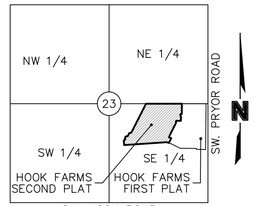
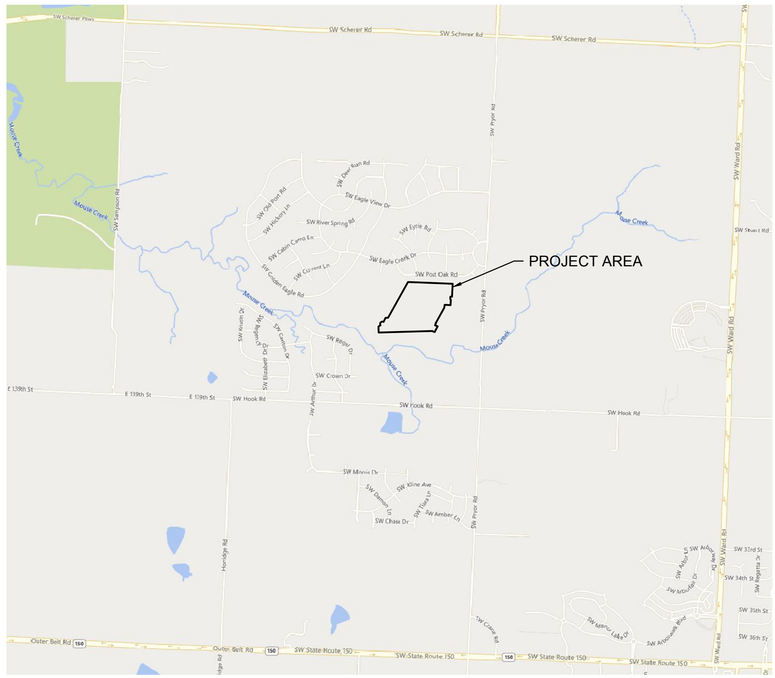
HOOK FARMS
SECOND PLAT
STREET & STORM SEWER PLANS

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



LOCATION MAP
SEC. 23, TWP. 47N., RGE. 32W.
(N.T.S.)



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: 816.455.2500

ENGINEER
OLSSON
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
CONTACT: JULIE E. SELLERS, P.E.
PHONE: 816.361.1177
EMAIL: JSELLERS@OLSSON.COM

SURVEYOR
OLSSON
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
CONTACT: JASON ROUDEBUSH, P.L.S.
PHONE: 816.361.1177
EMAIL: JROUDEBOUSH@OLSSON.COM

UTILITY SERVICE NUMBERS
NAME: LEE'S SUMMIT PUBLIC WORKS
PHONE: 816-969-1800

NAME: LEE'S SUMMIT WATER & SERVICES DEPARTMENT
PHONE: 816-969-1940

NAME: SPIRE (MGE)
PHONE: 314-342-0500

NAME: AT&T
PHONE: 800-286-8313

NAME: EVERGY
PHONE: 816-471-5275

NAME: SPECTRUM (TWC)
PHONE: 877-772-2253

NAME: GOOGLE FIBER
PHONE: 877-454-6959

☐ NOT FOR CONSTRUCTION

☐ REVIEWED FOR CONSTRUCTION

CALL BEFORE YOU DIG 1-800-DIG-RITE MISSOURI ONE CALL SYSTEM

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 I10409 IN BOOK I65 AT PAGE 01 IN JACKSON COUNTY RECORDER OF DEEDS OFFICE, ALSO BEING THE NORTHWEST CORNER OF PROPOSED HOOK FARMS FIRST PLAT; THENCE CONTINUING NORTH 87°45'24" WEST ON SAID NORTH LINE, ALSO BEING THE PROPOSED NORTH LINE OF SAID PROPOSED HOOK FARMS FIRST PLAT, ALSO BEING THE SOUTH LINE OF SAID EAGLE CREEK–FIRST PLAT, 643.83 FEET TO THE POINT OF BEGINNING OF THE TRACT OF LAND TO BE HEREIN DESCRIBED; THENCE LEAVING SAID NORTH AND SOUTH LINES, SOUTH 02°59'10" WEST, ALONG THE PROPOSED WESTERLY LINE OF PROPOSED HOOK FARMS FIRST PLAT, 277.38 FEET; THENCE NORTH 87°00'50" WEST, ALONG SAID PROPOSED WESTERLY LINE, 36.00 FEET; THENCE SOUTH 02°59'10" WEST, ALONG SAID PROPOSED WESTERLY LINE, 50.00 FEET; THENCE SOUTH 42°00'50" EAST, ALONG SAID PROPOSED WESTERLY LINE, 19.80 FEET; THENCE SOUTH 02°59'10" WEST, ALONG SAID PROPOSED WESTERLY LINE, 116.00 FEET; THENCE NORTH 87°00'50" WEST, ALONG SAID PROPOSED WESTERLY LINE, 126.12 FEET; THENCE SOUTH 07°19'52" WEST, ALONG SAID PROPOSED WESTERLY LINE, 64.17 FEET; THENCE SOUTH 29°10'47" WEST, ALONG SAID PROPOSED WESTERLY LINE, 375.17 FEET; THENCE SOUTH 15°20'56" WEST, ALONG SAID PROPOSED WESTERLY LINE, 50.00 FEET; THENCE ALONG SAID PROPOSED WESTERLY LINE, EASTERLY ALONG A CURVE TO THE RIGHT HAVING AN INITIAL TANGENT BEARING OF SOUTH 74°39'04" EAST WITH A RADIUS OF 275.00 FEET, A CENTRAL ANGLE OF 11°57'16" AND AN ARC DISTANCE OF 57.38 FEET; THENCE SOUTH 27°18'12" WEST, ALONG SAID PROPOSED WESTERLY LINE, 138.17 FEET; THENCE LEAVING SAID PROPOSED WESTERLY LINE, NORTH 67°11'53" WEST, 61.05 FEET; THENCE SOUTH 88°21'16" WEST, 1,139.83 FEET; THENCE NORTH 01°38'44" WEST, 128.09 FEET; THENCE NORTH 57°02'58" EAST, 49.90 FEET; THENCE NORTHEASTERLY ALONG A CURVE TO THE RIGHT HAVING AN INITIAL TANGENT BEARING OF NORTH 32°57'02" WEST WITH A RADIUS OF 50.00 FEET, A CENTRAL ANGLE OF 150°22'53" AND AN ARC DISTANCE OF 131.23 FEET; THENCE NORTH 27°25'51" EAST, 98.75 FEET; THENCE NORTH 88°21'16" EAST, 52.12 FEET; THENCE NORTH 29°10'47" EAST, 873.51 FEET TO A POINT ON SAID NORTH LINE OF SAID SOUTHEAST QUARTER, ALSO BEING THE SOUTH LINE OF EAGLE CREEK–SECOND PLAT, A SUBDIVISION IN SAID LEE'S SUMMIT RECORDED AS INSTRUMENT NUMBER 200100058889 IN BOOK I65 AT PAGE 09 IN SAID JACKSON COUNTY RECORDER OF DEEDS OFFICE; THENCE SOUTH 87°45'24" EAST, ON SAID NORTH LINE AND SAID SOUTH LINE, 682.19 FEET TO THE SOUTHEAST CORNER OF SAID EAGLE CREEK–SECOND PLAT, ALSO BEING THE SOUTHWEST CORNER OF SAID EAGLE CREEK–FIRST PLAT; THENCE SOUTH 87°45'24" EAST ON SAID NORTH LINE, AND SAID SOUTH LINE OF EAGLE CREEK–FIRST PLAT, 273.64 FEET TO THE POINT OF BEGINNING. CONTAINING 1,157,274 SQUARE FEET OR 26.57 ACRES, MORE OR LESS.

BENCHMARK

JA–74
ELEVATION: 1058.10
N: 978461.2779
E: 2809447.9650
DESCRIPTION: KC METRO ALUMINUM GRS DISK SET IN CONCRETE. THE STATION IS STAMPED JA–74, 1988, AND PROJECTS ABOUT 1 INCH

SHEET LIST

NUMBER	TITLE
C101	TITLE SHEET
C102	GENERAL NOTES
C103	GENERAL LAYOUT
C104	TYPICAL SECTIONS
C105	GRADING PLAN (FOR REFERENCE)
C106	GRADING PLAN (FOR REFERENCE)
C107	SWALE 1 PLAN & PROFILE
C108	SWALE 2 PLAN & PROFILE
C109	SWALE 2 PLAN & PROFILE
C110	ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
C111	ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
C112	ROADWAY PLAN & PROFILE (SW HOOK FARM DRIVE)
C113	ROADWAY PLAN & PROFILE (SW WHEATFIELD COURT)
C114	ROADWAY PLAN & PROFILE (SW WHEATFIELD COURT)
C115	ROADWAY PLAN & PROFILE (SW TRACKER LANE)
C116	ROADWAY PLAN & PROFILE (SW TRACKER LANE)
C117	ROADWAY PLAN & PROFILE (SW TRACKER LANE)
C118	ROADWAY PLAN & PROFILE (SW FARMHOUSE ROAD)
C119	ROADWAY PLAN & PROFILE (SW FIREFLY LANE)
C120	ROADWAY PLAN & PROFILE (SW FIREFLY LANE)
C121	ROADWAY PLAN & PROFILE (SW BARLEY FIELD DRIVE)
C122	ROADWAY PLAN & PROFILE (SW BARLEY FIELD DRIVE)
C123	TRAFFIC CONTROL PLAN
C124	SW TRACKER LANE & SW HOOK FARM DRIVE
C125	SW FIREFLY LANE & SW HOOK FARM DRIVE
C126	SW BARLEY FIELD DRIVE & SW HOOK FARM DRIVE
C127	SW FARMHOUSE ROAD & SW TRACKER LANE
C128	SW WHEATFIELD COURT & SW TRACKER LANE
C129	SW FIREFLY LANE & SW WHEATFIELD COURT
C130	SW BARLEY FIELD DRIVE & SW WHEATFIELD COURT
C131	SW HOOK FARM DRIVE CUL-DE-SAC
C132	STORM SEWER PLAN & PROFILE (LINE 1)
C133	STORM SEWER PLAN & PROFILE (LINE 1)
C134	STORM SEWER PLAN & PROFILE (LINE 2)
C135	STORM SEWER PLAN & PROFILE (LINE 2)
C136	STORM SEWER PLAN & PROFILE (LINES 3 & 4)
C137	STORM SEWER PLAN & PROFILE (LINES 5 & 7)
C138	STORM SEWER PLAN & PROFILE (LINE 6)
C139	STORM SEWER PLAN & PROFILE (LINE 8)
C140	STORM SEWER PLAN & PROFILE (LINE 9)
C141	STORM SEWER PLAN & PROFILE (LINE 10)
C142	STORM SEWER PLAN & PROFILE (LINES 11 & 12)
C143	WATER QUALITY BASIN PLAN
C144	MASTER DRAINAGE PLAN
C145	DRAINAGE PLAN
C146	DRAINAGE TABLES
C147	DRAINAGE TABLES
C148	DETAIL SHEET
C149	DETAIL SHEET
C150	DETAIL SHEET

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

Julie Sellers — 12/7/22

JULIE E. SELLERS, P.E.
CIVIL ENGINEER
MO # PE-2017000367

DATE

AS BUILT

DATE SURVEYED: 2022-05-26
I HEREBY CERTIFY THAT THE CONDITIONS SHOWN ARE CORRECT AND THE SEWER ARE ACCEPTABLY LOCATED WITHIN EXISTING EASEMENTS OR RIGHT OF WAYS.

olsson
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Missouri Certificate of Authority #001592
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North Kansas City, MO 64116
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FAX 816.361.1888
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

TITLE SHEET
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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

SHEET
C101

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_TTL01_B194061.dwg
DATE: Oct 11, 2022 3:25pm XREFS: C_PTBLK_B194061 C_PENDY_B194061
USER: ssaylor

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 ENCROACH ON WATERS OF THE U.S., INCLUDING WETLANDS, UNTIL ANY NECESSARY PERMITS MAY BE OBTAINED. THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS DESCRIBED IN THE PERMIT.

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. 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 MODOT RIGHT-OF-WAY SHALL CONFORM TO THE LATEST SPECIFICATIONS ADOPTED BY U.S. DEPARTMENT OF TRANSPORTATION AND MODOT.
   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. THE CONTRACTOR SHALL DISPOSE ALL WASTE MATERIAL RESULTING FROM THE PROJECT OFF-SITE AND IN STRICT CONFORMANCE WITH ALL LOCAL CODES AND ORDINANCES.

4. 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.

5. 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 IN CONFORMANCE WITH THE DESIGN FOR THIS PROJECT AS DESCRIBED IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS. THE ENGINEER'S REVIEW SHALL NOT EXTEND TO MEANS OR METHODS OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR HAS NOTIFIED ENGINEER OF EACH SUCH VARIATION AT THE TIME OF SUBMISSION, AND OBTAINED ENGINEER'S WRITTEN APPROVAL OF EACH SUCH VARIATION. PRIOR TO SUBMITTING EACH SHOP DRAWING OR SAMPLE, CONTRACTOR SHALL HAVE REVIEWED AND VERIFIED:
   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. ANY ITEMS IN THESE PLANS THAT ALLOW FOR AN "APPROVED EQUAL" ALTERNATIVE.

STORM SEWER GENERAL NOTES:

1. STORM STRUCTURES SHALL BE PER CURRENT CITY DETAILS. IF CITY DOES NOT HAVE PUBLISHED DETAILS STRUCTURES SHALL BE PER CURRENT APWA SPECIFICATIONS.

2. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR SHALL NOTIFY AND COORDINATE CONSTRUCTION WITH CITY OF LEE'S SUMMIT, MISSOURI.

3. ALL PIPE LENGTHS AND ELEVATIONS ARE CALCULATED LINEARLY FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

4. ALL STRUCTURE DIMENSIONS ARE TO INSIDE FACE OF STRUCTURE.

5. 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.

6. THE CONTRACTOR SHALL EXPOSE EXISTING UTILITIES AT LOCATIONS OF POSSIBLE CONFLICT AND POINTS OF CONNECTION PRIOR TO ANY CONSTRUCTION OF STORM SEWER.

7. 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.

8. STRUCTURE INVERT CHANNELS SHALL BE SMOOTH, CIRCULAR, AND CONFORMING TO ½ 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.

9. PIPE PENETRATIONS SHALL BE GROUTED TO ENSURE WATERTIGHT SEALS.

10. MAINTAIN MINIMUM DEPTH OF COVER PER APWA 5606.06

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
	STREET			
	EXCAVATION	C.Y.	26149	
	EMBANKMENT	C.Y.	25993	
	SUBGRADE STABILIZATION (6" FLYASH TREATMENT)	S.Y.	15049	
	6" ASPHALT PAVEMENT	S.Y.	12232	
	CONCRETE CURB & GUTTER (CG-2)	L.F.	8300	
	CONCRETE CURB & GUTTER (CG-2 DRY)	L.F.	166	
	5' CONCRETE SIDEWALK	L.F.	16.50	
	MILL & OVERLAY	S.Y.	40	
	ADA RAMP	EA.	15	
	STOP SIGNS	EA.	7	
	STREET NAME SIGNS	EA.	14	
	END OF ROAD TREATMENT	EA.	1	
	STORM			
	STD. CURB INLET (5'x3' INSIDE)	EA.	~~21~~	21
	STD. CURB INLET (5'X4' INSIDE)	EA.	~~2~~	2
	STD. CURB INLET (5'X5' INSIDE)	EA.	~~2~~	2
	STD. CURB INLET (8'x3' INSIDE)	EA.	~~2~~	2
	STD. STORM MANHOLE (4' DIA. INSIDE)	EA.	~~1~~	1
	STD. STORM MANHOLE (5' DIA. INSIDE)	EA.	~~1~~	1
	STD. FIELD INLET (4'x4' INSIDE)	EA.	~~7~~	7
	WATER QUALITY BASIN OUTLET STRUCTURE	EA.	~~1~~	1
	12" PVC	L.F.	~~168.41~~	
	15" HDPE	L.F.	~~1992.05~~	1759.36+
	18" HDPE	L.F.	~~477.24~~	324.77+
	24" HDPE	L.F.	~~945.56~~	942.83
	30" HDPE	L.F.	~~216.94~~	217.86
	36" HDPE	L.F.	~~549.76~~	547.53
	12" HDPE END SECTION	EA.	~~1~~	1
	15" HDPE END SECTION	EA.	~~1~~	1
	18" HDPE END SECTION	EA.	~~1~~	1
	24" HDPE END SECTION	EA.	~~1~~	1
	36" HDPE END SECTION	EA.	~~1~~	1
	RIPRAP	S.Y.	~~85.3~~	64.67
	CONNECTION TO EXISTING PIPE	EA.	~~2~~	2

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

AS BUILT

DATE SURVEYED: 2022-05-26

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Olsson - Civil Engineering
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FAX 816.361.1888
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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
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GENERAL NOTES
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

drawn by: B.M.W./A.A.
checked by: B.M.W.
designed by: B.M.W./A.A.
QA/QC by: J.E.S.
project no.: 819-4061
date: 01-08-2021

SHEET
C102

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_TTL01_B194061.dwg
DATE: Oct 11, 2022 3:25pm XREFS: C_PTBLK_B194061 C_PBNDY_B194061
USER: ssaylor

EAGLE CREEK
FIRST PLAT

TRACT N

TRACT M

TRACT O

HOOK FARMS
1ST PLAT

SW TRACKER LANE

SW FIREFLY LANE

SW WHEATFIELD COURT

SW FARMHOUSE ROAD

SW HOOK FARM DRIVE

SW BARLEY FIELD DRIVE

SW FARM FIELD ROAD

STORM LINE 1 SEE SHEETS C132–C133

STORM LINE 2 SEE SHEETS C134–C135

STORM LINE 3 SEE SHEET C136

STORM LINE 4 SEE SHEET C136

STORM LINE 5 SEE SHEET C137

STORM LINE 6 SEE SHEET C138

STORM LINE 7 SEE SHEET C137

STORM LINE 8 SEE SHEET C139

STORM LINE 9 SEE SHEET C140

STORM LINE 10 SEE SHEET C141

STORM LINE 11 SEE SHEET C142

STORM LINE 12 SEE SHEET C142

100–YEAR FLOODPLAIN

NOT AS-BUILT

olsson
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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
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

GENERAL LAYOUT
STREET & STORM SEWER PLANS

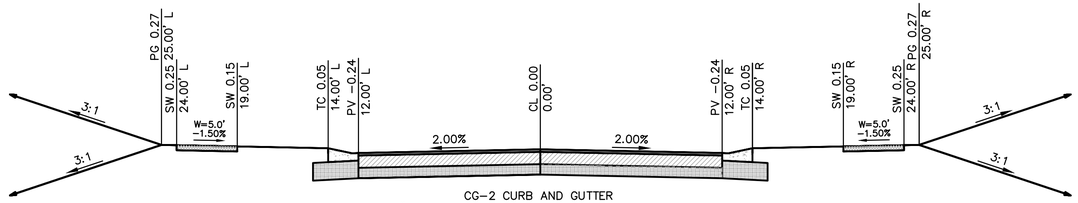
HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

drawn by: B.M.W./A.A.
checked by: B.M.W.
designed by: B.M.W./A.A.
QA/QC by: J.E.S.
project no.: 019-4061
date: 01-08-2021

SHEET
C103



CG-2 CURB AND GUTTER
2" TYPE 5 OR 6 ASPHALTIC CONCRETE SURFACE
4" TYPE 5 ASPHALTIC CONCRETE BASE COURSE
6" MIN. MODOT TYPE 5 STONE BASE
6" MIN. FLYASH STABILIZED SUBGRADE

TYPICAL ROADWAY SECTION

SW HOOK FARM DRIVE, SW TRACKER LANE, SW FIREFLY LANE
SW BARLEY FIELD DRIVE, SW WHEATFIELD COURT, SW FARMHOUSE ROAD
N.T.S.

NOT AS-BUILT

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_TYP01_B194061.dwg
DATE: Oct 11, 2022 3:26pm XREFS: C_PTBLK_B194061 USER: ssaylor

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TYPICAL SECTIONS
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C104

GENERAL NOTES:

1. CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEE'S SUMMIT (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED RIGHT-OF-WAY.

2. AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH AS RECOMMENDED BY GEOTECHNICAL ENGINEER AND OR TESTING AGENCY. SOILS REMOVED DURING SITE STRIPPING SHOULD BE EVALUATED TO DETERMINE IF PORTIONS OF THE TOPSOIL STRATUM MAY BE UTILIZED AS STRUCTURAL FILL WITHIN PAVEMENT AREAS. ANY MATERIAL NOT DEEMED AS SUITABLE FILL MATERIAL BY THE GEOTECHNICAL ENGINEER AND OR TESTING AGENCY SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR AT HIS EXPENSE.

3. ALL EMBANKMENT OUTSIDE OF RIGHT-OF-WAY SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 8". EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF -0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

2

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	26,149	25,993
SITE	117,707	77,137
FUTURE PHASE	0	54,547
TOTAL	143,856	157,677

EARTHWORK QUANTITIES NOTES:
1. EARTHWORK QUANTITIES BASED ON FINISHED GRADE SURFACE AND DO NOT INCLUDE ADJUSTMENTS FOR TOPSOIL AND SHRINKAGE.

2. EARTHWORK QUANTITIES DO NOT TAKE INTO CONSIDERATION EXCAVATION, REMOVAL AND DISPOSAL OF MATERIAL DEEMED UNSUITABLE BY A GEOTECHNICAL ENGINEER. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND FOR REPLACING IT WITH SUITABLE MATERIAL.

N

0' 30' 60' 120'
SCALE IN FEET

EAGLE CREEK
FIRST PLAT

SWALE 2.
SEE SHEET C108-C109
FOR DETAILS

SW FARMHOUSE ROAD

SW TRACKER LANE

SW FIREFLY LANE

SW WHEATFIELD COURT

SW BARLEY FIELD DRIVE

SW FARM FIELD ROAD

SW HOOK FARM DRIVE

SWALE 1.
SEE SHEET C107
FOR DETAILS

HOOK FARMS
1ST PLAT

TRACT M

TRACT N

TRACT O

MATCH LINE
SEE NEXT SHEET

NOT AS-BUILT SURFACE
REFER TO MASTER
DRAINAGE PLAN

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

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GRADING PLAN (FOR REFERENCE)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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SHEET
C105

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FUTURE PHASE EARTHWORK CONTRIBUTIONS	
LOCATION	FILL (C.Y.)
HOOK FARMS 2ND PLAT	40,727
RETREAT AT HOOK FARMS 2ND PLAT	9,872
EXCESS	3,948

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	26,149	25,993
SITE	117,707	77,137
FUTURE PHASE	0	54,547
TOTAL	143,856	157,677

EARTHWORK QUANTITIES NOTES:
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LOT FILL INFORMATION			
LOT NUMBER	MAX DEPTH OF FILL (OVER 2' PLACED)	FILL PLACED ON EXISTING SLOPES > 5:1	PROPOSED SLOPES > 3:1
50	5.5'		
51	4.8'		
52	4.9'		
53	5.2'		
54	7.5'		
55	8.2'		
56	9.7'	X	
57	8.7'	X	
58	10.7'		
59	11.6'		
60	11.6'		
61	11.4'		
62	11.1'		
63	11.0'		
64	10.8'		
65	10.8'		
66	9.8'		
67	10.0'		
68	11.2'		
69	10.7'		
70	9.1'		
71	8.3'		
72	7.1'		
73	5.9'		
74	5.7'		
75	4.7'		
76	3.5'		
77	2.9'		
78	3.1'		
84	2.5'		
85	3.5'		
86	5.8'		
87	6.8'		
88	8.6'		
89	10.3'		
90	8.2'		
91	6.7'		
92	4.3'		
107	8.1'	X	
108	7.8'	X	
118	7.3'	X	
119	7.5'	X	
120	2.7'		
128	8.4'	X	

X Indicates condition applies to lot

N

0' 30' 60' 120'
SCALE IN FEET

NOT AS-BUILT SURFACE
REFER TO MASTER DRAINAGE PLAN

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

MATCH LINE
SEE PREVIOUS SHEET

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REVISIONS

GRADING PLAN (FOR REFERENCE)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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

SHEET
C106

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_GRD01_B194061.dwg
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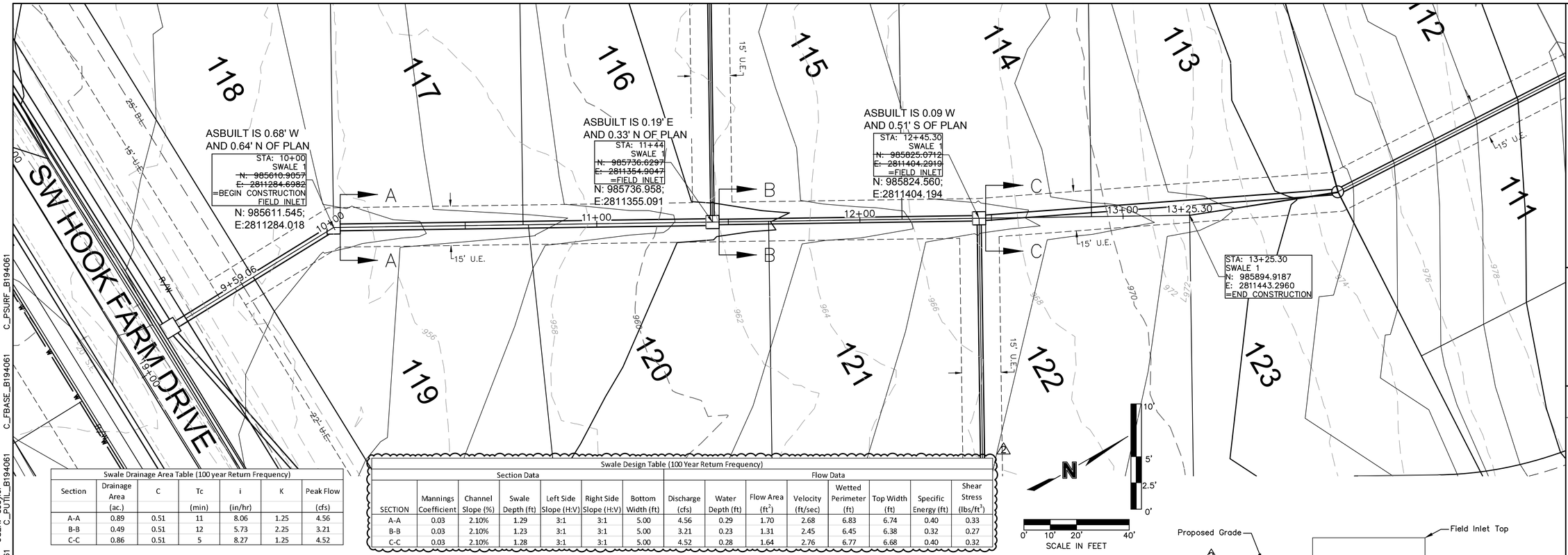
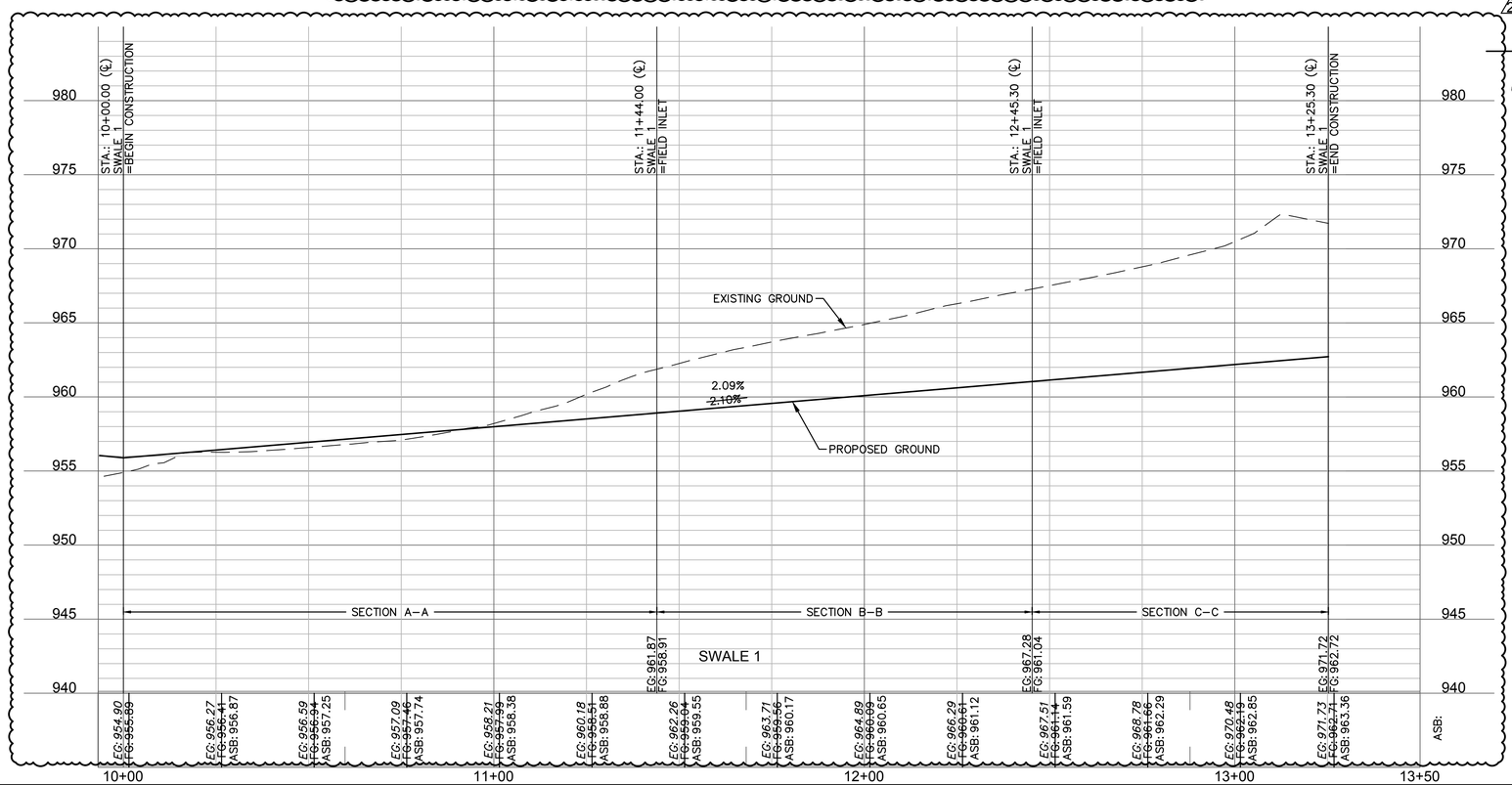


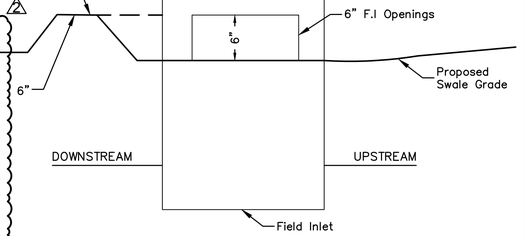
Swale Drainage Area Table (100 year Return Frequency)

Section	Drainage Area (ac.)	C	Tc (min)	i (in/hr)	K	Peak Flow (cfs)
A-A	0.89	0.51	11	8.06	1.25	4.56
B-B	0.49	0.51	12	5.73	2.25	3.21
C-C	0.86	0.51	5	8.27	1.25	4.52

Swale Design Table (100 Year Return Frequency)

	Section Data							Flow Data							
SECTION	Mannings Coefficient	Channel Slope (%)	Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft^2)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft^3)
A-A	0.03	2.10%	1.29	3:1	3:1	5.00	4.56	0.29	1.70	2.68	6.83	6.74	0.40	0.33
B-B	0.03	2.10%	1.23	3:1	3:1	5.00	3.21	0.23	1.31	2.45	6.45	6.38	0.32	0.27
C-C	0.03	2.10%	1.28	3:1	3:1	5.00	4.52	0.28	1.64	2.76	6.77	6.68	0.40	0.32



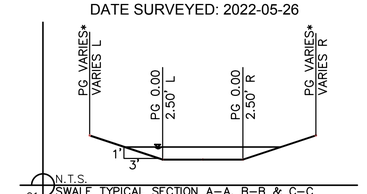


NOTE: INCLUDE SUMP PER ABOVE DETAIL WHERE FIELD INLETS ARE LOCATED WITHIN SWALES.

SUMP DETAIL
N.T.S.

