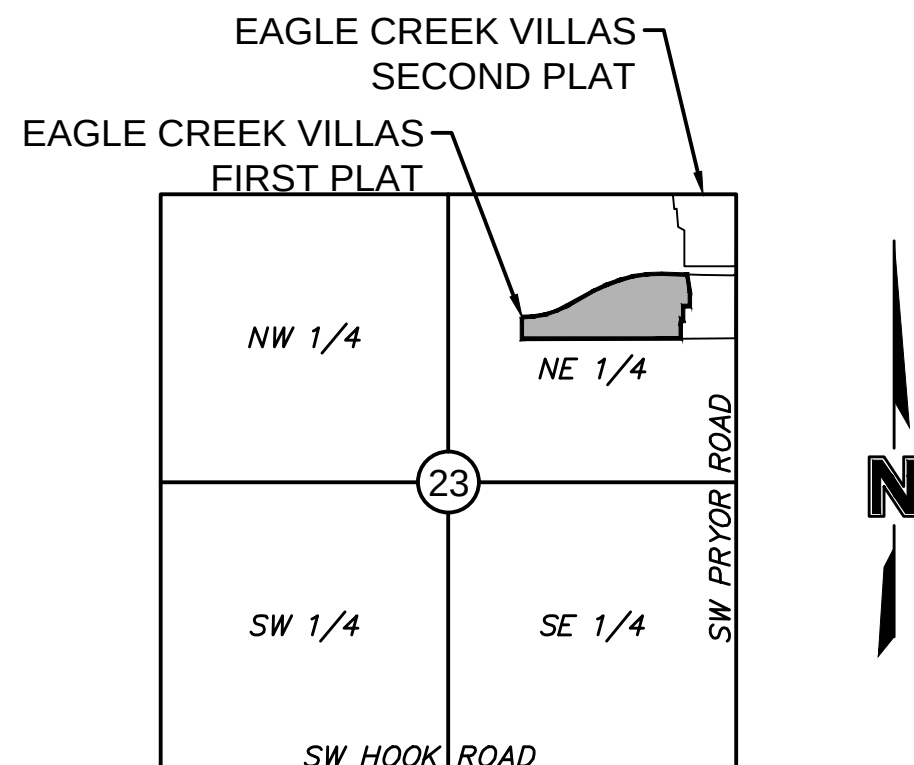




VICINITY MAP

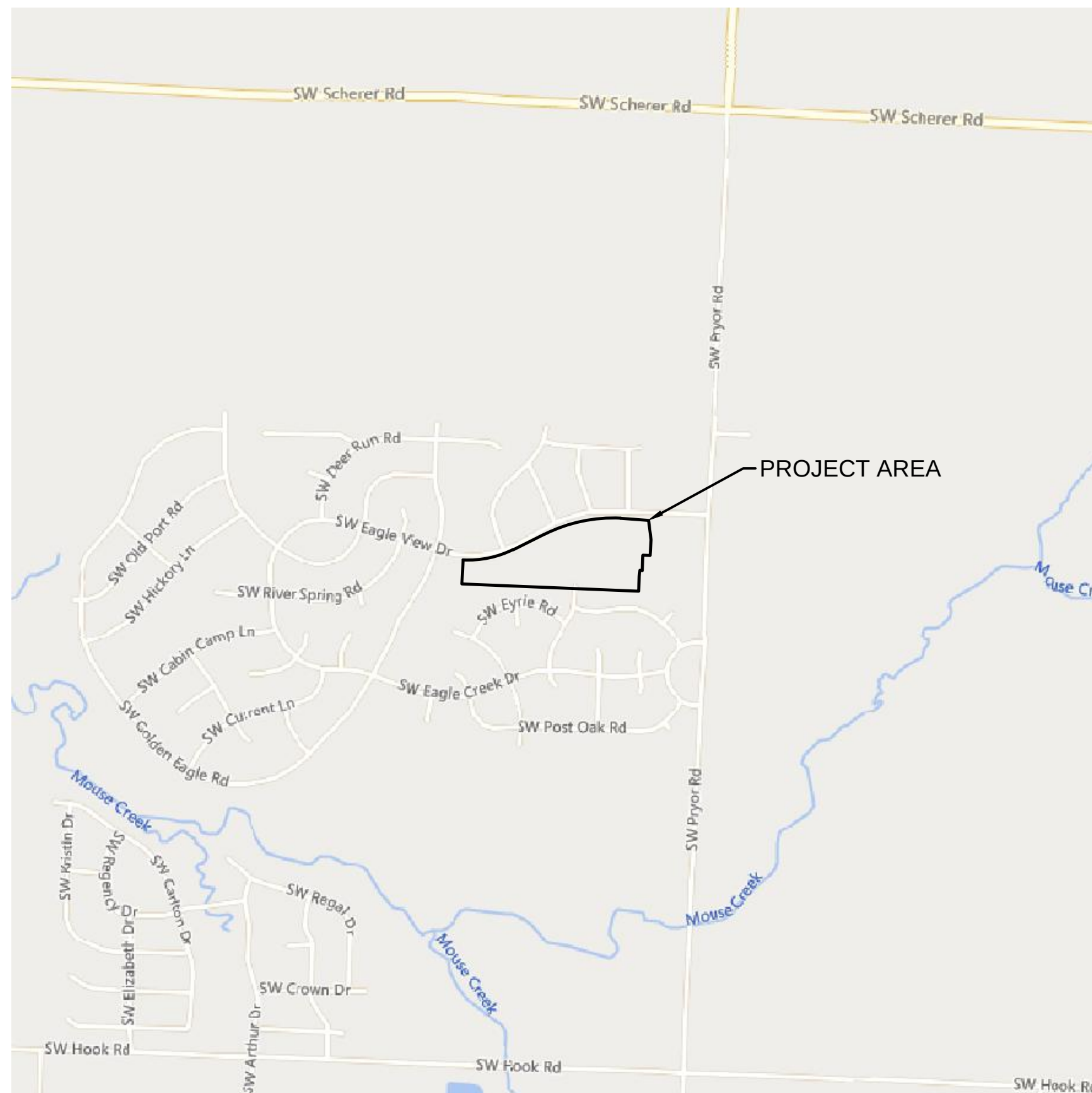
SEC 23, TWP 47, RGE 32
SCALE 1"=2000'

PROJECT TEAM & UTILITY CONTACT LIST	
<u>OWNER / DEVELOPER</u> HUNT MIDWEST REAL ESTATE DEVELOPMENT, INC 8300 NE UNDERGROUND DRIVE KANSAS CITY, MO 64161 CONTACT: AARON SCHMIDT PHONE: 816.455.2500 EMAIL: ASCHMIDT@HUNTMIDWEST.COM	<u>UTILITY SERVICE NUMBERS</u> NAME: LEE'S SUMMIT PUBLIC WORKS PHONE: 816-969-1800 NAME: LEE'S SUMMIT WATER UTILITIES PHONE: 816-969-1900
<u>ENGINEER</u> OLSSON 1301 BURLINGTON ST. SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: STEPHEN SAYLOR, P.E. PHONE: 816.442.6061 EMAIL: SSAYLOR@OLSSON.COM	NAME: SPIRE PHONE: 314-342-0500 NAME: AT&T PHONE: 800-286-8313 NAME: EVERGY PHONE: 816-471-5275
<u>SURVEYOR</u> OLSSON 1301 BURLINGTON ST. SUITE 100 NORTH KANSAS CITY, MO 64116 CONTACT: JASON ROUDEBUSH PHONE: 816.361.1177 EMAIL: JROUDEBUSH@OLSSON.COM	NAME: SPECTRUM PHONE: 877-772-2253 NAME: GOOGLE FIBER PHONE: 877-454-6959

☒	NOT FOR CONSTRUCTION
☐	REVIEWED FOR CONSTRUCTION

EAGLE CREEK VILLAS FIRST PLAT STREET & STORM SEWER PLANS

SECTION 23, TOWNSHIP 47 N, RANGE 32 W.
IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



PROPERTY DESCRIPTION:

A TRACT OF LAND IN THE NORTHEAST QUARTER OF SECTION 23 TOWNSHIP 47 NORTH, RANGE 32 WEST OF THE 5TH PRINCIPAL MERIDIAN IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI BEING BOUNDED AND DESCRIBED BY OR UNDER THE DIRECT SUPERVISION OF JASON S ROUBEUSH, PLS., 200214092 AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID NORTHEAST QUARTER; THENCE NORTH 02°46'08" EAST, ON THE EAST LINE OF SAID NORTHEAST QUARTER 1,323.83 FEET TO THE SOUTHEAST CORNER OF THE NORTH HALF OF SAID NORTHEAST QUARTER, ALSO BEING THE NORTHEAST CORNER OF EAGLE CREEK - FIFTH PLAT, A SUBDIVISION OF LAND IN SAID LEE'S SUMMIT RECORDED OCTOBER 9, 2001 AS INSTRUMENT NUMBER 20011000821219 IN BOOK 70 AT PAGE 15 IN SAID OFFICE OF RECORDER OF DEEDS, JACKSON COUNTY, MISSOURI; THENCE SOUTH 87°41'31" WEST, ON THE MIDDLE LINE OF SAID EAGLE CREEK - FIFTH PLAT, A SUBDIVISION OF LAND IN SAID LEE'S SUMMIT RECORDED OCTOBER 9, 2001 AS INSTRUMENT NUMBER 20011000821219 IN BOOK 70 AT PAGE 15 IN SAID OFFICE OF RECORDER OF DEEDS, JACKSON COUNTY, MISSOURI; THENCE NORTH 87°41'31" WEST ON SAID SOUTH LINE, ALSO BEING THE NORTH LINE OF SAID EAGLE CREEK - SIXTH PLAT, 704.45 FEET TO THE NORTHWEST CORNER OF SAID EAGLE CREEK - SIXTH PLAT, ALSO BEING THE EASTERLY LINE OF TRACT C OF EAGLE CREEK - SEVENTH PLAT, LOTS 230 THRU 282, INCLUSIVE, AND TRACT G, A SUBDIVISION OF LAND IN SAID LEE'S SUMMIT RECORDED APRIL 25, 2003 AS INSTRUMENT NUMBER 20031000821219 IN BOOK 70 AT PAGE 15 IN SAID OFFICE OF RECORDER OF DEEDS, JACKSON COUNTY, MISSOURI; THENCE NORTH 87°41'31" WEST ON SAID SOUTH LINE AND SAID EASTERLY LINE, 81.41 FEET; THENCE LEAVING SAID SOUTH LINE, NORTH 02°46'08" EAST, ON SAID EASTERLY LINE, 197.92 FEET TO THE NORTHEAST CORNER OF SAID TRACT C, ALSO BEING A POINT ON THE EXISTING SOUTHERLY RIGHT-OF-WAY LINE SW EAGLE VIEW DRIVE, AS ESTABLISHED BY SAID EAGLE CREEK - SEVENTH PLAT, LOTS 230 THRU 282, INCLUSIVE, AND TRACT C; THENCE EASTERLY, ON SAID EXISTING SOUTHERLY RIGHT-OF-WAY LINE, ON A CURVE TO THE LEFT HAVING AN INITIAL TANGENT BEARING OF SOUTH 86°54'35" EAST WITH A RADIUS OF 830.00 FEET, A CENTRAL ANGLE OF 29°39'21" AND AN ARC DISTANCE OF 429.57 FEET; THENCE NORTH 63°26'11" EAST, ON SAID EXISTING SOUTHERLY RIGHT-OF-WAY LINE, 285.62 FEET; THENCE EASTERLY, ON SAID EXISTING SOUTHERLY RIGHT-OF-WAY LINE, ON A CURVE TO THE RIGHT BEING TANGENT TO THE LAST DESCRIBED COURSE, WITH A RADIUS OF 870.70 FEET, A CENTRAL ANGLE OF 30°32'21" AND AN ARC DISTANCE OF 150.00 FEET; THENCE SOUTH 85°30'21" EAST, ON SAID EXISTING SOUTHERLY RIGHT-OF-WAY LINE, 181.05 FEET; THENCE LEAVING SAID SOUTHERLY RIGHT-OF-WAY LINE, NORTH 29°29'29" EAST, ON SAID SOUTHERLY RIGHT-OF-WAY LINE, 181.05 FEET; THENCE SOUTH 02°46'08" WEST, 259.61 FEET; THENCE SOUTH 02°31'58" WEST, 50.00 FEET; THENCE WESTERLY ON A CURVE TO THE RIGHT HAVING AN INITIAL TANGENT BEARING OF NORTH 87°41'31" WEST WITH A RADIUS OF 1,025.00 FEET, A CENTRAL ANGLE OF 04°39'21" AND AN ARC DISTANCE OF 83.29 FEET; THENCE SOUTH 02°18'29" WEST, 123.38 FEET TO THE POINT OF BEGINNING, CONTAINING 669.46 SQUARE FEET OR 15.37 ACRES, MORE OR LESS.

BENCHMARK

BENCHMARK NO. 1
CHISELED SQUARE ON THE NORTHWEST CORNER OF 6' X 4' CURB INLET THAT IS ON THE SOUTH SIDE OF SW EAGLEVIEW DRIVE AND WEST OF SW BURNINGWOOD LANE, STRAIGHT SOUTH OF A 6' X 4' CURB INLET.
ELEVATION = 1002.10

SHEET LIST TABLE	
SHEET #	SHEET TITLE
C101	TITLE SHEET
C102	GENERAL NOTES
C103	GENERAL LAYOUT
C104	GRADING PLAN (FOR REFERENCE ONLY)
C105	GRADING PLAN (FOR REFERENCE ONLY)
C106	SWALE 1 PLAN & PROFILE
C107	SWALE 2 PLAN & PROFILE
C108	SWALE 3 PLAN & PROFILE
C109	SWALE 4 PLAN & PROFILE
C110	SWALE 4 PLAN & PROFILE CONT.
C111	ROAD PLAN & PROFILE (SW RAMBLING VINE ROAD)
C112	ROAD PLAN & PROFILE (SW RAMBLING VINE ROAD)
C113	ROAD PLAN & PROFILE (SW RAMBLING VINE ROAD)
C114	ROAD PLAN & PROFILE (SW PHEASANT TRAIL)
C115	ROAD PLAN & PROFILE (SW SUNCATCHER ROAD)
C116	ROAD PLAN & PROFILE (SW BURNINGWOOD LANE)
C117	TRAFFIC CONTROL PLAN
C118	INTERSECTION SITE DISTANCE PLAN
C119	INTERSECTION SITE DISTANCE PROFILES
C120	INTERSECTION SITE DISTANCE PROFILES
C121	SW RAMBLING VINE RD & SW EAGLE VIEW DR
C122	SW RAMBLING VINE RD AND SW PHEASANT TRAIL
C123	SW RAMBLING VINE RD & SW SUNCATCHER RD
C124	SW RAMBLING VINE RD & SW BURNINGWOOD LN
C125	SW SUNCATCHER RD & SW EAGLE VIEW DR
C126	SW BURNINGWOOD LN & SW EAGLE VIEW DR
C127	STORM SEWER PLAN & PROFILE (LINE 1)
C128	STORM SEWER PLAN & PROFILE (LINE 1)
C129	STORM SEWER PLAN & PROFILE (LINE 1)
C130	STORM SEWER PLAN & PROFILE (LINE 1)
C131	STORM SEWER PLAN & PROFILE (LINE 2)
C132	STORM SEWER PLAN & PROFILE (LINE 2 & 3)
C133	STORM SEWER PLAN & PROFILE (LINE 4)
C134	STORM SEWER PLAN & PROFILE (LINE 5 & 6)
C135	STORM SEWER PLAN & PROFILE (LINE 7 & 8)
C136	STORM SEWER PLAN & PROFILE (LINE 9)
C137	WATER QUALITY BASIN PLAN
C138	MASTER DRAINAGE PLAN
C139	DRAINAGE PLAN
C140	DRAINAGE TABLES (10-YEAR)
C141	DRAINAGE TABLES (100-YEAR)
C142	DETAIL SHEET
C143	DETAIL SHEET
C144	DETAIL SHEET

OLSSON HAS BEEN RETAINED TO PROVIDE AS-BUILT DRAWINGS FOR THIS PROJECT.


STEPHEN SAYLOR, P.E.
CIVIL ENGINEER
MO#2018021248

2/15/2024

DATE

[illegible]

USER: ssaylor

DWG: F:\2020\2001-2500\020-2467-A\40-Design\AutoCAD\Final Plans\Sheets\Storm & Storm\VC_TTL01_A202467.dwg
DATE: Feb 15, 2024 11:10am XREFS: C_PTBK_A202467

GENERAL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE PLANS IN THEIR POSSESSION ARE THE MOST CURRENT VERSION ISSUED, ARE FULLY COORDINATED WITH ALL SUBCONTRACTORS, AND PRESENT ON SITE AT ALL TIMES. CURRENT PLANS PREPARED BY OLSSON MAY BE OBTAINED AT THE DIRECTION OF OLSSON'S CLIENT. DIRECT REQUESTS TO OLSSON MAY REQUIRE ADDITIONAL AUTHORIZATIONS, AGREEMENTS, AND/OR FEES. PLEASE CONTACT THE ENGINEER FOR INFORMATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
- ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
- THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, THE SAFETY OF ALL PERSONS INCLUDING VISITORS AND THE GENERAL PUBLIC, AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY THROUGHOUT THE PROJECT AND NOT BE LIMITED BY WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
- PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE WITH ALL UTILITY COMPANIES AND OBTAIN ANY RELEVANT INFORMATION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL BOUNDARY CORNERS AND SECTION CORNERS. ANY BOUNDARY CORNER AND/OR SECTION CORNER DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A LAND SURVEYOR LICENSED IN THE STATE OF MISSOURI, AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ADJACENT PROPERTIES AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE DURING CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES.
- PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER TO PERFORM A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.

REFERENCES

- UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY:
 - ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.
 - ALL CONSTRUCTION IN MODOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MODOT.
 - ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 - ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES..
 - ALL EXTERIOR PAVEMENT (PCC, ASPHALT, ETC.) SHALL BE IN CONFORMANCE WITH THE SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI AND THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE DELIVERY MANAGER AND COORDINATING ANY MAILBOXES THAT MAY BE DISTURBED. FAILURE TO DO SO MAY SUBJECT THE CONTRACTOR TO PROSECUTION BY THE FEDERAL GOVERNMENT.

EXISTING CONDITIONS

- THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING THEIR OWN INVESTIGATIONS AND MAKING THEIR OWN ASSUMPTIONS REGARDING SITE SURFACE AND SUBSURFACE CONDITIONS. THIS INCLUDES THE LOCATION AND CONSISTENCY OF ANY EXISTING ROCK LAYERS UNDERLYING THE PROJECT SITE. CONTACT THE ENGINEER REGARDING ANY DISCREPANCIES THAT MAY AFFECT THE ABILITY TO CONSTRUCT FROM THESE PLANS AS DESIGNED.
- EXISTING CONDITIONS WERE DETERMINED THROUGH A VARIETY OF METHODS THAT MAY INCLUDE SURVEY, AERIAL IMAGERY, AVAILABLE RECORDS, GIS DATA, ETC. SUBSURFACE CONDITIONS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES AND OTHER SITE IMPROVEMENTS PRESENT ON SITE. THE CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS WHEN CONFLICTS AND DISCREPANCIES ARE FOUND.

CONSTRUCTION

- THE CONTRACTOR SHALL INSTALL TRAFFIC CONTROL WHILE WORKING IN THE PUBLIC RIGHT-OF-WAY AS SHOWN IN THESE PLANS. IF PLANS ARE NOT PROVIDED, CONTRACTOR SHALL COORDINATE AND PROVIDE CONTROLS TO THE SATISFACTION OF THE RIGHT-OF-WAY OWNER.
- THE CONTRACTOR SHALL PROTECT ALL TREES OVER 3" CALIPER FROM DAMAGE. NO TREE SHALL BE REMOVED WITHOUT PERMISSION OF THE OWNER, UNLESS SHOWN OTHERWISE ON THESE PLANS.
- THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.
- ALL MANHOLES, CATCH BASINS, UTILITY VALVES AND METER PITS ARE TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED. NOT ALL ADJUSTMENTS ARE INDICATED IN THE PLANS.
- THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

SHOP DRAWINGS

- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS A MINIMUM OF 7 DAYS PRIOR TO THE REQUESTED DATE OF APPROVAL. ENGINEER SHALL REVIEW SHOP DRAWINGS OR SAMPLES IN CONFORMANCE WITH THE DESIGN FOR THIS PROJECT AS DESCRIBED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS. THE ENGINEER'S REVIEW SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS NOTIFIED ENGINEER OF EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND OBTAINED ENGINEER'S WRITTEN APPROVAL OF EACH SUCH VARIATION. PRIOR TO SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE REVIEWED AND VERIFIED:
 - ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT THERETO;
 - ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION PERTAINING TO THE PERFORMANCE OF THE WORK;
 - ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO;
 - CONTRACTOR SHALL ALSO HAVE REVIEWED AND COORDINATED EACH SHOP DRAWING OR SAMPLE WITH OTHER SHOP DRAWINGS AND SAMPLES, AND WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS.
 - ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY COMPLETED THE ABOVE TASKS.
- SHOP DRAWINGS AS DESCRIBED ABOVE ARE REQUIRED FOR, BUT NOT LIMITED TO, THE FOLLOWING:
 - ALL STORM SEWER STRUCTURES TO BE INSTALLED WITH THIS PROJECT.
 - ANY ITEMS IN THESE PLANS THAT ALLOW FOR AN 'APPROVED EQUAL' ALTERNATIVE.

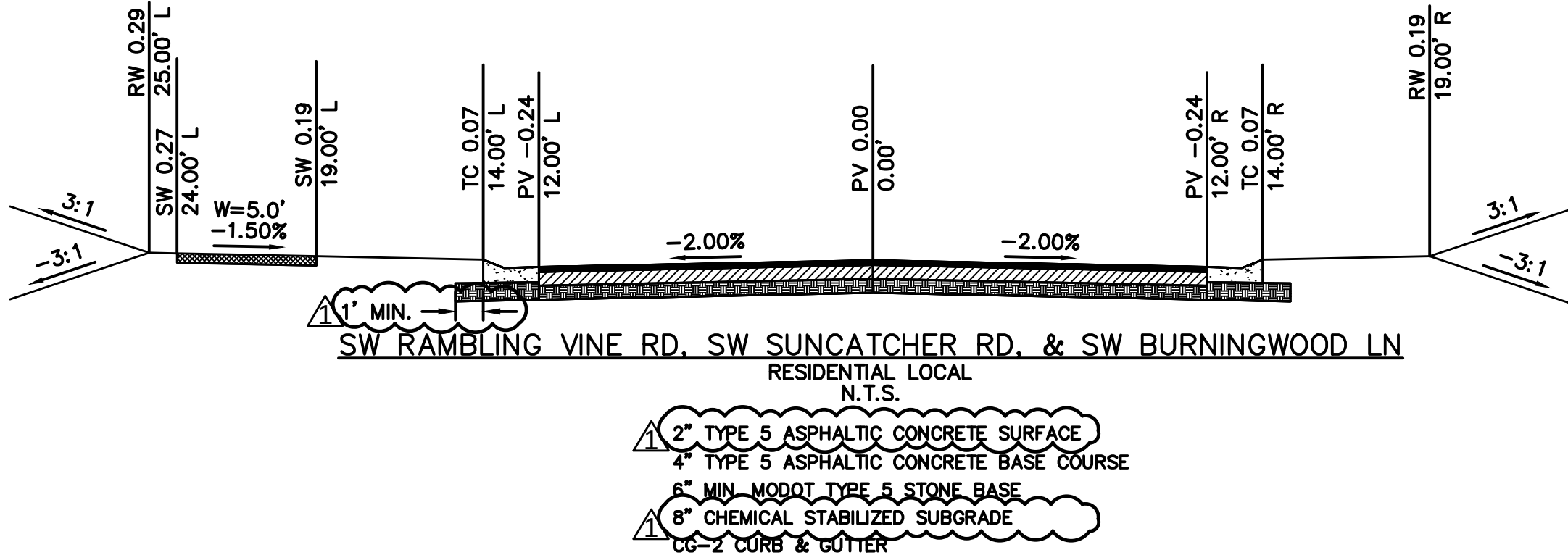
STORM SEWER GENERAL NOTES:

- STORM STRUCTURES SHALL BE PER CURRENT CITY DETAILS. IF CITY DOES NOT HAVE PUBLISHED DETAILS STRUCTURES SHALL BE PER CURRENT APWA SPECIFICATIONS.
- PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH CITY OF LEE'S SUMMIT, MISSOURI.
- ALL PIPE LENGTHS AND ELEVATIONS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- ALL STRUCTURE DIMENSIONS ARE TO INSIDE FACE OF STRUCTURE.
- COORDINATES ARE PROVIDED AT THE CENTER OF STRUCTURE. ADDITIONAL COORDINATES PROVIDED ARE PER LOCAL CODES AND ORDINANCES OR AS AN AID WHEN ORIENTING THE BOX DURING INSTALLATION.
- THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF STORM SEWER.
- STORM SEWER TRENCHES SHALL BE CONSTRUCTED SUCH THAT UNDISTURBED EXISTING SOIL OR FILL COMPACTED TO 95% PROCTOR DENSITY IS AT A DEPTH THAT IS 18" ABOVE TOP OF PROPOSED PIPE.
- STRUCTURE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO 1/2 THE ADJACENT PIPE SECTION (INVERT TO CENTER). CHANGES IN DIRECTION OF FLOW SHALL BE MADE WITH A SMOOTH CURVE AND MAINTAIN SHAPE THROUGHOUT. CHANGES IN GRADE OF ADJACENT PIPES SHALL BE TRANSITIONED SMOOTHLY AND EVENLY THROUGH THE STRUCTURE.
- PIPE PENETRATIONS SHALL BE GROUTED TO ENSURE WATERTIGHT SEALS.
- MAINTAIN MINIMUM DEPTH OF COVER PER APWA 5606.06

CONTROL POINT TABLE				
POINT NUMBER	NORTHING	EASTING	POINT ELEVATION	DESCRIPTION
3	988896.2697	2811669.1312	975.106	3" IB RED CONTROL CAP SET ON THE NORTH SIDE OF THE "T" INTERSECTION OF SW SUNCATCHER ROAD AND SW TIMBERTREE LANE. IT IS 2.30 FT NORTH OF THE BACK OF CURB, 4.40 FT EAST OF A NO PARKING SIGN, AND 2.10 FT SOUTH OF THE SIDEWALK.
1	988266.771	28811631.025	998.394	3" IB RED CONTROL CAP SET ON THE SOUTH SIDE OF EAGLE VIEW DRIVE, WEST OF SW SUNCATCHER ROAD AND EAST OF SW GOOSEBERRY LANE. IT IS 5.20 FT SOUTH OF THE BACK OF CURB, 32.00 FT NORTHEAST OF THE NORTHWEST CORNER OF A 6' X 6' VAULT, AND 77.00 FT WEST OF A NO PARKING SIGN
2	988263.9838	2812623.0498	1023.391	3" IB RED CONTROL CAP SET ON THE WEST SIDE OF PRYOR ROAD AND SOUTH OF SW EAGLEVIEW DRIVE. IT IS 9.00 FT SOUTH OF THE BACK OF CURB, 19.00 FT NORTHEAST TO THE NORTHEAST CORNER OF A 6' X 6' VAULT, AND 18.00 FT NORTHWEST TO A 4" TREE
4	988904.8351	2812800.168	1015.344	3" IB RED CONTROL CAP SET ON THE EAST SIDE OF PRYOR ROAD AND SOUTH OF DRIVEWAY #2041. IT IS 2.50 FT EAST OF THE EDGE OF ASPHALT, 55.00 FT SOUTH OF THE DRIVEWAY, AND 4.00 FT WEST OF THE TOP OF BANK

ESTIMATE OF QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
STREET				
	EXCAVATION	C.Y.	10606	
	EMBANKMENT	C.Y.	1038	
	6" ASPHALT PAVEMENT	S.Y.	6314.19	
	6" MODOT TYPE 5 STONE BASE	S.Y.	6314.19	
	8" CHEMICAL SUBGRADE STABILIZATION	S.Y.	6314.19	
	CONCRETE CURB & GUTTER (CG-2)	L.F.	4475.46	
	5' CONCRETE SIDEWALK	L.F.	3601.65	
	MILL & OVERLAY	S.Y.	13.33	
	ADA RAMP	EA.	12	
	STOP SIGNS	EA.	6	
	STREET NAME SIGNS	EA.	12	
	TYPE III OBJECT MARKER	EA.	4	
	TYPE IV OBJECT MARKER	EA.	2	
STORM				
	STD. CURB INLET (5'x3' INSIDE)	EA.	10	
	STD. CURB INLET (5'x4' INSIDE)	EA.	3	
	STD. CURB INLET (5'x5' INSIDE)	EA.	4	
	STD. CURB INLET (6'x3' INSIDE)	EA.	2	
	STD. CURB INLET (6'x5' INSIDE)	EA.	1	
	STD. CURB INLET (7'x5' INSIDE)	EA.	1	
	STD. STORM MANHOLE (4' DIA. INSIDE)	EA.	1	
	STD. FIELD INLET (4'x4' INSIDE)	EA.	7	
	15" HDPE	L.F.	1610.30	
	18" HDPE	L.F.	191.73	
	24" HDPE	L.F.	325.64	
	30" HDPE	L.F.	913.72	
	15" HDPE END SECTION	EA.	2	
	30" HDPE END SECTION	EA.	1	
	SWALE EXCAVATION	C.Y.	1743	
	SWALE EMBANKMENT	C.Y.	393	
	RIPRAP	S.Y.	26.74	
	TURF REINFORCEMENT MATTING	S.Y.	1572.61	

SUMMARY OF QUANTITIES AS INDICATED ABOVE AND ANY QUANTITIES AS SHOWN WITHIN THE PLANS HAVE BEEN PROVIDED FOR PERMITTING PURPOSES ONLY AND ARE NOT INTENDED FOR USE IN PREPARATION OF CONTRACT DOCUMENTS. QUANTITIES INTENDED FOR, BUT NOT LIMITED TO, THE PREPARATION OF PROPOSALS AND BID DOCUMENTS SHALL BE INDEPENDENTLY EVALUATED BY THE ESTIMATING PARTY BASED UPON THE CONTENTS OF THESE PLANS.



olsson

Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
PROFESSIONAL ENGINEER
STEPHEN M. SAYLOR
NUMBER
PE-2018021248
2/15/2024

BY

REVISIONS DESCRIPTION

DATE

REV. NO.

