

HIGHLAND MEADOWS - 5TH PLAT

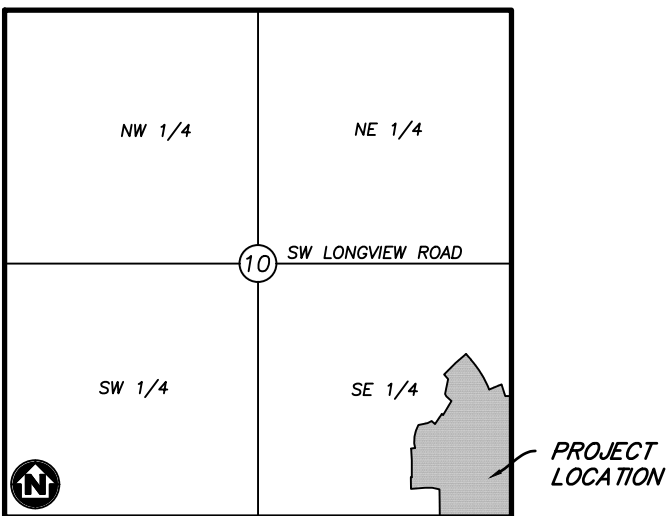
STREET, STORM SEWER, AND EROSION CONTROL PLANS

LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SEC. 10, TWP. 47N, RNG. 32W

DATE : 10/22/2021

LOTS : 134-159 (26 TOTAL)



VICINITY MAP

SECTION 10, TOWNSHIP 47, RANGE 32
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI
NOT TO SCALE

LEGAL DESCRIPTION:

THE EAST HALF OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 47 NORTH, RANGE 32 WEST, EXCEPT THOSE PARTS PLATTED AS HIGHLAND MEADOWS FIRST PLAT, HIGHLAND MEADOWS SECOND PLAT, HIGHLAND MEADOWS THIRD PLAT, HIGHLAND MEADOWS 4TH PLAT, SUBDIVISIONS IN LEE'S SUMMIT, JACKSON COUNTY, MISSOURI.

OIL AND GAS WELL NOTES:

NO ABANDONED OIL OR GAS WELLS HAVE BEEN IDENTIFIED WITHIN THE PROPERTY LIMITS OF THE PROPOSED CONSTRUCTION ACTIVITIES, PER THE MISSOURI DEPARTMENT OF NATURAL RESOURCES (MDNR) PERMITTED OIL AND GAS DATABASE, DATED JUNE 2, 2020.



Know what's below.
Call before you dig.



UTILITY CONTACTS:

SANITARY & WATER:

CITY OF LEE'S SUMMIT
JEFF THORN
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
PHONE (816) 969-1900

STORMWATER:

CITY OF LEE'S SUMMIT
PUBLIC WORKS
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
PHONE (816) 969-1800

STREETS:

CITY OF LEE'S SUMMIT
MICHAEL PARK
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
PHONE (816) 969-1900

AT&T:

RONALD GIFFERT
500 E 8TH STREET
KANSAS CITY, MO 64106
PHONE (816) 275-1550

EVERGY:

DOUG DAVIN
1300 SE HAMBLIN ROAD
LEE'S SUMMIT, MO 64081
PHONE (816) 347-4320

MISSOURI GAS ENERGY:

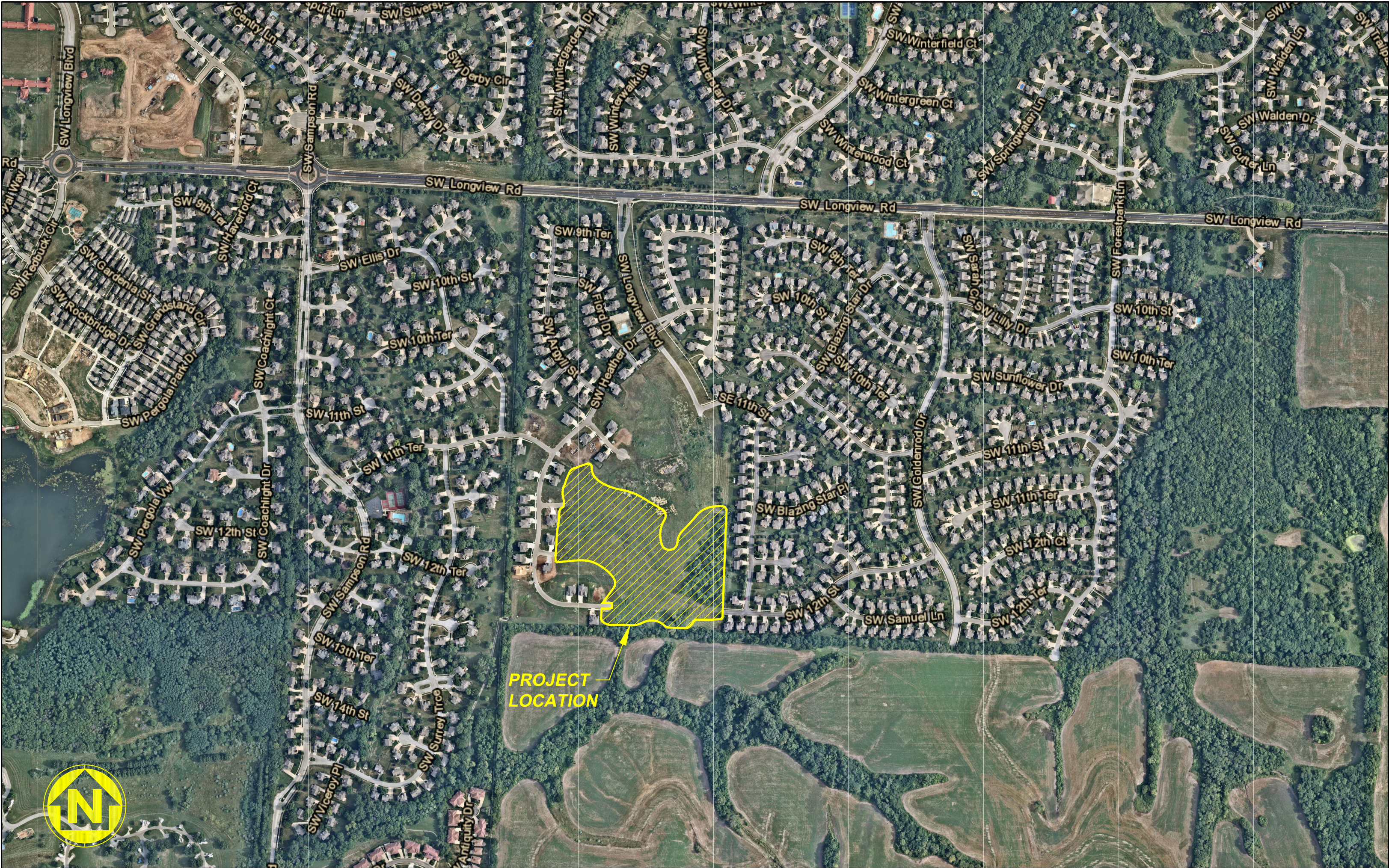
RICHARD FROCK
3025 SW CLOVER DRIVE
LEE'S SUMMIT, MO 64082
PHONE (816) 472-3489

FEMA FLOOD INFORMATION:

THE SITE IS LOCATED IN ZONE X, AREA OF MINIMAL FLOOD HAZARD, PER FEMA FIRM MAP 29095C0418G: EFFECTIVE DATE OF JANUARY 20, 2017. NO LETTERS OF MAP AMENDMENT OR REVISIONS ARE BEING PROPOSED.

BENCHMARK:

BM #1 N=999843.9665 E=2898946.9717 ELEV=935.04
DESCRIPTION = "JA-148" REFERENCE SYSTEM MONUMENT



WATERSHED: LITTLE BLUE RIVER

DISTURBED AREA: 15.3 AC

SURVEY CONTROL:

COORDINATES ARE BASED ON THE MISSOURI STATE PLANE COORDINATE SYSTEM, WEST ZONE, USING JACKSON COUNTY, MISSOURI, GEOGRAPHIC REFERENCE SYSTEM MONUMENT JA-148 (2003 ADJUSTMENT) AND ARE MODIFIED FROM GRIS COORDINATES TO GROUND COORDINATES BY UTILIZING A GRID SCALE FACTOR OF 0.9999020 AT REFERENCE MONUMENT JA-148.

PROJECT ELEVATIONS ARE BASED ON JACKSON COUNTY, MISSOURI, GEOGRAPHIC REFERENCE SYSTEM MONUMENT JA-148 (2003 ADJUSTMENT).

"JA-148" - STANDARD KC METRO ALUMINUM GRS DISK SET IN CONCRETE FLUSH WITH THE GROUND AND STAMPED "JA-148, 2002" LOCATED ON THE NORTH SIDE OF 3RD STREET, 12.5 FEET NORTH OF A SIDEWALK AND 102.5 FEET WEST OF THE PARKING LOT EXIT OF CEDAR CREEK ELEMENTARY SCHOOL.

GENERAL NOTES:

- CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE EXISTING CONDITIONS OF THE SITE AND HAVE ALL UTILITIES MARKED PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR SHALL POTHOLE ALL CONNECTION POINTS TO EXISTING UTILITIES AND POTENTIAL UTILITY CONFLICT LOCATIONS PRIOR TO ANY CONSTRUCTION ACTIVITIES. NOTIFY ENGINEER IMMEDIATELY IF CONFLICT OR DISCREPANCY EXISTS.
- CONTRACTOR SHALL PROTECT EXISTING STRUCTURES TO REMAIN FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION. ANY DAMAGE SHALL BE REPAIRED/ REPLACED TO PRE-CONSTRUCTION CONDITION AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL CONTACT THE CITY'S DEVELOPMENT SERVICES ENGINEERING INSPECTION TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH A FIELD ENGINEERING INSPECTOR PRIOR TO ANY LAND DISTURBANCE WORK AT (816) 969-1200.

DEVELOPER:

BRAD KEMPF
SUMMIT HOMES KC
120 SE 30TH STREET
LEE'S SUMMIT, MO 64082
BRADLEY@SUMMITHOMESKC.COM
(816) 927-9711

CIVIL ENGINEER:

ZACH MYERS
ANDERSON ENGINEERING, INC.
941 W 141ST TERR
KANSAS CITY, MO 64145
ZMYERS@ANDERSONENGINEERINGINC.COM
(816) 380-4821

PREPARED & SUBMITTED BY:

ANDERSON ENGINEERING INC.
KANSAS CITY, MISSOURI

ZACH MYERS, P.E.
MISSOURI P.E. NO. 2012009232

DATE

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PROJECT SPECIFICATIONS:

THE SPECIFICATIONS FOR THIS PROJECT SHALL BE THE FOLLOWING:

- MOST CURRENT VERSION OF THE DESIGN AND CONSTRUCTION MANUAL OF THE CITY OF LEE'S SUMMIT AS ADOPTED BY ORDINANCE 5813.

THE STANDARD SPECIFICATIONS THROUGH AND INCLUDING THE LATEST AMENDMENTS SHALL BE PART OF THESE PROJECT DRAWINGS AND SPECIFICATIONS AND ARE INCORPORATED HEREIN BY REFERENCE. THE MORE STRINGENT OF THESE STANDARD SPECIFICATIONS AND THOSE PREPARED BY THE ENGINEER PREPARING THESE PLANS SHALL GOVERN.



DRAWING INFO.		BY		DATE	
NO.	DESCRIPTION	BY	DATE	CHECK BY:	DATE
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2.	REVISED PER CITY COMMENTS	GC	3/10/21	DATE:	12/2/2020
3.	REVISED PER CITY COMMENTS	GC	3/15/21	ISSUED FOR:	20K0210057
4.	REVISED PER CITY COMMENTS	GC	10/22/21	JOB NUMBER:	00062
5.	ADDED SHEET C701 FOR INLETS	GC	10/22/21	MO COA NO.	00062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

COVER SHEET

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



SHEET NUMBER
CVR
1 OF 41

Oct 22, 2021 - 9:29am Plotted Bx gcote G:\Shared drives\WC10 - Land Development\Projects\2020\20KCT0057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20KCT0057 - SHT - GENERAL NOTES.dwg Layout: GENERAL NOTES

GENERAL NOTES

1.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE ALL STATE AND CITY PERMITS, INCLUDING PERMITS REQUIRED BY OTHER GOVERNING BODIES, REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT.
2.

PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND NOTIFYING ALL UTILITY COMPANIES AND SHALL FIELD VERIFY ALL UTILITIES THAT MAY BE ENCOUNTERED. THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR COMPLETE. IN THE EVENT THAT EXISTING UTILITIES ARE CONTACTED, DISRUPTED, OR IN ANY WAY ALTERED, CONTACT THE RESPECTIVE UTILITY COMPANY IMMEDIATELY. IN CASE OF EMERGENCY, DIAL 911.
3.

THE CONTRACTOR SHALL PROVIDE EROSION AND SILT PROTECTION AS REQUIRED DURING CONSTRUCTION AND SHALL BE RESPONSIBLE FOR KEEPING EXISTING STREET AND ADJACENT LAND FEATURES AND PROPERTY FREE OF MUD AND SILT. SEE "EROSION CONTROL PLAN" FOR MINIMUM EROSION CONTROL MEASURES REQUIRED BY THESE PLANS. EROSION CONTROLS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ONCE CONSTRUCTION BEGINS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES AND SHALL PROMPTLY REPAIR ANY AREA REQUIRING ATTENTION UNTIL SUBSTANTIAL COMPLETION.
4.

WARRANTY/DISCLAIMER: THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO CERTIFY THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER OBSERVES AND CONTROLS THE PHYSICAL CONSTRUCTION AND THE CONTINUAL BASIS AT THE SITE.
5.

ALL CONSTRUCTION SHALL FOLLOW THE CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL AS ADOPTED BY ORDINANCE 5613. WHERE DISCREPANCIES EXIST BETWEEN THESE PLANS AND THE DESIGN AND CONSTRUCTION MANUAL, THE DESIGN AND CONSTRUCTION MANUAL SHALL PREVAIL.
6.

THE CONTRACTOR SHALL PROVIDE AT LEAST ONE (1) CHEMICALLY TREATED PORTABLE TOILET UNIT, "SATELLITE CORPORATION", OR EQUAL FOR EVERY 20 WORKMEN ON THE JOB SITE. IN NO CASE SHALL LESS THAN ONE (1) BE PROVIDED. THE UNIT(S) SHALL REMAIN ON THE SITE DURING ALL ACTIVE PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL ENFORCE THE USE OF THE PUBLIC VIEW TO THE GREATEST EXTENT PRACTICABLE.
7.

ALL AREA TO BE FILLED AND SUBGRADES UNDER PAVEMENTS SHALL BE PROOF-ROLLED WITH A LOADED, RUBBER Tired TRUCK PRIOR TO FILL PLACEMENT OR ROADWAY PAVING OPERATIONS BEGIN. SOFT OR UNSTABLE AREA SHALL BE REMOVED AND REPLACED WITH STRUCTURAL FILL.
8.

PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A COPY OF AND BECOME FAMILIAR WITH THE GEOTECHNICAL REPORT BY ANDERSON ENGINEERING INC., UNLESS SPECIFICALLY NOTED ON THE PLANS. THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT ARE HEREBY INCORPORATED INTO THE PROJECT REQUIREMENTS AND SPECIFICATIONS.
9.

THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION LAYOUT AND STAKING FOR THIS PROJECT.
10.

ALL PIPE LENGTHS ARE SHOWN FROM STRUCTURE CENTER TO STRUCTURE CENTER.
11.

ALL STRUCTURE STATION AND OFFSET CALLOUTS ARE TO THE CENTER OF STRUCTURE.
12.

ALL CURB STATIONS, OFFSETS AND ELEVATIONS ARE TO THE TOP BACK OF CURB UNLESS OTHERWISE NOTED.
13.

ALL CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE SUBSIDIARY TO NEW DRAINAGE CONSTRUCTION.
14.

IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ACCESS TO ALL PROPERTIES IS AVAILABLE DURING CONSTRUCTION OF THE PROJECT.
15.

ALL SAW CUTS SHOWN ON THE PLANS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS OF THE CONTRACT. THE DEPTH OF THE CUT SHALL BE FULL DEPTH.
16.

EXISTING CONCRETE PAVEMENT AND EXISTING BITUMINOUS PAVEMENT THAT IS REMOVED WILL BECOME THE PROPERTY OF THE CONTRACTOR & DISPOSED OF AT HIS EXPENSE.
17.

EXISTING DRAINAGE STRUCTURES THAT ARE REMOVED, INCLUDING END SECTIONS, SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS.
18.

CONTRACTOR SHALL FIELD VERIFY EXISTING PIPE ELEVATIONS.
19.

CHANNELS SHALL BE CUT AT BOX CULVERTS (UNLESS OTHERWISE NOTED) TO FLOW LINE ELEVATIONS AND TO A WIDTH OF ONE FOOT OUTSIDE OF EACH OUTSIDE WALL AND WITH SLOPES OF 2 TO 1 PRIOR TO CONSTRUCTION OF THE CULVERT.
20.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE UTILITY OWNERS TO LOCATE AND FLAG ALL RELOCATED UNDERGROUND UTILITIES PRIOR TO EXCAVATION TO AVOID DAMAGING THE UTILITIES. THE LOCATIONS SHOWN ON THE PLANS ARE THE ORIGINAL SURVEYED LOCATION, PRIOR TO RELOCATION IN SOME CASES. THE INFORMATION SHOWN IN THESE PLANS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE UTILITY COMPANIES PROVIDED FOR FIELD LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL COORDINATE WITH THE PROPER UTILITY OWNERS DURING CONSTRUCTION OF THE PROPOSED STORM SEWER SYSTEM TO AVOID DAMAGES TO EXISTING FACILITIES. DAMAGE TO ANY FACILITIES WILL BE PAID FOR AT THE CONTRACTOR'S EXPENSE.
21.

ALL TREES, SHRUBS, BUSHES, AND BRUSH WITHIN THE GRADING LIMITS SHALL BE REMOVED BY THE CONTRACTOR UNLESS SPECIFICALLY INDICATED TO BE SAVED ON THE PLANS.
22.

ALL SIGNS REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY OF THE CITY, UNLESS NOT DESIRED BY CITY. IF NOT DESIRED BY CITY, CONTRACTOR SHALL REMOVE AND DISPOSE OF SIGNS AT HIS EXPENSE.
23.

DRAINAGE STRUCTURES WHICH ARE TO REMAIN, WHETHER EXTENDED OR NOT, SHALL BE CLEANED OUT BY THE CONTRACTOR, AS DIRECTED BY THE CITY.
24.

CONTRACTOR SHALL ACCOMPANY A DESIGNATED CITY REPRESENTATIVE DURING A PHOTOGRAPHY & VIDEO TOUR BEFORE ANY CONSTRUCTION BEGINS TO RECORD EXISTING CONDITIONS.
25.

THE CONTRACTOR SHALL THOROUGHLY REVIEW AND BECOME FAMILIAR WITH THE PROJECT PLANS, SPECIFICATIONS AND ANY SPECIAL CONDITIONS OF THE CONTRACT DOCUMENTS PRIOR TO BEGINNING CONSTRUCTION OF THIS PROJECT.
26.

DRIVEWAYS, SIDEWALKS, PARKING LOTS, YARD LIGHTS, FENCES, SPRINKLER SYSTEMS, UTILITY SERVICE LINE CONNECTIONS, LANDSCAPING, SEPTIC SYSTEMS, AND OTHER AREAS OUTSIDE THE CONSTRUCTION EASEMENTS THAT ARE DAMAGED BY THE CONTRACTOR SHALL BE RESTORED AT HIS EXPENSE TO A CONDITION EQUAL TO OR BETTER THAN EXISTING BEFORE DAMAGE OCCURRED.
27.

ALL WORK SHALL BE CONFINED WITHIN THE EASEMENTS AND/OR GRADING LIMITS AS DIRECTED BY THE ENGINEER. ALL TEMPORARY CONSTRUCTION EASEMENTS SHALL BE STAKED BY THE CONTRACTOR PRIOR TO BEGINNING OF CONSTRUCTION. ALL GRADING LIMITS SHOWN ARE APPROXIMATE AND MAY BE EXTENDED OR REDUCED AT THE DIRECTION OF THE ENGINEER.
28.

THE CONTRACTOR SHALL PROVIDE ADEQUATE SEDIMENT AND EROSION CONTROL TO PREVENT SEDIMENT AND/OR DEBRIS FROM ENTERING STREETS OPEN TO TRAFFIC THE COMPLETED STORM SEWER SYSTEM, OR YARDS OF ADJACENT RESIDENCES AND BUSINESSES.
29.

ALL TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST M.U.T.C.D. THE TRAFFIC CONTROL PLANS SHOWN ARE MINIMUM REQUIREMENTS ONLY AND DO NOT ATTEMPT TO ADDRESS IN DEPTH THE VARIETY OF SITUATIONS THAT MAY OCCUR ONCE CONSTRUCTION BEGINS. THE REQUIREMENTS SHOWN IN NO WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR SELECTING & IMPLEMENTING THE PROPER DEVICES AND PROCEDURES THAT WILL ASSURE THE SAFETY OF MOTORISTS, PEDESTRIANS, & WORKERS AT ALL TIMES.
30.

LABOR, TOOLS, MATERIALS, AND EQUIPMENT REQUIRED FOR TEMPORARY CONNECTIONS TO MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION SHALL BE SUBSIDIARY TO OTHER PAY ITEMS.
31.

REMOVAL OF EXISTING STRUCTURES SHALL INCLUDE, BUT NOT BE LIMITED TO, THE ITEMS NOTED IN THE PLANS AND IN THE SUMMARY OF QUANTITIES. WORK SHALL BE PAID FOR UNDER BID ITEM "REMOVAL OF EXISTING STRUCTURES". CONTRACTOR WILL DISPOSE OF EXISTING STRUCTURES AT HIS EXPENSE.
32.

THE CONTRACTOR WILL BE RESPONSIBLE FOR SUPPORTING AND PROTECTING ALL EXPOSED UTILITIES IN OPEN TRENCHES. WORK SHALL BE SUBSIDIARY TO OTHER PAY ITEMS.
33.

CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF THE EXISTING STORM SEWER PIPES AND ADJUST THE PROPOSED FLOWLINE ELEVATIONS, PIPE LENGTHS, AND STRUCTURES AS EACH SECTION OF THE EXISTING DRAINAGE STRUCTURE IS REMOVED AND UNCOVERED.
34.

EXCESS MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR DISPOSAL.
35.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY AT ALL TIMES.
36.

CONTRACTOR RESPONSIBLE FOR CONSTRUCTION OF ALL ADA-ACCESSIBLE RAMPS, AS WELL AS ANY SIDEWALK ADJACENT TO TRACTS OR UNPLATTED LAND, AT THE TIME OF INFRASTRUCTURE IMPROVEMENTS.
37.

CONTRACTOR TO CONSTRUCT STORMWATER MANAGEMENT FACILITIES SPECIFICALLY THOSE FEATURES RELATED TO DETENTION, PRIOR TO ANY LAND DISTURBANCE OF THE SITE AND PRIOR TO THE CONSTRUCTION OF ANY OTHER SITE DEVELOPMENT WORK AS NOT TO EFFECT DOWNSTREAM NEIGHBORS WITH UNDETAINED STORMWATER DISCHARGE.
38.

AN AS-GRADED AND AS-BUILT DRAWING SHALL BE SUBMITTED TO AND REVIEWED BY THE CITY FIR THE DETENTION BASIN. THIS SHALL BE REQUIRED PRIOR TO ISSUANCE OF A CERTIFICATE OF SUBSTANTIAL COMPLETION. ALL PRECAUTIONS SHOULD BE TAKEN TO ENSURE DETENTION POND AND OUTLET STRUCTURE ARE CONSTRUCTED ACCORDING TO THE APPROVED PLANS; VOLUMES AND ELEVATIONS ARE CRITICAL FOR AS-BUILT APPROVAL. THE CITY SHALL BE PROVIDED WITH AN AS-BUILT SURVEY OF THE DETENTION, OUTLET STRUCTURE INCLUDING ALL WEIR ELEVATIONS AND STORM SYSTEM INCLUDING ALL THE INVERTS, STAMPED BY A MISSOURI LICENSED ENGINEER.

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

GENERAL NOTES



SHEET NUMBER
C050
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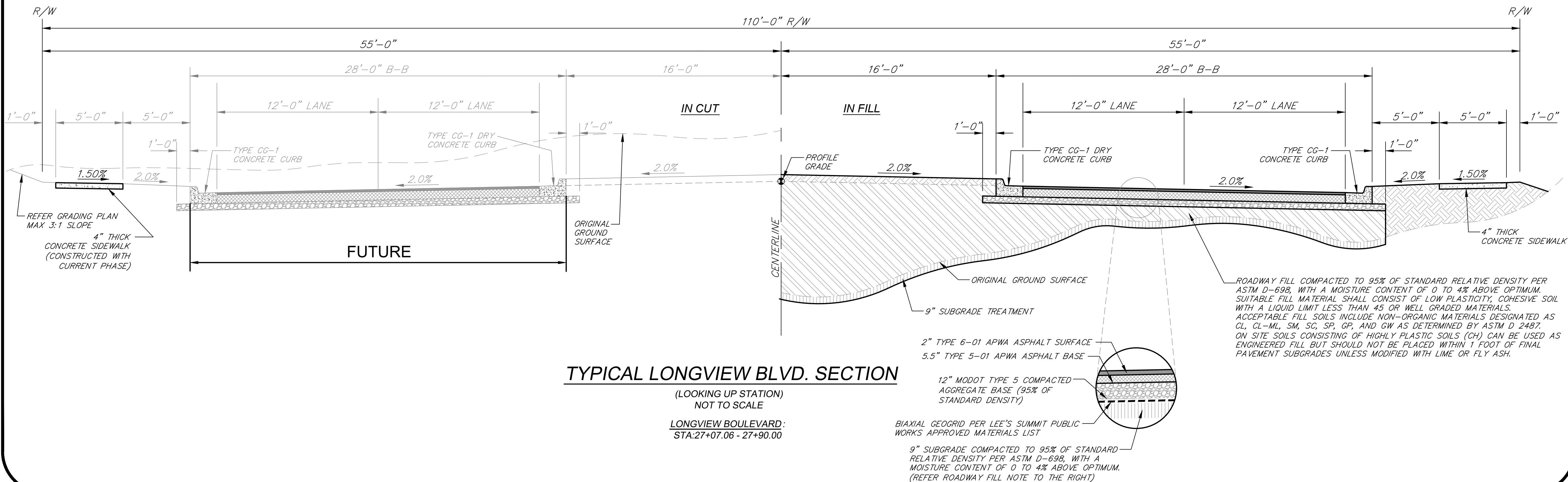
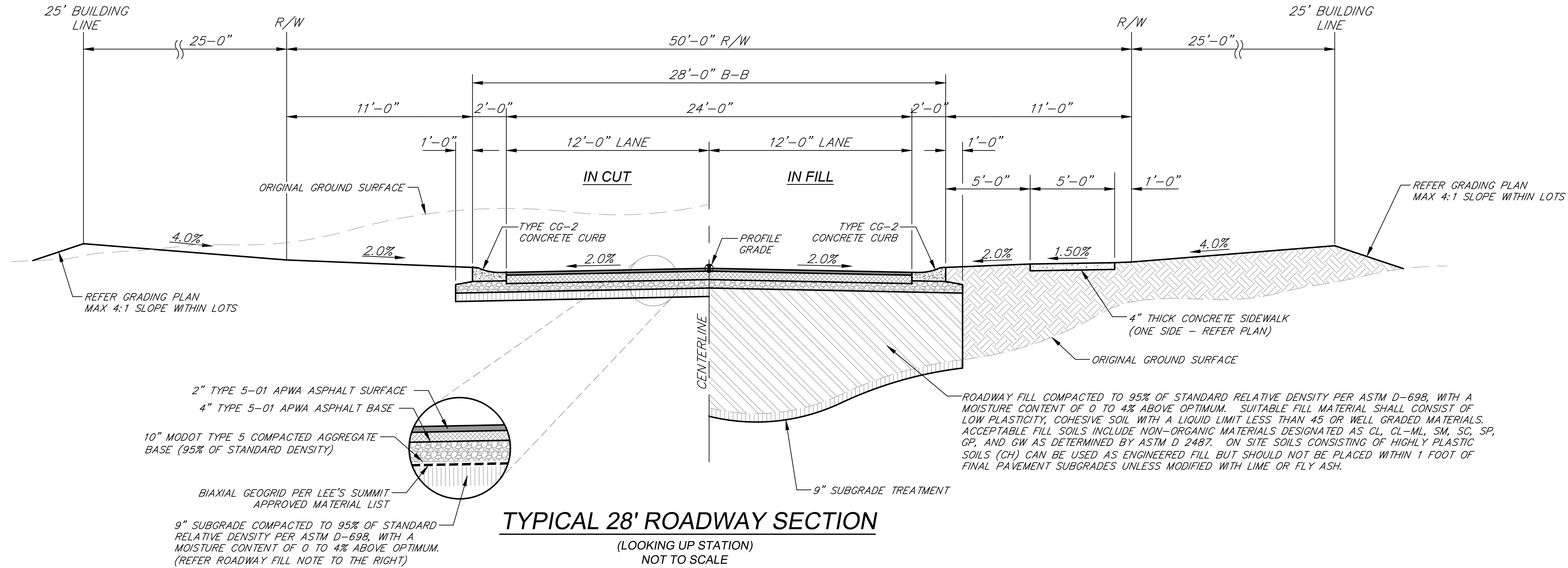
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A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - LC 62

Oct 22, 2021 - 9:29am Plotted Bx gcote G:\Shared drives\VC10 - Land Development\Projects\2020\20K10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20K10057 - SHT - TYPICAL SECTION.dwg Layout: TYPICAL SECTIONS



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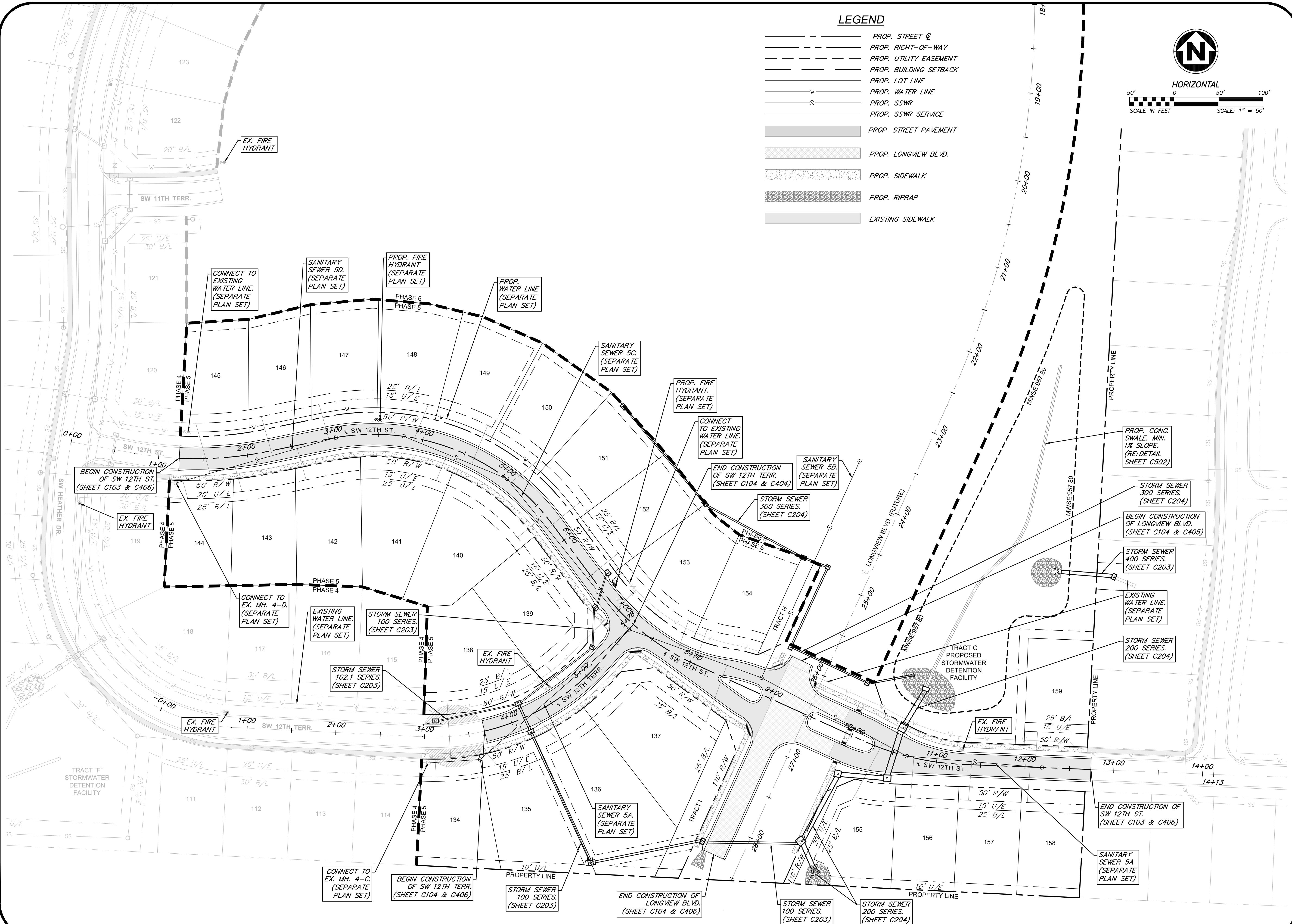
TYPICAL SECTIONS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER
PE-2012009232
EXPIRATION DATE
12/31/2021

SHEET NUMBER
C101
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Oct 22, 2021 - 9:29am Plotted Bx: gpc G:\Shared drives\WC10 - Land Development\Projects\2020\20K10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20K10057 - SH1 - GENERAL LAYOUT.dwg Layout: GENERAL LAYOUT



