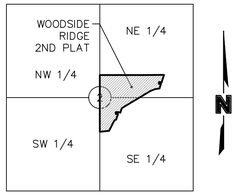
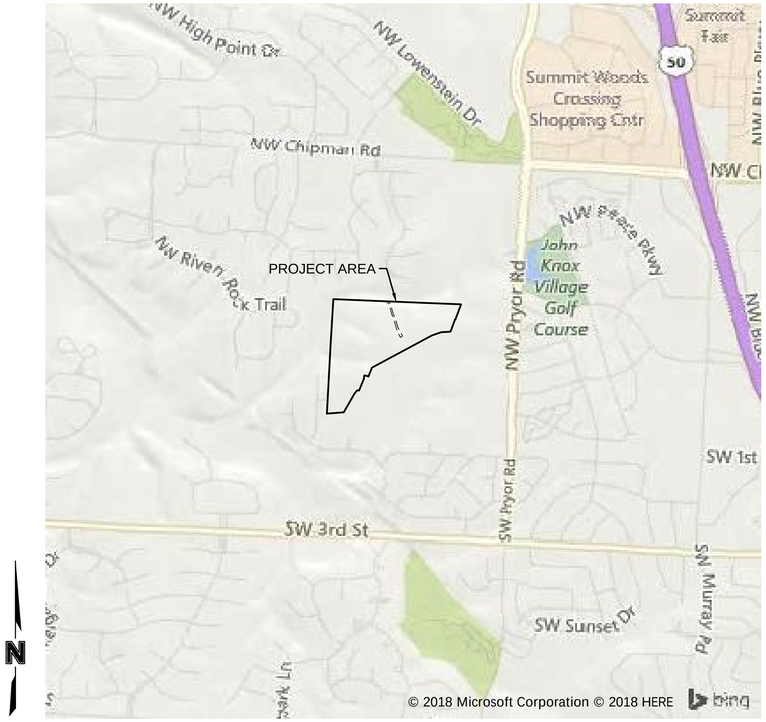


LOCATION MAP
Sec. 2, Twp. 47 N., Rge. 32 W.
(N.T.S.)

WOODSIDE RIDGE
SECOND PLAT
STREET & STORM SEWER PLANS

SECTION 2, TOWNSHIP 47 N, RANGE 32 W
IN LEE'S SUMMIT, JACKSON COUNTY, MO



Sheet List Table	
SHEET #	SHEET TITLE
C101	COVER SHEET
C102	GENERAL NOTES
C103	MASTER GENERAL LAYOUT
C104	GENERAL LAYOUT
C105	GENERAL LAYOUT
C106	GENERAL LAYOUT
C107	GRADING PLAN
C108	GRADING PLAN
C109	GRADING PLAN
C110	ROADWAY PLAN & PROFILE
C111	ROADWAY PLAN & PROFILE
C112	ROADWAY PLAN & PROFILE
C113	ROADWAY PLAN & PROFILE
C114	TRAFFIC CONTROL PLAN
C115	INTERSECTION DETAILS
C116	INTERSECTION DETAILS
C117	STORM SEWER PLAN & PROFILE
C118	STORM SEWER PLAN & PROFILE
C119	STORM SEWER PLAN & PROFILE
C120	STORM SEWER PLAN & PROFILE
C121	DETENTION BASIN PLAN
C122	DETENTION BASIN PLAN
C123	DRAINAGE PLAN
C124	DRAINAGE PLAN
C125	DRAINAGE PLAN
C126	10 YEAR DRAINAGE TABLES
C127	100 YEAR DRAINAGE TABLES
C128	MASTER DRAINAGE PLAN
C129	MASTER DRAINAGE PLAN
C130	MASTER DRAINAGE PLAN
C131	ADA DETAIL SHEET
C132	ADA DETAIL SHEET
C133	SINGAGE DETAIL SHEET
C134	STORM DETAIL SHEET
C135	STORM DETAIL SHEET

PROJECT TEAM & UTILITY CONTACT LIST

OWNER / DEVELOPER
CLAYTON PROPERTIES GROUP, LLC, DBA SUMMIT HOMES
120 SE 30TH STREET
LEE'S SUMMIT, MO 64082
CONTACT: VINCENT WALKER
PHONE: 816.246.6700
FAX: 816.246.2662

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

SURVEYOR
OLSSON
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
CONTACT: JASON ROUDEBUSH, PLS
PHONE: 816.361.1177

GEOTECHNICAL ENGINEER
OLSSON
1700 E. 123RD ST. OLATHE, KS 66061
CONTACT: JAMES LANDRUM
PHONE: 816.829.0078

UTILITY SERVICE NUMBERS
NAME: DEVELOPMENT SERVICES
PHONE: 816-969-1200

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:

Part of Lot 3B, WEST VILLAGE COMMERCIAL DEVELOPMENT, LOTS 3A AND 3B, a subdivision recorded as Instrument Number 19E0018413 in Book I182 at Page 62 in Jackson County Recorder of Deeds Office located in the Northeast and Southeast Quarter of Section 2, 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 87°47'03" West, on the South line of said Southeast Quarter 2,633.21 feet to the Southwest corner of said Southeast Quarter; thence North 03°05'41" East, on the West line of said Southeast Quarter, 1,326.36 feet to the Southwest corner of said Lot 3B, also being the Southwest corner of the North half said Southeast Quarter, also being a point on the Easterly line of STERLING HILLS 5TH PLAT, a subdivision in said Lee's Summit recorded as Instrument Number I1273788 in Book I54 at Page 88 in said Jackson County Recorder of Deeds Office, also being the Southwest corner of proposed WOODSIDE RIDGE 1st Plat, Lots 1 thru 143 Inclusive, and Tracts A, B, C, D, E, F, G and H; thence North 03°05'41" East on said West line and said Easterly line, also being the West line of said Lot 3B, also being the Westerly line of proposed WOODSIDE RIDGE 1ST PLAT, LOTS 1 thru 143 Inclusive, and Tracts A, B, C, D, E, F, G and H, 389.26 feet to the Point of Beginning of the tract of land to be herein described; thence leaving said proposed Westerly line, continuing North 03°05'41" East on said West lines and said Easterly lines, 936.61 feet to the Northeast corner of said STERLING HILLS 5TH PLAT, also being a point on the Easterly line of WINTERSET WOODS – 3RD PLAT, a subdivision in said Lee's Summit recorded as Instrument Number 2003I0002463 in Book I74 at Page 14 in said Jackson County Recorder of Deeds Office, also being the Northwest corner of said Southeast Quarter; thence North 03°26'14" East, on the said West line of said Lot 3B, said Easterly line and West line of said Northeast Quarter, 665.72 feet to the Northwest corner of the South Half of the South Half of said Northeast Quarter, also being the Northwest corner of said Lot 3B, also being the Northeast corner of said WINTERSET WOODS – 3RD PLAT, also being a point on the Southerly line of BROOKRIDGE ESTATES – SECOND PLAT LOTS 39–84, a subdivision in said Lee's Summit recorded as Instrument Number I802804 in Book I44 at Page 57 in said Jackson County Recorder of Deeds Office; thence South 87°37'42" East, along said Southerly line, also along the North line of said Lot 3B, also being the North line of said South Half of said South Half of said Northeast Quarter, also being the South line of THE FOREST OF BROOKRIDGE ESTATES – THIRD PLAT LOTS 117 – 133, a distance of 1,210.45 feet to the Southeast corner of said THE FOREST OF BROOKRIDGE ESTATES – THIRD PLAT LOTS 117 – 133 and to a point on said proposed Westerly line; thence South 87°37'42" East on said North line of said South Half of said South Half, said North line of said Lot 3B, and said proposed Westerly line, 574.95 feet; thence leaving said North lines, South 20°32'36" West, along said proposed Westerly line, 229.10 feet; thence Westerly, along said proposed Westerly line, on a curve to the left, having an initial tangent bearing of North 69°27'24" West with a radius of 425.00 feet, a central angle of 00°42'29" and an arc distance of 5.25 feet; thence South 19°50'07" West, along said proposed Westerly line 178.42 feet; thence South 85°52'23" West, along said proposed Westerly line, 130.41 feet; thence South 70°59'24" West, along said proposed Westerly line, 137.47 feet; thence South 61°49'26" West, along said proposed Westerly line, 951.56 feet; thence South 21°24'31" West, along said proposed Westerly line, 135.10 feet; thence Westerly, along said proposed Westerly line, along a curve to the left having an initial tangent bearing of North 68°35'29" West with a radius of 275.00 feet, a central angle of 12°33'32" and an arc distance of 60.28 feet; thence South 08°50'59" West, along said proposed Westerly line, 50.00 feet; thence South 22°12'04" West, along said proposed Westerly line, 173.03 feet; thence North 75°51'31" West, along said proposed Westerly line, 21.43 feet; thence South 41°11'03" West, along said proposed Westerly line, 60.06 feet; thence South 29°55'27" West, along said proposed Westerly line, 306.11 feet; thence South 85°54'26" West, along said proposed Westerly line, 236.75 feet to the Point of Beginning. Containing 1,514,368 square feet or 34.77 acres, more or less.

BENCHMARK

BMK #5 CHISELED SQUARE ON THE S.E. CORNER OF A CONCRETE PAD FOR A TRAFFIC SIGNAL BOX AT THE S.W. CORNER OF PRYOR ROAD AND O'BRIEN ROAD.

ELEVATION: 979.24

ASBUILT
03-24-2022

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

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

10/27/2022
DATE

olsson
MO Certificate of Authority # 001592
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	7/10/2020	REVISED PER CITY COMMENTS	
2	3/16/2021	REVISED PER CONTRACTOR COMMENT	

REVISIONS

COVER SHEET
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

2020

LEE'S SUMMIT, MO

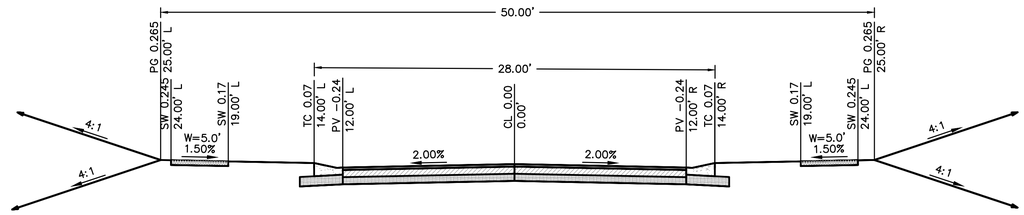
drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18.1140
date: 2020.06.09

SHEET
C101

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_TTL01_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:36pm

GENERAL NOTES:

1. THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE LEE'S SUMMIT, MISSOURI DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5813. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.
2. ALL MANHOLES, CATCH BASINS, UTILITY VALVES, AND METER PITS TO BE ADJUSTED OR REBUILT TO GRADE AS REQUIRED.
3. ALL SIGNS (I.E. STREET NAME AND STOP SIGNS) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF LEE'S SUMMIT, DESIGN AND CONSTRUCTION MANUAL, PRIOR TO SUBSTANTIAL COMPLETION. REFER TO SHEET C133 FOR SIGNAGE DETAILS.
4. THE ASPHALTIC CONCRETE SURFACES ON ALL PERMITTED STREETS SHALL BE VIRGIN MATERIAL.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL DOWNSTREAM EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION. EROSION CONTROL PLANS AND PROCEDURES SHALL BE IN PLACE PRIOR TO ANY EXCAVATION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING ROCK ELEVATIONS AT 25 FOOT (MAXIMUM) INTERVALS WHERE ENCOUNTERED, AND FURNISHING THIS INFORMATION TO THE DESIGN ENGINEER FOR USE ON "AS-BUILT" PLANS.
7. THE LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.
8. NO SUBSURFACE EXPLORATION FOR THE DETERMINATION OF AND/OR THE LOCATION OF EXISTING ROCK HAS BEEN MADE.
9. CONTRACTOR SHALL PROVIDE EARTHWORK AND MATERIAL TESTING TO COMPLY WITH THE STANDARD SPECIFICATIONS OF THE PUBLIC WORKS DEPARTMENT OR AS REQUIRED BY THE CITY'S FIELD REPRESENTATIVE.
10. CONTRACTOR MUST CONTACT DEVELOPMENT SERVICES INSPECTIONS AT 816-969-1200 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES.
11. P.O.S= PROPOSED OPEN SPACE.



CG-2 CURB AND GUTTER
2" TYPE 5 OR 6 ASPHALTIC CONCRETE SURFACE
4" TYPE 5-01 ASPHALTIC CONCRETE BASE COURSE
6" MIN. MODOT TYPE 5 STONE BASE
6" MIN. FLYASH SABILIZED SUBGRADE

1 NTS
RESIDENTIAL LOCAL STREET (28' BK-BK)
NW KILLARNEY LANE, NW PATCH COURT, NW O'BRIEN ROAD

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
	SITE			
1	EXCAVATION	C.Y.	52613	
2	EMBANKMENT	C.Y.	83489	
	STREET			
3	EXCAVATION	C.Y.	8049	
4	EMBANKMENT	C.Y.	7968	
5	8" ASPHALT PAVEMENT	S.Y.	7373	
6	STABILIZED SUBGRADE	S.Y.	9028	
7	8" MoDOT TYPE 5 AGGREGATE	S.Y.	9028	
8	CONCRETE CURB & GUTTER (CG-2)	L.F.	4747.02	
9	ADA HANDICAP RAMP	EA.	6	
10	STOP SIGNS	EA.	3	
11	STREET NAME SIGNS	EA.	4	
12	SIGN POSTS	EA.	1	
13	MILL & OVERLAY	S.Y.	40	
14	5' CONCRETE SIDEWALK	L.F.	55.00	
15	4" COMPACTED AGGREGATE FOR SIDEWALK	S.Y.	31.00	
16	SEEDING, FERTILIZER, OR MULCH	AC.	19.61	
17	TOPSOIL	C.Y.	13688.61	
	STORM			
18	STD. CURB INLET (5'x3' INSIDE)	EA.	~~12~~	12
19	STD. MANHOLE (4' DIA. INSIDE)	EA.	~~7~~	8
20	STD. FIELD INLET (4'x4' INSIDE)	EA.	~~2~~	2
21	15" HPDE	L.F.	~~1310.46~~	1273.78
22	18" HDPE	L.F.	~~582.72~~	467.81
23	18" RCP	L.F.	~~181.83~~	188.31
24	24" HDPE	L.F.	~~283.67~~	267.74
25	15" HDPE END SECTION	EA.	~~2~~	2
26	18" HDPE END SECTION	EA.	~~5~~	5
27	24" HDPE END SECTION	EA.	~~1~~	1
28	RIP-RAP	S.Y.	~~162~~	125.87

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.

LEGEND	
~~ECTVOH~~	EXISTING CABLE TV, OVERHEAD
~~ECTV~~	EXISTING CABLE TV, UNDERGROUND
~~CTVOH~~	PROPOSED CABLE TV, OVERHEAD
~~CTV~~	PROPOSED CABLE TV, UNDERGROUND
~~FCTVOH~~	FUTURE CABLE TV, OVERHEAD
~~FCTV~~	FUTURE CABLE TV, UNDERGROUND
~~EFOH~~	EXISTING FIBER OPTIC, OVERHEAD
~~EFO~~	EXISTING FIBER OPTIC, UNDERGROUND
~~FOH~~	PROPOSED FIBER OPTIC, OVERHEAD
~~FO~~	PROPOSED FIBER OPTIC, UNDERGROUND
~~FFOH~~	FUTURE FIBER OPTIC, OVERHEAD
~~FFO~~	FUTURE FIBER OPTIC, UNDERGROUND
~~EFP~~	EXISTING FIRE PROTECTION SYSTEM LINE
~~FP~~	PROPOSED FIRE PROTECTION SYSTEM LINE
~~FFP~~	FUTURE FIRE PROTECTION SYSTEM LINE
~~EFL~~	EXISTING FUEL LINE
~~FL~~	PROPOSED FUEL LINE
~~FFL~~	FUTURE FUEL LINE
~~EG~~	EXISTING NATURAL GAS LINE
~~G~~	PROPOSED NATURAL GAS LINE
~~FG~~	FUTURE NATURAL GAS LINE
~~ETELOH~~	EXISTING TELEPHONE LINE, OVERHEAD
~~ETEL~~	EXISTING TELEPHONE LINE, UNDERGROUND
~~TELOH~~	PROPOSED TELEPHONE LINE, OVERHEAD
~~TEL~~	PROPOSED TELEPHONE LINE, UNDERGROUND
~~FTELOH~~	FUTURE TELEPHONE LINE, OVERHEAD
~~FTEL~~	FUTURE TELEPHONE LINE, UNDERGROUND
~~EEOH~~	EXISTING POWER\ELECTRIC LINE, OVERHEAD
~~EE~~	EXISTING POWER\ELECTRIC LINE, UNDERGROUND
~~EOH~~	PROPOSED POWER\ELECTRIC LINE, OVERHEAD
~~E~~	PROPOSED POWER\ELECTRIC LINE, UNDERGROUND
~~FEOH~~	FUTURE POWER\ELECTRIC LINE, OVERHEAD
~~FE~~	FUTURE POWER\ELECTRIC LINE, UNDERGROUND
~~ESS~~	EXISTING SANITARY SEWER
~~SS~~	PROPOSED SANITARY SEWER
~~FSS~~	FUTURE SANITARY SEWER
~~ESL~~	EXISTING STEAM LINE
~~SL~~	PROPOSED STEAM LINE
~~FSL~~	FUTURE STEAM LINE
~~EST~~	EXISTING STORM SEWER
~~ST~~	PROPOSED STORM SEWER
~~FST~~	FUTURE STORM SEWER
~~EW~~	EXISTING WATER LINE
~~W~~	PROPOSED WATER LINE
~~FW~~	FUTURE WATER LINE

ASBUILT
03-24-2022

ALL NOTES REFERENCED ON THIS PLAN SHEET MAY HAVE APPLICATIONS TO EVERY FACET OF THE CONSTRUCTION PLANS. THE NOTE HEADINGS OR TITLES ARE TO BE USED AS A GENERAL GUIDE TO APPLICABLE SITUATIONS.

olsson
MO Certificate of Authority #001592
7301 W. 133rd Street, Suite 200
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

GENERAL NOTES
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

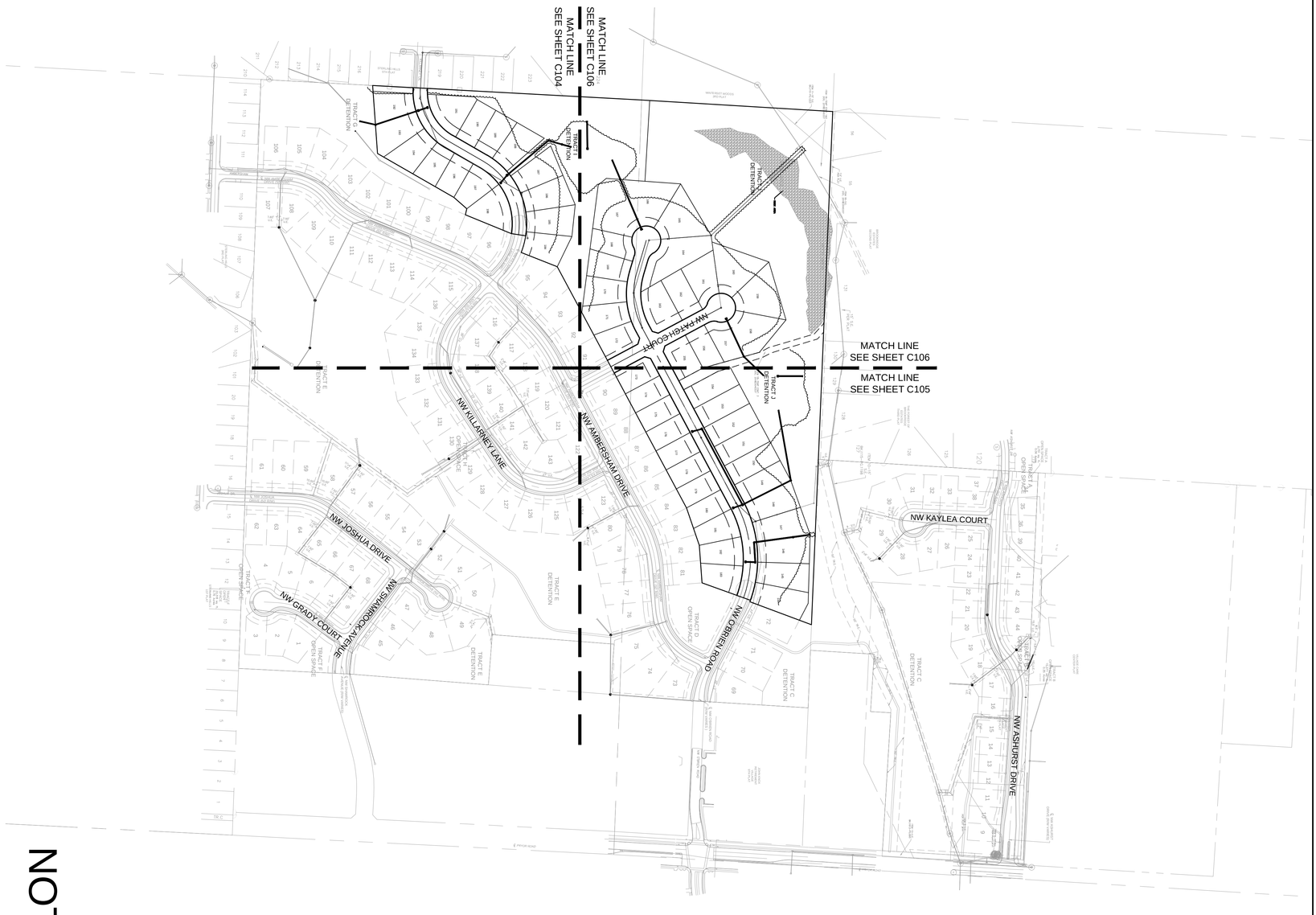
drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18.1140
date: 2020.07.10

SHEET
C102

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_GEN01_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:36pm

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_GEN02_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:37pm

0' 100' 200' 400'
SCALE IN FEET



NOT ASBUILT

SHEET
C103

MASTER GENERAL LAYOUT
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO 2020

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

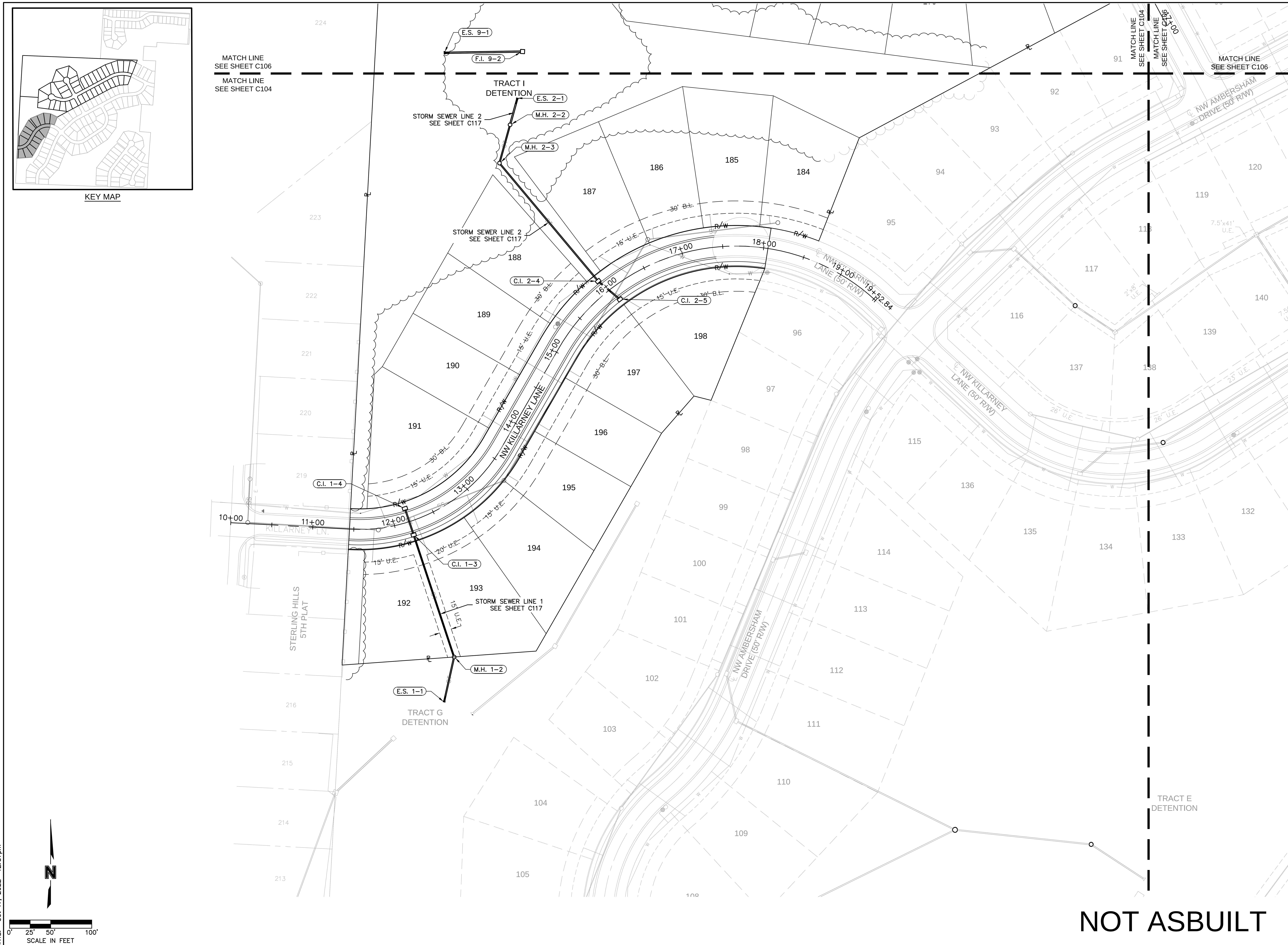
REVISIONS

drawn by: C.S.M
checked by: S.A.S
designed by: S.A.S
QA/QC by: J.E.S
project no: C181140
date: 2020.07.10

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2010008287
10/27/2022
CIVIL ENGINEER

olsson

MO Certificate of Authority #:001592
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116 TEL 816.361.1177 www.olsson.com



NOT ASBUILT

olsson

MO Certificate of Authority #:001592
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
PROFESSIONAL ENGINEER
10/27/2022

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

GENERAL LAYOUT
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C104

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_GEN02_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:37pm

KEY MAP

NOT ASBUILT

0' 25' 50' 100'
SCALE IN FEET

DWG: F:\2018\1001–1500\018–1140–C\40–Design\AutoCAD\Final Plans – Asbuilts\Sheets\GNCV\Street & Storm\C_GEN02_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:37pm

olsson
MO Certificate of Authority # 001592
501 Madison Avenue, Suite 105
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

GENERAL LAYOUT
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C105

KEY MAP

MATCH LINE SEE SHEET C106

MATCH LINE SEE SHEET C105

MATCH LINE SEE SHEET C106

MATCH LINE SEE SHEET C104

MATCH LINE SEE SHEET C104

E.S 10–1

STORM SEWER LINE 10 SEE SHEET C122

STORM SEWER LINE 5 SEE SHEET C119

M.H. 5–2

E.S. 5–1

TRACT J DETENTION

F.I. 10–2

E.S. 4–1

E.S.. 7–1

STORM SEWER LINE 7 SEE SHEET C120

M.H. 7–3

C.I. 7–4

C.I. 5–3

C.I. 7–5

C.I. 5–4

C.I. 4–3

C.I. 6–1

STORM SEWER LINE 6 SEE SHEET C120

C.I. 6–2

M.H. 4–2

ITEM 10–15' S.E. BK.I115–PG.1198

ITEM 18–TEMP ESMT. 3 DOC. 2018E0040337

15' S.E. PER PLAT

10.00' U.E.

20' U.E.

21'9" U.E.

15' U.E.

50' TR.E.

23' U.E.

22' U.E.

7.50' U.E.

8.5'x3' U.E.