1

02/15/2024

REVISED PER CITY COMMENTS

REVISIONS

GENERAL NOTES
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

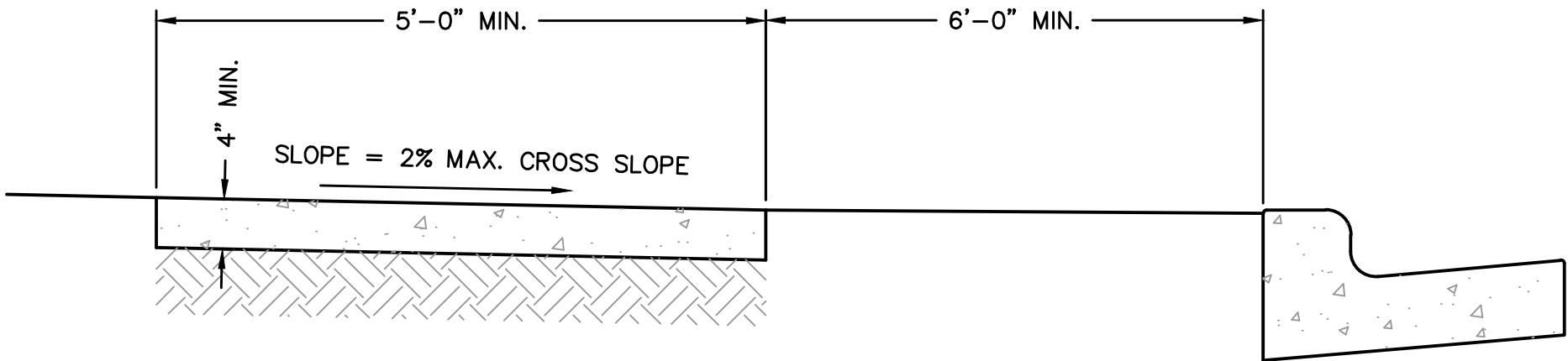
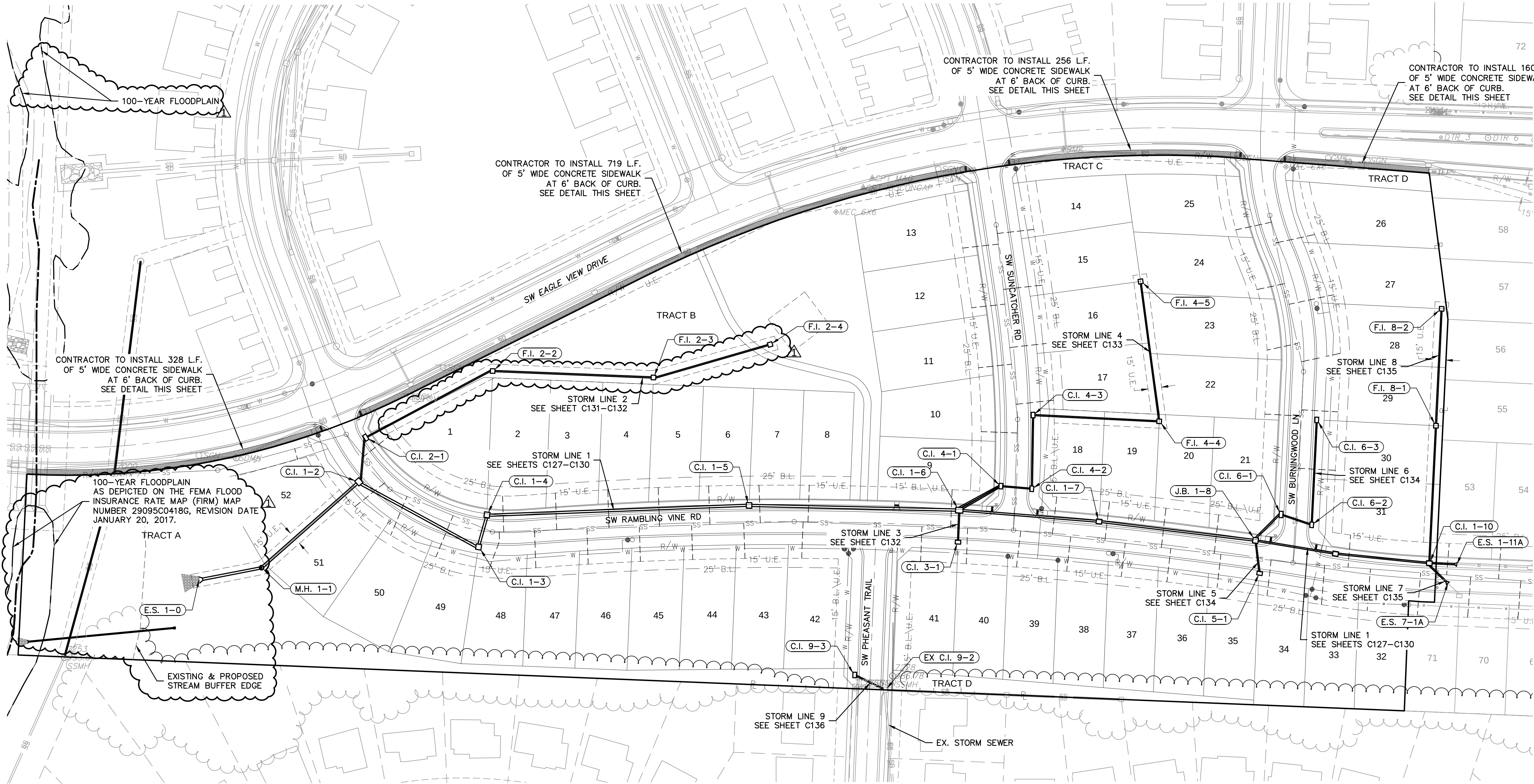
2023

LEE'S SUMMIT, MISSOURI

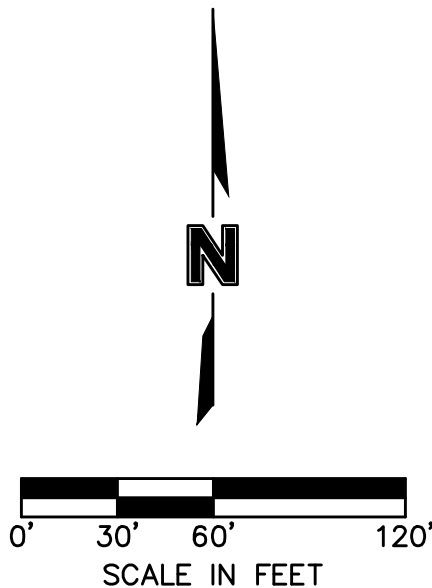
drawn by: _____ CW
checked by: _____ SS
approved by: _____ JS
QA/QC by: _____ JS
project no.: A20-2467
drawing no.: C TTL01 A202467
date: 02/15/2024

SHEET
C102

DWG: F:\2020\2001-2500\020-2467-A\40-Design\AutoCAD\Final Plans\Sheets\GNCV\Street & Storm\C_GEN01_A202467.dwg
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C_PBLK_A202467
C_PSTRM_A202467
XREFS: C_PUTIL_A202467
C_XBASE_A202467



DETAIL 1: STANDARD CONCRETE WALK DETAIL
NOT TO SCALE



olsson

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STATE OF MISSOURI
STEPHEN M. SAYLOR
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

GENERAL LAYOUT STREET & STORM SEWER PLANS		EAGLE CREEK VILLAS FIRST PLAT		2023	
BY		REV.	NO.	DATE	REVISIONS DESCRIPTION
		1		02/15/2024	REVISED PER CITY COMMENTS

drawn by: C/W
checked by: SS
approved by: JS
QA/QC by: JS
project no.: A20-2467
drawing no.: C_GEN01_A202467
date: 02/15/2024

SHEET
C103

LOT FILL INFORMATION			
LOT NUMBER	MAX DEPTH OF FILL (OVER 2' PLACED)	FILL PLACED ON EXISTING SLOPES > 5:1	PROPOSED SLOPES > 3:1
1			
2			
3			
4			
5		X	
6			
7			
8			
9			
10			
11			
12			
13	4.0	X	
14			
15			
16		X	
17	3.0	X	
18	3.0	X	
19	3.0	X	
20	3.0	X	
21	3.0	X	
22			
23		X	
24			
25			
26			
27			
28			
29			
30			
31			
32			
33		X	
34		X	
35	3.0	X	
36	3.0	X	
37	3.0	X	
38	7.0		
39	6.0		
40	6.0	X	
41	4.0	X	
42	3.0		
43	3.0		
44			
45			
46			
47			
48			
49			
50		X	
51	3.0	X	
52	3.0	X	

X Indicates condition applies to lot

GENERAL NOTES:

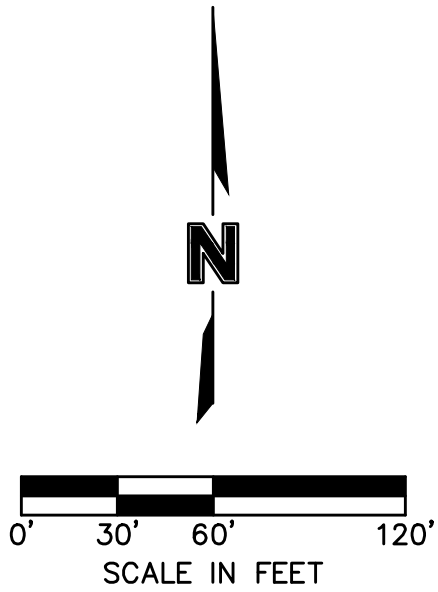
1. CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEE'S SUMMIT (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED RIGHT-OF-WAY.
2. AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND OR TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE GEOTECHNICAL ENGINEER AND OR TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AT HIS EXPENSE.
3. ALL EMBANKMENT OUTSIDE OF RIGHT-OF-WAY SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 8". EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF -0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	10,606	1,038
SWALE	1,743	393
SITE	67,079	40,131
TOTAL	79,428	41,562

EARTHWORK QUANTITIES NOTES:

1. EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
2. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.

LEGEND	
-100-	EXISTING INDEX CONTOURS
-100-	EXISTING INTERMEDIATE CONTOURS
-100-	PROPOSED INDEX CONTOURS
-100-	PROPOSED INTERMEDIATE CONTOURS



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STATE OF MISSOURI
STEPHEN M. SAYLOR
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

GRADING PLAN (FOR REFERENCE ONLY)
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

drawn by: _____
checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_GRD01_A202467
date: 02/15/2024

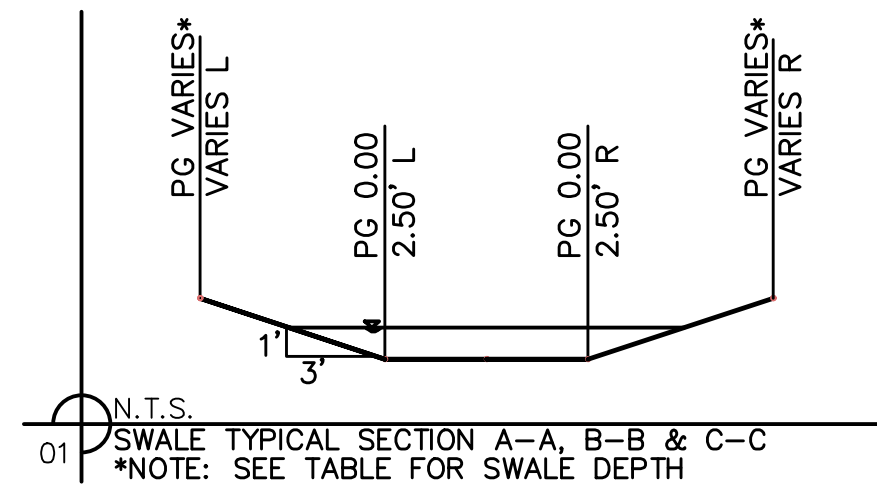
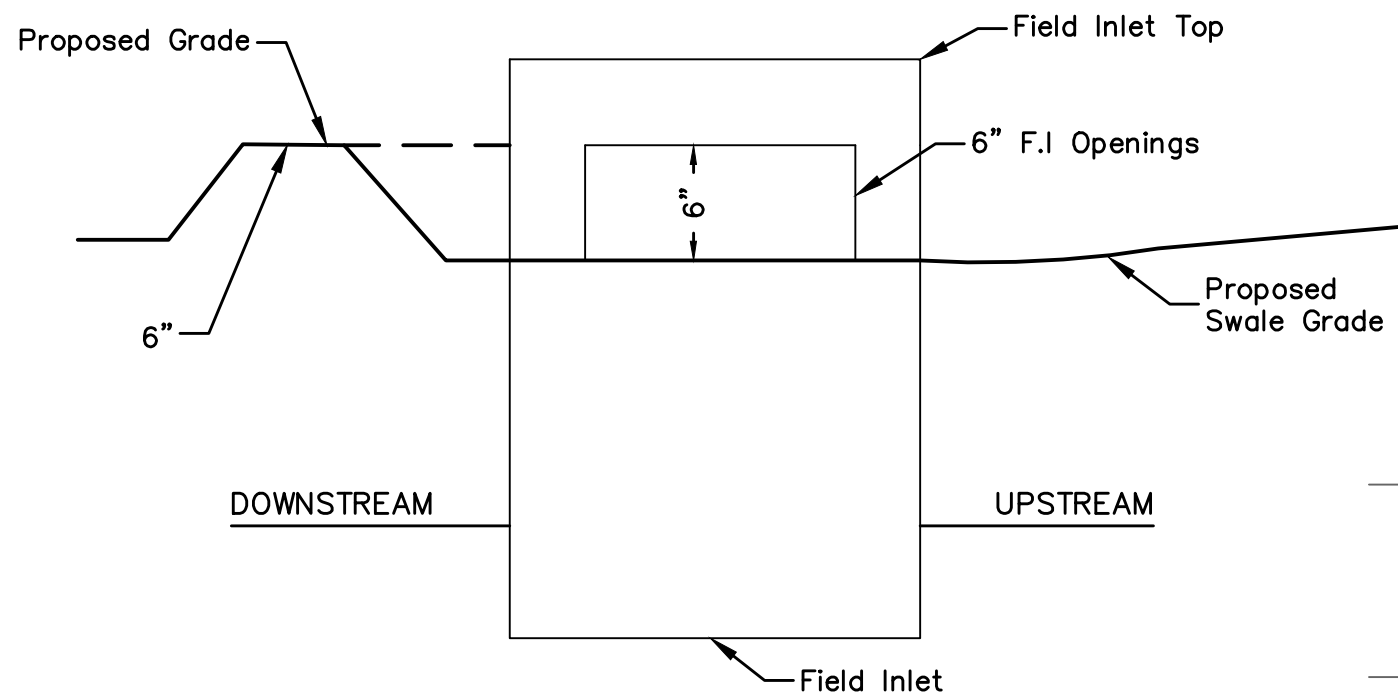
2023

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
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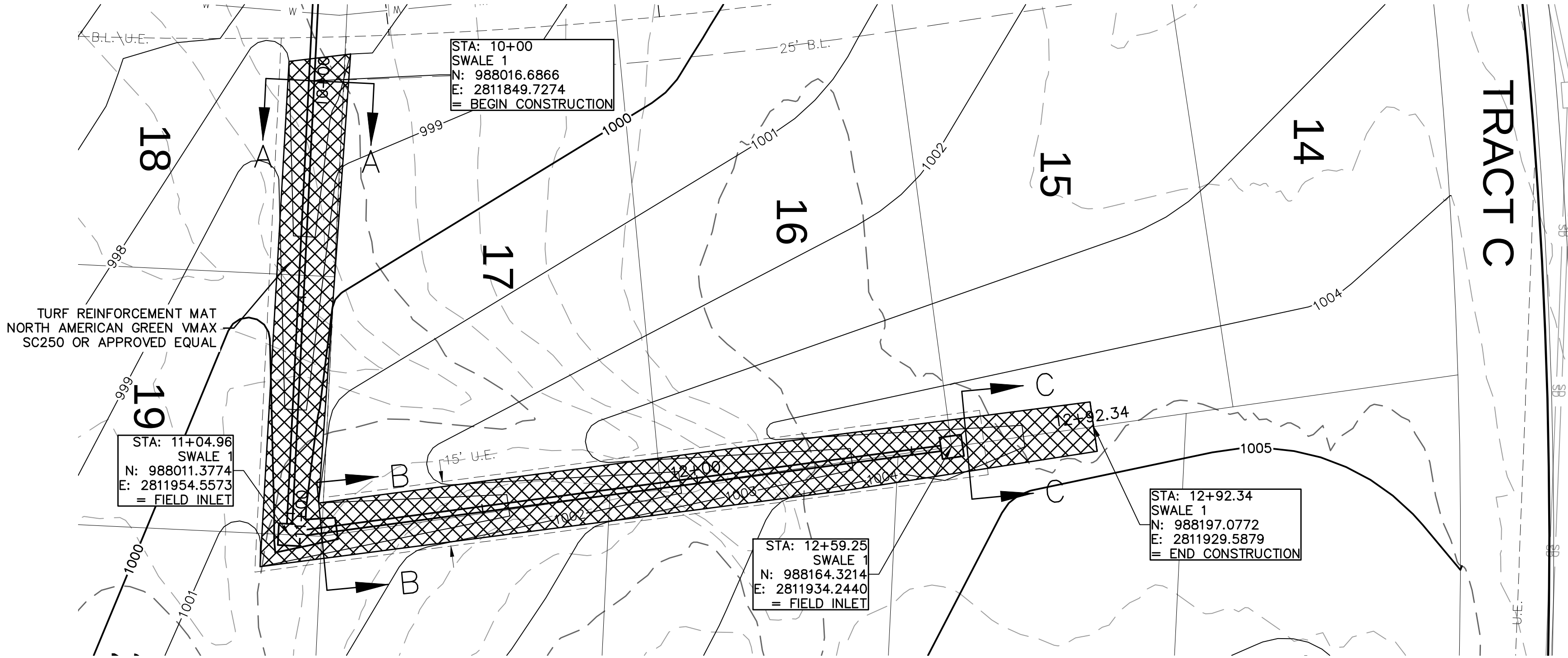
SHEET
C104

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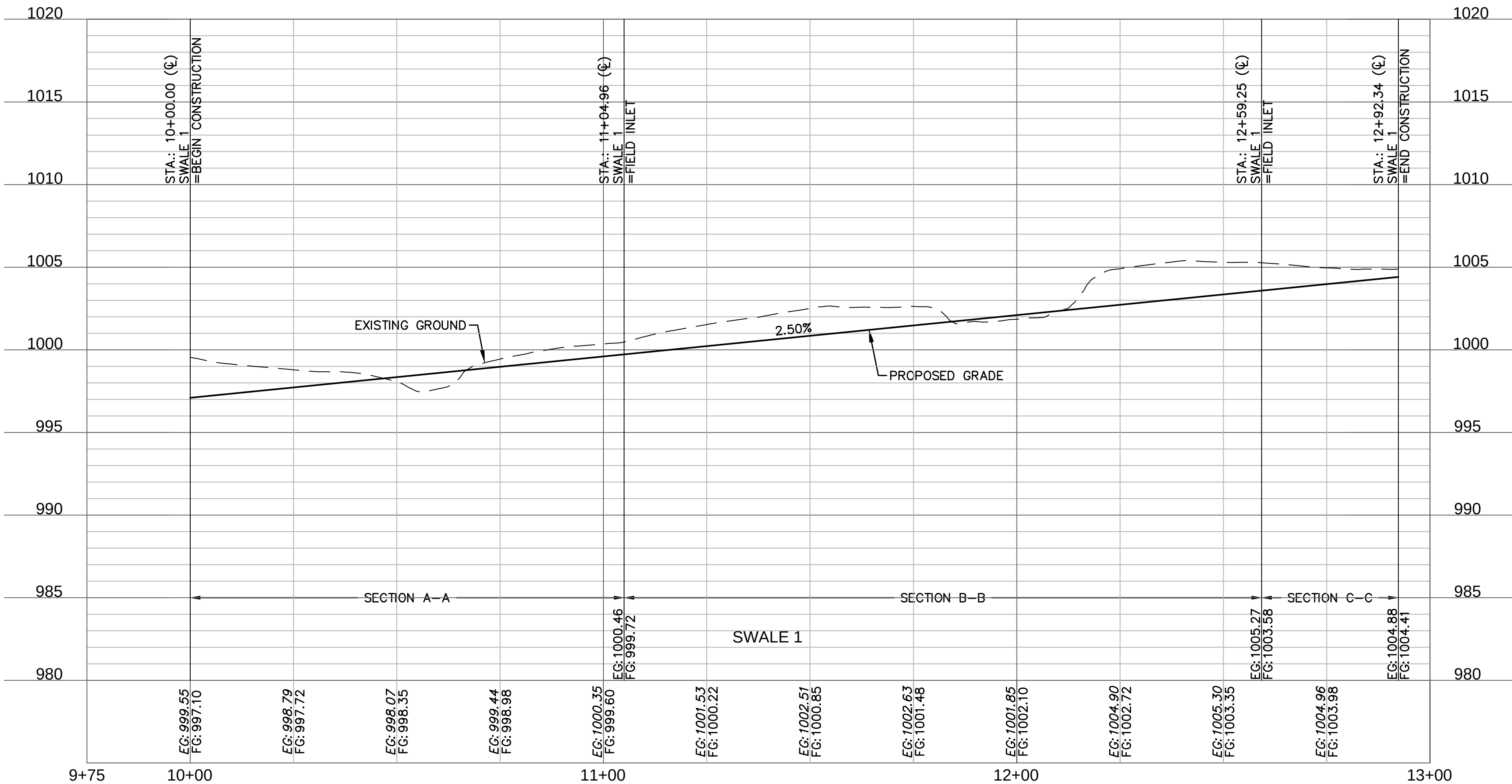
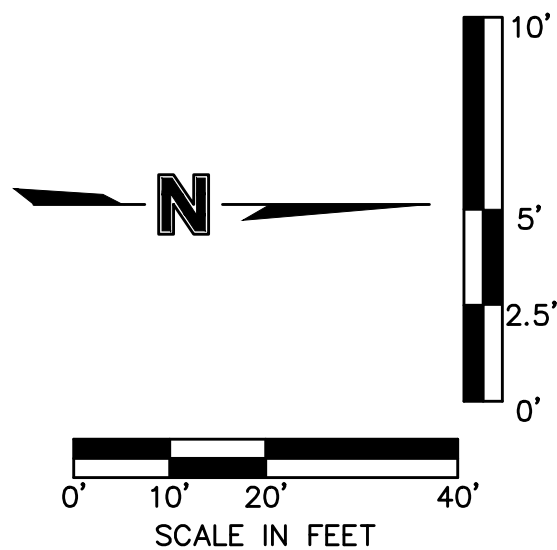


SWALE GRADING NOTES:

- CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
- AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.



Swale Design Table (100 Year Return Frequency)															
Section Data								Flow Data							
SECTION	Mannings Coefficient	Channel Slope (%)	Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft²)	
A-A	0.03	2.50%	1.10	3:1	3:1	5.00	0.72	0.10	0.53	1.36	5.63	5.60	0.13	0.15	
B-B	0.03	2.50%	1.21	3:1	3:1	5.00	2.83	0.21	1.18	2.39	6.33	6.26	0.30	0.29	
C-C	0.03	2.50%	1.05	3:1	3:1	5.00	0.20	0.05	0.26	0.78	5.32	5.30	0.06	0.08	



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STEPHEN M. SAYLOR
PROFESSIONAL ENGINEER
NUMBER
PE-2018021248
2/15/2024

SWALE 1 PLAN & PROFILE
STREET & STORM SEWER PLANS
EAGLE CREEK VILLAS
FIRST PLAT
LEE'S SUMMIT, MISSOURI

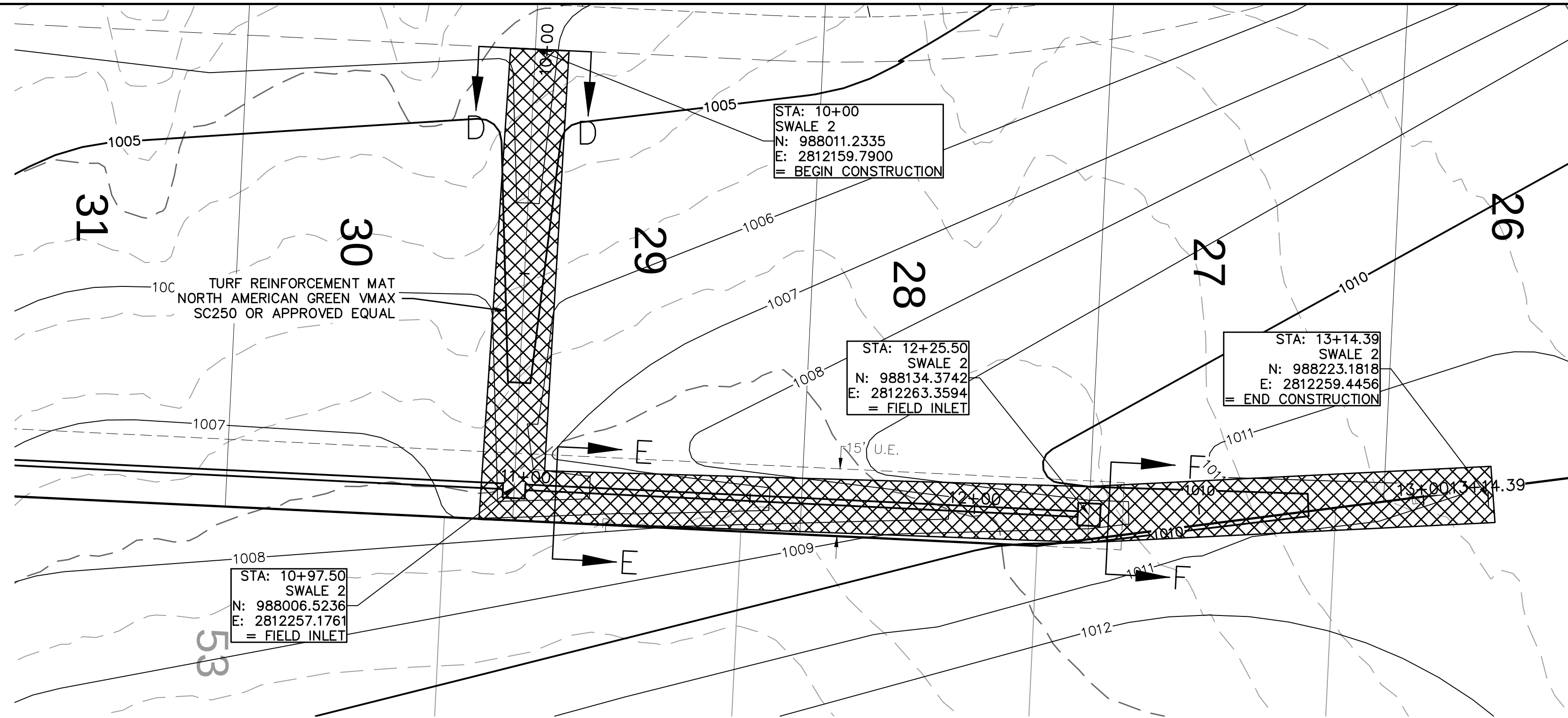
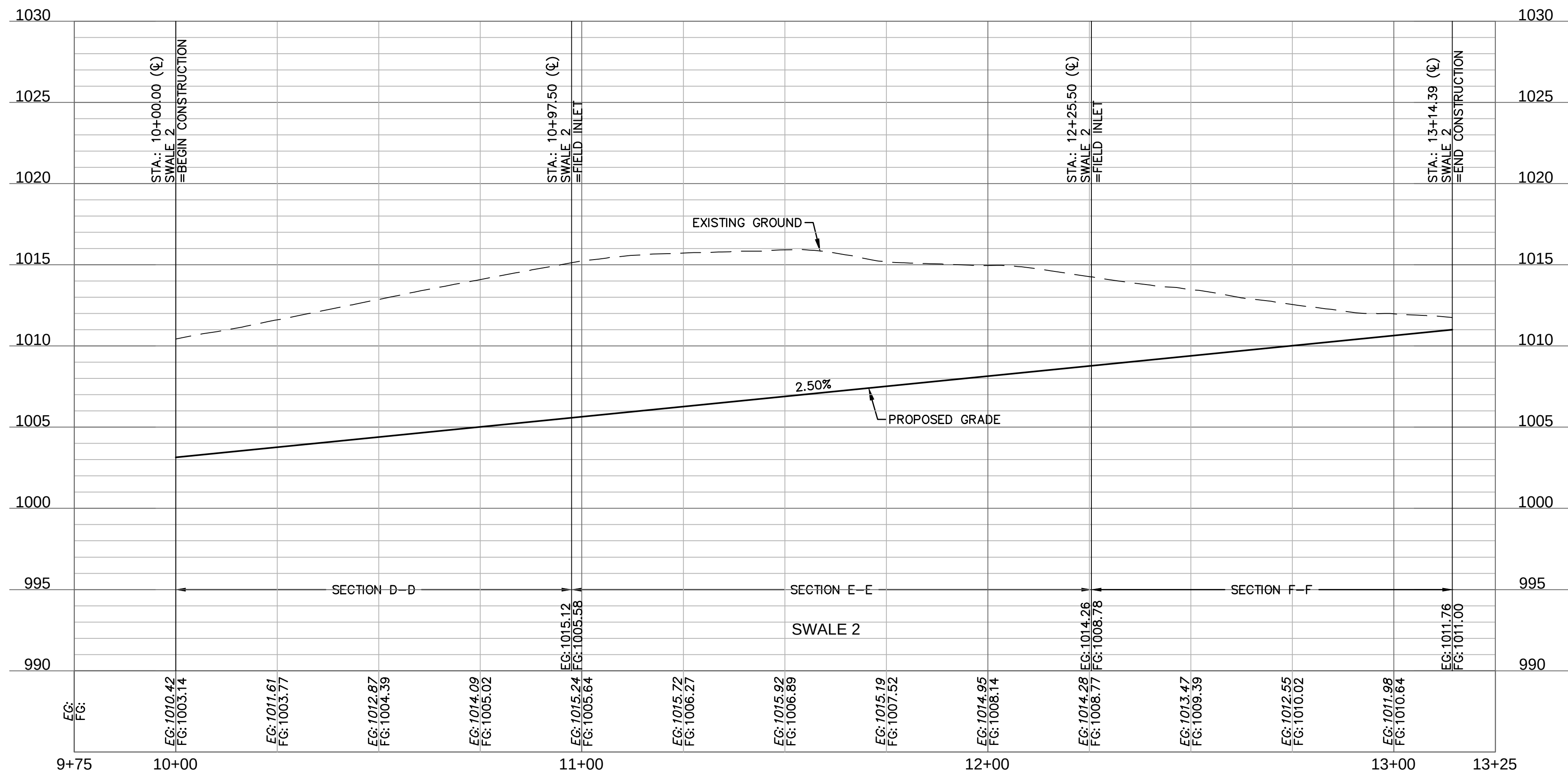
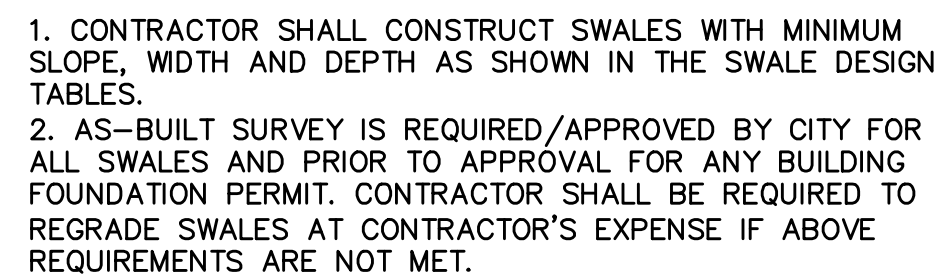
2023

drawn by: _____
checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_SWL01_A202467
date: 02/15/2024

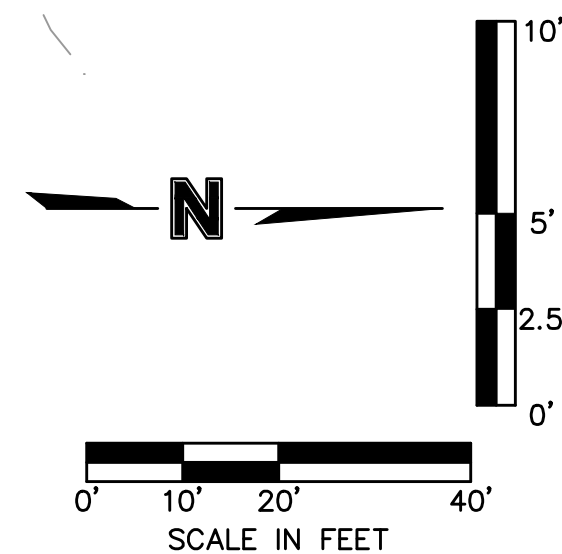
C/C
S/S
L/S
J/S

SHEET
C106

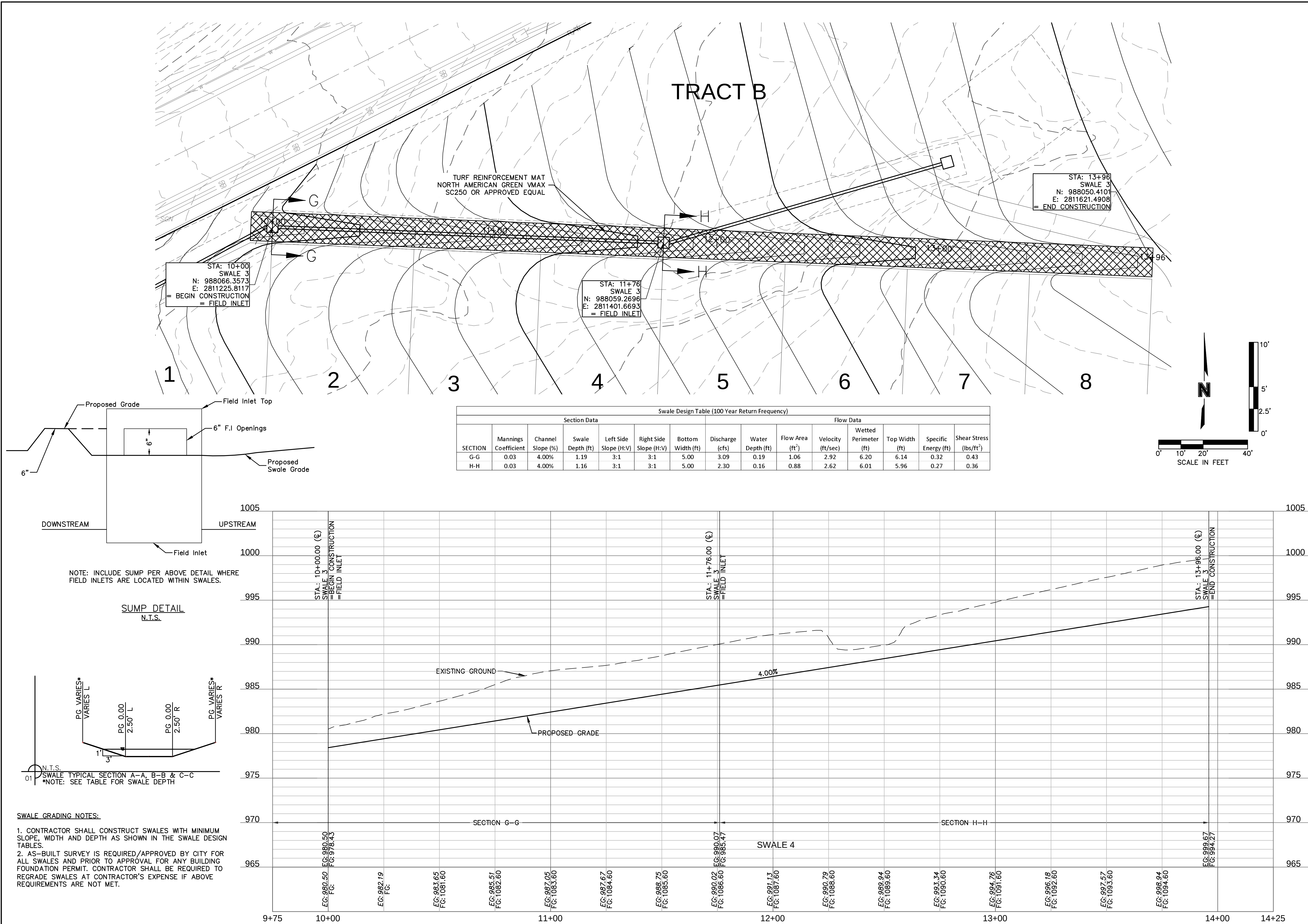
REVISIONS



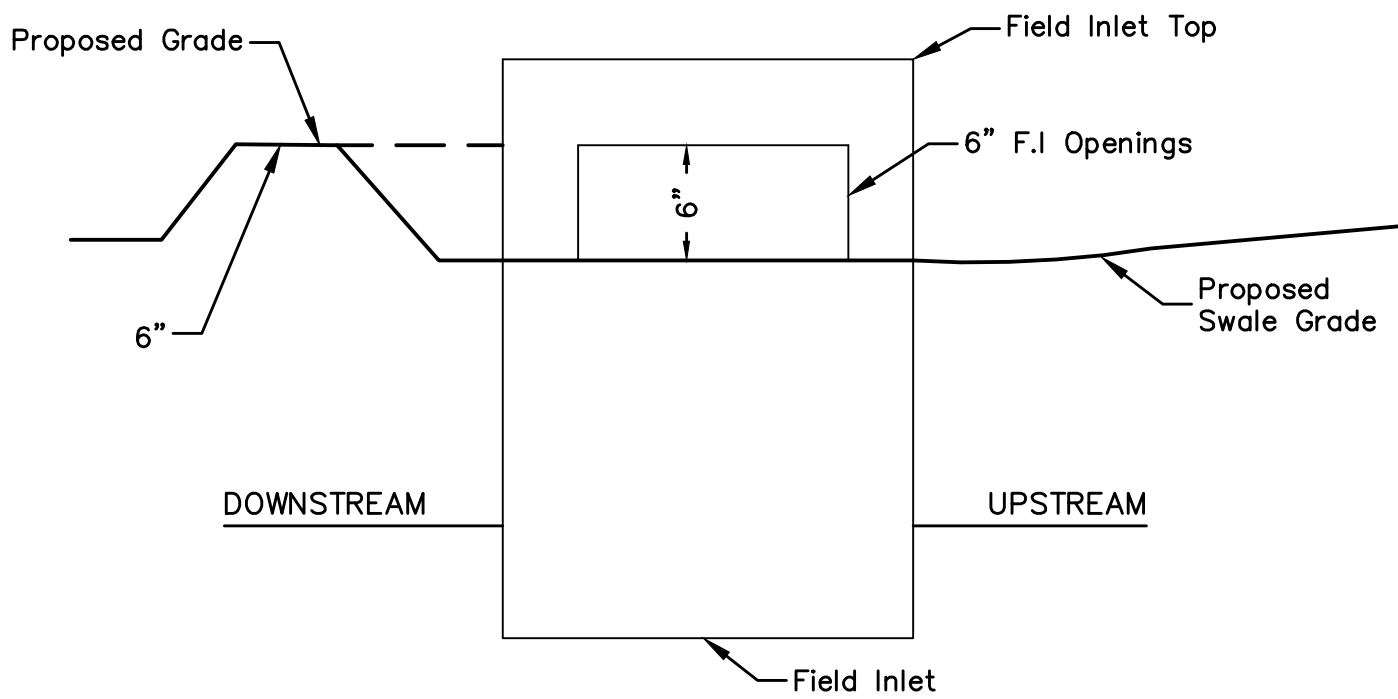
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Section Data							Flow Data							
SECTION	Mannings Coefficient	Channel Slope (%)	Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft²)
D-D	0.03	2.50%	1.10	3:1	3:1	5.00	0.72	0.10	0.53	1.36	5.63	5.60	0.13	0.15
E-E	0.03	2.50%	1.19	3:1	3:1	5.00	2.50	0.19	1.09	2.36	6.20	6.14	0.28	0.27
F-F	0.03	2.50%	1.13	3:1	3:1	5.00	1.18	0.13	0.70	1.68	5.82	5.78	0.17	0.19



