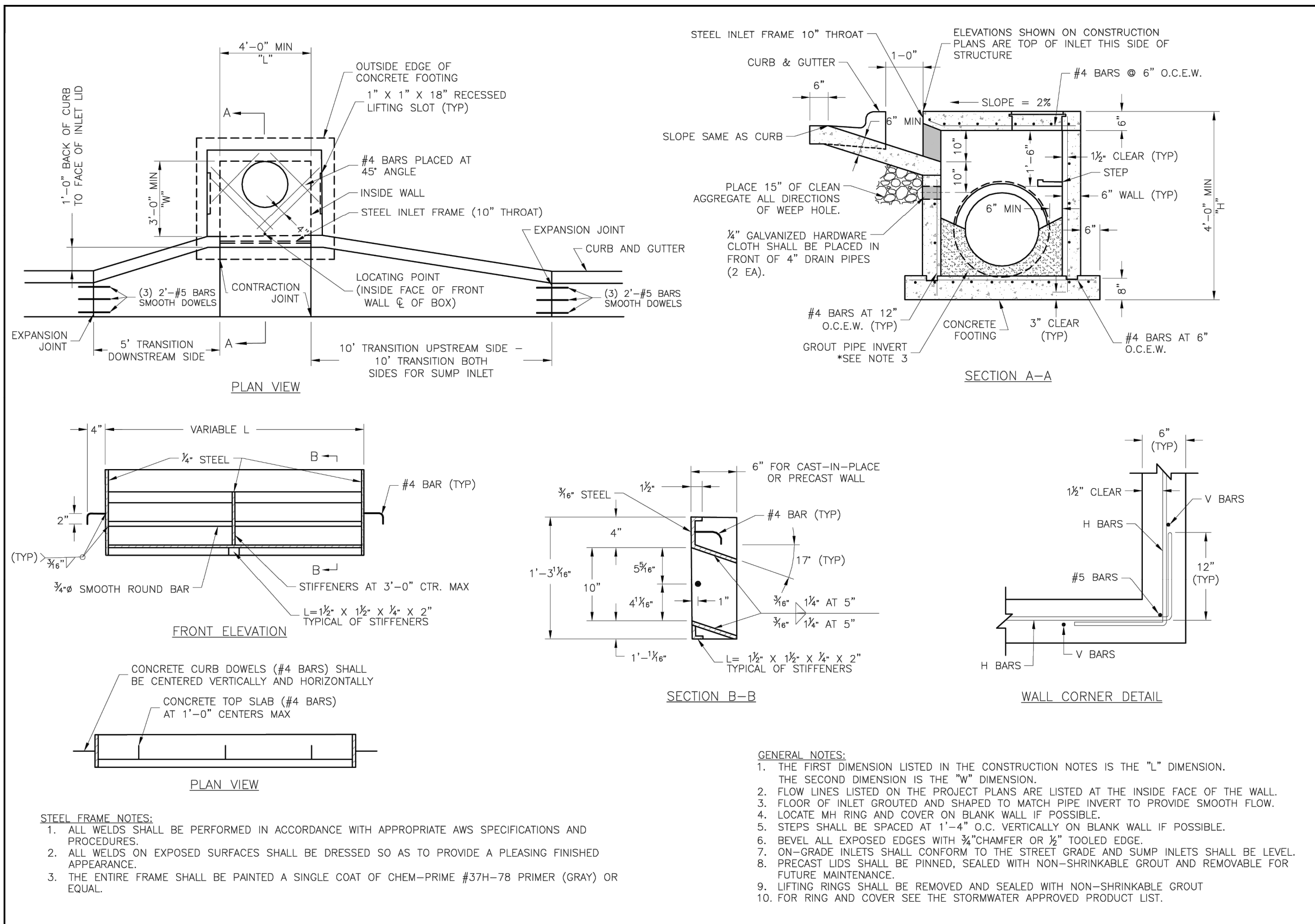
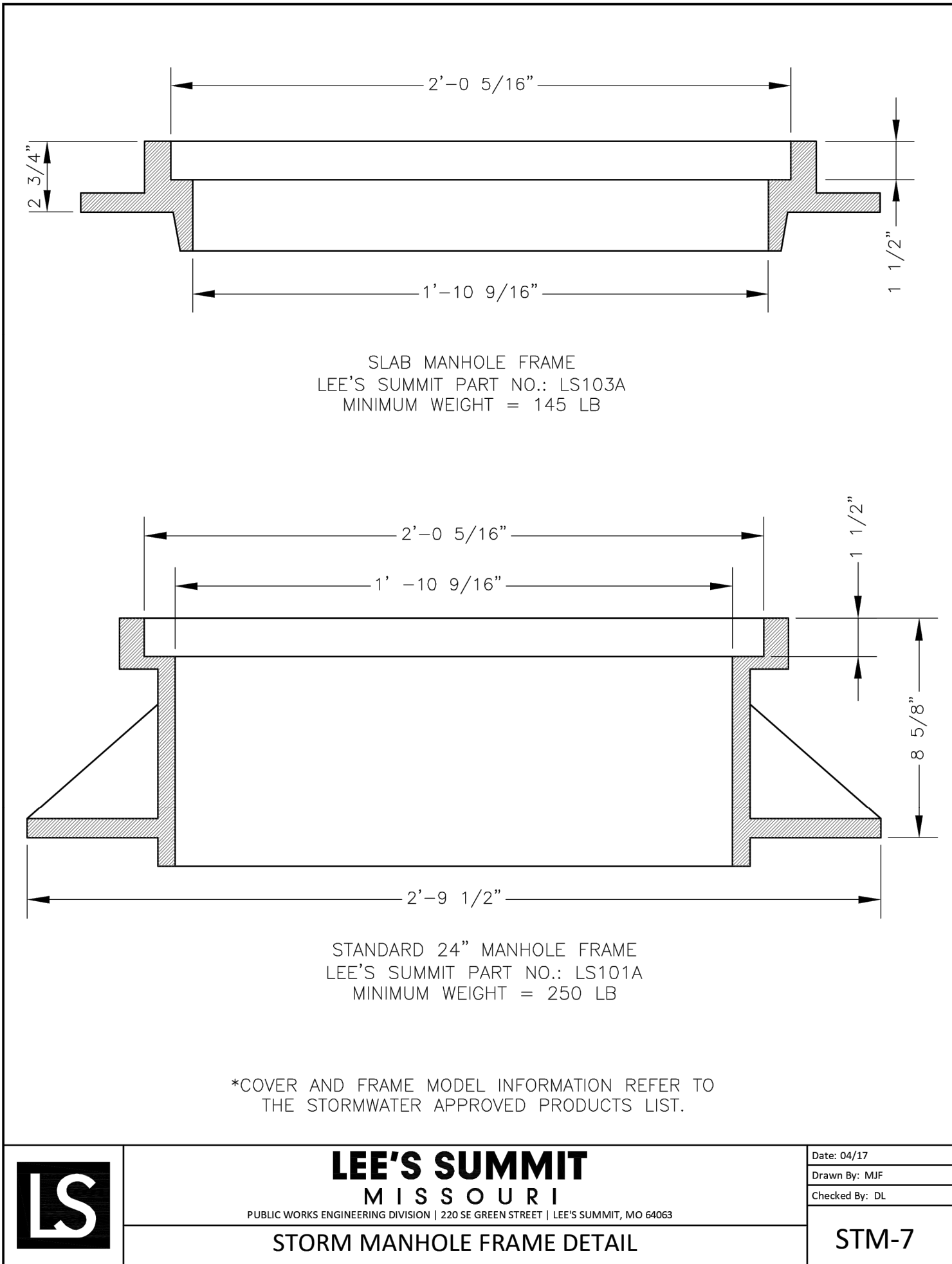