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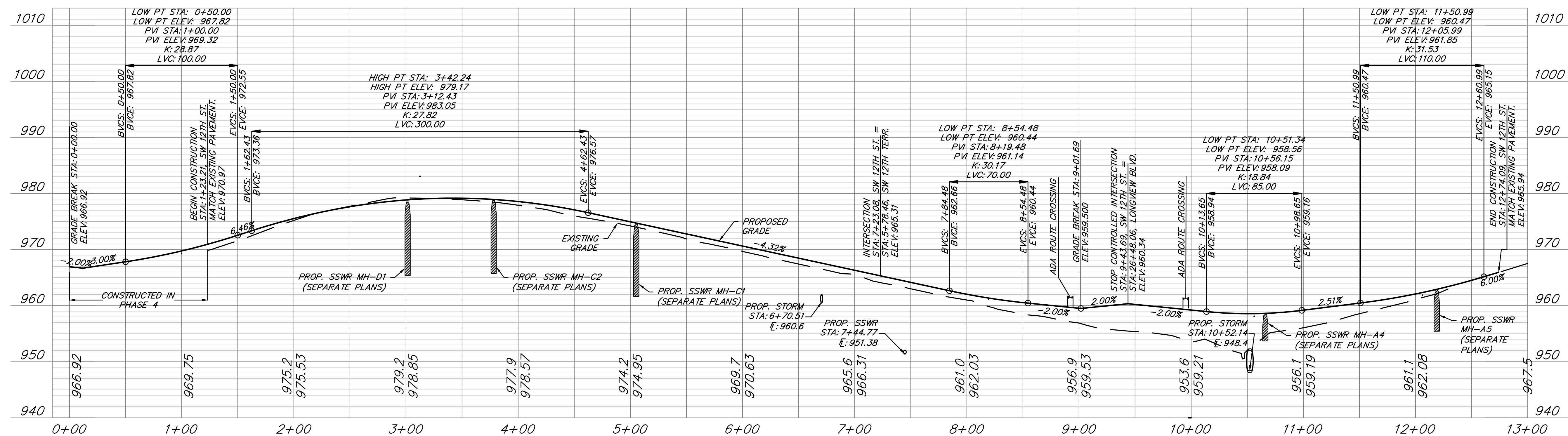
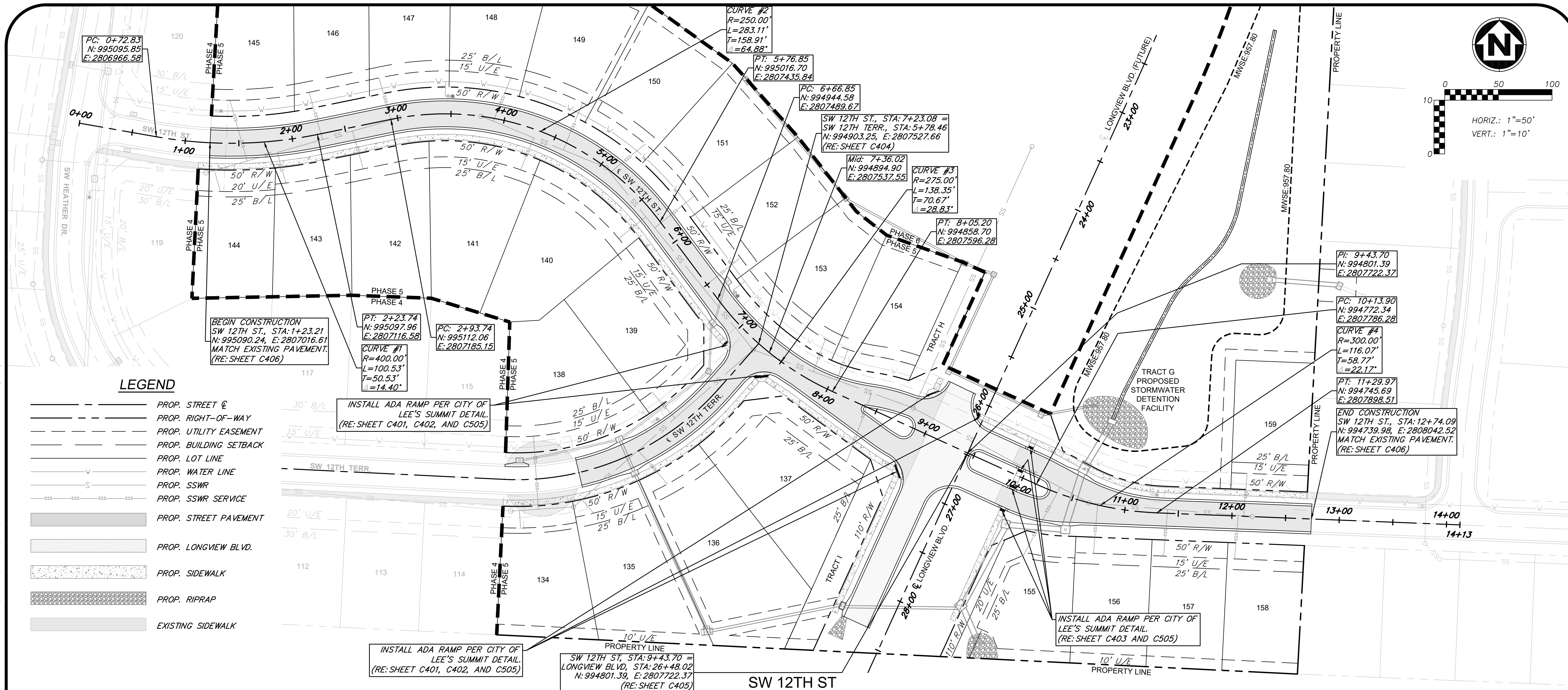
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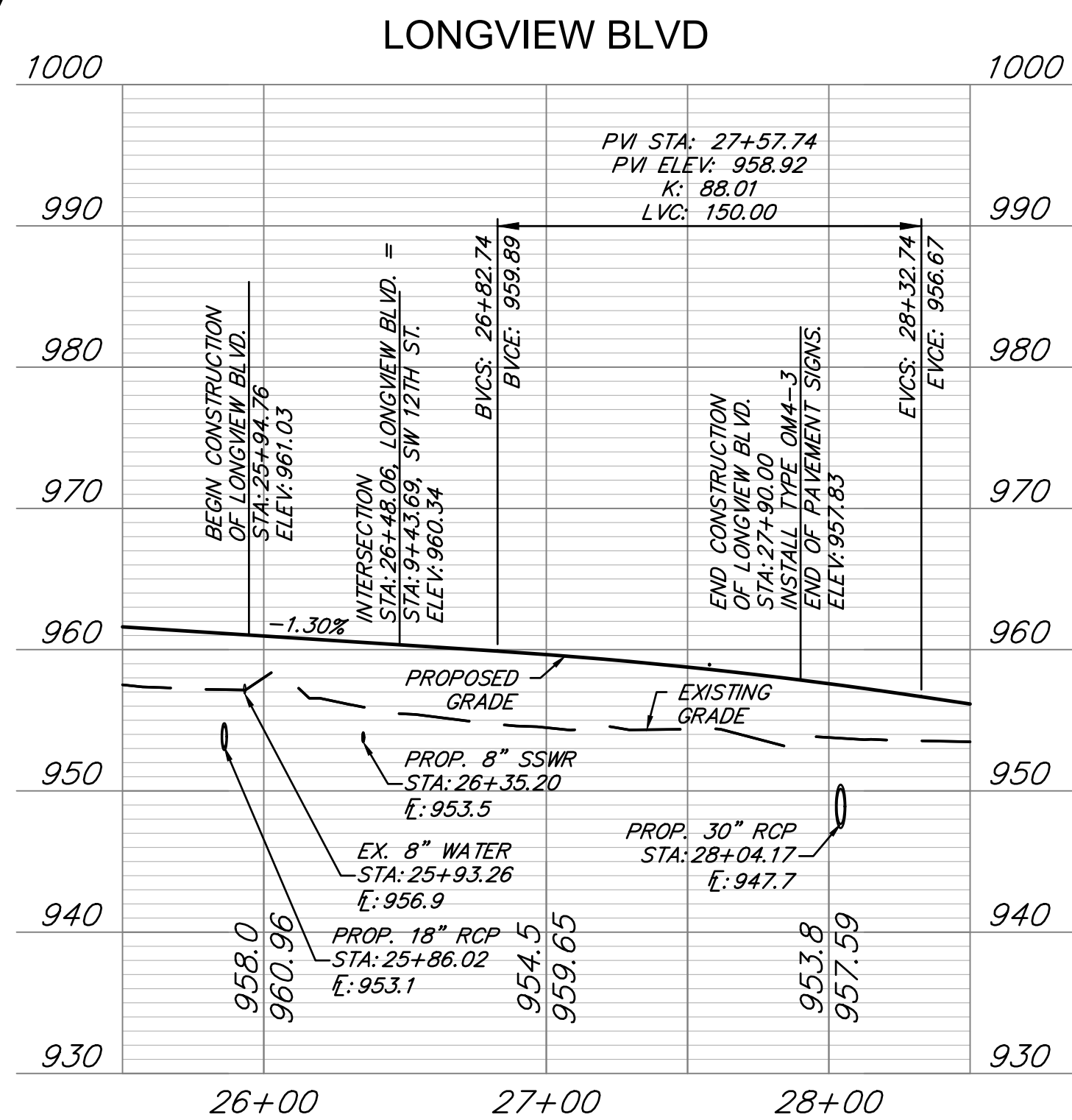
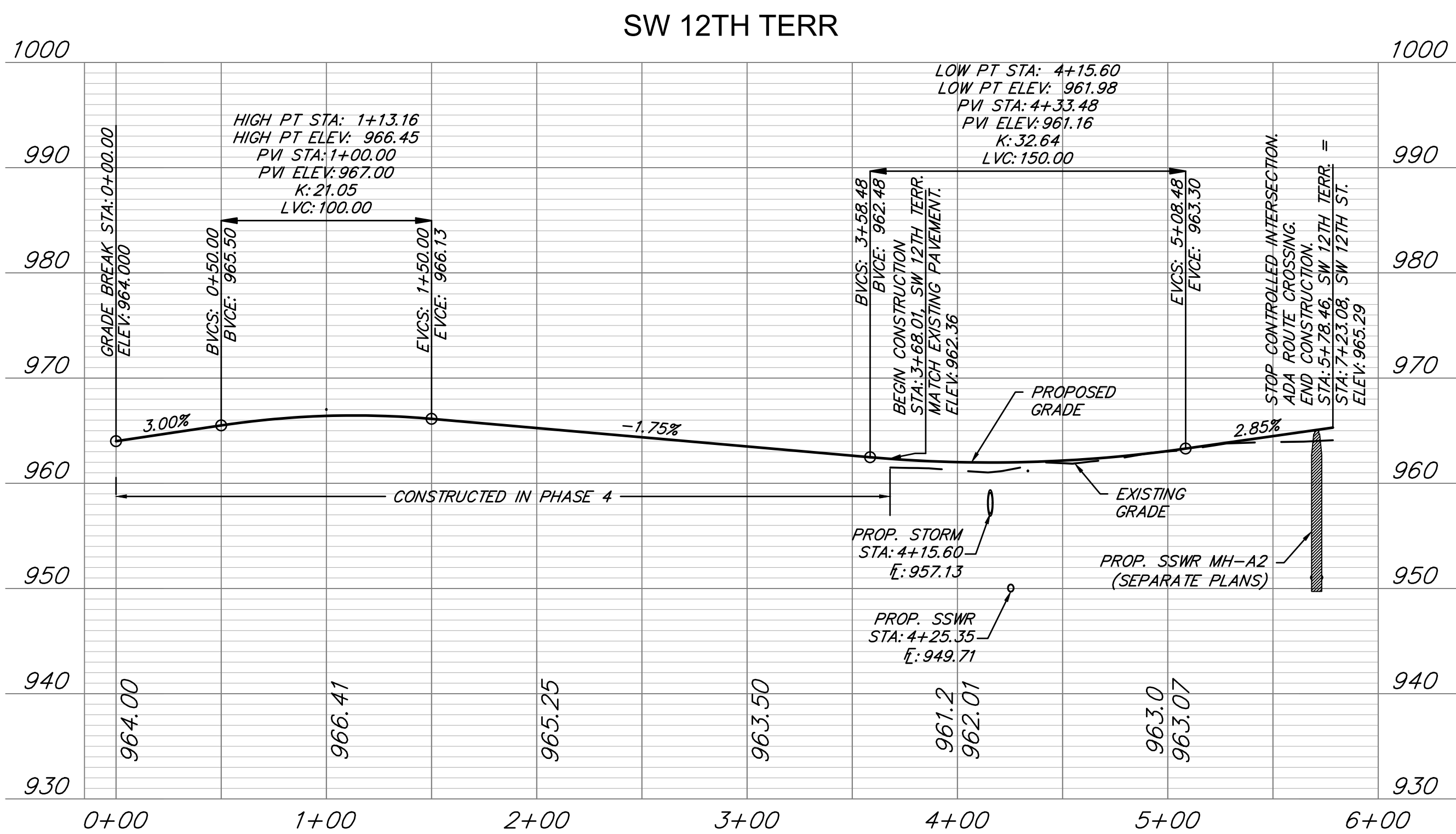
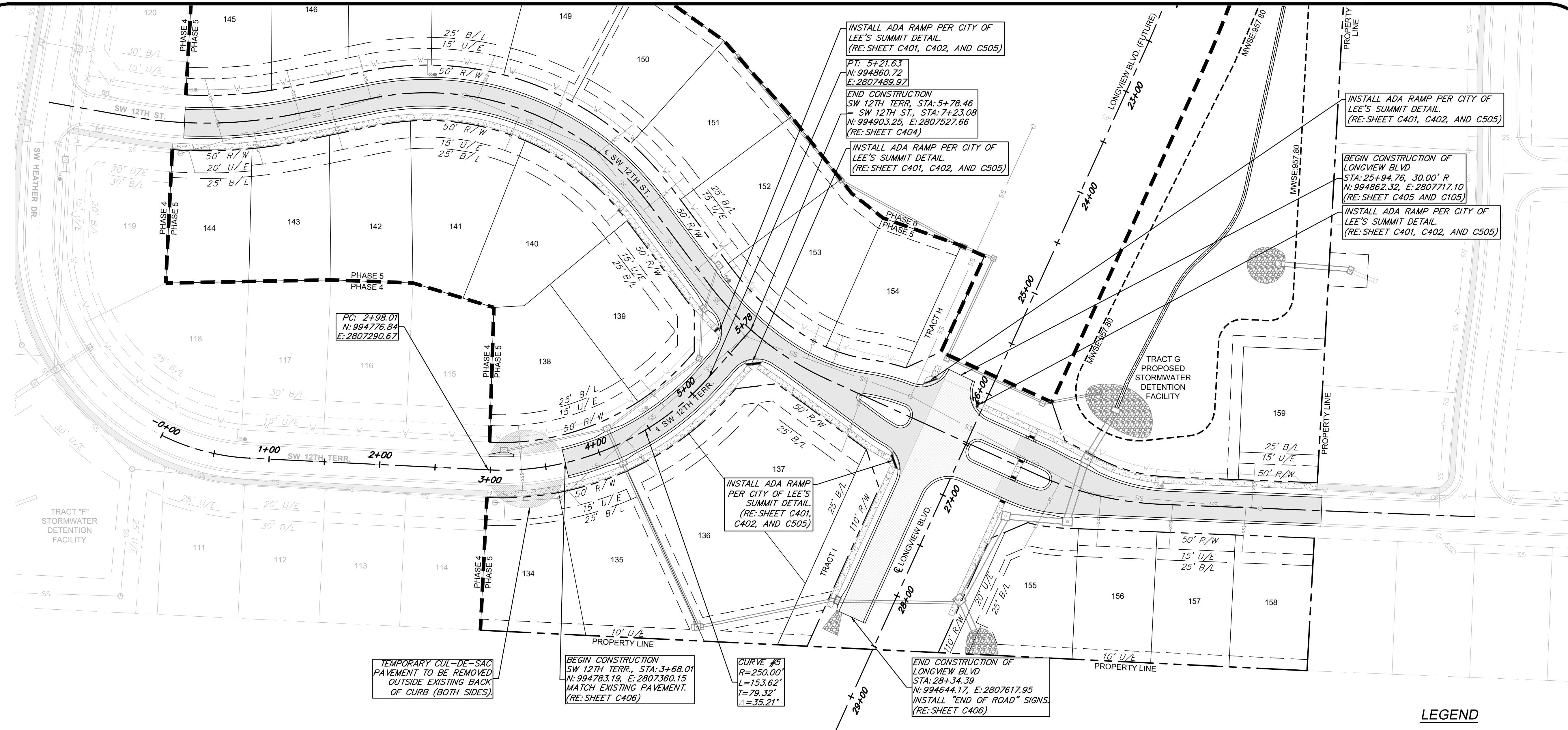
GENERAL LAYOUT

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

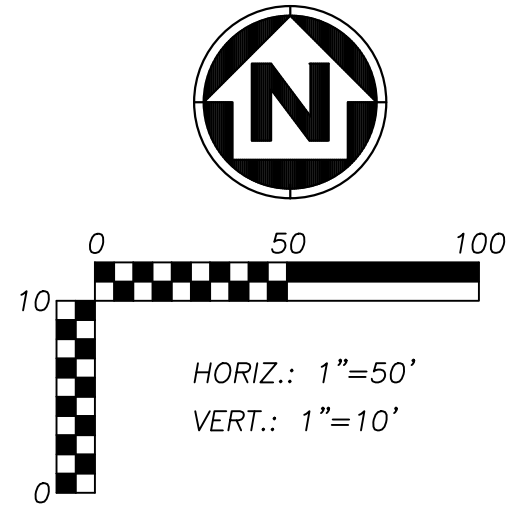
STATE OF MISSOURI
ZACH A. MYERS
NUMBER
FE-2012000232
EXPIRATION DATE
12/31/21
PROFESSIONAL ENGINEER

SHEET NUMBER
C102
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- LEGEND**
- PROP. STREET &
 - PROP. RIGHT-OF-WAY
 - PROP. UTILITY EASEMENT
 - PROP. BUILDING SETBACK
 - PROP. LOT LINE
 - PROP. WATER LINE
 - PROP. SSWR
 - PROP. SSWR SERVICE
 - PROP. STREET PAVEMENT
 - PROP. LONGVIEW BLVD.
 - PROP. SIDEWALK
 - PROP. RIPRAP
 - EXISTING SIDEWALK



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941 W. 141ST TER. • KANSAS CITY, MISSOURI 64145 • PHONE (816) 777-0400
A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - LC 62

REVISIONS		DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
		CHECK BY:	ZM
		LICENSE NO.	FE-2012000232
		DATE:	12/2/2020
		ISSUED FOR:	FOR REVIEW
		JOB NUMBER:	20K10057
		MO COA NO.	00062

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

**12TH TERR. & LONGVIEW BLVD.
PLAN & PROFILE**

S10, T47N, R22W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

SHEET NUMBER
C104
6 OF 41

Oct 22, 2021 - 9:30am Plotted Bk. g:\Shared drives\VC10 - Land Development\Projects\2020\20K10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20K10057 - SHT - INTERSECTION DETAILS.dwg Layout: STREET SIGNAGE PLAN

LEGEND

- TYPICAL 28' ROADWAY PAVEMENT SECTION
- LONGVIEW BLVD. PAVEMENT SECTION
- 5' CONCRETE SIDEWALK
- RIPRAP OUTLET STABILIZATION
- RIGHT-OF-WAY
- ROAD CENTERLINE

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 DESIGNEE.
- 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 STANDARD DRAWINGS.
- ALL EXISTING SIGNS WILL BE USED IN PLACE DURING CONSTRUCTION AND PROTECTED FROM DAMAGE UNLESS OTHERWISE INDICATED ON PLANS. IF THE CONTRACTOR DAMAGES ANY EXISTING SIGN OR POSTS DURING CONSTRUCTION, THE CONTRACTOR WILL 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 (1971 SE HAMLEN 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 INSTALLED TO BE LEFT IN PLACE OVERNIGHT WILL REQUIRE PRIOR APPROVAL FROM THE CITY INSPECTOR.



HORIZONTAL
0 40' 80'
SCALE IN FEET SCALE: 1" = 40'

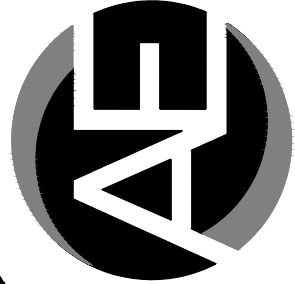
ALL SIGNAGE SHALL COMPLY WITH THE CITY OF LEE'S SUMMIT STANDARD DETAILS AND SPECIFICATIONS PER SECTION 3000 OF THE DESIGN AND CONSTRUCTION MANUAL. REFER TO DETAILS SHEET C407 AND C408.

BEGIN CONSTRUCTION OF LONGVIEW BLVD 30.00', RT STA: 25+94.76 N: 994862.32 E: 2807717.10 INSTALL (4) END OF ROAD SIGNS (OM4-3)

END CONSTRUCTION OF LONGVIEW BLVD 30.00', RT STA: 28+34.39 N: 994644.17 E: 2807617.95 INSTALL (4) END OF ROAD SIGNS (OM4-3)

SW 12TH ST STA: 8+79.69 36.00', RT N: 994795.10, E: 2807649.21 INSTALL "STOP" SIGN (R1-1). INSTALL STREET SIGNS (D3-1). "LONGVIEW BLVD." & "SW 12TH ST."

SW 12TH ST STA: 9+47.69 31.00', LT N: 994827.96, E: 2807738.83 INSTALL "STOP" SIGN (R1-1). INSTALL STREET SIGNS (D3-1). "LONGVIEW BLVD." & "SW 12TH ST."



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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

STREET SIGNAGE PLAN

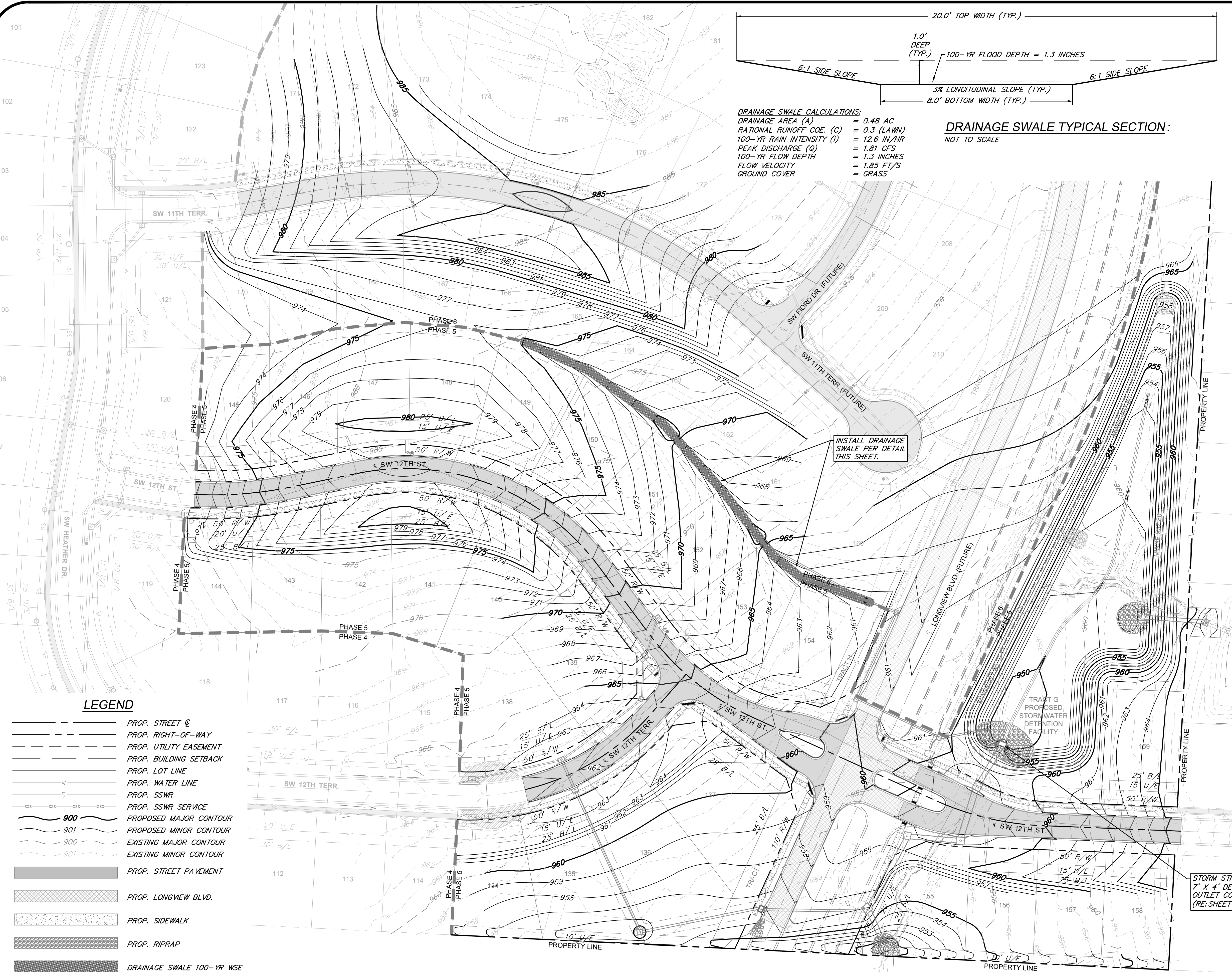


SHEET NUMBER
C105
7 OF 41

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

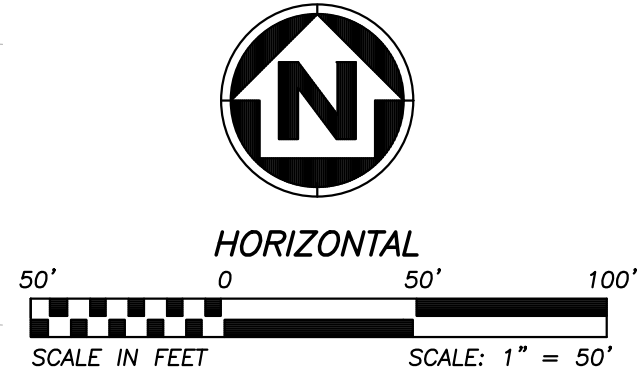
Oct 22, 2021 - 9:30am Plotted Bx: gscote G:\Shared drives\WC10 - Land Development\Projects\2020\20K10057 Highland Meadows - 5th Plat\01 CIV\03-DWG\Sheet\STREET AND STORM\20K10057 - 5th Plat - GRADING PLAN.dwg Layout: GRADING PLAN

LEGEND	
	PROP. STREET C/L
	PROP. RIGHT-OF-WAY
	PROP. UTILITY EASEMENT
	PROP. BUILDING SETBACK
	PROP. LOT LINE
	PROP. WATER LINE
	PROP. SSWR
	PROP. SSWR SERVICE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROP. STREET PAVEMENT
	PROP. LONGVIEW BLVD.
	PROP. SIDEWALK
	PROP. RIPRAP
	DRAINAGE SWALE 100-YR WSE
	EXISTING SIDEWALK



DRAINAGE SWALE CALCULATIONS:
DRAINAGE AREA (A) = 0.48 AC
RATIONAL RUNOFF COE. (C) = 0.3 (LAWN)
100-YR RAIN INTENSITY (I) = 12.6 IN/HR
PEAK DISCHARGE (Q) = 1.81 CFS
100-YR FLOOD DEPTH = 1.3 INCHES
FLOW VELOCITY = 1.85 FT/S
GROUND COVER = GRASS

- GRADING NOTES:**
- PRIOR TO COMMENCEMENT OF SITE MOBILIZATION, THE CONTRACTOR SHALL RECEIVE ALL PERMITS.
 - REFER TO THE CITY OF LEE'S SUMMIT, MISSOURI TECHNICAL PROVISIONS AND STANDARD DRAWINGS FOR THE SPECIFICATIONS FOR GRADING AND SUBGRADE PREPARATION FOR THIS PROJECT.
 - EXISTING GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS. PROPOSED GRADE CONTOURS SHOWN AT 1 FOOT INTERVALS.
 - ALL UNSURFACED AREAS THAT ARE DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES MINIMUM OF TOPSOIL. TOPSOIL SHALL BE BLACK SOIL FROM THE LOCAL VICINITY THAT PRODUCES HEAVY GROWTH.
 - ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED. NO SEPARATE OR ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION.
 - CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
 - ALL FILL WITHIN LOTS SHALL BE COMPACTED TO 95% OF STANDARD RELATIVE DENSITY PER ASTM D-698, WITH A MOISTURE CONTENT OF -3 TO 3% ABOVE OPTIMUM. CONTRACTOR RESPONSIBLE FOR SOIL TESTING.



REVISIONS		DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE
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2.	REVISED PER CITY COMMENTS	GC	2/26/21

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

GRADING PLAN

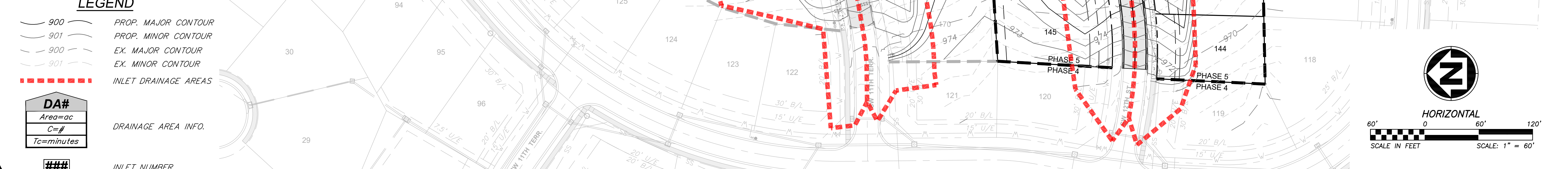
S10, T47N, R22W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



SHEET NUMBER
C106
8 OF 41

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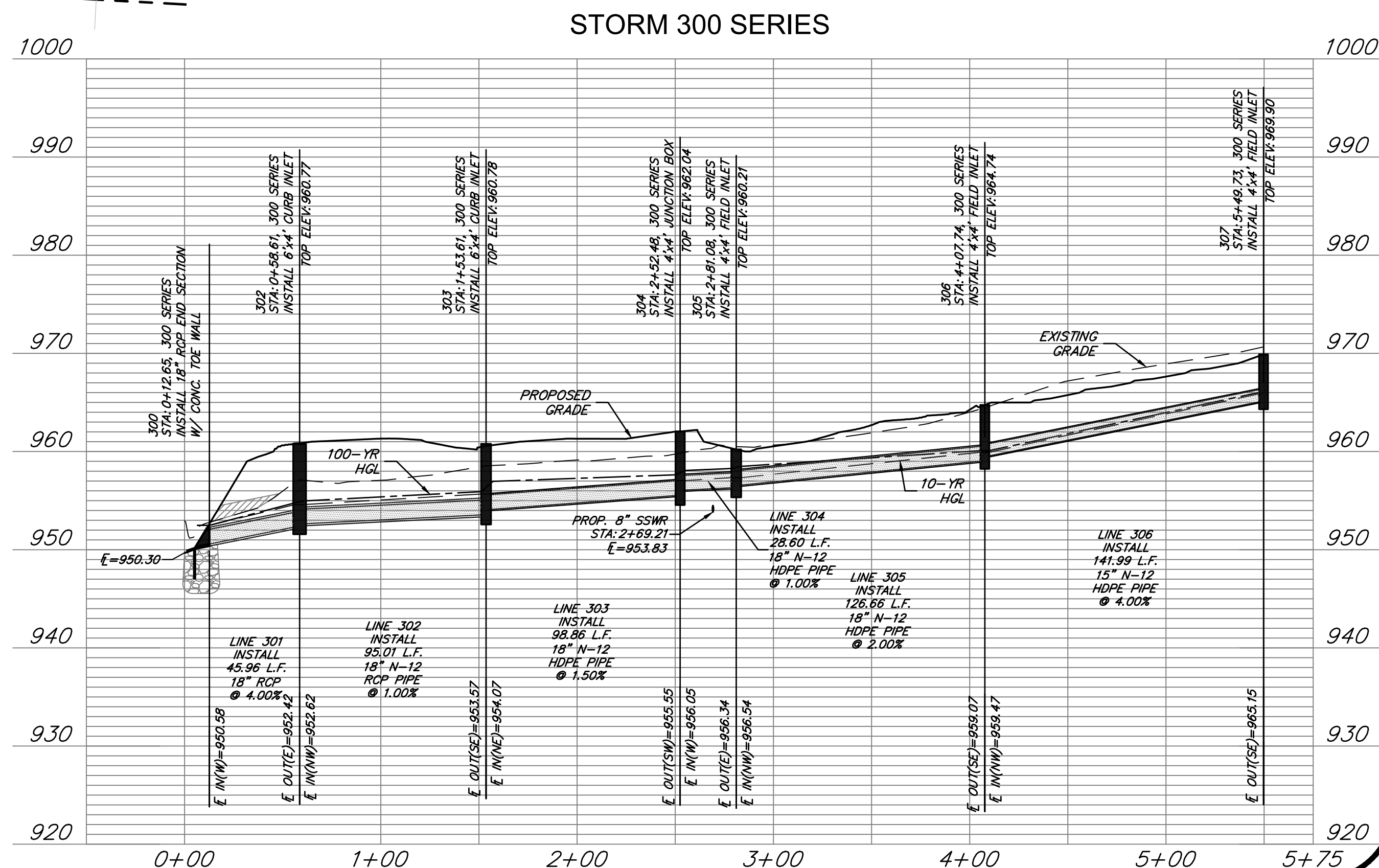
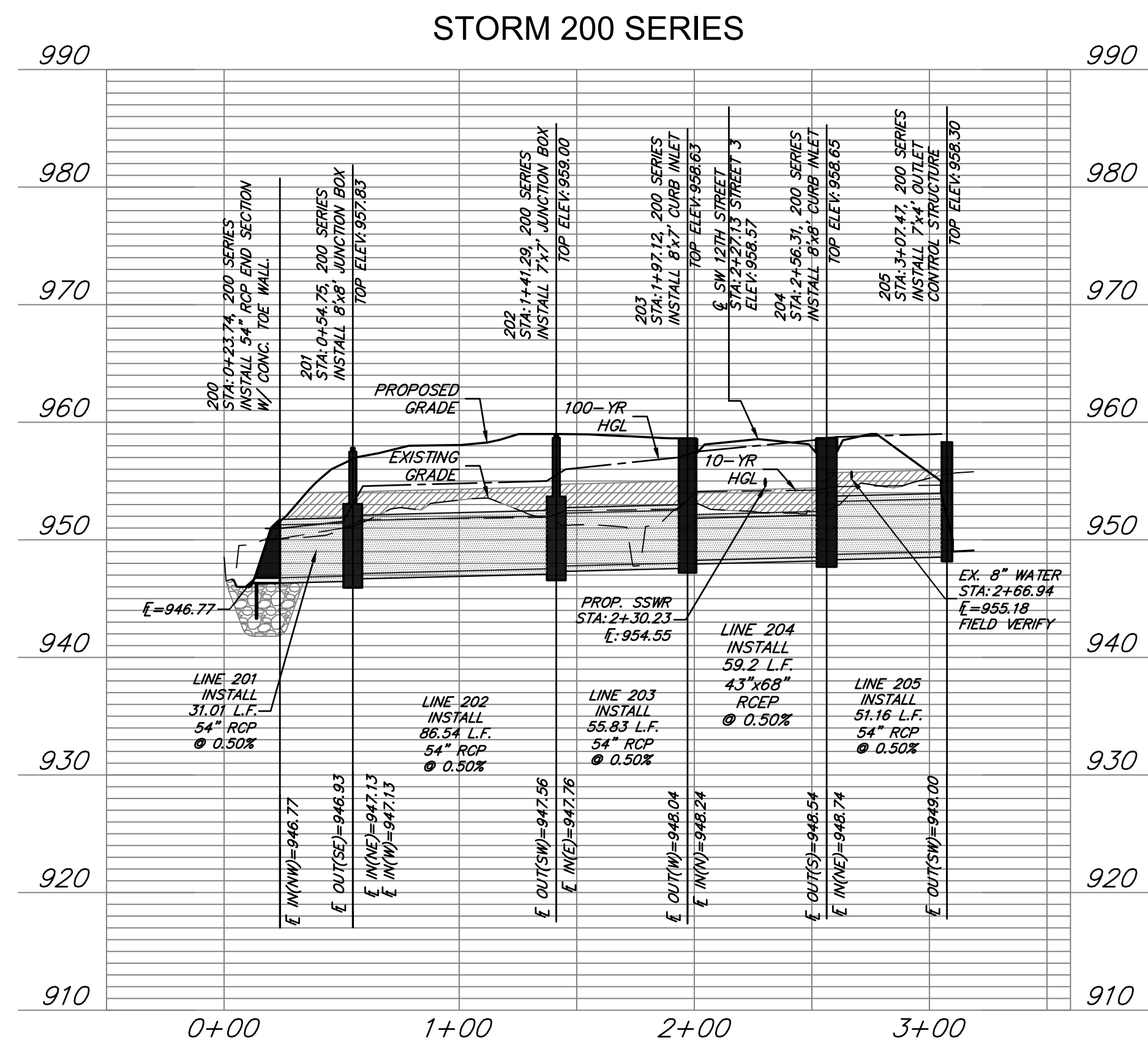
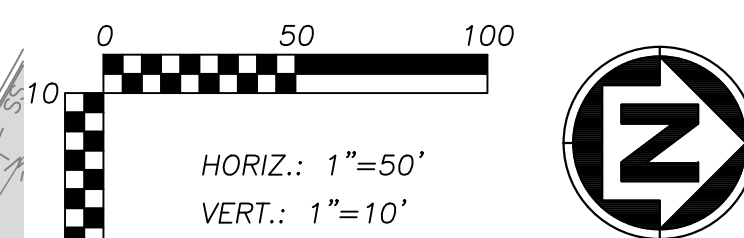
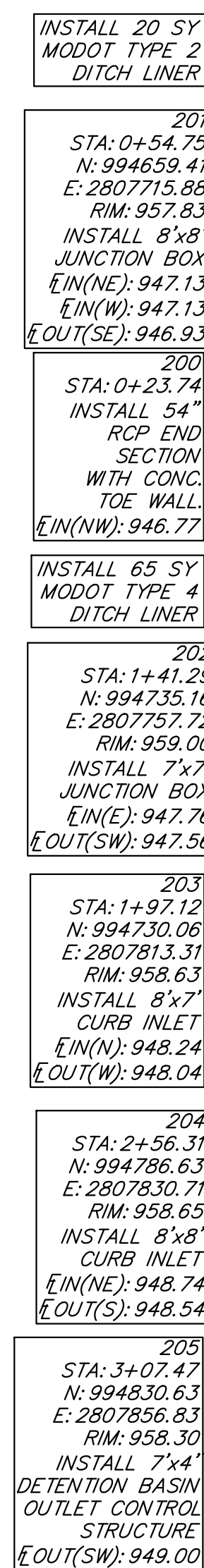


	SHEET NUMBER C201 <u>9</u> OF <u>41</u>
STATE OF MISSOURI ZACH A. MYERS <i>Zach A. Myers</i> NUMBER PE-2012009232 10/22/24 PROFESSIONAL ENGINEER	SUMMIT HOMES KC. HIGHLAND MEADOWS - 5TH PLAT DRAINAGE AREA PLAN S10, T47N, R32W LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

Oct 22, 2021 - 9:31am Plotted By: gpcate G:\Shared drives\KCI0 - Land Development\Projects\2020\20KCI0057 Highland Meadows - 5th Plat\01 DME\03-DWG\Bases\20KCI0057 - BASE - PROP - STORM.dwg Layout: DRAINAGE CALCULATIONS

STORM SEWER DRAINAGE CALCULATIONS:

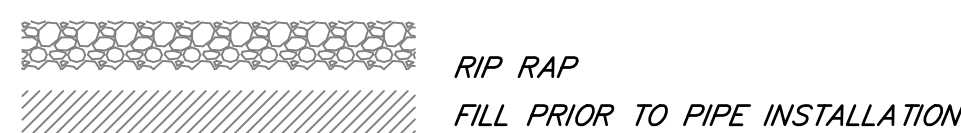
10-YEAR			HYDROLOGY									HYDRAULICS																GUTTER/INLET DESIGN					
Line No.	Inlet ID	Downstream Line No.	DrainageArea	Runoff Coefficient	Local CxA	System CxA	Tc	Local Intensity	System Intensity	Incremental Flow	Total Runoff	Line No.	Line	U/S Ground Elev.	U/S Invert	D/S Invert	Length	Slope	Size	n	Capacity Full	Total Runoff	Velocity	Velocity Out	HGLUp	HGLDn	Line ID	Local Q	QBypass	Gutter Slope	Gutter Spread	Gutter Width	
			(ac)	(C)			(min)	(in/hr)	(in/hr)	(cfs)	(cfs)			(ft)	(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)	(ft/s)	(ft/s)	(ft)	(ft)		(cfs)	(cfs)	(%)	(ft)	(ft)	
1	401	Outfall	0.00	0.00	0	0	0.0	0.00	0.00	0.00	0.00	LINE 401	401	967.50	958.15	952.20	59.49	10.00	36	0.013	210.92	0.00	9.01	9.01	960.54	954.59	LINE 401						
2	EX. DET.	1	0.00	0.00	0	0	0.0	0.00	0.00	54.51	0.00	LINE 402 (EX)	402	969.00	963.77	963.22	22.98	2.39	36	0.012	111.78	0.00	12.36	15.71	966.16	964.70	LINE 402 (EX)						
3	201	Outfall	0.00	0.00	0	0	7.7	0.00	7.06	0.00	22.43	LINE 201	201	957.83	946.93	946.77	31.01	0.50	54	0.013	141.26	22.43	9.71	9.71	950.10	949.94	LINE 201						
4	100A	3	0.96	0.51	0.49	0.49	7.2	8.34	7.26	4.09	18.92	LINE 100A	100A	956.50	948.13	947.13	110.34	0.91	30	0.013	39.04	18.92	4.03	3.86	950.29	950.10	LINE 100A	1.64	5.41	0.020	11.76	2.00	
5	100B	4	0.38	0.51	0.19	0.19	6.7	8.34	7.45	1.62	15.77	LINE 100B	100B	955.00	950.55	948.63	128.30	1.50	24	0.012	29.97	15.77	5.94	5.31	951.98	950.42	LINE 100B	1.62		Sag			
6	101	5	0.88	0.51	0.45	0.45	6.2	8.34	7.72	3.75	14.85	LINE 101	101	962.13	954.29	951.05	162.07	2.00	24	0.013	31.98	14.85	8.19	9.99	955.68	952.01	LINE 101	3.75		Sag			
7	102	6	0.77	0.51	0.39	0.39	6.0	8.34	7.80	3.28	11.50	LINE 102	102	962.13	954.84	954.49	35.00	1.00	24	0.013	22.62	11.50	5.83	5.92	956.06	955.68	LINE 102	7.60		Sag			
8	103	7	0.00	0.00	0	0	5.5	0.00	8.05	0.00	4.44	LINE 103	103	964.01	956.63	955.59	104.21	1.00	15	0.012	6.99	4.44	5.50	6.03	957.48	956.31	LINE 103						
9	104	8	0.43	0.51	0.22	0.22	5.3	8.34	8.17	1.83	4.50	LINE 104	104	966.98	959.08	956.83	44.95	5.00	15	0.012	15.65	4.50	5.97	6.94	959.94	957.48	LINE 104	0.65	1.18	0.050	5.34	2.00	
10	105	9	0.65	0.51	0.33	0.33	5.0	8.34	8.34	2.77	2.77	LINE 105	105	968.25	961.66	959.58	41.61	5.00	15	0.013	14.44	2.77	6.61	9.06	962.33	959.95	LINE 105	0.81	1.95	0.050	6.50	2.00	
11	102.1	7	1.04	0.51	0.53	0.53	5.0	8.34	8.34	4.43	4.43	LINE 102.1	102.1	963.94	958.67	955.59	95.18	3.24	15	0.012	12.58	4.43	7.16	9.35	959.52	956.10	LINE 102.1	1.28	3.14	0.020	9.73	2.00	
12	202	3	0.00	0.00	0	0	5.3	0.00	8.17	0.00	4.66	LINE 202	202	959.00	947.56	947.13	86.54	0.50	54	0.013	138.62	4.66	8.95	8.85	950.48	950.10	LINE 202						
13	203	12	0.68	0.51	0.35	0.35	5.2	8.34	8.25	2.89	4.71	LINE 203	203	958.63	948.04	947.76	55.83	0.50	54	0.013	139.27	4.71	9.28	9.50	950.96	950.56	LINE 203	2.89		Sag			
14	204	13	0.44	0.51	0.22	0.22	5.0	8.34	8.34	1.87	1.87	LINE 204	204	958.65	948.54	948.24	57.23	0.50	43 x 68	0.012	149.61	1.87	6.01	6.01	954.24	954.12	LINE 204	2.65		Sag			
15	205	14	0.00	0.00	0	0	0.0	0.00	0.00	94.04	0.00	LINE 205	205	958.30	949.00	948.74	51.16	0.50	54	0.013	140.16	0.00	5.91	5.91	954.64	954.52	LINE 205						
16	302	Outfall	0.31	0.51	0.16	0.16	7.6	8.34	7.09	1.32	9.25	LINE 301	301	960.84	952.42	950.58	45.96	4.00	18	0.013	21.01	9.25	6.23	6.23	953.60	951.76	LINE 301	0.54	0.78	0.050	4.50	2.00	
17	303	16	0.38	0.51	0.19	0.19	7.0	8.34	7.34	1.62	8.42	LINE 302	302	960.57	953.57	952.62	95.01	1.00	24	0.013	22.62	8.42	5.34	5.54	954.60	953.60	LINE 302	0.61	1.01	0.050	5.01	2.00	
18	304	17	0.00	0.00	0	0	6.6	0.00	7.52	0.00	7.17	LINE 303	303	962.04	955.55	954.07	98.87	1.50	18	0.012	13.92	7.17	6.72	7.93	956.59	954.83	LINE 303						
19	305	18	0.52	0.51	0.27	0.27	6.5	8.34	7.57	2.21	7.22	LINE 304	304	960.21	956.34	956.05	28.60	1.00	18	0.012	11.46	7.22	6.19	6.85	957.38	956.91	LINE 304	2.21		Sag			
20	306	19	0.47	0.51	0.24	0.24	5.8	8.34	7.91	2.00	5.45	LINE 305	305	964.74	959.07	956.54	126.66	2.00	18	0.012	16.08	5.45	5.14	5.35	959.97	957.38	LINE 305	2.00		Sag			
21	307	20	0.88	0.51	0.45	0.45	5.0	8.34	8.34	3.75	3.75	LINE 306	306	969.90	965.15	959.47	141.99	4.00	15	0.012	13.99	3.75	6.42	8.20	965.93	959.97	LINE 306	3.75		Sag			
100-YEAR																																	
			HYDROLOGY									HYDRAULICS																GUTTER/INLET DESIGN					
Line No.	Inlet ID	Downstream Line No.	DrainageArea	Runoff Coefficient	Local CxA	System CxA	Tc	Local Intensity	System Intensity	Incremental Flow	Total Runoff	Line No.	Line	U/S Ground Elev.	U/S Invert	D/S Invert	Length	Slope	Size	n	Capacity Full	Total Runoff	Velocity	Velocity Out	HGLUp	HGLDn	Line ID	Local Q	QBypass	Gutter Slope	Gutter Spread	Gutter Width	
			(ac)	(C)			(min)	(in/hr)	(in/hr)	(cfs)	(cfs)			(ft)	(ft)	(ft)	(ft)	(%)	(in)		(cfs)	(cfs)	(ft/s)	(ft/s)	(ft)	(ft)		(cfs)	(cfs)	(%)	(ft)	(ft)	
1	401	Outfall	0.00	0.00	0	0	0.0	0.00	0.00	0.00	0.00	LINE 401	401	967.50	958.15	952.20	59.49	10.00	36	0.013	210.92	0.00	15.99	15.99	961.08	955.13	LINE 401						
2	EX. DET.	1	0.00	0.00	0	0	0.0	0.00	0.00	112.38	0.00	LINE 402 (EX)	402	969.00	963.77	963.22	22.98	2.39	36	0.012	111.78	0.00	17.01	18.02	966.70	965.69	LINE 402 (EX)						
3	201	Outfall	0.00	0.00	0	0	6.8	0.00	11.18	0.00	35.51	LINE 201	201	957.83	946.93	946.77	31.01	0.50	54	0.013	141.26	35.51	14.65	14.86	951.56	950.97	LINE 201						
4	100A	3	0.96	0.51	0.49	0.49	6.4	12.60	11.41	6.17	29.74	LINE 100A	100A	956.50	948.13	947.13	110.34	0.91	30	0.013	39.04	29.74	6.06	6.06	955.15	954.57	LINE 100A	2.07	8.95	0.020	14.05	2.00	
5	100B	4	0.38	0.51	0.19	0.19	6.1	12.60	11.63	2.44	24.61	LINE 100B	100B	955.00	950.55	948.63	128.30	1.50	24	0.012	29.97	24.61	7.83	7.83	956.73	955.43	LINE 100B	2.44		Sag			
6	101	5	0.88	0.51	0.45	0.45	5.8	12.60	11.93	5.65	22.94	LINE 101	101	962.13	954.29	951.05	162.07	2.00	24	0.013	31.98	22.94	7.30	7.30	959.80	958.13	LINE 101	5.65		Sag			
7	102	6	0.77	0.51	0.39	0.39	5.7	12.60	12.02	4.95	17.71	LINE 102	102	962.13	954.84	954.49	35.00	1.00	24	0.013	22.62	17.71	5.64	5.64	960.43	960.21	LINE 102	11.99		Sag			
8	103	7	0.00	0.00	0	0	5.3	0.00	12.29	0.00	6.77	LINE 103	103	964.01	956.63	955.59	104.21	1.00	15	0.012	6.99	6.77	5.52	5.52	962.13	961.15	LINE 103						
9	104	8	0.43	0.51	0.22	0.22	5.2	12.60	12.41	2.76	6.84	LINE 104	104	966.98	959.08	956.83	44.95	5.00	15	0.012	15.65	6.84	5.57	5.57	962.93	962.50	LINE 104	0.81	1.95	0.050	6.50	2.00	
10	105	9	0.65	0.51	0.33	0.33	5.0	12.60	12.60	4.18	4.18	LINE 105	105	968.25	961.66	959.58	41.61	5.00	15	0.013	14.44	4.18	3.40	3.40	963.34	963.17	LINE 105	1.00	3.17	0.050	7.82	2.00	
11	102.1	7	1.04	0.51	0.53	0.53	5.0	12.60	12.60	6.68	6.68	LINE 102.1	102.1	963.94	958.67	955.59	95.18	3.24	15	0.012	12.58	6.68	5.45	5.45	962.02	961.15	LINE 102.1	1.59	5.09	0.020	11.51	2.00	
12	202	3	0.00	0.00	0	0	5.2	0.00	12.46	0.00	7.12	LINE 202	202	959.00	947.56	947.13	86.54	0.50															



GENERAL NOTES:

1. COORDINATES AT TOP ELEVATIONS SHOWN ARE LOCATED AT CENTER OF STRUCTURES. ROAD OFFSETS AREA AT INSIDE FACE OF CURB INLETS, AND AT CENTER OF MANHOLES AND JUNCTIONS BOXES.
2. PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
3. INSIDE FRONT FACE OF CURB INLETS SHALL BE LOCATED 1.5 FEET BEHIND BACK OF CURB. STRUCTURE SHALL BE PARALLEL WITH CURB ALIGNMENT.
4. TOP ELEVATION OF CURB INLETS SHALL BE SLOPED TO CONFORM TO GRADE OF STREET.
5. WATER MAINS AND STORM SEWERS SHALL HAVE AT LEAST 3' OF CLEAR HORIZONTAL SEPARATION.
6. CONTROLLED FILL: PRIOR TO INSTALLATION OF STORM SEWER PIPING IN FILL AREAS, FILL SHALL BE PLACED AND COMPACTED TO A MINIMUM 95% OF STANDARD PROCTOR DENSITY PER ASTM D 698 TO A MINIMUM DEPTH OF 2 FEET ABOVE THE TOP OF PIPE.