AS BUILT

DATE SURVEYED: 2022-05-26



SWALE GRADING NOTES:

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

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REVISIONS

SWALE 1 PLAN & PROFILE
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C107

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_SWL01_B194061.dwg
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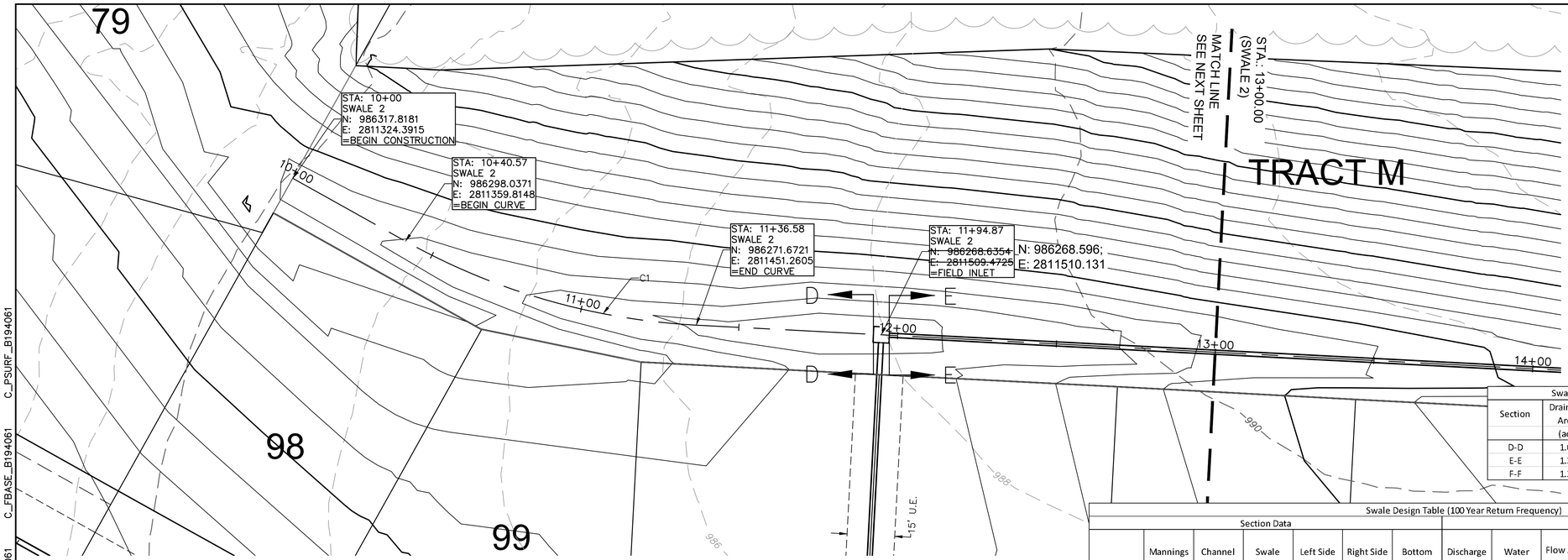
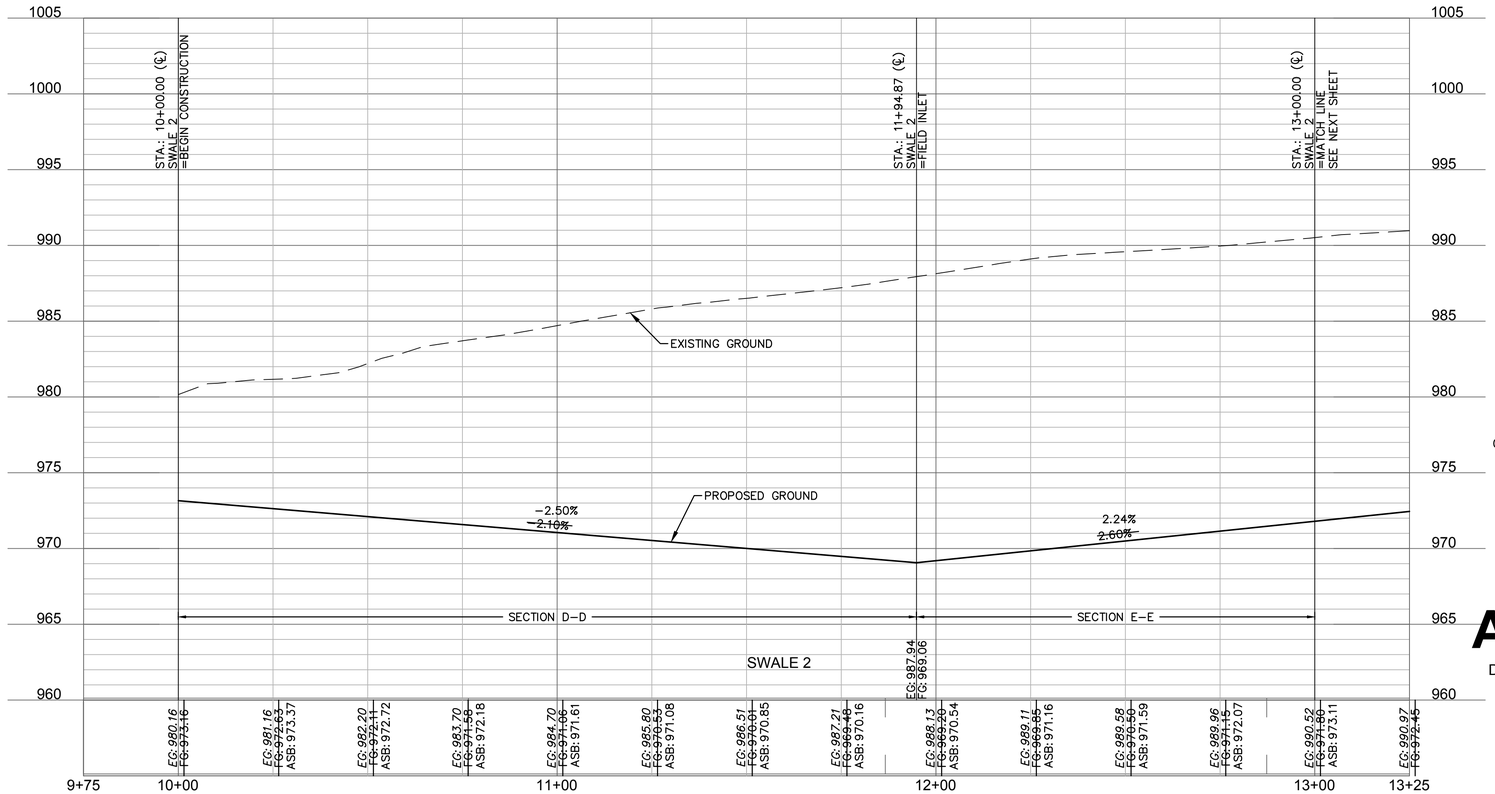
USER: ssoylor C_PUTIL_B194061 C_FBASE_B194061 C_PSURF_B194061

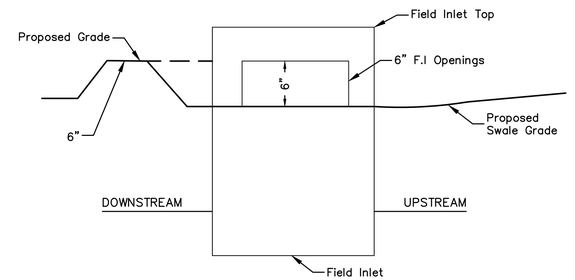


Swale Drainage Area Table (100 year Return Frequency)						
Section	Drainage Area (ac.)	C	Tc (min)	i (in/hr)	K	Peak Flow (cfs)
D-D	1.02	0.51	5	8.27	1.25	5.37
E-E	1.30	0.51	5	4.60	2.25	6.88
F-F	1.29	0.51	5	3.18	3.25	6.78

Swale Design Table (100 Year Return Frequency)														
Section Data							Flow Data							
SECTION	Mannings Coefficient	Channel Slope (%)	Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft^2)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft^3)
D-D	0.03	2.10%	2.50	3:1	3:1	5.00	5.37	0.31	1.84	2.92	6.96	6.86	0.44	0.35
E-E	0.03	2.60%	2.50	3:1	3:1	5.00	6.88	0.34	2.05	3.36	7.15	7.04	0.52	0.46
F-F	0.03	2.60%	2.50	3:1	3:1	5.00	6.78	0.34	2.05	3.31	7.15	7.04	0.52	0.46

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C1	10+40.57 11+36.58	N: 986298.04 E: 2811359.81	N: 986271.67 E: 2811451.26	210.00	96.00	026°11'37"	S73°55'01"E	95.17





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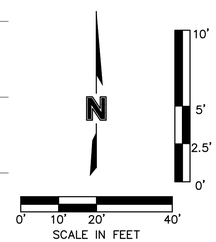

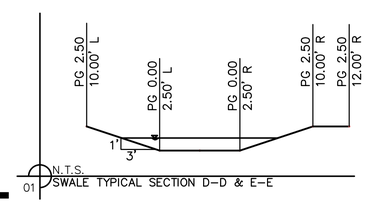

AS BUILT

DATE SURVEYED: 2022-05-26

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SWALE 2 PLAN & PROFILE
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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SHEET
C108

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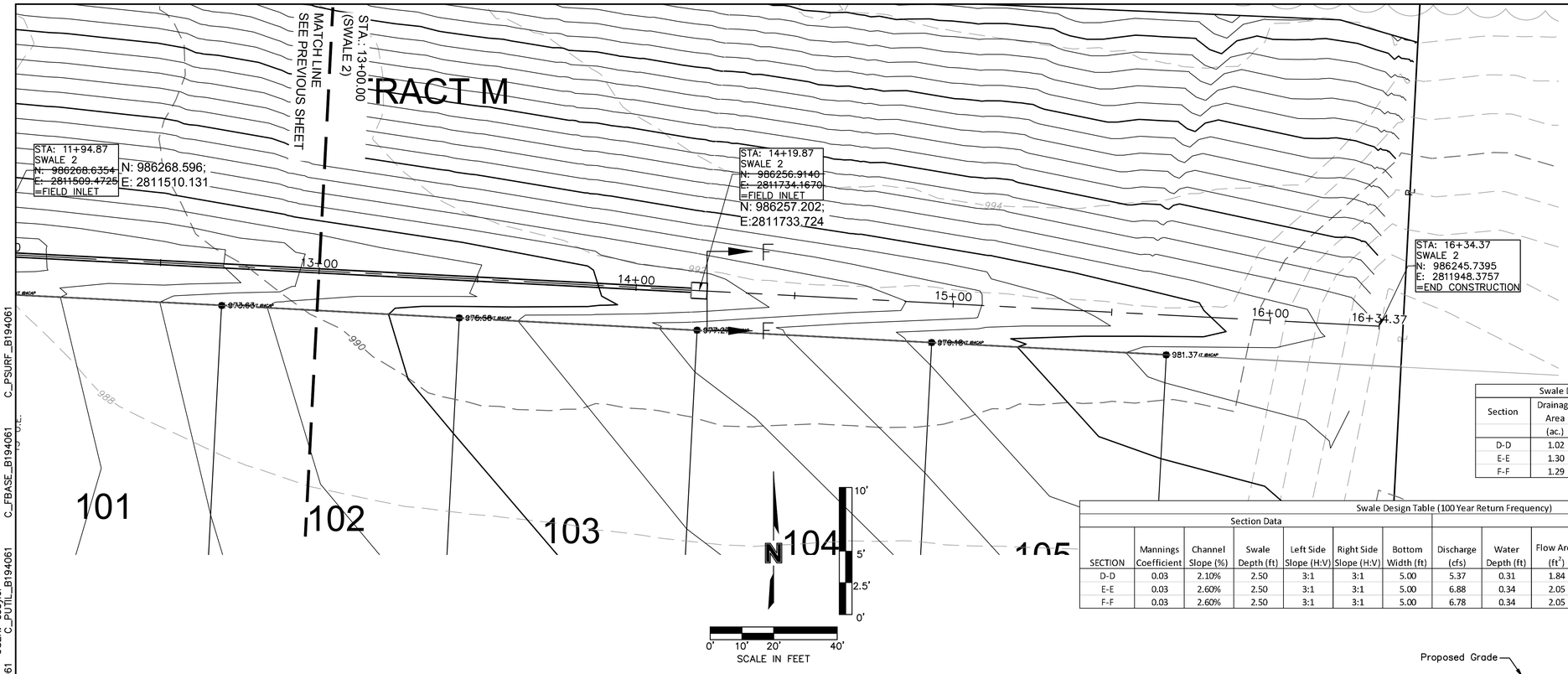

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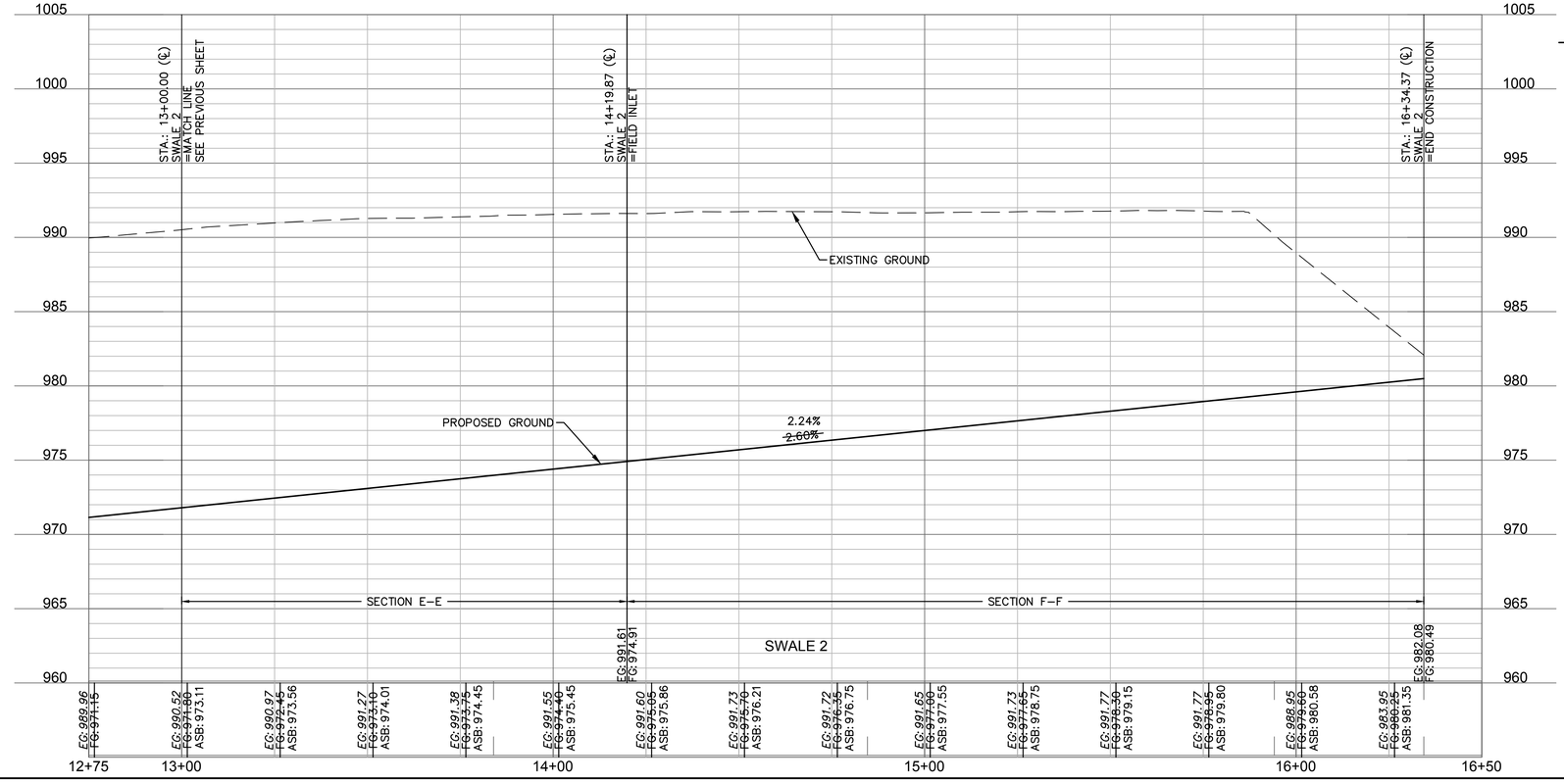
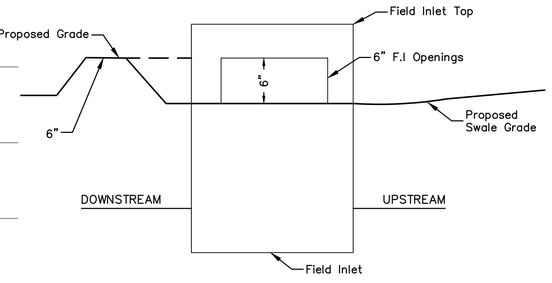
E-E	0.03	2.60%	2.50	3:1	3:1	5.00	6.88	0.34	2.05	3.36	7.15	7.04	0.52	0.46
F-F	0.03	2.60%	2.50	3:1	3:1	5.00	6.78	0.34	2.05	3.31	7.15	7.04	0.52	0.46



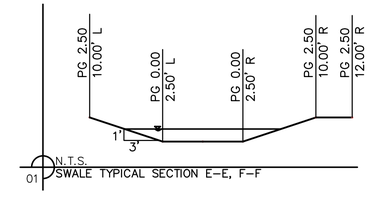


NOTE: INCLUDE SUMP PER ABOVE DETAIL WHERE FIELD INLETS ARE LOCATED WITHIN SWALES.

SUMP DETAIL
N.T.S.

AS BUILT

DATE SURVEYED: 2022-05-26



SWALE GRADING NOTES:

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

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1301 Burlington Street
North Kansas City, MO 64116
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FAX 816.361.1888
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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION
1	03-23-2021	REVISED PER CITY COMMENTS
2	04-16-2021	REVISED PER CITY COMMENTS
3	09-30-2021	CHANGES TO APPROVED PLANS

REVISIONS

SWALE 2 PLAN & PROFILE
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C109

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_SWL01_B194061.dwg USER: ssoylor
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LEGEND	
▨	ADA ACCESS ROUTE
■	ASPHALT PAVEMENT
▦	CONCRETE SIDEWALK
◡	CG-2 CURB & GUTTER
◡	CG-2 DRY CURB & GUTTER

AS BUILT

DATE SURVEYED: 2022-05-26

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

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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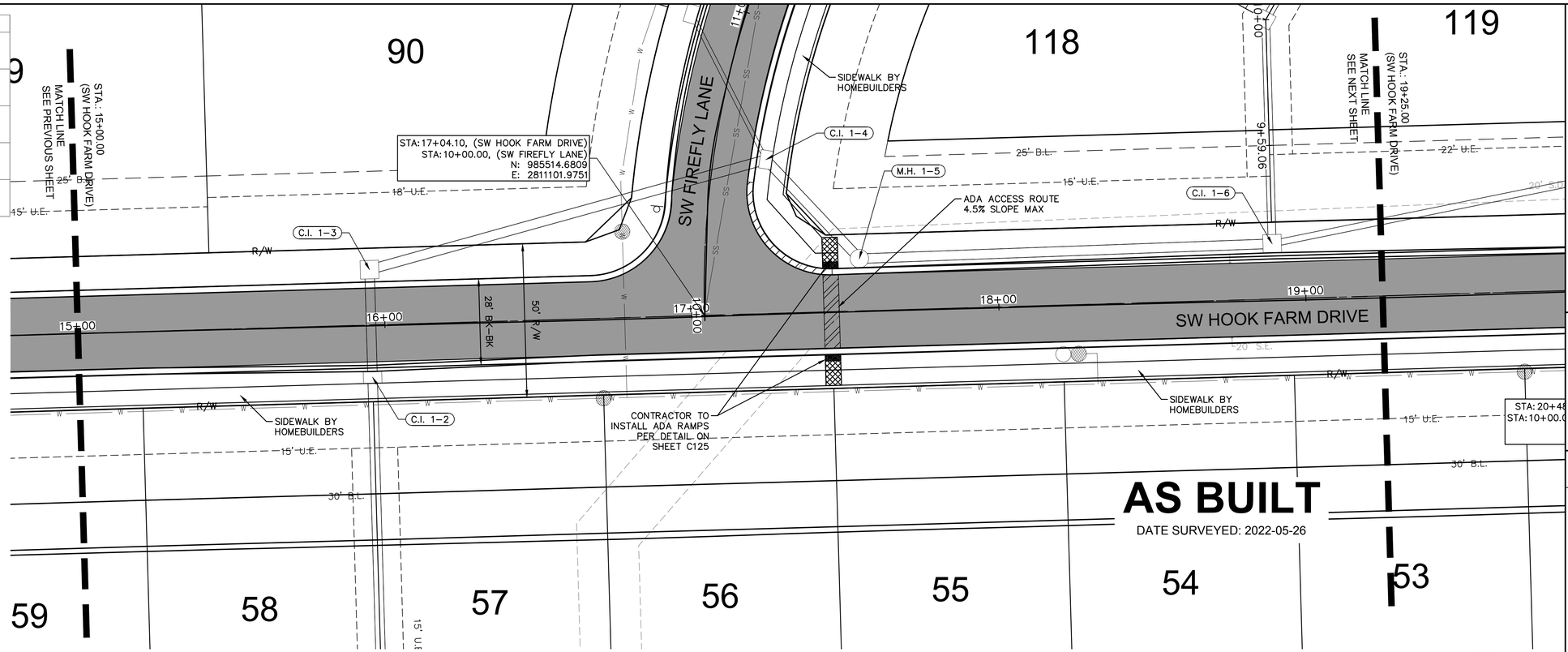
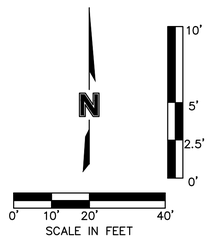
QA/QC by:	J.E.S.
project no.:	B19-4061
date:	01-08-2021

SHEET
C110

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





AS BUILT

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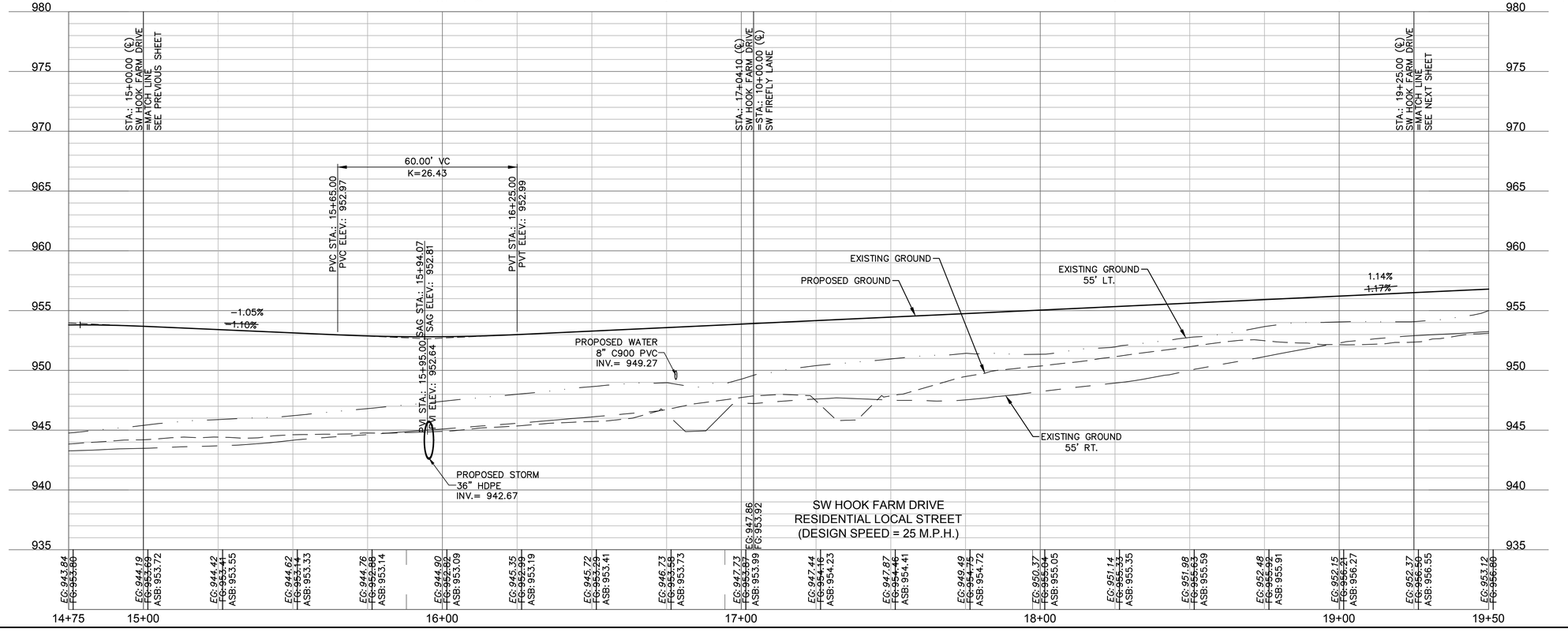

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SHEET
C111

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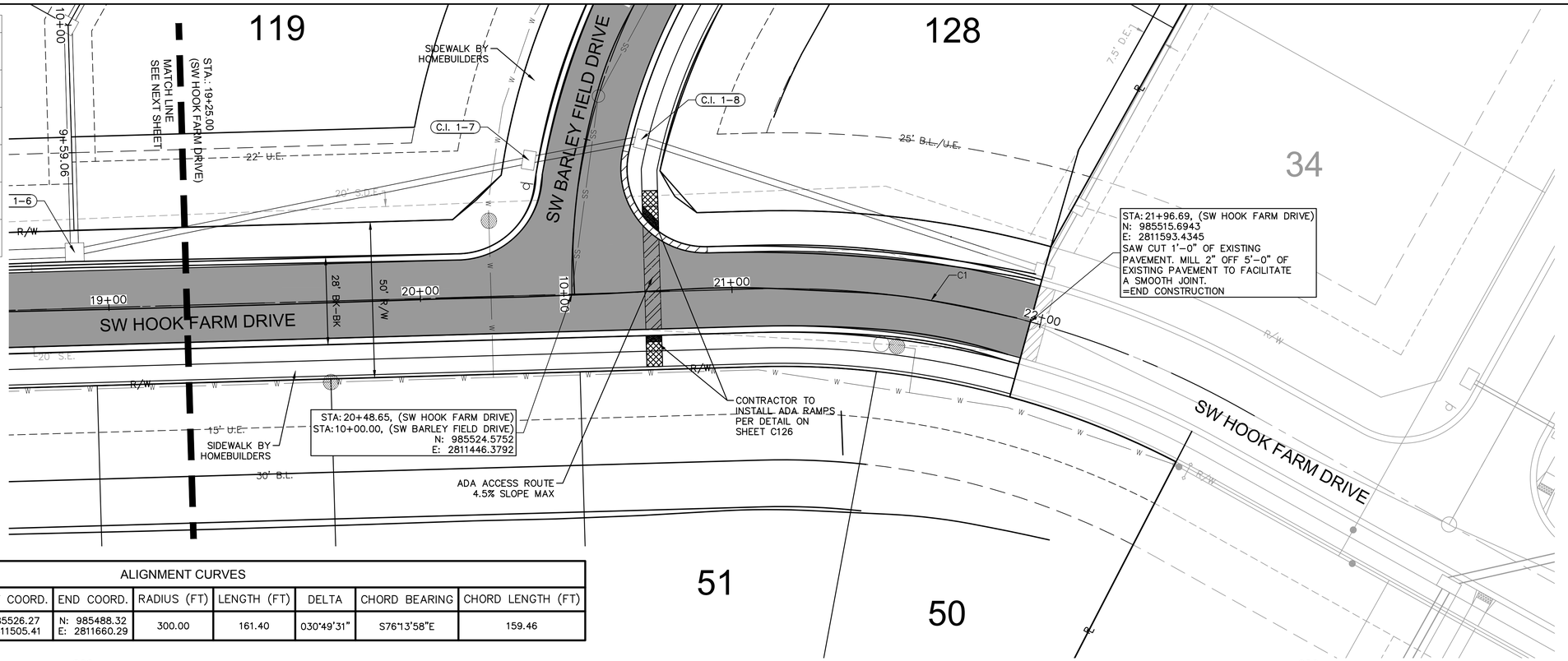
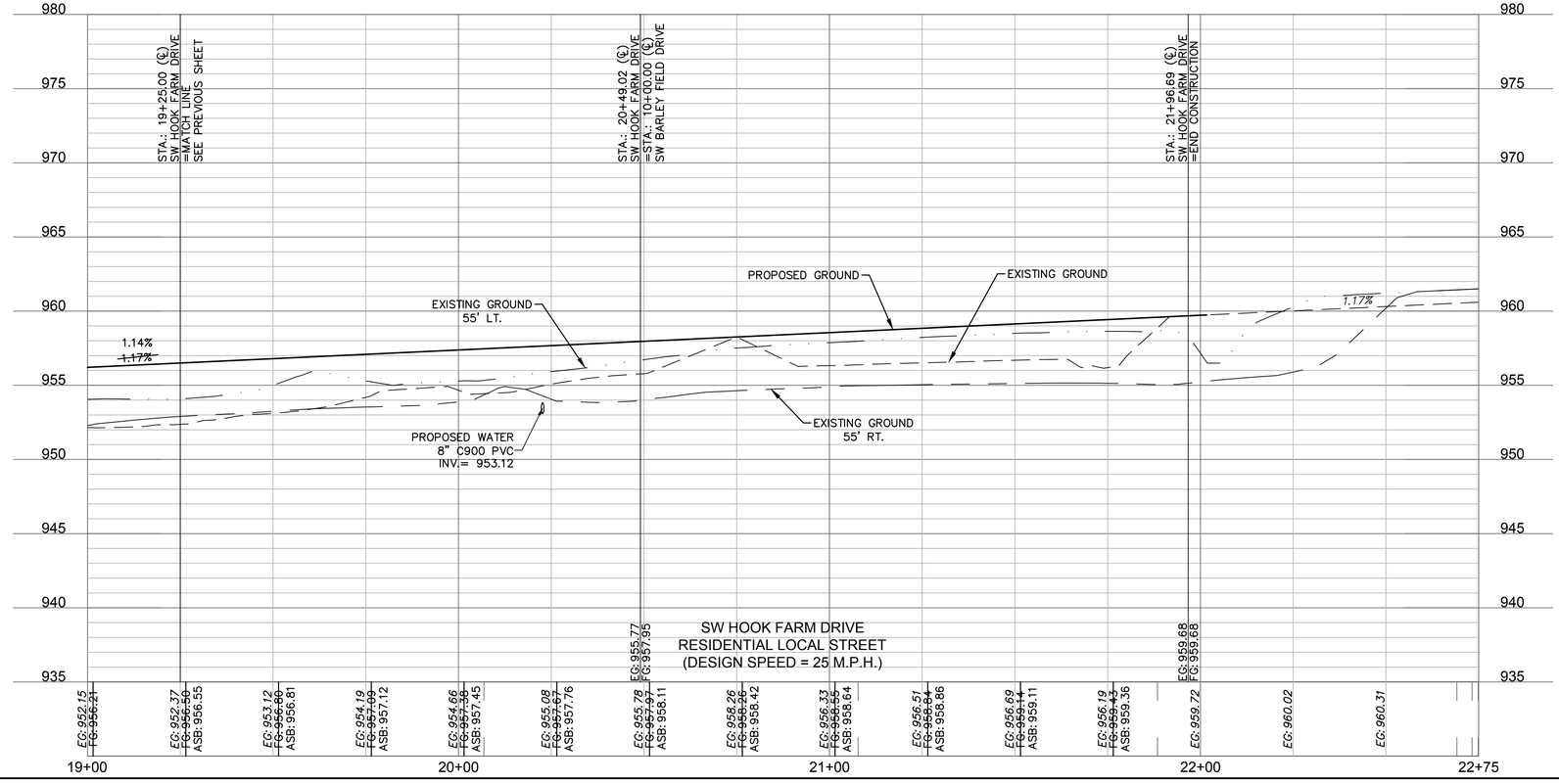
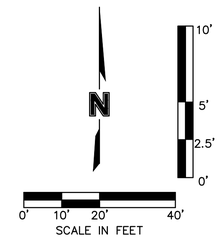
USER: ssoylor C_PUTIL_B194061 C_PSURF_B194061 C_PPATT_B194061

LEGEND	
	ADA ACCESS ROUTE
	MILL & OVERLAY
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-2 CURB & GUTTER
	CG-2 DRY CURB & GUTTER



ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C1	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"	S76°13'58"E	159.46





AS BUILT

DATE SURVEYED: 2022-05-26

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

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C112

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_RPP01_B194061.dwg
DATE: Oct 11, 2022 3:30pm XREFS: C_PTBLK_B194061 C_XBASE_B194061 C_PBASE_B194061 C_PBNDY_B194061
USER: ssoylor C_PUTIL_B194061 C_PSURF_B194061 C_PPATT_B194061

LEGEND	
▨	ADA ACCESS ROUTE
■	ASPHALT PAVEMENT
▩	CONCRETE SIDEWALK
◡	CG-2 CURB & GUTTER
◡	CG-2 DRY CURB & GUTTER

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C2	12+36.87 13+28.30	N: 986131.66 E: 2811314.20	N: 986106.55 E: 2811401.30	200.00	91.43	026°11'37"	S73°55'01"E	90.64

AS BUILT

DATE SURVEYED: 2022-05-26

SW WHEATFIELD COURT
RESIDENTIAL LOCAL STREET
(DESIGN SPEED = 25 M.P.H.)

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_RPP01_B194061.dwg USER: ssaylor
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ROADWAY PLAN & PROFILE (SW WHEATFIELD COURT)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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

SHEET
C113

LEGEND	
	ADA ACCESS ROUTE
	MILL & OVERLAY
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-2 CURB & GUTTER

101 102 103 104 105 106 49

STA:15+81.89, (SW WHEATFIELD COURT)
STA:16+17.22, (SW BARLEY FIELD DRIVE)
N: 986093.3400
E: 2811654.5408

STA:18+38.89, (SW WHEATFIELD COURT)
N: 986079.9515
E: 2811911.1918
SAW CUT 1'-0" OF EXISTING PAVEMENT. MILL 2" OFF 5'-0" OF EXISTING PAVEMENT TO FACILITATE A SMOOTH JOINT.
=END CONSTRUCTION

C.I. 6-1 C.I. 7-1 C.I. 2-5 C.I. 2-6

SW WHEATFIELD COURT
SW BARLEY FIELD DRIVE
14+00 15+00 16+00 16+17.22 17+00 18+00 19+00

28' BK-BK
50' R/W
30' B.L.
15' U.E.
20' S.D.E.
SIDEWALK BY HOMEBUILDERS

STA.: 14+25.00 (SW WHEATFIELD COURT)
MATCH LINE
SEE PREVIOUS SHEET

12 11 110 109 108 10

AS BUILT
DATE SURVEYED: 2022-05-26

N
SCALE IN FEET
0' 10' 20' 40'
10' 5' 2.5' 0'

1000 995 990 985 980 975 970 965 960 955

STA.: 14+25.00 (℄) SW WHEATFIELD COURT =MATCH LINE SEE PREVIOUS SHEET
STA.: 15+81.89 (℄) SW WHEATFIELD COURT =STA.: 16+17.22 (℄) SW BARLEY FIELD DRIVE
STA.: 18+38.89 (℄) SW WHEATFIELD COURT =END CONSTRUCTION

EXISTING GROUND
EXISTING GROUND 55' LT.
EXISTING GROUND 55' RT.
PROPOSED GROUND

25.00' VC
K=83.65
PVC STA.: 16+63.50
PVC ELEV.: 974.40
PVI STA.: 16+75.00
PVI ELEV.: 974.60
PVT STA.: 16+87.50
PVT ELEV.: 974.79

1.61% 1.60%
1.27% 1.30%
1.30%

PROPOSED STORM 24" HDPE INV.= 963.01
PROPOSED WATER 8" C900 PVC INV.= 967.93
PROPOSED STORM 15" HDPE INV.= 968.01

SW WHEATFIELD COURT
RESIDENTIAL LOCAL STREET
(DESIGN SPEED = 25 M.P.H.)