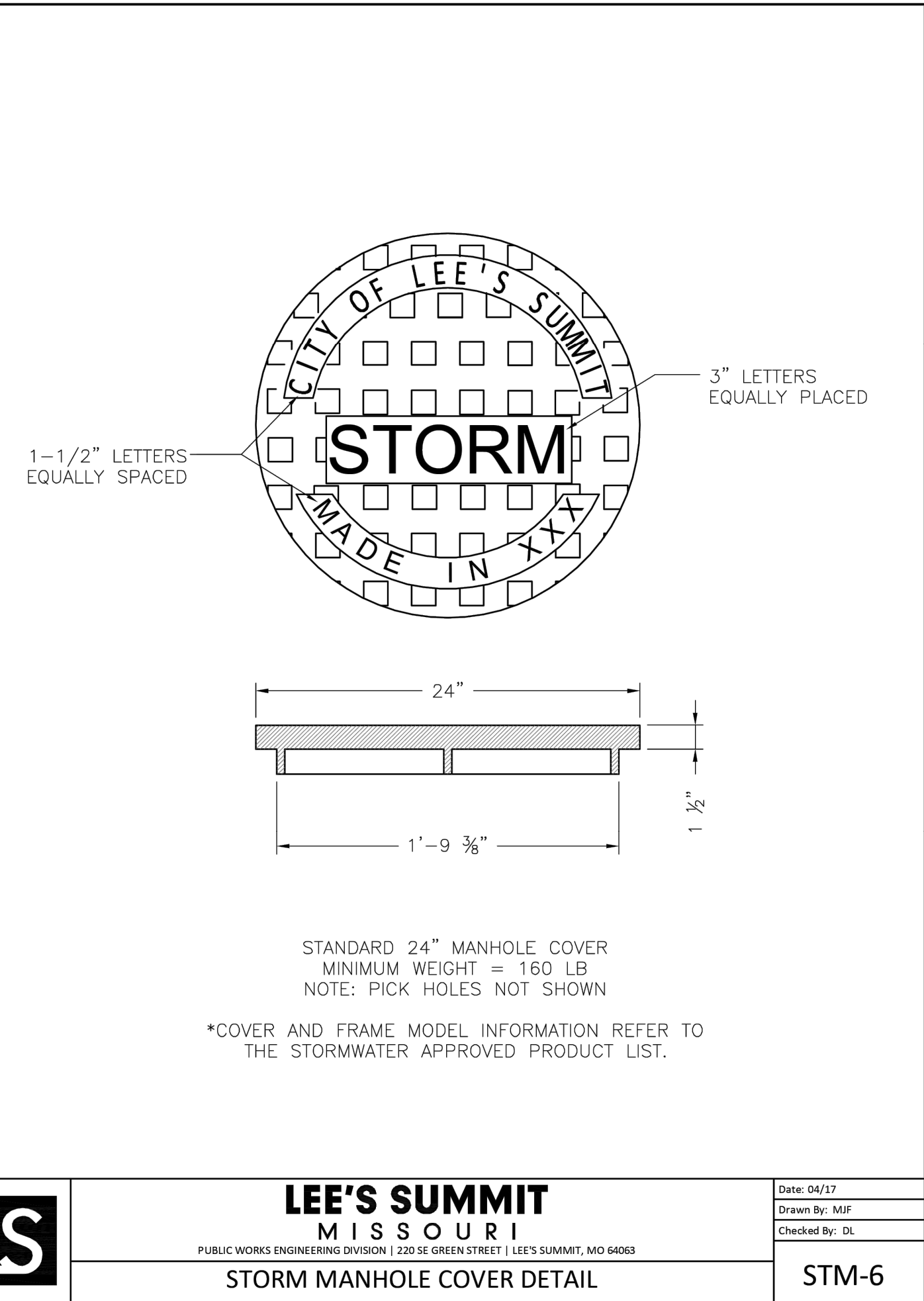
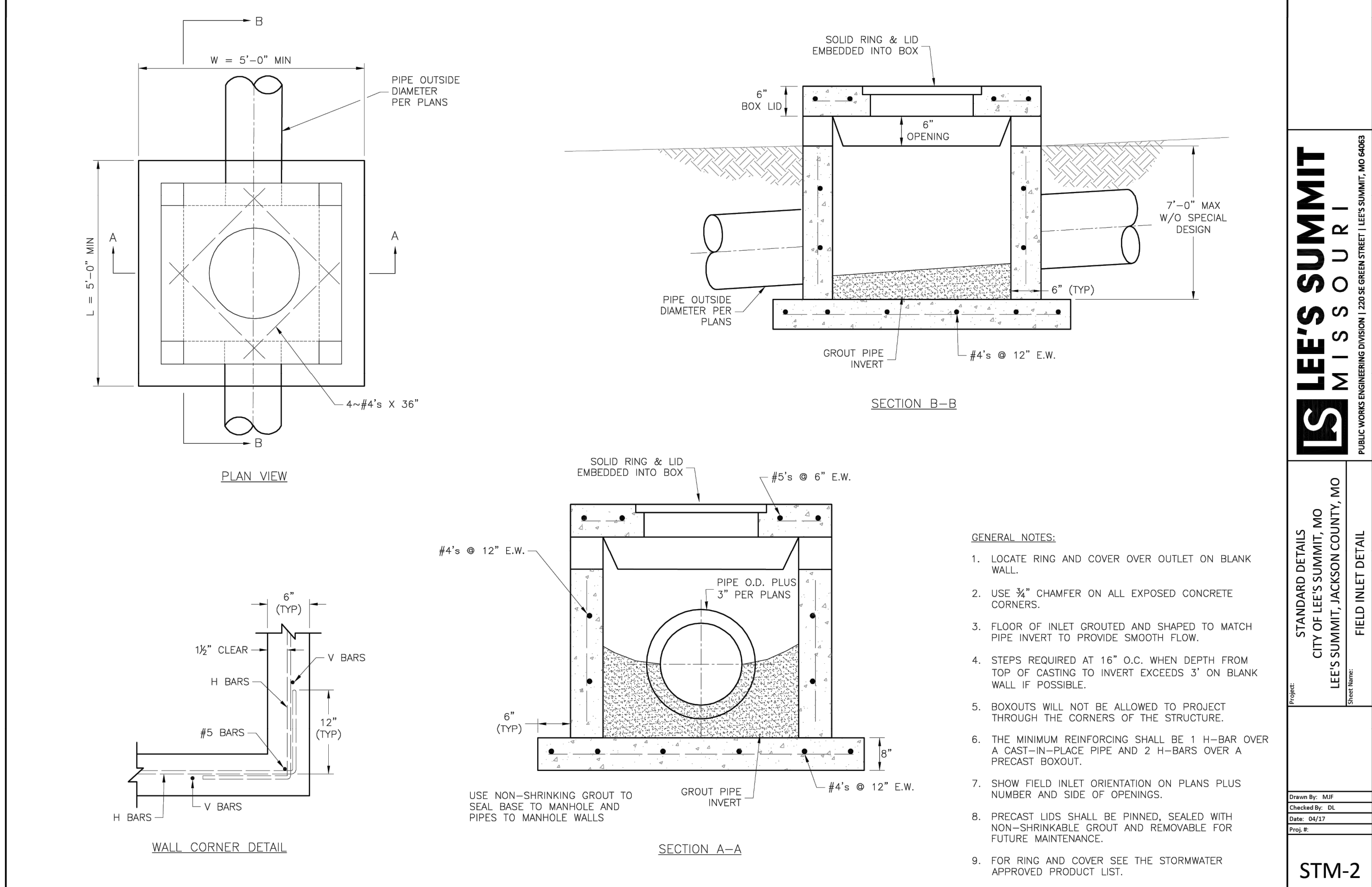
C. 304