LEGEND



STORM PIPE AND STRUCTURES:

1. HDPE PIPE SHALL CONFORM TO ASTM F2306. JOINTS SHALL BE INTEGRAL BELL AND SPIGOT WITH RUBBER GASKETS. JOINTS SHALL BE WATER TIGHT AS DEFINED BY ASTM F2306.
2. CONCRETE PIPE SHALL CONFORM TO ASTM C76, CLASS III, WALL TYPE B. JOINTS SHALL BE TONGUE-IN-GROOVE WITH PREFORMED, FLEXIBLE SEALANTS AND SHALL CONFORM TO ASTM C990.
3. PROPOSED CURB INLETS AND JUNCTION BOXES SHALL CONFORM TO THE CITY OF LEE'S SUMMIT STANDARD DETAILS.
4. DOUBLE WALL POLYPROPYLENE PIPE IS AN APPROVED EQUAL AND SHALL CONFORM TO THE CITY OF LEE'S SUMMIT SPECIFICATIONS PER SECTION 2602.2.G OF THE DESIGN AND CONSTRUCTION MANUAL.

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REVISIONS				DRAWING INFO.	
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1.	REVISED PER CITY COMMENTS	GC	11/15/21	CHECK BY:	GC
2.	REVISED PER CITY COMMENTS	GC	2/28/21	LICENSE NO.	ZM
3.	REVISED PER CITY COMMENTS	GC	3/10/21	DATE:	PE-201-2009232
4.	REVISED PER CITY COMMENTS	GC	3/15/21	ISSUED FOR:	12/2/2020
5.	ADDED SHEET C701 FOR INLETS	GC	10/22/23	JOB NUMBER:	FOR REVIEW 290KC10057
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SHEET NUMBER

C204

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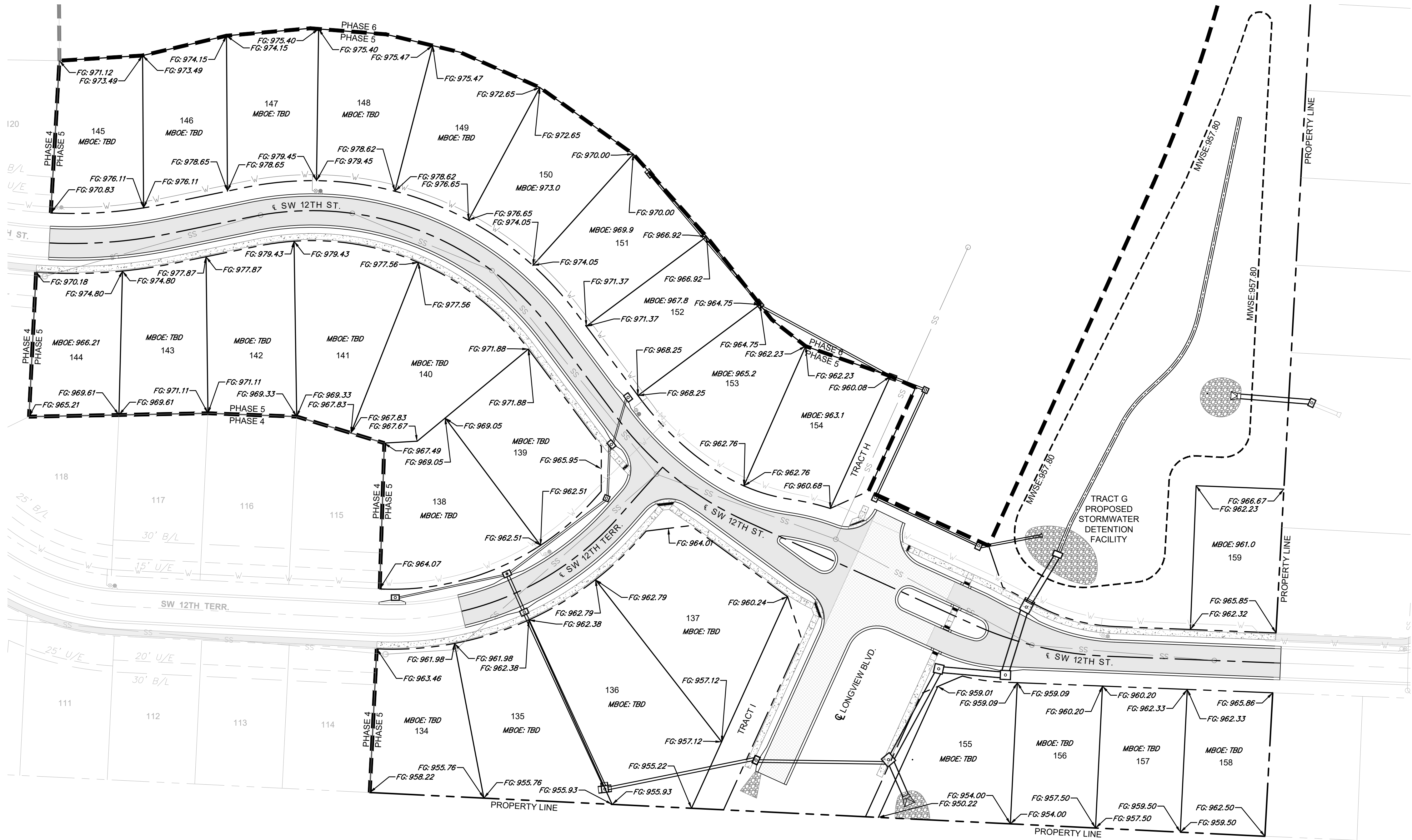
STATE OF MISSOURI
ZACH A. MYERS
PROFESSIONAL ENGINEER
NUMBER 05-2012009232
10/22/24

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

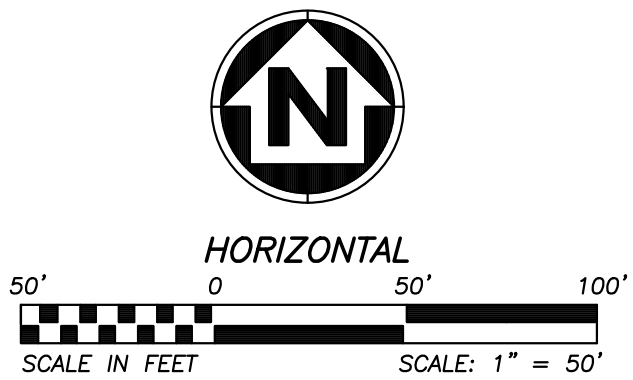
STORM SEWER PLAN &
PROFILE (2)

Oct 22, 2021 - 9:33am Plotted Bx: gcode G:\Shared drives\WC10 - Land Development\Projects\2020\20KCI0057 Highland Meadows - 5th Plat\01 CIVL\03-DWG\Bases\20KCI0057 - BASE - PROP - STORM.dwg Layout: MINIMUM BUILDING OPENING PLAN



LEGEND
FG FINISH GRADE
MBOE MINIMUM BUILDING OPENING ELEVATION
TBD TO BE DETERMINED BY HOME BUILDER AND
PLOT PLAN ENGINEER BASED ON HOUSE
STYLE AND FOOTPRINT

- GENERAL NOTES:**
- ALL LOTS SHALL BE ALLOWED TO HAVE WALKOUT BASEMENTS OR DAYLIGHT BASEMENTS AS DETERMINED BY HOME BUILDER AND/OR ENGINEER AT THE TIME OF PLOT PLAN AND BUILDING PERMIT APPLICATION SUBMITTAL. ALL PLOT PLANS SHALL MEET THE CITY OF LEE'S SUMMIT REQUIREMENTS AND BE SUBMITTED FOR CITY APPROVAL PRIOR TO CONSTRUCTION OF HOME.
 - MINIMUM BUILDING OPENING ELEVATIONS ON THIS PLAN HAVE BEEN DETERMINED BASED ON MAX. WATER SURFACE ELEVATION OF 1% DESIGN STORM PLUS (+) TWO (2) FEET, PER CITY OF LEE'S SUMMIT DESIGN AND CONSTRUCTION MANUAL SPECIFICATIONS.
 - FINISH GRADES ARE BASED ON MASS GRADING DESIGN FOR INSTALLATION OF PUBLIC IMPROVEMENTS. REAR LOT ELEVATIONS MAY VARY SLIGHTLY AFTER CONSTRUCTION OF HOMES, DEPENDING ON TYPE OF BASEMENT CONSTRUCTED AND OTHER UNFORESEEN FACTORS. HOME BUILDER SHALL FOLLOW DRAINAGE PATTERNS DEPICTED IN THESE PLANS AND ENSURE PLOT PLAN MAINTAINS DRAINAGE PATTERNS SHOWN.



REVISIONS		DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE
1.	REVISED PER CITY COMMENTS	GC	1/15/21
2.	REVISED PER CITY COMMENTS	GC	2/26/21
		CHECK BY:	ZM
		LICENSE NO.	FE-2012000232
		DATE:	12/2/2020
		ISSUED FOR:	FOR REVIEW
		JOB NUMBER:	20KCI0057
		MO COA NO.	00062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

MINIMUM BUILDING
OPENING PLAN

S10, T47N, R22W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



SHEET NUMBER
C206
14 OF 41

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Oct 22, 2021 - 9:33am Plotted Bx gpcote G:\Shared drives\WC10 - Land Development\Projects\2020\20K10057 Highland Meadows - 5th Plat\01 CIV\03-DWG\Sheet\STREET AND STORM\20K10057 - SHYS - EROSION.dwg Layout: PRE-CLEARING EROSION CONTROL PLAN

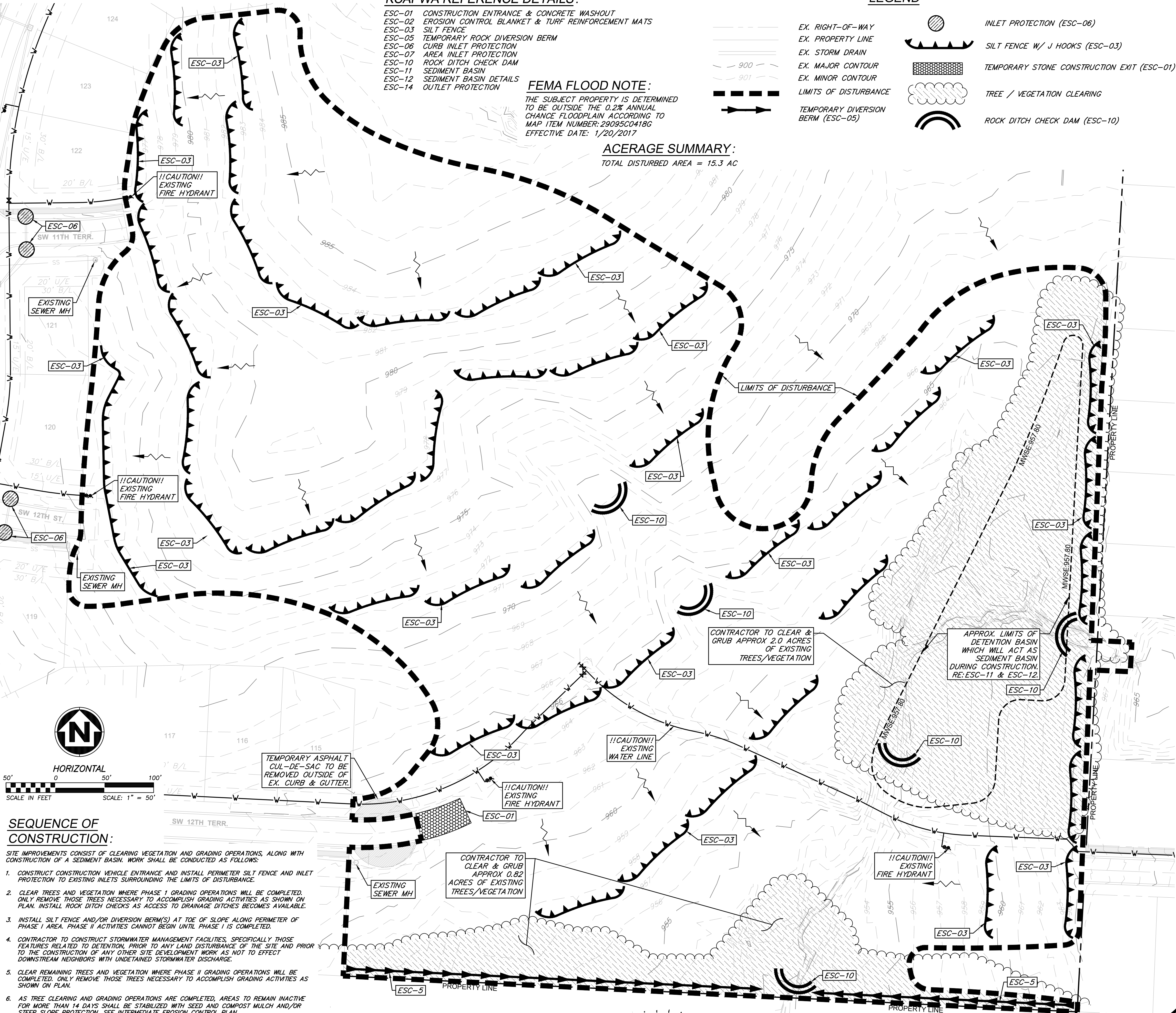
GENERAL EROSION CONTROL NOTES:

1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOD, ROCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE COVER.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

EROSION CONTROL MAINTENANCE:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEDED AS NEEDED.
4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.



KCAPWA REFERENCE DETAILS:

- ESC-01 CONSTRUCTION ENTRANCE & CONCRETE WASHOUT
- ESC-02 EROSION CONTROL BLANKET & TURF REINFORCEMENT MATS
- ESC-03 SILT FENCE
- ESC-05 TEMPORARY ROCK DIVERSION BERM
- ESC-06 CURB INLET PROTECTION
- ESC-07 AREA INLET PROTECTION
- ESC-10 ROCK DITCH CHECK DAM
- ESC-11 SEDIMENT BASIN
- ESC-12 SEDIMENT BASIN DETAILS
- ESC-14 OUTLET PROTECTION

FEMA FLOOD NOTE:

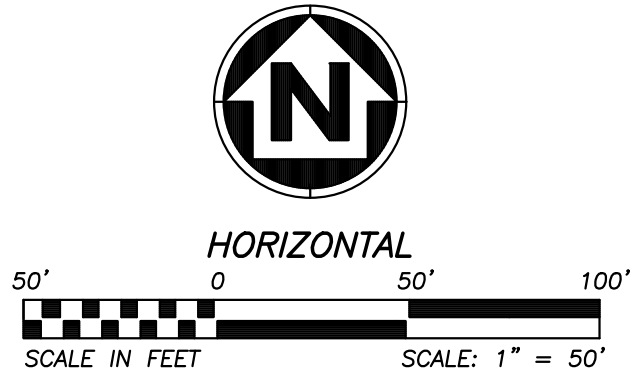
THE SUBJECT PROPERTY IS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO MAP ITEM NUMBER: 29095C0418G EFFECTIVE DATE: 1/20/2017

ACERAGE SUMMARY:

TOTAL DISTURBED AREA = 15.3 AC

LEGEND

- EX. RIGHT-OF-WAY
- EX. PROPERTY LINE
- EX. STORM DRAIN
- EX. MAJOR CONTOUR
- EX. MINOR CONTOUR
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION BERM (ESC-05)
- INLET PROTECTION (ESC-06)
- SILT FENCE W/ J HOOKS (ESC-03)
- TEMPORARY STONE CONSTRUCTION EXIT (ESC-01)
- TREE / VEGETATION CLEARING
- ROCK DITCH CHECK DAM (ESC-10)



SEQUENCE OF CONSTRUCTION:

SITE IMPROVEMENTS CONSIST OF CLEARING VEGETATION AND GRADING OPERATIONS, ALONG WITH CONSTRUCTION OF A SEDIMENT BASIN. WORK SHALL BE CONDUCTED AS FOLLOWS:

1. CONSTRUCT CONSTRUCTION VEHICLE ENTRANCE AND INSTALL PERIMETER SILT FENCE AND INLET PROTECTION TO EXISTING INLETS SURROUNDING THE LIMITS OF DISTURBANCE.
2. CLEAR TREES AND VEGETATION WHERE PHASE I GRADING OPERATIONS WILL BE COMPLETED. ONLY REMOVE THOSE TREES NECESSARY TO ACCOMPLISH GRADING ACTIVITIES AS SHOWN ON PLAN. INSTALL ROCK DITCH CHECKS AS ACCESS TO DRAINAGE DITCHES BECOMES AVAILABLE.
3. INSTALL SILT FENCE AND/OR DIVERSION BERM(S) AT TOE OF SLOPE ALONG PERIMETER OF PHASE I AREA. PHASE II ACTIVITIES CANNOT BEGIN UNTIL PHASE I IS COMPLETED.
4. CONTRACTOR TO CONSTRUCT STORMWATER MANAGEMENT FACILITIES. SPECIFICALLY THOSE FEATURES RELATED TO DETENTION, PRIOR TO ANY LAND DISTURBANCE OF THE SITE AND PRIOR TO THE CONSTRUCTION OF ANY OTHER SITE DEVELOPMENT WORK AS NOT TO EFFECT DOWNSTREAM NEIGHBORS WITH UNDETAINED STORMWATER DISCHARGE.
5. CLEAR REMAINING TREES AND VEGETATION WHERE PHASE II GRADING OPERATIONS WILL BE COMPLETED. ONLY REMOVE THOSE TREES NECESSARY TO ACCOMPLISH GRADING ACTIVITIES AS SHOWN ON PLAN.
6. AS TREE CLEARING AND GRADING OPERATIONS ARE COMPLETED, AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED WITH SEED AND COMPOST MULCH AND/OR STEEP SLOPE PROTECTION. SEE INTERMEDIATE EROSION CONTROL PLAN.

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1.	REVISED PER CITY COMMENTS	GC	1/15/21	GC	ZM
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				DATE:	12/2/2020
				ISSUED FOR:	FOR REVIEW
				JOB NUMBER:	20K10057
				MO COA NO.:	00062

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

PRE-CLEARING EROSION CONTROL PLAN

SHEET NUMBER
C301
15 OF 41

S10, T47N, R22W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER
FE-2012000232
EXPIRATION DATE
12/31/2021
PROFESSIONAL ENGINEER

1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS, BUT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICES AS WELL AS ANY OTHER CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY WORKS SHALL ACTUALLY ADJACENT TO LEAKING AREAS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE CONSTRUCTION MAINTENANCE AREA. TEMPORARY EMPLOYMENT PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE TO REMOVE OILS AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND ANY OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOIL, ROCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE COVER.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS SHALL BE MADE TO PREVENT THE WASH WATER FROM ENTERING THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUB CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

- ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL, AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEED AS NEEDED.
4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC HIGHWAYS—MAY BE REQUIRED TO REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SWALES SHOULD BE TREATED FOR EROSION FOLLOWING IF THE CHANNELS OR SLOPES SHOW ANY SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.

ESC-01 CONSTRUCTION ENTRANCE & CONCRETE WASHOUT
ESC-02 EROSION CONTROL BLANKET & TURF REINFORCEMENT MATS
ESC-03 SILT FENCE
ESC-05 TEMPORARY ROCK DIVERSION BERM
ESC-06 CURB INLET PROTECTION
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ESC-12 SEDIMENT BASIN DETAILS
ESC-14 OUTLET PROTECTION

FEMA FLOOD NOTE:

THE SUBJECT PROPERTY IS DETERMINED
TO BE OUTSIDE THE 0.2% ANNUAL
CHANCE FLOODPLAIN ACCORDING TO
MAP ITEM NUMBER: 29095C0418G
EFFECTIVE DATE: 1/20/2017

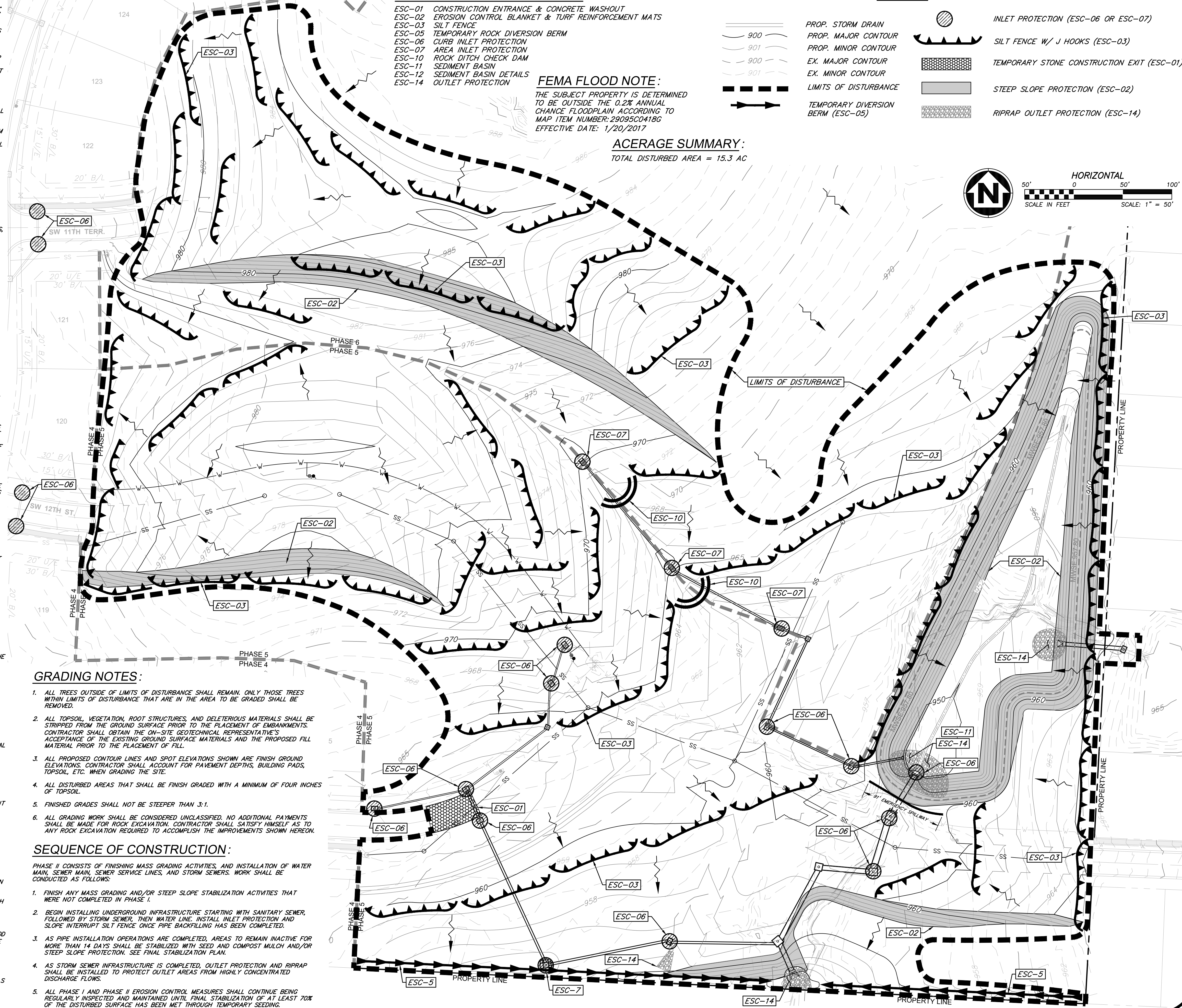
TOTAL DISTURBED AREA = 15.3 AC

PROP. STORM DRAIN		INLET PROTECTION (ESC-06 OR ESC-07)
PROP. MAJOR CONTOUR		SILT FENCE W/ J HOOKS (ESC-03)
PROP. MINOR CONTOUR		
EX. MAJOR CONTOUR		TEMPORARY STONE CONSTRUCTION EXIT (ESC-01)
EX. MINOR CONTOUR		
LIMITS OF DISTURBANCE		STEEP SLOPE PROTECTION (ESC-02)
TEMPORARY DIVERSION BERM (ESC-05)		RIPRAP OUTLET PROTECTION (ESC-14)

1. ALL TREES OUTSIDE OF LIMITS OF DISTURBANCE SHALL REMAIN. ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT ARE IN THE AREA TO BE GRADED SHALL BE REMOVED.
2. ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS. CONTRACTOR SHALL OBTAIN THE ON-SITE GEOLOGICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL.
3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING FADS, TOPSOIL, ETC. WHEN GRADING THE SITE.
4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A MINIMUM OF FOUR INCHES OF TOPSOIL.
5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.
6. ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREON.

PHASE 1 CONSISTS OF FINISHING MASS GRADING ACTIVITIES, AND INSTALLATION OF WATER MAIN, SEWER MAIN, SEWER SERVICE LINES, AND STORM SEWERS. WORK SHALL BE CONDUCTED AS FOLLOWS:

1. FINISH ANY MASS GRADING AND/OR STEEP SLOPE STABILIZATION ACTIVITIES THAT WERE NOT COMPLETED IN PHASE I.
2. BEGIN INSTALLING UNDERGROUND INFRASTRUCTURE STARTING WITH SANITARY SEWER, FOLLOWED BY STORM SEWER, THEN WATER LINE. INSTALL INLET PROTECTION AND SLOPE INTERRUPT SILT FENCE ONCE PIPE BACKFILLING HAS BEEN COMPLETED.
3. AS PIPE INSTALLATION OPERATIONS ARE COMPLETED, AREAS TO REMAIN INACTIVE FOR MORE THAN 14 DAYS SHALL BE STABILIZED WITH SEED AND COMPOST MULCH AND/OR STEEP SLOPE PROTECTION. SEE FINAL STABILIZATION PLAN.
4. AS STORM SEWER INFRASTRUCTURE IS COMPLETED, OUTLET PROTECTION AND RIPRAP SHALL BE INSTALLED TO PROTECT OUTLET AREAS FROM HIGHLY CONCENTRATED DISCHARGE FLOWS.
5. ALL PHASE I AND PHASE II EROSION CONTROL MEASURES SHALL CONTINUE BEING REGULARLY INSPECTED AND MAINTAINED UNTIL FINAL STABILIZATION OF AT LEAST 70% OF THE DISTURBED SURFACE HAS BEEN MET THROUGH TEMPORARY SEEDING.



REVIEWS			DRAWING INFO.		
NO.	DESCRIPTION	BY	DATE	DRAWN BY:	GC
1.	REVISED PER CITY COMMENTS	GC	1/15/21	CHECK BY:	ZM
2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO.	PE-20120069232
3.	REVISED PER CITY COMMENTS	GC	3/10/21	DATE:	12/2/2020
				ISSUED FOR:	FOR REVIEW
				JOB NUMBER:	20KIC10057
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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

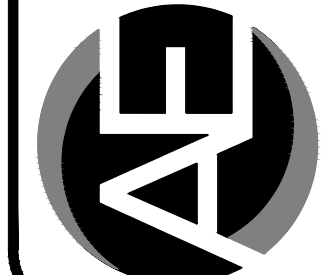
INTERMEDIATE EROSION CONTROL PLAN

S10, T47N, R32W
EE'S SUMMIT, JACKSON COUNTY, MISSOURI



SHEET NUMBER
C302
16 OF 41

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A LICENSED MISSOURI ENGINEERING & SURVEYING CORPORATION - IC 62

Oct 22, 2021 - 9:34am Plotted Bx: gstate G:\Shared drives\WC10 - Land Development\Projects\2020\20K10057 Highland Meadows - 5th Plat\01 CIV\103-DWG\Sheet\STREET AND STORM\20K10057 - SHYS - EROSION.dwg Layout: FINAL STABILIZATION EROSION CONTROL PLAN

GENERAL EROSION CONTROL NOTES:

1. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING ("EROSION CONTROL"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS ("SWPPP"), PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OR NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
5. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE STABILIZED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 21 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. STABILIZATION MAY CONSIST OF SEED, SOD, ROCK, PAVEMENT, STRUCTURE OR OTHER NON-ERODIBLE COVER.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
17. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES CONSISTING OF TOPSOIL, CLAY, OR SILT SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.
21. CONTRACTOR RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE. PONDING OF WATER WILL NOT BE ALLOWED ON SITE. IF NECESSARY, CONTRACTOR TO PROVIDE TEMPORARY SWALES OR PUMPING IN LOW POINT SUMP CONDITIONS UNTIL THE INSTALLATION OF STORM SEWER.

EROSION CONTROL MAINTENANCE:

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE COMMENTS OR REQUIREMENTS OF APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. AT A MINIMUM, THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS FOR GOOD HOUSEKEEPING, SPILL CONTROL AND EROSION AND SEDIMENT CONTROL AS SPECIFIED IN THE KANSAS CITY METROPOLITAN CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION SECTION 2150.
2. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
4. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
5. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
6. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
7. DRAINAGE SWALES WITH SLOPES STEEPER THAN 15% SHALL BE INSPECTED AFTER EACH RAINFALL EVENT. THESE CHANNELS AND SLOPES SHOULD BE TREATED WITH EROSION FABRIC. IF THE CHANNELS OR SLOPES SHOW ANY SIGN OF FAILURE, COORDINATE WITH THE ENGINEER TO DEVELOP A PLAN TO RE-STABILIZE THE FAILED AREA.

KCAPWA REFERENCE DETAILS:

- ESC-01 CONSTRUCTION ENTRANCE & CONCRETE WASHOUT
- ESC-02 EROSION CONTROL BLANKET & TURF REINFORCEMENT MATS
- ESC-03 SILT FENCE
- ESC-05 TEMPORARY ROCK DIVERSION BERM
- ESC-06 CURB INLET PROTECTION
- ESC-07 AREA INLET PROTECTION
- ESC-10 ROCK DITCH CHECK DAM
- ESC-11 SEDIMENT BASIN
- ESC-12 SEDIMENT BASIN DETAILS
- ESC-14 OUTLET PROTECTION

FEMA FLOOD NOTE:

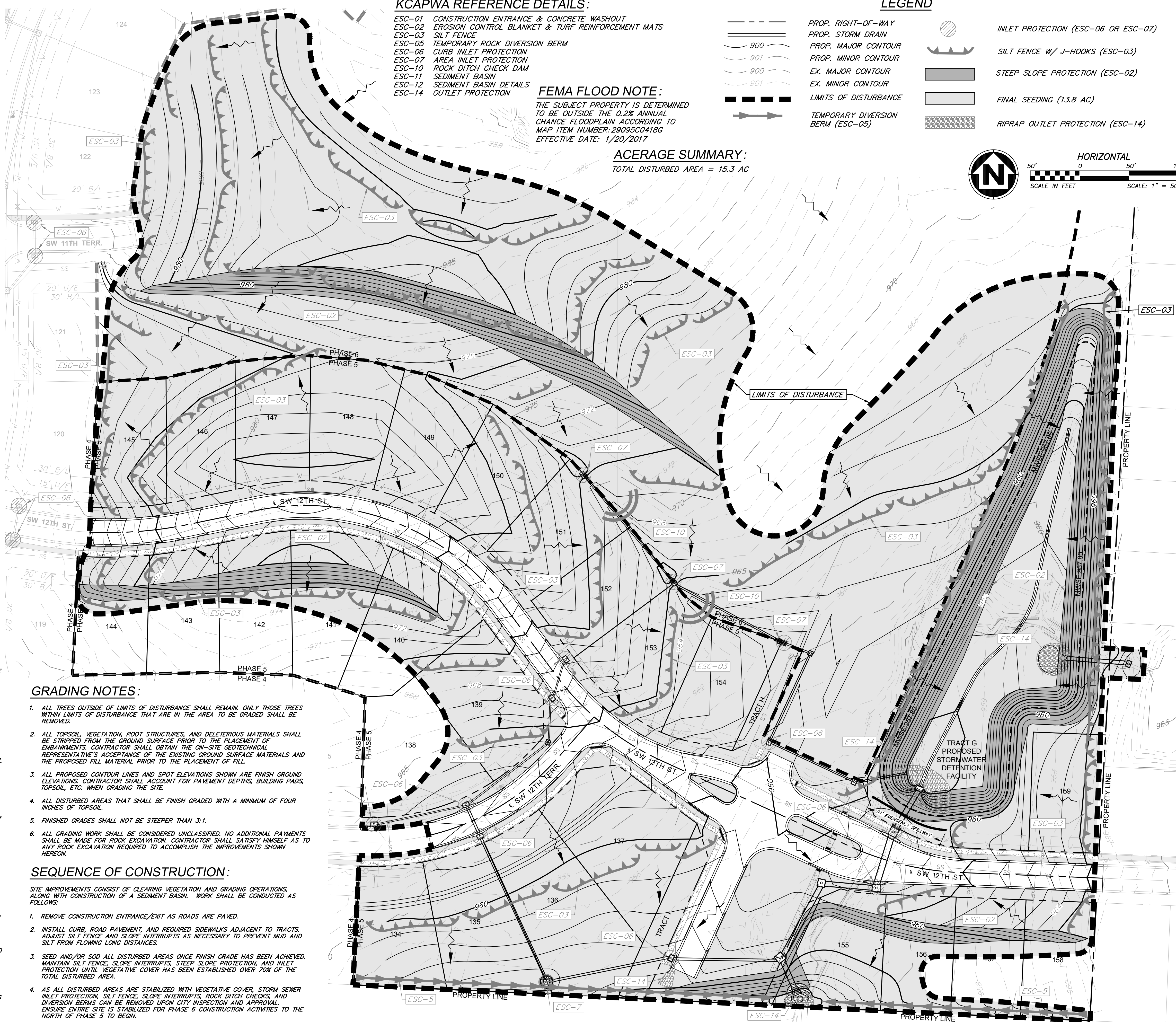
THE SUBJECT PROPERTY IS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO MAP ITEM NUMBER: 29095C0418G
EFFECTIVE DATE: 1/20/2017

ACERAGE SUMMARY:

TOTAL DISTURBED AREA = 15.3 AC

LEGEND

- PROP. RIGHT-OF-WAY
- PROP. STORM DRAIN
- 900 PROP. MAJOR CONTOUR
- 901 PROP. MINOR CONTOUR
- 900 EX. MAJOR CONTOUR
- 901 EX. MINOR CONTOUR
- LIMITS OF DISTURBANCE
- TEMPORARY DIVERSION BERM (ESC-05)
- INLET PROTECTION (ESC-06 OR ESC-07)
- SILT FENCE W/ J-HOOKS (ESC-03)
- STEEP SLOPE PROTECTION (ESC-02)
- FINAL SEEDING (13.8 AC)
- RIPRAP OUTLET PROTECTION (ESC-14)



GRADING NOTES:

1. ALL TREES OUTSIDE OF LIMITS OF DISTURBANCE SHALL REMAIN. ONLY THOSE TREES WITHIN LIMITS OF DISTURBANCE THAT ARE IN THE AREA TO BE GRADED SHALL BE REMOVED.
2. ALL TOPSOIL, VEGETATION, ROOT STRUCTURES, AND DELETERIOUS MATERIALS SHALL BE STRIPPED FROM THE GROUND SURFACE PRIOR TO THE PLACEMENT OF EMBANKMENTS. CONTRACTOR SHALL OBTAIN THE ON-SITE GEOTECHNICAL REPRESENTATIVE'S ACCEPTANCE OF THE EXISTING GROUND SURFACE MATERIALS AND THE PROPOSED FILL MATERIAL PRIOR TO THE PLACEMENT OF FILL.
3. ALL PROPOSED CONTOUR LINES AND SPOT ELEVATIONS SHOWN ARE FINISH GROUND ELEVATIONS. CONTRACTOR SHALL ACCOUNT FOR PAVEMENT DEPTHS, BUILDING PADS, TOPSOIL, ETC. WHEN GRADING THE SITE.
4. ALL DISTURBED AREAS THAT SHALL BE FINISH GRADED WITH A MINIMUM OF FOUR INCHES OF TOPSOIL.
5. FINISHED GRADES SHALL NOT BE STEEPER THAN 3:1.
6. ALL GRADING WORK SHALL BE CONSIDERED UNCLASSIFIED. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR ROCK EXCAVATION. CONTRACTOR SHALL SATISFY HIMSELF AS TO ANY ROCK EXCAVATION REQUIRED TO ACCOMPLISH THE IMPROVEMENTS SHOWN HEREON.

SEQUENCE OF CONSTRUCTION:

SITE IMPROVEMENTS CONSIST OF CLEARING VEGETATION AND GRADING OPERATIONS, ALONG WITH CONSTRUCTION OF A SEDIMENT BASIN. WORK SHALL BE CONDUCTED AS FOLLOWS:

1. REMOVE CONSTRUCTION ENTRANCE/EXIT AS ROADS ARE PAVED.
2. INSTALL CURB, ROAD PAVEMENT, AND REQUIRED SIDEWALKS ADJACENT TO TRACTS. ADJUST SILT FENCE AND SLOPE INTERRUPTS AS NECESSARY TO PREVENT MUD AND SILT FROM FLOWING LONG DISTANCES.
3. SEED AND/OR SOD ALL DISTURBED AREAS ONCE FINISH GRADE HAS BEEN ACHIEVED. MAINTAIN SILT FENCE, SLOPE INTERRUPTS, STEEP SLOPE PROTECTION, AND INLET PROTECTION UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED OVER 70% OF THE TOTAL DISTURBED AREA.
4. AS ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATIVE COVER, STORM SEWER INLET PROTECTION, SILT FENCE, SLOPE INTERRUPTS, ROCK DITCH CHECKS, AND DIVERSION BERMS CAN BE REMOVED UPON CITY INSPECTION AND APPROVAL. ENSURE ENTIRE SITE IS STABILIZED FOR PHASE 6 CONSTRUCTION ACTIVITIES TO THE NORTH OF PHASE 5 TO BEGIN.