NW O'BRIEN ROAD (50' R/W)

NW PATCH COURT

NW AMBERSHAM DRIVE (50' R/W)

NW KILLARNEY LANE (50' R/W)

TRACT D OPEN SPACE

TRACT E DETENTION

12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00

127 128 129 130 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183

70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 120 121 122 123 124 125

NOT ASBUILT

N

0' 25' 50' 100'

SCALE IN FEET

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_GEN02_C181140.dwg USER: ssoylor

DATE: Oct 17, 2022 12:37pm

olsson

MO Certificate of Authority # 001592
KS Certificate of Authority # E-1045
NORTH KANSAS CITY, MO 64116

TEL 816.361.1177

www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

GENERAL LAYOUT
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C106

KEY MAP

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.

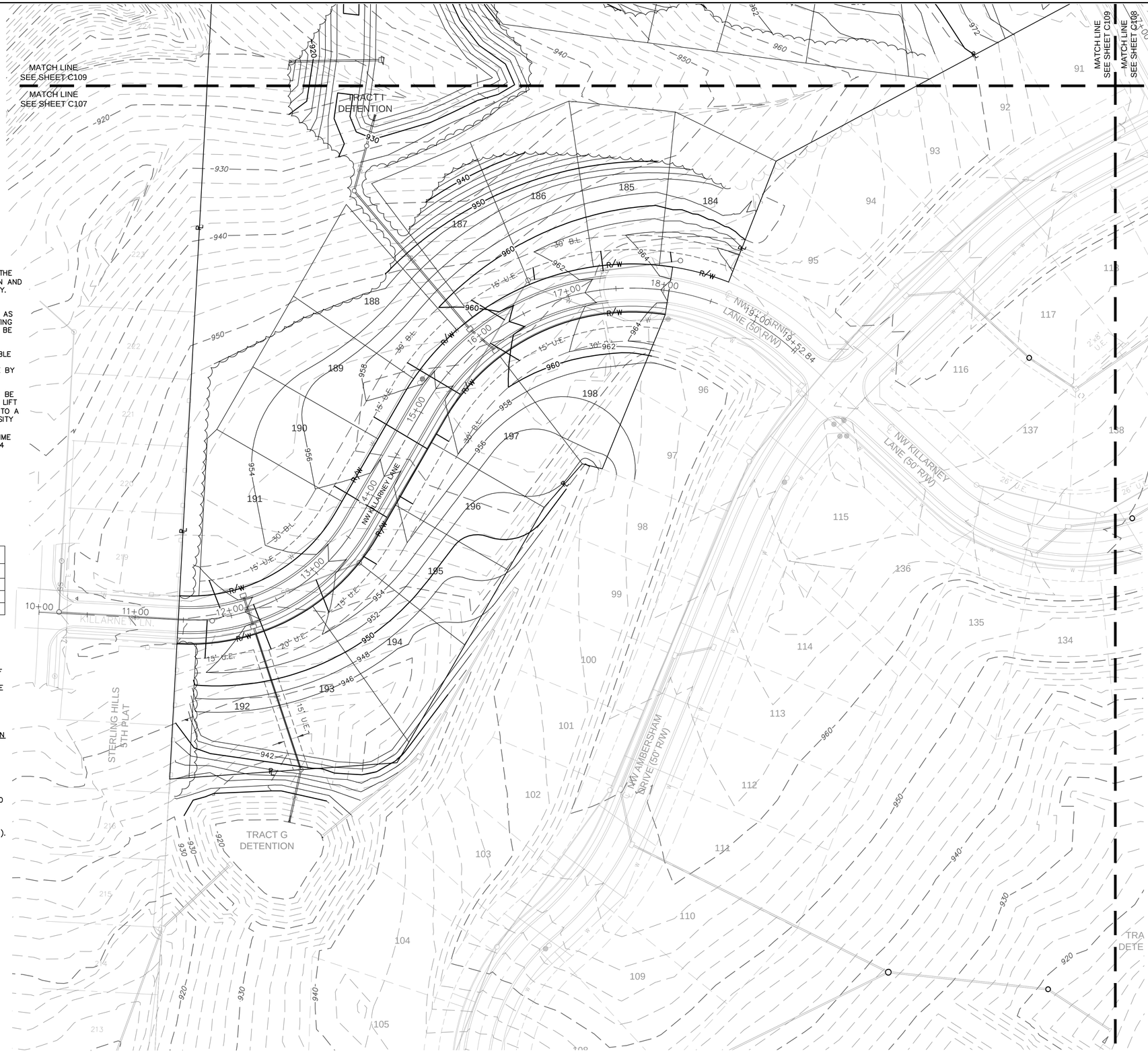
LEGEND	
–100–	EXISTING INDEX CONTOURS
–100–	EXISTING INTERMEDIATE CONTOURS
100	PROPOSED INDEX CONTOURS
100	PROPOSED INTERMEDIATE CONTOURS

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	8049	7968
SITE	52613	83489
TOTAL	60662	91457

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.

THIRD PARTY TESTING REQUIRED FOR DETENTION BASIN IN TRACT E:
1. REMOVE TOPSOIL AND ORGANIC DIRT FROM THE AREA
2. PROOF ROLL TO CHECK THE SUBGRADE
   2.1. REMOVE OR REPAIR ANY UNSTABLE AREA IN ACCORDANCE WITH THIRD-PARTY TESTER
3. PLACE 9" LOOSE LIFTS OF 9" MATERIAL WITH LL=50 AND PI=25 OR GREATER. 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.



Woodside Ridge Plat 2 Lot Fill Information	
Lot Number	Over 8' Fill Placed
144	
145	11'
146	13'
147	12'
148	11'
149	9'
150	
151	9'
152	9'
153	12'
154	9'
155	9'
156	
157	
158	9'
159	10'
160	9'
161	
162	
163	
164	11'
165	10'
166	
167	
168	
169	
170	
171	
172	
173	
174	
175	
176	
177	
178	
179	
180	
181	
182	
183	
184	
185	
186	9'
187	10'
188	
189	
190	
191	
192	
193	10'
194	
195	
196	
197	
198	

NOT ASBUILT

0' 25' 50' 100'
SCALE IN FEET

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2105
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

GRADING PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18.1140
date: 2020.07.10

SHEET
C107

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_GRD02_C181140.dwg
DATE: Oct 17, 2022 12:38pm
USER: ssoylor

KEY MAP

Woodside Ridge Plat 2 Lot Fill Information	
Lot Number	Over 8' Fill Placed
144	
145	11'
146	13'
147	12'
148	11'
149	9'
150	
151	9'
152	9'
153	12'
154	9'
155	9'
156	
157	
158	9'
159	10'
160	9'
161	
162	
163	
164	11'
165	10'
166	
167	
168	
169	
170	
171	
172	
173	
174	
175	
176	
177	
178	
179	
180	
181	
182	
183	
184	
185	
186	9'
187	10'
188	
189	
190	
191	
192	
193	10'
194	
195	
196	
197	
198	

NOT ASBUILT

N

0' 25' 50' 100'
SCALE IN FEET

BROOKRIDGE ESTATES SECOND PLAT

MATCH LINE SEE SHEET C109

MATCH LINE SEE SHEET C108

MATCH LINE SEE SHEET C109

MATCH LINE SEE SHEET C107

MATCH LINE SEE SHEET C108

MATCH LINE SEE SHEET C107

TRACT J DETENTION

TRACT I DETENTION

ROCK BLUFF

50' TRAIL ESMT.

25' U.E.

15' U.E.

7.5' U.E. PER PLAT

WINTERSET WOODS 3RD PLAT

NW PATCH COURT

NW O'BRIEN ROAD

NW AMBER DRIVE

olsson

MO Certificate of Authority # 001592
KS Certificate of Authority # E-2019
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

GRADING PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18.1140
date: 2020.07.10

SHEET
C108

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_GRD02_C181140.dwg
DATE: Oct 17, 2022 12:38pm
USER: ssoylor

KEY MAP

Woodside Ridge Plat 2 Lot Fill Information	
Lot Number	Over 8' Fill Placed
144	
145	11'
146	13'
147	12'
148	11'
149	9'
150	
151	9'
152	9'
153	12'
154	9'
155	9'
156	
157	
158	9'
159	10'
160	9'
161	
162	
163	
164	11'
165	10'
166	
167	
168	
169	
170	
171	
172	
173	
174	
175	
176	
177	
178	
179	
180	
181	
182	
183	
184	
185	
186	9'
187	10'
188	
189	
190	
191	
192	
193	10'
194	
195	
196	
197	
198	

MATCH LINE
SEE SHEET C109

MATCH LINE
SEE SHEET C108

MATCH LINE
SEE SHEET C109

MATCH LINE
SEE SHEET C107

MATCH LINE
SEE SHEET C107

TRACT J
DETENTION

TRACT D
OPEN SPACE

TRACT E
DETENTION

NW O'BRIEN ROAD (50' R/W)

NW PATTICKOURY

NW AMBERSHAM
DRIVE (50' R/W)

NW KILLARNEY
LANE (50' R/W)

NOT ASBUILT

N

0' 25' 50' 100'
SCALE IN FEET

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_GRD02_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:38pm

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2010
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

GRADING PLAN
STREET & STORM SEWER PLANS

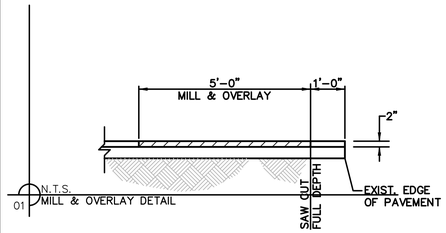
WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

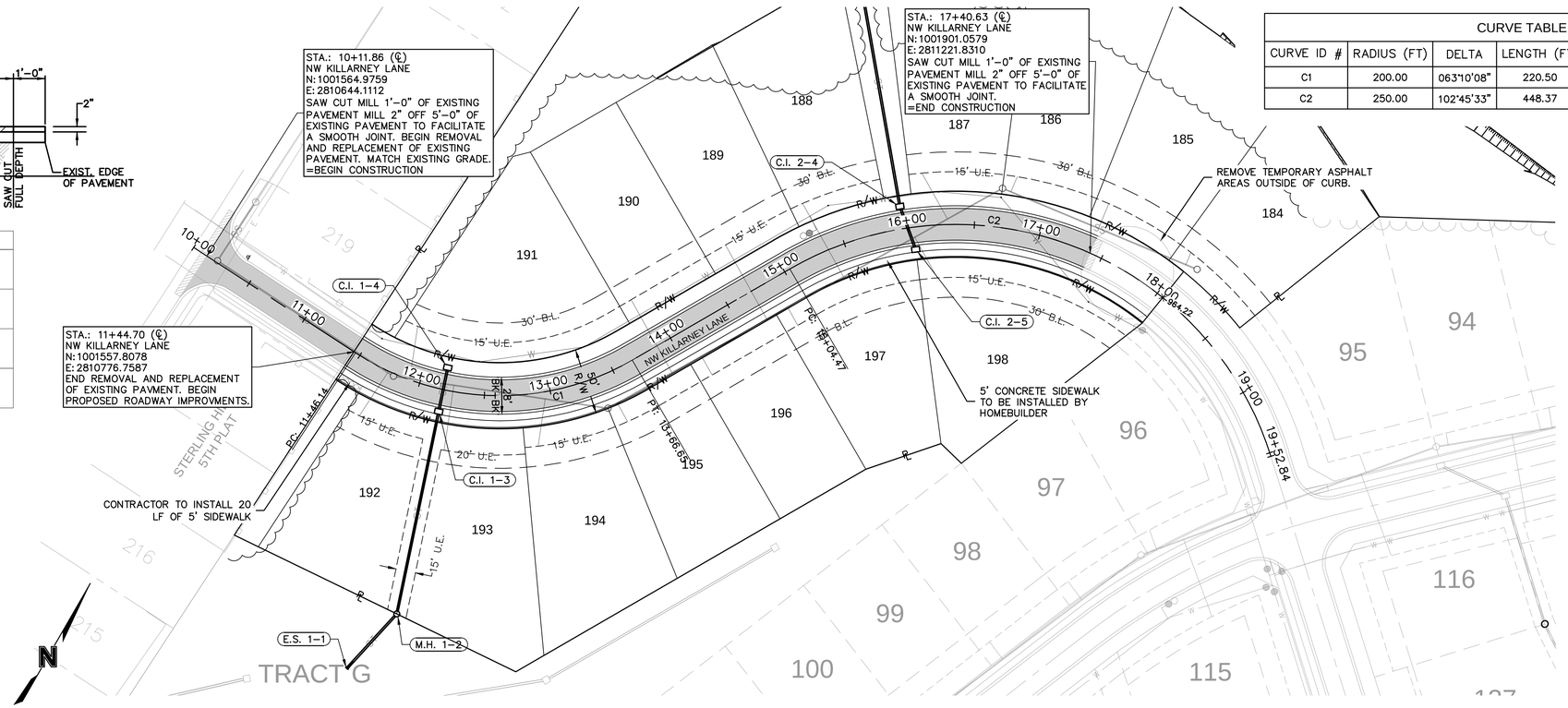
2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

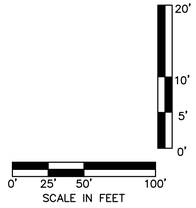
SHEET
C109

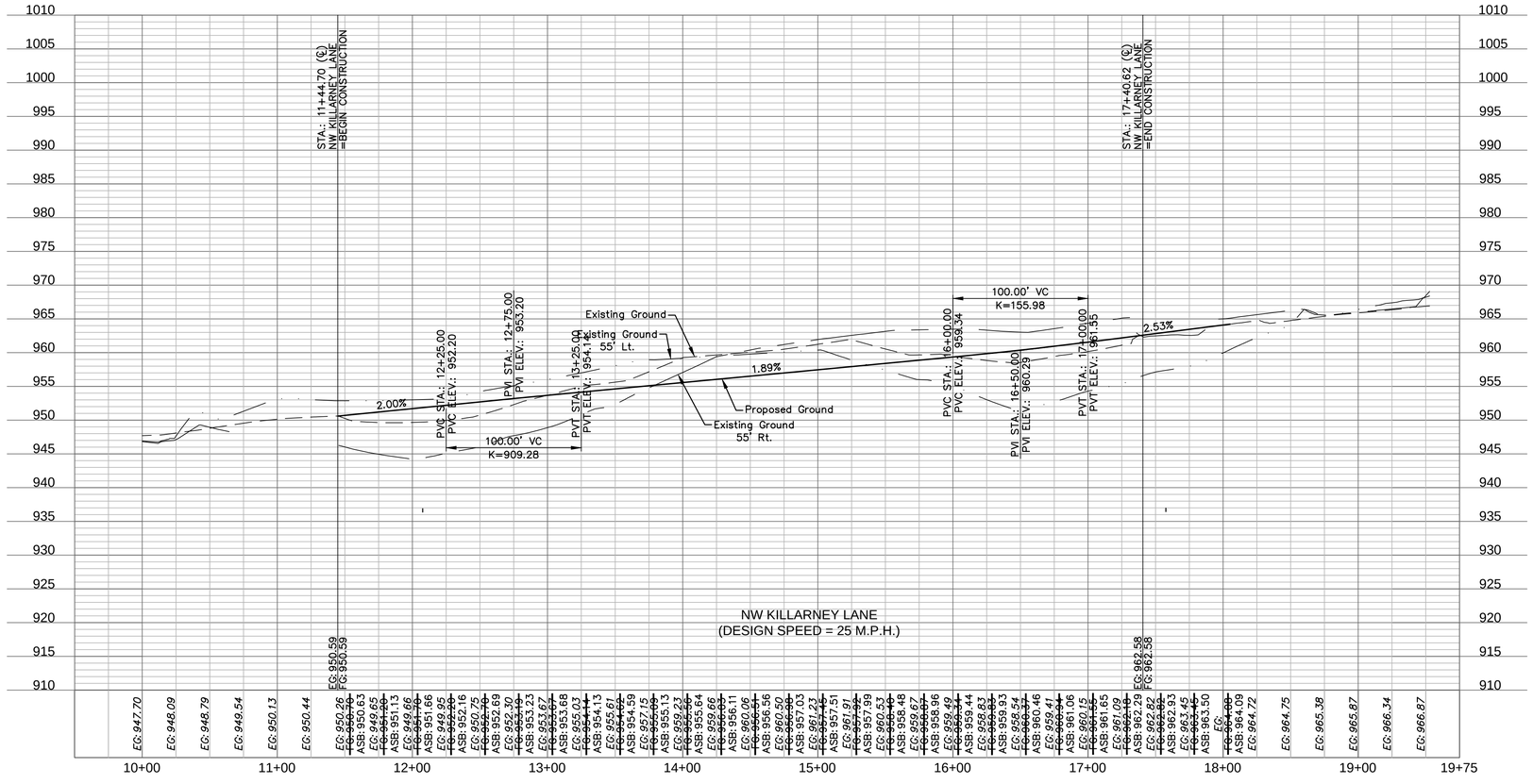


LEGEND	
	CONCRETE SIDEWALK
	ASPHALT PAVEMENT
	MILL AND OVERLAY
	CG-2 CURB & GUTTER



CURVE TABLE					
CURVE ID #	RADIUS (FT)	DELTA	LENGTH (FT)	TANGENT (FT)	P.I. STA. (BK.)
C1	200.00	063°10'08"	220.50	122.97	12+43.68
C2	250.00	102°45'33"	448.37	312.94	16+39.90





ASBUILT
03-24-2022

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-105
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO/REV	DATE	BY	REVISIONS DESCRIPTION
			REVISIONS

ROADWAY PLAN & PROFILE
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

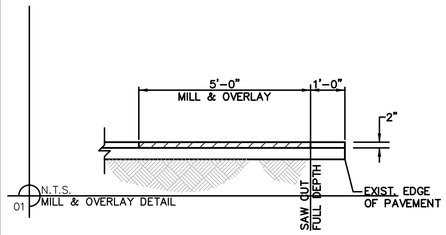
LEE'S SUMMIT, MO

2020

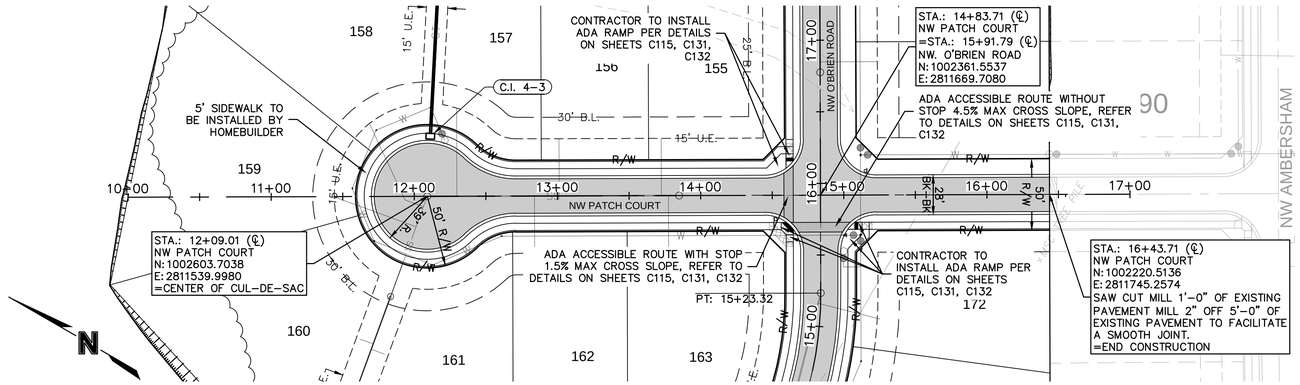
drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

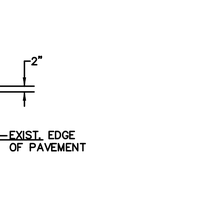
SHEET
C110

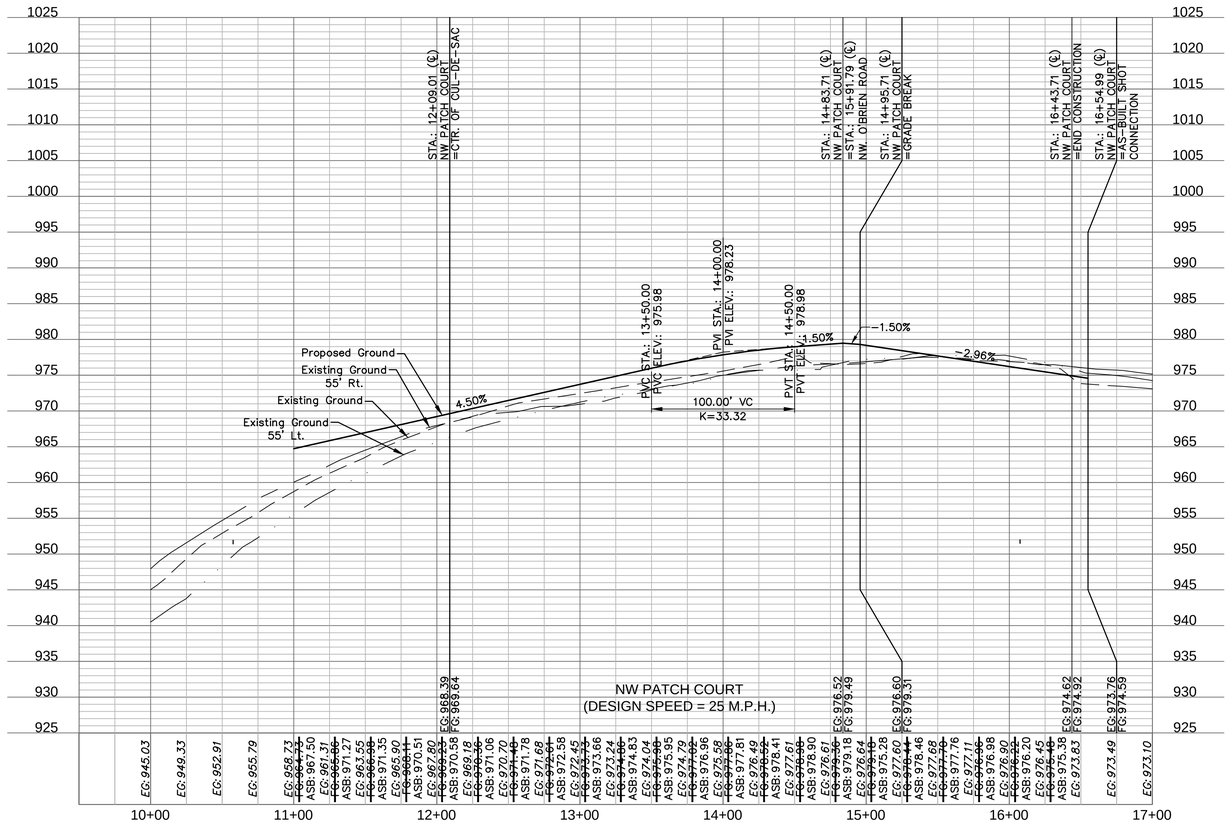
DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_RPP02_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:39pm



LEGEND	
	CONCRETE SIDEWALK
	ASPHALT PAVEMENT
	MILL AND OVERLAY
	CG-2 CURB & GUTTER







ASBUILT
03-24-2022

olsson
MO Certificate of Authority # 001592
101 SW Main Street, Suite 1405
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

ROADWAY PLAN & PROFILE
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

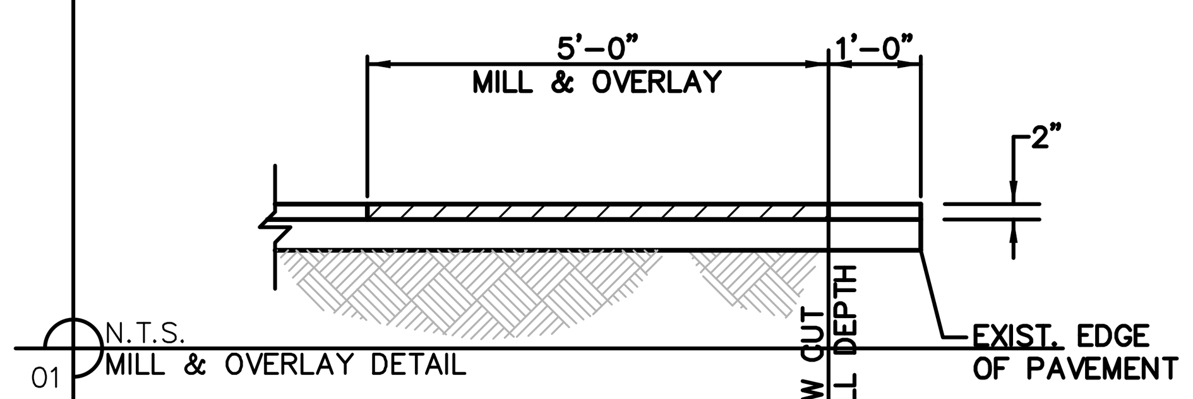
LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C111

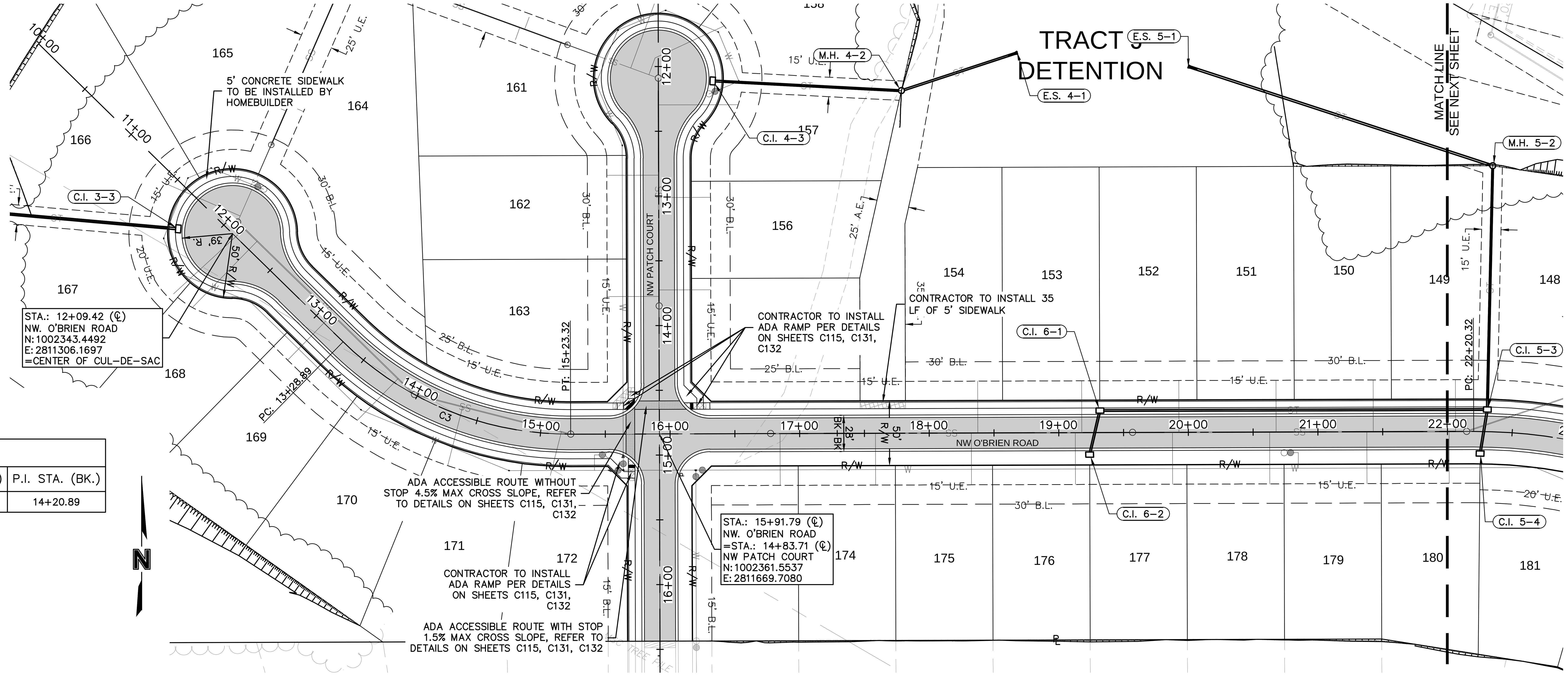
DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_RPP02_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:39pm



