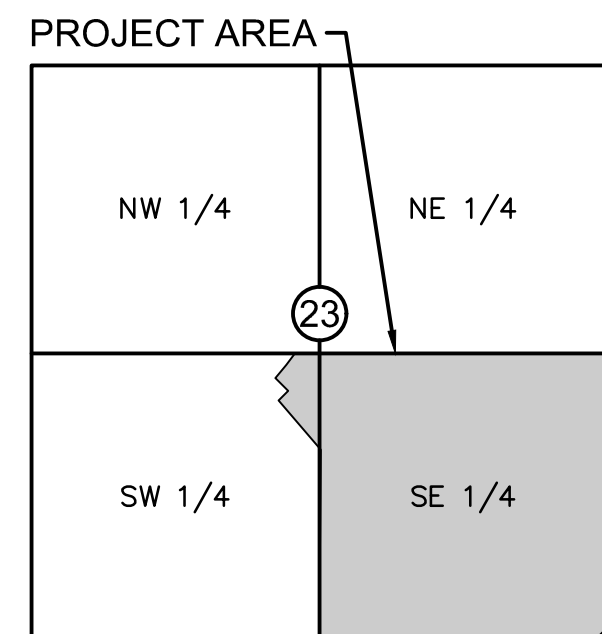


HOOK FARMS FIRST PLAT STREET AND STORM SEWER PLANS

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



VICINITY MAP
S23, T47N, R32W
SCALE 1"=2000'

PROJECT TEAM & UTILITY CONTACT LIST	
OWNER / DEVELOPER	HUNT MIDWEST REAL ESTATE DEVELOPMENT, INC. 8300 NE UNDERGROUND DRIVE KANSAS CITY, MO 64161 CONTACT: AARON SCHMIDT PHONE: 816.459.4285 EMAIL: ASCHMIDT@HUNTMIDWEST.COM
ENGINEER	OLSSON 1301 BURLINGTON STREET, SUITE 100 NORTH KANSAS CITY, MISSOURI 64116 CONTACT: JULIE E. SELLERS, P.E. PHONE: 816.361.1177
SURVEYOR	OLSSON 1301 BURLINGTON STREET, SUITE 100 NORTH KANSAS CITY, MISSOURI 64116 CONTACT: JASON ROUDEBUSH, P.L.S. PHONE: 816.361.1177

<input type="checkbox"/>	NOT FOR CONSTRUCTION
<input checked="" type="checkbox"/>	REVIEWED FOR CONSTRUCTION



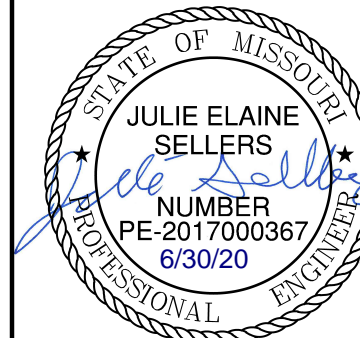
PROPERTY DESCRIPTION:

A tract of land in the Southeast 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 Roudebush, P.L.S. 2002014092 as follows: Commencing at the Southeast corner of said Southeast Quarter; thence North 02°45'34" East, on the East line of said Southeast Quarter, 2,635.08 feet to the Northeast corner of said Southeast Quarter; thence North 87°45'24" West, on the North line of said Southeast Quarter, 50.00 feet to the Southeast corner of Lot 3, EAGLE CREEK—FIRST PLAT, a subdivision in said Lee's Summit recorded as Instrument Number 110409 in Book 165 at Page 01 in Jackson County Recorder of Deeds Office, also being the Northwest corner of SW Pryor Road as described in the Right of Way Deed recorded as Instrument Number 20050087407 in said Jackson County Recorder of Deeds Office, also being Point of Beginning of the tract of land to be herein described; thence South 02°45'34" West, on the existing Westerly right-of-way line of said SW Pryor Road of said Right of Way Deed, 1,220.74 feet; thence leaving said existing Westerly right-of-way line, North 87°00'50" West, 245.56 feet; thence North 02°59'10" East, 25.00 feet; thence North 87°00'50" West, 438.50 feet; thence North 60°49'13" West, 252.48 feet; thence North 67°11'53" West, 74.21 feet; thence North 27°18'12" East, 138.17 feet; thence Westerly, on a curve to the left, having an initial tangent bearing of North 62°41'48" West with a radius of 275.00 feet, a central angle of 11°57'16" and an arc distance of 57.38 feet; thence North 15°20'56" East, 50.00 feet; thence North 29°10'47" East, 375.17 feet; thence North 07°19'52" East, 64.17 feet; thence South 87°00'50" East, 126.12 feet; thence North 02°59'10" East, 116.00 feet; thence North 42°00'50" West, 19.80 feet; thence North 02°59'10" East, 50.00 feet; thence South 87°00'50" East, 36.00 feet; thence North 02°59'10" East, 277.38 feet to a point on the South line of said EAGLE CREEK—FIRST PLAT and said North line of said Southeast Quarter; thence South 87°45'24" East, on said South and said North line, 643.83 feet to the Point of Beginning. Containing 953,270 square feet or 21.88 acres, more or less.

Sheet List Table	
Sheet Number	Sheet Title
C101	TITLE SHEET
C102	GENERAL NOTES
C103	GENERAL LAYOUT
C104	GRADING PLAN
C105	SWALE 1 PLAN & PROFILE
C106	SWALE 2 PLAN & PROFILE
C107	SWALE 3 PLAN & PROFILE
C108	SWALE 3 PLAN & PROFILE CONT'D
C109	SWALE 4 PLAN & PROFILE
C110	WATER QUALITY BASIN PLAN
C111	ROADWAY PLAN & PROFILE (SW WHEATFIELD COURT)
C112	ROADWAY PLAN & PROFILE (SW FARM FIELD ROAD)
C113	ROADWAY PLAN & PROFILE (SW FARM FIELD ROAD)
C114	ROADWAY PLAN & PROFILE (SW 26TH TERRACE)
C115	ROADWAY PLAN & PROFILE (SW 26TH TERRACE)
C116	ROADWAY PLAN & PROFILE (SW FARM FIELD COURT)
C117	ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
C118	ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
C119	ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
C120	TRAFFIC CONTROL PLAN
C121	SW WHEATFIELD COURT & SW FARM FIELD ROAD
C122	SW FARM FIELD ROAD & SW 26TH TERRACE
C123	SW 26TH TERRACE
C124	SW FARM FIELD ROAD & SW FARM FIELD COURT
C125	SW FARM FIELD ROAD & SW HOOK FARM DRIVE
C126	SW HOOK FARM DRIVE & SW HOOK FARM DRIVE
C127	SW FARM FIELD COURT & SW HOOK FARM DRIVE
C128	SW WHEAT FIELD COURT CUL-DE-SAC
C129	STORM SEWER PLAN & PROFILE (LINE 1)
C130	STORM SEWER PLAN & PROFILE (LINE 1 CONT'D)
C131	STORM SEWER PLAN & PROFILE (LINE 2)
C132	STORM SEWER PLAN & PROFILE (LINE 3 & 9)
C133	STORM SEWER PLAN & PROFILE (LINE 4)
C134	STORM SEWER PLAN & PROFILE (LINE 4 CONT'D)
C135	STORM SEWER PLAN & PROFILE (LINES 5, 6, & 8)
C136	STORM SEWER PLAN & PROFILE (LINE 7)
C137	MASTER DRAINAGE PLAN
C138	DRAINAGE PLAN
C139	DRAINAGE TABLES
C140	STORM DETAILS

olsson

Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
FAX 816.361.1888
www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS

BY	DATE	REVISIONS
	2020	

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
date:	04/20/2020

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/15/2020

SHEET
C101

USER: nhsaiser

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Sheets\GNCV\Street and Storm Plans\C_TTL01_0194061.dwg
DATE: Jun 29, 2020 5:57pm
XREFS: C_PBDLK_0194061_34x22



DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Storm Plans\NC_TTL01_0194061.dwg
 DATE: Jun 29, 2020 5:57pm
 XREFS: C_PTBULK_0194061_34x22
 C_PBNDY_0194061
 USER: nhaiser

GENERAL NOTES

1. 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.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS UNLESS WRITTEN APPROVAL FROM ENGINEER, OWNER, AND DEVELOPER.
3. ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
4. ALL ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITIES AND ITEMS OF WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLETE THE WORK SHOWN IN THE PLANS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, PAYING ALL FEES, AND FOR OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.
7. THE CONTRACTOR SHALL NOT ENGAGE IN ACTIVITIES THAT MAY ENCRUCH 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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

1. ARCHITECTURAL AND STRUCTURAL ELEMENTS SHOWN IN THESE PLANS ARE FOR REFERENCE ONLY. CONTRACTORS AND SURVEYORS SHALL REFERENCE THEIR RESPECTIVE PLANS FOR DESIGN INFORMATION.
2. THE CONTRACTOR SHALL ADHERE TO THE SITE PREPARATION AND STRUCTURAL FILL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AS PROVIDED BY THE GEOTECHNICAL ENGINEER INCLUDING ALL CURRENT ADDENDUMS, THE STANDARDS AND SPECIFICATIONS OF LEE'S SUMMIT, MISSOURI SHALL ALSO APPLY AND TAKE PRECEDENCE WHEN STRICTER THAN THE GEOTECHNICAL REPORT OR WHEN NO GEOTECHNICAL REPORT IS GIVEN.
3. UNLESS EXPLICITLY DESCRIBED OTHERWISE WITHIN THESE PLANS THE FOLLOWING SHALL APPLY:
 - A. ALL CONSTRUCTION, INCLUDING THOSE LISTED BELOW, SHALL CONFORM TO THE LATEST CODES AND ORDINANCES OF LEE'S SUMMIT, MISSOURI.
 - B. ALL CONSTRUCTION IN MISSOURI DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MISSOURI DEPARTMENT OF TRANSPORTATION.
 - C. ALL TRAFFIC CONTROL SIGNAGE SHALL CONFORM WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 - D. ALL UTILITY EXTENSIONS AND CONSTRUCTION SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE UTILITY COMPANIES..
 - E. 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.
4. 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

1. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS OF THE PROJECT AREA.
2. 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.
3. 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

1. 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.
2. 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.
3. IN ADDITION TO THE CONDITIONS OF THE GEOTECHNICAL REPORT AND AS A MINIMUM THE CONTRACTOR SHALL PERFORM THE GRADING AS FOLLOWS:
 - A. THE CONSTRUCTION AREA SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL AND ORGANIC MATTER FROM ALL AREAS TO BE OCCUPIED BY BUILDING AND PAVING. STRIPPING EXISTING TOPSOIL AND ORGANIC MATTER SHALL BE TO A MINIMUM DEPTH OF 6 INCHES. TOPSOIL FOR REPLACEMENT ON SLOPES MAY BE STOCKPILED ON SITE IN AREAS DESIGNATED BY THE OWNER. CONTRACTOR SHALL REMOVE EXCESS STRIPPINGS AND EXCESS EXCAVATION WITHIN 30 DAYS OF COMPLETION OF GRADING OPERATIONS.
 - B. AREAS TO RECEIVE FILL AND AREAS CUT TO SUBGRADE LEVEL SHALL BE SCARIFIED AND THE TOP 8-INCH DEPTH COMPACTED TO 95% STANDARD PROCTOR DENSITY. THE SUBGRADE SHALL BE PROOF ROLLED WITH A MODERATELY HEAVY LOADED DUMP TRUCK OR SIMILAR APPROVED CONSTRUCTION EQUIPMENT TO DETECT UNSUITABLE SOIL CONDITIONS. ANY UNSUITABLE AREAS SHALL BE UNDERCUT AND REPLACED WITH SUITABLE MATERIAL BEFORE ANY FILL MATERIAL CAN BE APPLIED.
 - C. FILL SHALL BE PLACED IN MAXIMUM OF 8 INCH LIFTS.
 - D. TOPSOIL SHALL BE PLACED TO A MINIMUM DEPTH OF 6 INCHES OVER ALL AREAS DISTURBED BY THE WORK. LARGE STONES, STICKS AND LUMPS SHALL BE REMOVED OR BROKEN UP, AND THE TOPSOIL SHALL BE LEVELED AND RAKED. ALL DISTURBED AREAS SHALL BE LANDSCAPED PER LANDSCAPE PLANS OR SHALL BE SEEDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED.
 - E. CONTRACTOR SHALL PROVIDE COMPACTION TEST RESULTS AS REQUIRED.
4. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.
5. 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.
6. THE CONTRACTOR SHALL STREET SWEEP OR OTHERWISE CLEAN ALL ACCESS ROUTES TO THE SITE AT CONCLUSION OF THE PROJECT.

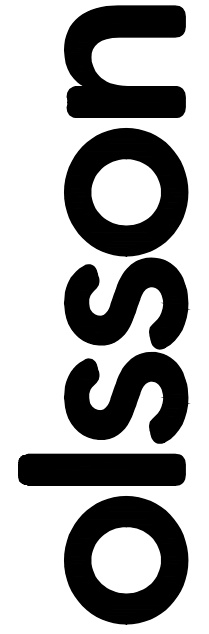
SHOP DRAWINGS

1. 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 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:
 - A. ALL FIELD MEASUREMENTS, QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR INFORMATION WITH RESPECT THERETO;
 - B. ALL MATERIALS WITH RESPECT TO INTENDED USE, FABRICATION, SHIPPING, HANDLING, STORAGE, ASSEMBLY AND INSTALLATION PERTAINING TO THE PERFORMANCE OF THE WORK;
 - C. ALL INFORMATION RELATIVE TO MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENT THERETO;
 - D. 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.
 - E. ALL SUBMITTED SHOP DRAWINGS SHALL BEAR A STAMP OR SPECIFIC WRITTEN INDICATION AND SIGNATURE THAT CONTRACTOR HAS FULLY COMPLETED THE ABOVE TASKS.
2. SHOP DRAWINGS AS DESCRIBED ABOVE ARE REQUIRED FOR, BUT NOT LIMITED TO, THE FOLLOWING:
 - A. ALL STORM SEWER STRUCTURES TO BE INSTALLED WITH THIS PROJECT.
 - B. ALL SANITARY SEWER STRUCTURES TO BE INSTALLED WITH THIS PROJECT.
 - C. ALL SITE FENCING AND RAILING INCLUDING ANY GATES.
 - D. ALL LANDSCAPE AND RETAINING WALLS.
 - E. ANY ITEMS IN THESE PLANS THAT ALLOW FOR AN "APPROVED EQUAL" ALTERNATIVE.

STORM SEWER PLAN NOTES

1. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH LEE'S SUMMIT, MISSOURI.
2. ALL PIPE LENGTHS AND ELEVATIONS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. 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.
4. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF STORM SEWER.
5. 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.
6. 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.
7. PIPE PENETRATIONS SHALL BE GROUTED TO ENSURE WATERTIGHT SEALS.

ESTIMATE OF QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
STREET				
1	EXCAVATION	C.Y.	5,854	
2	EMBANKMENT	C.Y.	15,100	
3	SUBGRADE STABILIZATION (6" FLYASH TREATMENT)	S.Y.	11,866	
4	6" ASPHALT PAVEMENT	S.Y.	9,612	
5	CONCRETE CURB & GUTTER (CG-2)	L.F.	6,335	
6	CONCRETE CURB & GUTTER (CG-1 DRY)	L.F.	245	
7	5' CONCRETE SIDEWALK	L.F.	143	
8	ADA RAMP	EA.	11	
9	STOP SIGNS	EA.	5	
10	STREET NAME SIGNS	EA.	10	
11	TYPE IV OBJECT MARKERS	EA.	2	
STORM				
12	STD. CURB INLET (5'x3' INSIDE)	EA.	19	
13	STD. CURB INLET (6'x3' INSIDE)	EA.	3	
14	STD. FIELD INLET (4'x4' INSIDE)	EA.	6	
15	STD. MANHOLE (5' DIA. INSIDE)	EA.	1	
16	WATER QUALITY BASIN OUTLET STRUCTURE	EA.	1	
17	6" PVC	L.F.	175.99	
18	15" HDPE	L.F.	419.42	
19	18" HDPE	L.F.	1552.87	
20	24" HDPE	L.F.	436.49	
21	30" HDPE	L.F.	284.64	
22	36" HDPE	L.F.	94.79	
23	18" FLARED END SECTION	L.F.	2	
24	24" FLARED END SECTION	L.F.	1	
25	30" FLARED END SECTION	EA.	1	
26	36" FLARED END SECTION	EA.	1	
27	15" HDPE PLUG	EA.	1	
28	RIPRAP	S.Y.	55.1	



Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS

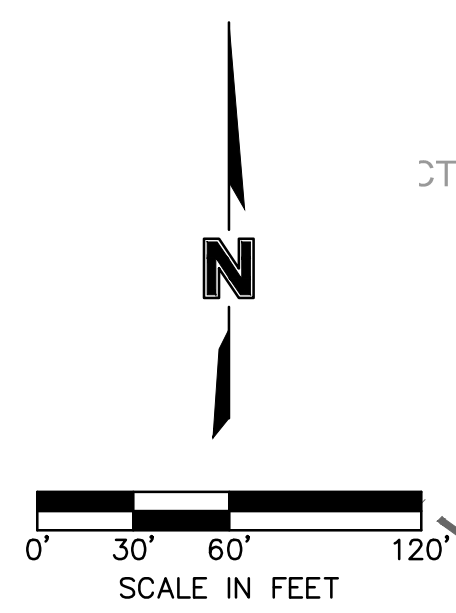
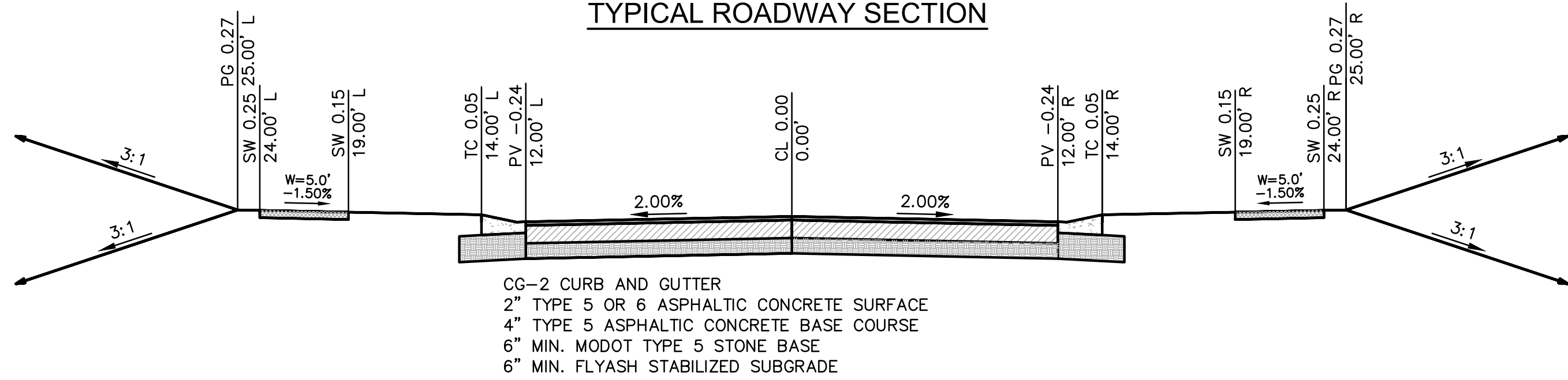
GENERAL NOTES
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST PLAT
 LEE'S SUMMIT, MO
 2020
 REVISIONS

RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

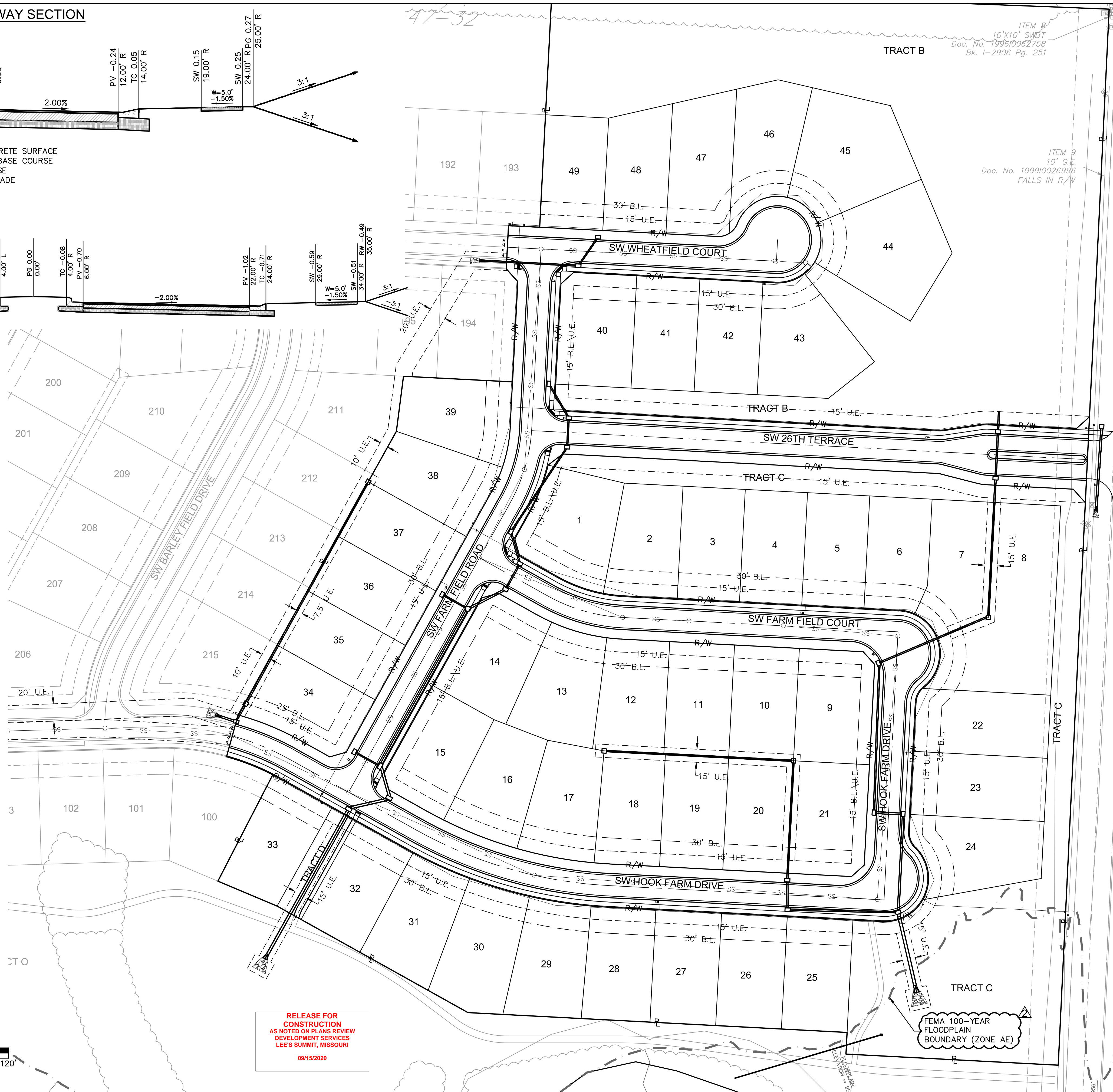
drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\GEN01_0194061.dwg USER: nheiser
 DATE: Jun 30, 2020 7:14am XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\XBASE_0194061 C:\PUTIL_0194061

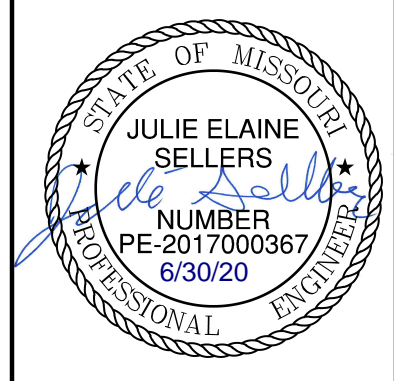
TYPICAL ROADWAY SECTION



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

GENERAL LAYOUT
 STREET AND STORM SEWER PLANS

HOOK FARMS
 FIRST PLAT

LEE'S SUMMIT, MO

2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

SHEET C103

GENERAL NOTES:

- 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.
- 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.
- 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.

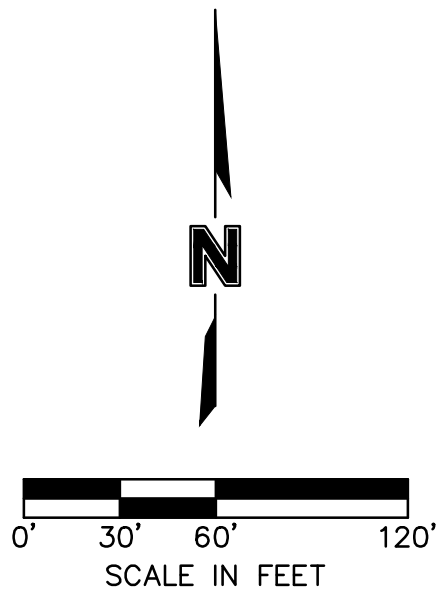
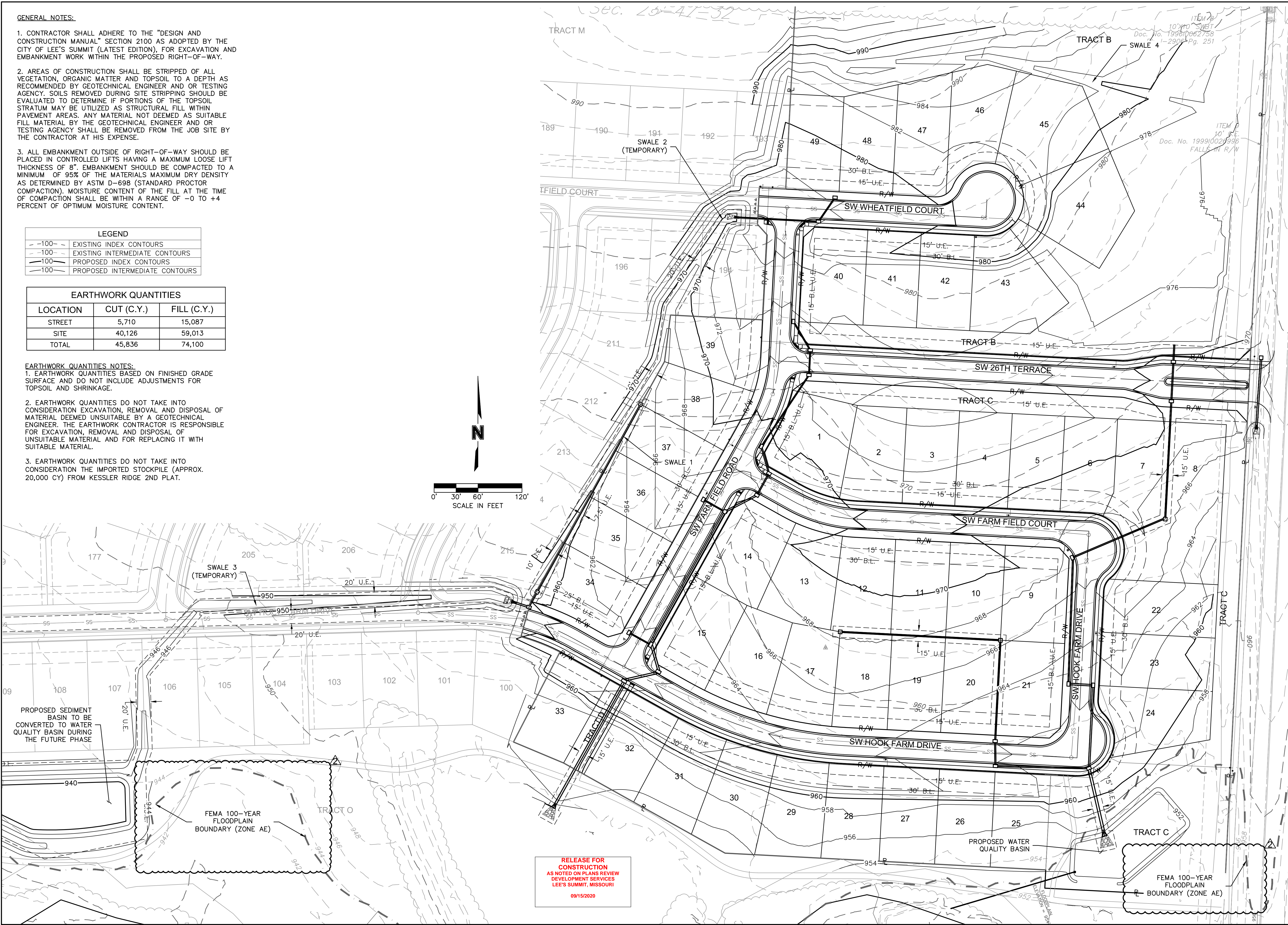
LEGEND	
-100-	EXISTING INDEX CONTOURS
-100-	EXISTING INTERMEDIATE CONTOURS
-100-	PROPOSED INDEX CONTOURS
-100-	PROPOSED INTERMEDIATE CONTOURS

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	5,710	15,087
SITE	40,126	59,013
TOTAL	45,836	74,100

EARTHWORK QUANTITIES NOTES:

- EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.
- 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.
- EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION THE IMPORTED STOCKPILE (APPROX. 20,000 CY) FROM KESSLER RIDGE 2ND PLAT.

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Storm Plans\VC_GRD01_0194061.dwg
 DATE: Jun 29, 2020 5:57pm
 XREFS: C:\PTBLK_0194061_34x22
 USER: rneiser
 C:\P\UTIL_0194061
 C:\PBASE_0194061



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com

STATE OF MISSOURI

JULIE ELAINE SELLERS

Julie Sellers

NUMBER
 PE-2017000367
 6/30/20

PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	

GRADING PLAN
STREET AND STORM SEWER PLANS

HOOK FARMS
FIRST PLAT

REVISIONS

LEE'S SUMMIT, MO

2020

drawn by: CGW

checked by: JES

approved by: NDH

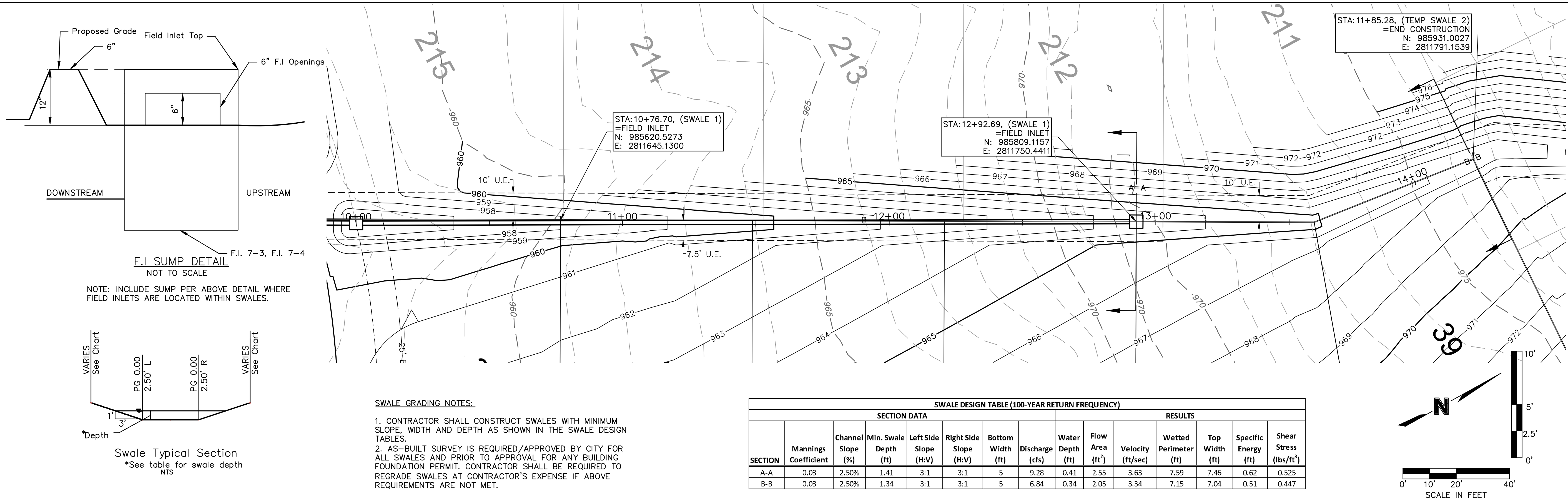
QA/QC by: JES

project no.: 019-4061

drawing no.: 04/20/2020

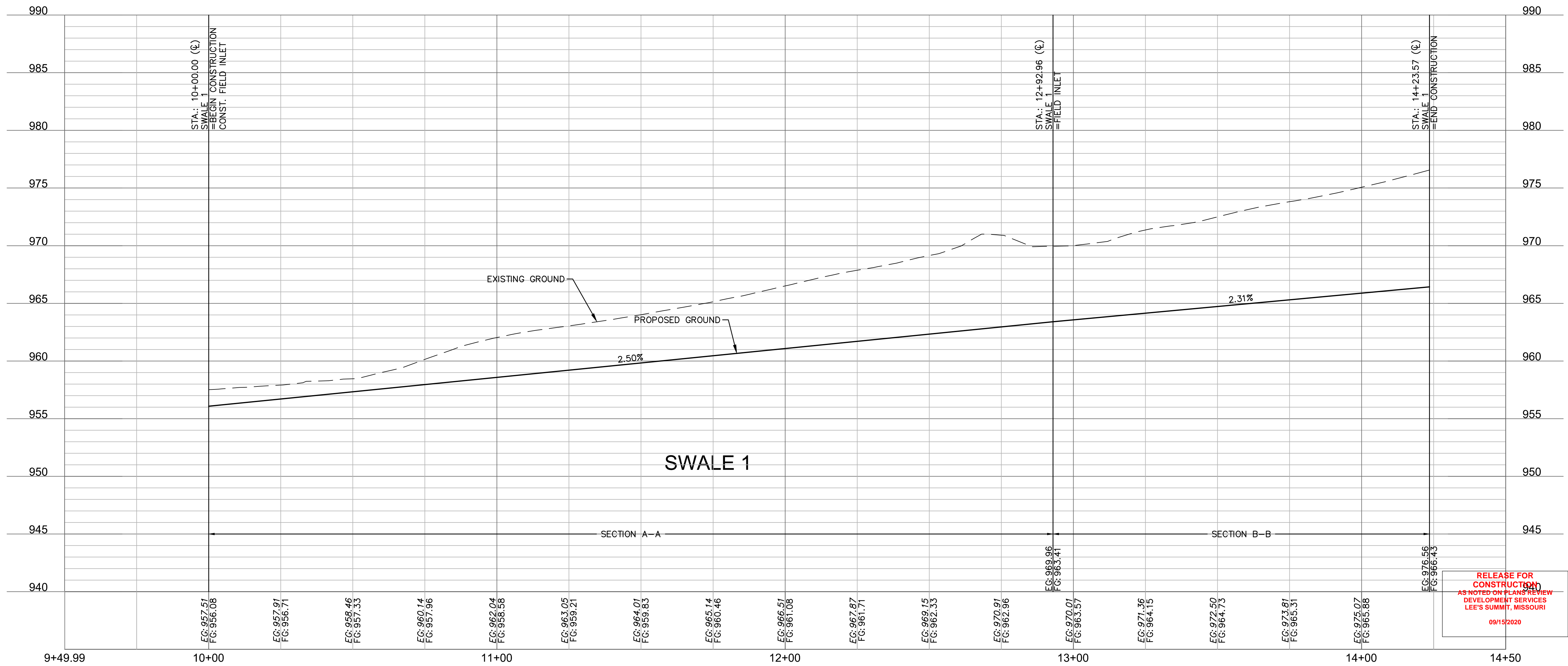
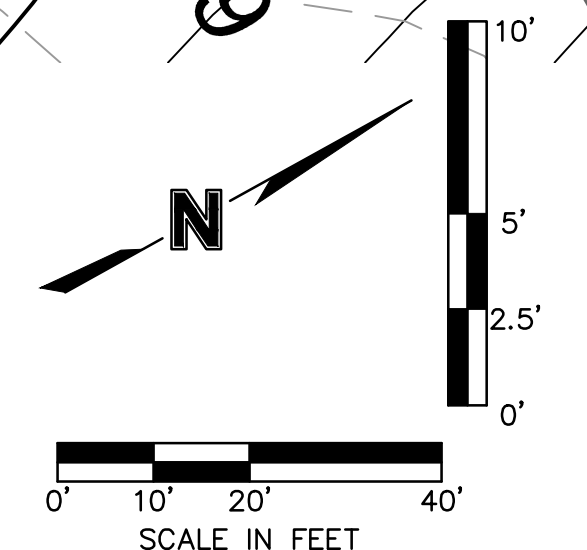
SHEET
C104

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\SW_01_0194061.dwg
 DATE: Jun 29, 2020 5:59pm
 XREFS: C:\PTBLK_0194061_34x22 C:\XBASE_0194061 C:\PBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061
 USER: nheiser



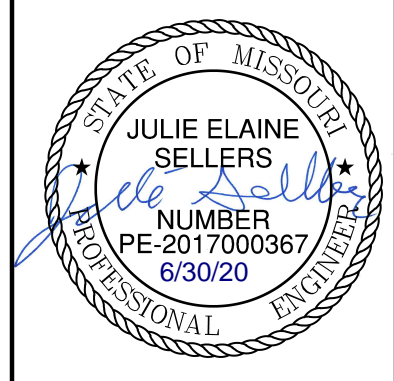
- SWALE GRADING NOTES:**
- CONTRACTOR SHALL CONSTRUCT SWALES WITH MINIMUM SLOPE, WIDTH AND DEPTH AS SHOWN IN THE SWALE DESIGN TABLES.
 - AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES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

SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION DATA							RESULTS							
SECTION	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft ²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft ²)
A-A	0.03	2.50%	1.41	3:1	3:1	5	9.28	0.41	2.55	3.63	7.59	7.46	0.62	0.525
B-B	0.03	2.50%	1.34	3:1	3:1	5	6.84	0.34	2.05	3.34	7.15	7.04	0.51	0.447



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com

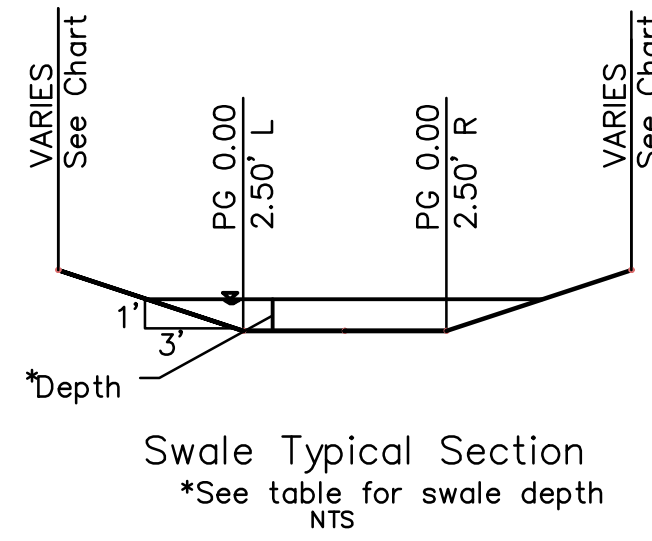


REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

SWALE 1 PLAN & PROFILE
STREET AND STORM SEWER PLANS
HOOK FARMS
FIRST PLAT
 LEE'S SUMMIT, MO
 2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\SW_01_0194061.dwg
 DATE: Jun 29, 2020 5:59pm
 XREFS: C:\PTBLK_0194061_34x22 C:\PBNY_0194061 C:\XBASE_0194061 C:\PBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061