EG: 983.03 FG: 976.26
EG: 983.24 FG: 976.66 ASB: 970.63
EG: 983.32 FG: 971.06 ASB: 971.06
EG: 983.43 FG: 971.46 ASB: 971.46
EG: 983.59 FG: 971.86 ASB: 971.81
EG: 983.74 FG: 972.26 ASB: 972.30
EG: 983.84 FG: 972.66 ASB: 972.70
EG: 983.83 FG: 973.06 ASB: 973.04
EG: 983.79 FG: 973.11
EG: 983.63 FG: 973.46 ASB: 973.50
EG: 983.84 FG: 973.86 ASB: 973.94
EG: 983.89 FG: 974.26 ASB: 974.31
EG: 983.86 FG: 974.69 ASB: 974.65
EG: 983.74 FG: 974.92 ASB: 974.94
EG: 983.54 FG: 975.27 ASB: 975.20
EG: 983.55 FG: 975.57 ASB: 975.54
EG: 979.36 FG: 975.96 ASB: 975.92
EG: 974.36 FG: 976.22 ASB: 976.23
EG: 976.30 FG: 976.55 ASB: 976.58
EG: 976.73 FG: 976.73
EG: 976.87
EG: 977.20
EG: 977.52

14+00 15+00 16+00 17+00 18+00 19+00

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REVISIONS

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

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

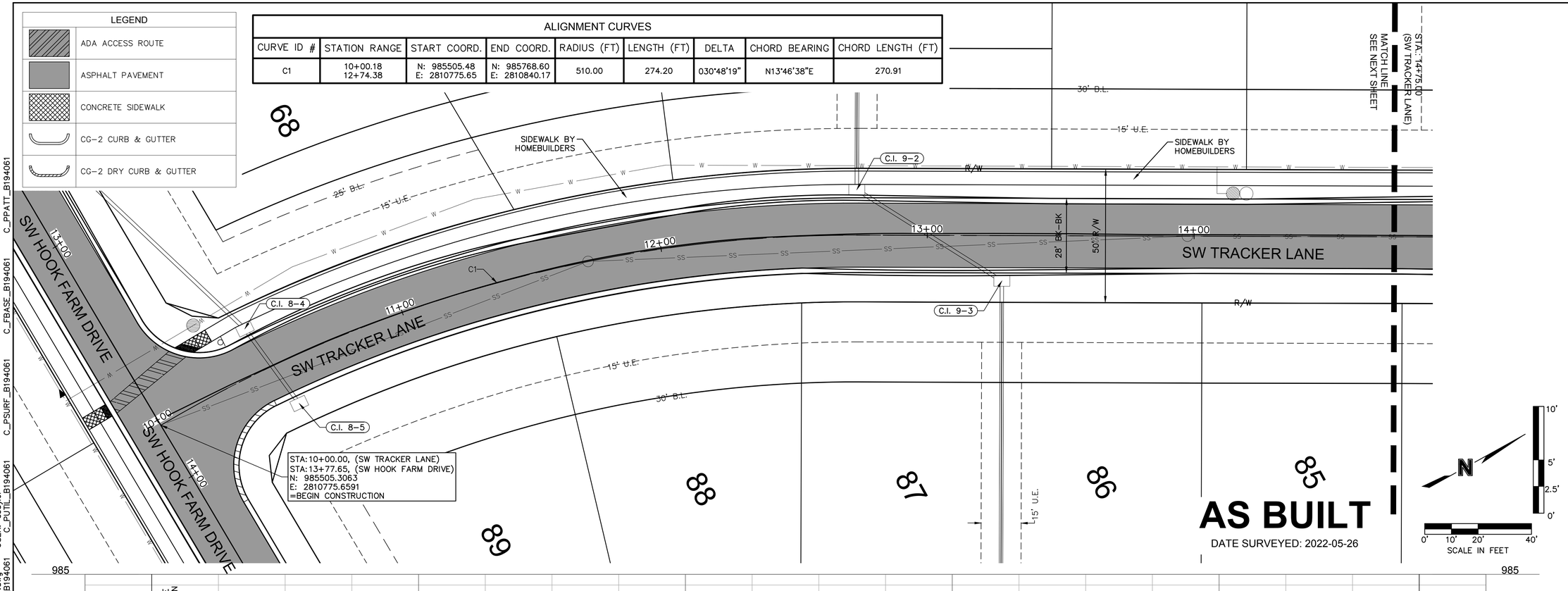
2021

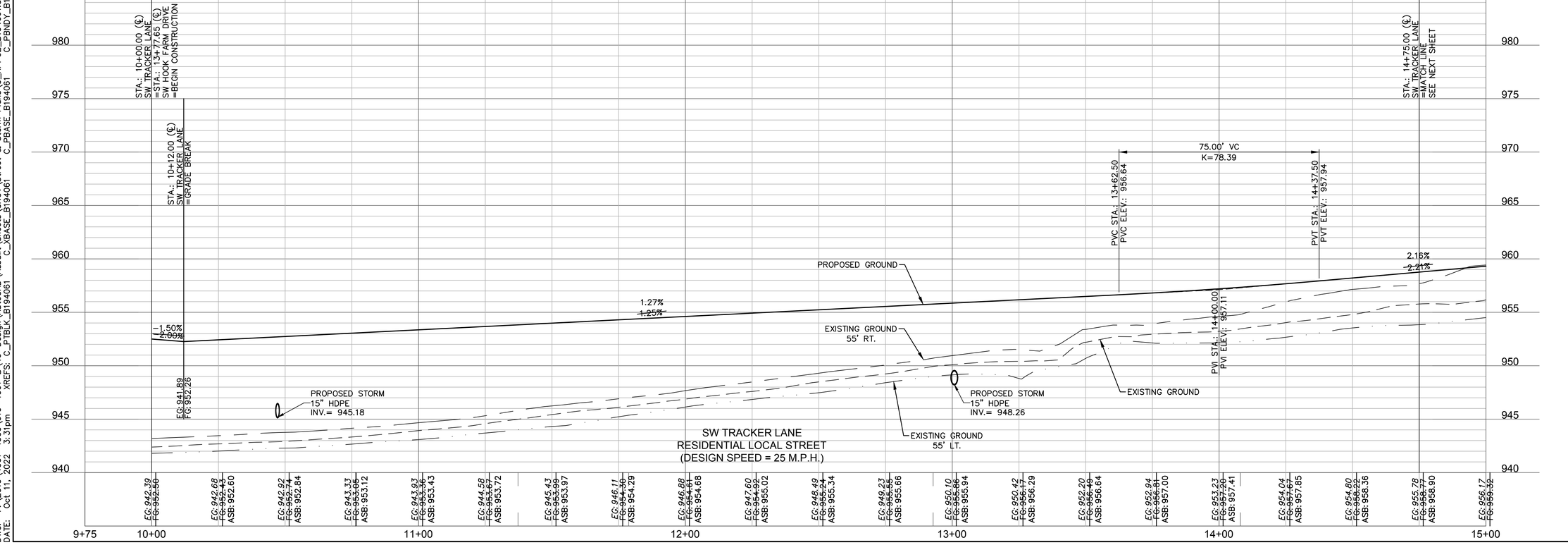
drawn by: B.M.W./A.A.
checked by: B.M.W.
designed by: B.M.W./A.A.
QA/QC by: J.E.S.
project no.: B19-4061
date: 01-08-2021

SHEET
C114

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

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C1	10+00.18 12+74.38	N: 985505.48 E: 2810775.65	N: 985768.60 E: 2810840.17	510.00	274.20	030°48'19"	N13°46'38"E	270.91





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ROADWAY PLAN & PROFILE (SW TRACKER LANE)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C115

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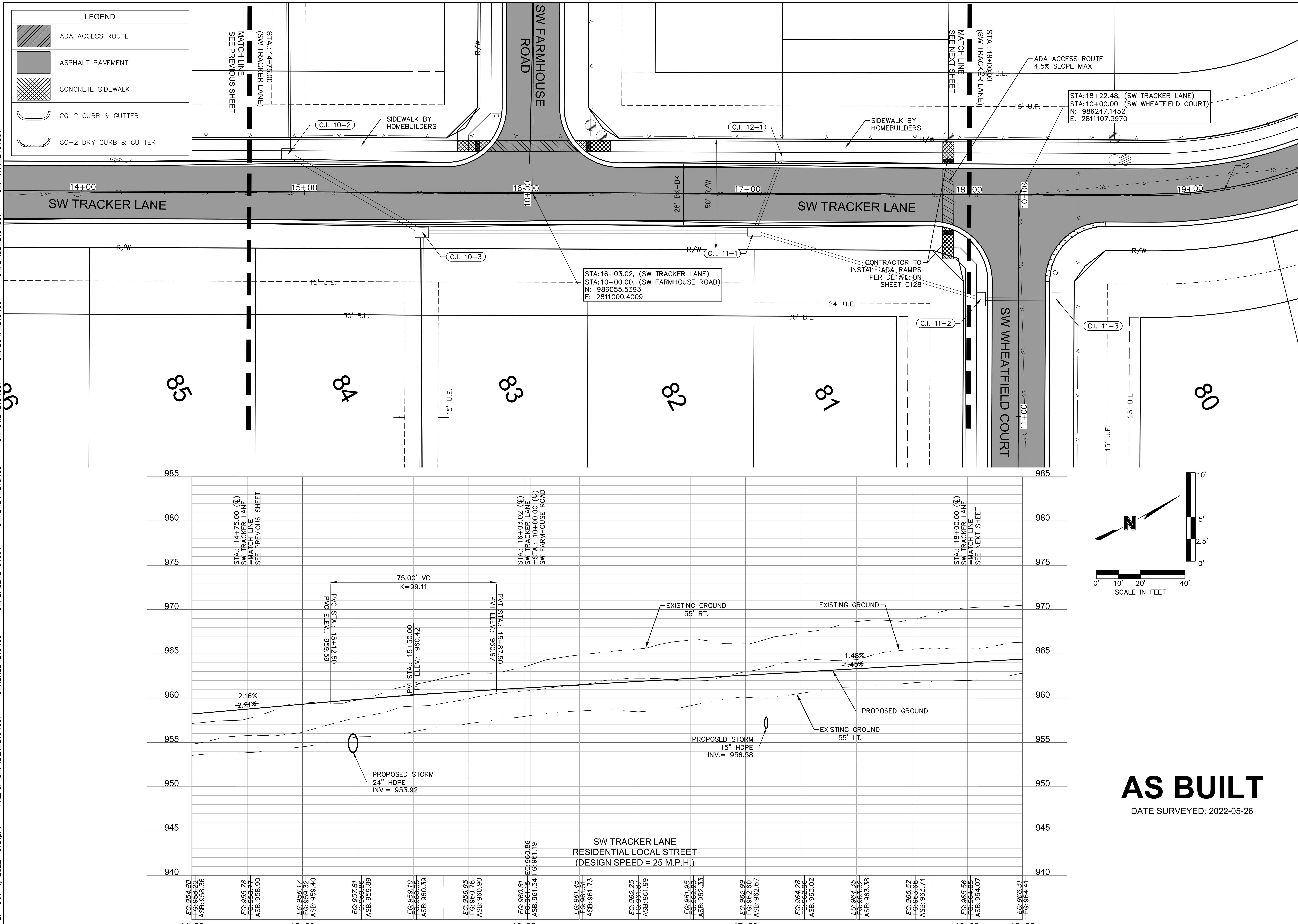

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DATE SURVEYED: 2022-05-26

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HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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designed by:	B.M.W./A.A.
QA/QC by:	J.E.S.
project no.:	B19-4061
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SHEET
C116

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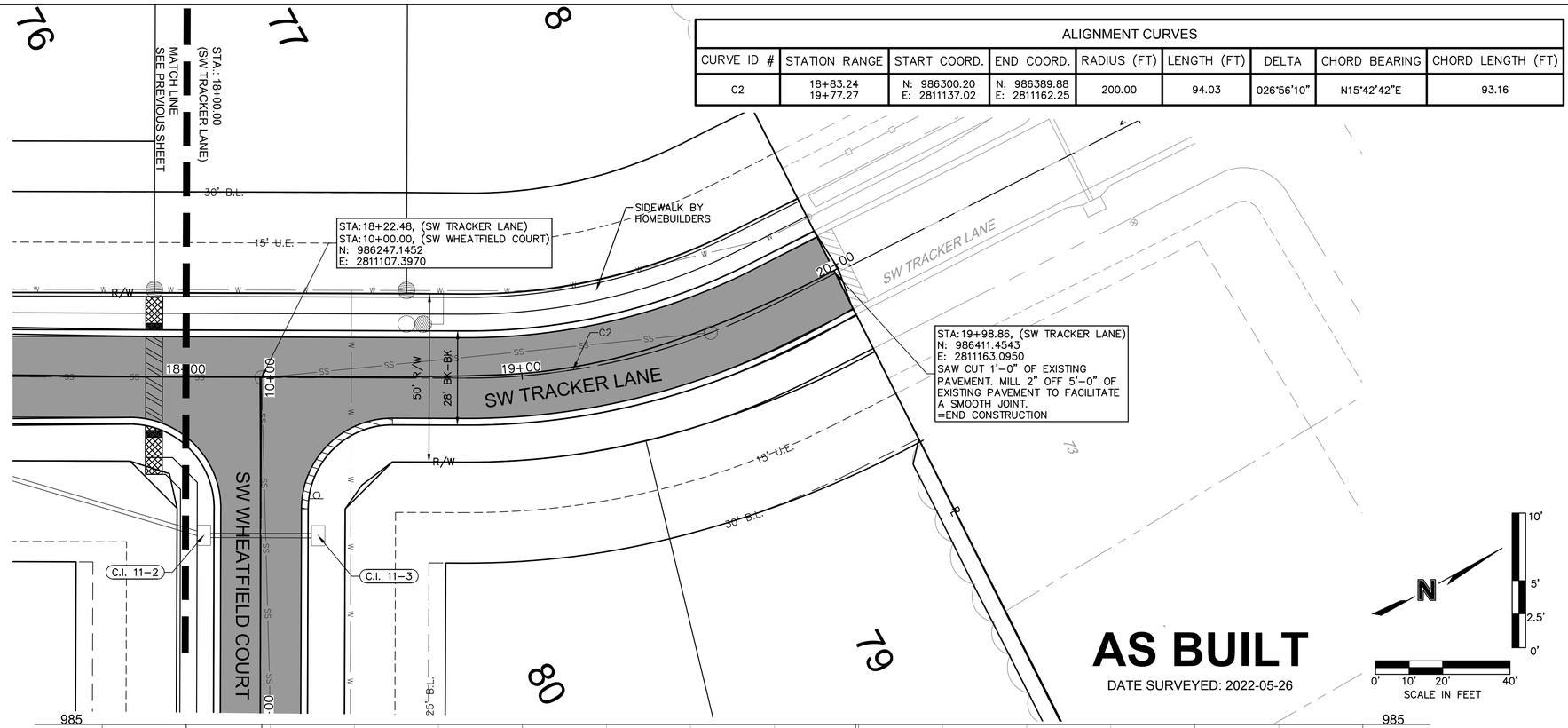
XREFS: C_PTBLK_B194061 C_XBASE_B194061 C_PBASE_B194061 C_PBNDY_B194061
USER: ssaylor
C_PUTIL_B194061 C_PSURF_B194061 C_FBASE_B194061 C_PPATT_B194061

LEGEND	
	ADA ACCESS ROUTE
	MILL & OVERLAY
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-2 CURB & GUTTER
	CG-2 DRY CURB & GUTTER

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C2	18+83.24 19+77.27	N: 986300.20 E: 2811137.02	N: 986389.88 E: 2811162.25	200.00	94.03	026°56'10"	N15°42'42"E	93.16



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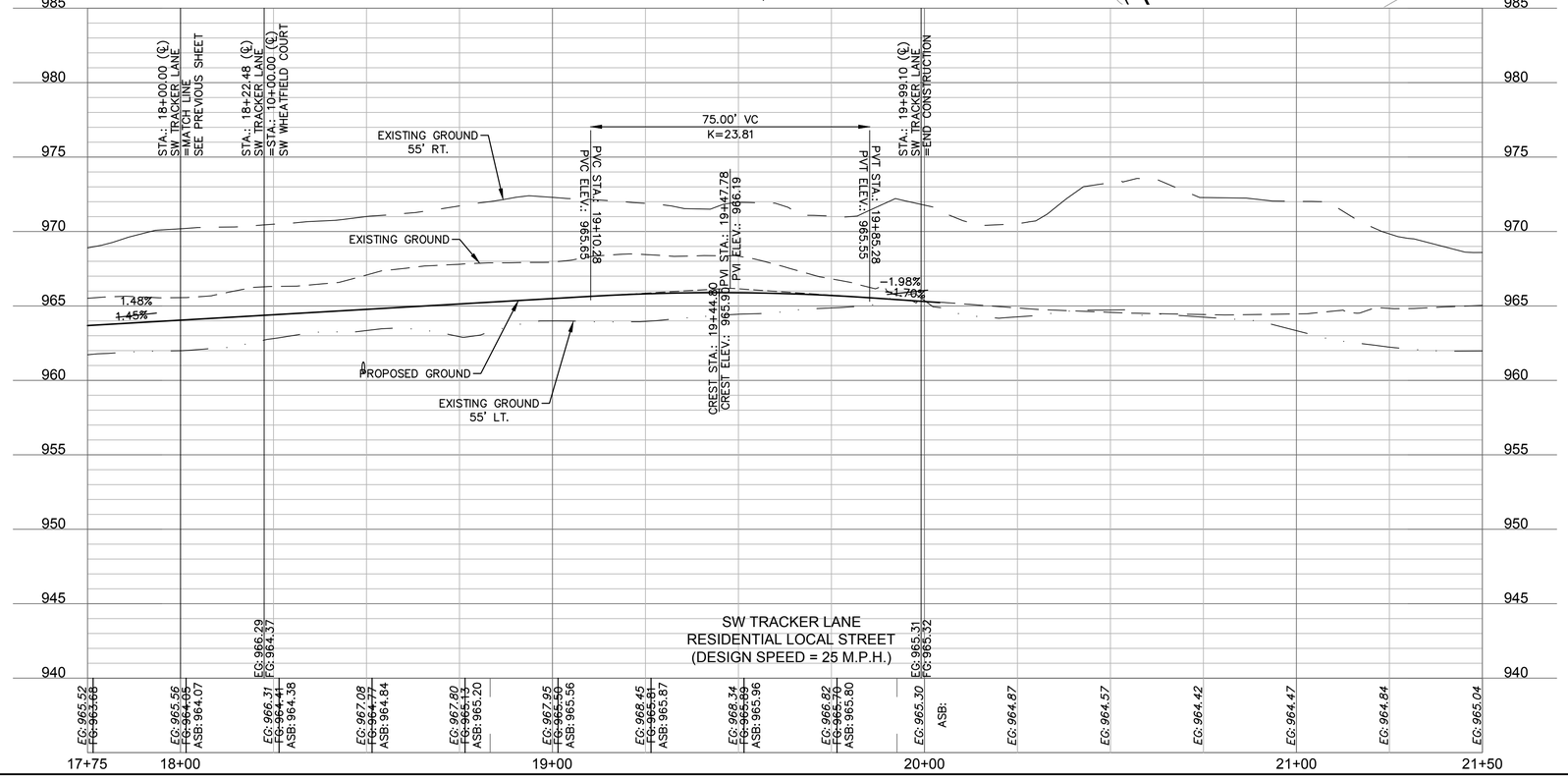

SW TRACKER LANE
RESIDENTIAL LOCAL STREET
(DESIGN SPEED = 25 M.P.H.)

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3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

ROADWAY PLAN & PROFILE (SW TRACKER LANE)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C117

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C-RPP02_B194061.dwg
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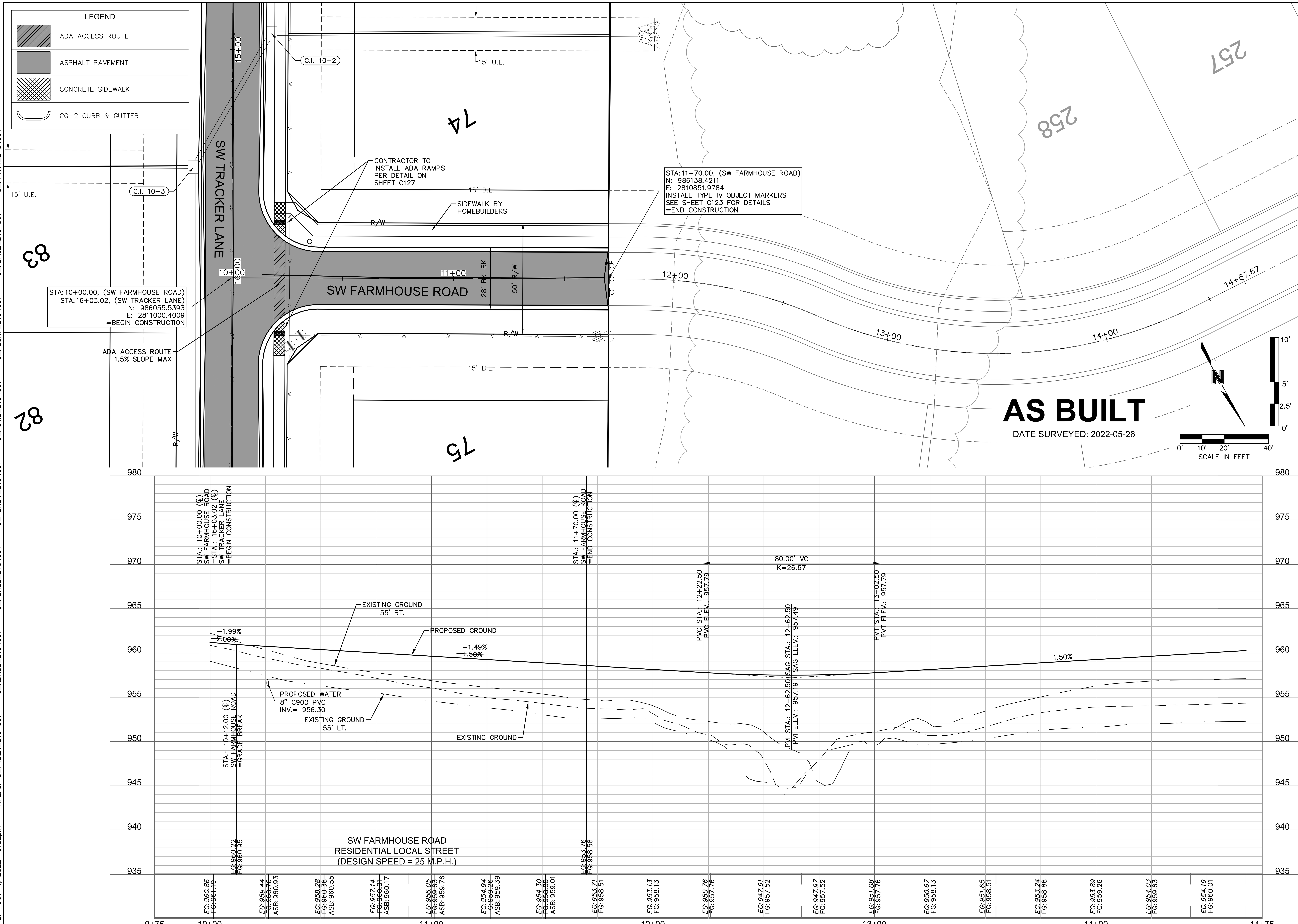

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USER: ssaylor

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

ROADWAY PLAN & PROFILE (SW FARMHOUSE ROAD)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

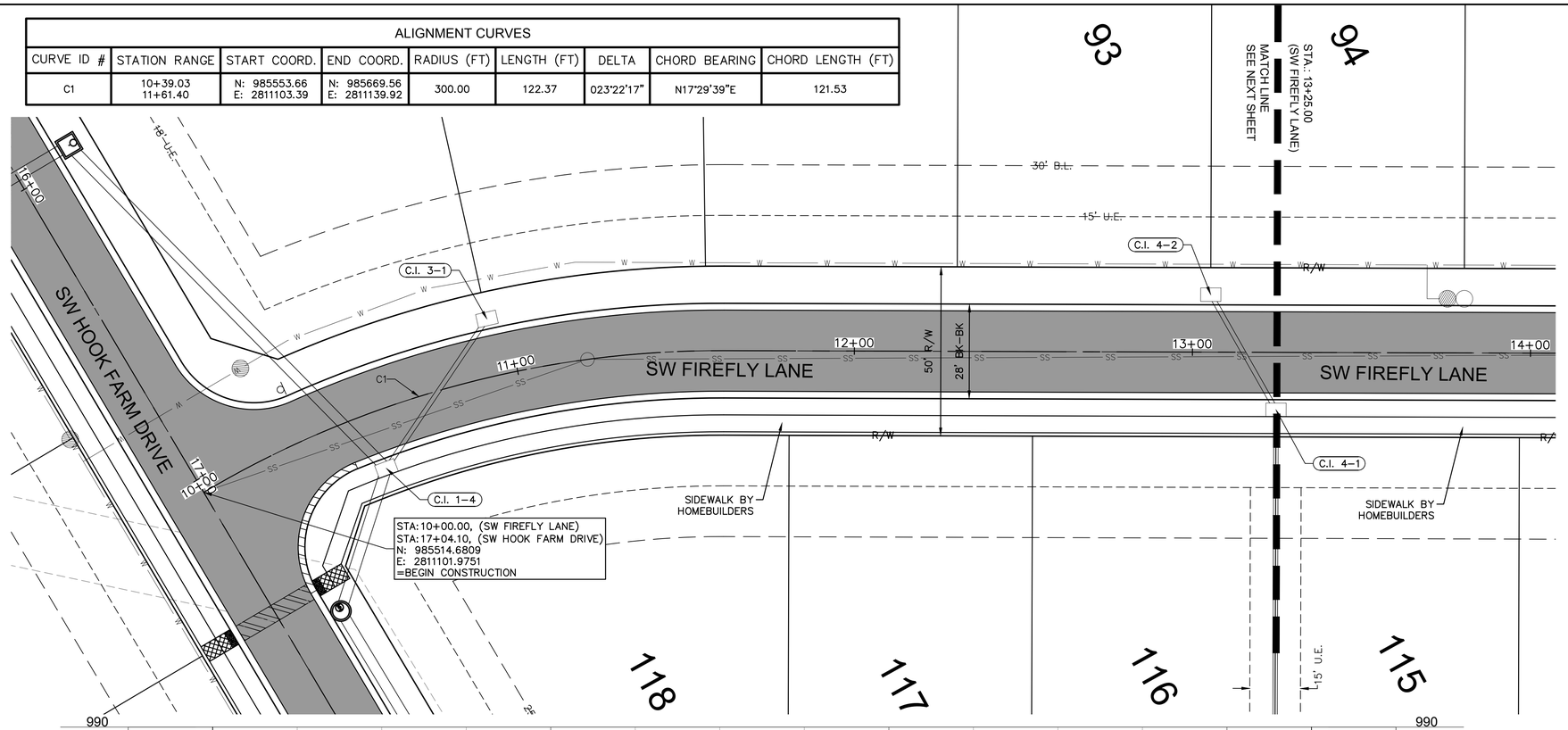
2021

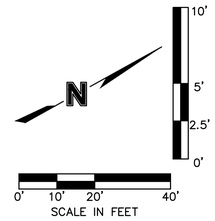
drawn by:	B.M.W./A.A.
checked by:	B.M.W.
designed by:	B.M.W./A.A.
QA/QC by:	J.E.S.
project no.:	B19-4061
date:	01-08-2021

SHEET
C118

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

ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C1	10+39.03 11+61.40	N: 985553.66 E: 2811103.39	N: 985669.56 E: 2811139.92	300.00	122.37	023°22'17"	N17°29'39"E	121.53





AS BUILT

DATE SURVEYED: 2022-05-26

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JULIE ELAINE SELLERS
NUMBER PE-2017000367
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REVISIONS

ROADWAY PLAN & PROFILE (SW FIREFLY LANE)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C119

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_RPP03_B194061.dwg
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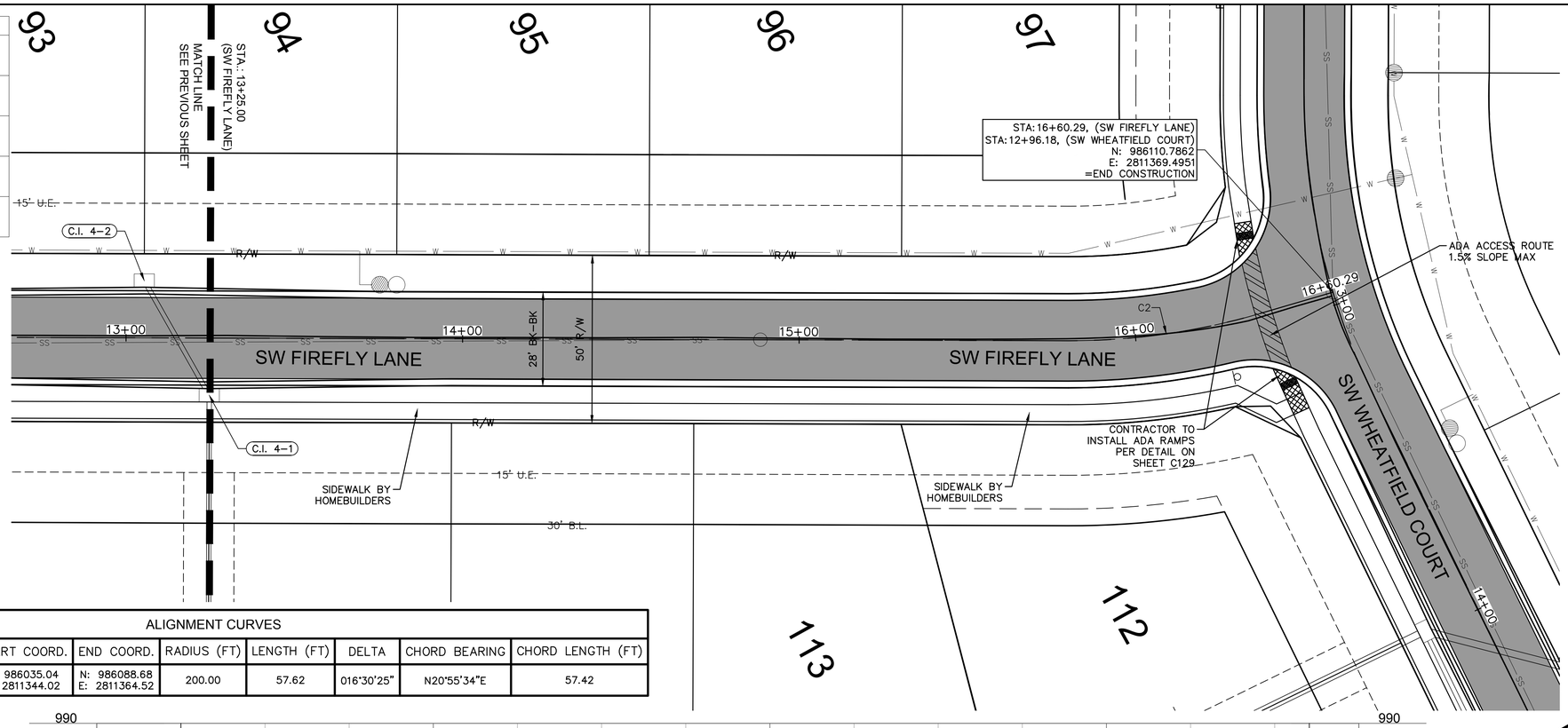
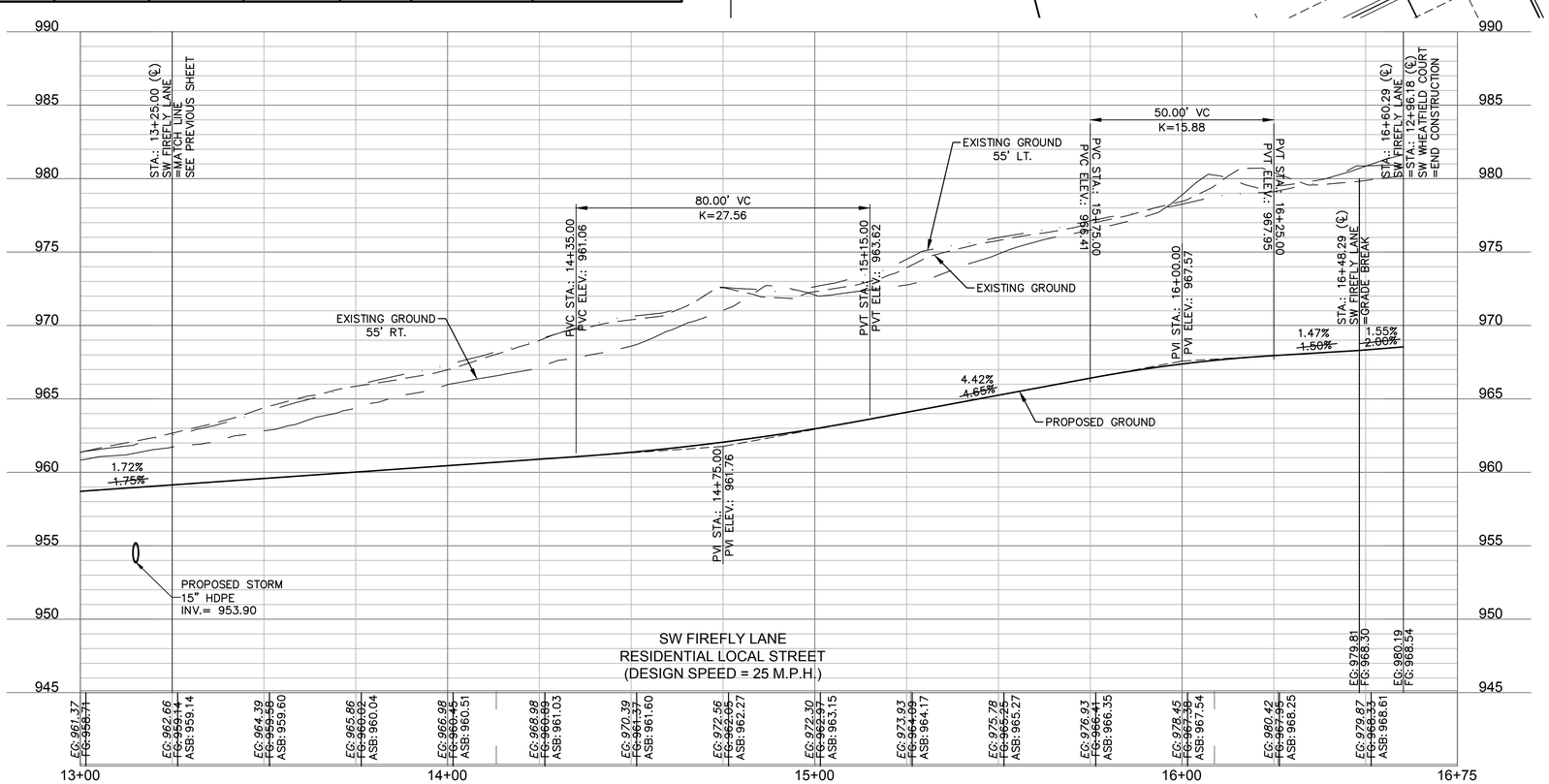
LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-2 CURB & GUTTER
	CG-2 DRY CURB & GUTTER



ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C2	15+80.01 16+37.63	N: 986035.04 E: 2811344.02	N: 986088.68 E: 2811364.52	200.00	57.62	016°30'25"	N20°55'34"E	57.42



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DATE SURVEYED: 2022-05-26

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
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REVISIONS

ROADWAY PLAN & PROFILE (SW FIREFLY LANE)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C120

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_RPP03_B194061.dwg
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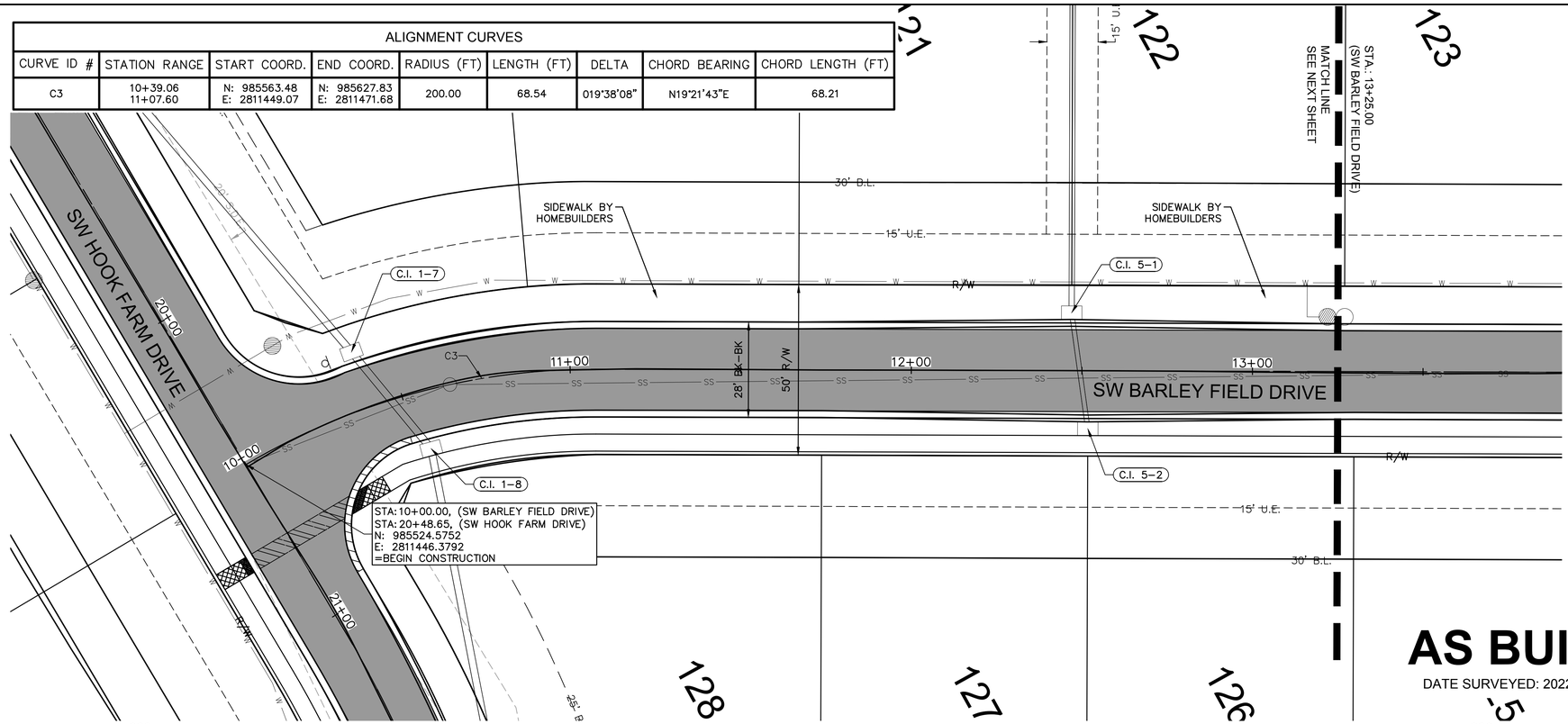
USER: ssoylor C_PUTIL_B194061 C_PSURF_B194061 C_FBASE_B194061 C_PPATT_B194061

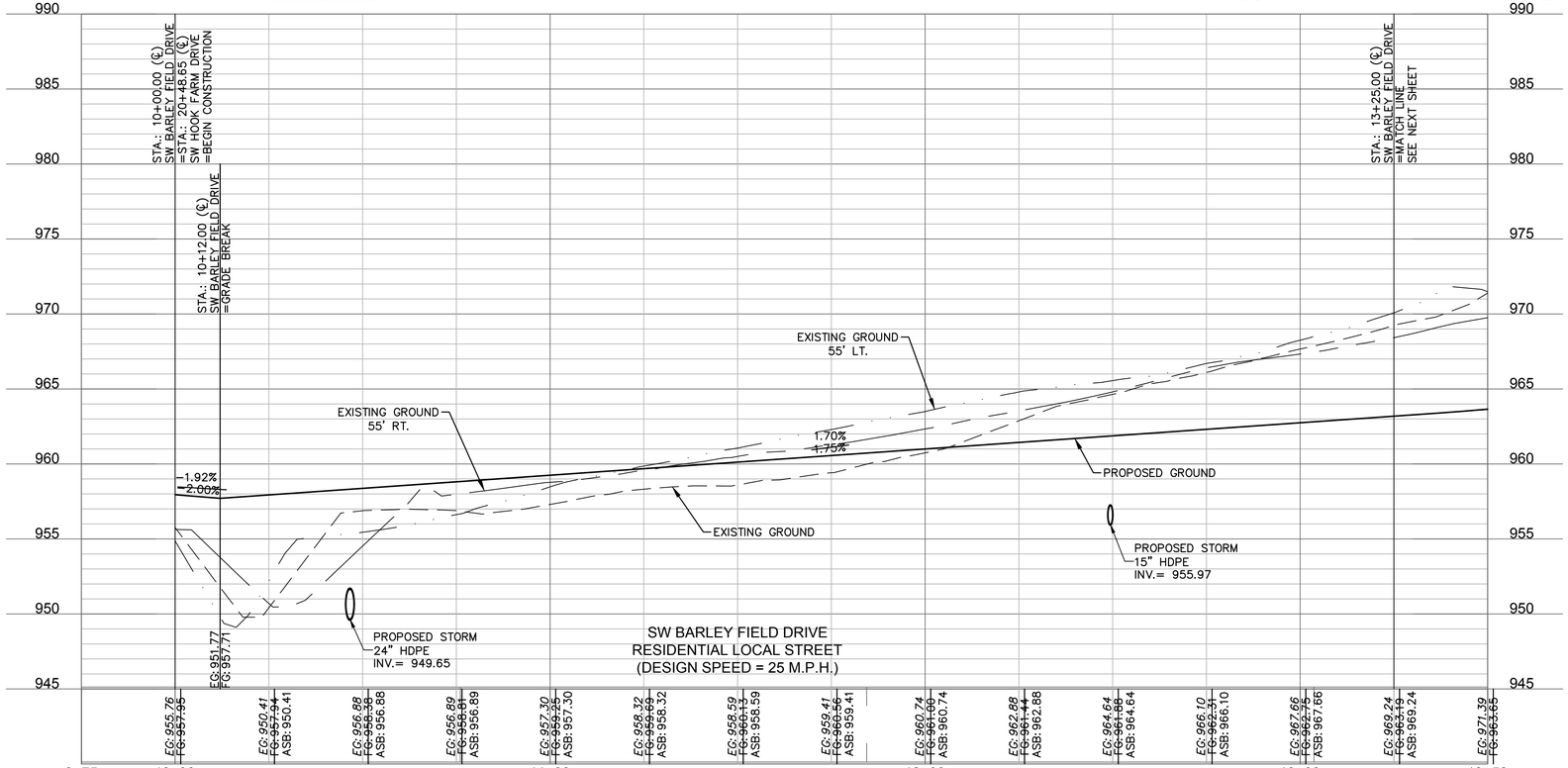
LEGEND	
	ADA ACCESS ROUTE
	ASPHALT PAVEMENT
	CONCRETE SIDEWALK
	CG-2 CURB & GUTTER
	CG-2 DRY CURB & GUTTER