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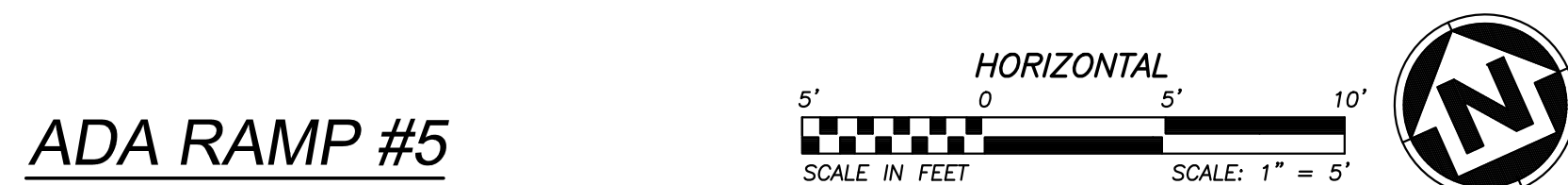
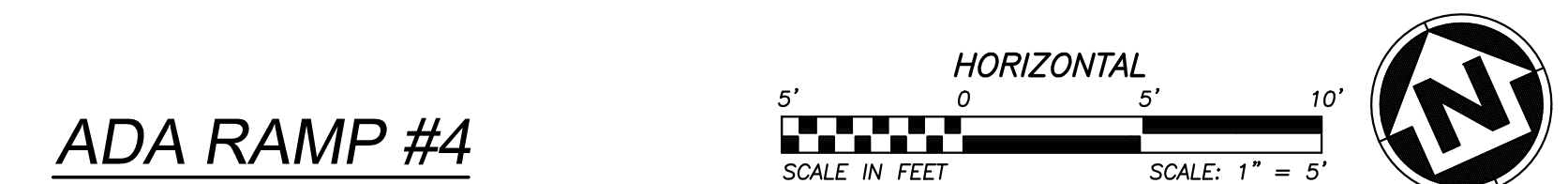
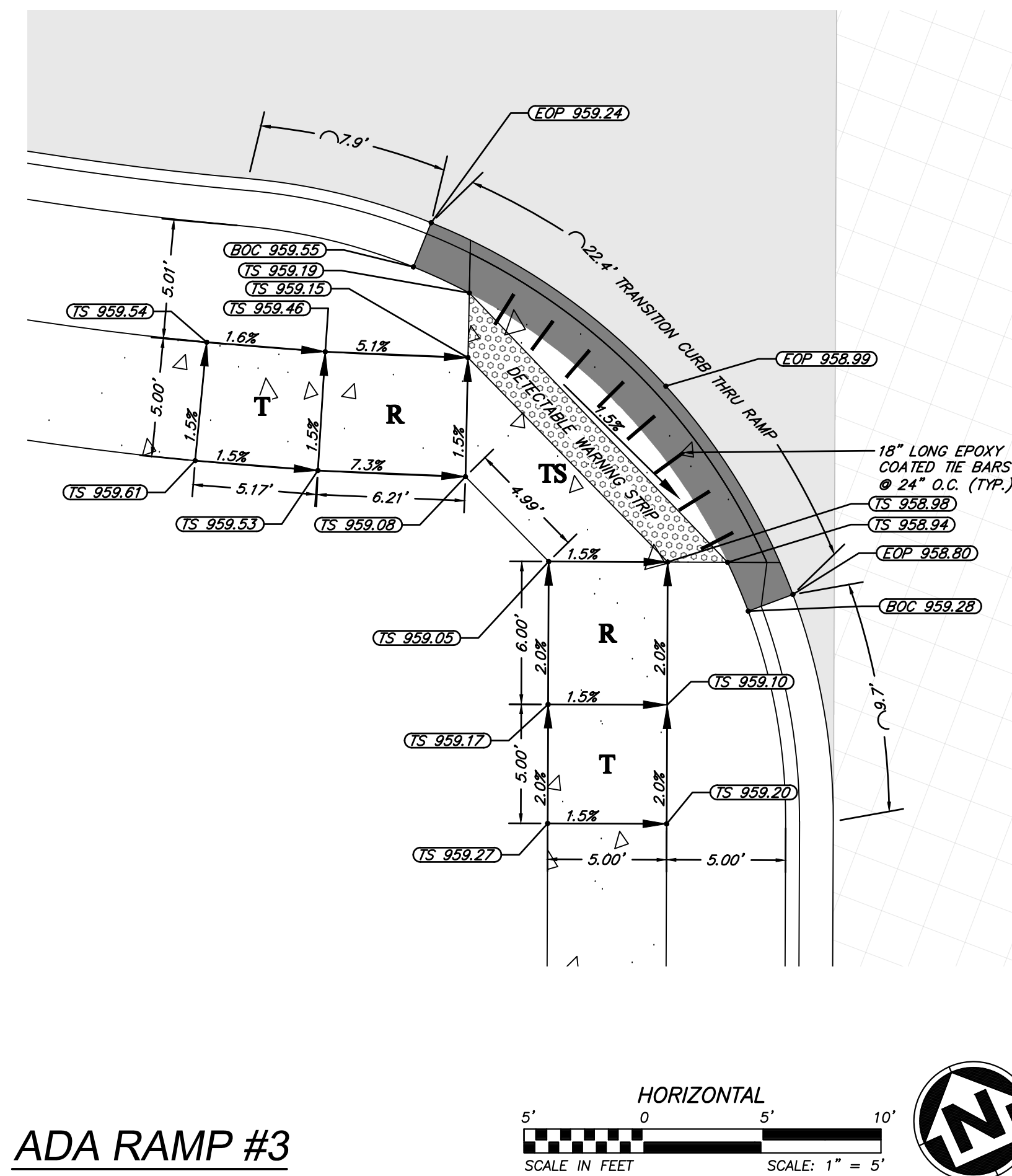
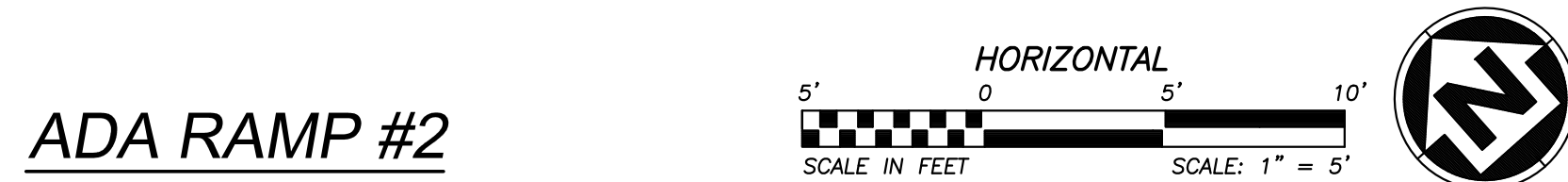
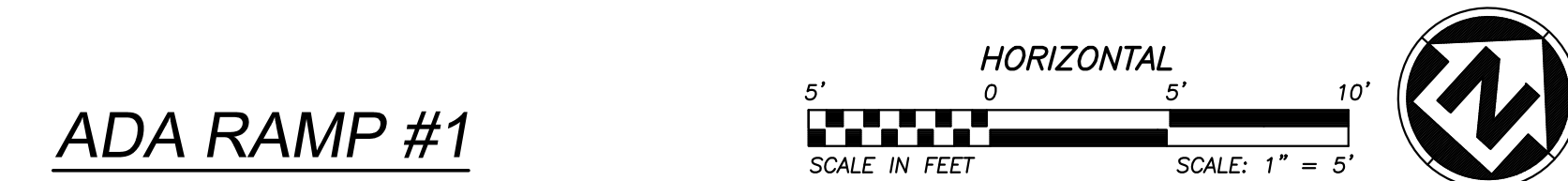
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2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO.	PE-20120069232
3.	REVISED PER CITY COMMENTS	GC	3/10/21	DATE:	12/2/2020
				ISSUED FOR:	FOR REVIEW
				JOB NUMBER:	20KC10057
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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

FINAL STABILIZATION
EROSION CONTROL PLAN

SHEET NUMBER
C303
17 OF 41

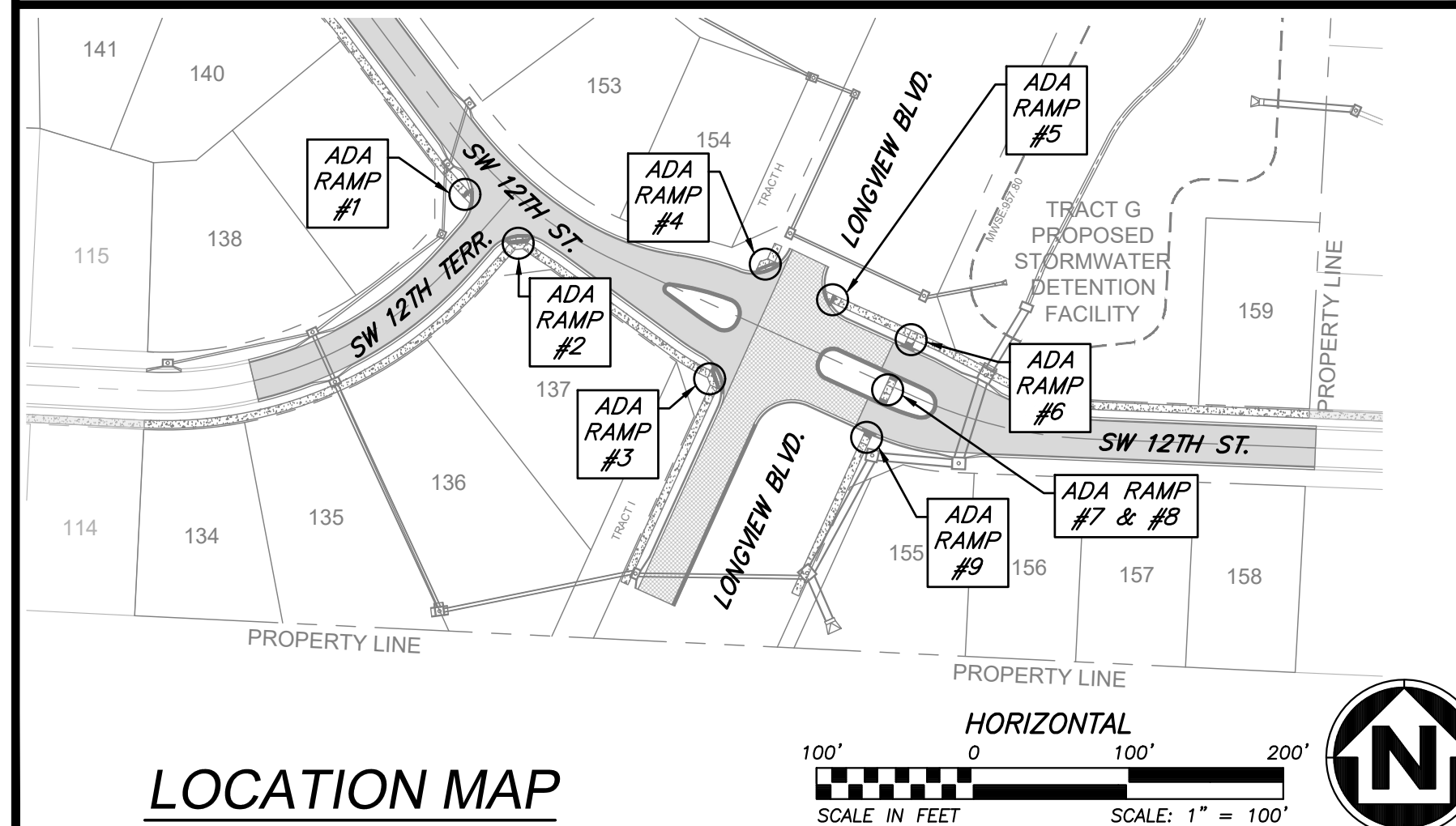
S10, T47N, R22W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



EOP = *EDGE OF PAVEMENT*
TS = *TOP OF SIDEWALK*
TYP = *TYPICAL*
T = *TRANSITION*
TS = *TURNING SPACE*
R = *RAMP*

KCMMB4K CONCRETE SIDEWALK

1. CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WITH AN OPENING SHALL BE AT LEAST 48" WIDE.
2. USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED THE BARS 9" IN EACH DIRECTION.
3. SIDEWALKS, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAPPED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
4. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABOUT DRIVEWAYS AND SIMILAR STRUCTURES, AND 150' CENTERS MAX.
5. 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 ADA SLOPE REQUIREMENT, 8.33% CROSS SLOPE RAMP SHALL EXTENDED TO A LENGTH OF 15 FEET TO MATCH EXISTING SIDEWALK. CROSS SLOPE OF RAMP SHALL BE 1.5% ±0.5%.
6. 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.
7. FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR
8. RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMPS TO EXISTING SIDEWALKS 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.
9. ALL SIDEWALK AND RAMP TRANSITIONS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).



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REVISIONS				DRAWING INFO.	
NO.	DESCRIPTION	BY	DATE	DRAWN BY:	GC
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2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO.	PE-2012009232
				DATE:	12/2/2020
				ISSUED FOR:	FOR REVIEW
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				MO COA NO.	0000682

S10, T47N, R32W
 FF'S SUMMIT, JACKSON COUNTY, MISSOURI

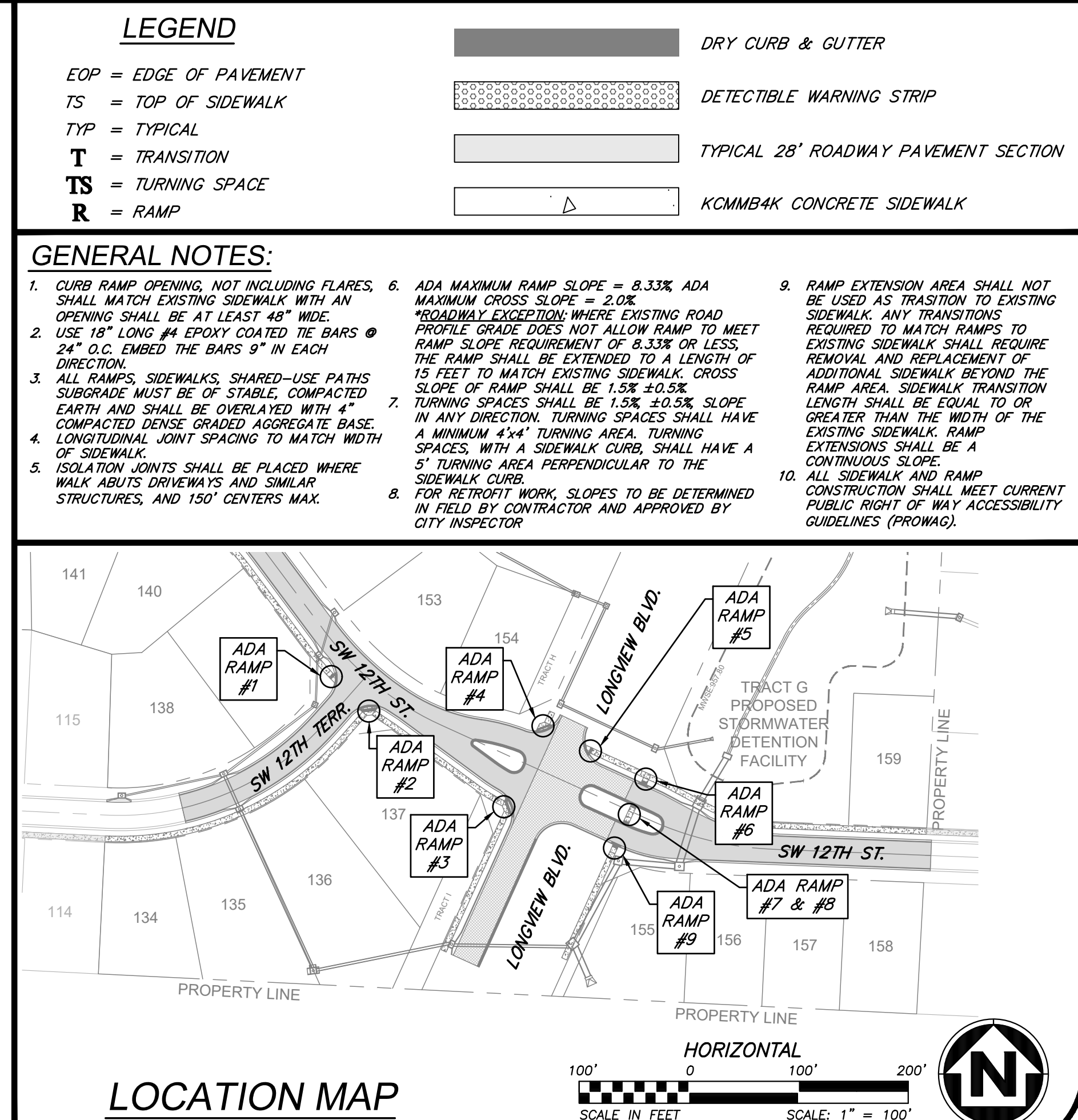
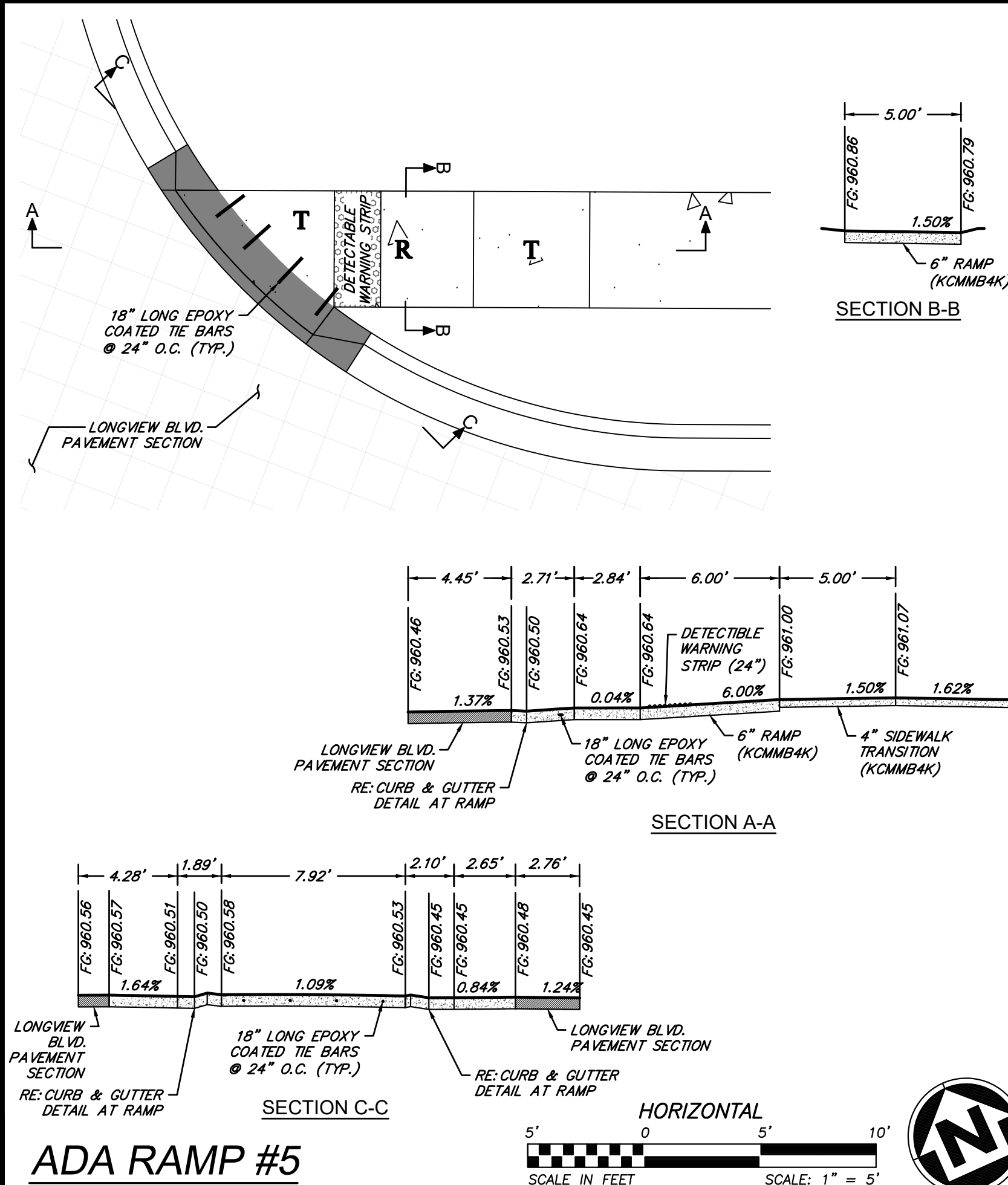
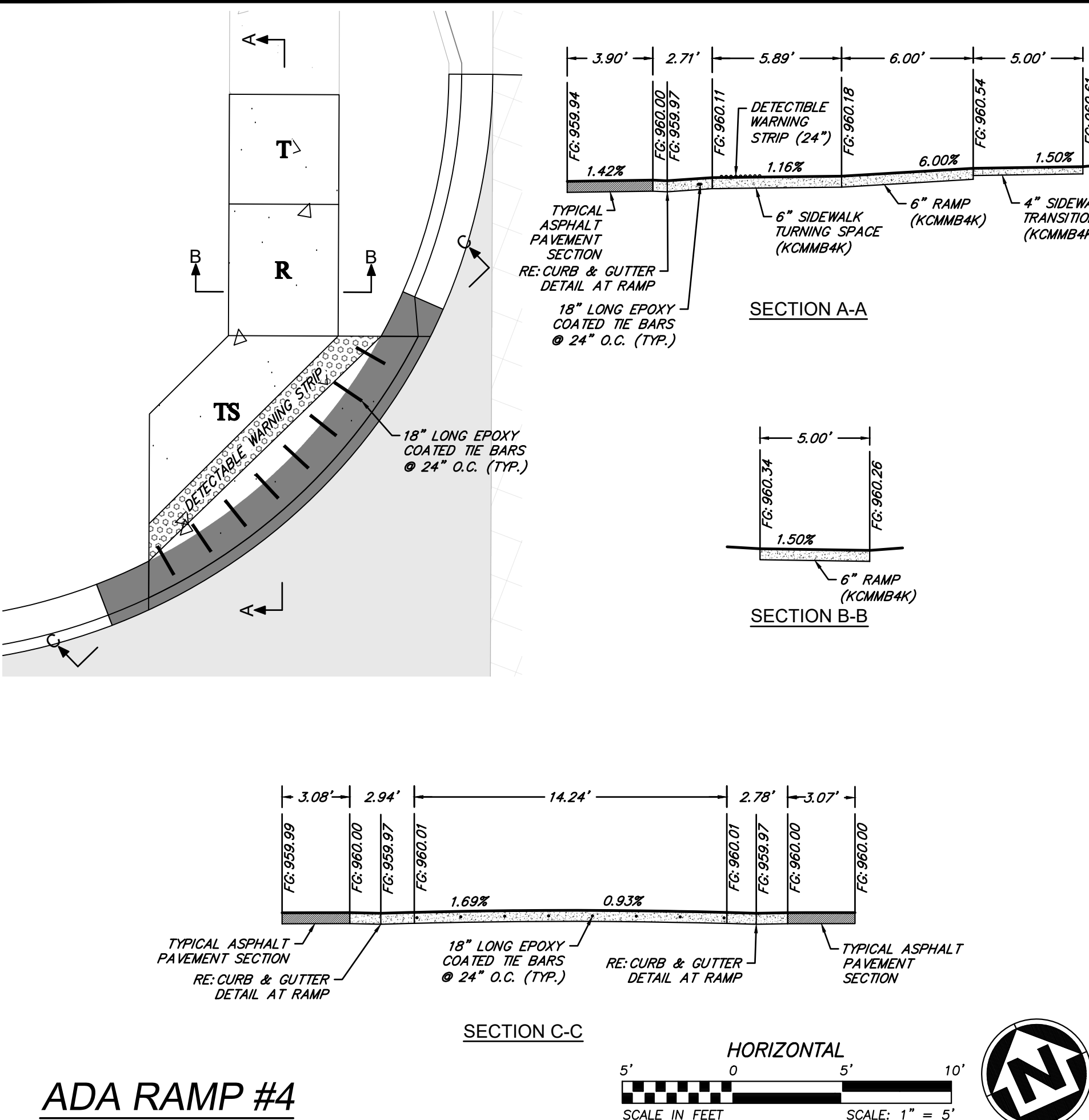
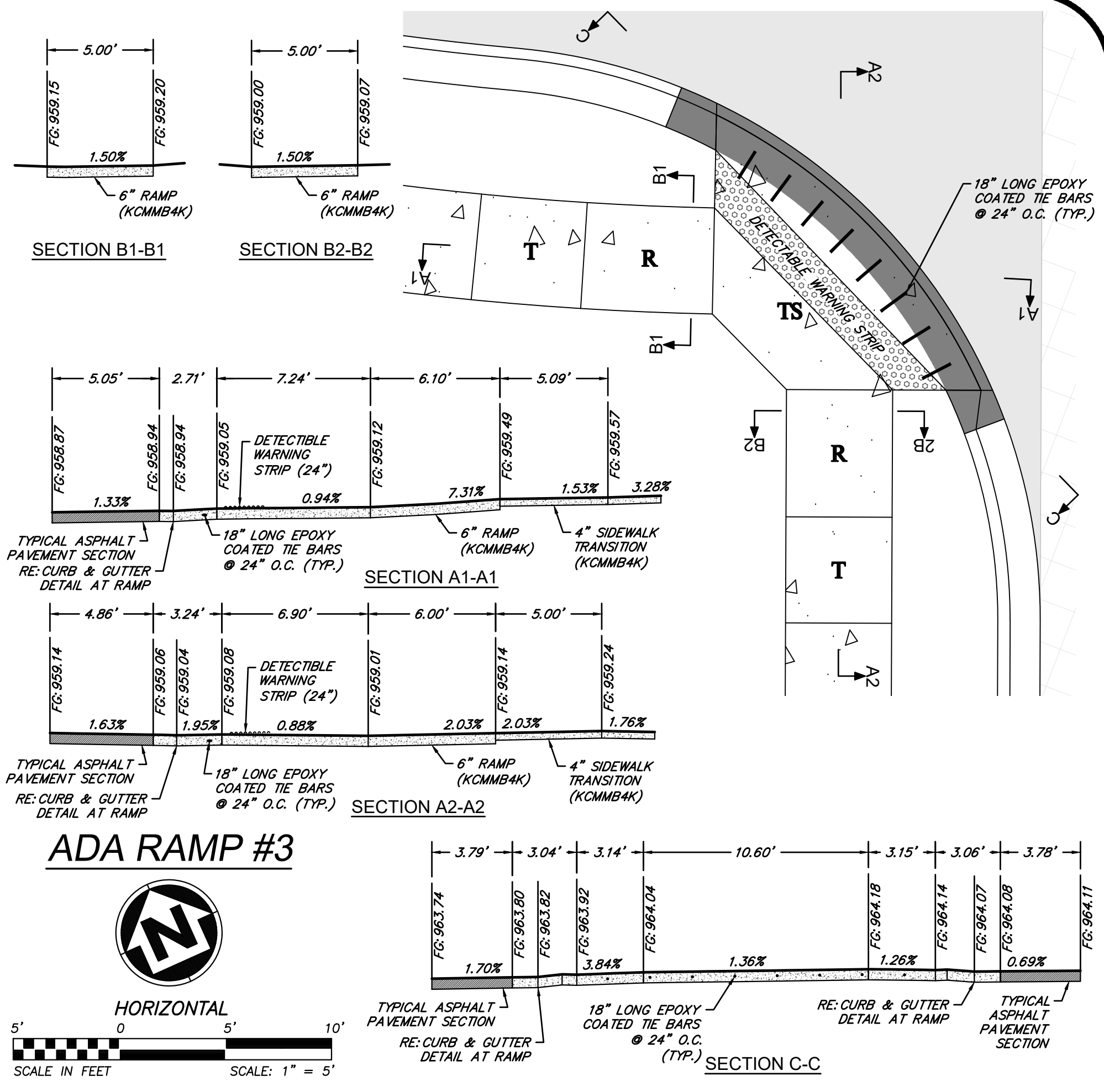
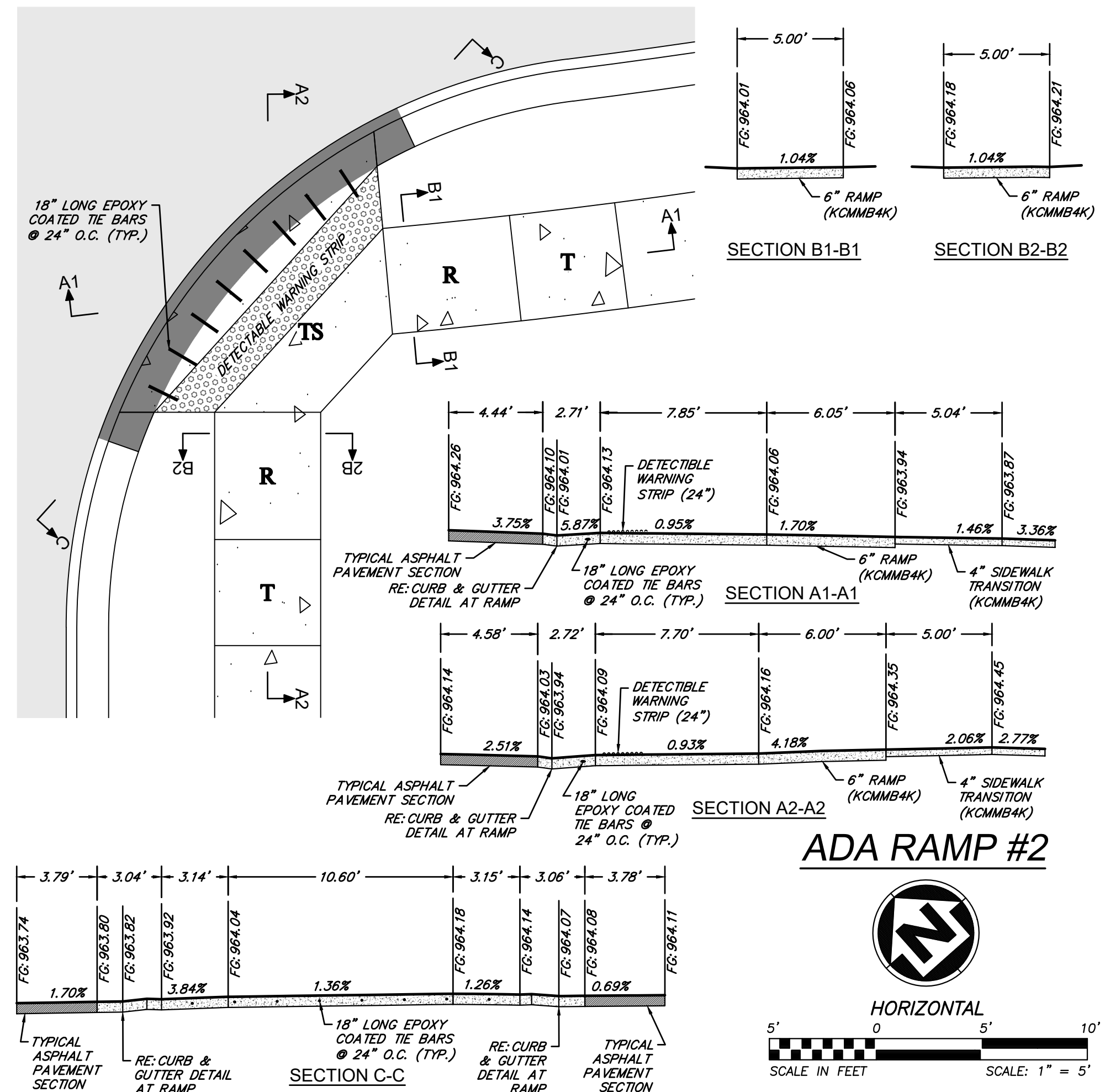
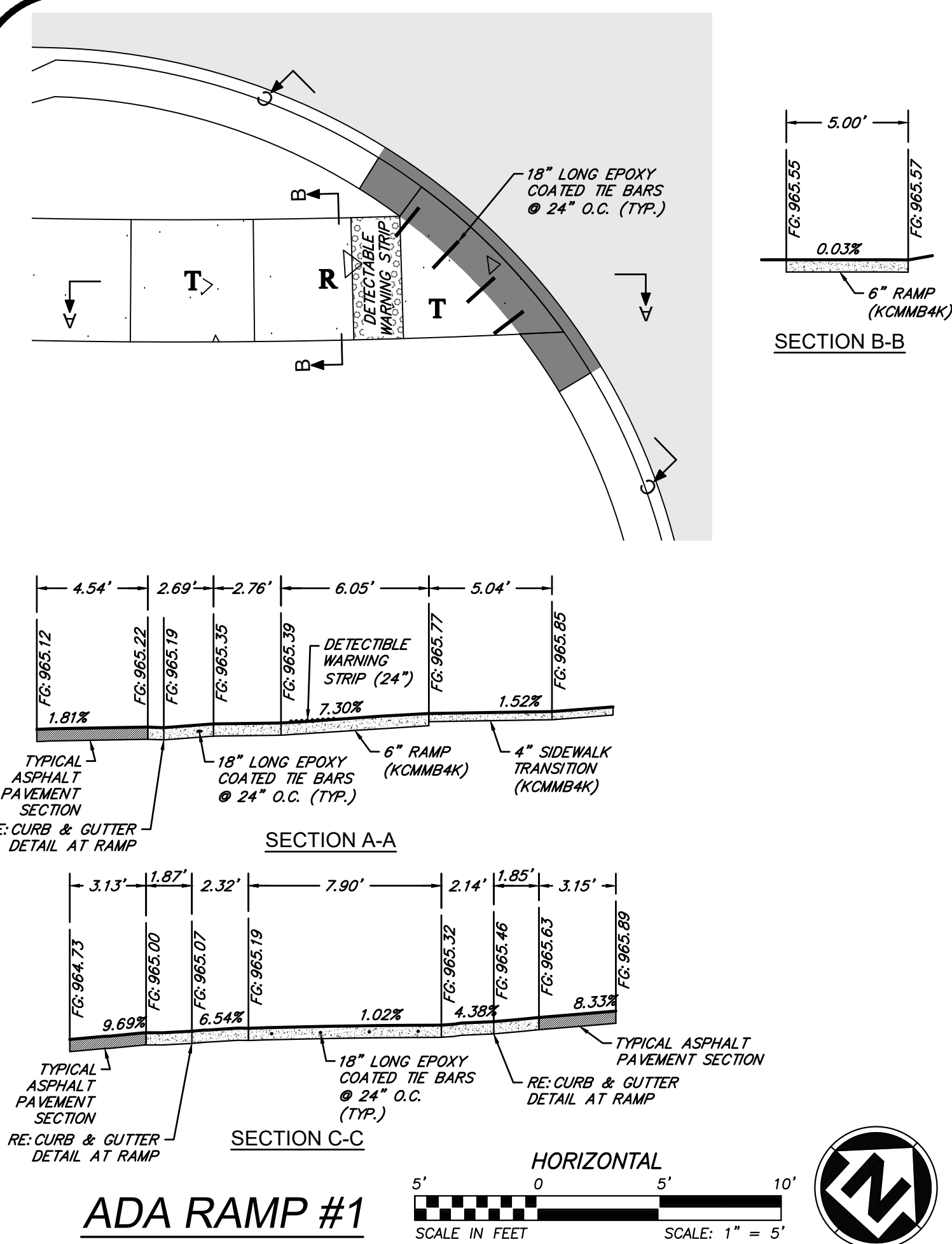
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

ADA RAMP PLAN



SHEET NUMBER
C401
18 OF 41

Oct 22, 2021 - 9:35am Plotted Bx: g:\Shared drives\WC10 - Land Development\Projects\2020\20K10057 Highland Meadows - 5th Plat\01 CIVL\03-DWG\Sheet\STREET AND STORM\20K10057 - SHT - INTERSECTION DETAILS.dwg Layout: ADA RAMP CROSS SECTIONS



- LEGEND**
- EOP = EDGE OF PAVEMENT
 - TS = TOP OF SIDEWALK
 - TYP = TYPICAL
 - T = TRANSITION
 - TS = TURNING SPACE
 - R = RAMP
- DRY CURB & GUTTER
 - DETECTIBLE WARNING STRIP
 - TYPICAL 28' ROADWAY PAVEMENT SECTION
 - KCMB4K CONCRETE SIDEWALK
- GENERAL NOTES:**
- CURB RAMP OPENING, NOT INCLUDING FLARES, SHALL MATCH EXISTING SIDEWALK WITH AN OPENING SHALL BE AT LEAST 48" WIDE.
 - USE 18" LONG #4 EPOXY COATED TIE BARS @ 24" O.C. EMBED THE BARS 9" IN EACH DIRECTION.
 - ALL RAMP, SIDEWALKS, SHARED-USE PATHS SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
 - LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
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 - 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%.
 - 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.
 - FOR RETROFIT WORK, SLOPES TO BE DETERMINED IN FIELD BY CONTRACTOR AND APPROVED BY CITY INSPECTOR.
 - RAMP EXTENSION AREA SHALL NOT BE USED AS TRANSITION TO EXISTING SIDEWALK. ANY TRANSITIONS REQUIRED TO MATCH RAMP 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.
 - ALL SIDEWALK AND RAMP CONSTRUCTION SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).

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NO.	DESCRIPTION	BY	DATE
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2.	REVISED PER CITY COMMENTS	GC	2/26/21
DRAWN BY: GC		CHECK BY: ZM	
LICENSE NO. FE-2012009232		DATE: 12/2/2020	
ISSUED FOR: FOR REVIEW		JOB NUMBER: 20K10057	
MO COA NO. 00062		© COPYRIGHT ANDERSON ENGINEERING, INC. 2020	

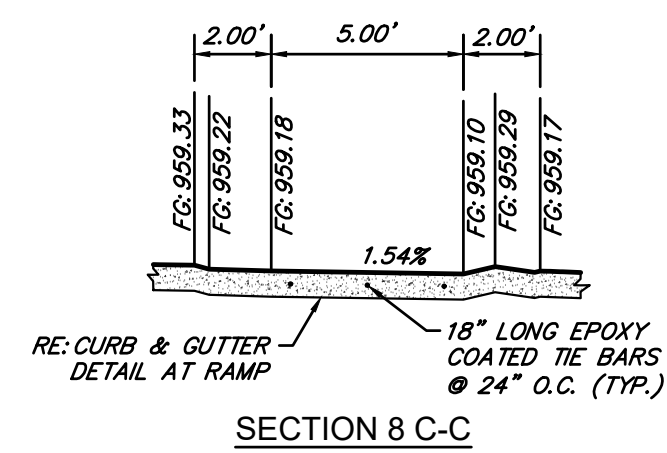
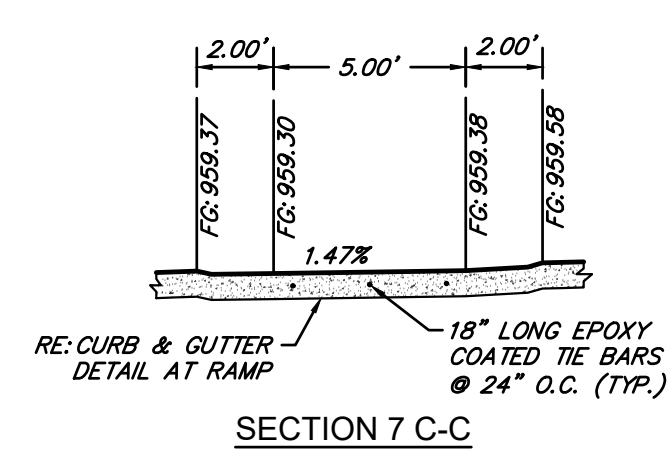
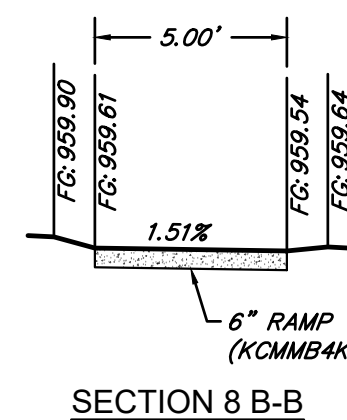
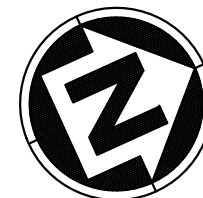
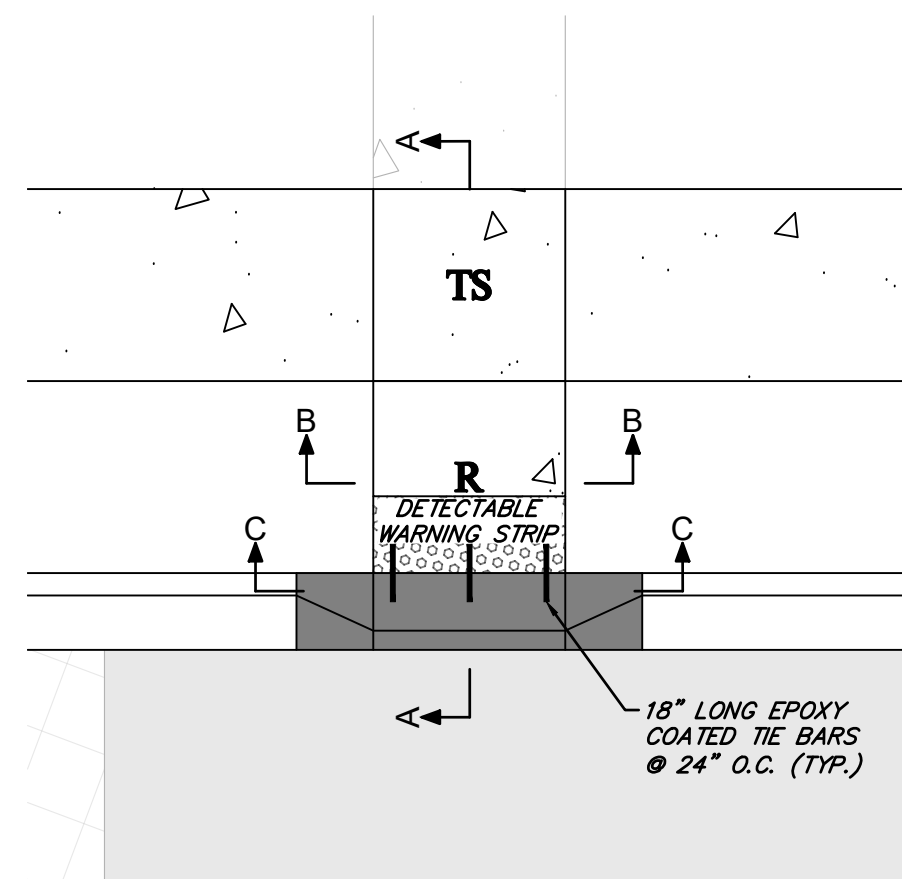
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

ADA RAMP CROSS SECTIONS

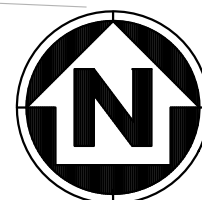
S10, T47N, R22W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
NUMBER FE-2012009232
EXPIRATION DATE 12/31/22
PROFESSIONAL ENGINEER

SHEET NUMBER
C402
19 OF 41



LOCATION MAP



STATE OF MISSOURI
ZACH A. MYERS
Zach A. Myers
NUMBER
JE-2012009232
10/22/24
PROFESSIONAL ENGINEER

SHEET NUMBER
C403
20 OF 41

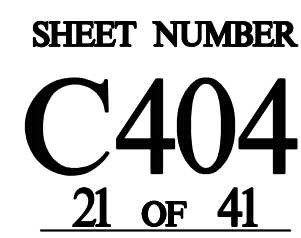
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2.	REVISED PER CITY COMMENTS	GC	2/26/21	LICENSE NO.	PE-2012009332
				DATE:	12/23/2020
				ISSUED FOR:	FOR REVIEW
				JOB NUMBER:	20KCC10057
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TYPICAL 28' ROADWAY PAVEMENT SECTION	
5' CONCRETE SIDEWALK	
DRY CURB & GUTTER	
RIGHT-OF-WAY	EQ
ROAD CENTERLINE	TP
DRAINAGE PATH	TS