10-YEAR INLET																						
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)	InletDepth (ft)	BypassDepth (ft)	BypassSpread (ft)	GutterDepth (ft)	GutterSpread (ft)	Bypass Str.
1-1	1-2	0.77	8.8	6.37	0.51	2.5	0	2.5	0	Dp-Curb	6	8	Sag	.....	0.02	0.02	0.22	n/a	n/a	0.22	11.06	Sag
2-1	2-2	0.28	5.3	7.26	0.51	1.04	0	1.04	0	Dp-Curb	6	8	Sag	.....	0.02	0.02	0.12	n/a	n/a	0.12	6.15	Sag
2-2	2-3	0.12	5.9	7.08	0.51	0.43	0.12	0.3	0.26	Curb	10	5	0.038	2	0.05	0.02	0.12	0.09	1.77	0.12	2.87	2-6
2-3	2-4	0.6	6.2	7	0.51	2.14	1.91	0.89	3.16	Curb	10	5	0.038	2	0.05	0.02	0.22	0.21	7.35	0.22	8.19	2-5
2-4	2-5R	0.4	6.4	6.95	0.51	1.42	3.16	4.58	0	Curb	10	5	Sag	2	0.05	0.02	0.44	n/a	n/a	0.44	18.84	Sag
2-4	2-5L	0.55	8.1	6.53	0.51	1.83	0	1.83	0	Curb	10	5	Sag	2	0.05	0.02	0.26	n/a	n/a	0.26	10.22	Sag
2-5	2-6R	0.16	6.5	6.92	0.51	0.56	0.26	0.82	0	Curb	10	5	Sag	2	0.05	0.02	0.18	n/a	n/a	0.18	6.01	Sag
2-5	2-6L	0.08	6.2	7	0.51	0.29	0	0.29	0	Curb	10	5	Sag	2	0.05	0.02	0.12	n/a	n/a	0.12	2.96	Sag
2-4	3-1	0.19	8.8	6.37	0.51	0.62	0	0.62	0	Dp-Curb	6	4	Sag	.....	0.02	0.02	0.14	n/a	n/a	0.14	6.91	Sag
2-2	4-1	0.54	6.8	6.84	0.51	1.88	0	1.88	0	Dp-Curb	6	4	Sag	.....	0.02	0.02	0.29	n/a	n/a	0.29	14.55	Sag
4-1	4-2	0.32	7.6	6.65	0.51	1.08	0	1.08	0	Dp-Curb	6	4	Sag	.....	0.02	0.02	0.2	n/a	n/a	0.2	10.06	Sag
4-2	4-3	0.08	5.6	7.17	0.51	0.29	0.03	0.19	0.12	Curb	10	5	0.05	2	0.05	0.02	0.09	0.06	1.27	0.09	1.81	2-3
4-3	4-4	0.37	7	6.79	0.51	1.28	1.28	0.66	1.91	Curb	10	5	0.05	2	0.05	0.02	0.19	0.17	5.45	0.19	6.28	2-4
5-1	5-2	0.4	6.1	7.03	0.51	1.43	0	1.43	0	Dp-Curb	6	16	Sag	.....	0.02	0.02	0.1	n/a	n/a	0.1	4.81	Sag
5-2	5-3	0.61	6.3	6.98	0.51	2.17	0	2.17	0	Dp-Curb	6	16	Sag	.....	0.02	0.02	0.13	n/a	n/a	0.13	6.34	Sag
5-3	5-4	0.5	6.3	6.98	0.51	1.78	0	1.78	0	Dp-Curb	6	16	Sag	.....	0.02	0.02	0.11	n/a	n/a	0.11	5.55	Sag
6-1	6-2	0	0	0	0.51	0	.....	.....	.....	MH	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sag
6-2	6-3	0.13	6.4	6.95	0.51	0.46	0	0.3	0.16	Curb	10	5	0.02	2	0.05	0.02	0.12	0.08	1.65	0.12	3.14	6-4
6-3	6-4	0.1	6.1	7.03	0.51	0.36	0.16	0.33	0.19	Curb	10	5	0.02	2	0.05	0.02	0.13	0.09	1.76	0.13	3.38	4-4
6-4	6-5R	0.7	7.6	6.65	0.51	2.37	2.26	4.63	0	Curb	10	5	Sag	2	0.05	0.02	0.44	n/a	n/a	0.44	18.99	Sag
6-4	6-5L	0.21	7	6.79	0.51	0.73	0	0.73	0	Curb	10	5	Sag	2	0.05	0.02	0.17	n/a	n/a	0.17	5.52	Sag
6-5	6-6	0.07	5.8	7.11	0.51	0.25	0	0.23	0.03	Curb	10	5	0.01	2	0.05	0.02	0.11	0.05	0.95	0.11	2.62	4-3
6-4	7-1R	0.17	8.2	6.5	0.51	0.56	0	0.37	0.19	Curb	10	5	0.014	2	0.05	0.02	0.14	0.09	1.9	0.14	3.99	4-4
6-4	7-1L	0.37	7.3	6.72	0.51	1.27	0	0.6	0.66	Curb	10	5	0.014	2	0.05	0.02	0.18	0.15	4.38	0.18	6.08	4-4
7-1	7-2	0.19	7.3	6.72	0.51	0.65	0	0.41	0.24	Curb	10	5	0.014	2	0.05	0.02	0.15	0.1	2.19	0.15	4.33	4-4
6-3	8-1	0.97	8.6	6.41	0.51	3.17	0	0.91	2.26	Curb	10	5	0.02	2	0.05	0.02	0.23	0.21	7.3	0.23	8.46	6-5
9-1	9-2	0	0	0	0.51	0	.....	.....	.....	MH	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Sag
9-2	9-3R	0.25	7.5	6.67	0.51	0.85	0	0.85	0	Curb	10	5	Sag	2	0.05	0.02	0.18	n/a	n/a	0.18	6.13	Sag
9-2	9-3L	0.19	6.7	6.87	0.51	0.67	0	0.67	0	Curb	10	5	Sag	2	0.05	0.02	0.16	n/a	n/a	0.16	5.21	Sag
10-1	10-2	0.35	6.3	6.98	0.51	1.25	0	1.25	0	Dp-Curb	6	8	Sag	.....	0.02	0.02	0.14	n/a	n/a	0.14	6.95	Sag
10-2	10-3	1.26	9.7	6.18	0.51	3.97	0	3.97	0	Dp-Curb	6	16	Sag	.....	0.02	0.02	0.19	n/a	n/a	0.19	9.48	Sag