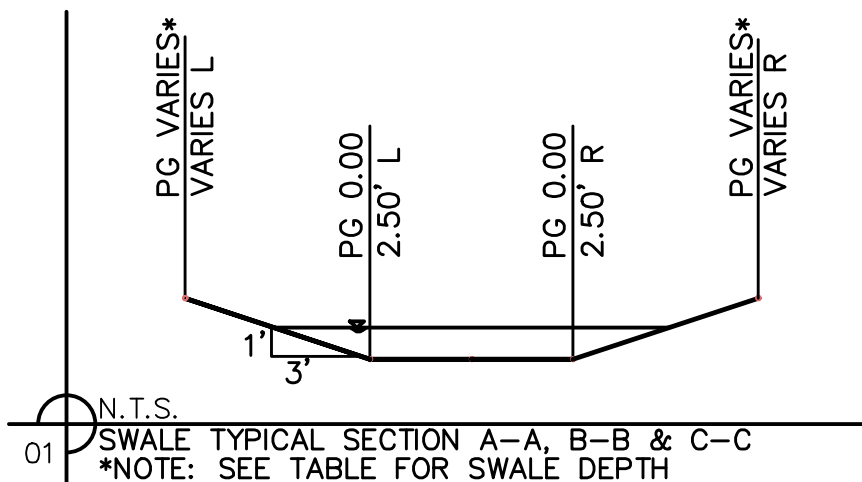
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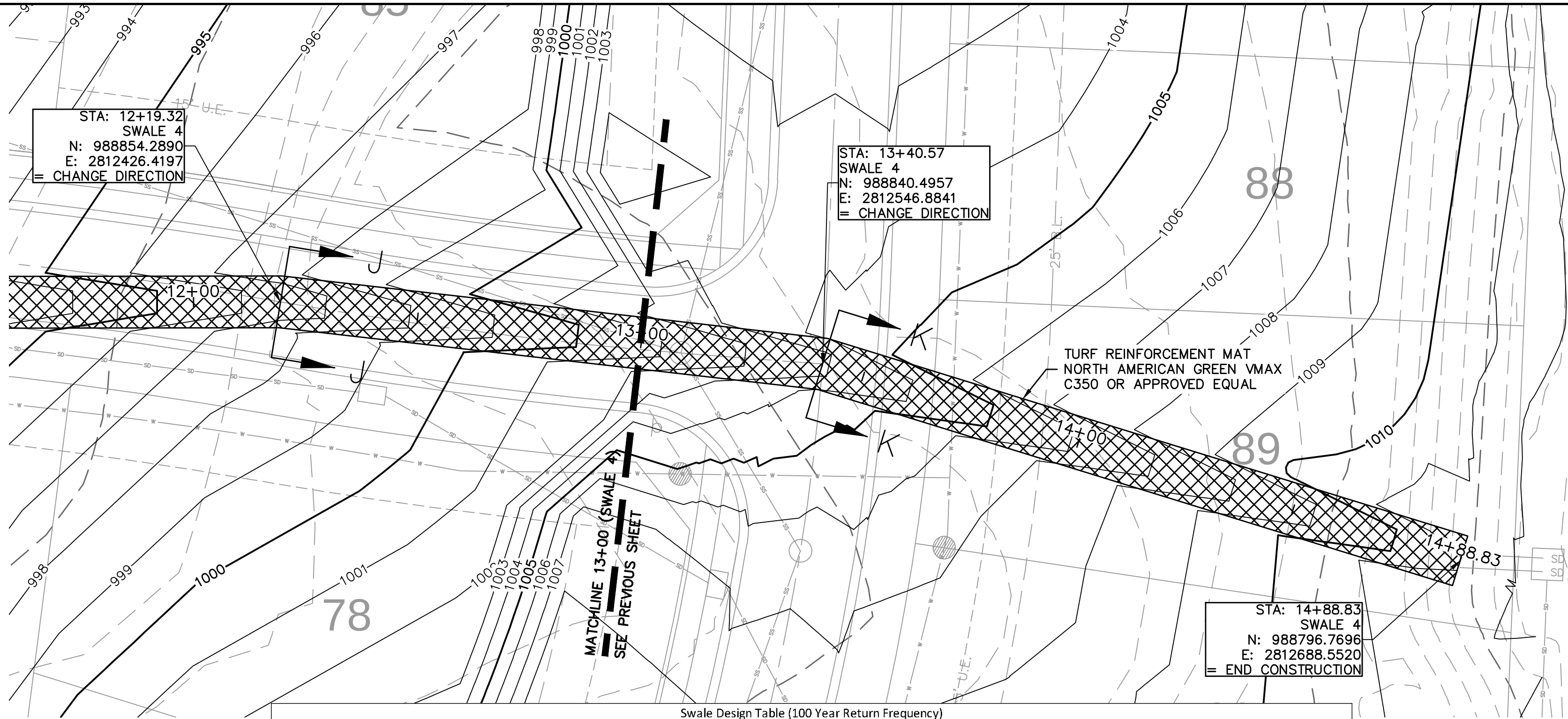


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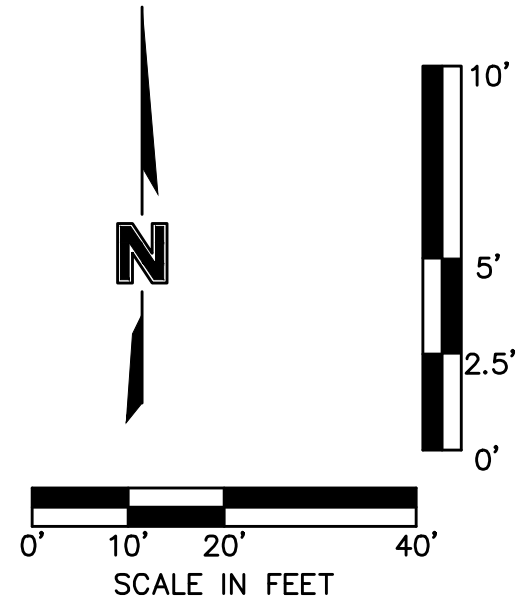
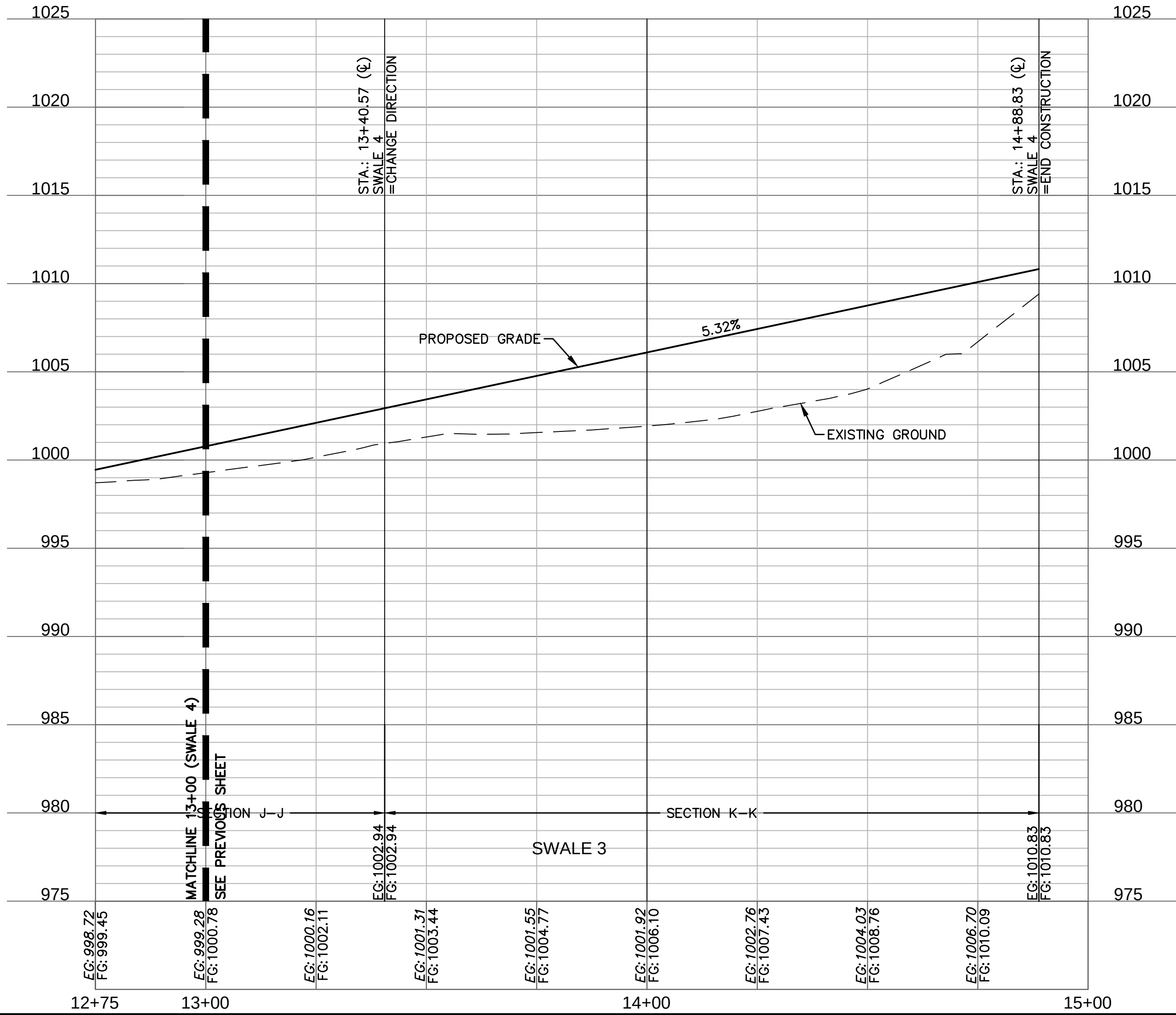


SWALE GRADING NOTES:

1. CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
2. AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.



Section Data										Flow Data						
SECTION	Mannings Coefficient	Channel Slope (%)	Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft²)		
I-I	0.03	5.32%	1.10	3:1	3:1	5.00	61.38	0.10	0.53	1.74	5.63	5.60	0.15	0.31		
J-J	0.03	5.32%	1.92	3:1	3:1	5.00	61.38	0.92	7.14	8.60	10.82	10.52	2.07	2.19		
K-K	0.03	5.32%	1.92	3:1	3:1	5.00	61.38	0.92	7.14	8.60	10.82	10.52	2.07	2.19		



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STEPHEN M. SAYLOR
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

SWALE 4 PLAN & PROFILE CONT.
STREET & STORM SEWER PLANS
EAGLE CREEK VILLAS
FIRST PLAT
LEE'S SUMMIT, MISSOURI

2023

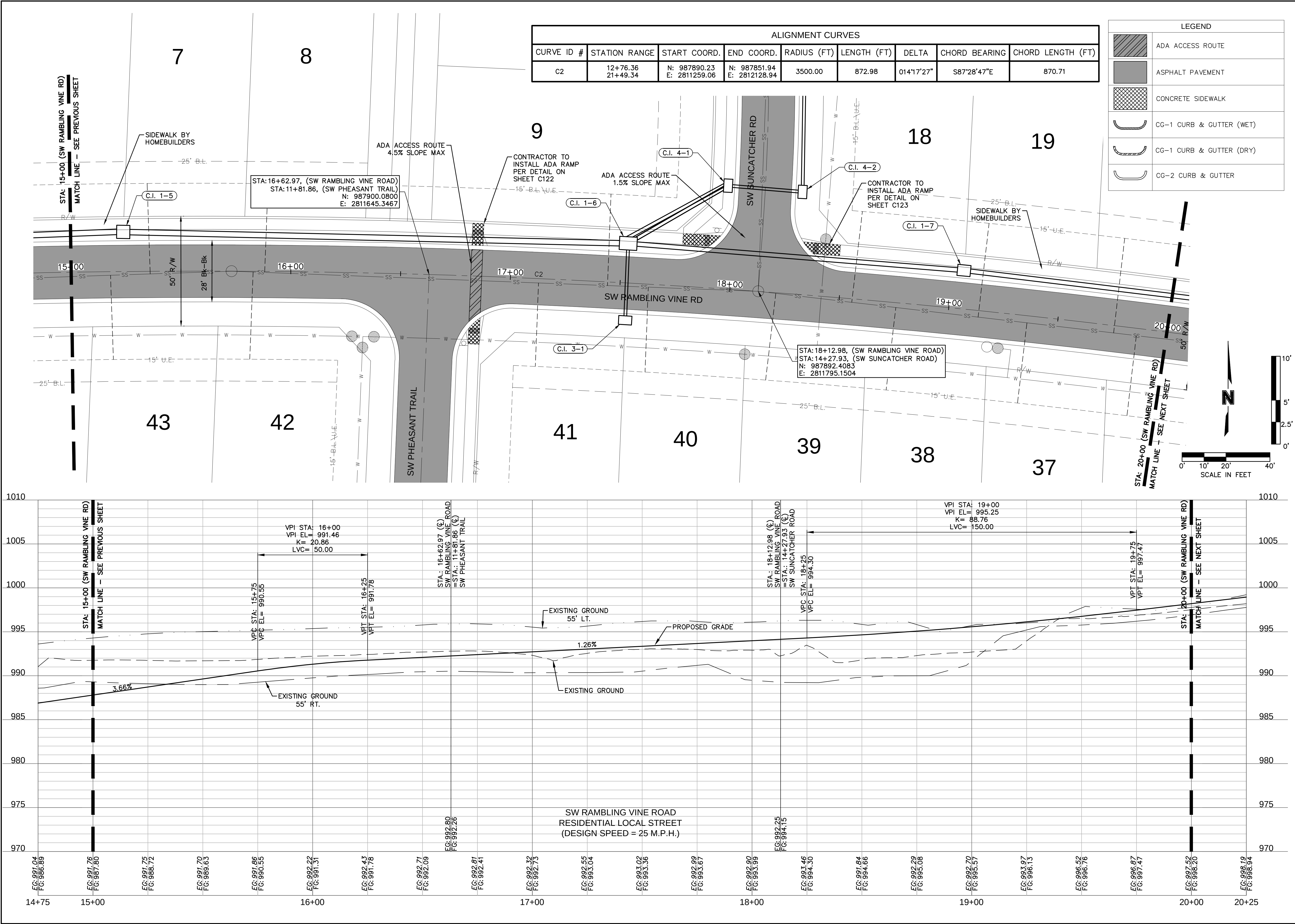
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checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_SWL01_A202467
date: 02/15/2024

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JS

BY

REVISIONS

SHEET
C110



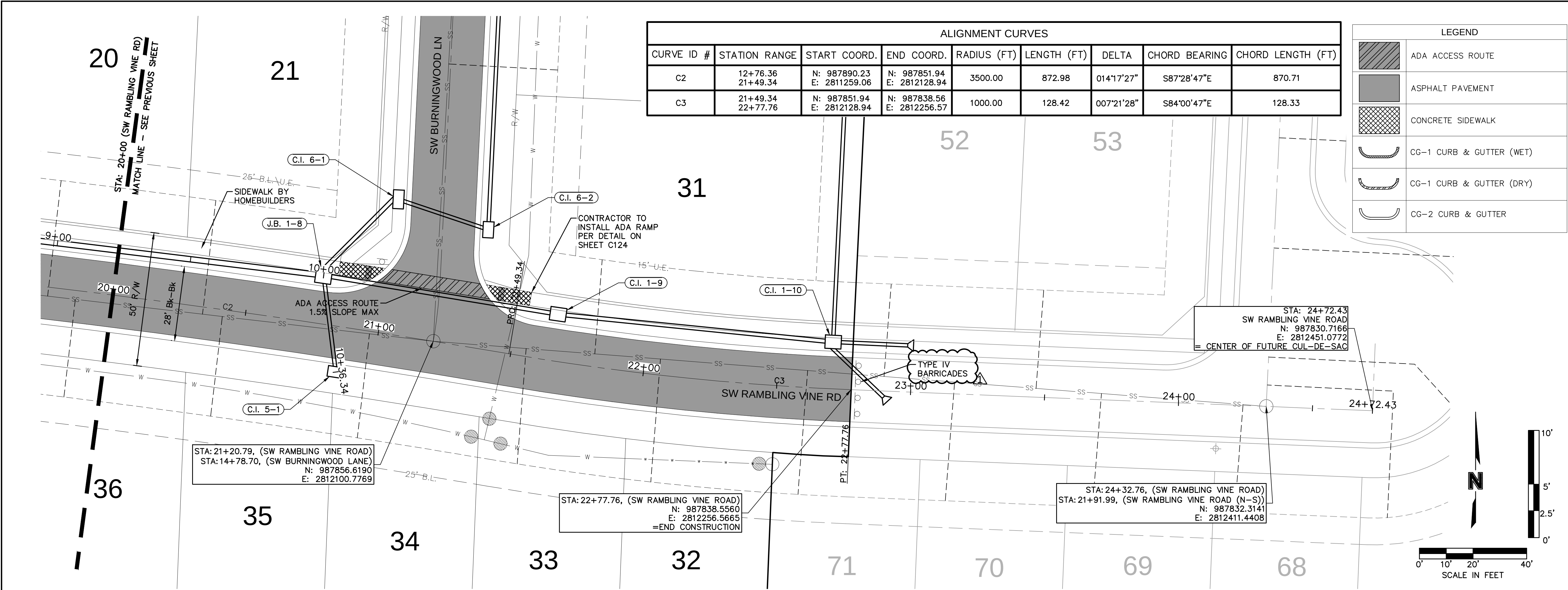
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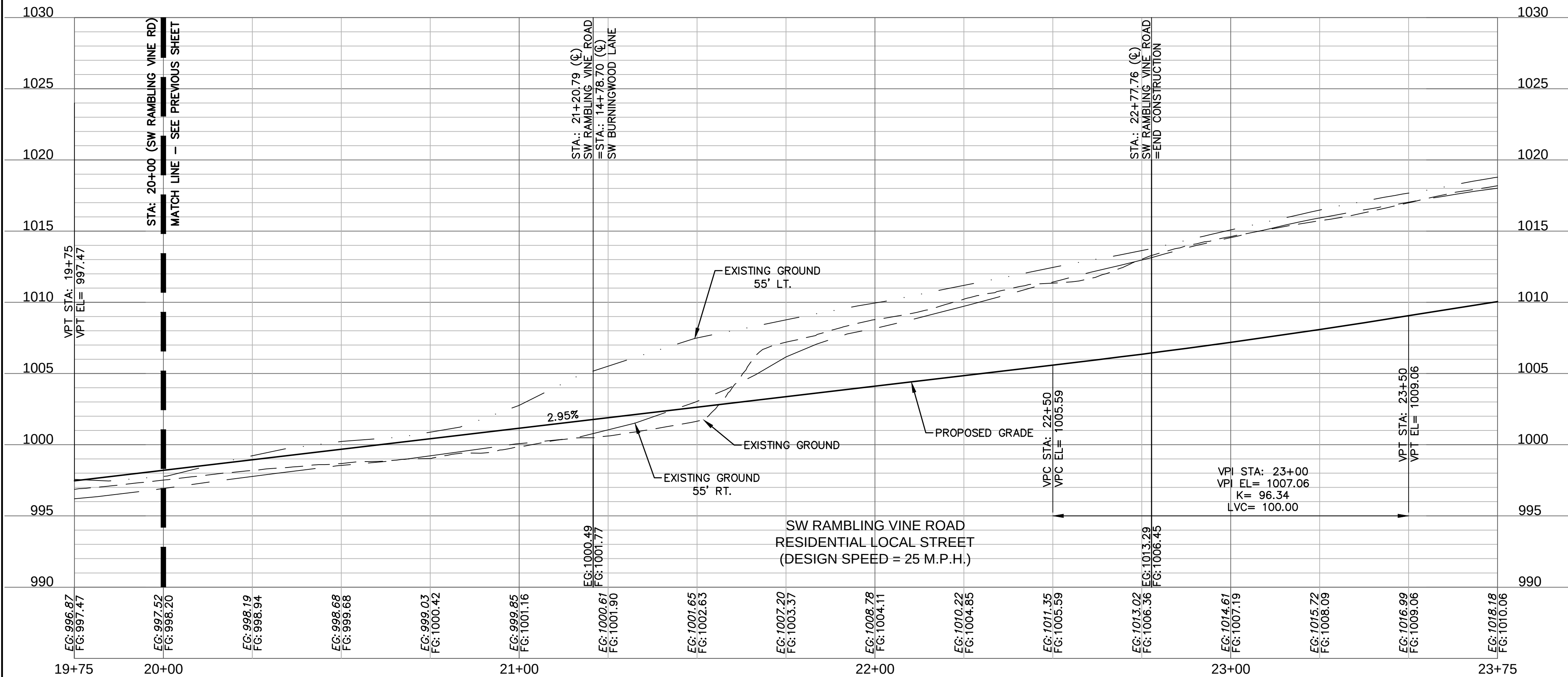
ROAD PLAN & PROFILE (SW RAMBLING VINE ROAD) STREET & STORM SEWER PLANS	EAGLE CREEK VILLAS FIRST PLAT	2023
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drawn by: _____	checked by: _____	QA/QC by: _____	project no.: A20-2467	drawing no.: C_RPP01_A202467	date: 02/15/2024
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SHEET C112



ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C2	12+76.36 21+49.34	N: 987890.23 E: 2811259.06	N: 987851.94 E: 2812128.94	3500.00	872.98	014°17'27"	S87°28'47"E	870.71
C3	21+49.34 22+77.76	N: 987851.94 E: 2812128.94	N: 987838.56 E: 2812256.57	1000.00	128.42	007°21'28"	S84°00'47"E	128.33



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SAVOR NUMBER
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

ROAD PLAN & PROFILE (SW RAMBLING VINE ROAD)
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

drawn by: _____
checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_RPP01_A202467
date: 02/15/2024

2023

BY

REVISIONS DESCRIPTION

DATE

REV. NO.

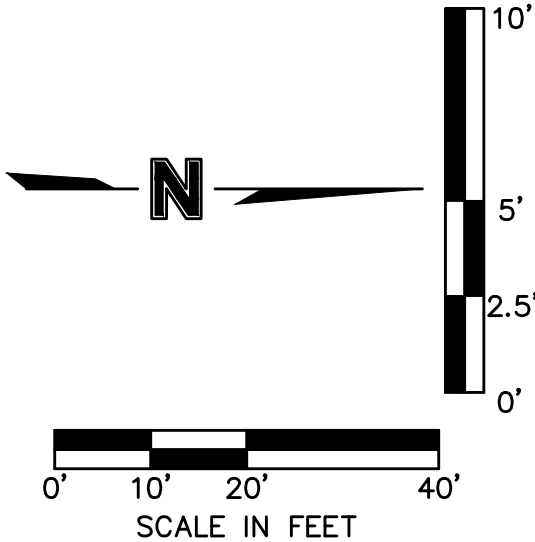
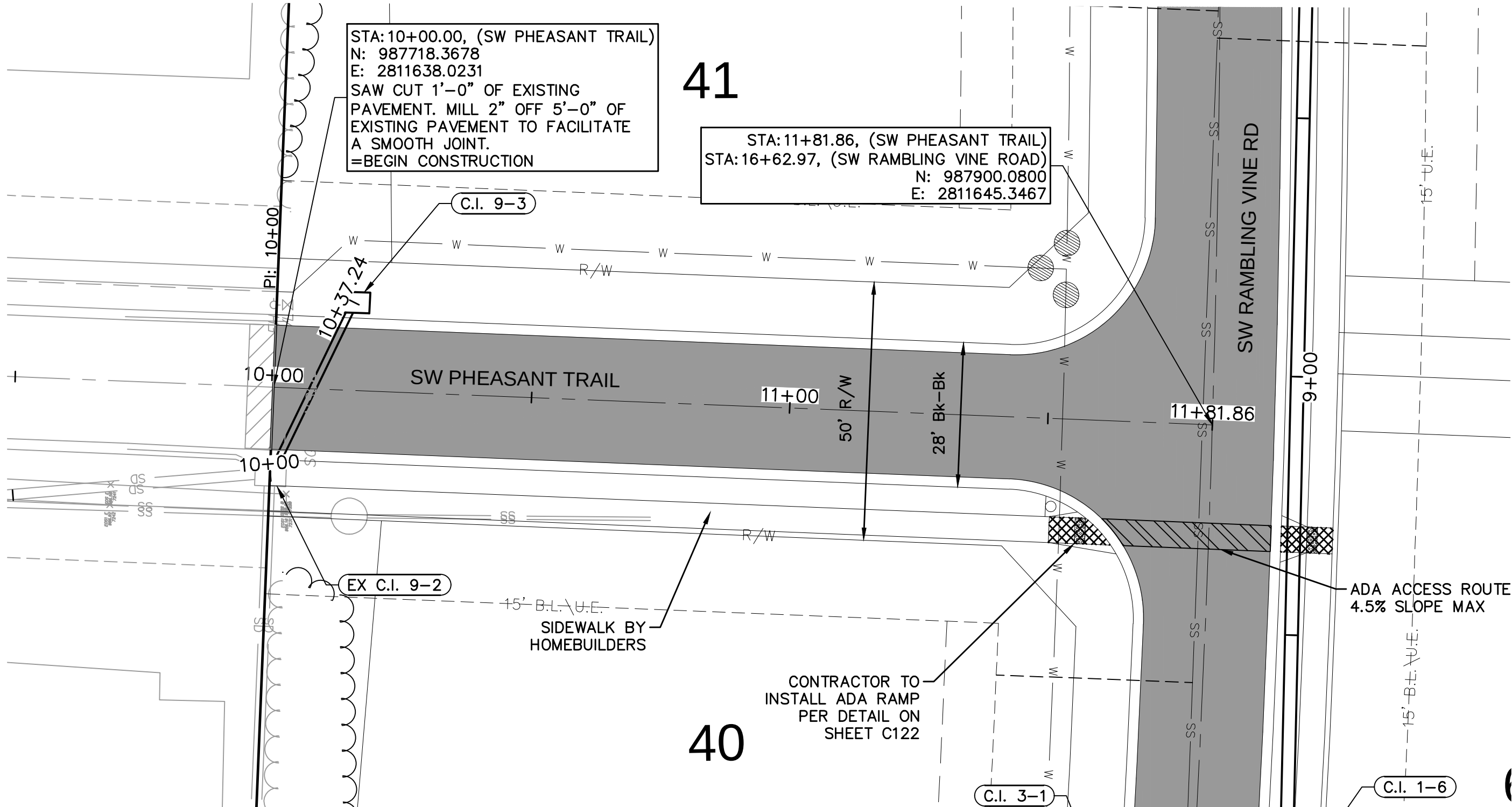
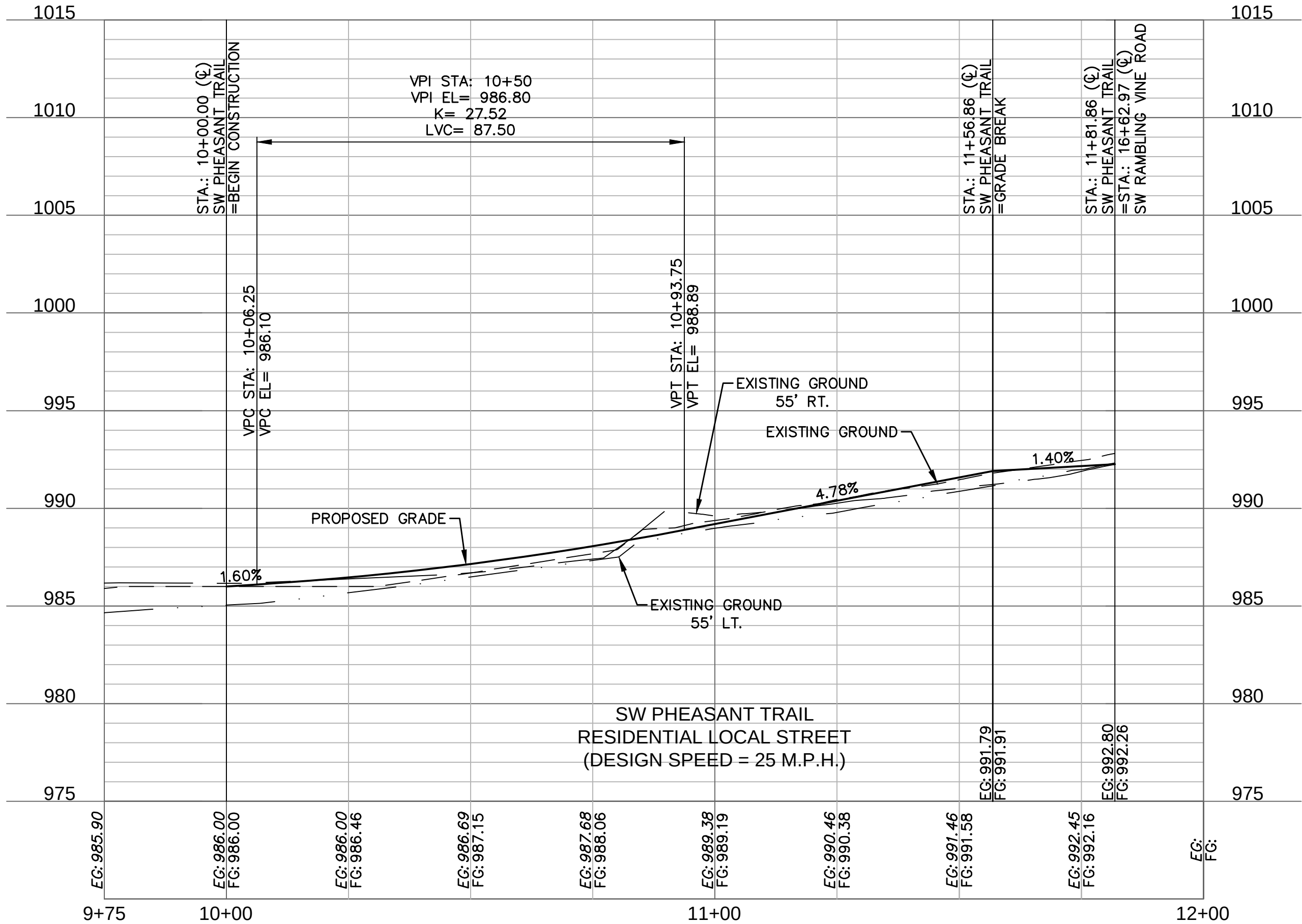
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02/15/2024

REVISED PER CITY COMMENTS

REVISIONS

SHEET
C113



LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-1 CURB & GUTTER (WET)
	CG-1 CURB & GUTTER (DRY)
	CG-2 CURB & GUTTER

ROAD PLAN & PROFILE (SW PHEASANT TRAIL)
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

2023

drawn by: _____
checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_RPP02_A202467
date: 02/15/2024

2023

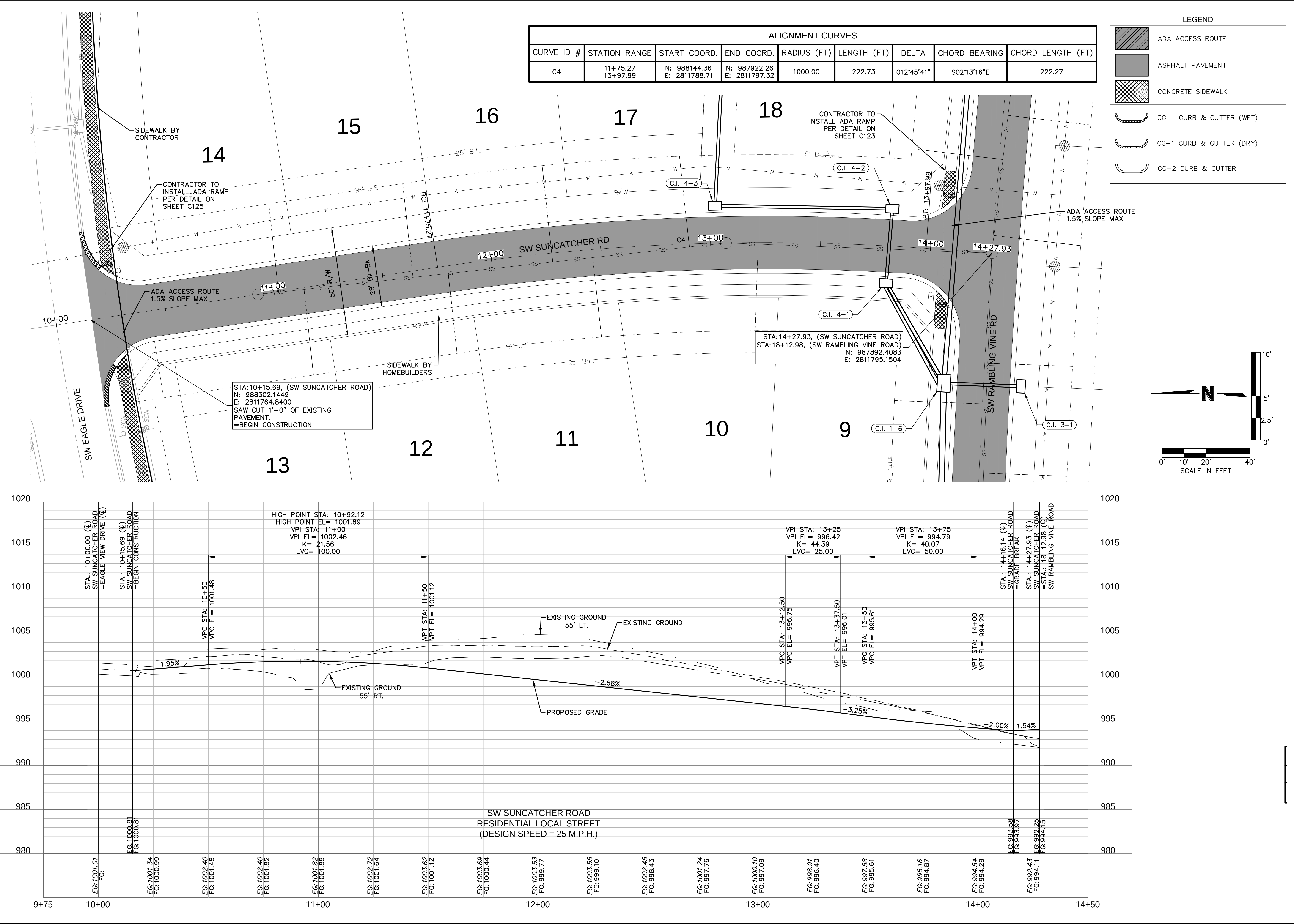
STATE OF MISSOURI
STEPHEN M. SAYLOR
NUMBER
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