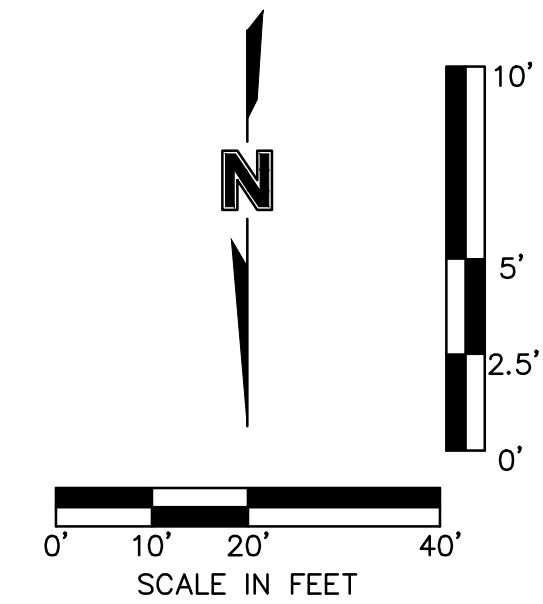
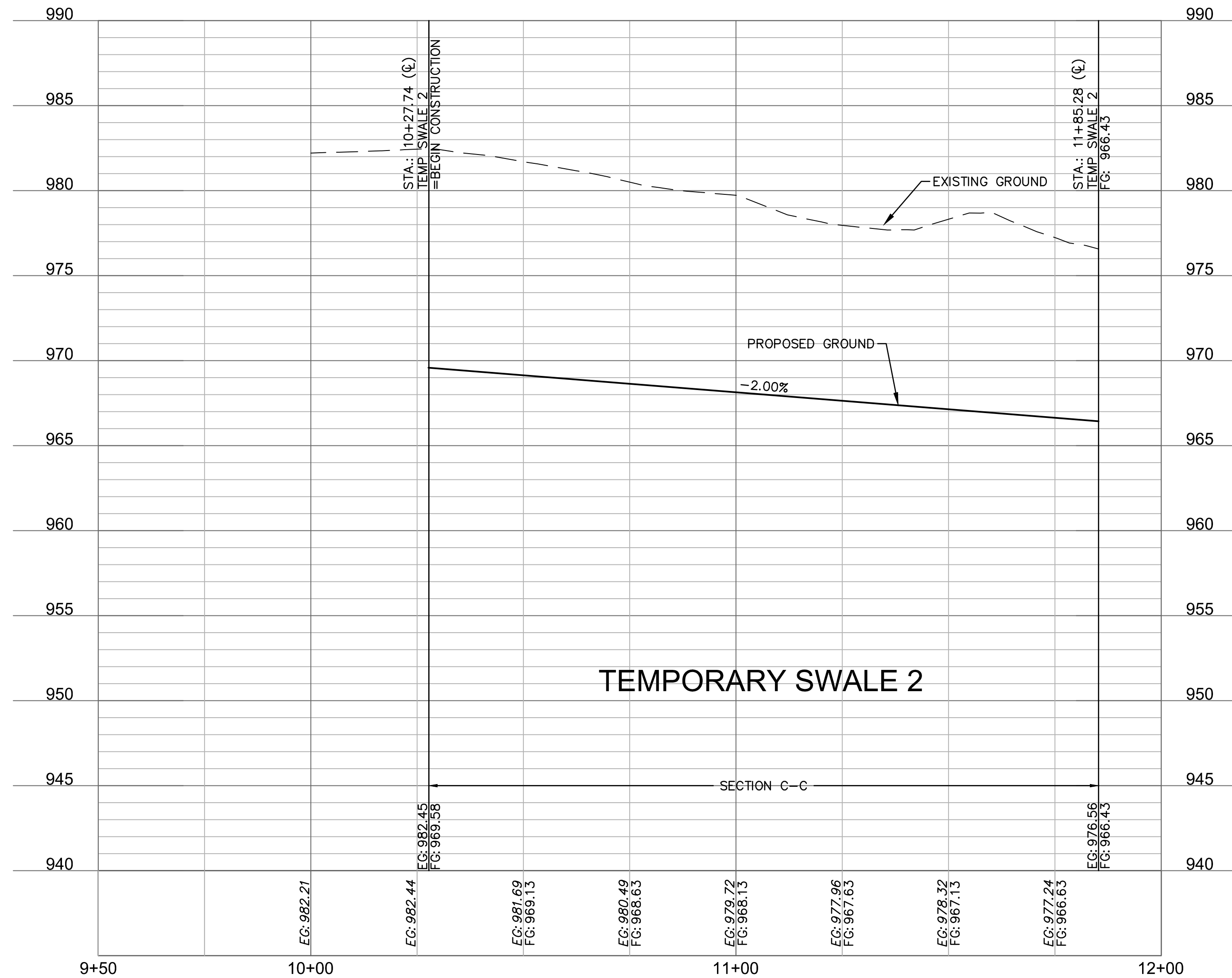
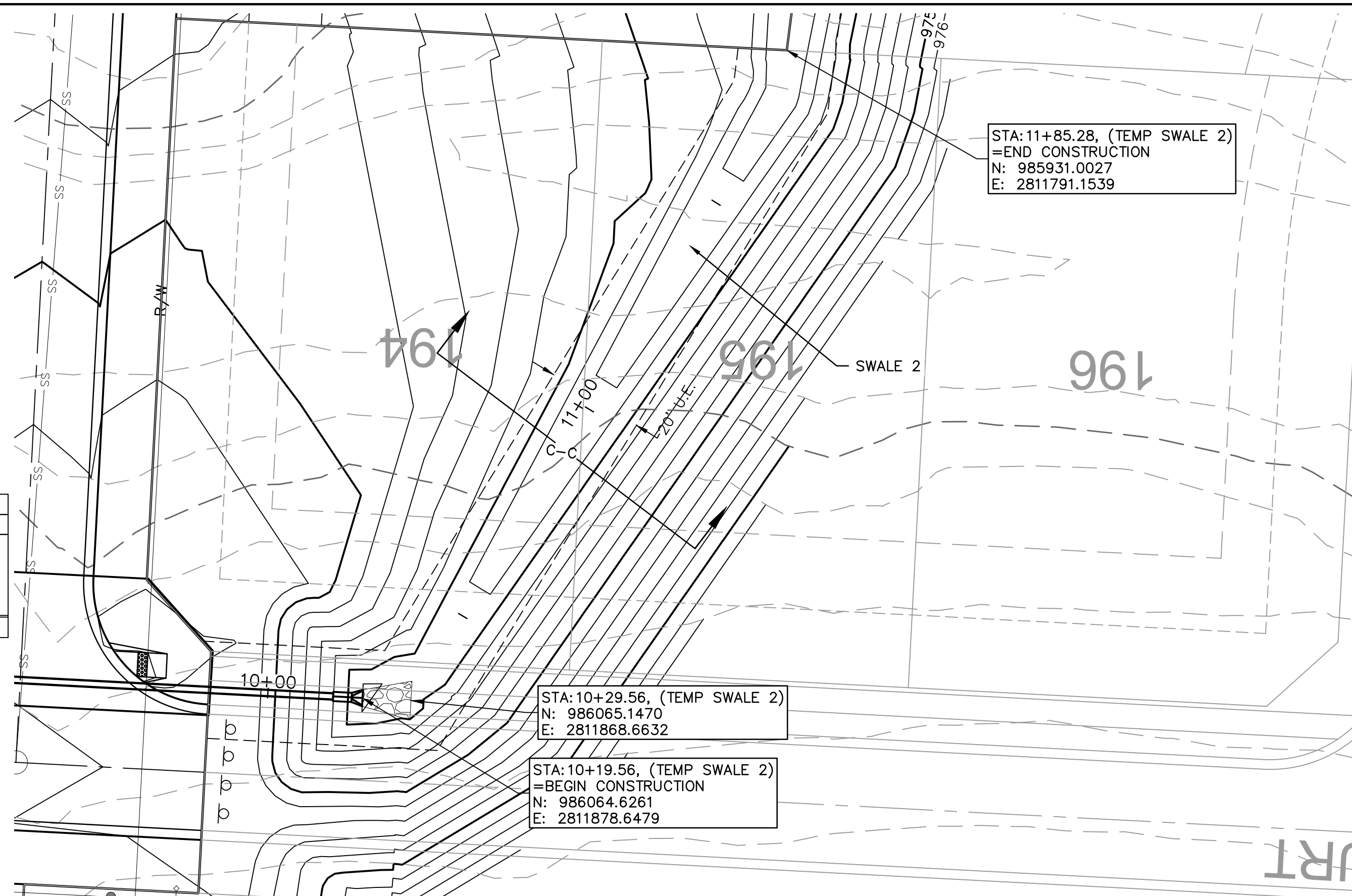


SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)

SECTION DATA							RESULTS							
SECTION	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft ²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft ²)
C-C	0.03	2.00%	1.23	3:1	3:1	5	19.60	0.23	1.31	2.28	6.45	6.38	0.31	0.253

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.



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com

STATE OF MISSOURI
 JULIE ELAINE SELLERS
 PROFESSIONAL ENGINEER
 NUMBER PE-2017000367
 6/30/20

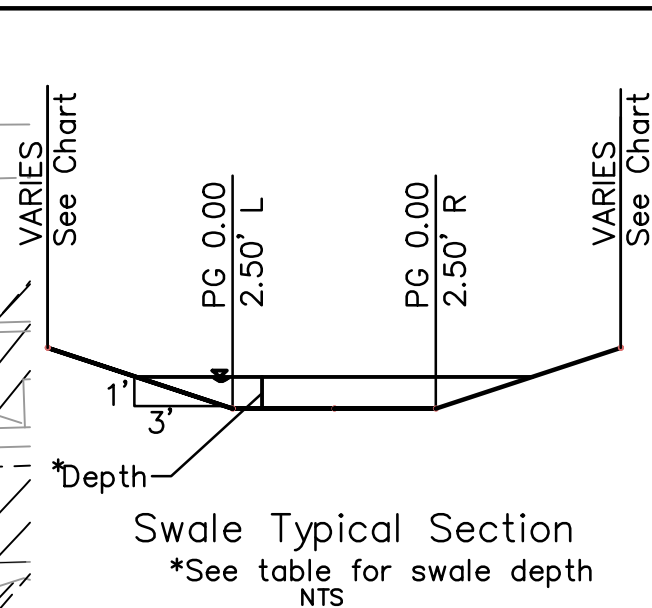
REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

SWALE 2 PLAN & PROFILE
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST PLAT
 LEE'S SUMMIT, MO
 2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

SHEET C106

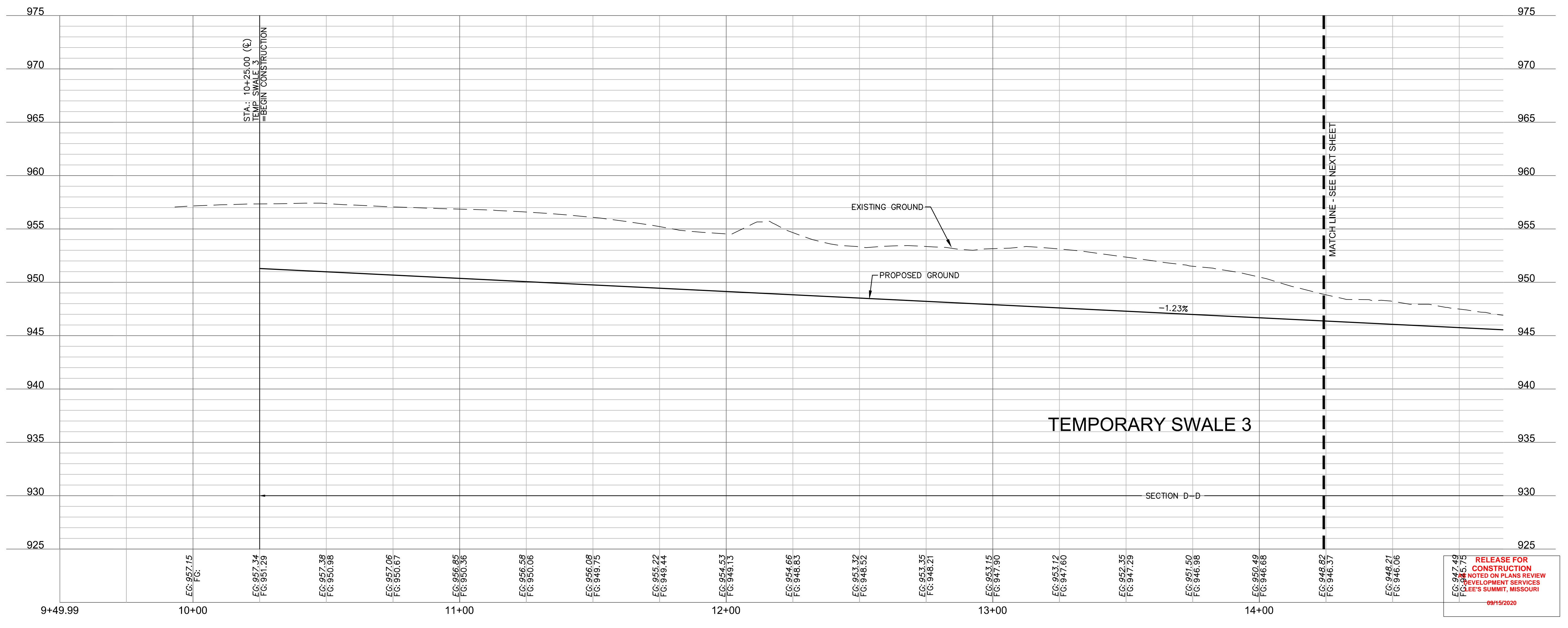
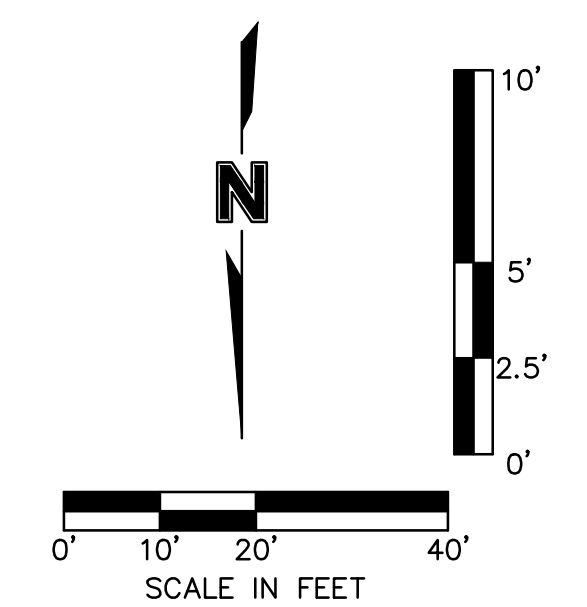
DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\SW_01_0194061.dwg
 DATE: Jun 29, 2020 5:59pm
 XREFS: C:\PTBLK_0194061_34x22 C:\PBNDRY_0194061 C:\XBASE_0194061 C:\PBASE_0194061 C:\PUTIL_0194061
 USER: nheiser



SECTION	SECTION DATA							RESULTS						
	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft ²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft ²)
D-D	0.03	1.23%	2.03	3:1	3:1	5	36.35	1.03	8.33	4.36	11.51	11.18	1.33	0.556

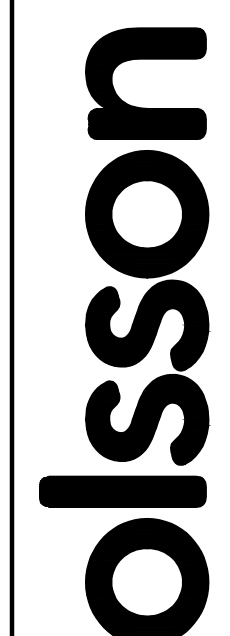
SWALE GRADING NOTES:

- 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.

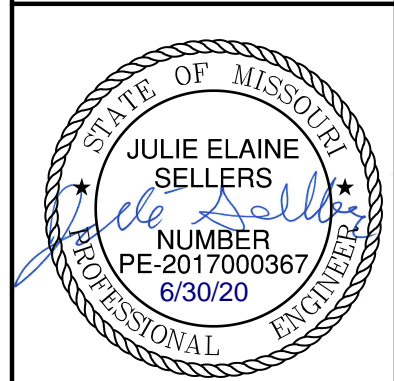


CGW
 JES
 NDH
 JES
 019-4061
 04/20/2020

RELEASE FOR CONSTRUCTION
 NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS

SWALE 3 PLAN & PROFILE
 STREET AND STORM SEWER PLANS

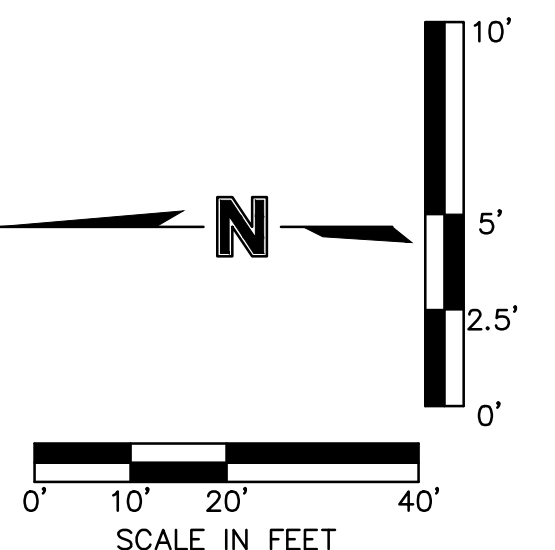
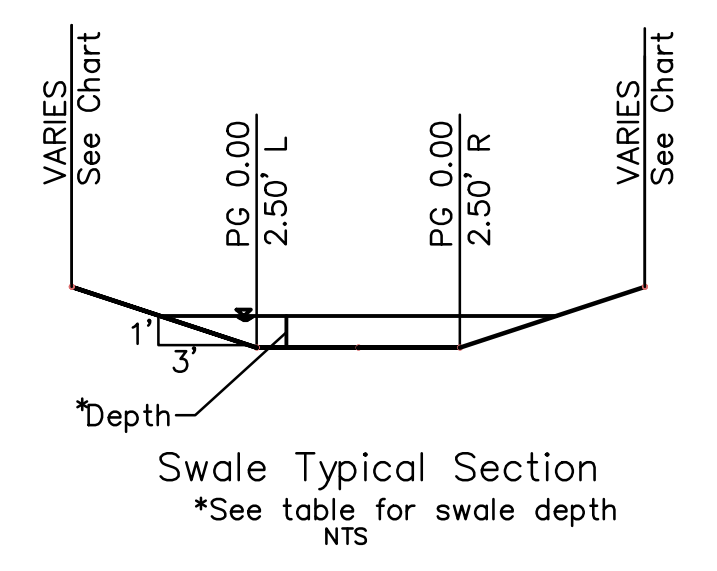
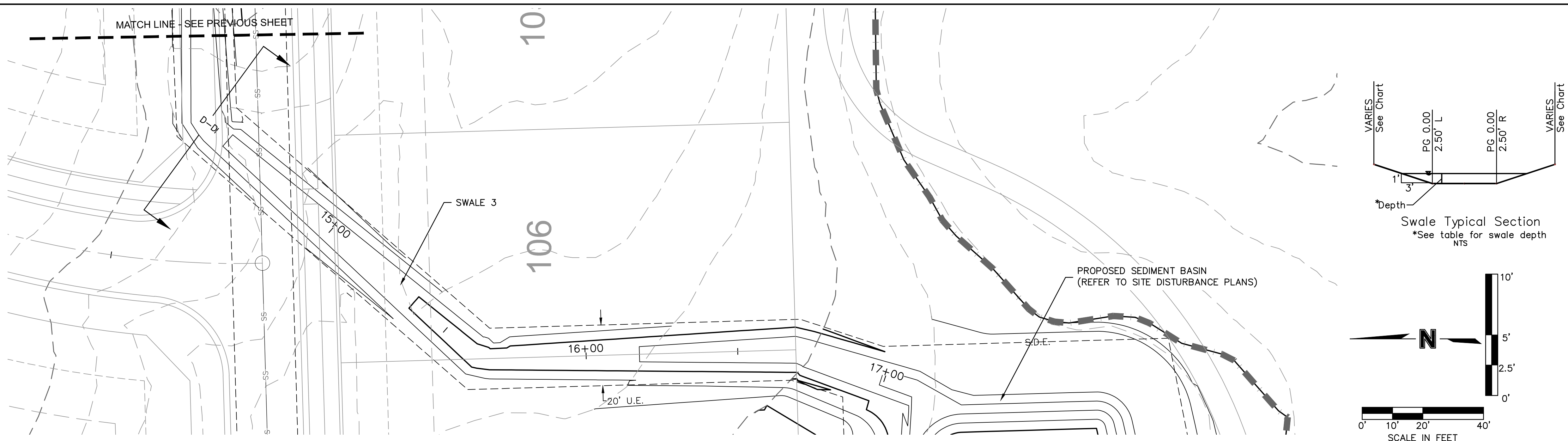
HOOK FARMS
 FIRST PLAT

LEE'S SUMMIT, MO

2020

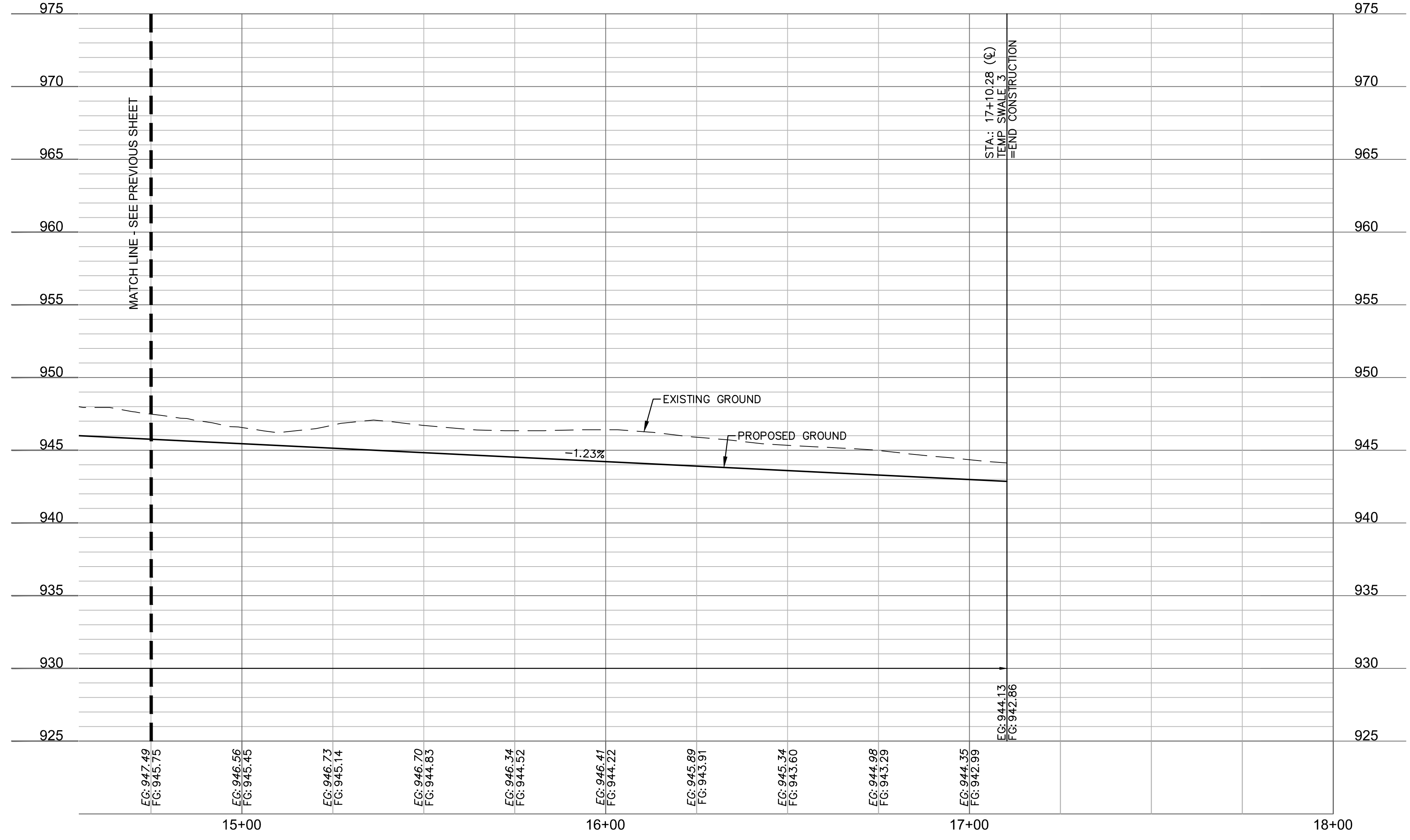
REVISIONS

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\SW_01_0194061.dwg USER: nheiser
 DATE: Jun 29, 2020 5:59pm XREFS: C:\PTBLK_0194061_34x22 C:\XBASE_0194061 C:\PBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061

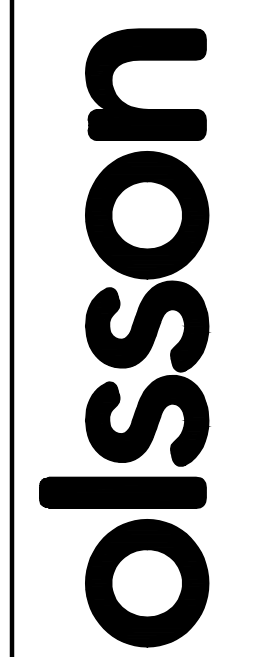


SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION DATA								RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft ²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft ²)
D-D	0.03	1.23%	2.03	3:1	3:1	5	36.35	1.03	8.33	4.36	11.51	11.18	1.33	0.556


- 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.



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

SWALE 3 PLAN & PROFILE CONT'D
 STREET AND STORM SEWER PLANS

HOOK FARMS
 FIRST PLAT

LEE'S SUMMIT, MO

2020

REVISIONS

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020

SHEET
C108

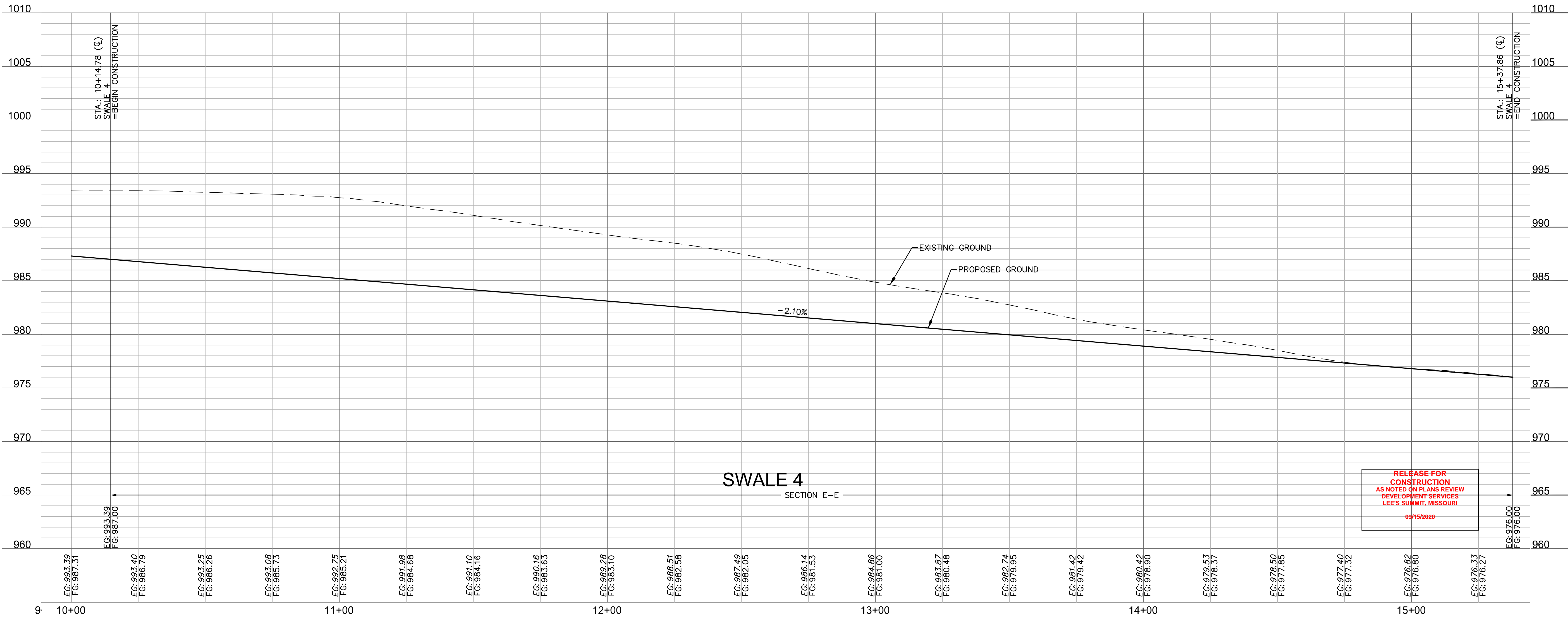
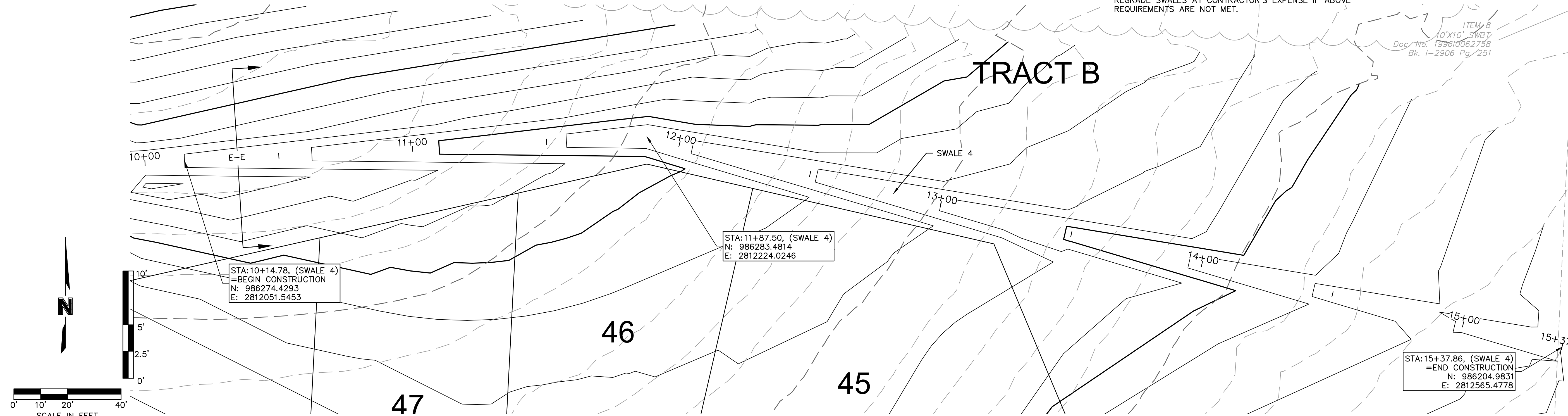
DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\SW01_0194061.dwg
 DATE: Jun 29, 2020 6:00pm
 XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\PBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061
 USER: nheiser

SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION DATA								RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Min. Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft ²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft ²)
E-E	0.03	2.10%	1.39	3:1	3:1	5	7.99	0.39	2.41	3.32	7.47	7.34	0.56	0.422

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.

ITEM 8
 10'X10' SWBY
 Doc No. 199610062758
 Bk. 1-2906 Pg. 251



olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com

STATE OF MISSOURI
 JULIE ELAINE SELLERS
 PROFESSIONAL ENGINEER
 NUMBER PE-2017000367
 6/30/20

REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS

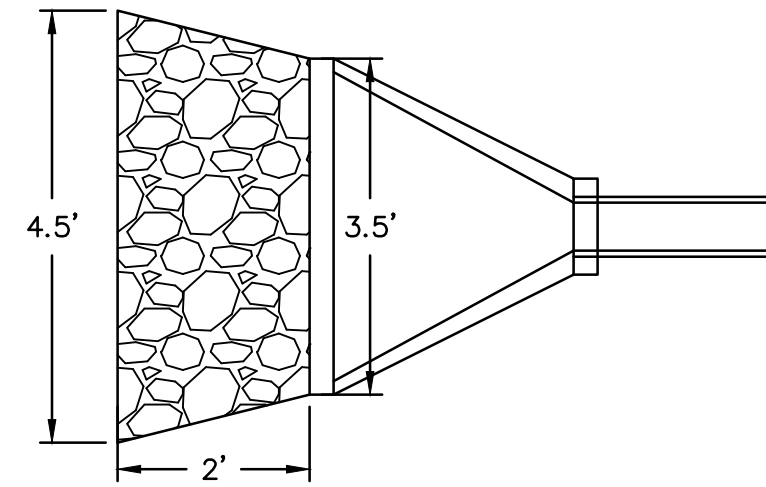
SWALE 4 PLAN & PROFILE
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST FLAT
 LEE'S SUMMIT, MO
 2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

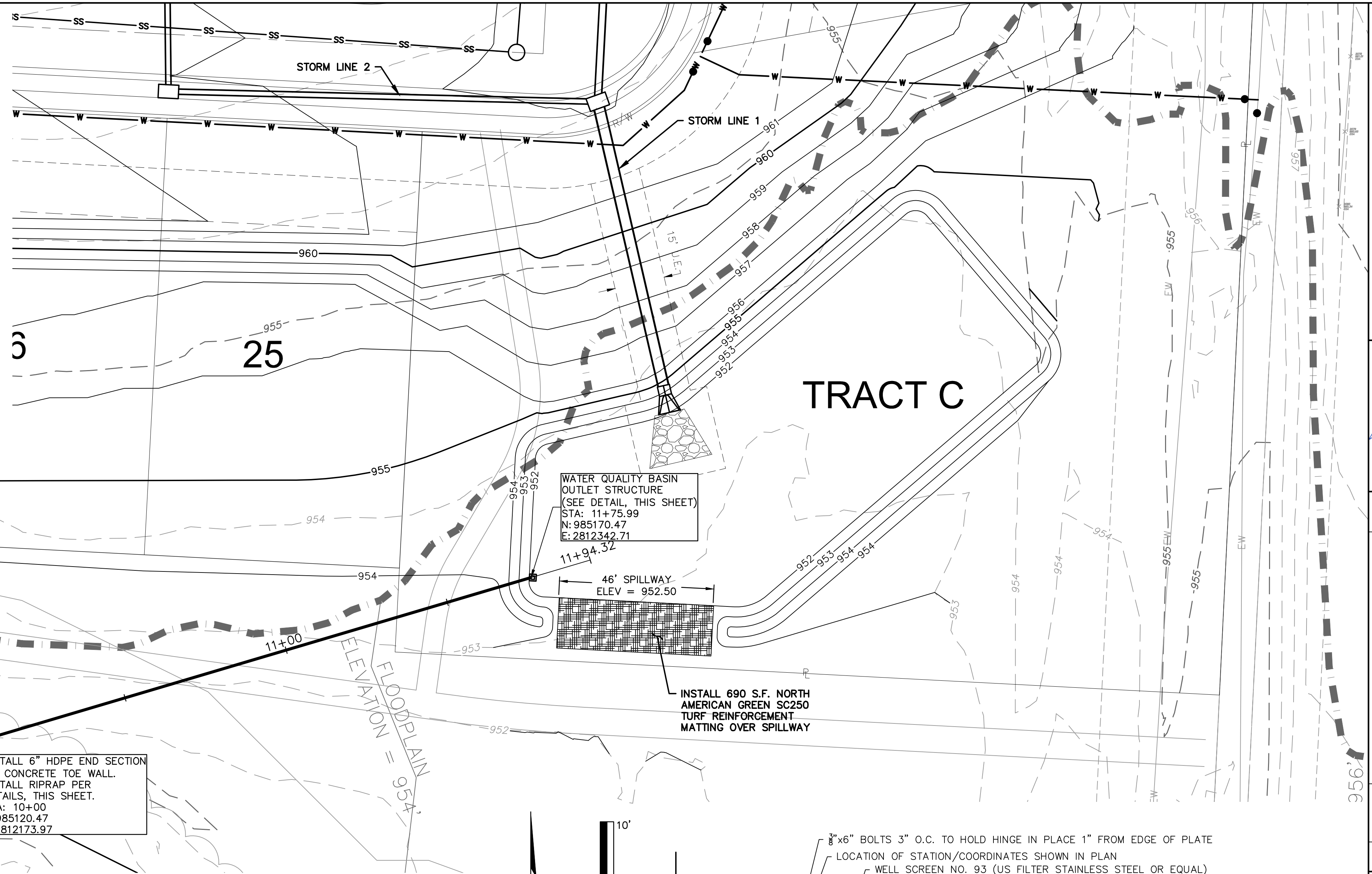
DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\VC_DBP01_0194061.dwg
 DATE: Jun 29, 2020 6:00pm
 XREFS: C:\PTBLK_0194061_34x22 C:\XBASE_0194061 C:\PBNDY_0194061 C:\PBASE_0194061 USER: rneiser
 C:\PUTIL_0194061

Riprap Calculations							
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
WQv Outlet	0.93	0.5	1	5	2	1.46	0.5

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



Scale: 1"=2'
 02 RIPRAP OUTLET PROTECTION



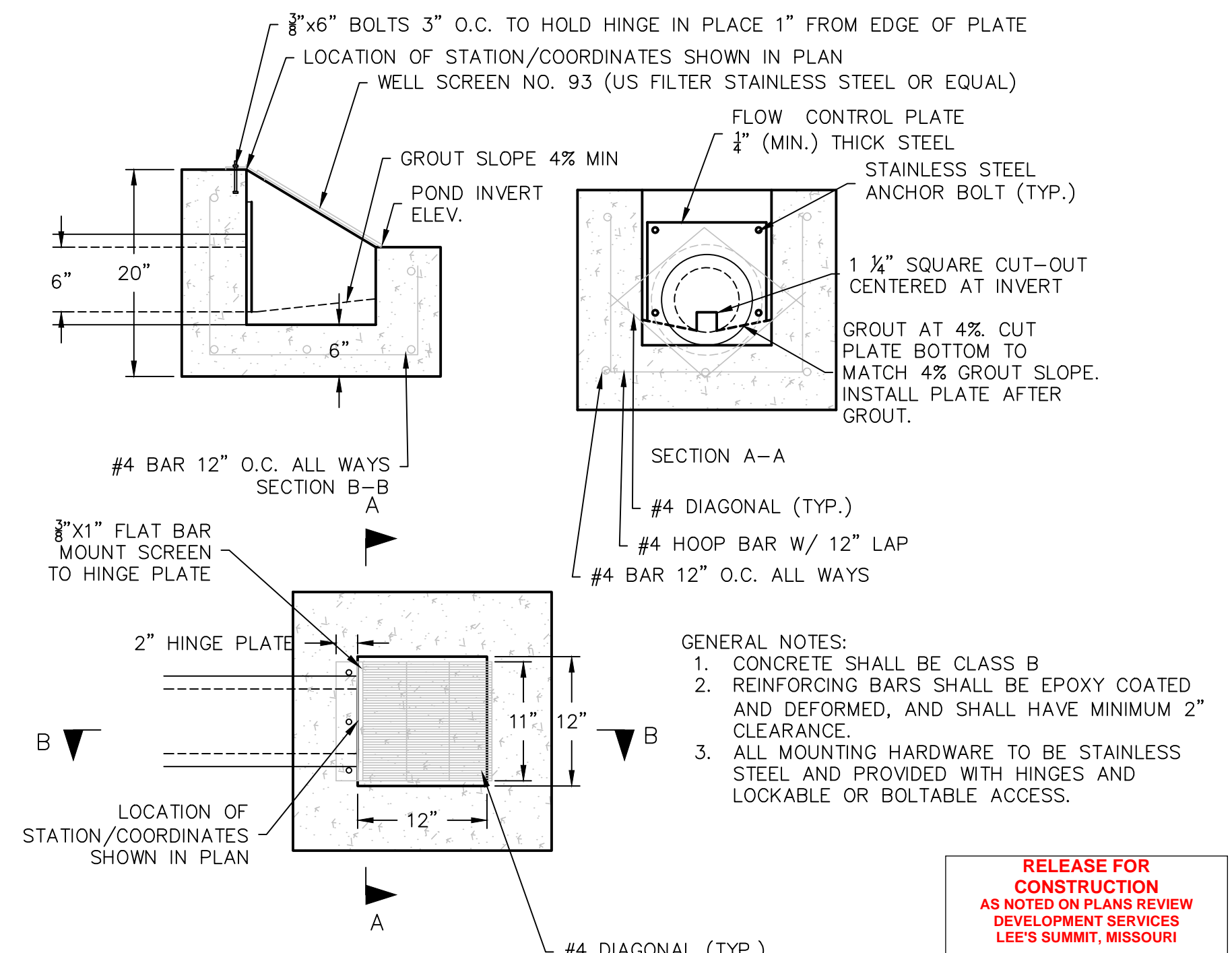
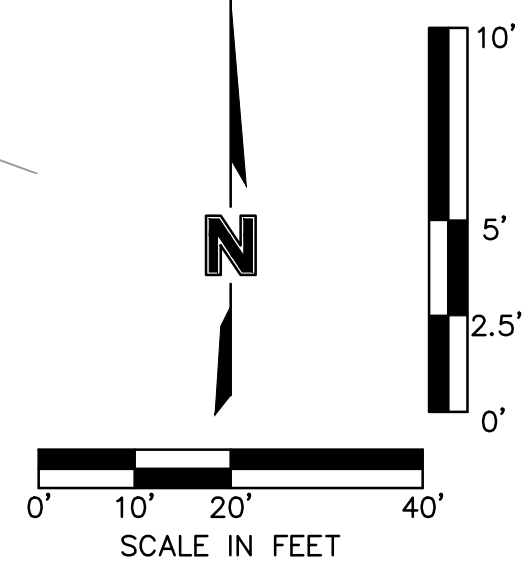
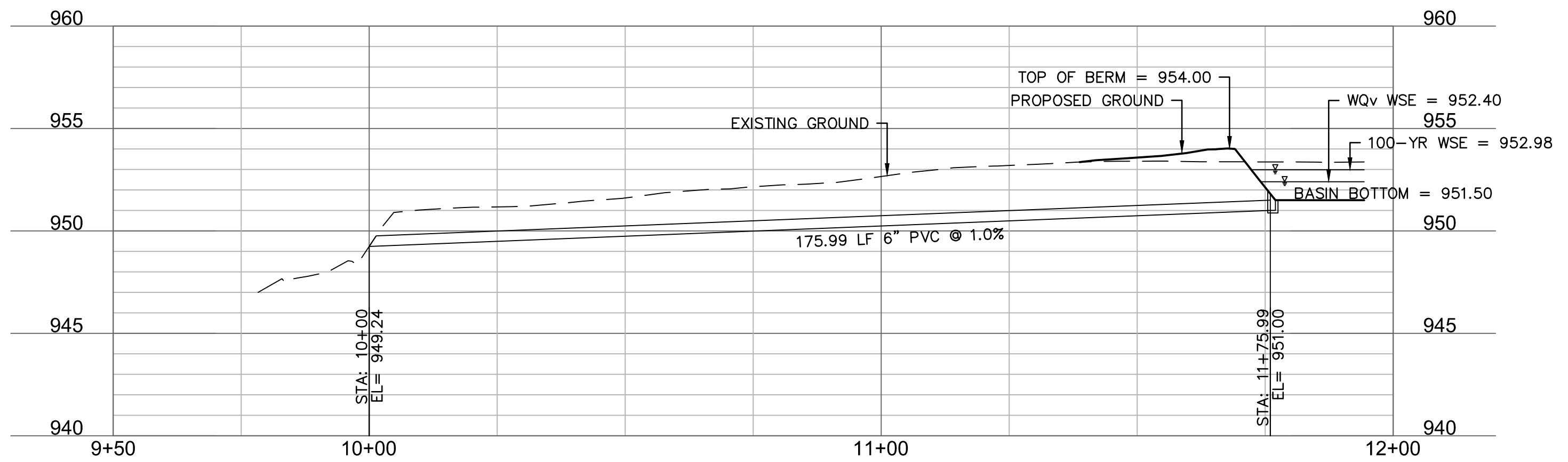
INSTALL 6" HDPE END SECTION
 W/ CONCRETE TOE WALL.
 INSTALL RIPRAP PER
 DETAILS, THIS SHEET.
 STA: 10+00
 N: 985120.47
 E: 2812173.97