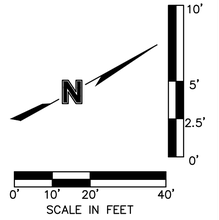
ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C3	10+39.06 11+07.60	N: 985563.48 E: 2811449.07	N: 985627.83 E: 2811471.68	200.00	68.54	019°38'08"	N19°21'43"E	68.21



AS BUILT

DATE SURVEYED: 2022-05-26





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STATE OF MISSOURI
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REVISIONS

ROADWAY PLAN & PROFILE (SW BARLEY FIELD DRIVE)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

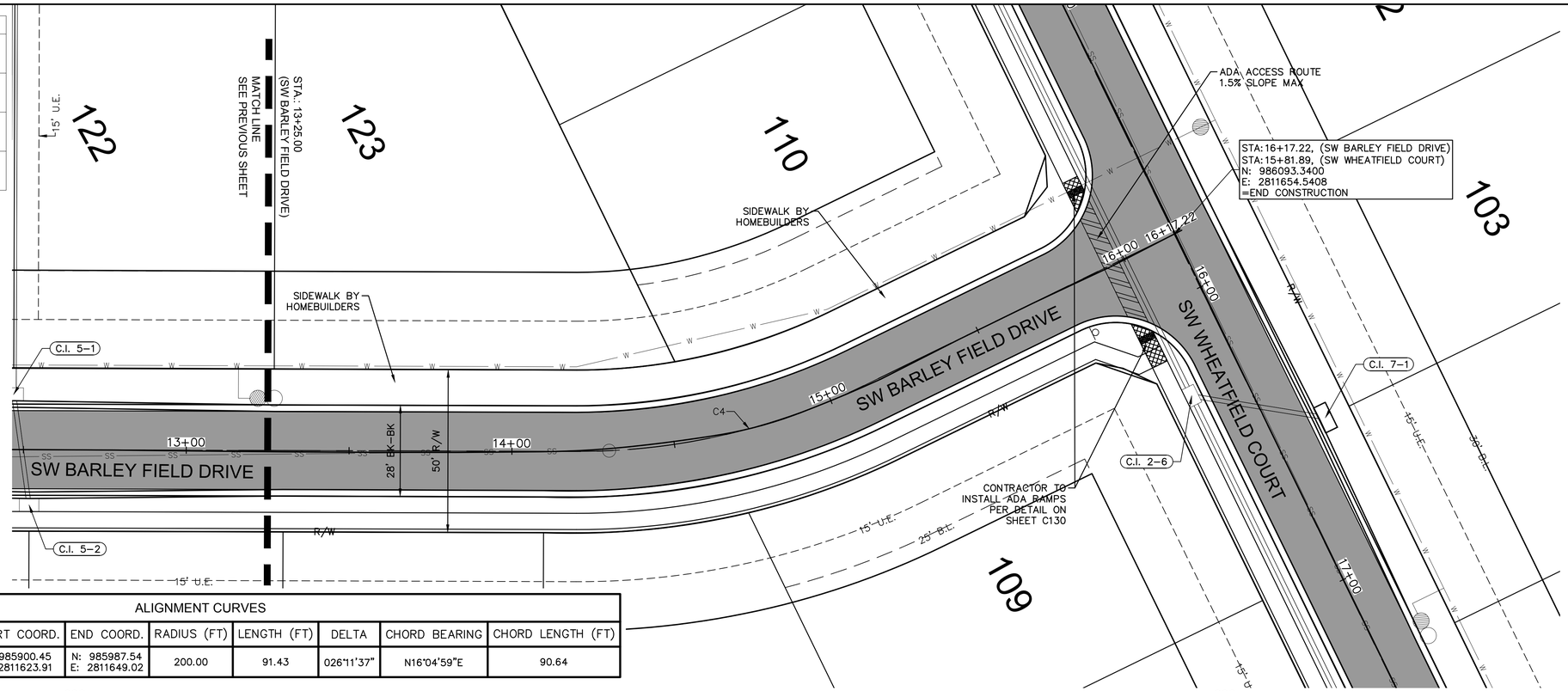
2021

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

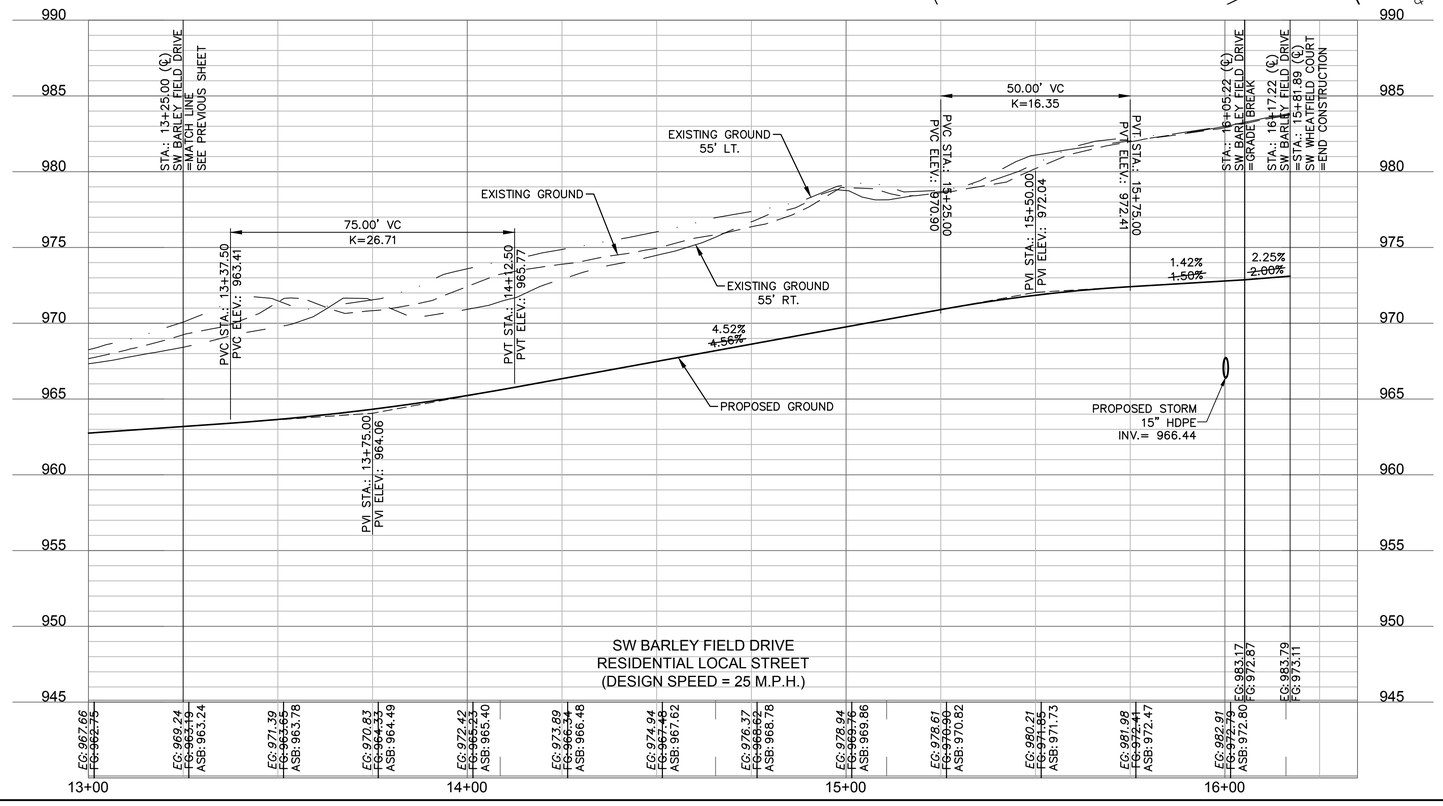
SHEET
C121

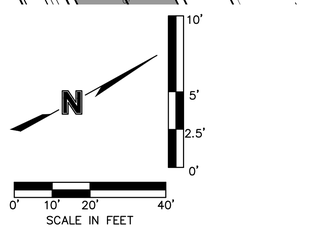
DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_RPP03_B194061.dwg
DATE: Oct 11, 2022 3:33pm XREFS: C_PTBLK_B194061 C_XBASE_B194061 C_PBASE_B194061 C_PBNDY_B194061
USER: ssoylor C_PUTIL_B194061 C_PSURF_B194061 C_FBASE_B194061 C_PPATT_B194061

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



ALIGNMENT CURVES								
CURVE ID #	STATION RANGE	START COORD.	END COORD.	RADIUS (FT)	LENGTH (FT)	DELTA	CHORD BEARING	CHORD LENGTH (FT)
C4	14+19.84 15+11.28	N: 985900.45 E: 2811623.91	N: 985987.54 E: 2811649.02	200.00	91.43	026°11'37"	N16°04'59"E	90.64





AS BUILT

DATE SURVEYED: 2022-05-26

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REVISIONS

ROADWAY PLAN & PROFILE (SW BARLEY FIELD DRIVE)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C122

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_RPP03_B194061.dwg
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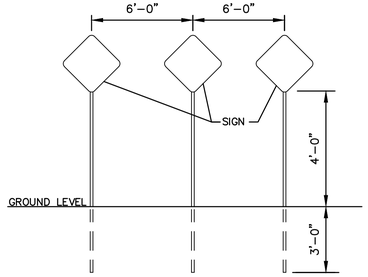
USER: ssoylor
C_PBNDY_B194061



END OF ROAD TREATMENT
N.T.S.

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

EAGLE CREEK FIRST PLAT

REMOVE EXISTING TYPE IV OBJECT MARKERS

INSTALL SW WHEATFIELD COURT AND SW TRACKER LANE STREET NAME SIGNS WITH STOP SIGN.

INSTALL TYPE IV OBJECT MARKERS.

INSTALL SW FARMHOUSE ROAD AND SW TRACKER LANE STREET NAME SIGNS WITH STOP SIGN.

INSTALL SW WHEATFIELD COURT AND SW FIREFLY LANE STREET NAME SIGNS WITH STOP SIGN.

INSTALL SW WHEATFIELD COURT AND SW BARLEY FIELD DRIVE STREET NAME SIGNS WITH STOP SIGN.

REMOVE EXISTING TYPE IV OBJECT MARKERS

INSTALL SW HOOK FARM DRIVE AND SW TRACKER LANE STREET NAME SIGNS WITH STOP SIGN.

INSTALL SW HOOK FARM DRIVE AND SW FIREFLY LANE STREET NAME SIGNS WITH STOP SIGN.

INSTALL SW HOOK FARM DRIVE AND SW BARLEY FIELD DRIVE STREET NAME SIGNS WITH STOP SIGN.

REMOVE EXISTING TYPE IV OBJECT MARKERS

SW FARMHOUSE ROAD
SW TRACKER LANE
SW FIREFLY LANE
SW BARLEY FIELD DRIVE
SW WHEATFIELD COURT
SW HOOK FARM DRIVE
SW FARM FIELD ROAD

TRACT M
TRACT N
TRACT O

HOOK FARMS 1ST PLAT

NOT AS-BUILT

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

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REVISIONS

TRAFFIC CONTROL PLAN
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

drawn by: B.M.W./A.A.
checked by: B.M.W.
designed by: B.M.W./A.A.
QA/QC by: J.E.S.
project no.: 819-4061
date: 01-08-2021

SHEET
C123

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_TCP01_B194061.dwg USER: ssaylor
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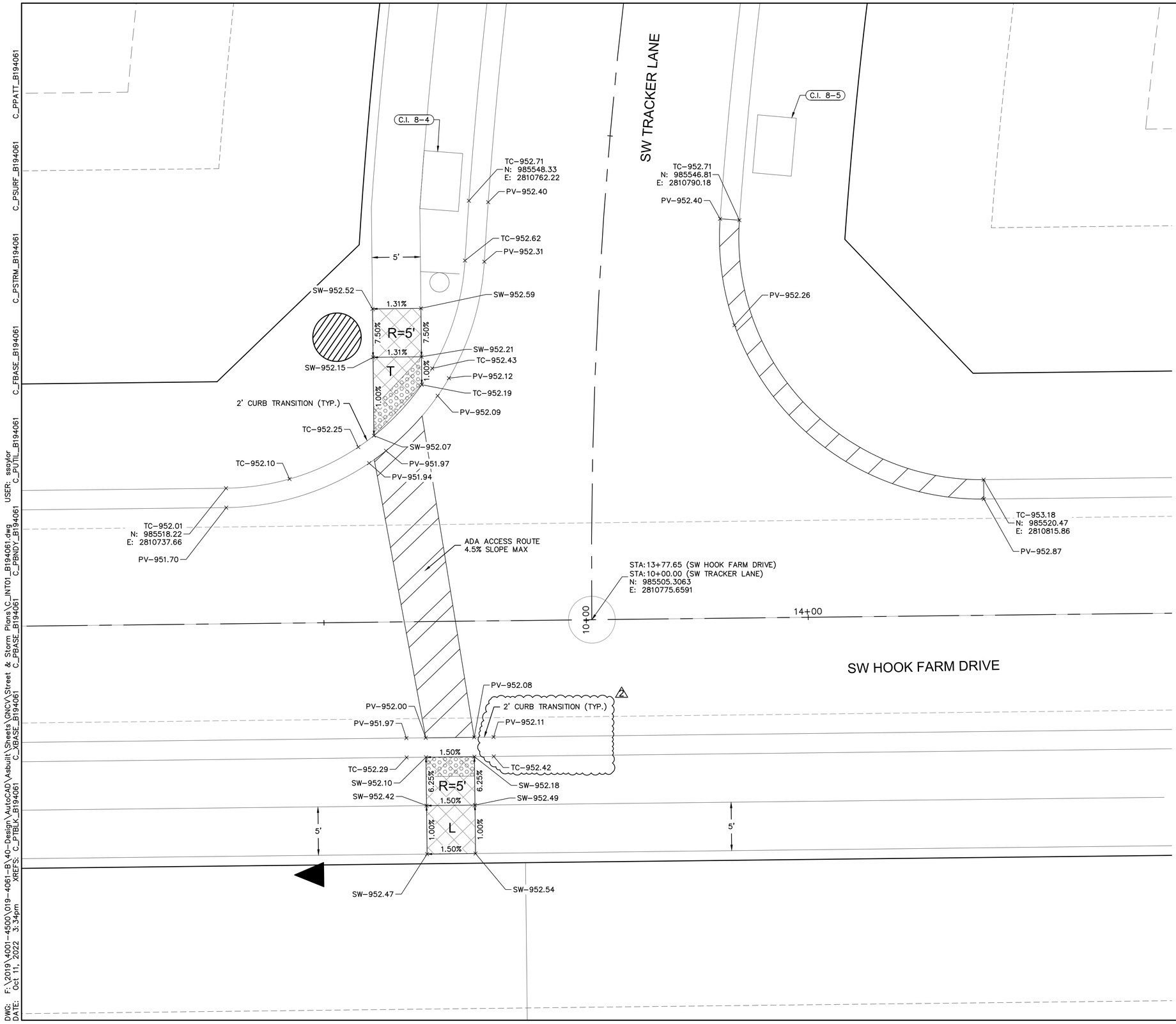

INTERSECTION AND ADA DETAIL NOTES:

1. ALL ADA CURB RAMPS SHALL BE BUILT PER CURRENT MUNICIPALITY ADOPTED ADA STANDARDS.
2. CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10 MAX SLOPES.
3. LANDING SHALL BE PROVIDED WHERE INDICATED ON PLAN SHEET OR BY PROWAG STANDARDS. LANDING SHALL BE 4'X4' MINIMUM.
4. RAMP RUNS SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1:12 UNLESS THE RAMP LENGTH IS OVER 15 FEET, THEN THE SLOPE CAN BE GREATER AS INDICATED IN DETAILS TO REACH STREET GRADES.
5. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
6. CROSS SLOPE FOR RAMPS AND SIDEWALK SHALL NOT EXCEED 2%.
7. AFTER CURBS HAVE BEEN CONSTRUCTED, AND BEFORE ASPHALT OR CONCRETE PAVEMENT IS POURED, CURBS SHOULD BE MEASURED WITH A LEVEL TO ENSURE CURB ALONG ADA RAMPS AND LANDINGS WILL MEET ADA REQUIREMENTS.
8. ADA RAMP CONSTRUCTION WILL BE INSPECTED THOROUGHLY BY THE CITY INSPECTOR. CONTRACTOR SHALL BE REQUIRED TO RECONSTRUCT RAMPS, CURBS AND/OR PAVEMENT AT CONTRACTOR'S EXPENSE IF ADA RAMPS AND LANDINGS CANNOT MEET THE ADA REQUIREMENTS, PER APPROVED PLAN OR APPROVED ALTERNATIVE.
9. CURVE DATA IS FOR BACK OF CURB.

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

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STATE OF MISSOURI
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NUMBER PE-2017000367
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PROFESSIONAL ENGINEER

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REVISIONS

SW TRACKER LANE & SW HOOK FARM DRIVE
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

drawn by:	B.M.W./A.A.
checked by:	B.M.W.
designed by:	B.M.W./A.A.
QA/QC by:	J.E.S.
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SHEET
C124

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_INT01_B194061.dwg
DATE: Oct 11, 2022 3:34pm
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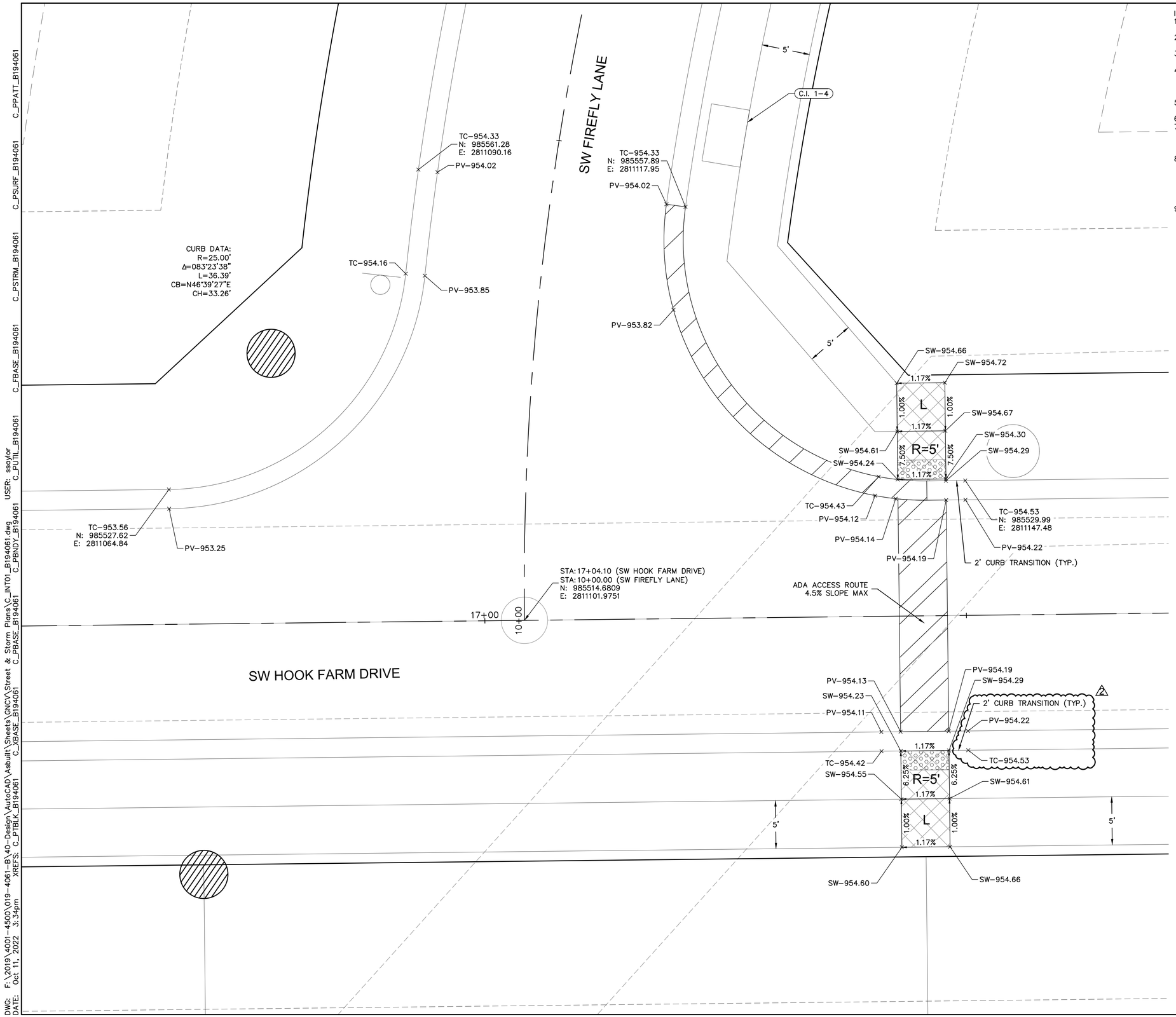
USER: ssaylor



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4. RAMP RUNS SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1:12 UNLESS THE RAMP LENGTH IS OVER 15 FEET, THEN THE SLOPE CAN BE GREATER AS INDICATED IN DETAILS TO REACH STREET GRADES.
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9. CURVE DATA IS FOR BACK OF CURB.

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

NOT AS-BUILT

N

0' 2.5' 5' 10'
SCALE IN FEET

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REVISIONS

SW FIREFLY LANE & SW HOOK FARM DRIVE
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

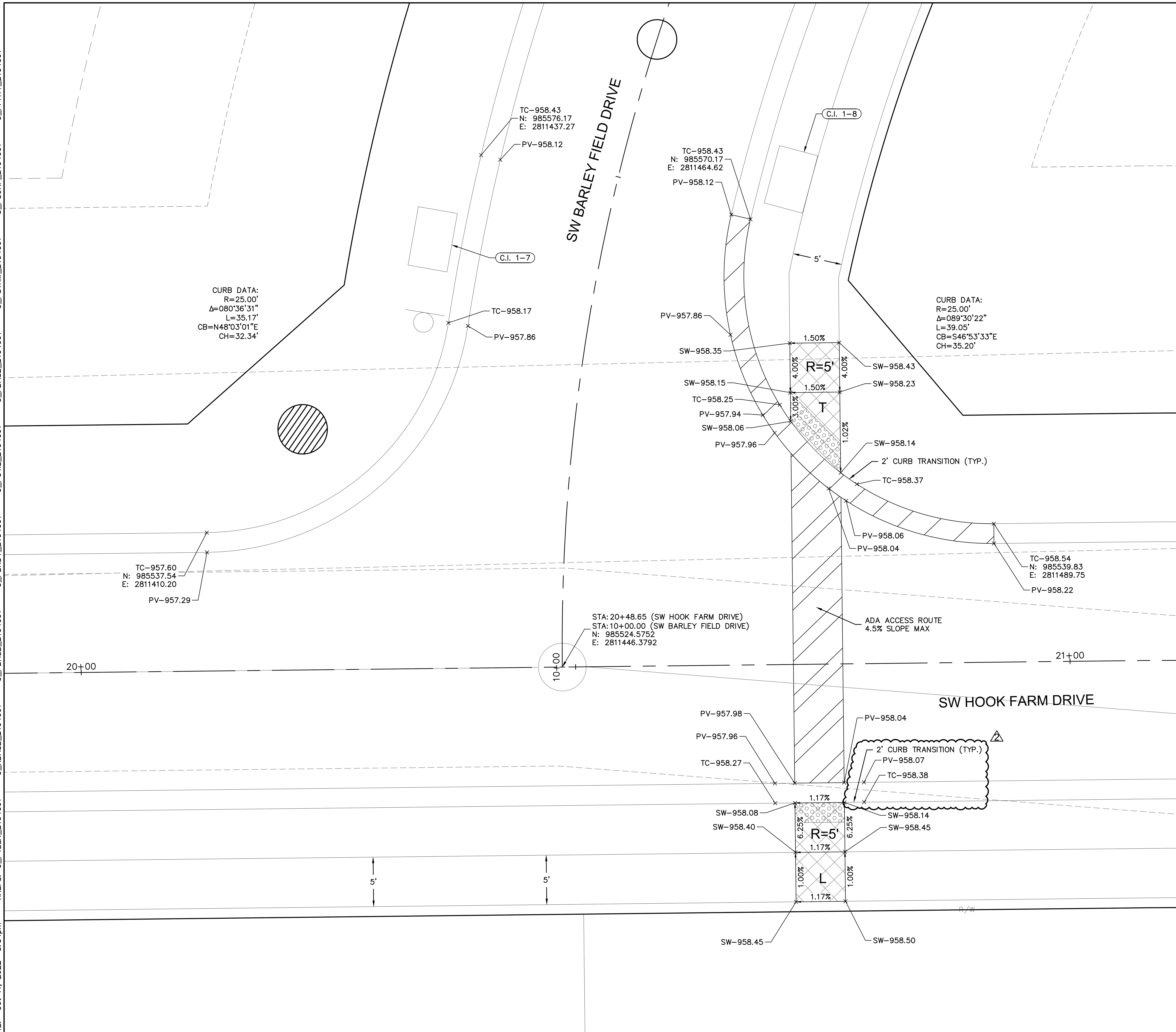
2021

LEE'S SUMMIT, MO

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

SHEET
C125

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_INT01_B194061.dwg USER: ssaylor
DATE: Oct 11, 2022 3:34pm XREFS: C_PTBLK_B194061 C_XBASE_B194061 C_PBASE_B194061 C_PBNDY_B194061 C_PSTRM_B194061 C_PSURF_B194061 C_FBASE_B194061 C_PUTIL_B194061 C_PPATT_B194061



INTERSECTION AND ADA DETAIL NOTES:

1. ALL ADA CURB RAMPS SHALL BE BUILT PER CURRENT MUNICIPALITY ADOPTED ADA STANDARDS.
2. CURB RAMP FLARES SHALL NOT BE STEEPER THAN 1:10 MAX SLOPES.
3. LANDING SHALL BE PROVIDED WHERE INDICATED ON PLAN SHEET OR BY PROWAG STANDARDS. LANDING SHALL BE 4'X4' MINIMUM.
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LEGEND	
TC–	TOP OF CURB
PV–	TOP OF PAVEMENT
SW–	SIDEWALK
L	LANDING AREA
R	RAMP AREA
T	TRANSITION AREA
(hatch)	ADA ACCESS ROUTE
(symbol)	CG–2 CURB & GUTTER
(symbol)	CG–2 DRY CURB & GUTTER
(crosshatch)	ADA RAMP (CONSTRUCTED BY CONTRACTOR)

NOT AS-BUILT

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
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REVISIONS

SW BARLEY FIELD DRIVE & SW HOOK FARM DRIVE
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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

SHEET
C126

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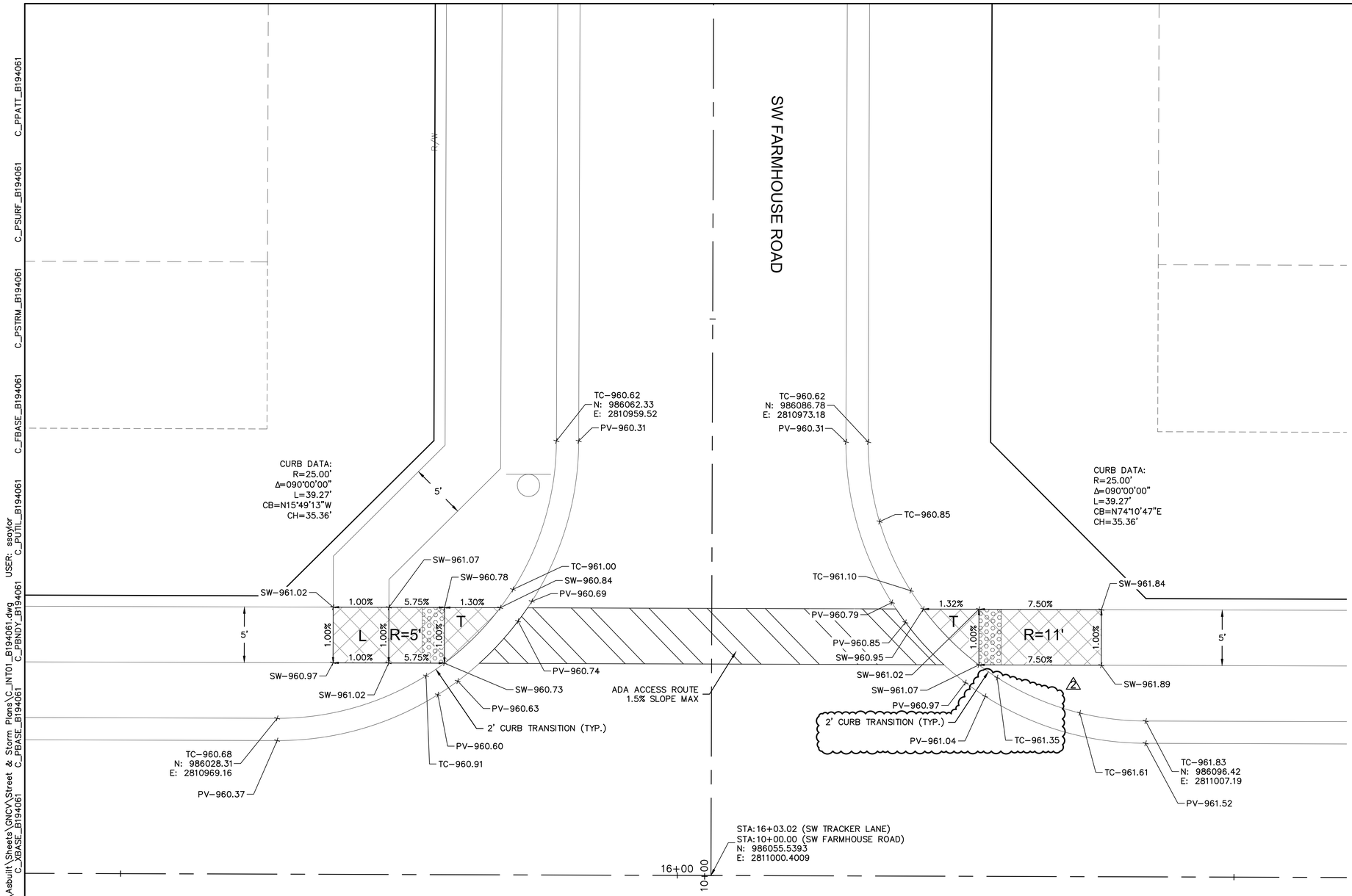

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	CG-2 DRY CURB & GUTTER
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NOT AS-BUILT

N

0' 2.5' 5' 10'
SCALE IN FEET

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REVISIONS

SW FARMHOUSE ROAD & SW TRACKER LANE
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

drawn by: B.M.W./A.A.
checked by: B.M.W.
designed by: B.M.W./A.A.
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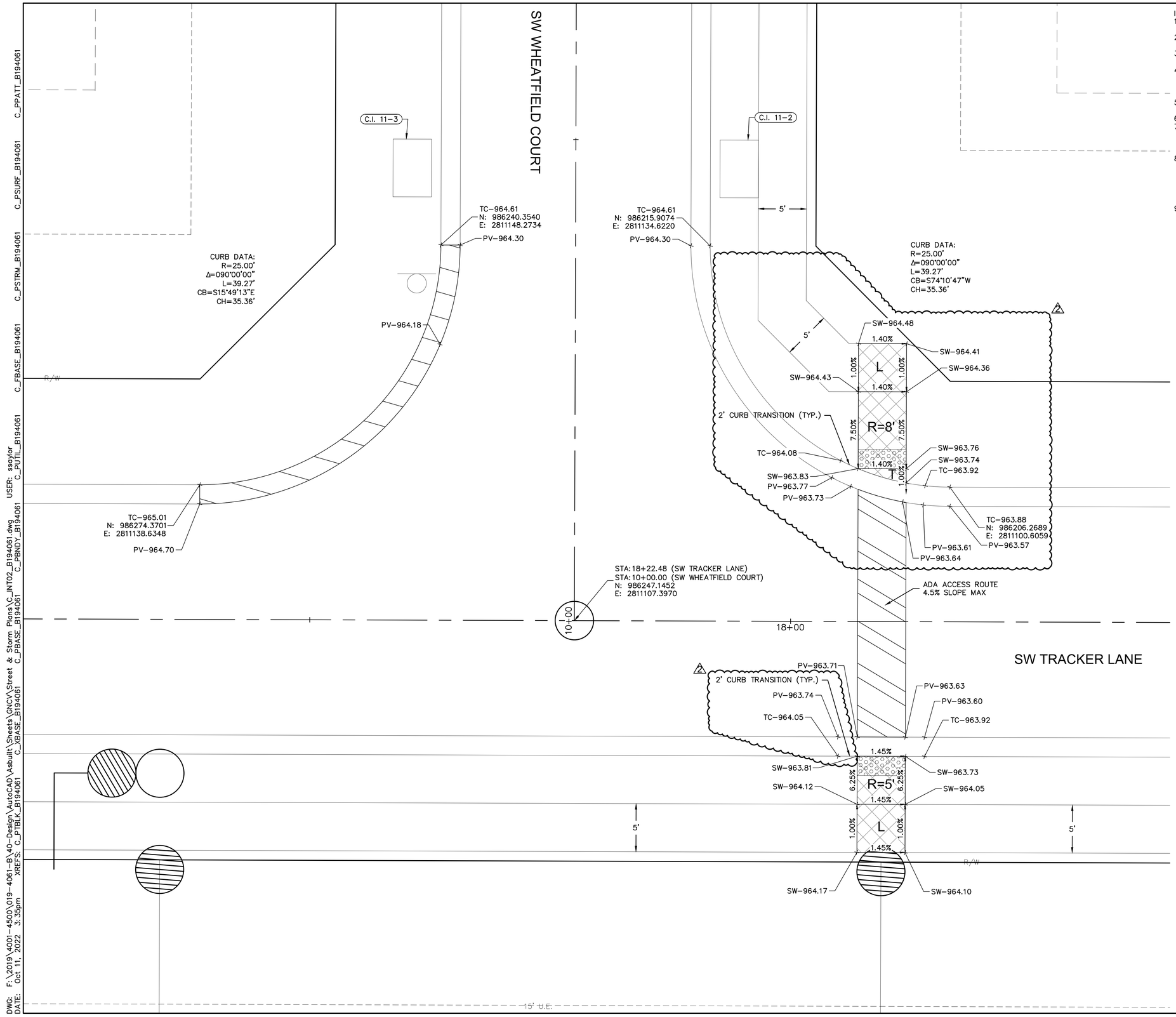
SHEET
C127

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_INT01_B194061.dwg USER: ssoylor
DATE: Oct 11, 2022 3:34pm XREFS: C_PTBLK_B194061 C_XBASE_B194061 C_PBASE_B194061 C_PBNDY_B194061 C_PSTRM_B194061 C_PFBASE_B194061 C_PSURF_B194061 C_PPATT_B194061 C_PUTIL_B194061



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STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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SHEET
C128

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USER: ssaylor

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	ADA ACCESS ROUTE
	CG-2 CURB & GUTTER
	CG-2 DRY CURB & GUTTER
	ADA RAMP (CONSTRUCTED BY CONTRACTOR)

SW FIREFLY LANE

16+00

5'

TC-967.96
N: 986068.4816
E: 2811373.5791
PV-967.65
TC-968.00
PV-967.69

CURB DATA:
R=25.00'
Δ=077°12'56"
L=33.69'
CB=S54°22'43"W
CH=31.20'

TC-968.38
SW-968.24
PV-968.07
PV-968.14
SW-968.69
SW-968.31
SW-968.76
1.50%
7.50%
1.31%
1.00%
L
R=5'
T
SW-968.36
PV-968.26
2' CURB TRANSITION (TYP.)
PV-968.33
TC-968.64
SW-968.81
SW-968.74
PV-968.81
TC-969.13
N: 986092.5627
E: 2811400.7018

ADA ACCESS ROUTE
1.5% SLOPE MAX

TC-967.96
N: 986076.8649
E: 2811346.8635
PV-967.65

CURB DATA:
R=25.00'
Δ=085°38'08"
L=37.37'
CB=N25°23'45"W
CH=33.98'

TC-968.17
2' CURB TRANSITION (TYP.)
PV-967.86
SW-968.05
SW-968.35
SW-967.99
1.30%
6.00%
T
1.00%
R=5'
PV-967.89
SW-968.10
SW-968.40
PV-968.00
PV-967.97
TC-968.28
TC-968.08
N: 986107.5644
E: 2811332.2891
PV-967.76

STA:12+96.18 (SW WHEATFIELD COURT)
STA:16+60.29 (SW FIREFLY LANE)
N: 986110.7862
E: 2811369.4951

13+00

16+60.29

SW WHEATFIELD COURT

NOT AS-BUILT

N

0' 2.5' 5' 10'
SCALE IN FEET

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REVISIONS

SW FIREFLY LANE & SW WHEATFIELD COURT
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C129

INTERSECTION AND ADA DETAIL NOTES:

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T	TRANSITION AREA
	ADA ACCESS ROUTE
	CG-2 CURB & GUTTER
	CG-2 DRY CURB & GUTTER
	ADA RAMP (CONSTRUCTED BY CONTRACTOR)

SW BARLEY FIELD DRIVE

CURB DATA:
R=25.00'
Δ=090°00'00"
L=39.27'
CB=S47°59'10"W
CH=35.36'

TC–972.53
N: 986053.6636
E: 2811666.4900
PV–972.22

TC–972.53
N: 986055.1223
E: 2811638.5281
PV–972.22

CURB DATA:
R=25.00'
Δ=090°00'00"
L=39.27'
CB=N42°00'50"W
CH=35.36'

ADA ACCESS ROUTE
1.5% SLOPE MAX

SW–973.34
SW–973.41
SW–972.96
SW–972.90
TC–973.03
PV–972.72
PV–972.80
SW–973.46
SW–973.39
SW–973.01
PV–972.91
2' CURB TRANSITION (TYP.)
PV–972.98
TC–973.29
TC–973.80
N: 986077.3273
E: 2811692.7584
PV–973.49

PV–972.57
PV–972.62
TC–972.88
SW–972.72
SW–972.65
SW–972.90
SW–972.60
PV–972.50
2' CURB TRANSITION (TYP.)
PV–972.47
SW–972.85
TC–972.78
PV–972.24
TC–972.56
N: 986081.3907
E: 2811614.8644

L R=5' T — 1.50% / 7.50% / 1.00%
T R=5' — 5.00% / 1.00%
5'

16+00

STA:15+81.89 (SW WHEATFIELD COURT)
STA:16+17.22 (SW BARLEY FIELD DRIVE)
N: 986093.3400
E: 2811654.5408

16+17.22

SW WHEATFIELD COURT

R/W

NOT AS-BUILT

N

0' 2.5' 5' 10'
SCALE IN FEET

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SW BARLEY FIELD DRIVE & SW WHEATFIELD COURT
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

drawn by: B.M.W./A.A.
checked by: B.M.W.
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QA/QC by: J.E.S.
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SHEET
C130

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	CG-2 CURB & GUTTER

CURB DATA:
R=39.00'
Δ=251°04'31"
L=170.90'
CB=S33°53'32"W
CH=63.47'

TC–947.72,
LOW SPOT

TC–948.78

CURB DATA:
R=35.00'
Δ=071°04'31"
L=43.42'
CB=S56°06'28"E
CH=40.69'

TC–949.38
N: 985512.3003
E: 2810531.5866

SW–948.17
SW–948.09
TC–947.97
2' CURB TRANSITION (TYP.)
SW–947.78
PV–947.68
6'
L
R=5'
PV–947.75
SW–947.84
TC–948.08
SW–948.16
SW–948.23
5'
SW–948.30
SW–948.40

20' S.E.