LEGEND

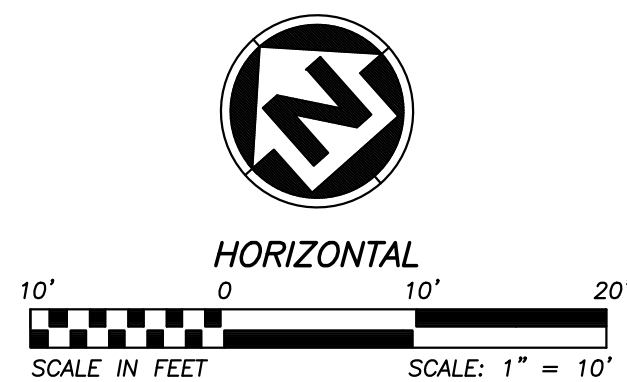
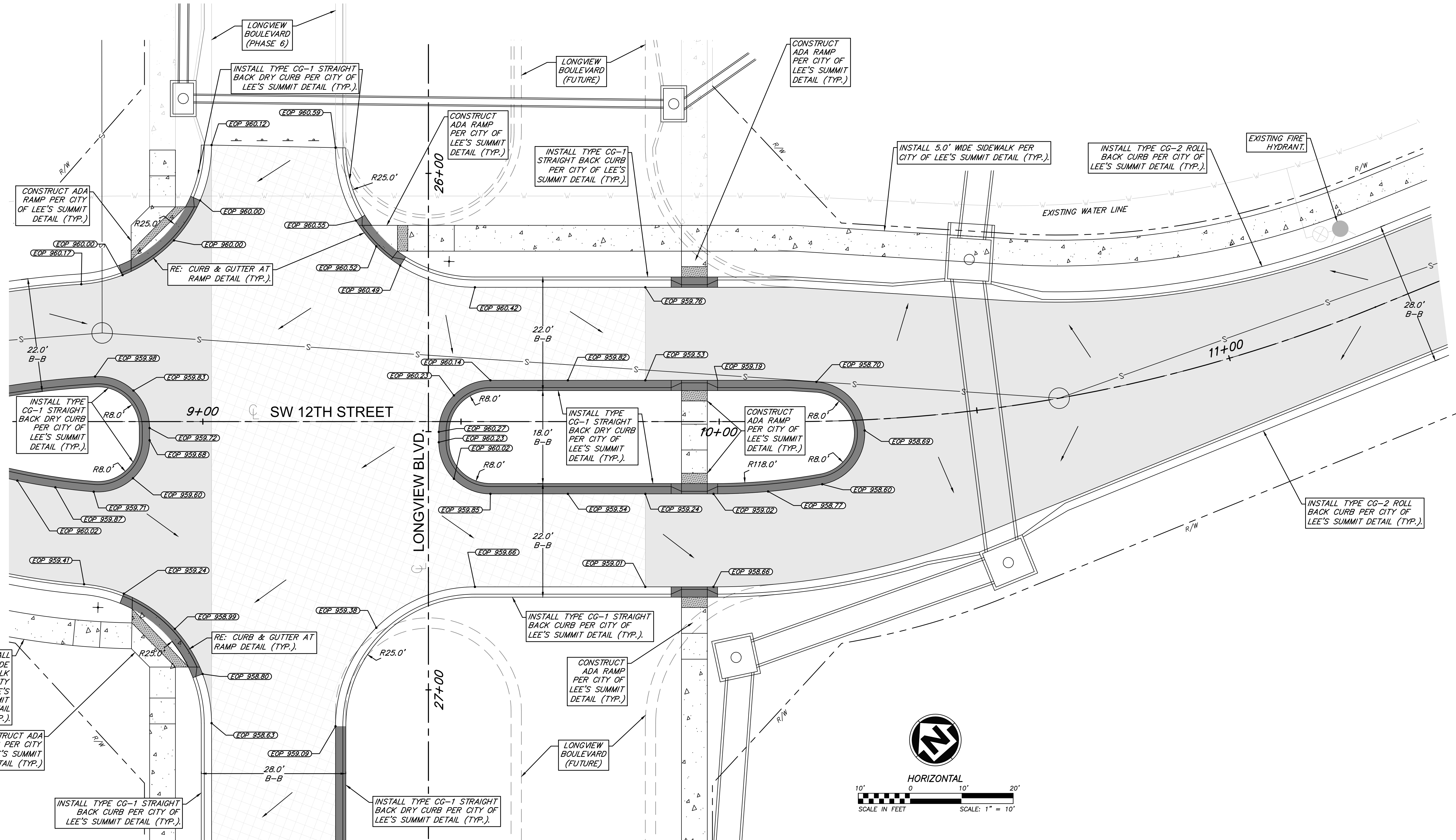
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT



Oct 22, 2021 - 9:36am Plotted Bx: g:\Shared drives\VC10 - Land Development\Projects\2020\20K10057 Highland Meadows - 5th Plat\01 CIVIL\03-DWG\Sheet\STREET AND STORM\20K10057 - SHT - INTERSECTION DETAILS.dwg Layout: INTERSECTION DETAILS (2)

LEGEND

- TYPICAL 28' ROADWAY PAVEMENT SECTION
- TYPICAL LONGVIEW BLVD. PAVEMENT SECTION
- 5' CONCRETE SIDEWALK
- DRY CURB & GUTTER
- RIGHT-OF-WAY
- ROAD CENTERLINE
- DRAINAGE PATH
- EOP = EDGE OF PAVEMENT
- TP = TOP OF PAVEMENT
- TS = TOP OF SIDEWALK
- B-B = BACK OF CURB TO BACK OF CURB
- TYP = TYPICAL



INTERSECTION OF SW 12TH STREET & LONGVIEW BOULEVARD

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		CHECK BY:	ZM
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		DATE:	12/2/2020
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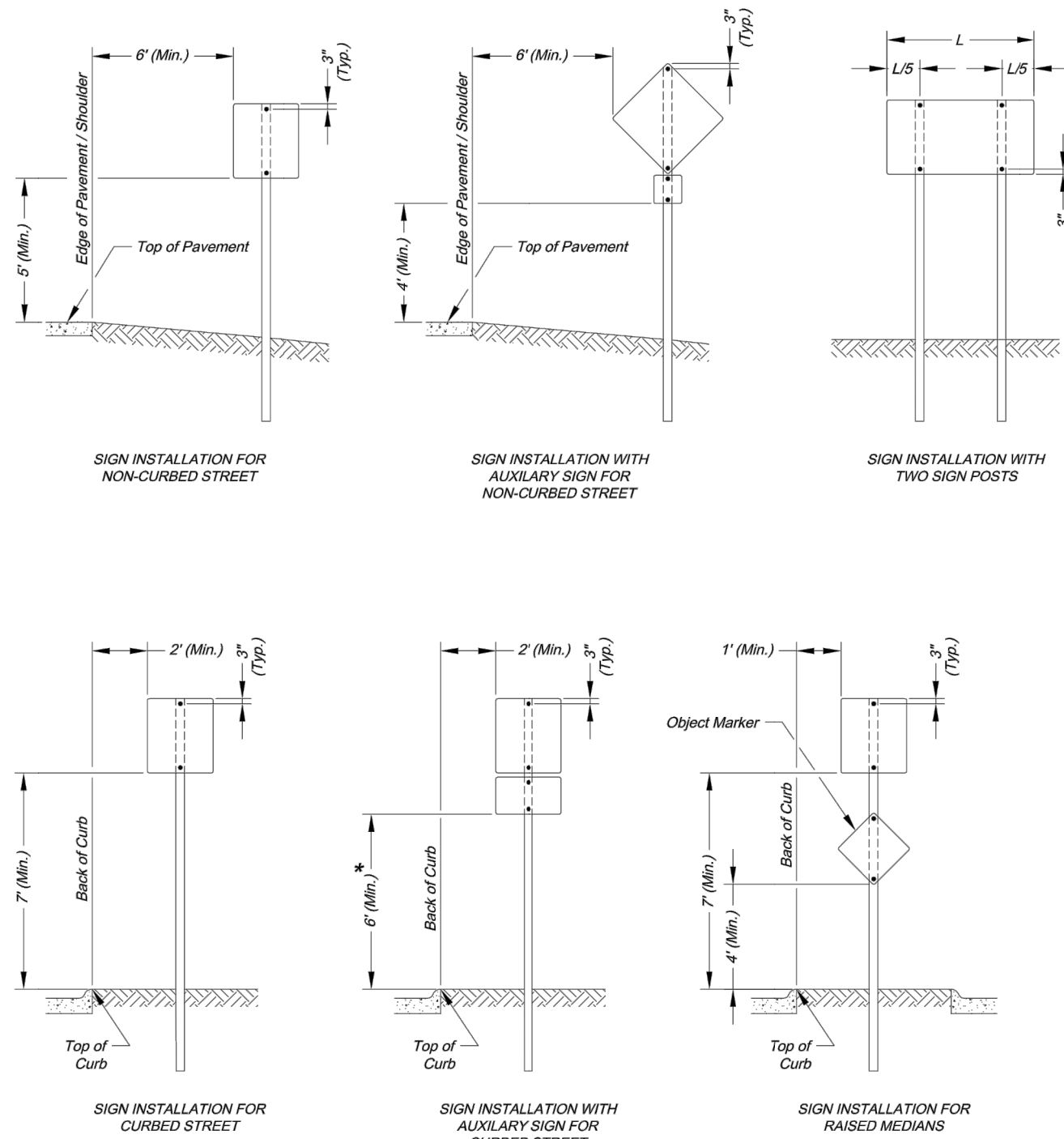
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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

INTERSECTION DETAILS (2)

SHEET NUMBER
C405
22 OF 41

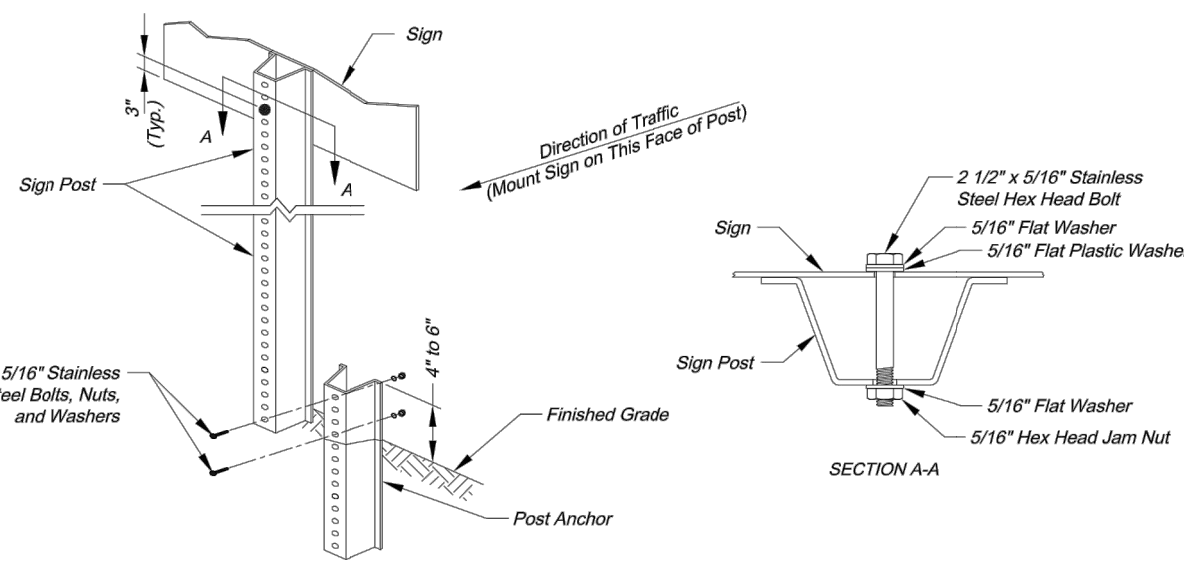
S10, T47N, R2W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



SIGN MOUNTING DETAILS

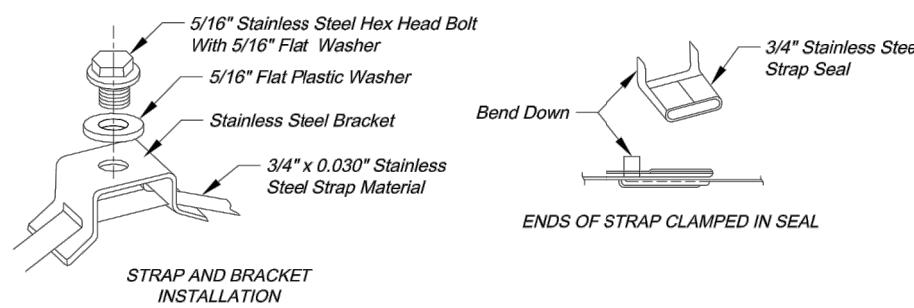
* The height to the bottom of a sign when it is located in a pedestrian walkway or extends into a walkway shall be a minimum of 80 inches above the walkway.

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



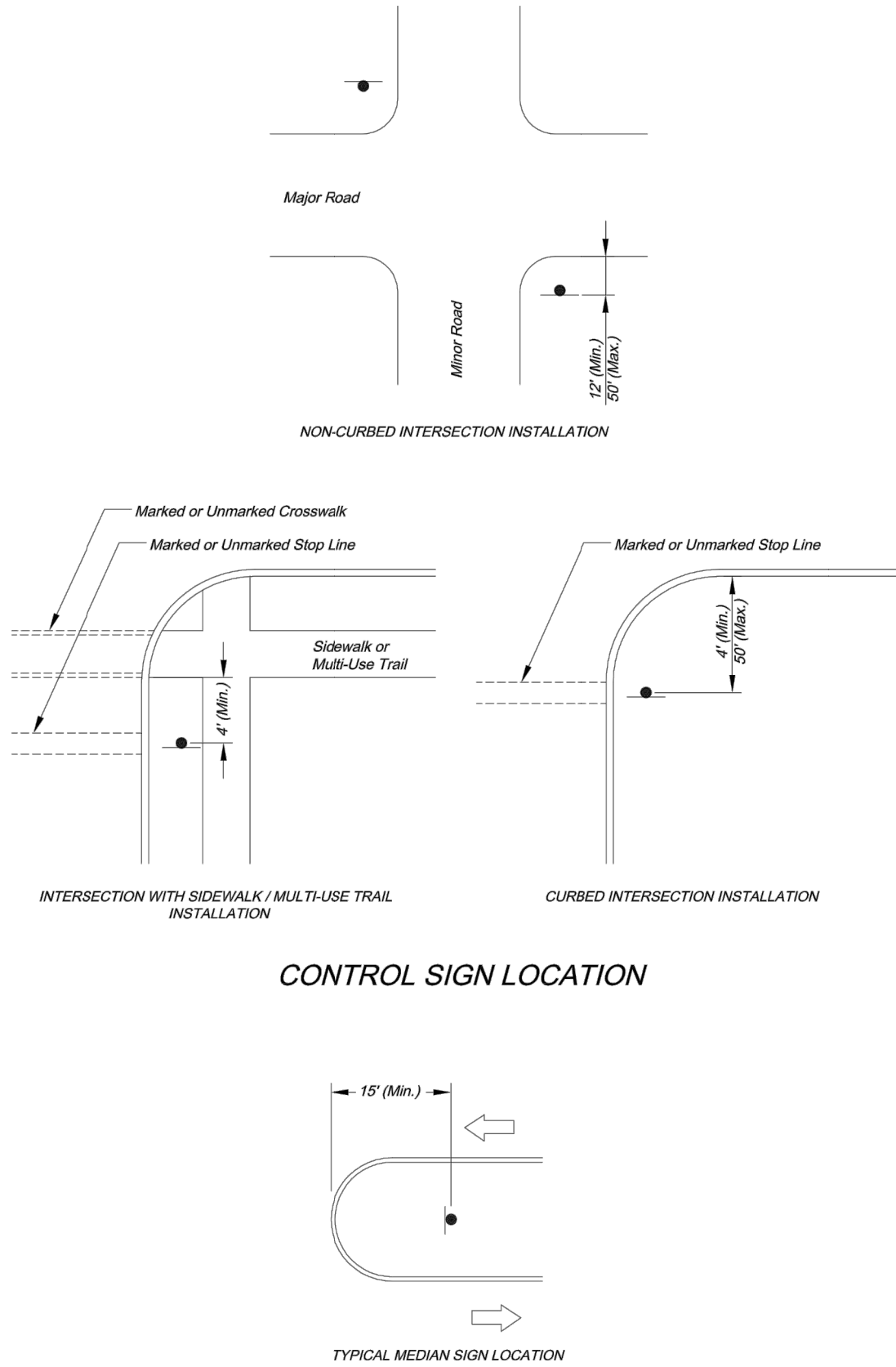
U-STEEL POST DETAILS

- 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 ft. tall, 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 301 stainless steel.

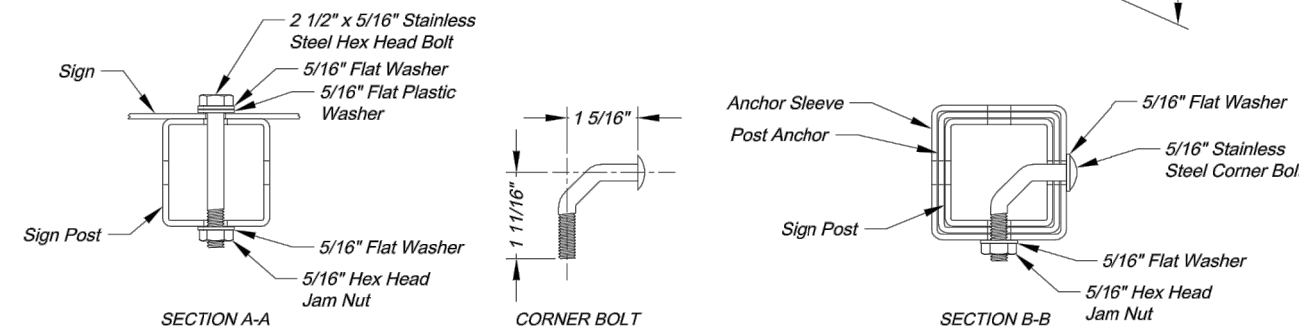


MEDIAN SIGN LOCATION

- 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.

- 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.
 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 encased in reflectorized drums (no less than 7 feet above the pavement surface) until they can be reinstalled. Any temporary Stop or Yield sign installation to be left in place overnight will require prior approval from the City Inspector.

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



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 1/4" x 2 1/4" x 36" Square Steel Post
Anchor Sleeve - 12 Ga. 2 1/4" x 2 1/4" x 18" Square Steel Post
 2. 14 Gauge posts must meet a certified minimum yield strength of 80,000 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 come-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.



CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 989-1800 FAX: (816) 989-1809

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

Drawn By: AS
Checked By: JM
Date: 08/26/2009
Project#

1 OF 3



CITY OF LEE'S SUMMIT
PUBLIC WORKS DEPARTMENT
220 SE GREEN STREET
LEE'S SUMMIT, MISSOURI 64063
PHONE: (816) 989-1800 FAX: (816) 989-1809

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

Drawn By: AS
Checked By: JM
Date: 08/26/2009
Project#

2 OF 3

2

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

SIGN POST & MOUNTING
DETAILS



SHEET NUMBER
C407
24 OF 41

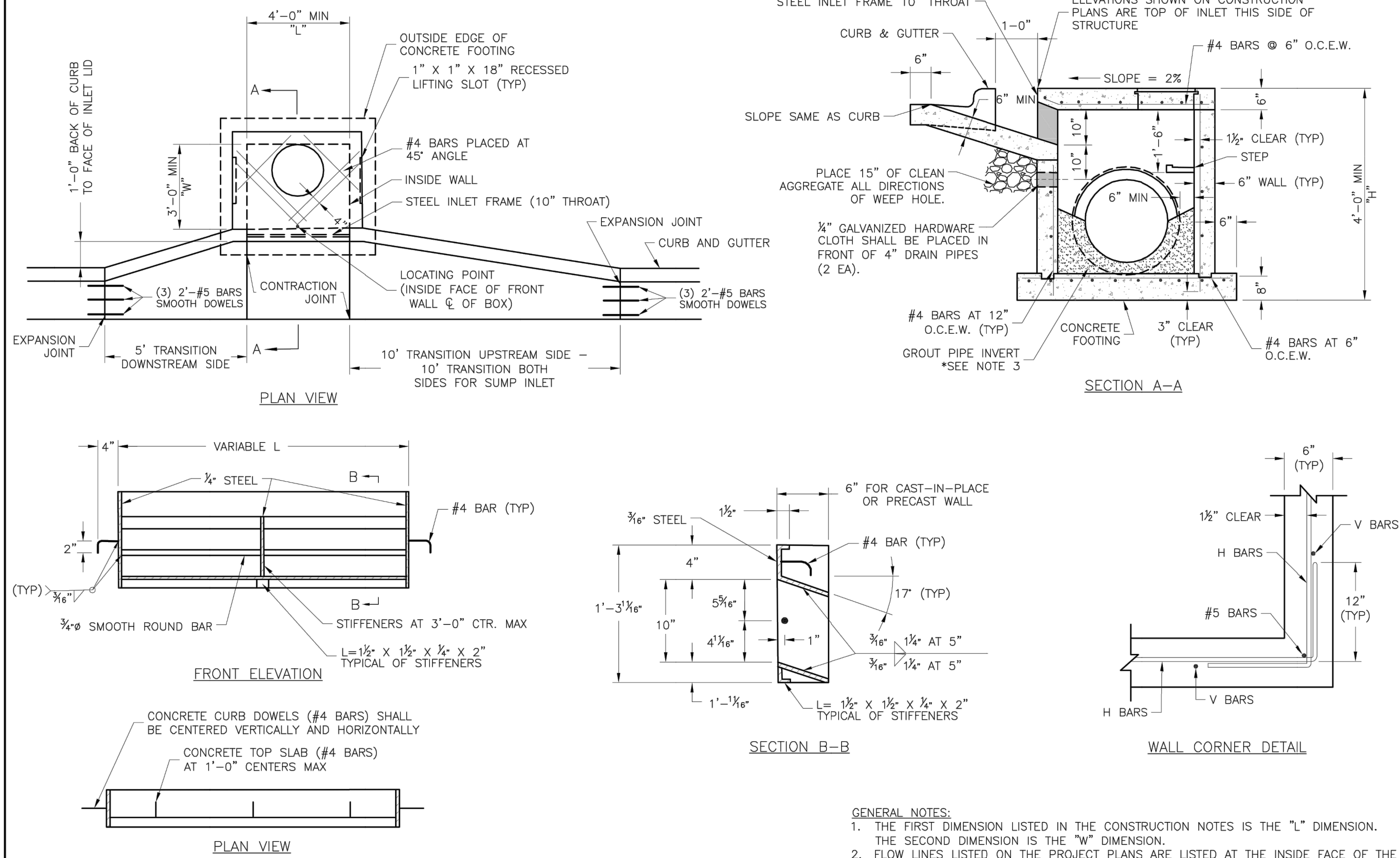
S10, T47N, R22W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

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		ISSUED FOR:	FOR REVIEW
		JOB NUMBER:	20K10057
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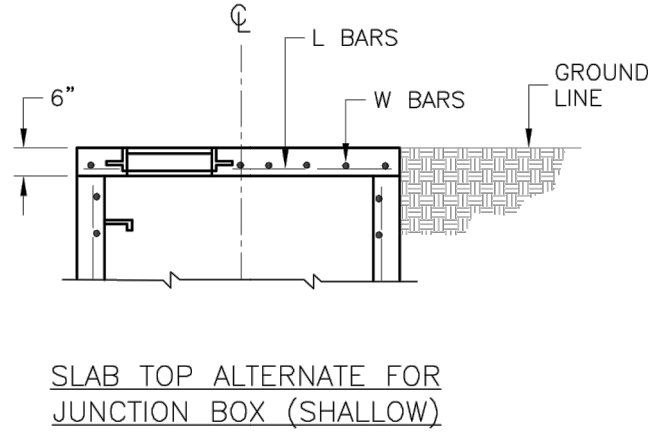
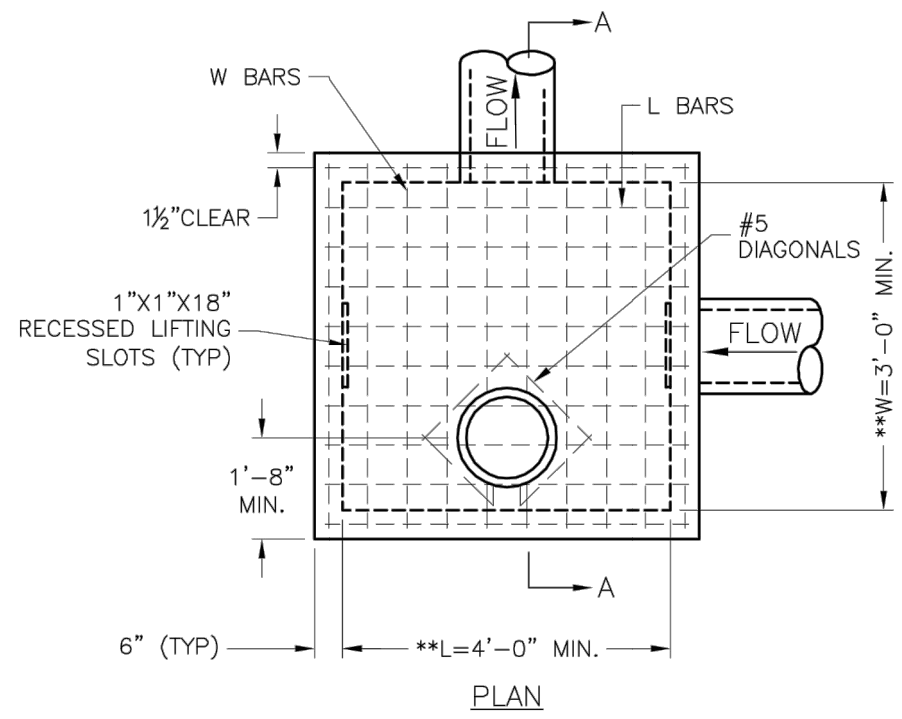


STEEL FRAME NOTES:

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

GENERAL NOTES:

1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
5. STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
6. BEVEL ALL EXPOSED EDGES WITH 3/4" CHAMFER OR 1/2" 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.

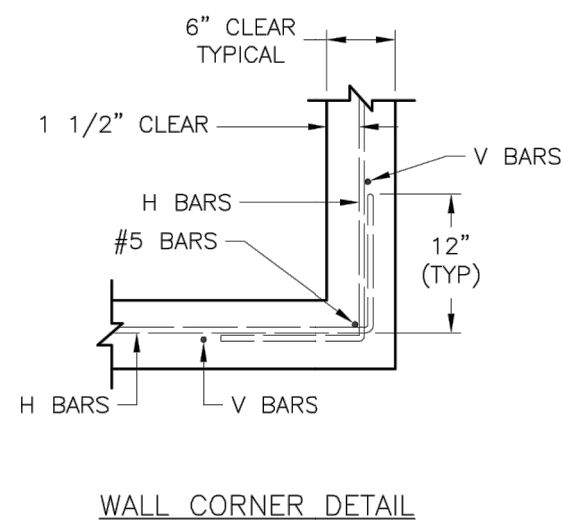
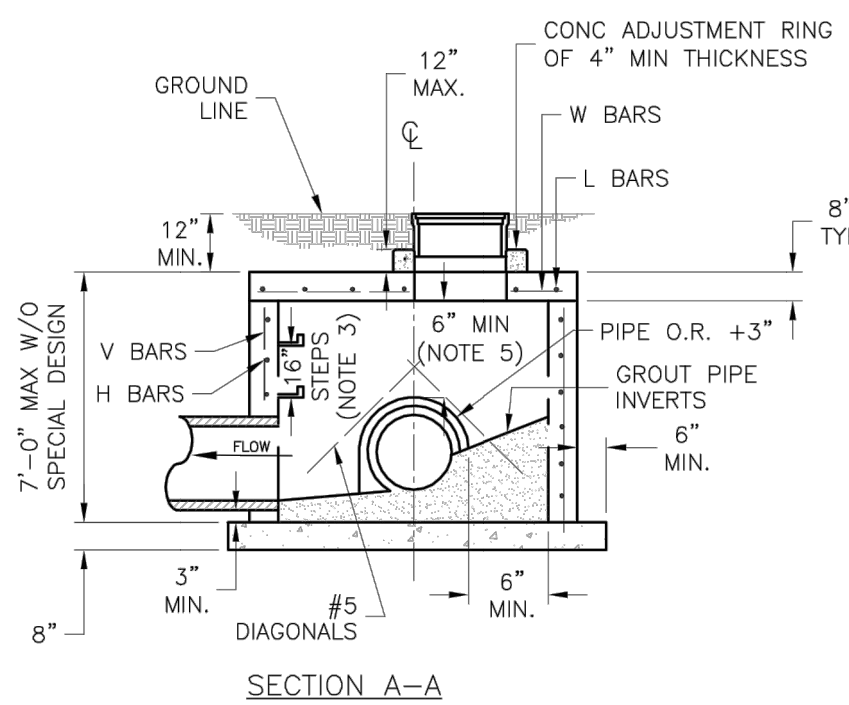


** INCREASE IN MULTIPLES OF 6" (7'-0") MAX WITHOUT SPECIAL DESIGN. (SEE PROJECT PLANS FOR DETAILS)

REINFORCING		
BAR SIZE	SPACING (IN.)	
H 4	12	
V 4	12	
L 5	6	
W 5	6	

GENERAL NOTES:

1. LOCATE RING AND COVER ON BLANK WALL.
2. USE 3/4" CHAMFER STRIP OR 1/2" R EDGER TOOL ON ALL EXPOSED CONCRETE CORNERS.
3. STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 4' ON BLANK WALL IF POSSIBLE.
4. BOXOUTS WILL NOT BE ALLOWED TO PROJECT THROUGH THE CORNERS OF THE STRUCTURE AND THE MINIMUM DISTANCE BETWEEN BOXOUTS IS 6".
5. THE MINIMUM REINFORCING SHALL BE 1 H-BAR OVER A CAST-IN-PLACE PIPE AND 2 H-BARS OVER A PRECAST BOXOUT.
6. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
7. REINFORCING OF COVERS IN STREETS REQUIRE SPECIAL DESIGN.
10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.



LEE'S SUMMIT MISSOURI

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

STORM INLET DETAIL

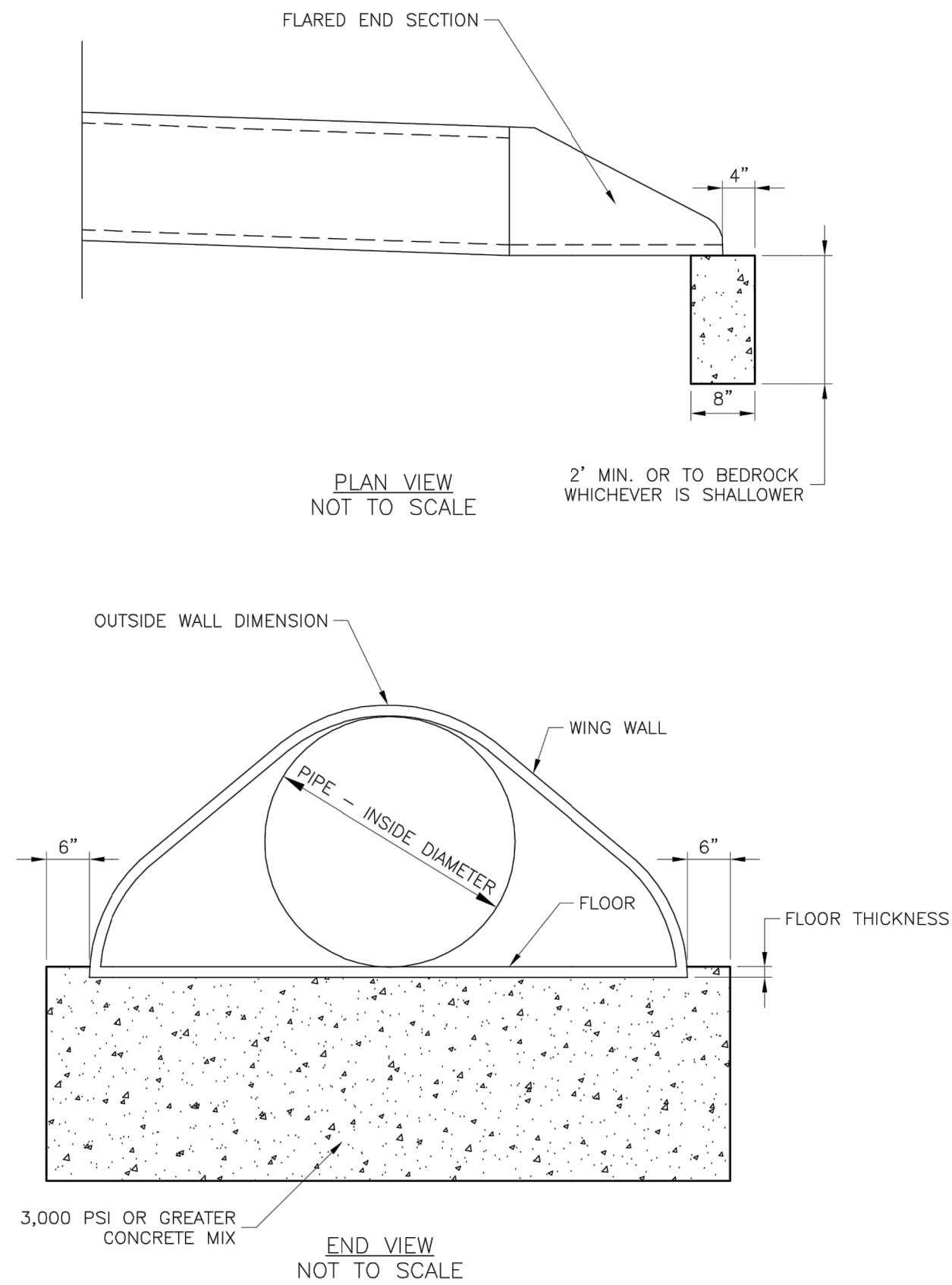
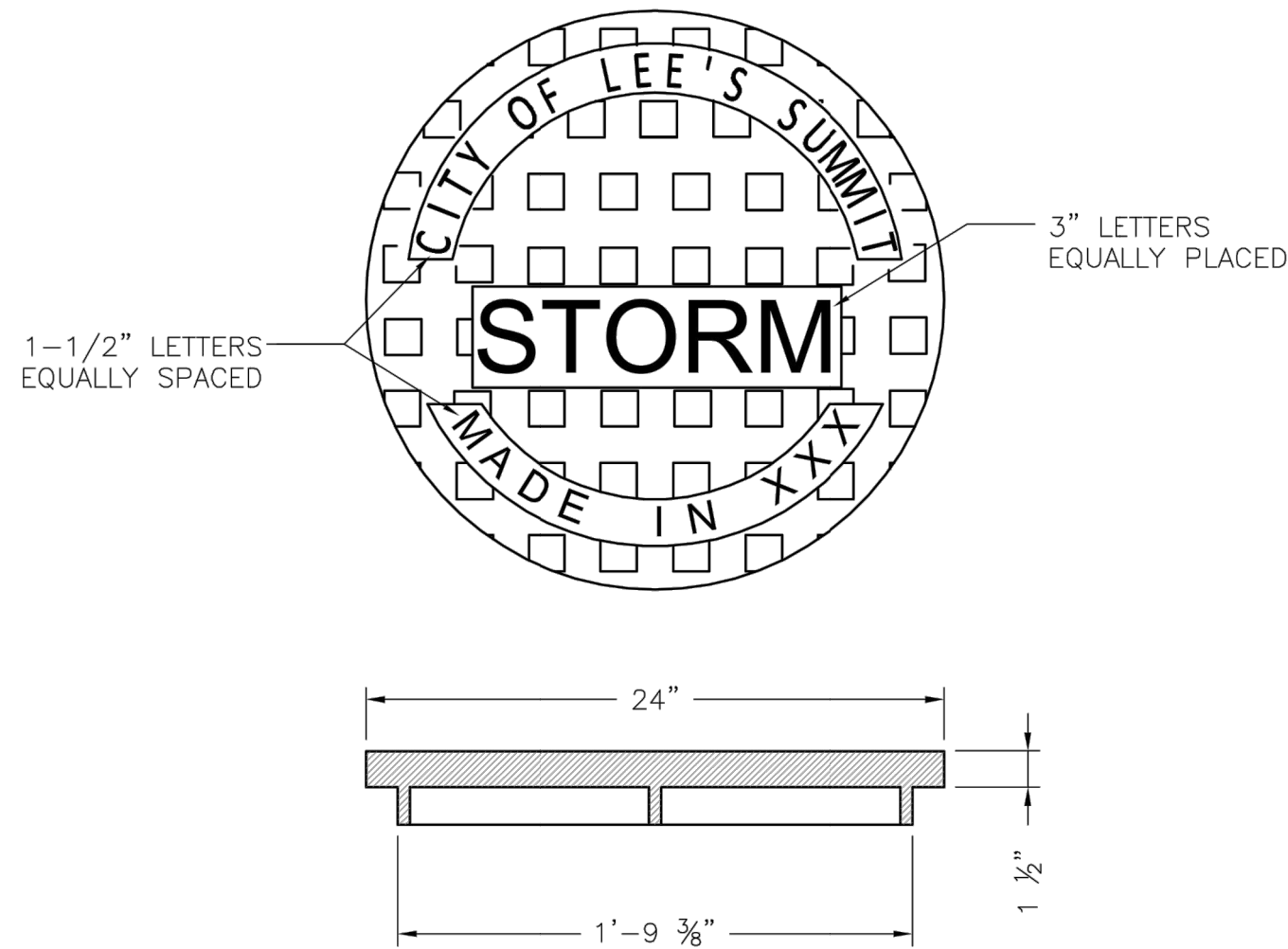
STM-1

LEE'S SUMMIT MISSOURI

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

JUNCTION BOX DETAIL

STM-3



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FE-2012009232	12/2/2020				
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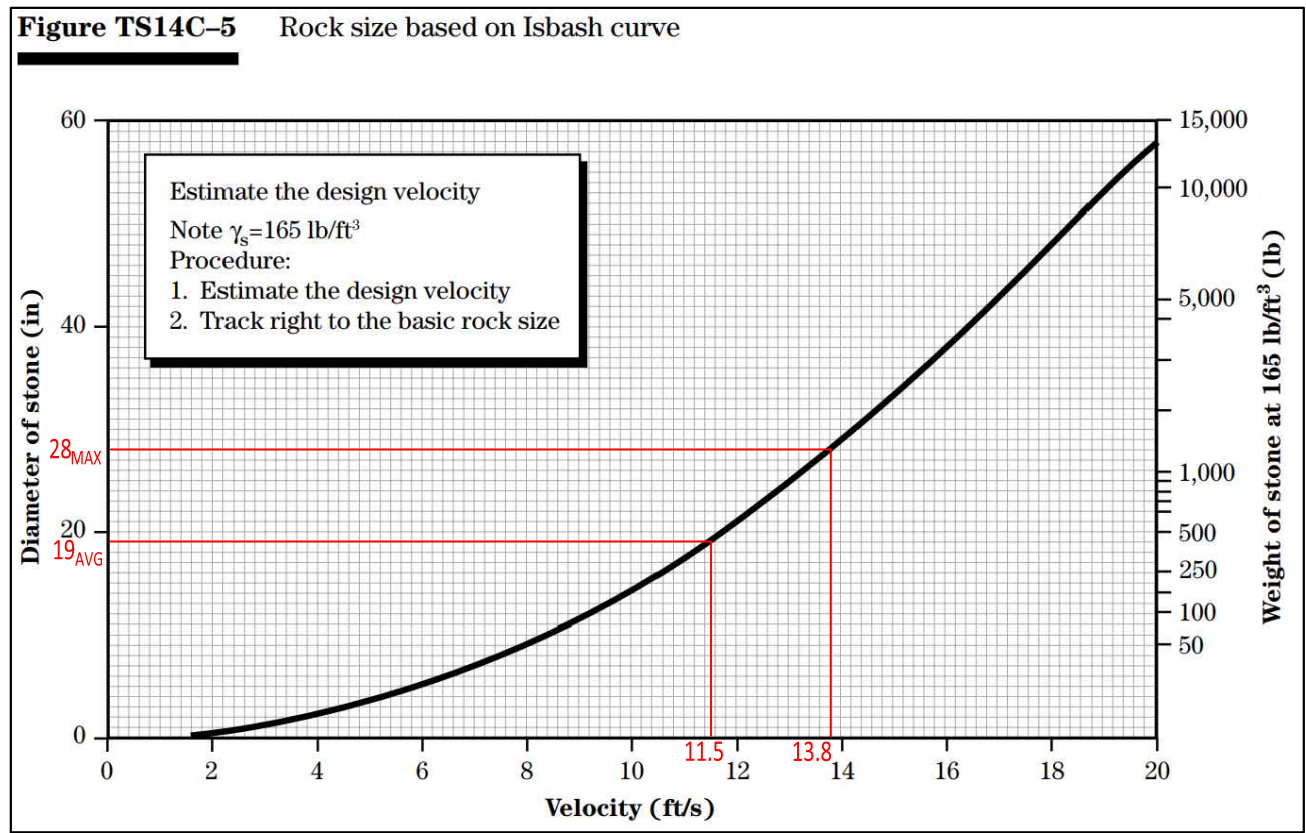
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

STORM SEWER DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



SHEET NUMBER
C501
26 OF 41



MAXIMUM 10-YR OUTLET VELOCITY PER DRAINAGE CALCULATIONS (SHEET C202) $\approx$ 9.71 FT/S.
PER TABLE ABOVE, 9.71 FT/S x 1.2 SAFETY FACTOR = 11.5 FT/S $\approx$ 19" AVERAGE STONE SIZE.
19" STONE $\approx$ MoDOT TYPE 4 DITCH LINER SPECIFICATION

"TYPE 4 ROCK DITCH LINER SHALL CONSIST OF MATERIAL WITH A PREDOMINANT ROCK SIZE OF 19 INCHES, A MAXIMUM ROCK SIZE OF 28 INCHES AND A GRADATION SUCH THAT NO MORE THAN 15% WILL BE LESS THAN 6 INCHES" PER SECTION 609.60.2.4 OF THE 2018 MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

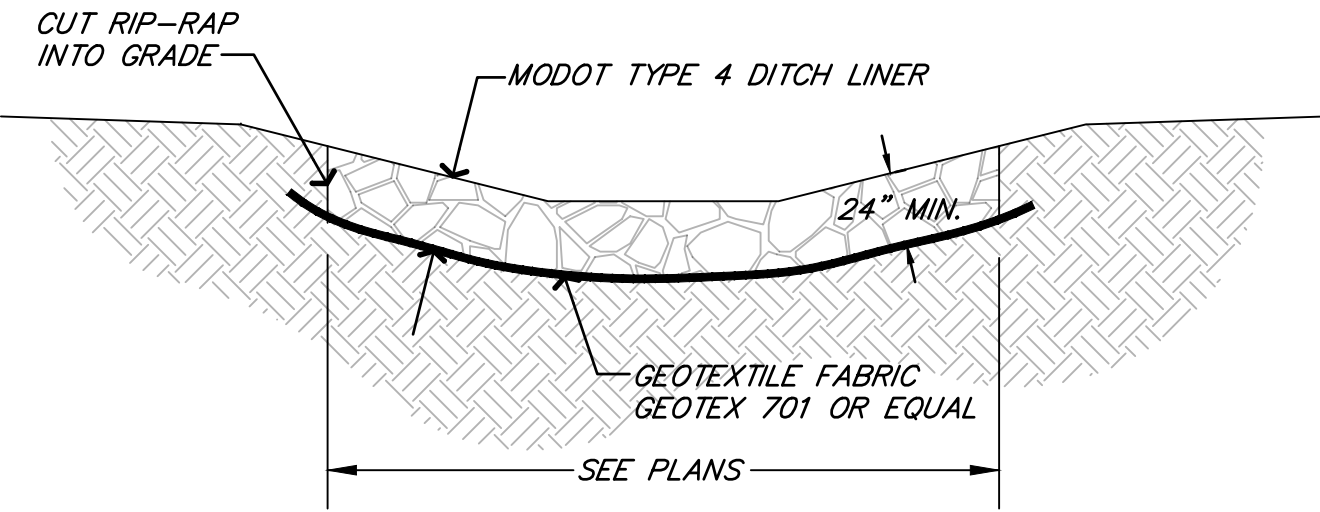
RIPRAP DETAILS

NOT TO SCALE

RIP-RAP NOTES:

- ROCK TO BE USED FOR RIP-RAP SHALL CONSIST OF INDIVIDUAL ROCK FRAGMENTS THAT ARE DENSE, SOUND, AND RESISTANT TO ABRASION. THE ROCK SHALL BE FREE OF CRACKS, SEAMS, AND OTHER DEFECTS THAT WOULD TEND TO INCREASE THE DESTRUCTION OF THE INDIVIDUAL ROCK FRAGMENTS DUE TO WATER AND FRONT ACTION. REFER APWA SECTION 2600.
- RIP-RAP SHALL HAVE A MINIMUM THICKNESS OF 24" AT ALL LOCATIONS SHOWN ON THE PLANS. RIP-RAP SHALL BE PLACED ON GEOTEXTILE FABRIC AS SHOWN IN THE DETAIL.
- 24" THICK RIP-RAP SHALL BE WELL-GRADED ($D_{50} = 19"$) AND CONFORM TO THE TABLE BELOW:

PERCENT LIGHTER	WEIGHT, LBS.
100	700
85-95	525
30-50	175
0-15	30
- A SAMPLE OF ALL ROCK TO BE PLACED SHALL BE SET ASIDE AT A QUARRY CHOSEN BY THE CONTRACTOR AND VISUALLY INSPECTED BY THE CONTRACTOR FOR QUALITY TO ENSURE ROCK MEETS ALL REQUIREMENTS PRIOR TO DELIVERY.