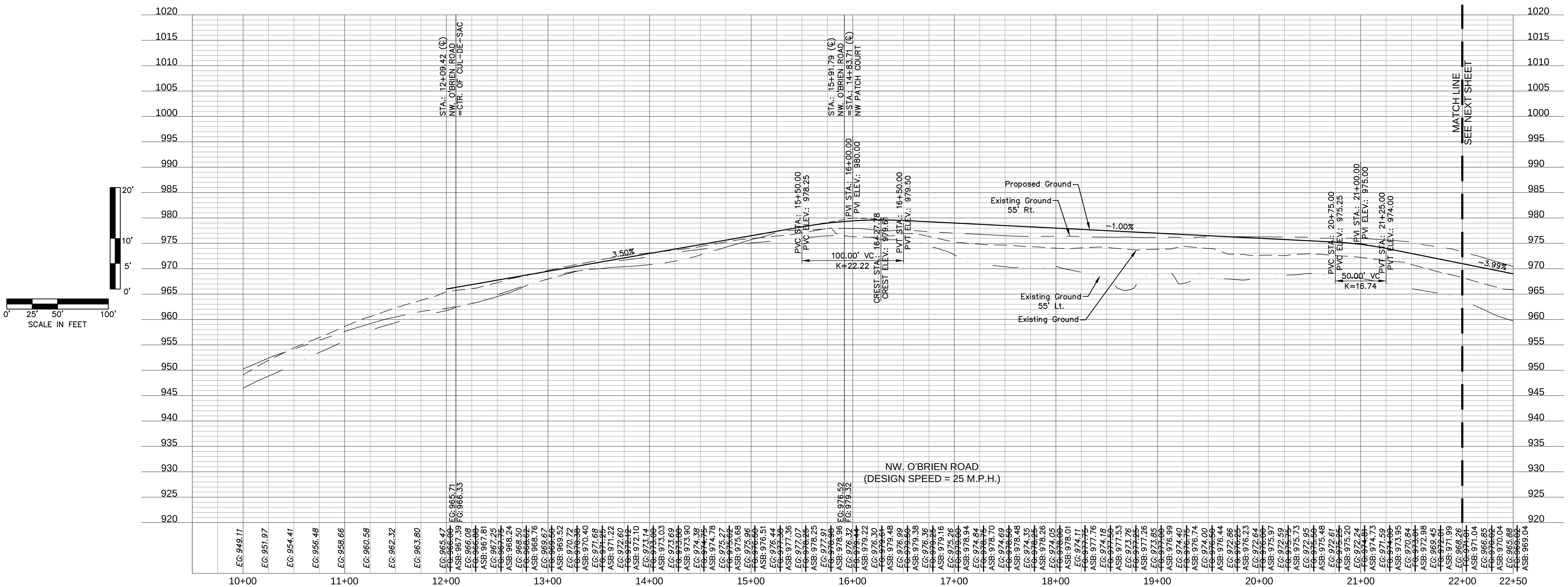
N.T.S.
01 MILL & OVERLAY DETAIL

LEGEND	
	CONCRETE SIDEWALK
	ASPHALT PAVEMENT
	MILL AND OVERLAY
	CG-2 CURB & GUTTER

CURVE TABLE					
CURVE ID #	RADIUS (FT)	DELTA	LENGTH (FT)	TANGENT (FT)	P.I. STA. (BK.)
C3	250.00	044°33'34"	194.43	102.43	14+20.89



ASBUILT
03-24-2022



DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_RPP02_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:39pm

olsson
MO Certificate of Authority #001592
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
PROFESSIONAL ENGINEER
10/27/2022

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

ROADWAY PLAN & PROFILE
STREET & STORM SEWER PLANS

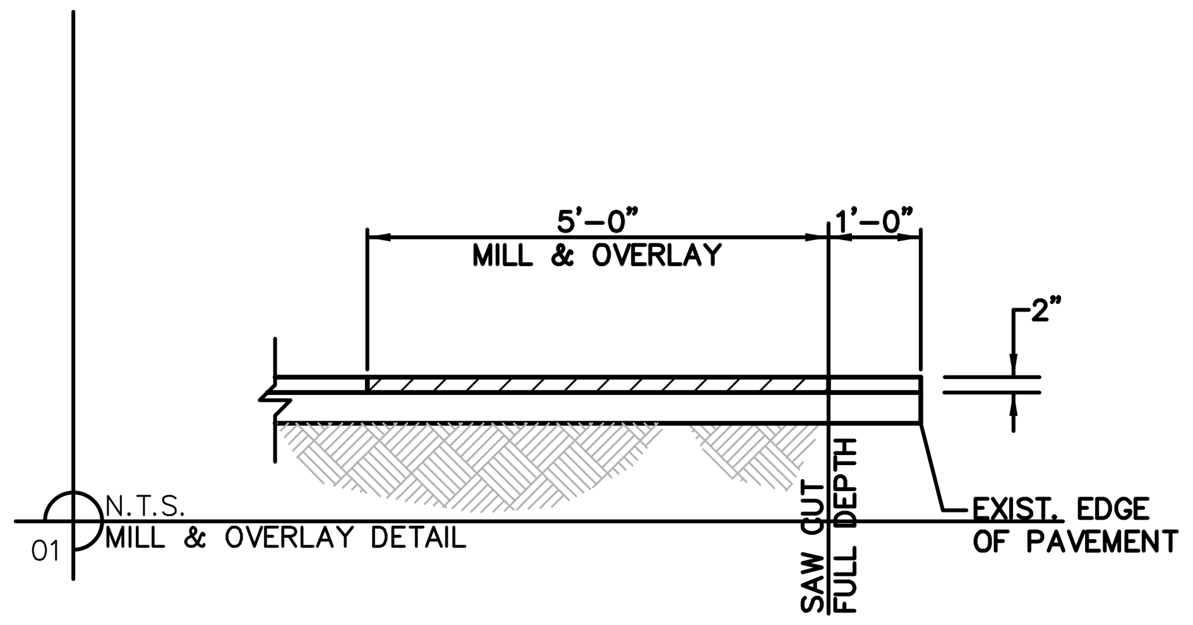
WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by:	C.S.M
checked by:	S.M.S
designed by:	C.S.M
QA/QC by:	J.E.S
project no.:	C18-1140
date:	2020.07.10

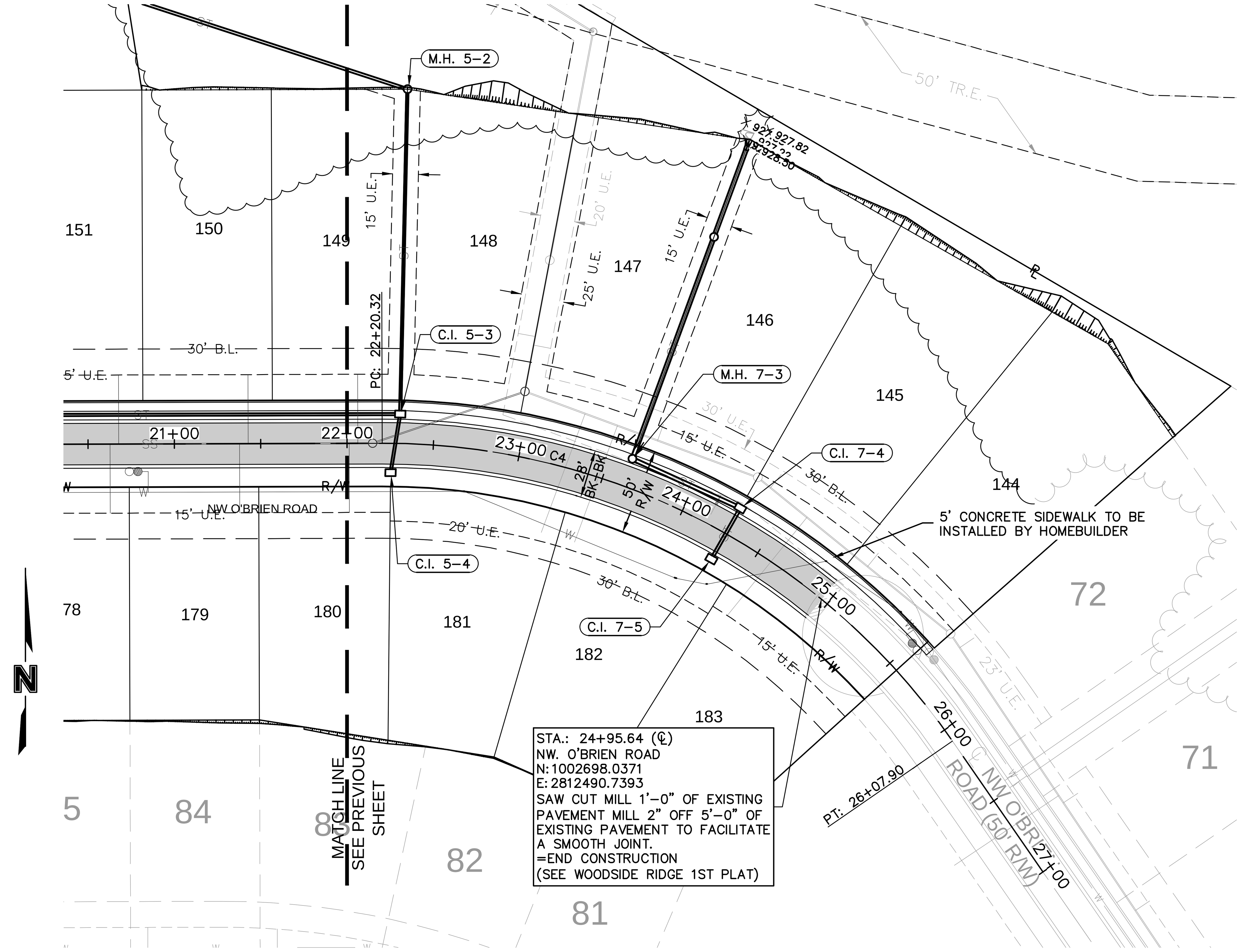
SHEET
C112

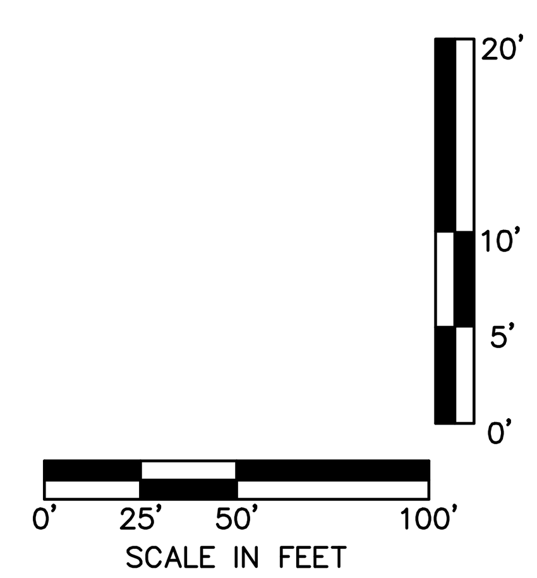


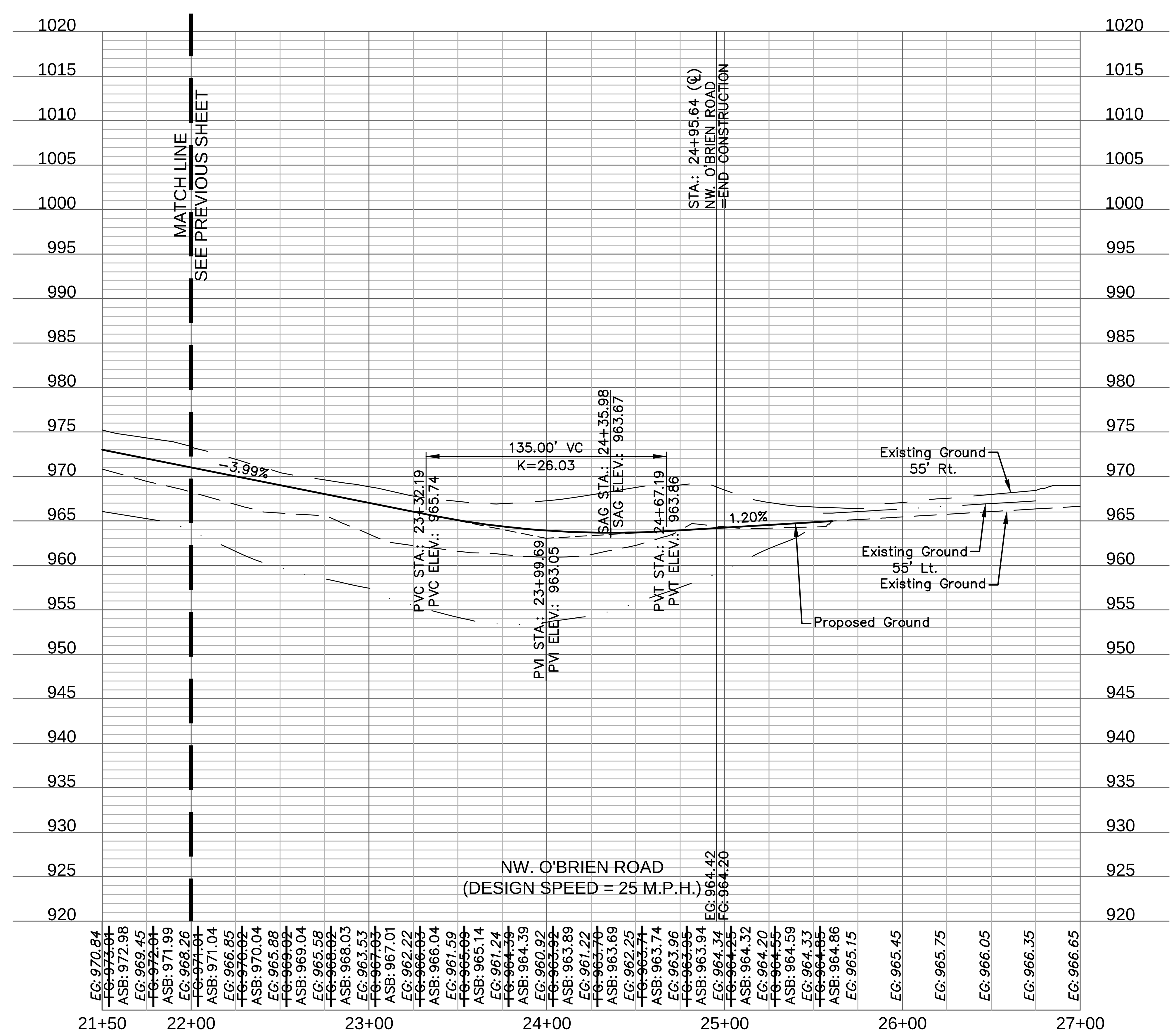
LEGEND	
(symbol)	CONCRETE SIDEWALK
(symbol)	ASPHALT PAVEMENT
(symbol)	MILL AND OVERLAY
(symbol)	CG-2 CURB & GUTTER

CURVE TABLE

CURVE ID #	RADIUS (FT)	DELTA	LENGTH (FT)	TANGENT (FT)	P.I. STA. (BK.)
C4	400.00	055°31'00"	387.58	210.52	23+97.37







ASBUILT
03-24-2022

olsson

MO Certificate of Authority #001592
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

ROADWAY PLAN & PROFILE
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

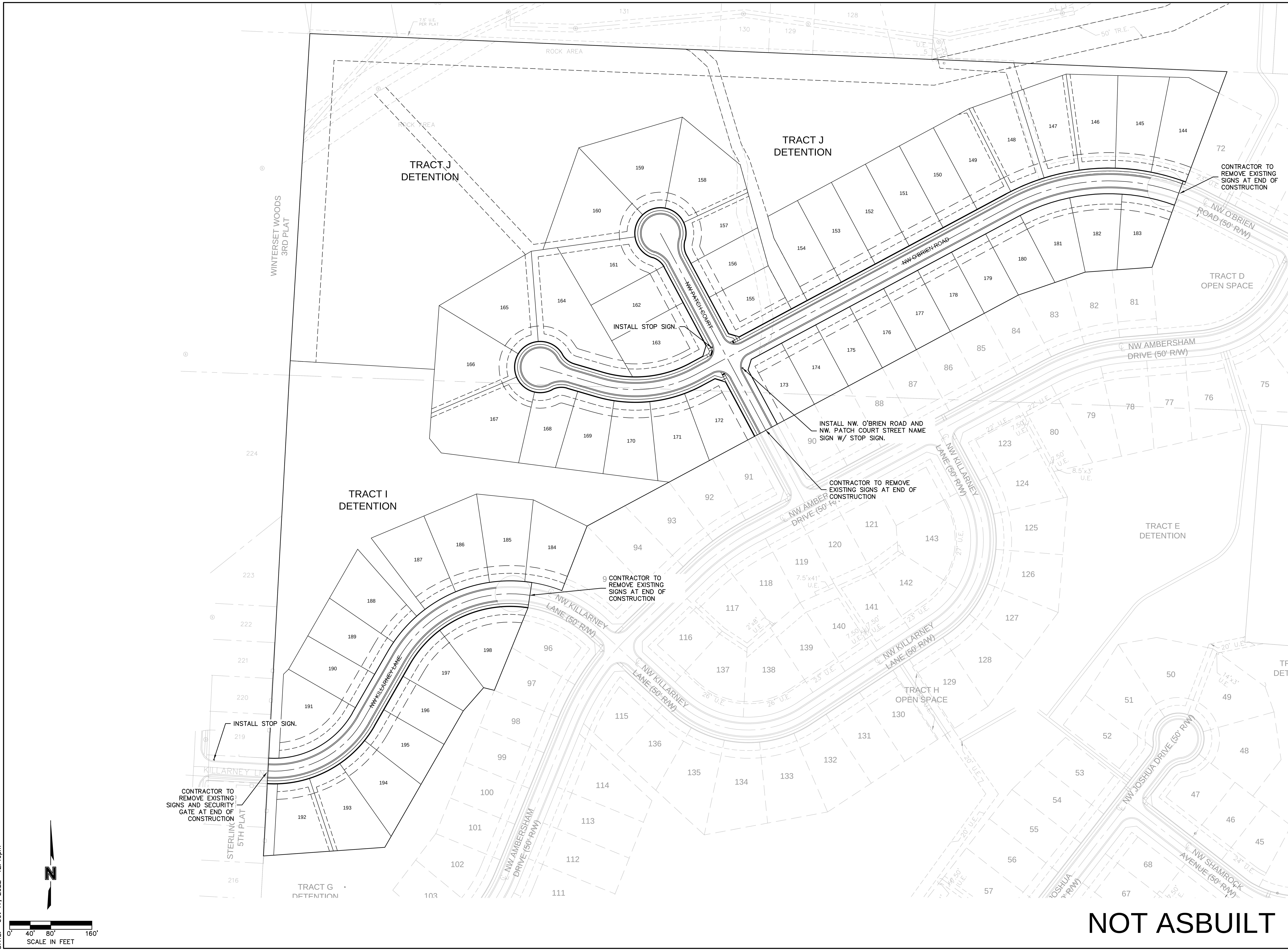
LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C113

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_RPP02_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:40pm



NOT ASBUILT

olsson

MO Certificate of Authority #001592
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
PROFESSIONAL ENGINEER
10/27/2022

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

TRAFFIC CONTROL PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

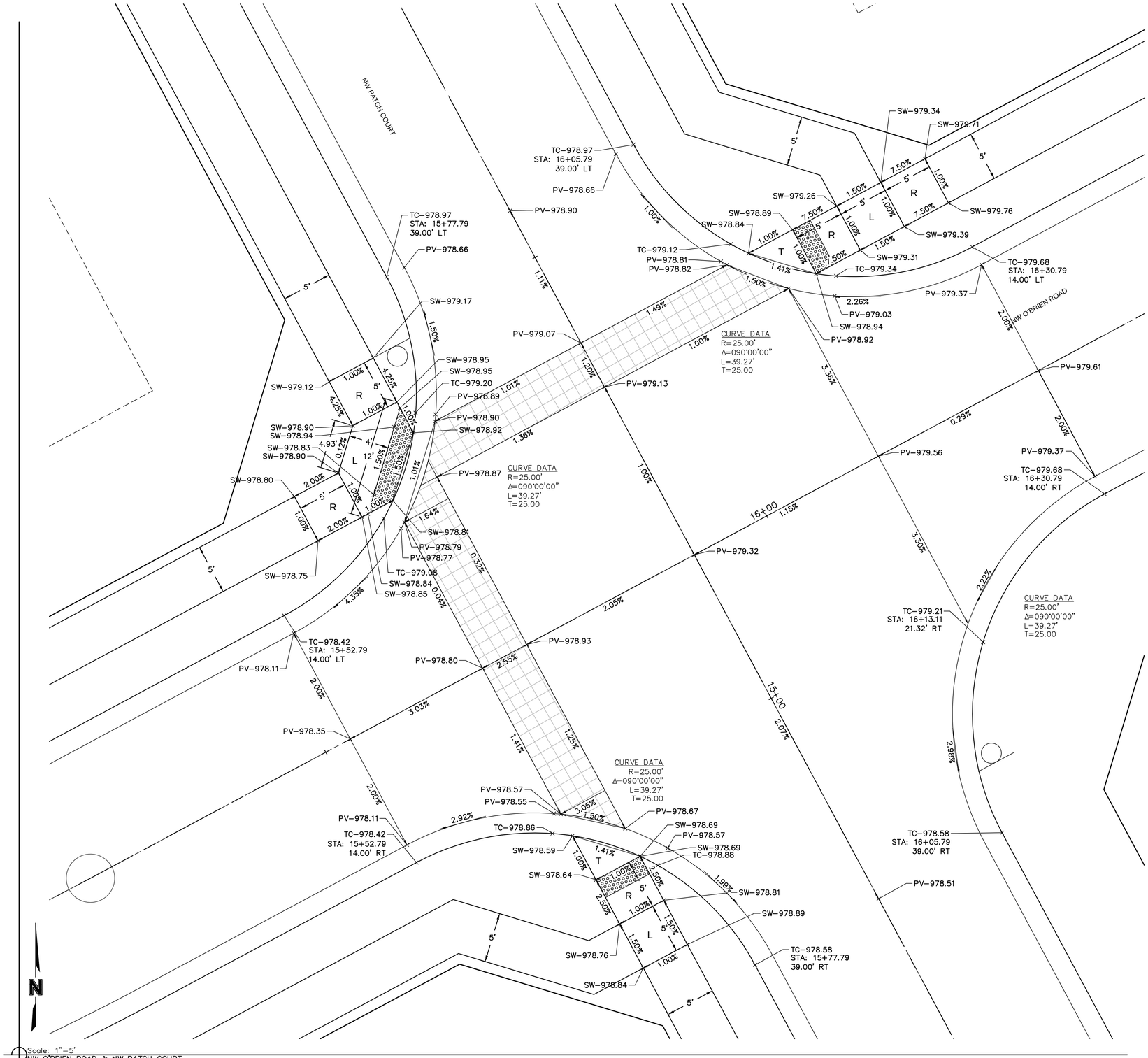
2020

LEE'S SUMMIT, MO

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C114

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_TRF02_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:40pm



NOT ASBUILT

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_SPT02_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:41pm

olsson
MO Certificate of Authority # 001592
3301 American Avenue, Suite 105
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION
3	2021.09.14	REVISED PER CITY COMMENTS
4	2021.09.22	REVISED PER CONTRACTOR COMMENT

BY

INTERSECTION DETAILS
STREET & STORM SEWER PLANS

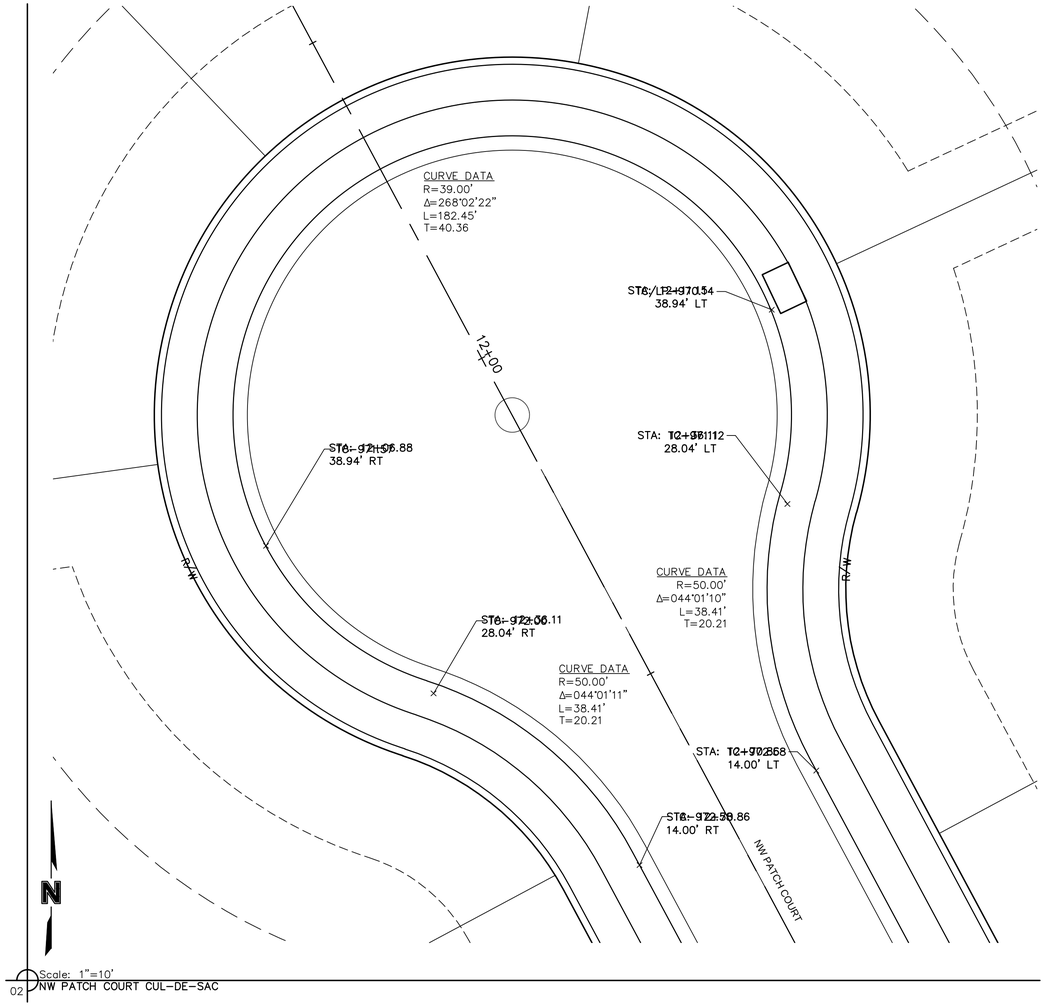
WOODSIDE RIDGE
SECOND PLAT

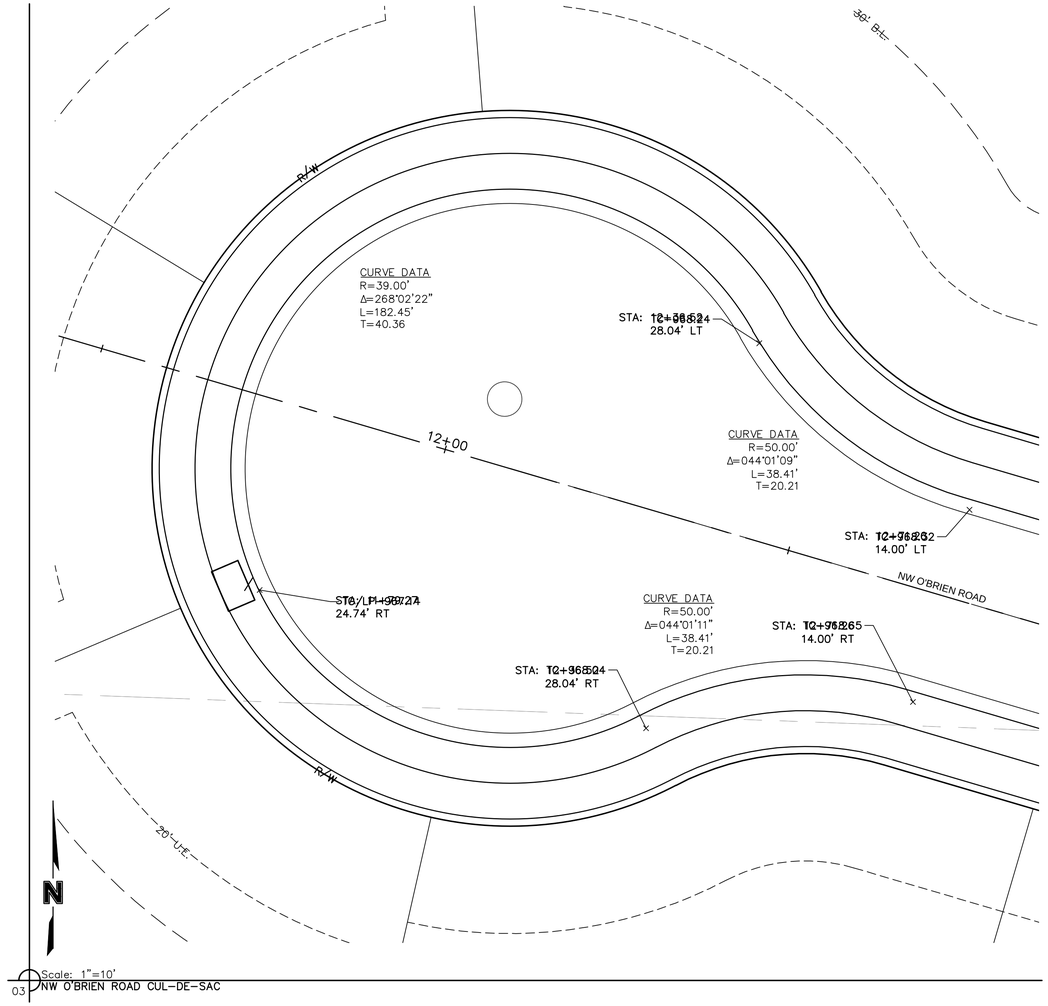
2020

LEE'S SUMMIT, MO

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C115





NOT ASBUILT

olsson
MO Certificate of Authority # 001592
3301 W. 95th STREET, SUITE 105
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

