



Sec. 23, Twp. 47 N., Rge. 32 W.
(N.T.S.)

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



OWNER / DEVELOPER
HUNT MIDWEST REAL ESTATE DEVELOPMENT,
INC.
8300 NE. UNDERGROUND DRIVE
KANSAS CITY, MISSOURI 64161
CONTACT: BRENNER HOLLAND
PHONE: 816.455.2500
FAX: 816.455.8701
EMAIL: BHOLLAND@HUNTMIDWEST.COM

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

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

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

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

NAME: KCP&L
PHONE: 816-471-5275

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

NAME: GOOGLE FIBER
PHONE: 877-454-6959

ENGINEER
OLSSON ASSOCIATES
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
CONTACT: NICHOLAS D. HEISER, P.E.
PHONE: 816.587.4320

SURVEYOR
OLSSON ASSOCIATES
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
CONTACT: JASON ROUEBUSH, P.L.S.
PHONE: 816.587.4320



Sheet Number

Nick

NICHOLAS D. HEISER, P.E.
CIVIL ENGINEER
MO#2015000555
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
PHONE: 816.587.4320
FAX: 816.587.1393

06/01/2020
DATE

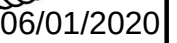
CITY OF LEE'S SUMMIT, MISSOURI

DATE _____

Sue Pyles

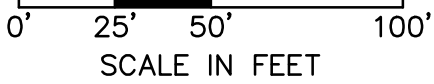
These plans have been reviewed for accuracy and are accepted for basic conformance to the approved construction drawings.

TEL 816.587.4320
FAX 816.587.1393
www.olssonassociates.com

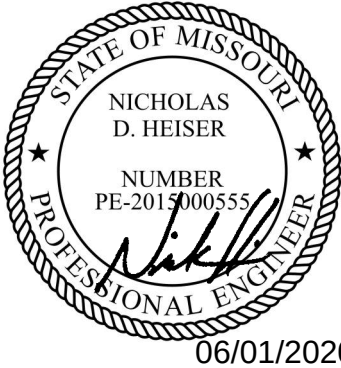
[illegible]EAGLE CREEK
SIXTEENTH PLAT

Drawn by: B.P.K
 Checked by: N.D.H.
 Designed by: B.P.K.
 A/QC by: M.G.D.
 Project no.: 018-0847
 Date: 2018.04.20

SHEET
C101



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ASSOCIATES

[illegible]

GENERAL LAYOUT STREET, STORM & EROSION CONTROL PLANS	
EAGLE CREEK SIXTEENTH PLAT	
LEE'S SUMMIT, MO	2018

drawn by: B.P.K
checked by: N.D.H
designed by: B.P.K
QA/QC by: M.G.D
project no.: 018-0847
date: 2018.04.20



GENERAL NOTES:

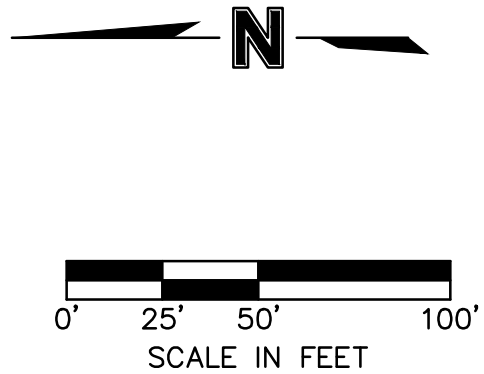
1. CONTRACTOR SHALL ADHERE TO THE "DESIGN AND CONSTRUCTION MANUAL" SECTION 2100 AS ADOPTED BY THE CITY OF LEE'S SUMMIT (LATEST EDITION), FOR EXCAVATION AND EMBANKMENT WORK WITHIN THE PROPOSED RIGHT-OF-WAY.
2. AREAS OF CONSTRUCTION SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC MATTER AND TOPSOIL TO A DEPTH 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. CONTRACTOR SHALL ADHERE TO THE SITE PREPARATION AND STRUCTURAL FILL RECOMMENDATIONS AS CALLED OUT IN THE GEOTECHNICAL REPORT AND ENGINEERING EVALUATION AS PROVIDED BY THE GEOTECHNICAL ENGINEER.
4. ALL EMBANKMENT OUTSIDE OF RIGHT-OF-WAY SHOULD BE PLACED IN CONTROLLED LIFTS HAVING A MAXIMUM LOOSE LIFT THICKNESS OF 8". EMBANKMENT SHOULD BE COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR COMPACTION). MOISTURE CONTENT OF THE FILL AT THE TIME OF COMPACTION SHALL BE WITHIN A RANGE OF -0 TO +4 PERCENT OF OPTIMUM MOISTURE CONTENT.

EARTHWORK QUANTITIES		
LOCATION	CUT (C.Y.)	FILL (C.Y.)
STREET	2038	2612
SITE	21647	21345
TOTAL	23685	23957

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

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

NOT AS BUILT



drawn by: B.P.K.
checked by: N.D.H.
designed by: B.P.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

SHEET
C104

STREET, STORM & EROSION CONTROL PLANS

EAGLE CREEK
SIXTEENTH PLAT

LEE'S SUMMIT, MO

18

2018

NO. REV. 1

DATE 05/17/2018

REVISIONS DESCRIPTION

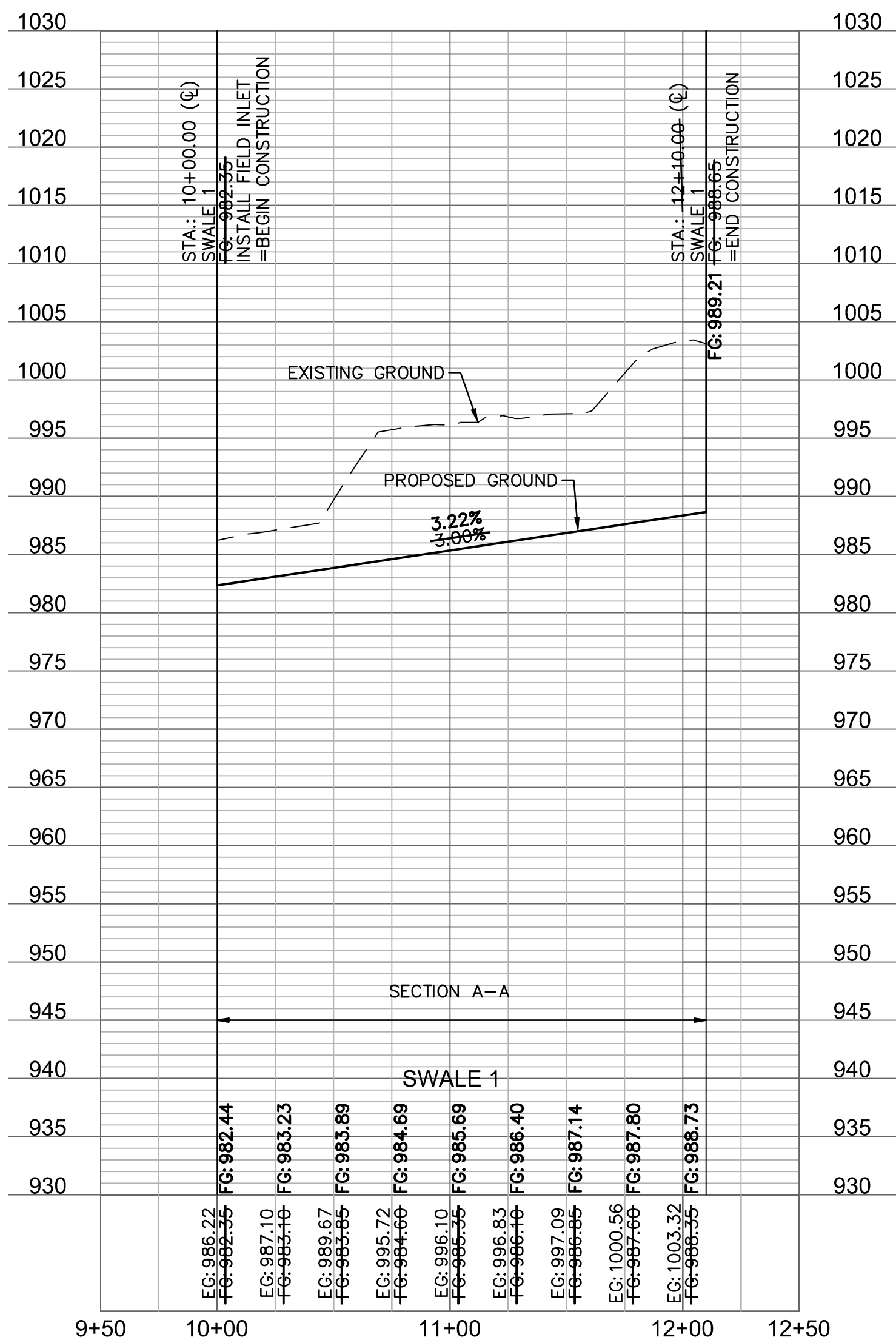
CITY COMMENTS - 05/17/2018

BY

REVISIONS

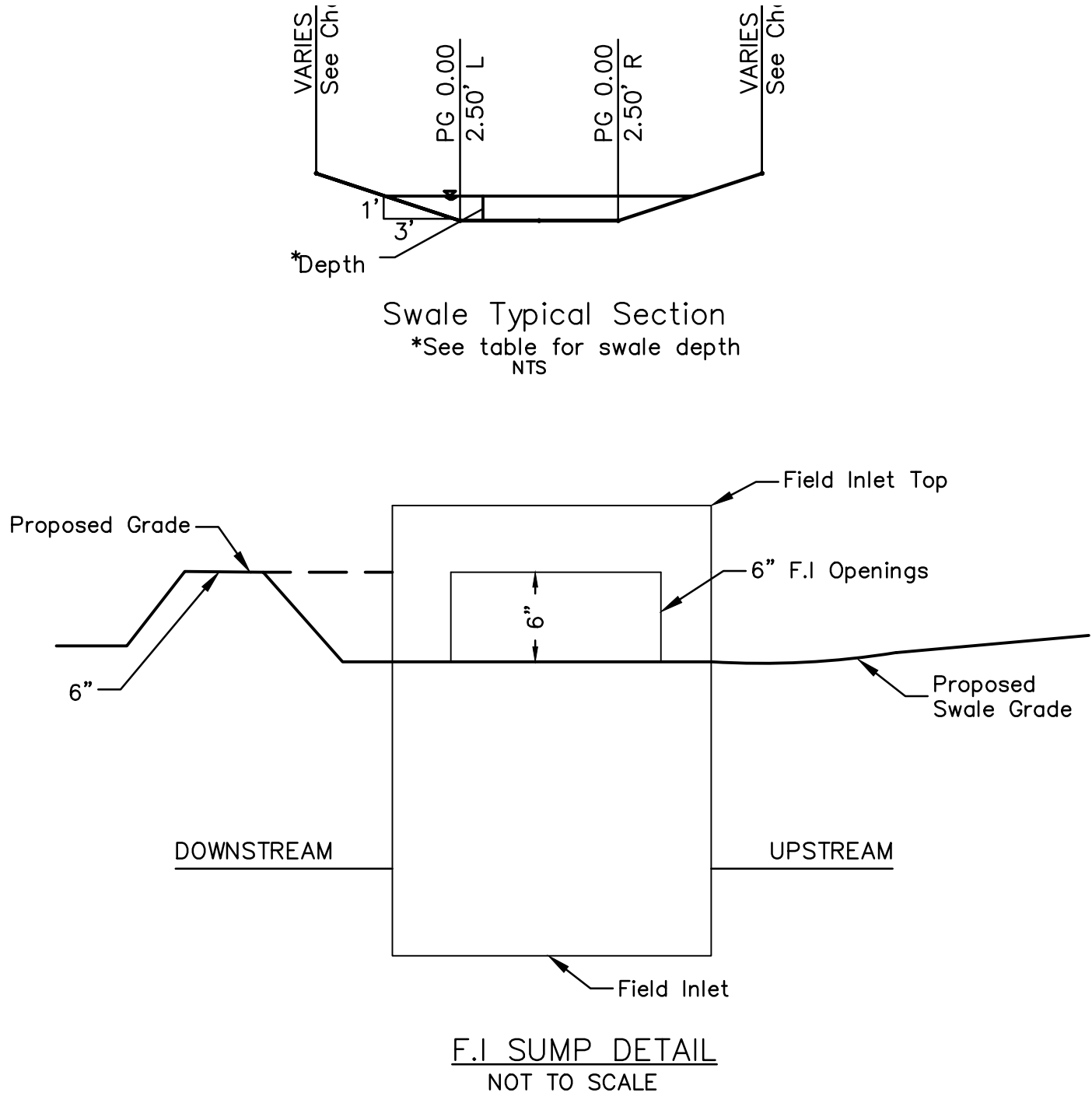
STATE OF MISSOURI
NICHOLAS D. HEISER
NUMBER PE-2013-000555
PROFESSIONAL ENGINEER
06/01/2020

MOLSSON ASSOCIATES
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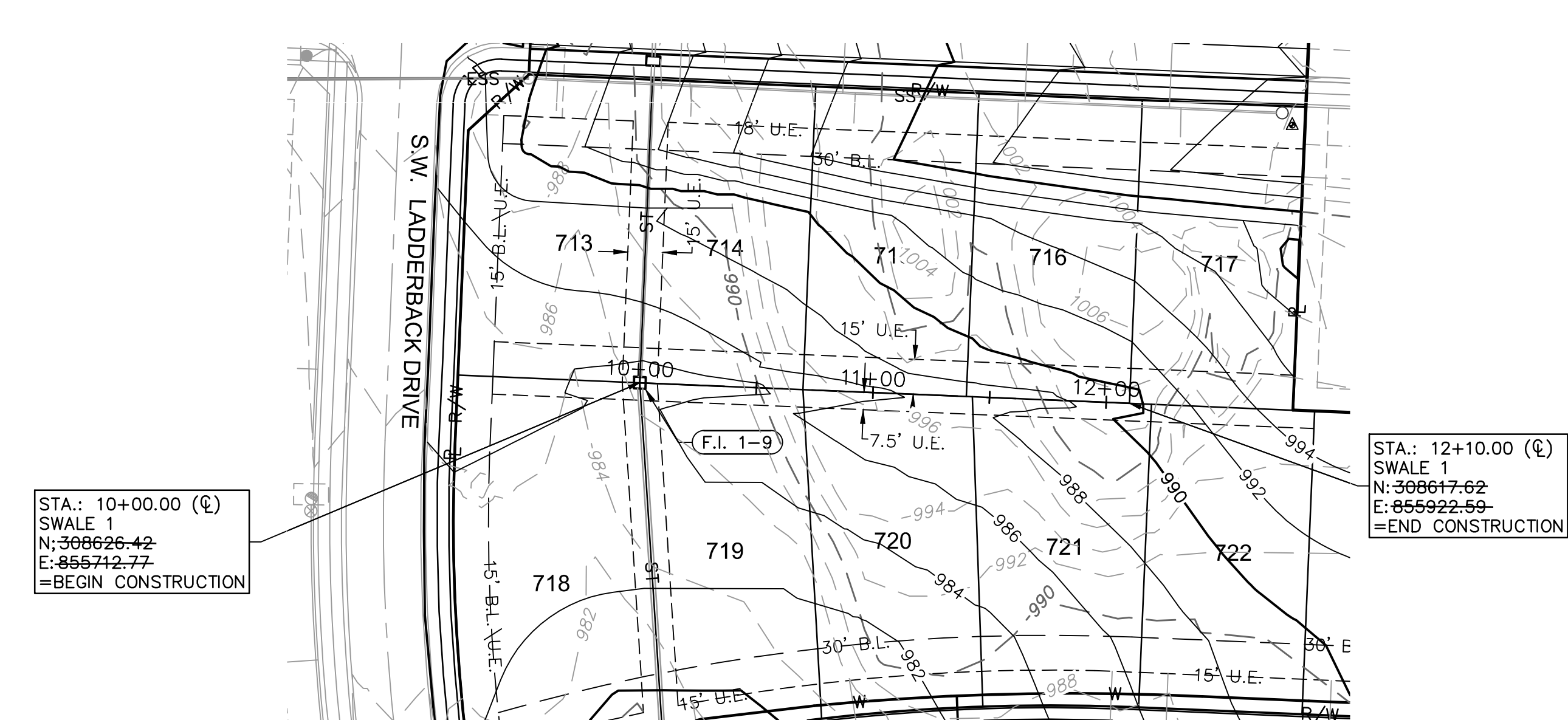
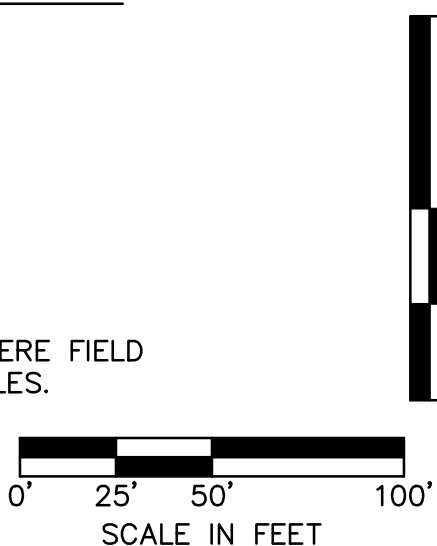


SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION DATA								RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Minimum Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft2)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft3)
A-A	0.03	3.00%	1.35	3:1	3:1	5	7.70	0.35	2.12	3.64	7.21	7.10	0.56	0.55
B-B	0.03	2.70%	1.31	3:1	3:1	5	5.86	0.31	1.84	3.19	6.96	6.86	0.47	0.44
C-C	0.03	2.70%	1.23	3:1	3:1	5	3.42	0.23	1.31	2.61	6.45	6.38	0.34	0.34
D-D	0.03	2.70%	1.25	3:1	3:1	5	4.01	0.25	1.44	2.79	6.58	6.50	0.37	0.37

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

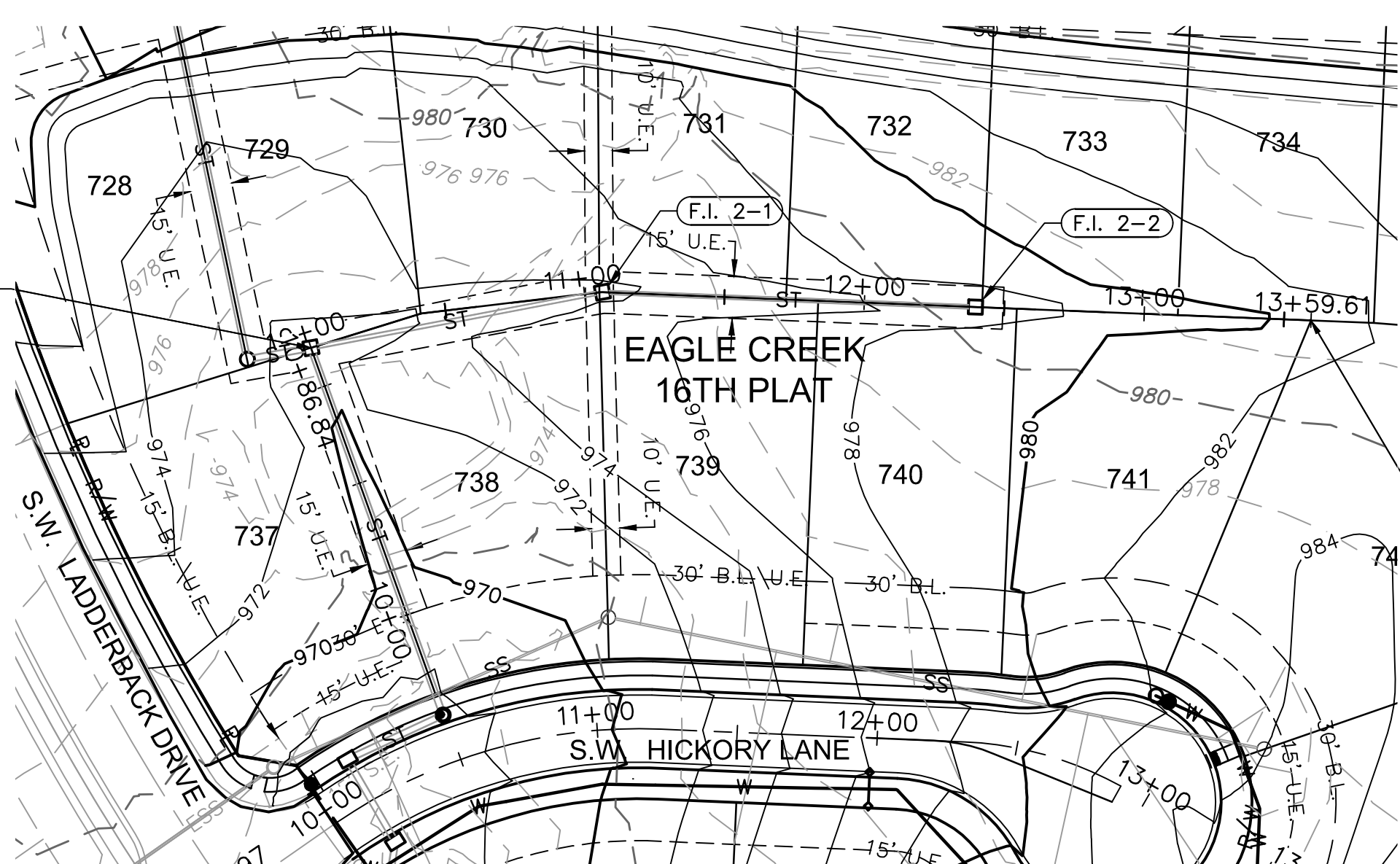


NOTE: INCLUDE SUMP PER ABOVE DETAIL WHERE FIELD INLETS ARE LOCATED ON GRADE WITHIN SWALES.