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STEPHEN M. SAYLOR
SAYLOR
NUMBER
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

ROAD PLAN & PROFILE (SW SUNCATCHER ROAD)
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

drawn by: CJK
checked by: SS
approved by: JS
QA/QC by: JS
project no.: A20-2467
drawing no.: C_RPP02_A202467
date: 02/15/2024

BY

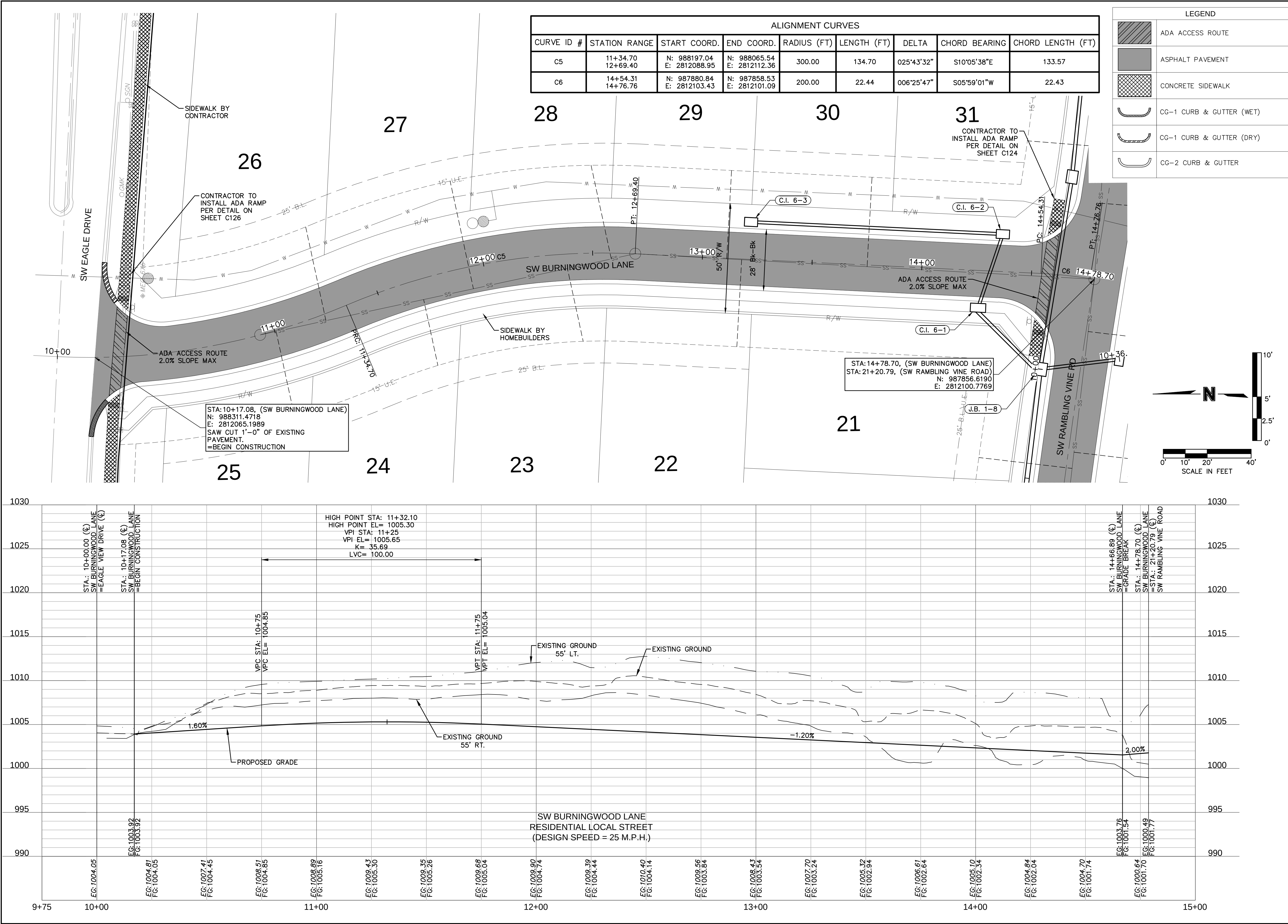
REVISIONS DESCRIPTION

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C115



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STATE OF MISSOURI
STEPHEN M. SAYLOR
NUMBER
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

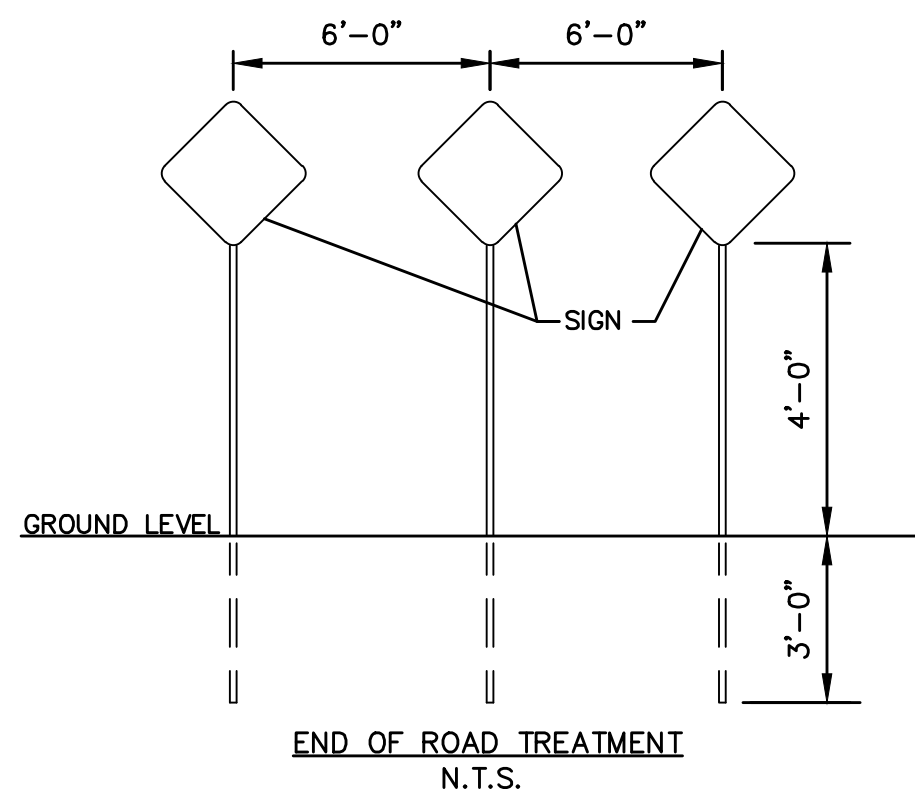
BY
REVISIONS DESCRIPTION
DATE
REV. NO.

ROAD PLAN & PROFILE (SW BURNINGWOOD LANE)
STREET & STORM SEWER PLANS
EAGLE CREEK VILLAS
FIRST PLAT
LEE'S SUMMIT, MISSOURI
2023

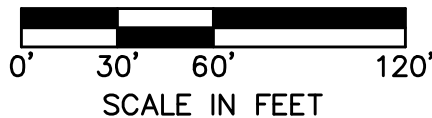
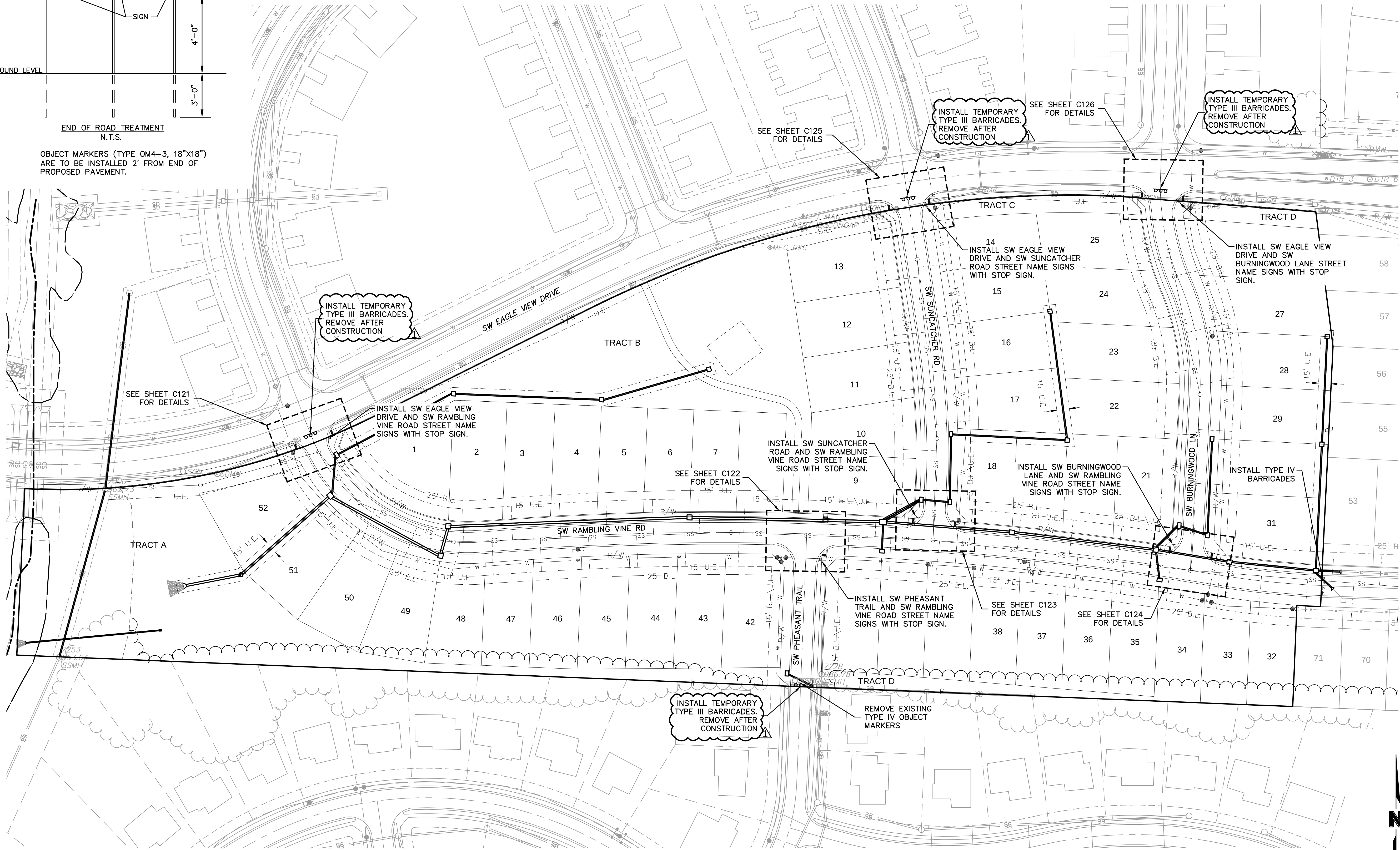
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date: 02/15/2024

SHEET
C116

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USER: ssyfor



OBJECT MARKERS (TYPE OM4-3, 18"X18") ARE TO BE INSTALLED 2' FROM END OF PROPOSED PAVEMENT.



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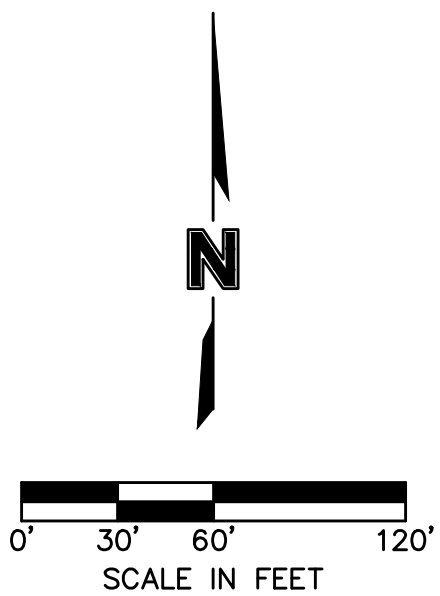
STATE OF MISSOURI
STEPHEN M. SAYLOR
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

REVISIONS		
REV. NO.	DATE	REVISIONS DESCRIPTION
1	02/15/2024	REVISED PER CITY COMMENTS

TRAFFIC CONTROL PLAN STREET & STORM SEWER PLANS	
EAGLE CREEK VILLAS FIRST PLAT	
LEE'S SUMMIT, MISSOURI	
2023	

drawn by: CJK
checked by: SS
approved by: JS
QA/QC by: JS
project no.: A20-2467
drawing no.: C TCP01 A202467
date: 02/15/2024

SHEET
C117

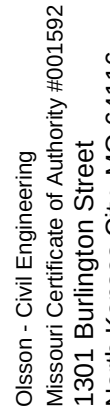
USER: ssaylor
C_PBND

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
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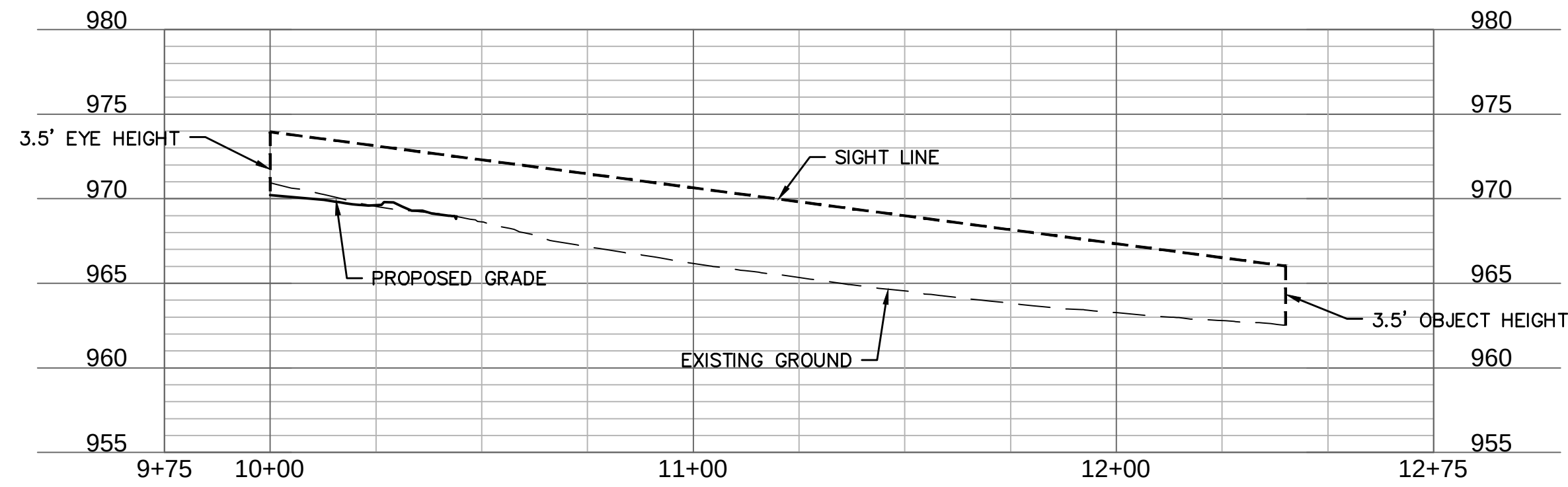
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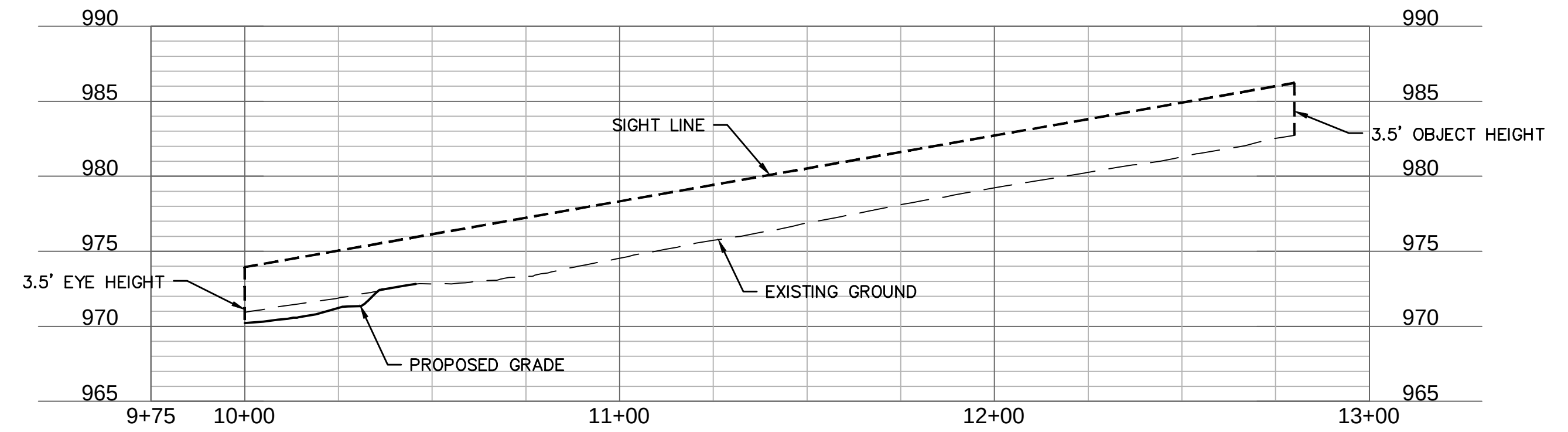
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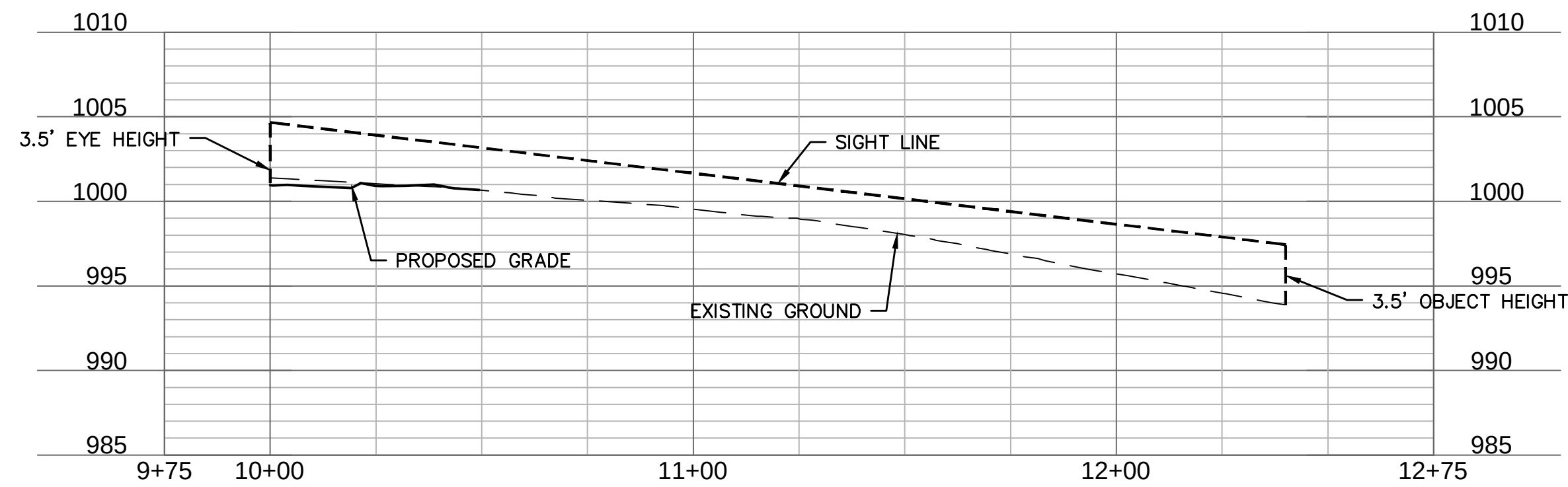
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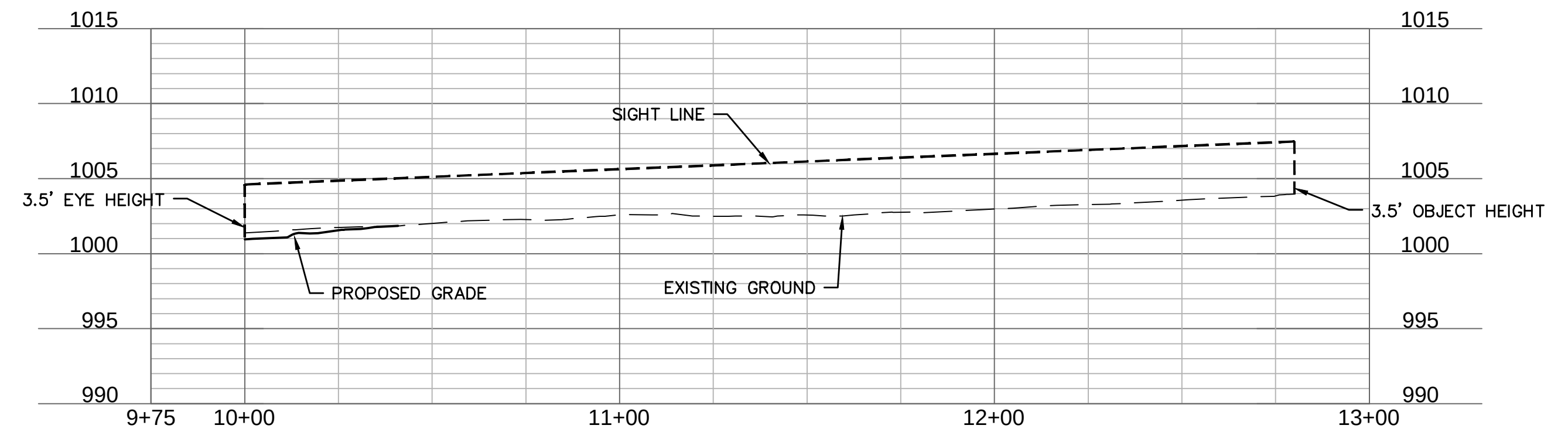
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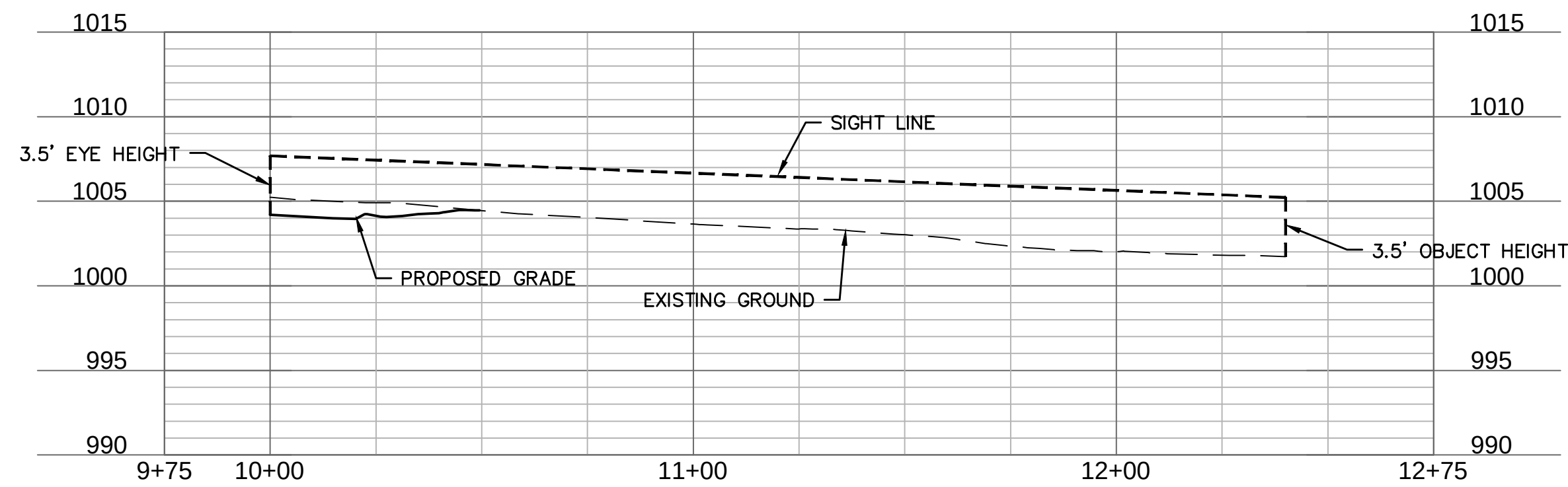
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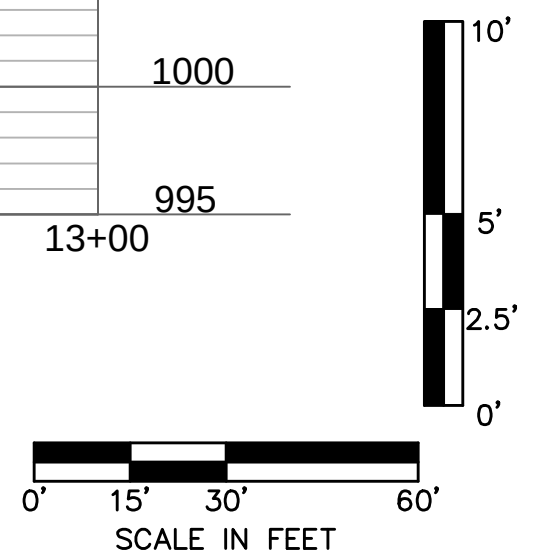
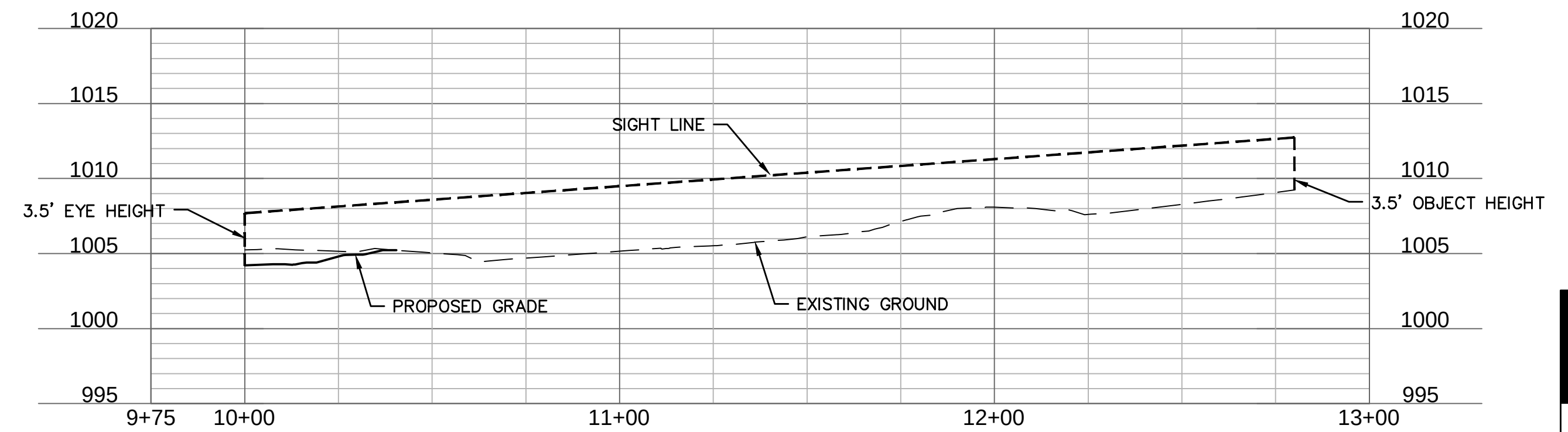
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ISD 3-A (9+75 - 12+75)



ISD 3-B (9+75 - 13+00)



INTERSECTION SITE DISTANCE PROFILES

STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

2023

Drawn by: _____ CW
 Checked by: _____ SS
 Approved by: _____ JS
 A/QC by: _____ JS
 Project no.: _____ A20-2467
 Drawing no.: _____ C TCP02 A202467
 Date: _____ 02/15/2024

SHEET
C119

[illegible]

STATE OF MISSOURI
 ★ ★
 STEPHEN M.
 SAYLOR
 NUMBER
 PE-2018021248
 2/15/2024
 PROFESSIONAL ENGINEER

also

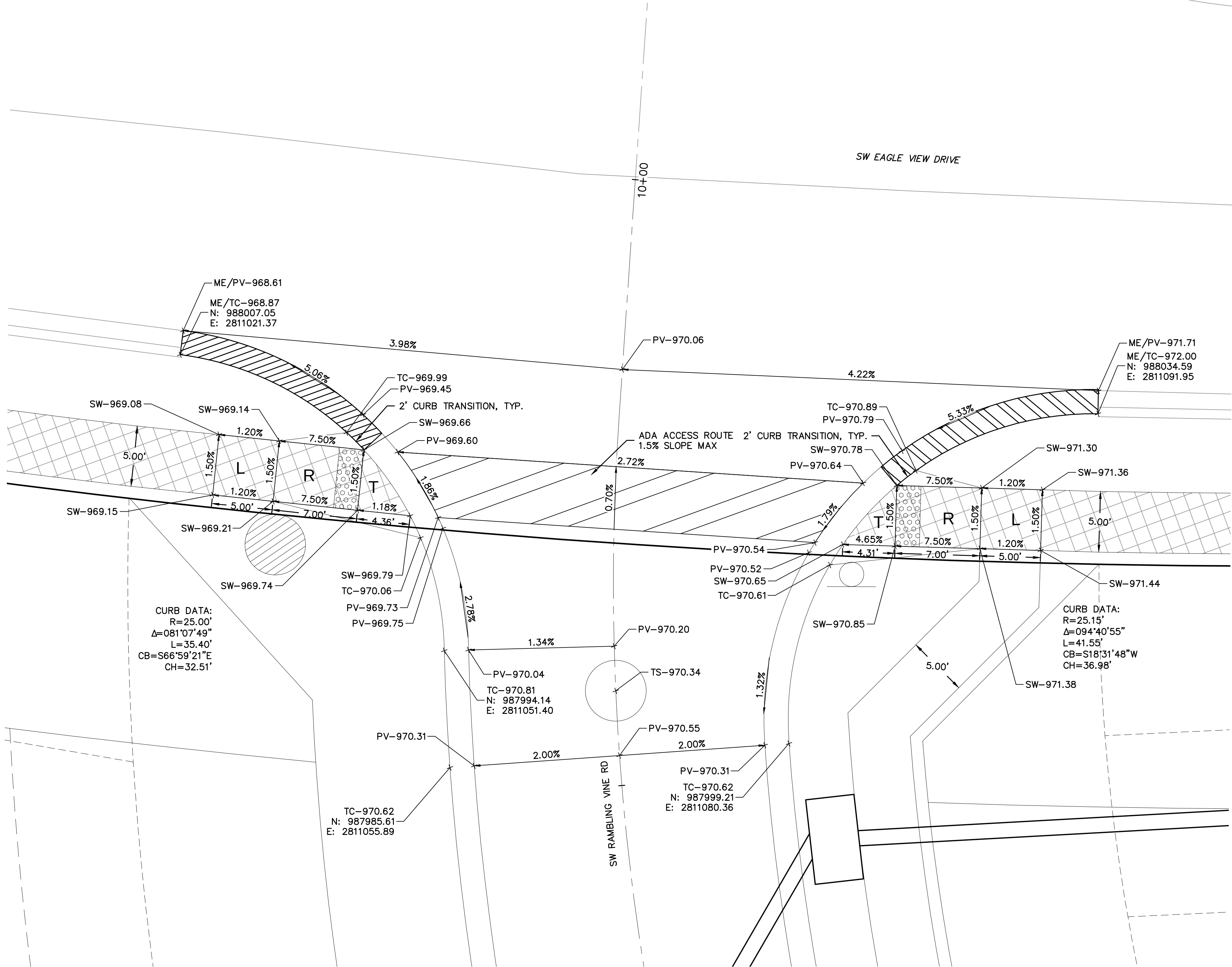
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116

TEL 816.361.1177 www.olsson.com

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INTERSECTION SITE DISTANCE PROFILES STREET & STORM SEWER PLANS					
EAGLE CREEK VILLAS FIRST PLAT					
LEE'S SUMMIT, MISSOURI					
2023					
drawn by: _____ CW					
checked by: _____ SS					
approved by: _____ JS					
QA/QC by: _____ JS					
project no.: _____ A20-2467					
drawing no.: C TCP02 A202467					
date: 02/15/2024					
SHEET C120					

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USER: ssaylor



- INTERSECTION AND ADA DETAIL NOTES:
1. ALL ADA CURB RAMPs SHALL BE BUILT PER CURRENT MUNICIPALITY ADOPTED ADA STANDARDS.
 2. CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10 MAX SLOPES.
 3. LANDINGS SHALL BE PROVIDED WHERE INDICATED ON PLAN SHEET OR BY PROWAG STANDARDS. LANDING SHALL BE 4'x4' MINIMUM. RAMP RUNS SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1:12 UNLESS THE RAMP LENGTH IS OVER 15 FEET, THEN THE SLOPE CAN BE GREATER AS INDICATED IN DETAILS TO REACH STREET GRADES.
 4. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
 5. CROSS SLOPE FOR RAMPs AND SIDEWALK SHALL NOT EXCEED 2%.
 6. AFTER CURBS HAVE BEEN CONSTRUCTED, AND BEFORE ASPHALT OR CONCRETE PAVEMENT IS POURED, CURBS SHOULD BE MEASURED WITH A LEVEL TO ENSURE CURB ALONG ADA RAMPs AND LANDINGS WILL MEET ADA REQUIREMENTS.
 7. ADA RAMP CONSTRUCTION WILL BE INSPECTED THOROUGHLY BY THE CITY INSPECTOR. CONTRACTOR SHALL BE REQUIRED TO RECONSTRUCT RAMPs, CURBS AND/OR PAVEMENT AT CONTRACTOR'S EXPENSE IF ADA RAMPs AND LANDINGS CANNOT MEET THE ADA REQUIREMENTS, PER APPROVED PLAN OR APPROVED ALTERNATIVE.
 8. CURVE DATA IS FOR BACK OF CURB.