10-YEAR 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	139.4	0.77	0.77	0.51	0.39	0.39	8.8	8.8	6.4	2.5	2.5	12.32	5.94	15	2.15	912	915	912.38	915.63	0	918.5
2-1	2-2	50.18	0.28	3.69	0.51	0.14	1.88	5.3	9.6	6.2	11.67	11.67	71.89	11.31	24	5.98	912	915	912.55	916.23	0	924.5
2-2	2-3	138.03	0.12	2.1	0.51	0.06	1.07	5.9	9.4	6.2	6.69	6.69	40.78	11.18	18	8.93	920	932.32	920.41	933.32	924.5	941.27
2-3	2-4	46.47	0.6	1.98	0.51	0.31	1.01	6.2	9.3	6.3	6.33	6.33	14.16	6.51	18	1.08	932.82	933.32	932.51	934.29	941.27	940.79
2-4	2-5R	94.12	0.4	1.19	0.51	0.2	0.61	6.4	8.1	6.5	3.96	3.96	9.4	6.04	15	1.25	933.82	935	934.39	935.8	940.79	939.79
2-4	2-5L	1	0.55	0.55	0.51	0.28	0.28	8.1	8.1	6.5	1.83	1.83	26.54	2.91	15	10	935	935.1	935.8	935.64	939.79	939.79
2-5	2-6R	34	0.16	0.24	0.51	0.08	0.12	6.5	6.5	6.9	0.85	0.85	7.75	3.28	15	0.85	935.5	935.79	935.8	936.15	939.79	939.79
2-5	2-6L	1	0.08	0.08	0.51	0.04	0.04	6.2	6.2	7	0.29	0.29	26.55	1.56	15	10	935.79	935.89	936.15	936.1	939.79	939.79
2-4	3-1	128.62	0.19	0.19	0.51	0.1	0.1	8.8	8.8	6.4	0.62	0.62	17.36	4.65	15	4.28	936	941.5	936.16	941.81	940.79	946.25
2-2	4-1	113.49	0.54	1.31	0.51	0.28	0.67	6.8	8.3	6.5	4.33	4.33	14.33	5.82	18	1.1	916.5	917.75	917.07	918.55	924.5	924.5
4-1	4-2	189.85	0.32	0.77	0.51	0.16	0.39	7.6	7.6	6.6	2.61	2.61	25.85	4.56	15	9.48	918	936	918.55	936.65	924.5	944.33
4-2	4-3	135.55	0.08	0.45	0.51	0.04	0.23	5.6	7.1	6.8	1.55	1.55	16.12	5.87	15	3.69	940	945	940.26	945.49	944.33	950.08
4-3	4-4	34	0.37	0.37	0.51	0.19	0.19	7	7	6.8	1.28	1.28	12.47	4.55	15	2.21	945.2	945.95	945.49	946.4	950.08	950.08
5-1	5-2	96.83	0.4	1.51	0.51	0.2	0.77	6.1	7.8	6.6	5.09	5.09	9.61	5.16	18	0.5	937	937.48	937.78	938.35	0	944
5-2	5-3	259.22	0.61	1.11	0.51	0.31	0.57	6.3	6.9	6.8	3.87	3.87	9.67	4.76	18	0.5	937.98	939.28	938.64	940.03	944	944
5-3	5-4	132.58	0.5	0.5	0.51	0.26	0.26	6.3	6.3	7	1.78	1.78	5.92	3.91	15	0.5	939.78	940.44	940.25	940.97	944	944
6-1	6-2	49.06	0	2.91	0.51	0	1.48	0	9.2	6.3	9.33	9.33	72.71	10.62	24	6.11	940	943	940.48	944.09	0	950.2
6-2	6-3	140.5	0.13	2.91	0.51	0.07	1.48	6.4	8.9	6.4	9.44	9.44	30.38	6.94	24	1.07	945	946.5	945.77	947.6	950.2	958.57
6-3	6-4	175.8	0.1	1.81	0.51	0.05	0.92	6.1	8.4	6.5	5.97	5.97	12.61	6.07	18	0.85	947	948.5	947.73	949.44	958.57	955.36
6-4	6-5R	79.6	0.7	0.98	0.51	0.36	0.5	7.6	7.6	6.6	3.32	3.32	6.65	4.93	15	0.63	949	949.5	949.62	950.23	955.36	954.54
6-4	6-5L	1	0.21	0.21	0.51	0.11	0.11	7	7	6.8	0.73	0.73	26.54	1.87	15	10	949.5	949.6	950.23	949.93	954.54	954.54
6-5	6-6	34	0.07	0.07	0.51	0.04	0.04	5.8	5.8	7.1	0.25	0.25	10.58	1.84	15	1.59	950	950.54	950.23	950.73	954.54	954.54
6-4	7-1R	50	0.17	0.73	0.51	0.09	0.37	8.2	8.2	6.5	2.42	2.42	8.39	4.94	15	1	949	949.5	949.46	950.12	955.36	954.87
6-4	7-1L	1	0.37	0.56	0.51	0.19	0.29	7.3	7.5	6.7	1.91	1.91	26.54	3.4	15	10	949.5	949.6	950.12	950.15	954.87	954.87
7-1	7-2	34	0.19	0.19	0.51	0.1	0.1	7.3	7.3	6.7	0.65	0.65	10.18	3.67	15	1.47	950	950.5	950.21	950.81	954.87	954.87
6-3	8-1	35.8	0.97	0.97	0.51	0.49	0.49	8.6	8.6	6.4	3.17	3.17	11.48	6.18	15	1.87	954	954.67	954.45	955.39	958.57	958.33
9-1	9-2	75	0	0.44	0.51	0	0.22	0	7.8	6.6	1.48	1.48	8.67	4.34	15	1.07	942	942.8	942.35	943.28	0	950.86
9-2	9-3R	96.85	0.25	0.44	0.51	0.13	0.22	7.5	7.5	6.7	1.5	1.5	24.13	5.33	15	8.26	943	951	943.28	951.48	950.86	956.92
9-2	9-3L	1	0.19	0.19	0.51	0.1	0.1	6.7	6.7	6.9	0.67	0.67	26.54	5.93	15	10	952	952.1	952.14	952.42	956.92	956.92
10-1	10-2	134.78	0.35	1.61	0.51	0.18	0.82	6.3	10.2	6.1	4.98	4.98	14.46	7.97	15	2.97	938	942	938.51	942.9	0	946
10-2	10-3	165.22	1.26	1.26	0.51	0.64	0.64	9.7	9.7	6.2	3.97	3.97	12.22	5.16	15	2.12	942.2	942.8	942.9	946.51	946	949.7