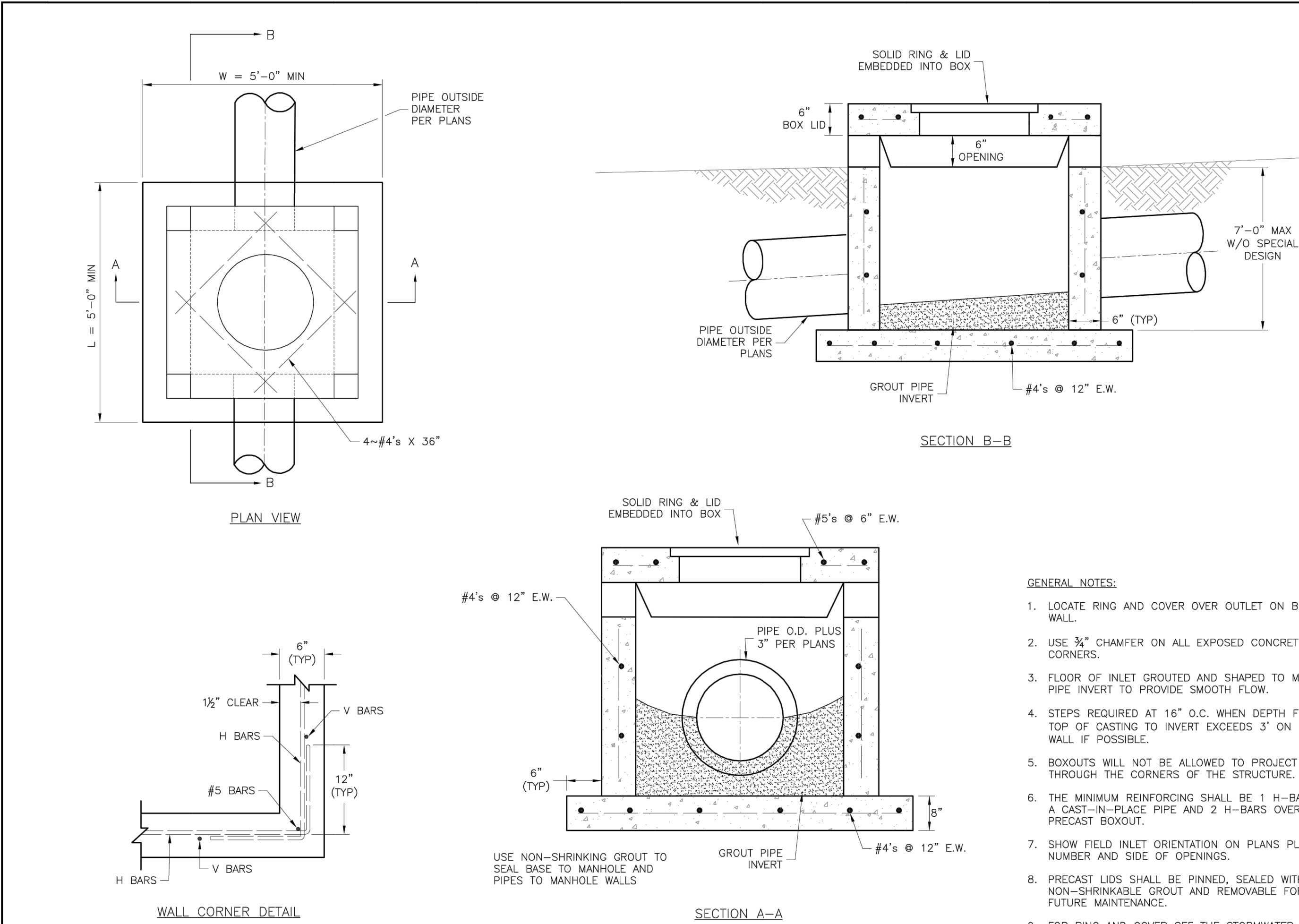
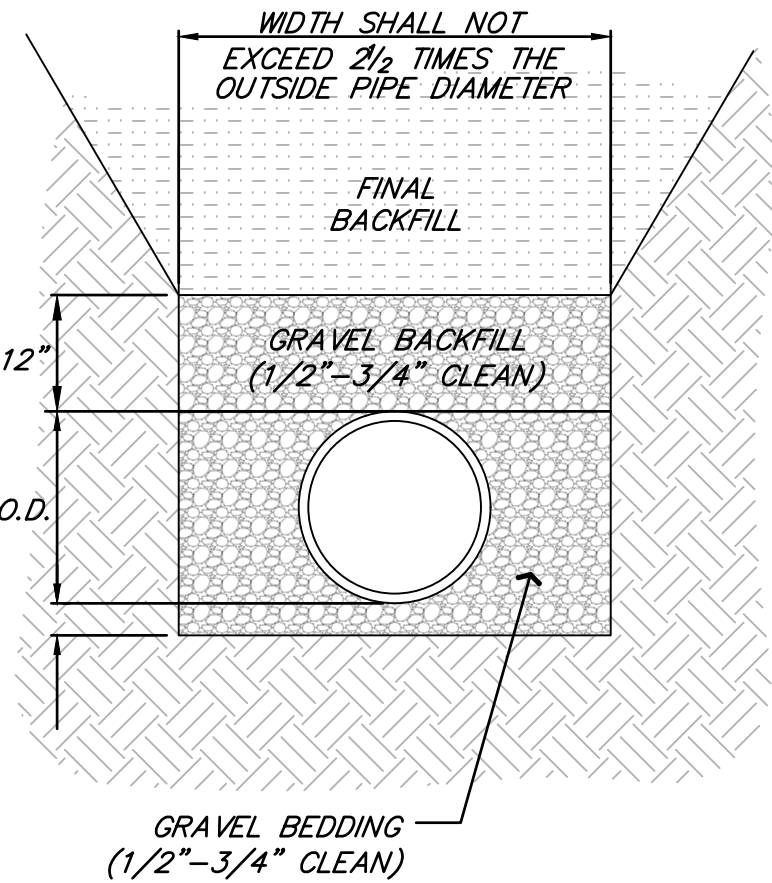
BEDDING

- 1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS
- INITIAL BACKFILL**
- UNDER PAVED AREAS OR WITHIN 4' HORIZONTAL OF PAVED AREAS 1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS
 - UNDER OPEN AREAS 1/2"-3/4" CLEAN AGGREGATE, HAND TAMPED OR MECHANICALLY COMPACTED IN MAX. 4" LIFTS
- FINAL BACKFILL**
- UNDER PAVED AREAS OR WITHIN 4' HORIZONTAL OF PAVED AREAS ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE, ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8", COMPACTED TO 95% OF STANDARD DENSITY PER ASTM D-698
 - UNDER OPEN AREAS ON-SITE OR IMPORTED MATERIAL FREE OF MUCK, FROZEN MATERIAL, EXCESS MOISTURE, ORGANICS, TOPSOIL, RUBBISH, CONSTRUCTION DEBRIS, ROCK OR BRICK LARGER THAN 8", COMPACTED TO 90% OF STANDARD DENSITY PER ASTM D-698

BEDDING DEPTH BELOW PIPE		
PIPE DIAMETER	IN SOIL	IN ROCK
24" AND LESS	4"	6"
27" THRU 60"	4"	9"

PIPE BEDDING DETAIL

NOT TO SCALE



GENERAL NOTES:

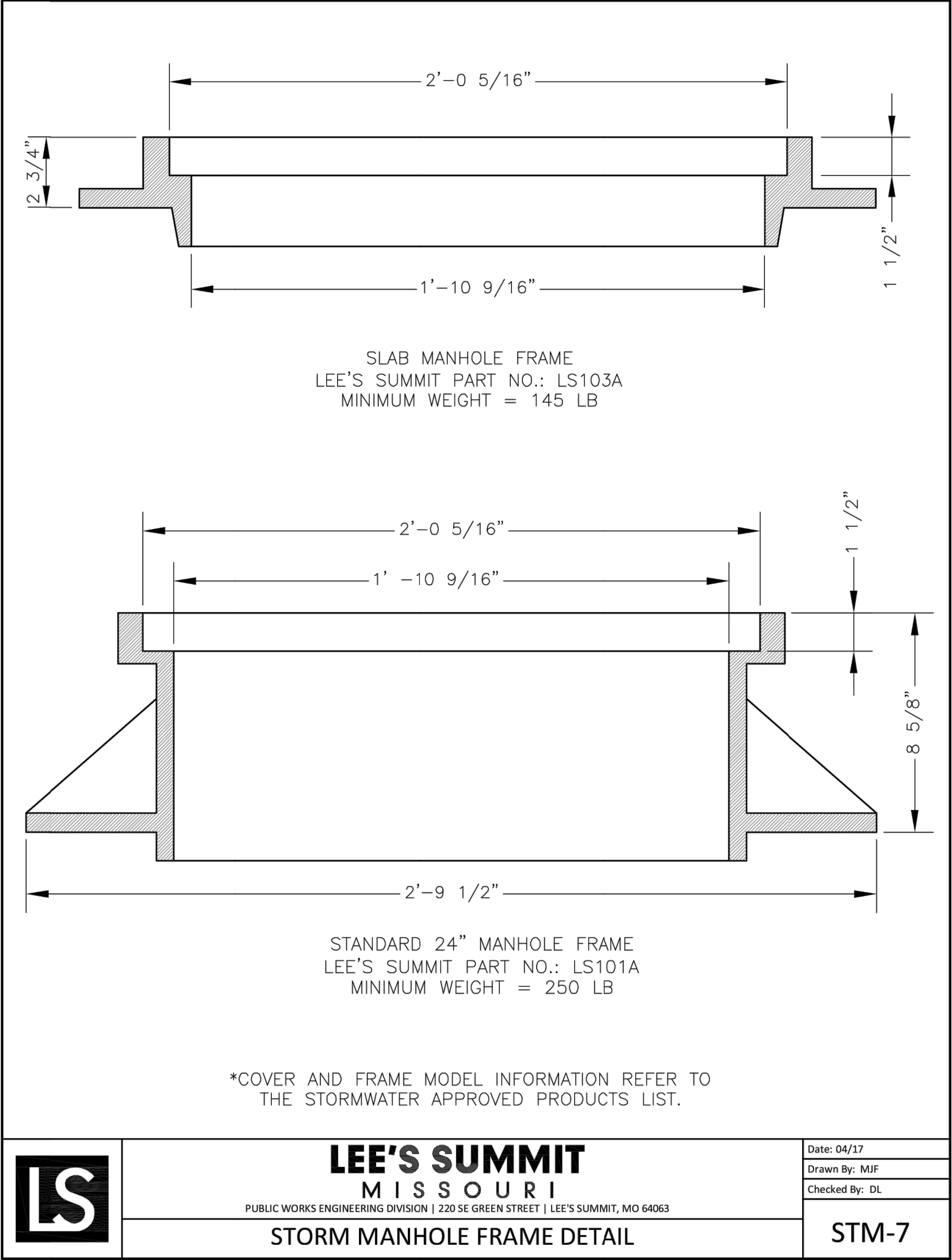
- LOCATE RING AND COVER OVER OUTLET ON BLANK WALL.
- USE 3/4" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.
- FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
- STEPS REQUIRED AT 16" O.C. WHEN DEPTH FROM TOP OF CASTING TO INVERT EXCEEDS 3' ON BLANK WALL IF POSSIBLE.
- BOXOUTS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

LEE'S SUMMIT
MISSOURI

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

FIELD INLET DETAIL

STM-2



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

STORM MANHOLE FRAME DETAIL

STM-7

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

STORM SEWER DETAILS (2)



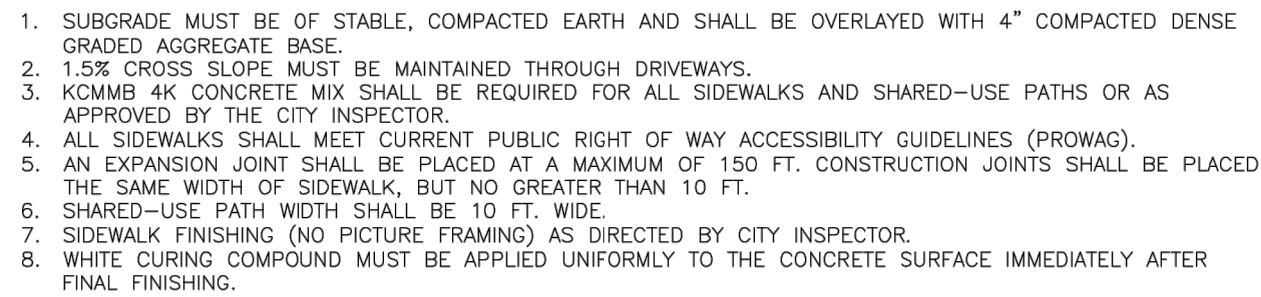
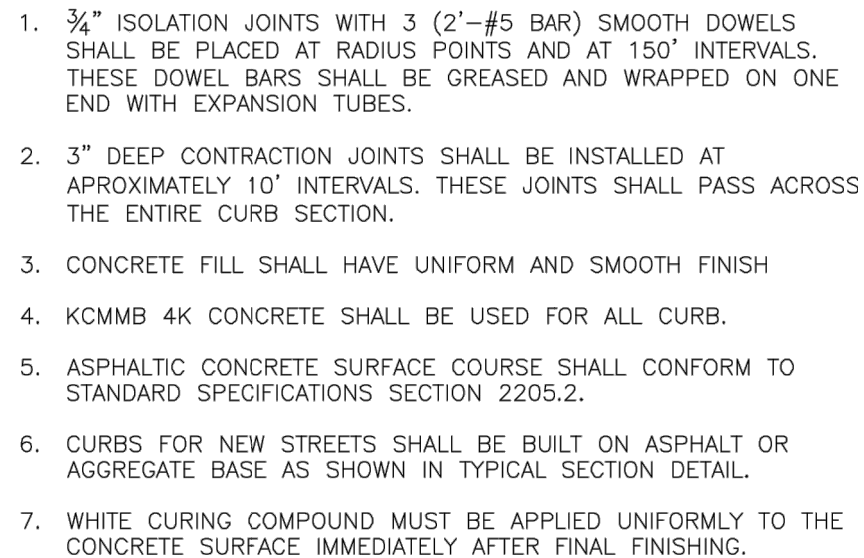
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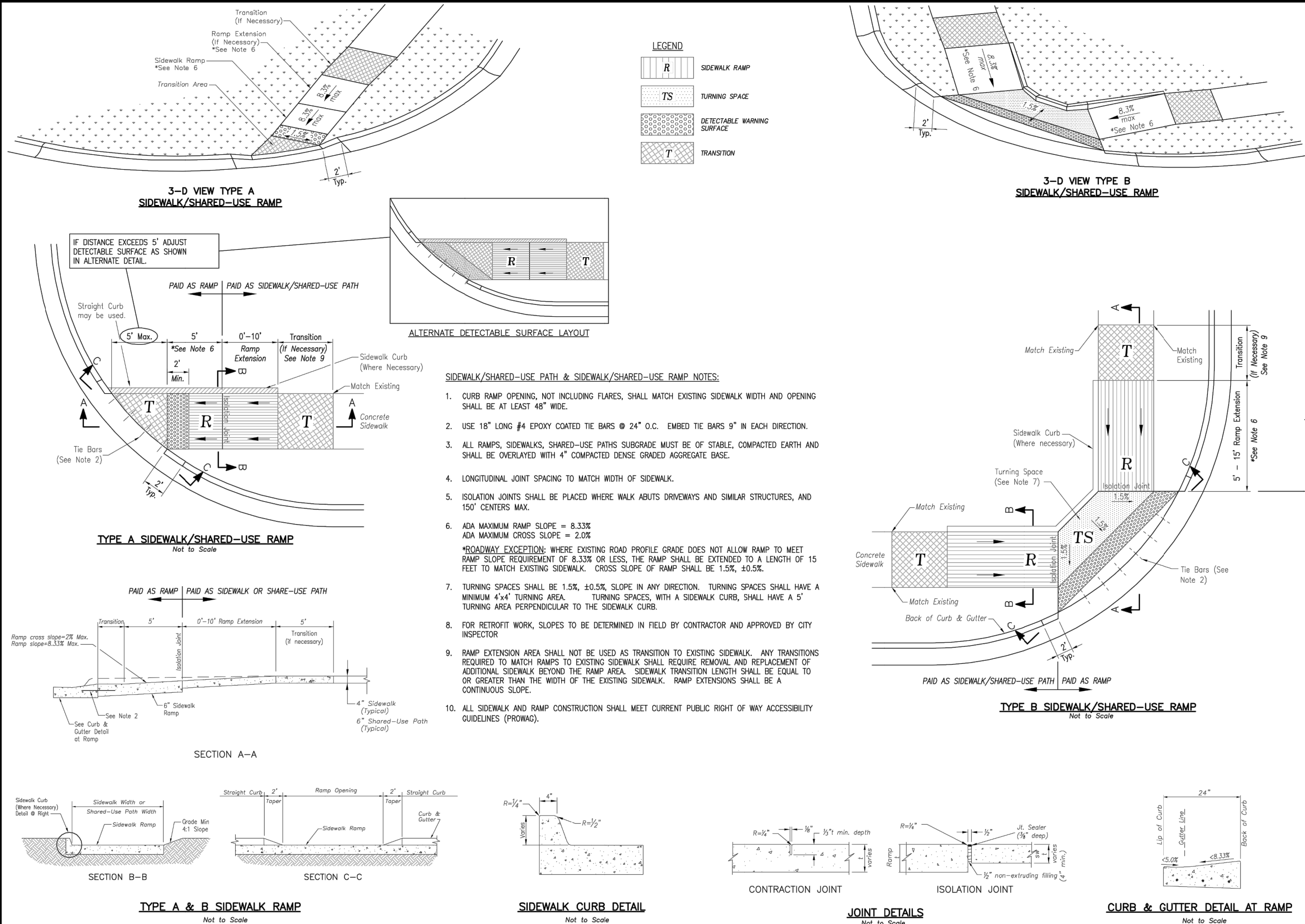
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STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

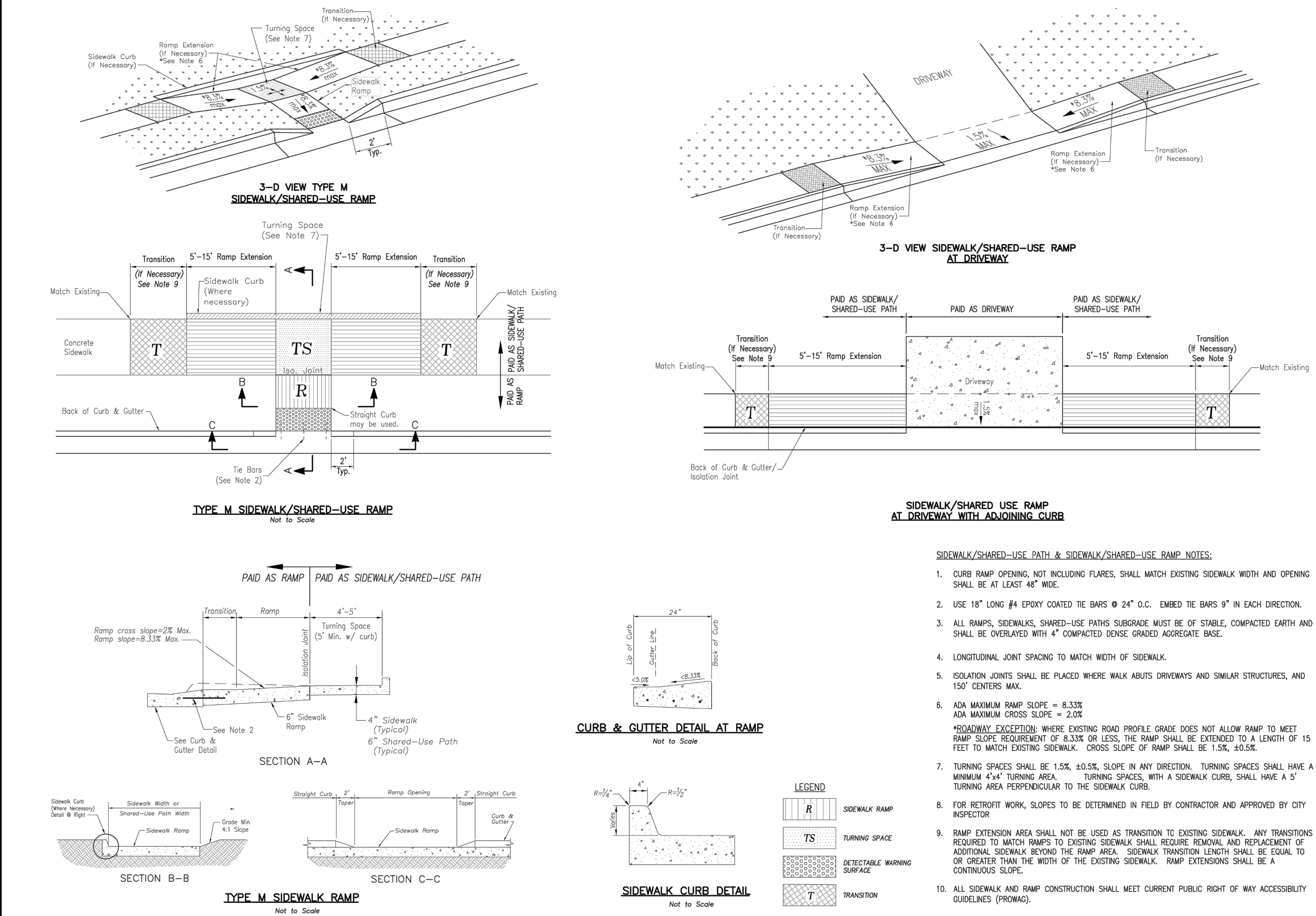
PROJECT
ADA RAMP RETROFIT DETAIL

Drawn By: MJP
Checked By: DL
Date: 04/17
Proj. #: GEN-3A

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

PROJECT
ADA RAMP RETROFIT DETAIL

Drawn By: MJP
Checked By: DL
Date: 04/17
Proj. #: GEN-3B



GEN-3B

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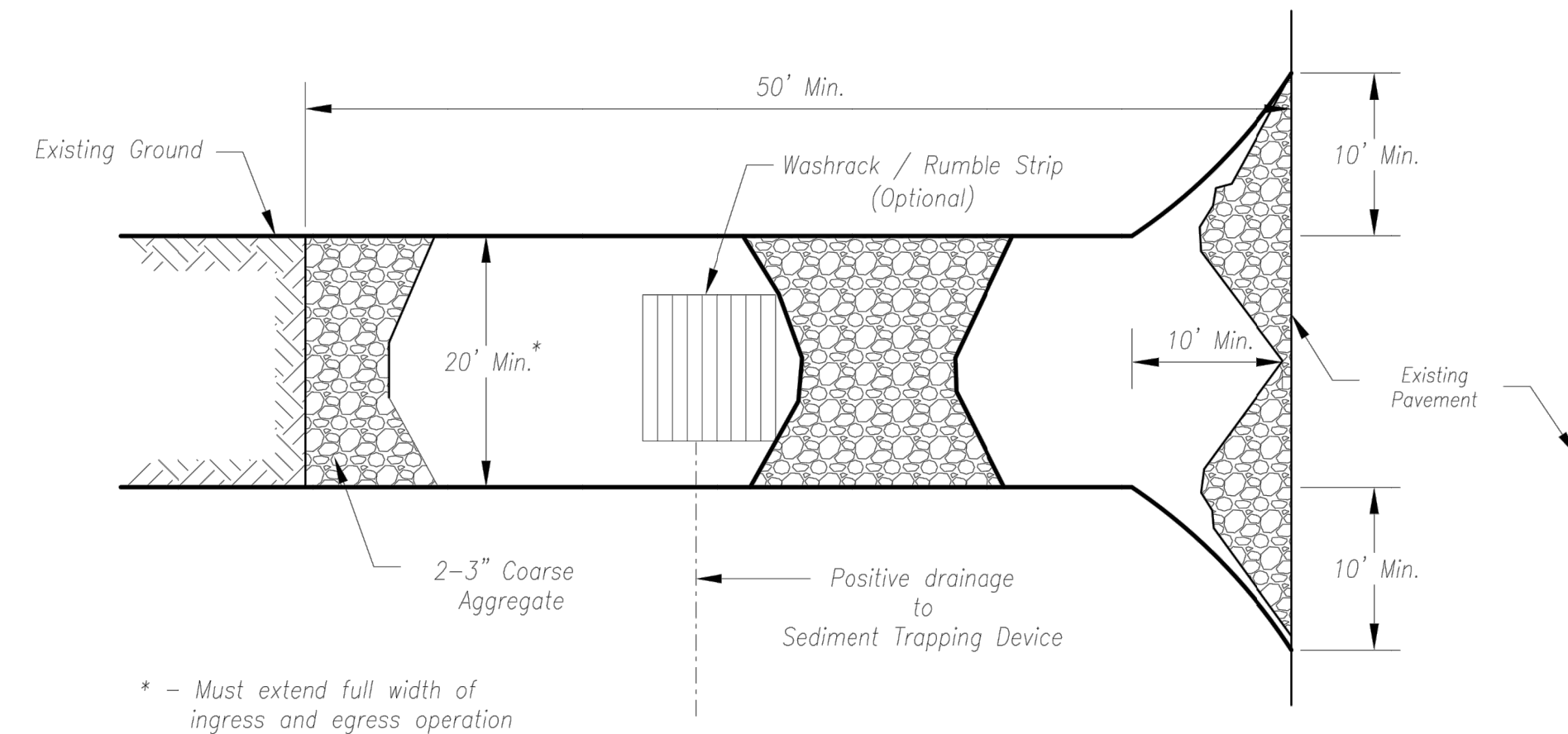
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

ADA RAMP DETAILS

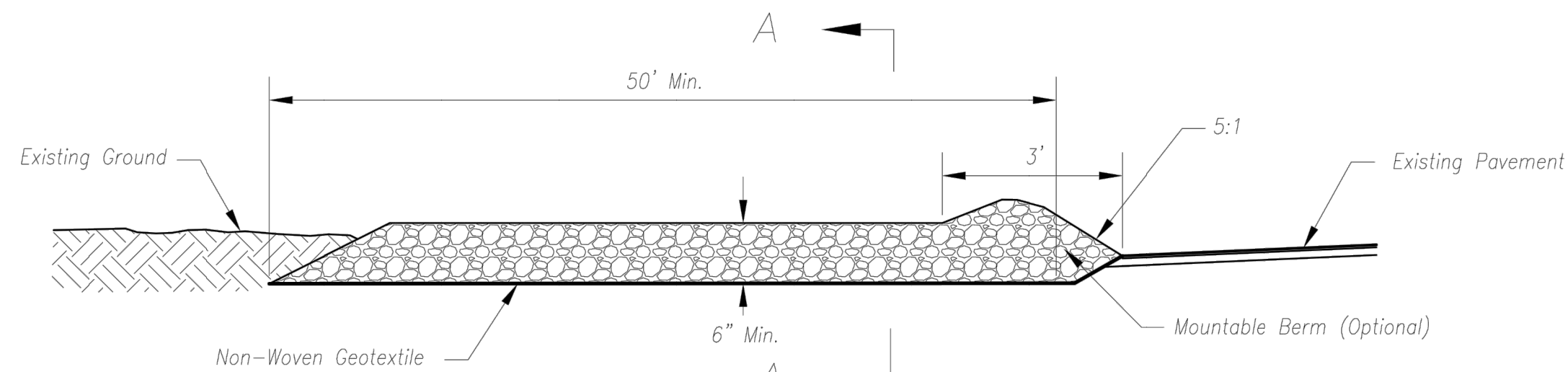
S10, T47N, R22W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI
ZACH A. MYERS
Professional Engineer
NUMBER
FE-2012009232
EXPIRATION DATE
12/31/2021

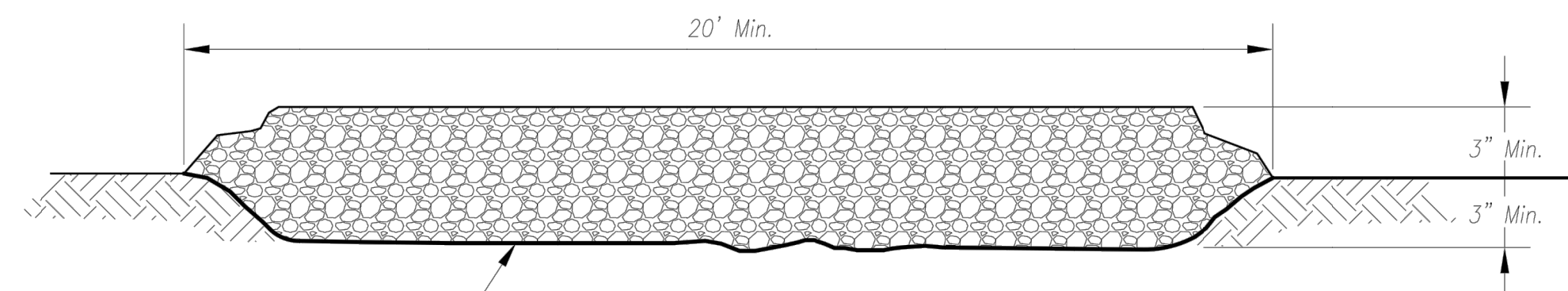
SHEET NUMBER
C505
30 OF 41



Plan View
Not to Scale



Side Elevation
Not to Scale



Section A-A
Not to Scale

Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 2%, construct a 6— to 8—inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
6. Divert all surface runoff and drainage from the entrance to a sediment control device.
7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

1. Reshape entrance as needed to maintain function and integrity of Installation. Top dress with clean aggregate as needed.

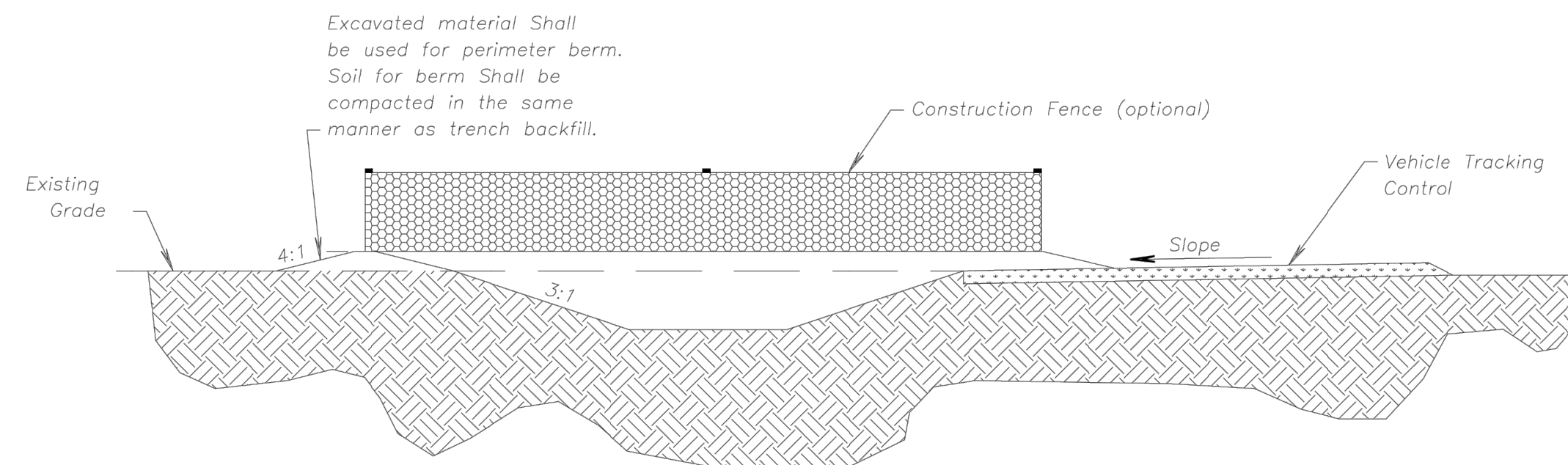
CONSTRUCTION ENTRANCE

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
5. A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, wasted pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water-tight container and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.



CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION Kansas City Metro Chapter 		KANSAS CITY METRO CHAPTER
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT		STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016



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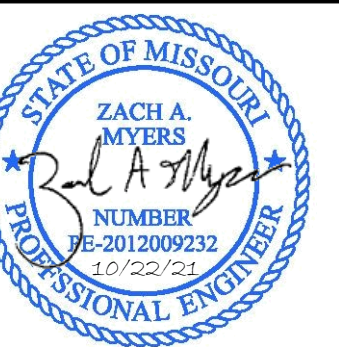
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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

CONSTRUCTION ENTRANCE DETAILS

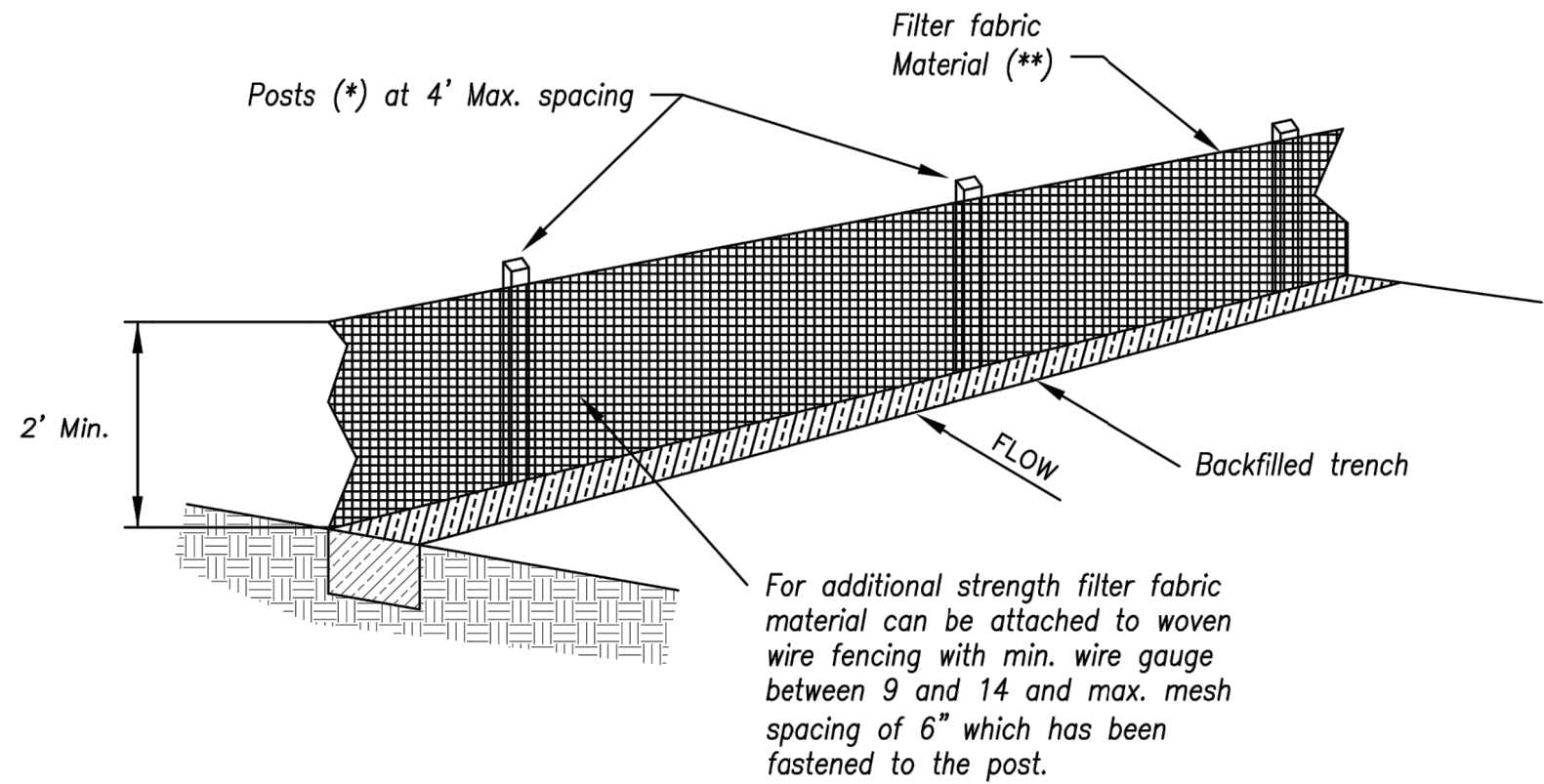
S10, 147N, R32W
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SHEET NUMBER

C601
31 OF 41

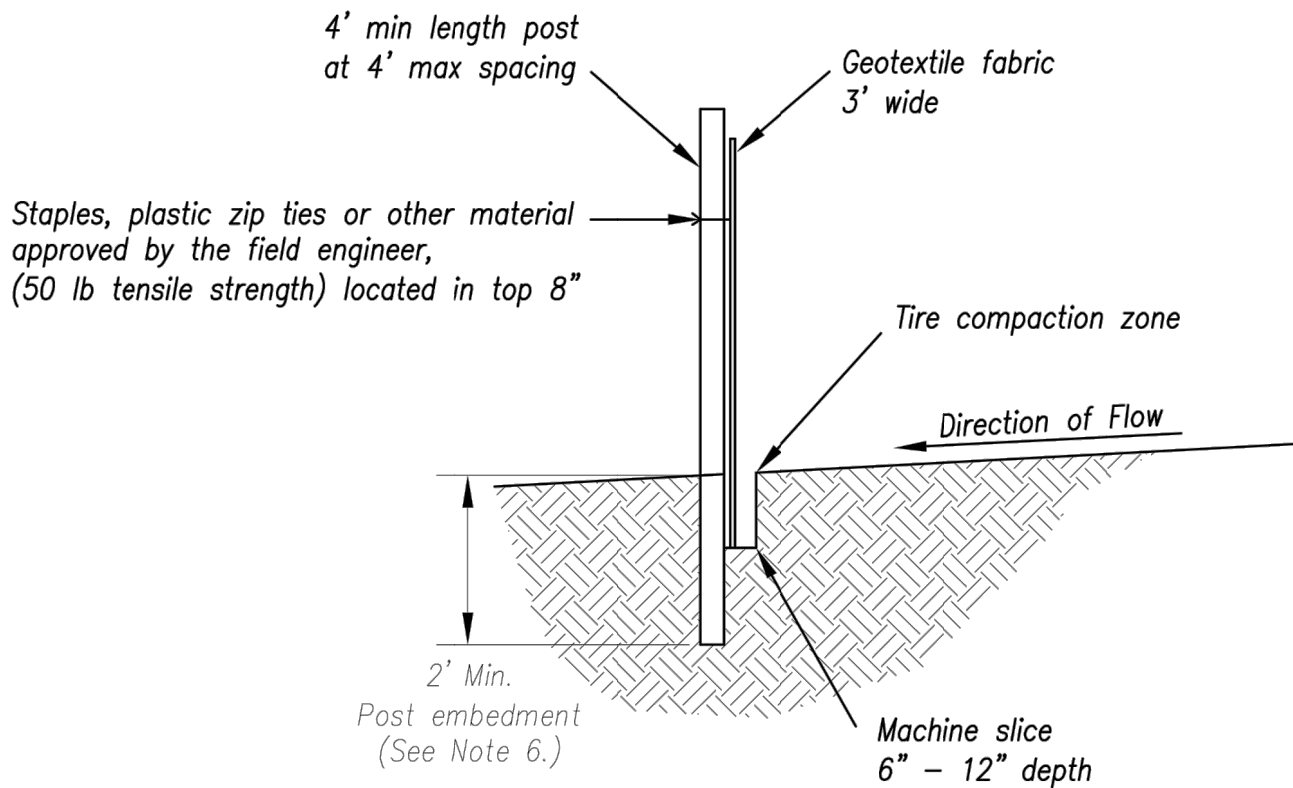
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- (*) POSTS
- MIN. LENGTH 4'
 - HARDWOOD 1 3/8" x 1 3/8"
 - NO.2 SOUTHERN PINE 2 5/8" x 2 5/8"
 - STEEL 1.33 LB/FT

(**) - Geotextile Fabric shall meet the requirements of AASHTO M288

SILT FENCE DETAILS
Not to Scale



Notes:

1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches 1/2 the height of silt fence.
2. Repair as necessary to maintain function and structure.