INTERSECTION DETAILS
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

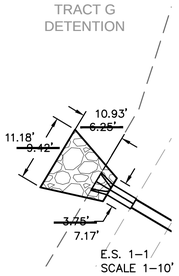
LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

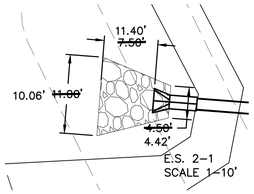
SHEET
C116

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_SPT02_C181140.dwg
DATE: Oct 17, 2022 12:41pm
USER: ssoylor



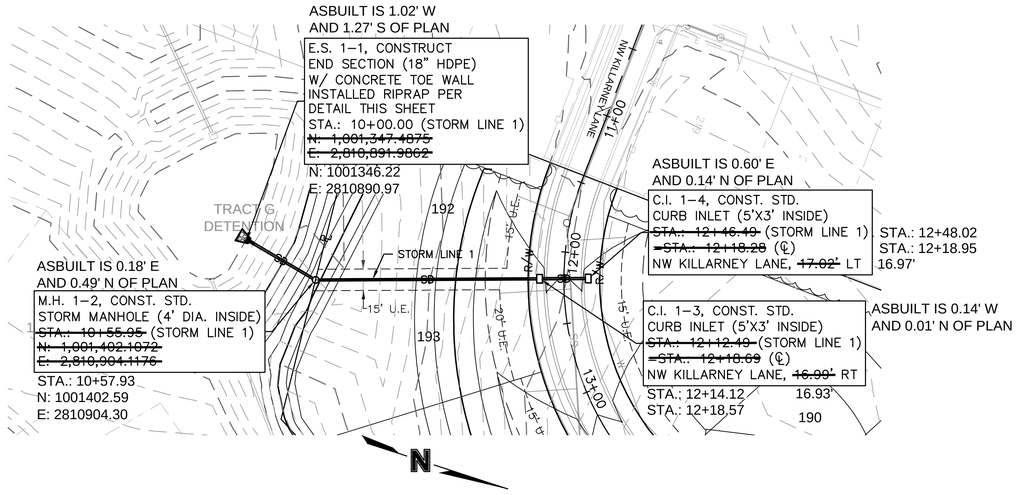
Riprap Calculations							
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 1-1	7.34	1.25	3	10	6.25	2.00	~~3.5~~
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							

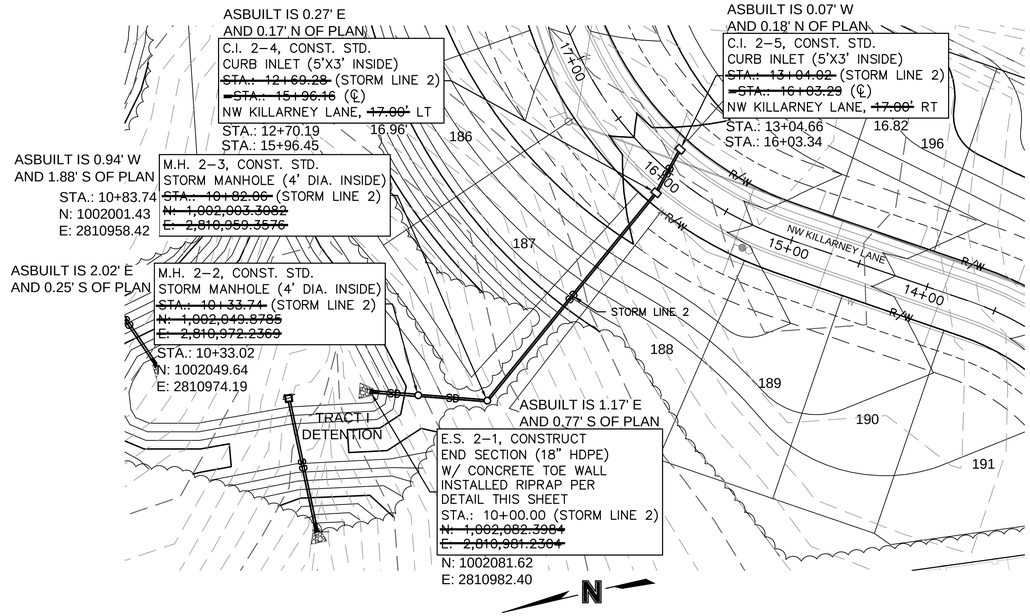
19.74



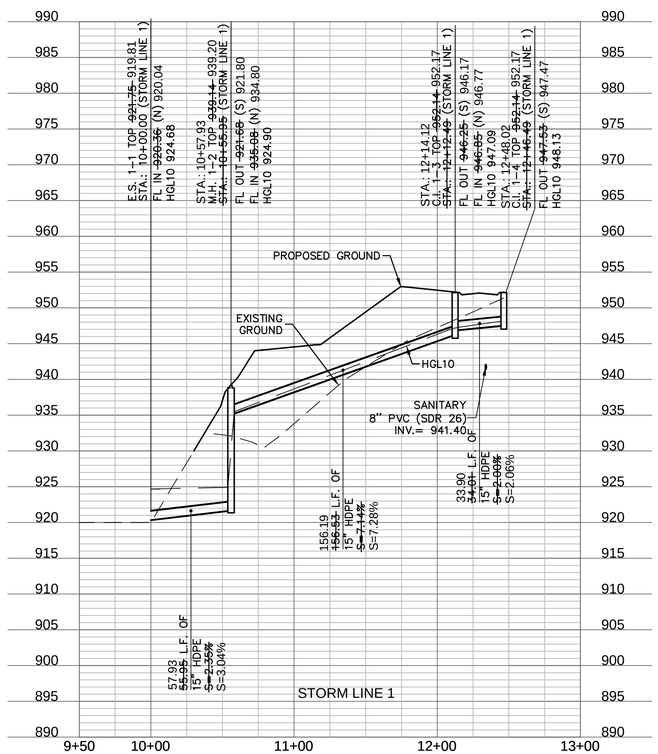
Riprap Calculations							
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 2-1	9.35	1.5	3	10	7.5	2.00	~~7.3~~
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							

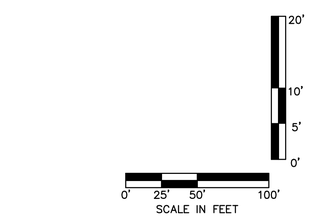
8.77

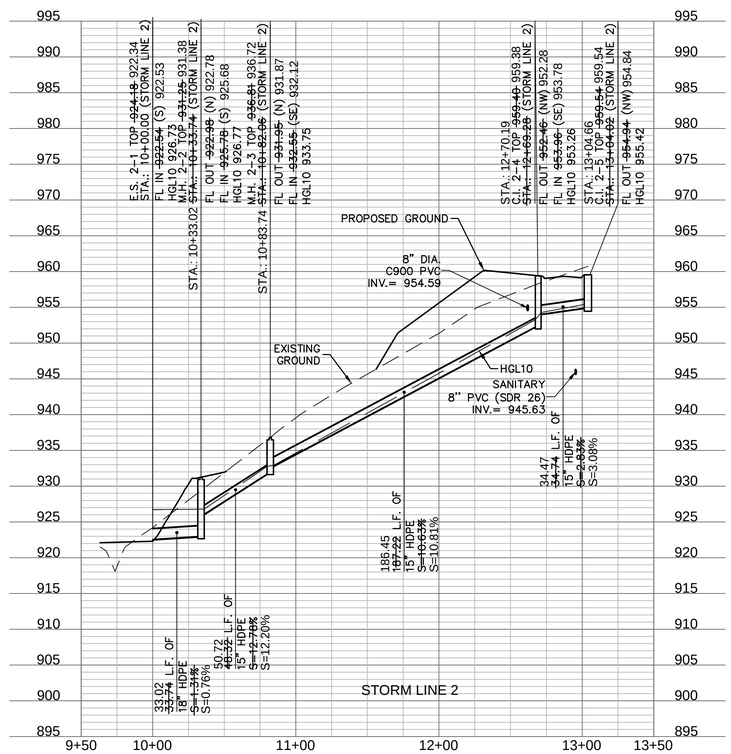




ASBUILT
03-24-2022







olsson
MO Certificate of Authority #001592
KS Certificate of Authority #E-2011
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
2	3/16/2021	REVISED PER CONTRACTOR COMMENT	

REVISIONS

STORM SEWER PLAN & PROFILE
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

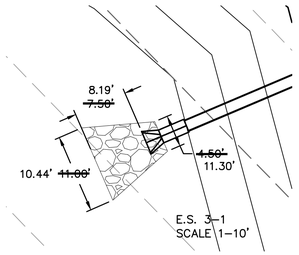
LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

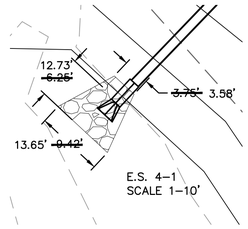
SHEET
C117

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_STM02_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:59pm



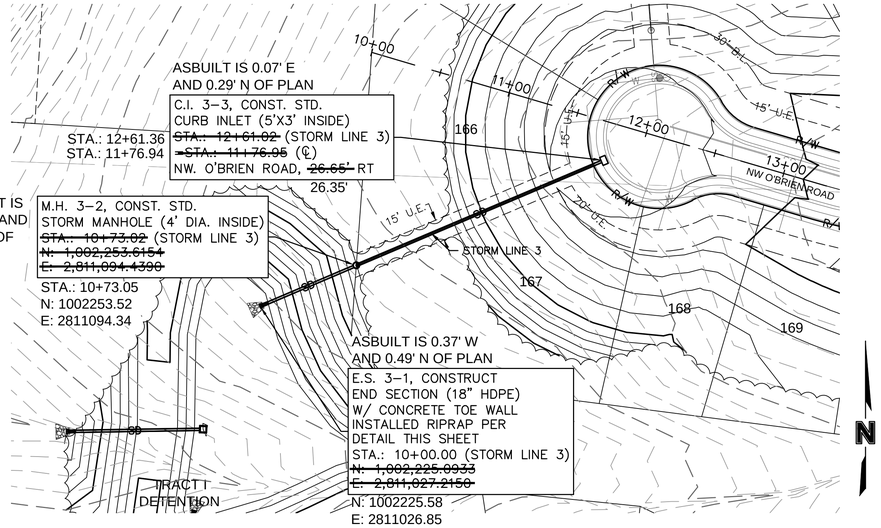
Riprap Calculations							
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 3-1	7.83	1.5	3	10	7.5	2.00	~~5.5~~
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							

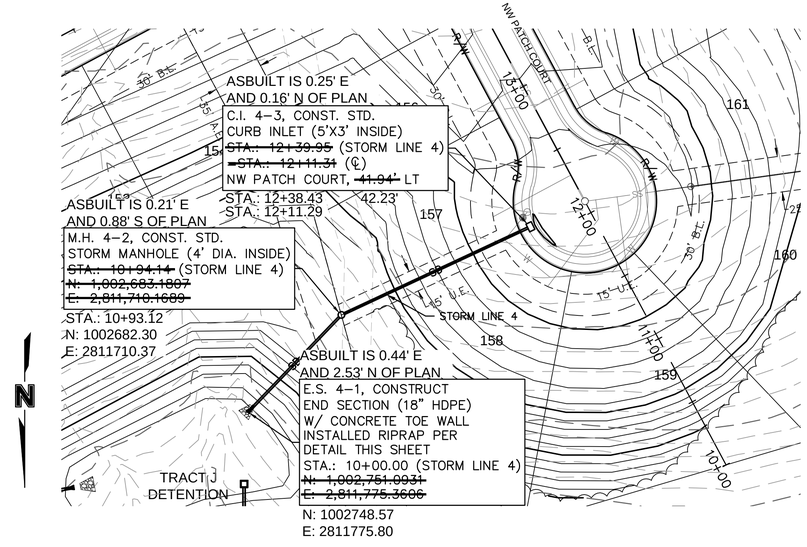
10.41



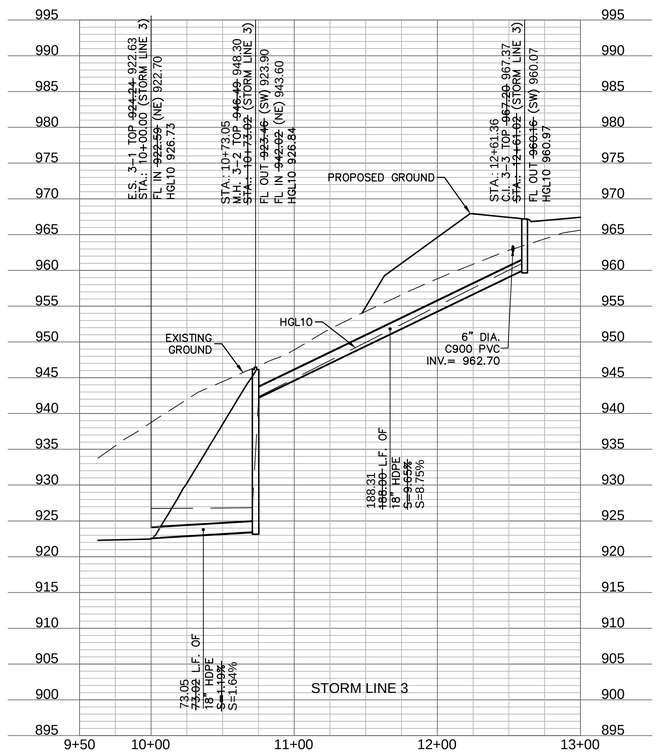
Riprap Calculations							
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 4-1	6.05	1.25	3	10	6.25	2.00	~~7.9~~
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							

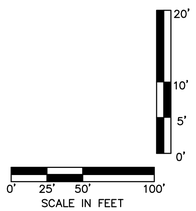
13.71

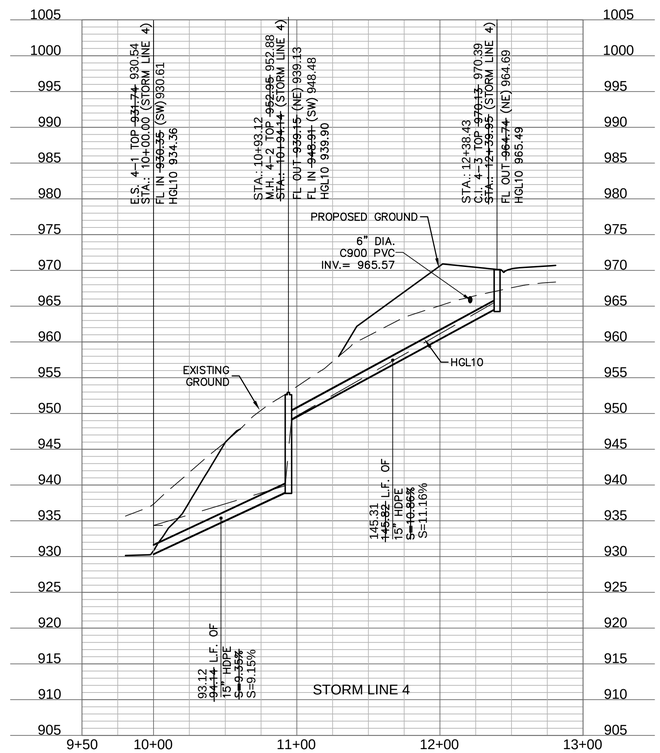




ASBUILT
03-24-2022







olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2045
1301 MAIN STREET, SUITE 400
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
2	3/16/2021	REVISED PER CONTRACTOR COMMENT	

REVISIONS

STORM SEWER PLAN & PROFILE
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

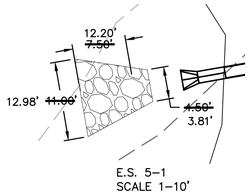
LEE'S SUMMIT, MO

2020

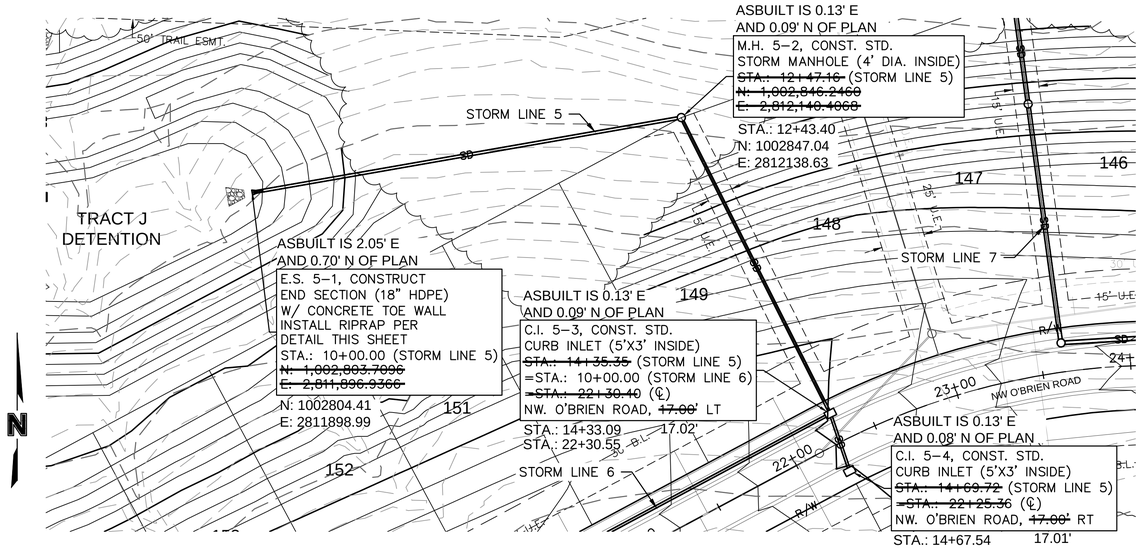
drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

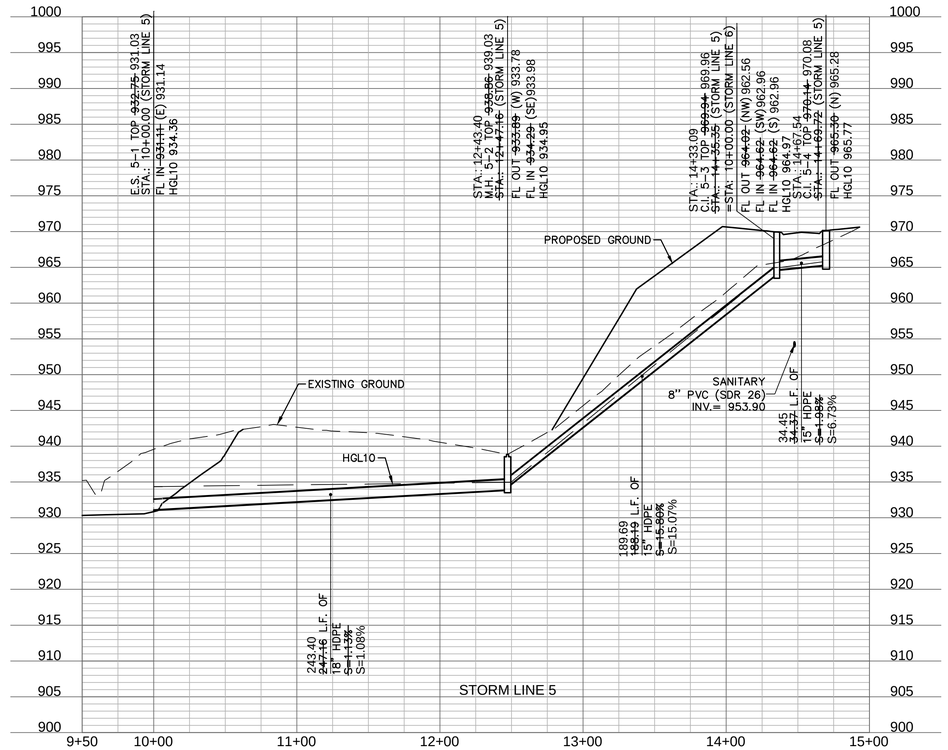
SHEET
C118

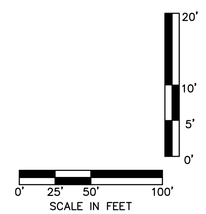
DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_STM02_C181140.dwg
DATE: Oct 17, 2022 1:00pm
USER: ssoylor



Riprap Calculations							
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 5-1	9.89	1.5	3	10	7.5	2.00	~~27.4~~ 13.12
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							







ASBUILT
03-24-2022

olsson
MO Certificate of Authority # 001592
3101 BROADWAY, SUITE 515
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
2	3/16/2021	REVISED PER CONTRACTOR COMMENT	

REVISIONS

STORM SEWER PLAN & PROFILE
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

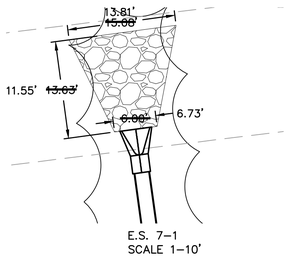
2020

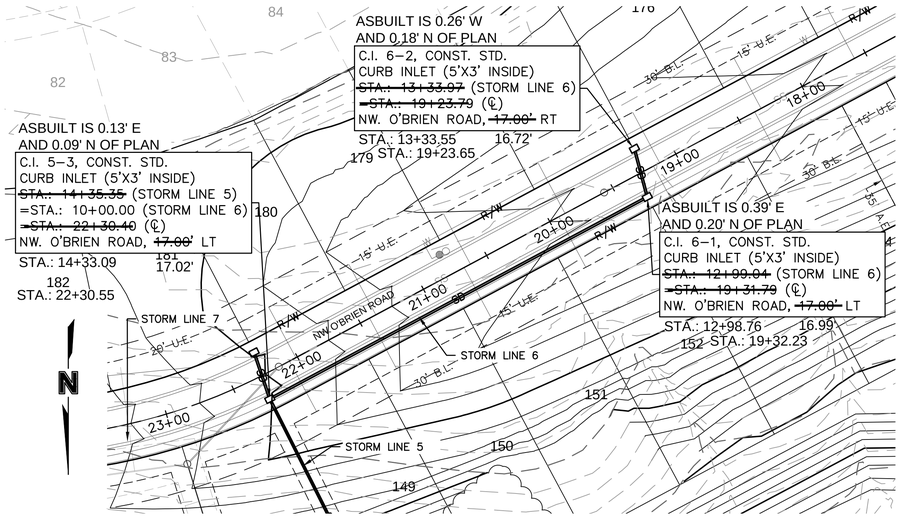
drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

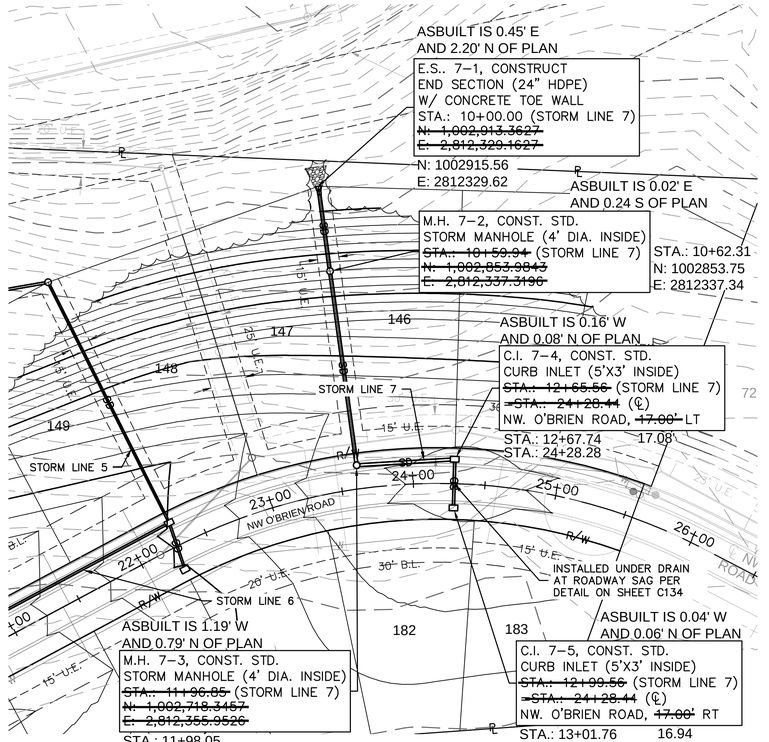
SHEET
C119

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_STM02_C181140.dwg
DATE: Oct 17, 2022 1:00pm
USER: ssoylor

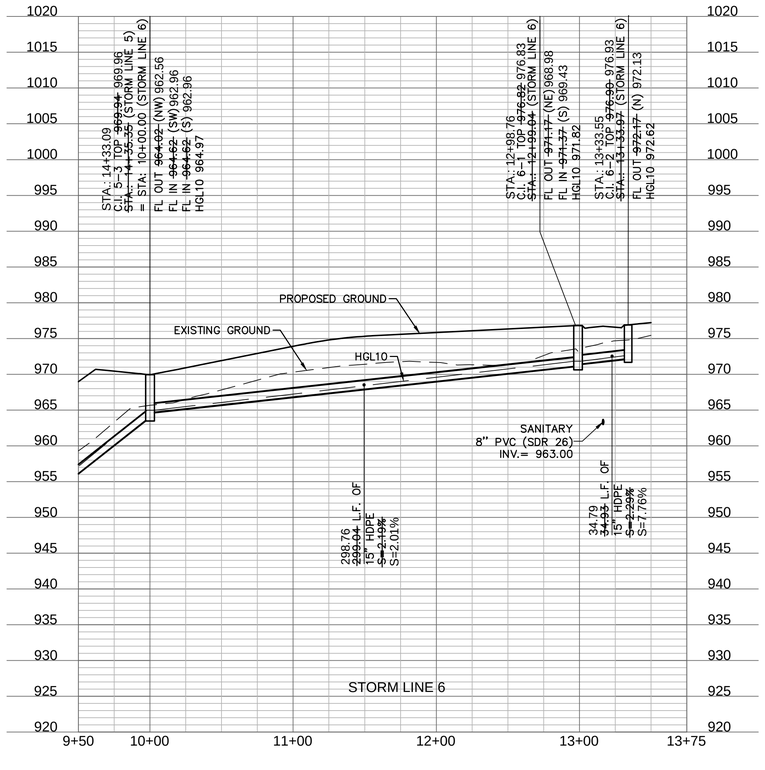
Riprap Calculations							
End Section	Q_{100} (cfs)	Pipe Diameter (ft)	Class*	D50* (in)	Apron Length (ft)	Apron Depth (ft)	Area (SY)
E.S. 7-1	18.97	2	3	10	10	2.00	~~27.4~~ 12.40
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							