100-YEAR INLET																						
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)	InletDepth (ft)	BypassDepth (ft)	BypassSpread (ft)	GutterDepth (ft)	GutterSpread (ft)	Bypass Str.
1-1	1-2	0.77	8.8	11.31	0.51	4.44	0	4.44	0	Dp-Curb	6	8	Sag	....	0.02	0.02	0.32	n/a	n/a	0.32	16.22	Sag
2-1	2-2	0.28	5.3	12.75	0.51	1.82	0	1.82	0	Dp-Curb	6	8	Sag	....	0.02	0.02	0.18	n/a	n/a	0.18	8.95	Sag
2-2	2-3	0.12	5.9	12.48	0.51	0.76	0.32	0.44	0.64	Curb	10	5	0.038	2	0.05	0.02	0.15	0.12	3.17	0.15	4.36	7
2-3	2-4	0.6	6.2	12.34	0.51	3.78	4.31	1.27	6.82	Curb	10	5	0.038	2	0.05	0.02	0.28	0.26	10.19	0.28	10.92	5
2-4	2-5R	0.4	6.4	12.26	0.51	2.5	6.82	9.32	0	Curb	10	5	Sag	2	0.05	0.02	0.67	n/a	n/a	0.67	30.26	Sag
2-4	2-5L	0.55	8.1	11.57	0.51	3.24	0	3.24	0	Curb	10	5	Sag	2	0.05	0.02	0.36	n/a	n/a	0.36	14.97	Sag
2-5	2-6R	0.16	6.5	12.21	0.51	1	0.64	1.64	0	Curb	10	5	Sag	2	0.05	0.02	0.25	n/a	n/a	0.25	9.5	Sag
2-5	2-6L	0.08	6.2	12.34	0.51	0.5	0	0.5	0	Curb	10	5	Sag	2	0.05	0.02	0.15	n/a	n/a	0.15	4.32	Sag
2-4	3-1	0.19	8.8	11.31	0.51	1.1	0	1.1	0	Dp-Curb	6	4	Sag	....	0.02	0.02	0.2	n/a	n/a	0.2	10.13	Sag
2-2	4-1	0.54	6.8	12.08	0.51	3.33	0	3.33	0	Dp-Curb	6	4	Sag	....	0.02	0.02	0.43	n/a	n/a	0.43	21.26	Sag
4-1	4-2	0.32	7.6	11.76	0.51	1.92	0	1.92	0	Dp-Curb	6	4	Sag	....	0.02	0.02	0.29	n/a	n/a	0.29	14.72	Sag
4-2	4-3	0.08	5.6	12.61	0.51	0.51	0.1	0.3	0.32	Curb	10	5	0.05	2	0.05	0.02	0.12	0.09	1.82	0.12	2.8	3
4-3	4-4	0.37	7	12	0.51	2.26	2.99	0.95	4.31	Curb	10	5	0.05	2	0.05	0.02	0.23	0.22	7.92	0.23	8.63	4
5-1	5-2	0.4	6.1	12.39	0.51	2.53	0	2.53	0	Dp-Curb	6	16	Sag	....	0.02	0.02	0.14	n/a	n/a	0.14	7.02	Sag
5-2	5-3	0.61	6.3	12.3	0.51	3.83	0	3.83	0	Dp-Curb	6	16	Sag	....	0.02	0.02	0.19	n/a	n/a	0.19	9.25	Sag
5-3	5-4	0.5	6.3	12.3	0.51	3.14	0	3.14	0	Dp-Curb	6	16	Sag	....	0.02	0.02	0.16	n/a	n/a	0.16	8.1	Sag
6-1	6-2	0	0	0	0.51	0	....	....	....	MH	....	....	....	....	....	....	....	....	....	....	....	....
6-2	6-3	0.13	6.4	12.26	0.51	0.81	0	0.43	0.38	Curb	10	5	0.02	2	0.05	0.02	0.15	0.11	2.74	0.15	4.44	19
6-3	6-4	0.1	6.1	12.39	0.51	0.63	0.38	0.49	0.52	Curb	10	5	0.02	2	0.05	0.02	0.16	0.13	3.41	0.16	4.98	13
6-4	6-5R	0.7	7.6	11.76	0.51	4.2	4.4	8.6	0	Curb	10	5	Sag	2	0.05	0.02	0.63	n/a	n/a	0.63	28.69	Sag
6-4	6-5L	0.21	7	12	0.51	1.29	0	1.29	0	Curb	10	5	Sag	2	0.05	0.02	0.22	n/a	n/a	0.22	8.07	Sag
6-5	6-6	0.07	5.8	12.52	0.51	0.45	0	0.34	0.1	Curb	10	5	0.01	2	0.05	0.02	0.14	0.08	1.61	0.14	3.84	12
6-4	7-1R	0.17	8.2	11.53	0.51	1	0	0.53	0.47	Curb	10	5	0.014	2	0.05	0.02	0.17	0.13	3.59	0.17	5.42	13
6-4	7-1L	0.37	7.3	11.88	0.51	2.24	0	0.82	1.42	Curb	10	5	0.014	2	0.05	0.02	0.22	0.19	6.41	0.22	7.87	13
7-1	7-2	0.19	7.3	11.88	0.51	1.15	0	0.57	0.58	Curb	10	5	0.014	2	0.05	0.02	0.18	0.14	4.06	0.18	5.81	13
6-3	8-1	0.97	8.6	11.38	0.51	5.63	0	1.23	4.4	Curb	10	5	0.02	2	0.05	0.02	0.27	0.25	9.71	0.27	10.74	20
9-1	9-2	0	0	0	0.51	0	....	....	....	MH	....	....	....	....	....	....	....	....	....	....	....	....
9-2	9-3R	0.25	7.5	11.8	0.51	1.5	0	1.5	0	Curb	10	5	Sag	2	0.05	0.02	0.24	n/a	n/a	0.24	8.97	Sag
9-2	9-3L	0.19	6.7	12.13	0.51	1.18	0	1.18	0	Curb	10	5	Sag	2	0.05	0.02	0.21	n/a	n/a	0.21	7.61	Sag
10-1	10-2	0.35	6.3	12.3	0.51	2.2	0	2.2	0	Dp-Curb	6	8	Sag	....	0.02	0.02	0.2	n/a	n/a	0.2	10.14	Sag
10-2	10-3	1.26	9.7	10.99	0.51	7.06	0	7.06	0	Dp-Curb	6	16	Sag	....	0.02	0.02	0.28	n/a	n/a	0.28	13.93	Sag