LEGEND	
TC-	TOP OF CURB
PV-	TOP OF PAVEMENT
SW-	SIDEWALK
L	LANDING AREA
R	RAMP AREA
T	TRANSITION AREA
	ADA ACCESS ROUTE
	CG-2 CURB & GUTTER
	CONCRETE SIDEWALK (CONSTRUCTED BY CONTRACTOR)
	CG-1 CURB & GUTTER (WET)
	CG-1 CURB & GUTTER (DRY)

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STATE OF MISSOURI
STEPHEN M. SAYLOR
SAYLOR
NUMBER
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

SW RAMBLING VINE RD & SW EAGLE VIEW DR
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

drawn by: _____
checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_INT01_A202467
date: 02/15/2024

2023

BY

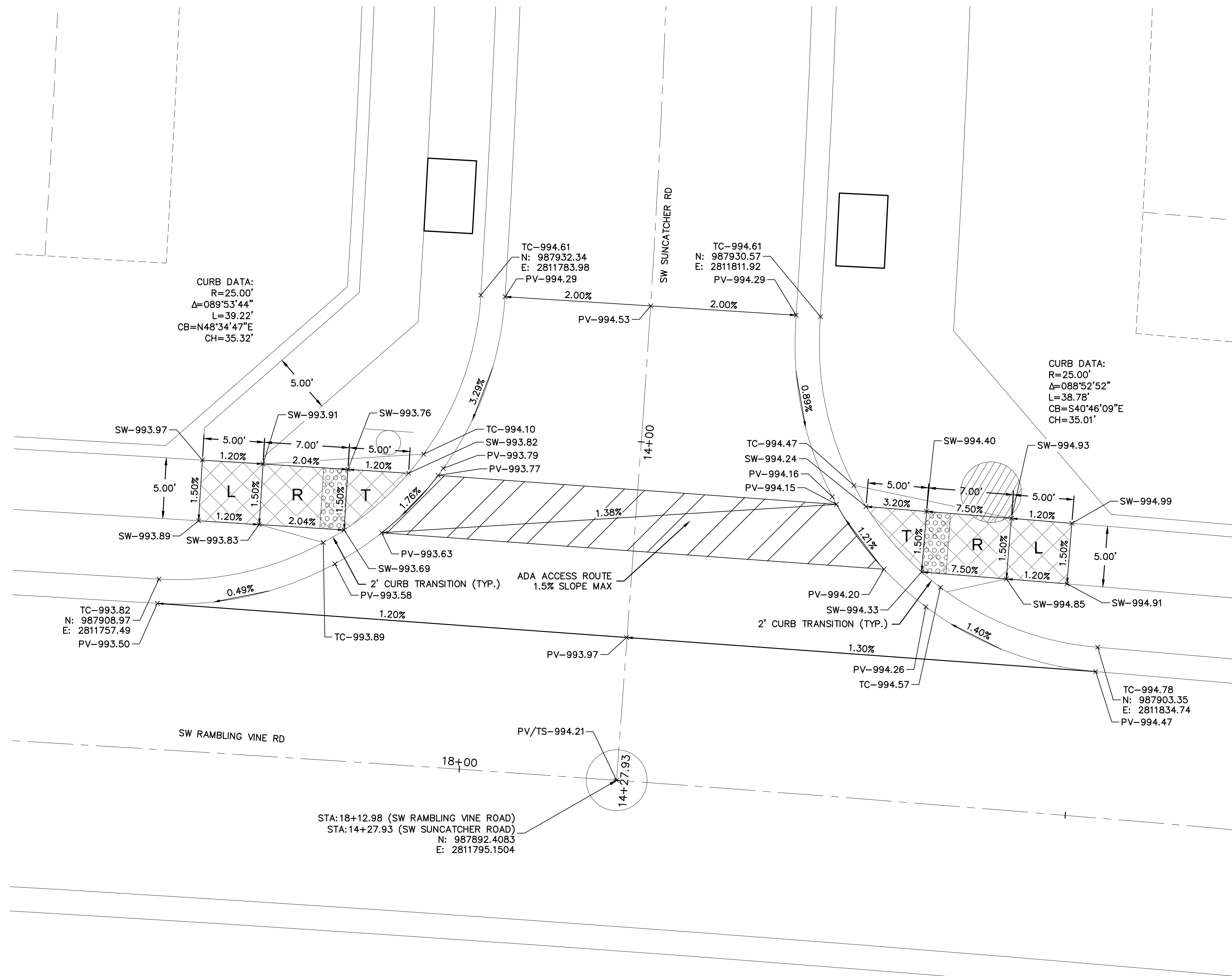
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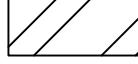
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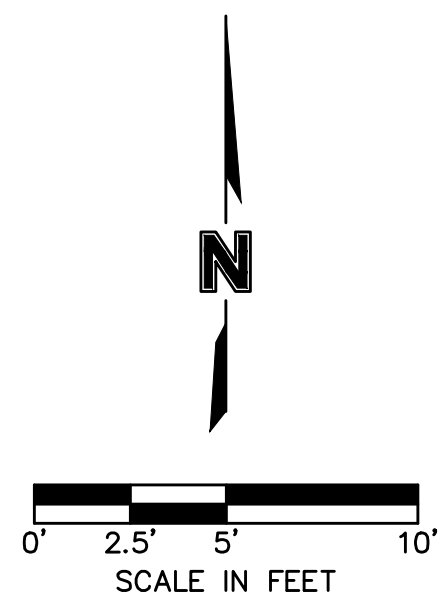
REVISIONS

SHEET
C121



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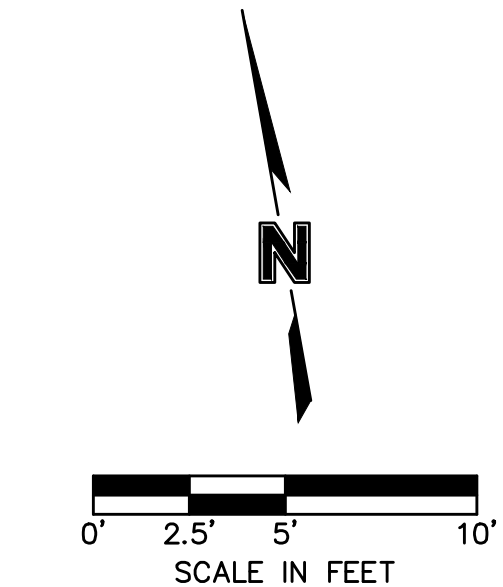
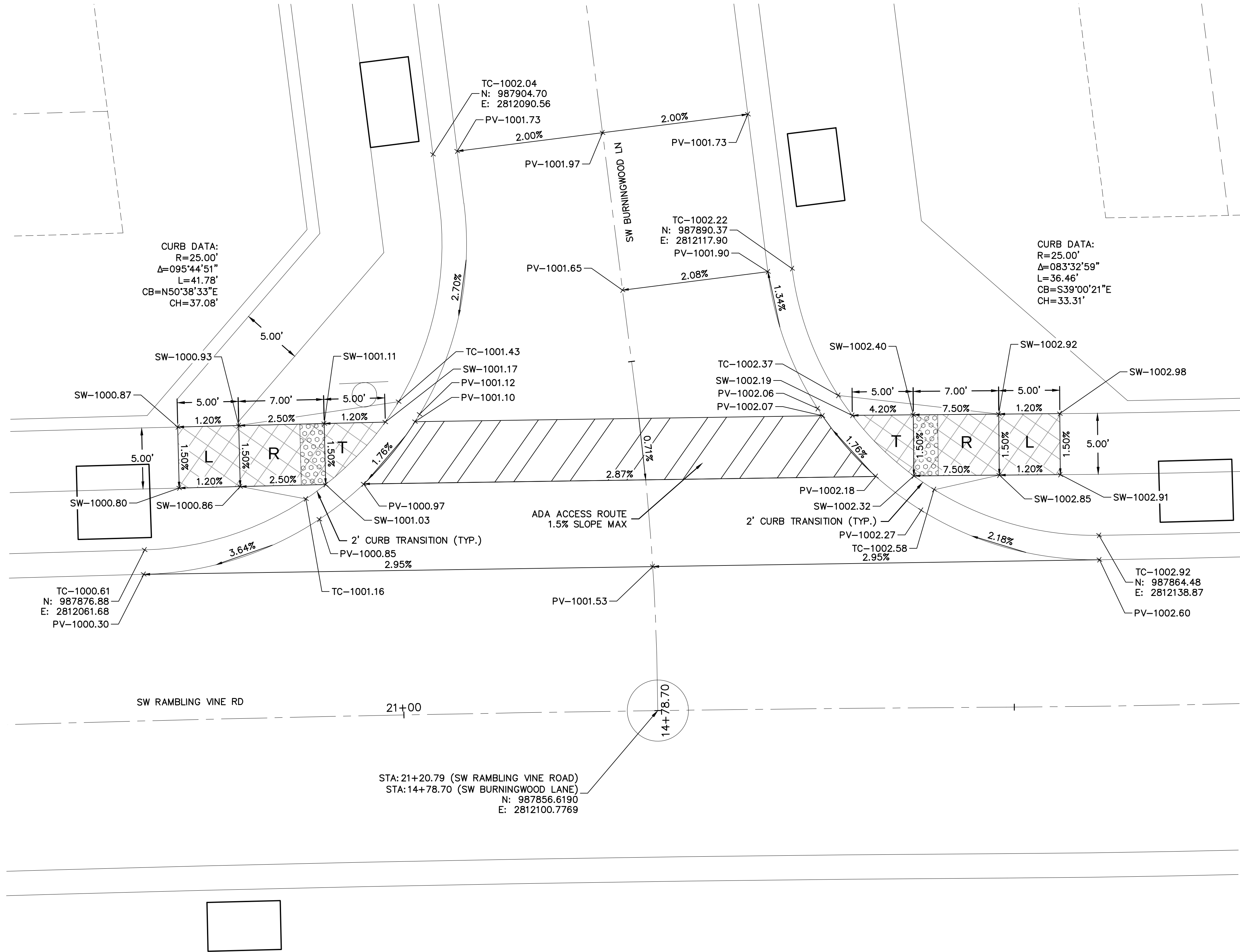
LEGEND	
TC-	TOP OF CURB
PV-	TOP OF PAVEMENT
SW-	SIDEWALK
L	LANDING AREA
R	RAMP AREA
T	TRANSITION AREA
	ADA ACCESS ROUTE
	CG-2 CURB & GUTTER
	CONCRETE SIDEWALK (CONSTRUCTED BY CONTRACTOR)

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SW RAMBLING VINE RD & SW SUNCATCHER RD STREET & STORM SEWER PLANS	EAGLE CREEK VILLAS FIRST PLAT	2023
LEE'S SUMMIT, MISSOURI		

drawn by: _____ CW
checked by: _____ SS
approved by: _____ JS
QA/QC by: _____ JS
project no.: _____ A20-2467
drawing no.: C INT01 A202467
date: _____ 02/15/2024

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USER: ssaylor



LEGEND	
TC-	TOP OF CURB
PV-	TOP OF PAVEMENT
SW-	SIDEWALK
L	LANDING AREA
R	RAMP AREA
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	ADA ACCESS ROUTE
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 9. CURVE DATA IS FOR BACK OF CURB.

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STATE OF MISSOURI
PROFESSIONAL ENGINEER
STEPHEN M. SAYLOR
SAYLOR NUMBER
PE-2018021248
2/15/2024

SW RAMBLING VINE RD & SW BURNINGWOOD LN
STREET & STORM SEWER PLANS
EAGLE CREEK VILLAS
FIRST PLAT
LEE'S SUMMIT, MISSOURI

drawn by: _____
checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_INT01_A202467
date: 02/15/2024

2023

BY

REVISIONS DESCRIPTION

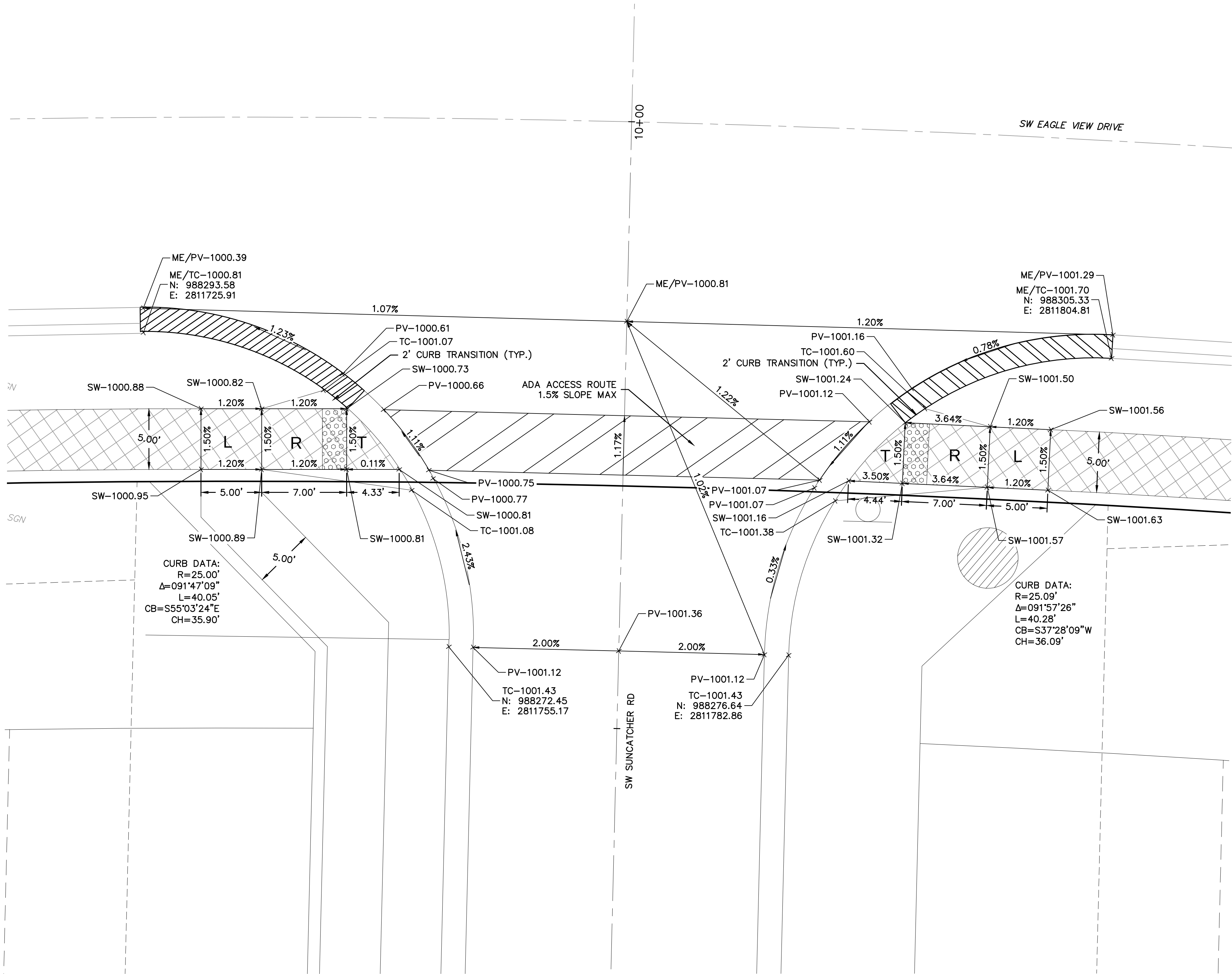
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REV. NO.

REVISIONS

SHEET
C124

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USER: ssaylor



LEGEND	
TC-	TOP OF CURB
PV-	TOP OF PAVEMENT
SW-	SIDEWALK
L	LANDING AREA
R	RAMP AREA
T	TRANSITION AREA
	ADA ACCESS ROUTE
	CG-2 CURB & GUTTER
	CONCRETE SIDEWALK (CONSTRUCTED BY CONTRACTOR)
	CG-1 CURB & GUTTER (WET)
	CG-1 CURB & GUTTER (DRY)

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 9. CURVE DATA IS FOR BACK OF CURB.

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STATE OF MISSOURI

STEPHEN M. SAYLOR

PE-2018021248

2/15/2024

PROFESSIONAL ENGINEER

SW SUNCATCHER RD & SW EAGLE VIEW DR
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

2023

drawn by: _____ JS

checked by: _____ SS

approved by: _____ JS

QA/QC by: _____ JS

project no.: A20-2467

drawing no.: C_INT01_A202467

date: 02/15/2024

SHEET

C125

BY

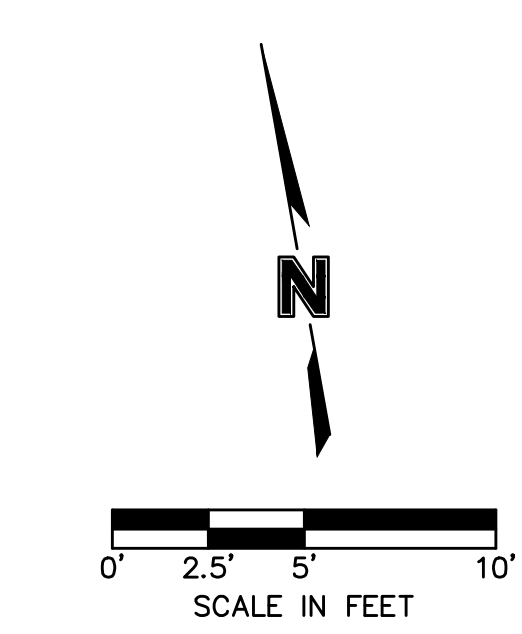
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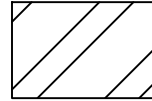
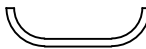
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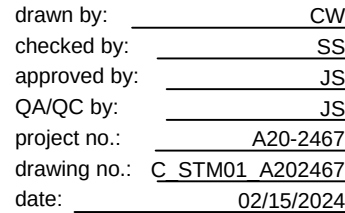
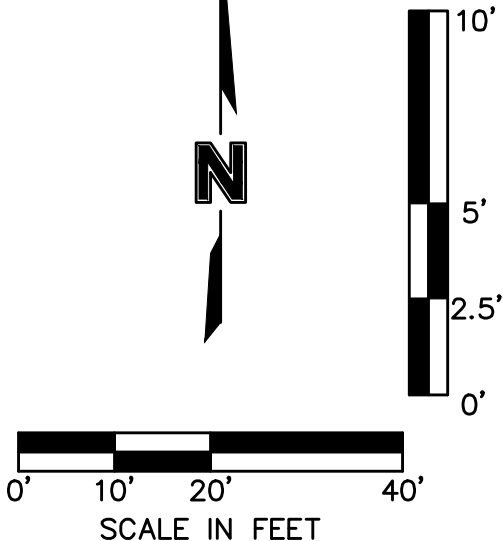
REVISIONS

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LEGEND	
TC-	TOP OF CURB
PV-	TOP OF PAVEMENT
SW-	SIDEWALK
L	LANDING AREA
R	RAMP AREA
T	TRANSITION AREA
	ADA ACCESS ROUTE
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	CG-1 CURB & GUTTER (DRY)

STATE OF MISSOURI
 ★ ★
 STEPHEN M.
 SAYLOR
 NUMBER
 PE-2018021248
 2/15/2024
 PROFESSIONAL ENGINEER

USER: ssaylor
7 C_PBN

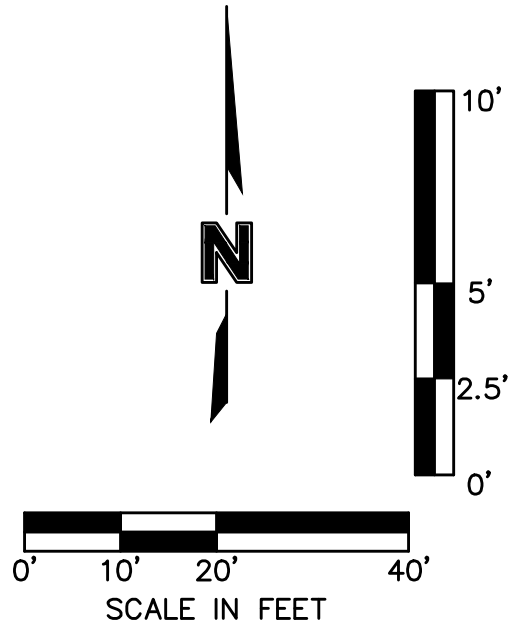
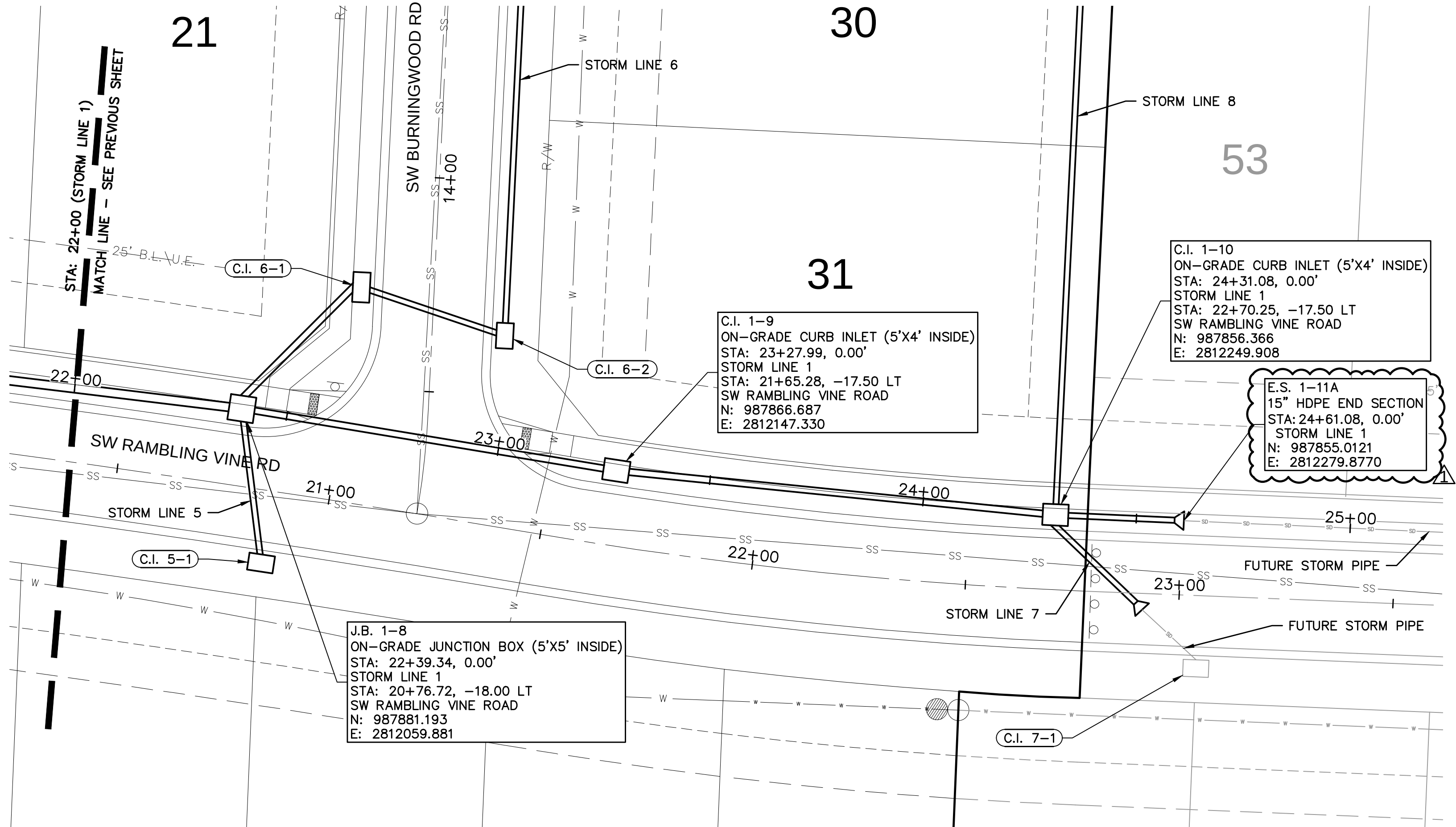
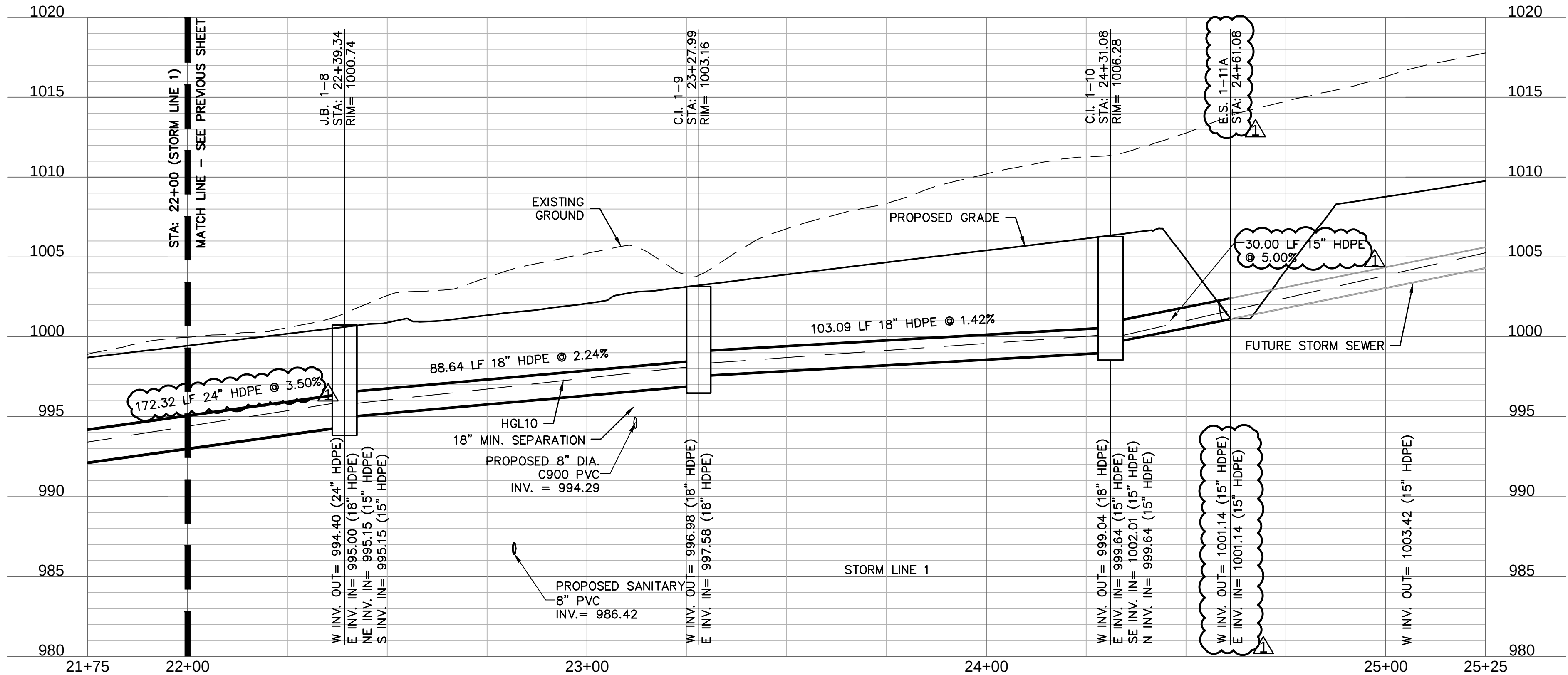
STORM SEWER PLAN & PROFILE (LINE 1) STREET & STORM SEWER PLANS	2023
EAGLE CREEK VILLAS FIRST PLAT	
EE'S SUMMIT MISSOURI	

REV. NO.	DATE	REVISIONS DESCRIPTION
1	02/15/2024	REVISED PER CITY COMMENTS



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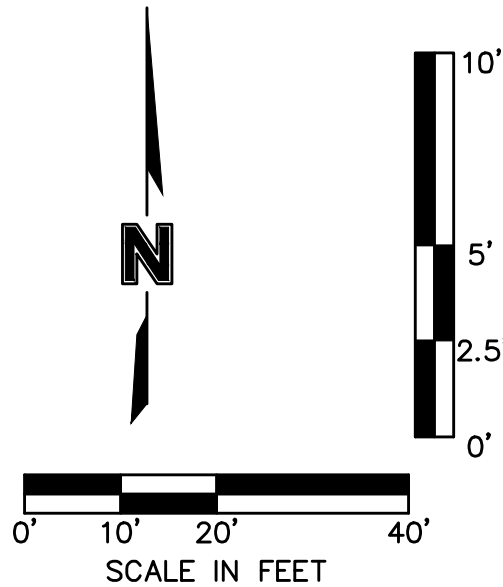
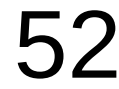
STATE OF MISSOURI
STEPHEN M. SAYLOR
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

BY
DATE
02/15/2024
REV. NO. 1
REVISIONS DESCRIPTION
REVISED PER CITY COMMENTS

STORM SEWER PLAN & PROFILE (LINE 1)
STREET & STORM SEWER PLANS
EAGLE CREEK VILLAS
FIRST PLAT
LEE'S SUMMIT, MISSOURI
2023

drawn by: CQ
checked by: SS
approved by: JS
QA/QC by: JS
project no.: A20-2467
drawing no.: C_STM01_A202467
date: 02/15/2024

SHEET
C130

USER: ssaylor
C_PTE
67

SHEET
C131

STORM SEWER PLAN & PROFILE (LINE 2)
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

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REVISIONS

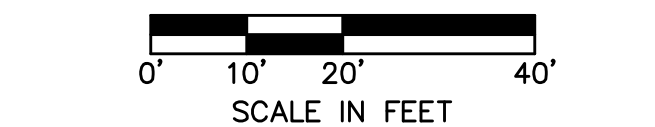
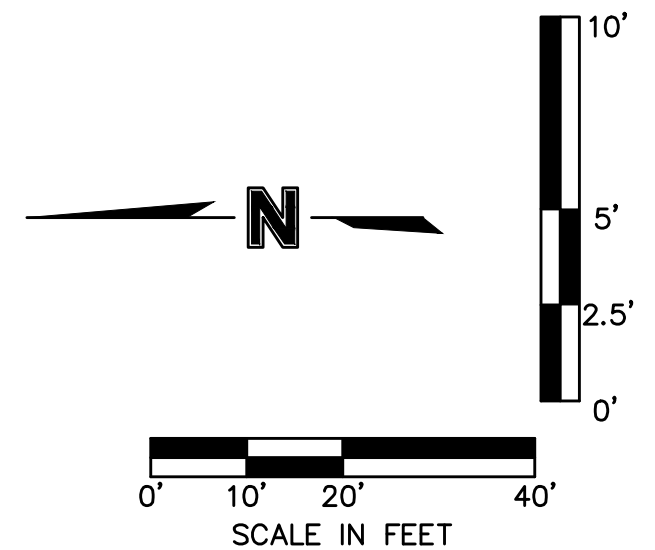
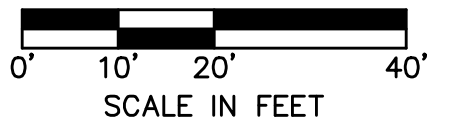
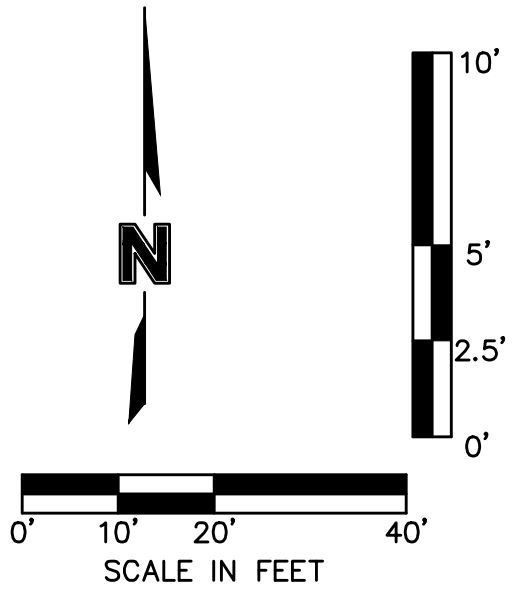


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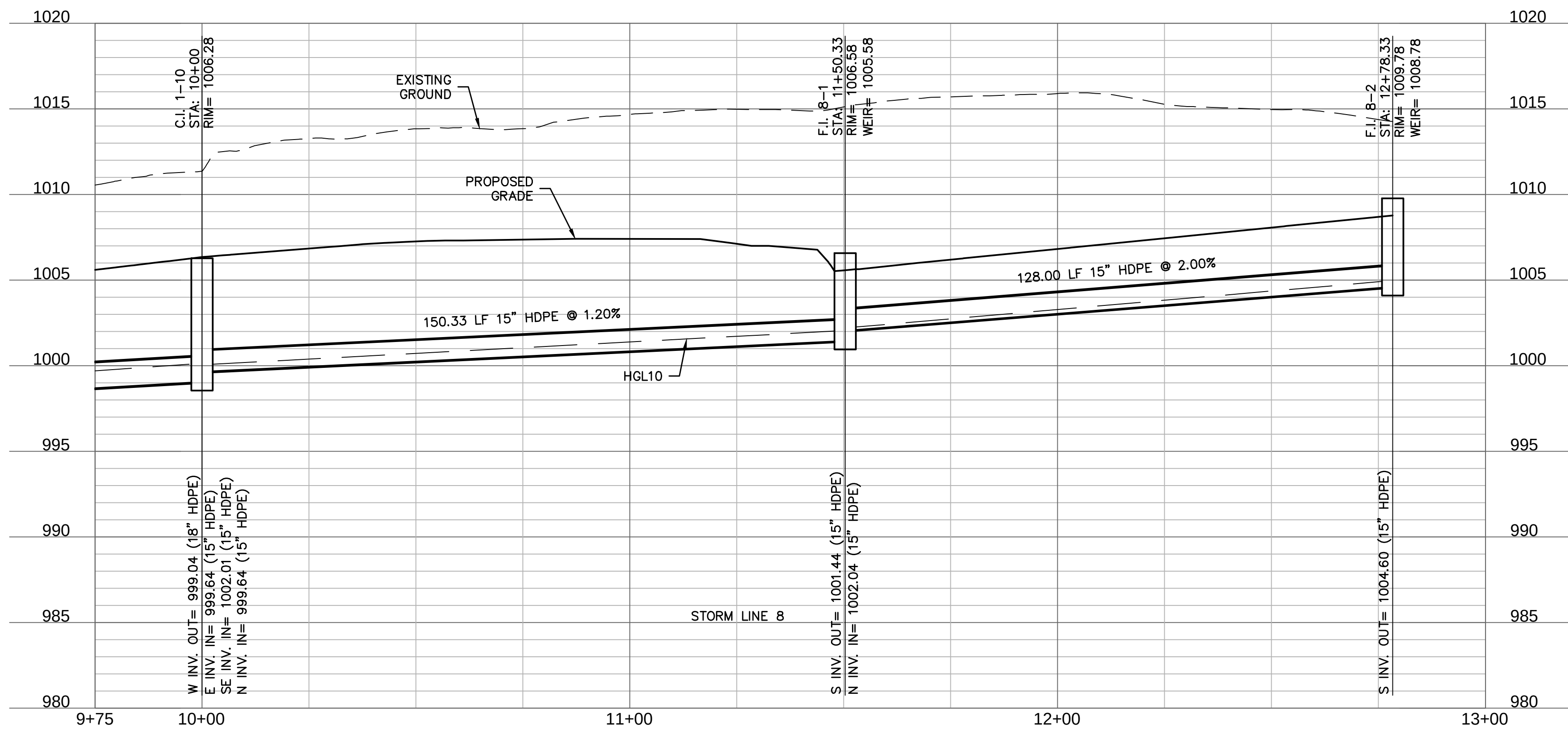
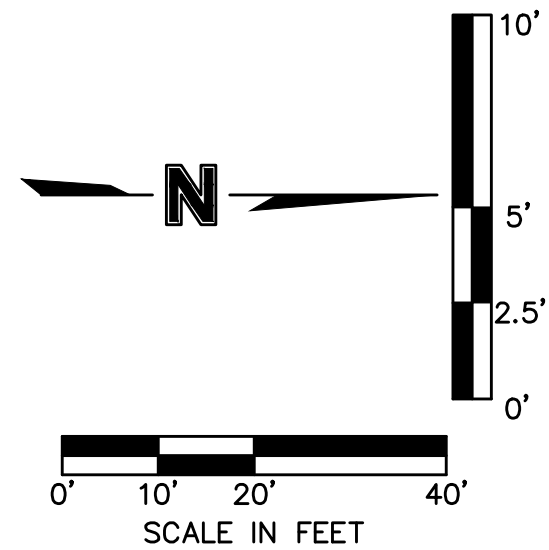
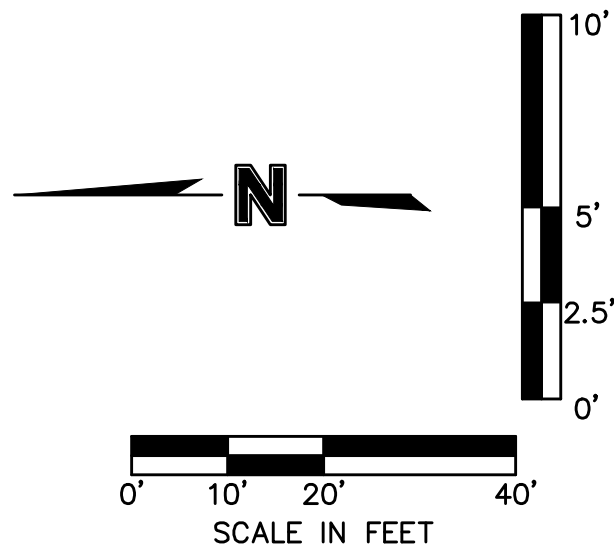
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USER: ssaylor
67 C_PTE