SW HOOK FARM DRIVE

11+00

TC–949.38
N: 985484.3118
E: 2810532.3907

TC–948.61

NOT AS-BUILT

N

0' 2.5' 5' 10'
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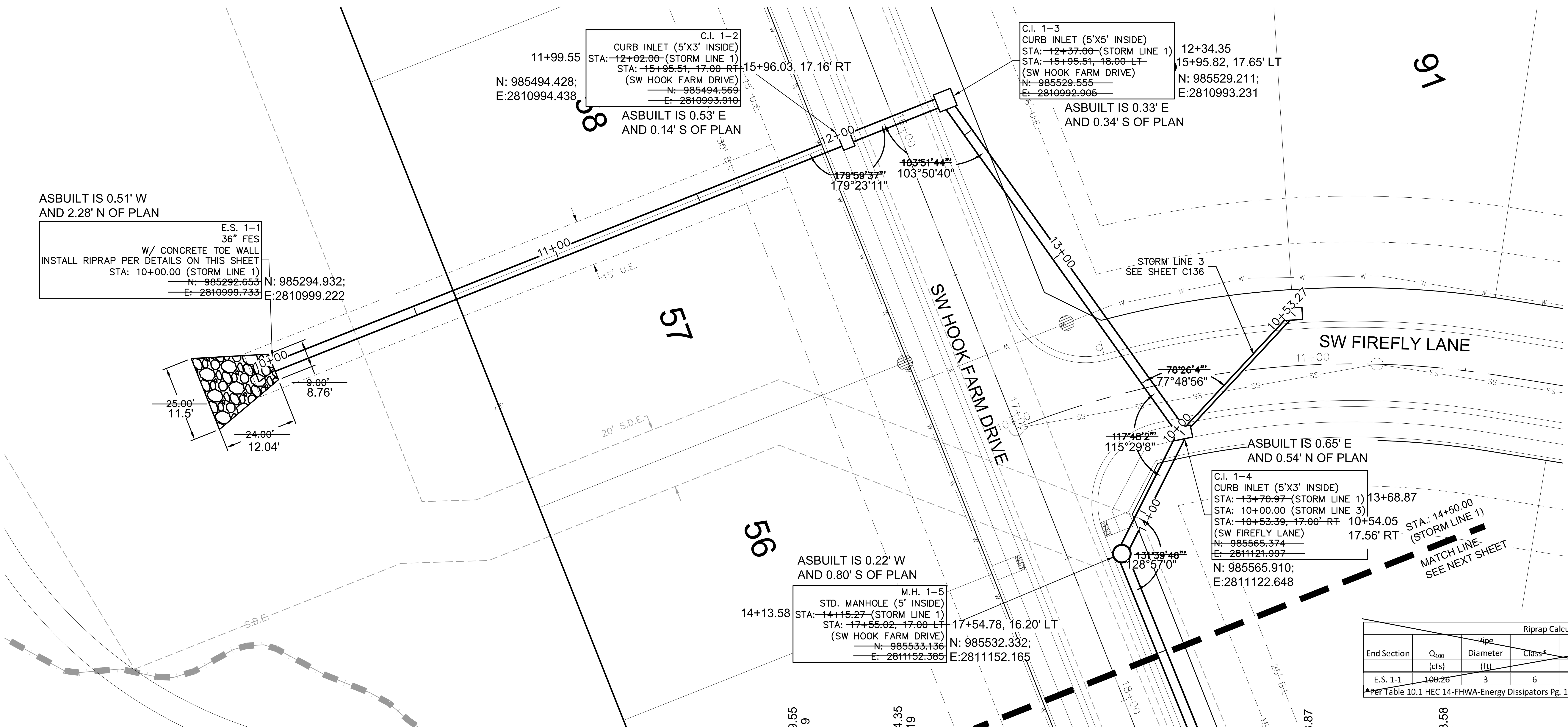
SHEET
C131

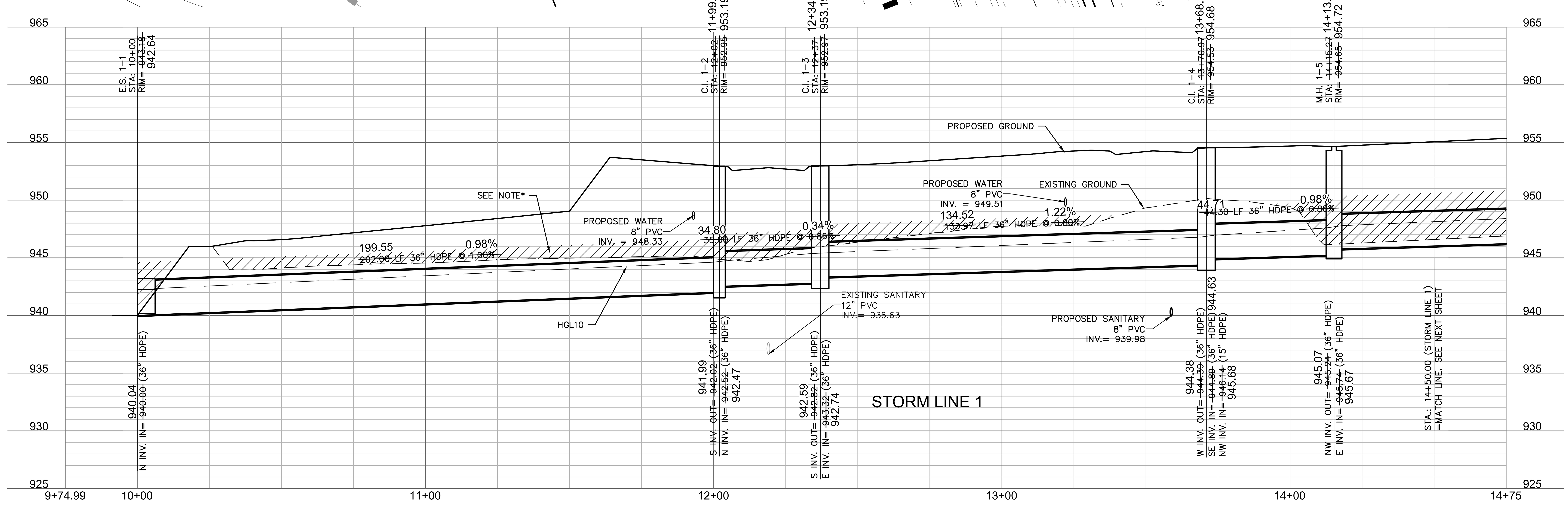
AS BUILT

DATE SURVEYED: 2022-05-26



*NOTE: CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 18" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE

Riprap Calculations							
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 1-1	100.26	3	6	22	24	3.67	45.3
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							



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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

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

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C132

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_STM01_B194061.dwg USER: ssaylor
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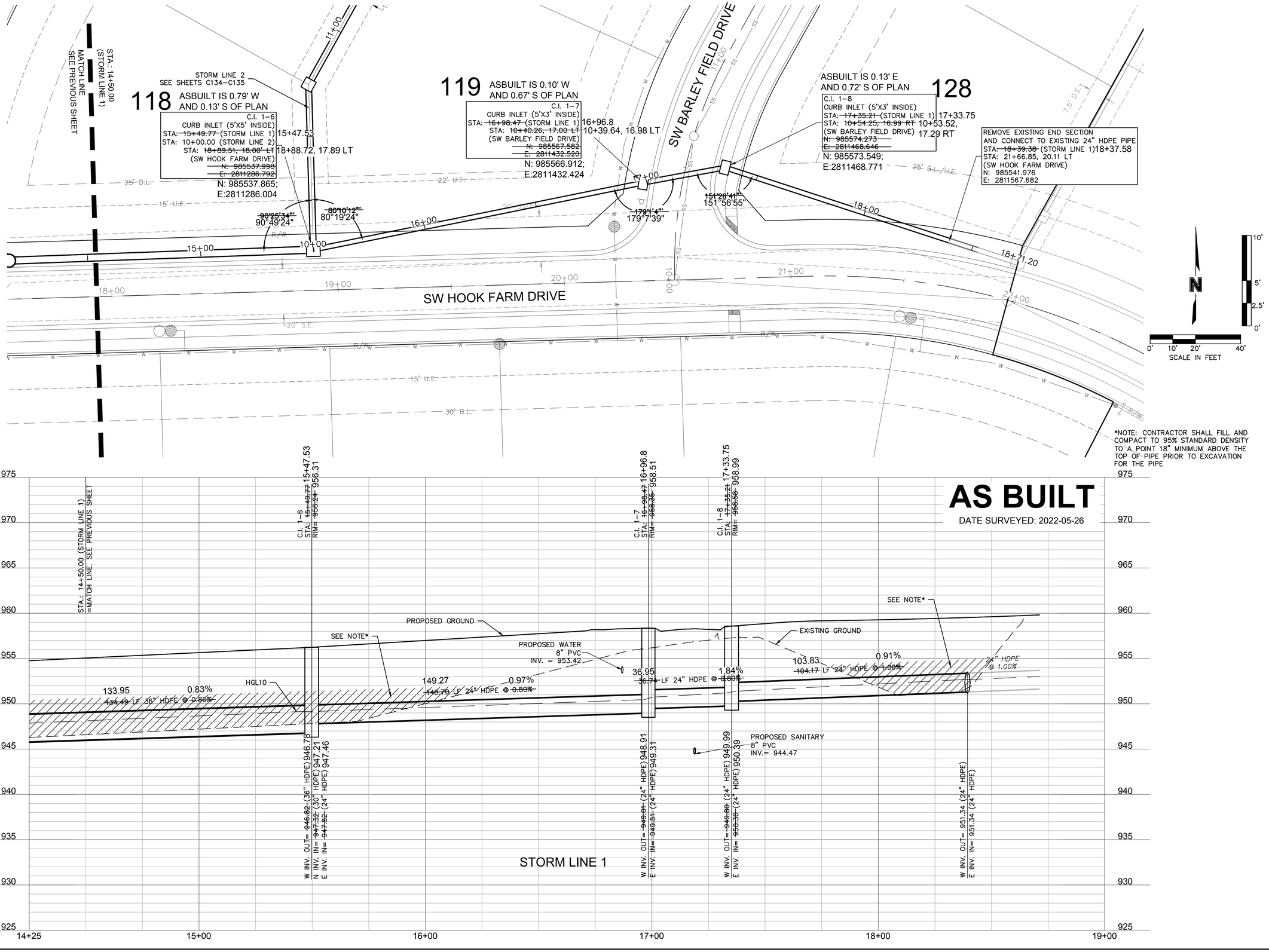

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REVISIONS

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

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C133

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_STM01_B194061.dwg
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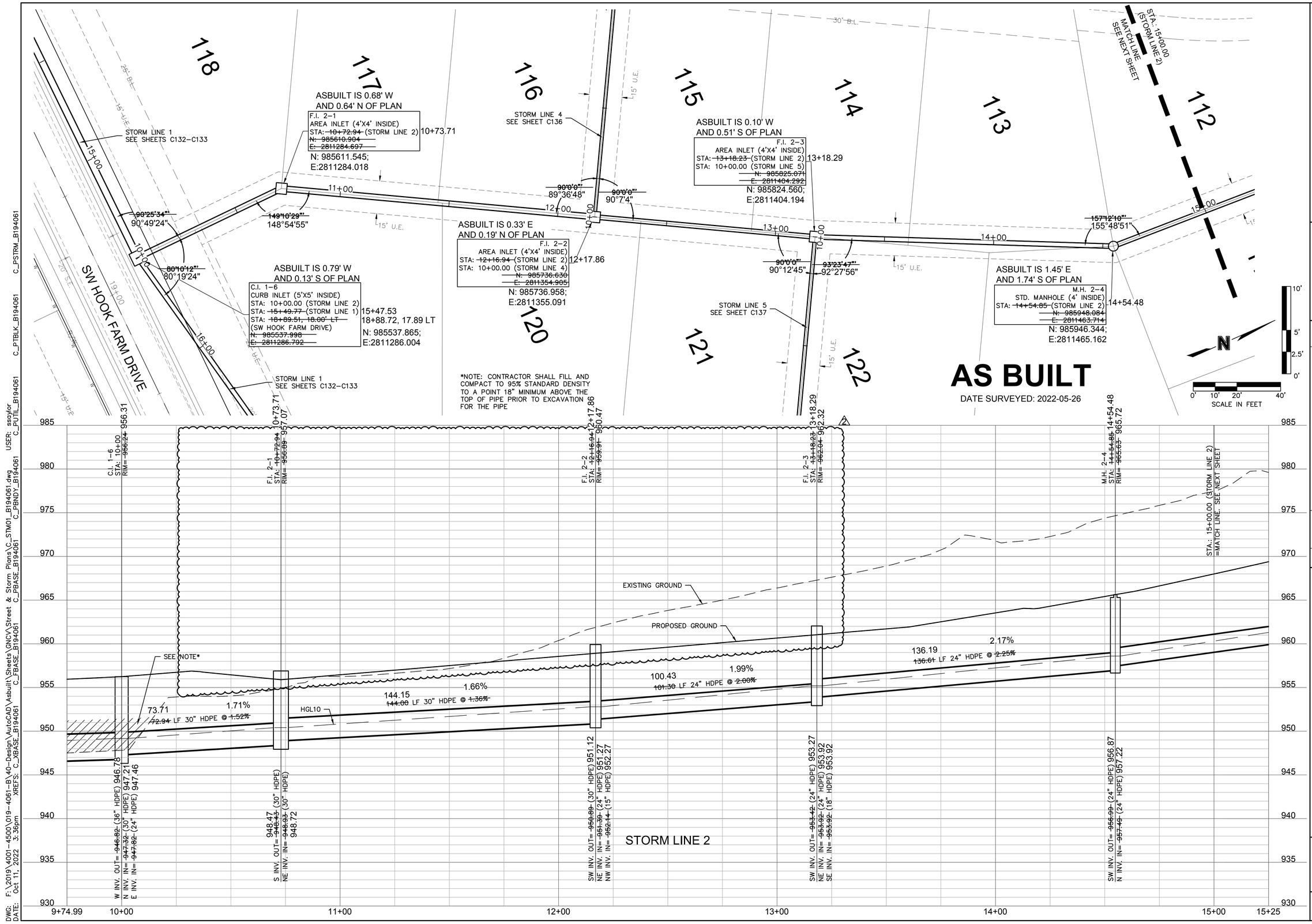

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REVISIONS

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

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C134

ASBUILT IS 0.12' E
AND 0.22' S OF PLAN

C.I. 2–5
CURB INLET (5'X3' INSIDE)
STA: ~~15+92.85~~ (STORM LINE 2) 15+93.93
STA: 10+00.00 (STORM LINE 6)
STA: ~~13+98.89, 17.00' RT~~ 13+99.02, 17.22 RT
(SW WHEATFIELD COURT)
~~N: 986085.896~~ N: 986085.675;
~~E: 2811470.904~~ E:2811471.021

STORM LINE 6
SEE SHEET C138

STORM LINE 7
SEE SHEET C137

SW WHEATFIELD COURT

SW BARLEY FIELD DRIVE

SW FARM FIELD ROAD

~~49°32'28"~~
49°52'30"

~~90°0'0"~~
89°22'22"

~~125°12'50"~~
124°29'39"

~~54°47'10"~~
55°19'29"

ASBUILT IS 0.04' W
AND 0.41' S OF PLAN

C.I. 2–6
CURB INLET (5'X3' INSIDE)
STA: ~~18+22.85~~ (STORM LINE 2) 18+23.78
STA: 10+00.00 (STORM LINE 7)
STA: ~~16+28.89, 17.00' RT~~ 16+28.87, 17.41 RT
(SW WHEATFIELD COURT)
~~N: 986073.915~~ N: 986073.505;
~~E: 2811700.591~~ E:2811700.547

REMOVE EXISTING END SECTION AND
CONNECT TO EXISTING 15" HDPE PIPE
STA: ~~20+01.14~~ (STORM LINE 2) 19+97.6
N: 986064.626
E: 2811878.648

112
STA.: 15+00.00
(STORM LINE 2)

111

110

109

108

107

MATCH LINE
SEE PREVIOUS SHEET

*NOTE: CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 18" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE

SCALE IN FEET
0' 10' 20' 40'
10' 5' 2.5' 0'

AS BUILT

DATE SURVEYED: 2022-05-26

STORM LINE 2

EXISTING GROUND

PROPOSED GROUND

PROPOSED WATER
8" PVC
INV. = 967.97

HGL10

139.45
~~138.00~~ LF 24" HDPE @ ~~3.50%~~
3.47%

229.85
~~230.00~~ LF 15" HDPE @ ~~1.84%~~
1.94%

173.82
~~178.30~~ LF 15" HDPE @ ~~1.00%~~
1.04%

SEE NOTE*

15" HDPE
@ 1.00%

STA.: 15+00.00 (STORM LINE 2)
=MATCH LINE. SEE PREVIOUS SHEET

C.I. 2–5
STA: ~~15+92.85~~ 15+93.93
RIM= ~~976.31~~ 970.26

S INV. OUT= ~~962.32~~ (24" HDPE) 962.06
NE INV. IN= ~~962.82~~ (24" HDPE) 962.41
E INV. IN= ~~963.07~~ (15" HDPE) 962.76

C.I. 2–6
STA: ~~18+22.85~~ 18+23.78
RIM= ~~973.99~~ 974.02

W INV. OUT= ~~967.30~~ (15" HDPE) 967.22
E INV. IN= ~~967.80~~ (15" HDPE) 967.77
NE INV. IN= ~~967.80~~ (15" HDPE) 967.87

W INV. OUT= 969.58 (15" HDPE)
E INV. IN= 969.58 (15" HDPE)

990 985 980 975 970 965 960 955 950 945 940

14+74.99 15+00 16+00 17+00 18+00 19+00 20+00 20+25

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REVISIONS

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

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C135

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_STM01_B194061.dwg
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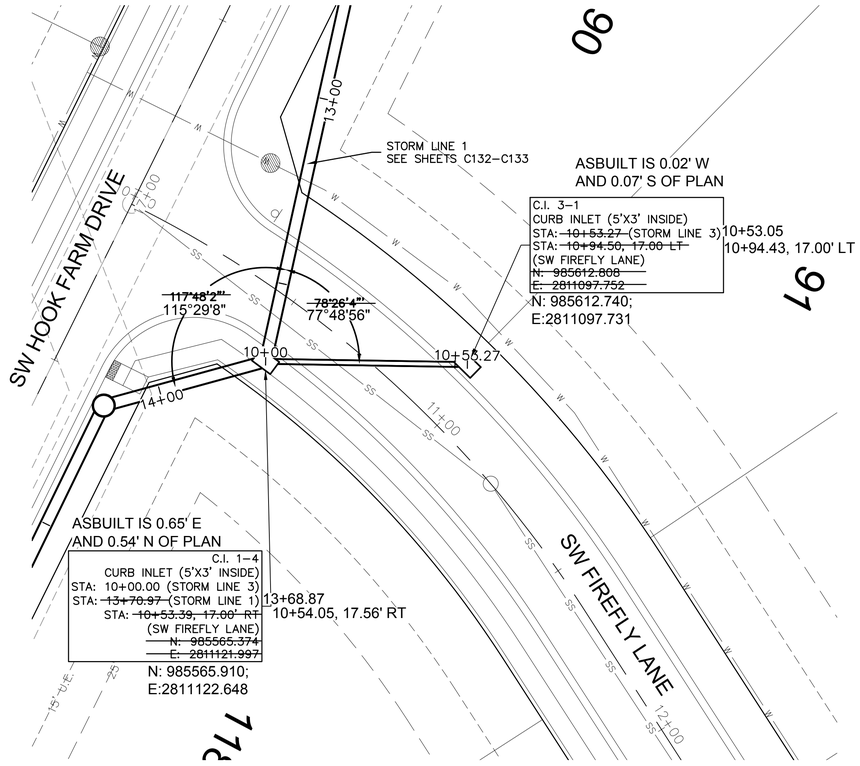
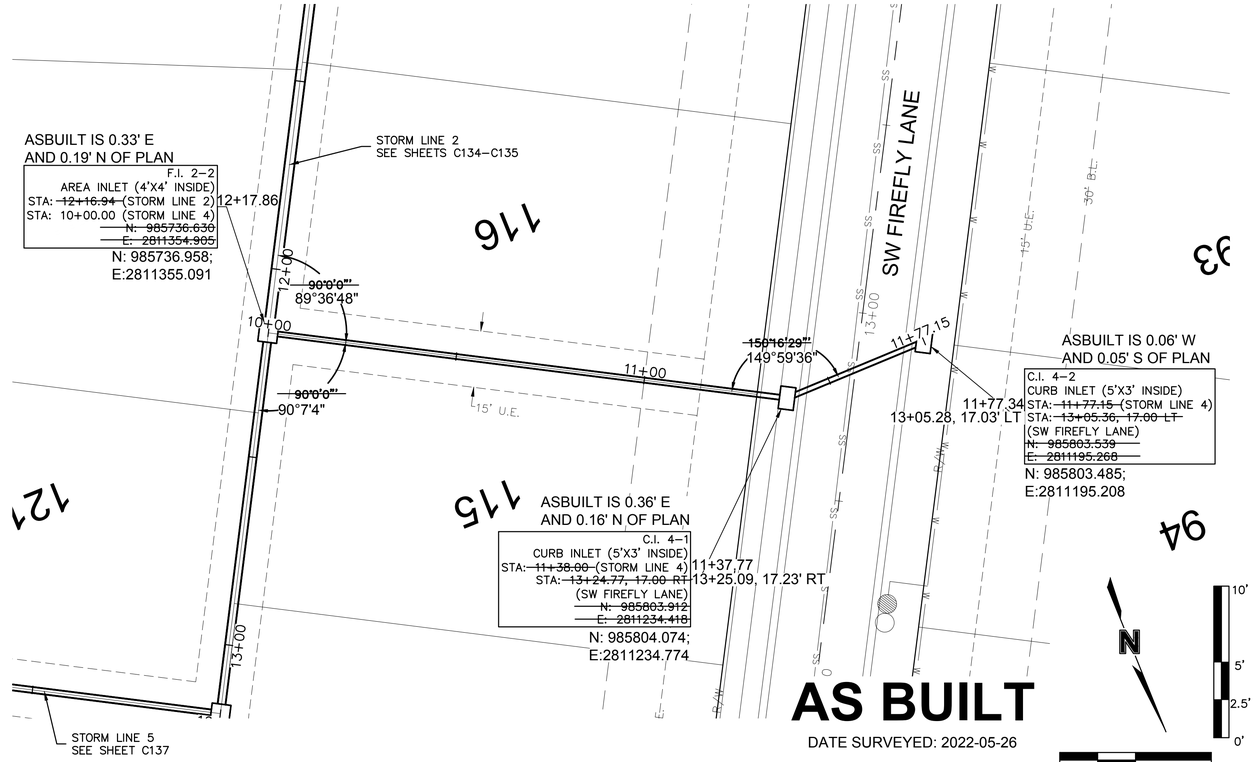
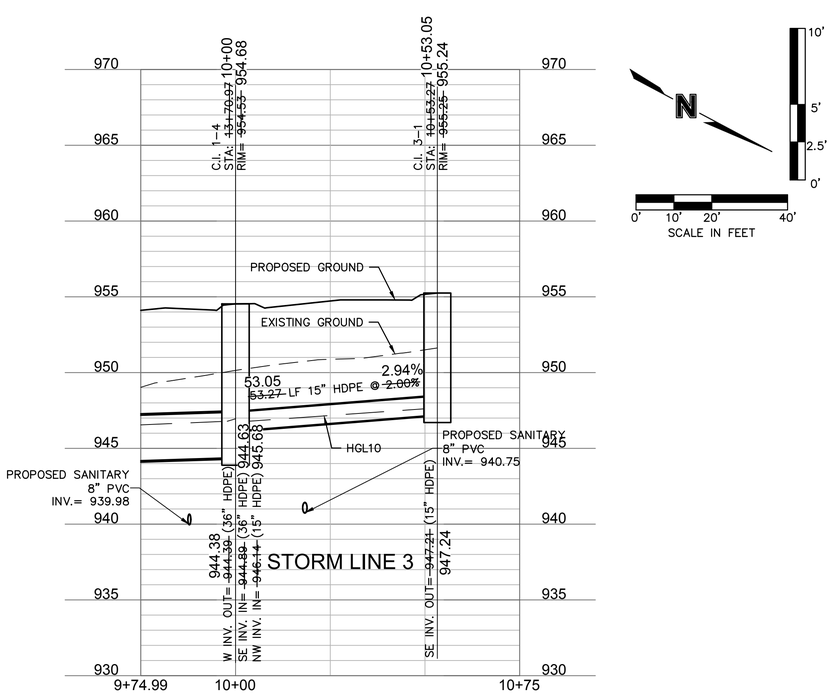
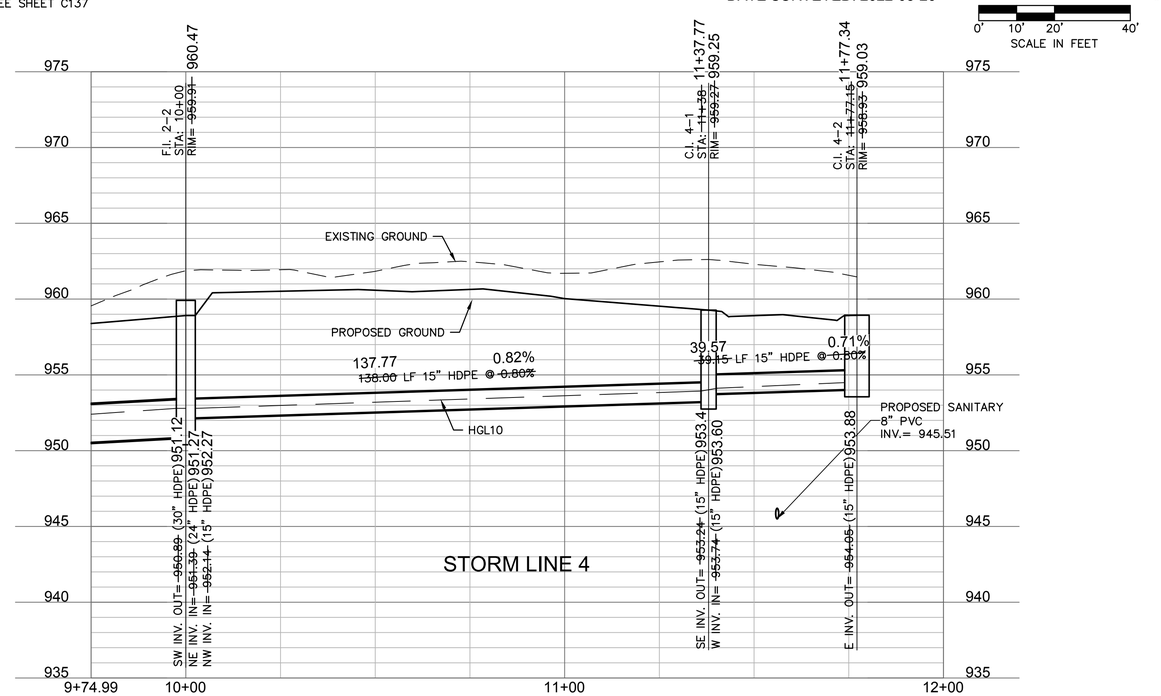




AS BUILT

DATE SURVEYED: 2022-05-26





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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

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REVISIONS

STORM SEWER PLAN & PROFILE (LINES 3 & 4)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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

SHEET
C136

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_STM02_B194061.dwg
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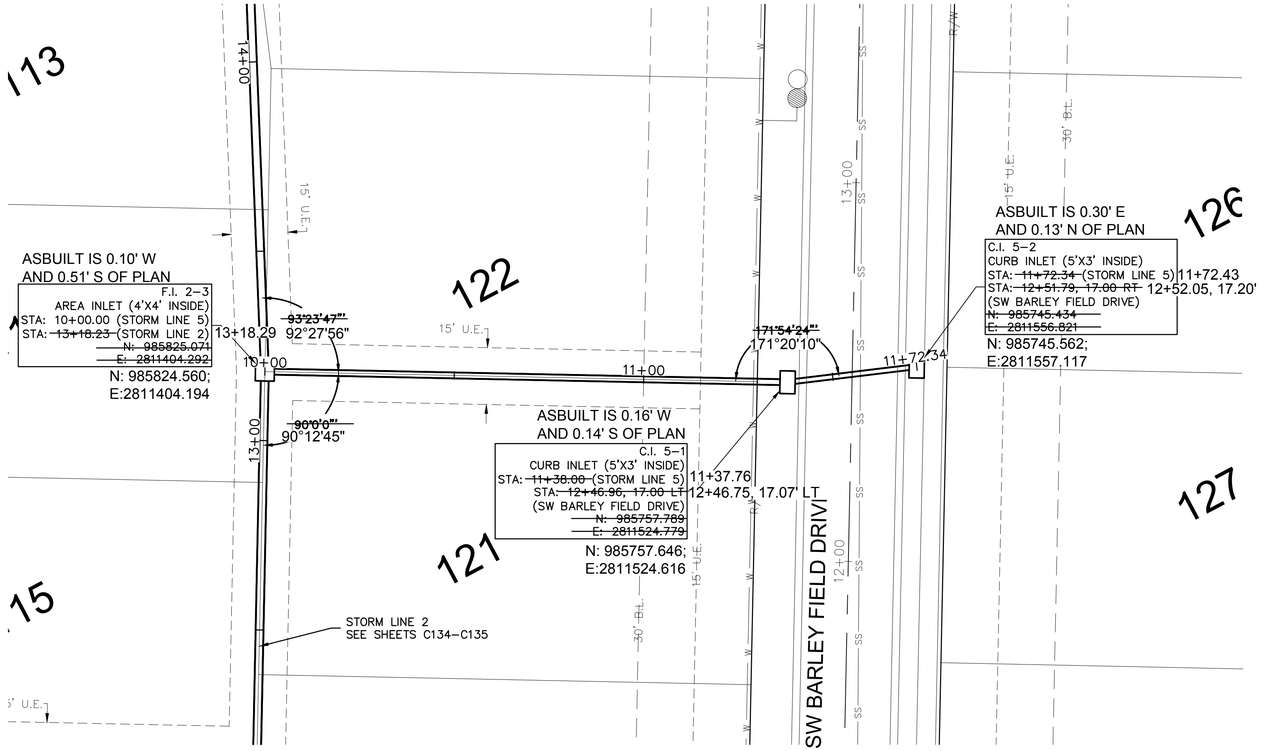
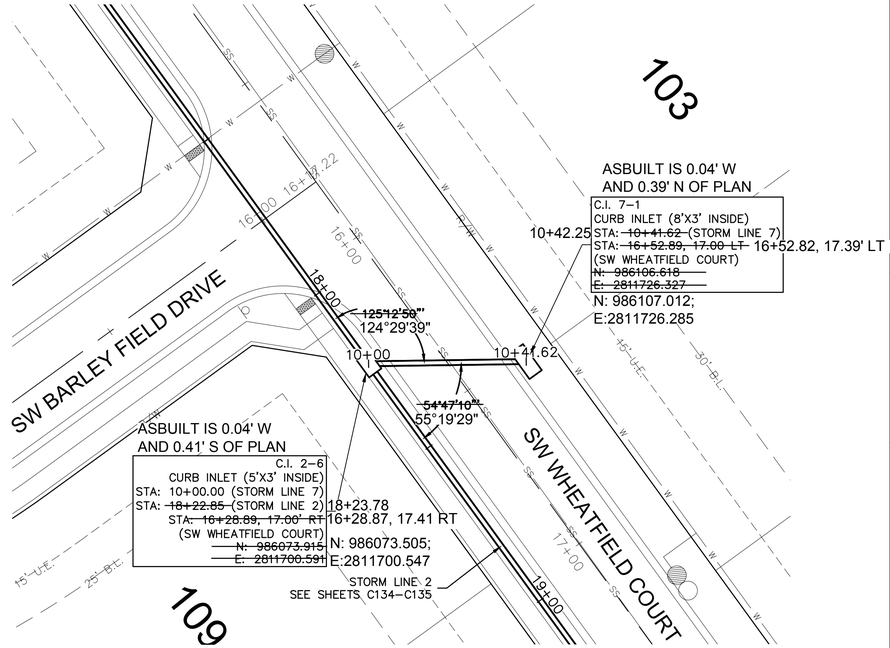
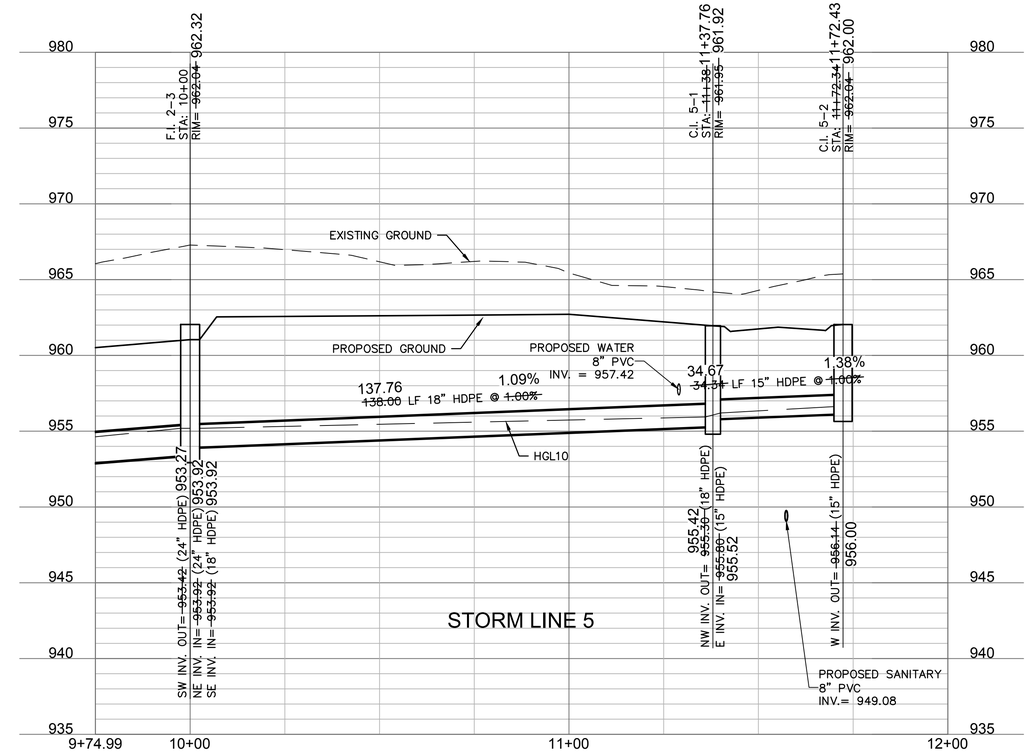
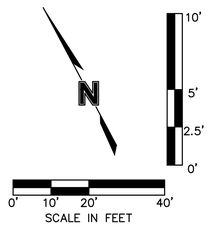