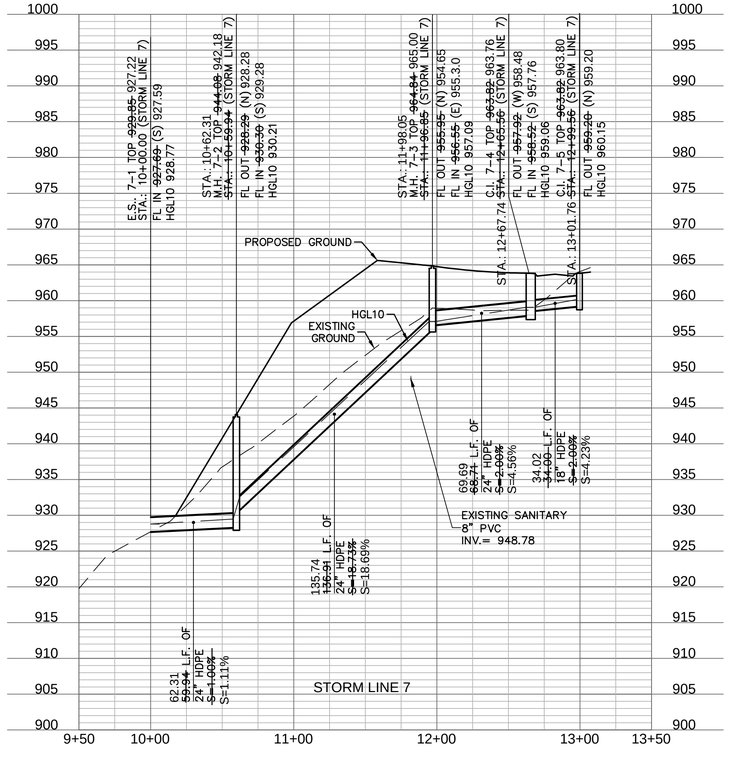


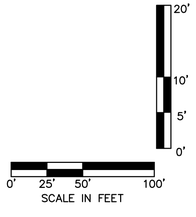




ASBUILT
03-24-2022







olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-1045
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
2	3/16/2021	REVISED PER CONTRACTOR COMMENT	

REVISIONS

STORM SEWER PLAN & PROFILE
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

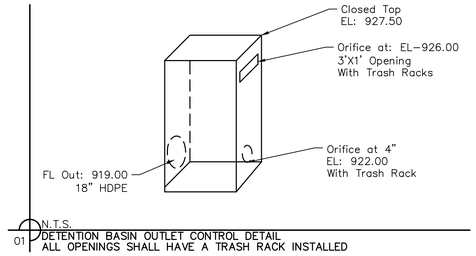
LEES SUMMIT, MO

2020

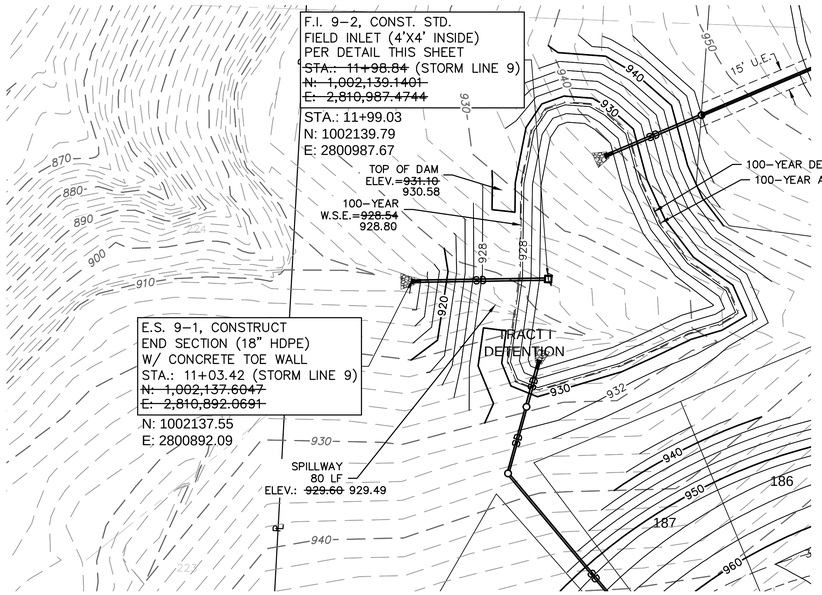
drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

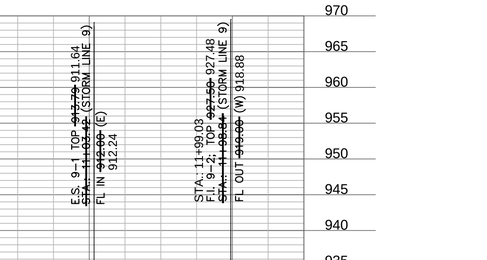
SHEET
C120

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_STM02_C181140.dwg
DATE: Oct 17, 2022 1:00pm
USER: ssoylor

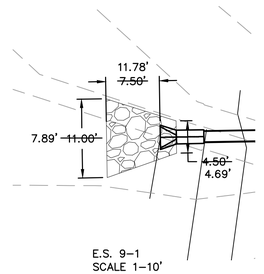


01 DETENTION BASIN OUTLET CONTROL DETAIL
ALL OPENINGS SHALL HAVE A TRASH RACK INSTALLED





NOTES:
1. CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION AND IS RESPONSIBLE FOR ANY DEWATERING NECESSARY FOR CONSTRUCTION. DEWATERING SHALL BE SUBSIDIARY TO OTHER BID ITEMS.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING THE STRUCTURE DIMENSIONS, INVERTS, AND STRUCTURAL REINFORCEMENT DETAILS ON THE PRINCIPAL SPILLWAY.



E.S. 9-1
SCALE 1-10'

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	23.91	1.5	3	10	7.5	2.00	~~27.4~~ 23.88
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							

EARTHWORK QUANTITIES	
CUT (C.Y.)	FILL (C.Y.)
6,485	2,184

10yr. W.S.E.	100yr. W.S.E.
926.73	928.54

ASBUILT
03-24-2022

olsson
MO Certificate of Authority # 001592
1301 Burlington, Suite 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

DETENTION BASIN PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

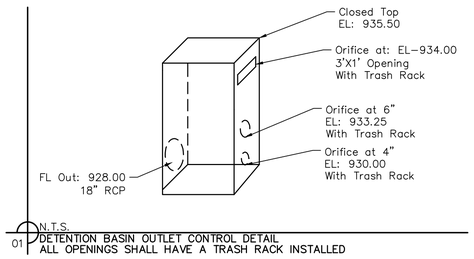
LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C121

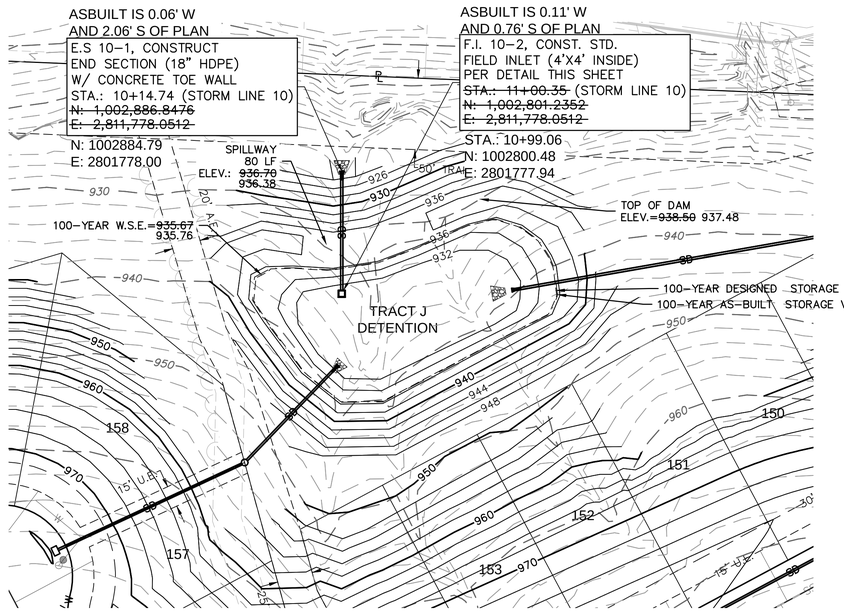
DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_DBP02_C18140.dwg USER: ssoylor
DATE: Oct 17, 2022 1:00pm

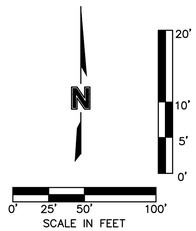


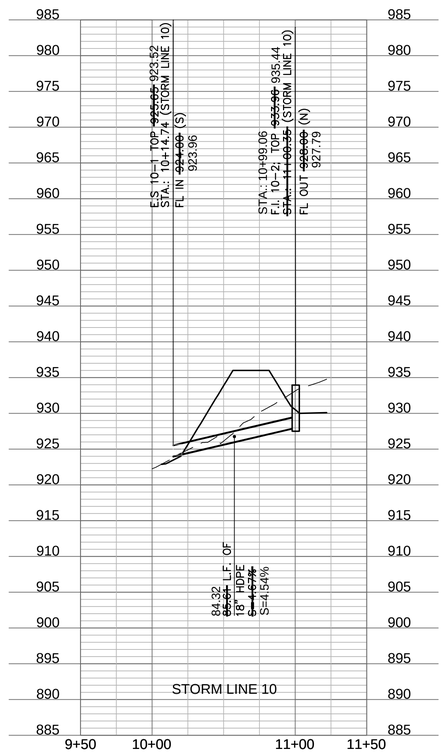
01 DETENTION BASIN OUTLET CONTROL DETAIL
ALL OPENINGS SHALL HAVE A TRASH RACK INSTALLED

EARTHWORK QUANTITIES	
CUT (C.Y.)	FILL (C.Y.)
4,012	2,535

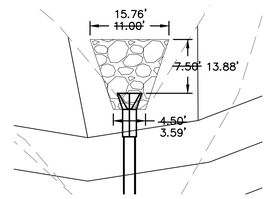
10yr. W.S.E.	100yr. W.S.E.
934.36	935.67







NOTES:
1. CONTRACTOR SHALL MAINTAIN DRAINAGE DURING CONSTRUCTION AND IS RESPONSIBLE FOR ANY DEWATERING NECESSARY FOR CONSTRUCTION. DEWATERING SHALL BE SUBSIDIARY TO OTHER BID ITEMS.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING THE STRUCTURE DIMENSIONS, INVERTS, AND STRUCTURAL REINFORCEMENT DETAILS ON THE PRINCIPAL SPILLWAY.



E.S. 10–1
SCALE 1–10'

Riprap Calculations								
End Section	Q_{100}	Pipe Diameter	Class*	D50*	Apron Length	Apron Depth	Area
	(cfs)	(ft)		(in)	(ft)	(ft)	(SY)
E.S. 10-1	18.41	1.5	3	10	7.5	2.00	~~27.4~~ 23.84
*Per Table 10.1 HEC 14-FHWA-Energy Dissipators Pg. 10-18							

ASBUILT
03-24-2022

olsson
MO Certificate of Authority # 001592
1301 Burlington, Suite 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

DETENTION BASIN PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18.1140
date: 2020.07.10

SHEET
C122

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_DBP02_C18140.dwg USER: ssoylor
DATE: Oct 17, 2022 1:00pm

KEY MAP

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

NOTES:

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

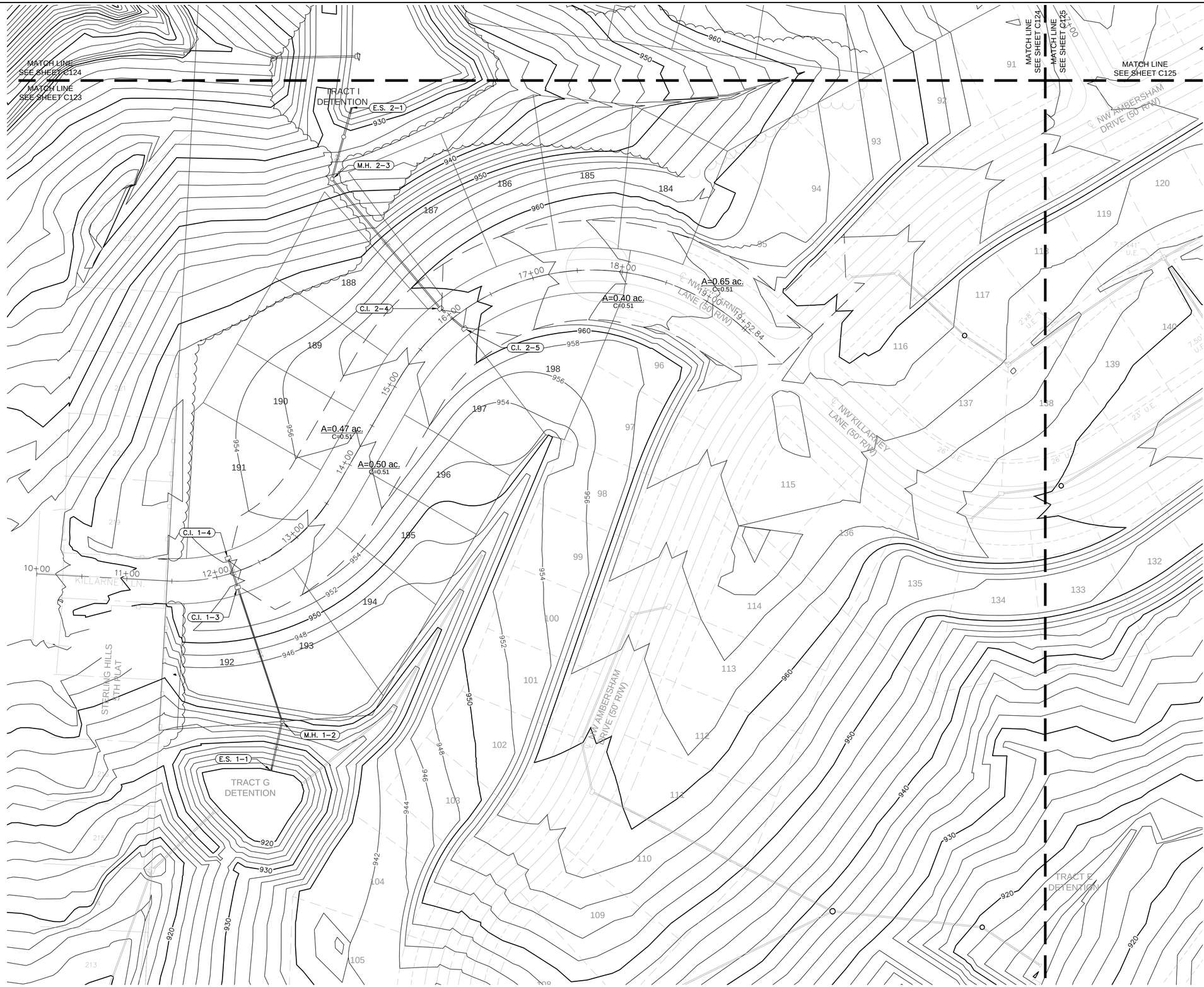
2. PLAT IS LOCATED IN ZONE X, "AREAS OUTSIDE THE 1–PERCENT ANNUAL CHANCE FLOODPLAINS, AREAS OF 1–PERCENT ANNUAL CHANCE SHEET FLOW FLOODING WHERE THE AVERAGE DEPTHS ARE LESS THAN 1 FOOT, AREAS OF 1–PERCENT ANNUAL CHANCE STREAM FLOODING WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 1 SQUARE MILE, OR AREAS PROTECTED FROM THE 1–PERCENT ANNUAL CHANCE FLOOD BY LEVEES. NO BASE FLOOD ELEVATIONS OR DEPTHS ARE SHOWN WITHIN THIS ZONE"

3. BUFFER ZONE FOR NATURAL STREAMS IS LOCATED WITHIN PLAT.

4. MLO ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN CORNER MBOES SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.

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

NOT ASBUILT



olsson

MO Certificate of Authority # 001592
KS Certificate of Authority # E-2045
NORTH KANSAS CITY, MO 64116

TEL 816.361.1177

www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

DRAINAGE PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C123

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_DRN02_C181140.dwg
DATE: Oct 17, 2022 12:44pm
USER: ssaylor

KEY MAP

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

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

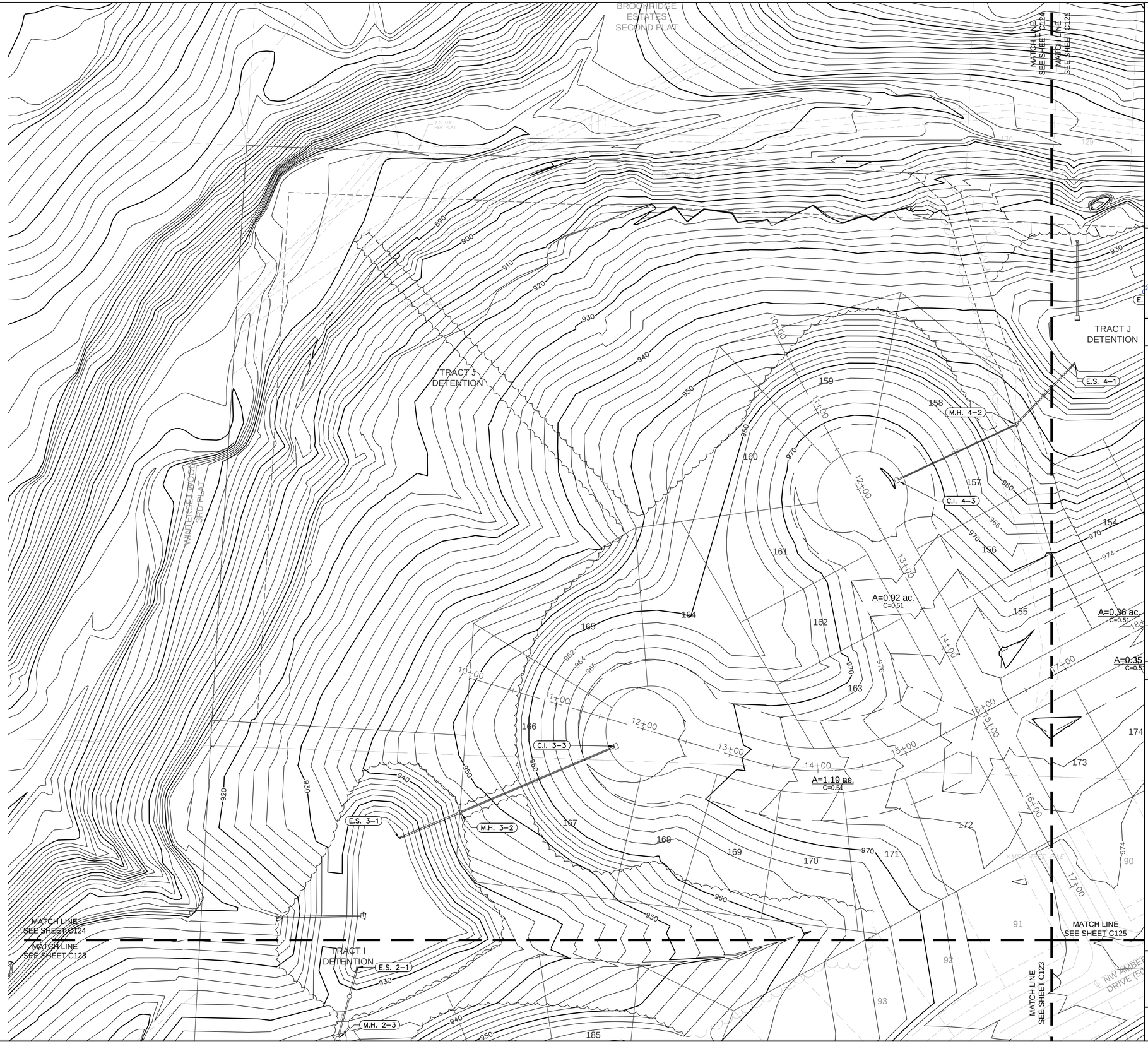
2. PLAT IS LOCATED IN ZONE X, "AREAS OUTSIDE THE 1–PERCENT ANNUAL CHANCE FLOODPLAINS, AREAS OF 1–PERCENT ANNUAL CHANCE SHEET FLOW FLOODING WHERE THE AVERAGE DEPTHS ARE LESS THAN 1 FOOT, AREAS OF 1–PERCENT ANNUAL CHANCE STREAM FLOODING WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 1 SQUARE MILE, OR AREAS PROTECTED FROM THE 1–PERCENT ANNUAL CHANCE FLOOD BY LEVEES. NO BASE FLOOD ELEVATIONS OR DEPTHS ARE SHOWN WITHIN THIS ZONE"

3. BUFFER ZONE FOR NATURAL STREAMS IS LOCATED WITHIN PLAT.

4. MLO ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN CORNER MBOES SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.

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

NOT ASBUILT



N

0' 25' 50' 100'
SCALE IN FEET

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2010
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO/ REV.	DATE	REVISIONS DESCRIPTION	BY

DRAINAGE PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18.1140
date: 2020.07.10

SHEET
C124

DWG: F:\2018\1001–1500\018–1140–C\40–Design\AutoCAD\Final Plans – Asbuilts\Sheets\GNCV\Street & Storm\C_DRN02_C181140.dwg
DATE: Oct 17, 2022 12:44pm
USER: ssoylor

KEY MAP

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

NOTES:

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

2. PLAT IS LOCATED 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. BUFFER ZONE FOR NATURAL STREAMS IS LOCATED WITHIN PLAT.

4. MLO ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN CORNER MBOES SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.

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

NOT ASBUILT

MATCH LINE
SEE SHEET C124

MATCH LINE
SEE SHEET C125

MATCH LINE
SEE SHEET C124

MATCH LINE
SEE SHEET C123

MATCH LINE
SEE SHEET C123

TRACT J
DETENTION

TRACT D
OPEN SPACE

TRACT E
DETENTION

M.H. 5–2
E.S. 5–1
E.S. 4–1
M.H. 4–2
C.I. 4–3
C.I. 6–1
C.I. 6–2
C.I. 5–3
C.I. 5–4
M.H. 7–3
C.I. 7–4
C.I. 7–5

A=0.92 ac. C=0.51
A=0.36 ac. C=0.51
A=0.35 ac. C=0.51
A=0.35 ac. C=0.51
A=1.53 ac. C=0.51
A=0.99 ac. C=0.51

℄ NW AMBERSHAM DRIVE (50' R/W)
℄ NW KILLARNEY LANE (50' R/W)
℄ NW OBRIEN ROAD (50' R/W)

N

0' 25' 50' 100'
SCALE IN FEET

DWG: F:\2018\1001–1500\018–1140–C\40–Design\AutoCAD\Final Plans – Asbuilts\Sheets\GNCV\Street & Storm\C_DRN02_C181140.dwg
DATE: Oct 17, 2022 12:44pm USER: ssoylor

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2018
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

DRAINAGE PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C125

Storm Sewer Design Calculation Table

10 Year Return Frequency

Upstream Structure	Downstream Structure	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope (%)	Diameter (in)	Manning's n	Total Flow (cfs)	Velocity (ft/s)	Capacity (cfs)	Flow Depth (ft)	Upstream Struct. HGL (ft)
M.H. 5-2	Outfall	253.96	933.89	930.00	1.53	18	0.012	5.48	3.60	14.08	1.50	934.95
C.I. 5-3	M.H. 5-2	188.19	964.02	934.29	15.80	15	0.012	5.48	6.22	27.80	0.77	964.97
C.I. 6-1	C.I. 5-3	299.05	971.17	964.62	2.19	15	0.012	2.66	5.58	10.35	0.43	971.82
C.I. 6-2	C.I. 6-1	34.93	972.17	971.37	2.29	15	0.012	1.31	3.27	10.59	0.45	972.62 j
C.I. 5-4	C.I. 5-3	34.40	965.30	964.62	1.98	15	0.012	1.41	4.20	9.84	0.35	965.77
M.H. 7-2	Outfall	42.64	925.43	925.00	1.01	24	0.012	10.22	6.48	24.61	0.90	926.57
M.H. 7-3	M.H. 7-2	178.96	955.95	925.75	16.88	24	0.012	10.22	6.94	100.66	0.82	957.09
C.I. 7-4	M.H. 7-3	68.71	957.92	956.55	1.99	24	0.012	10.22	7.54	34.60	0.75	959.06
C.I. 7-5	C.I. 7-4	34.00	959.20	958.52	2.00	18	0.012	6.12	6.82	16.09	0.64	960.15
M.H. 2-2	Outfall	33.74	922.67	922.00	1.99	18	0.012	3.94	2.23	16.03	1.50	926.77
M.H. 2-3	M.H. 2-2	48.32	931.95	925.78	12.77	15	0.012	3.94	4.20	25.00	1.02	932.75 j
C.I. 2-4	M.H. 2-3	187.22	952.46	932.55	10.63	15	0.012	3.94	9.33	22.81	0.35	953.26
C.I. 2-5	C.I. 2-4	34.74	954.94	953.96	2.82	15	0.012	1.50	4.99	11.75	0.30	955.42
M.H. 4-2	Outfall	91.51	939.15	930.00	10.00	15	0.012	3.45	3.65	22.12	1.25	939.90 j
C.I. 4-3	M.H. 4-2	145.82	964.74	948.91	10.86	15	0.012	3.45	8.99	23.05	0.33	965.49
M.H. 1-2	Outfall	55.95	921.68	920.00	3.00	15	0.012	4.34	3.54	12.12	1.25	924.90
C.I. 1-3	M.H. 1-2	156.54	946.25	935.08	7.14	15	0.012	4.34	8.66	18.69	0.41	947.09
C.I. 1-4	C.I. 1-3	34.01	947.53	946.85	2.00	15	0.012	2.27	5.21	9.89	0.41	948.13
M.H. 3-2	Outfall	73.02	923.46	922.00	2.00	18	0.012	4.46	2.52	16.09	1.50	926.84
C.I. 3-3	M.H. 3-2	188.00	960.16	942.02	9.65	18	0.012	4.46	9.13	35.34	0.36	960.97

Inlet Design Table

10 Year Return Frequency

Inlet ID	Inlet Location	Peak Flow	Upstream Bypass	Total Flow	Clogging Factor	Inlet Capacity	Sag Inlet Capacity (Note 1)	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
		(cfs)	(cfs)	(cfs)		(cfs)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 5-3	GRADE	1.31	0.10	1.41	1.00	1.12	1.12	1.12	0.29	79.64%	0.12	5.85	...
C.I. 5-4	GRADE	1.31	0.09	1.41	1.00	1.12	1.12	1.12	0.29	79.72%	0.12	5.85	...
C.I. 6-1	GRADE	1.35	0.00	1.35	1.00	1.25	1.25	1.25	0.10	92.60%	0.15	7.46	...
C.I. 6-2	GRADE	1.31	0.00	1.31	1.00	1.22	1.22	1.22	0.09	92.83%	0.15	7.38	...
C.I. 7-4(L)	SAG	0.75	0.39	1.14	0.80	19.40	15.52	1.14	0.00	100.00%	0.14	6.76	...
C.I. 7-4(R)	SAG	2.25	0.00	2.25	0.80	19.40	15.52	2.25	0.00	100.00%	0.14	6.97	...
C.I. 7-4(B)	SAG	0.71	0.00	0.71	0.80	19.40	15.52	0.71	0.00	100.00%	...	...	...
C.I. 7-4	SAG	3.71	0.39	4.10	0.80	19.40	15.52	4.10	0.00	100.00%	...	...	...
C.I. 7-5(L)	SAG	2.25	0.38	2.63	0.80	19.40	15.52	2.63	0.00	100.00%	0.15	7.39	...
C.I. 7-5(R)	SAG	1.61	0.00	1.61	0.80	19.40	15.52	1.61	0.00	100.00%	0.15	7.71	...
C.I. 7-5(B)	SAG	1.88	0.00	1.88	0.80	19.40	15.52	1.88	0.00	100.00%	...	...	...
C.I. 7-5	SAG	5.74	0.38	6.12	0.80	19.40	15.52	6.12	0.00	100.00%	...	...	...
C.I. 4-3(L)	SAG	2.29	0.00	2.29	0.80	19.40	15.52	2.29	0.00	100.00%	0.14	7.13	...
C.I. 4-3(R)	SAG	0.53	0.00	0.53	0.80	19.40	15.52	0.53	0.00	100.00%	0.10	5.03	...
C.I. 4-3(B)	SAG	0.64	0.00	0.64	0.80	19.40	15.52	0.64	0.00	100.00%	...	...	...
C.I. 4-3	SAG	3.45	0.00	3.45	0.80	19.40	15.52	3.45	0.00	100.00%	...	...	...
C.I. 3-3(L)	SAG	1.99	0.00	1.99	0.80	19.40	15.52	1.99	0.00	100.00%	0.17	8.59	...
C.I. 3-3(R)	SAG	1.80	0.00	1.80	0.80	19.40	15.52	1.80	0.00	100.00%	0.16	7.77	...
C.I. 3-3(B)	SAG	0.68	0.00	0.68	0.80	19.40	15.52	0.68	0.00	100.00%	...	...	...
C.I. 3-3	SAG	4.46	0.00	4.46	0.80	19.40	15.52	4.46	0.00	100.00%	...	...	...
C.I. 2-4	GRADE	2.44	0.00	2.44	1.00	1.93	1.93	1.93	0.51	79.16%	0.17	8.26	...
C.I. 2-5	GRADE	1.50	0.00	1.50	1.00	1.30	1.30	1.30	0.20	86.81%	0.14	6.88	...
C.I. 1-3	GRADE	1.88	0.20	2.07	1.00	1.69	1.69	1.69	0.39	81.41%	0.15	7.69	...
C.I. 1-4	GRADE	1.76	0.51	2.27	1.00	1.81	1.81	1.81	0.46	79.80%	0.16	7.96	...