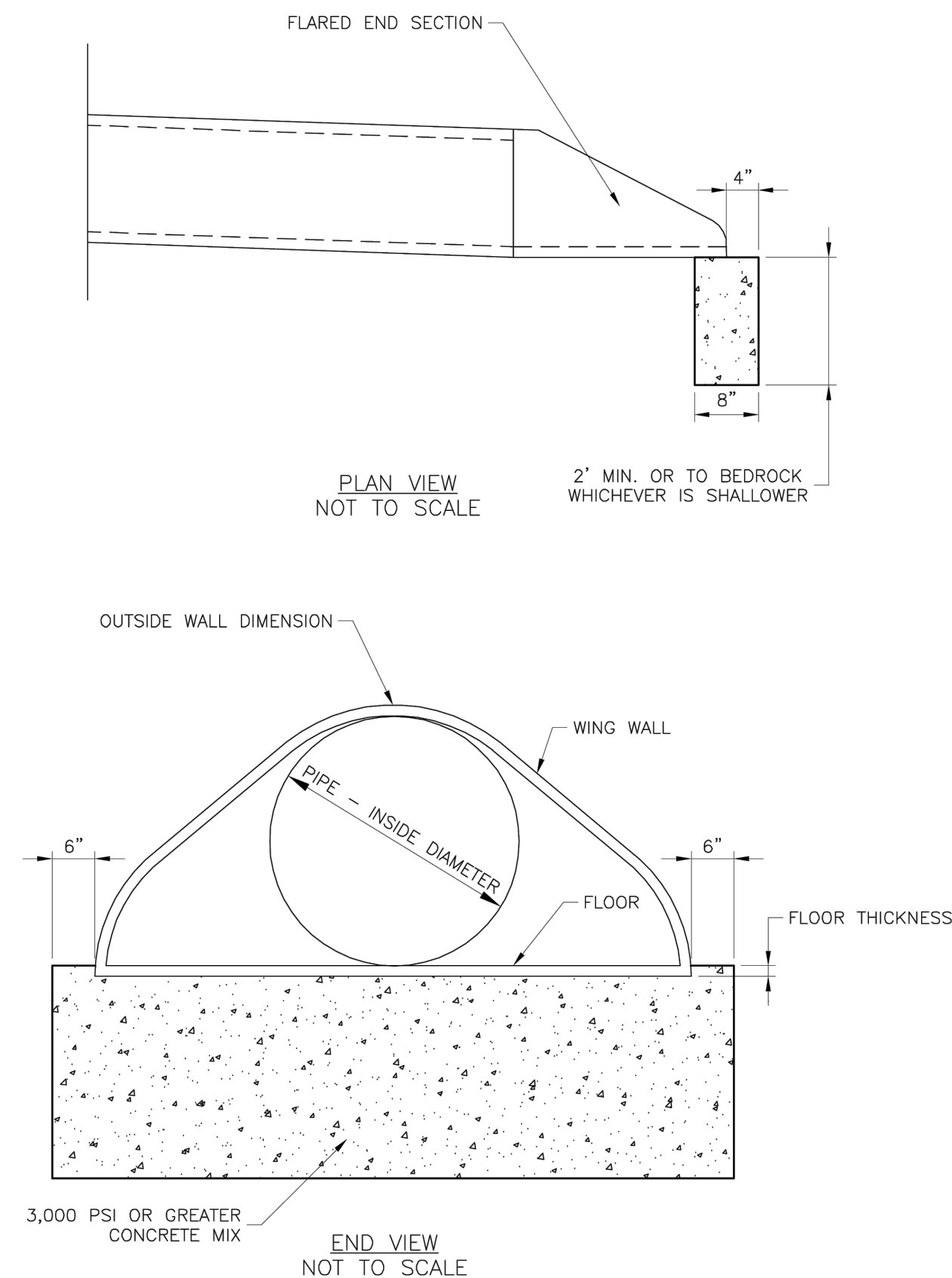
100-YEAR PIPE																						
D.S. Str.	U.S. Str.	LineLength (ft)	Incr.Area (ac)	TotalArea (ac)	RunoffCoeff. (C)	IncrC x A	TotalC x A	InletTime (min)	TimeConc (min)	RnfalInt (in/hr)	TotalRunoff (cfs)	TotalFlow (cfs)	CapacFull (cfs)	Veloc (ft/s)	PipeSize (in)	PipeSlope (%)	Inv ElevDn (ft)	Inv ElevUp (ft)	HGLDn (ft)	HGLUp (ft)	Grnd/RimDn (ft)	Grnd/RimUp (ft)
1-1	1-2	139.4	0.77	0.77	0.51	0.39	0.39	8.8	8.8	11.3	4.44	4.44	12.32	4.3	15	2.15	912	915	915.4	915.85	0	918.5
2-1	2-2	50.18	0.28	3.69	0.51	0.14	1.88	5.3	9.5	11.1	20.84	20.84	71.89	7.11	24	5.98	912	915	915.4	916.63	0	924.5
2-2	2-3	138.03	0.12	2.1	0.51	0.06	1.07	5.9	9.3	11.1	11.92	11.92	40.78	13.65	18	8.93	920	932.32	920.56	933.63	924.5	941.27
2-3	2-4	46.47	0.6	1.98	0.51	0.31	1.01	6.2	9.2	11.2	11.28	11.28	14.16	7.95	18	1.08	932.82	933.32	933.83	934.6	941.27	940.79
2-4	2-5R	94.12	0.4	1.19	0.51	0.2	0.61	6.4	8.1	11.6	7.02	7.02	9.4	7.36	15	1.25	933.82	935	934.63	936.06	940.79	939.79
2-4	2-5L	1	0.55	0.55	0.51	0.28	0.28	8.1	8.1	11.6	3.24	3.24	26.54	3.66	15	10	935	935.1	936.06	935.83	939.79	939.79
2-5	2-6R	34	0.16	0.24	0.51	0.08	0.12	6.5	6.5	12.2	1.49	1.49	7.75	3.11	15	0.85	935.5	935.79	936.06	936.27	939.79	939.79
2-5	2-6L	1	0.08	0.08	0.51	0.04	0.04	6.2	6.2	12.3	0.5	0.5	26.55	1.83	15	10	935.79	935.89	936.27	936.17	939.79	939.79
2-4	3-1	128.62	0.19	0.19	0.51	0.1	0.1	8.8	8.8	11.3	1.1	1.1	17.36	5.5	15	4.28	936	941.5	936.21	941.91	940.79	946.25
2-2	4-1	113.49	0.54	1.31	0.51	0.28	0.67	6.8	8.2	11.5	7.7	7.7	14.33	6.97	18	1.1	916.5	917.75	917.28	918.82	924.5	924.5
4-1	4-2	189.85	0.32	0.77	0.51	0.16	0.39	7.6	7.6	11.8	4.62	4.62	25.85	5.22	15	9.48	918	936	918.82	936.87	924.5	944.33
4-2	4-3	135.55	0.08	0.45	0.51	0.04	0.23	5.6	7.1	12	2.74	2.74	16.12	6.96	15	3.69	940	945	940.35	945.66	944.33	950.08
4-3	4-4	34	0.37	0.37	0.51	0.19	0.19	7	7	12	2.26	2.26	12.47	4.67	15	2.21	945.2	945.95	945.66	946.55	950.08	950.08
5-1	5-2	96.83	0.4	1.51	0.51	0.2	0.77	6.1	8.3	11.5	8.85	8.85	9.61	5.01	18	0.5	937	937.48	941.49	941.9	0	944