WATER QUALITY BASIN
 OUTLET STRUCTURE
 (SEE DETAIL, THIS SHEET)
 STA: 11+75.99
 N: 985170.47
 E: 2812342.71

46' SPILLWAY
 ELEV = 952.50

INSTALL 690 S.F. NORTH
 AMERICAN GREEN SC250
 TURF REINFORCEMENT
 MATTING OVER SPILLWAY

WATER QUALITY OUTLET (9+50 - 12+00)



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com





STATE OF MISSOURI
 JULIE ELAINE SELLERS
 PE-2017000367
 6/30/20
 PROFESSIONAL ENGINEER

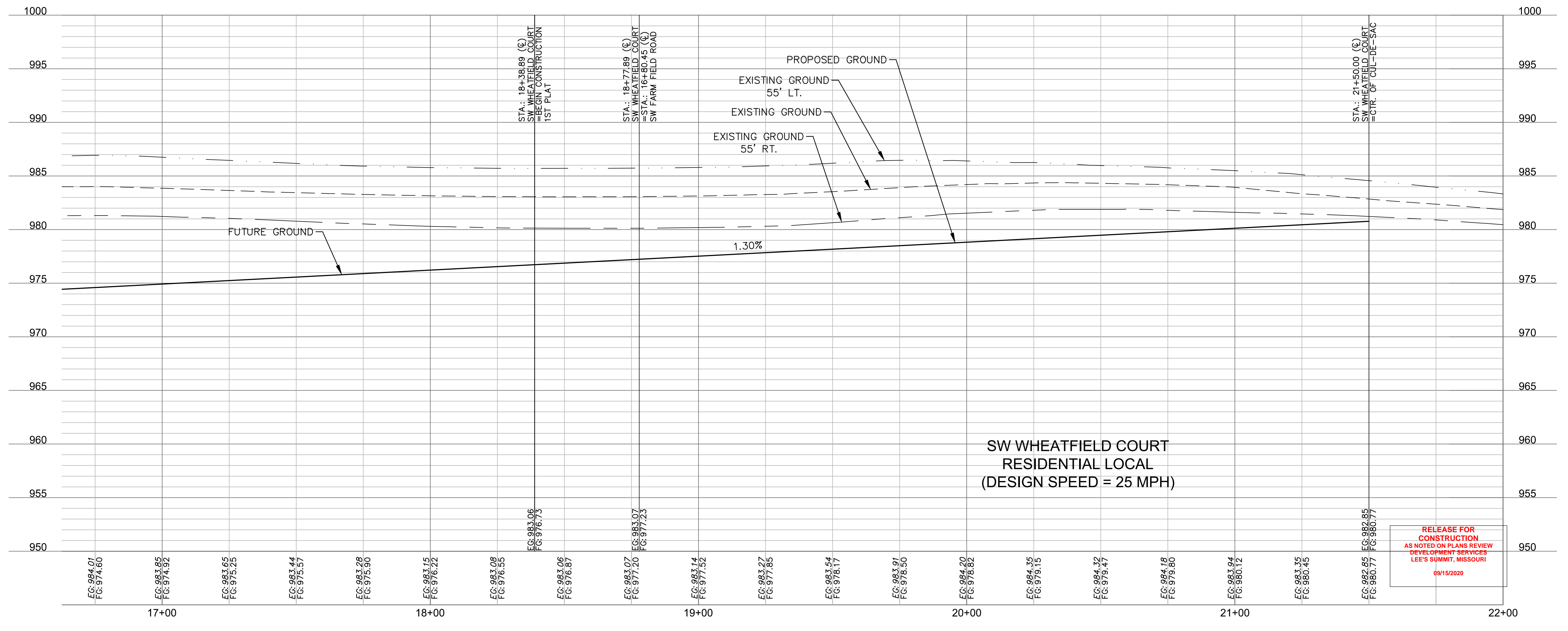
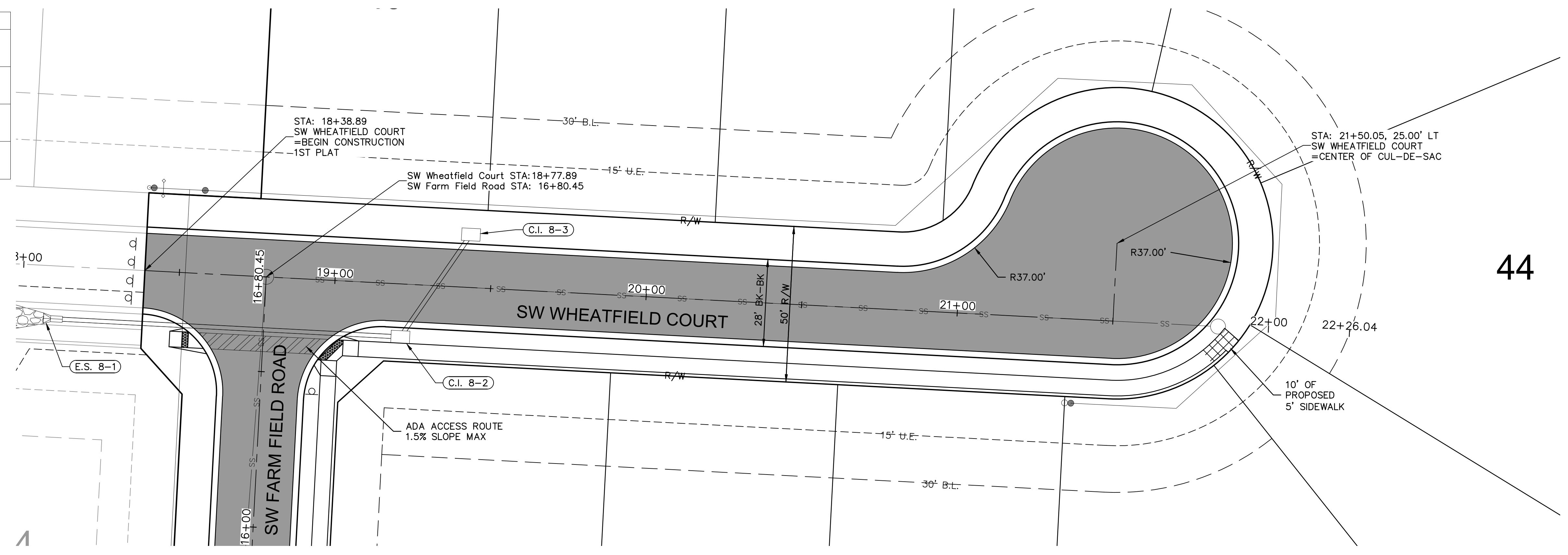
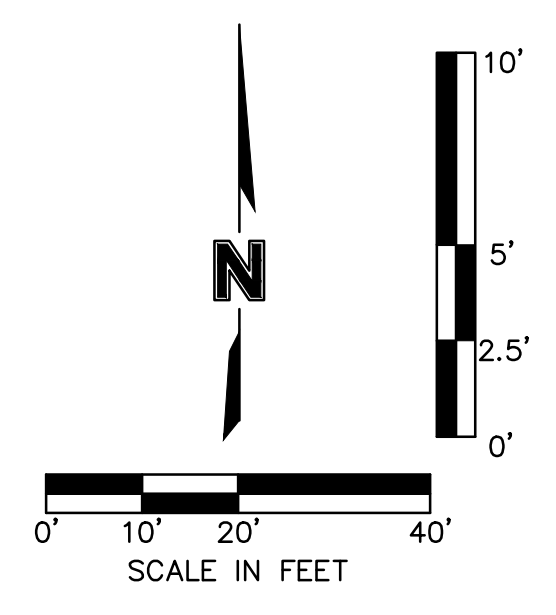
REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

WATER QUALITY BASIN PLAN
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST FLAT
 LEE'S SUMMIT, MO
 2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Storm Plans\CV\Street and Storm Plans\CV_RPP01_0194061.dwg
 DATE: Jun 29, 2020 6:34pm
 XREFS: C:\PTBLK_0194061_34x22 C:\PBNY_0194061 C:\PBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061 C:\PPATT_0194061 C:\PSTRM_0194061
 USER: rneiser

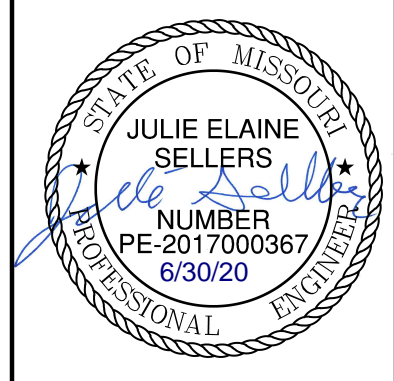
LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

44

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsosn.com

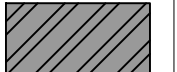




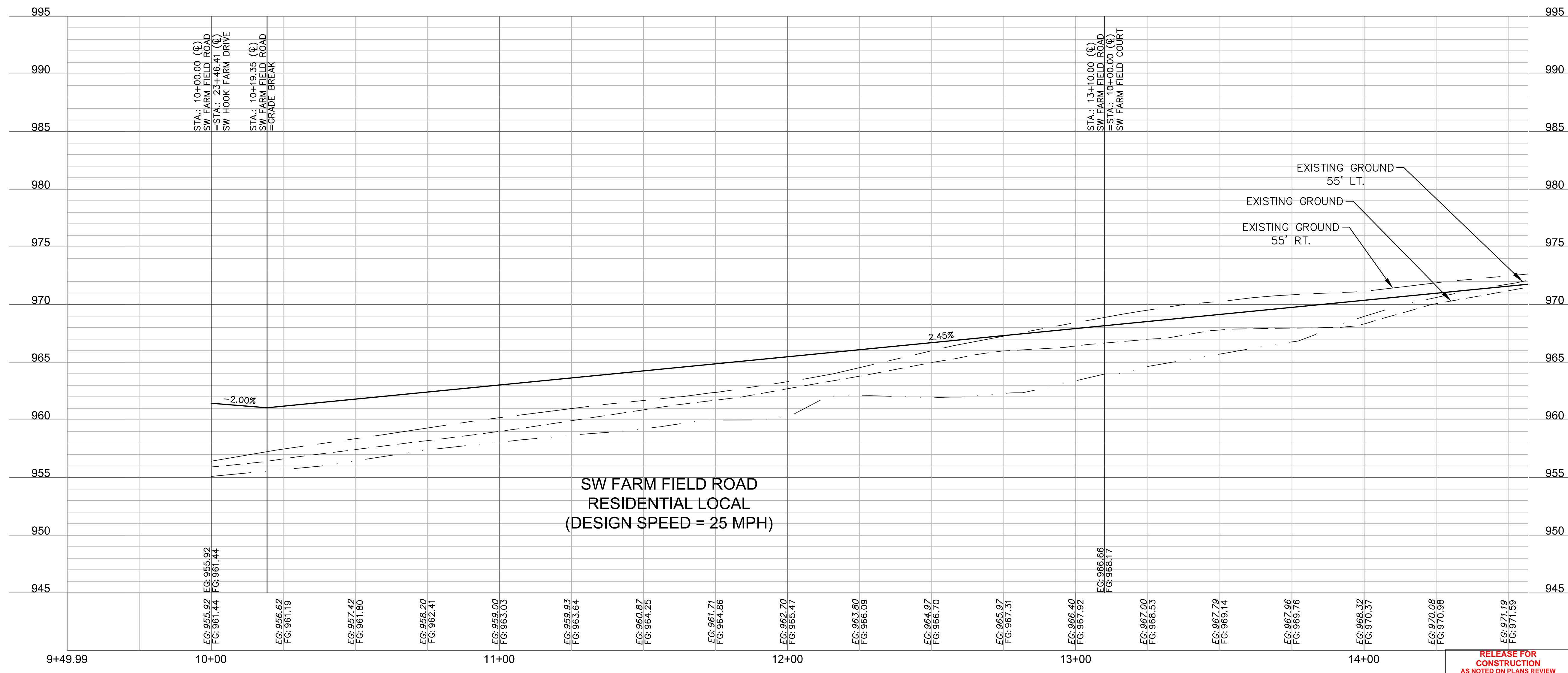
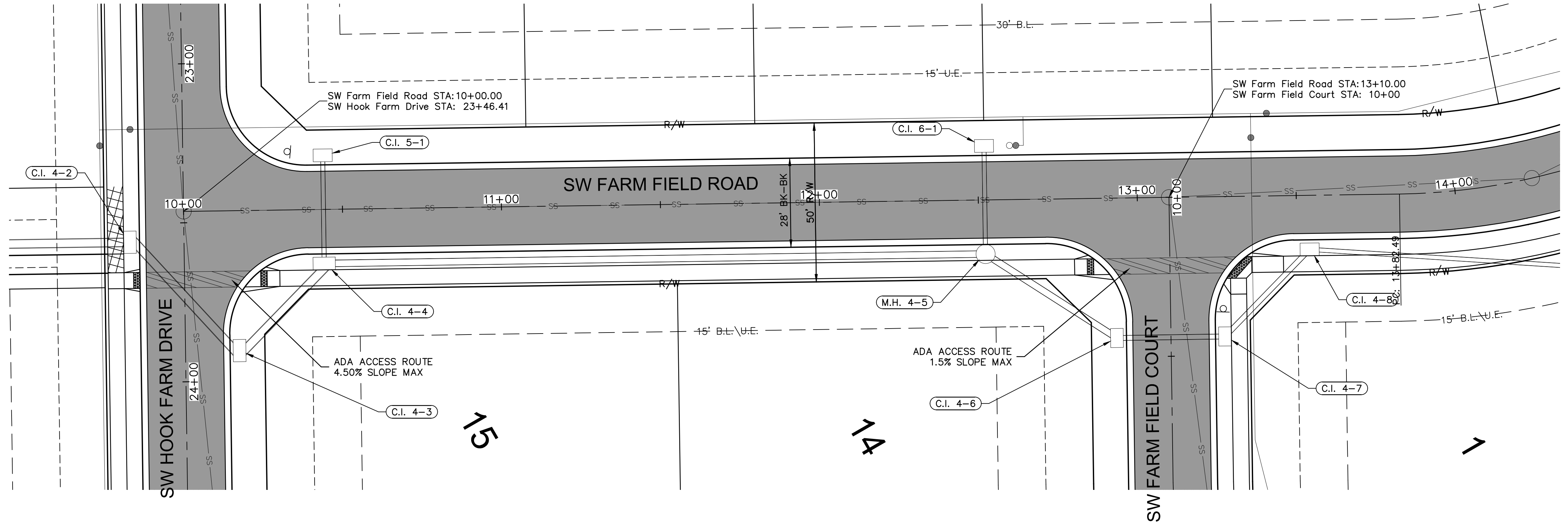
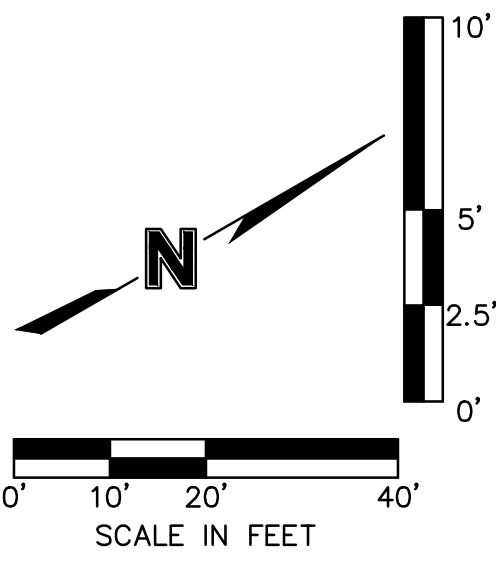
REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

ROADWAY PLAN & PROFILE (SW WHEATFIELD COURT) STREET AND STORM SEWER PLANS		BY
HOOK FARMS FIRST PLAT		
LEE'S SUMMIT, MO		2020
drawn by:	CGW	
checked by:	JES	
approved by:	NDH	
QA/QC by:	JES	
project no.:	019-4061	
drawing no.:		
date:	04/20/2020	

SHEET
C111

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Sheets\GNCV\Street and Storm Plans\VC_RPP01_0194061.dwg
 DATE: Jun 29, 2020 6:34pm XREFS: C:\PTBLK_0194061_34x22 C:\PBNDRY_0194061 C:\XBASE_0194061 C:\FBASE_0194061 C:\PUTIL_0194061 C:\PPATT_0194061 C:\PSTRM_0194061
 USER: rneiser

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER



RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/15/2020

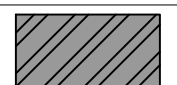

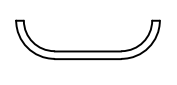
Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com

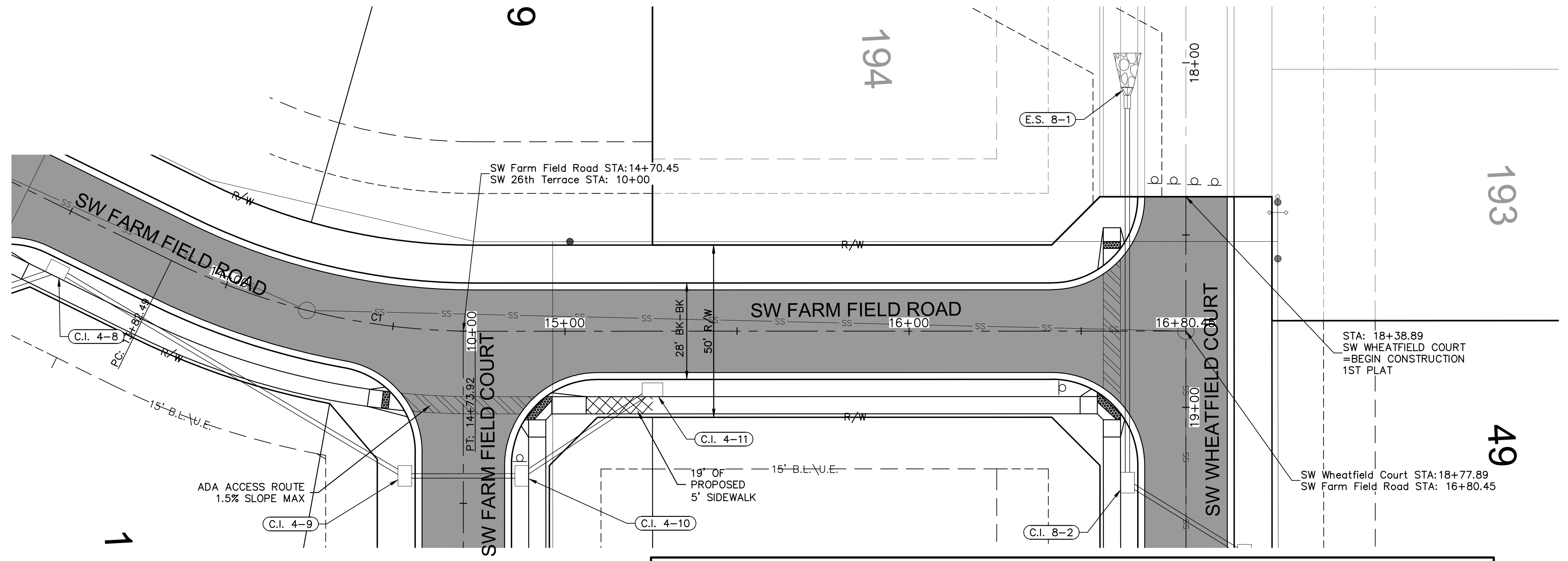
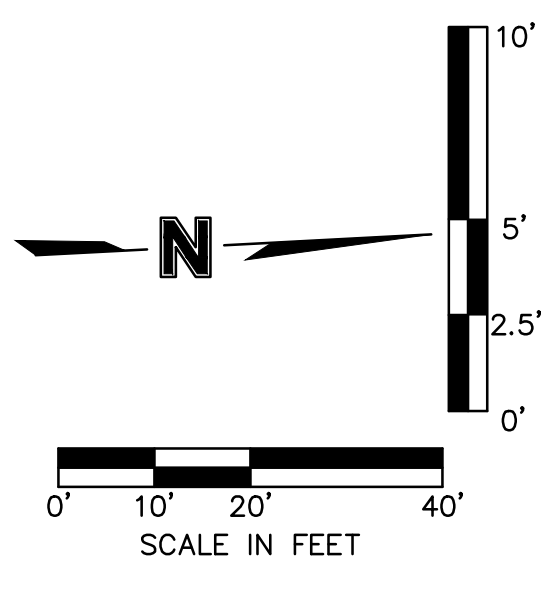
REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

ROADWAY PLAN & PROFILE (SW FARM FIELD ROAD) STREET AND STORM SEWER PLANS	BY
HOOK FARMS FIRST FLAT	
LEE'S SUMMIT, MO	2020

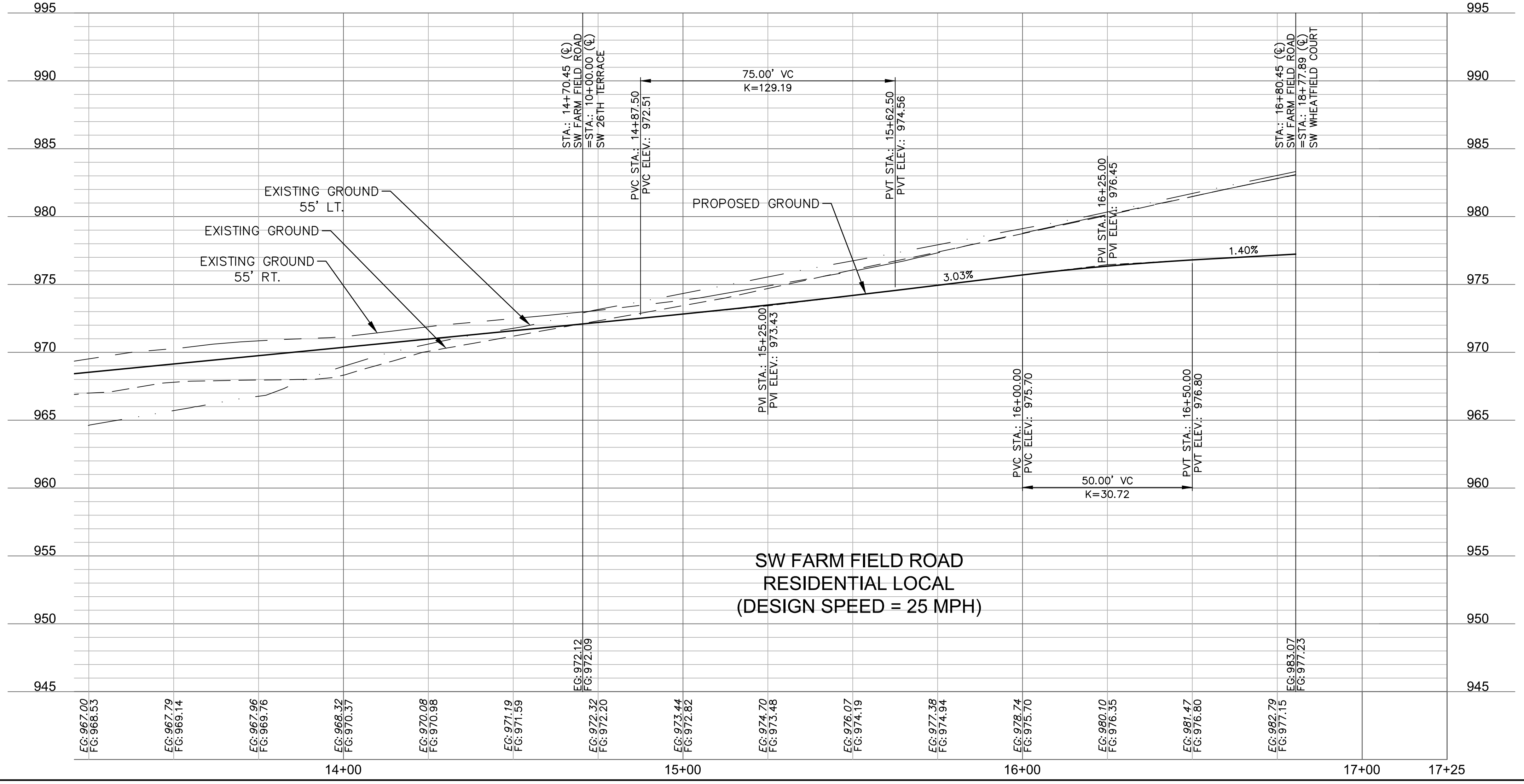
SHEET
C112

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\VC_RPP01_0194061.dwg USER: nheiser
 DATE: Jun 29, 2020 6:34pm XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\XBASE_0194061 C:\FBASE_0194061 C:\PUTIL_0194061 C:\PPATT_0194061 C:\PSTRM_0194061

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER



ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	TANGENT	P.I. STATION (BACK)
C1	13+82.49 14+73.92	N: 985784.58 E: 2811914.27	N: 985871.67 E: 2811939.38	200.00	91.43	026°11'37"	46.53	14+27.39



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com

STATE OF MISSOURI
 JULIE ELAINE SELLERS
Julie Sellers
 NUMBER PE-2017000367
 6/30/20
 PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

ROADWAY PLAN & PROFILE (SW FARM FIELD ROAD)
 STREET AND STORM SEWER PLANS

HOOK FARMS
 FIRST PLAT

LEE'S SUMMIT, MO

2020

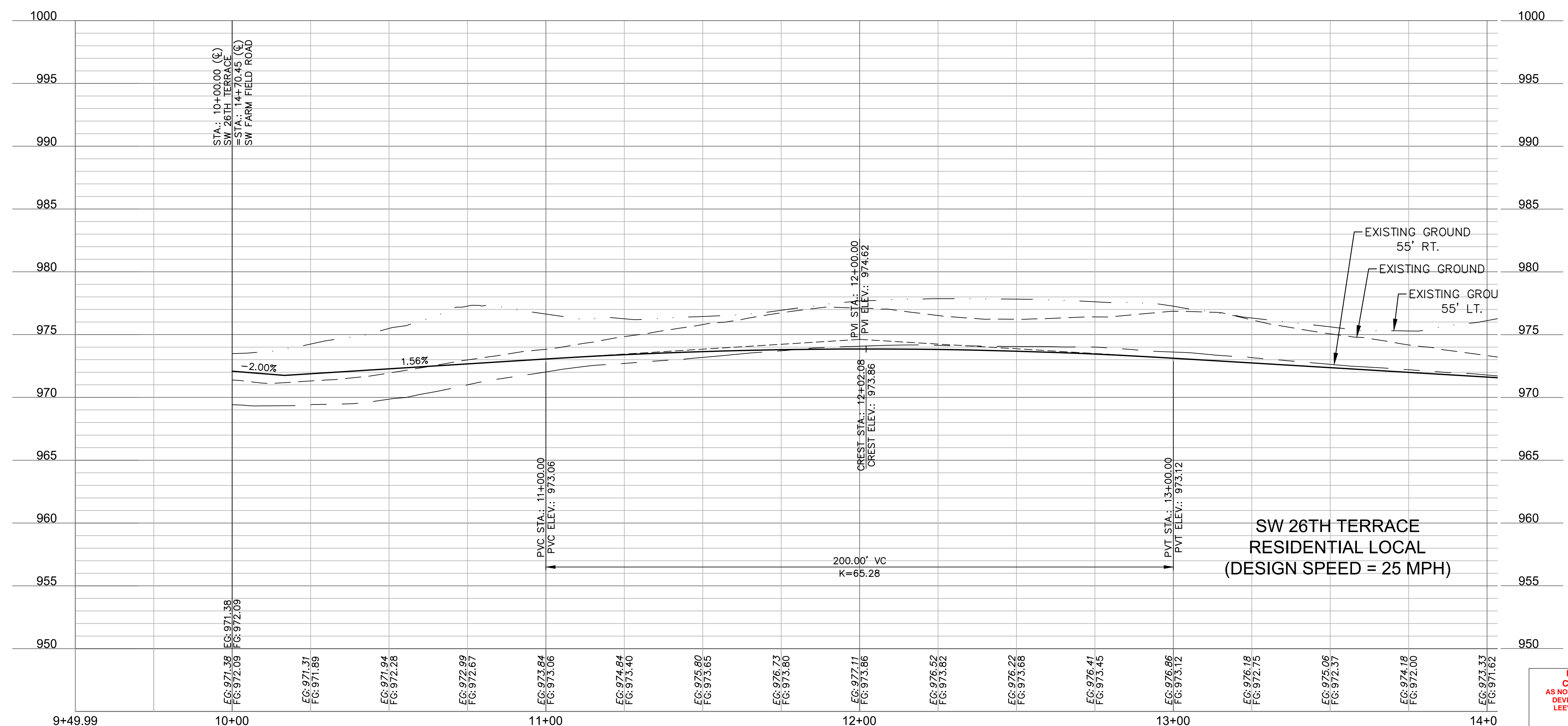
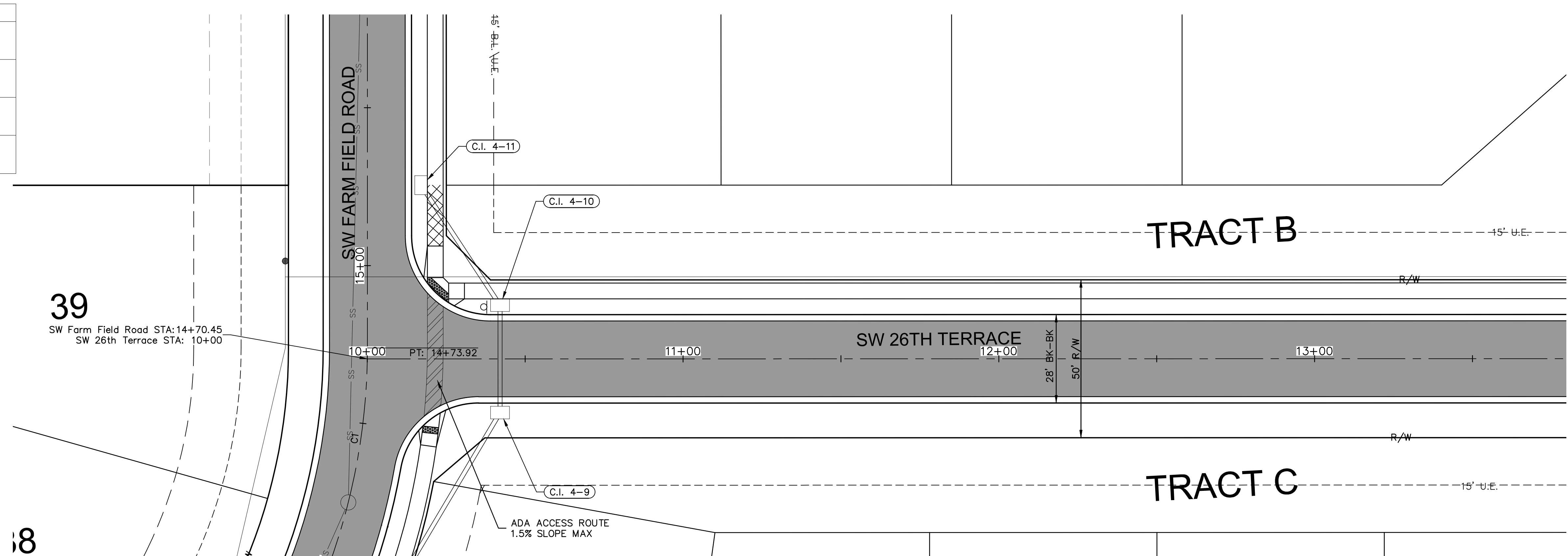
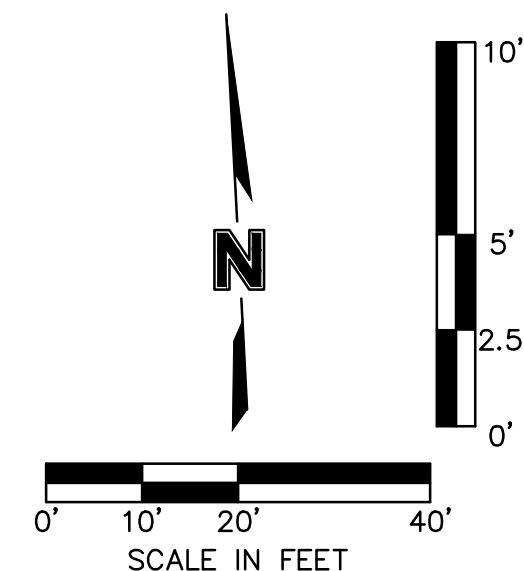
REVISIONS

drawn by:	CGW	checked by:	JES
approved by:	NDH	QA/QC by:	JES
project no.:	019-4061	drawing no.:	
date:	04/20/2020		

SHEET C113

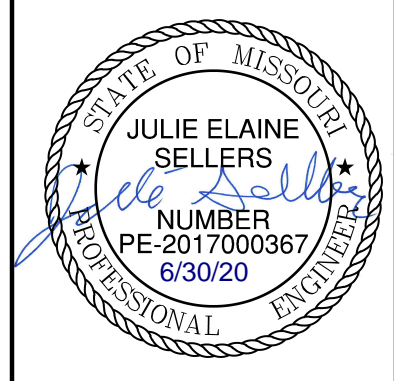
DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Storm Plans\VC_RPP01_0194061.dwg USER: rneiser
 DATE: Jun 29, 2020 6:34pm XREFS: C:\PTBLK_0194061_34x22 C:\PBN DY_0194061 C:\XBASE_0194061 C:\FBASE_0194061 C:\PSURF_0194061 C:_PUTIL_0194061 C:_PPATT_0194061 C:_PSTRM_0194061

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com



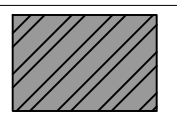

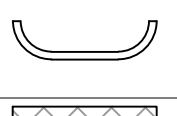
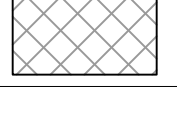
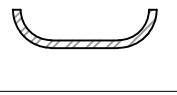
REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

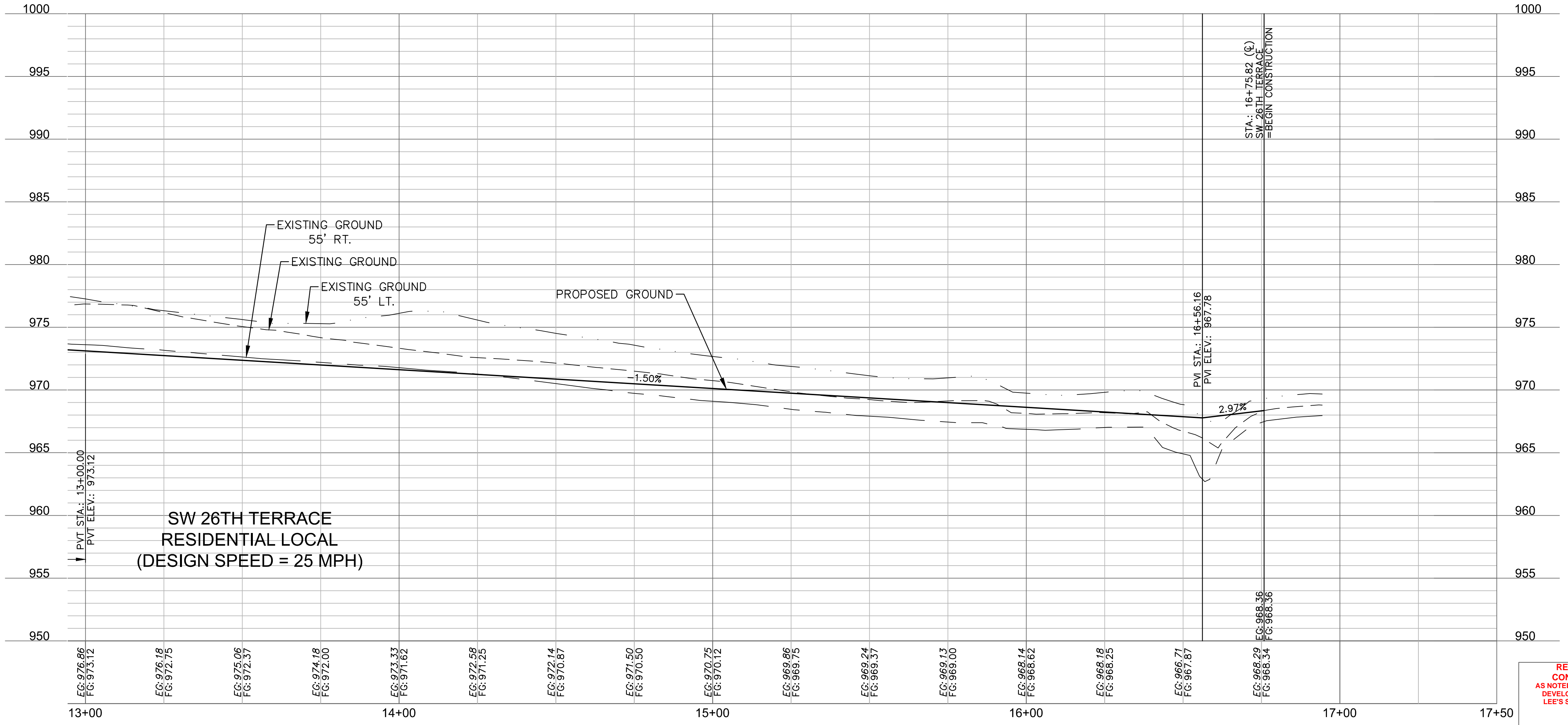
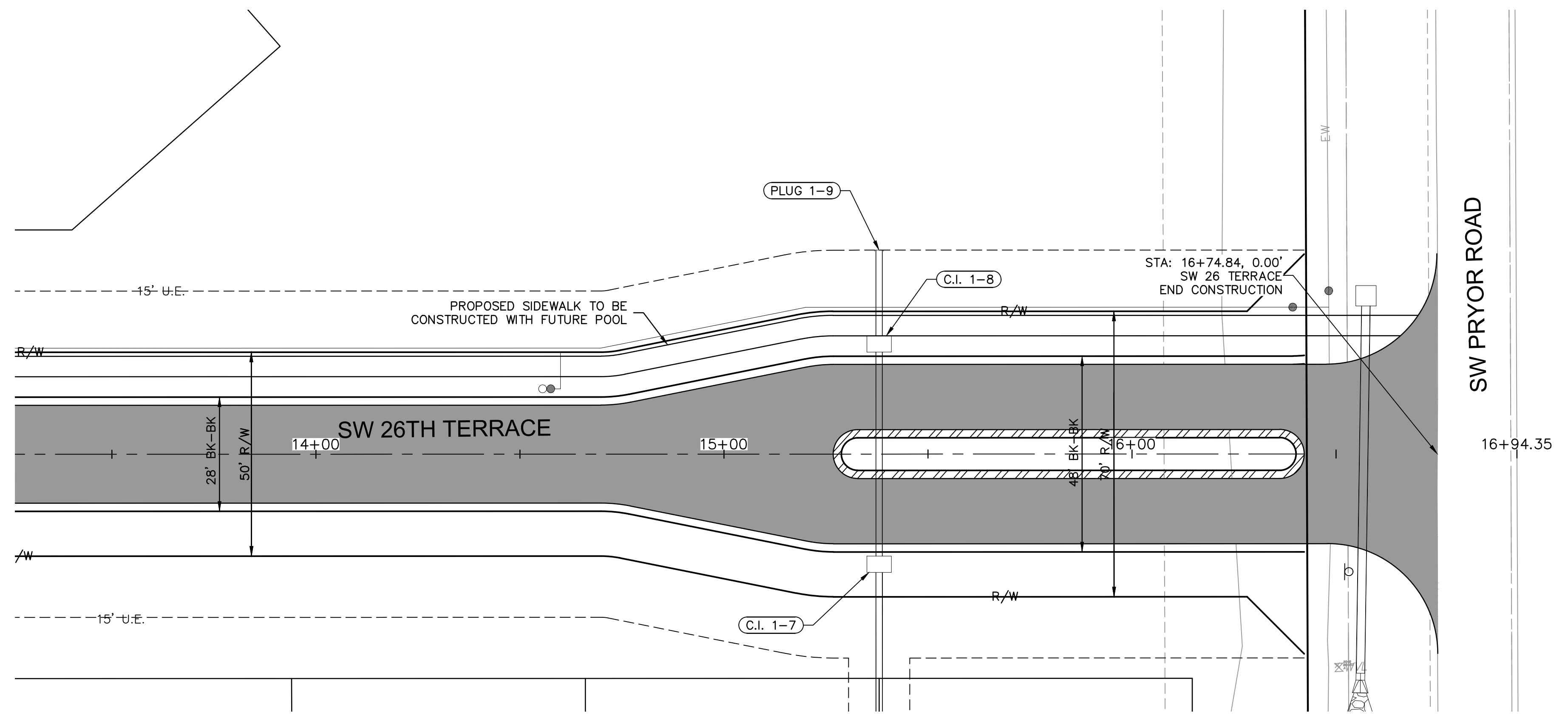
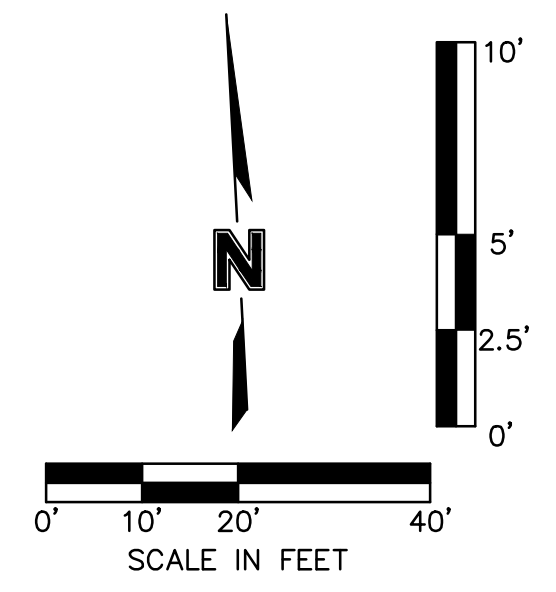
ROADWAY PLAN & PROFILE (SW 26TH TERRACE)
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST FLAT
 LEE'S SUMMIT, MO
 2020