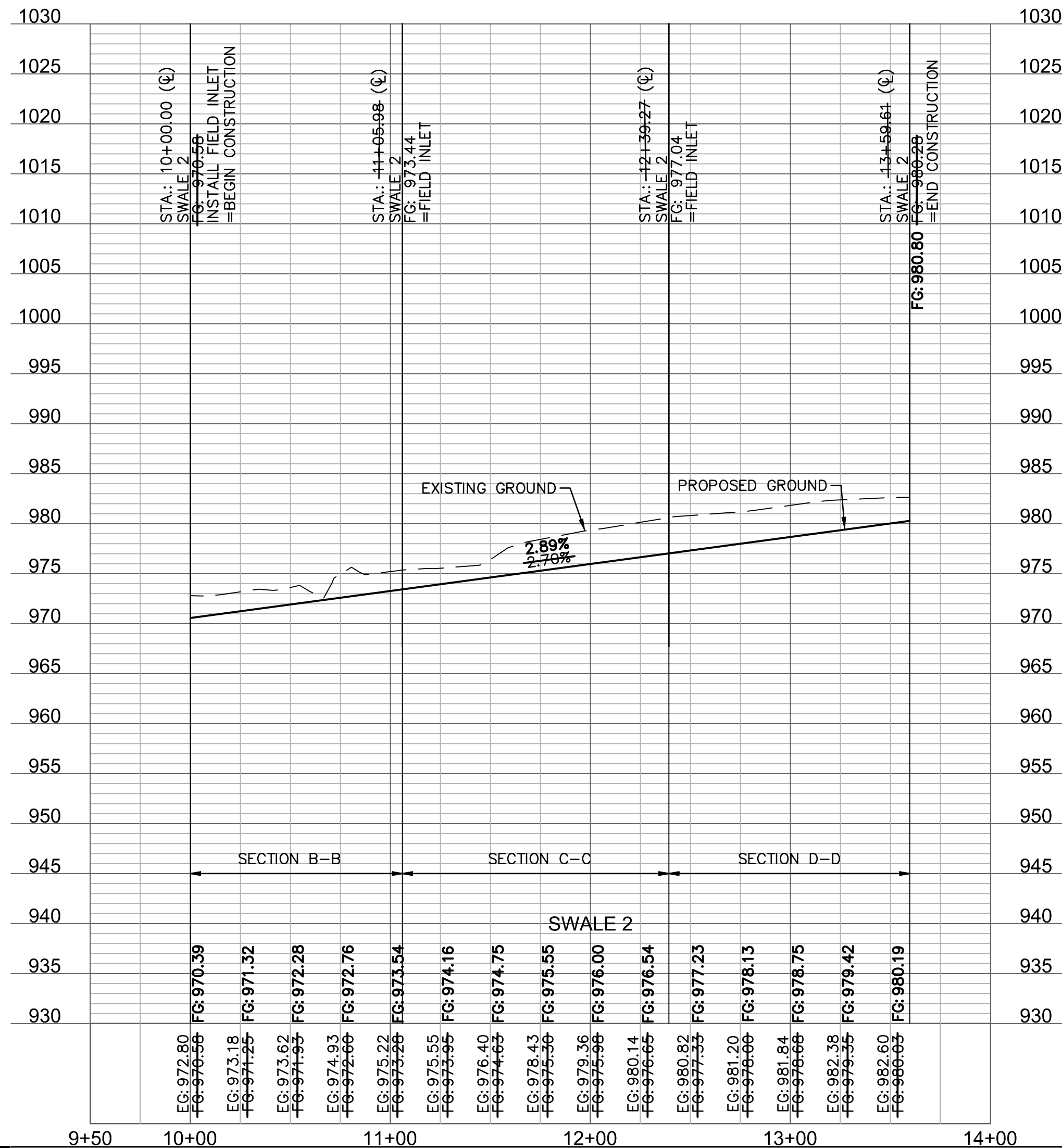


STA.: 10+00.00 (E)
SWALE 2
N: 308288.47
E: 855788.40
=BEGIN CONSTRUCTION

STA.: 12+10.00 (E)
SWALE 1
N: 308617.62
E: 855922.59
=END CONSTRUCTION



STA.: 13+59.61 (E)
SWALE 2
N: 308298.22
E: 856137.51
=END CONSTRUCTION



AS BUILT
DATE: 05/29/2020

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STATE OF MISSOURI
NICHOLAS D. HEISER
NUMBER PE-2013000555
PROFESSIONAL ENGINEER

06/01/2020

BY

REVISIONS DESCRIPTION

NO. REV. DATE

1 06/15/2018 CITY COMMENTS - 05/17/2018

SWALE PLAN & PROFILE
STREET, STORM & EROSION CONTROL PLANS

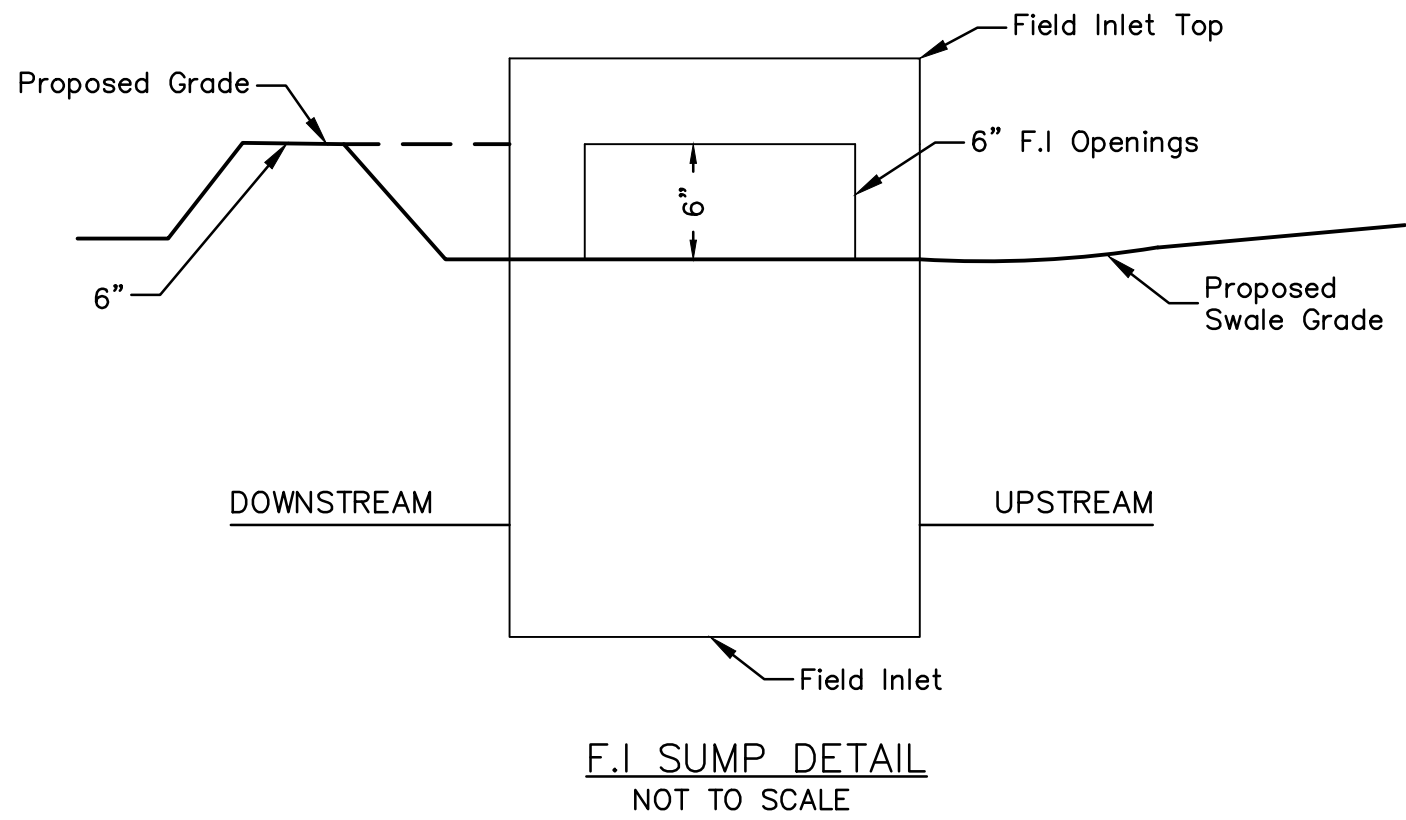
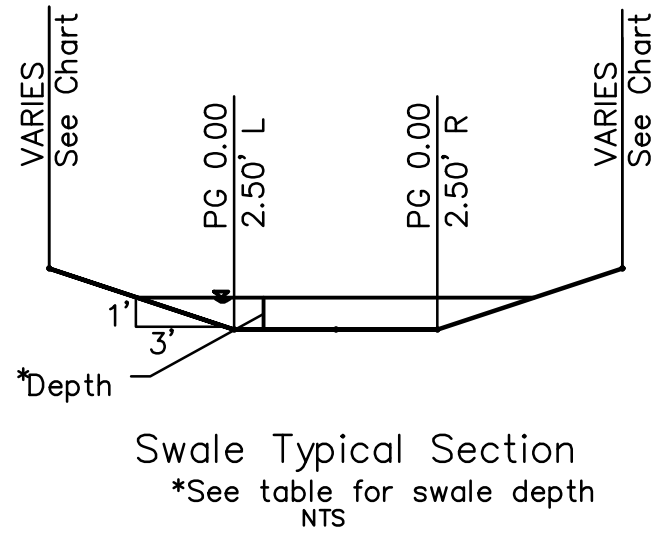
EAGLE CREEK
SIXTEENTH PLAT

2018

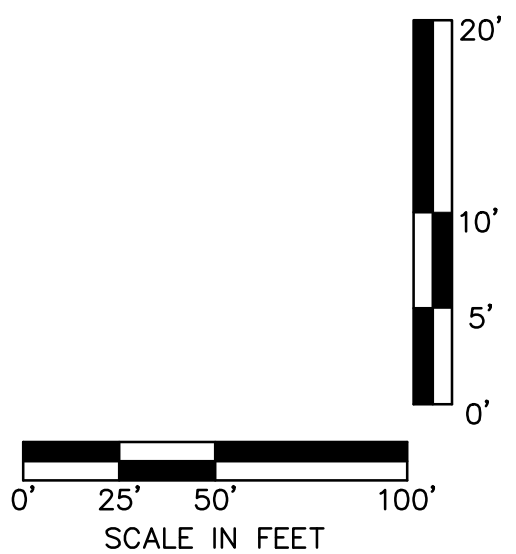
drawn by: B.B.K.
checked by: N.D.H.
designed by: B.P.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

SHEET
C105

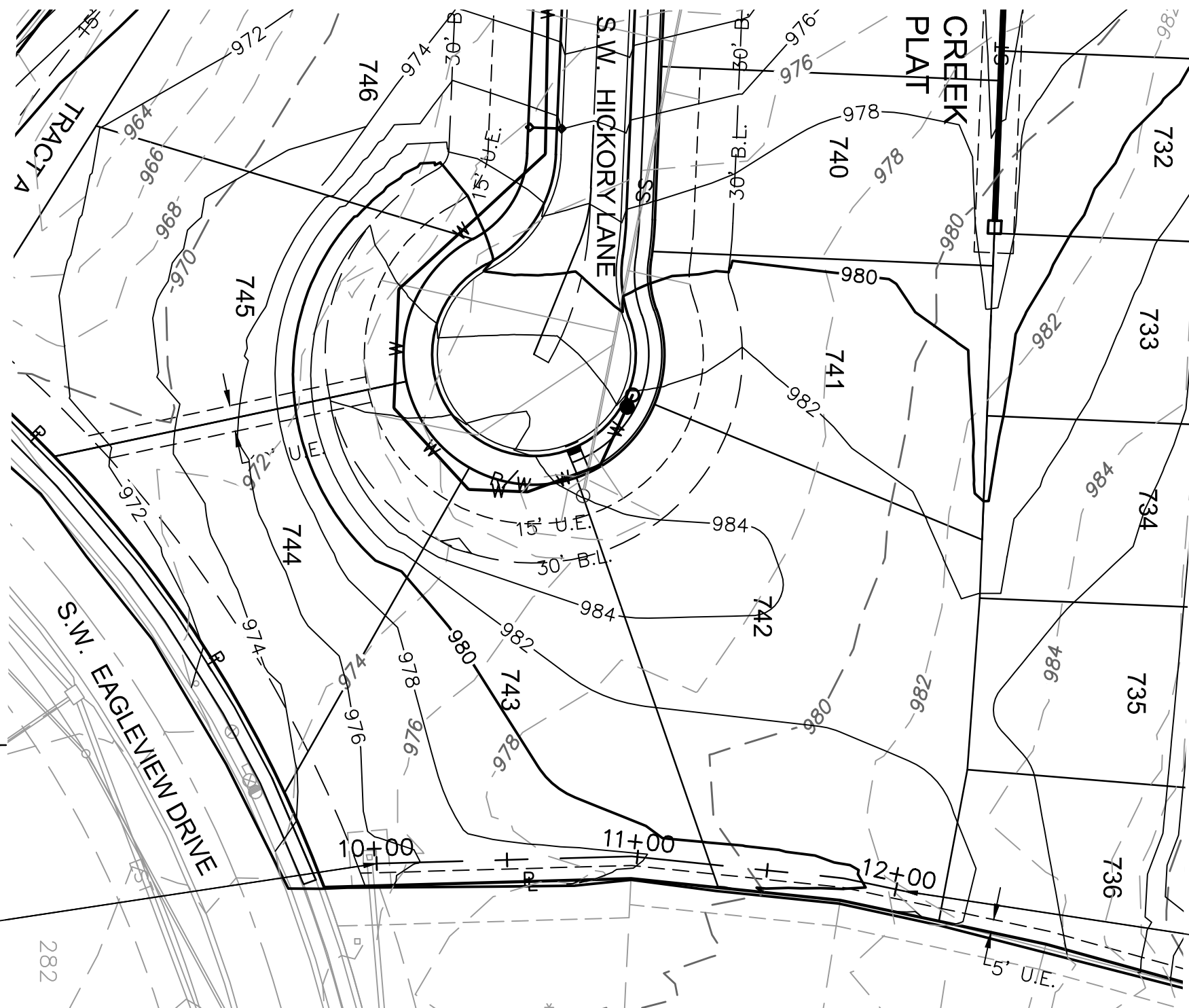
SWALE GRADING NOTES:
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2. AS-BUILT SURVEY IS REQUIRED/APPROVED BY CITY FOR ALL SWALES AND PRIOR TO APPROVAL FOR ANY BUILDING FOUNDATION PERMIT. CONTRACTOR SHALL BE REQUIRED TO REGRADE SWALES AT CONTRACTOR'S EXPENSE IF ABOVE REQUIREMENTS ARE NOT MET.



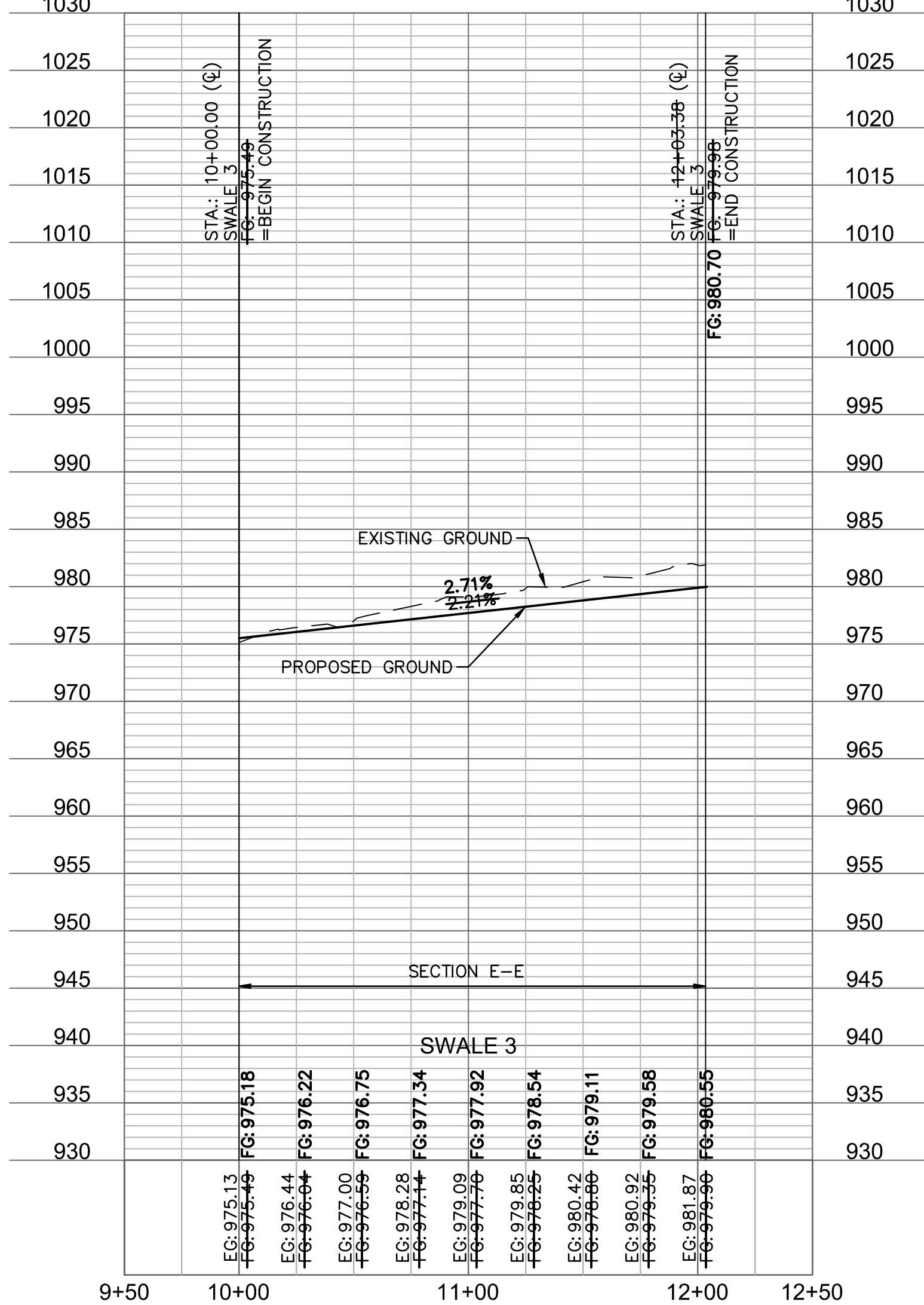
NOTE: INCLUDE SUMP PER ABOVE DETAIL WHERE FIELD INLETS ARE LOCATED ON GRADE WITHIN SWALES.