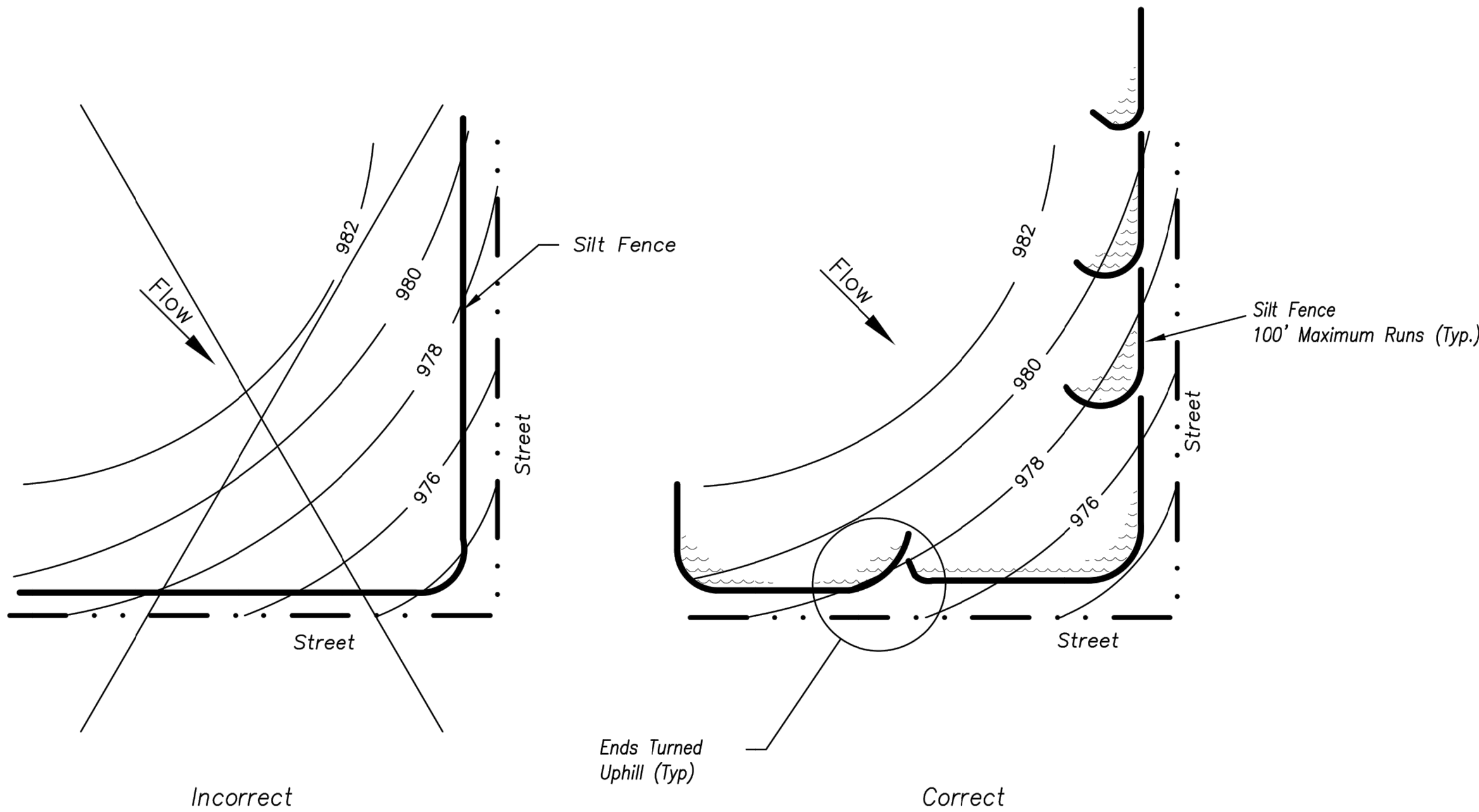
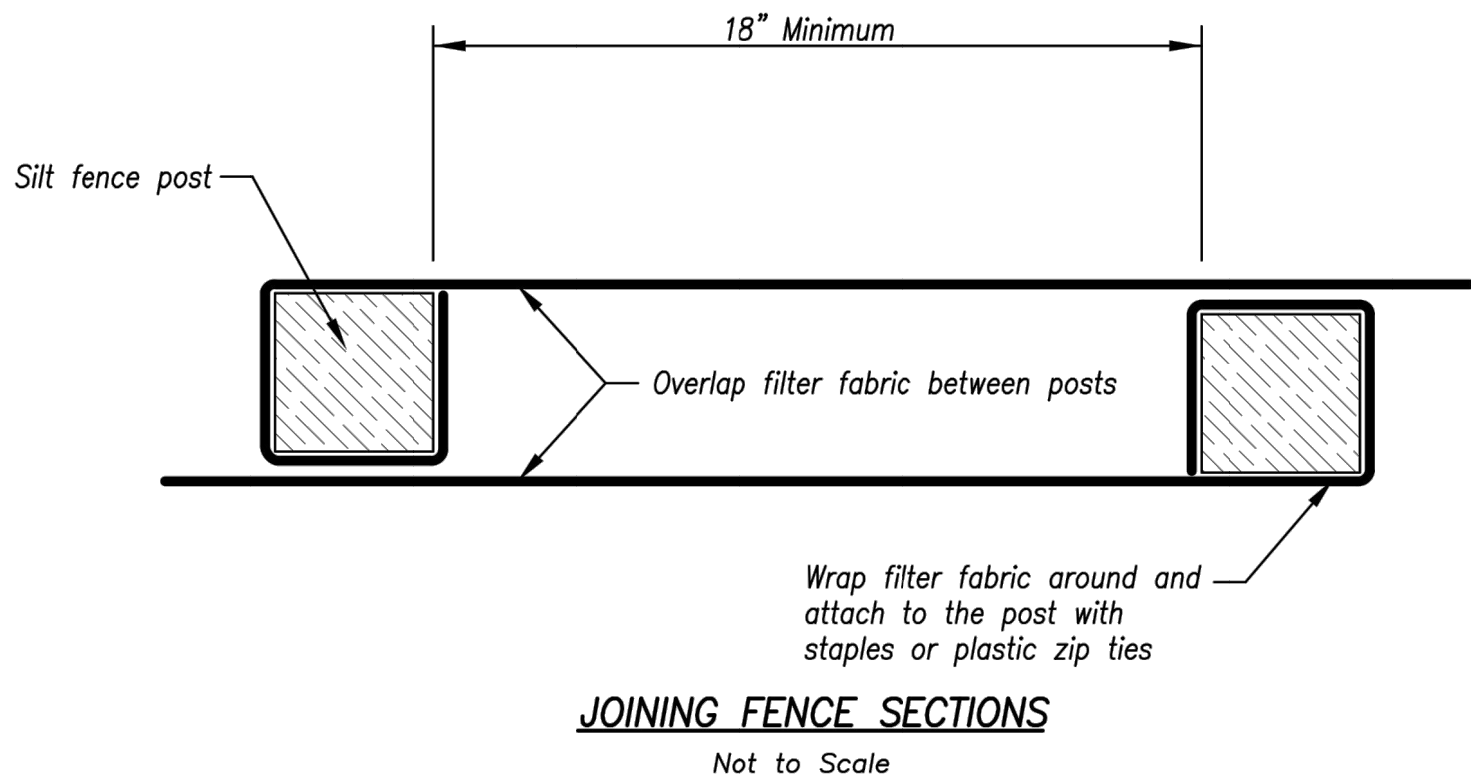
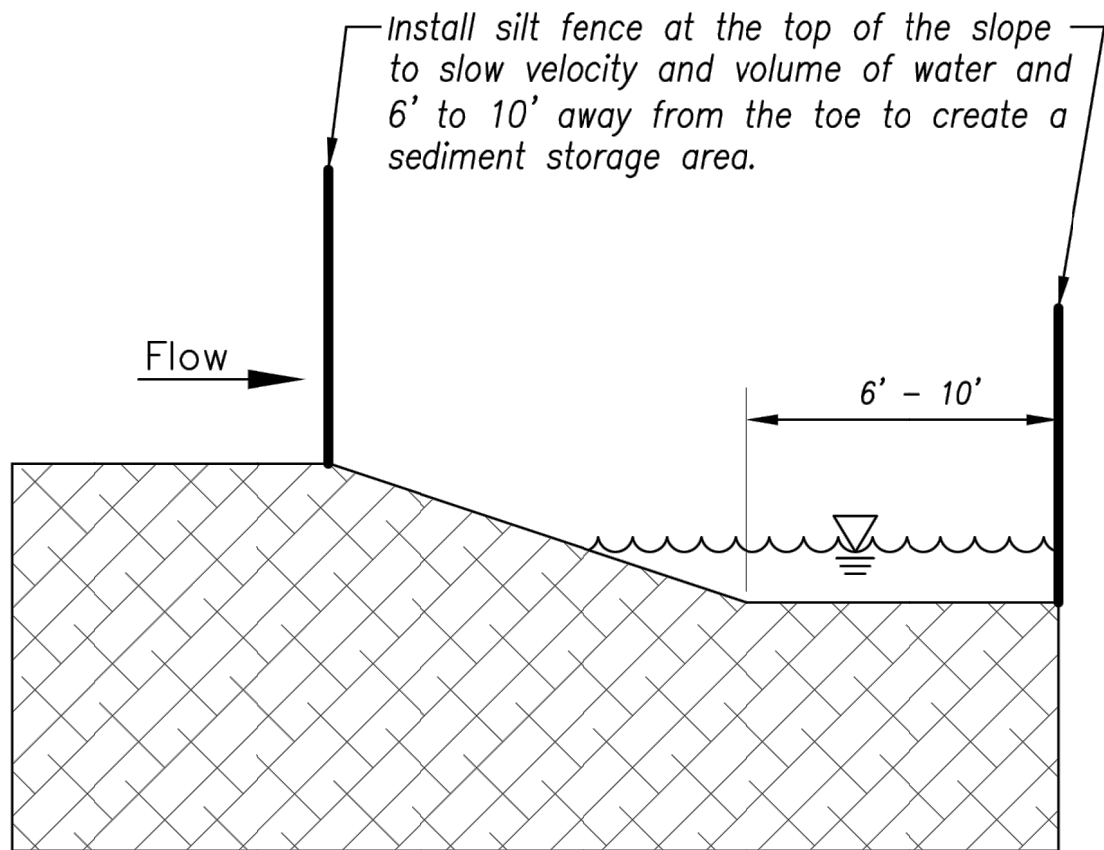


Figure A

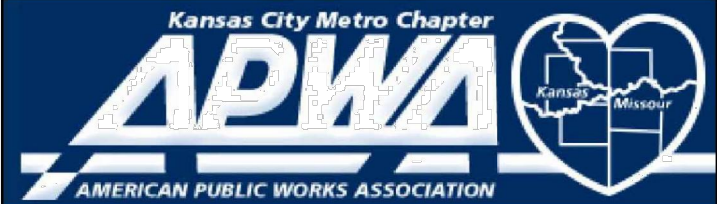
SILT FENCE LAYOUT
Not to Scale



JOINING FENCE SECTIONS
Not to Scale

AMERICAN PUBLIC WORKS ASSOCIATION

Kansas City Metro Chapter



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SILT FENCE

STANDARD DRAWING
NUMBER ESC-03
ADOPTED:
10/24/2016

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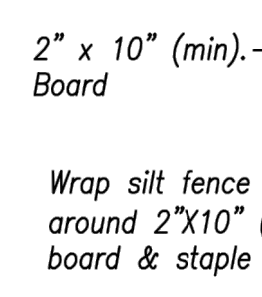
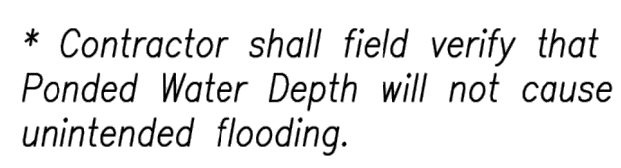
SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

SILT FENCE DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



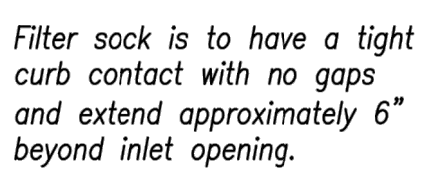
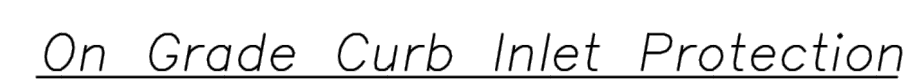
SHEET NUMBER
C603
33 OF 41



EARLY STAGE CURB INLET
(Open Box and Prior to Pouring
Curb and Inlet Throat)

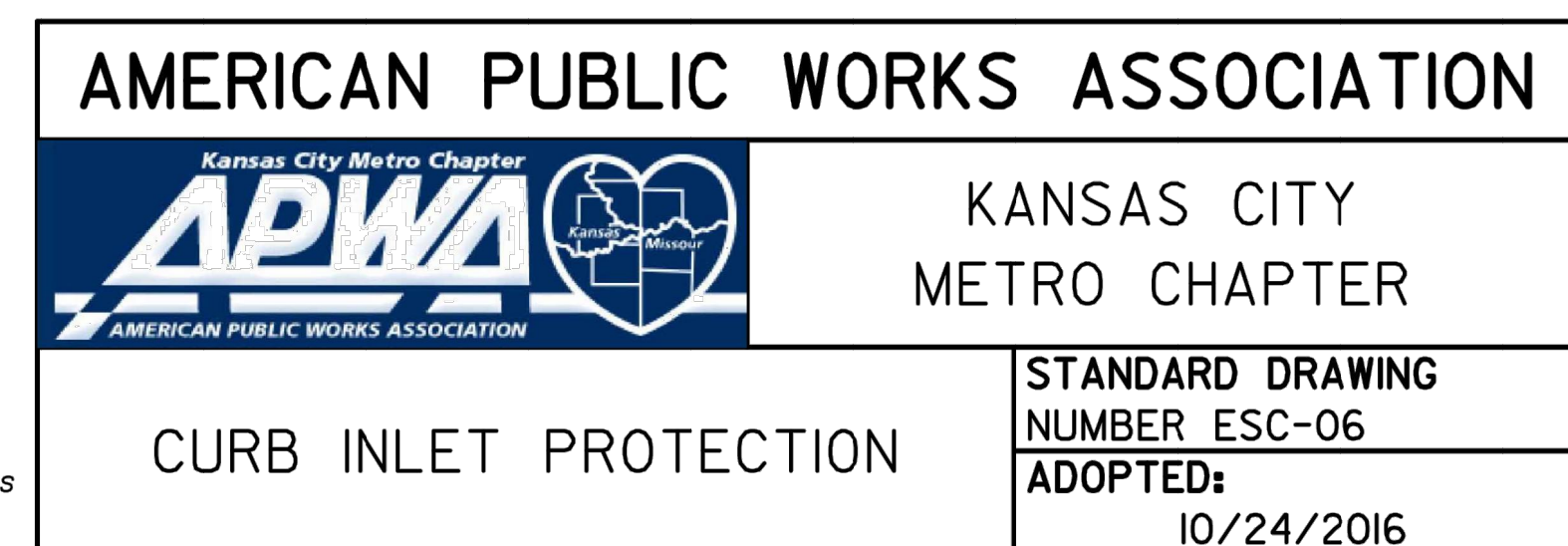
- Maintenance:

1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.



Sump Inlet Sediment Filter

LATE STAGE CURB INLET
(After Pouring Curb and Inlet Throat)



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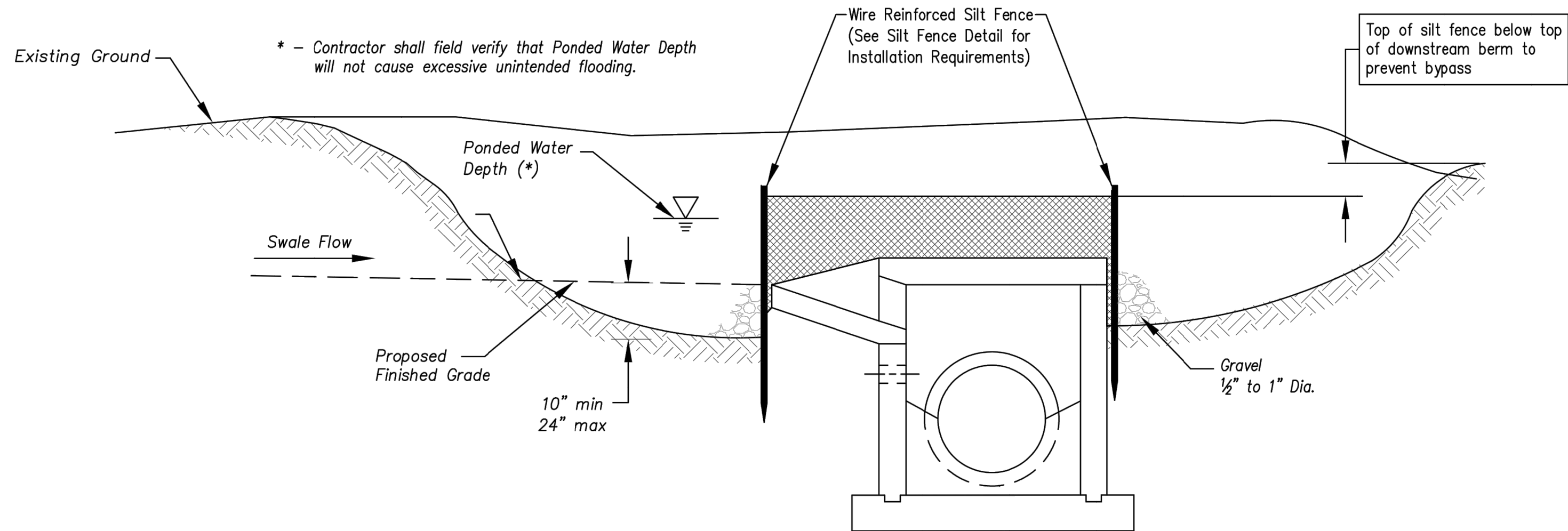
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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

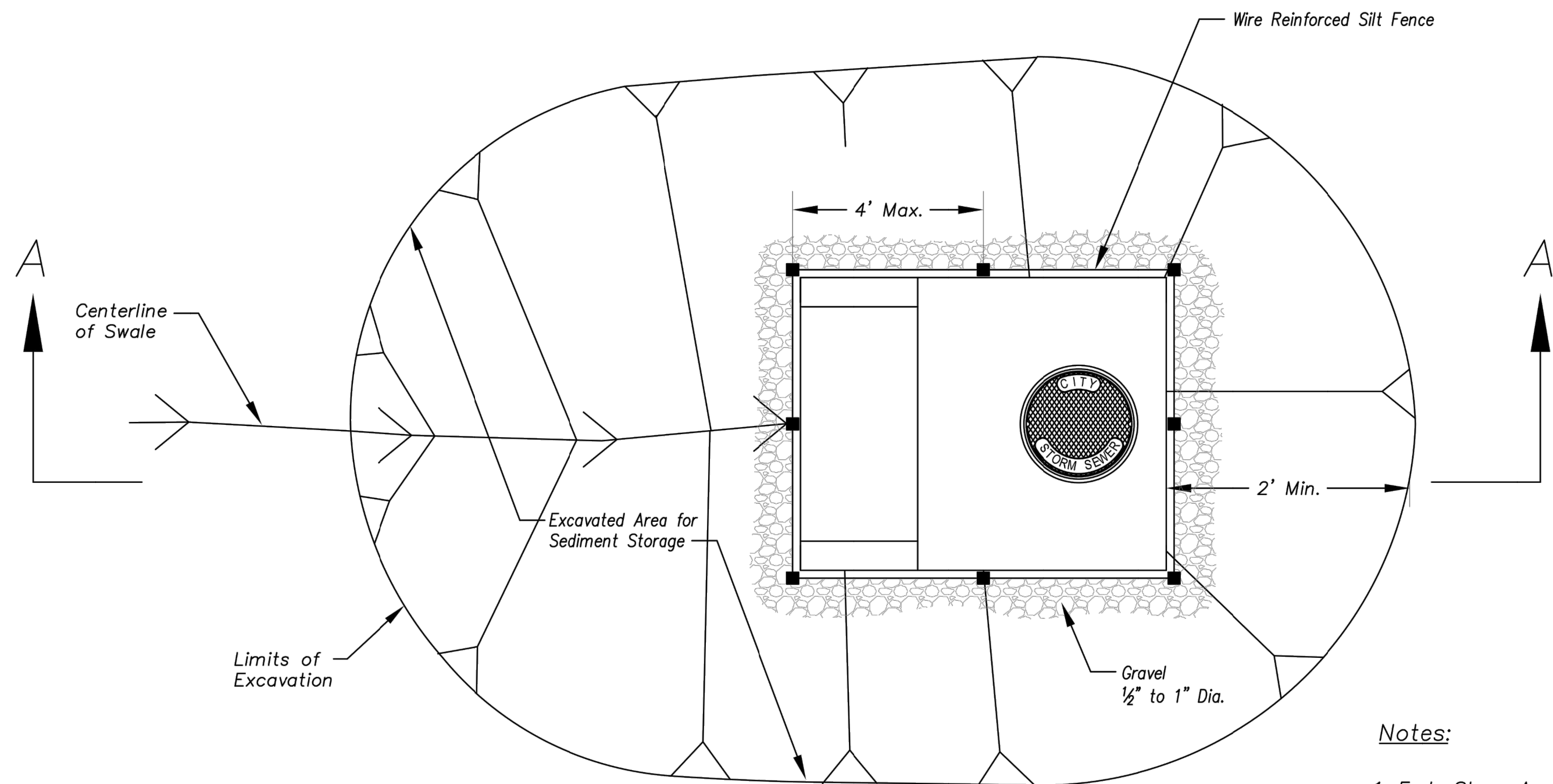


SHEET NUMBER
C604
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Section A-A
Not to Scale

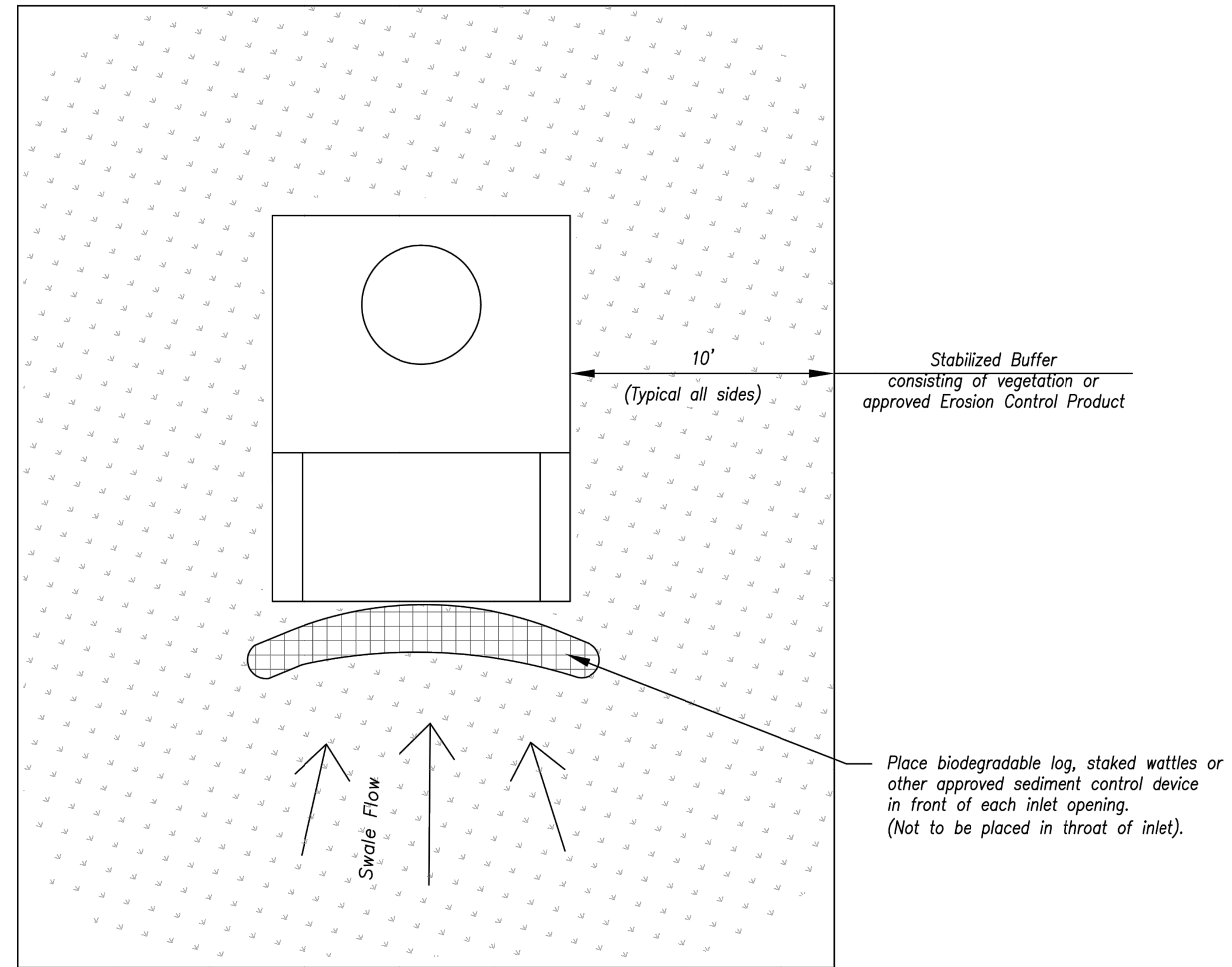


EARLY STAGE AREA INLET
(All open boxes and inlets not at final grade)

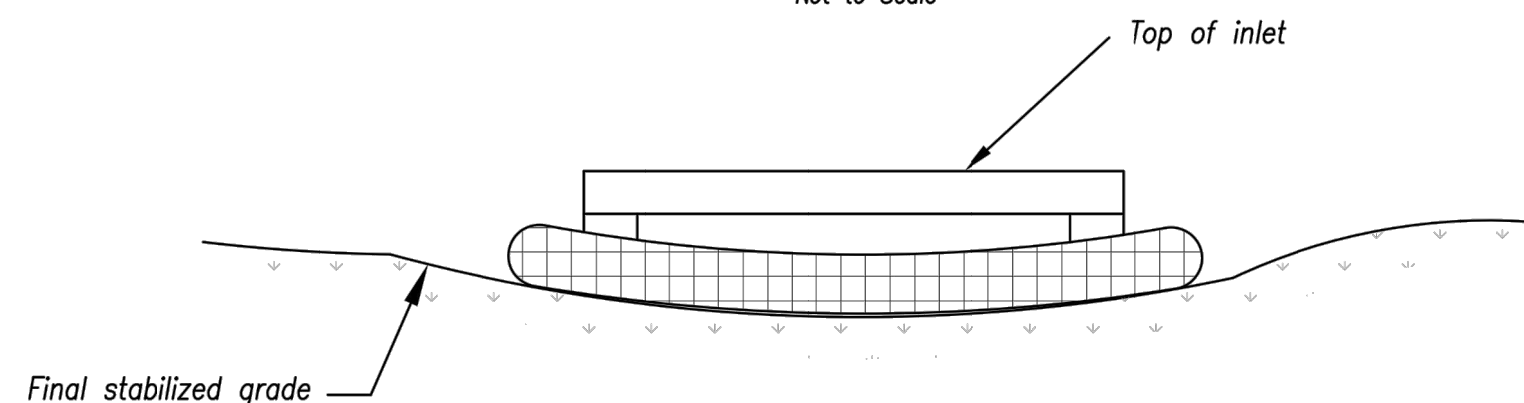
Plan
Not to Scale

Notes:

1. Early Stage Area Inlet Sediment Barrier to be installed immediately after inlet or junction box is constructed.
2. Silt fence shall remain in place until excavated area is removed and Late Stage Area Inlet is being installed.
3. Backfill excavated area ONLY after final grading of the site. Stabilization of the site is to immediately follow.
4. Wire reinforced silt fence may be used in place of silt fence attached to wood frame.



Plan
Not to Scale



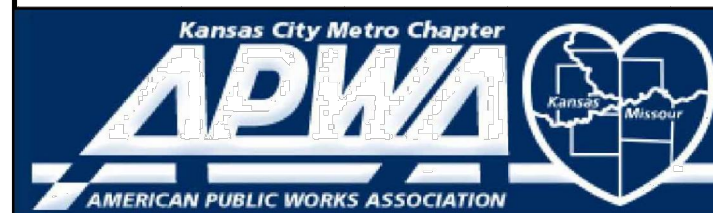
Front View

LATE STAGE AREA INLET
(Area inlets at final grade and existing inlets)

Maintenance:

1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.

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AREA INLET AND
JUNCTION BOX PROTECTION

STANDARD DRAWING
NUMBER ESC-07
ADOPTED:
10/24/2016

Modified from 2015 Overland Park Standard Details
for Erosion and Sediment Control.

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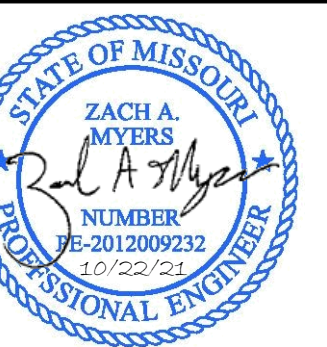
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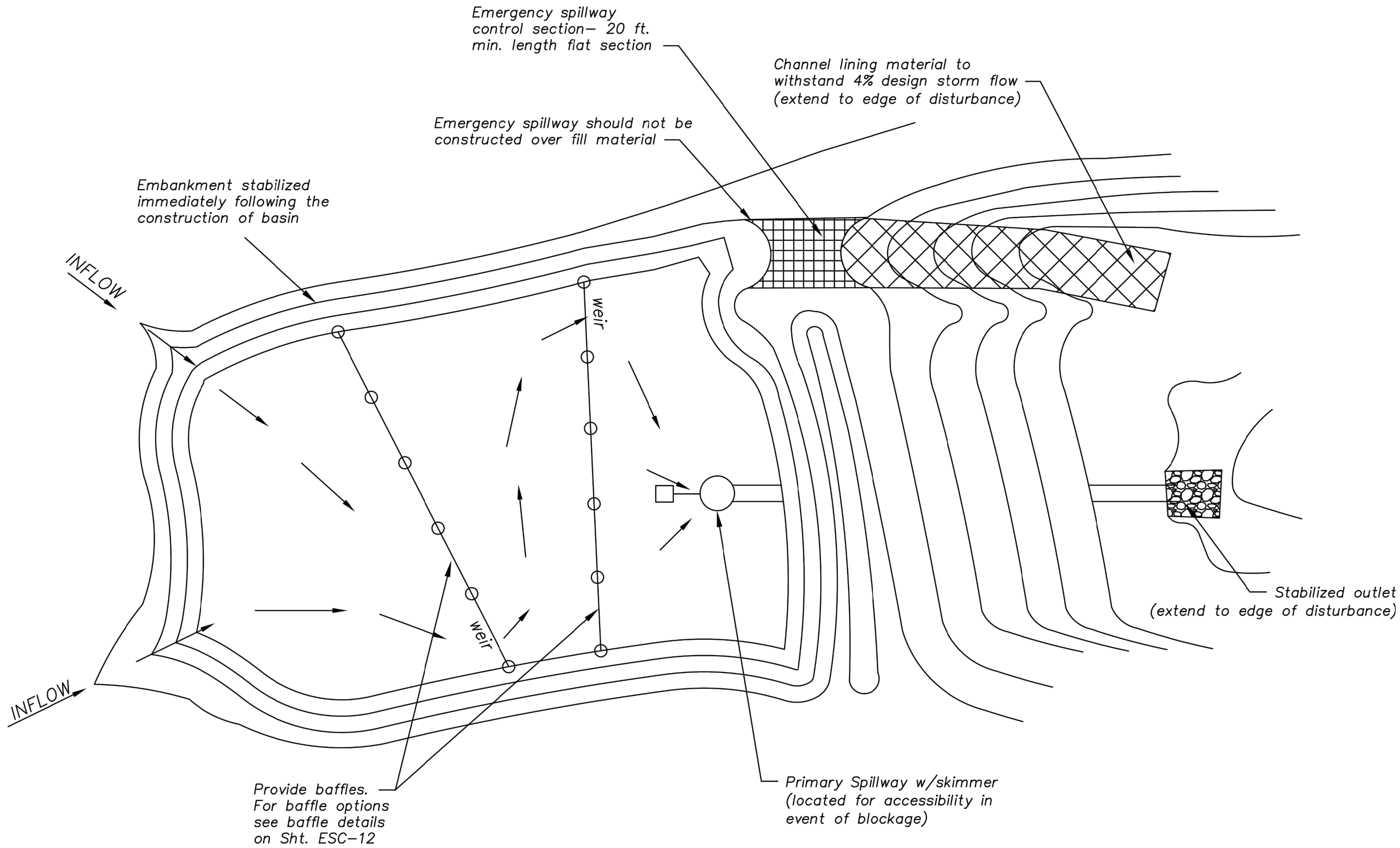
AREA INLET
PROTECTION DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI



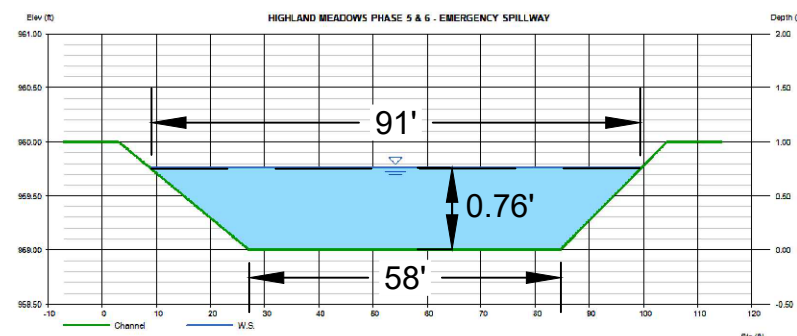
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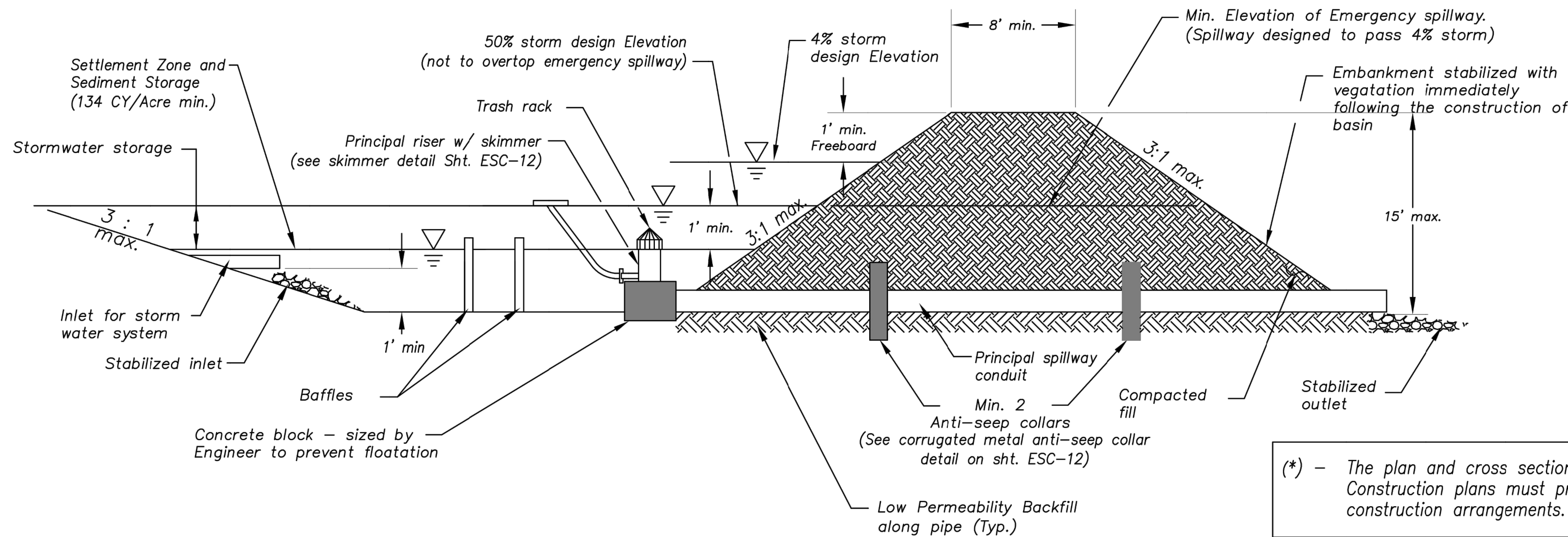


EMERGENCY SPILLWAY CALCULATIONS:

DEPTH - 0.76 FT
Q_{SPILL} - 203.4 CFS
Q_{top} - 194.2 CFS
AREA - 56.4 SQ.FT.
V - 3.61 FT/S
W_P - 90.9 FT
Y_C - 0.67
TOP W - 91 FT
BOT. W - 58 FT



Plan View (*)
Not to Scale



Cross Section (*)
Not to Scale

(*) - The plan and cross section are schematic in nature. Construction plans must provide specific site construction arrangements.

Sediment Basin Design Summary (**)

Design Item	Basin #1	Basin #2	Units	Notes
Site Data:				
Tributary Drainage Area to Pond	18.87		Acre	
50% (2 yr) Design Flow	52		cfs	
4% (25 yr) Design Flow	165		cfs	
Pond Data:				
Minimum Sediment Storage Volume	2,529		cu yd	134 cy/acre required minimum
Provided Sediment Storage Volume	3,550		cu yd	
Bottom Elevation	949.00		Ft	
Sediment Cleanout Elevation	951.40		Ft	Elevation equal to 20% of original design volume
Top of Riser Elevation	954.50		Ft	Top of dry storage volume
Emergency Spillway Elevation	959.00		Ft	at or above Q-2 elevation. 1.0 ft min above principal spillway
Top of Dam Elevation	959.00		Ft	1.0 ft min above Q-25 elevation
Basin Shape Data:				
A = Area at Normal Pool	33,261		SF	
L = Length of Flow Path	505		Ft	
We = Effective Width = A/L	88.4		Ft	
Length to Width Ratio = L/We	3.7			
Principal Spillway Data:				
Riser Pipe dia	60		in	15" min. Size for 2 year flow minimum
Barrel Pipe dia	54		in	15" min. Size for 2 year flow minimum
Concrete Base size for Riser Pipe	1.5		CY	Size to prevent flotation. 1.25 safety factor required
Skimmer Size	6"			Designer to provide specific details and calculations per application to dewater in 48 to 72 hours
Emergency Spillway Data:				
Design Depth in Spillway	0.76		ft	
Design Velocity in Spillway	3.61		ft/sec	
Lining Material	CH-CL			Designer to provide specific details and calculations per application

(**) - Required on all Sediment Basin Plan Sheets

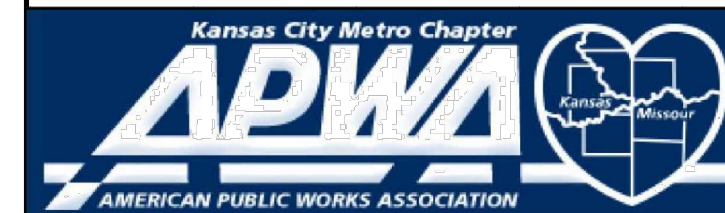
Sediment Basin Notes:

- Interior baffles shall be provided to reduce short-circuiting of the basin. See Sht. ESC-12 for approved baffle options.
- Emergency spillways to be located in a non-fill location when feasible and shall be lined with a non-erodible material such as Riprap or Turf Reinforcement Mat.
- When directed, sediment basins shall be fenced using construction fence or other material for safety reasons and include warning signs, reading: "Danger - KEEP OUT".

Maintenance:

- Check temporary sediment basins after periods of significant runoff.
- Remove sediment and restore the basin to its original dimensions when sediment accumulates to 20% of the storage capacity.
- Immediately repair any erosion damage to the embankment and outlets.
- Repair and/or replace baffles as necessary to maintain function and integrity of installation.
- Keep outlet, skimmer and pool area free of all trash and other debris.