5-2	5-3	259.22	0.61	1.11	0.51	0.31	0.57	6.3	7.2	11.9	6.76	6.76	9.67	3.82	18	0.5	937.98	939.28	942.23	942.87	944	944
5-3	5-4	132.58	0.5	0.5	0.51	0.26	0.26	6.3	6.3	12.3	3.14	3.14	5.92	2.56	15	0.5	939.78	940.44	943.21	943.39	944	944
6-1	6-2	49.06	0	2.91	0.51	0	1.48	0	9	11.2	16.65	16.65	72.71	6.68	24	6.11	940	943	941.49	944.47	0	950.2
6-2	6-3	140.5	0.13	2.91	0.51	0.07	1.48	6.4	8.8	11.3	16.8	16.8	30.38	8.34	24	1.07	945	946.5	946.06	947.98	950.2	958.57
6-3	6-4	175.8	0.1	1.81	0.51	0.05	0.92	6.1	8.4	11.5	10.59	10.59	12.61	7.36	18	0.85	947	948.5	948.05	949.75	958.57	955.36
6-4	6-5R	79.6	0.7	0.98	0.51	0.36	0.5	7.6	7.6	11.8	5.88	5.88	6.65	5.91	15	0.63	949	949.5	949.91	950.48	955.36	954.54
6-4	6-5L	1	0.21	0.21	0.51	0.11	0.11	7	7	12	1.29	1.29	26.54	2.25	15	10	949.5	949.6	950.48	950.05	954.54	954.54
6-5	6-6	34	0.07	0.07	0.51	0.04	0.04	5.8	5.8	12.5	0.45	0.45	10.58	1.73	15	1.59	950	950.54	950.48	950.8	954.54	954.54
6-4	7-1R	50	0.17	0.73	0.51	0.09	0.37	8.2	8.2	11.5	4.29	4.29	8.39	5.25	15	1	949	949.5	949.75	950.34	955.36	954.87
6-4	7-1L	1	0.37	0.56	0.51	0.19	0.29	7.3	7.5	11.8	3.38	3.38	26.54	4.16	15	10	949.5	949.6	950.34	950.34	954.87	954.87
7-1	7-2	34	0.19	0.19	0.51	0.1	0.1	7.3	7.3	11.9	1.15	1.15	10.18	3.71	15	1.47	950	950.5	950.34	950.92	954.87	954.87
6-3	8-1	35.8	0.97	0.97	0.51	0.49	0.49	8.6	8.6	11.4	5.63	5.63	11.48	7.44	15	1.87	954	954.67	954.62	955.63	958.57	958.33
9-1	9-2	75	0	0.44	0.51	0	0.22	0	7.8	11.7	2.62	2.62	8.67	5.13	15	1.07	942	942.8	942.47	943.45	0	950.86
9-2	9-3R	96.85	0.25	0.44	0.51	0.13	0.22	7.5	7.5	11.8	2.65	2.65	24.13	5.39	15	8.26	943	951	943.45	951.65	950.86	956.92
9-2	9-3L	1	0.19	0.19	0.51	0.1	0.1	6.7	6.7	12.1	1.18	1.18	26.54	7.02	15	10	952	952.1	952.18	952.53	956.92	956.92
10-1	10-2	134.78	0.35	1.61	0.51	0.18	0.82	6.3	10.1	10.9	8.91	8.91	14.46	7.4	15	2.97	938	942	941.49	943.15	0	946
10-2	10-3	165.22	1.26	1.26	0.51	0.64	0.64	9.7	9.7	11	7.06	7.06	12.22	6.7	15	2.12	942.2	945.7	943.15	946.76	946	949.7