STA.: 10+00.00 (E)
SWALE 3
N: 308066.10
E: 856261.65
=BEGIN CONSTRUCTION

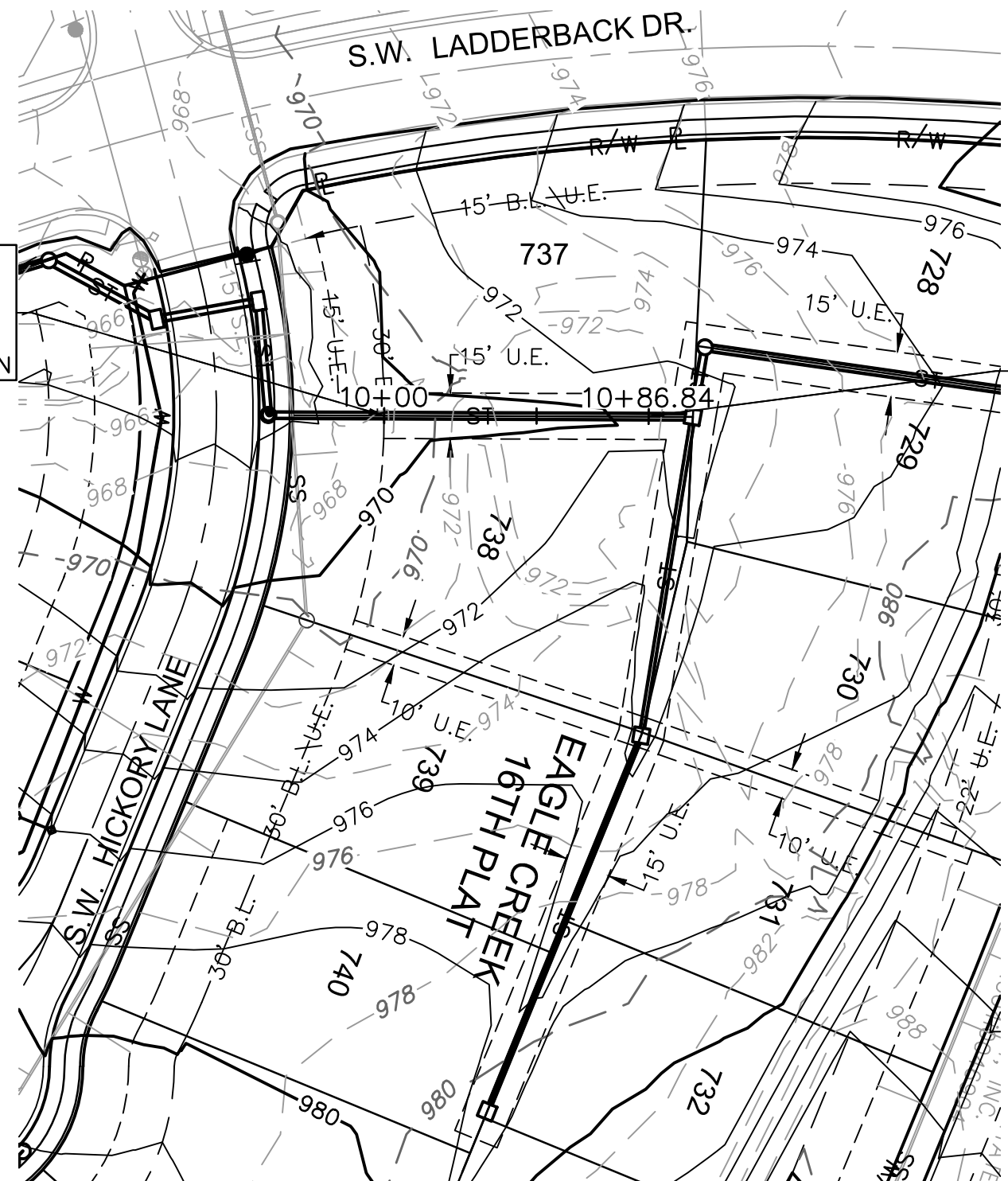


STA.: 12+03.38 (E)
SWALE 3
N: 308268.48
E: 856272.24
=END CONSTRUCTION

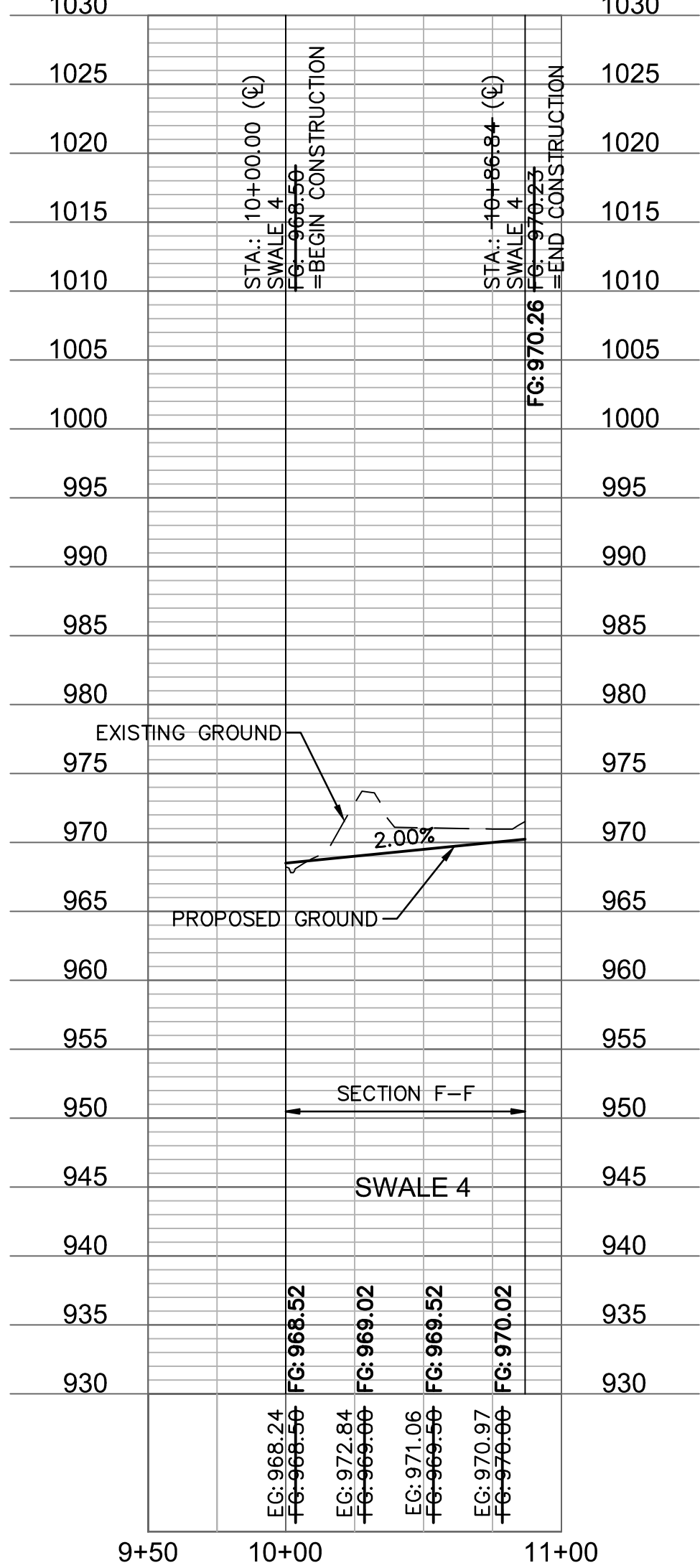


SWALE DESIGN TABLE (100-YEAR RETURN FREQUENCY)														
SECTION DATA								RESULTS						
SECTION	Mannings Coefficient	Channel Slope (%)	Minimum Swale Depth (ft)	Left Side Slope (H:V)	Right Side Slope (H:V)	Bottom Width (ft)	Discharge (cfs)	Water Depth (ft)	Flow Area (ft²)	Velocity (ft/sec)	Wetted Perimeter (ft)	Top Width (ft)	Specific Energy (ft)	Shear Stress (lbs/ft³)
E-E	0.03	2.21%	1.41	3:1	3:1	5	8.75	0.41	2.55	3.43	7.59	7.46	0.59	0.46
F-F	0.03	2.00%	1.4	3:1	3:1	5	8.28	0.40	2.48	3.34	7.53	7.40	0.57	0.41

STA.: 10+00.00 (E)
SWALE 4
N: 308193.10
E: 855814.70
=BEGIN CONSTRUCTION



STA.: 10+86.84 (E)
SWALE 4
N: 308274.79
E: 855785.22
=END CONSTRUCTION



AS BUILT
DATE: 05/29/2020

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www.olsonassociates.com

STATE OF MISSOURI
NICHOLAS D. HEISER
NUMBER PE-2013-000555
PROFESSIONAL ENGINEER
06/01/2020

BY

REVISIONS DESCRIPTION

NO. REV.

DATE

CITY COMMENTS - 06/15/2018

SWALE PLAN & PROFILE
STREET, STORM & EROSION CONTROL PLANS

EAGLE CREEK
SIXTEENTH PLAT

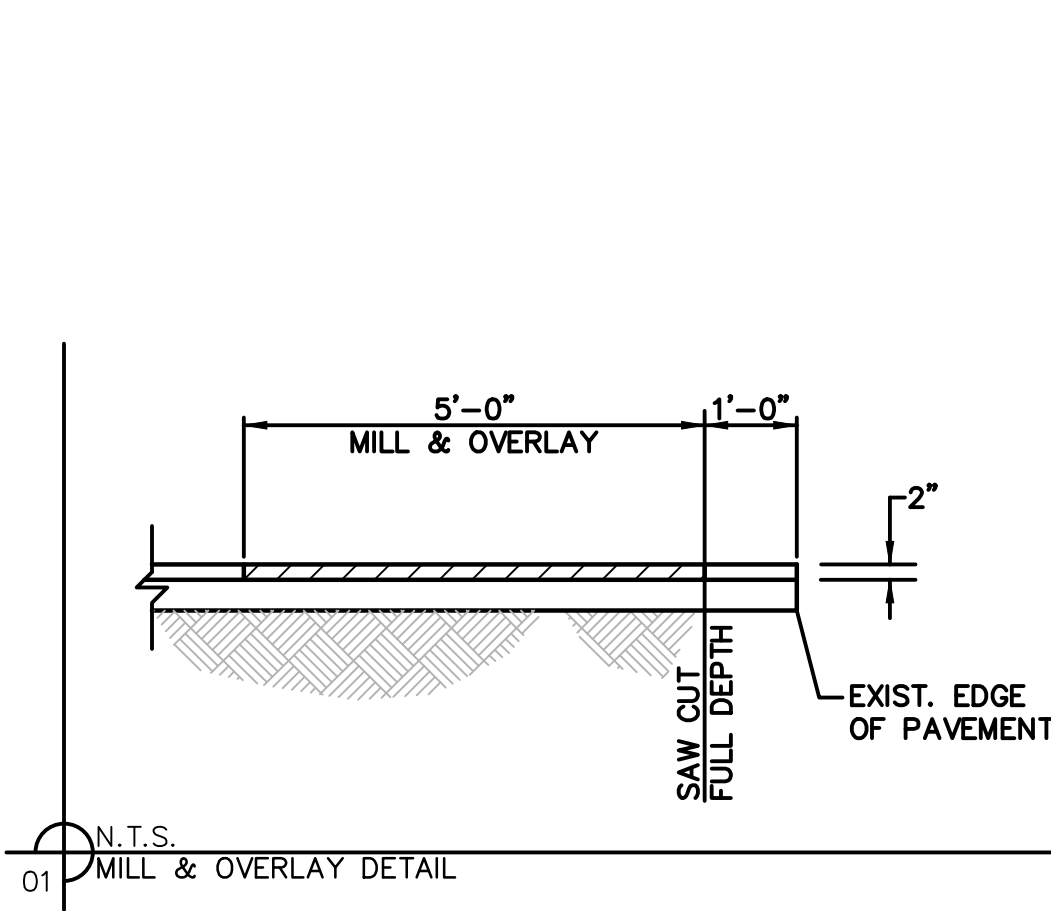
2018

drawn by: B.P.K.
checked by: N.D.H.
designed by: B.P.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

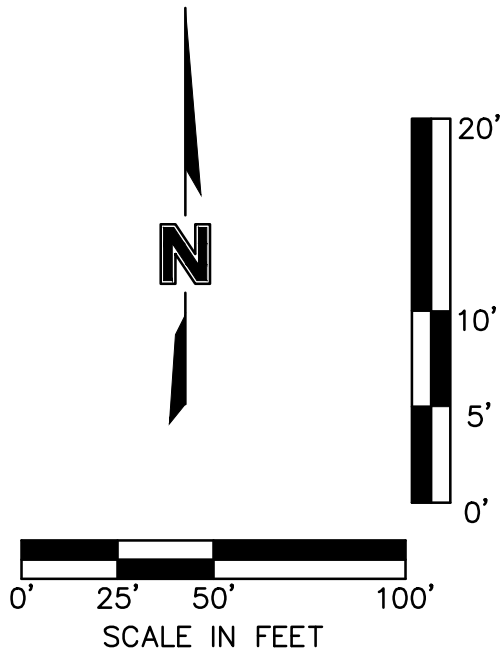
SHEET
C106

REVISIONS

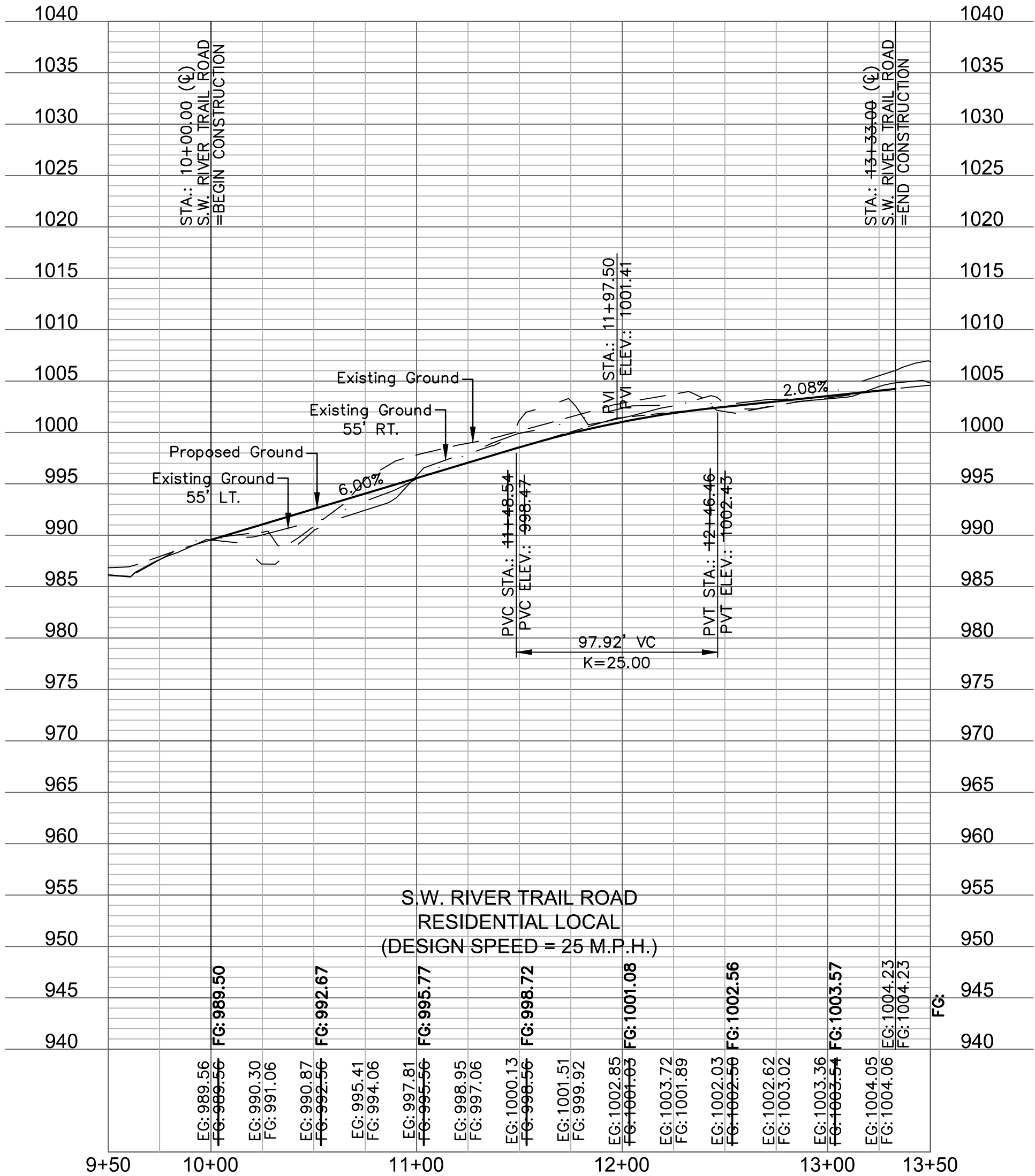
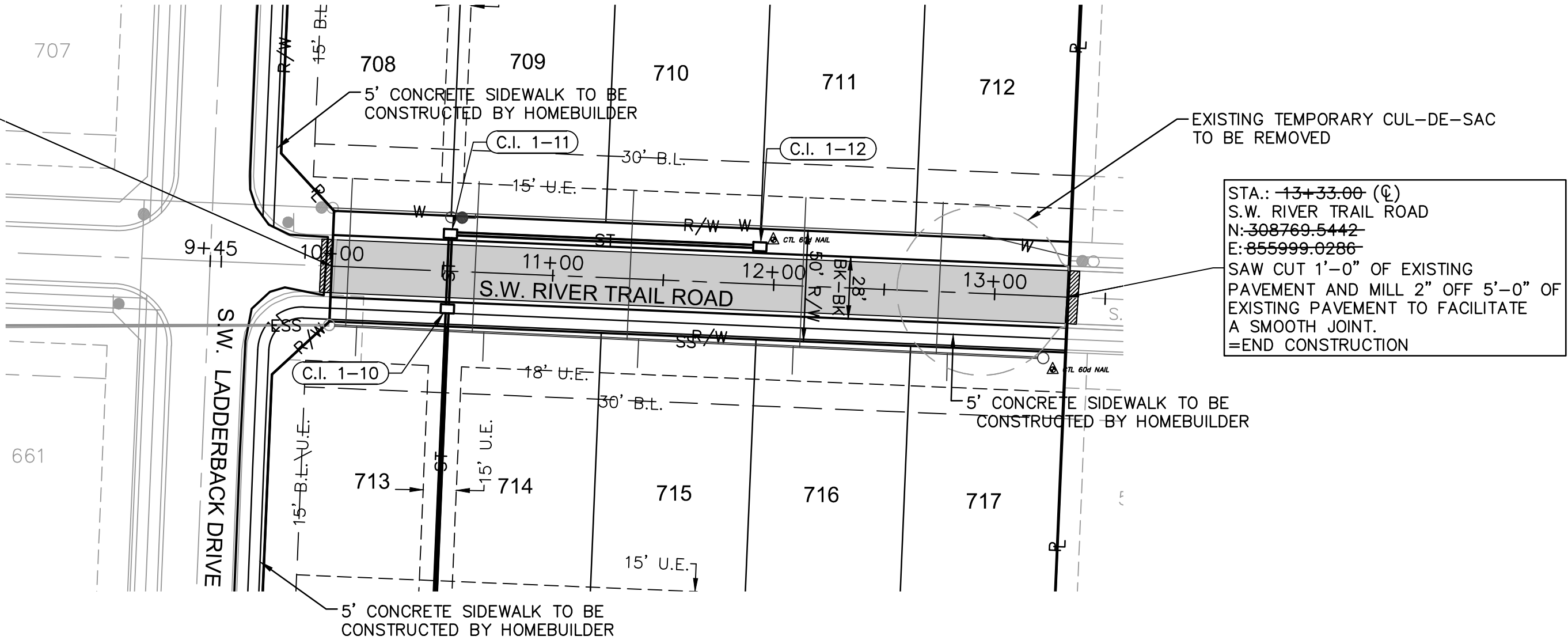
LEE'S SUMMIT, MO



LEGEND	
	MILL & OVERLAY
	CONCRETE SIDEWALK
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER (See Detail Sheet)

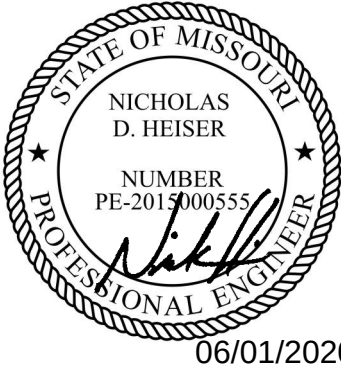


STA.: 10+00.00 (C)
S.W. RIVER TRAIL ROAD
N: 308783.5092
E: 855666.3216
SAW CUT 1'-0" OF EXISTING PAVEMENT AND MILL 2" OFF 5'-0" OF EXISTING PAVEMENT TO FACILITATE A SMOOTH JOINT.
=BEGIN CONSTRUCTION