Notes:

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

Drainage Area Design Table

10 Year Return Frequency

Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
C.I. 5-3	0.35	0.51	5.00	7.35	1.00	1.31
C.I. 5-4	0.35	0.51	5.00	7.35	1.00	1.31
C.I. 6-1	0.36	0.51	5.00	7.35	1.00	1.35
C.I. 6-2	0.35	0.51	5.00	7.35	1.00	1.31
C.I. 7-4(L)	0.20	0.51	5.00	7.35	1.00	0.75
C.I. 7-4(R)	0.60	0.51	5.00	7.35	1.00	2.25
C.I. 7-4(B)	0.19	0.51	5.00	7.35	1.00	0.71
C.I. 7-4	0.99	0.51	5.00	7.35	1.00	3.71
C.I. 7-5(L)	0.60	0.51	5.00	7.35	1.00	2.25
C.I. 7-5(R)	0.43	0.51	5.00	7.35	1.00	1.61
C.I. 7-5(B)	0.50	0.51	5.00	7.35	1.00	1.88
C.I. 7-5	1.53	0.51	5.00	7.35	1.00	5.74
C.I. 4-3(L)	0.61	0.51	5.00	7.35	1.00	2.29
C.I. 4-3(R)	0.14	0.51	5.00	7.35	1.00	0.53
C.I. 4-3(B)	0.17	0.51	5.00	7.35	1.00	0.64
C.I. 4-3	0.92	0.51	5.00	7.35	1.00	3.45
C.I. 3-3(L)	0.53	0.51	5.00	7.35	1.00	1.99
C.I. 3-3(R)	0.48	0.51	5.00	7.35	1.00	1.80
C.I. 3-3(B)	0.18	0.51	5.00	7.35	1.00	0.68
C.I. 3-3	1.19	0.51	5.00	7.35	1.00	4.46
C.I. 2-4	0.65	0.51	5.00	7.35	1.00	2.44
C.I. 2-5	0.40	0.51	5.00	7.35	1.00	1.50
C.I. 1-3	0.50	0.51	5.00	7.35	1.00	1.88
C.I. 1-4	0.47	0.51	5.00	7.35	1.00	1.76

NOT ASBUILT

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2008
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
2	3/16/2021	REVISED PER CONTRACTOR COMMENT	

REVISIONS

10 YEAR DRAINAGE TABLES
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18.1140
date: 2020.07.10

SHEET
C126

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_TAB02_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:44pm

Storm Sewer Design Calculation Table

100 Year Return Frequency

Upstream Structure	Downstream Structure	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Slope (%)	Diameter (in)	Manning's n	Total Flow (cfs)	Velocity (ft/s)	Capacity (cfs)	Flow Depth (ft)	Upstream Struct. HGL (ft)
M.H. 5-2	Outfall	253.96	933.89	930.00	1.53	18	0.012	9.89	5.60	14.08	1.50	937.59
C.I. 5-3	M.H. 5-2	188.19	964.02	934.29	15.80	15	0.012	9.89	8.15	27.80	1.25	965.20 j
C.I. 6-1	C.I. 5-3	299.05	971.17	964.62	2.19	15	0.012	4.67	6.65	10.35	0.59	972.05
C.I. 6-2	C.I. 6-1	34.93	972.17	971.37	2.29	15	0.012	2.30	3.65	10.59	0.68	972.78 j
C.I. 5-4	C.I. 5-3	34.40	965.30	964.62	1.98	15	0.012	2.60	4.36	9.84	0.58	965.95
M.H. 7-2	Outfall	42.64	925.43	925.00	1.01	24	0.012	18.97	7.91	24.61	1.32	927.00
M.H. 7-3	M.H. 7-2	178.96	955.95	925.75	16.88	24	0.012	18.97	8.21	100.66	1.25	957.52
C.I. 7-4	M.H. 7-3	68.71	957.92	956.55	1.99	24	0.012	18.97	9.23	34.60	1.06	959.49
C.I. 7-5	C.I. 7-4	34.00	959.20	958.52	2.00	18	0.012	11.25	8.18	16.09	0.97	960.48
M.H. 2-2	Outfall	33.74	922.67	922.00	1.99	18	0.012	6.91	3.91	16.03	1.50	928.66
M.H. 2-3	M.H. 2-2	48.32	931.95	925.78	12.77	15	0.012	6.91	5.95	25.00	1.25	933.00 j
C.I. 2-4	M.H. 2-3	187.22	952.46	932.55	10.63	15	0.012	6.91	11.27	22.81	0.47	953.51
C.I. 2-5	C.I. 2-4	34.74	954.94	953.96	2.82	15	0.012	2.63	5.90	11.75	0.40	955.59
M.H. 4-2	Outfall	91.51	939.15	930.00	10.00	15	0.012	6.05	5.36	22.12	1.25	940.14 j
C.I. 4-3	M.H. 4-2	145.82	964.74	948.91	10.86	15	0.012	6.05	10.80	23.05	0.44	965.73
M.H. 1-2	Outfall	55.95	921.68	920.00	3.00	15	0.012	8.40	6.85	12.12	1.25	927.29
C.I. 1-3	M.H. 1-2	156.54	946.25	935.08	7.14	15	0.012	8.40	11.00	18.69	0.59	947.38
C.I. 1-4	C.I. 1-3	34.01	947.53	946.85	2.00	15	0.012	4.52	6.44	9.89	0.59	948.39
M.H. 3-2	Outfall	73.02	923.46	922.00	2.00	18	0.012	7.83	4.43	16.09	1.50	928.89
C.I. 3-3	M.H. 3-2	188.00	960.16	942.02	9.65	18	0.012	7.83	10.90	35.34	0.48	961.24

Inlet Design Table

100 Year Return Frequency

Inlet ID	Inlet Location	Peak Flow	Upstream Bypass	Total Flow	Clogging Factor	Inlet Capacity	Sag Inlet Capacity (Note 1)	Captured Flow	Bypass Flow	Inlet Efficiency (Note 2)	Gutter Depth	Gutter Spread	Ponding Depth
		(cfs)	(cfs)	(cfs)		(cfs)	(cfs)	(cfs)	(cfs)	(%)	(ft)	(ft)	(ft)
C.I. 5-3	GRADE	2.30	0.31	2.62	1.00	1.73	1.73	1.73	0.89	65.92%	0.15	7.38	...
C.I. 5-4	GRADE	2.30	0.30	2.60	1.00	1.72	1.72	1.72	0.88	66.09%	0.15	7.36	...
C.I. 6-1	GRADE	2.37	0.00	2.37	1.00	2.05	2.05	2.05	0.31	86.71%	0.18	9.21	...
C.I. 6-2	GRADE	2.30	0.00	2.30	1.00	2.01	2.01	2.01	0.30	87.07%	0.18	9.12	...
C.I. 7-4(L)	SAG	1.32	1.21	2.52	0.80	19.40	15.52	2.52	0.00	100.00%	0.18	9.12	...
C.I. 7-4(R)	SAG	3.95	0.00	3.95	0.80	19.40	15.52	3.95	0.00	100.00%	0.17	8.61	...
C.I. 7-4(B)	SAG	1.25	0.00	1.25	0.80	19.40	15.52	1.25	0.00	100.00%	...	...	...
C.I. 7-4	SAG	6.51	1.21	7.72	0.80	19.40	15.52	7.72	0.00	100.00%	...	...	...
C.I. 7-5(L)	SAG	3.95	1.18	5.13	0.80	19.40	15.52	5.13	0.00	100.00%	0.19	9.49	...
C.I. 7-5(R)	SAG	2.83	0.00	2.83	0.80	19.40	15.52	2.83	0.00	100.00%	0.19	9.52	...
C.I. 7-5(B)	SAG	3.29	0.00	3.29	0.80	19.40	15.52	3.29	0.00	100.00%	...	...	...
C.I. 7-5	SAG	10.07	1.18	11.25	0.80	19.40	15.52	11.25	0.00	100.00%	...	...	...
C.I. 4-3(L)	SAG	4.01	0.00	4.01	0.80	19.40	15.52	4.01	0.00	100.00%	0.18	8.80	...
C.I. 4-3(R)	SAG	0.92	0.00	0.92	0.80	19.40	15.52	0.92	0.00	100.00%	0.12	6.21	...
C.I. 4-3(B)	SAG	1.12	0.00	1.12	0.80	19.40	15.52	1.12	0.00	100.00%	...	...	...
C.I. 4-3	SAG	6.05	0.00	6.05	0.80	19.40	15.52	6.05	0.00	100.00%	...	...	...
C.I. 3-3(L)	SAG	3.49	0.00	3.49	0.80	19.40	15.52	3.49	0.00	100.00%	0.21	10.61	...
C.I. 3-3(R)	SAG	3.16	0.00	3.16	0.80	19.40	15.52	3.16	0.00	100.00%	0.19	9.60	...
C.I. 3-3(B)	SAG	1.18	0.00	1.18	0.80	19.40	15.52	1.18	0.00	100.00%	...	...	...
C.I. 3-3	SAG	7.83	0.00	7.83	0.80	19.40	15.52	7.83	0.00	100.00%	...	...	...
C.I. 2-4	GRADE	4.28	0.00	4.28	1.00	2.85	2.85	2.85	1.43	66.66%	0.20	10.19	...
C.I. 2-5	GRADE	2.63	0.00	2.63	1.00	2.04	2.04	2.04	0.59	77.68%	0.17	8.50	...
C.I. 1-3	GRADE	3.29	0.59	3.88	1.00	2.65	2.65	2.65	1.23	68.23%	0.19	9.73	...
C.I. 1-4	GRADE	3.09	1.43	4.52	1.00	2.90	2.90	2.90	1.61	64.28%	0.21	10.31	...

Notes:

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

Drainage Area Design Table

100 Year Return Frequency

Inlet ID	Drainage Area	C	Tc	i	K	Peak Flow
	(ac)		(min)	(in/hr)		(cfs)
C.I. 5-3	0.35	0.51	5.00	10.32	1.25	2.30
C.I. 5-4	0.35	0.51	5.00	10.32	1.25	2.30
C.I. 6-1	0.36	0.51	5.00	10.32	1.25	2.37
C.I. 6-2	0.35	0.51	5.00	10.32	1.25	2.30
C.I. 7-4(L)	0.20	0.51	5.00	10.32	1.25	1.32
C.I. 7-4(R)	0.60	0.51	5.00	10.32	1.25	3.95
C.I. 7-4(B)	0.19	0.51	5.00	10.32	1.25	1.25
C.I. 7-4	0.99	0.51	5.00	10.32	1.25	6.51
C.I. 7-5(L)	0.60	0.51	5.00	10.32	1.25	3.95
C.I. 7-5(R)	0.43	0.51	5.00	10.32	1.25	2.83
C.I. 7-5(B)	0.50	0.51	5.00	10.32	1.25	3.29
C.I. 7-5	1.53	0.51	5.00	10.32	1.25	10.07
C.I. 4-3(L)	0.61	0.51	5.00	10.32	1.25	4.01
C.I. 4-3(R)	0.14	0.51	5.00	10.32	1.25	0.92
C.I. 4-3(B)	0.17	0.51	5.00	10.32	1.25	1.12
C.I. 4-3	0.92	0.51	5.00	10.32	1.25	6.05
C.I. 3-3(L)	0.53	0.51	5.00	10.32	1.25	3.49
C.I. 3-3(R)	0.48	0.51	5.00	10.32	1.25	3.16
C.I. 3-3(B)	0.18	0.51	5.00	10.32	1.25	1.18
C.I. 3-3	1.19	0.51	5.00	10.32	1.25	7.83
C.I. 2-4	0.65	0.51	5.00	10.32	1.25	4.28
C.I. 2-5	0.40	0.51	5.00	10.32	1.25	2.63
C.I. 1-3	0.50	0.51	5.00	10.32	1.25	3.29
C.I. 1-4	0.47	0.51	5.00	10.32	1.25	3.09

NOT ASBUILT

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-1256
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
2	3/16/2021	REVISED PER CONTRACTOR COMMENT	

REVISIONS

100 YEAR DRAINAGE TABLES
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18.1140
date: 2020.07.10

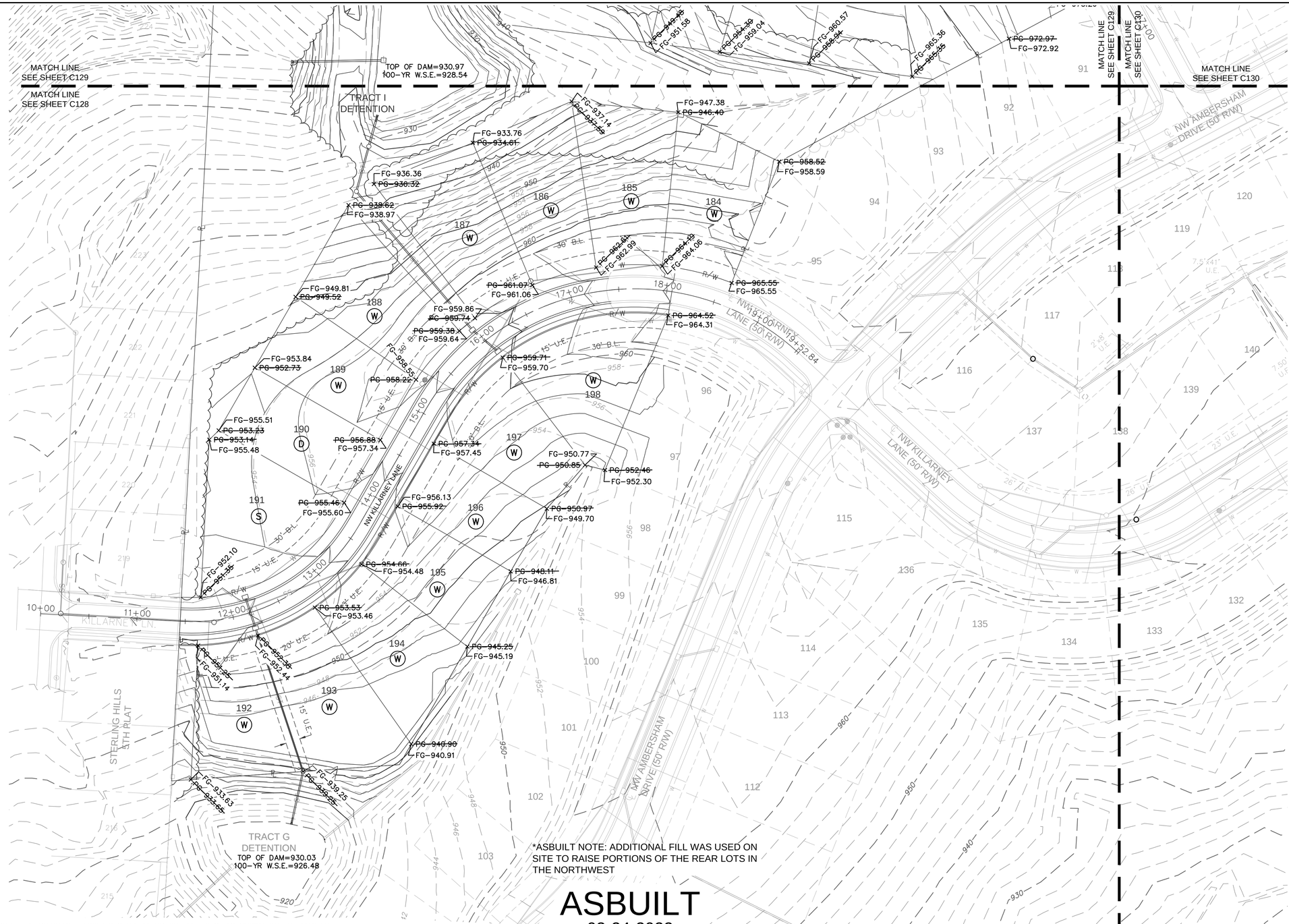
SHEET
C127

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_TAB02_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:44pm

KEY MAP

Woodside Ridge Second Plat Minimum Building Opening Elevation			
Lot	Rear Left MBOE	Rear Right MBOE	As Built Plot Plan Required
149	945.25	938.92	Y
150	952.25	945.25	Y
151	950.78	952.25	Y
152	950.23	950.78	Y
153	950.56	950.23	Y
154	953.80	950.56	Y
155	970.20	979.35	Y
156	957.42	970.20	Y
157	953.53	957.42	Y
158	937.69	953.53	Y
166	948.97	945.09	Y
167	952.18	948.97	Y
168	959.64	952.18	Y
169	961.17	959.64	Y
170	965.96	961.17	Y
184	947.98	959.19	Y
185	937.74	947.98	Y
186	934.36	937.74	Y
187	936.96	934.36	Y
192	939.85	934.23	Y
193	941.51	939.85	Y
194	945.79	941.51	Y
195	947.41	945.79	Y
196	950.30	947.41	Y
197	951.37	950.30	Y
198	952.90	951.37	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.



*ASBUILT NOTE: ADDITIONAL FILL WAS USED ON SITE TO RAISE PORTIONS OF THE REAR LOTS IN THE NORTHWEST

ASBUILT
03-24-2022

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

2. PLAT IS LOCATED 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. BUFFER ZONE FOR NATURAL STREAMS IS LOCATED WITHIN PLAT.

4. MBOE ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN CORNER MBOES SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.

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

RMBOE - REAR MINIMUM BUILDING OPENING ELEVATION
FMBOE - FRONT MINIMUM BUILDING OPENING ELEVATION

LOT TYPES:
S - STANDARD
D - DAYLIGHT
W - WALKOUT

BASIN 9 DETENTION (TRACT I):
100-YEAR W.S.E. (NON-CLOGGED): 928.54
CLOGGED CONDITION (ALL FLOW THROUGH EMERGENCY SPILLWAY): 929.60

LEGEND	
100	FINISHED INDEX CONTOURS
100	FINISHED INTERMEDIATE CONTOURS

N

0' 25' 50' 100'
SCALE IN FEET

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-1255
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	7/10/2020	REVISED PER CITY COMMENTS	

REVISIONS

MASTER DRAINAGE PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.F.S
project no.: C10-1140
date: 2020.07.10

SHEET
C128

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_MDR02_C181140.dwg USER: ssoylor
DATE: Oct 17, 2022 12:45pm

KEY MAP

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

2. PLAT IS LOCATED 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. BUFFER ZONE FOR NATURAL STREAMS IS LOCATED WITHIN PLAT.

4. MBOE ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN CORNER MBOES SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.

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

RMBOE – REAR MINIMUM BUILDING OPENING ELEVATION
FMBOE – FRONT MINIMUM BUILDING OPENING ELEVATION

LOT TYPES:
S – STANDARD
D – DAYLIGHT
W – WALKOUT

BASIN C1 DETENTION (TRACT I):
100-YEAR W.S.E. (NON-CLOGGED): 928.54
CLOGGED CONDITION (ALL FLOW THROUGH EMERGENCY SPILLWAY): 929.60

BASIN C1 DETENTION (TRACT J):
100-YEAR W.S.E. (NON-CLOGGED): 935.67
CLOGGED CONDITION (ALL FLOW THROUGH EMERGENCY SPILLWAY): 936.70

Woodside Ridge Second Plat Minimum Building Opening Elevation			
Lot	Rear Left MBOE	Rear Right MBOE	As Built Plot Plan Required
149	945.25	938.92	Y
150	952.25	945.25	Y
151	950.78	952.25	Y
152	950.23	950.78	Y
153	950.56	950.23	Y
154	953.80	950.56	Y
155	970.20	979.35	Y
156	957.42	970.20	Y
157	953.53	957.42	Y
158	937.69	953.53	Y
166	948.97	945.09	Y
167	952.18	948.97	Y
168	959.64	952.18	Y
169	961.17	959.64	Y
170	965.96	961.17	Y
184	947.98	959.19	Y
185	937.74	947.98	Y
186	934.36	937.74	Y
187	936.96	934.36	Y
192	939.85	934.23	Y
193	941.51	939.85	Y
194	945.79	941.51	Y
195	947.41	945.79	Y
196	950.30	947.41	Y
197	951.37	950.30	Y
198	952.90	951.37	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.

LEGEND	
100	FINISHED INDEX CONTOURS
100	FINISHED INTERMEDIATE CONTOURS

ASBUILT
03-24-2022

*ASBUILT NOTE: ADDITIONAL FILL WAS USED ON SITE TO RAISE PORTIONS OF THE REAR LOTS IN THE NORTHWEST

N

0' 25' 50' 100'
SCALE IN FEET

MATCH LINE SEE SHEET C129
MATCH LINE SEE SHEET C130
MATCH LINE SEE SHEET C129
MATCH LINE SEE SHEET C128
MATCH LINE SEE SHEET C130
MATCH LINE SEE SHEET C128

TRACT J DETENTION
TOP OF DAM=937.67
100-YR W.S.E.=935.67

TRACT I DETENTION
TOP OF DAM=930.97
100-YR W.S.E.=928.54

50' TRAIL ESMT.
15' U.E.
20' U.E.
25' U.E.
30' B/L
15' B/L
NW O'BRIEN ROAD
NW PATCH COURT
NW AMBER DRIVE

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2010
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	7/30/2020	REVISED PER CITY COMMENTS	

REVISIONS

MASTER DRAINAGE PLAN
STREET & STORM SEWER PLANS
WOODSIDE RIDGE
SECOND PLAT
LEE'S SUMMIT, MO
2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C129

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_MDR02_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:45pm

KEY MAP

Woodside Ridge Second Plat Minimum Building Opening Elevation			
Lot	Rear Left MBOE	Rear Right MBOE	As Built Plot Plan Required
149	945.25	938.92	Y
150	952.25	945.25	Y
151	950.78	952.25	Y
152	950.23	950.78	Y
153	950.56	950.23	Y
154	953.80	950.56	Y
155	970.20	979.35	Y
156	957.42	970.20	Y
157	953.53	957.42	Y
158	937.69	953.53	Y
166	948.97	945.09	Y
167	952.18	948.97	Y
168	959.64	952.18	Y
169	961.17	959.64	Y
170	965.96	961.17	Y
184	947.98	959.19	Y
185	937.74	947.98	Y
186	934.36	937.74	Y
187	936.96	934.36	Y
192	939.85	934.23	Y
193	941.51	939.85	Y
194	945.79	941.51	Y
195	947.41	945.79	Y
196	950.30	947.41	Y
197	951.37	950.30	Y
198	952.90	951.37	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.

MATCH LINE SEE SHEET C129

MATCH LINE SEE SHEET C130

MATCH LINE SEE SHEET C129

MATCH LINE SEE SHEET C128

MATCH LINE SEE SHEET C128

TRACT J DETENTION
TOP OF DAM=937.81
100-YR W.S.E.=935.67

TRACT D OPEN SPACE

TRACT E DETENTION

NW O'BRIEN ROAD (50' R/W)

NW PATCH COURT

NW AMBERSHAM DRIVE (50' R/W)

NW KILLARNEY LANE (50' R/W)

*ASBUILT NOTE: ADDITIONAL FILL WAS USED ON SITE TO RAISE PORTIONS OF THE REAR LOTS IN THE NORTHWEST

ASBUILT
03-24-2022

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

2. PLAT IS LOCATED 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. BUFFER ZONE FOR NATURAL STREAMS IS LOCATED WITHIN PLAT.

4. MBOE ELEVATIONS HAVE BEEN PROVIDED AT EACH LOT CORNER. INTERPOLATION WILL BE ALLOWED BETWEEN CORNER MBOES SHOWN ON THE MASTER DRAINAGE PLAN, DEPENDING ON THE LOCATION OF THE LOWEST OPENING ON THE PROPOSED STRUCTURE.

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

RMBOE - REAR MINIMUM BUILDING OPENING ELEVATION
FMBOE - FRONT MINIMUM BUILDING OPENING ELEVATION

LOT TYPES:
S - STANDARD
D - DAYLIGHT
W - WALKOUT

BASIN 10 DETENTION (TRACT J):
100-YEAR W.S.E. (NON-CLOGGED): 935.67
CLOGGED CONDITION (ALL FLOW THROUGH EMERGENCY SPILLWAY): 936.70

LEGEND	
100	FINISHED INDEX CONTOURS
100	FINISHED INTERMEDIATE CONTOURS

N

0' 25' 50' 100'
SCALE IN FEET

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2066
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	7/10/2020	REVISED PER CITY COMMENTS	

REVISIONS

MASTER DRAINAGE PLAN
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

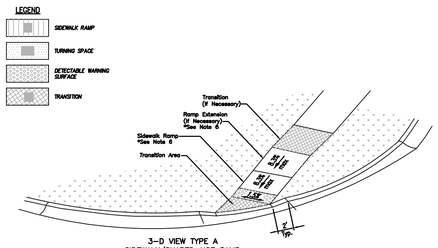
2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C10-1140
date: 2020.07.10

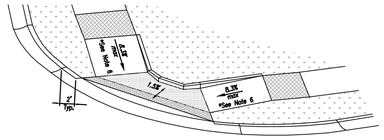
SHEET
C130

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_MDR02_C181140.dwg
DATE: Oct 17, 2022 12:45pm
USER: ssoylor

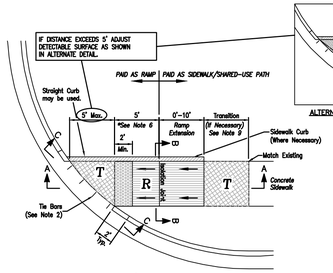
REFER TO SHEETS C110 AND C111 FOR RAMP SLOPE AND DIMENSION. DETAILS ARE GUIDELINES AS TO HOW RAMPS SHALL BE CONSTRUCTED.