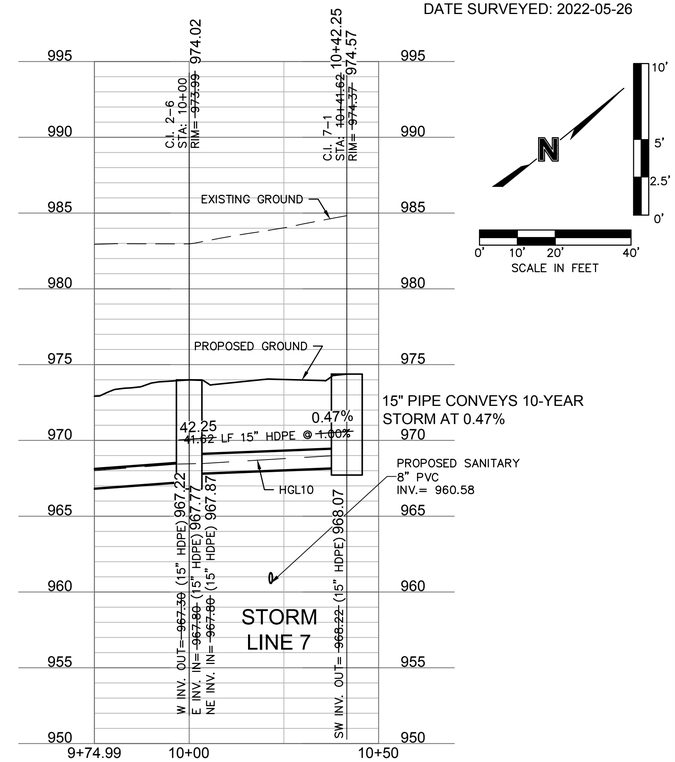


AS BUILT

DATE SURVEYED: 2022-05-26







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12/7/22
PROFESSIONAL ENGINEER

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REVISIONS

STORM SEWER PLAN & PROFILE (LINES 5 & 7)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEES SUMMIT, MO

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

SHEET
C137

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_STM02_B194061.dwg
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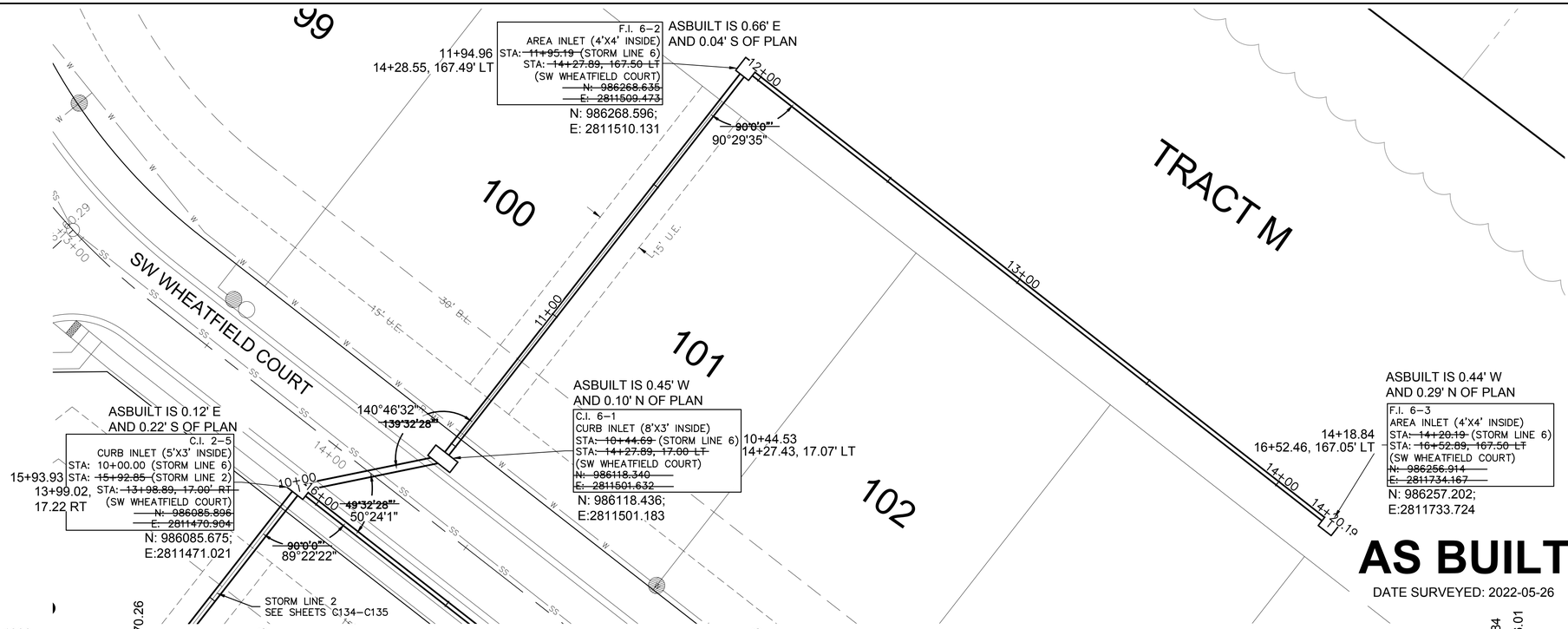

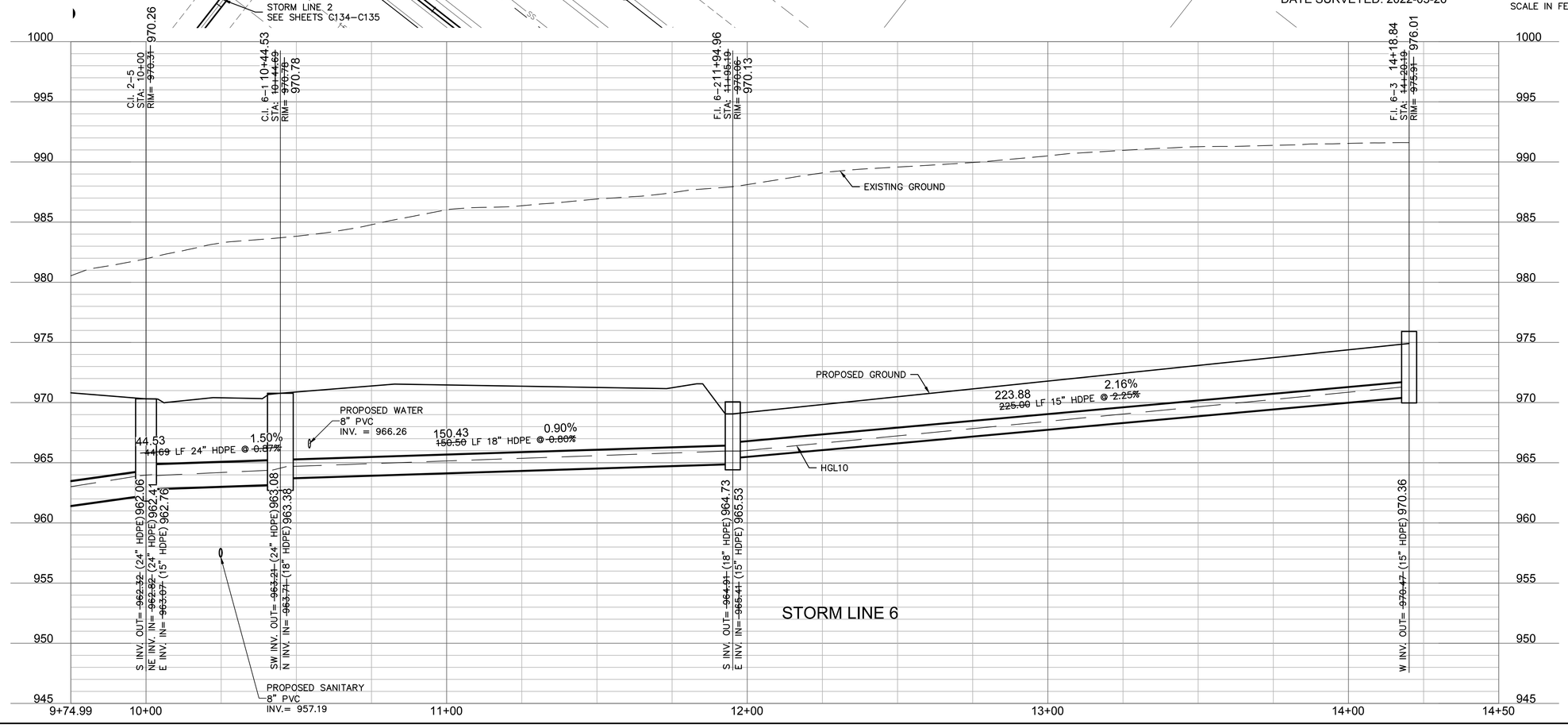

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REVISIONS

STORM SEWER PLAN & PROFILE (LINE 6)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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

SHEET
C138

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C-STM02_B194061.dwg USER: ssoylor
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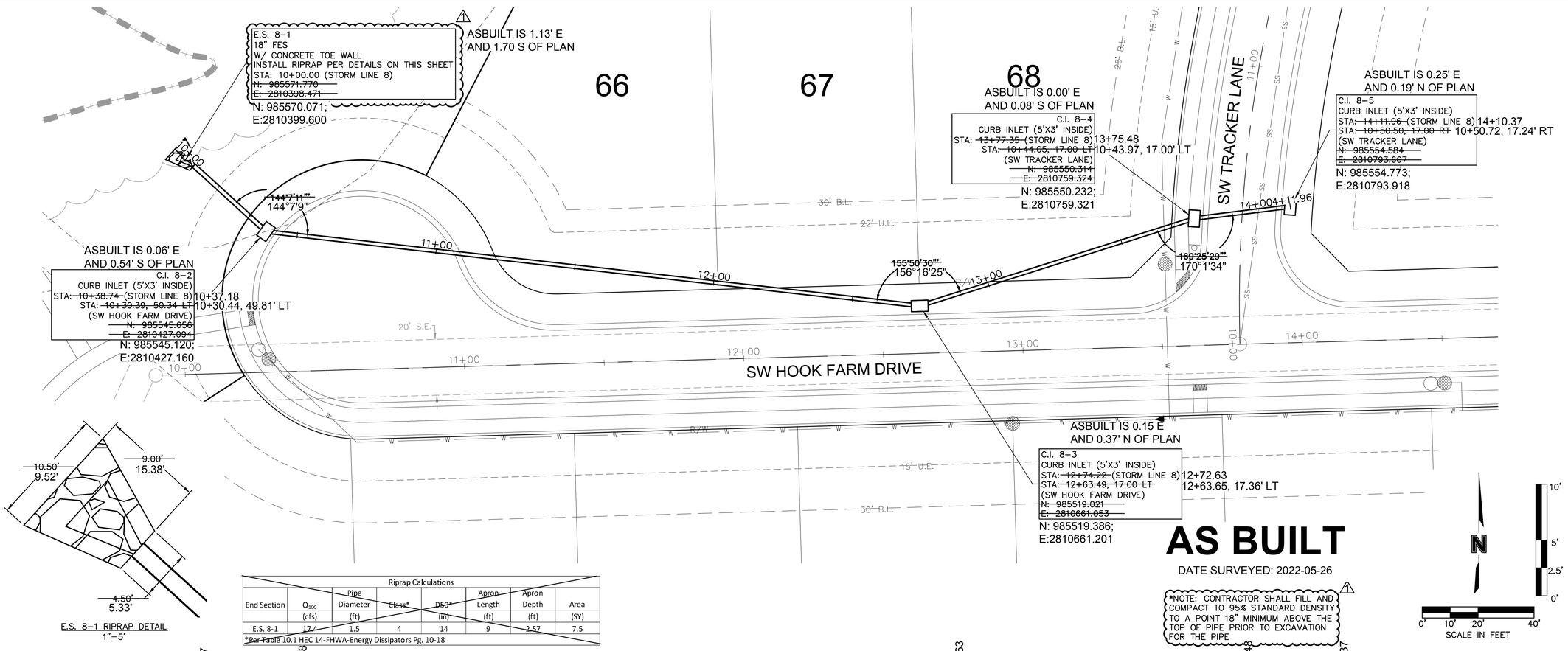
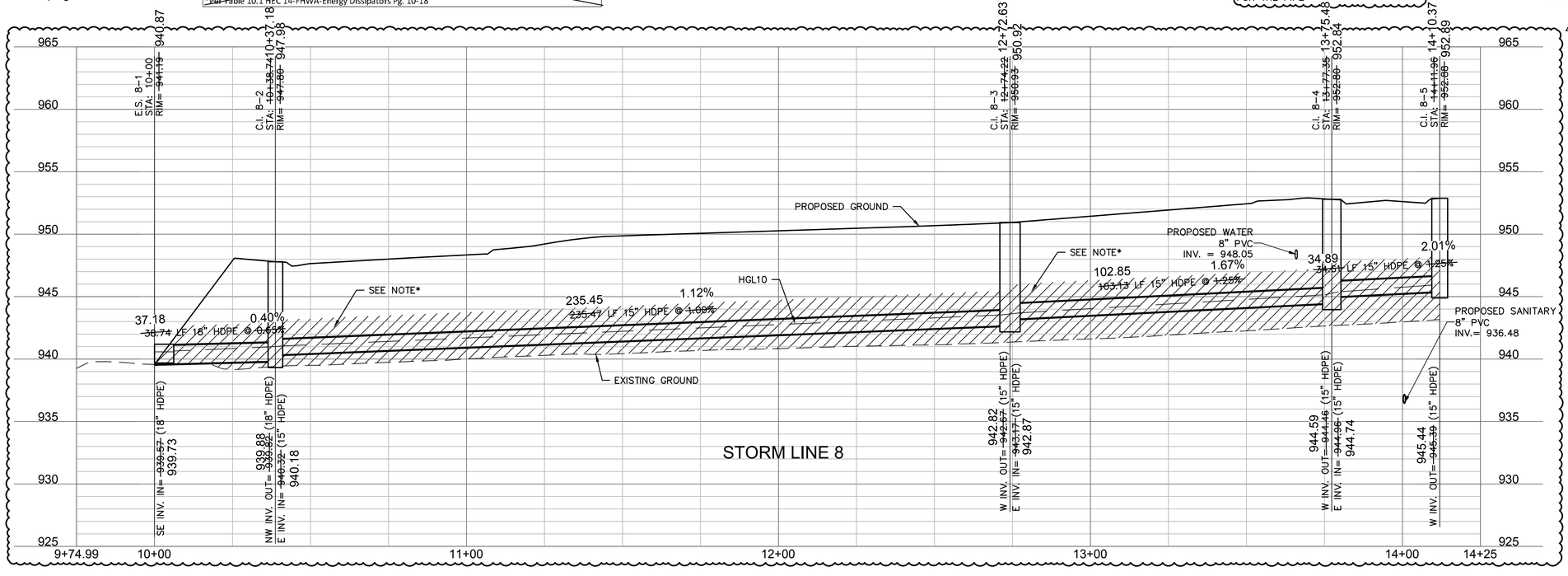


Riprap Calculations							
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	~~D50*~~ (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 8-1	17.4	1.5	4	14	9	~~2.57~~	7.5

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



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REVISIONS

STORM SEWER PLAN & PROFILE (LINE 8)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

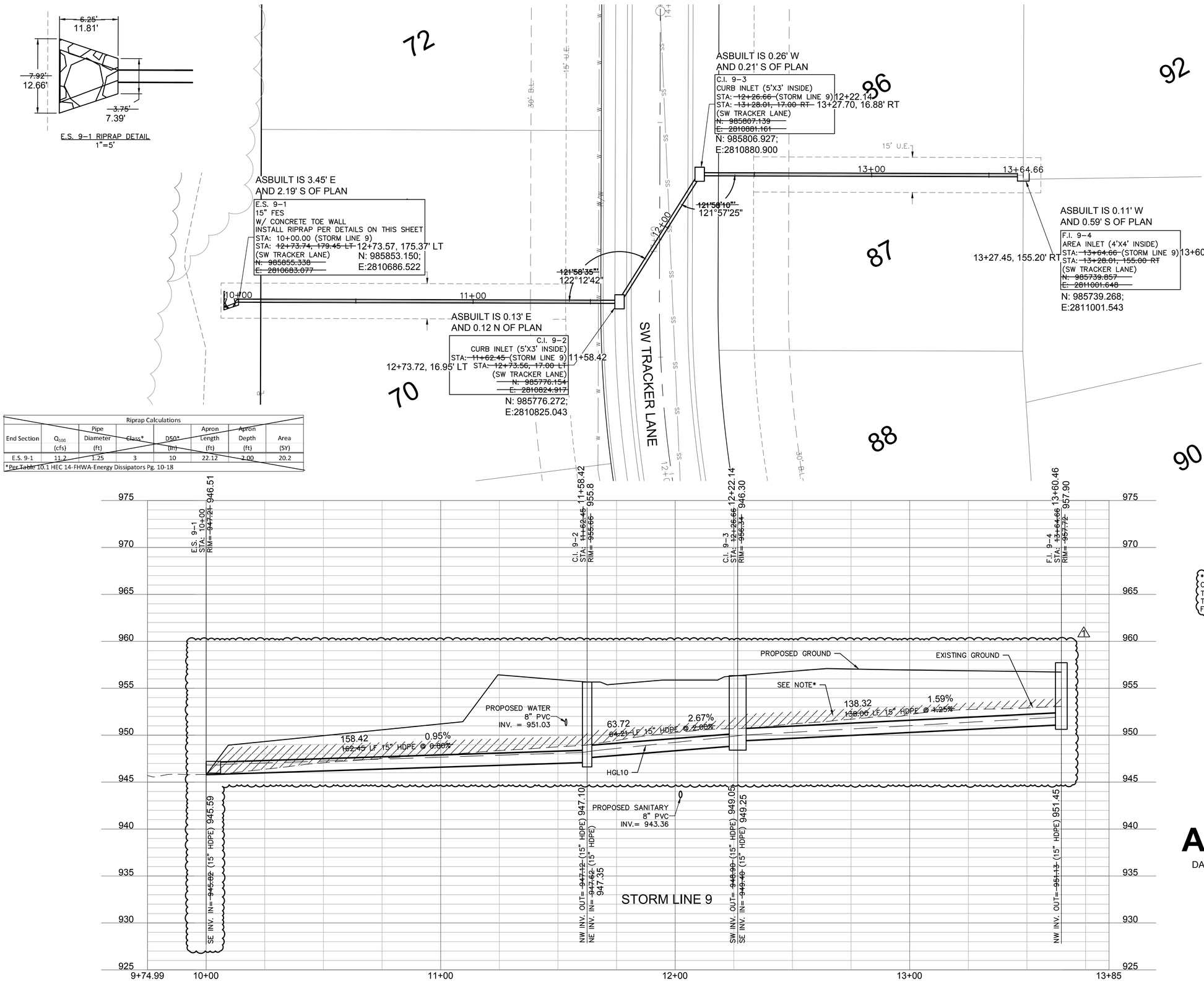
2021

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

SHEET
C139

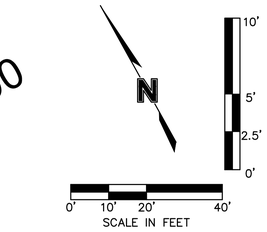
DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt Sheets\GNCV\Street & Storm Plans\C_STM02_B194061.dwg C_PSTRM_B194061
DATE: Oct 11, 2022 3:37pm XREFS: C_XBASE_B194061 C_FBASE_B194061 C_PBASE_B194061 C_PBNDY_B194061 C_PUTIL_B194061 C_PTBLK_B194061
USER: ssoylor

E.S. 9-1 RIPRAP DETAIL
1"=5'



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	11.2	1.25	3	10	22.12	2.00	20.2

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



*NOTE: CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 18" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE

AS BUILT

DATE SURVEYED: 2022-05-26

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12/7/22

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REVISIONS

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

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C140

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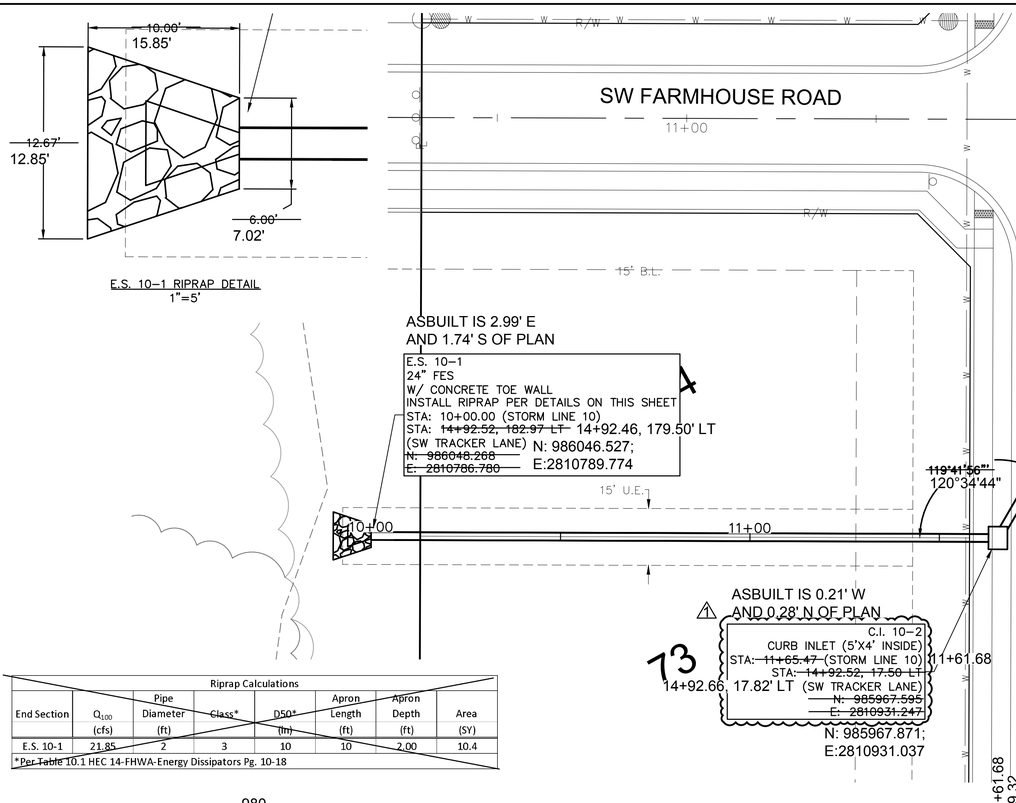
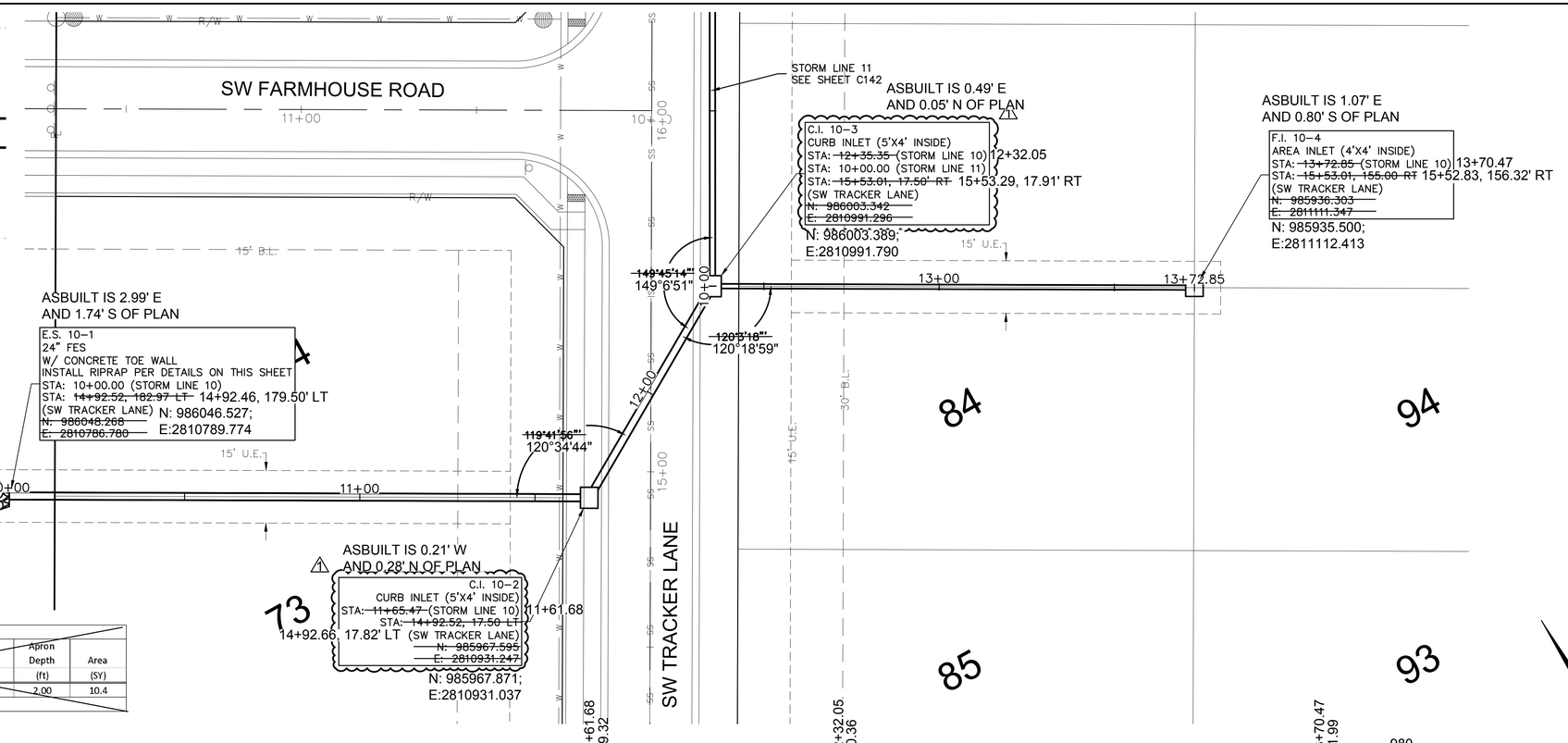
USER: ssoylor

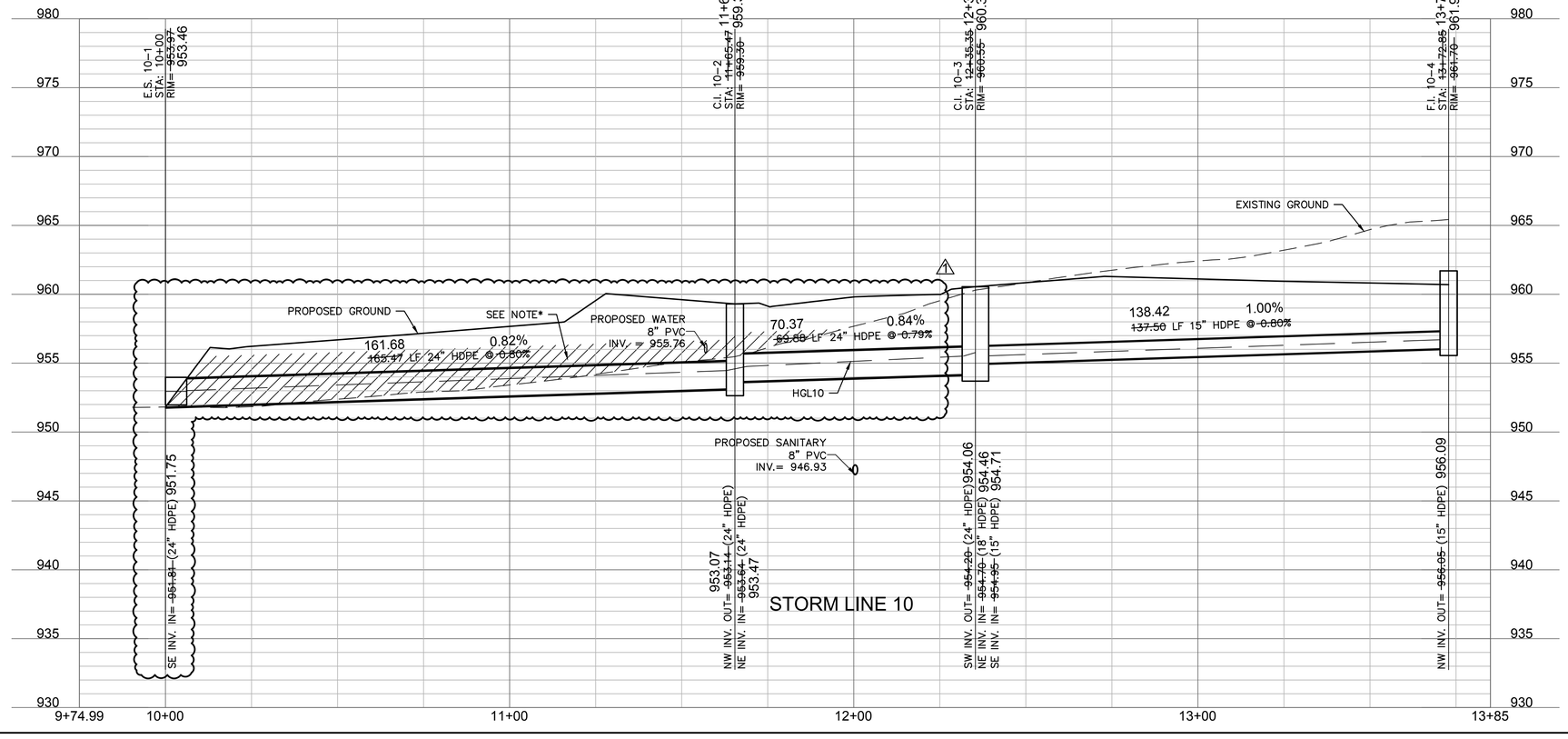


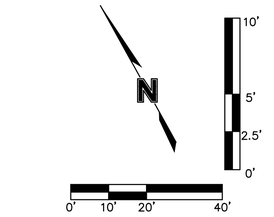
E.S. 10–1 RIPRAP DETAIL
1"=5'



Riprap Calculations								
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 10-1	21.85	2	3	10	10	2.00	10.4

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





*NOTE: CONTRACTOR SHALL FILL AND COMPACT TO 95% STANDARD DENSITY TO A POINT 18" MINIMUM ABOVE THE TOP OF PIPE PRIOR TO EXCAVATION FOR THE PIPE

AS BUILT

DATE SURVEYED: 2022-05-26

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
PROFESSIONAL ENGINEER
12/7/22

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

STORM SEWER PLAN & PROFILE (LINE 10)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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

SHEET
C141

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_STM03_B194061.dwg
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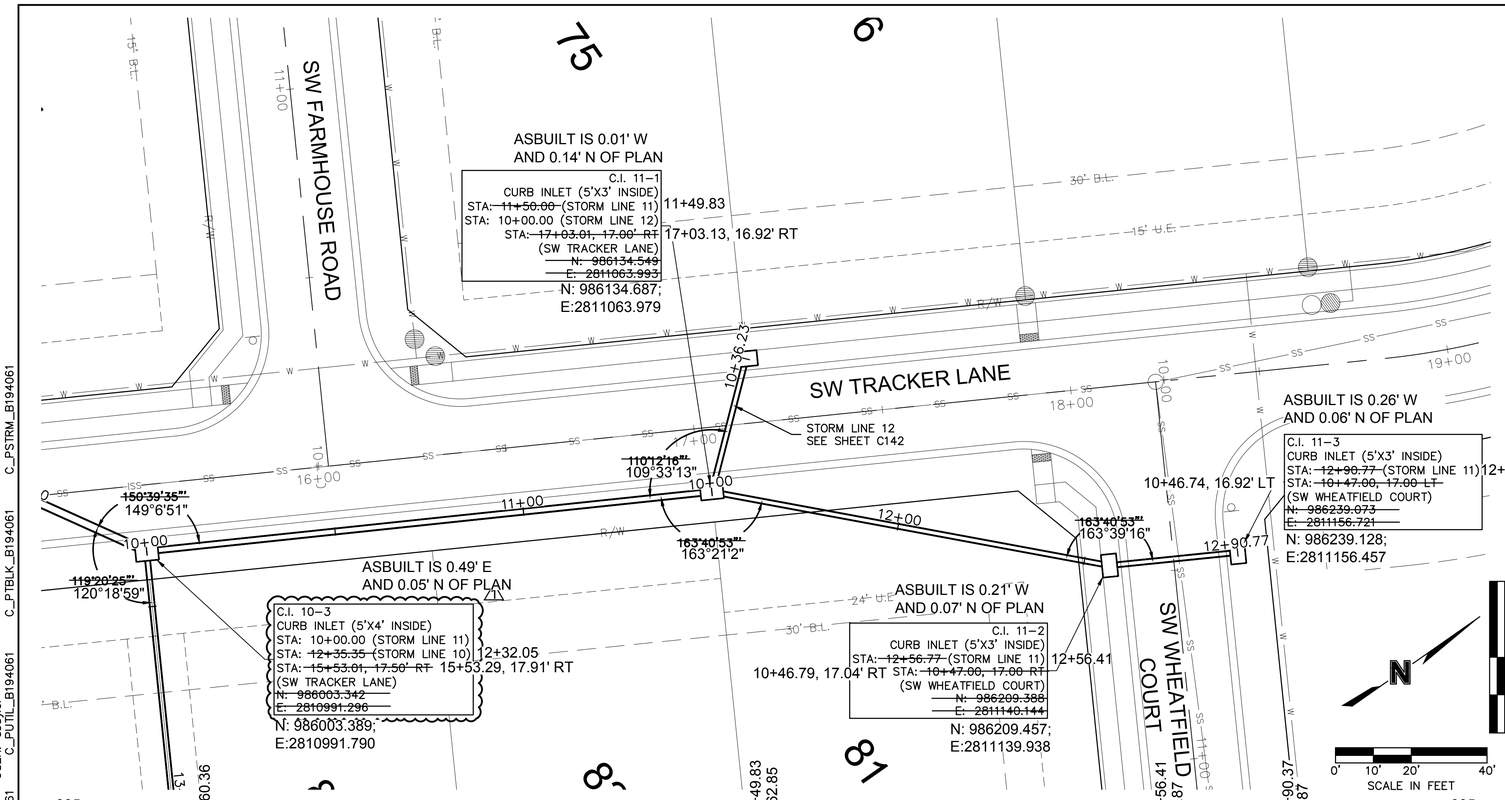
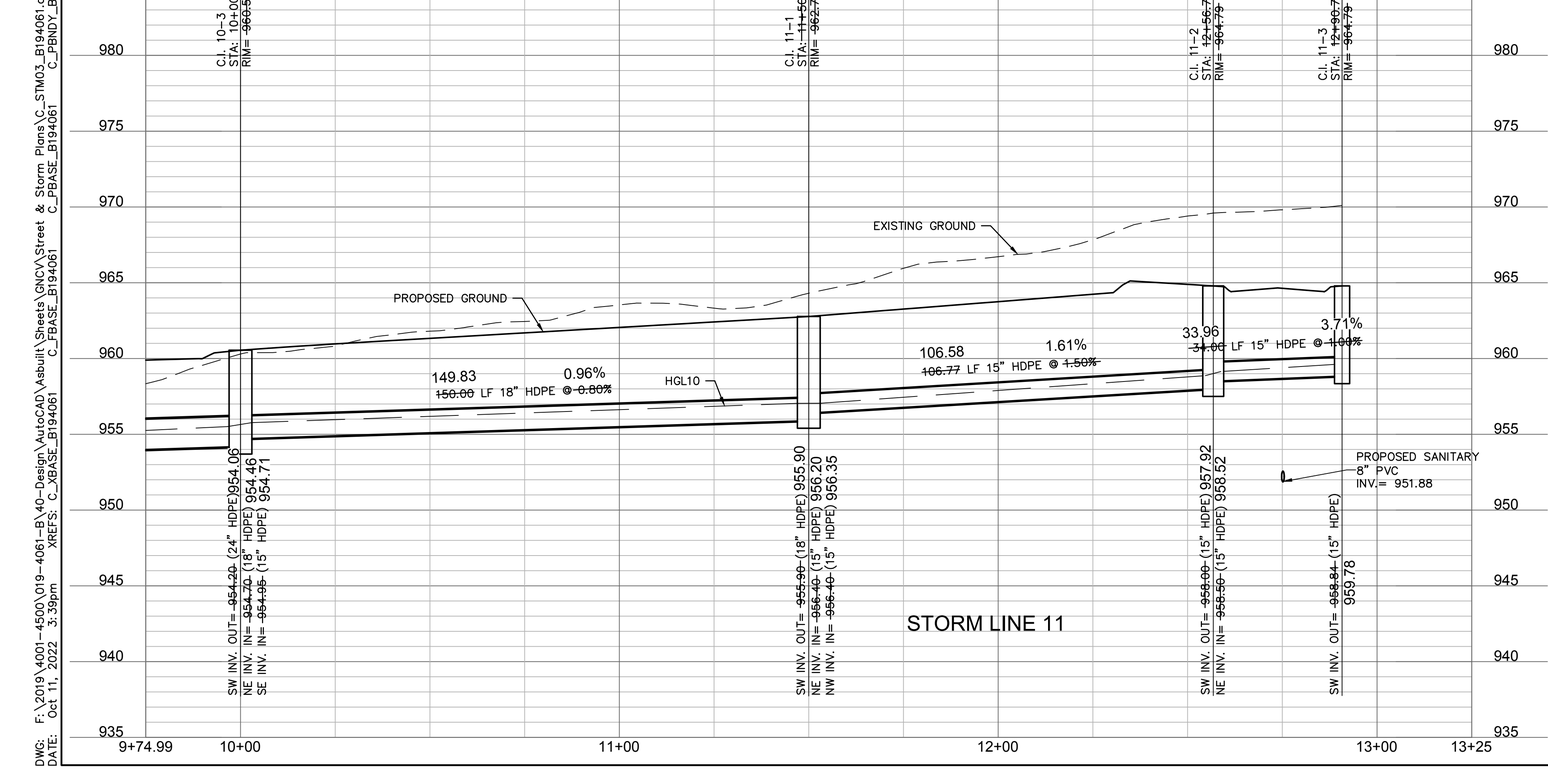
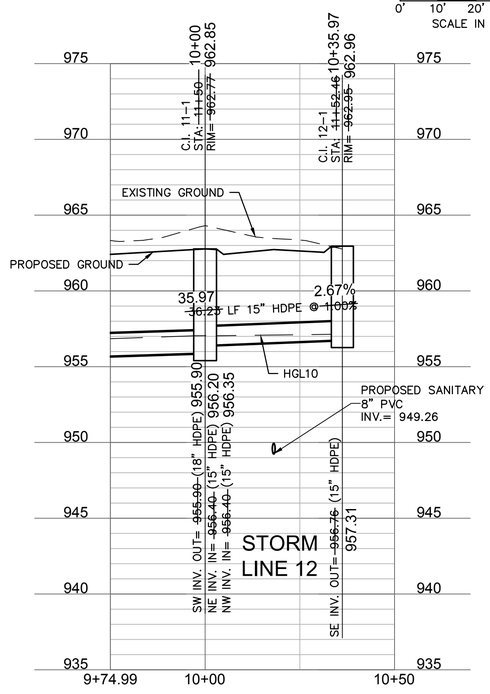