AS BUILT
DATE: 05/29/2020

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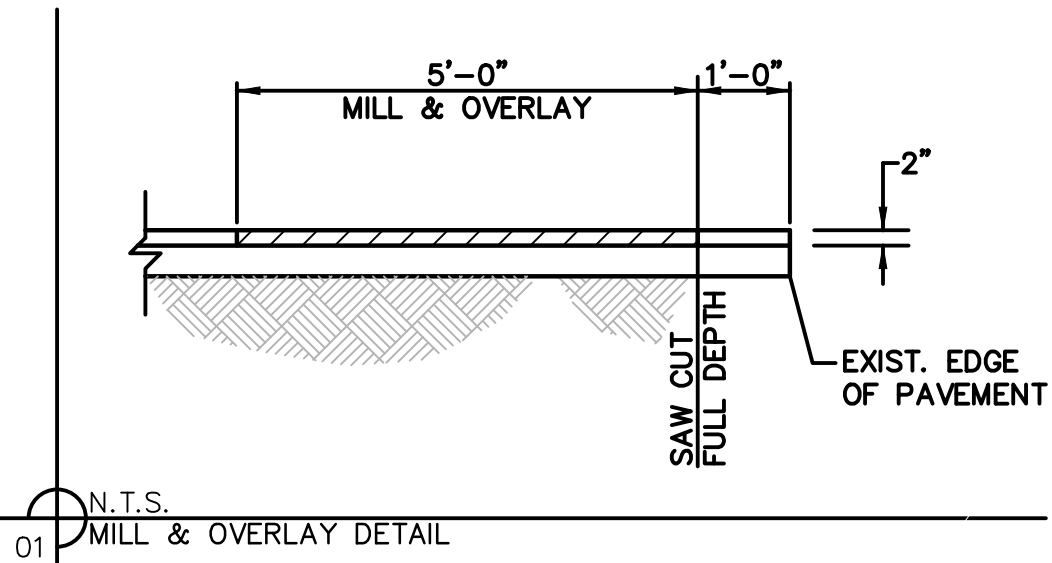
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2		07/12/2018	CITY COMMENTS - 07/10/2018
3		07/31/2018	CITY COMMENTS - 07/31/2018

ROADWAY PLAN & PROFILE		STREET, STORM & EROSION CONTROL PLANS	
EAGLE CREEK		SIXTEENTH PLAT	
LEE'S SUMMIT, MO		2018	

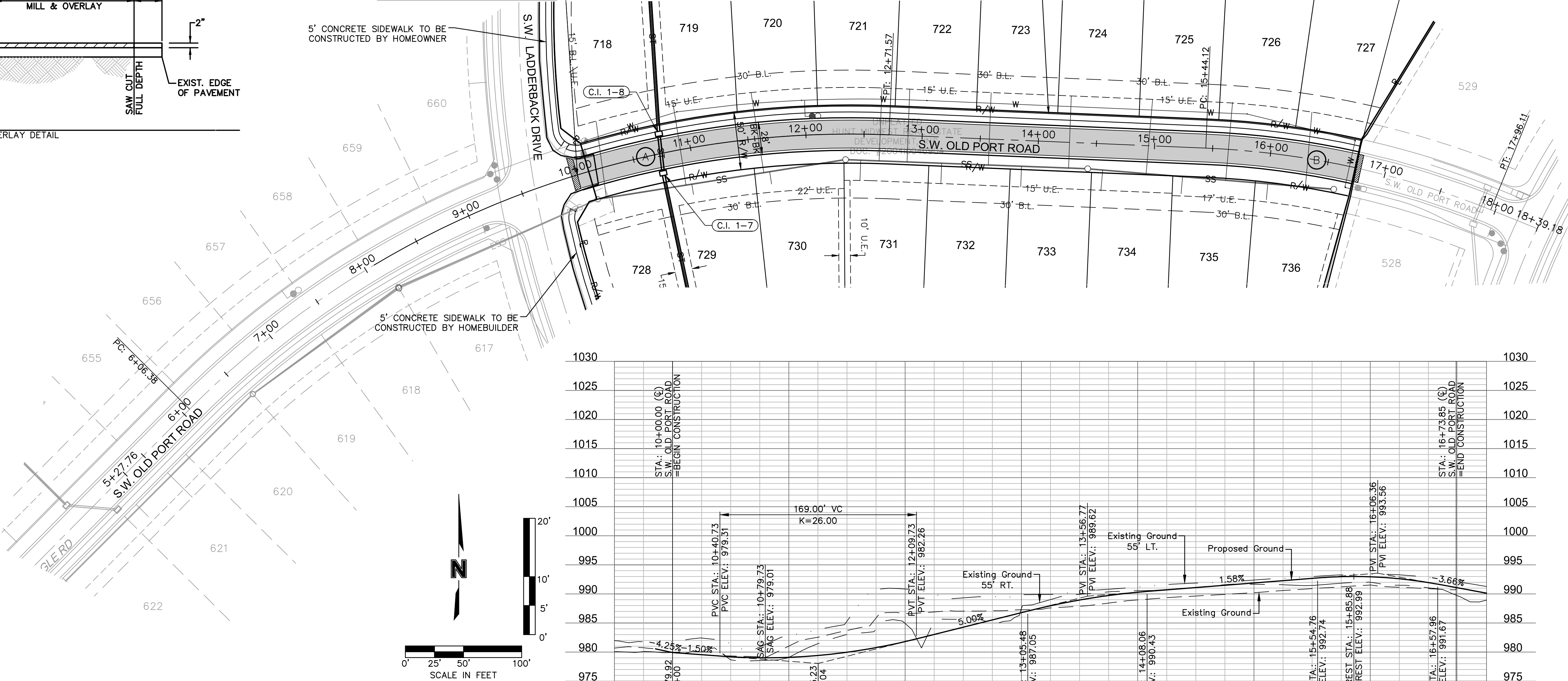
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SHEET
C107

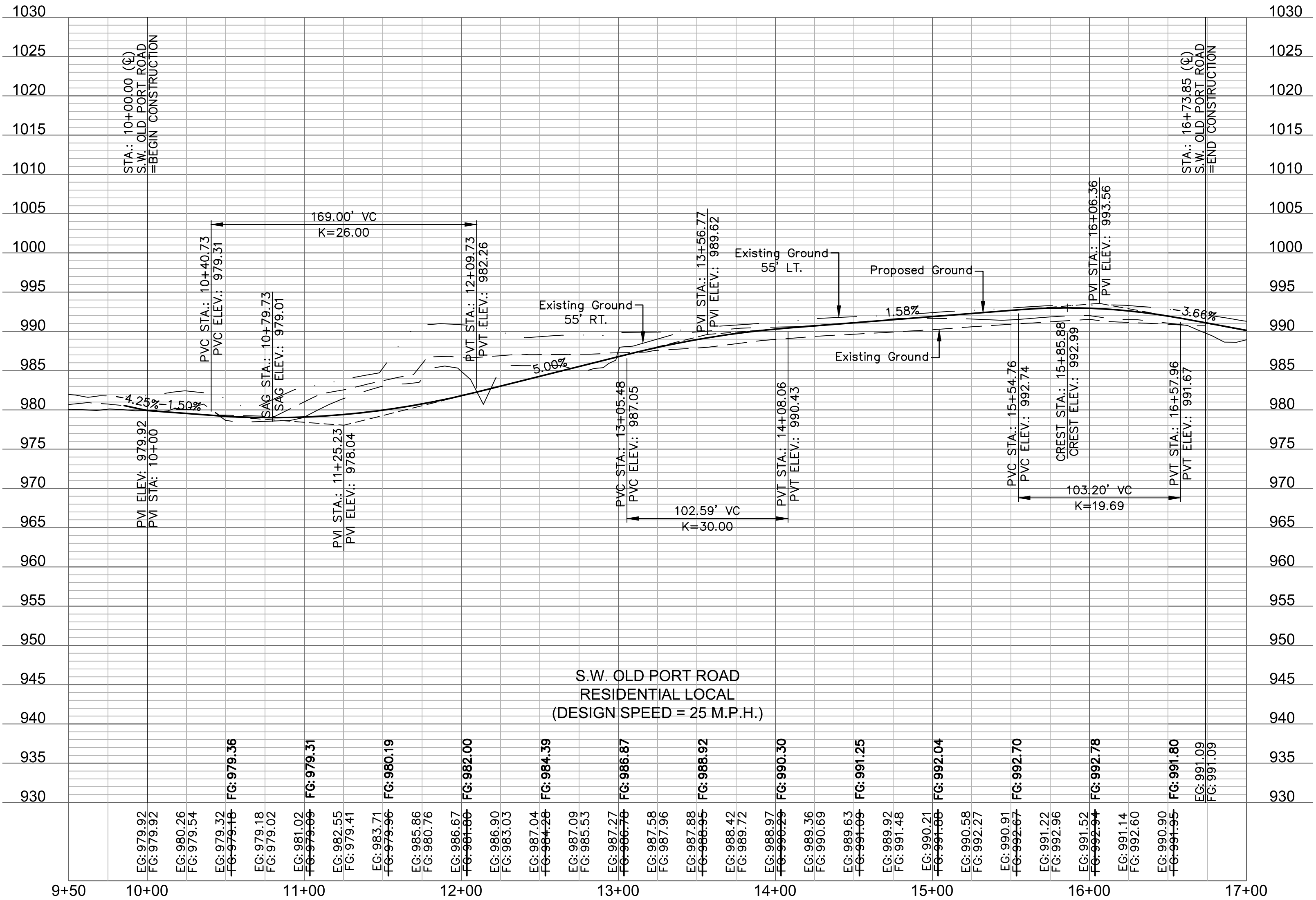
CURVE	RADIUS	LENGTH	TANGENT	P.I. STA. (BK.)
A	800	665.20	353.19	9+18.38
B	735	252.00	127.24	16+68.87



STA.: 10+00.00 (C)
S.W. OLD PORT ROAD
N: 308428.0880
E: 855653.2998
SAW CUT 1'-0" OF EXISTING
PAVEMENT AND MILL 2" OFF 5'-0" OF
EXISTING PAVEMENT TO FACILITATE
A SMOOTH JOINT.
=BEGIN CONSTRUCTION

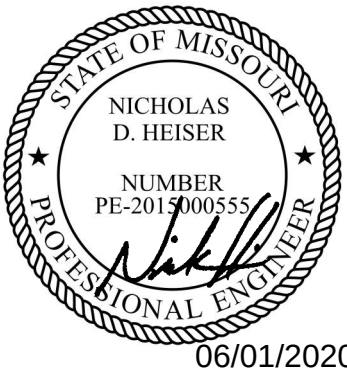
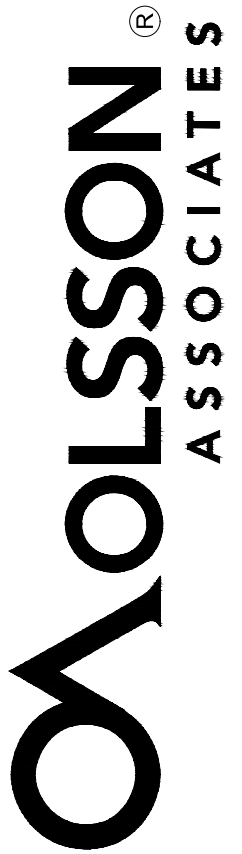


LEGEND	
	MILL & OVERLAY
	CONCRETE SIDEWALK
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER (See Detail Sheet)



AS BUILT
DATE: 05/29/2020

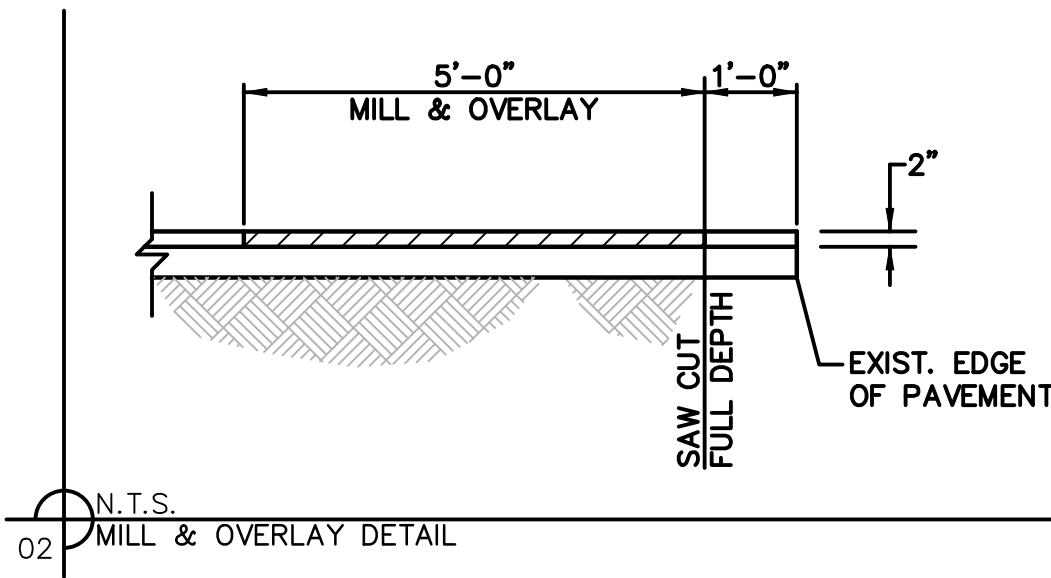
STA.: 16+73.85 (C)
S.W. OLD PORT ROAD
N: 308434.2787
E: 856322.1408
SAW CUT 1'-0" OF EXISTING
PAVEMENT AND MILL 2" OFF 5'-0" OF
EXISTING PAVEMENT TO FACILITATE
A SMOOTH JOINT.
=END CONSTRUCTION

[illegible]

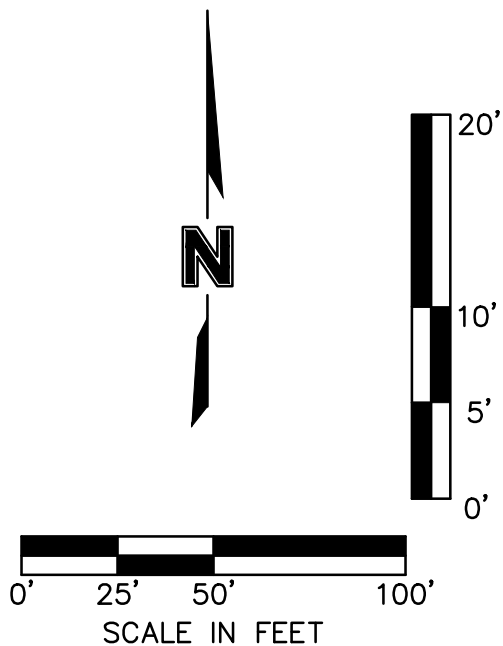
ROADWAY PLAN & PROFILE STREET, STORM & EROSION CONTROL PLANS	
EAGLE CREEK SIXTEENTH PLAT	
LEE'S SUMMIT, MO	2018

drawn by: B.P.K
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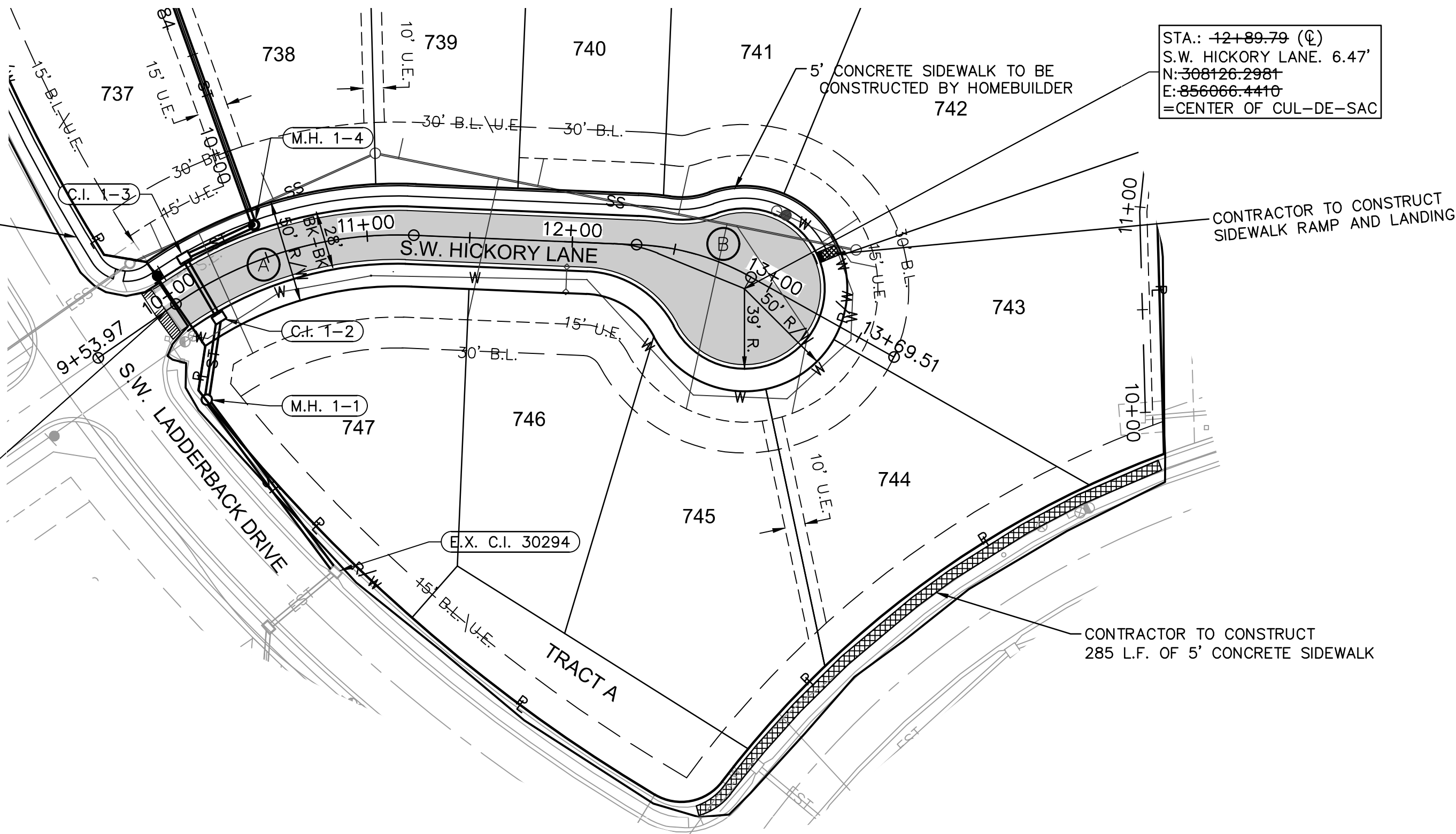
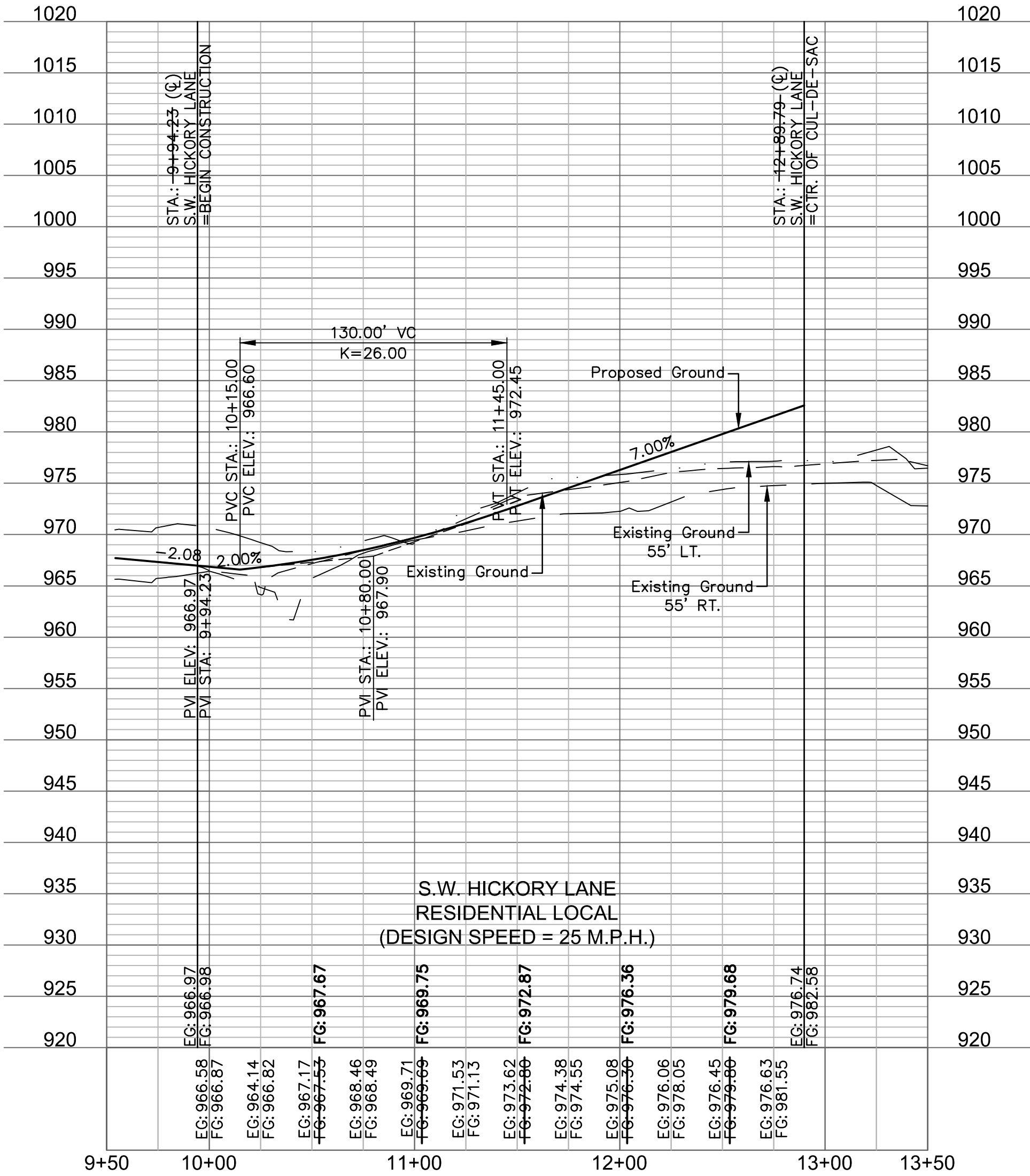
CURVE	RADIUS	LENGTH	TANGENT	P.I. STA. (BK.)
A	190	122.68	63.57	10+57.48
B	125	56.48	29.79	12+60.00