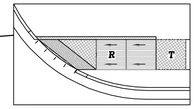
3-D VIEW TYPE A
SIDEWALK/SHARED-USE RAMP



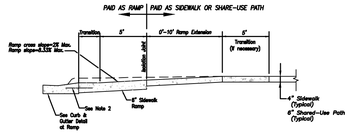
3-D VIEW TYPE B
SIDEWALK/SHARED-USE RAMP



TYPE A SIDEWALK/SHARED-USE RAMP
Not to Scale



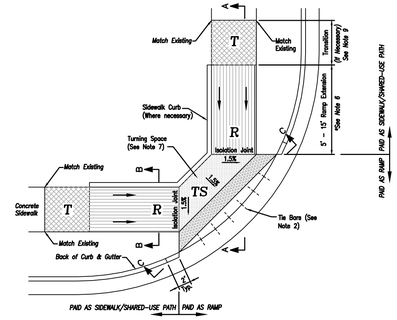
ALTERNATE DETECTABLE SURFACE LAYOUT



SECTION A-A

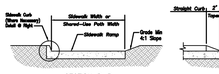
SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

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).

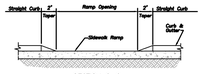


TYPE B SIDEWALK/SHARED-USE RAMP
Not to Scale

NOT ASBUILT

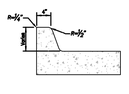


SECTION B-B

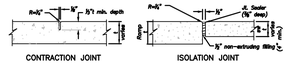


SECTION C-C

TYPE A & B SIDEWALK RAMP
Not to Scale

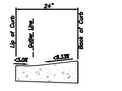


SIDEWALK CURB DETAIL
Not to Scale



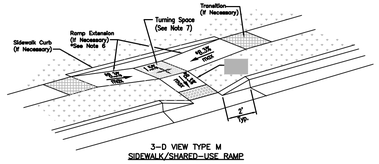
CONTRACTION JOINT
ISOLATION JOINT

JOINT DETAILS
Not to Scale

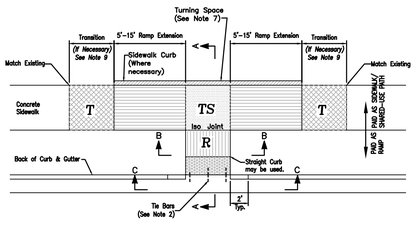


CURB & GUTTER DETAIL AT RAMP
Not to Scale

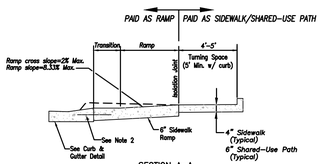
N.T.S.
01 ADA RAMP RETROFIT DETAIL (A)



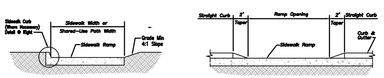
3-D VIEW TYPE M
SIDEWALK/SHARED-USE RAMP



TYPE M SIDEWALK/SHARED-USE RAMP
Not to Scale



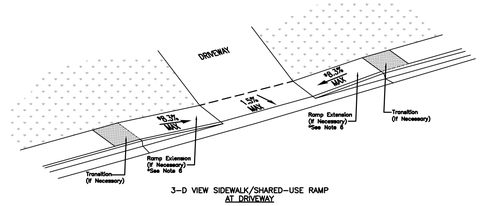
SECTION A-A



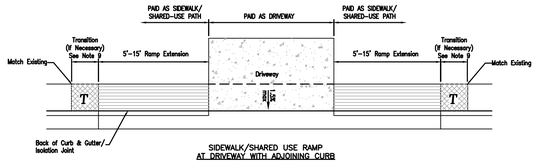
SECTION B-B

SECTION C-C

TYPE M SIDEWALK RAMP
Not to Scale

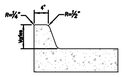


3-D VIEW SIDEWALK/SHARED-USE RAMP
AT DRIVEWAY

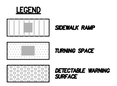


SIDEWALK/SHARED USE RAMP
AT DRIVEWAY WITH ADJOINING CURB

CURB & GUTTER DETAIL AT RAMP
Not to Scale



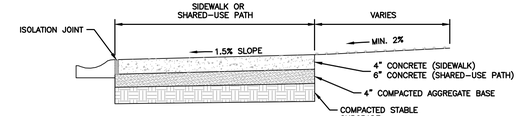
SIDEWALK CURB DETAIL
Not to Scale



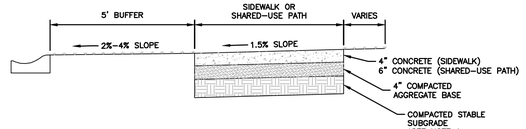
SIDEWALK/SHARED-USE PATH & SIDEWALK/SHARED-USE RAMP NOTES:

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).

N.T.S.
02 ADA RAMP RETROFIT DETAIL (B)



SIDEWALK/SHARED-USE PATH WITHOUT BUFFER
NOT TO SCALE



SIDEWALK/SHARED-USE PATH WITH BUFFER
NOT TO SCALE

GENERAL NOTES:

1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS AND SHARED-USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
4. ALL SIDEWALKS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN EXPANSION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK, BUT NO GREATER THAN 10 FT.
6. SHARED-USE PATH WIDTH SHALL BE 10 FT. WIDE.
7. SIDEWALK FINISHING (NO PICTURE FRAMING) AS DIRECTED BY CITY INSPECTOR.
8. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.

N.T.S.
03 SIDEWALK\SHARED-USE PATH DETAIL

olsson
MO Certificate of Authority # 001592
KS Certificate of Authority # E-2090
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

ADA DETAIL SHEET
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

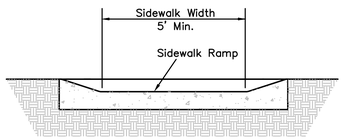
2020

LEES SUMMIT, MO

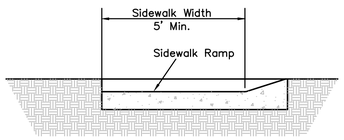
drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C131

USER: ssoylor
DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_DTL01_C181140.dwg
DATE: Oct 17, 2022 12:45pm

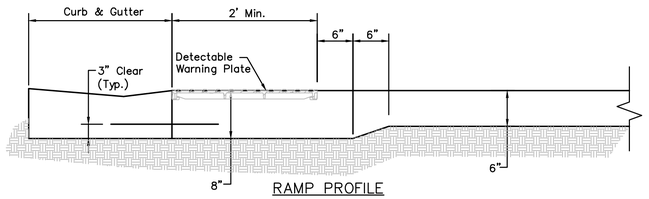


TYPE A SIDEWALK RAMP

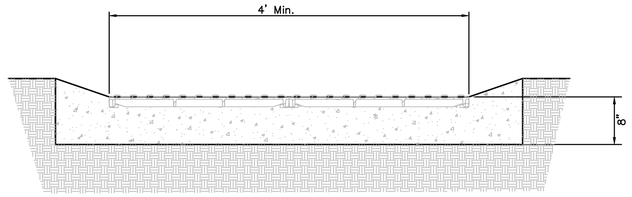


TYPE B SIDEWALK RAMP

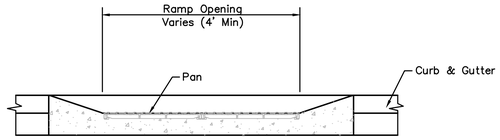
01 N.T.S.
SECTION B-B



RAMP PROFILE



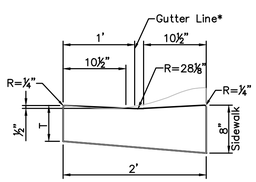
RAMP SECTION



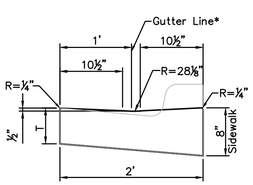
TYPE A & B SIDEWALK RAMP
(TYPE B SHOWN)

02 N.T.S.
SECTION C-C

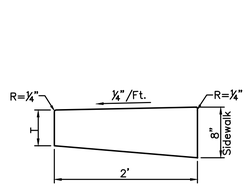
04 N.T.S.
DETECTABLE WARNING PLATE INSTALLATION DETAIL



USE WITH CG-2 CURB
(T=Pavement Thickness)



USE WITH DRY CURB
(T=Pavement Thickness)



USE WITH DRY CURB
(T=Pavement Thickness)

* 0.5% minimum positive slope in gutter line shall be maintained through transition from standard curb to ramp curb

03 N.T.S.
STREET CURB DETAIL AT RAMP

NOT ASBUILT

olsson
MO Certificate of Authority # 001592
1301 Burlington, Suite 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

REVISIONS

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

ADA DETAIL SHEET
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

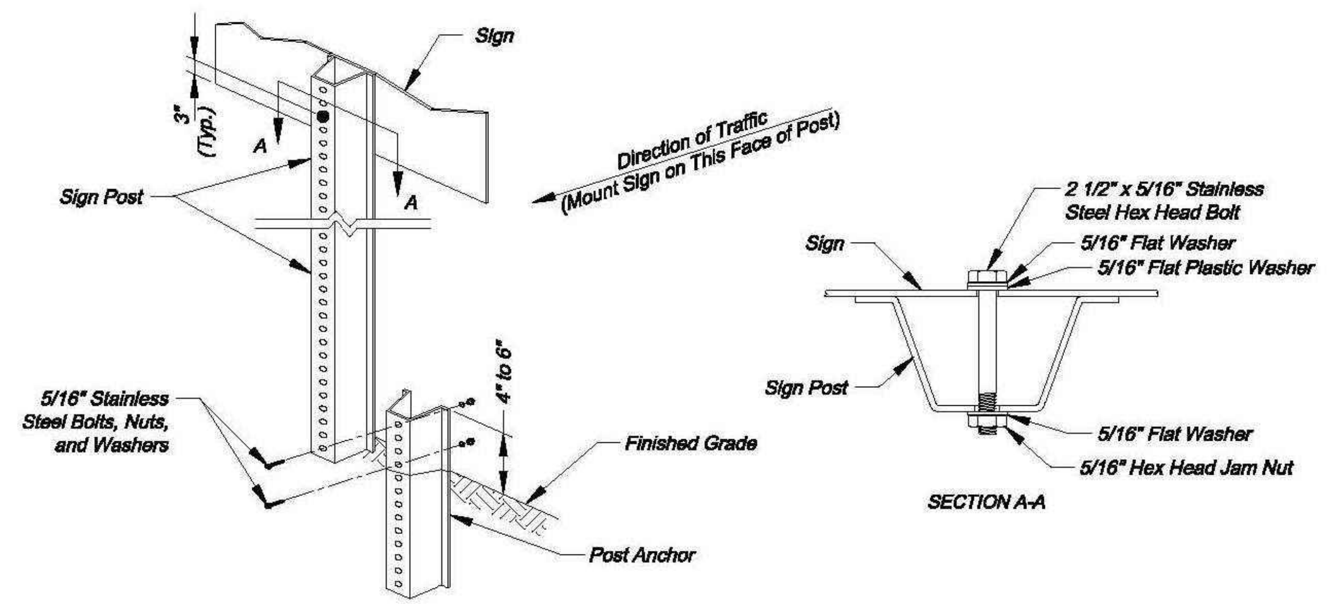
drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C132

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_DTL01_C181140.dwg
DATE: Oct 17, 2022 12:45pm USER: ssoylor

PERMANENT SIGNING GENERAL NOTES:

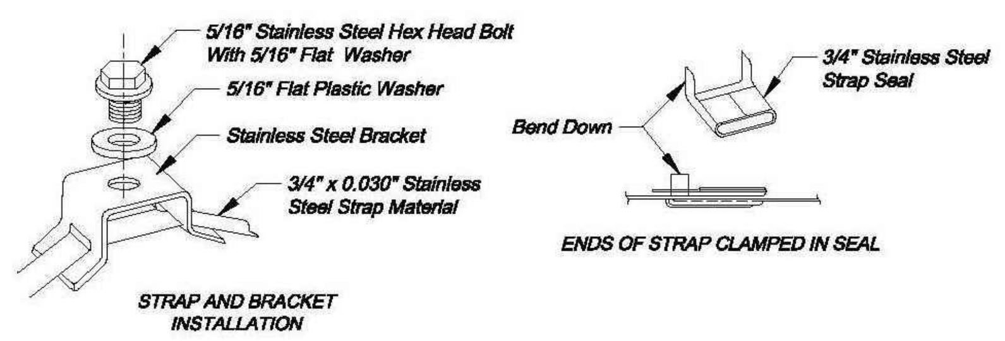
1. All signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
2. The Contractor is responsible for avoiding any and all utilities when installing sign posts, whether the utility is indicated on the plans or not.
3. All workmanship and materials shall be subject to the inspection and approval of the Public Works Department of the City of Lee's Summit.
4. The Contractor shall stake the location of all sign posts to be installed. The City Inspector shall inspect the staking prior to installation. Minor relocation to avoid conflicts may be allowed with the approval of the City Traffic Engineer or designee.
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.



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.



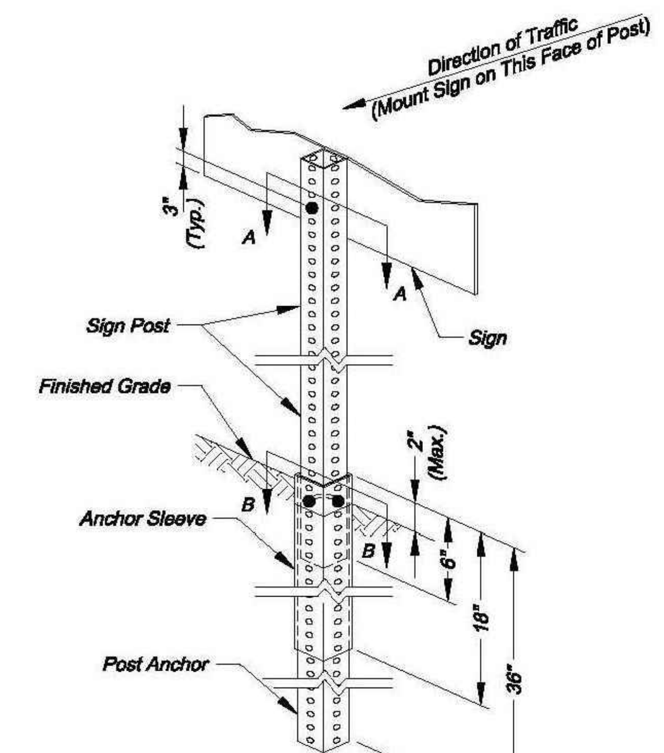
STRAP TYPE SIGN SUPPORT DETAILS

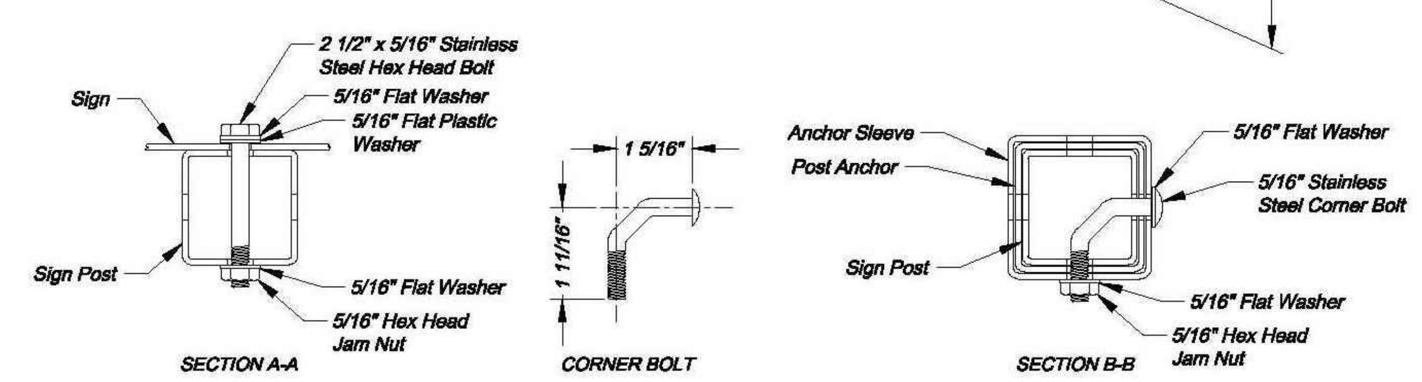
METAL POLE SIGN MOUNTING NOTES:

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 2 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 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.

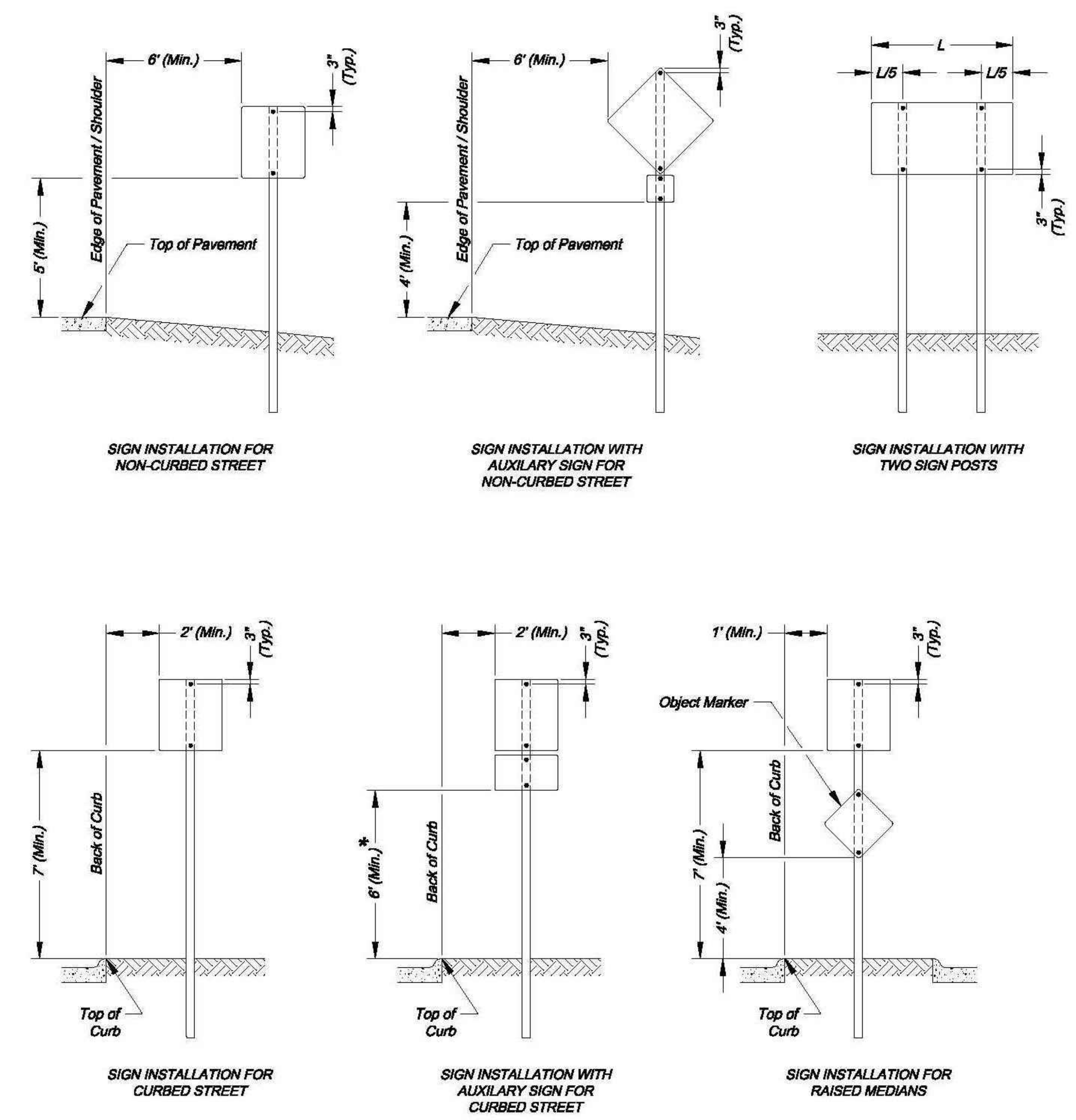




SQUARE STEEL POST DETAILS

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 ¼" x 2 ¼" 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.

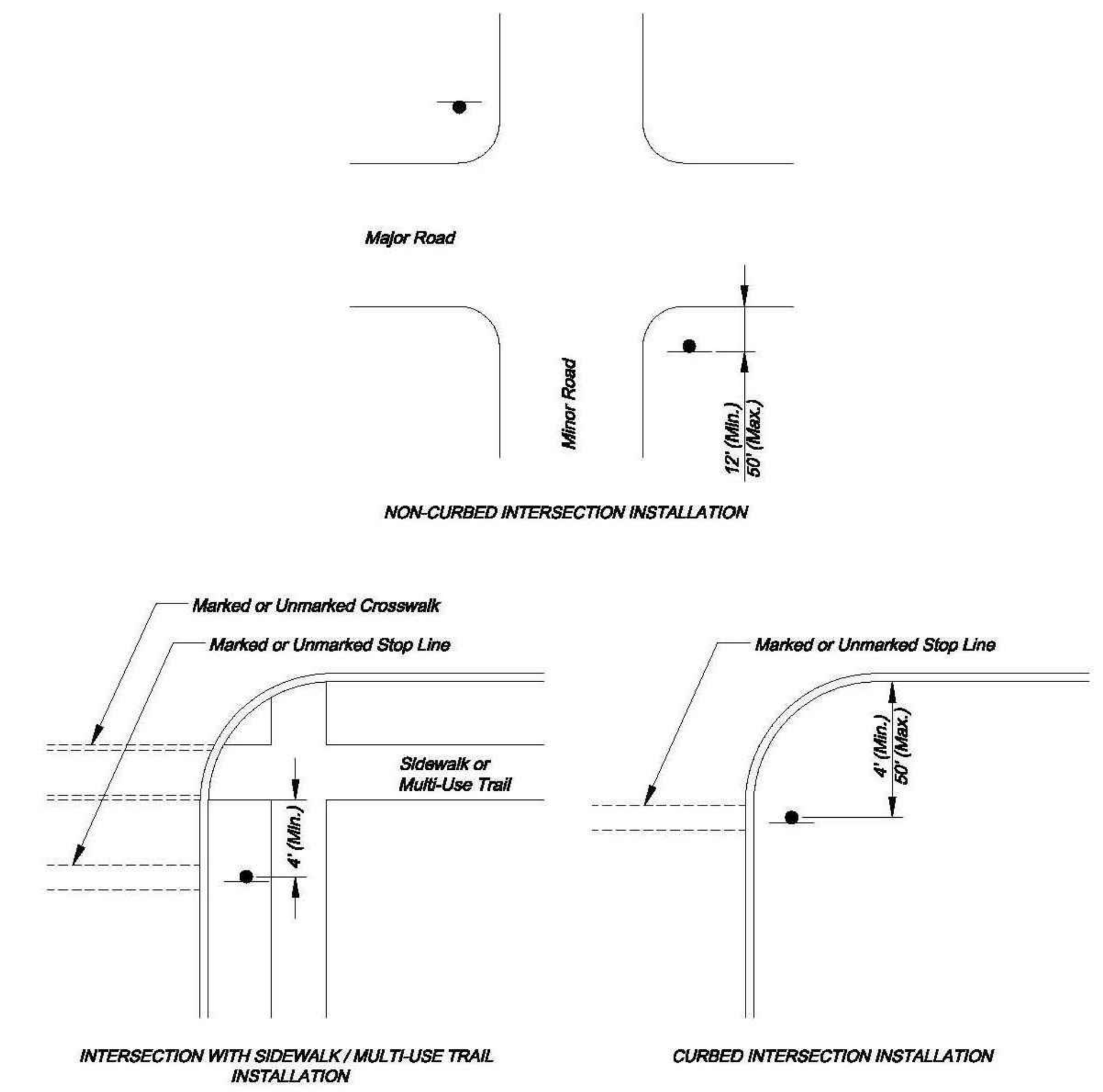


SIGN MOUNTING DETAILS

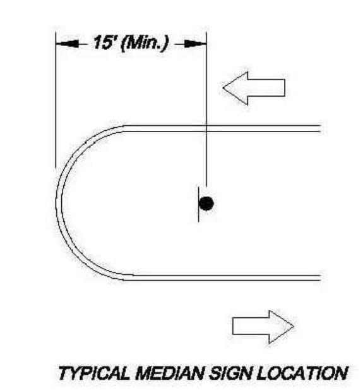
* The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.

NOTE:

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



CONTROL 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.