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STORM SEWER PLAN & PROFILE (LINE 7 & 8) STREET & STORM SEWER PLANS	2023
EAGLE CREEK VILLAS FIRST PLAT	
LEE'S SUMMIT, MISSOURI	

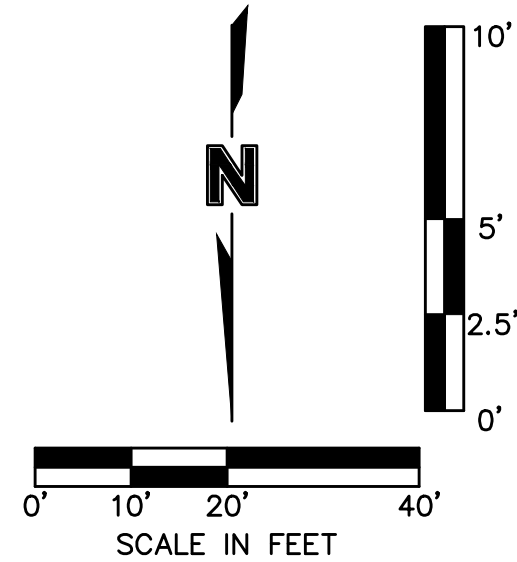
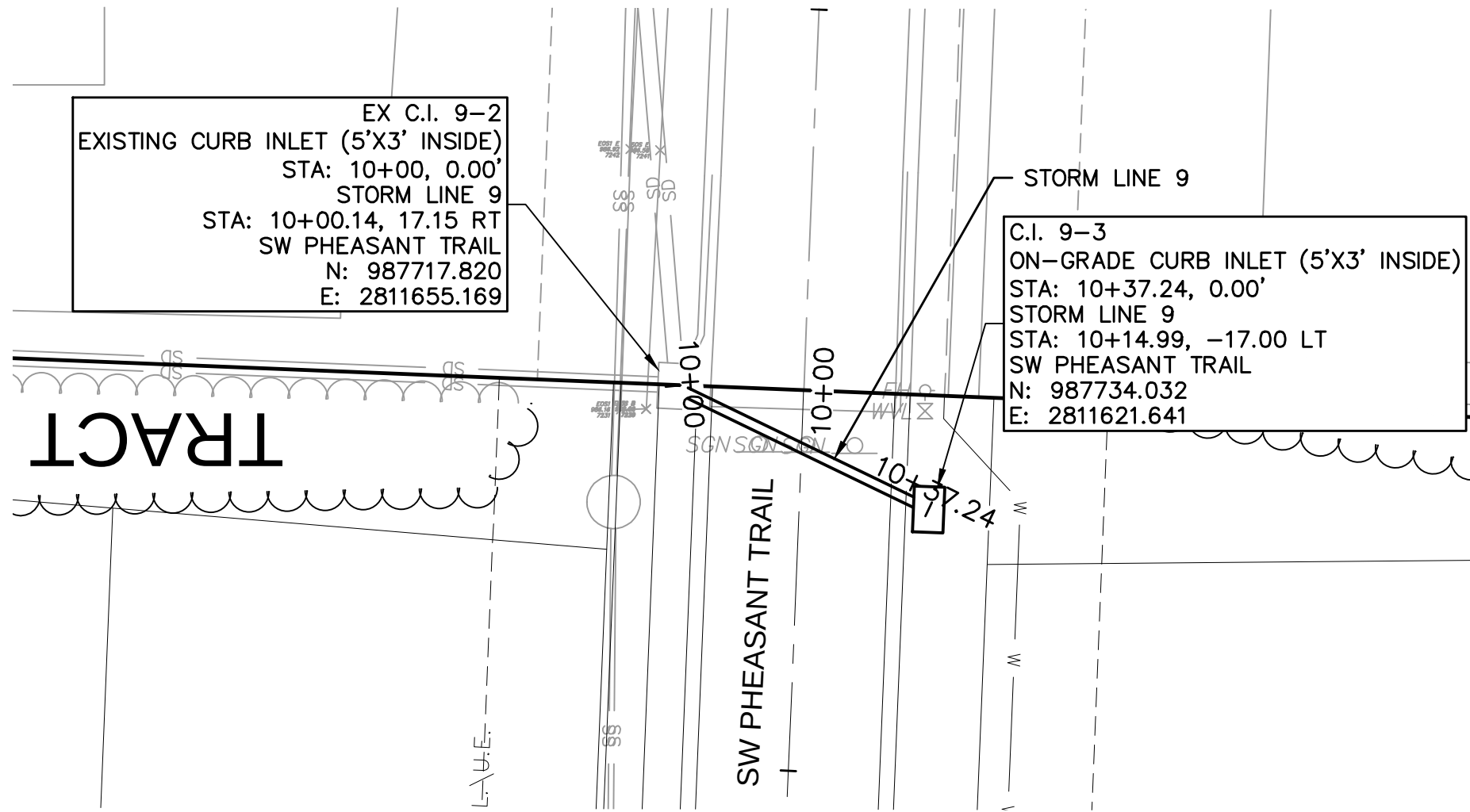
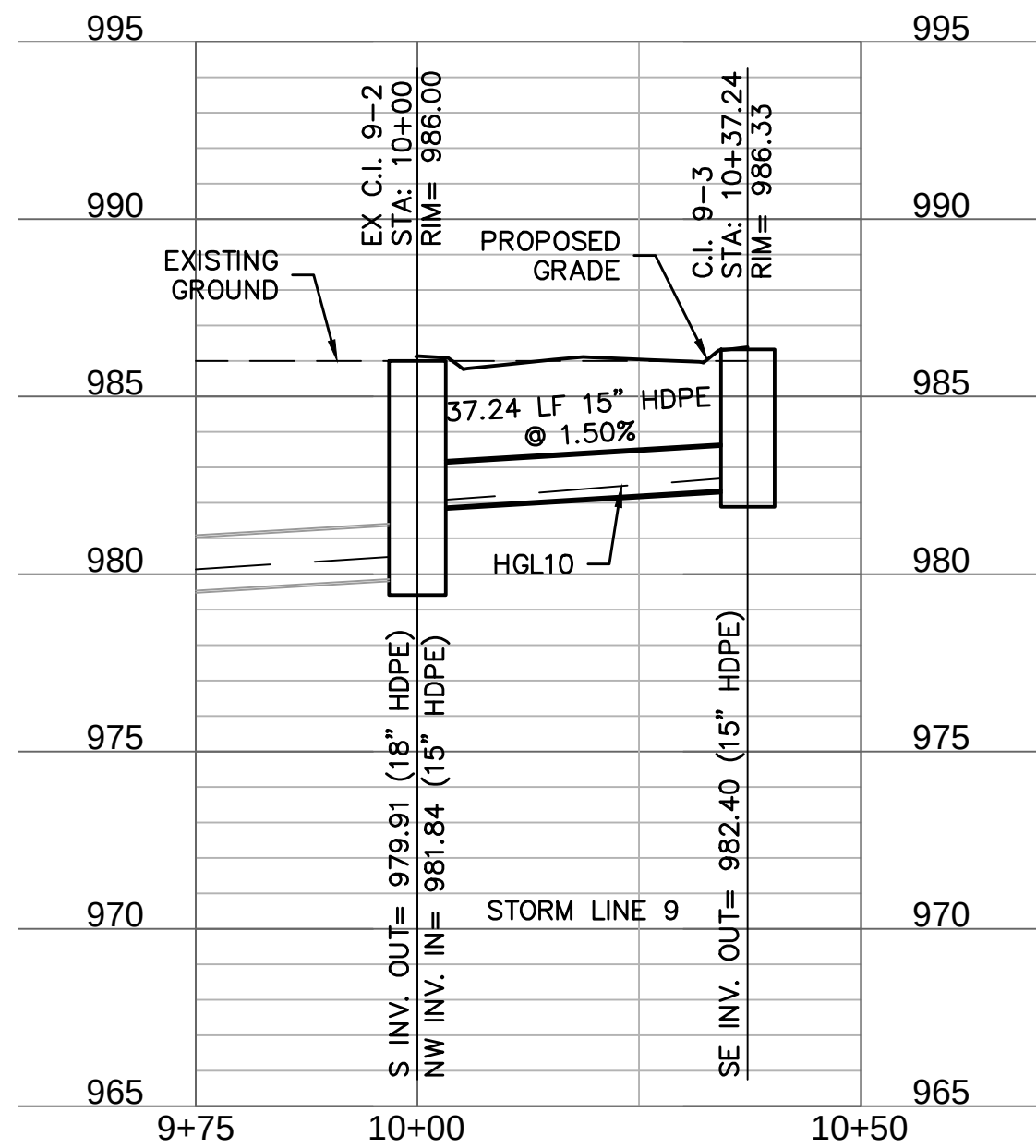
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checked by: _____ SS
approved by: _____ JS
QA/QC by: _____ JS
project no.: _____ A20-2467
drawing no.: C STM02 A202467
date: _____ 02/15/2024

SHEET C135

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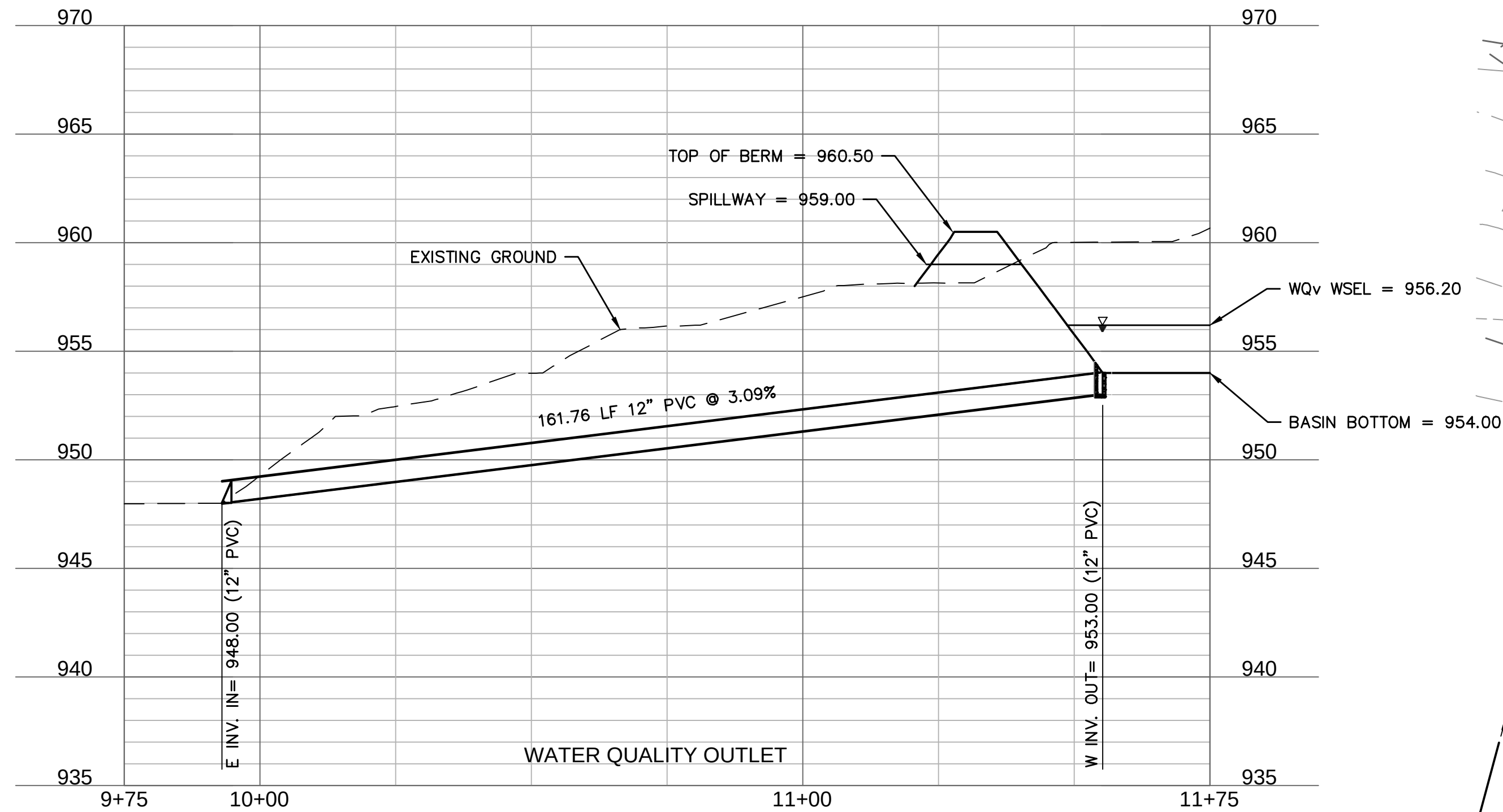
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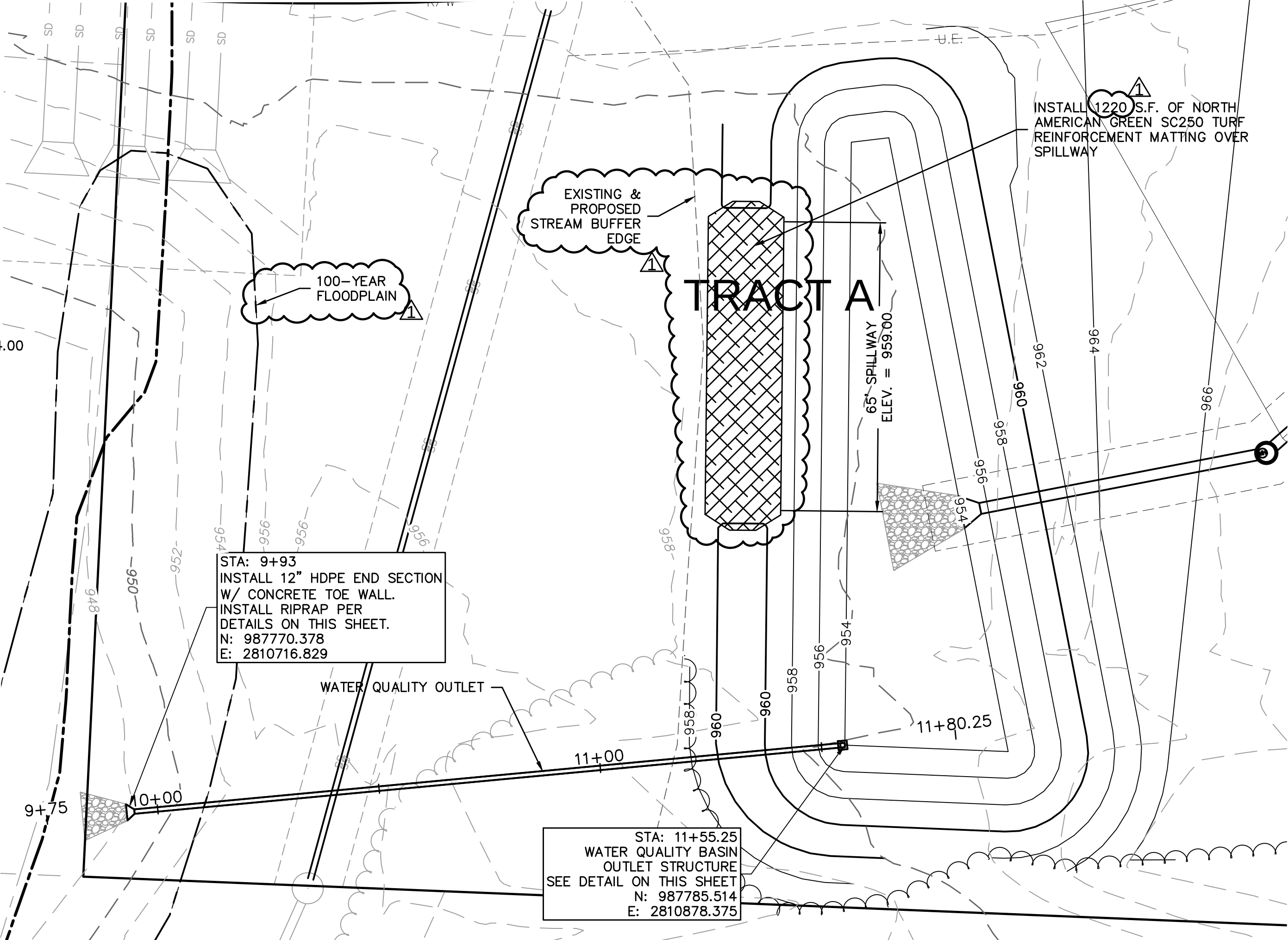
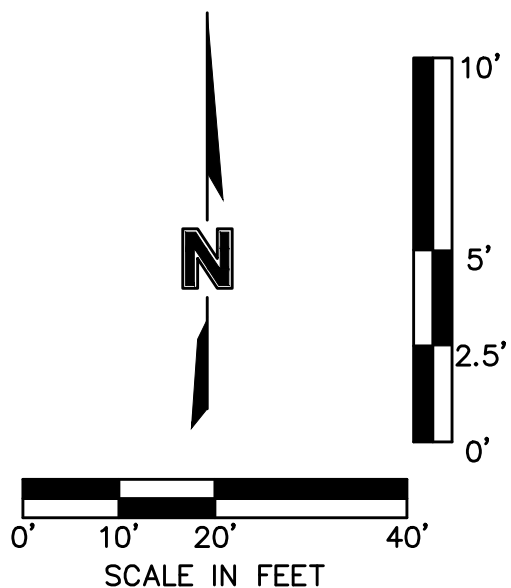
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checked by: _____ SS
approved by: _____ JS
QA/QC by: _____ JS
project no.: _____ A20-2467
drawing no.: C STM02 A202467
date: _____ 02/15/2024

SHEET
C136

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USER: ssoyfor



BASIN DETAILS	
SPILLWAY TYPE	BROAD CRESTED WEIR
SPILLWAY LENGTH	65 FT
SPILLWAY ELEVATION	959.00 FT
SPILLWAY DEPTH	1.50 FT
DAM ELEVATION	960.50 FT
WATER QUALITY STORM WATER SURFACE ELEVATION	956.20 FT
DESIGN STORAGE	28,703 CF

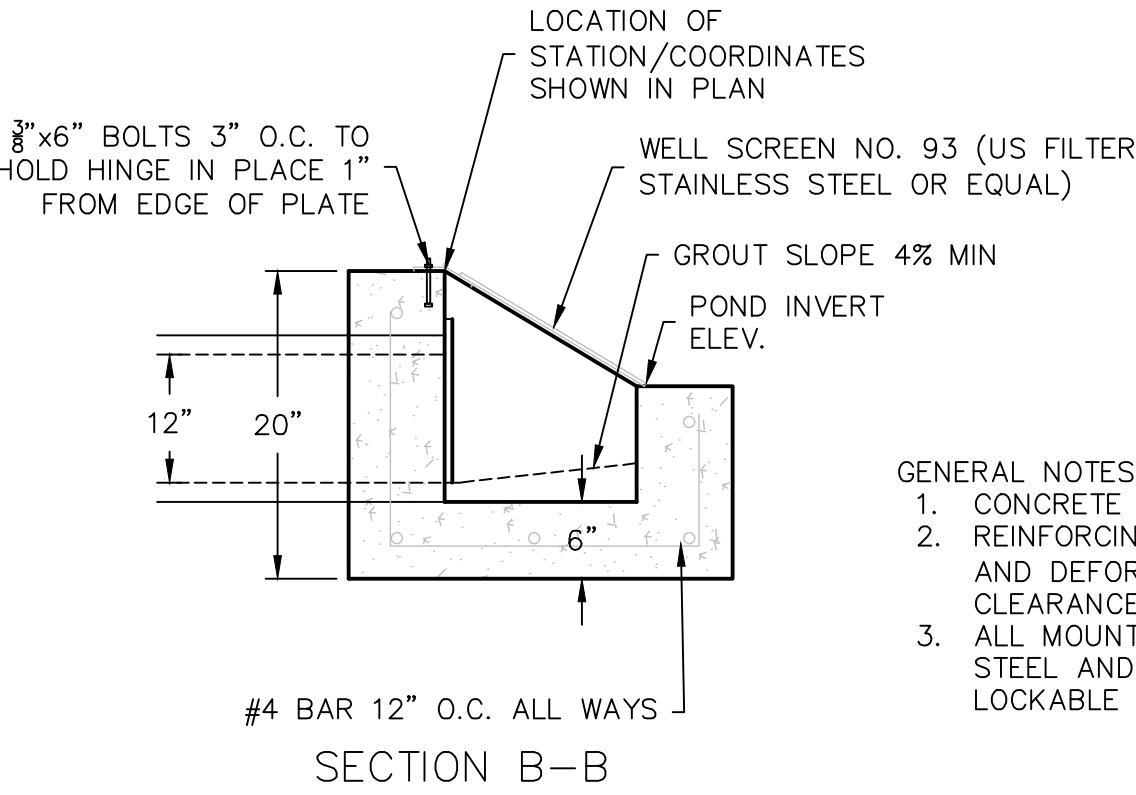
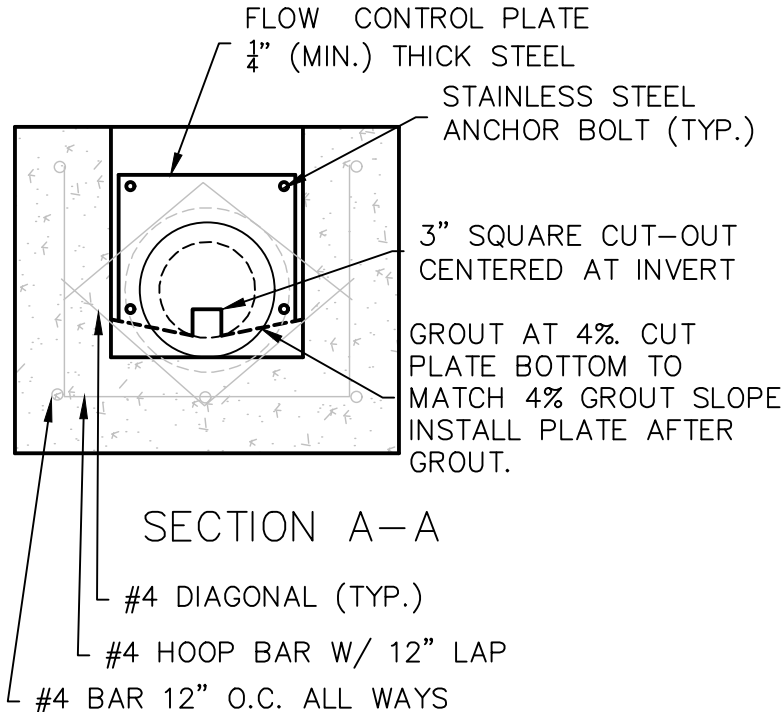
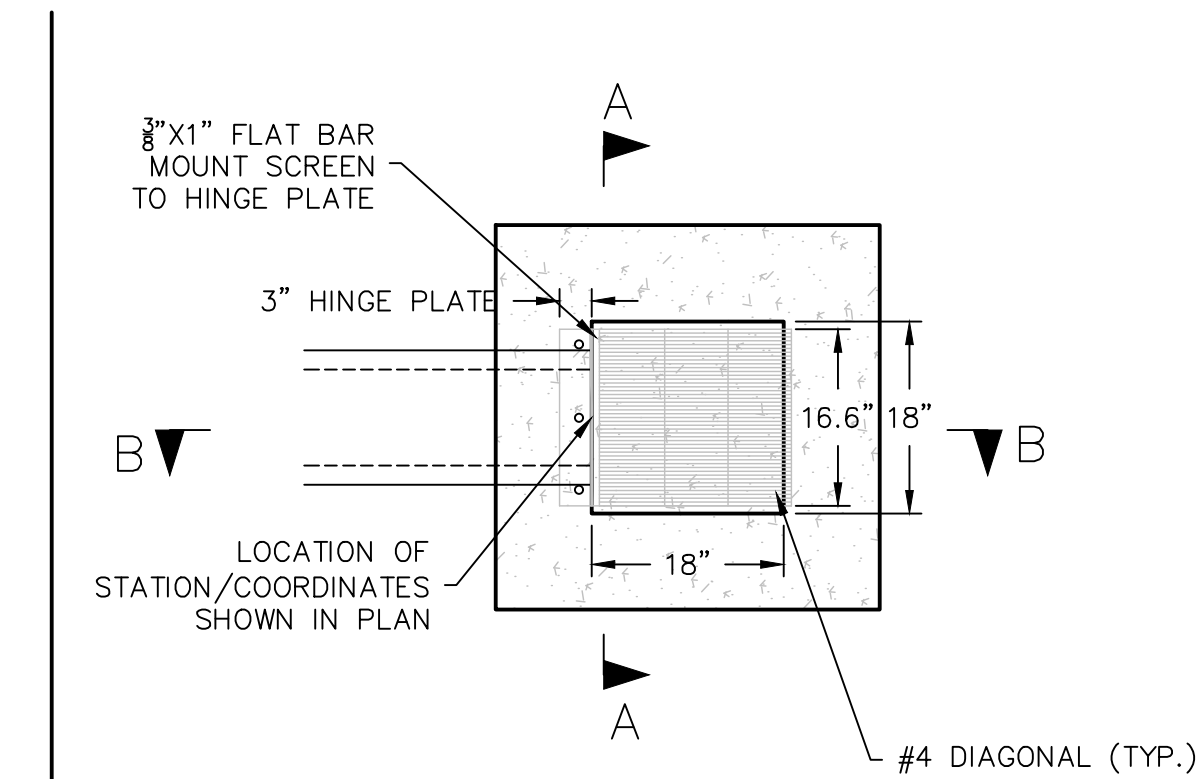


STA: 11+55.25
WATER QUALITY BASIN
OUTLET STRUCTURE
SEE DETAIL ON THIS SHEET
N: 987785.514
E: 2810878.375

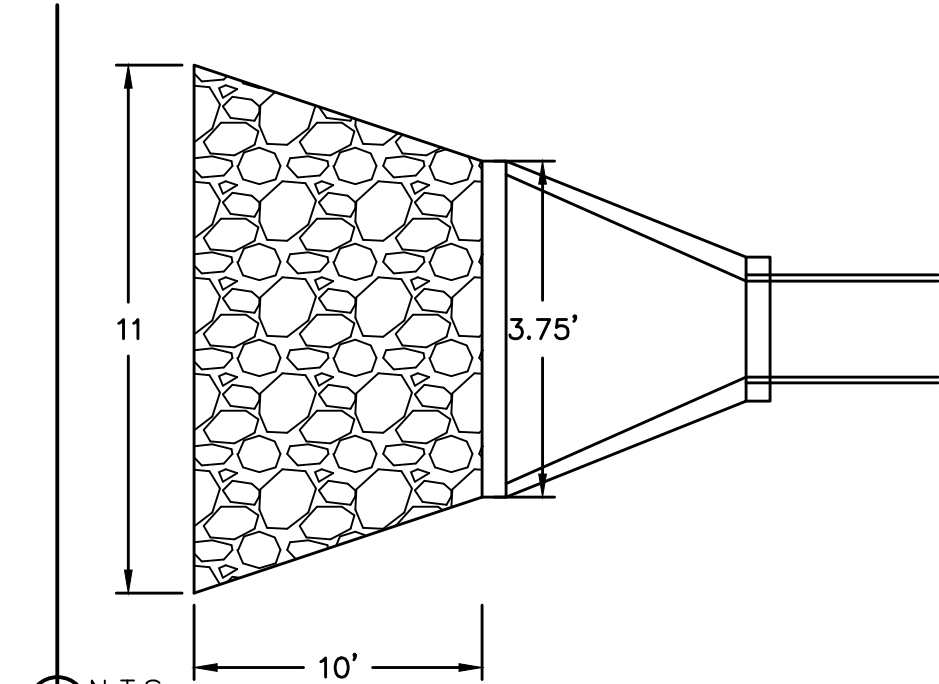
STA: 9+93
INSTALL 12" HDPE END SECTION
W/ CONCRETE TOE WALL.
INSTALL RIPRAP PER
DETAILS ON THIS SHEET.
N: 987770.378
E: 2810716.829

Riprap Calculations						
End Section	Q ₁₀₀	Pipe Diameter	Class*	D50*	Apron Length	Apron Depth
	(cfs)	(ft)		(in)	(ft)	(ft)
WQy Outlet	12.97	1	5	20	7	3.33
Area						
						(SY)
WQy Outlet	12.97	1	5	20	7	3.33
						4.1

*Per Table 10.1 HEC-14 FHWA-Energy Dissipators Pg. 10-18



- GENERAL NOTES:
- CONCRETE SHALL BE CLASS B
 - REINFORCING BARS SHALL BE EPOXY COATED AND DEFORMED, AND SHALL HAVE MINIMUM 2" CLEARANCE.
 - ALL MOUNTING HARDWARE TO BE STAINLESS STEEL AND PROVIDED WITH HINGES AND LOCKABLE OR BOLTABLE ACCESS.



01 WATER QUALITY BASIN OULET STRUCTURE

02 RIPRAP OUTLET PROTECTION

olsson

Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
STEPHEN M. SAYLOR
NUMBER
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

BY

REVISIONS DESCRIPTION

DATE

REV. NO.

1

02/15/2024

REVISOR PER CITY COMMENTS

WATER QUALITY BASIN PLAN
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

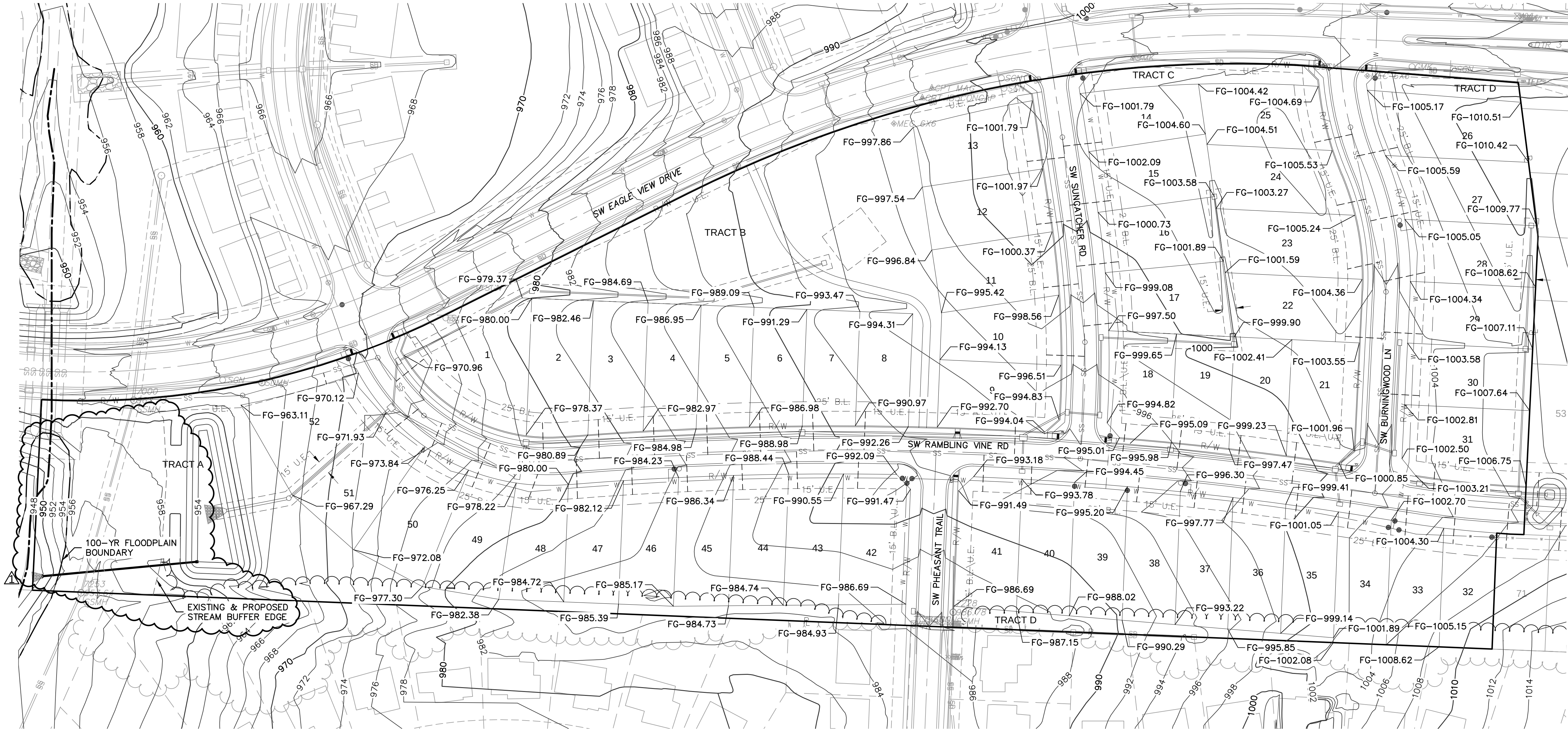
LEE'S SUMMIT, MISSOURI

2023

drawn by: CQ
checked by: SS
approved by: JS
QA/QC by: JS
project no.: A20-2467
drawing no.: C_DBP01_A202467
date: 02/15/2024

SHEET
C137

DWG: F:\2020\2001-2500\020-2467-A\40-Design\AutoCAD\Final Plans\Sheets\GNCV\Street & Storm\C_DRN01_A202467.dwg
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C_XBASE_A202467



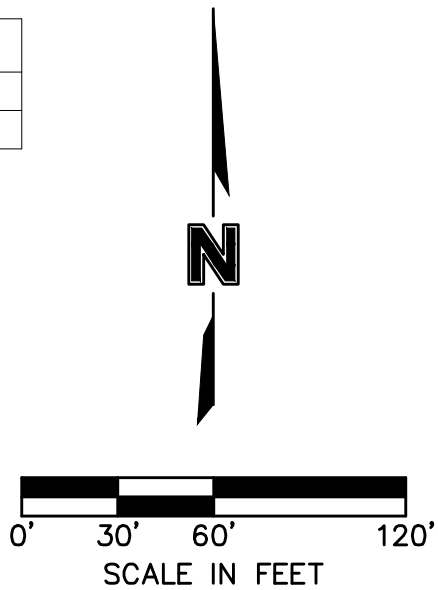
- NOTES:
- INDIVIDUAL LOT OWNERS SHALL NOT CHANGE OR OBSTRUCT THE DRAINAGE FLOW LINES OR PATHS ON THE LOTS, AS SHOWN ON THE MASTER DRAINAGE PLAN, UNLESS SPECIFIC APPLICATION IS MADE AND APPROVED BY THE CITY ENGINEER.
 - PLAT IS LOCATION IN ZONE X, "AREAS OUTSIDE THE 1-PERCENT ANNUAL CHANCE FLOODPLAINS, AREAS OF 1-PERCENT ANNUAL CHANCE SHEET FLOW FLOODING WHERE THE AVERAGE DEPTHS ARE LESS THAN 1 FOOT, AREAS OF 1-PERCENT ANNUAL CHANCE STREAM FLOODING WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 1 SQUARE MILE, OR AREAS PROTECTED FROM THE 1-PERCENT ANNUAL CHANCE FLOOD BY LEVEES. NO BASE FLOOD ELEVATIONS OR DEPTHS ARE SHOWN WITHIN THIS ZONE" AS DEPICTED ON THE FEMA FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBER 29095C0418G, REVISION DATE JANUARY 20, 2017.
 - THE STREAM BUFFER EDGE HAS BEEN IDENTIFIED ON THE PLAT WHICH IS LOCATED OUTSIDE OF THE PLAT HAS BEEN IDENTIFIED PLAT IS LOCATED OUTSIDE OF PROPOSED SITE IMPROVEMENTS AND OUTSIDE OF PROPOSED LOTS.
 - MBOE ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN THE RIGHT AND LEFT SIDE MBOE'S SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.
 - REFER TO SHEET C106-C110 FOR SWALE GRADING DETAILS.
 - DRAINAGE PATHS TO BE CONSTRUCTED BETWEEN LOTS LABELED AS STANDARD

AND/OR UPHILL LOTS.