LEGEND	
	MILL & OVERLAY
	CONCRETE SIDEWALK
	ASPHALT PAVEMENT
	CG-2 CURB & GUTTER (See Detail Sheet)

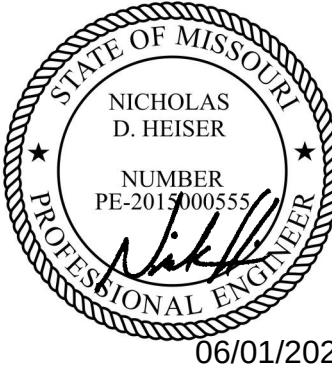


STA.: 9+94.23 (C)
S.W. HICKORY LANE
N: 308115.560+
E: 855784.7459
SAW CUT MILL 1'-0" OF EXISTING PAVEMENT MILL 2" OFF 5'-0" OF EXISTING PAVEMENT TO FACILITATE A SMOOTH JOINT.
=BEGIN CONSTRUCTION



STA.: 12+89.79 (C)
S.W. HICKORY LANE. 6.47'
N: 308126.298+
E: 856666.4410
=CENTER OF CUL-DE-SAC

AS BUILT
DATE: 05/29/2020



NO.	REV.	DATE	REVISIONS DESCRIPTION
1		06/15/2018	CITY COMMENTS - 06/17/2018
2		07/19/2018	CITY COMMENTS - 07/10/2018
3		07/31/2018	CITY COMMENTS - 07/31/2018

ROADWAY PLAN & PROFILE		2018
STREET, STORM & EROSION CONTROL PLANS		
EAGLE CREEK SIXTEENTH PLAT		
LEE'S SUMMIT, MO		

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SHEET
C109

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1301 EURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
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www.molssonassociates.com

ASBUILT IS 0.10' E
AND 0.33' N OF PLAN
STA.: 11+80.47
STA.: 10+15.05 CL
17.25' LT

C.I. 1-3, CONST. STD.
CURB INLET (5'X3' INSIDE)
STA.: 11+78.34 (STORM LINE 1)
=STA.: 10+14.82 (E)
S.W. HICKORY LANE, 47.00' LT

ASBUILT IS 1.01' E
AND 0.52' S OF PLAN
STA.: 12+18.54
STA.: 10+50.08 CL
16.17' LT

M.H. 1-4, CONST. STD.
STORM MANHOLE (4' DIA. INSIDE)
STA.: 12+16.53 (STORM LINE 1)
=STA.: 10+49.37 (E)
S.W. HICKORY LANE, 47.00' LT

ASBUILT IS 0.10' W
AND 0.38' N OF PLAN
STA.: 15+63.87
STA.: 10+75.75 CL
17.39' LT

C.I. 1-8, CONST. STD.
CURB INLET (5'X3' INSIDE)
STA.: 15+61.62 (STORM LINE 1)
=STA.: 10+75.77 (E)
S.W. OLD PORT ROAD, 47.00' LT

ASBUILT IS 0.77' W
AND 0.06' N OF PLAN
STA.: 17+26.87
N:308626.4860'
E:855712.0000'

F.I. 1-9, CONST. STD.
FIELD INLET (4'X4' INSIDE)
OPEN ON 4 SIDES (N,E,S,W)
STA.: 17+24.79 (STORM LINE 1)
N: 308,626.4229
E: 855,712.7747

ASBUILT IS 0.36' W
AND 0.33' S OF PLAN
STA.: 18+64.47
STA.: 10+52.66
17.35' RT

C.I. 1-10, CONST. STD.
CURB INLET (5'X3' INSIDE)
STA.: 18+62.77 (STORM LINE 1)
=STA.: 10+53.00 (E)
S.W. RIVER TRAIL ROAD, 47.00' RT

AS BUILT
DATE: 05/29/2020

ASBUILT IS 0.19' W
AND 0.11' S OF PLAN
STA.: 11+46.23
STA.: 10+14.59 CL
17.00' RT

C.I. 1-2, CONST. STD.
CURB INLET (5'X3' INSIDE)
STA.: 11+44.04 (STORM LINE 1)
=STA.: 10+14.83 (E)
S.W. HICKORY LANE, 47.00' RT

ASBUILT IS 1.73' W
AND 0.06' S OF PLAN
STA.: 11+05.76
N:308072.2110'
E:855802.8120'

M.H. 1-1, CONST. STD.
STORM MANHOLE (4' DIA. INSIDE)
STA.: 11+04.66 (STORM LINE 1)
N: 308,072.2688
E: 855,804.5385

E.X. C.I. 30294, CONNECT TO EXISTING
CURB INLET (5'X3' INSIDE)
STA.: 10+00.00 (STORM LINE 1)
N: 307,988.4343
E: 855,867.1999

REMOVE EXISTING END SECTION, PIPE,
AND PATCH CURB INLET PER CITY STANDARDS.

ASBUILT IS 0.68' E
AND 0.92' N OF PLAN
STA.: 13+81.69
N:308285.3060'
E:855758.3120'

M.H. 1-6, CONST. STD.
STORM MANHOLE (4' DIA. INSIDE)
STA.: 13+79.02 (STORM LINE 1)
N: 308,284.3818
E: 855,757.6333

F.I. 1-5, CONST. STD.
FIELD INLET (4'X4' INSIDE)
OPEN ON 4 SIDES (N,E,S,W)
STA.: 13+55.89 (STORM LINE 1)
N: 308,288.4661
E: 855,780.4033
STA.: 13+59.65
N: 308289.2840'
E: 855779.9540'

C.I. 1-7, CONST. STD.
CURB INLET (5'X3' INSIDE)
STA.: 15+27.36 (STORM LINE 1)
=STA.: 10+72.63 (E)
S.W. OLD PORT ROAD, 47.00' RT

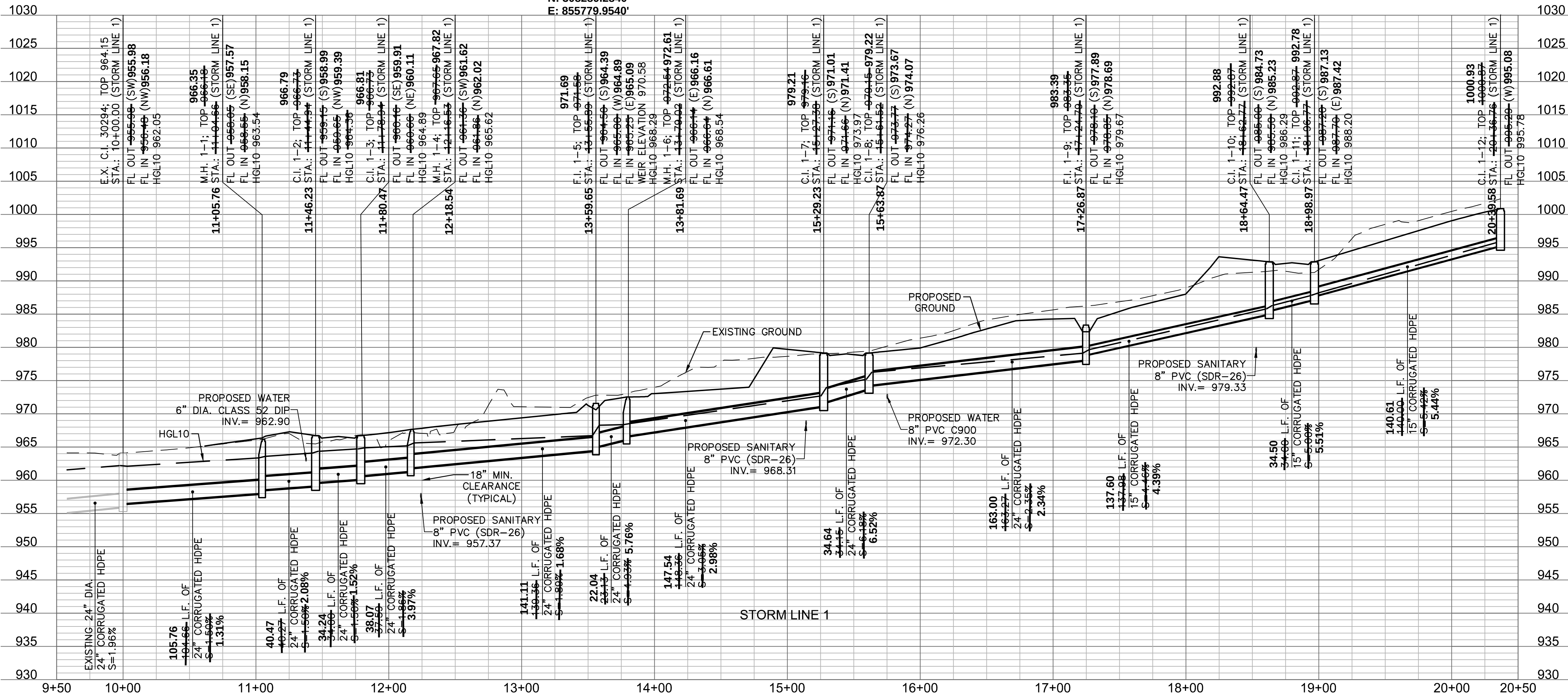
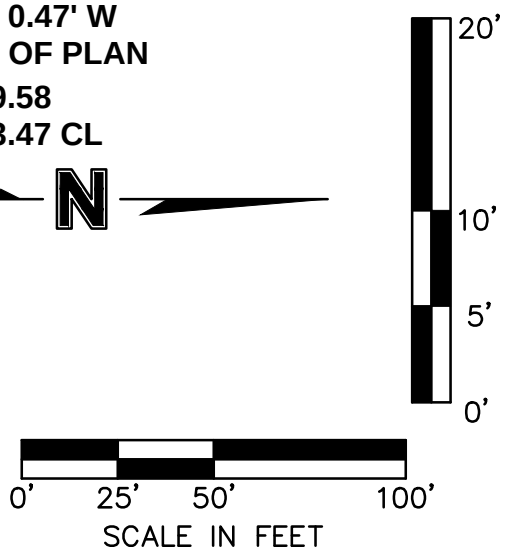
ASBUILT IS 0.44' W
AND 0.16' S OF PLAN
STA.: 15+29.23
STA.: 10+72.16 CL
17.06' RT

ASBUILT IS 0.14' W
AND 0.16' N OF PLAN
STA.: 18+98.97
STA.: 10+52.85 CL
17.15' LT

C.I. 1-11, CONST. STD.
CURB INLET (5'X3' INSIDE)
STA.: 18+96.77 (STORM LINE 1)
=STA.: 10+53.00 (E)
S.W. RIVER TRAIL ROAD, 47.00' LT

C.I. 1-12, CONST. STD.
CURB INLET (5'X3' INSIDE)
STA.: 20+36.76 (STORM LINE 1)
=STA.: 11+92.00 (E)
S.W. RIVER TRAIL ROAD, 47.00' LT

ASBUILT IS 0.47' W
AND 0.07' S OF PLAN
STA.: 20+39.58
STA.: 11+93.47 CL
16.95' LT



NO.	REV.	DATE	REVISIONS DESCRIPTION
1		06/12/2018	CITY COMMENTS - 06/17/2018

STORM SEWER PLAN & PROFILE	2018
STREET, STORM & EROSION CONTROL PLANS	
EAGLE CREEK SIXTEENTH PLAT	
LEE'S SUMMIT, MO	

drawn by: B.B.K.
checked by: N.D.H.
designed by: B.B.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

DWG: F:\2018\0501-1000\018-0847\40-Design\AutoCAD\Final Plans\Sheets\GNC\01_Street & Storm_34x22\C_TAB01_80847.dwg
DATE: Jul 12, 2018 10:27am
USER: bkoleci

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)
E.X. C.I. 30294	SAG	3.14	0.00	3.14	0.80	19.40	15.52	3.14	0.00	100.00%	...	...	...
C.I. 1-2	SAG	1.87	0.00	1.87	0.80	19.40	15.52	1.87	0.00	100.00%	...	...	...
C.I. 1-3	SAG	4.09	0.00	4.09	0.80	19.40	15.52	4.09	0.00	100.00%	...	...	...
F.I. 1-5	SAG	3.34	0.00	3.34	0.80	18.67	14.93	3.34	0.00	100.00%	...	...	0.16
C.I. 1-7	SAG	2.47	0.00	2.47	0.80	23.28	18.63	2.47	0.00	100.00%	...	...	...
C.I. 1-8	SAG	7.77	0.45	8.22	0.80	23.28	18.63	8.22	0.00	100.00%	...	...	...
F.I. 1-9	SAG	4.39	0.00	4.39	0.80	18.67	14.93	4.39	0.00	100.00%	...	...	0.19
C.I. 1-10	GRADE	1.70	0.00	1.70	1.00	1.25	1.25	1.25	0.45	73.44%	0.12	6.07	...
C.I. 1-11	GRADE	0.56	0.82	1.39	1.00	1.08	1.08	1.08	0.31	77.68%	0.11	5.63	...
C.I. 1-12	GRADE	2.37	0.00	2.37	1.00	1.55	1.55	1.55	0.82	65.29%	0.14	6.88	...
F.I. 2-1	SAG	1.95	0.00	1.95	1.80	97.00	174.60	1.95	0.00	100.00%	...	...	0.11
F.I. 2-2	SAG	2.29	0.00	2.29	2.80	208.71	584.39	2.29	0.00	100.00%	...	...	0.12
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)
EX. C.I. 30294 (L)	0.20	0.51	5.00	7.35	1.00	0.75
EX. C.I. 30294 (R)	0.39	0.51	9.57	6.17	1.00	1.22
E.X. C.I. 30294	1.02	0.51	10.15	6.05	1.00	3.14
C.I. 1-2(L)	0.33	0.51	5.05	7.34	1.00	1.25
C.I. 1-2(R)	0.00	0.51	5.00	7.35	1.00	0.00
C.I. 1-2(B)	0.17	0.51	5.00	7.35	1.00	0.62
C.I. 1-2	0.50	0.51	5.05	7.34	1.00	1.87
C.I. 1-3(L)	0.27	0.51	5.36	7.24	1.00	1.00
C.I. 1-3(R)	0.52	0.51	6.07	7.04	1.00	1.86
C.I. 1-3B)	0.35	0.51	5.00	7.35	1.00	1.32
C.I. 1-3	1.14	0.51	6.07	7.04	1.00	4.09
F.I. 1-5	0.89	0.51	5.00	7.35	1.00	3.34
C.I. 1-7(L)	0.54	0.51	8.09	6.51	1.00	1.80
C.I. 1-7(R)	0.03	0.51	5.00	7.35	1.00	0.10
C.I. 1-7(B)	0.17	0.51	5.00	7.35	1.00	0.65
C.I. 1-7	0.74	0.51	8.09	6.51	1.00	2.47
C.I. 1-8(L)	0.49	0.51	6.59	6.89	1.00	1.72
C.I. 1-8(R)	1.89	0.51	13.86	5.36	1.00	5.18
C.I. 1-8(B)	0.46	0.51	5.28	7.27	1.00	1.70
C.I. 1-8	2.84	0.51	13.86	5.36	1.00	7.77
F.I. 1-9	1.17	0.51	5.00	7.35	1.00	4.39
C.I. 1-10	0.51	0.51	8.02	6.53	1.00	1.70
C.I. 1-11	0.15	0.51	5.00	7.35	1.00	0.56
C.I. 1-12	0.77	0.51	10.15	6.05	1.00	2.37
F.I. 2-1	0.52	0.51	5.00	7.35	1.00	1.95
F.I. 2-2	0.61	0.51	5.00	7.35	1.00	2.29

STORM SEWER DESIGN CALCULATION (10-YR)																
Upstream Structure	Downstream Structure	Line Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	Pipe Slope	Pipe Size (in)	Manning's n	Total Flow (cfs)	Upstream Velocity (ft/s)	Downstream Velocity (ft/s)	Pipe Capacity (cfs)	Upstream Depth (ft)	Downstream Depth (ft)	Upstream Struct. HGL (ft)	Downstream Struct. HGL (ft)	Upstream Top Elev. (ft)
EX. C.I. 32931	EX. F.E.S.	58.700	954.75	953.78	1.65	24	0.01	36.59	11.77	11.68	37.80	1.93**	1.97	956.68 j	955.75	964.13
EX. C.I. 30294	EX. C.I. 32931	42.218	955.98	955.15	1.97	24	0.01	35.19	11.20	11.20	41.23	2.00	2.00	961.93	961.32	964.15
MH 1-1	EX. C.I. 30294	104.665	958.05	956.48	1.50	24	0.01	32.05	10.20	10.20	36.01	2.00	2.00	963.30	962.05	966.18
C.I. 1-2	MH 1-1	40.273	959.15	958.55	1.49	24	0.01	32.05	10.20	10.20	35.89	2.00	2.00	964.02	963.54	966.73
C.I. 1-3	C.I. 1-2	34.002	960.16	959.65	1.50	24	0.01	30.18	9.61	9.61	36.01	2.00	2.00	964.72	964.36	966.73
MH. 1-4	C.I. 1-3	37.586	961.36	960.66	1.86	24	0.01	26.09	8.30	8.31	40.13	2.00	2.00	965.19	964.89	967.65
F.I. 1-5	MH. 1-4	139.359	964.50	961.86	1.89	24	0.01	26.09	8.30	8.31	40.47	2.00	2.00	966.72	965.62	971.58
MH. 1-6	F.I. 1-5	23.133	966.14	965.00	4.93	24	0.01	18.51	5.89	5.89	65.27	2.00	2.00	968.38	968.29	972.54
C.I. 1-7	MH. 1-6	148.357	971.16	966.64	3.05	24	0.01	18.51	7.10	6.00	51.32	1.55**	1.90	972.71 j	968.54	979.16
C.I. 1-8	C.I. 1-7	34.146	973.77	971.66	6.18	24	0.01	16.04	6.61	5.11	73.09	1.44**	2.00	975.21 j	973.97	979.15
F.I. 1-9	C.I. 1-8	163.268	978.10	974.27	2.35	24	0.01	8.27	5.11	2.63	45.03	1.02**	1.99	979.12 j	976.26	983.35
C.I. 1-10	F.I. 1-9	137.977	985.00	978.85	4.46	15	0.01	3.88	4.71	4.56	17.72	0.80**	0.82	985.80 j	979.67	992.87
C.I. 1-11	C.I. 1-10	34.000	987.20	985.50	5.00	15	0.01	2.63	4.08	3.20	18.77	0.65**	0.79	987.85 j	986.29	992.87
C.I. 1-12	C.I. 1-11	139.998	995.29	987.70	5.42	15	0.01	1.55	3.45	3.39	19.55	0.49**	0.50	995.78 j	988.20	1000.87
F.I. 2-1	C.I. 1-12	105.979	967.37	965.25	2.00	15	0.01	4.24	3.57	3.46	11.87	1.16	1.25	968.53	968.29	974.44
F.I. 2-2	F.I. 2-1	133.293	970.66	967.87	2.09	15	0.01	2.29	3.90	3.14	12.15	0.60**	0.72	971.26 j	968.59	978.04
Notes: j - Line contains hyd. jump; ** - critical depth																