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020

SHEET
 C114

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Storm Plans\VC_RPP01_0194061.dwg USER: nheiser
 DATE: Jun 29, 2020 6:34pm XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\XBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061 C:\PPATT_0194061 C:\PSTRM_0194061

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK
	CG-1 CURB & GUTTER



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsosn.com

STATE OF MISSOURI
 JULIE ELAINE SELLERS
Julie Sellers
 NUMBER PE-2017000367
 6/30/20
 PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

ROADWAY PLAN & PROFILE (SW 26TH TERRACE)
 STREET AND STORM SEWER PLANS

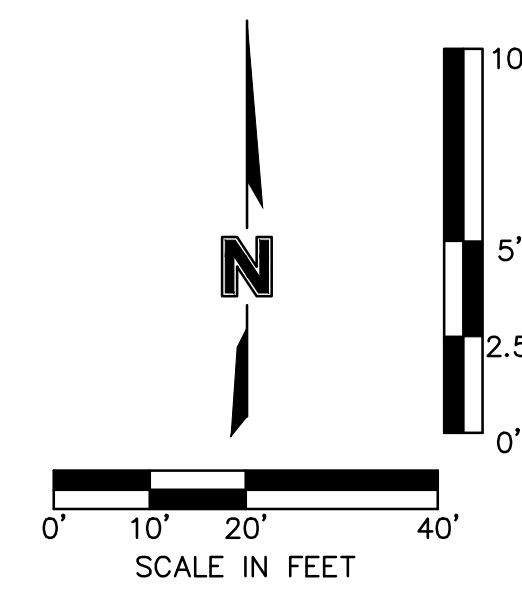
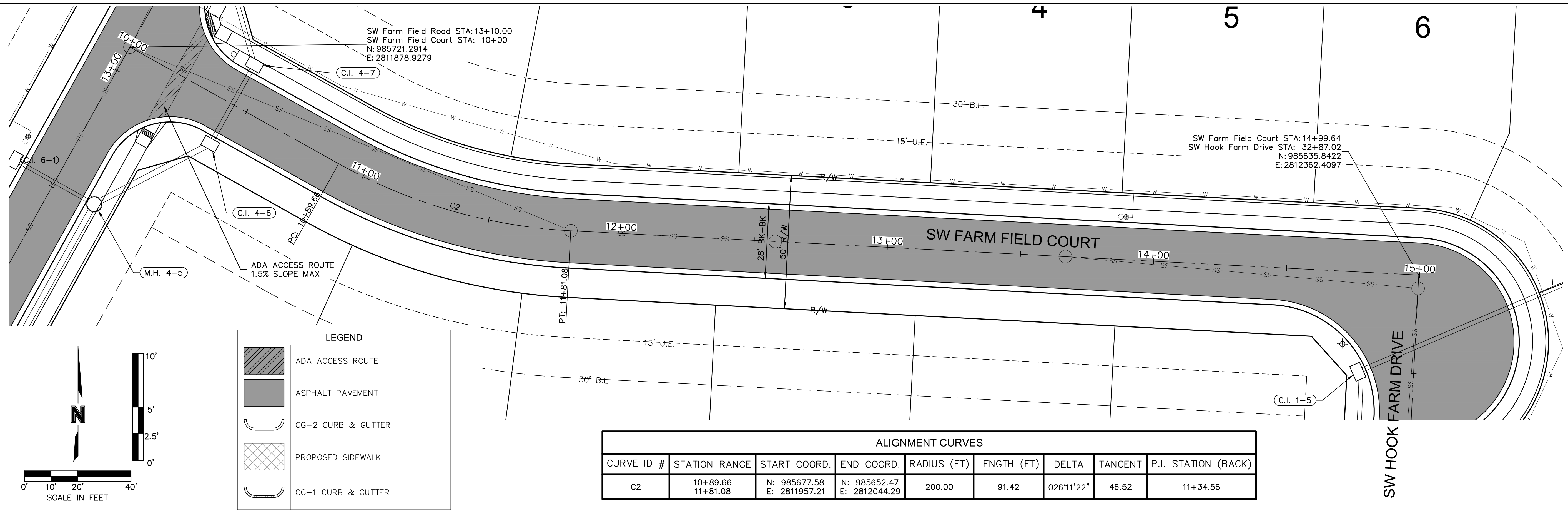
HOOK FARMS
 FIRST FLAT
 2020

LEE'S SUMMIT, MO

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020

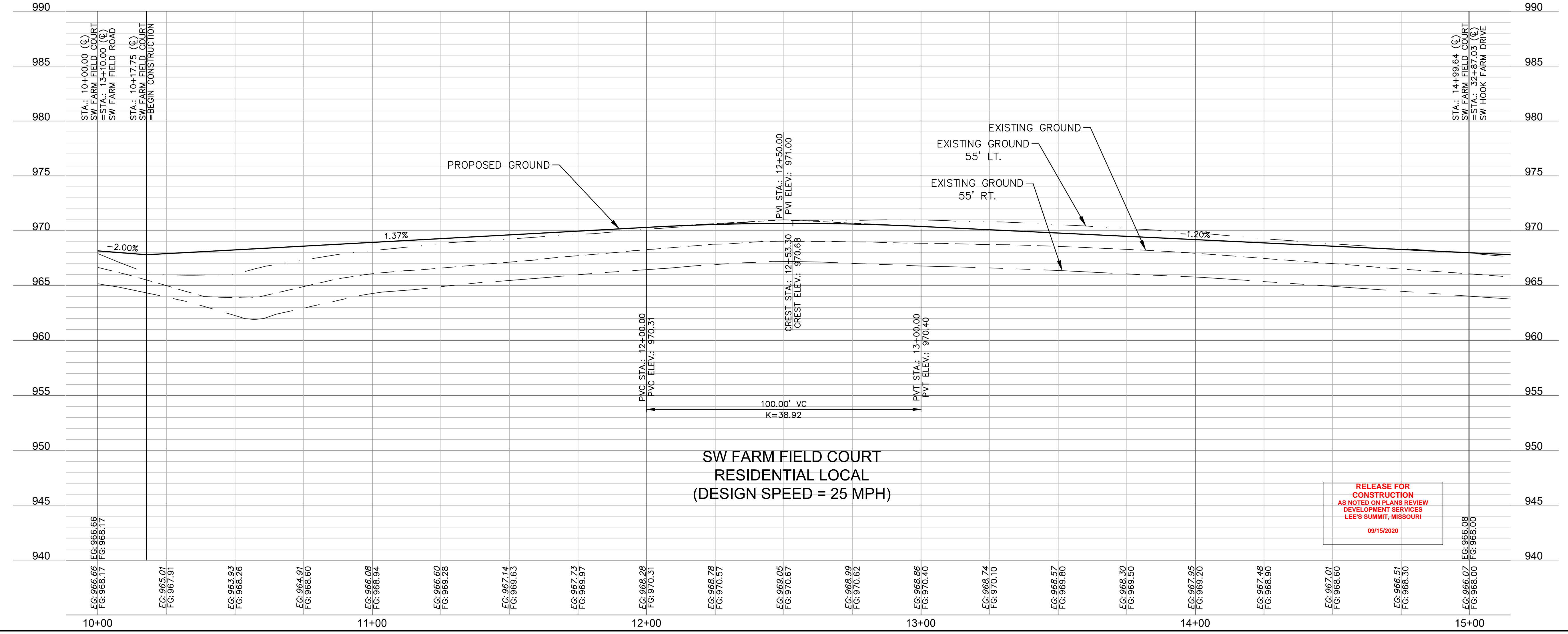
SHEET C115

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\VC_RPP02_0194061.dwg USER: nheiser C_PSTRM_0194061
 DATE: Jun 29, 2020 6:39pm XREFS: C_PBLK_0194061_34x22 C_PBNDY_0194061 C_PBASE_0194061 C_PPATT_0194061 C_PUTIL_0194061 C_PSURF_0194061



LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK
	CG-1 CURB & GUTTER

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	TANGENT	P.I. STATION (BACK)
C2	10+89.66 11+81.08	N: 985677.58 E: 2811957.21	N: 985652.47 E: 2812044.29	200.00	91.42	026°11'22"	46.52	11+34.56



Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com

REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

ROADWAY PLAN & PROFILE (SW WHEATFIELD COURT)
 STREET AND STORM SEWER PLANS

HOOK FARMS
 FIRST FLAT

LEE'S SUMMIT, MO

2020

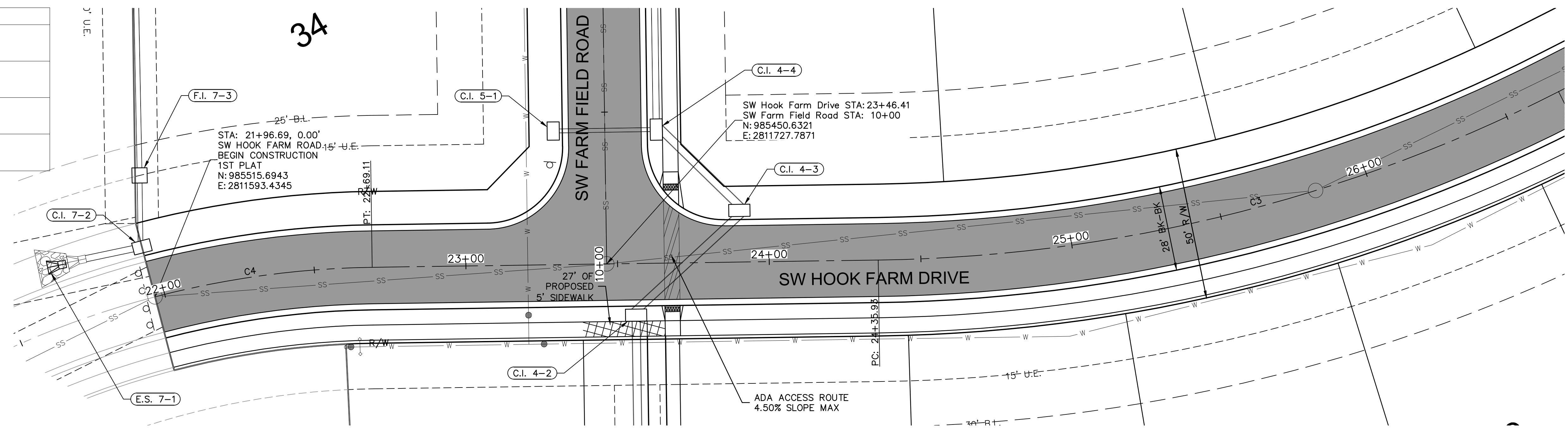
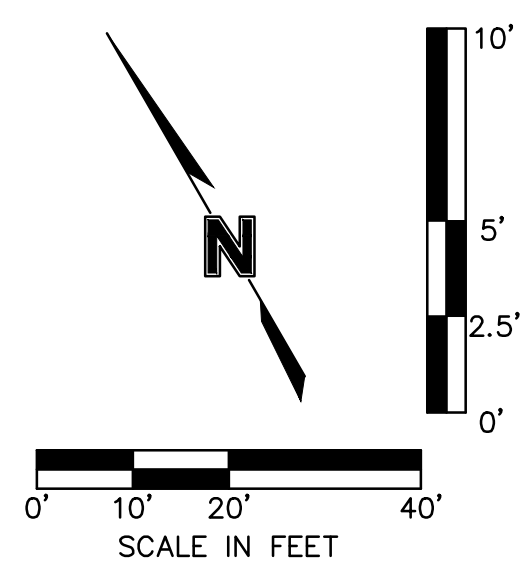
REVISIONS

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

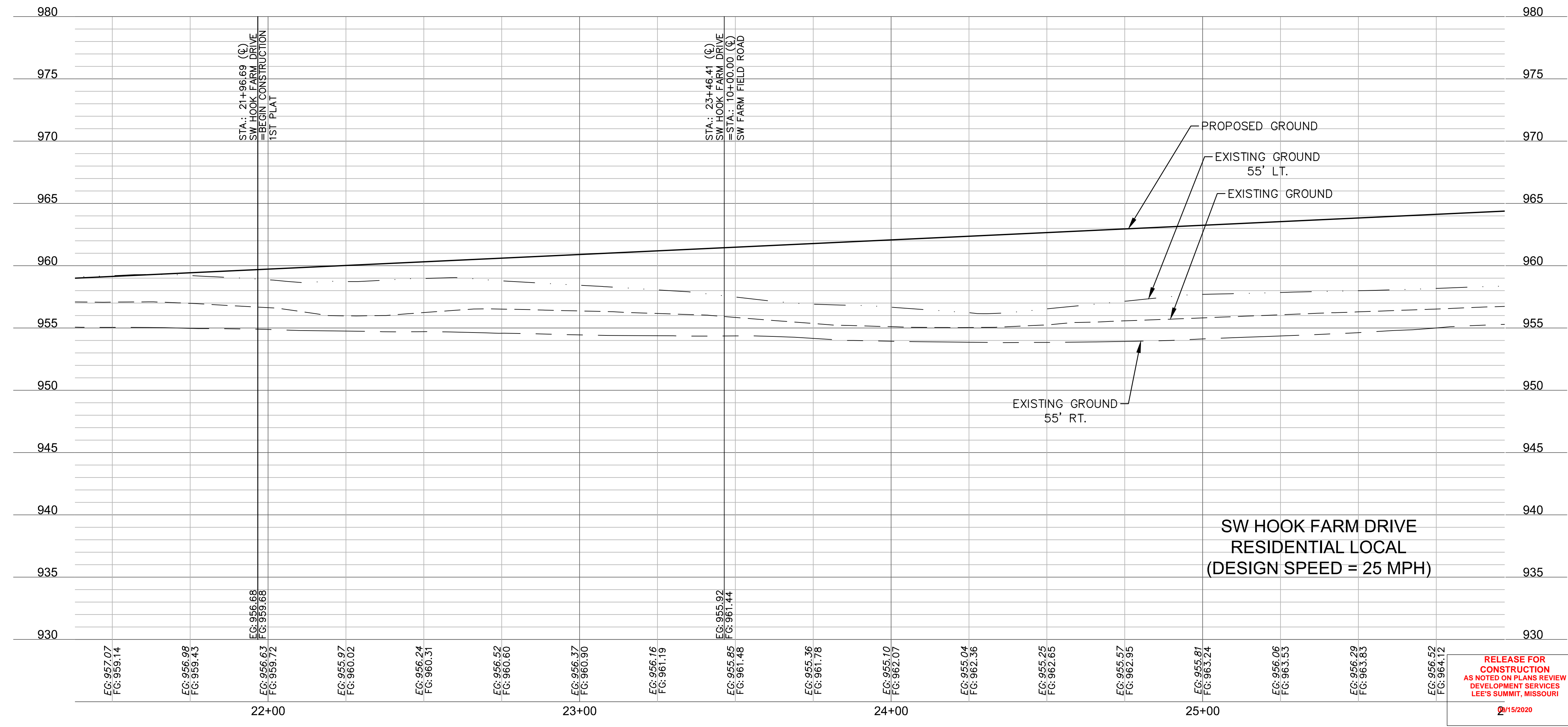
SHEET
 C116

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Storm Plans\VC_RPP02_0194061.dwg
 DATE: Jun 29, 2020 6:40pm
 USER: nheiser
 XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\XBASE_0194061 C:\PPATT_0194061 C:\PUTIL_0194061 C:\PSTRM_0194061

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	TANGENT	P.I. STATION (BACK)
C3	24+35.93 26+68.94	N: 985406.99 E: 2811805.95	N: 985342.96 E: 2812027.88	510.00	233.00	026°10'37"	118.57	25+50.37
C4	21+07.71 22+69.11	N: 985526.27 E: 2811505.41	N: 985488.32 E: 2811660.29	300.00	161.40	030°49'31"	82.71	21+86.40

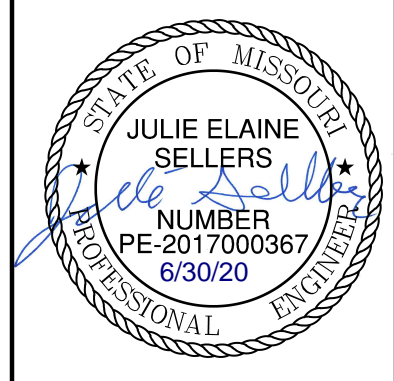


RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI

06/15/2020

olsson

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS

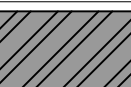



ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
 STREET AND STORM SEWER PLANS

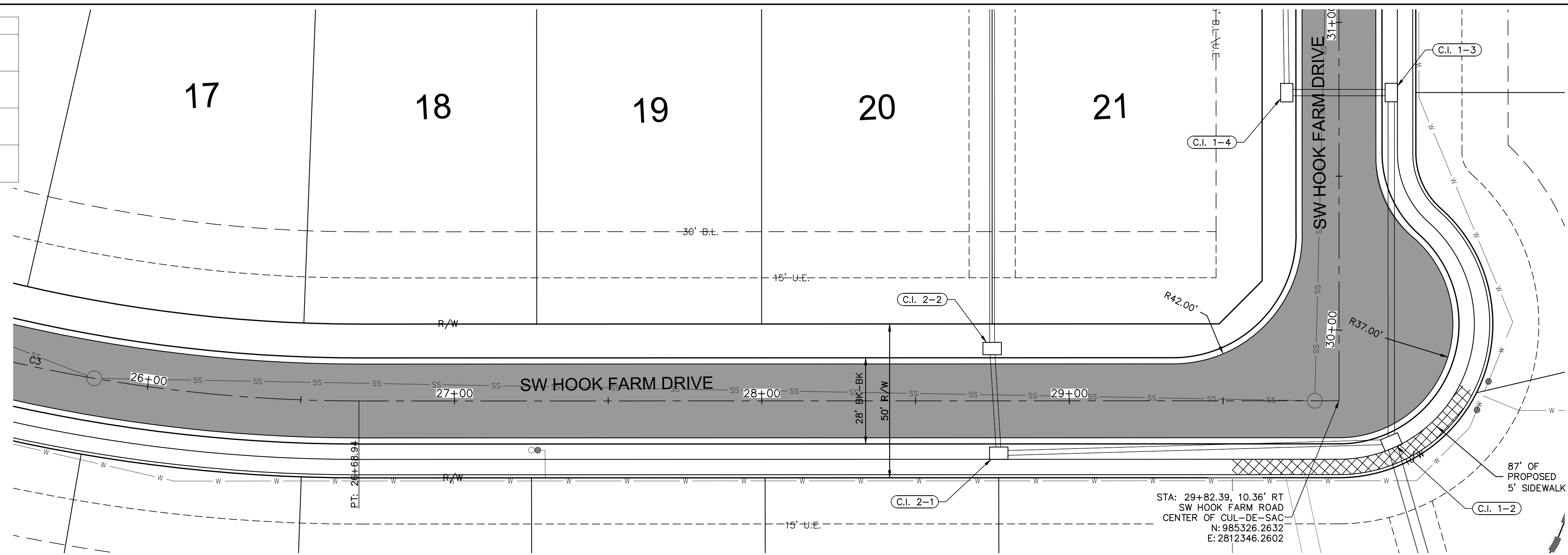
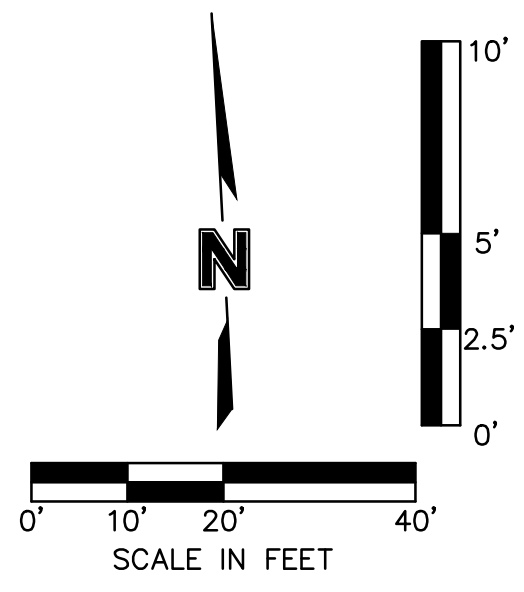
HOOK FARMS
 FIRST PLAT

LEE'S SUMMIT, MO 2020

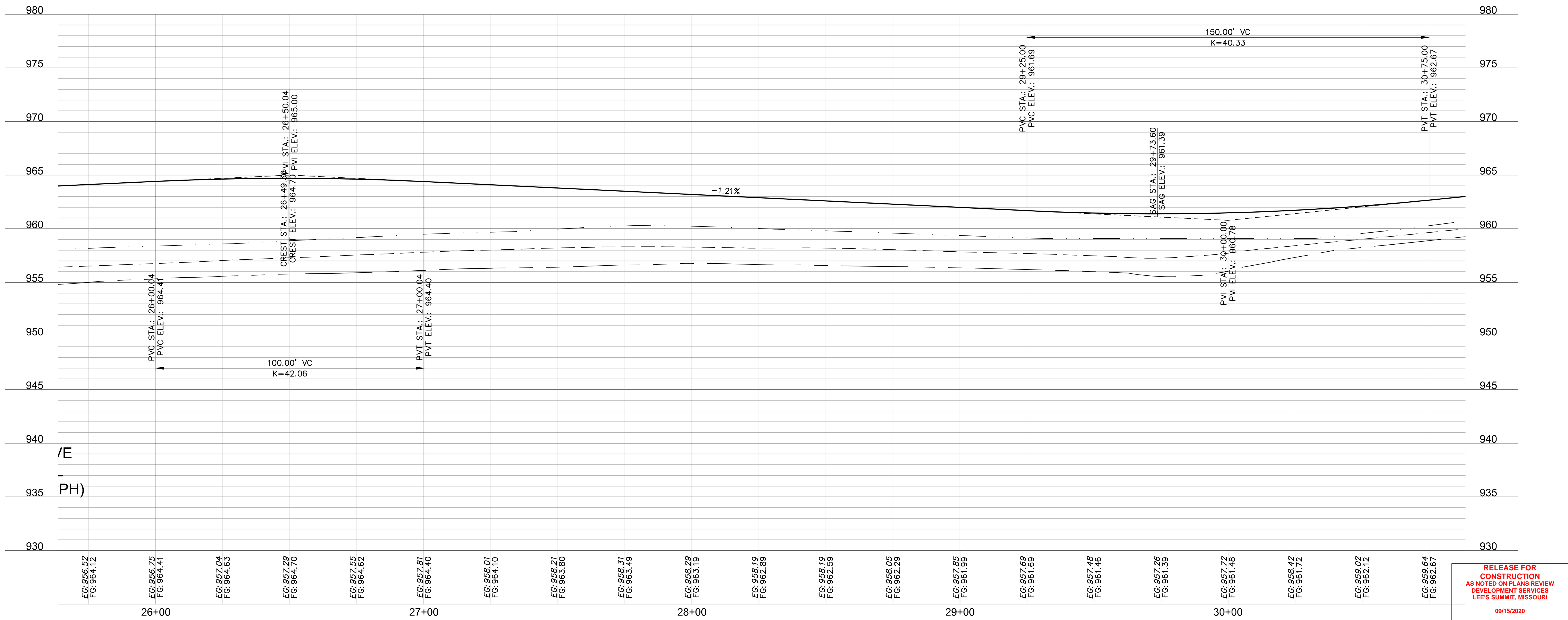
drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Storm Plans\VC_RPP02_0194061.dwg
 DATE: Jun 29, 2020 6:40pm
 USER: nheiser
 XREFS: C:\PTBLK_0194061_34x22 C:\PBNDRY_0194061 C:\XBASE_0194061 C:\FBASE_0194061 C:\PPATT_0194061 C:\PUTIL_0194061 C:\PSTRM_0194061

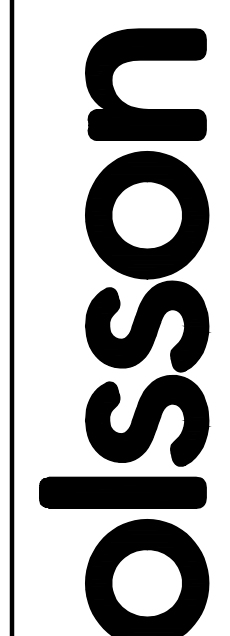
LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



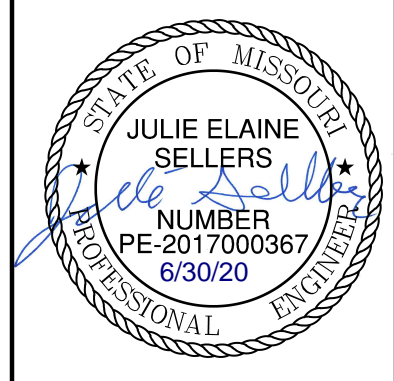
STA: 29+82.39, 10.36' RT
 SW HOOK FARM ROAD
 CENTER OF CUL-DE-SAC
 N: 985326.2632
 E: 2812346.2602



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
 STREET AND STORM SEWER PLANS

HOOK FARMS
 FIRST PLAT

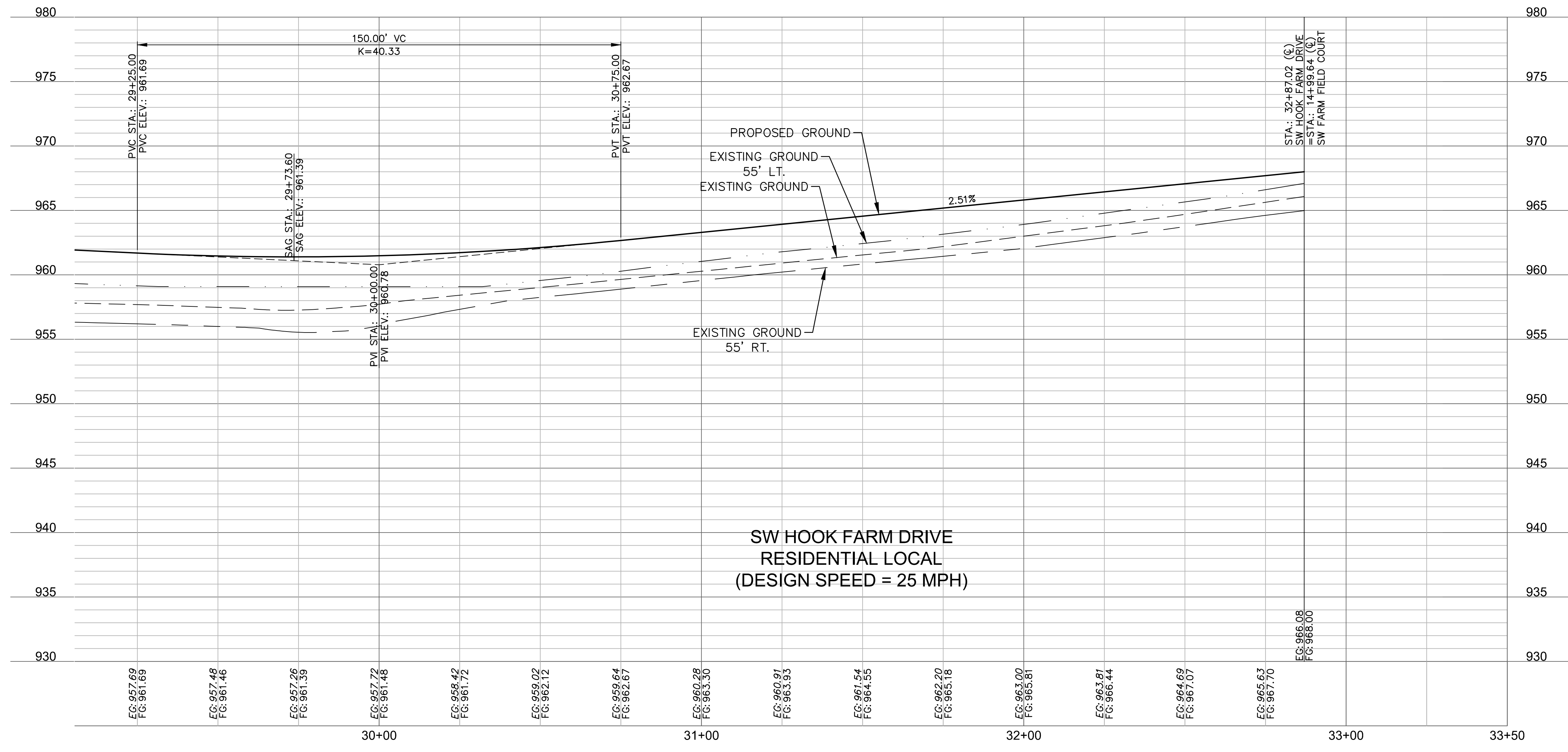
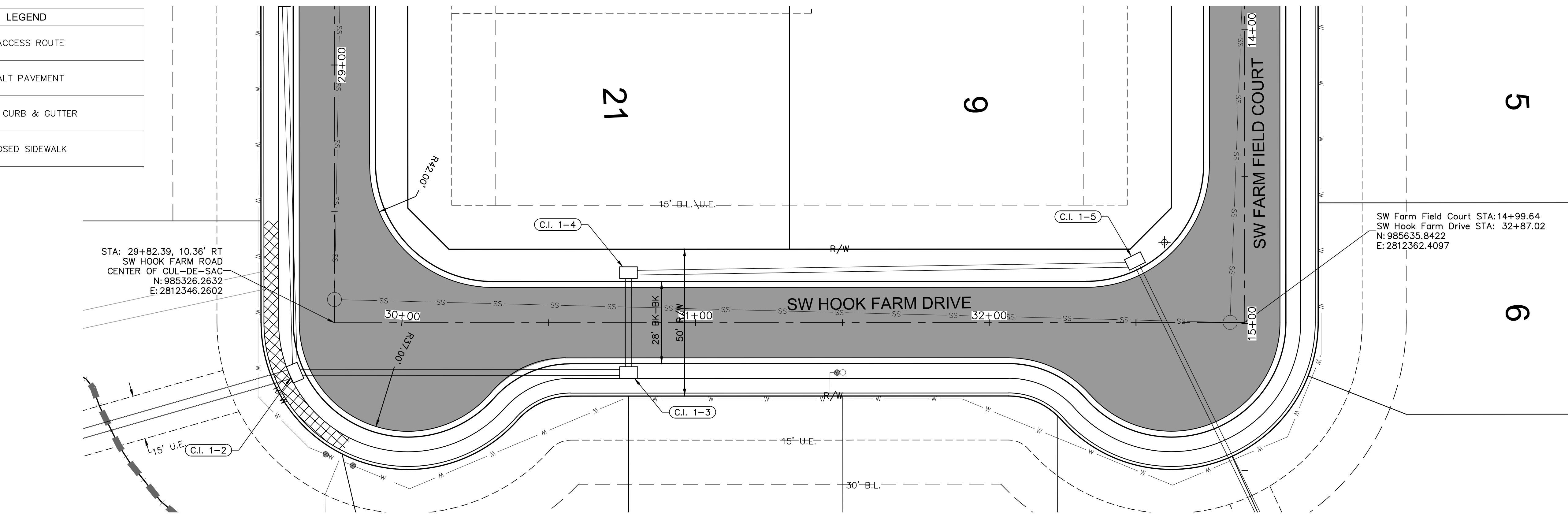
LEE'S SUMMIT, MO

2020

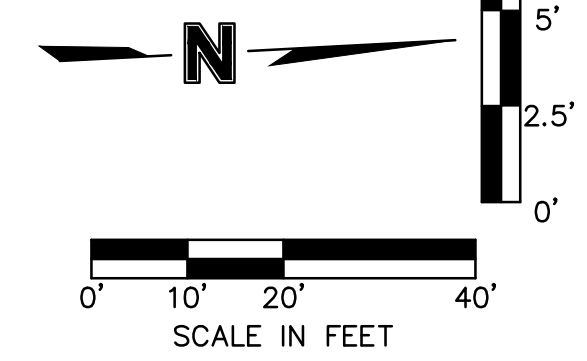
drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Storm Plans\VC_RPP02_0194061.dwg
 DATE: Jun 29, 2020 6:40pm
 USER: nheiser
 XREFS: C:\PTBLK_0194061_34x22 C:\PBNDRY_0194061 C:\FBASE_0194061 C:\PPATT_0194061 C:\PUTIL_0194061 C:\PSTRM_0194061

LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER
	PROPOSED SIDEWALK



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



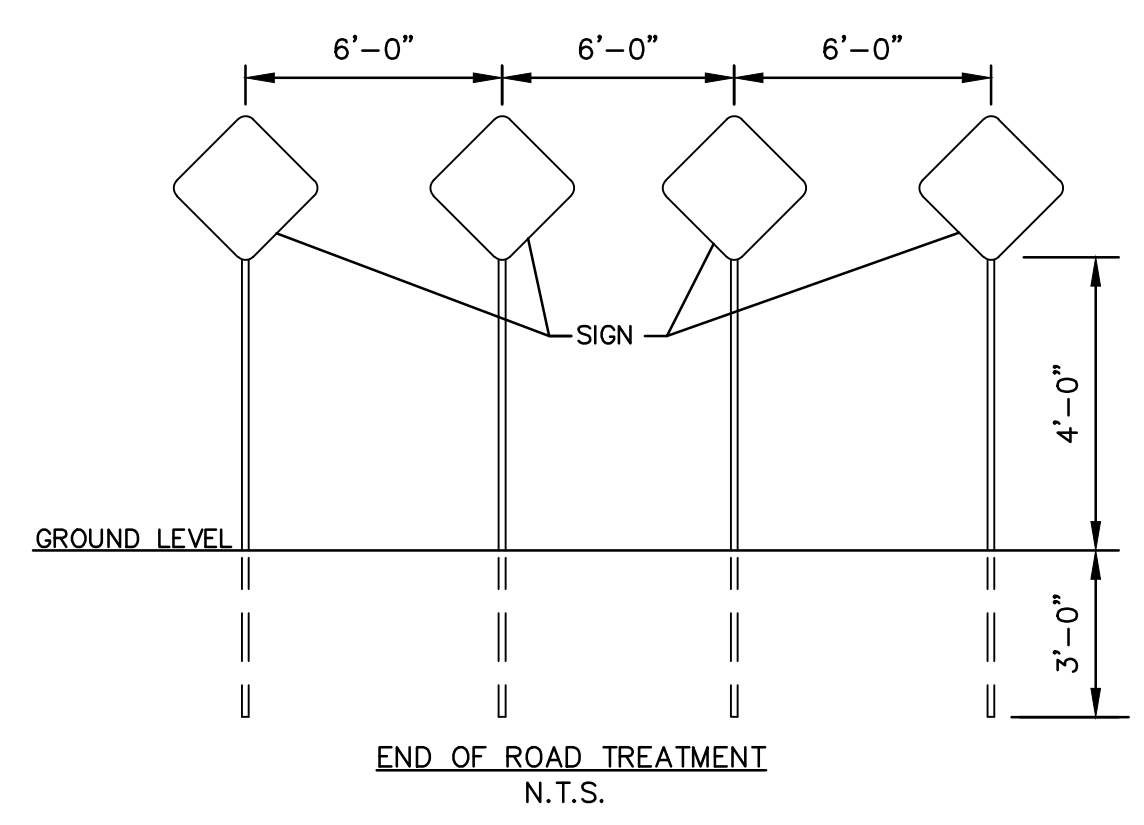
olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com

STATE OF MISSOURI
 JULIE ELAINE SELLERS
 PE-2017000367
 6/30/20

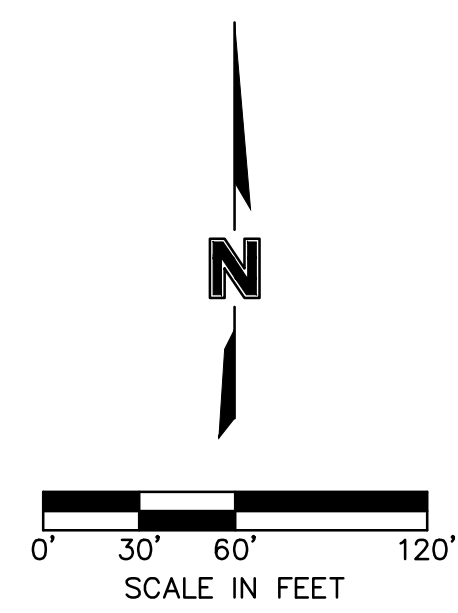
REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST PLAT
 LEE'S SUMMIT, MO
 2020

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Sheets\GNCV\Street and Storm Plans\TC_P01_0194061.dwg
 DATE: Jun 30, 2020 7:14am XREFS: C_P\BLK_0194061_34x22 C_P\BASE_0194061 C_P\BASE_0194061 USER: nheiser C_P\BASE_0194061



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



ITEM 8
 10'X10' SWBT
 Doc. No. 199910026996
 Bk. 1-2906 Pg. 251

ITEM 9
 10' G.E.
 Doc. No. 199910026996
 FALLS IN R/W

RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com

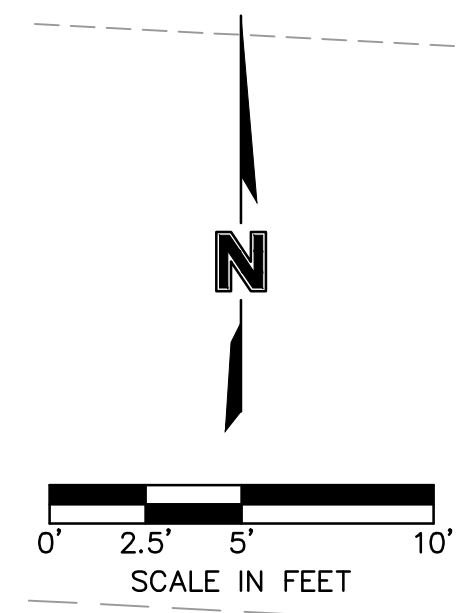
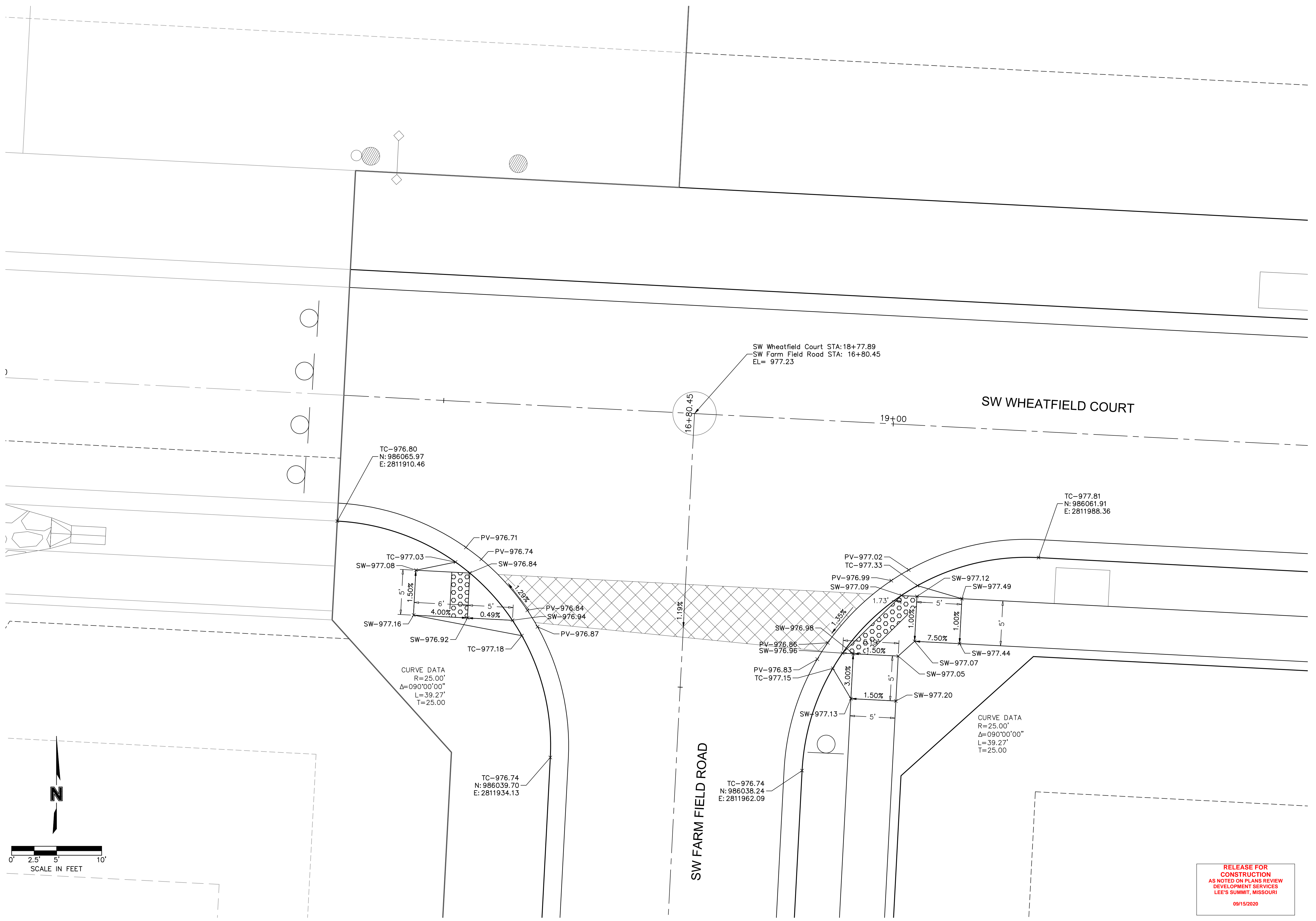
STATE OF MISSOURI
 JULIE ELAINE SELLERS
 PE-2017000367
 6/30/20
 PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