Eagle Creek Villas 1st Plat			
Minimum Building Opening Elevation			
Lot	Rear Left MBOE	Rear Right MBOE	As Built Plot Plan Required
22	1000.50	1002.19	Y
23	1002.19	1003.87	Y
24	1003.87	1005.11	Y
51	972.68	967.89	Y
52	967.89	963.71	Y
MBOE elevations have been provided per lot lines, facing the lot from the street.			
Interpolation will be allowed between the right and left side MBOE's provided, depending on the location of the lowest opening on the proposed structure.			

NOTES:
FG - FINISHED GRADE

LEGEND	
—100—	FINISHED INDEX CONTOURS
—100—	FINISHED INTERMEDIATE CONTOURS



olsson

Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
STEPHEN M. SAYLOR
PROFESSIONAL ENGINEER
NUMBER
PE-2018021248
2/15/2024

BY

REV. NO.

DATE

REVISIONS DESCRIPTION

REVISED PER CITY COMMENTS

1

02/15/2024

MASTER DRAINAGE PLAN
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

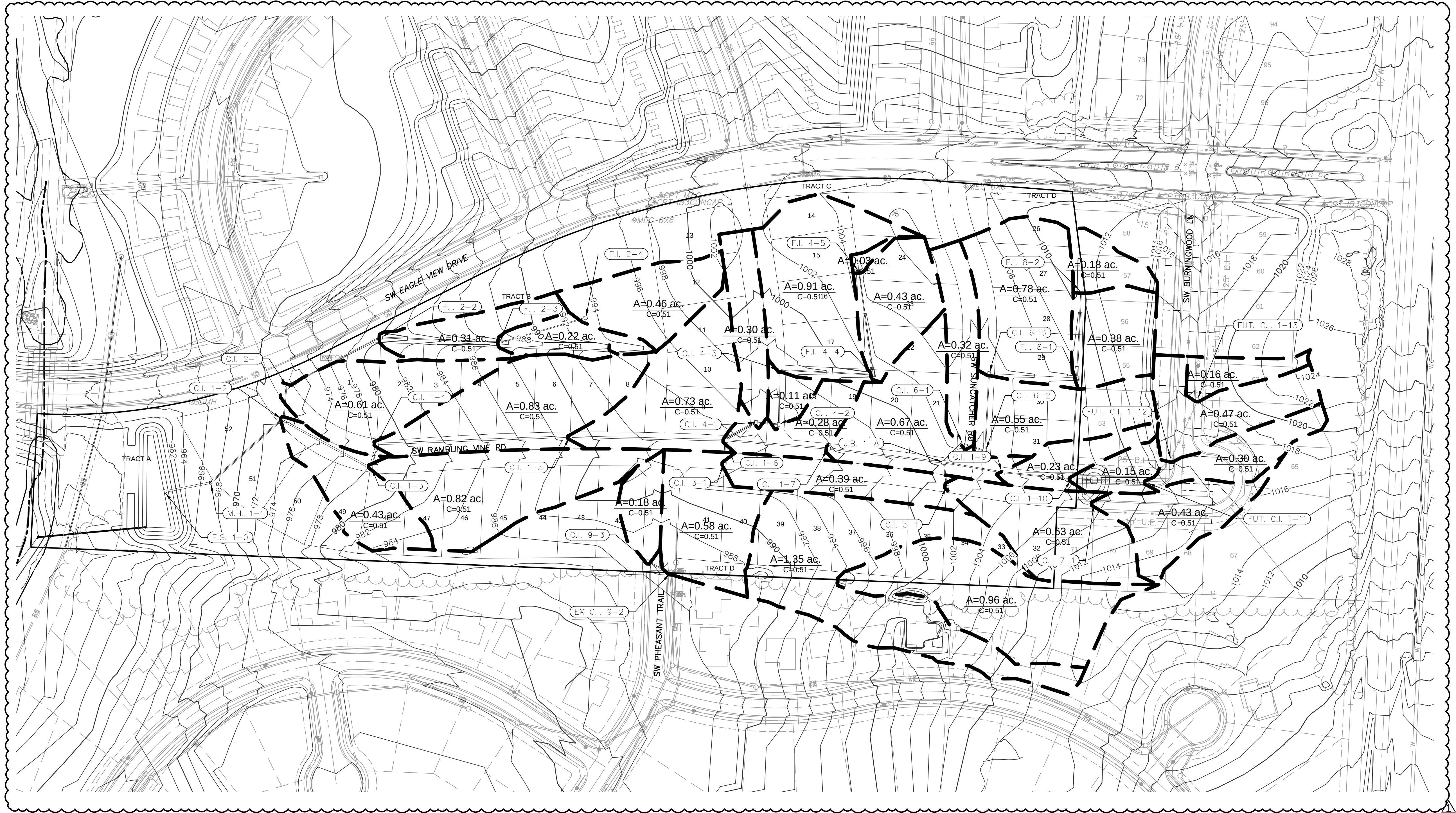
LEE'S SUMMIT, MISSOURI

2023

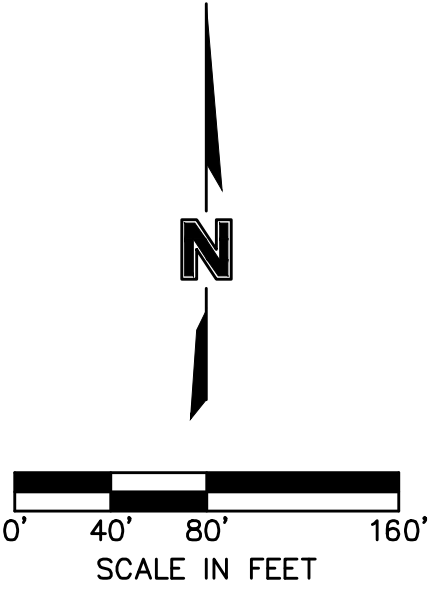
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checked by: _____
approved by: _____
QA/QC by: _____
project no.: _____
drawing no.: C_DRN01_A202467
date: 02/15/2024

CW
SS
JS
JS
A20-2467

SHEET
C138



LEGEND	
	FINISHED INDEX CONTOURS
	FINISHED INTERMEDIATE CONTOURS
	RIDGE LINE
	DRAINAGE AREA
	RUNOFF COEFFICIENT
	STORM STRUCTURE NUMBER



DRAINAGE PLAN STREET & STORM SEWER PLANS		REV NO.	DATE	REVISIONS DESCRIPTION	BY
		1	02/15/2024	REVISED PER CITY COMMENTS	

drawn by: _____
checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_DRN02_A202467
date: 02/15/2024



Inlet Design Table													
10 Year Return Frequency													
Inlet ID	Inlet Location	Peak Flow	Upstream Bypass	Total Flow	Clogging Factor	Inlet Capacity	Sag Inlet Capacity (Note 1)	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
		(cfs)	(cfs)	(cfs)		(cfs)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 1-2	GRADE	1.51	0.94	2.45	1.00	1.69	1.69	1.69	0.76	69.13%	0.15	7.31	...
C.I. 1-3	GRADE	2.77	0.00	2.77	1.00	1.83	1.83	1.83	0.94	65.99%	0.15	7.66	...
C.I. 1-4	GRADE	2.66	0.87	3.53	1.00	2.10	2.10	1.43	59.42%	0.17	8.39	...	...
C.I. 1-5	GRADE	2.43	0.22	2.64	1.00	1.78	1.78	1.78	0.87	67.23%	0.15	7.53	...
C.I. 1-6	GRADE	1.05	0.79	1.84	1.00	1.62	1.62	1.62	0.22	88.27%	0.16	8.10	...
C.I. 1-7	GRADE	2.15	0.23	2.38	1.00	1.88	1.88	1.88	0.50	78.95%	0.16	8.10	...
C.I. 1-9	GRADE	0.83	0.56	1.39	1.00	1.16	1.16	1.16	0.23	83.50%	0.12	6.16	...
C.I. 1-10	GRADE	0.56	0.26	0.82	1.00	0.74	0.74	0.74	0.08	90.19%	0.10	5.06	...
C.I. 2-1	GRADE	2.02	0.00	2.02	1.00	1.49	1.49	1.49	0.53	73.64%	0.14	6.80	...
F.I. 2-2	GRADE	1.09	0.00	1.09	1.80	35.34	63.61	1.09	0.00	100.00%	...	...	0.09
F.I. 2-3	GRADE	0.83	0.00	0.83	2.80	45.64	127.80	0.83	0.00	100.00%	...	...	0.08
F.I. 2-4	GRADE	1.57	0.00	1.57	3.80	54.02	205.27	1.57	0.00	100.00%	...	...	0.12
C.I. 3-1	GRADE	1.46	0.71	2.17	1.00	1.87	1.87	1.87	0.30	86.17%	0.17	8.62	...
C.I. 4-1	GRADE	1.13	0.00	1.13	1.00	0.98	0.98	0.98	0.14	87.41%	0.12	5.79	...
C.I. 4-2	GRADE	0.41	0.74	1.15	1.00	1.00	1.00	1.00	0.15	87.15%	0.12	5.84	...
C.I. 4-3	GRADE	2.66	0.00	2.66	1.00	1.92	1.92	1.92	0.74	72.34%	0.16	8.00	...
F.I. 4-4	GRADE	1.61	0.00	1.61	4.80	61.26	294.04	1.61	0.00	100.00%	...	...	0.12
F.I. 4-5	GRADE	0.11	0.00	0.11	5.80	67.73	392.83	0.11	0.00	100.00%	...	...	0.02
C.I. 5-1	GRADE	2.22	0.31	2.53	1.00	1.82	1.82	1.82	0.71	71.98%	0.15	7.71	...
C.I. 6-1	GRADE	1.20	0.00	1.20	1.00	1.11	1.11	1.11	0.09	92.52%	0.14	6.90	...
C.I. 6-2	GRADE	2.01	0.47	2.48	1.00	2.09	2.09	2.09	0.39	84.30%	0.18	9.05	...
C.I. 6-3	GRADE	2.72	0.00	2.72	1.00	2.25	2.25	2.25	0.47	82.85%	0.19	9.37	...
C.I. 7-1	GRADE	1.61	0.00	1.61	1.00	1.31	1.31	1.31	0.31	81.05%	0.13	6.51	...
F.I. 8-1	GRADE	1.43	0.00	1.43	6.80	73.63	500.70	1.43	0.00	100.00%	...	...	0.11
F.I. 8-2	GRADE	0.68	0.00	0.68	7.80	79.10	616.96	0.68	0.00	100.00%	...	...	0.07
EX C.I. 9-2	GRADE	2.18	0.00	2.18	1.00	1.72	1.72	1.72	0.45	79.31%	0.15	7.69	...
C.I. 9-3	GRADE	0.68	0.00	0.68	1.00	0.63	0.63	0.63	0.04	93.66%	0.10	4.96	...
EX. F.I. 10-1	GRADE	5.06	0.00	5.06	8.80	84.21	741.03	5.06	0.00	100.00%	...	...	0.25
EX. F.I. 10-2	GRADE	3.60	0.00	3.60	9.80	89.03	872.46	3.60	0.00	100.00%	...	...	0.20

Notes:
1. Inlet capacity at sag location has been reduced by a clogging factor of 0.80, reducing theoretical capacity to 80% capacity, as required per APWA Section 5600.
Both theoretical capacity and reduced capacity are shown.
2. Inlet efficiency shown in the tables is Captured Flow/Total Flow, denoting the actual percentage of flow captured after the capacity has been reduced to 80% of theoretical capacity.

Drainage Area Design Table						
10 Year Return Frequency						
Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
C.I. 1-2	0.43	0.51	6.68	6.87	1.00	1.51
C.I. 1-3	0.82	0.51	7.58	6.63	1.00	2.77
C.I. 1-4	0.83	0.51	9.01	6.29	1.00	2.66
C.I. 1-5	0.73	0.51	8.04	6.52	1.00	2.43
C.I. 1-6	0.28	0.51	5.00	7.35	1.00	1.05
C.I. 1-7	0.67	0.51	9.04	6.29	1.00	2.15
C.I. 1-9	0.23	0.51	5.92	7.08	1.00	0.83
C.I. 1-10	0.15	0.51	5.00	7.35	1.00	0.56
C.I. 2-1	0.61	0.51	8.16	6.49	1.00	2.02
F.I. 2-2	0.31	0.51	6.68	6.87	1.00	1.09
F.I. 2-3	0.22	0.51	5.00	7.35	1.00	0.83
F.I. 2-4	0.46	0.51	7.38	6.69	1.00	1.57
C.I. 3-1	0.39	0.51	5.00	7.35	1.00	1.46
C.I. 4-1	0.30	0.51	5.00	7.35	1.00	1.13
C.I. 4-2	0.11	0.51	5.00	7.35	1.00	0.41
C.I. 4-3	0.91	0.51	11.73	5.73	1.00	2.66
F.I. 4-4	0.43	0.51	5.00	7.35	1.00	1.61
F.I. 4-5	0.03	0.51	5.00	7.35	1.00	0.11
C.I. 5-1	0.63	0.51	6.51	6.91	1.00	2.22
C.I. 6-1	0.32	0.51	5.00	7.35	1.00	1.20
C.I. 6-2	0.55	0.51	5.63	7.16	1.00	2.01
C.I. 6-3	0.78	0.51	6.81	6.83	1.00	2.72
C.I. 7-1	0.43	0.51	5.00	7.35	1.00	1.61
F.I. 8-1	0.38	0.51	5.00	7.35	1.00	1.43
F.I. 8-2	0.18	0.51	5.00	7.35	1.00	0.68
EX C.I. 9-2	0.58	0.51	5.00	7.35	1.00	2.18
C.I. 9-3	0.18	0.51	5.00	7.35	1.00	0.68
EX. F.I. 10-1	1.35	0.51	5.00	7.35	1.00	5.06
EX. F.I. 10-2	0.96	0.51	5.00	7.35	1.00	3.60

Storm Sewer Design Calculation Table												
10 Year Return Frequency												
Upstream Structure	Downstream Structure	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope (%)	Diameter (in)	Manning's n	Total Flow (cfs)	Velocity (ft/s)	Capacity (cfs)	Flow Depth (ft)	Upstream Struct. HGL (ft)
M.H. 1-1	E.S. 1-0	69.78	955.74	954.00	2.49	30	0.012	39.18	11.74	70.16	1.34	957.85
C.I. 1-2	M.H. 1-1	142.00	964.10	956.34	5.46	30	0.012	39.18	10.76	103.86	1.51	966.21
C.I. 1-3	C.I. 1-2	149.01	969.15	964.70	2.99	30	0.012	32.51	9.22	76.78	1.51	971.09
C.I. 1-4	C.I. 1-3	36.24	970.81	969.75	2.93	30	0.012	30.68	9.59	75.99	1.34	972.7
C.I. 1-5	C.I. 1-4	286.78	980.04	971.41	3.01	30	0.012	28.58	9.35	77.07	1.29	981.86
C.I. 1-6	C.I. 1-5	229.91	984.10	980.65	1.50	30	0.012	26.8	9.14	54.43	1.24	985.86
C.I. 1-7	C.I. 1-6	153.32	987.77	984.70	2.00	24	0.012	17.69	8.13	34.67	1.16	989.28
J.B. 1-8	C.I. 1-7	172.32	994.40	988.37	3.50	24	0.012	15.81	8.93	45.84	0.91	995.83
C.I. 1-9	J.B. 1-8	88.64	996.98	995.00	2.23	18	0.012	8.54	7.23	17	0.83	998.11
C.I. 1-10	C.I. 1-9	103.10	999.04	997.58	1.42	18	0.012	7.38	6.7	13.54	0.79	1000.09
FUT. C.I. 1-11	C.I. 1-10	75.57	1003.42	999.64	5.00	15	0.012	3.22	6.22	15.65	0.45	1004.14
FUT. 1-12	FUT. C.I. 1-11	49.45	1007.65	1005.77	3.80	12	0.012	2.14	6.2	7.52	0.37	1008.28
FUT. C.I. 1-13	FUT. 1-12	97.39	1009.71	1008.25	1.50	12	0.012	0.58	3.4	4.72	0.24	1010.03
C.I. 2-1	C.I. 1-2	48.98	966.25	965.35	1.84	15	0.012	4.98	5.39	9.48	0.86	967.15
F.I. 2-2	C.I. 2-1	156.61	972.71	966.85	3.74	15	0.012	3.49	6.88	13.53	0.43	973.46
F.I. 2-3	F.I. 2-2	176.00	979.47	973.31	3.50	15	0.012	2.4	6.04	13.09	0.36	980.09
F.I. 2-4	F.I. 2-3	132.53	985.85	980.07	4.36	15	0.012	1.57	5.62	14.61	0.28	986.35
C.I. 3-1	C.I. 1-6	35.00	989.40	988.87	1.51	15	0.012	1.87	4.63	8.61	0.4	989.94
C.I. 4-1	C.I. 1-6	52.51	986.14	985.10	1.98	18	0.012	5.62	5.6	16.01	0.76	987.05
C.I. 4-2	C.I. 4-1	34.01	987.25	986.74	1.50	15	0.012	4.64	6.09	8.57	0.66	988.12
C.I. 4-3	C.I. 4-2	80.55	989.06	987.85	1.50	15	0.012	3.64	5.64	8.57	0.57	989.83
F.I. 4-4	C.I. 4-3	138.04	993.46	989.66	2.75	15	0.012	1.72	5.16	11.61	0.33	993.98
F.I. 4-5	F.I. 4-4	154.29	998.30	994.06	2.75	15	0.012	0.11	2.32	11.6	0.09	998.43
C.I. 5-1	J.B. 1-8	36.34	996.49	995.15	3.69	15	0.012	1.82	3.14	13.43	0.68	997.03 j
C.I. 6-1	J.B. 1-8	39.78	996.00	995.15	2.14	15	0.012	5.45	6.71	10.23	0.68	996.95
C.I. 6-2	C.I. 6-1	35.35	997.12	996.60	1.47	15	0.012	4.34	5.94	8.48	0.63	997.96
C.I. 6-3	C.I. 6-2	114.75	999.04	997.72	1.15	15	0.012	2.25	4.61	7.5	0.47	999.64
C.I. 7-1	C.I. 1-10	48.58	1003.15	1002.01	2.35	15	0.012	1.31	4.6	10.72	0.3	1003.6
F.I. 8-1	C.I. 1-10	150.33	1001.44	999.64	1.20	15	0.012	2.11	4.54	7.65	0.45	1002.02
F.I. 8-2	F.I. 8-1	128.00	1004.60	1002.04	2.00	15	0.012	0.68	3.67	9.89	0.22	1004.92
EX C.I. 9-2	EX C.I. 9-1	162.08	979.91	977.48	1.50	18	0.012	2.35	4.77	13.93	0.42	980.49
C.I. 9-3	EX C.I. 9-2	37.24	982.40	981.84	1.50	15	0.012	0.63	3.37	8.58	0.23	982.71

Inlet Design Table													
100 Year Return Frequency													
Inlet ID	Inlet Location	Peak Flow	Upstream Bypass	Total Flow	Clogging Factor	Inlet Capacity	Sag Inlet Capacity (Note 1)	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
		(cfs)	(cfs)	(cfs)		(cfs)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 1-2	GRADE	2.65	2.45	5.10	1.00	2.48	2.48	2.48	2.62	48.56%	0.19	9.63	...
C.I. 1-3	GRADE	4.89	0.00	4.89	1.00	2.44	2.44	2.44	2.45	49.85%	0.19	9.48	...
C.I. 1-4	GRADE	4.70	3.17	7.87	1.00	2.81	2.81	2.81	5.06	35.67%	0.23	11.33	...
C.I. 1-5	GRADE	4.28	1.47	5.75	1.00	2.58	2.58	2.58	3.17	44.92%	0.20	10.08	...
C.I. 1-6	GRADE	1.84	3.18	5.02	1.00	3.55	3.55	3.55	1.47	70.64%	0.24	11.80	...
C.I. 1-7	GRADE	3.79	1.30	5.09	1.00	3.11	3.11	3.11	1.99	61.01%	0.22	10.78	...
C.I. 1-9	GRADE	1.46	2.10	3.56	1.00	2.25	2.25	2.25	1.30	63.40%	0.18	8.76	...
C.I. 1-10	GRADE	0.99	0.91	1.89	1.00	1.48	1.48	1.48	0.41	78.10%	0.14	6.92	...
C.I. 2-1	GRADE	3.56	0.00	3.56	1.00	2.11	2.11	2.11	1.45	59.18%	0.17	8.42	...
F.I. 2-2	GRADE	1.91	0.00	1.91	1.80	35.34	63.61	1.91	0.00	100.00%	...	...	0.13
F.I. 2-3	GRADE	1.45	0.00	1.45	2.80	45.64	127.80	1.45	0.00	100.00%	...	...	0.11
F.I. 2-4	GRADE	2.76	0.00	2.76	3.80	54.02	205.27	2.76	0.00	100.00%	...	...	0.17
C.I. 3-1	GRADE	2.57	2.15	4.71	1.00	3.40	3.40	3.40	1.31	72.12%	0.23	11.52	...
C.I. 4-1	GRADE	1.97	0.00	1.97	1.00	1.55	1.55	1.55	0.42	78.59%	0.14	7.15	...
C.I. 4-2	GRADE	0.72	2.01	2.73	1.00	1.96	1.96	1.96	0.77	71.75%	0.16	8.08	...
C.I. 4-3	GRADE	4.71	0.00	4.71	1.00	2.70	2.70	2.70	2.01	57.41%	0.20	9.91	...
F.I. 4-4	GRADE	2.83	0.00	2.83	4.80	61.26	294.04	2.83	0.00	100.00%	...	...	0.17
F.I. 4-5	GRADE	0.20	0.00	0.20	5.80	67.73	392.83	0.20	0.00	100.00%	...	...	0.03
C.I. 5-1	GRADE	3.91	0.87	4.78	1.00	2.63	2.63	2.63	2.15	55.04%	0.20	9.78	...
C.I. 6-1	GRADE	2.11	0.00	2.11	1.00	1.82	1.82	1.82	0.28	86.58%	0.17	8.52	...
C.I. 6-2	GRADE	3.53	1.35	4.88	1.00	3.48	3.48	3.48	1.40	71.32%	0.23	11.67	...
C.I. 6-3	GRADE	4.78	0.00	4.78	1.00	3.43	3.43	3.43	1.35	71.78%	0.23	11.59	...
C.I. 7-1	GRADE	2.83	0.00	2.83	1.00	1.96	1.96	1.96	0.87	69.29%	0.16	8.04	...
F.I. 8-1	GRADE	2.50	0.00	2.50	6.80	73.63	500.70	2.50	0.00	100.00%	...	...	0.16
F.I. 8-2	GRADE	1.18	0.00	1.18	7.80	79.10	616.96	1.18	0.00	100.00%	...	...	0.10
EX C.I. 9-2	GRADE	3.82	0.00	3.82	1.00	2.55	2.55	2.55	1.26	66.87%	0.19	9.49	...
C.I. 9-3	GRADE	1.18	0.00	1.18	1.00	1.05	1.05	1.05	0.14	88.42%	0.12	6.12	...
EX. F.I. 10-1	GRADE	8.88	0.00	8.88	8.80	84.21	741.03	8.88	0.00	100.00%	...	...	0.37
EX. F.I. 10-2	GRADE	6.32	0.00	6.32	9.80	89.03	872.46	6.32	0.00	100.00%	...	...	0.29

Notes:
1. Inlet capacity at sag location has been reduced by a clogging factor of 0.80, reducing theoretical capacity to 80% capacity, as required per APWA Section 5600.
Both theoretical capacity and reduced capacity are shown.
2. Inlet efficiency shown in the tables is Captured Flow/Total Flow, denoting the actual percentage of flow captured after the capacity has been reduced to 80% of theoretical capacity.

Drainage Area Design Table						
100 Year Return Frequency						
Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
C.I. 1-2	0.43	0.51	6.68	9.67	1.25	2.65
C.I. 1-3	0.82	0.51	7.58	9.35	1.25	4.89
C.I. 1-4	0.83	0.51	9.01	8.89	1.25	4.70
C.I. 1-5	0.73	0.51	8.04	9.20	1.25	4.28
C.I. 1-6	0.28	0.51	5.00	10.32	1.25	1.84
C.I. 1-7	0.67	0.51	9.04	8.88	1.25	3.79
C.I. 1-9	0.23	0.51	5.92	9.95	1.25	1.46
C.I. 1-10	0.15	0.51	5.00	10.32	1.25	0.99
C.I. 2-1	0.61	0.51	8.16	9.16	1.25	3.56
F.I. 2-2	0.31	0.51	6.68	9.67	1.25	1.91
F.I. 2-3	0.22	0.51	5.00	10.32	1.25	1.45
F.I. 2-4	0.46	0.51	7.38	9.42	1.25	2.76
C.I. 3-1	0.39	0.51	5.00	10.32	1.25	2.57
C.I. 4-1	0.30	0.51	5.00	10.32	1.25	1.97
C.I. 4-2	0.11	0.51	5.00	10.32	1.25	0.72
C.I. 4-3	0.91	0.51	11.73	8.12	1.25	4.71
F.I. 4-4	0.43	0.51	5.00	10.32	1.25	2.83
F.I. 4-5	0.03	0.51	5.00	10.32	1.25	0.20
C.I. 5-1	0.63	0.51	6.51	9.73	1.25	3.91
C.I. 6-1	0.32	0.51	5.00	10.32	1.25	2.11
C.I. 6-2	0.55	0.51	5.63	10.07	1.25	3.53
C.I. 6-3	0.78	0.51	6.81	9.62	1.25	4.78
C.I. 7-1	0.43	0.51	5.00	10.32	1.25	2.83
F.I. 8-1	0.38	0.51	5.00	10.32	1.25	2.50
F.I. 8-2	0.18	0.51	5.00	10.32	1.25	1.18
EX C.I. 9-2	0.58	0.51	5.00	10.32	1.25	3.82
C.I. 9-3	0.18	0.51	5.00	10.32	1.25	1.18
EX. F.I. 10-1	1.35	0.51	5.00	10.32	1.25	8.88
EX. F.I. 10-2	0.96	0.51	5.00	10.32	1.25	6.32

Storm Sewer Design Calculation Table												
100 Year Return Frequency												
Upstream Structure	Downstream Structure	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope (%)	Diameter (in)	Manning's n	Total Flow (cfs)	Velocity (ft/s)	Capacity (cfs)	Flow Depth (ft)	Upstream Struct. HGL (ft)
M.H. 1-1	E.S. 1-0	69.78	955.74	954.00	2.49	30	0.012	63.78	14.66	70.16	1.87	958.15
C.I. 1-2	M.H. 1-1	142.00	964.10	956.34	5.46	30	0.012	63.78	14.92	103.86	1.81	966.51
C.I. 1-3	C.I. 1-2	149.01	969.15	964.70	2.99	30	0.012	53.07	12.52	76.78	1.81	971.48
C.I. 1-4	C.I. 1-3	36.24	970.81	969.75	2.93	30	0.012	50.63	12.31	75.99	1.73	973.12
C.I. 1-5	C.I. 1-4	286.78	980.04	971.41	3.01	30	0.012	47.82	11.81	77.07	1.71	982.31
C.I. 1-6	C.I. 1-5	229.91	984.10	980.65	1.50	30	0.012	45.24	11.1	54.43	1.74	986.33
C.I. 1-7	C.I. 1-6	153.32	987.77	984.70	2.00	24	0.012	29.05	10.1	34.67	1.63	989.62
J.B. 1-8	C.I. 1-7	172.32	994.40	988.37	3.50	24	0.012	25.94	10.68	45.84	1.25	996.18
C.I. 1-9	J.B. 1-8	88.64	996.98	995.00	2.23	18	0.012	14.58	9.13	17	1.18	998.38
C.I. 1-10	C.I. 1-9	103.10	999.04	997.58	1.42	18	0.012	12.33	8.07	13.54	1.12	1000.37
FUT. C.I. 1-11	C.I. 1-10	75.57	1003.42	999.64	5.00	15	0.012	5.21	6.2	15.65	0.73	1004.35
FUT. 1-12	FUT. C.I. 1-11	49.45	1007.65	1005.77	3.80	12	0.012	3.48	7.29	7.52	0.48	1008.45
FUT. C.I. 1-13	FUT. 1-12	97.39	1009.71	1008.25	1.50	12	0.012	0.98	3.96	4.72	0.31	1010.13
C.I. 2-1	C.I. 1-2	48.98	966.25	965.35	1.84	15	0.012	8.23	6.99	9.48	1.16	967.37 j
F.I. 2-2	C.I. 2-1	156.61	972.71	966.85	3.74	15	0.012	6.12	8.28	13.53	0.59	973.71
F.I. 2-3	F.I. 2-2	176.00	979.47	973.31	3.50	15	0.012	4.21	7.18	13.09	0.49	980.3
F.I. 2-4	F.I. 2-3	132.53	985.85	980.07	4.36	15	0.012	2.76	6.64	14.61	0.37	986.52
C.I. 3-1	C.I. 1-6	35.00	989.40	988.87	1.51	15	0.012	3.4	5.54	8.61	0.55	990.14
C.I. 4-1	C.I. 1-6	52.51	986.14	985.10	1.98	18	0.012	9.24	6.1	16.01	1.23	987.31 j
C.I. 4-2	C.I. 4-1	34.01	987.25	986.74	1.50	15	0.012	7.69	7.31	8.57	0.93	988.35
C.I. 4-3	C.I. 4-2	80.55	989.06	987.85	1.50	15	0.012	5.73	6.55	8.57	0.75	990.03
F.I. 4-4	C.I. 4-3	138.04	993.46	989.66	2.75	15	0.012	3.03	6.12	11.61	0.44	994.16
F.I. 4-5	F.I. 4-4	154.29	998.30	994.06	2.75	15	0.012	0.2	2.76	11.6	0.11	998.47
C.I. 5-1	J.B. 1-8	36.34	996.49	995.15	3.69	15	0.012	2.63	3.25	13.43	1.03	997.14 j
C.I. 6-1	J.B. 1-8	39.78	996.00	995.15	2.14	15	0.012	8.73	7.73	10.23	1.03	997.15
C.I. 6-2	C.I. 6-1	35.35	997.12	996.60	1.47	15	0.012	6.91	6.98	8.48	0.86	998.17
C.I. 6-3	C.I. 6-2	114.75	999.04	997.72	1.15	15	0.012	3.43	5.23	7.5	0.59	999.79
C.I. 7-1	C.I. 1-10	48.58	1003.15	1002.01	2.35	15	0.012	1.96	5.17	10.72	0.36	1003.71
F.I. 8-1	C.I. 1-10	150.33	1001.44	999.64	1.20	15	0.012	3.68	4.79	7.65	0.73	1002.21
F.I. 8-2	F.I. 8-1	128.00	1004.60	1002.04	2.00	15	0.012	1.18	4.3	9.89	0.29	1005.03
EX C.I. 9-2	EX C.I. 9-1	162.08	979.91	977.48	1.50	18	0.012	3.6	5.44	13.93	0.52	980.63
C.I. 9-3	EX C.I. 9-2	37.24	982.40	981.84	1.50	15	0.012	1.05	3.9	8.58	0.3	982.8

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STATE OF MISSOURI
STEPHEN M. SAYLOR
PE-2018021248
2/15/2024
PROFESSIONAL ENGINEER