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)
E.X. C.I. 30294	SAG	5.56	0.00	5.56	0.80	19.40	15.52	5.56	0.00	100.00%	...	...	...
C.I. 1-2	SAG	3.28	0.00	3.28	0.80	19.40	15.52	3.28	0.00	100.00%	...	...	...
C.I. 1-3	SAG	7.19	0.00	7.19	0.80	19.40	15.52	7.19	0.00	100.00%	...	...	...
F.I. 1-5	SAG	5.86	0.00	5.86	0.80	18.67	14.93	5.86	0.00	100.00%	...	...	0.23
C.I. 1-7	SAG	4.35	0.00	4.35	0.80	23.28	18.63	4.35	0.00	100.00%	...	...	...
C.I. 1-8	SAG	13.78	1.23	15.01	0.80	23.28	18.63	15.01	0.00	100.00%	...	...	...
F.I. 1-9	SAG	7.70	0.00	7.70	0.80	18.67	14.93	7.70	0.00	100.00%	...	...	0.28
C.I. 1-10	GRADE	2.99	0.00	2.99	1.00	1.76	1.76	1.76	1.23	58.94%	0.15	7.51	...
C.I. 1-11	GRADE	0.99	2.14	3.13	1.00	1.80	1.80	1.80	1.33	57.65%	0.15	7.64	...
C.I. 1-12	GRADE	4.20	0.00	4.20	1.00	2.05	2.05	2.05	2.14	48.94%	0.17	8.52	...
F.I. 2-1	SAG	3.42	0.00	3.42	1.80	97.00	174.60	3.42	0.00	100.00%	...	...	0.16
F.I. 2-2	SAG	4.01	0.00	4.01	2.80	208.71	584.39	4.01	0.00	100.00%	...	...	0.18
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)
EX. C.I. 30294 (L)	0.20	0.51	5.00	10.32	1.25	1.31
EX. C.I. 30294 (R)	0.39	0.51	9.57	8.72	1.25	2.15
E.X. C.I. 30294	1.02	0.51	10.15	8.55	1.25	5.56
C.I. 1-2(L)	0.33	0.51	5.05	10.30	1.25	2.19
C.I. 1-2(R)	0.00	0.51	5.00	10.32	1.25	0.00
C.I. 1-2(B)	0.17	0.51	5.00	10.32	1.25	1.10
C.I. 1-2	0.50	0.51	5.05	10.30	1.25	3.28
C.I. 1-3(L)	0.27	0.51	5.36	10.17	1.25	1.76
C.I. 1-3(R)	0.52	0.51	6.07	9.90	1.25	3.26
C.I. 1-3B)	0.35	0.51	5.00	10.32	1.25	2.31
C.I. 1-3	1.14	0.51	6.07	9.90	1.25	7.19
F.I. 1-5	0.89	0.51	5.00	10.32	1.25	5.86
C.I. 1-7(L)	0.54	0.51	8.09	9.18	1.25	3.17
C.I. 1-7(R)	0.03	0.51	5.00	10.32	1.25	0.18
C.I. 1-7(B)	0.17	0.51	5.00	10.32	1.25	1.15
C.I. 1-7	0.74	0.51	8.09	9.18	1.25	4.35
C.I. 1-8(L)	0.49	0.51	6.59	9.70	1.25	3.03
C.I. 1-8(R)	1.89	0.51	13.86	7.61	1.25	9.19
C.I. 1-8(B)	0.46	0.51	5.28	10.21	1.25	2.98
C.I. 1-8	2.84	0.51	13.86	7.61	1.25	13.78
F.I. 1-9	1.17	0.51	5.00	10.32	1.25	7.70
C.I. 1-10	0.51	0.51	8.02	9.20	1.25	2.99
C.I. 1-11	0.15	0.51	5.00	10.32	1.25	0.99
C.I. 1-12	0.77	0.51	10.15	8.55	1.25	4.20
F.I. 2-1	0.52	0.51	5.00	10.32	1.25	3.42
F.I. 2-2	0.61	0.51	5.00	10.32	1.25	4.01

DWG: F:\2018\0501-1000\018-0847\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Street & Storm_34x22\C_DRN02_80847.dwg
DATE: May 31, 2020 10:28pm
USER: nheiser



AS BUILT

DATE: 05/29/2020

- 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 LOCATION IN ZONE X, "AREAS OUTSIDE THE 1-PERCENT ANNUAL CHANCE FLOODPLAINS, AREAS OF 1-PERCENT ANNUAL CHANCE SHEET FLOW FLOODING WHERE THE AVERAGE DEPTHS ARE LESS THAN 1 FOOT, AREAS OF 1-PERCENT ANNUAL CHANCE STREAM FLOODING WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 1 SQUARE MILE, OR AREAS PROTECTED FROM THE 1-PERCENT ANNUAL CHANCE FLOOD BY LEVEES. NO BASE FLOOD ELEVATIONS OR DEPTHS ARE SHOWN WITHIN THIS ZONE"
 3. PLAT IS LOCATED OUTSIDE OF ANY REQUIRED BUFFER ZONES FOR NATURAL STREAMS.
 4. MBOE ELEVATIONS HAVE BEEN PROVIDED PER LOT LINES. INTERPOLATION WILL BE ALLOWED BETWEEN THE RIGHT AND LEFT SIDE 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

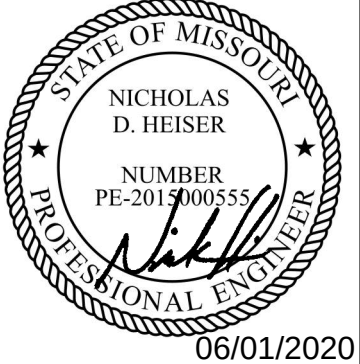
LOT TYPES:
S - STANDARD
DL - DAYLIGHT
WO - WALKOUT

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

Lot	Rear Left MLO	Rear Right MLO	Front Left MLO	Front Right MLO
708	984.14	991.23	990.46	993.63
709	991.23	995.31	993.63	997.83
710	995.31	999.43	997.83	1001.63
711	999.43	1003.97	1001.63	1003.67
712	1003.97	1007.53	1003.67	1005.12
713	984.70	985.26	993.62	990.45
714	986.80	984.70	997.81	993.62
715	988.90	986.80	1001.60	997.81
716	991.00	988.90	1003.62	1001.60
717	996.10	991.00	1005.06	1003.62
718	984.70	984.70	982.65	980.91
719	984.70	984.70	980.91	980.68
720	986.80	985.89	980.68	983.21
721	985.89	988.63	983.21	986.45
722	988.63	991.86	986.45	989.68
723	991.86	993.62	989.68	991.44
724	993.62	994.73	991.44	992.55
725	994.73	995.80	992.55	993.62
726	995.80	995.80	993.62	993.62
727	995.80	994.69	993.62	992.51
728	973.15	974.60	979.92	980.66
729	974.20	973.15	980.93	979.92
730	975.77	974.20	984.30	980.93
731	977.50	975.77	988.01	984.30
732	979.36	977.50	990.66	988.01
733	981.25	979.36	991.93	990.66
734	984.48	981.25	993.04	991.93
735	983.35	984.48	993.88	993.04
736	982.41	983.35	991.98	993.88
737	974.60	973.01	971.12	970.22
738	973.01	975.77	970.22	970.86
739	975.77	977.78	970.86	975.26
740	977.78	979.70	975.26	979.75
741	979.70	984.48	979.75	982.89
742	984.48	982.41	982.89	984.66
743	980.94	977.93	984.66	985.88
744	974.21	971.44	985.88	983.98
745	971.44	972.44	983.98	981.05
746	972.44	971.18	981.05	973.74
747	971.18	965.58	973.74	967.82

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

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BY		REVISIONS DESCRIPTION	
1	06/15/2018	CITY COMMENTS - 05/17/2018	
2	07/19/2018	CITY COMMENTS - 07/10/2018	
3	07/31/2018	CITY COMMENTS - 07/23/2018	
4	08/07/2018	UPDATE MLO TABLE & ADD BERM ELEVATIONS	

NO. REV.		DATE	
1	06/15/2018	06/15/2018	
2	07/19/2018	07/19/2018	
3	07/31/2018	07/31/2018	
4	08/07/2018	08/07/2018	

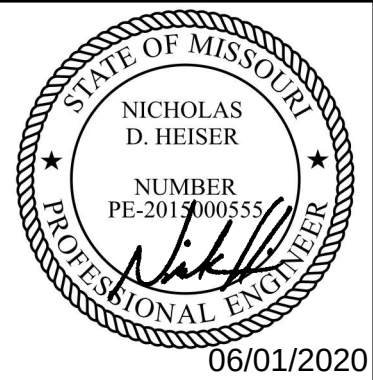
MASTER DRAINAGE PLAN STREET, STORM & EROSION CONTROL PLANS		EAGLE CREEK SIXTEENTH PLAT	
LEE'S SUMMIT, MO		2018	

drawn by: B.P.K.
checked by: N.D.H.
designed by: B.P.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

SHEET
C115

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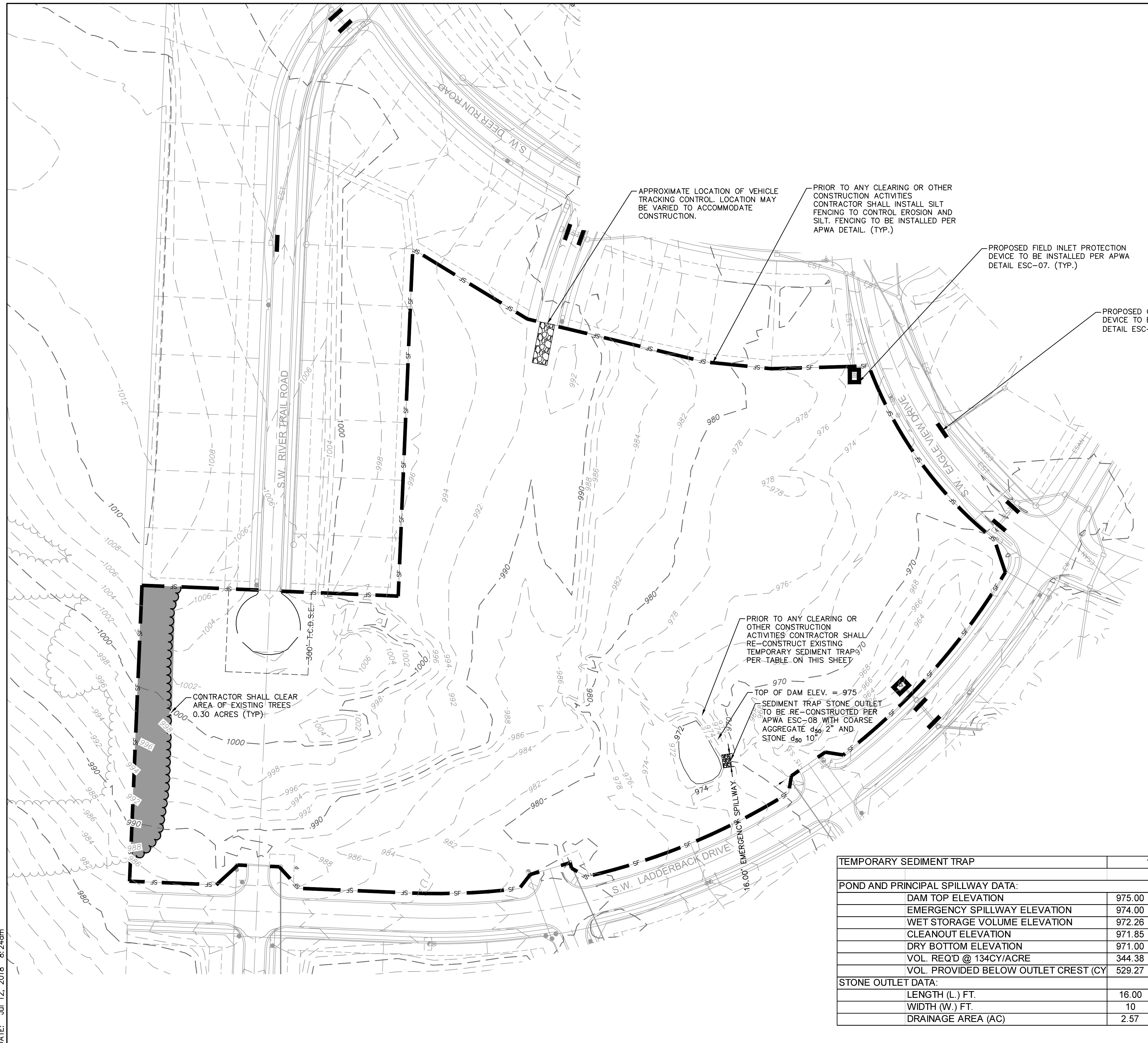
MO Certificate of Authority # 0000000000
1301 BURLINGTON, SUITE 100
NORTH KANSAS CITY, MO 64116
TEL 816.587.4320
FAX 816.587.1393
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[illegible]

EROSION CONTROL PLAN - PHASE 1 STREET, STORM & EROSION CONTROL PLANS	
EAGLE CREEK SIXTEENTH PLAT	
LEE'S SUMMIT, MO	2018

drawn by: B.P.K
checked by: N.D.H.
designed by: B.P.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

SHEET
C116

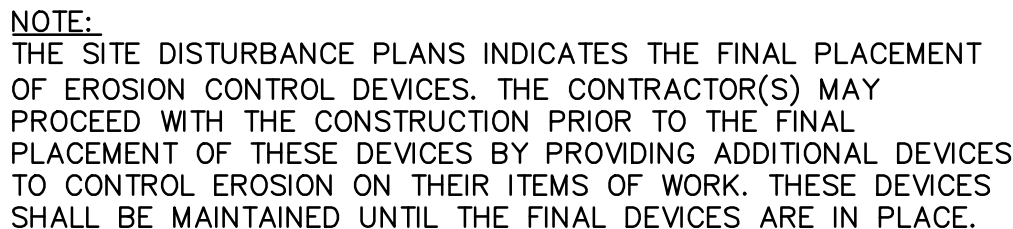


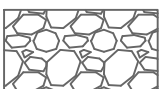
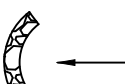
NOTE:
THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

LEGEND	
PHASE 1	
 SF 	SILT FENCE
	TEMPORARY STONE CONSTRUCTION ENTRANCE

TEMPORARY SEDIMENT TRAP		1
POND AND PRINCIPAL SPILLWAY DATA:		
	DAM TOP ELEVATION	975.00
	EMERGENCY SPILLWAY ELEVATION	974.00
	WET STORAGE VOLUME ELEVATION	972.26
	CLEANOUT ELEVATION	971.85
	DRY BOTTOM ELEVATION	971.00
	VOL. REQ'D @ 134CY/ACRE	344.38
	VOL. PROVIDED BELOW OUTLET CREST (CY)	529.27
STONE OUTLET DATA:		
	LENGTH (L.) FT.	16.00
	WIDTH (W.) FT.	10
	DRAINAGE AREA (AC)	2.57

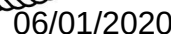
USER: bkoleci
 DWG: F:\2018\0501-1000\018-0847\40-Design\AutoCAD\Final Plans\Sheets\GNCV\01_Street & Storm_34x22\C_ERC01_80847.dwg
 DATE: Jul 12, 2018 8:24am



LEGEND		
 SF	 SF	SILT FENCE
		STORM DRAIN INLET PROTECTION
		TEMPORARY STONE CONSTRUCTION ENTRANCE
		ROCK CHECK DAMS

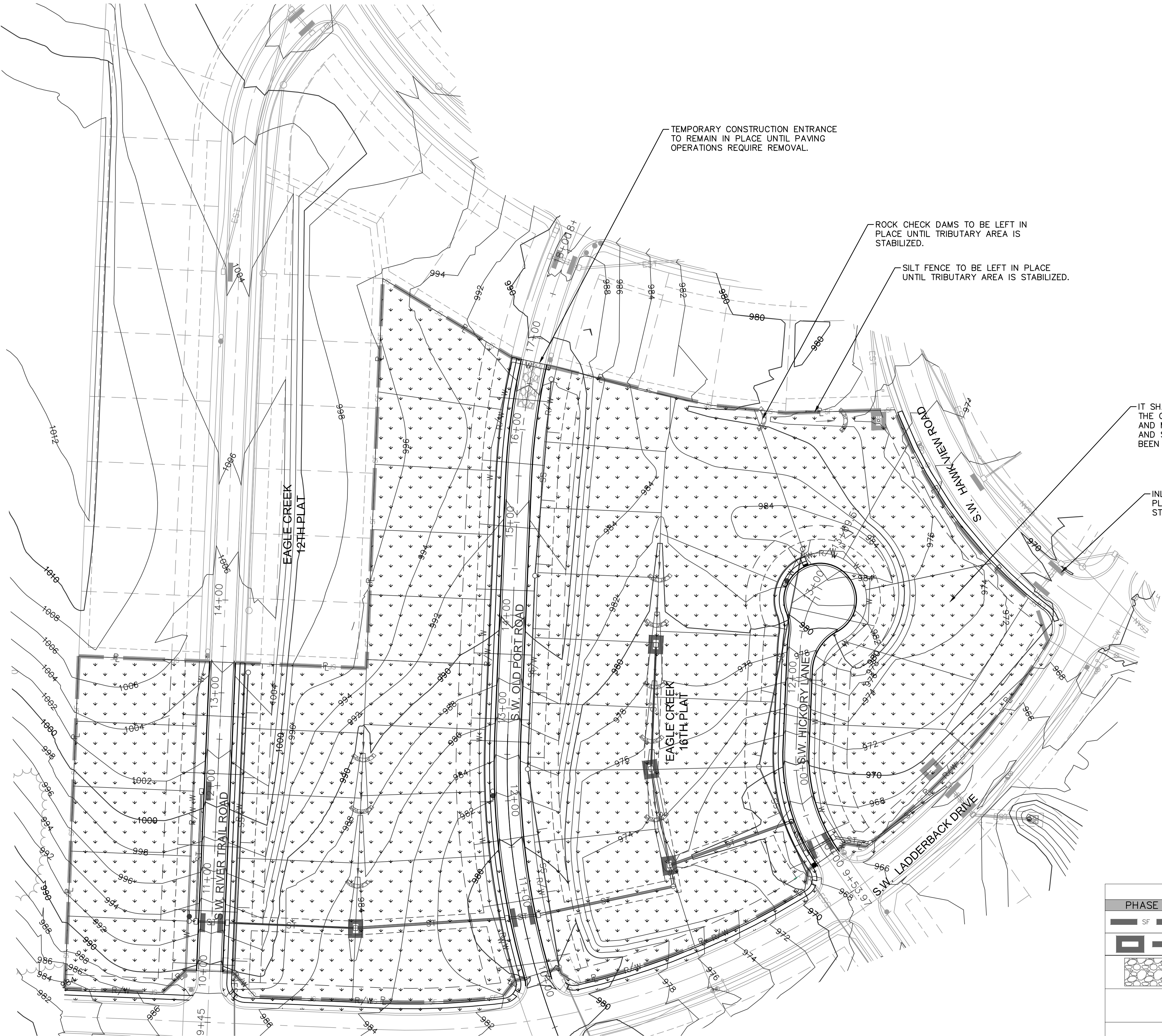
LEE'S SUMMIT. MO

DEVISIONS



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C117



GENERAL NOTES:

SEED & MULCH NOTES:
SEEDING SHALL BE DONE BEFORE THE PROPOSED SEEDBED BECOMES ERODED, CRUSTED OVER,OR DRIED OUT AND SHALL NOT BE DONE WHEN THE GROUND IS FROZEN, OR COVERED WITH SNOW. THE SEED SHALL COMPLY WITH THE REQUIREMENTS OF THE MISSOURI SEED LAW AND THE FEDERAL SEED ACT. ALSO, IT SHALL CONTAIN NO SEED OF ANY PLANT ON THE FEDERAL NOXIOUS WEED LIST. OTHER WEED SEED SHALL NOT EXCEED ONE PERCENT BY WEIGHT OF MIX.

SEED & FERTILIZER RATE:
MIX I - RYE GRASS / BLUE GRASS -----100 LBS. PER. ACRE
MIX II - TALL FESCUE / BLUE GRASS -----195 LBS. PER ACRE
LIME -----2000 LBS. PER ACRE
(50 LBS. PER 1000 SQ. FT.)
FERTILIZER -----800 TO 1200 LBS.
PER ACRE (25 LBS. PER 1000 SQ. FT.)

DURING THE DATES DECEMBER 15TH THROUGH MAY 31 ALL LIME, FERTILIZER, SEED, AND MULCH SHALL BE APPLIED TO FINISHED SLOPES OF DISTURBED AREAS. DURING THE MONTHS OF JUNE, JULY, OCTOBER, AND NOVEMBER 1ST THROUGH DECEMBER 15TH, LIME, FERTILIZER, SEED, AND MULCH SHALL BE APPLIED AT THE FOLLOWING RATES:

LIME - 100 % OF SPECIFIED QUANTITY
FERTILIZER - 75 % OF THE SPECIFIED QUANTITY
SEED - 50 % OF THE SPECIFIED QUANTITY
MULCH - 100 % OF THE SPECIFIED QUANTITY
MULCH SHALL BE VEGETATIVE TYPE, CEREAL STRAW FROM STALKS OF OATS, RYE, OR BARLEY, OR APPROVED EQUAL. THE STRAW SHALL BE FREE OF PROHIBITED WEED SEED AND RELATIVELY FREE OF ALL OTHER NOXIOUS AND UNDESIRABLE SEED. MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE, (70 TO 90 LBS. PER 1000 SQ. FT.). MULCH SHALL BE EMBEDDED BY A MULCH ANCHORING TOOL OR DISK TYPE ROLLER HAVING FLAT SERRATED DISKS SPACED NOT MORE THAN 10 INCHES APART AND CLEANING SCRAPERS SHALL BE PROVIDED.