TRAFFIC CONTROL PLAN STREET AND STORM SEWER PLANS	BY
HOOK FARMS FIRST PLAT	
LEE'S SUMMIT, MO	2020
drawn by: CGW	
checked by: JES	
approved by: NDH	
QA/QC by: JES	
project no.: 019-4061	
drawing no.:	
date: 04/20/2020	

SHEET C120

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\CV_INT01_0194061.dwg USER: nheiser
 DATE: Jun 29, 2020 6:42pm XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\PBASE_0194061 C:\PUTIL_0194061



CURVE DATA
 R=25.00'
 $\Delta=090^{\circ}00'00''$
 L=39.27'
 T=25.00

CURVE DATA
 R=25.00'
 $\Delta=090^{\circ}00'00''$
 L=39.27'
 T=25.00

SW Wheatfield Court STA: 18+77.89
 SW Farm Field Road STA: 16+80.45
 EL= 977.23

RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.7888
 www.olsson.com

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

SW WHEATFIELD COURT & SW FARM FIELD ROAD
 STREET AND STORM SEWER PLANS

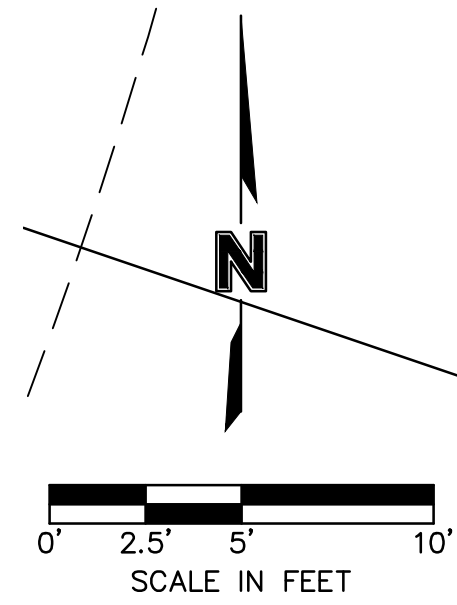
HOOK FARMS
 FIRST PLAT

LEE'S SUMMIT, MO 2020

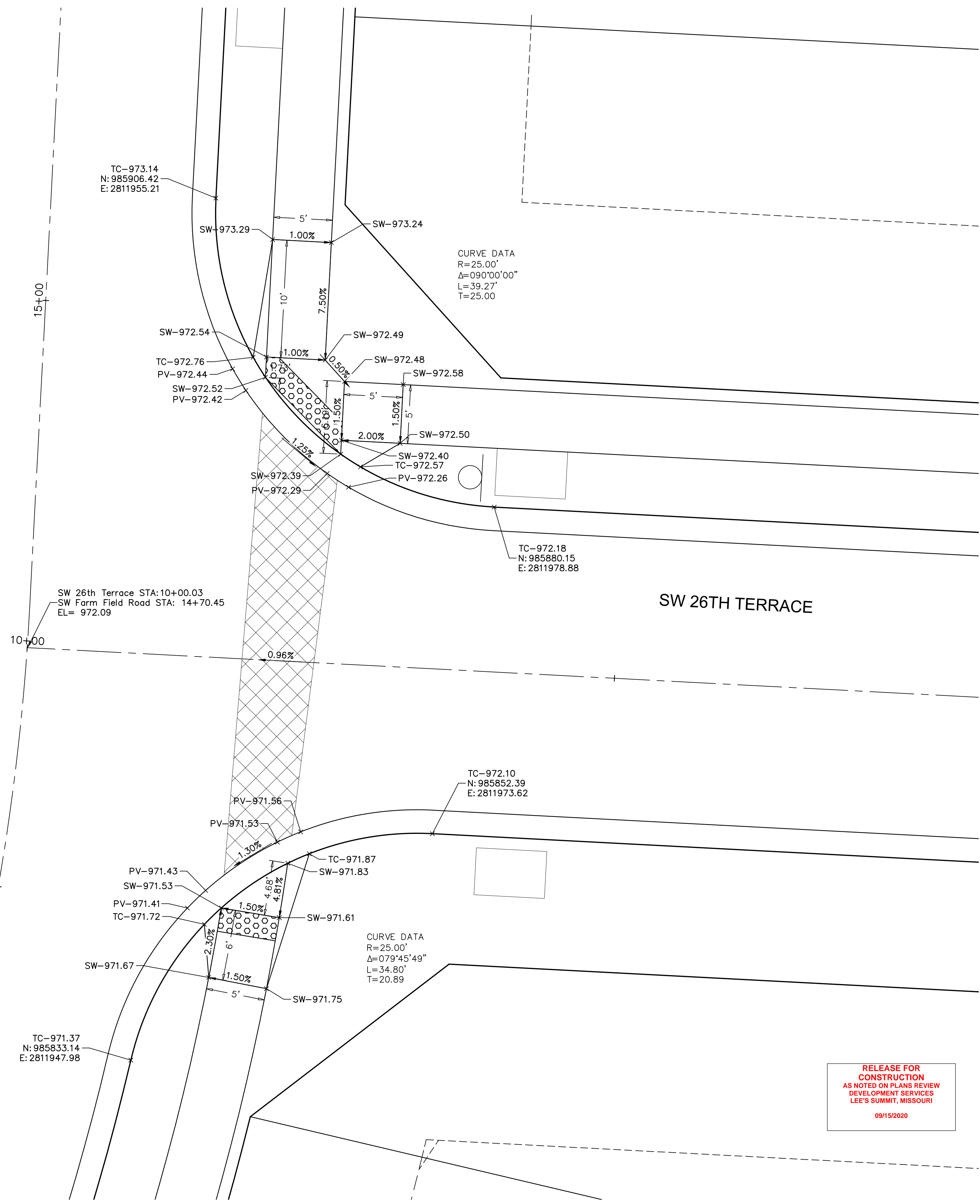
drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

SHEET C121

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\NCV\Street and Storm Plans\NC_INT01_0194061.dwg USER: nheiser
 DATE: Jun 29, 2020 6:42pm XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\XBASE_0194061 C:\PUTIL_0194061

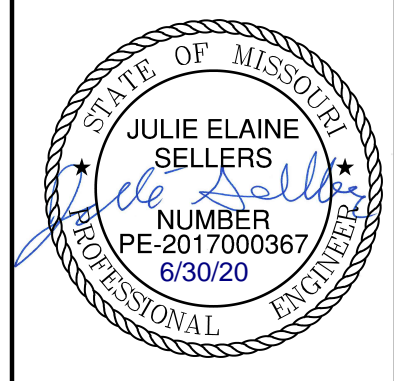


SW FARM FIELD ROAD



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.7888
 www.olsson.com

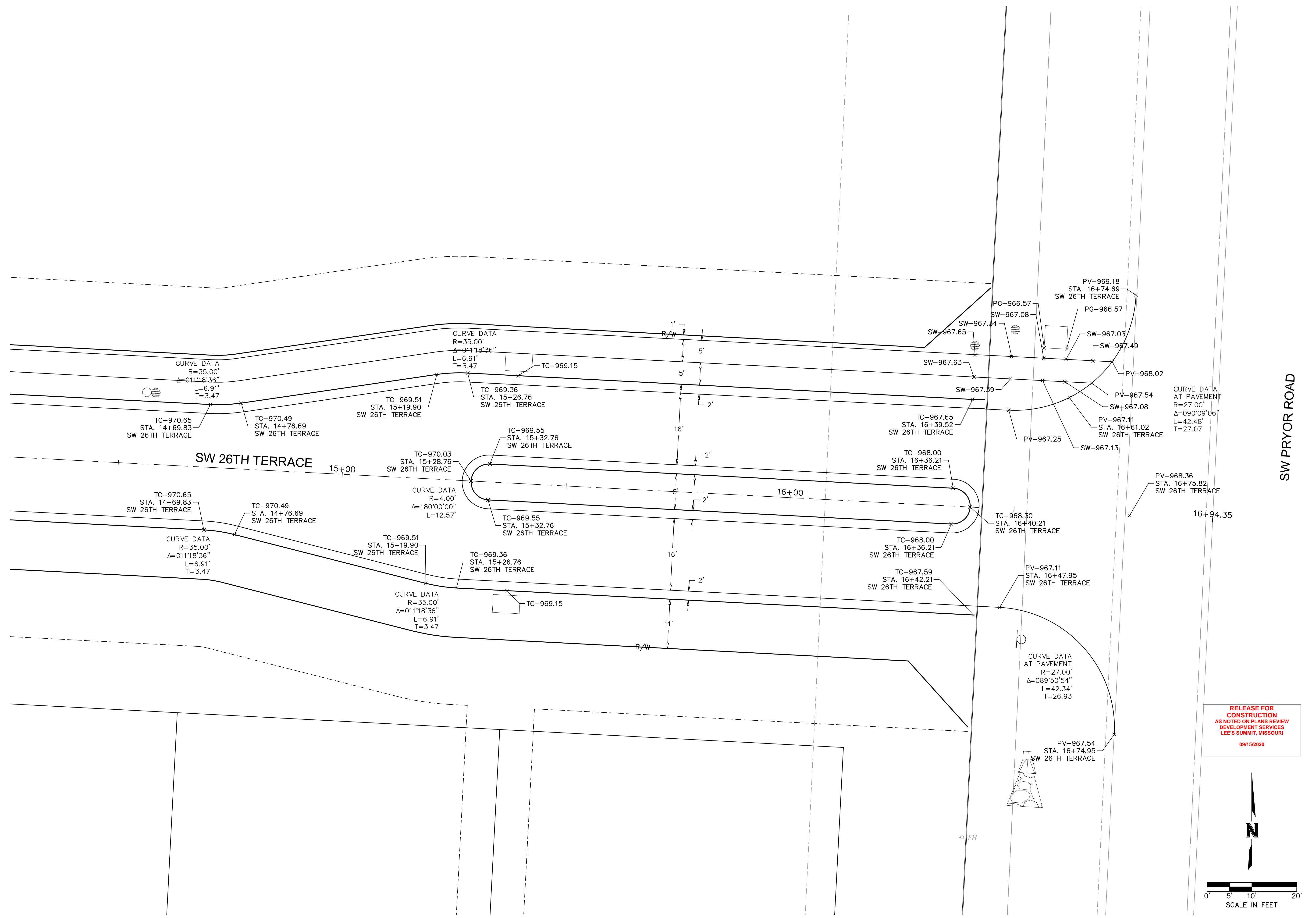


REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

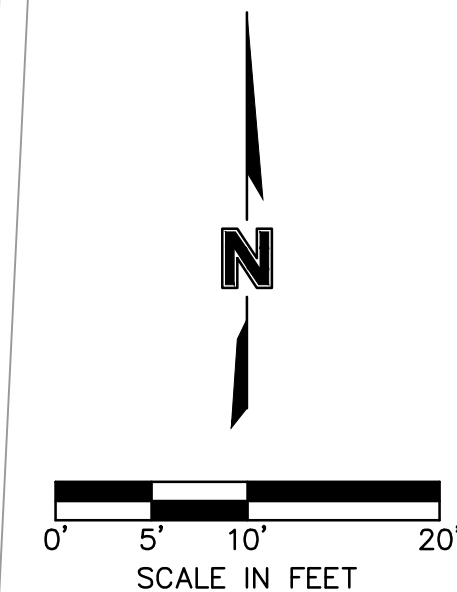
SW FARM FIELD ROAD & SW 26TH TERRACE STREET AND STORM SEWER PLANS	2020
HOOK FARMS FIRST PLAT	
LEE'S SUMMIT, MO	
drawn by: CGW	
checked by: JES	
approved by: NDH	
QA/QC by: JES	
project no.: 019-4061	
drawing no.: 04/20/2020	

SHEET C122

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Sheets\GNCV\Street and Storm Plans\NC_INT02_0194061.dwg
 DATE: Jun 29, 2020 6:43pm XREFS: C_PTBK_0194061_34x22 C_PBNDY_0194061 C_PBASE_0194061 C_PUTIL_0194061 USER: nhrseier C_PBASE_0194061

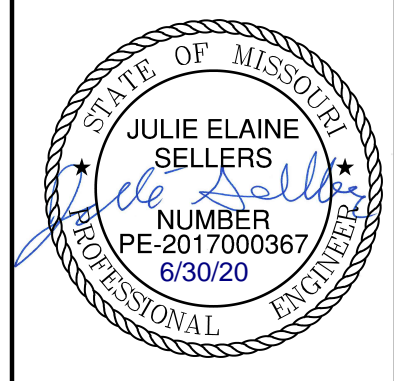


RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



SW PRYOR ROAD

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.7888
 www.olsosn.com



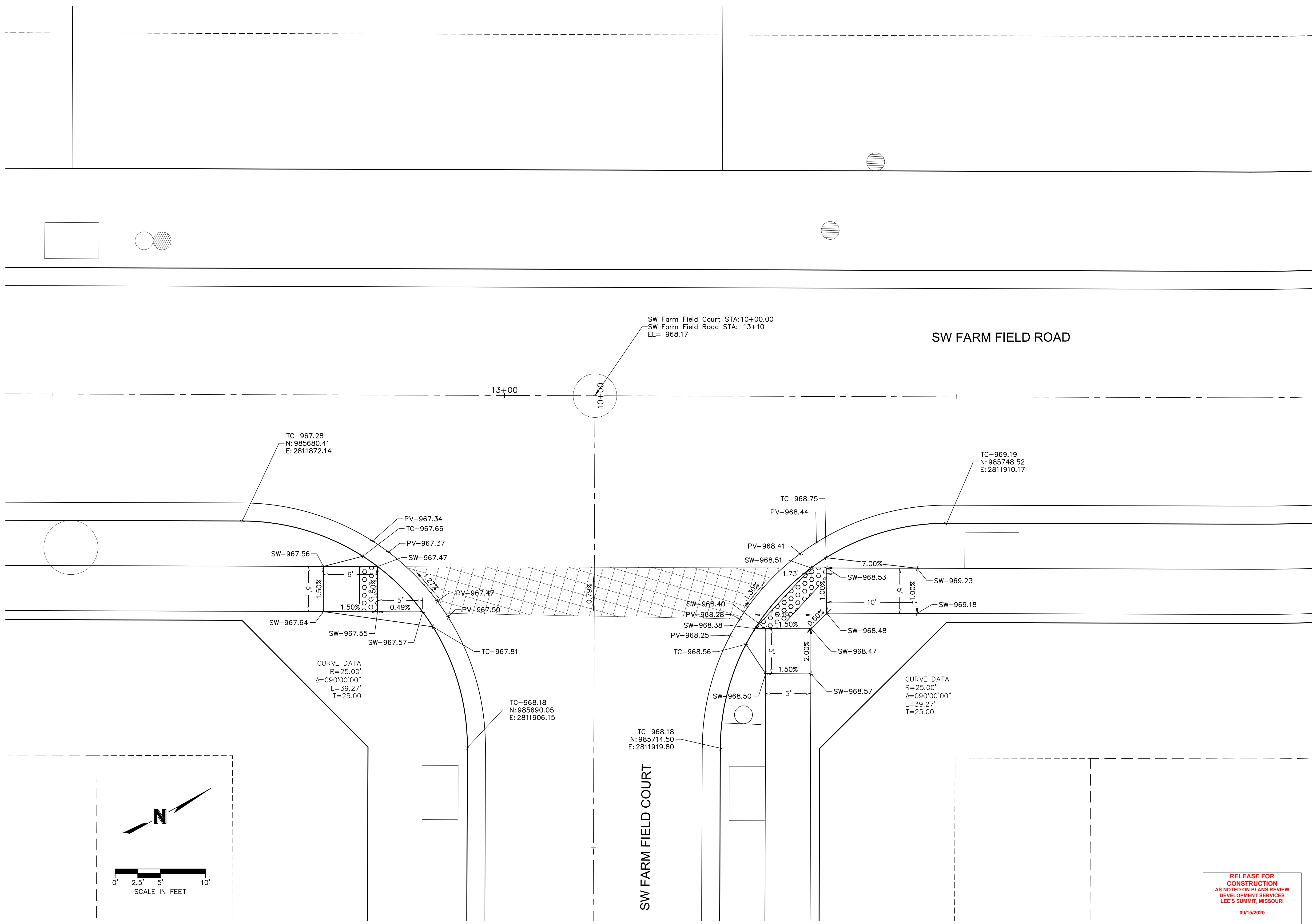
REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

SW 26TH TERRACE
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST PLAT
 LEE'S SUMMIT, MO
 2020

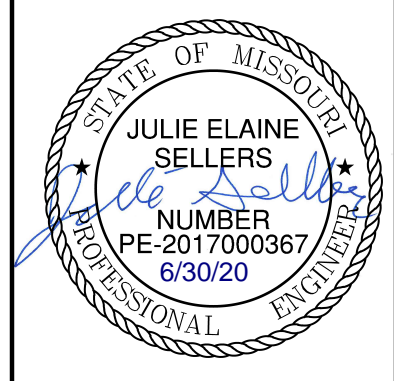
drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

SHEET
 C123

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\GNCV\Street and Storm Plans\NC_INT01_0194061.dwg USER: nheiser
 DATE: Jun 29, 2020 6:44pm XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\XBASE_0194061 C:\PUTIL_0194061



olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsosn.com



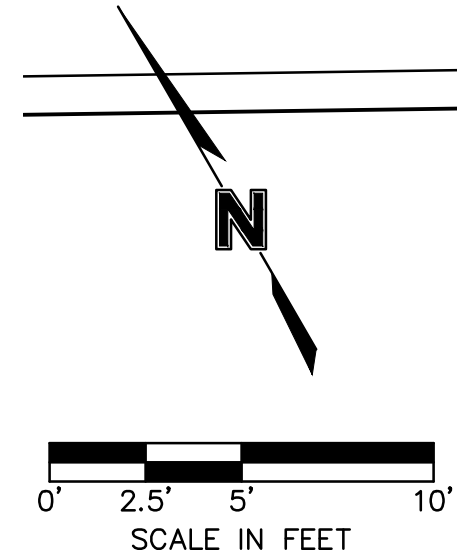
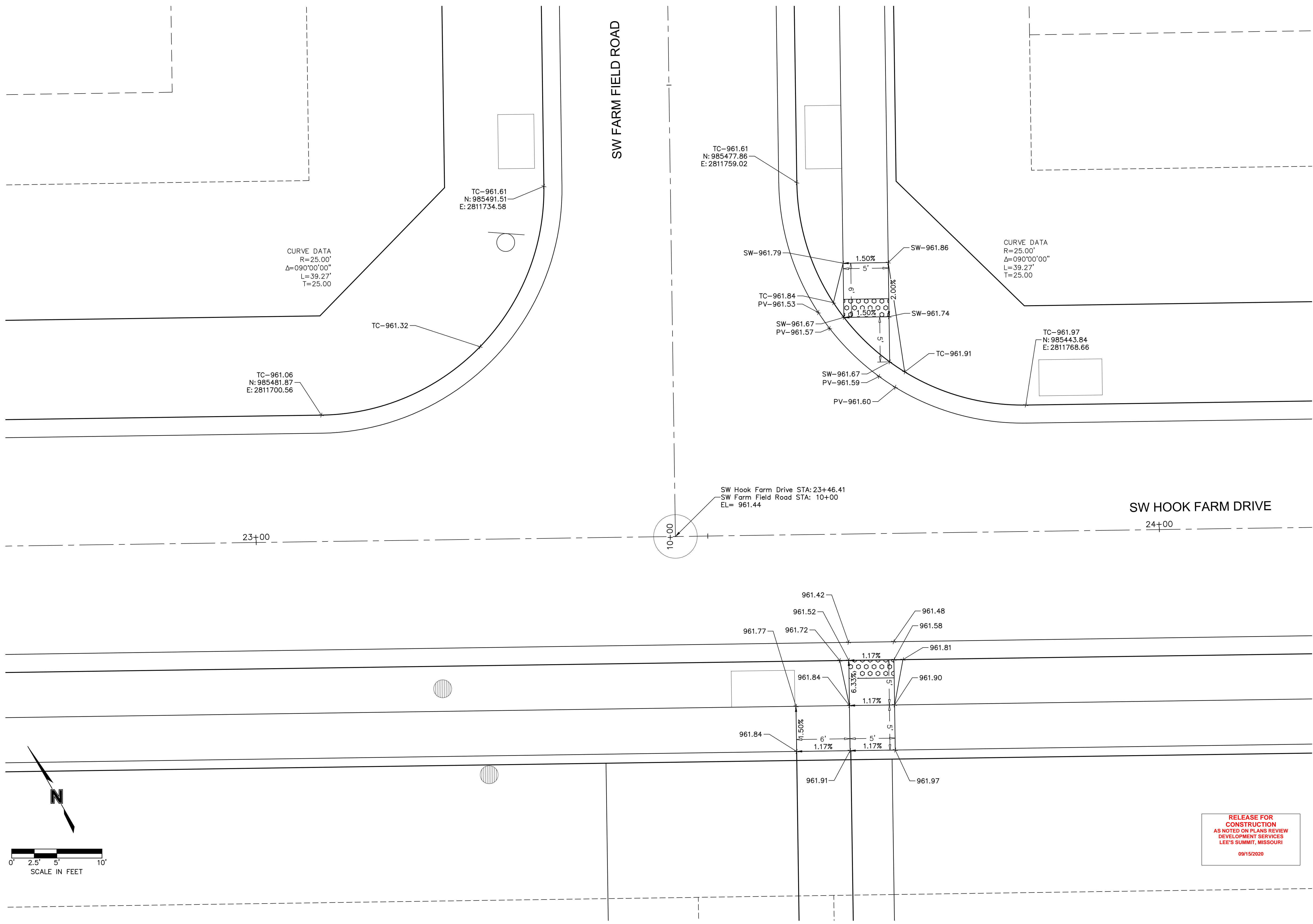
REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	

SW FARM FIELD ROAD & SW FARM FIELD COURT
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST PLAT
 LEE'S SUMMIT, MO
 2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

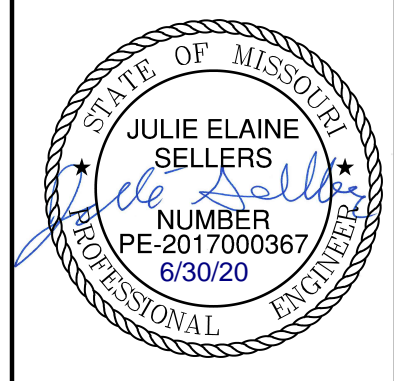
RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\NCV\Street and Storm Plans\NC_INT02_0194061.dwg
 DATE: Jun 29, 2020 6:46pm XREFS: C_P\BLK_0194061_34x22 C_P\BNDY_0194061 C_P\BASE_0194061 C_P\BASE_0194061 C_P\UTIL_0194061 USER: nhraiser



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.7888
 www.olson.com



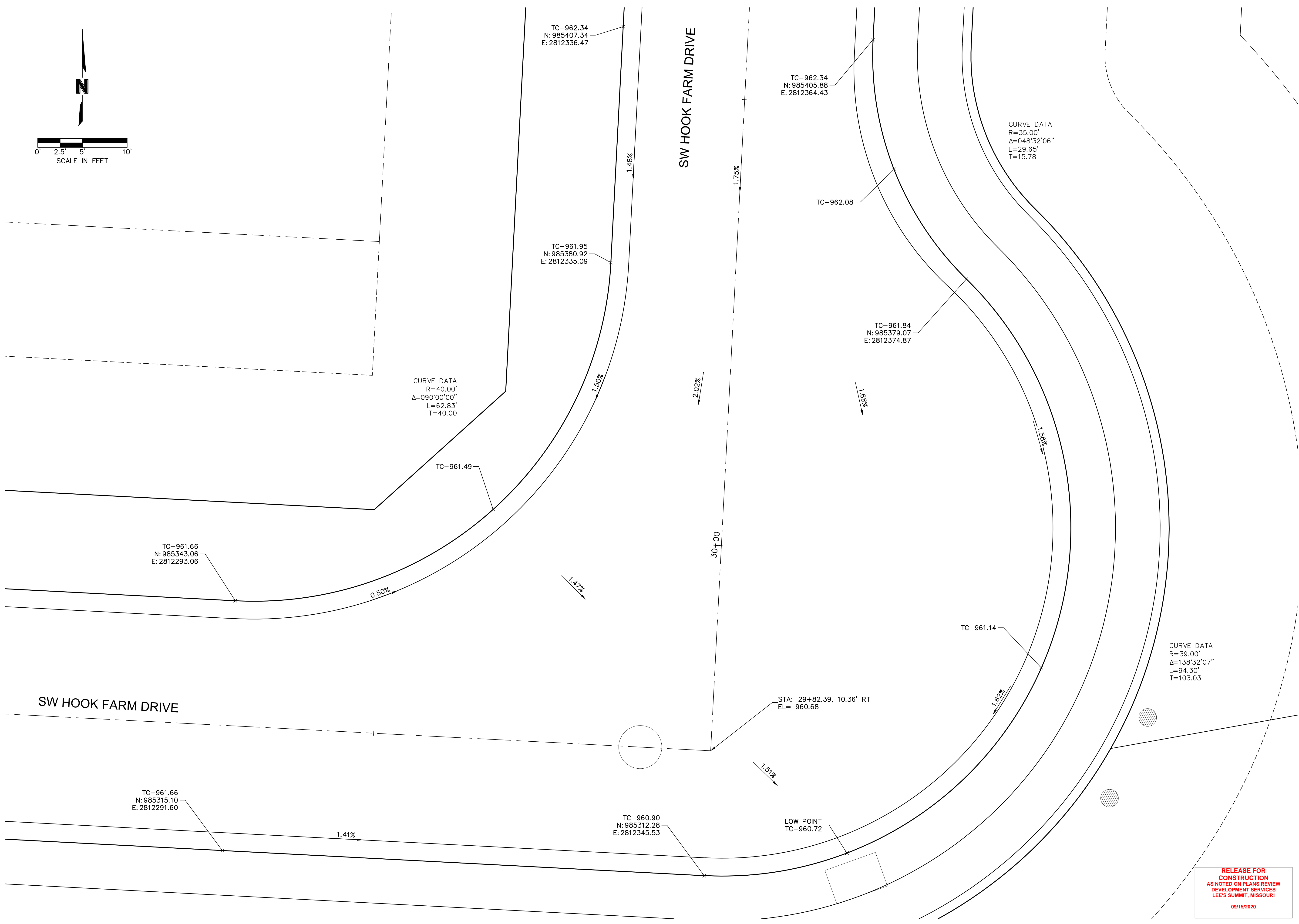
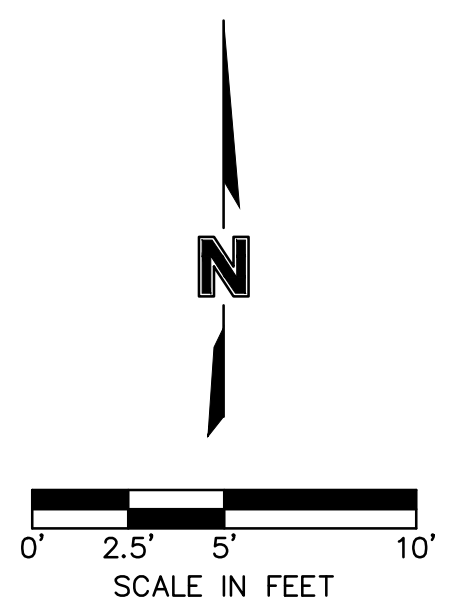
REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	

SW FARM FIELD ROAD & SW HOOK FARM DRIVE
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST PLAT
 LEE'S SUMMIT, MO
 2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

SHEET C125

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final_Plans\Sheets\GNCV\Street and Storm Plans\C_INT02_0194061.dwg
DATE: Jun 29, 2020 6:46pm XREFS: C:\PTBLK_0194061_34x22 C:\PBNDY_0194061 C:\FBASE_0194061 C:\PUTIL_0194061



CURVE DATA
R=40.00'
Δ=090°00'00"
L=62.83'
T=40.00

CURVE DATA
R=35.00'
Δ=048°32'06"
L=29.65'
T=15.78

CURVE DATA
R=39.00'
Δ=138°32'07"
L=94.30'
T=103.03

STA: 29+82.39, 10.36' RT
EL= 960.68

LOW POINT
TC-960.72

TC-962.34
N: 985407.34
E: 2812336.47

TC-962.34
N: 985405.88
E: 2812364.43

TC-961.95
N: 985380.92
E: 2812335.09

TC-961.84
N: 985379.07
E: 2812374.87

TC-961.66
N: 985343.06
E: 2812293.06

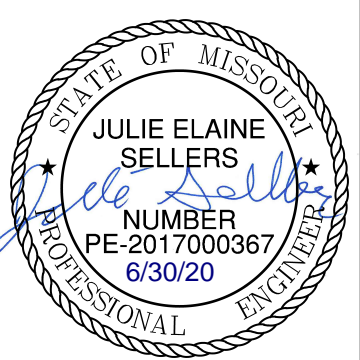
TC-961.66
N: 985315.10
E: 2812291.60

TC-960.90
N: 985312.28
E: 2812345.53

SW HOOK FARM DRIVE

SW HOOK FARM DRIVE

olsson
Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
FAX 816.361.1888
www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	

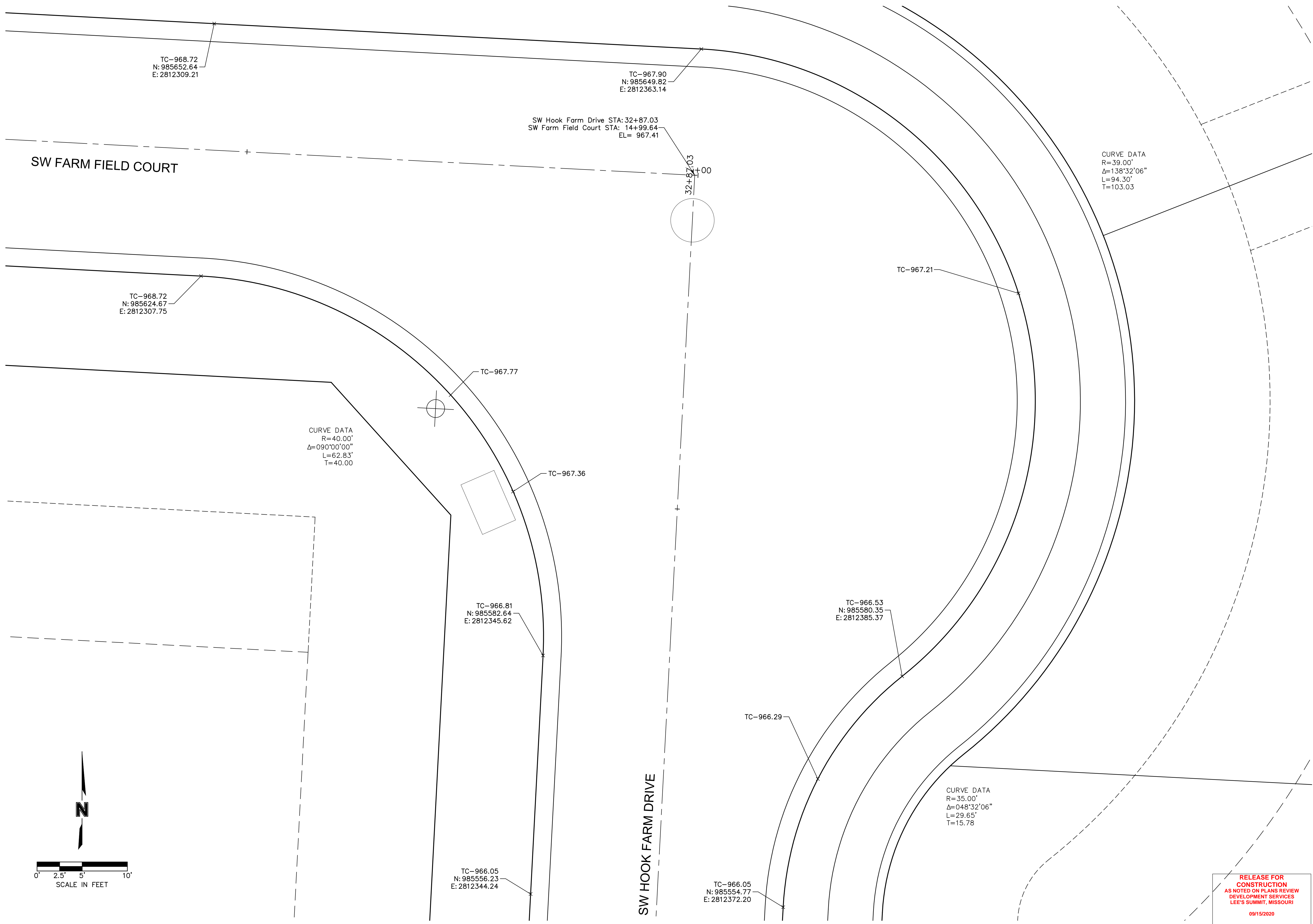
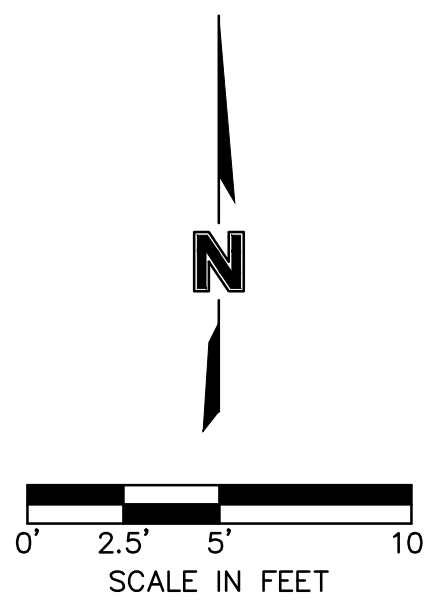
SW HOOK FARM DRIVE & SW HOOK FARM DRIVE STREET AND STORM SEWER PLANS
HOOK FARMS FIRST PLAT
LEE'S SUMMIT, MO
2020

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/15/2020

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020

SHEET C126

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Storm Plans\NC_INT02_0194061.dwg USER: nhriser
 DATE: Jun 29, 2020 6:46pm XREFS: C:\PTBLK_0194061_34x22 C:\PBNDY_0194061 C:\XBASE_0194061 C:\FBASE_0194061 C:\PUTIL_0194061



TC-968.72
 N: 985652.64
 E: 2812309.21

TC-967.90
 N: 985649.82
 E: 2812363.14

SW Hook Farm Drive STA: 32+87.03
 SW Farm Field Court STA: 14+99.64
 EL= 967.41

CURVE DATA
 R=39.00'
 $\Delta=138^{\circ}32'06''$
 L=94.30'
 T=103.03

TC-968.72
 N: 985624.67
 E: 2812307.75

CURVE DATA
 R=40.00'
 $\Delta=090^{\circ}00'00''$
 L=62.83'
 T=40.00

TC-966.81
 N: 985582.64
 E: 2812345.62

TC-966.53
 N: 985580.35
 E: 2812385.37

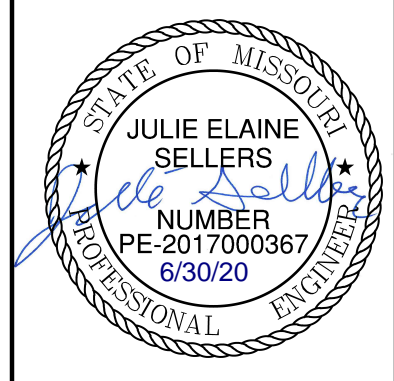
TC-966.05
 N: 985556.23
 E: 2812344.24

TC-966.05
 N: 985554.77
 E: 2812372.20

CURVE DATA
 R=35.00'
 $\Delta=048^{\circ}32'06''$
 L=29.65'
 T=15.78

RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

SW FARM FIELD COURT & SW HOOK FARM DRIVE
 STREET AND STORM SEWER PLANS

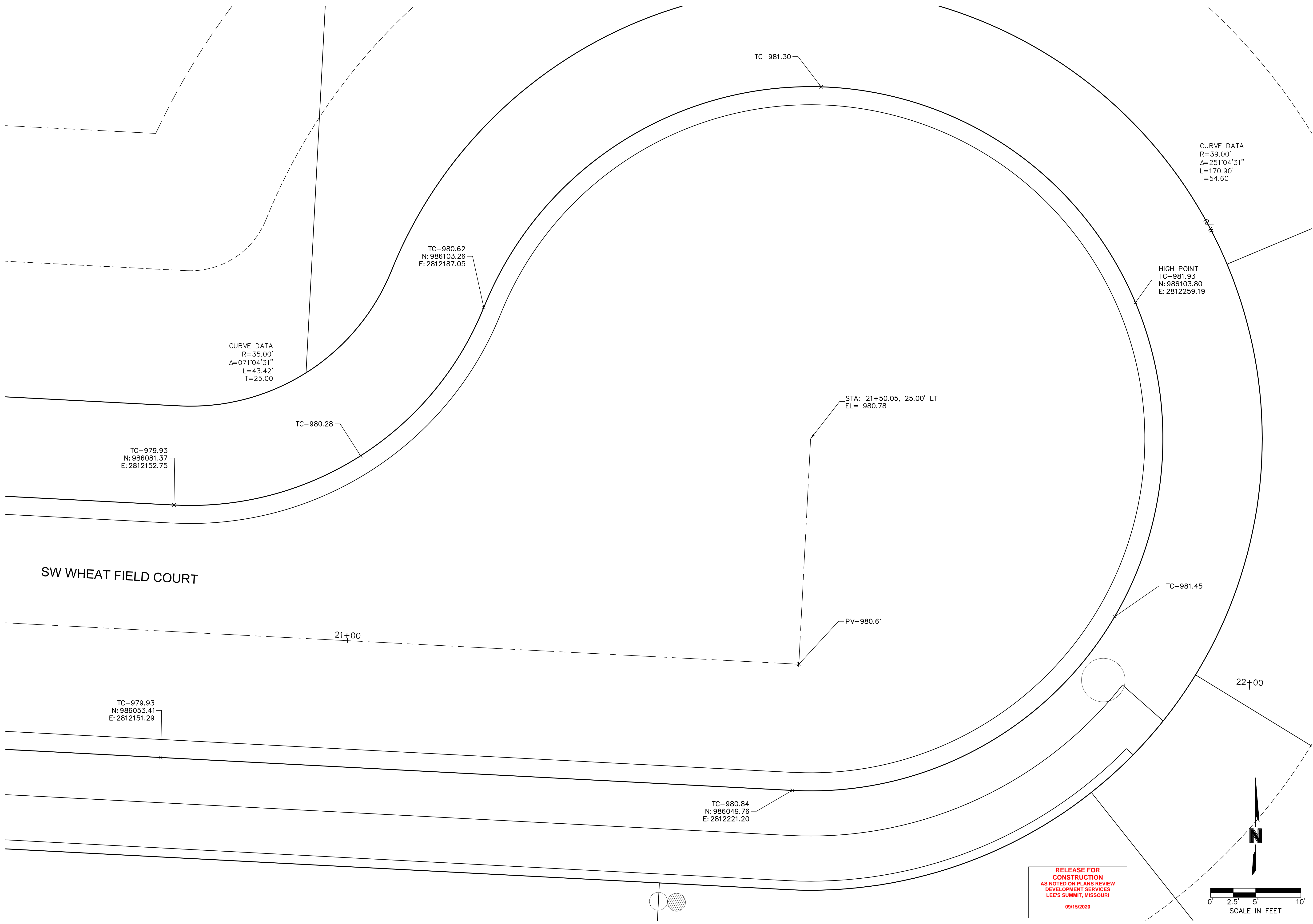
HOOK FARMS
 FIRST PLAT

LEE'S SUMMIT, MO 2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

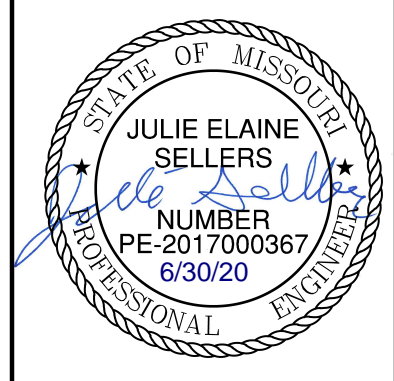
SHEET C127

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Sheets\GNCV\Street and Storm Plans\C_INT02_0194061.dwg USER: nhraiser C_PUTIL_0194061
 DATE: Jun 29, 2020 6:46pm XREFS: C:\PTBLK_0194061_34x22 C_XBASE_0194061 C_PBASE_0194061 C_FBASE_0194061