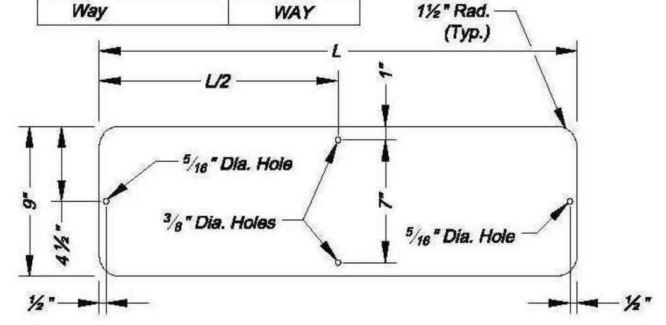
STANDARD ABBREVIATION LISTS

Named Streets	
Avenue	AVE
Boulevard	BLVD
Circle	CIR
Creek	CR
Court	CT
Crossing	XING
Drive	DR
Highway	HWY
Lane	LN
Parkway	PKWY
Place	PL
Road	RD
Street	ST
Terrace	TER
Trail	TRL
Way	WAY

Numbered Streets	
First	ST
Second	ND
Third	RD
Fourth to Tenth	TH

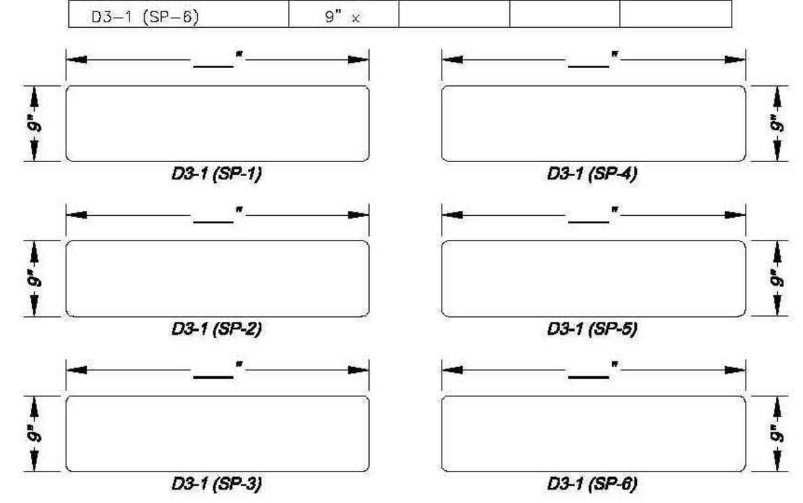
STREET NAME SIGN QUANTITIES

Sign Designation	Sign Size	Sign Area (Sq. Ft.)	Number	Quantity (Sq. Ft.)
D3–1 (SP–1)	9" x	Sq. Ft.	1	1
D3–1 (SP–2)	9" x			
D3–1 (SP–3)	9" x			
D3–1 (SP–4)	9" x			
D3–1 (SP–5)	9" x			
D3–1 (SP–6)	9" x			

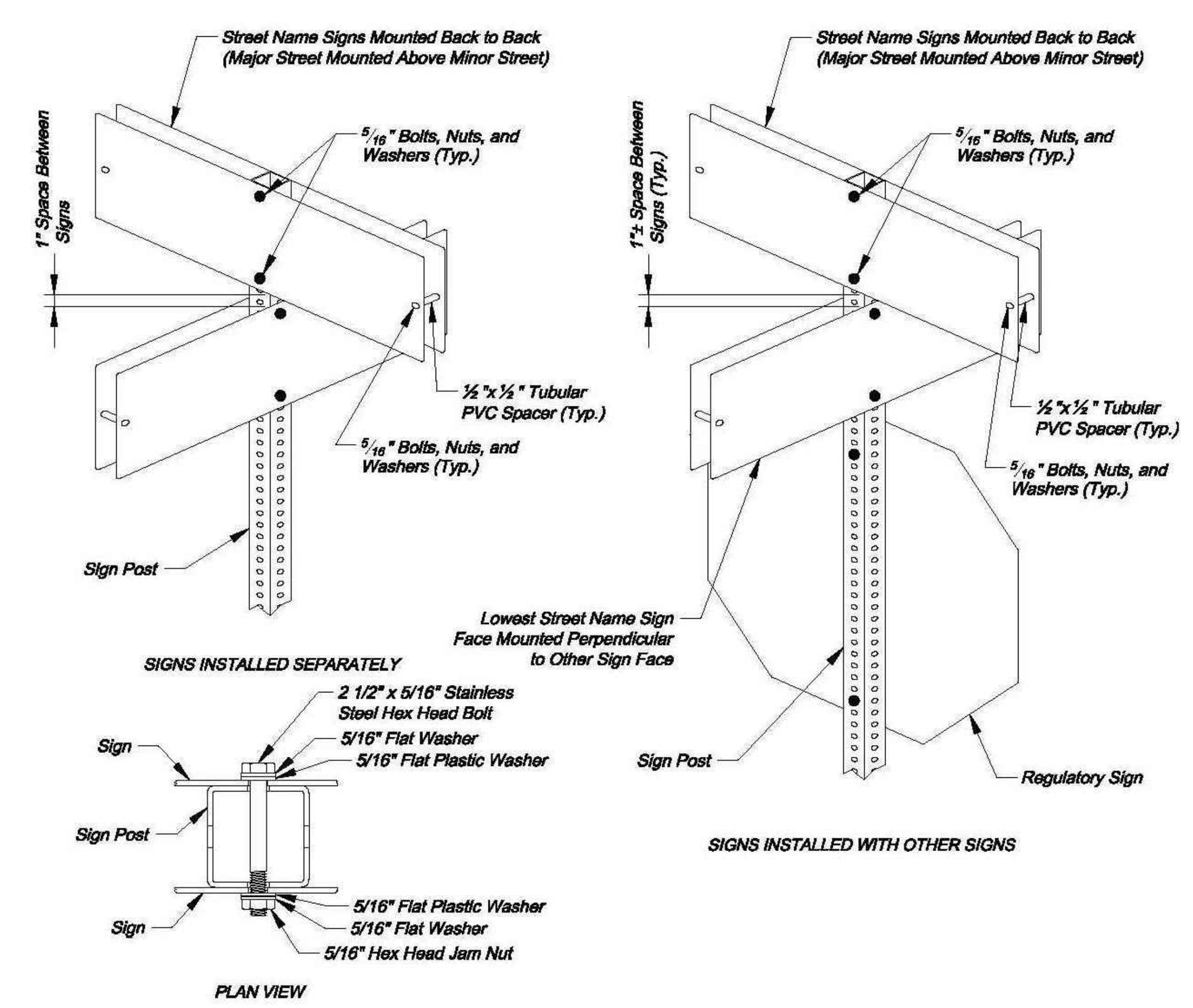


STREET NAME SIGN BLANK DETAILS

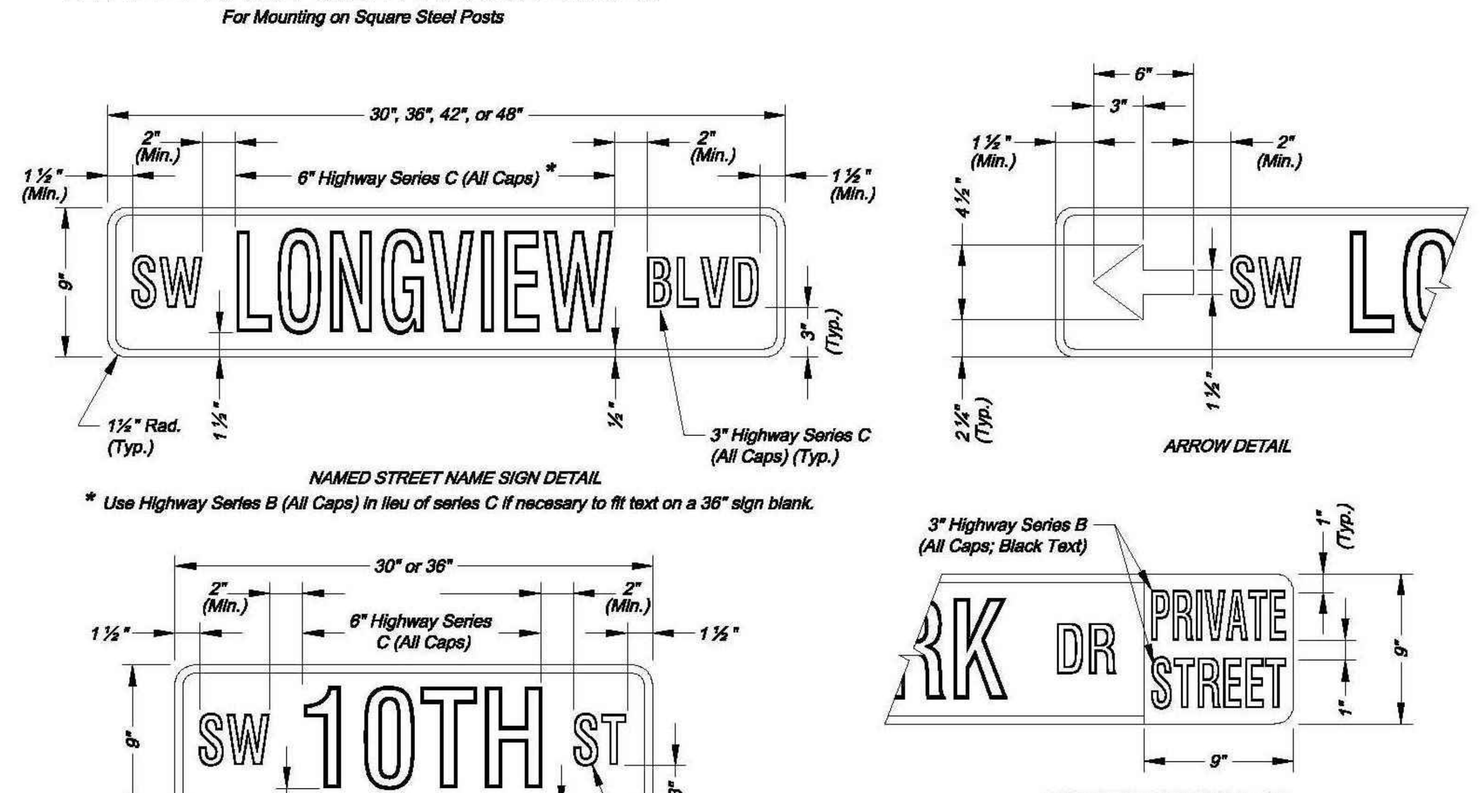
For Mounting on Square Steel Posts



PROJECT SIGN DETAILS



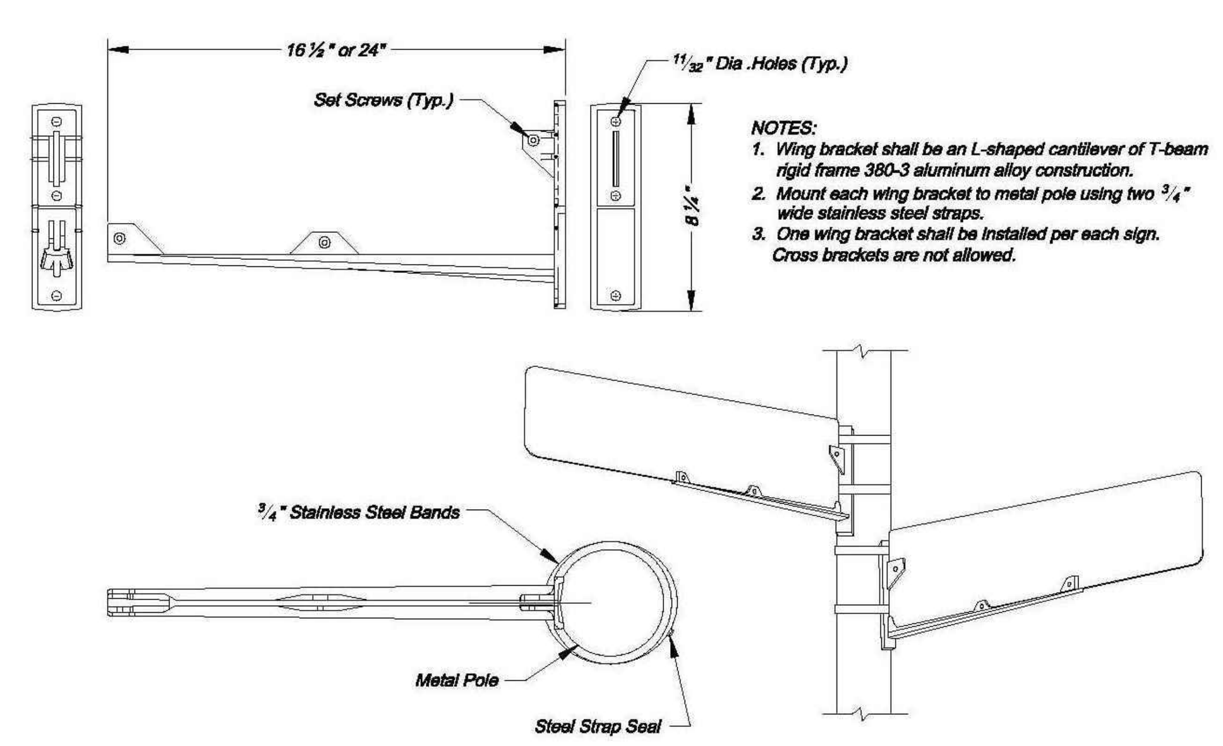
SQUARE STEEL POST MOUNTING DETAILS



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.

STREET NAME SIGN FACE DETAILS



NOTES:

1. Wing bracket shall be an L-shaped cantilever of T-beam rigid frame 380-3 aluminum alloy construction.
2. Mount each wing bracket to metal pole using two ¾" wide stainless steel straps.
3. One wing bracket shall be installed per each sign. Cross brackets are not allowed.

WING BRACKET MOUNTING DETAILS

NOT ASBUILT

olsson

MO Certificate of Authority # 001592
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI — JULIE ELAINE SELLERS — NUMBER PE-2017000367 — PROFESSIONAL ENGINEER — 10/27/2022

NO. REV.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

SINGAGE DETAIL SHEET
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

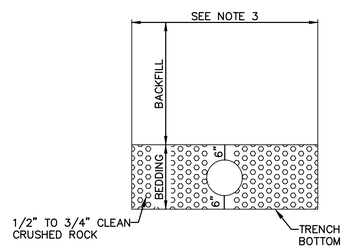
LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C133

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_DTL01_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:45pm



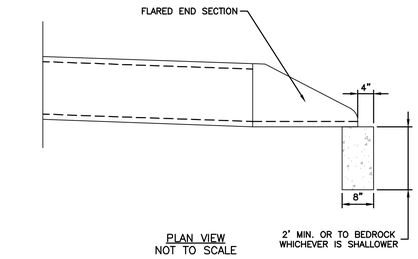
TYPICAL SECTION FOR PLASTIC PIPE
(IN ROCK OR SOIL)

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

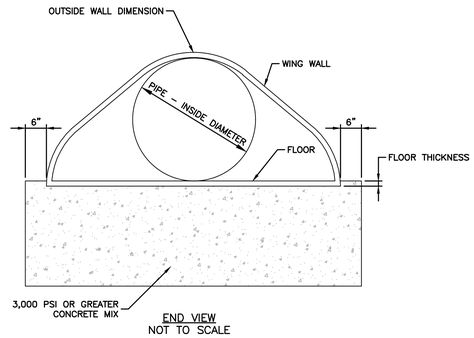
2. TRENCH BANKS MAY BE CUT BACK ON SLOPES IN ACCORDANCE WITH CURRENT OSHA REGULATIONS, BUT ONLY IN AREAS WHERE THE INCREASED TRENCH WIDTH WILL NOT INTERFERE WITH SURFACE FEATURES. SLOPES MUST NOT EXTEND BELOW TOP OF BEDDING.

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

N.T.S.
01 UNDERGROUND PIPE INSTALLATION FROM STORM SEWER LINES

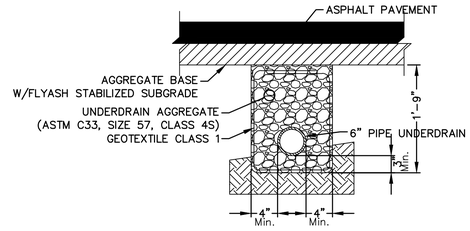


PLAN VIEW
NOT TO SCALE



END VIEW
NOT TO SCALE

N.T.S.
03 FLARED END SECTION SUPPORT DETAIL



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".

N.T.S.
05 PIPE UNDERDRAIN LATERAL

NOT ASBUILT

olsson
MO Certificate of Authority #001592
KS Certificate of Authority #E-2066
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
10/27/2022
PROFESSIONAL ENGINEER

REVISIONS
REVISIONS DESCRIPTION | DATE | NO. REV. | BY

STORM DETAIL SHEET
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

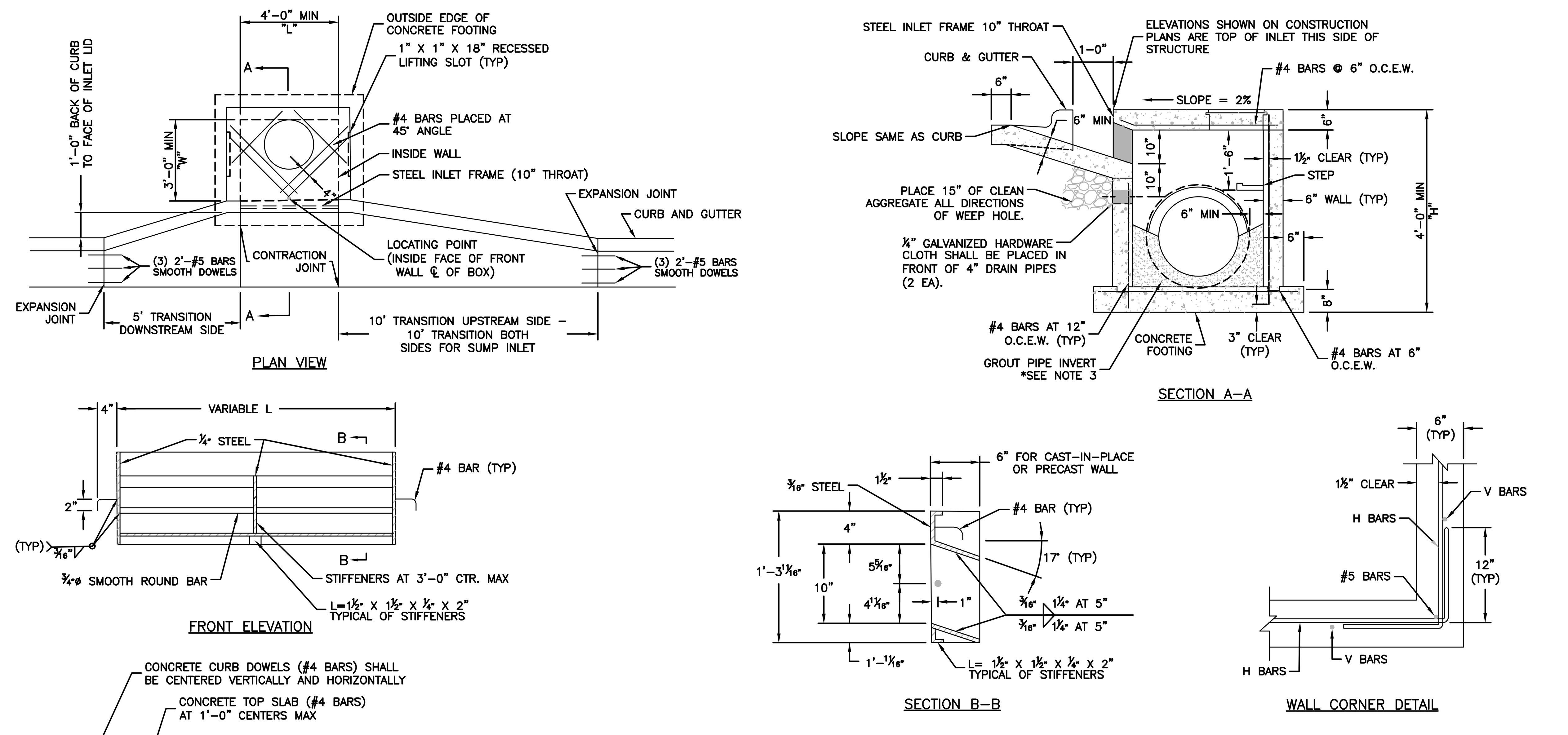
LEE'S SUMMIT, MO

2020

drawn by: C.S.M
checked by: S.M.S
designed by: C.S.M
QA/QC by: J.E.S
project no.: C18-1140
date: 2020.07.10

SHEET
C134

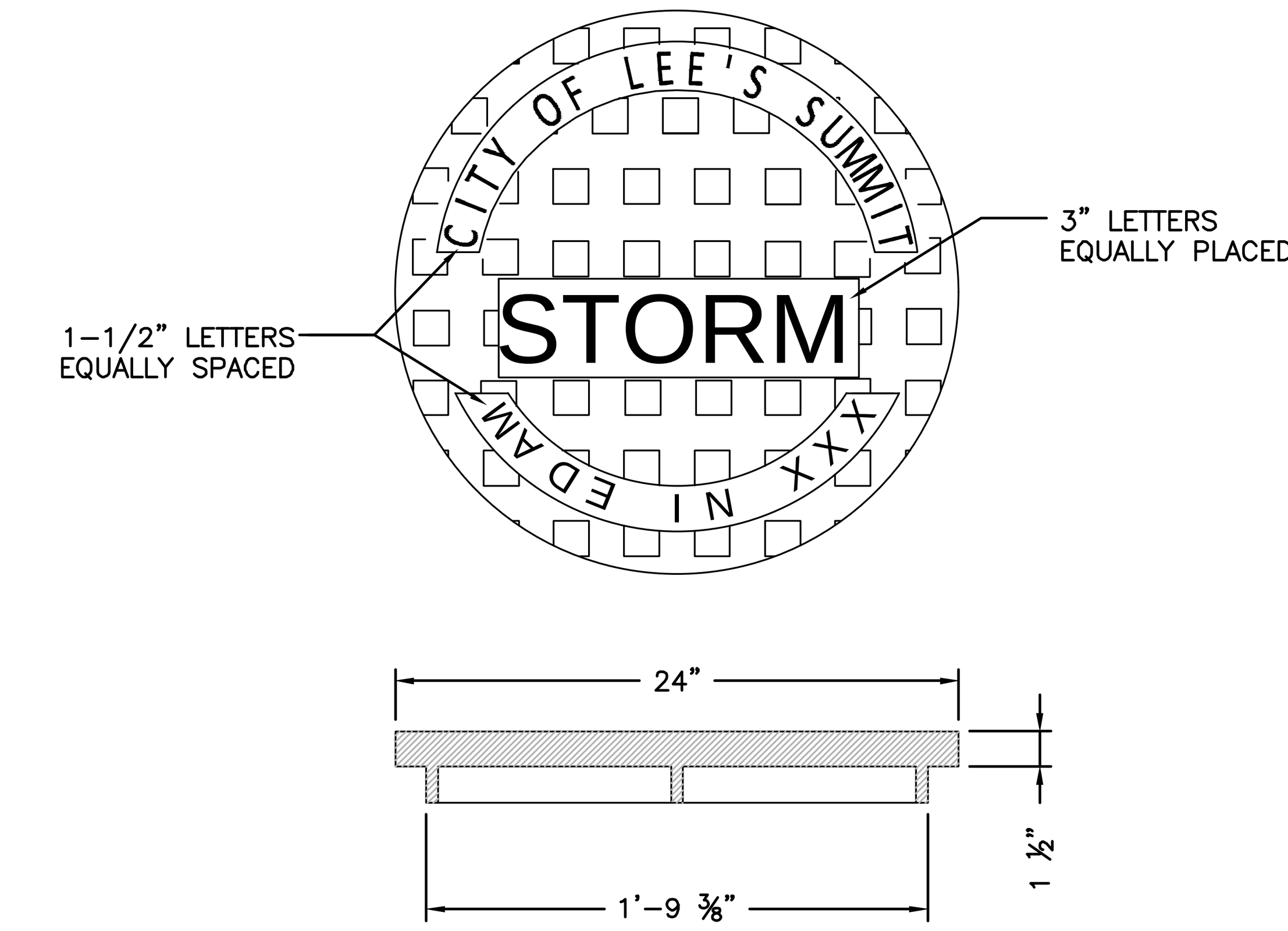
USER: ssoylor
DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_DTL01_C181140.dwg
DATE: Oct 17, 2022 12:45pm



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.

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.

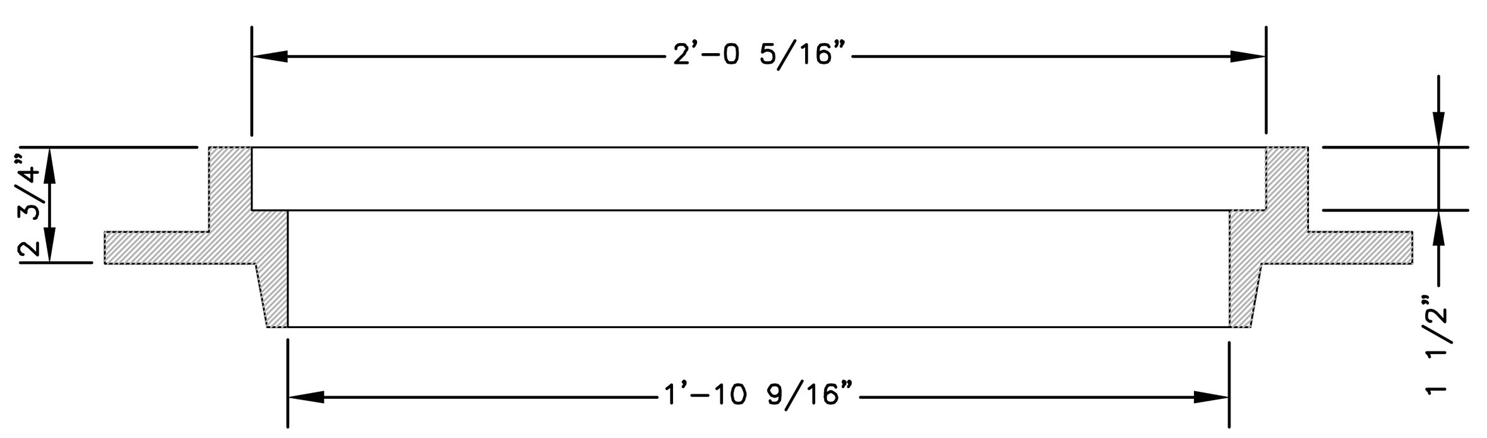
01 N.T.S. 03



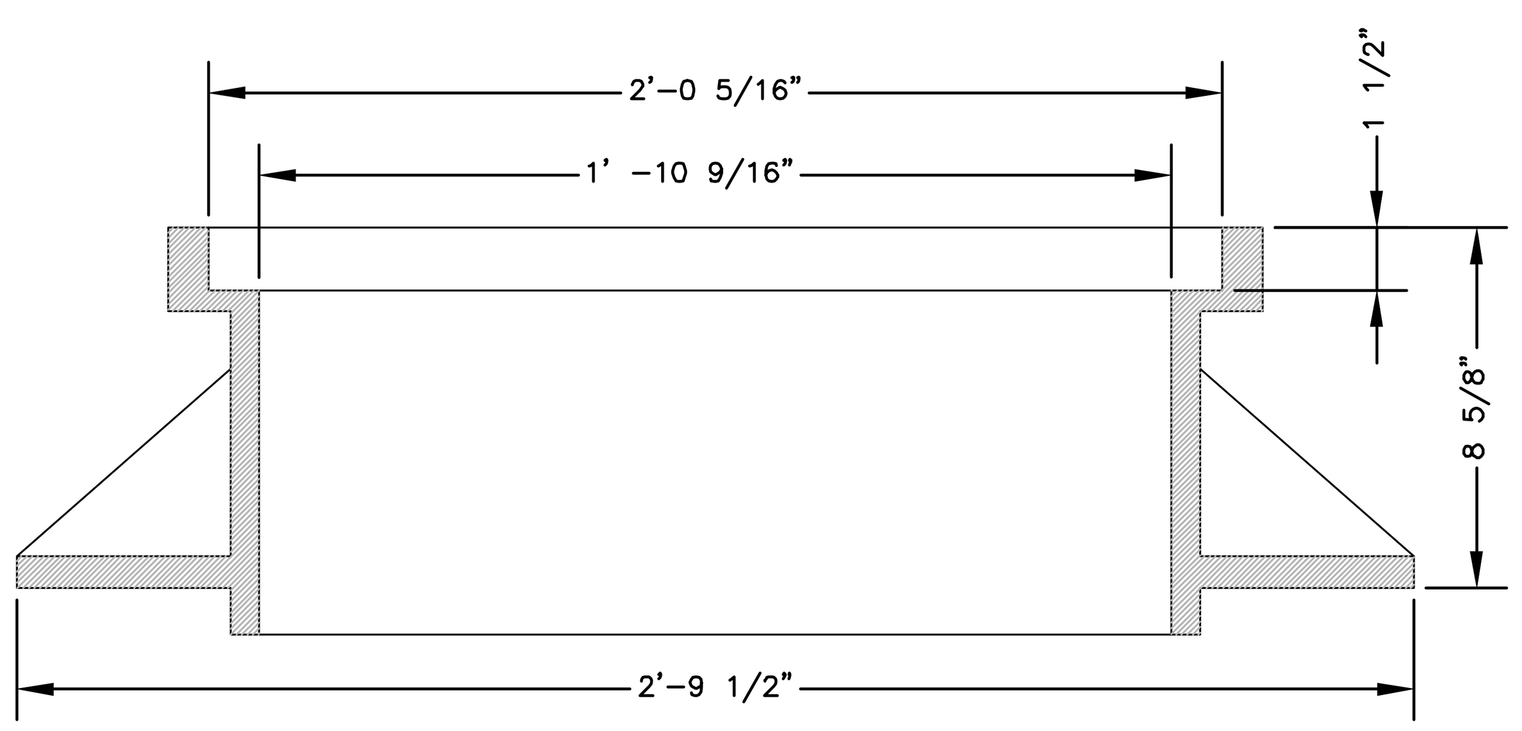
STANDARD 24" MANHOLE COVER
MINIMUM WEIGHT = 160 LB
NOTE: PICK HOLES NOT SHOWN

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

04 N.T.S. STORM MANHOLE COVER DETAIL



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.

02 N.T.S. STORM MANHOLE FRAME DETAIL

NOT ASBUILT

DWG: F:\2018\1001-1500\018-1140-C\40-Design\AutoCAD\Final Plans - Asbuilts\Sheets\GNCV\Street & Storm\C_DTL01_C181140.dwg USER: ssaylor
DATE: Oct 17, 2022 12:45pm

olsson
MO Certificate of Authority # 001592
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.361.1177
www.olsson.com

STATE OF MISSOURI
JULIE ELAINE SELLERS
NUMBER PE-2017000367
PROFESSIONAL ENGINEER
10/27/2022

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

REVISIONS

STORM DETAIL SHEET
STREET & STORM SEWER PLANS

WOODSIDE RIDGE
SECOND PLAT

LEE'S SUMMIT, MO

2020

drawn by:	C.S.M
checked by:	S.M.S
designed by:	C.S.M
QA/QC by:	J.E.S
project no.:	C18-1140
date:	2020.07.10

SHEET
C135