THE SITE DISTURBANCE PLANS INDICATES THE FINAL PLACEMENT OF EROSION CONTROL DEVICES. THE CONTRACTOR(S) MAY PROCEED WITH THE CONSTRUCTION PRIOR TO THE FINAL PLACEMENT OF THESE DEVICES BY PROVIDING ADDITIONAL DEVICES TO CONTROL EROSION ON THEIR ITEMS OF WORK. THESE DEVICES SHALL BE MAINTAINED UNTIL THE FINAL DEVICES ARE IN PLACE.

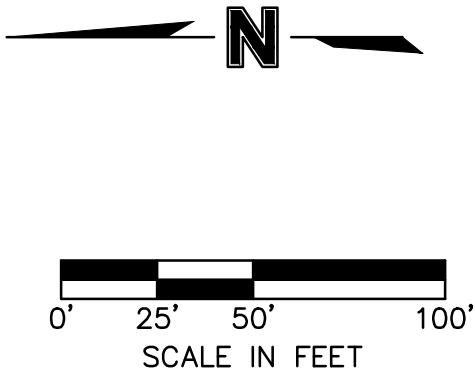
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SEED AND MULCH TO PREVENT EROSION AND SILTATION ONCE TRACT A HAS BEEN CLEARED AND GRADED.

INLET PROTECTION TO BE LEFT IN PLACE UNTIL TRIBUTARY AREA IS STABILIZED.

TEMPORARY CONSTRUCTION ENTRANCE TO REMAIN IN PLACE UNTIL PAVING OPERATIONS REQUIRE REMOVAL.

ROCK CHECK DAMS TO BE LEFT IN PLACE UNTIL TRIBUTARY AREA IS STABILIZED.

SILT FENCE TO BE LEFT IN PLACE UNTIL TRIBUTARY AREA IS STABILIZED.



LEGEND			
PHASE 1	PHASE 2	PHASE 3	
			SILT FENCE
			STORM DRAIN INLET PROTECTION
			TEMPORARY STONE CONSTRUCTION ENTRANCE
			SEED AND MULCH
			ROCK CHECK DAMS

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STATE OF MISSOURI

NICHOLAS D. HEISER

NUMBER PE-2013000555

06/01/2020

NO. REV.	DATE	REVISIONS DESCRIPTION	BY
1	06/18/2018	CITY COMMENTS - 05/17/2018	

EROSION CONTROL PLAN - PHASE 3
STREET, STORM & EROSION CONTROL PLANS

EAGLE CREEK
SIXTEENTH PLAT

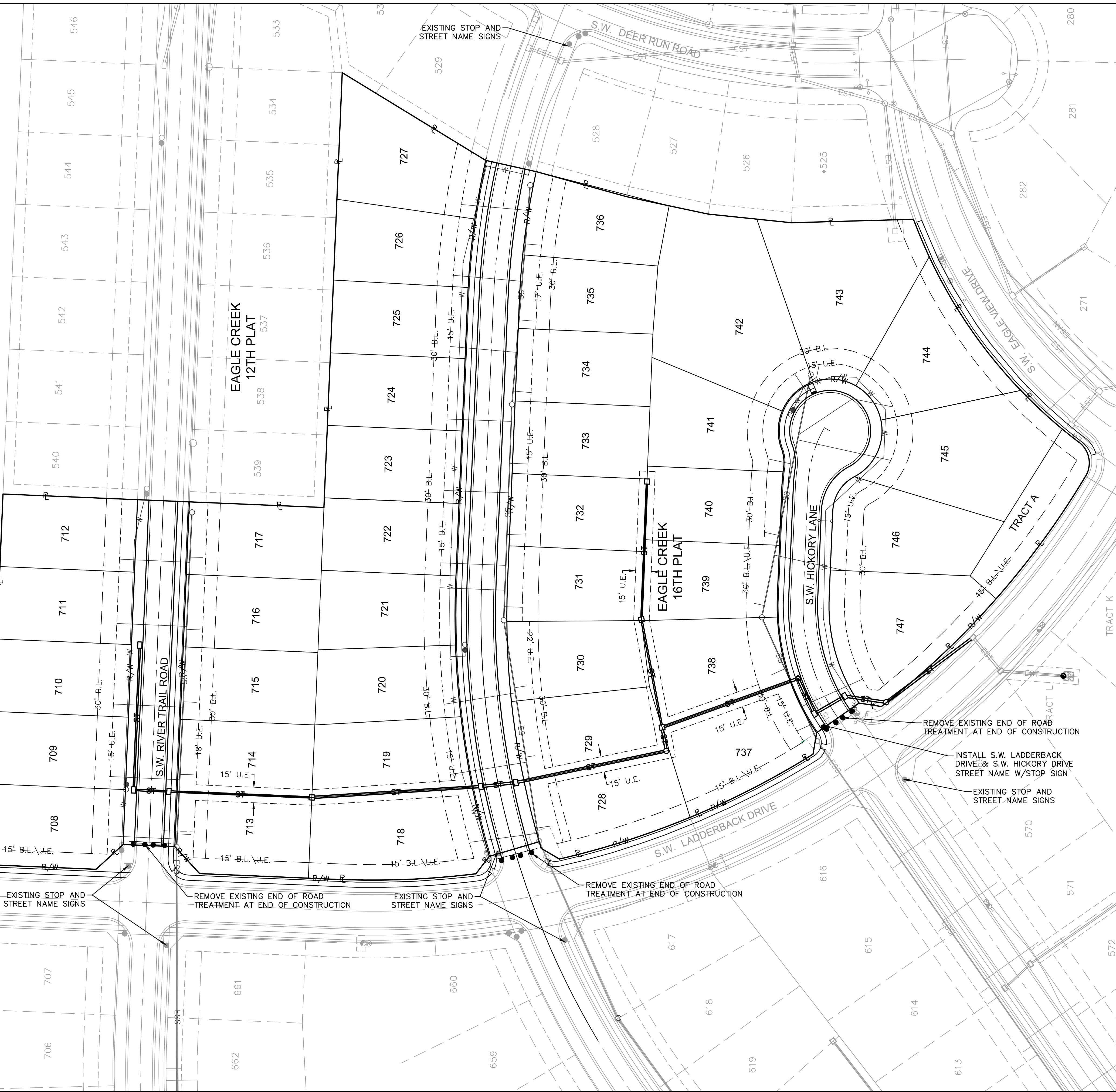
LEE'S SUMMIT, MO

2018

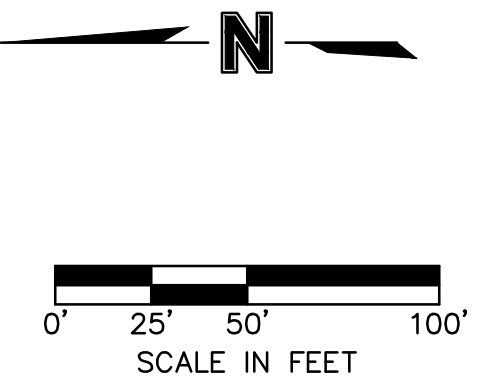
REVISIONS

drawn by: B.P.K.
checked by: N.D.H.
designed by: B.P.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

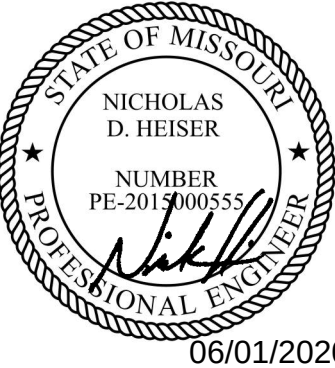
USER: bkoleci



PLAN NOTES:
1. ALL TEMPORARY TRAFFIC CONTROL AND DETOUR
SIGNS SHALL BE PLACED ON BREAKAWAY SIGN POSTS.
2. SIGNS SHALL BE INSTALLED PER MUTCD STANDARDS
AND GUIDELINES



NOT AS BUILT



BY

REVISIONS DESCRIPTION
05/17/2019

SIGNAGE PLAN

EAGLE CREEK
SIXTEENTH PLAT

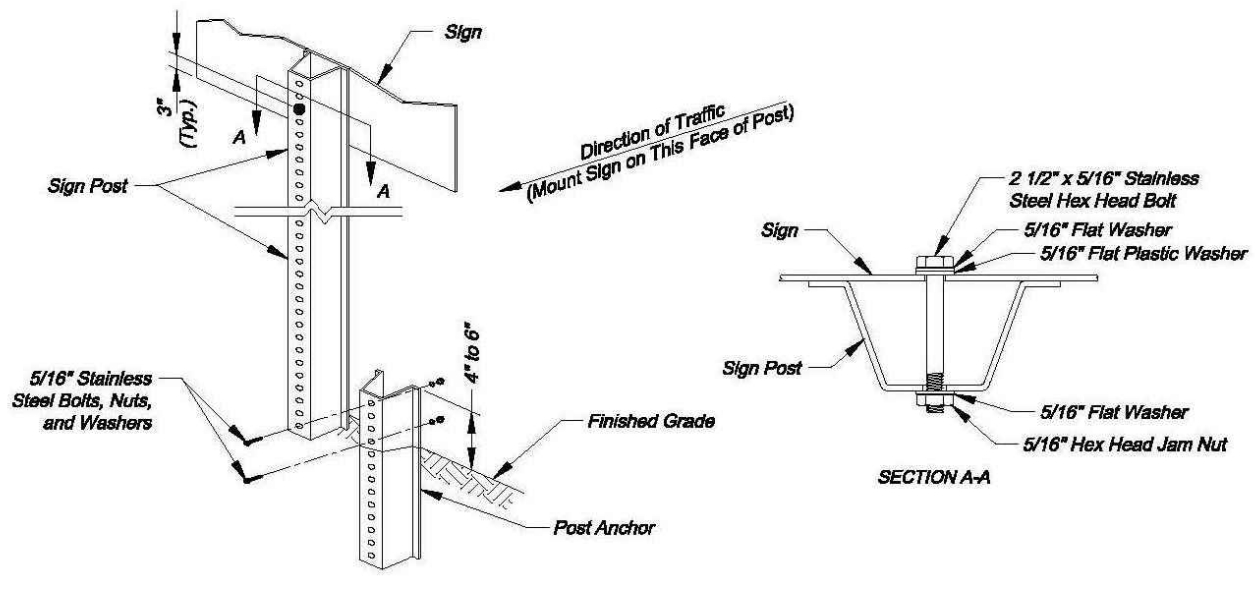
LEE'S SUMMIT, MO

drawn by: B.P.K
checked by: N.D.H.
designed by: B.P.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

SHEET
C119

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U-STEEL POST DETAILS

- U-STEEL POST NOTES:**
- Splice shall be positioned entirely between finished grade line and 18" above finished grade line. Only one splice will be allowed per post.
 - U-Steel post shall be 3 to 6 ft. galvanized according to ASTM A123.
 - U-Steel post can be used for installation of signs with an area of less than 2.5 square feet.
 - All posts shall be embedded a minimum of 3 feet.

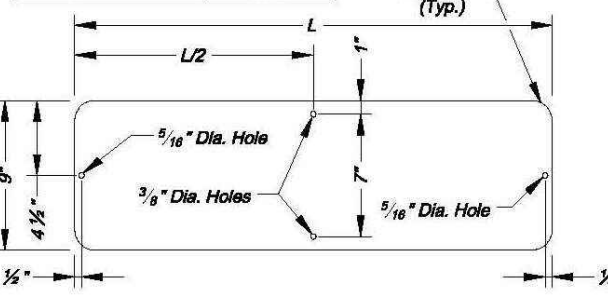


STRAP TYPE SIGN SUPPORT DETAILS

- METAL POLE SIGN MOUNTING NOTES:**
- Signs on metal poles shall be attached with two brackets and stainless steel bands.
 - Holes in sign for attachment to the mounting brackets shall be offset a minimum of 2 inches from the edge of the sign.
 - Holes in sign shall be located such that the sign is level.
 - All sign, bracket, and seal materials should be Type 301 stainless steel.

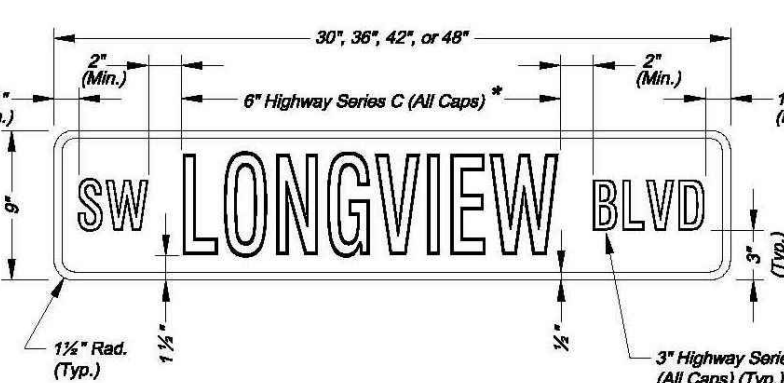
STANDARD ABBREVIATION LISTS

Named Streets	Abbreviation	Numbered Streets	Abbreviation
Avenue	AVE	First	ST
Boulevard	BLVD	Second	ND
Circle	CIR	Third	RD
Creek	CR	Fourth to Tenth	TH
Court	CT		
Crossing	XING		
Drive	DR		
Highway	HWY		
Lane	LN		
Passway	PKWY		
Place	PL		
Road	RD		
Street	ST		
Turnpike	TRN		
Trail	TRL		
Way	WAY		

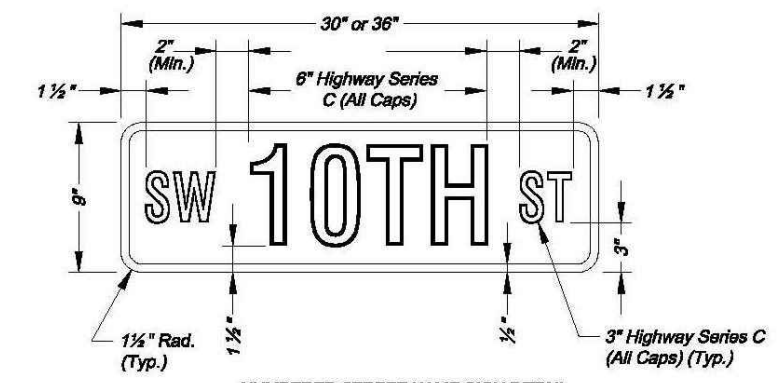


STREET NAME SIGN BLANK DETAILS

For Mounting on Square Steel Posts



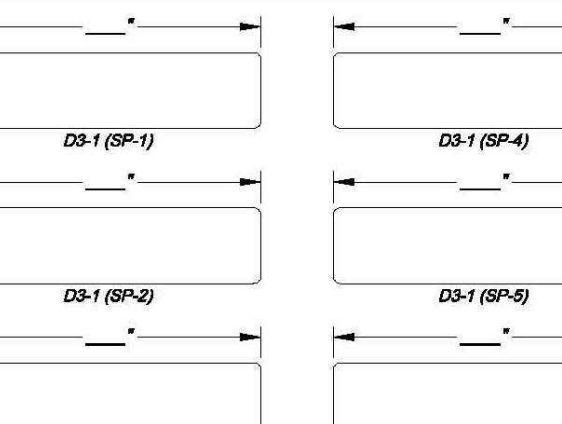
* Use Highway Series B (All Caps) in lieu of series C if necessary to fit text on a 36" sign blank.



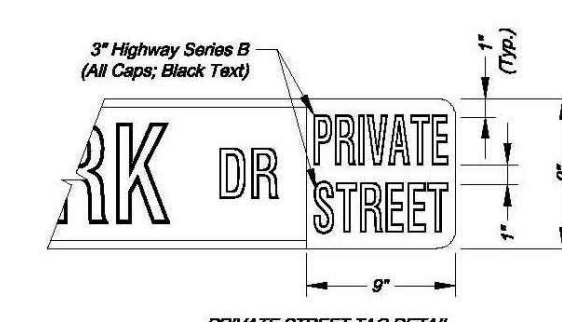
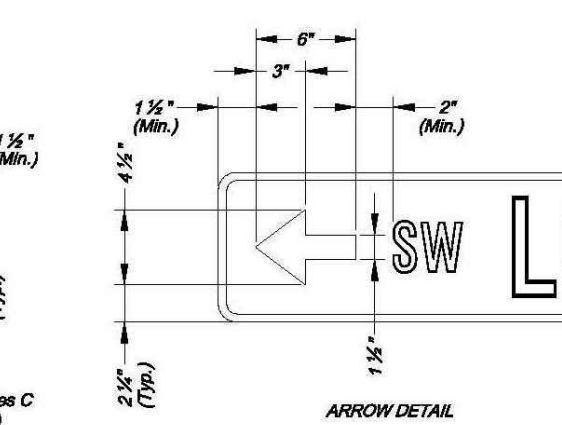
NUMBERED STREET NAME SIGN DETAIL

STREET NAME SIGN QUANTITIES

Sign Designation	Sign Size	Sign Area (Sq. Ft.)	Number	Quantity (Sq. Ft.)
D3-1 (SP-1)	8" x 8"	Sq. Ft.	1	1
D3-1 (SP-2)	8" x 8"	Sq. Ft.	1	1
D3-1 (SP-3)	8" x 8"	Sq. Ft.	1	1
D3-1 (SP-4)	8" x 8"	Sq. Ft.	1	1
D3-1 (SP-5)	8" x 8"	Sq. Ft.	1	1
D3-1 (SP-6)	8" x 8"	Sq. Ft.	1	1



PROJECT SIGN DETAILS



- NOTES:**
- For all street name signs, the legend shall be white and the background shall be green.
 - 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.
 - 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.

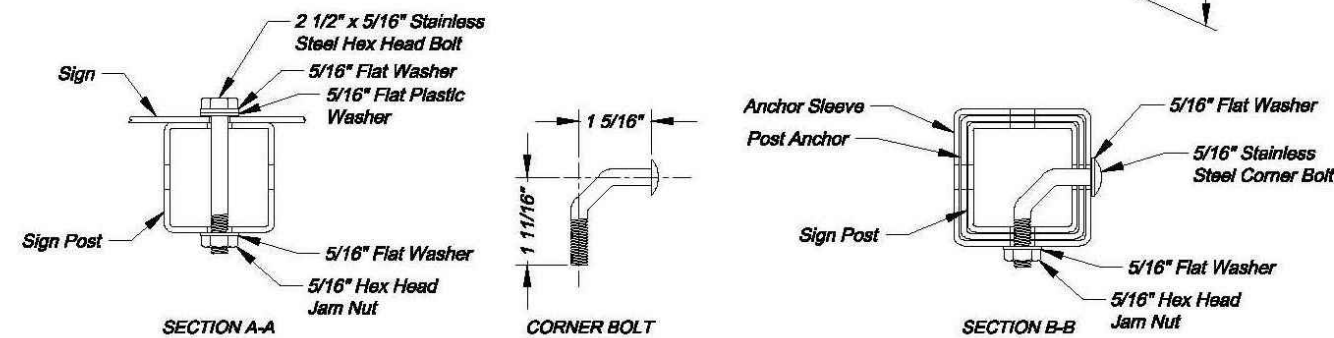
STREET NAME SIGN FACE DETAILS

PERMANENT SIGNING GENERAL NOTES:

- All signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- The Contractor is responsible for avoiding any and all utilities when installing sign posts, whether the utility is indicated on the plans or not.
- All workmanship and materials shall be subject to the inspection and approval of the Public Works Department of the City of Lee's Summit.
- 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 designer.
- 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.
- All post mounted signs shall be installed with breakaway anchors according to the Standard Drawings.
- 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.
- 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 (1071 SE Hamilton 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.
- All Stop, Yield, or street name signs shall be maintained in a conspicuous location for the driving public. All Stop and Yield signs removed for construction purposes can be temporarily erected in reflectorized drums (no less than 7 feet above the pavement surface) until they can be reinstalled. Any temporary Stop or Yield sign installation to be left in place overnight will require prior approval from the City Inspector.