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsosn.com



REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

SW WHEAT FIELD COURT CUL-DE-SAC
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST PLAT
 LEE'S SUMMIT, MO
 2020

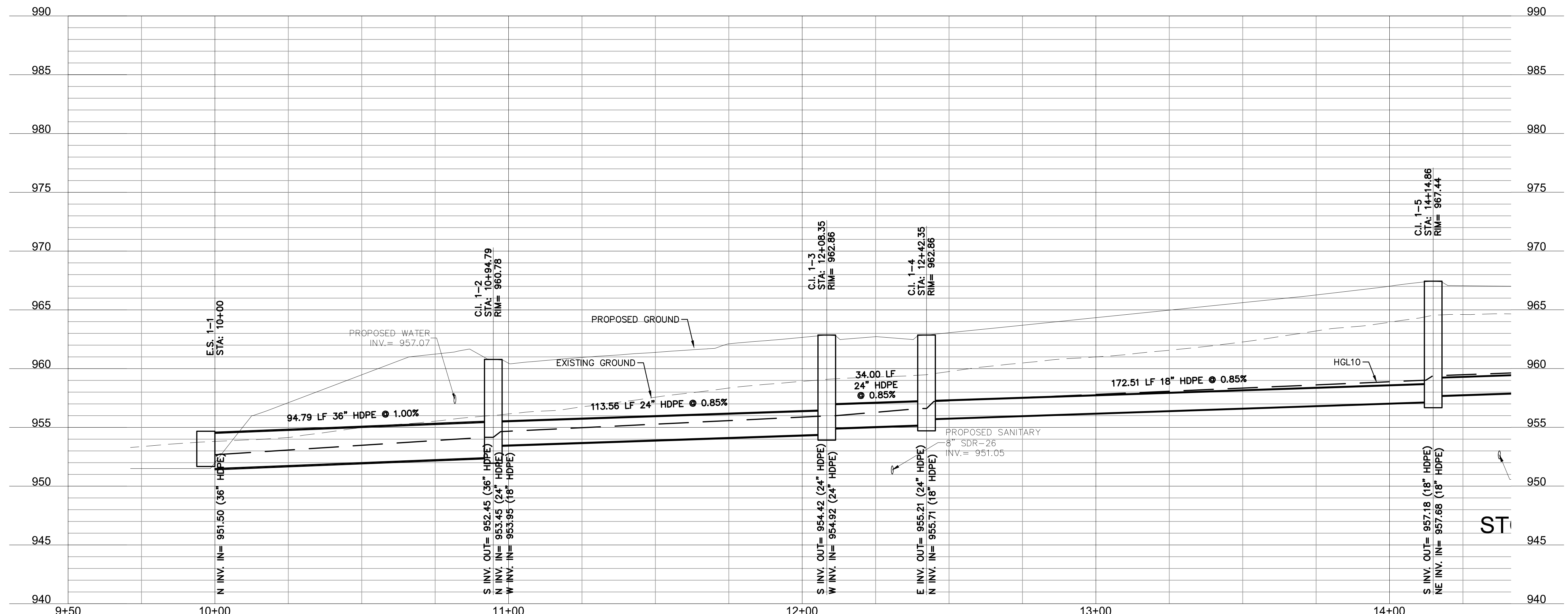
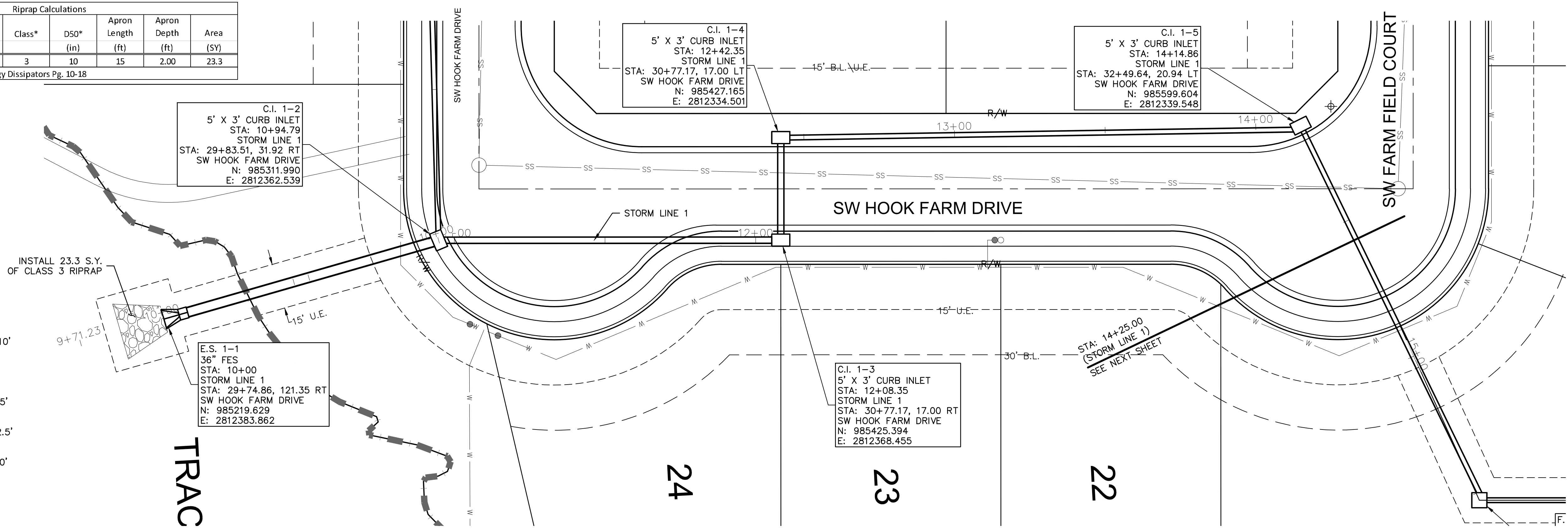
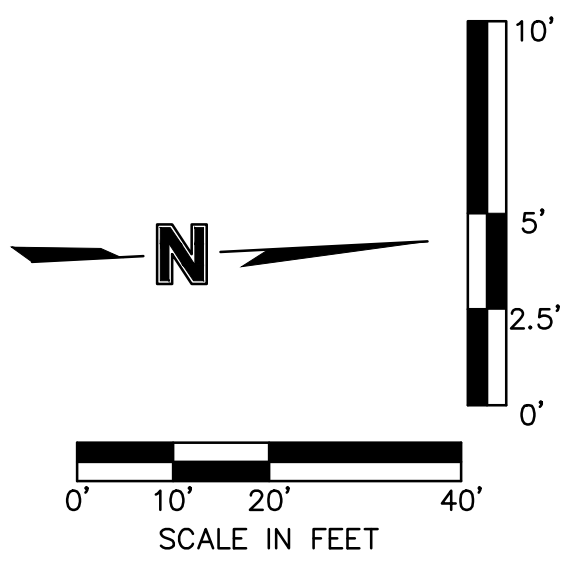
drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

SHEET C128

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Storm Plans\019-4061.dwg USER: nheiser
DATE: Jun 30, 2020 7:14am XREFS: C:\PTBLK_0194061_34x22 C:\PBDY_0194061 C:\PBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061

Riprap Calculations							
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area
E.S. 1-1	48.24	3	3	10	15	2.00	23.3

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



RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI
09/15/2020

Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
FAX 816.361.1888
www.olsson.com

REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

STORM SEWER PLAN & PROFILE (LINE 1)
STREET AND STORM SEWER PLANS

HOOK FARMS
FIRST FLAT

LEE'S SUMMIT, MO

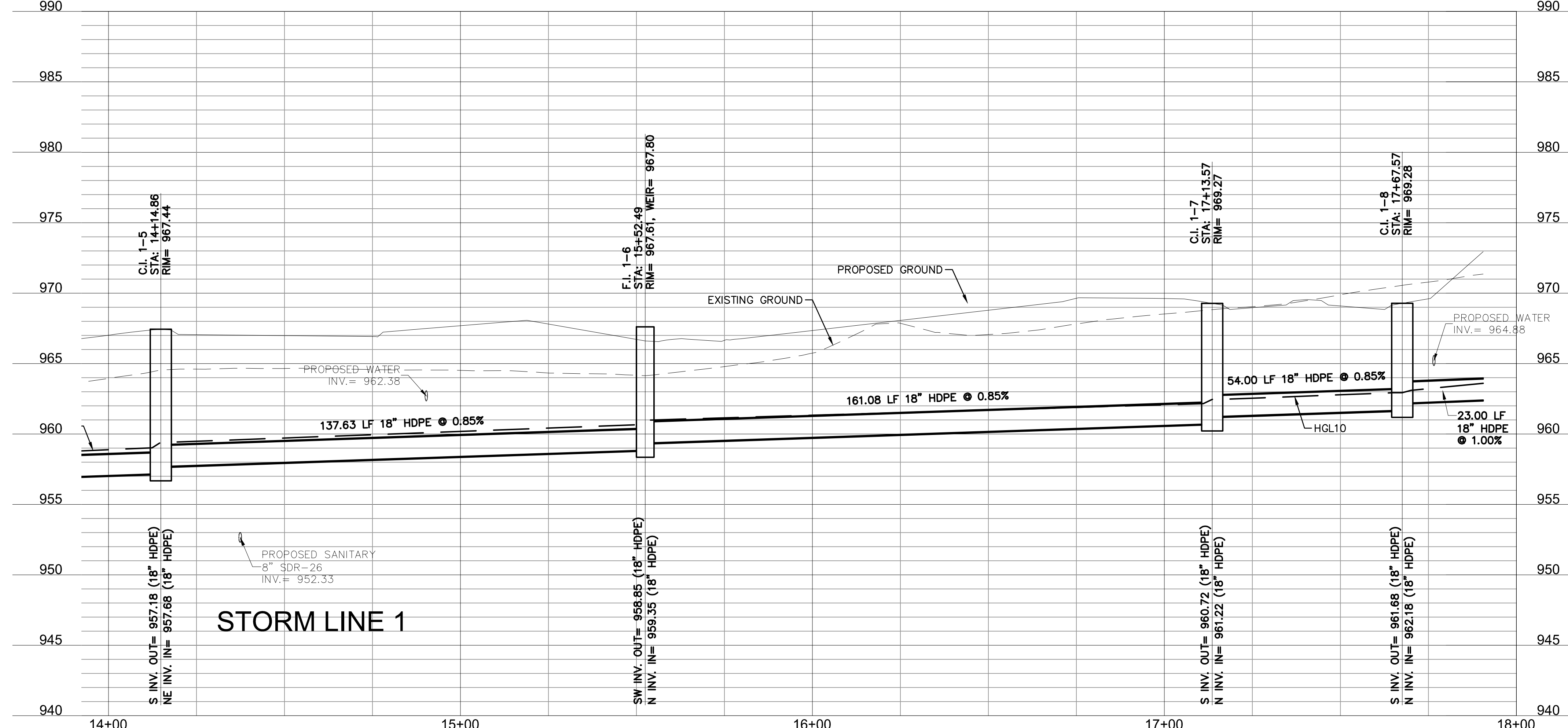
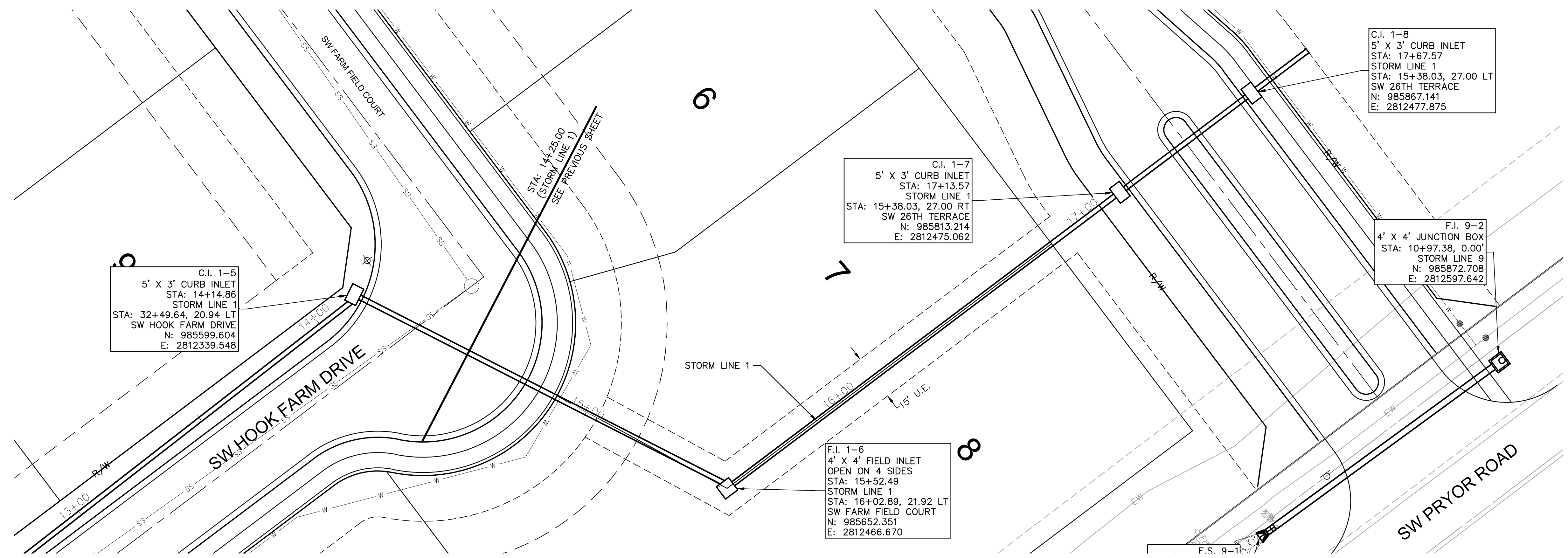
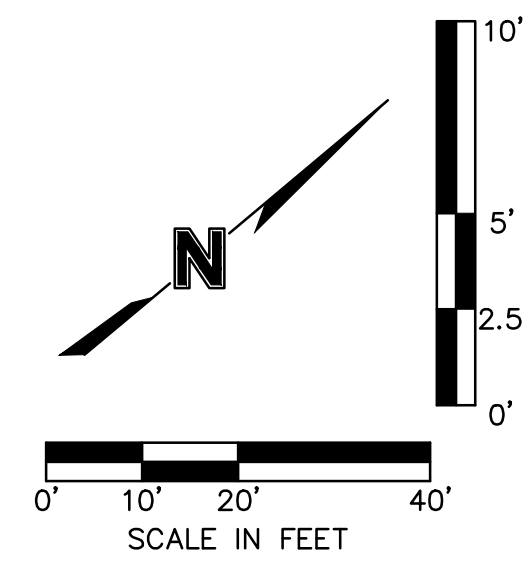
2020

REVISIONS

drawn by: _____	CGW
checked by: _____	JES
approved by: _____	NDH
QA/QC by: _____	JES
project no.: _____	019-4061
drawing no.: _____	
date: _____	04/20/2020

SHEET C129

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Sheets\NCV\Street and Storm Plans\NCV_STM01_0194061.dwg USER: nheiser
 DATE: Jun 30, 2020 7:14am XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\PBASE_0194061 C:\PSTRM_0194061 C:\PSURF_0194061 C:\PUTIL_0194061



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com

REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

STORM SEWER PLAN & PROFILE (LINE 1 CONT'D)
 STREET AND STORM SEWER PLANS

BY

REVISIONS

HOOK FARMS
 FIRST FLAT

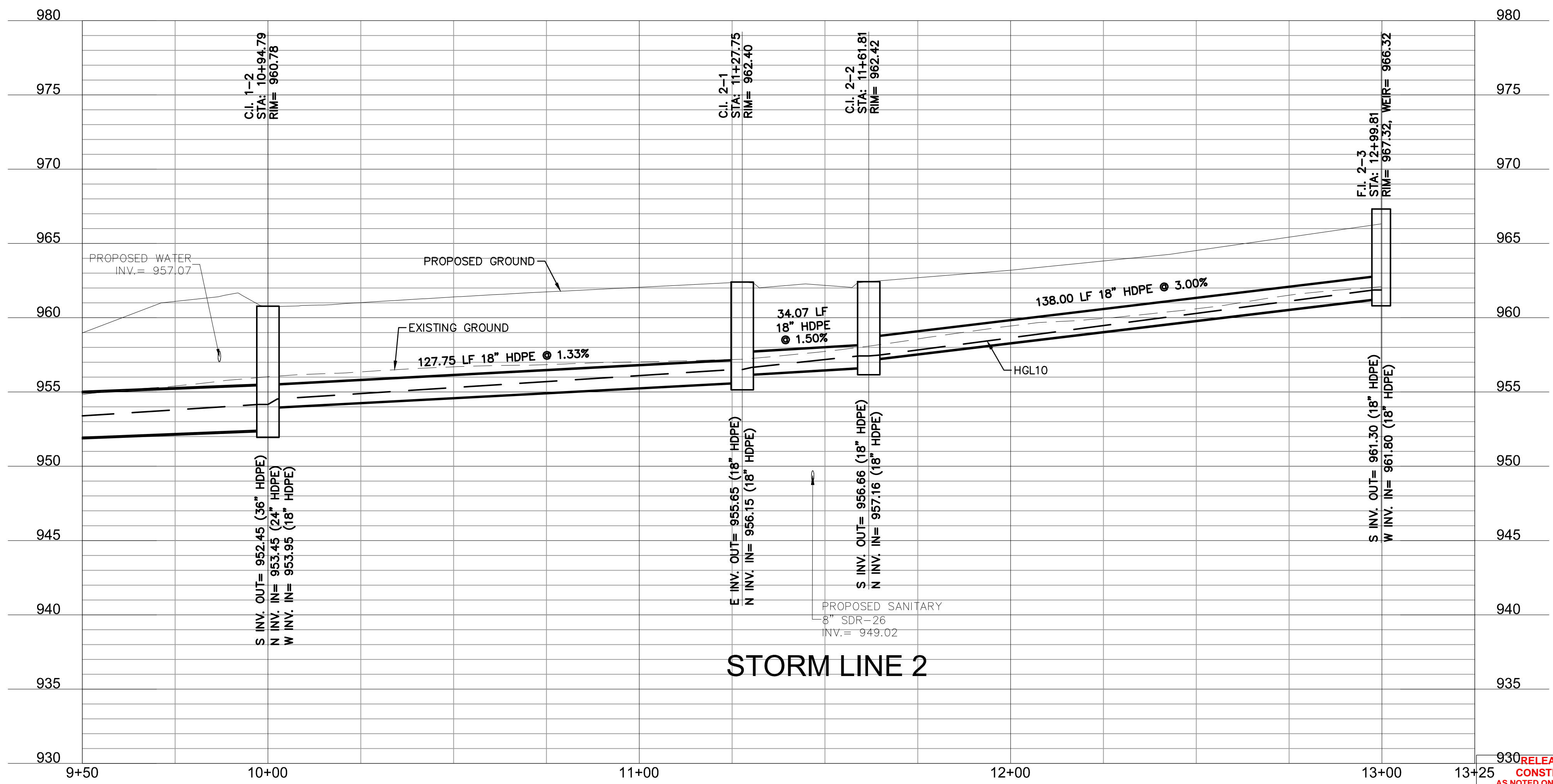
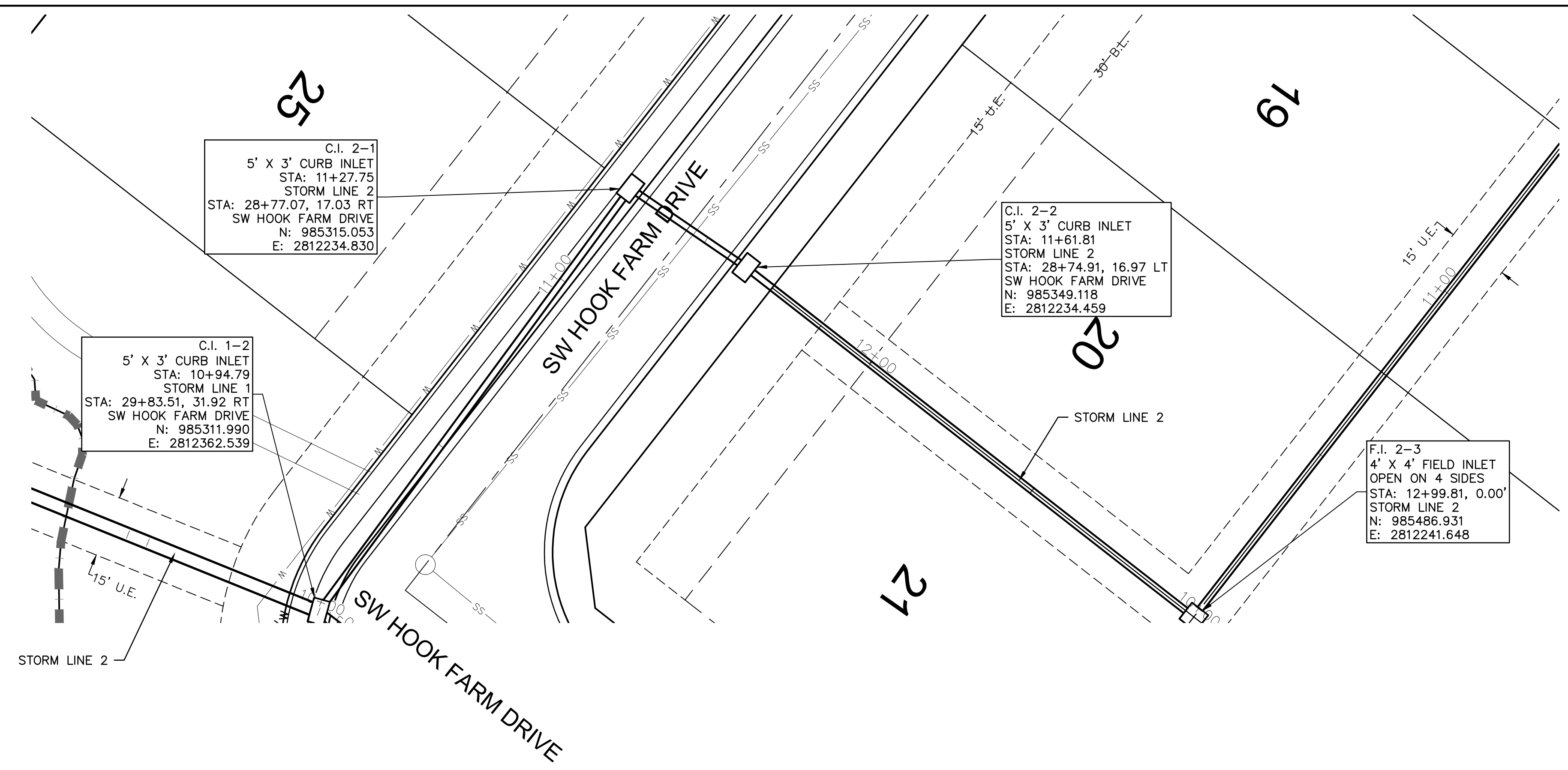
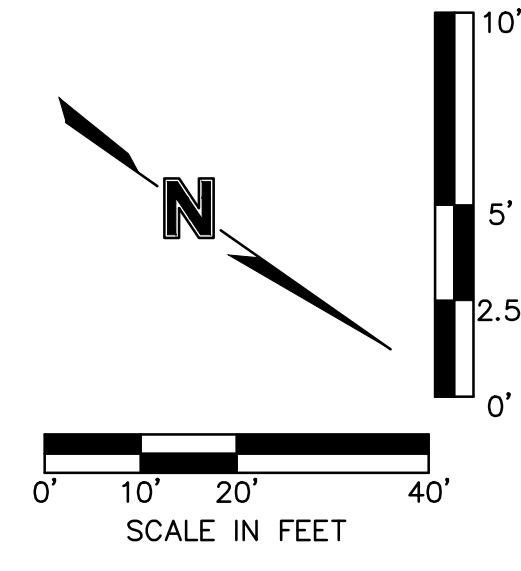
2020

LEE'S SUMMIT, MO

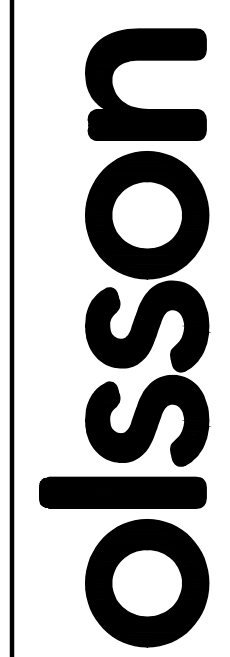
SHEET
 C130

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020


DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Sheets\NCV\Street and Storm Plans\0194061.dwg USER: nheiser
 DATE: Jun 30, 2020 7:14am XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\XBASE_0194061 C:\PBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061



930 RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com



JULIE ELAINE SELLERS
 PROFESSIONAL ENGINEER
 NUMBER PE-2017000367
 6/30/20

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	08/15/2020	REVISED PER CITY COMMENTS	
2	08/25/2020	REVISED PER CITY COMMENTS	

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

HOOK FARMS
 FIRST PLAT

LEE'S SUMMIT, MO

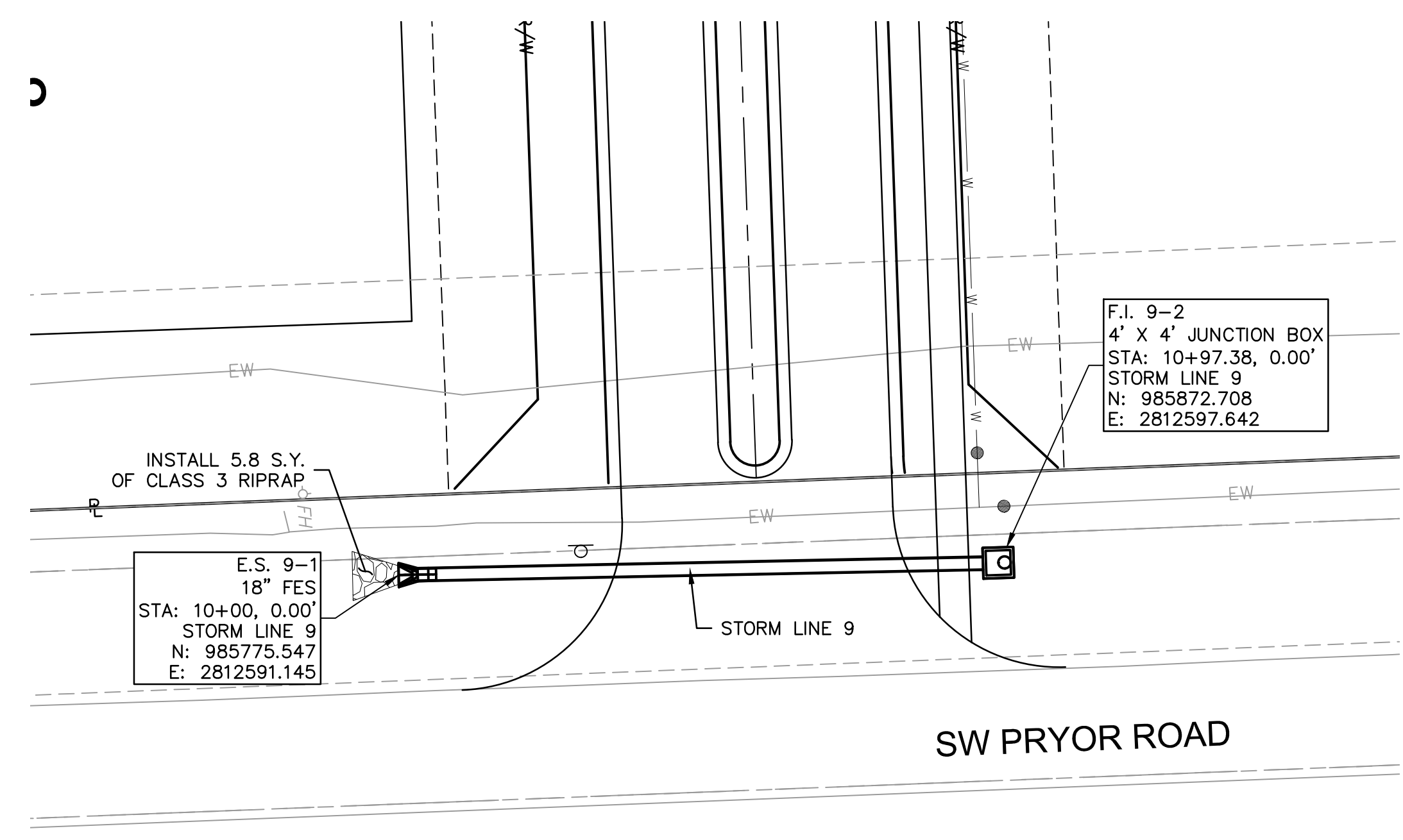
2020

REVISIONS

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

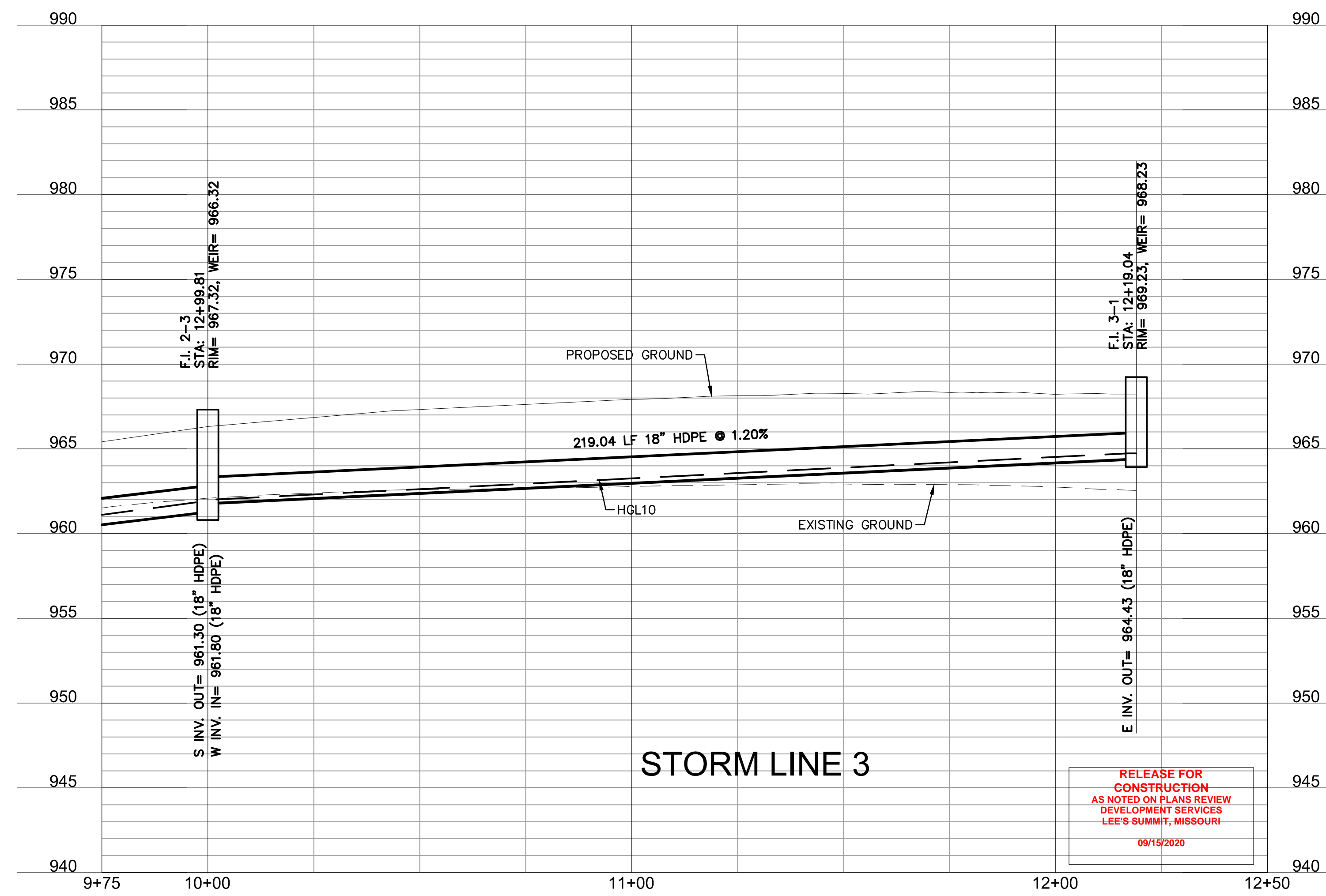
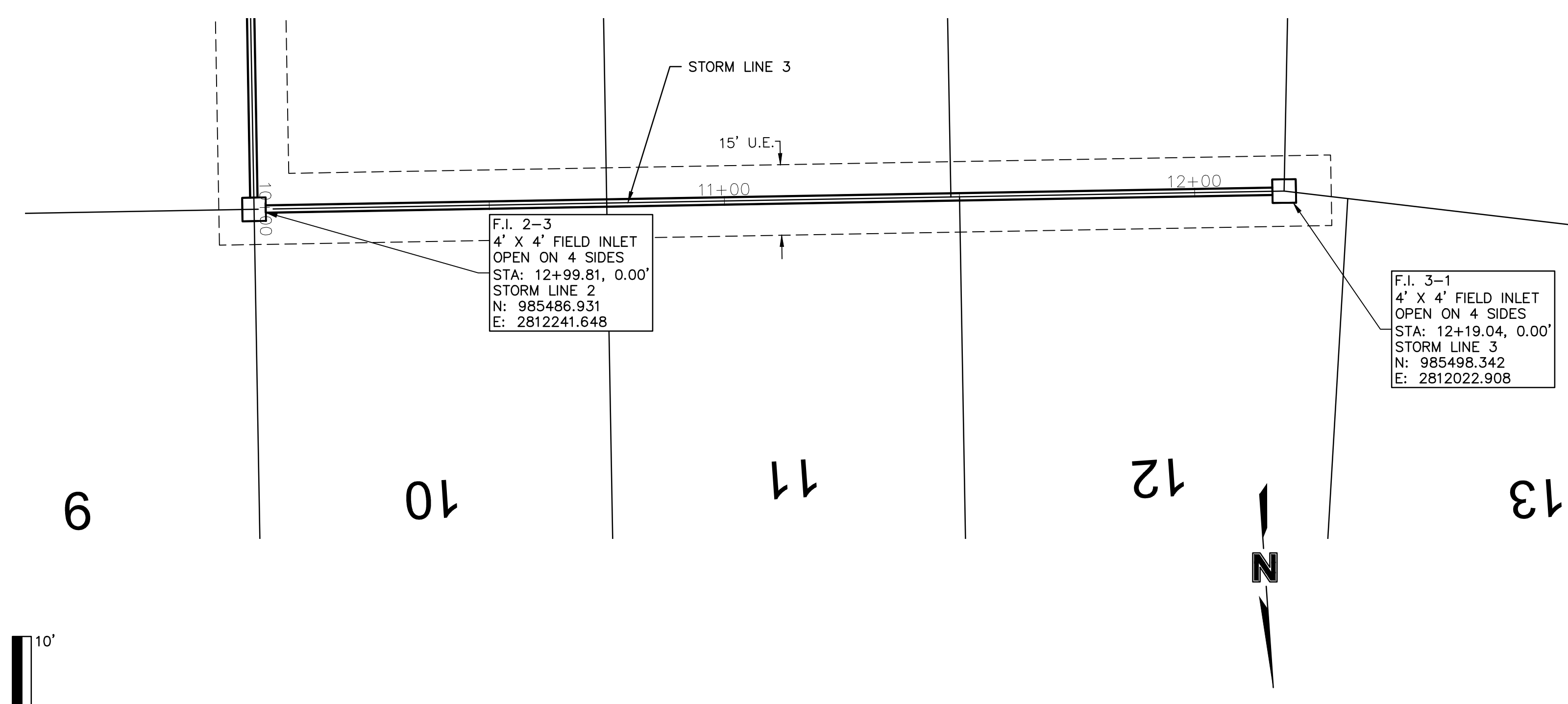
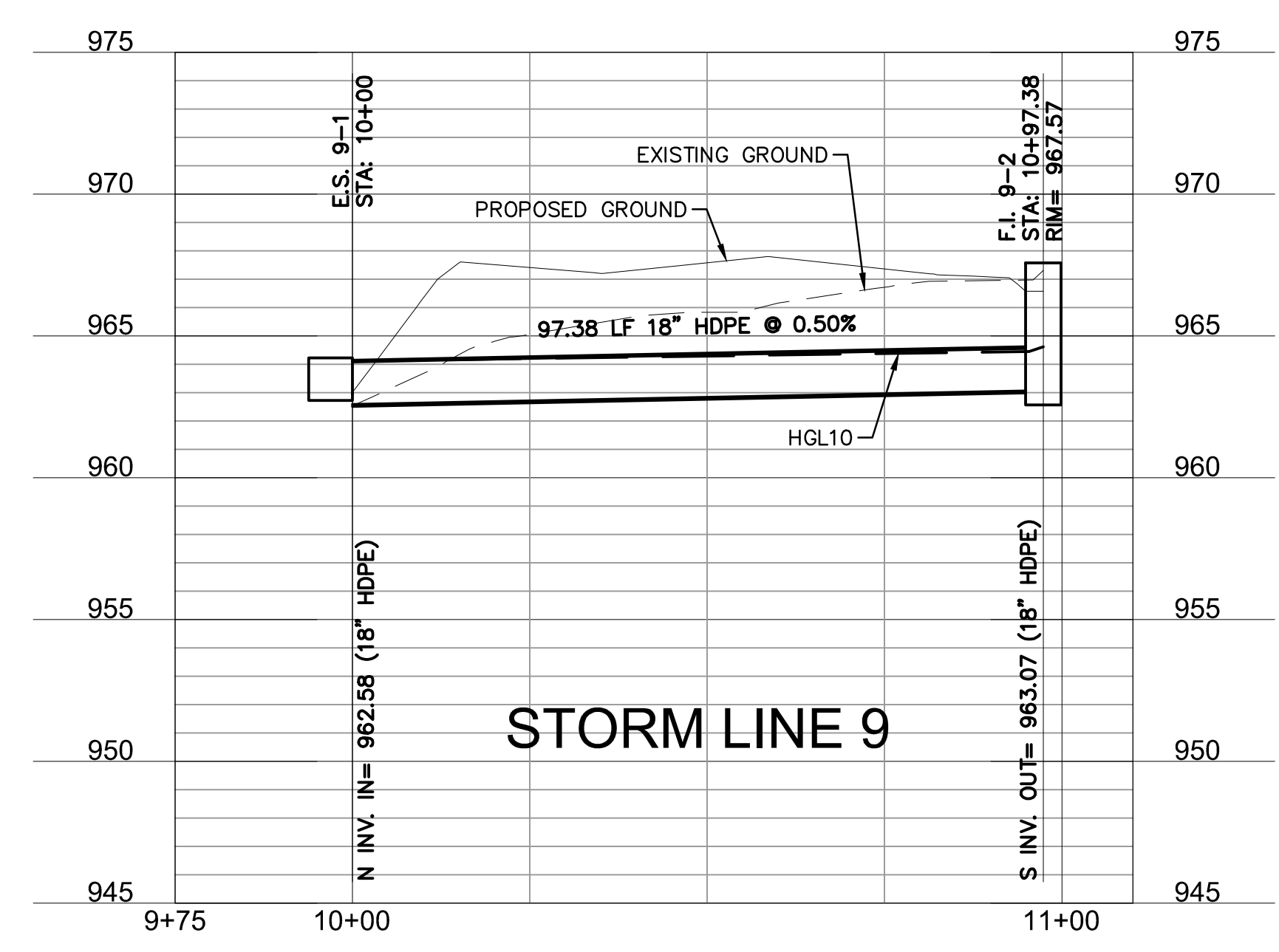
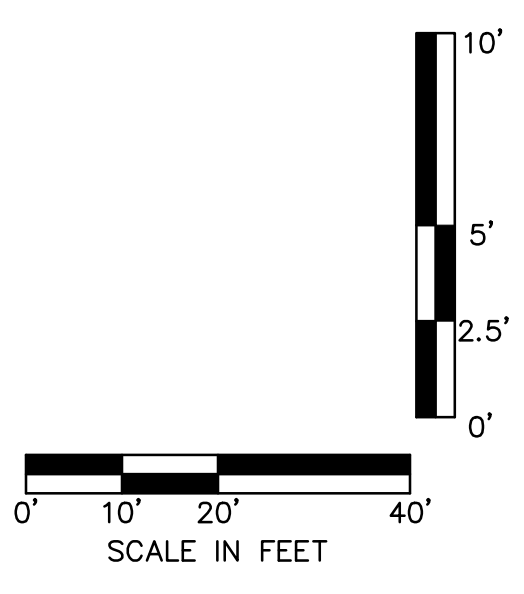
SHEET C131

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Storm Plans\019-4061.dwg USER: nheiser
 DATE: Jun 30, 2020 7:14am XREFS: C:\PTBLK_0194061_34x22 C:\PBDY_0194061 C:\XBASE_0194061 C:\PBASE_0194061 C:\PSTRM_0194061 C:\PSURF_0194061 C:\PUTIL_0194061



Riprap Calculations							
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 9-1	14.93	1.5	3	10	7.5	2.00	5.8