RELEASED FOR CONSTRUCTION
As Noted on Plan Review

Development Services Department
Lee's Summit, Missouri
09/01/2023

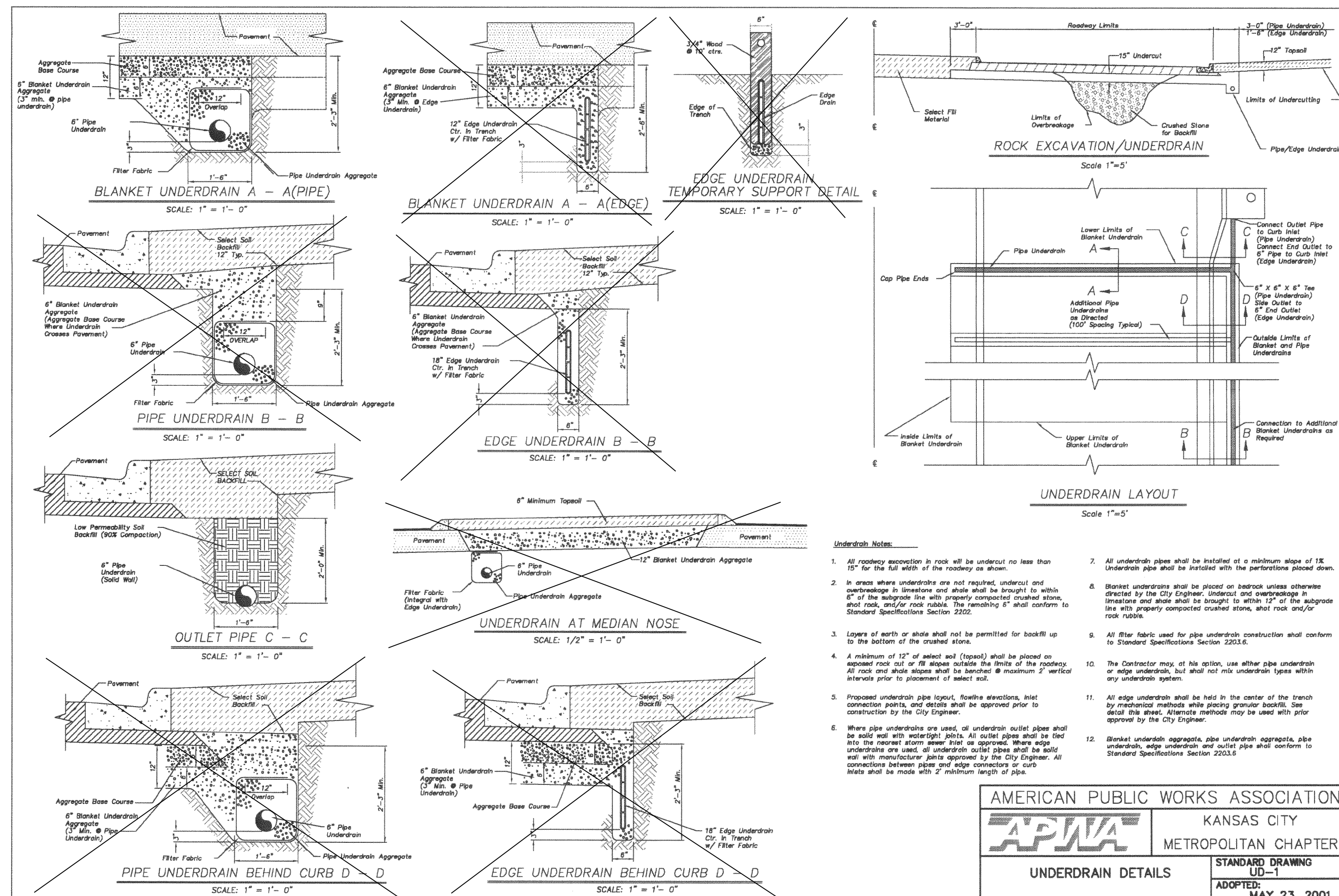
Development Services Department
Lee's Summit, Missouri
09/01/2023



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

FLARED END SECTION SUPPORT DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL
STM-5



ENGINEERING SOLUTIONS
—ENGINEERING & SURVEYING—
50 SE. 10TH STREET
LEE'S SUMMIT, MO 64082
P:816/373-9888 F:816/607-9849

Professional Registration
Missouri
Engineering 2005002186-D
Surveying 2005008319-D
Kansas
Engineering E-1695
Surveying LS-218
Oklahoma
Engineering 6254
Nebraska
Engineering CA2621

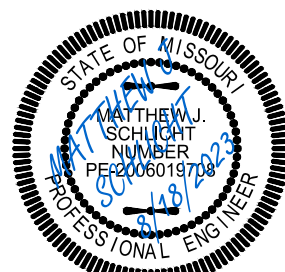
Part of the Southeast $\frac{1}{4}$
 Section 27, Township 48 North, Range 31 West
 Lee's Summit, Jackson County, Missouri

Project: WOODLAND OAKS
LSMO
Issue Date: February 25, 2021

Construction Details

Construction Plans for:
WOODLAND OAKS
Lots 1 thru 42

Lee's Summit, Jackson County, Missouri



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

REVISIONS

REV. 5/5/2021

REV. 5/26/202

3 REV. 6/22/202

4 REV. 6/29/202

Updated 6/16/20

Updated 7/21/20

Updated 8/18/20

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