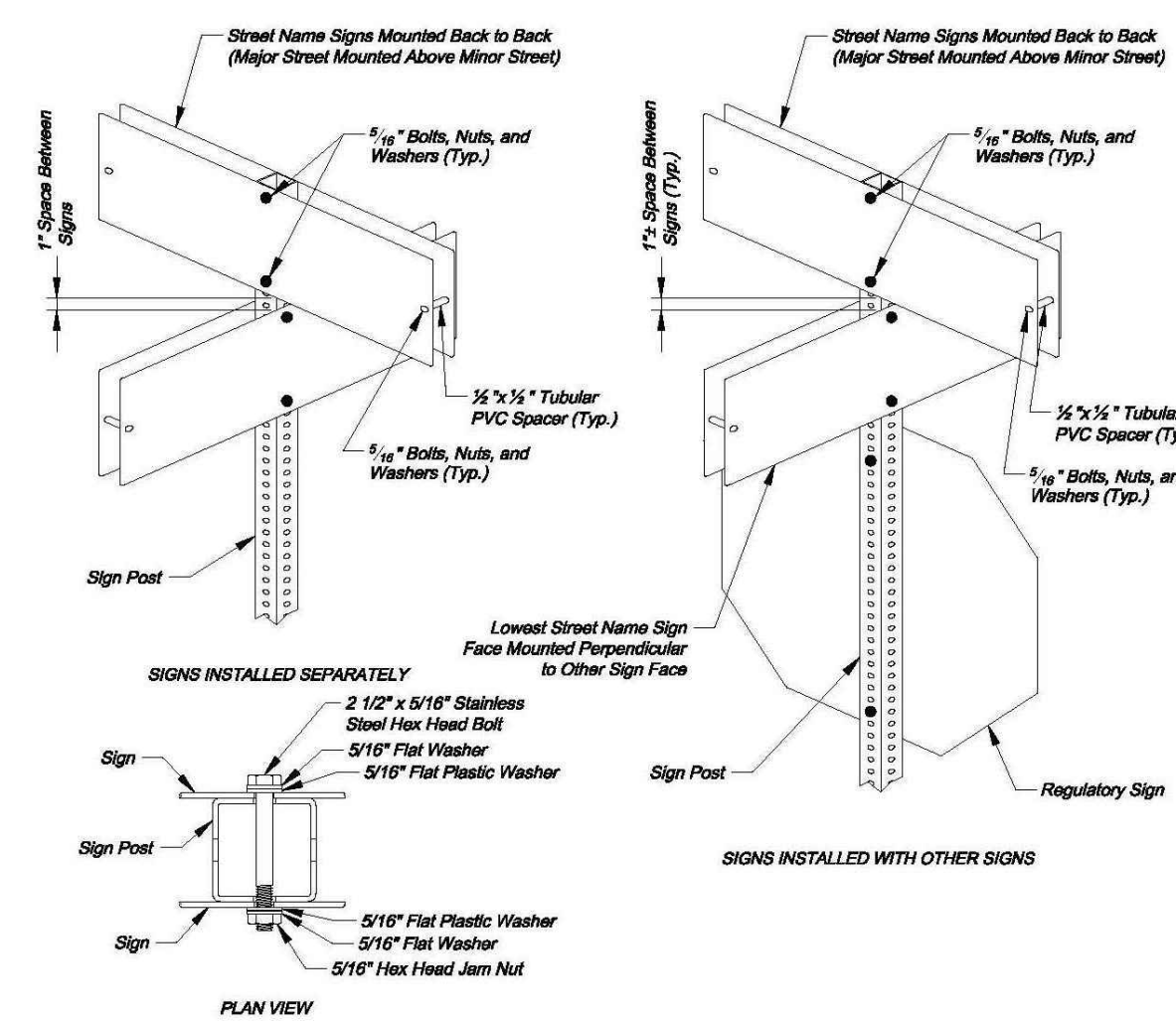
SQUARE STEEL POST INSTALLATION SEQUENCE:

- Sign post anchor driven partially into the ground using a drive cap with a sledge or power equipment.
- Anchor sleeve slipped over anchor and drive into the ground together with the sign post.
- Insert sign post into the post anchor and bolt in place.

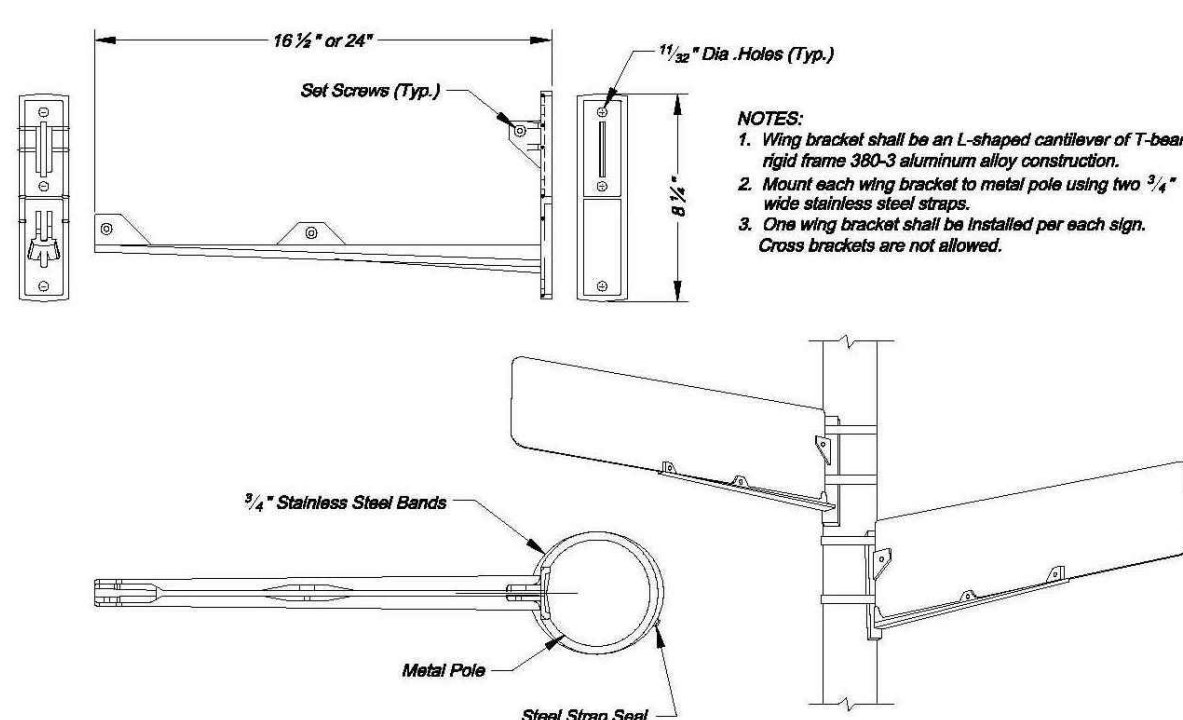


SQUARE STEEL POST DETAILS

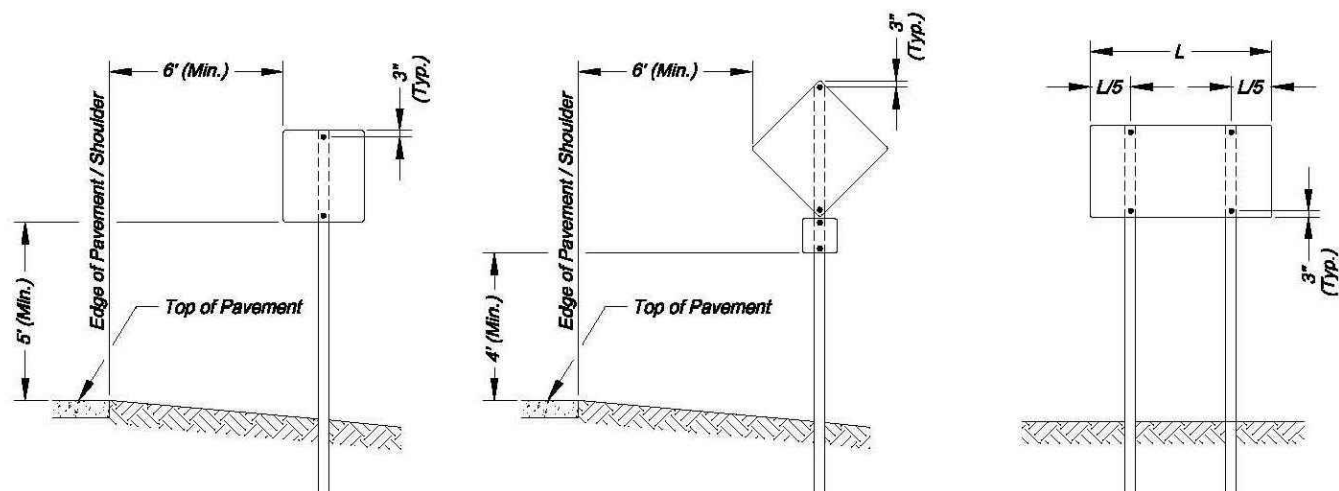
- SQUARE STEEL POST NOTES:**
- Square steel sign posts and break-away anchor shall consist of the following materials:
Sign Post - 14 Ga. 2" x 2" Square Steel Post
Post Anchor - 12 Ga. 2 1/2" x 2 1/2" x 30" Square Steel Post
Anchor Sleeve - 12 Ga. 2 1/2" x 2 1/2" x 18" Square Steel Post
 - 14 Gauge posts must meet a certified minimum yield strength of 80,000 psi.
 - 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.
 - The maximum area for one sign post is 8.0 square feet. A sign or combination of signs with an area greater than 8.0 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.



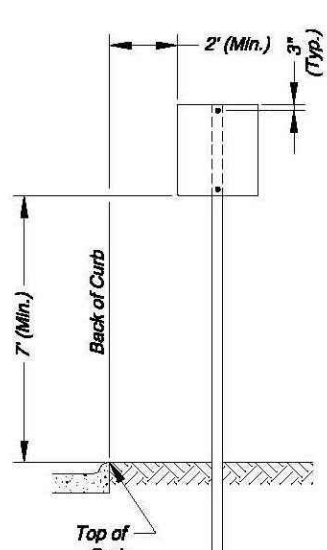
SQUARE STEEL POST MOUNTING DETAILS



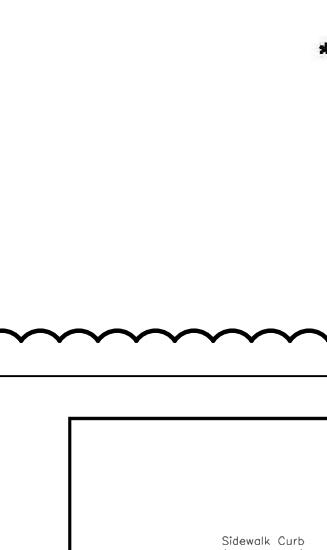
WING BRACKET MOUNTING DETAILS



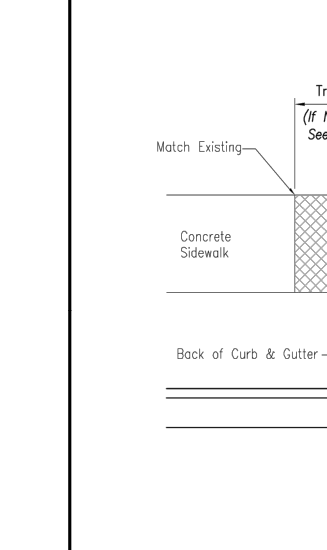
SIGN INSTALLATION FOR NON-CURBED STREET



SIGN INSTALLATION FOR CURBED STREET



SIGN INSTALLATION WITH AUXILIARY SIGN FOR CURBED STREET



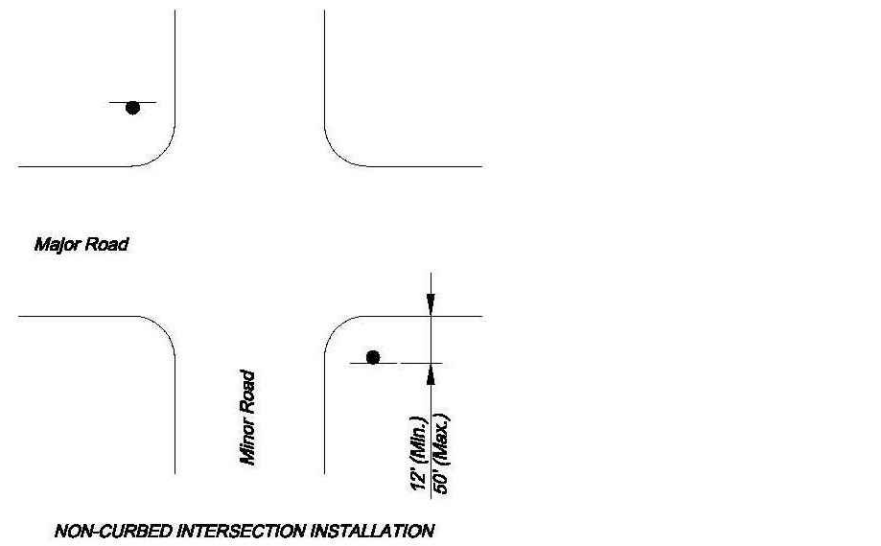
SIGN INSTALLATION FOR RAISED MEDIANS

SIGN MOUNTING DETAILS

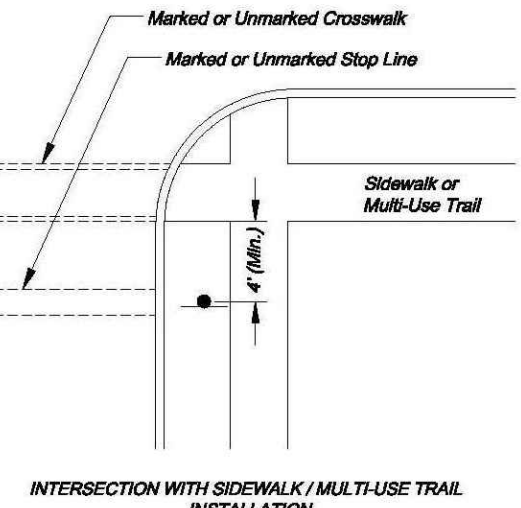
- * The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.

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

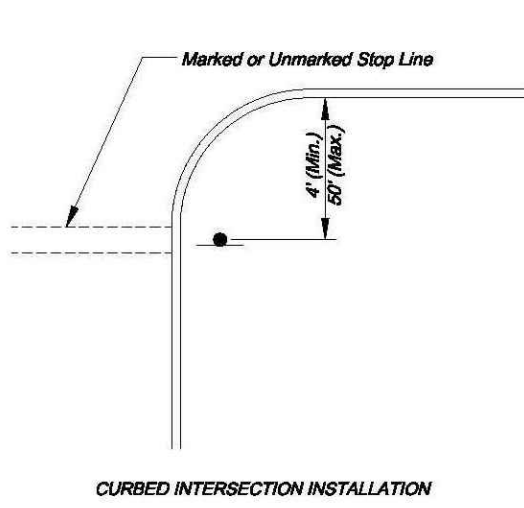
NOT AS BUILT



NON-CURBED INTERSECTION INSTALLATION

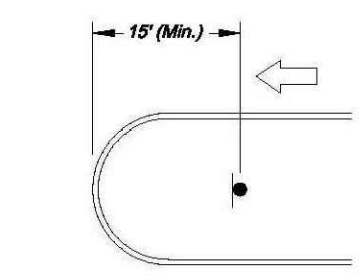


INTERSECTION WITH SIDEWALK/MULTI-USE TRAIL INSTALLATION



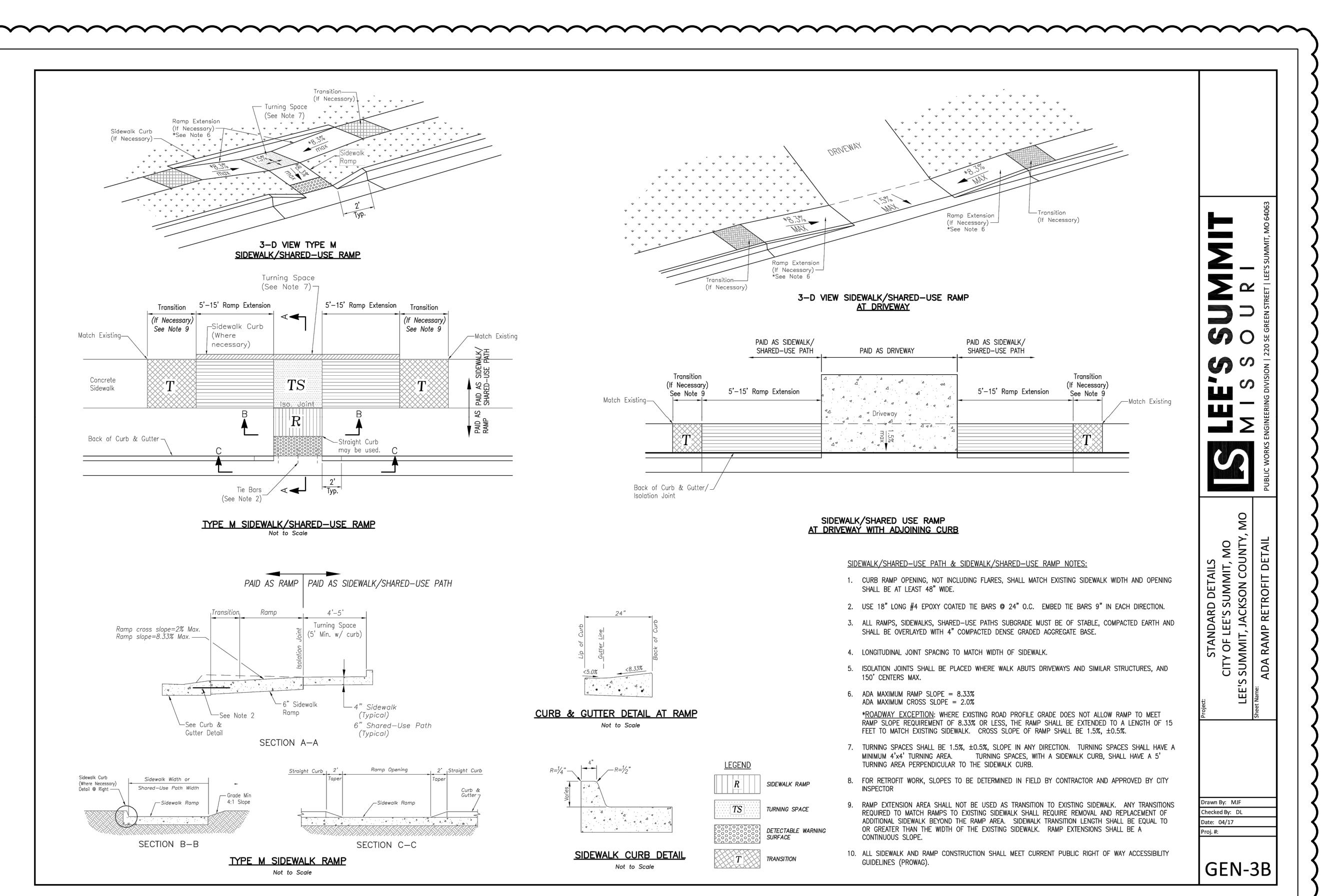
CURBED INTERSECTION INSTALLATION

CONTROL SIGN LOCATION



MEDIAN SIGN LOCATION

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



GEN-3B

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

Drawn By	MDP
Checked By	MDP
Designed By	MDP
QA/QC By	M.G.D.
Project No.	018-0847
Date	2018.04.20

MOLSSON ASSOCIATES

Professional Engineer
NICHOLAS D. HEISER
NUMBER PE-2013-000555
06/01/2020

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FAX 816.587.1393
WWW.MOLSSONASSOCIATES.COM

DETAIL SHEET

STREET, STORM & EROSION CONTROL PLANS

EAGLE CREEK SIXTEENTH PLAT

LEE'S SUMMIT, MO

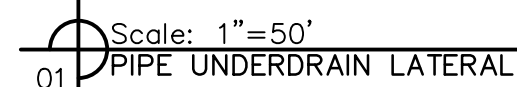
2018

REVISIONS

NO.	REV.	DATE	BY	REVISIONS DESCRIPTION
1		06/12/2018		CITY COMMENTS - 05/17/2018
		07/12/2018		CITY COMMENTS - 07/10/2018

drawn by: B.P.H.
checked by: N.D.H.
designed by: B.P.H.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

SHEET C120



drawn by: _____ B.P.K
checked by: _____ N.D.H.
designed by: _____ B.P.K.
QA/QC by: _____ M.G.D.
project no.: _____ 018-0847
date: _____ 2018.04.20

SHEET
C121

NOT AS BUILT

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FAX 816.587.1393
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STATE OF MISSOURI
NICHOLAS
D. HEISER
NUMBER
PE-2015000555
PROFESSIONAL ENGINEER
06/01/2020

06/01/2020

[illegible]

REVISIONS

2018

LEE'S SUMMIT, MO

EROSION CONTROL DETAILS

EAGLE CREEK
SIXTEENTH PLAT

drawn by: B.P.K
checked by: N.D.H.
designed by: B.P.K.
QA/QC by: M.G.D.
project no.: 018-0847
date: 2018.04.20

SHEET
C123