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



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.7888
 www.olsson.com

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	06/15/2020	REVISED PER CITY COMMENTS	
2	06/25/2020	REVISED PER CITY COMMENTS	

STORM SEWER PLAN & PROFILE (LINE 3 & 9)
 STREET AND STORM SEWER PLANS

HOOK FARMS
 FIRST FLAT

2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

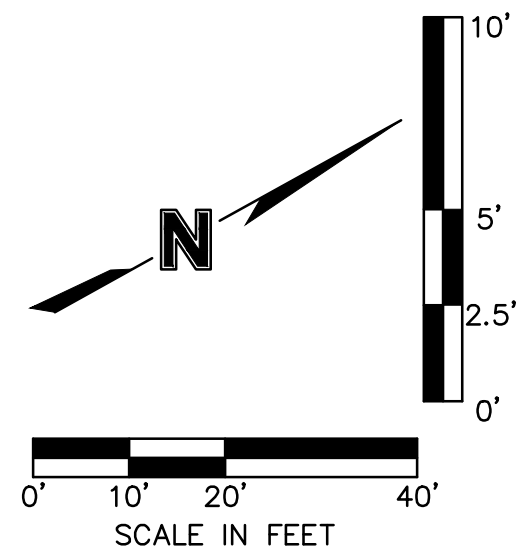
REVISIONS

SHEET
C132

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\Storm Plans\019-4061.dwg USER: nheiser
 DATE: Jun 29, 2020 6:53pm XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\XBASE_0194061 C:\PSURF_0194061 C:\PSTRM_0194061 C:\PUTIL_0194061

Riprap Calculations							
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 4-1	27.38	2.5	2	6	10	1.65	12.0

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



INSTALL 12 S.Y. OF CLASS 2 RIPRAP

E.S. 4-1
30" FES
STA: 10+00
STORM LINE 4
N: 985258.303
E: 2811631.226

33

32

C.I. 4-3
6' X 3' CURB INLET
STA: 12+46.46
STORM LINE 4
STA: 23+90.41, 17.00 LT
SW HOOK FARM DRIVE
N: 985444.022
E: 2811774.492

SW HOOK FARM DRIVE

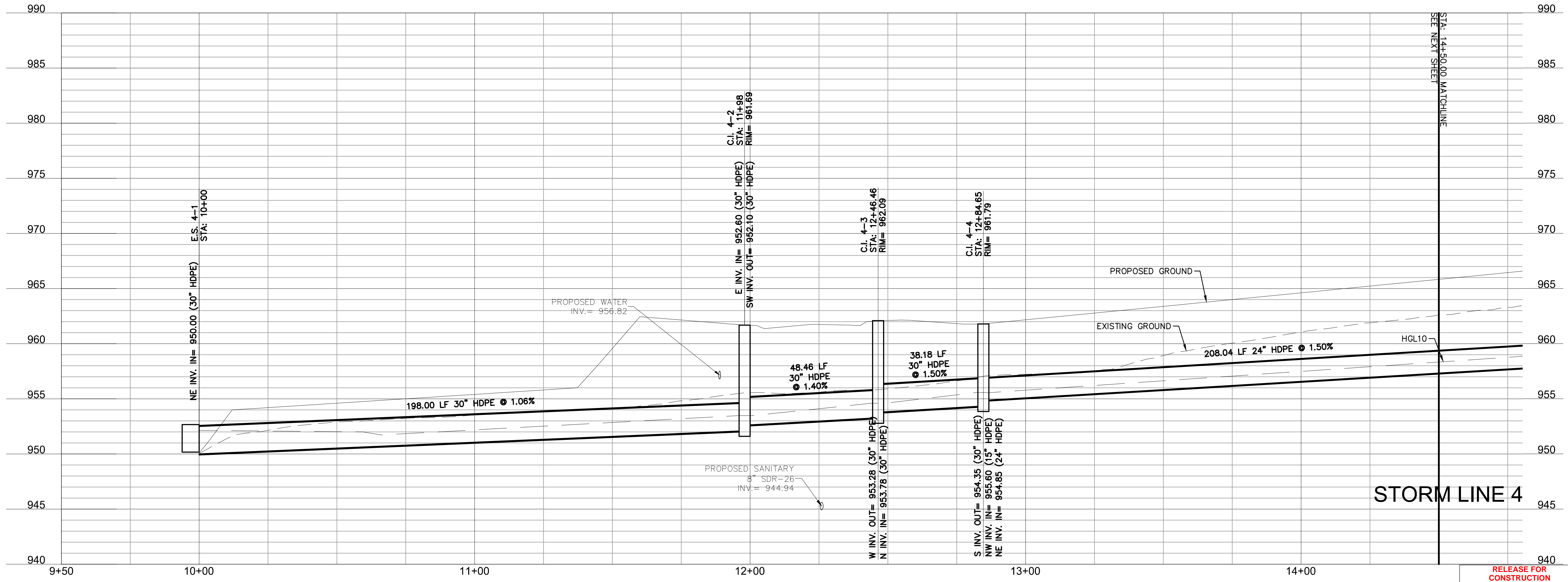
C.I. 4-4
6' X 3' CURB INLET
STA: 12+84.65
STORM LINE 4
STA: 10+44.00, 17.00 RT
SW FARM FIELD ROAD
N: 985480.760
E: 2811764.082

15

SW FARM FIELD ROAD

M.H. 4-5
60" MH
STA: 14+92.68
STORM LINE 4
STA: 12+52.04, 17.00 RT
SW FARM FIELD ROAD
N: 985662.394
E: 2811865.510

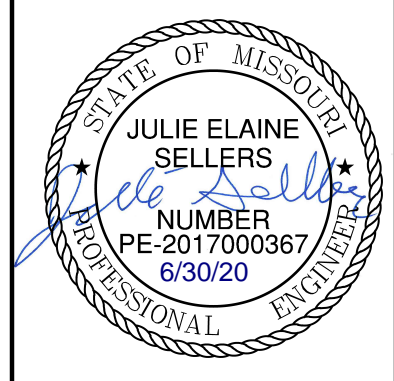
14



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
09/15/2020

olsson

Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
FAX 816.361.1888
www.olson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

STORM SEWER PLAN & PROFILE (LINE 4)
STREET AND STORM SEWER PLANS

HOOK FARMS
FIRST FLAT

LEE'S SUMMIT, MO

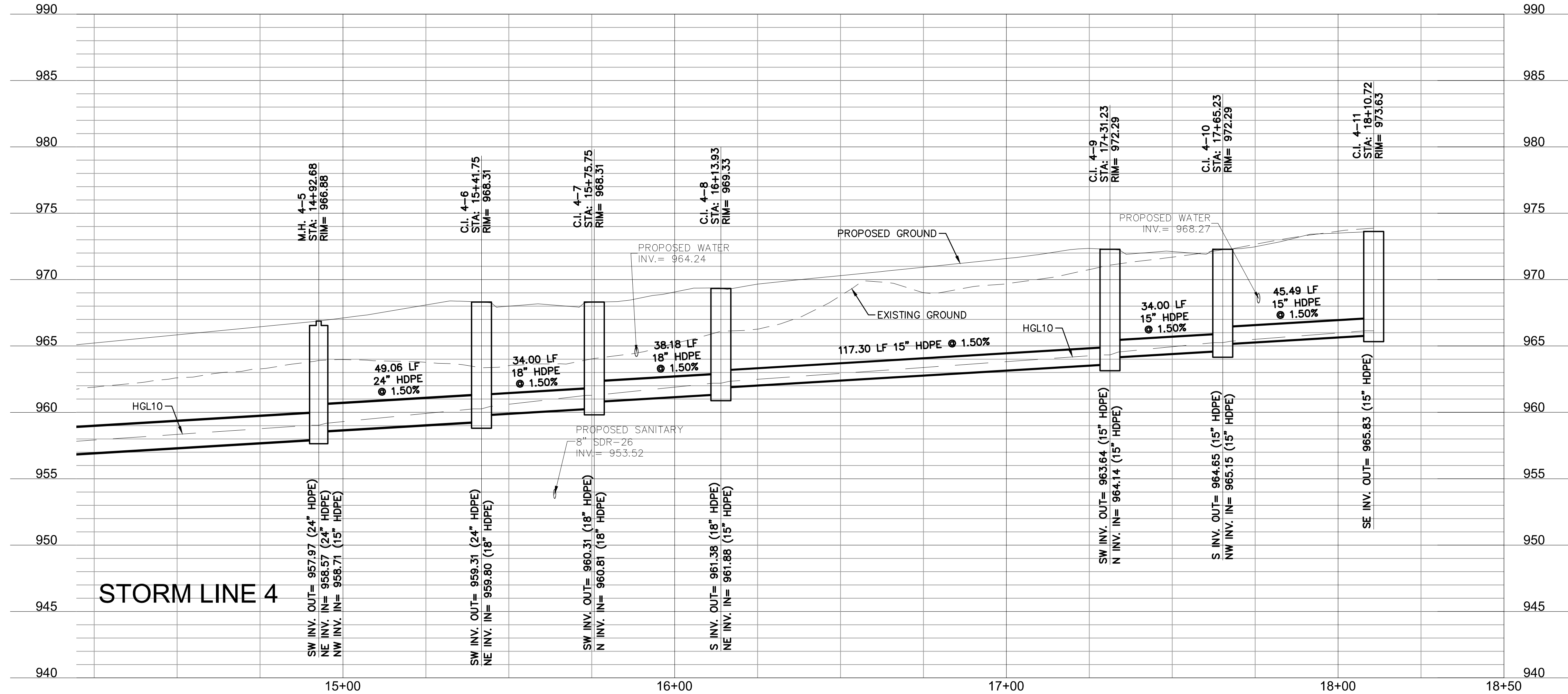
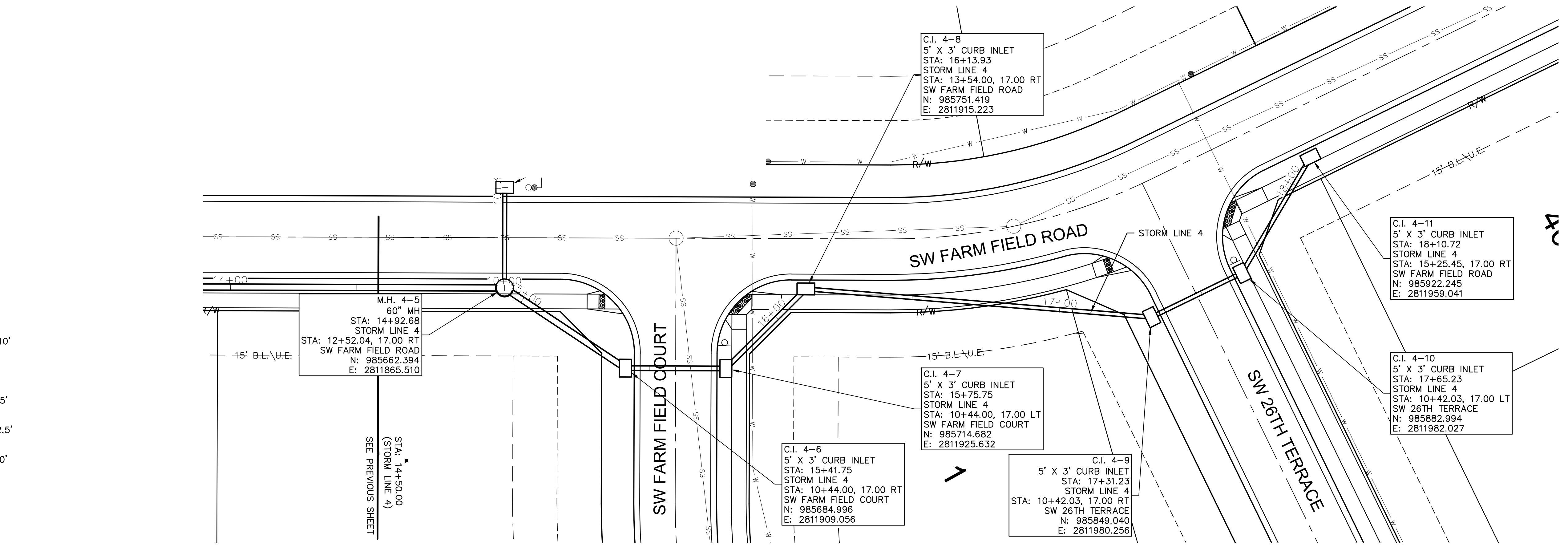
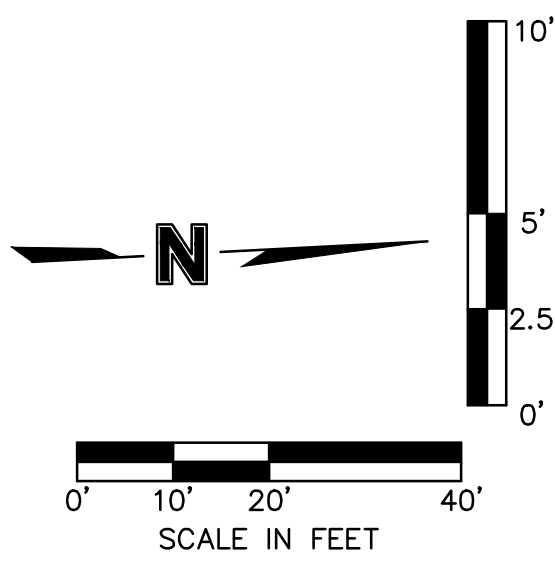
2020

REVISIONS

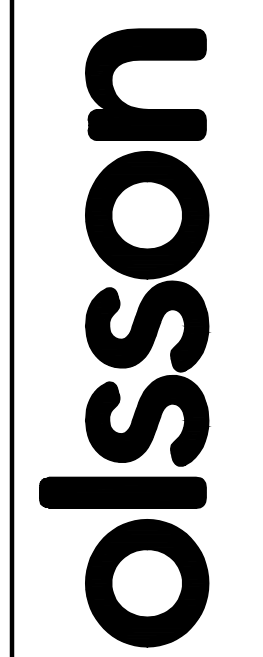
drawn by: CGW
checked by: JES
approved by: NDH
QA/QC by: JES
project no.: 019-4061
drawing no.:
date: 04/20/2020

SHEET C133

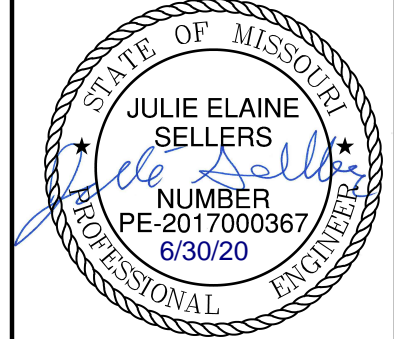
DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\C_STM02_0194061.dwg USER: nheiser
 DATE: Jun 29, 2020 6:53pm XREFS: C:\PTBLK_0194061_34x22 C:\PBASE_0194061 C:\PSURF_0194061 C:\PUTIL_0194061



RELEASE FOR
 CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.7888
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

STORM SEWER PLAN & PROFILE (LINE 4 CONT'D)
 STREET AND STORM SEWER PLANS

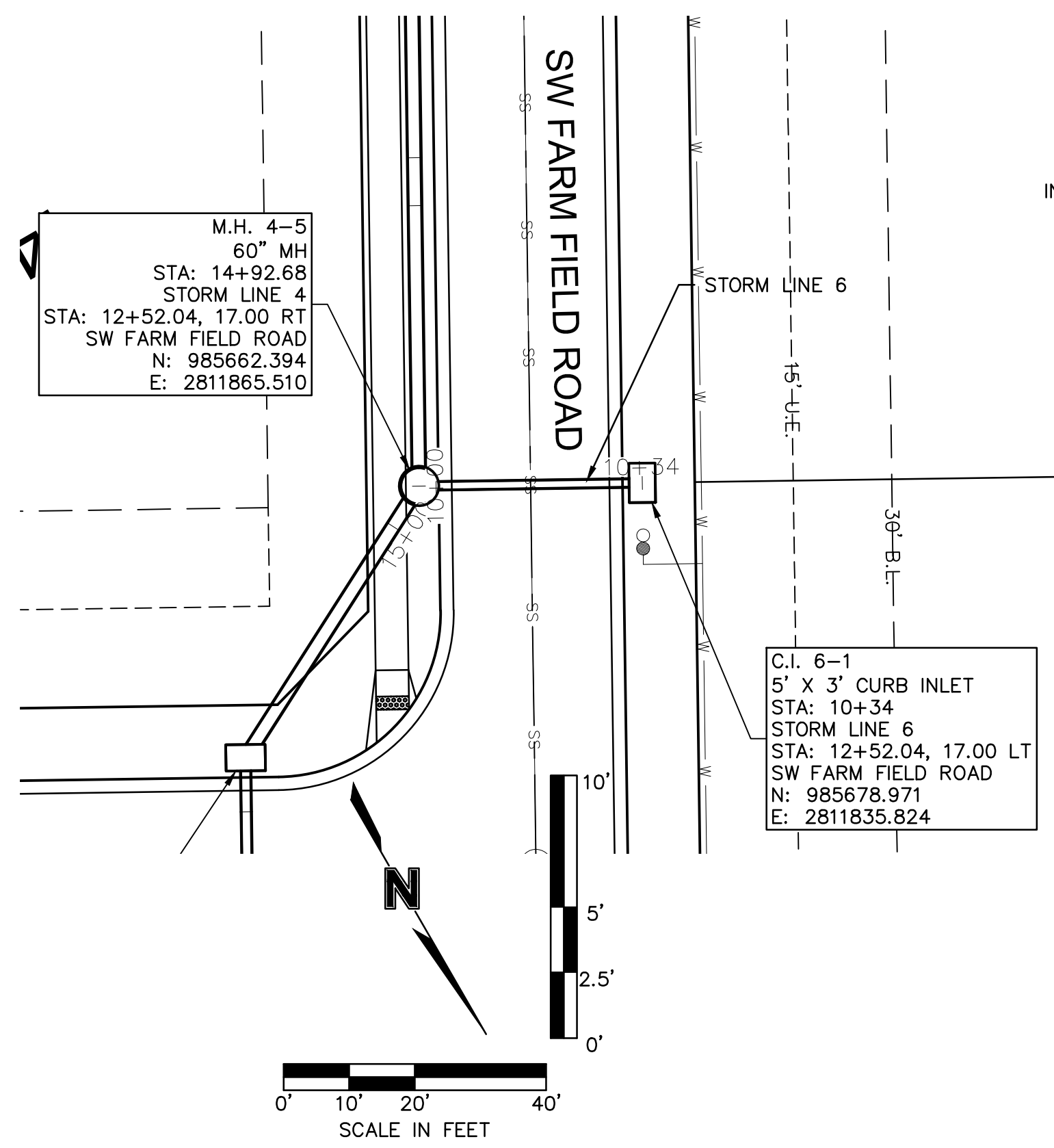
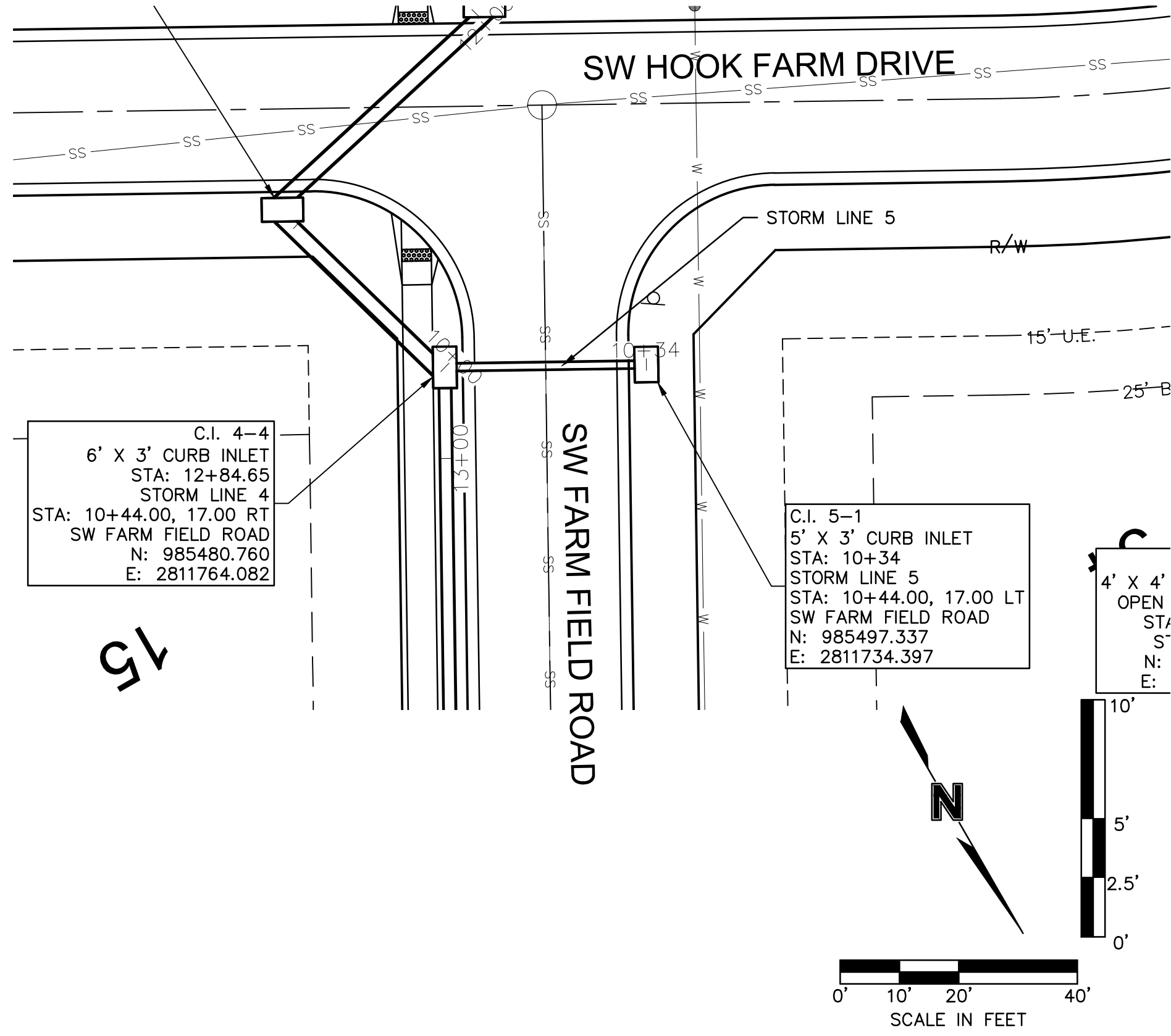
HOOK FARMS
 FIRST FLAT

2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

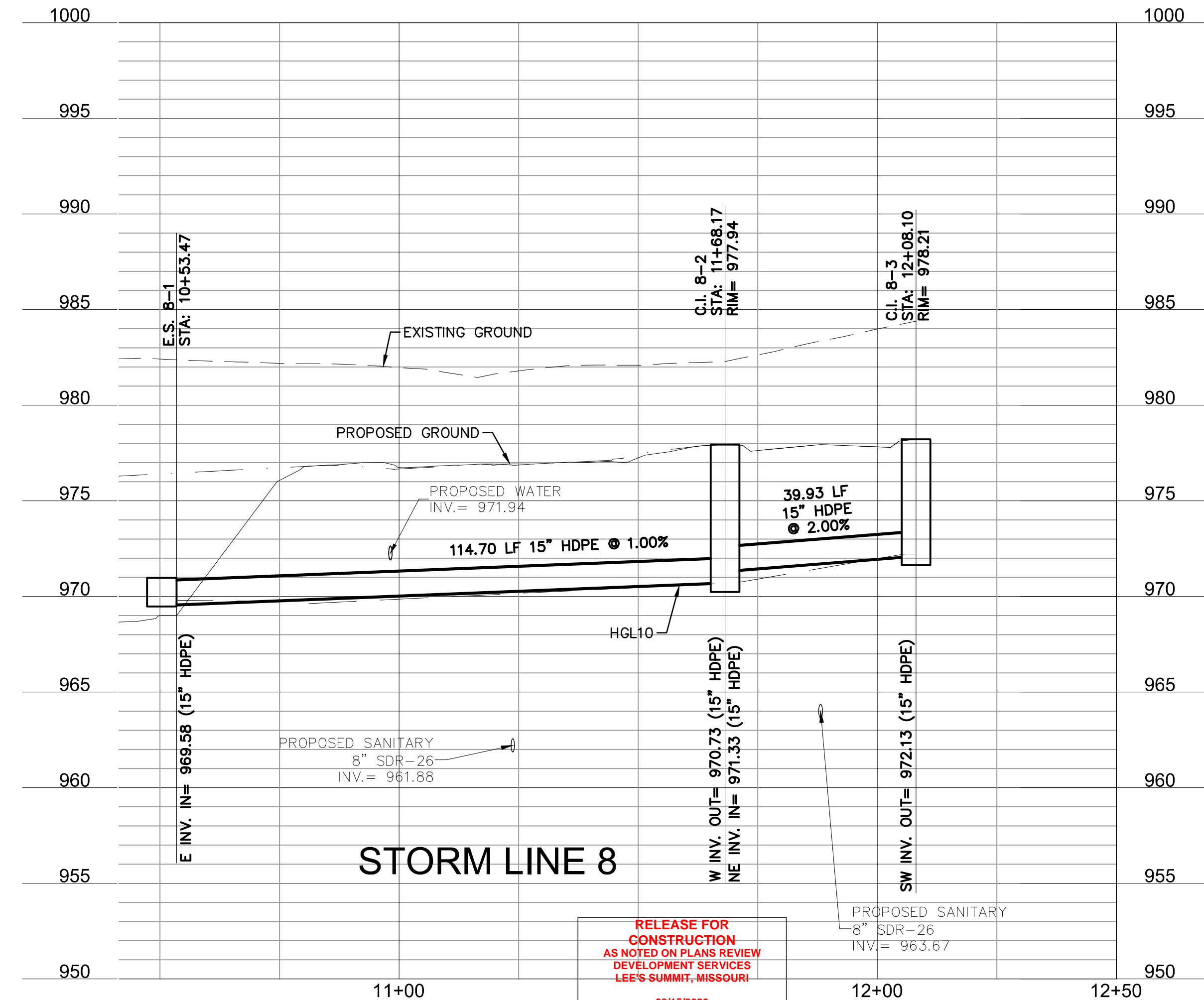
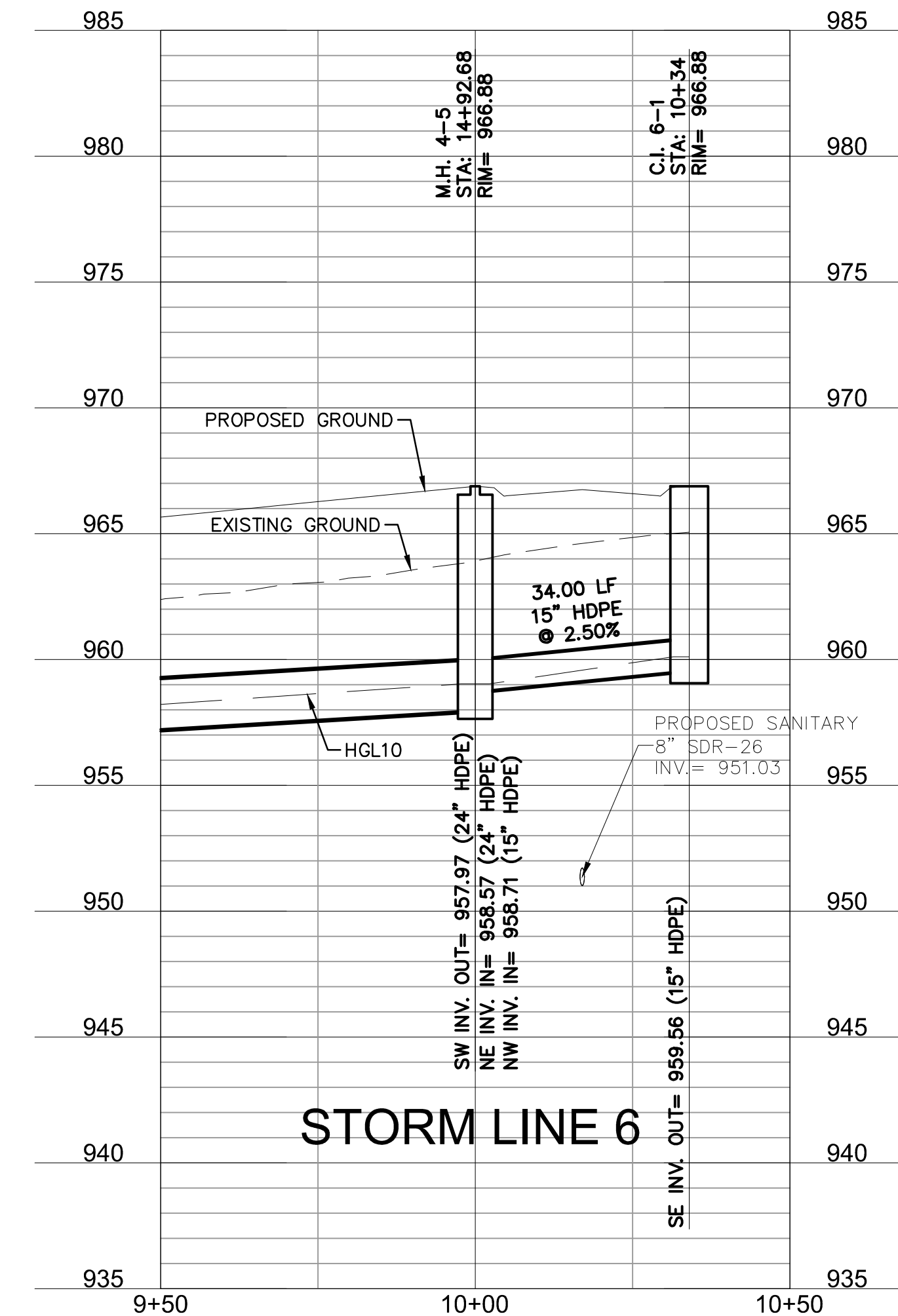
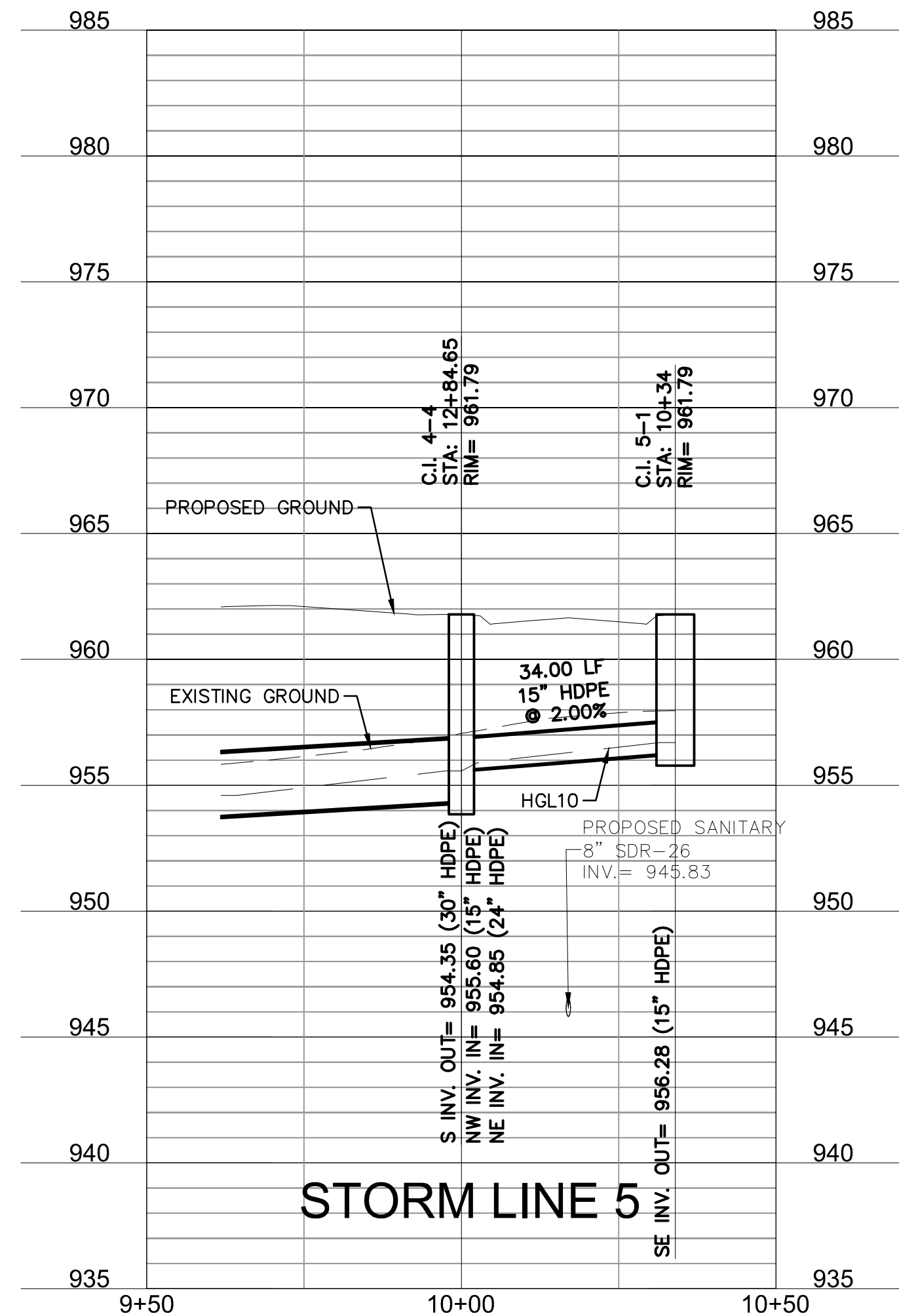
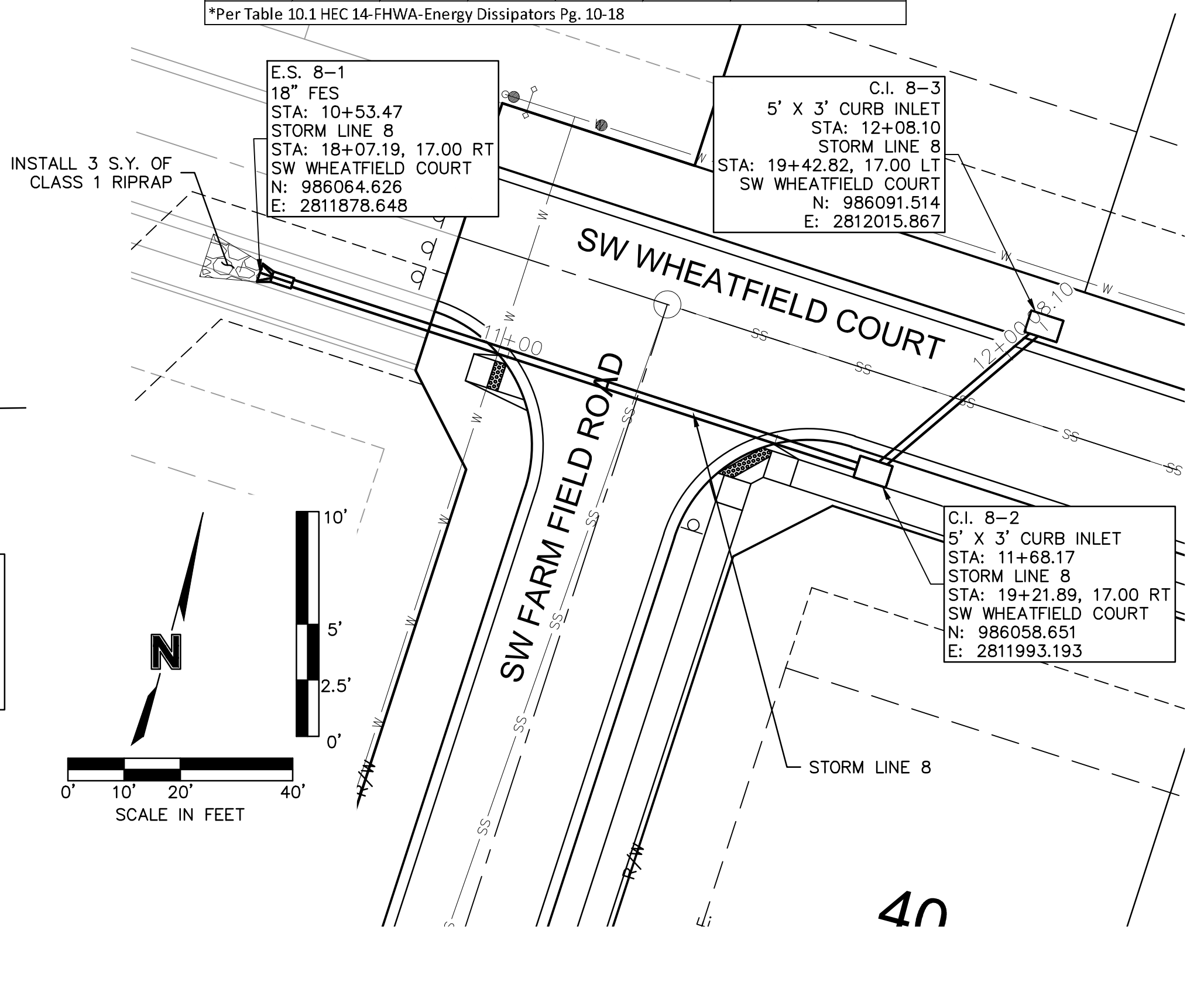
SHEET
 C134

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Storm Plans\NC_STM02_0194061.dwg
 DATE: Jun 29, 2020 6:53pm
 USER: nheiser
 C:\PSTRM_0194061 C:\PSURF_0194061 C:\PUTIL_0194061
 XREFS: C:\PTBLK_0194061_34x22 C:\XBASE_0194061 C:\FBASE_0194061



Riprap Calculations							
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 8-1	5.56	1.25	1	5	5	1.46	3.0

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



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com

REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	09/25/2020	REVISED PER CITY COMMENTS

STORM SEWER PLAN & PROFILE (LINES 5, 6, & 8)
 STREET AND STORM SEWER PLANS

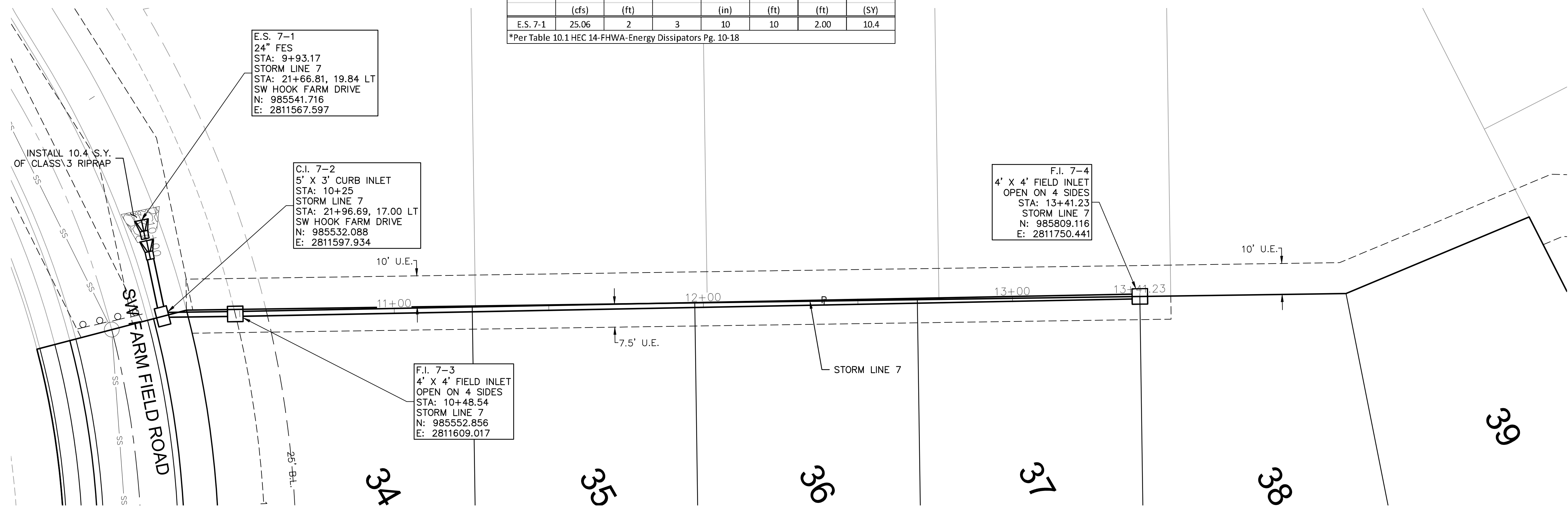
HOOK FARMS
 FIRST FLAT

2020

LEE'S SUMMIT, MO

SHEET C135

DWG: F:\2019\4001-4500\019-4061-Design\AutoCAD\Final Plans\Storm Plans\019-4061.dwg
 DATE: Jun 29, 2020 6:53pm
 USER: nheiser
 XREFS: C:\PTBLK_0194061_34x22 C:\XBASE_0194061 C:\PBASE_0194061 C:\PSURF_0194061 C:\PSTRM_0194061 C:\PUTIL_0194061



Riprap Calculations							
End Section	Q ₁₀₀ (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 7-1	25.06	2	3	10	10	2.00	10.4