BY

REV. NO. 1

DATE 02/15/2024

REVISED PER CITY COMMENTS

REVISIONS

DRAINAGE TABLES (100-YEAR)
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

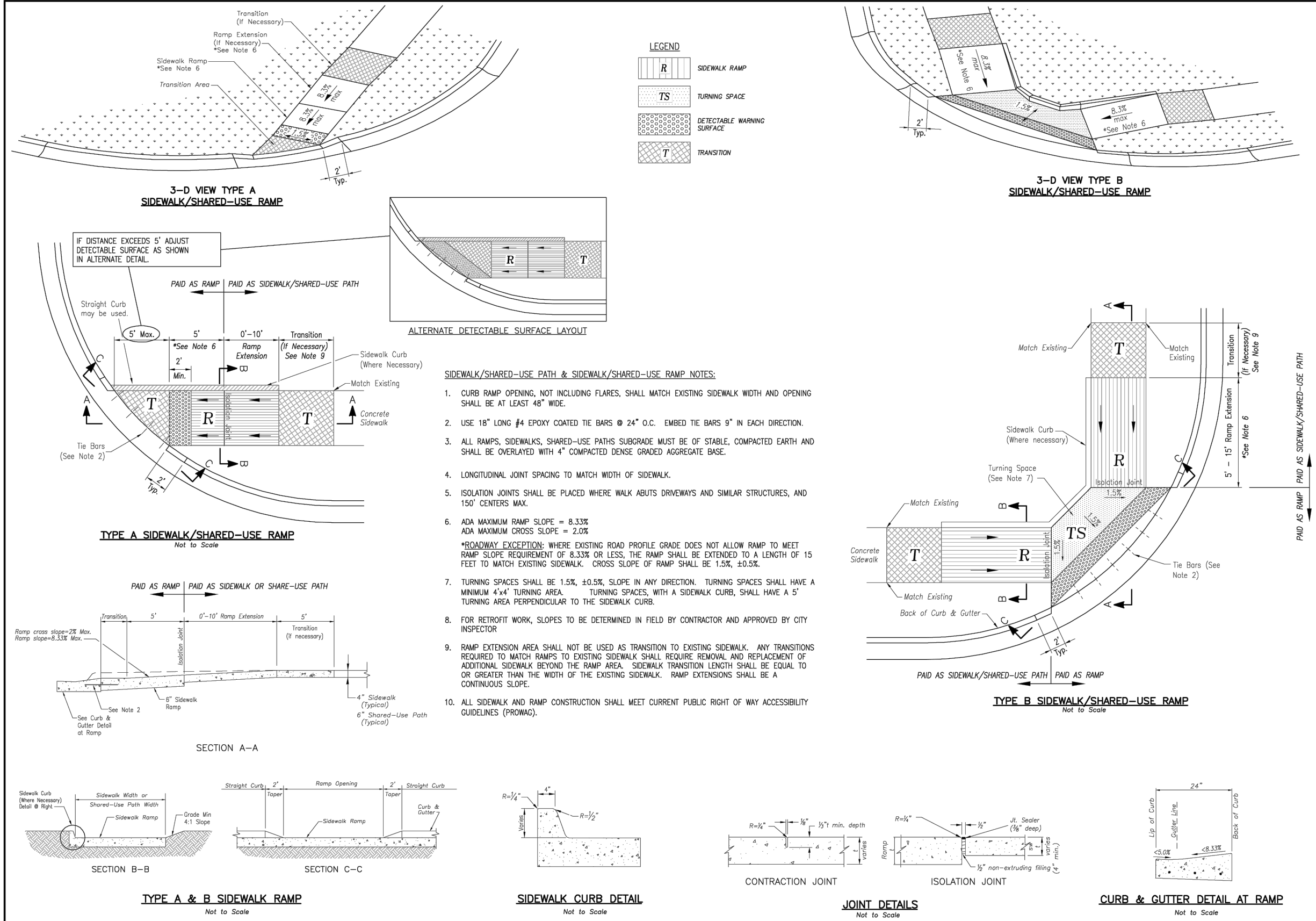
LEE'S SUMMIT, MISSOURI

2023

drawn by: _____
checked by: _____
approved by: _____
QA/QC by: _____
project no.: A20-2467
drawing no.: C_DRN02_A202467
date: 02/15/2024

CW
SS
JS
JS

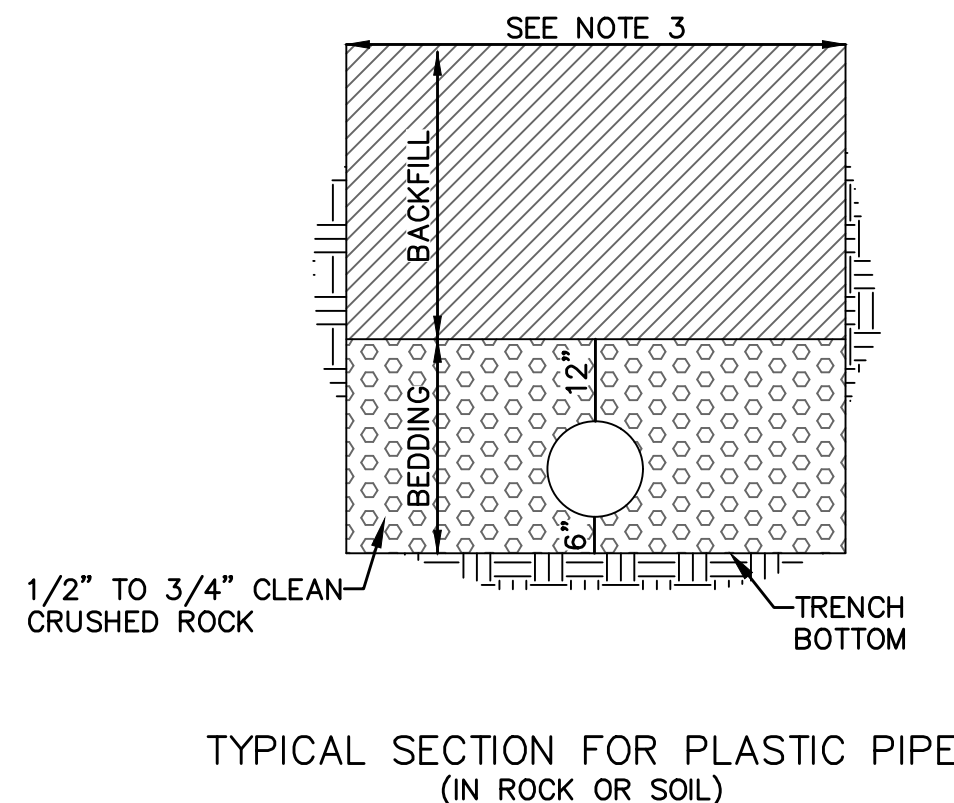
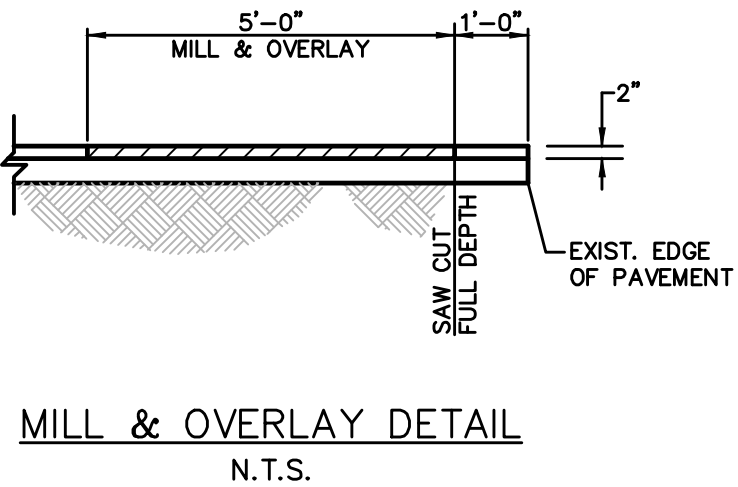
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LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 1205 SE GREEN STREET | LEE'S SUMMIT, MO 64683

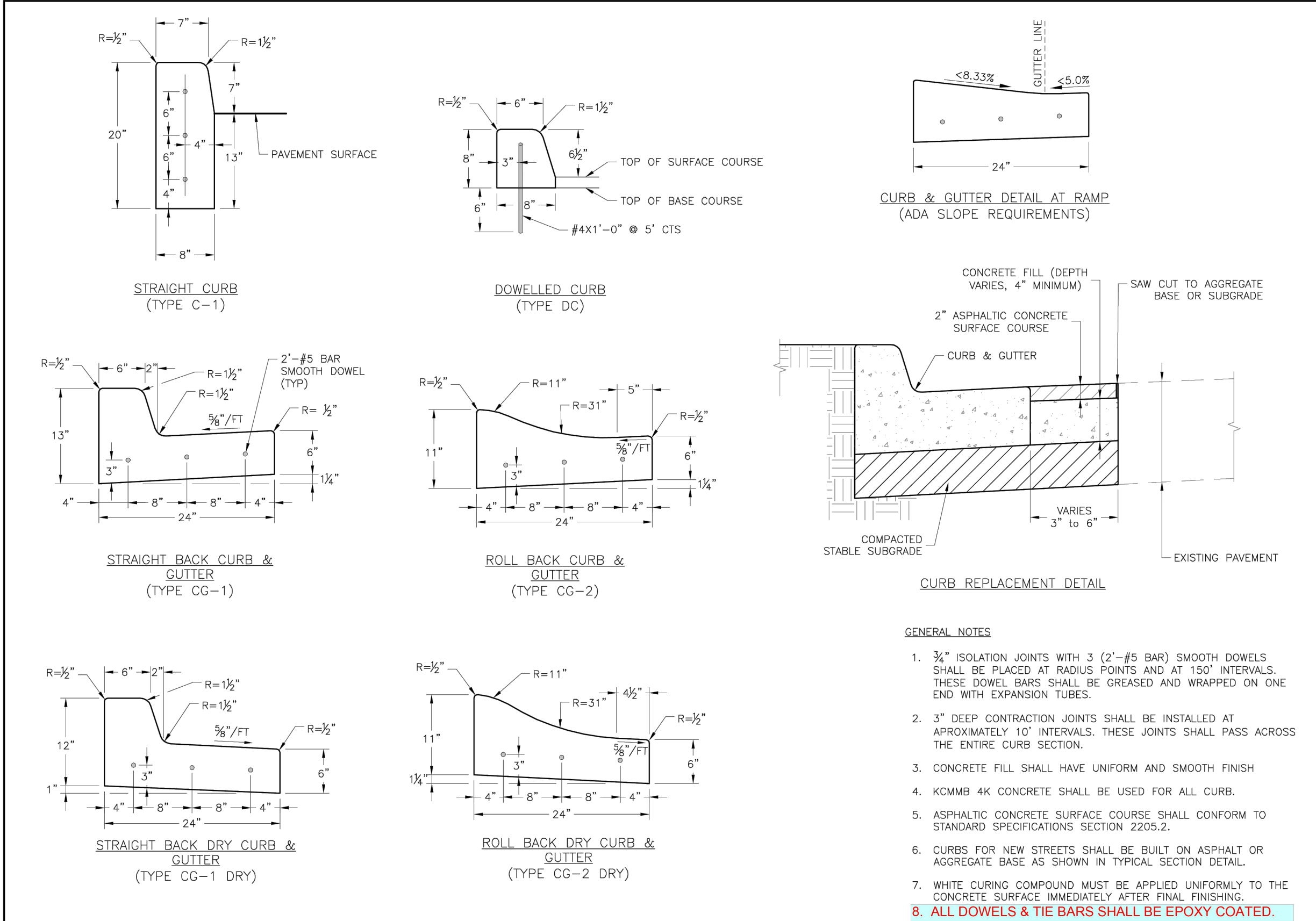
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
ADA RAMP RETROFIT DETAIL

GEN-3A



UNDERGROUND PIPE INSTALLATION FOR STORM SEWER LINES
N.T.S.

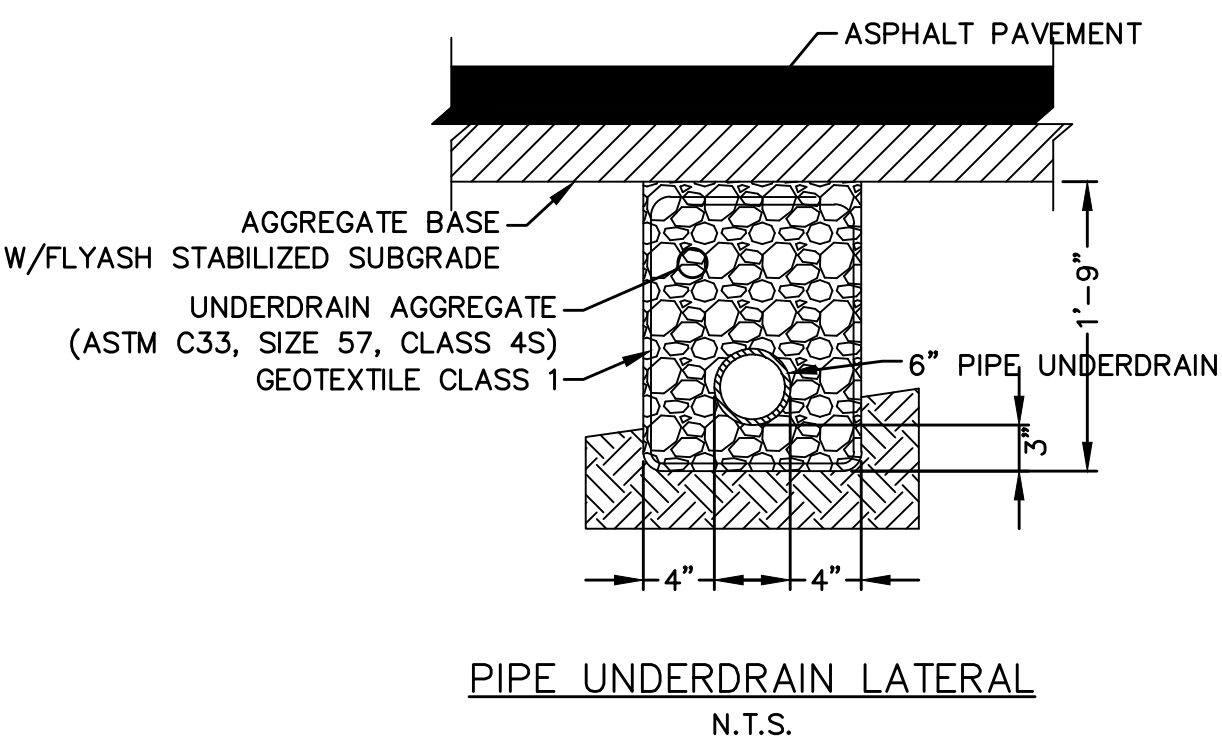
1. BACKFILL SHALL BE JOB EXECAVATED MATERIAL FREE FROM DEBRIS AND STONES COMPACTED TO 90% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698. BACKFILL UNDER PAVEMENT (EXISTING OR PROPOSED), SHALL BE FLOWABLE FILL.
2. TRENCH BANKS MAY BE CUT BACK ON SLOPES IN ACCORDANCE WITH CURRENT OSHA REGULATIONS, BUT ONLY IN AREAS WHERE THE INCREASED TRENCH WIDTH WILL NOT INTERFERE WITH SURFACE FEATURES. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING.
3. MINIMUM AND MAXIMUM WIDTHS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATION AS APPROVED ON ENGINEERING PLANS.



LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 1205 SE GREEN STREET | LEE'S SUMMIT, MO 64683

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

GEN-4



- NOTES:**
1. Where Pipe Underdrains are used, all Underdrain Outlet Pipes shall be solid wall with watertight joints. All Outlets Pipes shall be tied into the nearest storm sewer inlets at roadway sag locations as indicated in the street profile.
 2. All Underdrain Pipes shall be installed at a minimum slope of 1%.
 3. Underdrain Pipe shall be installed with the perforations placed down.
 4. Blanket Underdrain Aggregate, Pipe Underdrain Aggregate, Pipe Underdrain, Edge Underdrain and Outlet Pipe shall conform to City of Lee's Summit Specifications.
 5. Overlap geotextile at top of trench a minimum of 12".

DETAIL SHEET
STREET & STORM SEWER PLANS

EAGLE CREEK VILLAS
FIRST PLAT

LEE'S SUMMIT, MISSOURI

drawn by: B.M.W./A.A.
checked by: B.M.W./A.A.
approved by: B.M.W./A.A.
QA/QC by: J.E.S.
project no.: B19-4061
drawing no.: C_DET01_A202467
date: 01-08-2021

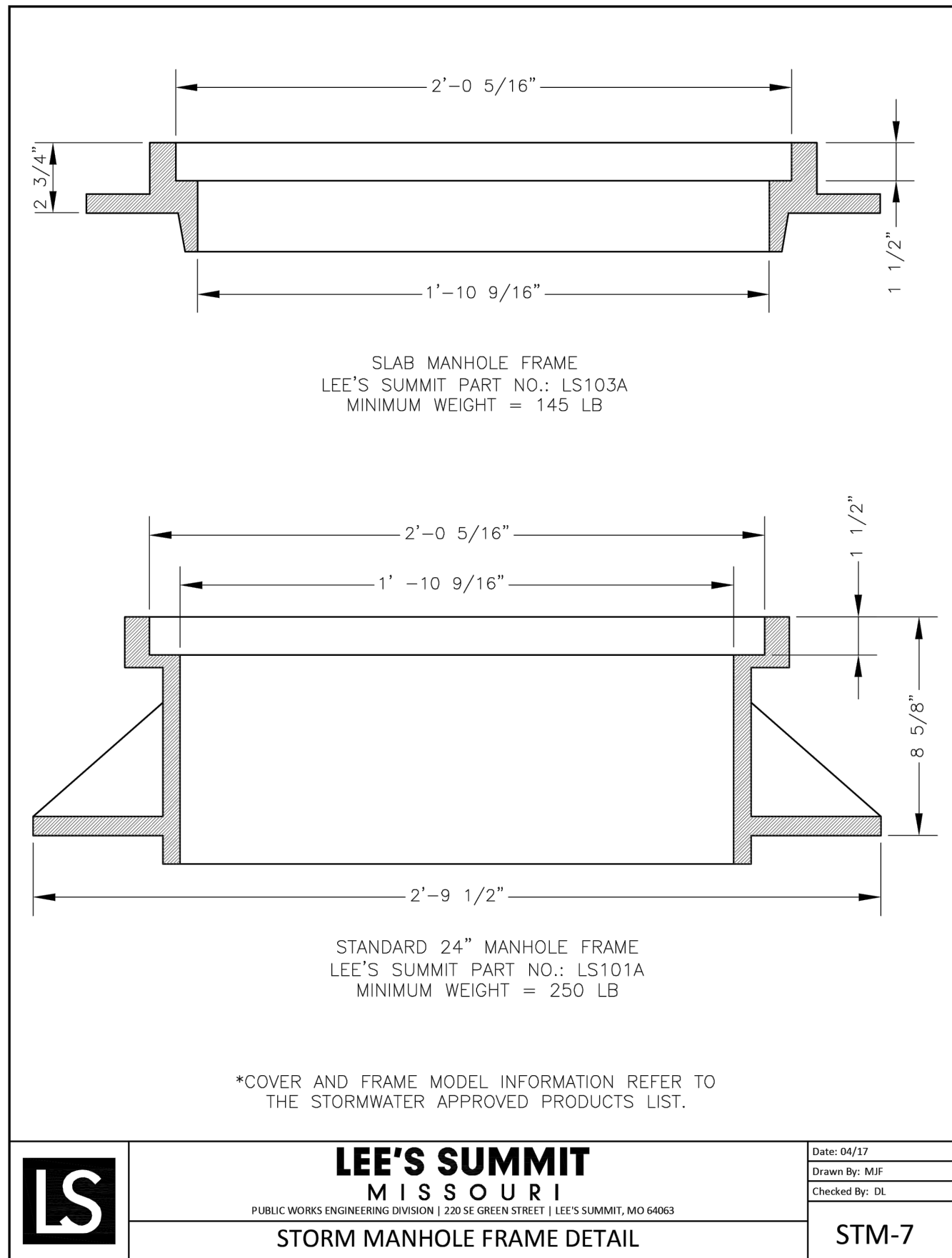
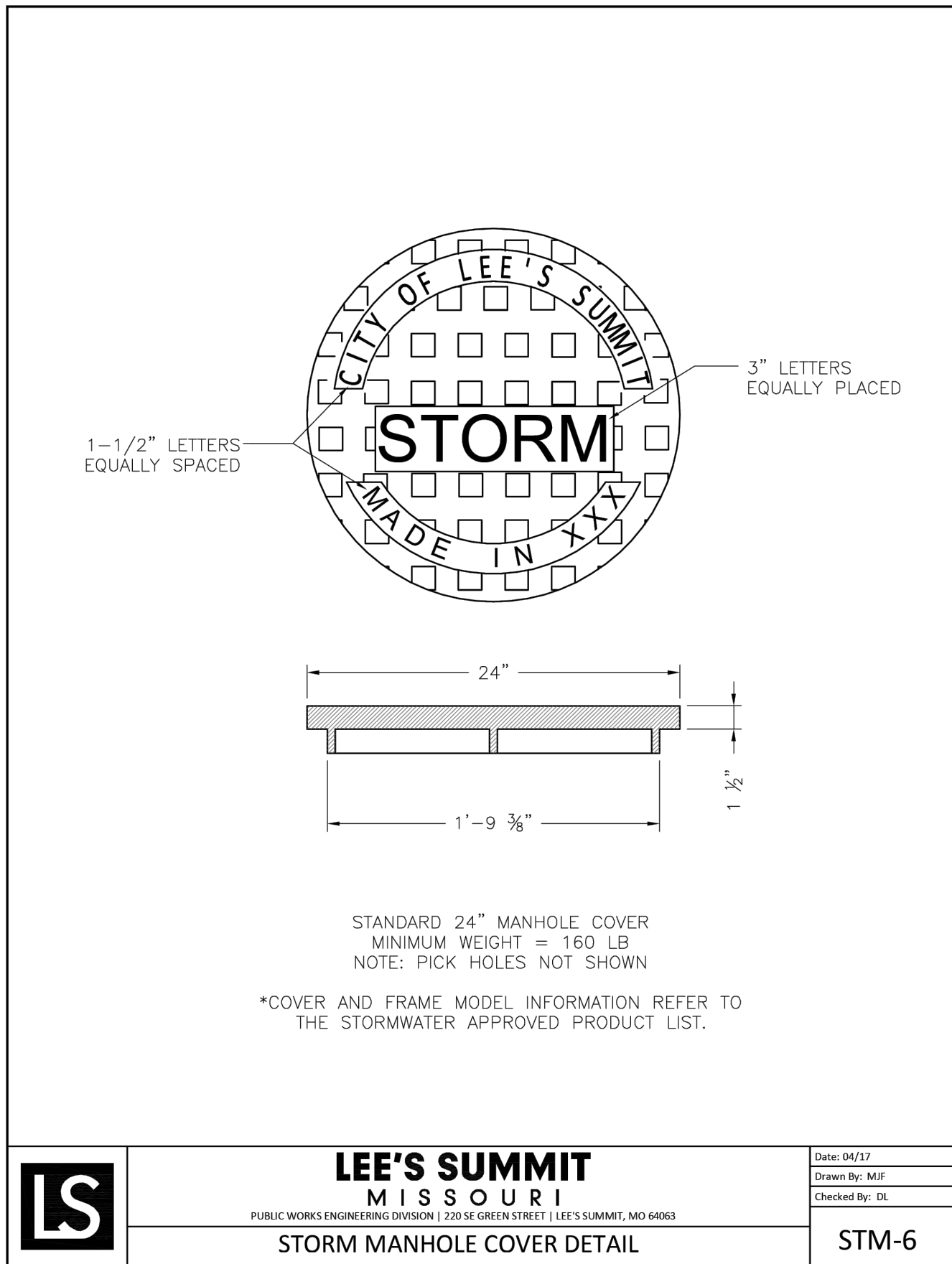
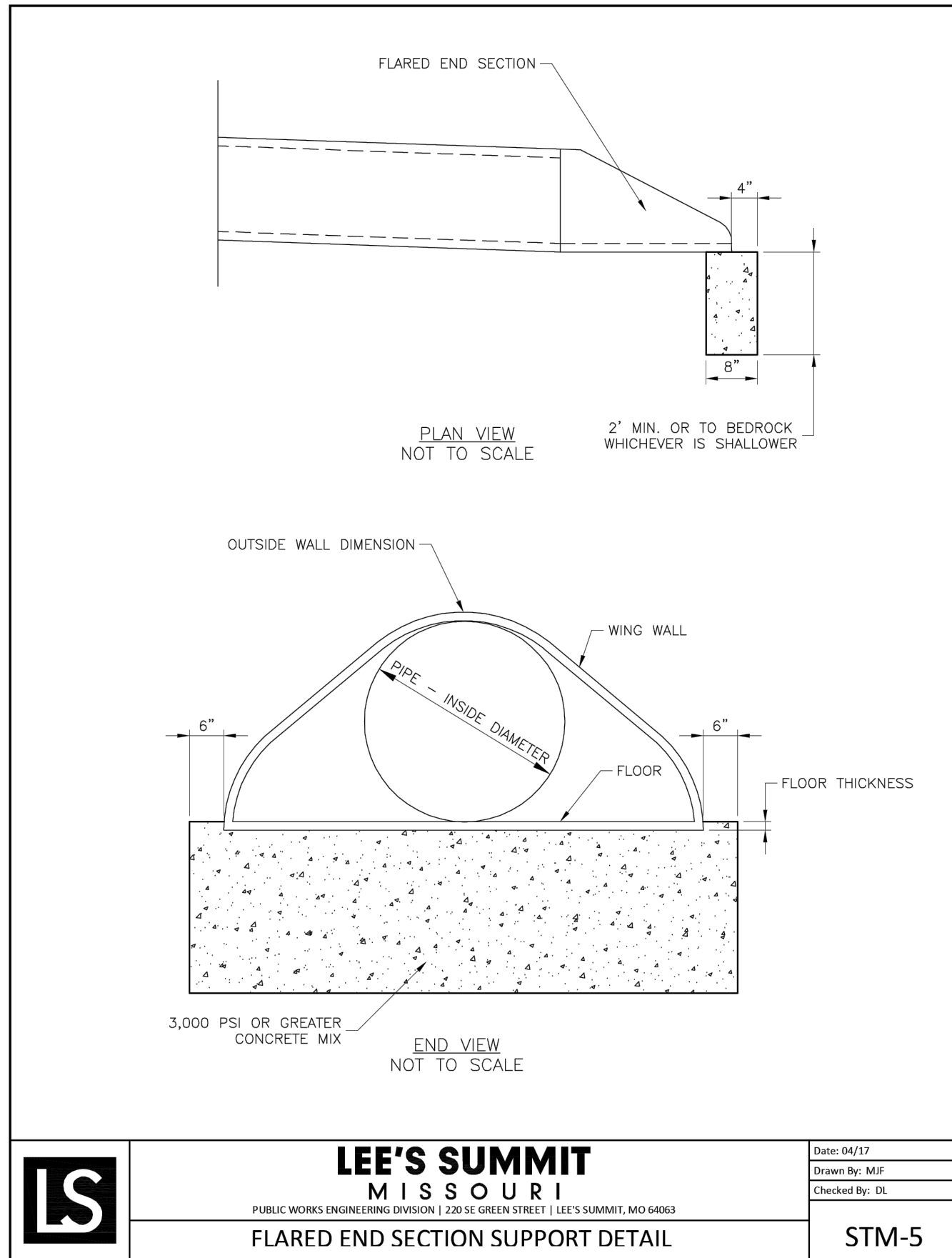
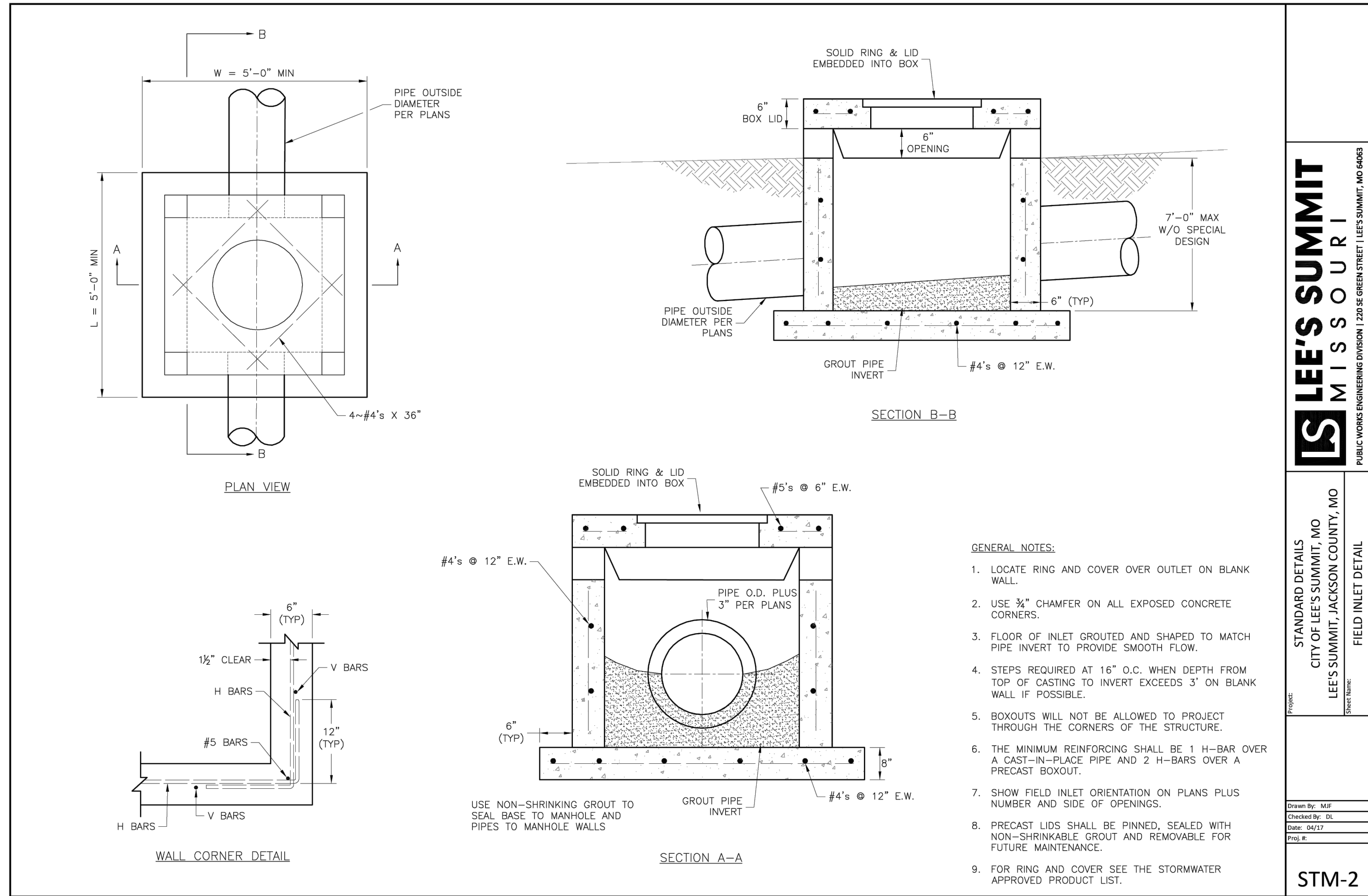
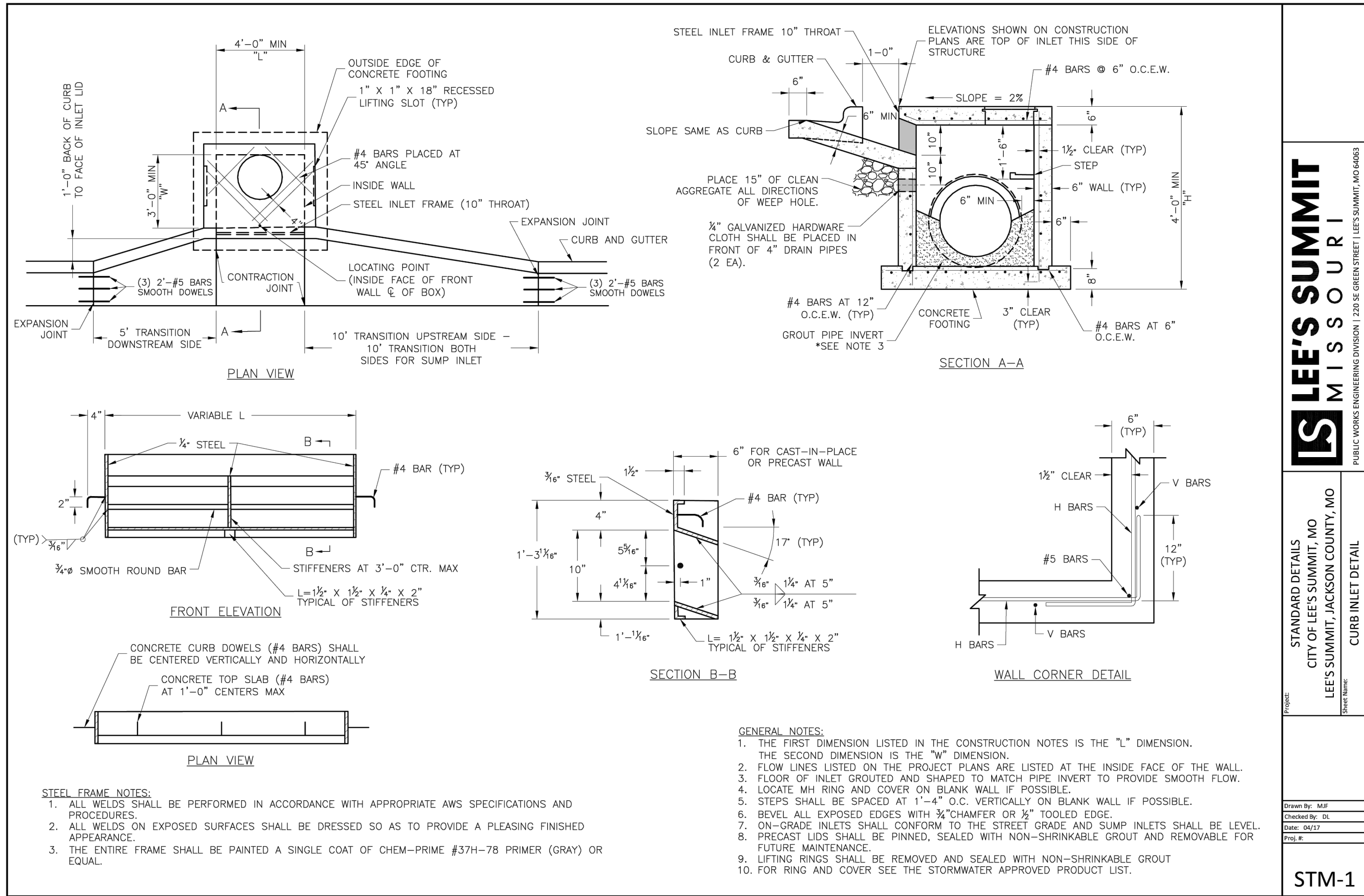
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REV. NO.	DATE	REVISIONS DESCRIPTION

REVISIONS

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