AS BUILT

DATE SURVEYED: 2022-05-26





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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

STORM SEWER PLAN & PROFILE (LINES 11 & 12)
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C142

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C-STM03_B194061.dwg
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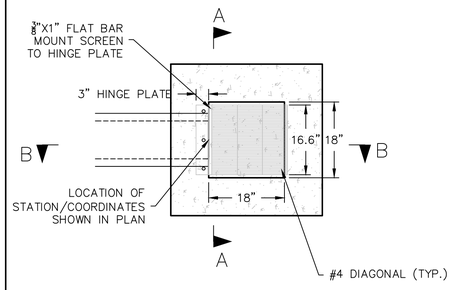
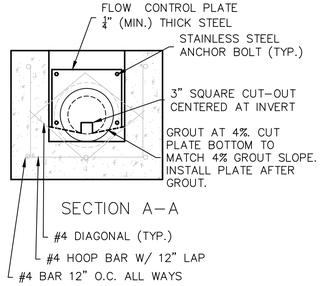
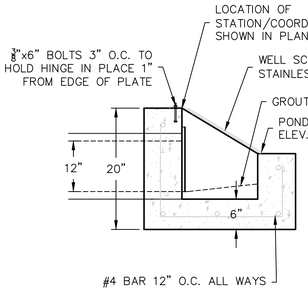
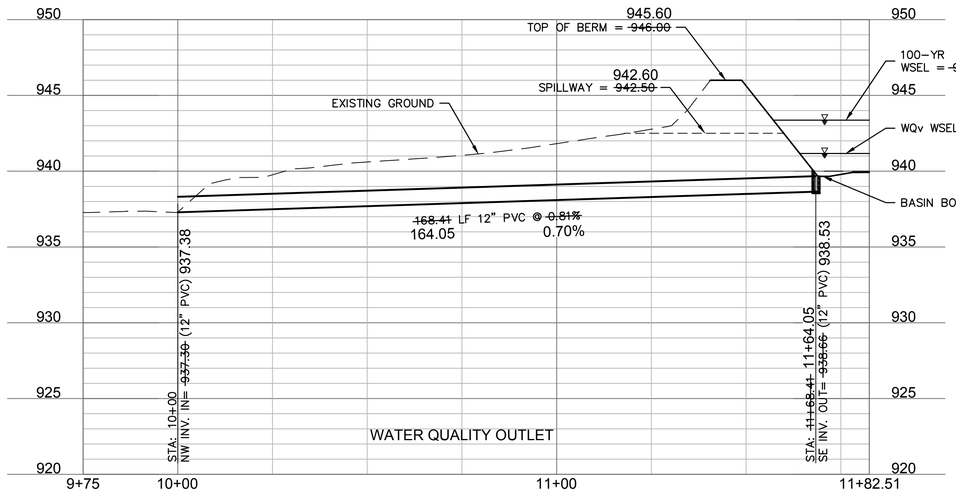


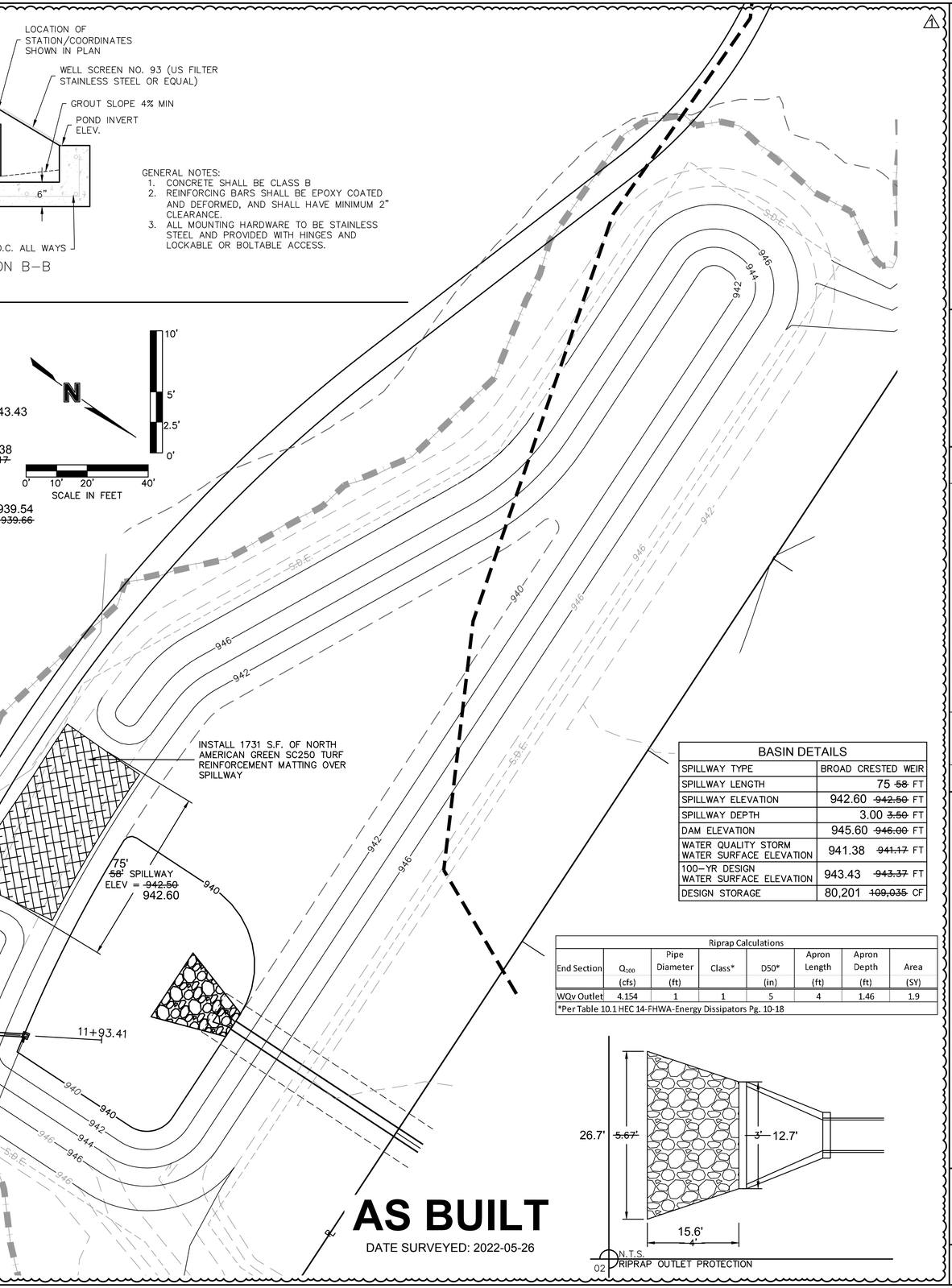




GENERAL NOTES:
1. CONCRETE SHALL BE CLASS B
2. REINFORCING BARS SHALL BE EPOXY COATED AND DEFORMED, AND SHALL HAVE MINIMUM 2" CLEARANCE.
3. ALL MOUNTING HARDWARE TO BE STAINLESS STEEL AND PROVIDED WITH HINGES AND LOCKABLE OR BOLTABLE ACCESS.

01 N.T.S.
WATER QUALITY BASIN OULET STRUCTURE





AS BUILT

DATE SURVEYED: 2022-05-26

BASIN DETAILS	
SPILLWAY TYPE	BROAD CRESTED WEIR
SPILLWAY LENGTH	75 ~~58~~ FT
SPILLWAY ELEVATION	942.60 ~~942.50~~ FT
SPILLWAY DEPTH	3.00 ~~3.50~~ FT
DAM ELEVATION	945.60 ~~946.00~~ FT
WATER QUALITY STORM WATER SURFACE ELEVATION	941.38 ~~941.17~~ FT
100-YR DESIGN WATER SURFACE ELEVATION	943.43 ~~943.37~~ FT
DESIGN STORAGE	80,201 ~~109,035~~ CF

Riprap Calculations

End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
WQv Outlet	4.154	1	1	5	4	1.46	1.9

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

02 N.T.S.
RIPRAP OUTLET PROTECTION

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1301 Burlington Street
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www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

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1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	08-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

WATER QUALITY BASIN PLAN
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C143

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_DBP01_B194061.dwg USER: ssoylor
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Hook Farms Second Plat Minimum Building Opening Elevation			
Lot	Rear Left MBOE	Rear Right MBOE	As Built Plot Plan Required
50	954.92	953.57	Y
51	953.57	952.88	Y
52	952.88	950.65	Y
53	950.65	950.27	Y
54	950.27	949.30	Y
55	949.30	948.19	Y
56	948.19	947.82	Y
57	947.82	979.35	Y
58	947.34	947.97	Y
59	947.97	947.72	Y
60	947.72	947.99	Y
61	947.99	946.90	Y
62	946.90	944.72	Y
63	944.72	942.92	Y
64	942.92	942.70	Y
65	973.63	940.82	Y
66	941.13	943.41	Y
67	943.41	947.90	Y
68	947.90	954.22	Y
69	943.41	948.62	Y
70	948.62	949.34	Y
71	949.34	950.54	Y
72	950.54	953.88	Y
73	953.88	956.67	Y
74	977.02	959.59	Y

MBOE elevations have been provided per lot lines, facing the lot from the street. Interpolation will be allowed between the right and left side MBOE's provided, depending on the location of the lowest opening on the proposed structure.

Hook Farms Second Plat Minimum Building Opening Elevation			
Lot	Rear Left MBOE	Rear Right MBOE	As Built Plot Plan Required
75	958.90	977.02	Y
76	956.91	957.60	Y
77	957.60	958.44	Y
78	958.44	960.42	Y
79	981.53	975.44	Y
98	975.44	974.55	Y
99	974.55	973.89	Y
100	973.89	971.83	Y
101	971.83	974.23	Y
102	974.23	976.18	Y
103	976.18	977.87	Y
104	977.87	979.78	Y
105	979.78	981.97	Y
106	981.97	981.86	Y
113	966.25	964.26	Y
114	964.26	962.62	Y
115	962.62	961.34	Y
116	961.34	959.40	Y
117	959.40	957.84	Y
118	957.84	956.70	Y
119	957.17	958.17	Y
120	958.17	960.37	Y
121	960.37	961.93	Y
122	961.93	963.96	Y
123	963.96	966.25	Y
124	969.47	965.97	Y
125	965.97	964.26	Y
126	964.26	961.86	Y
127	961.86	959.66	Y
128	959.66	961.40	Y

NOTES:

MBOE – MINIMUM BUILDING OPENING ELEVATION
FG – FINISHED GRADE

LEGEND

100	AS–BUILT SURFACE CONTOURS
100	PROPOSED SURFACE CONTOURS

BASEMENT TYPES

- (S) STANDARD
- (W) WALKOUT
- (D) DAYLIGHT

SW FARMHOUSE LANE
SW TRACKER LANE
SW FIREFLY LANE
SW BARLEY FIELD DRIVE
SW WHEATFIELD COURT
SW HOOK FARM DRIVE
TRACT M
TRACT O
SWALE 2, SEE SHEET C106–C109 FOR DETAILS
SWALE 1, SEE SHEET C107 FOR DETAILS

0' 30' 60' 120'
SCALE IN FEET

AS BUILT

DATE SURVEYED: 2022-05-26

NOTES:
1. INDIVIDUAL LOT OWNERS SHALL NOT CHANGE OR OBSTRUCT THE DRAINAGE FLOW LINES OR PATHS ON THE LOTS, AS SHOWN ON THE MATER DRAINAGE PLAN, UNLESS SPECIFIC APPLICATION IS MADE AND APPROVED BY THE CITY ENGINEER.

2. 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"

3. PLAT IS LOCATED OUTSIDE OF ANY REQUIRED BUFFER ZONES FOR NATURAL STREAMS.

4. 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.

5. REFER TO SHEET C107–C109 FOR SWALE GRADING DETAILS.

6. DRAINAGE PATHS TO BE CONSTRUCTED BETWEEN LOTS LABELED AS STANDARD AND/OR UPHILL LOTS.

7. NO BUILDING PERMITS WILL BE ISSUED UNTIL AN AS–GRADED MASTER DRAINAGE PLAN HAS BEEN SUBMITTED TO THE CITY AND APPROVED BY THE CITY.

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www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	08-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

MASTER DRAINAGE PLAN
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C144

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_DRN01_B194061.dwg USER: cwoodward
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LEGEND	
100	FINISHED INDEX CONTOURS
100	FINISHED INTERMEDIATE CONTOURS
	RIDGE LINE
A	DRAINAGE AREA
C	RUNOFF COEFFICIENT
C.I. 0–0	STORM STRUCTURE NUMBER

NOT AS-BUILT

N

0' 30' 60' 120'
SCALE IN FEET

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STATE OF MISSOURI
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12/7/22
PROFESSIONAL ENGINEER

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3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

DRAINAGE PLAN
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

2021

LEE'S SUMMIT, MO

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

SHEET
C145

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_DRN02_B194061.dwg
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USER: ssoylor

Inlet Design Table

10 Year Return Frequency

Inlet ID	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 1-2(L)	3.36	0.00	100.00%	0.20	10.20	...
C.I. 1-2(R)	0.23	0.00	100.00%	0.07	3.74	...
C.I. 1-2	4.19	0.00	100.00%	...	...	...
C.I. 1-3(L)	0.34	0.00	100.00%	0.09	4.36	...
C.I. 1-3(R)	2.74	0.00	100.00%	0.19	9.44	...
C.I. 1-3	7.20	0.00	100.00%	...	...	...
C.I. 1-4	1.43	0.24	85.63%	0.14	7.21	...
C.I. 1-6	1.94	0.32	85.85%	0.18	8.79	...
C.I. 1-7	1.08	0.13	89.48%	0.13	6.36	...
C.I. 1-8	1.05	0.12	89.77%	0.13	6.28	...
F.I. 2-1	3.04	0.00	100.00%	...	...	0.15
F.I. 2-2	2.59	0.00	100.00%	...	...	0.13
F.I. 2-3	2.48	0.00	100.00%	...	...	0.13
C.I. 2-5	0.64	0.03	95.13%	0.11	5.27	...
C.I. 2-6	0.97	0.08	91.95%	0.12	6.22	...
C.I. 3-1	1.08	0.11	90.54%	0.13	6.47	...
C.I. 4-1	1.66	0.32	83.66%	0.16	7.76	...
C.I. 4-2	1.28	0.18	87.85%	0.14	6.92	...
C.I. 5-1	1.34	0.20	87.27%	0.14	7.05	...
C.I. 5-2	1.54	0.27	85.02%	0.15	7.50	...
C.I. 6-1	3.22	0.90	78.18%	0.21	10.38	...
F.I. 6-2	3.41	0.00	100.00%	...	...	0.16
F.I. 6-3	4.16	0.00	100.00%	...	...	0.18
C.I. 7-1	3.80	1.42	72.80%	0.23	11.35	...
C.I. 8-2(L)	2.06	0.00	100.00%	0.15	7.65	...
C.I. 8-2(R)	0.99	0.00	100.00%	0.13	6.25	...
C.I. 8-2	3.99	0.00	100.00%	...	...	...
C.I. 8-3	1.51	0.17	89.96%	0.16	7.96	...
C.I. 8-4	1.10	0.14	88.79%	0.13	6.37	...
C.I. 8-5	1.86	0.38	83.08%	0.17	8.31	...
C.I. 9-2	0.98	0.08	92.39%	0.13	6.34	...
C.I. 9-3	1.59	0.25	86.30%	0.16	7.76	...
F.I. 9-4	3.68	0.00	100.00%	...	...	0.17
C.I. 10-2	0.33	0.01	97.51%	0.08	3.88	...
C.I. 10-3	1.85	0.41	81.75%	0.16	8.20	...
F.I. 10-4	2.63	0.00	100.00%	...	...	0.14
C.I. 11-1	3.20	1.41	69.52%	0.22	11.03	...
C.I. 11-2	0.91	0.07	92.93%	0.12	6.12	...
C.I. 11-3	3.67	2.18	62.75%	0.24	11.98	...
C.I. 12-1	0.94	0.07	92.82%	0.12	6.25	...
F.I. 9-4	3.68	0.00	100.00%	...	...	0.17
C.I. 10-2	0.33	0.01	97.51%	0.08	3.88	...
C.I. 10-3	1.85	0.41	81.75%	0.16	8.20	...
F.I. 10-4	2.63	0.00	100.00%	...	...	0.14
C.I. 11-1	3.20	1.41	69.52%	0.22	11.03	...
C.I. 11-2	0.91	0.07	92.93%	0.12	6.12	...
C.I. 11-3	3.67	2.18	62.75%	0.24	11.98	...
C.I. 12-1	0.94	0.07	92.82%	0.12	6.25	...

Drainage Area Design Table

10 Year Return Frequency

Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
C.I. 1-2(L)	0.87	0.51	5.00	7.35	1.00	3.26
C.I. 1-2(R)	0.06	0.51	5.00	7.35	1.00	0.23
C.I. 1-2(B)	0.16	0.51	5.00	7.35	1.00	0.60
C.I. 1-2	1.09	0.51	5.00	7.35	1.00	4.09
C.I. 1-3(L)	0.09	0.51	5.00	7.35	1.00	0.34
C.I. 1-3(R)	0.55	0.51	5.00	7.35	1.00	2.06
C.I. 1-3(B)	1.10	0.51	5.00	7.35	1.00	4.13
C.I. 1-3	1.74	0.51	5.00	7.35	1.00	6.53
C.I. 1-4	0.36	0.51	5.00	7.35	1.00	1.35
C.I. 1-6	0.50	0.51	5.00	7.35	1.00	1.88
C.I. 1-7	0.27	0.51	5.00	7.35	1.00	1.01
C.I. 1-8	0.24	0.51	5.00	7.35	1.00	0.90
F.I. 2-1	0.81	0.51	5.00	7.35	1.00	3.04
F.I. 2-2	0.69	0.51	5.00	7.35	1.00	2.59
F.I. 2-3	0.66	0.51	5.00	7.35	1.00	2.48
C.I. 2-5	0.18	0.51	5.00	7.35	1.00	0.68
C.I. 2-6	0.28	0.51	5.00	7.35	1.00	1.05
C.I. 3-1	0.27	0.51	5.00	7.35	1.00	1.01
C.I. 4-1	0.52	0.51	5.00	7.35	1.00	1.95
C.I. 4-2	0.39	0.51	5.00	7.35	1.00	1.46
C.I. 5-1	0.40	0.51	5.00	7.35	1.00	1.50
C.I. 5-2	0.46	0.51	5.00	7.35	1.00	1.73
C.I. 6-1	0.72	0.51	5.00	7.35	1.00	2.70
F.I. 6-2	0.91	0.51	5.00	7.35	1.00	3.41
F.I. 6-3	1.11	0.51	5.00	7.35	1.00	4.16
C.I. 7-1	1.02	0.51	5.00	7.35	1.00	3.83
C.I. 8-2(L)	0.55	0.51	5.00	7.35	1.00	2.06
C.I. 8-2(R)	0.22	0.51	5.00	7.35	1.00	0.83
C.I. 8-2(B)	0.25	0.51	5.00	7.35	1.00	0.94
C.I. 8-2	1.02	0.51	5.00	7.35	1.00	3.83
C.I. 8-3	0.31	0.51	5.00	7.35	1.00	1.16
C.I. 8-4	0.31	0.51	5.00	7.35	1.00	1.16
C.I. 8-5	0.53	0.51	5.00	7.35	1.00	1.99
C.I. 9-2	0.28	0.51	5.00	7.35	1.00	1.05
C.I. 9-3	0.38	0.51	5.00	7.35	1.00	1.43
F.I. 9-4	0.98	0.51	5.00	7.35	1.00	3.68
C.I. 10-2	0.09	0.51	5.00	7.35	1.00	0.34
C.I. 10-3	0.23	0.51	5.00	7.35	1.00	0.86
F.I. 10-4	0.70	0.51	5.00	7.35	1.00	2.63
C.I. 11-1	0.63	0.51	5.00	7.35	1.00	2.36
C.I. 11-2	0.26	0.51	5.00	7.35	1.00	0.98
C.I. 11-3	1.32	0.51	5.00	7.35	1.00	4.95
C.I. 12-1	0.27	0.51	5.00	7.35	1.00	1.01

Storm Sewer Design Calculation Table

10 Year Return Frequency

Upstream Structure	Downstream Structure	Length	Upstream Invert	Downstream Invert	Slope	Diameter	Manning's n	Total Flow	Velocity	Capacity	Flow Depth	Upstream Struct. HGL	Upstream Top Elev.
		(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(ft/s)	(cfs)	(ft)	(ft)	(ft)
C.I. 1-2	E.S. 1-1	202.00	942.02	940.00	1.00	36	0.012	65.27	10.82	72.25	2.23	944.61	952.95
C.I. 1-3	C.I. 1-2	35.00	942.83	942.52	~~0.86~~	36	0.012	61.08	~~10.33~~	~~68.99~~	~~2.19~~	~~945.35~~	952.95
C.I. 1-4	C.I. 1-3	133.97	944.39	943.32	0.80	36	0.012	53.88	9.58	64.51	2.10	946.77	954.53
M.H. 1-5	C.I. 1-4	44.30	945.24	944.89	0.79	36	0.012	51.37	9.41	64.22	2.03	947.57	954.65
C.I. 1-6	M.H. 1-5	134.49	946.82	945.74	0.80	36	0.012	51.37	9.44	64.75	2.02	949.15	956.22
C.I. 1-7	C.I. 1-6	148.70	949.01	947.82	0.80	24	0.012	16.30	7.01	21.91	1.33	950.46	958.22
C.I. 1-8	C.I. 1-7	36.74	949.80	949.51	0.79	24	0.012	15.22	6.97	21.77	1.23	951.21	958.58
NULL ON LINE 1	C.I. 1-8	104.17	951.34	950.30	1.00	24	0.012	14.17	7.17	24.48	1.09	952.69	953.52
F.I. 2-1	C.I. 1-6	72.94	948.43	947.32	1.52	30	0.012	34.08	8.46	54.44	1.85	950.41	956.89
F.I. 2-2	F.I. 2-1	144.00	950.89	948.93	1.36	30	0.012	30.54	8.99	51.83	1.46	952.77	959.91
F.I. 2-3	F.I. 2-2	101.30	953.42	951.39	2.00	24	0.012	25.01	9.67	34.69	1.38	955.18	962.04
M.H. 2-4	F.I. 2-3	136.61	956.99	953.92	2.25	24	0.012	19.65	8.37	36.73	1.26	958.58	965.63
C.I. 2-5	M.H. 2-4	138.00	962.32	957.49	3.50	24	0.012	19.65	9.27	45.84	1.09	963.91	970.31
C.I. 2-6	C.I. 2-5	230.00	967.30	963.07	1.84	15	0.012	8.72	8.09	9.49	0.94	968.44	973.99
NULL ON LINE 2	C.I. 2-6	178.30	969.58	967.80	1.00	15	0.012	3.95	5.30	6.99	0.67	970.38	970.95
C.I. 3-1	C.I. 1-4	53.27	947.21	946.14	2.01	15	0.012	1.08	2.42	9.91	0.63	947.62	955.25
C.I. 4-1	F.I. 2-2	138.00	953.24	952.14	0.80	15	0.012	2.94	4.48	6.25	0.63	953.93	959.27
C.I. 4-2	C.I. 4-1	39.15	954.05	953.74	0.79	15	0.012	1.28	3.62	6.22	0.38	954.50	958.93
C.I. 5-1	F.I. 2-3	138.00	955.30	953.92	1.00	18	0.012	2.88	2.89	11.38	1.26	955.94	961.95
C.I. 5-2	C.I. 5-1	34.34	956.14	955.80	0.99	15	0.012	1.54	4.00	6.96	0.40	956.63	962.04
C.I. 6-1	C.I. 2-5	44.69	963.21	962.82	0.87	24	0.012	10.29	5.69	22.89	1.09	964.36	970.78
F.I. 6-2	C.I. 6-1	150.50	964.91	963.71	0.80	18	0.012	7.57	5.97	10.16	0.96	965.97	970.06
F.I. 6-3	F.I. 6-2	225.00	970.47	965.41	2.25	15	0.012	4.16	6.45	10.49	0.55	971.29	975.91
C.I. 7-1	C.I. 2-6	41.62	968.22	967.80	~~1.01~~	15	0.012	3.80	~~5.25~~	~~7.03~~	~~0.66~~	~~969.01~~	974.37
C.I. 8-2	E.S. 8-1	38.74	939.82	939.57	0.65	18	0.012	8.46	5.88	9.14	1.13	940.97	946.73
C.I. 8-3	C.I. 8-2	235.47	942.67	940.32	1.00	15	0.012	4.47	4.98	6.99	0.86	943.53	950.92
C.I. 8-4	C.I. 8-3	103.13	944.46	943.17	1.25	15	0.012	2.96	5.09	7.82	0.53	945.15	952.80
C.I. 8-5	C.I. 8-4	34.61	945.39	944.96	1.24	15	0.012	1.86	4.43	7.80	0.42	945.93	952.88
C.I. 9-2	E.S. 9-1	162.45	947.12	945.82	0.80	15	0.012	5.73	5.70	6.26	0.94	948.09	955.66
C.I. 9-3	C.I. 9-2	64.21	948.90	947.62	1.99	15	0.012	4.75	6.55	9.88	0.61	949.78	956.35
F.I. 9-4	C.I. 9-3	138.00	951.13	949.40	1.25	15	0.012	3.68	5.44	7.83	0.60	951.90	957.72
C.I. 10-2	E.S. 10-1	165.47	953.14	951.81	0.80	24	0.012	13.10	6.67	21.93	1.11	954.44	959.29
C.I. 10-3	C.I. 10-2	69.88	954.20	953.64	0.79	24	0.012	12.77	6.63	22.01	1.09	955.48	960.55
F.I. 10-4	C.I. 10-3	137.50	956.05	954.95	0.80	15	0.012	2.63	4.48	6.25	0.57	956.70	961.70
C.I. 11-1	C.I. 10-3	150.00	955.90	954.70	0.80	18	0.012	8.72	6.26	10.18	1.07	957.04	962.77
C.I. 11-2	C.I. 11-1	106.77	958.00	956.40	1.50	15	0.012	4.58	6.07	8.56	0.65	958.87	964.79
C.I. 11-3	C.I. 11-2	34.00	958.84	958.50	1.00	15	0.012	3.67	5.19	7.00	0.64	959.61	964.79
C.I. 12-1	C.I. 11-1	36.23	956.76	956.40	0.99	15	0.012	0.94	2.23	6.97	0.64	957.14	962.95

0.34% — 8.78 — 42.89 — 3.00 — 945.72

0.47% — 4.38 — 4.85 — 0.83 — 968.83

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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

DRAINAGE TABLES
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C146

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_TAB01_B194061.dwg USER: ssoylor
DATE: Oct 11, 2022 3:41pm XREFS: C_PTBLK_B194061

Inlet Design Table

100 Year Return Frequency

Inlet ID	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 1-2(L)	6.19	0.00	100.00%	0.26	12.82	...
C.I. 1-2(R)	0.39	0.00	100.00%	0.09	4.62	...
C.I. 1-2	7.63	0.00	100.00%	...	...	...
C.I. 1-3(L)	0.59	0.00	100.00%	0.11	5.38	...
C.I. 1-3(R)	6.36	0.00	100.00%	0.26	12.96	...
C.I. 1-3	14.19	0.00	100.00%	...	...	...
C.I. 1-4	2.44	0.89	73.20%	0.19	9.34	...
C.I. 1-6	3.55	1.43	71.29%	0.24	11.81	...
C.I. 1-7	1.90	0.48	79.74%	0.16	8.20	...
C.I. 1-8	1.92	0.50	79.31%	0.17	8.25	...
F.I. 2-1	5.33	0.00	100.00%	...	...	0.22
F.I. 2-2	4.54	0.00	100.00%	...	...	0.19
F.I. 2-3	4.34	0.00	100.00%	...	...	0.19
C.I. 2-5	1.08	0.11	90.84%	0.13	6.50	...
C.I. 2-6	1.58	0.26	85.66%	0.15	7.68	...
C.I. 3-1	1.89	0.42	81.80%	0.17	8.30	...
C.I. 4-1	2.57	0.96	72.69%	0.19	9.63	...
C.I. 4-2	2.03	0.53	79.27%	0.17	8.55	...
C.I. 5-1	2.14	0.60	78.02%	0.18	8.76	...
C.I. 5-2	2.44	0.85	74.25%	0.19	9.38	...
C.I. 6-1	5.35	4.17	56.23%	0.28	14.21	...
F.I. 6-2	5.99	0.00	100.00%	...	...	0.23
F.I. 6-3	7.30	0.00	100.00%	...	...	0.27
C.I. 7-1	5.55	4.78	53.73%	0.29	14.65	...
C.I. 8-2(L)	3.62	0.00	100.00%	0.19	9.45	...
C.I. 8-2(R)	2.87	0.00	100.00%	0.19	9.30	...
C.I. 8-2	8.13	0.00	100.00%	...	...	...
C.I. 8-3	3.64	1.42	71.92%	0.24	12.02	...
C.I. 8-4	1.83	0.46	79.78%	0.16	8.02	...
C.I. 8-5	3.80	2.55	59.83%	0.25	12.28	...
C.I. 9-2	1.62	0.26	86.25%	0.16	7.85	...
C.I. 9-3	4.00	2.86	58.28%	0.25	12.72	...
F.I. 9-4	6.45	0.00	100.00%	...	...	0.25
C.I. 10-2	0.56	0.03	94.87%	0.10	4.79	...
C.I. 10-3	4.19	4.36	49.04%	0.27	13.48	...
F.I. 10-4	4.61	0.00	100.00%	...	...	0.20
C.I. 11-1	5.09	7.04	41.98%	0.32	15.85	...
C.I. 11-2	1.49	0.22	87.24%	0.15	7.56	...
C.I. 11-3	5.08	7.77	39.56%	0.32	16.10	...
C.I. 12-1	1.55	0.23	87.07%	0.15	7.71	...
F.I. 9-4	6.45	0.00	100.00%	...	...	0.25
C.I. 10-2	0.56	0.03	94.87%	0.10	4.79	...
C.I. 10-3	4.19	4.36	49.04%	0.27	13.48	...
F.I. 10-4	4.61	0.00	100.00%	...	...	0.20
C.I. 11-1	5.09	7.04	41.98%	0.32	15.85	...
C.I. 11-2	1.49	0.22	87.24%	0.15	7.56	...
C.I. 11-3	5.08	7.77	39.56%	0.32	16.10	...
C.I. 12-1	1.55	0.23	87.07%	0.15	7.71	...