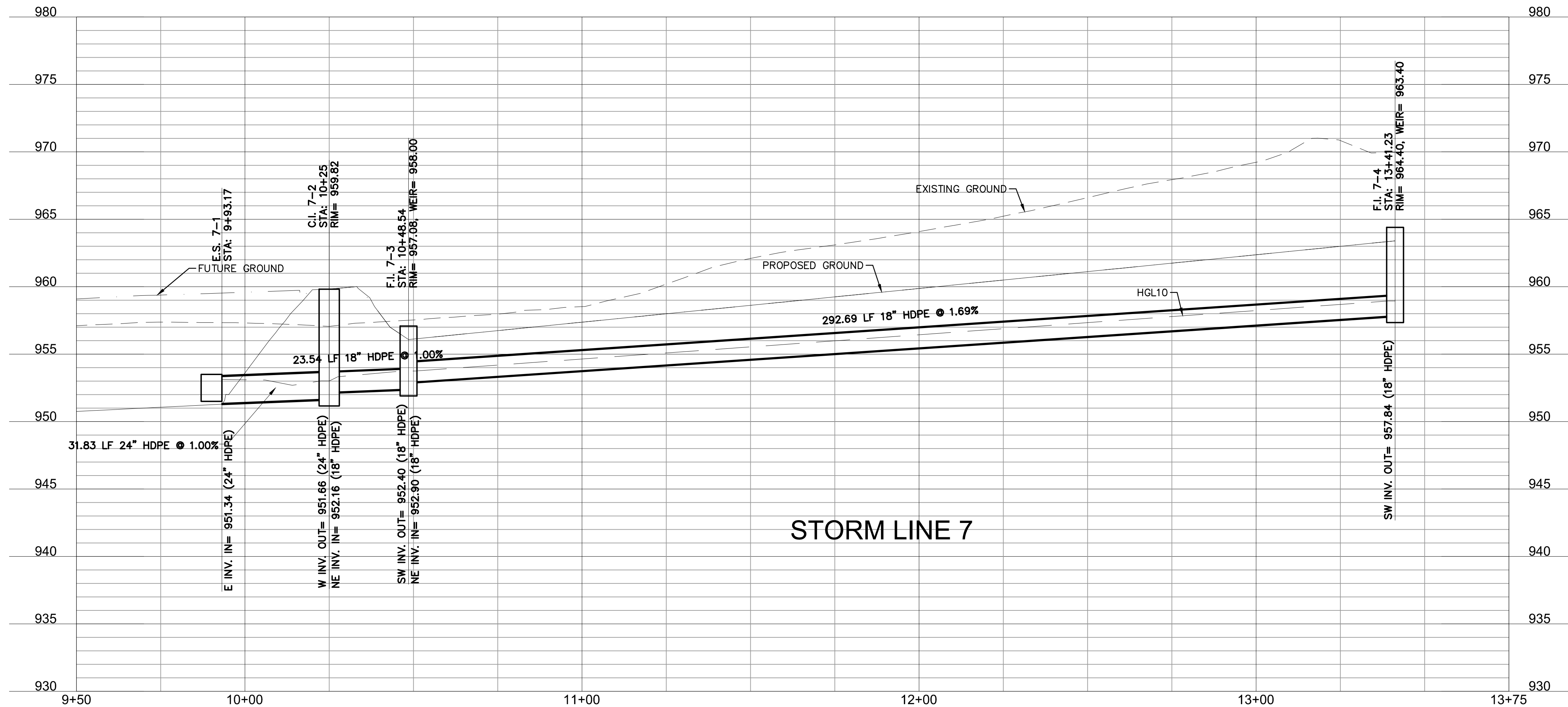
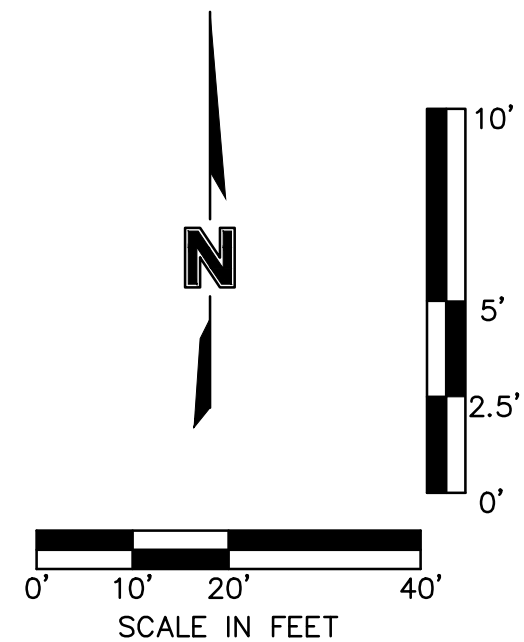
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18

E.S. 7-1
 24" FES
 STA: 9+93.17
 STORM LINE 7
 STA: 21+56.81, 19.84 LT
 SW HOOK FARM DRIVE
 N: 985541.716
 E: 2811567.597

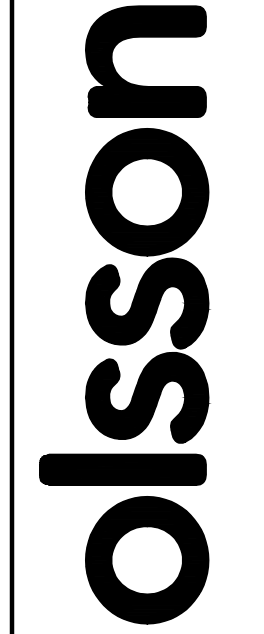
C.I. 7-2
 5' X 3' CURB INLET
 STA: 10+25
 STORM LINE 7
 STA: 21+96.69, 17.00 LT
 SW HOOK FARM DRIVE
 N: 985532.088
 E: 2811597.934

F.I. 7-3
 4' X 4' FIELD INLET
 OPEN ON 4 SIDES
 STA: 10+48.54
 STORM LINE 7
 N: 985552.856
 E: 2811609.017

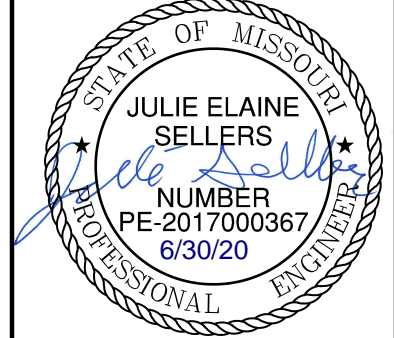
F.I. 7-4
 4' X 4' FIELD INLET
 OPEN ON 4 SIDES
 STA: 13+41.23
 STORM LINE 7
 N: 985809.116
 E: 2811750.441



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020



Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	06/15/2020	REVISED PER CITY COMMENTS
2	06/25/2020	REVISED PER CITY COMMENTS

STORM SEWER PLAN & PROFILE (LINE 7)
 STREET AND STORM SEWER PLANS

HOOK FARMS
 FIRST FLAT

LEE'S SUMMIT, MO

2020

REVISIONS

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020

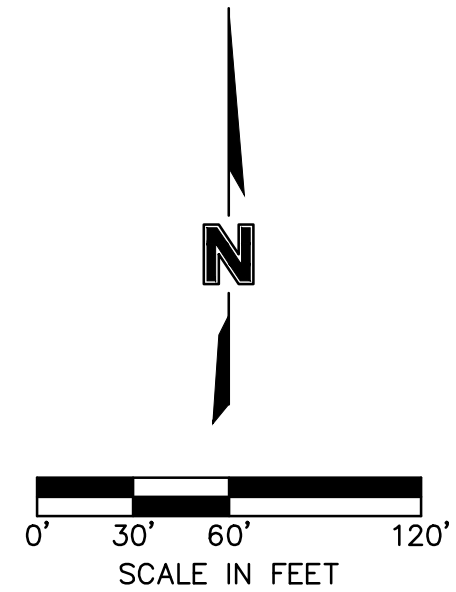
SHEET
C136

DWG: F:\2019\4001-4500\019-4061\40-Design\AutoCAD\Final Plans\Storm Plans\NC_STM03_0194061.dwg
 DATE: Jun 29, 2020 6:54pm
 USER: nheiser
 C_PSTRM_0194061
 C_PUTL_0194061
 C_FBASE_0194061
 C_PENDY_0194061
 C_XBASE_0194061

LEGEND	
—100—	FINISHED INDEX CONTOURS
-100-	FINISHED INTERMEDIATE CONTOURS
—	RIDGE LINE
A	DRAINAGE AREA
C	RUNOFF COEFFICIENT
C.I. 0-D	STORM STRUCTURE NUMBER

- NOTES:**
- MBOE – MINIMUM BUILDING OPENING ELEVATION
- 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"
 - PLAT IS LOCATED OUTSIDE OF ANY REQUIRED BUFFER ZONES FOR NATURAL STREAMS.
 - 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 C105-C109 FOR SWALE GRADING DETAILS.
 - DRAINAGE PATHS TO BE CONSTRUCTED BETWEEN EACH OF THE LOTS LABELED AS STANDARD LOTS TO DRAIN WEST.
 - NO BUILDING PERMITS WILL BE ISSUED UNTIL AN AS-GRADED MASTER DRAINAGE PLAN HAS BEEN SUBMITTED TO THE CITY AND APPROVED BY THE CITY.

- BASEMENT TYPES**
- (S) STANDARD
 - (D) DAYLIGHT
 - (WO) WALK-OUT



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.7888
 www.olsson.com

REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

MASTER DRAINAGE PLAN
 STREET AND STORM SEWER PLANS

HOOK FARMS
 FIRST PLAT

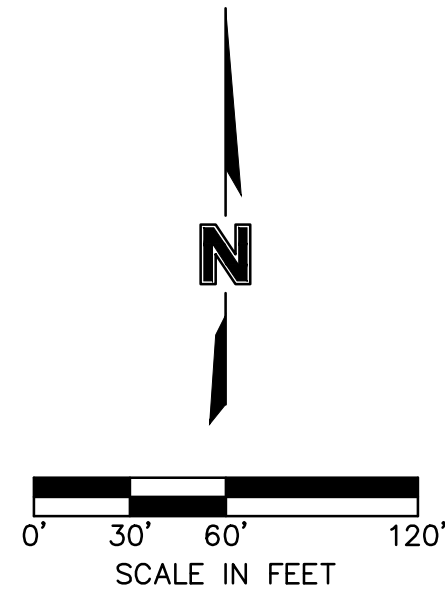
LEE'S SUMMIT, MO

2020

SHEET
 C137

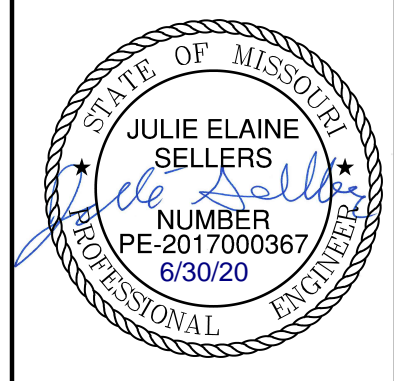
DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Storm Plans\NC_STM04_0194061.dwg USER: nheiser C_PSTRM_0194061
 DATE: Jun 30, 2020 7:14am XREFS: C_PTBK_0194061_34x22 C_PNDY_0194061 C_XBASE_0194061 C_PBASE_0194061 C_PUTIL_0194061

LEGEND	
— 100	FINISHED INDEX CONTOURS
- - - 100	FINISHED INTERMEDIATE CONTOURS
—	RIDGE LINE
A	DRAINAGE AREA
C	RUNOFF COEFFICIENT
C.I. 0-D	STORM STRUCTURE NUMBER



RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olson.com



REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

DRAINAGE PLAN
STREET AND STORM SEWER PLANS
HOOK FARMS
FIRST FLAT
 LEE'S SUMMIT, MO 2020

drawn by:	CGW
checked by:	JES
approved by:	NDH
QA/QC by:	JES
project no.:	019-4061
drawing no.:	
date:	04/20/2020

USER: nheiser

DWG: F:\2019\4001-4500\019-4061-40-Design\AutoCAD\Final Plans\Sheets\NCV\Street and Storm Plans\TAB01_0194061.dwg
DATE: Jun 29, 2020 6:54pm XREFS: C:\PTBLK_0194061_34x22

Inlet Design Table 10 Year Return Frequency table with columns for Inlet ID, Location, Peak Flow, Bypass, Total Flow, Clogging Factor, Inlet Capacity, Sag Inlet Capacity, Captured Flow, Bypass Flow, Inlet Efficiency, Gutter Depth, Gutter Spread, Ponding Depth.

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.

Inlet Design Table 100 Year Return Frequency table with columns for Inlet ID, Location, Peak Flow, Bypass, Total Flow, Clogging Factor, Inlet Capacity, Sag Inlet Capacity, Captured Flow, Bypass Flow, Inlet Efficiency, Gutter Depth, Gutter Spread, Ponding Depth.

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 table with columns for Inlet ID, Drainage Area, C, Tc, i, K, Peak Flow.

Drainage Area Design Table 100 Year Return Frequency table with columns for Inlet ID, Drainage Area, C, Tc, i, K, Peak Flow.

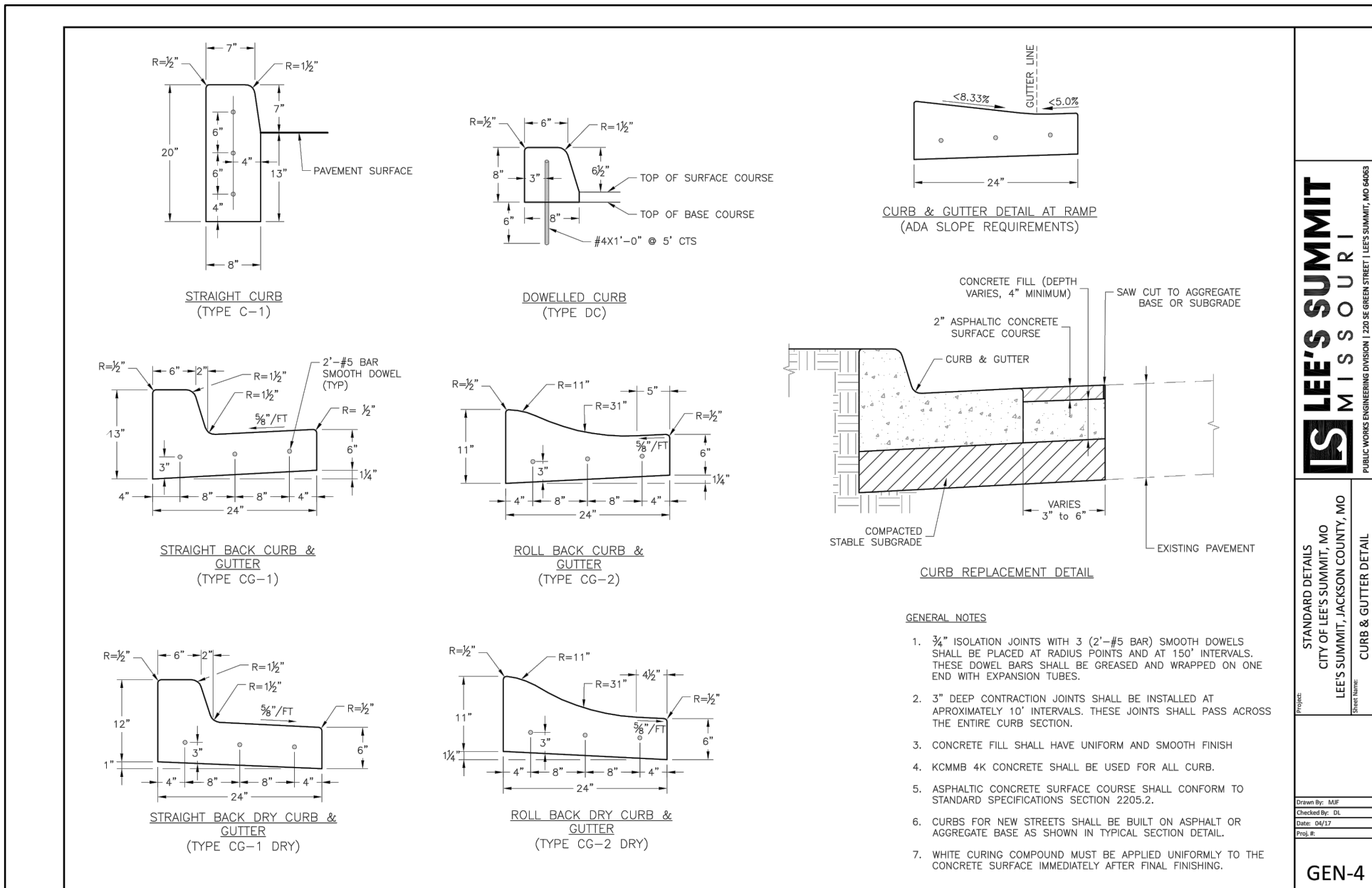
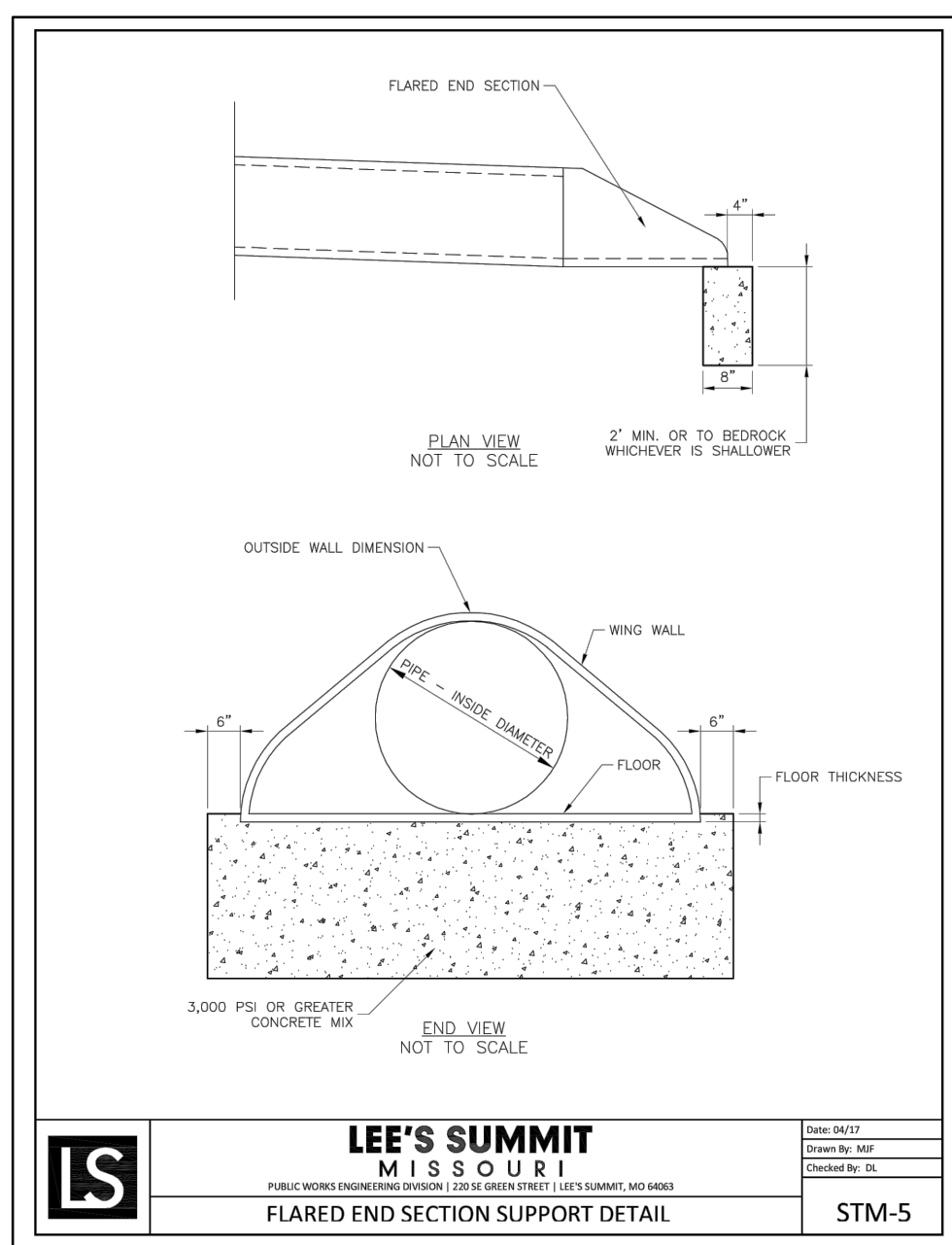
Storm Sewer Design Calculation Table 10 Year Return Frequency table with columns for Upstream Structure, Downstream Structure, Length, Invert, Slope, Diameter, Manning's n, Total Flow, Velocity, Capacity, Flow Depth, Upstream Struct. HGL, Upstream Top Elev.

Storm Sewer Design Calculation Table 100 Year Return Frequency table with columns for Upstream Structure, Downstream Structure, Length, Invert, Slope, Diameter, Manning's n, Total Flow, Velocity, Capacity, Flow Depth, Upstream Struct. HGL, Upstream Top Elev.

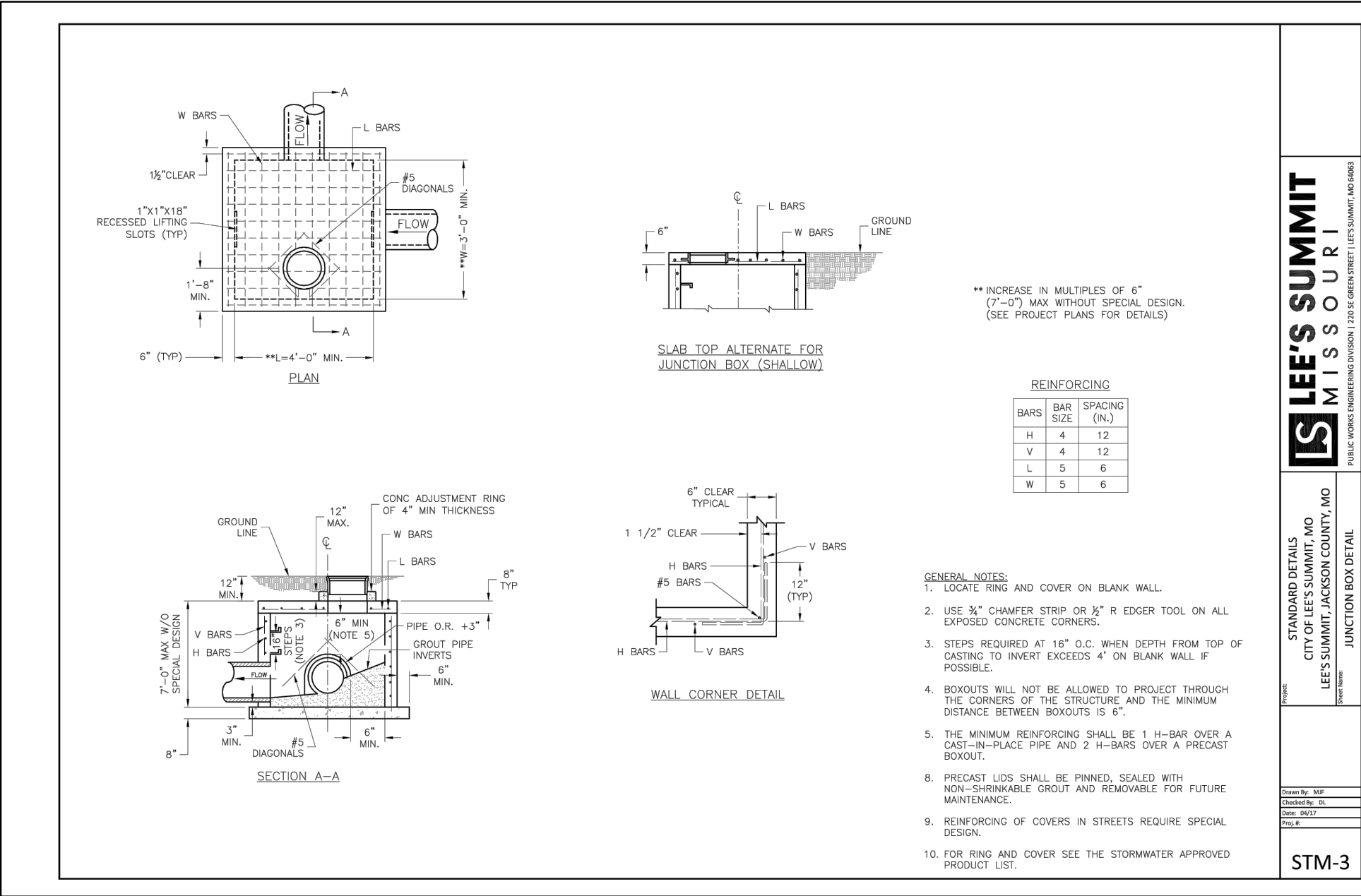
Professional Engineer seal for Julie Elaine Sellers, Missouri, No. PE-2017000367. Includes project title 'DRAINAGE TABLES STREET AND STORM SEWER PLANS', 'HOOK FARMS FIRST FLAT', 'LEE'S SUMMIT, MO', and '2020 REVISIONS'.

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 09/15/2020

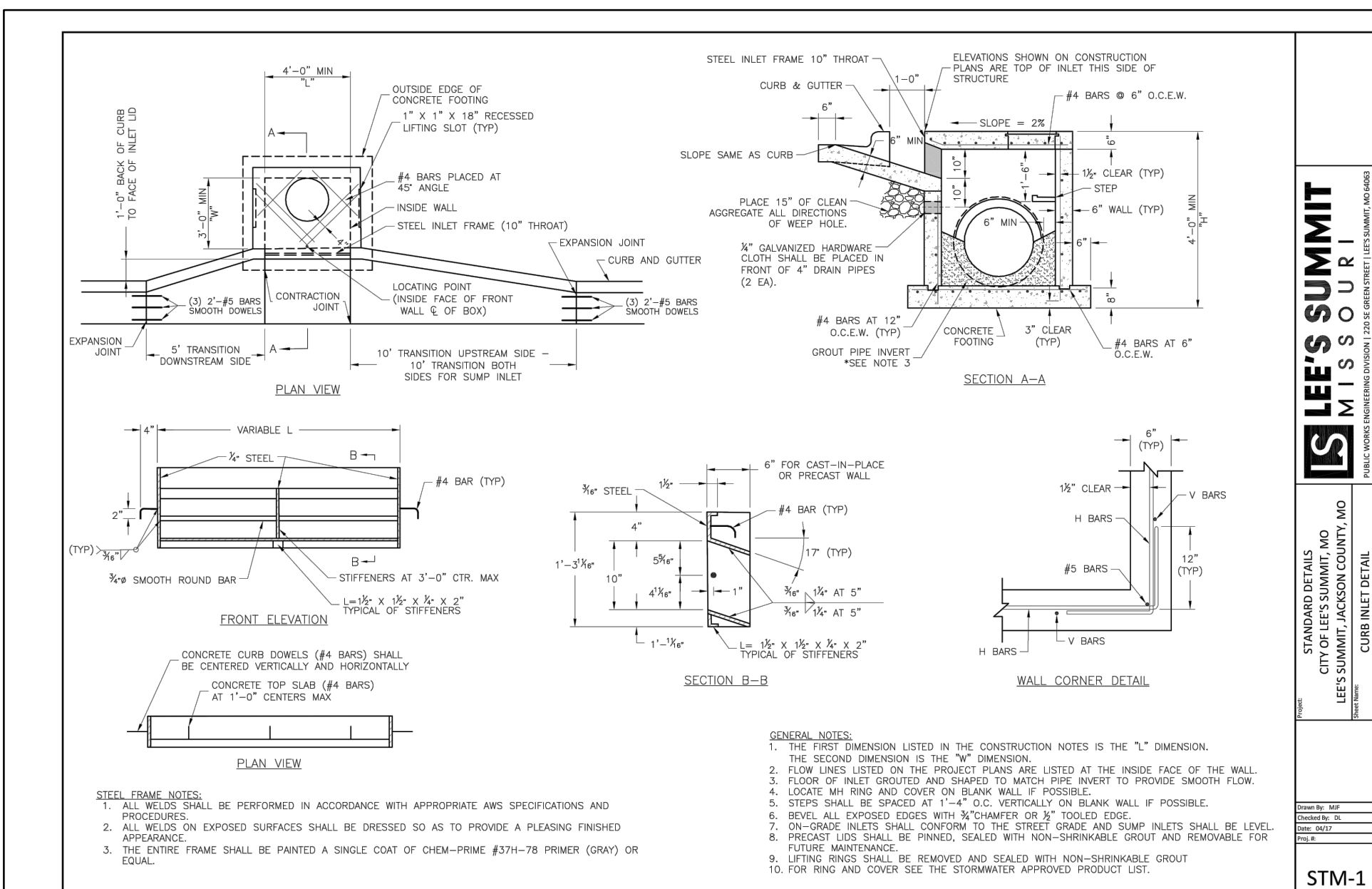
CGW checked by: JES NDH approved by: JES project no.: 019-4061 drawing no.: 04/20/2020



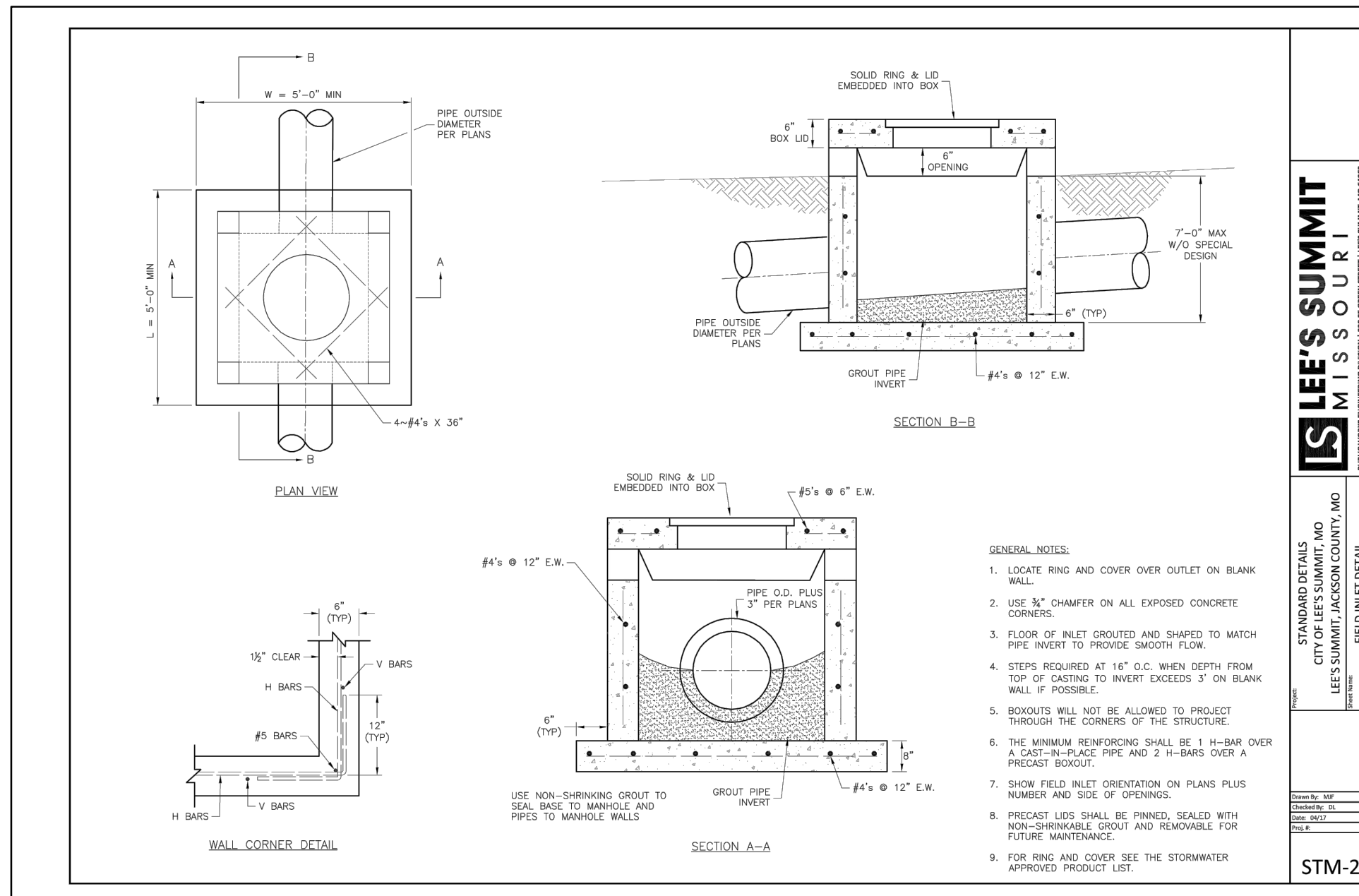
LEE'S SUMMIT MISSOURI
 STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 CURB & GUTTER DETAIL
 GEN-4



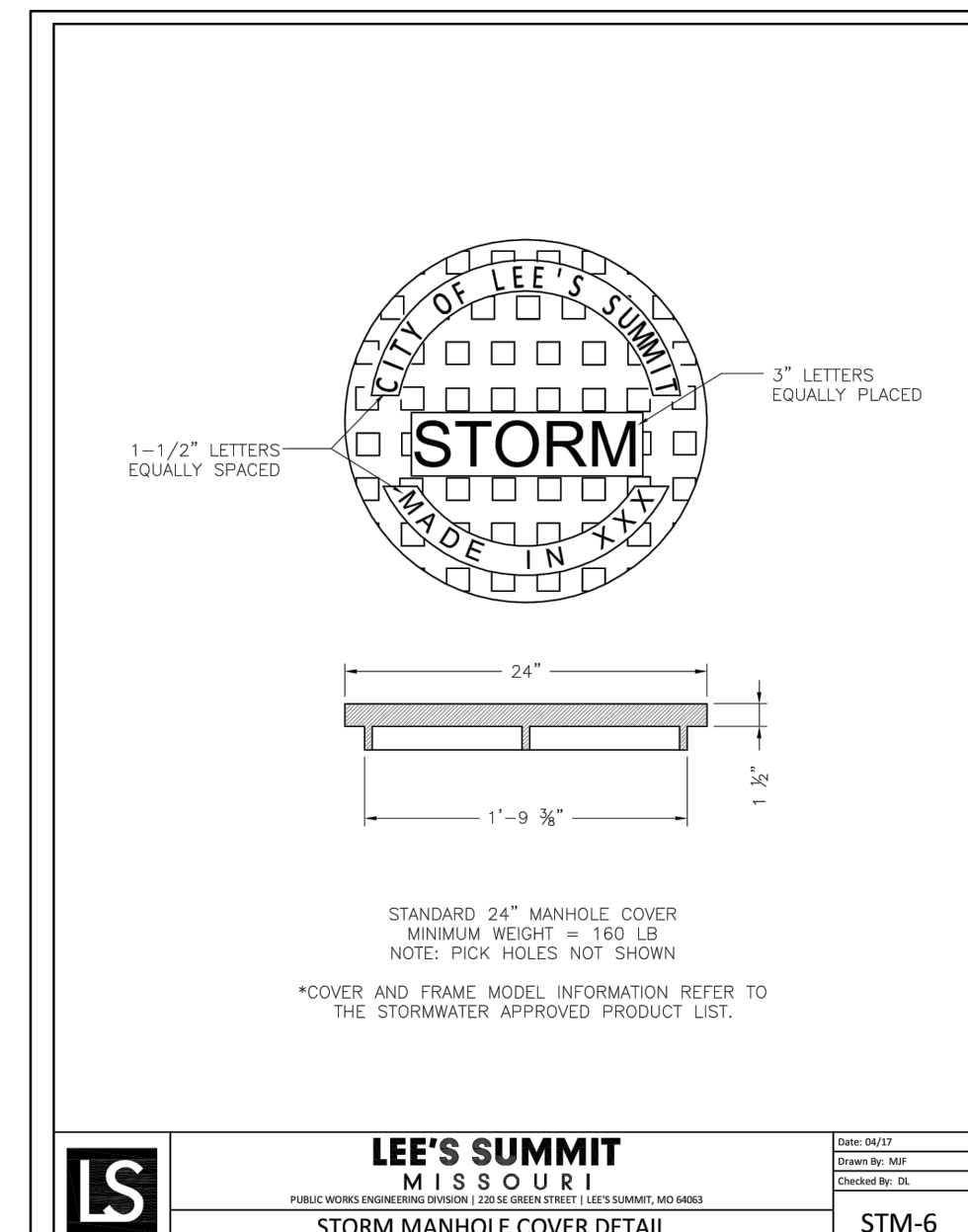
LEE'S SUMMIT MISSOURI
 STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 FUNCTION BOX DETAIL
 STM-3



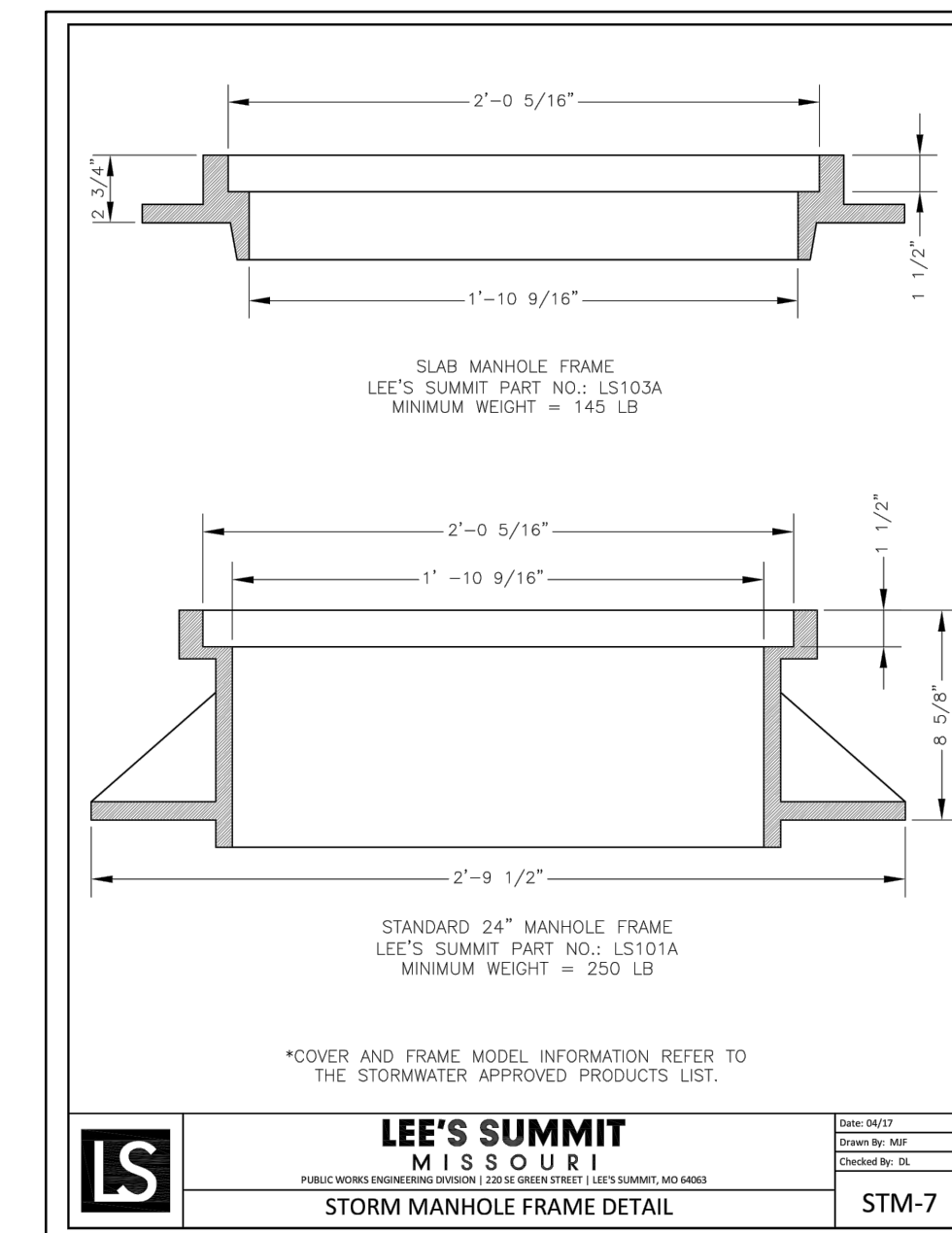
LEE'S SUMMIT MISSOURI
 STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 CURB INLET DETAIL
 STM-1



LEE'S SUMMIT MISSOURI
 STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 FIELD INLET DETAIL
 STM-2



LEE'S SUMMIT MISSOURI
 STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 STORM MANHOLE COVER DETAIL
 STM-6



LEE'S SUMMIT MISSOURI
 STANDARD DETAILS
 CITY OF LEE'S SUMMIT, MO
 LEE'S SUMMIT, JACKSON COUNTY, MO
 STORM MANHOLE FRAME DETAIL
 STM-7

olsson
 Olsson - Civil Engineering
 Missouri Certificate of Authority #001592
 1301 Burlington Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 FAX 816.361.1888
 www.olsson.com

REV. NO.	DATE	REVISIONS DESCRIPTION
1	08/15/2020	REVISED PER CITY COMMENTS
2	08/25/2020	REVISED PER CITY COMMENTS

STORM DETAILS
 STREET AND STORM SEWER PLANS
 HOOK FARMS
 FIRST FLAT
 LEE'S SUMMIT, MO
 2020

drawn by: CGW
 checked by: JES
 approved by: NDH
 QA/QC by: JES
 project no.: 019-4061
 drawing no.:
 date: 04/20/2020

RELEASE FOR CONSTRUCTION
 AS NOTED ON PLANS REVIEW
 DEVELOPMENT SERVICES
 LEE'S SUMMIT, MISSOURI
 09/15/2020