Drainage Area Design Table

100 Year Return Frequency

Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
C.I. 1-2(L)	0.87	0.51	5.00	10.32	1.25	5.73
C.I. 1-2(R)	0.06	0.51	5.00	10.32	1.25	0.39
C.I. 1-2(B)	0.16	0.51	5.00	10.32	1.25	1.05
C.I. 1-2	1.09	0.51	5.00	10.32	1.25	7.17
C.I. 1-3(L)	0.09	0.51	5.00	10.32	1.25	0.59
C.I. 1-3(R)	0.55	0.51	5.00	10.32	1.25	3.62
C.I. 1-3(B)	1.10	0.51	5.00	10.32	1.25	7.24
C.I. 1-3	1.74	0.51	5.00	10.32	1.25	11.45
C.I. 1-4	0.36	0.51	5.00	10.32	1.25	2.37
C.I. 1-6	0.50	0.51	5.00	10.32	1.25	3.29
C.I. 1-7	0.27	0.51	5.00	10.32	1.25	1.78
C.I. 1-8	0.24	0.51	5.00	10.32	1.25	1.58
F.I. 2-1	0.81	0.51	5.00	10.32	1.25	5.33
F.I. 2-2	0.69	0.51	5.00	10.32	1.25	4.54
F.I. 2-3	0.66	0.51	5.00	10.32	1.25	4.34
C.I. 2-5	0.18	0.51	5.00	10.32	1.25	1.18
C.I. 2-6	0.28	0.51	5.00	10.32	1.25	1.84
C.I. 3-1	0.27	0.51	5.00	10.32	1.25	1.78
C.I. 4-1	0.52	0.51	5.00	10.32	1.25	3.42
C.I. 4-2	0.39	0.51	5.00	10.32	1.25	2.57
C.I. 5-1	0.40	0.51	5.00	10.32	1.25	2.63
C.I. 5-2	0.46	0.51	5.00	10.32	1.25	3.03
C.I. 6-1	0.72	0.51	5.00	10.32	1.25	4.74
F.I. 6-2	0.91	0.51	5.00	10.32	1.25	5.99
F.I. 6-3	1.11	0.51	5.00	10.32	1.25	7.30
C.I. 7-1	1.02	0.51	5.00	10.32	1.25	6.71
C.I. 8-2(L)	0.55	0.51	5.00	10.32	1.25	3.62
C.I. 8-2(R)	0.22	0.51	5.00	10.32	1.25	1.45
C.I. 8-2(B)	0.25	0.51	5.00	10.32	1.25	1.65
C.I. 8-2	1.02	0.51	5.00	10.32	1.25	6.71
C.I. 8-3	0.31	0.51	5.00	10.32	1.25	2.04
C.I. 8-4	0.31	0.51	5.00	10.32	1.25	2.04
C.I. 8-5	0.53	0.51	5.00	10.32	1.25	3.49
C.I. 9-2	0.28	0.51	5.00	10.32	1.25	1.84
C.I. 9-3	0.38	0.51	5.00	10.32	1.25	2.50
F.I. 9-4	0.98	0.51	5.00	10.32	1.25	6.45
C.I. 10-2	0.09	0.51	5.00	10.32	1.25	0.59
C.I. 10-3	0.23	0.51	5.00	10.32	1.25	1.51
F.I. 10-4	0.70	0.51	5.00	10.32	1.25	4.61
C.I. 11-1	0.63	0.51	5.00	10.32	1.25	4.15
C.I. 11-2	0.26	0.51	5.00	10.32	1.25	1.71
C.I. 11-3	1.32	0.51	5.00	10.32	1.25	8.69
C.I. 12-1	0.27	0.51	5.00	10.32	1.25	1.78

Storm Sewer Design Calculation Table

100 Year Return Frequency

Upstream Structure	Downstream Structure	Length	Upstream Invert	Downstream Invert	Slope	Diameter	Manning's n	Total Flow	Velocity	Capacity	Flow Depth	Upstream Struct. HGL	Upstream Top Elev.
		(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(ft/s)	(cfs)	(ft)	(ft)	(ft)
C.I. 1-2	E.S. 1-1	202.00	942.02	940.00	1.00	36	0.012	100.26	14.26	72.25	2.90	946.61	952.95
C.I. 1-3	C.I. 1-2	35.00	942.83	942.52	~~0.86~~	36	0.012	92.63	~~13.11~~	~~68.99~~	~~3.00~~	~~948.11~~	952.95
C.I. 1-4	C.I. 1-3	133.97	944.39	943.32	0.80	36	0.012	78.44	11.10	64.51	3.00	950.76	954.53
M.H. 1-5	C.I. 1-4	44.30	945.24	944.89	0.79	36	0.012	74.11	10.49	64.22	3.00	951.99	954.65
C.I. 1-6	M.H. 1-5	134.49	946.82	945.74	0.80	36	0.012	74.11	10.49	64.75	3.00	954.09	956.22
C.I. 1-7	C.I. 1-6	148.70	949.01	947.82	0.80	24	0.012	17.99	5.73	21.91	2.00	955.58	958.22
C.I. 1-8	C.I. 1-7	36.74	949.80	949.51	0.79	24	0.012	16.09	5.12	21.77	2.00	955.89	958.58
NULL ON LINE 1	C.I. 1-8	104.17	951.34	950.30	1.00	24	0.012	14.17	4.51	24.48	2.00	956.36	953.52
F.I. 2-1	C.I. 1-6	72.94	948.43	947.32	1.52	30	0.012	54.19	11.04	54.44	2.50	956.33	956.89
F.I. 2-2	F.I. 2-1	144.00	950.89	948.93	1.36	30	0.012	48.00	9.78	51.83	2.50	958.21	959.91
F.I. 2-3	F.I. 2-2	101.30	953.42	951.39	2.00	24	0.012	38.86	12.37	34.69	2.00	961.35	962.04
M.H. 2-4	F.I. 2-3	136.61	956.99	953.92	2.25	24	0.012	29.94	9.53	36.73	2.00	964.35	965.63
C.I. 2-5	M.H. 2-4	138.00	962.32	957.49	3.50	24	0.012	29.94	9.53	45.84	2.00	966.83	970.31
C.I. 2-6	C.I. 2-5	230.00	967.30	963.07	1.84	15	0.012	11.08	9.03	9.49	1.25	973.17	973.99
NULL ON LINE 2	C.I. 2-6	178.30	969.58	967.80	1.00	15	0.012	3.95	3.22	6.99	1.25	974.24	970.95
C.I. 3-1	C.I. 1-4	53.27	947.21	946.14	2.01	15	0.012	1.89	1.54	9.91	1.25	951.57	955.25
C.I. 4-1	F.I. 2-2	138.00	953.24	952.14	0.80	15	0.012	4.60	3.75	6.25	1.25	959.40	959.27
C.I. 4-2	C.I. 4-1	39.15	954.05	953.74	0.79	15	0.012	2.03	1.65	6.22	1.25	959.50	958.93
C.I. 5-1	F.I. 2-3	138.00	955.30	953.92	1.00	18	0.012	4.58	2.59	11.38	1.50	962.53	961.95
C.I. 5-2	C.I. 5-1	34.34	956.14	955.80	0.99	15	0.012	2.44	1.99	6.96	1.25	962.60	962.04
C.I. 6-1	C.I. 2-5	44.69	963.21	962.82	0.87	24	0.012	17.78	5.66	22.89	2.00	967.63	970.78
F.I. 6-2	C.I. 6-1	150.50	964.91	963.71	0.80	18	0.012	13.29	7.52	10.16	1.50	971.03	970.06
F.I. 6-3	F.I. 6-2	225.00	970.47	965.41	2.25	15	0.012	7.30	5.95	10.49	1.25	972.39	975.91
C.I. 7-1	C.I. 2-6	41.62	968.22	967.80	~~1.01~~	15	0.012	5.55	~~4.52~~	~~7.03~~	~~1.25~~	~~973.94~~	974.37
C.I. 8-2	E.S. 8-1	38.74	939.82	939.57	0.65	18	0.012	17.40	9.91	9.14	1.44	941.90	946.73
C.I. 8-3	C.I. 8-2	235.47	942.67	940.32	1.00	15	0.012	9.27	7.55	6.99	1.25	946.64	950.92
C.I. 8-4	C.I. 8-3	103.13	944.46	943.17	1.25	15	0.012	5.63	4.59	7.82	1.25	947.57	952.80
C.I. 8-5	C.I. 8-4	34.61	945.39	944.96	1.24	15	0.012	3.80	3.10	7.80	1.25	947.77	952.88
C.I. 9-2	E.S. 9-1	162.45	947.12	945.82	0.80	15	0.012	11.20	9.13	6.26	1.25	952.40	955.66
C.I. 9-3	C.I. 9-2	64.21	948.90	947.62	1.99	15	0.012	9.58	7.81	9.88	1.25	954.12	956.35
F.I. 9-4	C.I. 9-3	138.00	951.13	949.40	1.25	15	0.012	6.45	5.26	7.83	1.25	956.73	957.72
C.I. 10-2	E.S. 10-1	165.47	953.14	951.81	0.80	24	0.012	21.85	7.88	21.93	1.63	954.81	959.29
C.I. 10-3	C.I. 10-2	69.88	954.20	953.64	0.79	24	0.012	21.29	7.83	22.01	1.58	955.85	960.55
F.I. 10-4	C.I. 10-3	137.50	956.05	954.95	0.80	15	0.012	4.61	4.90	6.25	0.92	956.92	961.70
C.I. 11-1	C.I. 10-3	150.00	955.90	954.70	0.80	18	0.012	13.21	7.48	10.18	1.50	958.22	962.77
C.I. 11-2	C.I. 11-1	106.77	958.00	956.40	1.50	15	0.012	6.57	5.35	8.56	1.25	959.51	964.79
C.I. 11-3	C.I. 11-2	34.00	958.84	958.50	1.00	15	0.012	5.08	4.80	7.00	1.15	959.75	964.79
C.I. 12-1	C.I. 11-1	36.23	956.76	956.40	0.99	15	0.012	1.55	1.26	6.97	1.25	958.59	962.95

0.34% 13.34 42.89 3.00 948.33

0.47% 4.52 4.85 1.25 975.08

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Missouri Certificate of Authority #001592
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North Kansas City, MO 64116
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FAX 816.361.1888
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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
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REVISIONS

DRAINAGE TABLES
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

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

SHEET
C147

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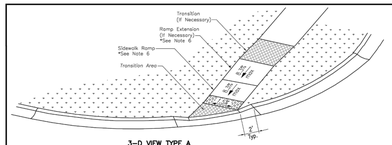
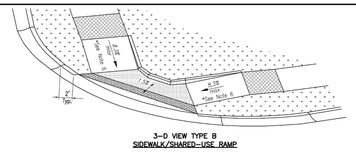


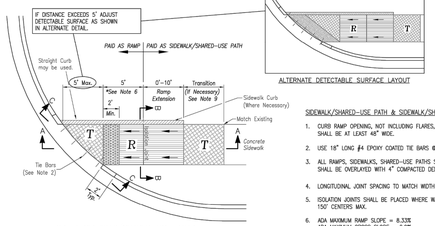
3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP

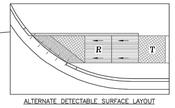
LEGEND

R	SIDEWALK RAMP
TS	TURNING SPACE
	DETECTABLE WARNING SURFACE
T	TRANSITION



3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP



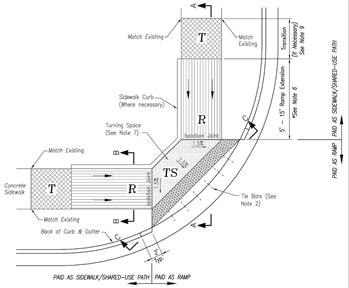


ALTERNATE DETECTABLE SURFACE LAYOUT

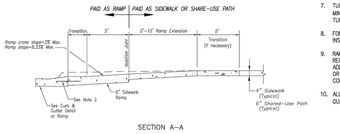
TYPE A SIDEWALK/SHARED-USE RAMP
Not to Scale

SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

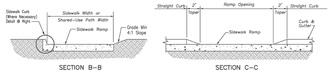
1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WIDTH AND OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED TIE BARS 9" IN EACH DIRECTION.
3. ALL RAMPS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
4. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
5. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
6. ADA MAXIMUM RAMP SLOPE = 8.33%
   ADA MAXIMUM CROSS SLOPE = 2.0%
   *ROADWAY EXCEPTION: WHERE EXISTING ROAD PROFILE GRADE DOES NOT ALLOW RAMP TO MEET RAMP SLOPE REQUIREMENT OF 8.33% OR LESS, THE RAMP SHALL BE EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5%, ±0.5%.
7. TURNING SPACES SHALL BE 1.5%, ±0.5%, SLOPE IN ANY DIRECTION. TURNING SPACES SHALL HAVE A MINIMUM 4'x4' TURNING AREA. TURNING SPACES, WITH A SIDEWALK CURB, SHALL HAVE A 5' TURNING AREA PERPENDICULAR TO THE SIDEWALK CURB.
8. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
9. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALK SHALL REQUIRE REMOVAL AND REPLACEMENT OF ADDITIONAL SIDEWALK BEYOND THE RAMP AREA. SIDEWALK TRANSITION LENGTH SHALL BE EQUAL TO OR GREATER THAN THE WIDTH OF THE EXISTING SIDEWALK. RAMP EXTENSIONS SHALL BE A CONTINUOUS SLOPE.
10. ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



TYPE B SIDEWALK/SHARED-USE RAMP
Not to Scale



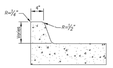
SECTION A–A



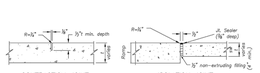
SECTION B–B

SECTION C–C

TYPE A & B SIDEWALK RAMP
Not to Scale

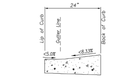


SIDEWALK CURB DETAIL
Not to Scale



CONTRACTION JOINT ISOLATION JOINT

JOINT DETAILS
Not to Scale



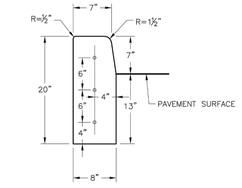
CURB & GUTTER DETAIL AT RAMP
Not to Scale

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

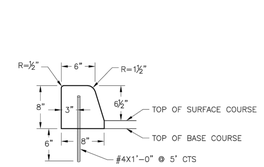
Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO
Client: LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: ADA RAMP RETROFIT DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

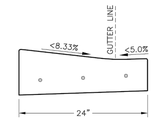
GEN-3A



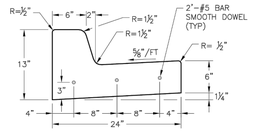
STRAIGHT CURB
(TYPE C-1)



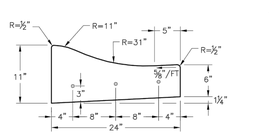
DOWELLED CURB
(TYPE DC)



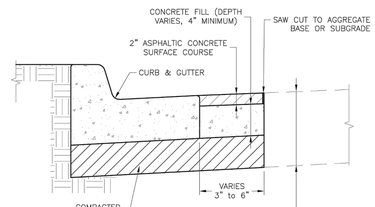
CURB & GUTTER DETAIL AT RAMP
(ADA SLOPE REQUIREMENTS)



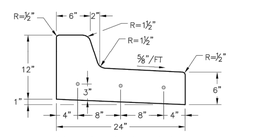
STRAIGHT BACK CURB & GUTTER
(TYPE CG-1)



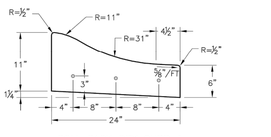
ROLL BACK CURB & GUTTER
(TYPE CG-2)



CURB REPLACEMENT DETAIL



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



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

GENERAL NOTES

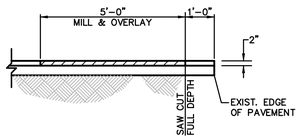
1. ¾" ISOLATION JOINTS WITH 3 (2'–#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.
8. ALL DOWELS & TIE BARS SHALL BE EPOXY COATED.

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

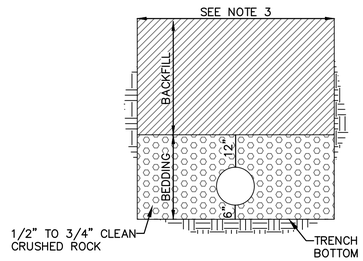
Project: STANDARD DETAILS CITY OF LEE'S SUMMIT, MO
Client: LEE'S SUMMIT, JACKSON COUNTY, MO
Sheet Name: CURB & GUTTER DETAIL

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-4



MILL & OVERLAY DETAIL
N.T.S.



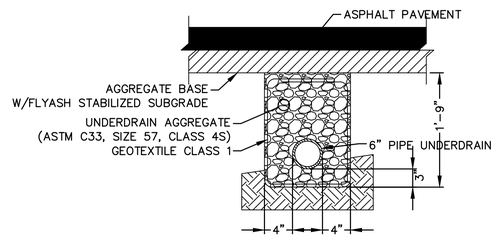
TYPICAL SECTION FOR PLASTIC PIPE
(IN ROCK OR SOIL)

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

1. BACKFILL SHALL BE JOB EXECAVATED MATERIAL FREE FROM DEBRIS AND STONES COMPACTED TO 90% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698. BACKFILL UNDER PAVEMENT (EXISTING OR PROPOSED), SHALL BE FLOWABLE FILL.

2. TRENCH BANKS MAY BE CUT BACK ON SLOPES IN ACCORDANCE WITH CURRENT OSHA REGULATIONS, BUT ONLY IN AREAS WHERE THE INCREASED TRENCH WIDTH WILL NOT INTERFERE WITH SURFACE FEATURES. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING.

3. MINIMUM AND MAXIMUM WIDTHS SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATION AS APPROVED ON ENGINEERING PLANS.



PIPE UNDERDRAIN LATERAL
N.T.S.

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

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Missouri Certificate of Authority #001592
1301 Burlington Street
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TEL 816.361.1177
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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

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STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

drawn by: B.M.W./A.A.
checked by: B.M.W.
designed by: B.M.W./A.A.
QA/QC by: J.E.S.
project no.: B19-4061
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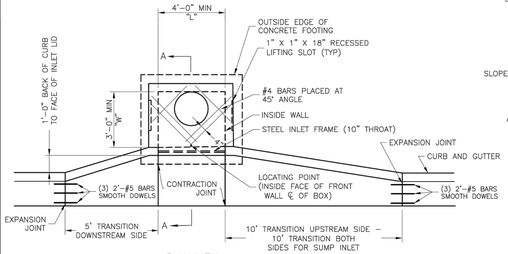
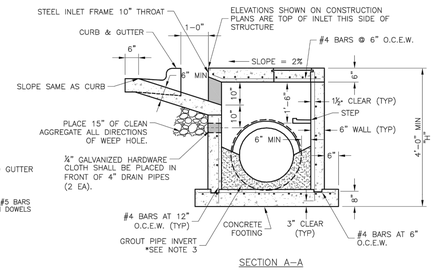
SHEET
C148

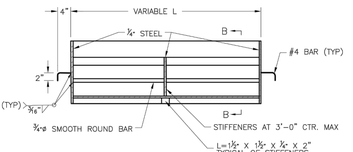
DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_DET01_B194061.dwg
DATE: Oct 11, 2022 3:41pm XREFS: C_PTBLK_B194061
USER: ssaylor



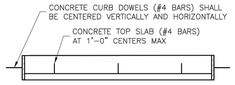
PLAN VIEW



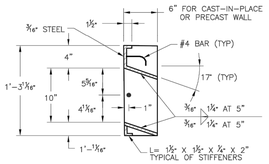
SECTION A–A



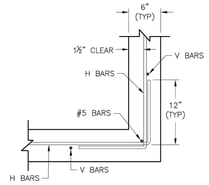
FRONT ELEVATION



PLAN VIEW



SECTION B–B



WALL CORNER DETAIL

STEEL FRAME NOTES:
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM–PRIME #37H–78 PRIMER (GRAY) OR EQUAL.

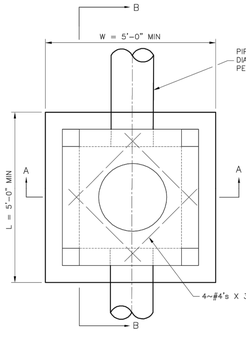
GENERAL NOTES:
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'–4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH ¾"CHAMFER OR ½" TOOLED EDGE.
7. ON–GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON–SHRINKABLE GROUT
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

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

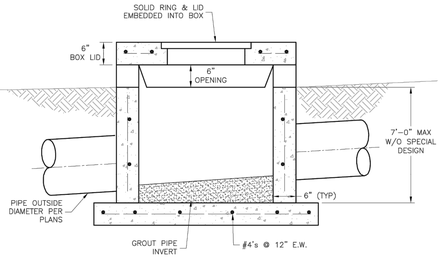
STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO
CURB INLET DETAIL

Finish:
Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

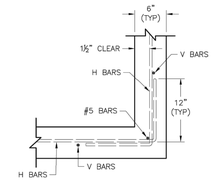
STM-1



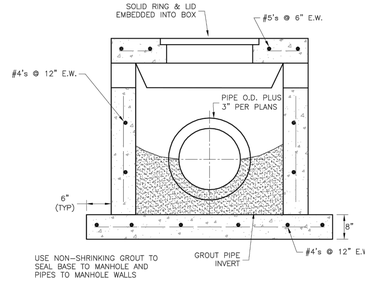
PLAN VIEW



SECTION B–B



WALL CORNER DETAIL



SECTION A–A

GENERAL NOTES:
1. LOCATE RING AND COVER OVER OUTLET ON BLANK WALL.
2. USE ¾" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 3' ON BLANK WALL IF POSSIBLE.
5. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE.
6. THE MINIMUM REINFORCING SHALL BE 1 H–BAR OVER A CAST–IN–PLACE PIPE AND 2 H–BARS OVER A PRECAST BOXOUT.
7. SHOW FIELD INLET ORIENTATION ON PLANS PLUS NUMBER AND SIDE OF OPENINGS.
8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON–SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
9. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

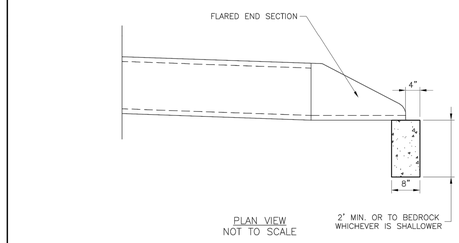
LEE'S SUMMIT MISSOURI
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

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

Finish:
Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-2

NOT AS-BUILT



PLAN VIEW
NOT TO SCALE

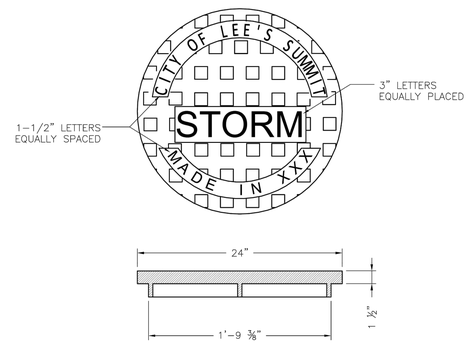
END VIEW
NOT TO SCALE

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

FLARED END SECTION SUPPORT DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-5



STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB
NOTE: PICK HOLES NOT SHOWN

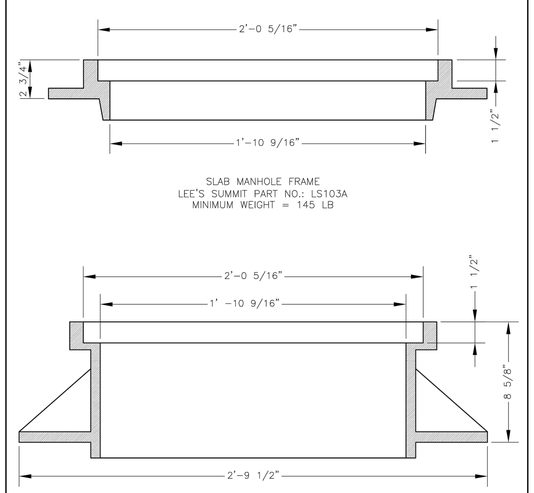
*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

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

STORM MANHOLE COVER DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-6



SLAB MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS103A
MINIMUM WEIGHT = 145 LB

STANDARD 24" MANHOLE FRAME
LEE'S SUMMIT PART NO.: LS101A
MINIMUM WEIGHT = 250 LB

*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCTS LIST.

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

STORM MANHOLE FRAME DETAIL

Date: 04/17
Drawn By: MJF
Checked By: DL

STM-7

olsson
Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177
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STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

DETAIL SHEET
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

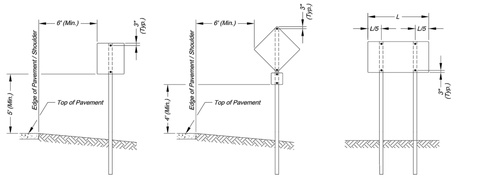
LEE'S SUMMIT, MO

2021

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

SHEET
C149

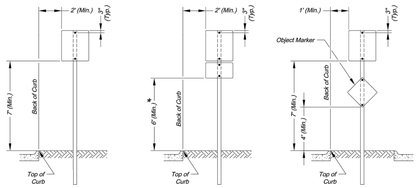
DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_DET01_B194061.dwg
DATE: Oct 11, 2022 3:41pm XREFS: C_PTBLK_B194061 USER: ssaylor



SIGN INSTALLATION FOR NON-CURBED STREET

SIGN INSTALLATION WITH AUXILARY SIGN FOR NON-CURBED STREET

SIGN INSTALLATION WITH TWO SIGN POSTS



SIGN INSTALLATION FOR CURBED STREET

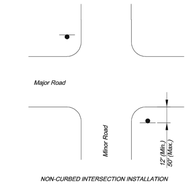
SIGN INSTALLATION WITH AUXILARY SIGN FOR CURBED STREET

SIGN INSTALLATION FOR RAISED MEDIANS

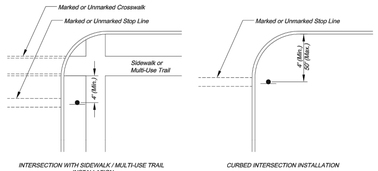
SIGN MOUNTING DETAILS

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

NOTE:
1. *Generally, the sign mounting height should not be more than 1' greater than the minimum mounting height.*



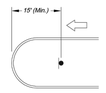
NON-CURBED INTERSECTION INSTALLATION



INTERSECTION WITH SIDEWALK / MULTI-USE TRAIL INSTALLATION

CURBED INTERSECTION INSTALLATION

CONTROL SIGN LOCATION



TYPICAL MEDIAN SIGN LOCATION

MEDIAN SIGN LOCATION

NOTES:
1. *A 4" P.V.C. sleeve shall be installed in new concrete medians at each location where a sign is to be installed.*
2. *For existing concrete medians, a 4" hole shall be cored into the concrete.*

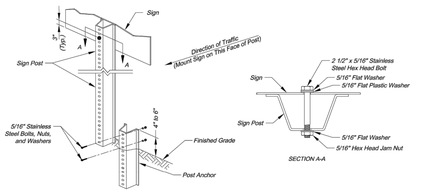
CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE (816) 969-1800 FAX: (816) 969-1809

Project:
SIGN MOUNTING DETAILS
Sheet Name:
STANDARD DRAWING SN-1

Drawn By: AS
Checked By: JW
Date: 08/28/2009
Project#

1 OF 3

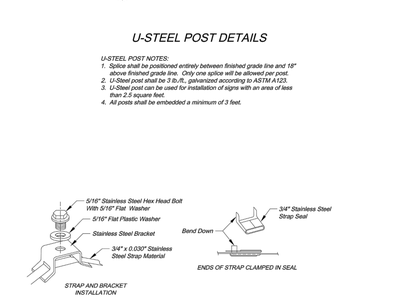
1



U-STEEL POST DETAILS

U-STEEL POST NOTES:
1. *Splice shall be positioned entirely between finished grade line and 18" above finished grade line. Only one splice will be allowed per post.*
2. *U-Steel post shall be 3 lb./ft., galvanized according to ASTM A123.*
3. *U-Steel post can be used for installation of signs with an area of less than 2.5 square feet.*
4. *All posts shall be embedded a minimum of 3 feet.*

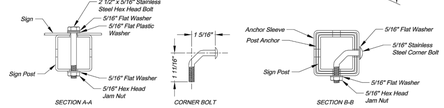
PERMANENT SIGNING GENERAL NOTES:
1. *All signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) .*
2. *The Contractor is responsible for avoiding any and all utilities when installing sign posts, whether the utility is indicated on the plans or not.*
3. *All workmanship and materials shall be subject to the inspection and approval of the Public Works Department of the City of Lee's Summit. Minor relocation to avoid conflicts may be allowed with the approval of the City Traffic Engineer or designee.*
4. *The Contractor shall stake the location of all sign posts to be installed. The City Inspector shall inspect the staking prior to installation.*
5. *Signs shown to be installed on the side of metal poles shall be mounted with stainless steel straps or wing brackets as detailed. No signs are to be installed on wood poles. See Traffic Signal Standard Drawings for the installation of signs on mast arms.*
6. *All post mounted signs shall be installed with breakaway anchors according to the Standard Drawings.*
7. *All existing signs will be used in place during construction and protected from damage unless otherwise indicated in the plans. If the Contractor damages any existing sign or posts during construction, the Contractor will be required to replace the damaged materials with new signs or posts of the same type and size at the Contractor's expense. The Contractor shall be responsible for removing and storing any signs that are to be reinstalled on the project. All equipment shall be reinstalled in good condition.*
8. *Existing permanent signs and posts removed by the Contractor for construction purposes which are not to be reinstalled shall be delivered to the City's Public Works Maintenance Facility (1971 SE Hamblen Road). The Contractor shall be responsible for removing and storing equipment in good condition and is fully responsible for the equipment until it is delivered.*
9. *All Stop, Yield, or street name signs shall be maintained in a conspicuous location for the driving public. All Stop and Yield signs removed for construction purposes can be temporarily erected in reflectorized drums (no less than 7 feet above the pavement surface) until they can be reinstalled. Any temporary Stop or Yield sign installation to be left in place overnight will require prior approval from the City Inspector.*



SQUARE STEEL POST INSTALLATION SEQUENCE:
1. *Sign post anchor driven partially into the ground using a drive cap with a sledge or power equipment.*
2. *Anchor sleeve slipped over anchor and drive into the ground together with the sign post anchor.*
3. *Insert sign post into the post anchor and bolt in place.*

STRAP TYPE SIGN SUPPORT DETAILS

METAL POLE SIGN MOUNTING NOTES:
1. *Signs on metal poles shall be attached with two brackets and stainless steel bands.*
2. *Holes in sign for attachment to the mounting brackets shall be offset a minimum of 3 inches from the edge of the sign.*
3. *Holes in sign shall be located such that the sign is level.*
4. *All strap, bracket, and seal materials should be Type 201 stainless steel.*



SQUARE STEEL POST DETAILS

SQUARE STEEL POST NOTES:
1. *Square steel sign posts and break-away anchor shall consist of the following materials:*
   Sign Post - 14 Ga. 2" x 2" Square Steel Post
   Post Anchor - 12 Ga. 2 ½" x 2 ½" x 36" Square Steel Post
   Anchor Sleeve - 12 Ga. 2 ½" x 2 ½" x 18" Square Steel Post
2. *14 Gauge posts must meet a certified minimum yield strength of 60,000 psi.*
3. *In all installations the first hole above the finished grade line on the sign post, anchor, and anchor sleeve must be in line for the insertion of the corner bolt.*
4. *The maximum area for one sign post is 9.0 square feet. A sign or combination of signs with an area greater than 9.0 square feet will require two posts. Also, signs with a width greater than 36" (not including 36" x 36" diamond shaped signs) will require two posts.*

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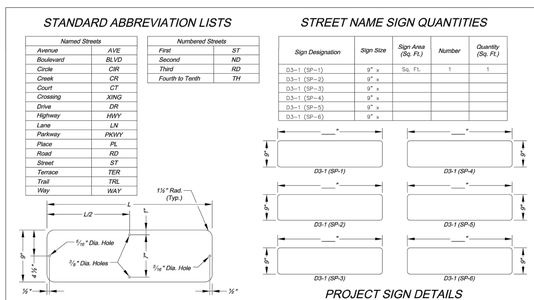
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE (816) 969-1800 FAX: (816) 969-1809

Project:
SIGN POST DETAILS
Sheet Name:
STANDARD DRAWING SN-2

Drawn By: AS
Checked By: JW
Date: 08/28/2009
Project#

2 OF 3

2



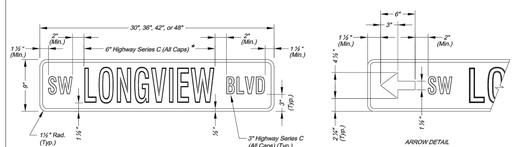
STANDARD ABBREVIATION LISTS

STREET NAME SIGN BLANK DETAILS

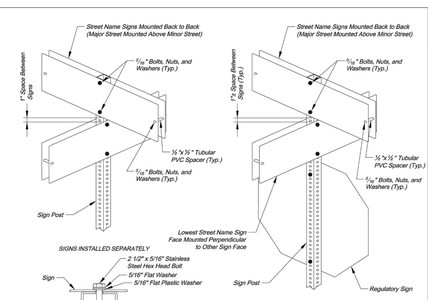
For Mounting on Square Steel Posts

STREET NAME SIGN QUANTITIES

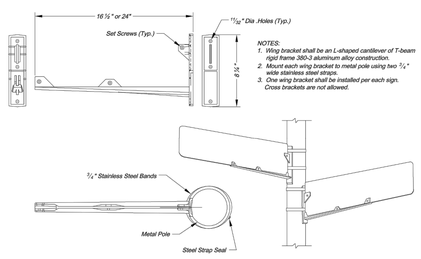
PROJECT SIGN DETAILS



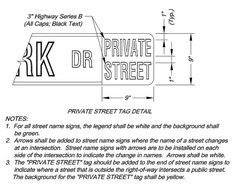
STREET NAME SIGN FACE DETAILS



SQUARE STEEL POST MOUNTING DETAILS



WING BRACKET MOUNTING DETAILS



NOTES:
1. *For all street name signs, the legend shall be white and the background shall be green.*
2. *Arrows shall be added to street name signs where the name of a street changes at an intersection. Street name signs with arrows are to be installed on each side of the intersection to indicate the change in names. Arrows shall be white.*
3. *The "PRIVATE STREET" tag should be added to the end of street name signs to indicate where a street that is outside the right-of-way intersects a public street. The background for the "PRIVATE STREET" tag shall be yellow.*

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PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE (816) 969-1800 FAX: (816) 969-1809

Project:
STREET NAME SIGN DETAILS
Sheet Name:
STANDARD DRAWING SN-3

Drawn By: AS
Checked By: JW
Date: 08/28/2009
Project#

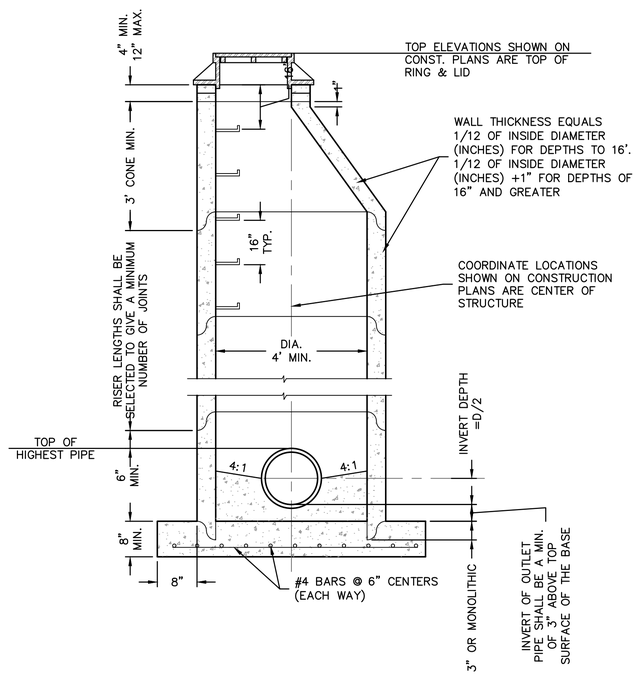
3 OF 3

3

NOT AS-BUILT

STORM MANHOLE NOTES

1. ALL MANHOLES ARE TO BE PRECAST CONCRETE AND OF ECCENTRIC CONE TYPE UNLESS OTHERWISE SPECIFIED.
2. MANHOLE TOP ADJUSTMENTS SHALL BE ACCOMPLISHED BY THE USE OF CONCRETE ADJUSTMENT RINGS.
3. TOP OF MANHOLE CASTING SHALL BE SET FLUSH AND ON SAME SLOPE AS FINISHED SURFACE OR AS DIRECTED BY THE ENGINEER.
4. REINFORCEMENT IN ALL SECTIONS SHALL EQUAL OR EXCEED A.S.T.M. C–478 SPECIFICATIONS.
5. THE ENGINEER SHALL DESIGNATE MODIFICATIONS FOR MANHOLES WITH SPECIAL DESIGNS.
6. THE INSIDE DIAMETER OF THE MANHOLE SHALL BE 4'–0" FOR PIPE DIAMETERS FROM 12" THRU 24", 5'–0" FOR PIPE DIAMETERS FROM 27" THRU 36", AND 6'–0" FOR PIPE DIAMETERS 42" THRU 48".
7. CLEARANCE TOLERANCE OF PIPE OPENINGS: THE MAXIMUM ALLOWABLE PIPE OPENING ON A HORIZONTAL AXIS SHALL BE THE OUTSIDE DIAMETER OF THE PIPE PLUS 12". THE MAXIMUM ALLOWABLE PIPE OPENING ON VERTICAL AXIS SHALL BE THE OUTSIDE DIAMETER PLUS 8". THE MAXIMUM CLEARANCE BETWEEN THE OUTSIDE SURFACE OF AN INSTALLED PIPE AND THE CONCRETE OF THE MANHOLE SHALL BE 2".
8. INSTALLATION OF PIPE OPENINGS: ALL REQUIRED PIPE OPENINGS SHALL BE PLANT CAST IN MANHOLE UNITS. FIELD ALTERATIONS OF OPENINGS WILL BE PERMITTED PROVIDED WALLS ARE SCORED WITH A MASONRY SAW TO A DEPTH SUFFICIENT TO SEVER REINFOECING STEEL. A CHIPPING HAMMER MAY THEN BE USED TO REMOVE THE CONCRETE. MINIMUM DISTANCE BETWEEN ANY TWO ADJACENT PIPES SHALL BE 2".
9. NO DIRECT PAYMENT FOR SHAPING FLOOR OR CONNECTING PIPES AS SHOWN ON PLANS.
10. RING AND COVER TO BE NEENAH R–1736, CLAY & BAILEY #2008, DEETER # 1316, OR APPROVED EQUAL. (CASTING MAY VARY BY MUNICIPALITY, REFER TO PLANS & CONTRACT DOCUMENTS.)



STANDARD PRECAST STORM SEWER MANHOLE

NOT TO SCALE

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

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
12/7/22
PROFESSIONAL ENGINEER

REV. NO.	DATE	REVISIONS DESCRIPTION	BY
1	03-23-2021	REVISED PER CITY COMMENTS	
2	04-16-2021	REVISED PER CITY COMMENTS	
3	09-30-2021	CHANGES TO APPROVED PLANS	

REVISIONS

DETAIL SHEET
STREET & STORM SEWER PLANS

HOOK FARMS
SECOND PLAT

LEE'S SUMMIT, MO

2021

drawn by: B.M.W./A.A.
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SHEET
C150

DWG: F:\2019\4001-4500\019-4061-B\40-Design\AutoCAD\Asbuilt\Sheets\GNCV\Street & Storm Plans\C_DET01_B194061.dwg USER: ssaylor
DATE: Oct 11, 2022 3:41pm XREFS: C_PTBLK_B194061