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KANSAS CITY
METRO CHAPTER

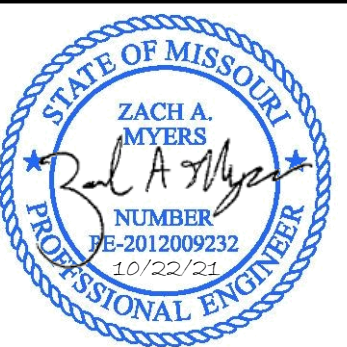
SEDIMENT BASIN

STANDARD DRAWING
NUMBER ESC-II
ADOPTED:
10/24/2016

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

SEDIMENT BASIN

S10, T47N, R32W
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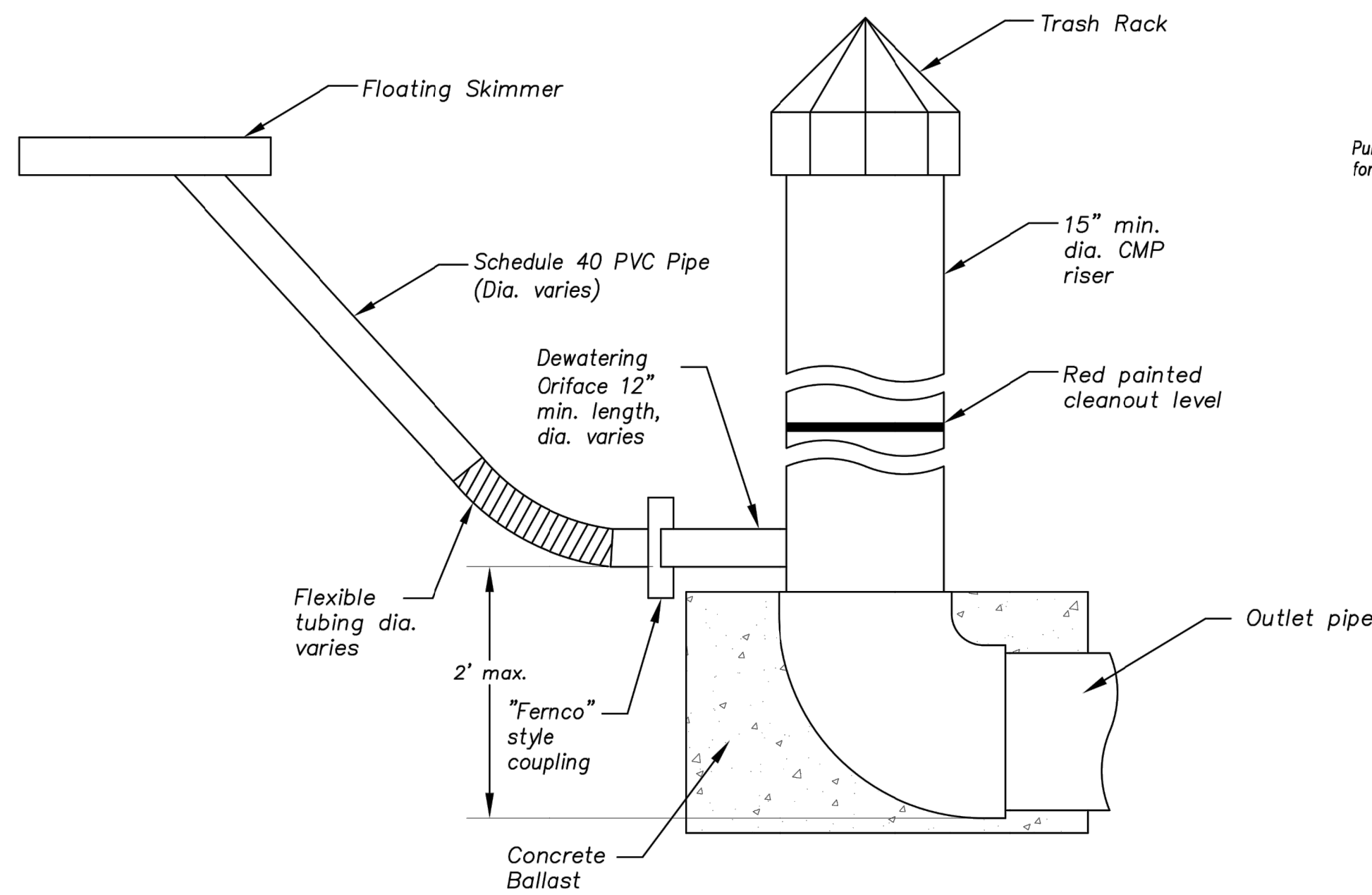
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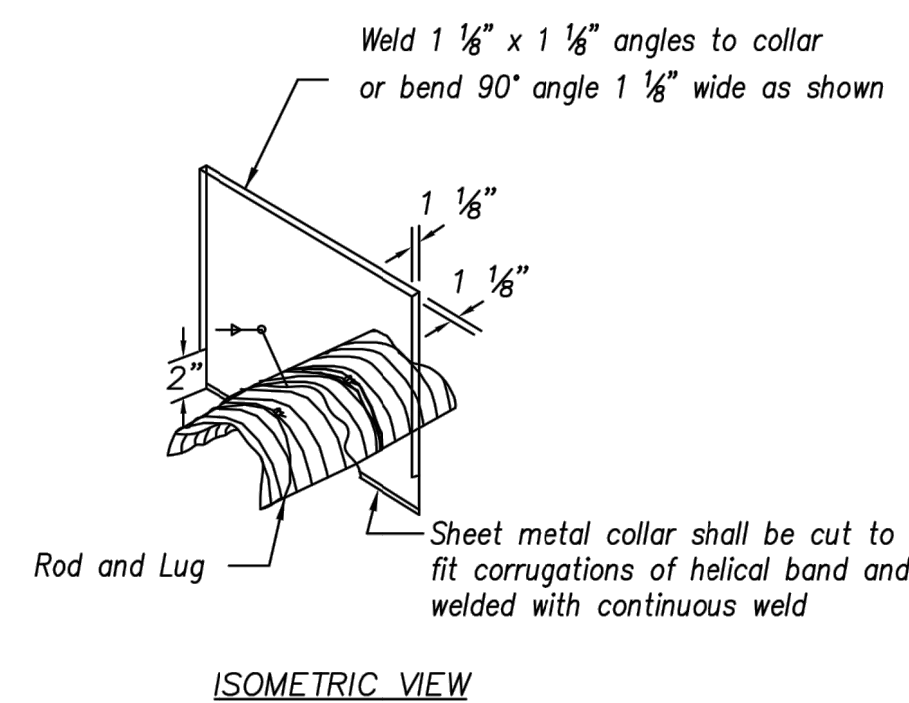
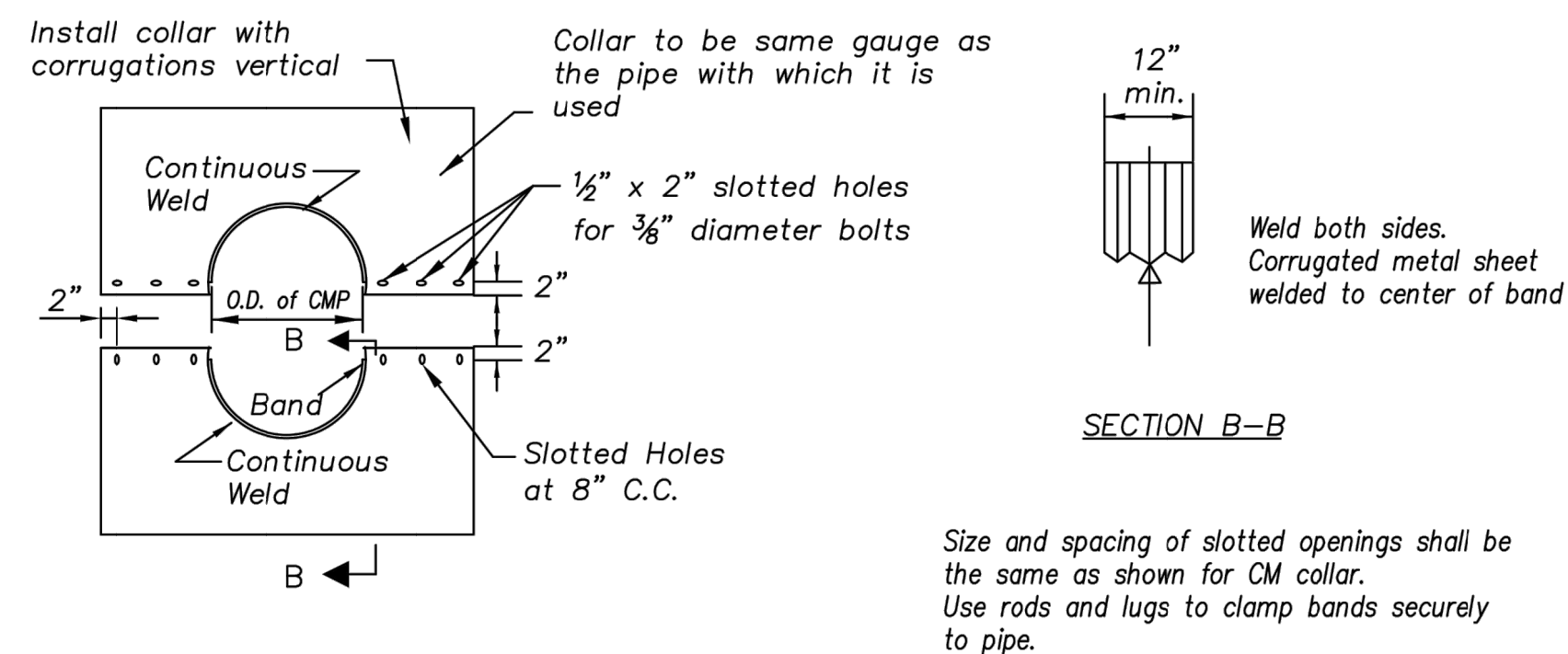
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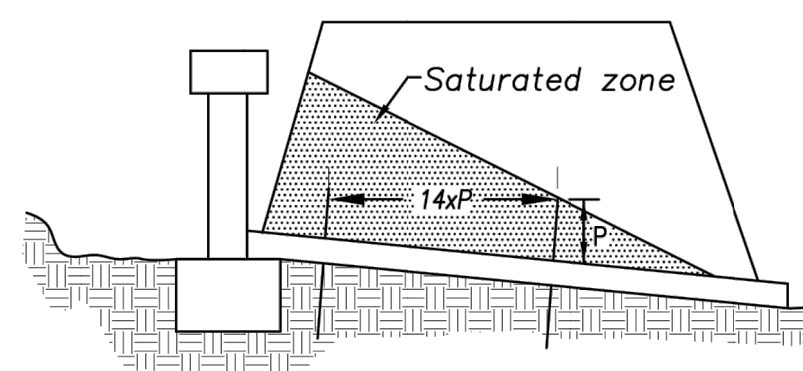
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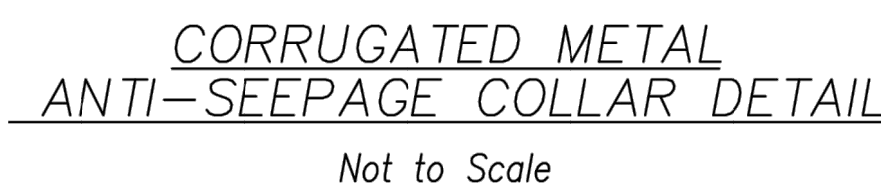
PRINCIPAL SPILLWAY DETAIL



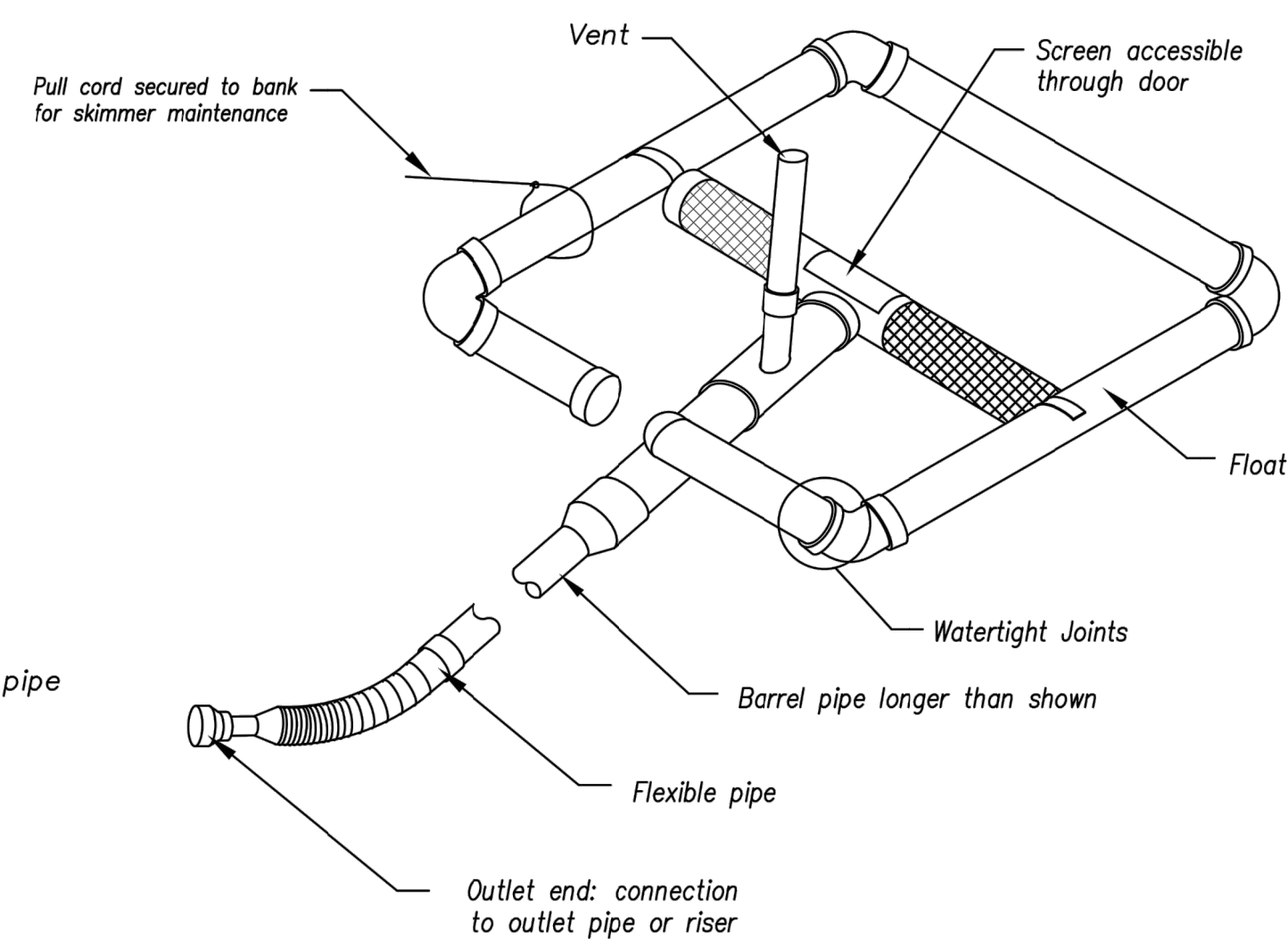
ISOMETRIC VIEW



ANTI-SEEPAGE COLLAR LOCATIONS

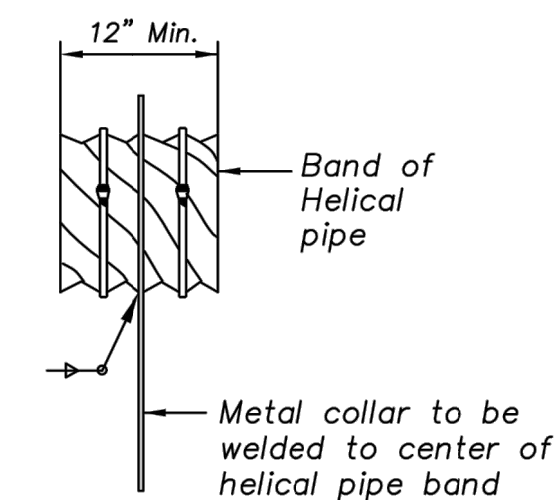


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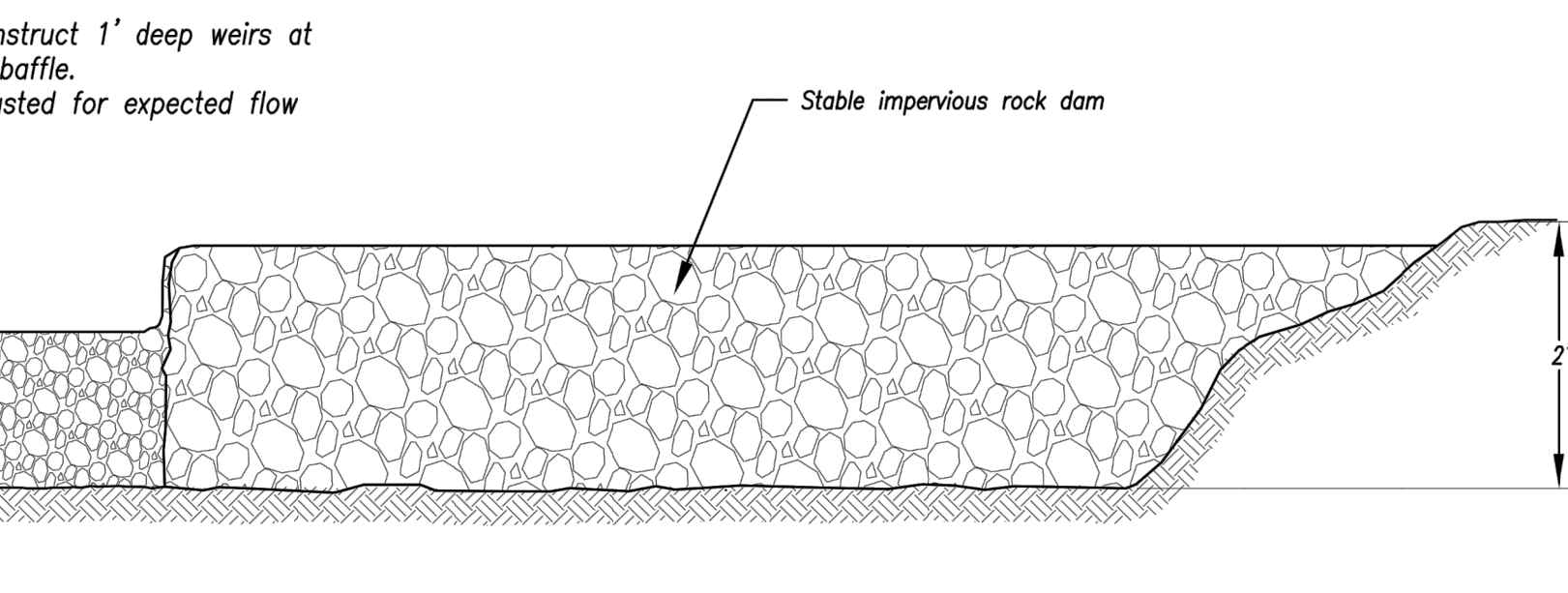
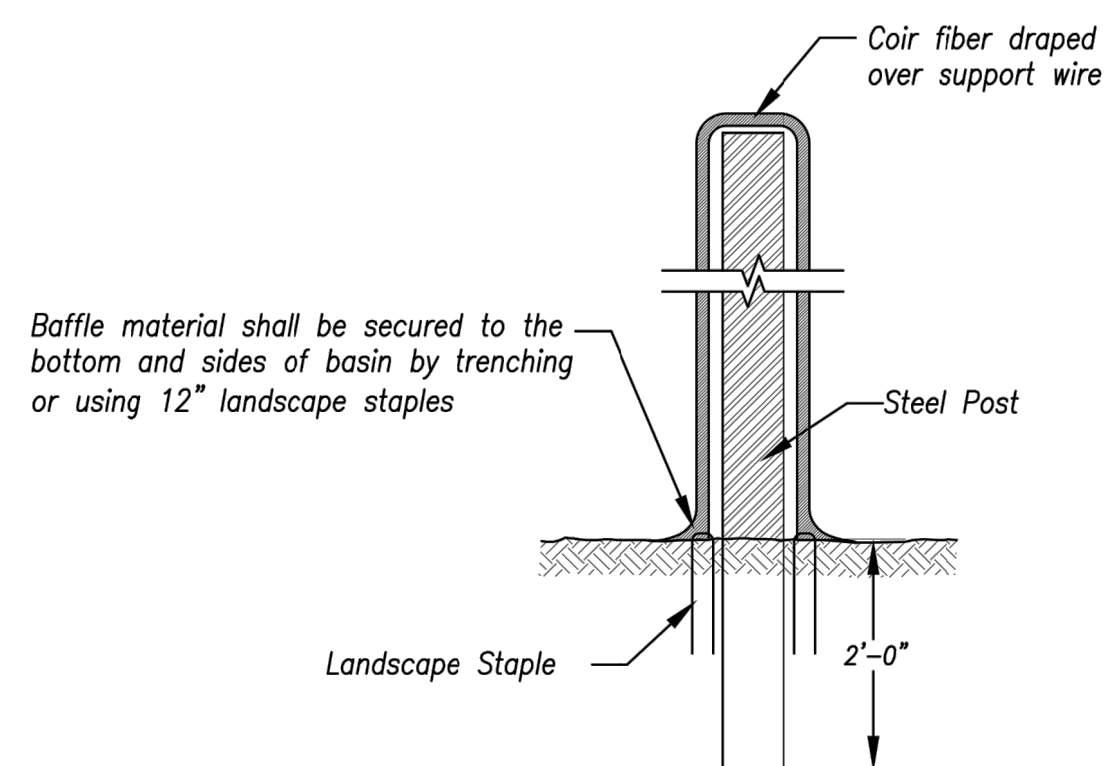


SKIMMER DETAIL (Typ.) *

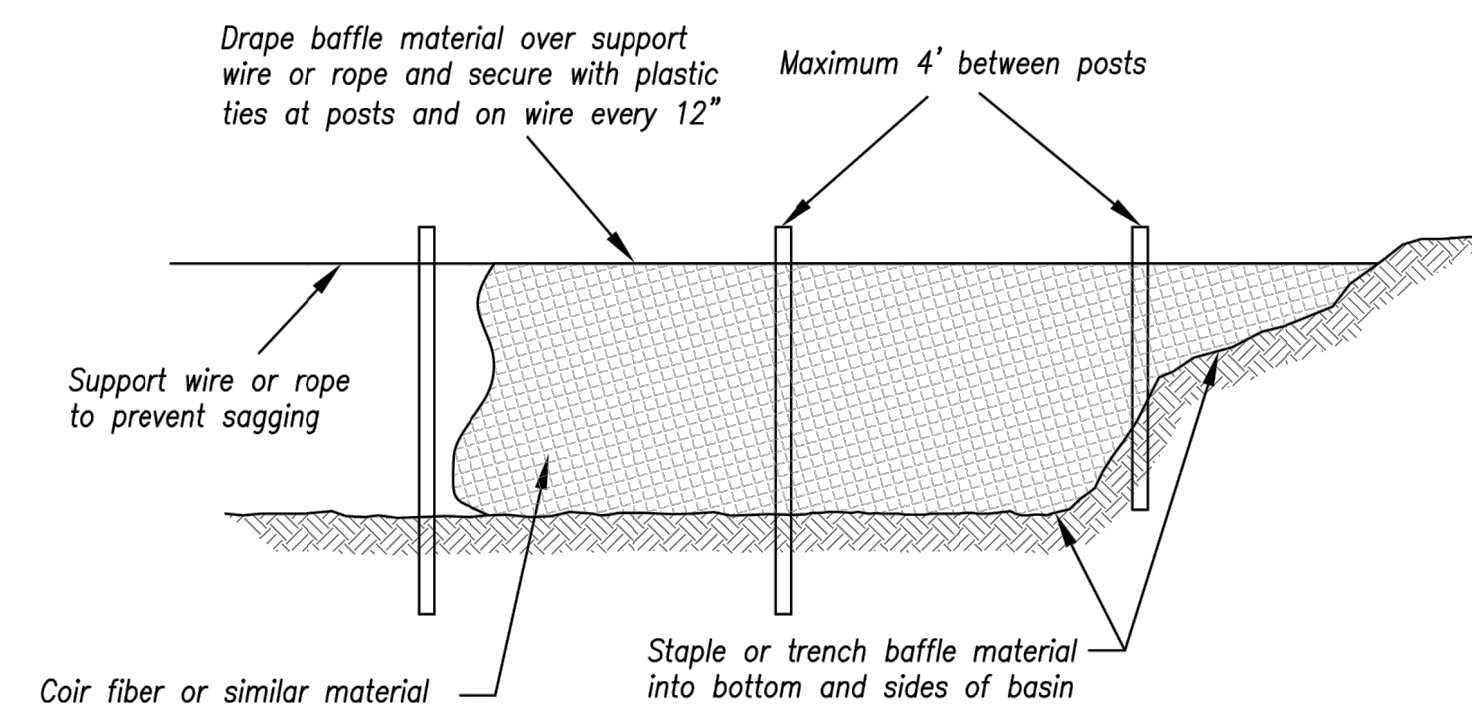
* Designer to provide specific details per application (e.g. pipe sizes, screen sizes, perforation, etc.) as required.



PARTIAL ELEVATION



Option A – Rock with Weir



Option B – Coir Fiber Material

BAFFLE DETAILS

Not to Scale

Anti-Seepage Collar Notes:

1. Connections between the anti-seepage collar and the barrel must be watertight.
2. P = projection distance. Sized as required to achieve at least a 10% increase in seepage length.
3. $14xP$ = Max. spacing between collars.
4. Collars shall generally be placed in the middle third of the embankment, and within the saturated zone.
5. All materials to be in accordance with construction material specifications.
6. When specified on the plans, coating of collars shall be in accordance with construction material specifications.
7. Unassembled collars shall be marked by painting or tagging to identify matching pairs.
8. The lap between the two half sections and between the pipe and connecting band shall be caulked with asphalt mastic at the time of installation.
9. Each collar shall be furnished with two (2) $\frac{1}{2}$ " diameter rods with standard tank lugs for connecting the collars to the pipe.
10. For bands and collars, modification of the details shown may be used providing equal water tightness is maintained and detailed drawings are Submitted and approved by the Engineer prior to delivery.
11. Two other types of anti-seep collars are:
 - a. Corrugated metal, similar to above, except shop welded to a 4 ft. section of the pipe and connected to the pipe with connecting bands.
 - b. Concrete, 6 inches thick, formed around the pipe with #3 rebar spaced 15".

Modified from 2015 Overland Park Standard Details
for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION <i>Kansas City Metro Chapter</i>  		KANSAS CITY METRO CHAPTER
SEDIMENT BASIN - DETAILS	STANDARD DRAWING NUMBER ESC-12 ADOPTED: 10/24/2016	

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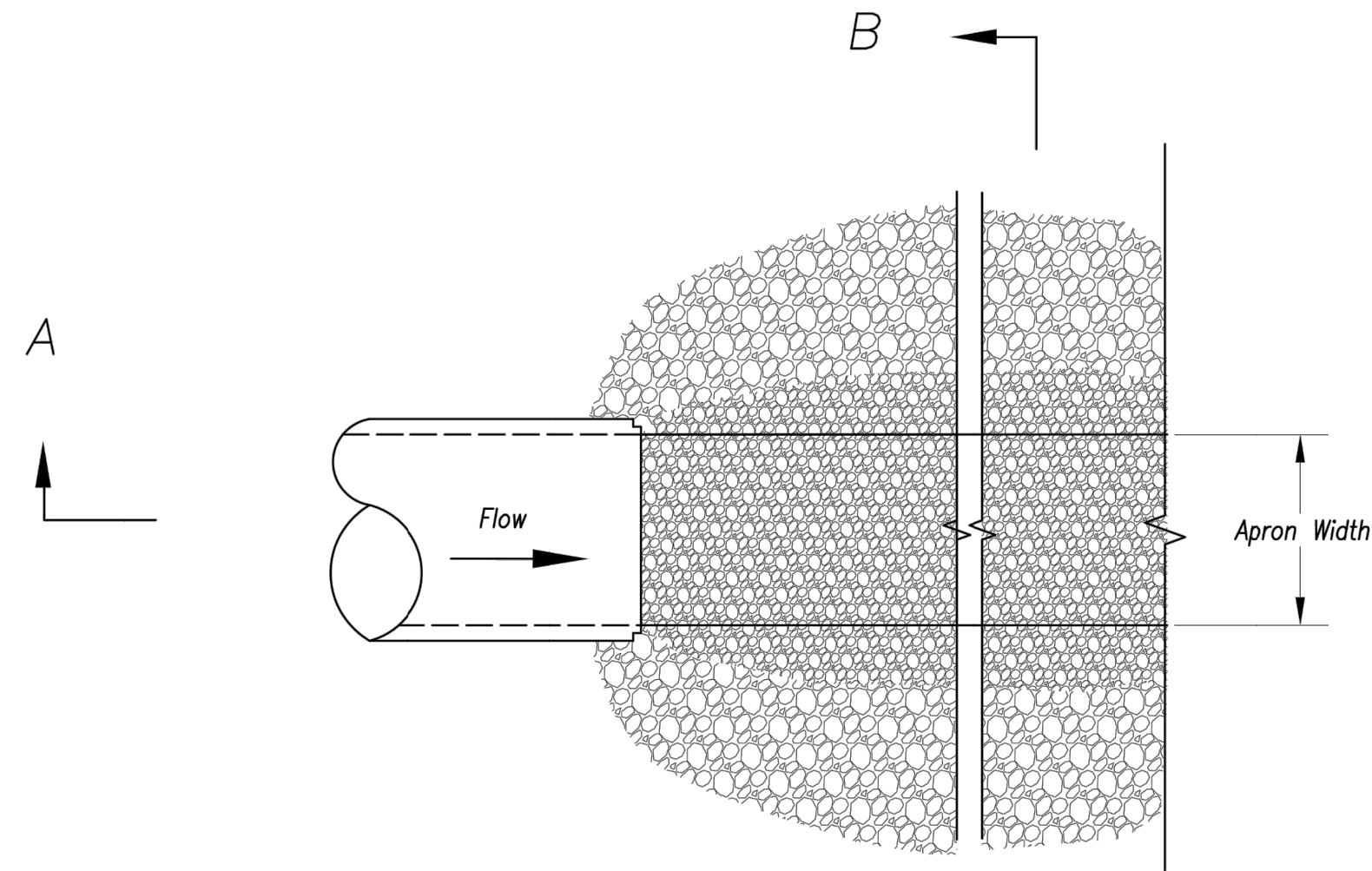
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HIGHLAND MEADOWS - 5TH PLAT

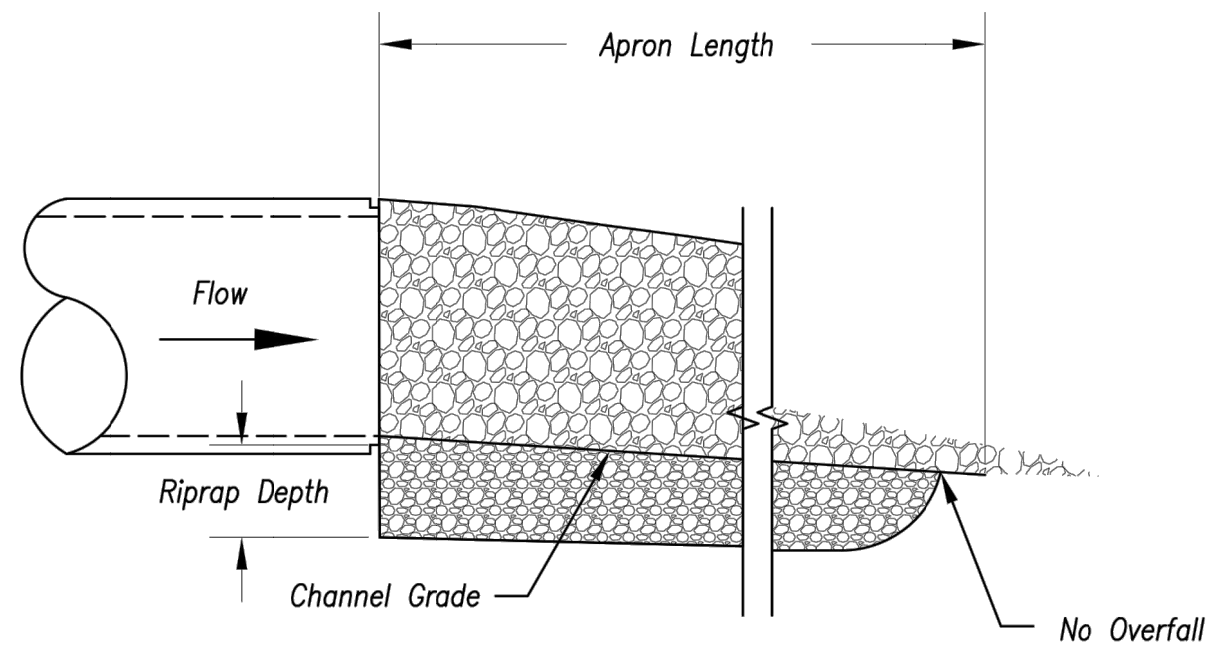


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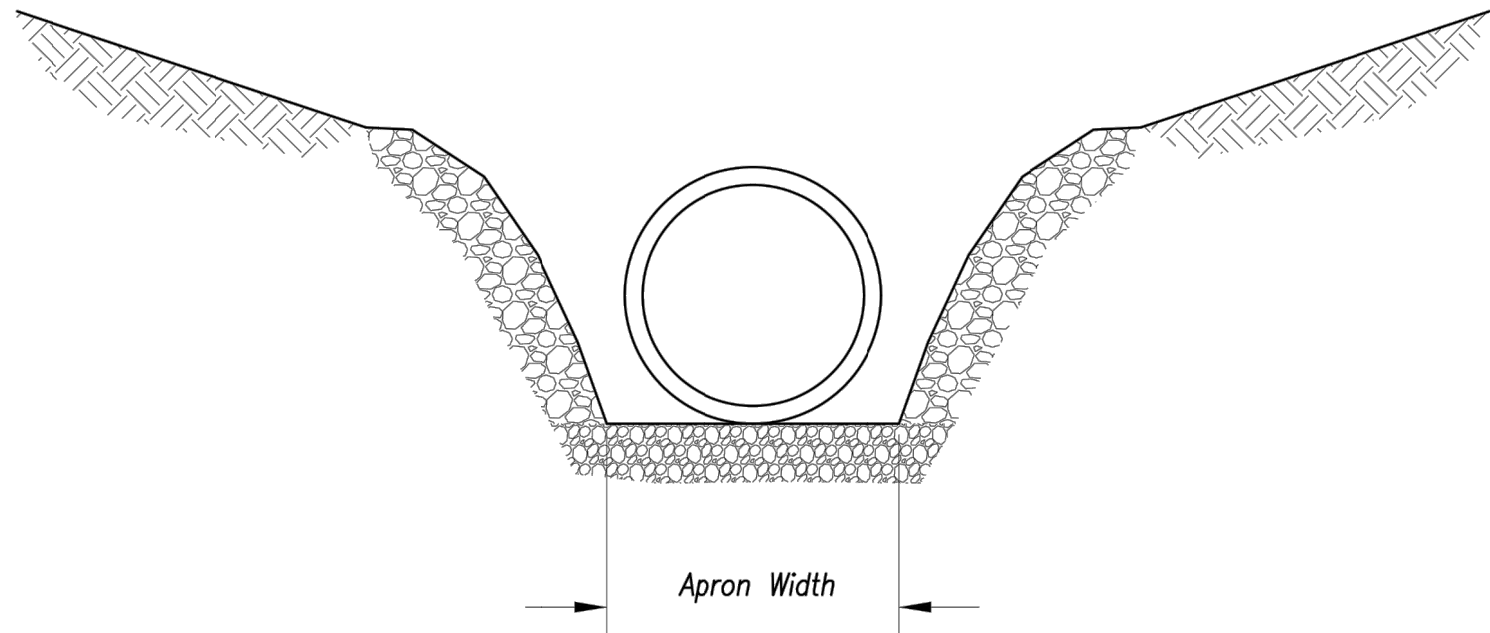
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Plan View
Not to Scale

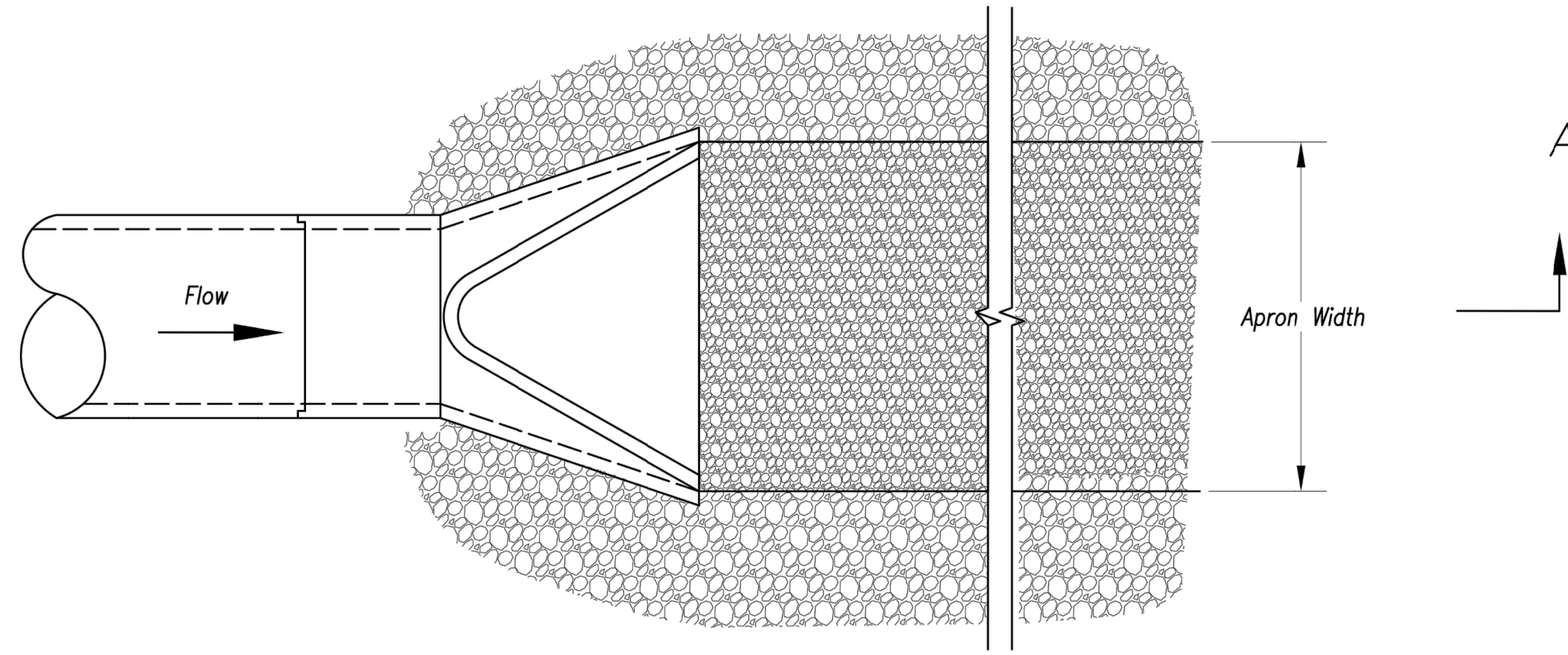


Section A-A
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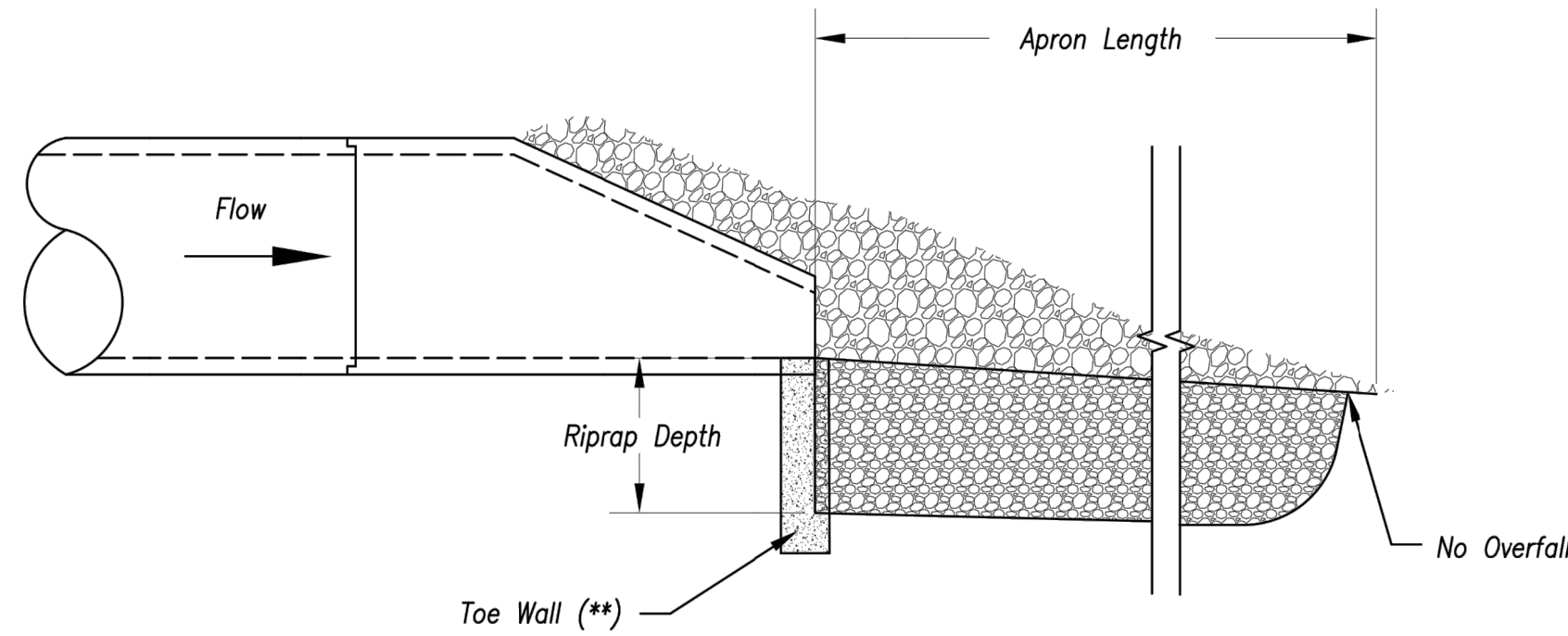


Section B-B
Not to Scale

OUTLET PROTECTION W/O END SECTION



Plan View
Not to Scale



Section A-A
Not to Scale

OUTLET PROTECTION WITH END SECTION

Notes:

1. Rock all sides steeper than 3:1.
2. Stabilize all disturbed areas downstream of outlet to the limits of disturbance.
3. Alternative outlet protection and slope stabilization measures may be used with approval by the Engineer.
4. Install riprap apron so that it is no higher than flowline of pipe.
5. Reference APWA Specification 2650 for rock type, size, and placement.

Modified from 2015 Overland Park Standard Details
for Erosion and Sediment Control.

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
OUTLET PROTECTION	STANDARD DRAWING NUMBER ESC-I4 ADOPTED: 10/24/2016

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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

OUTLET PROTECTION DETAILS

S10, T47N, R32W
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

STATE OF MISSOURI

ZACH A. MYERS

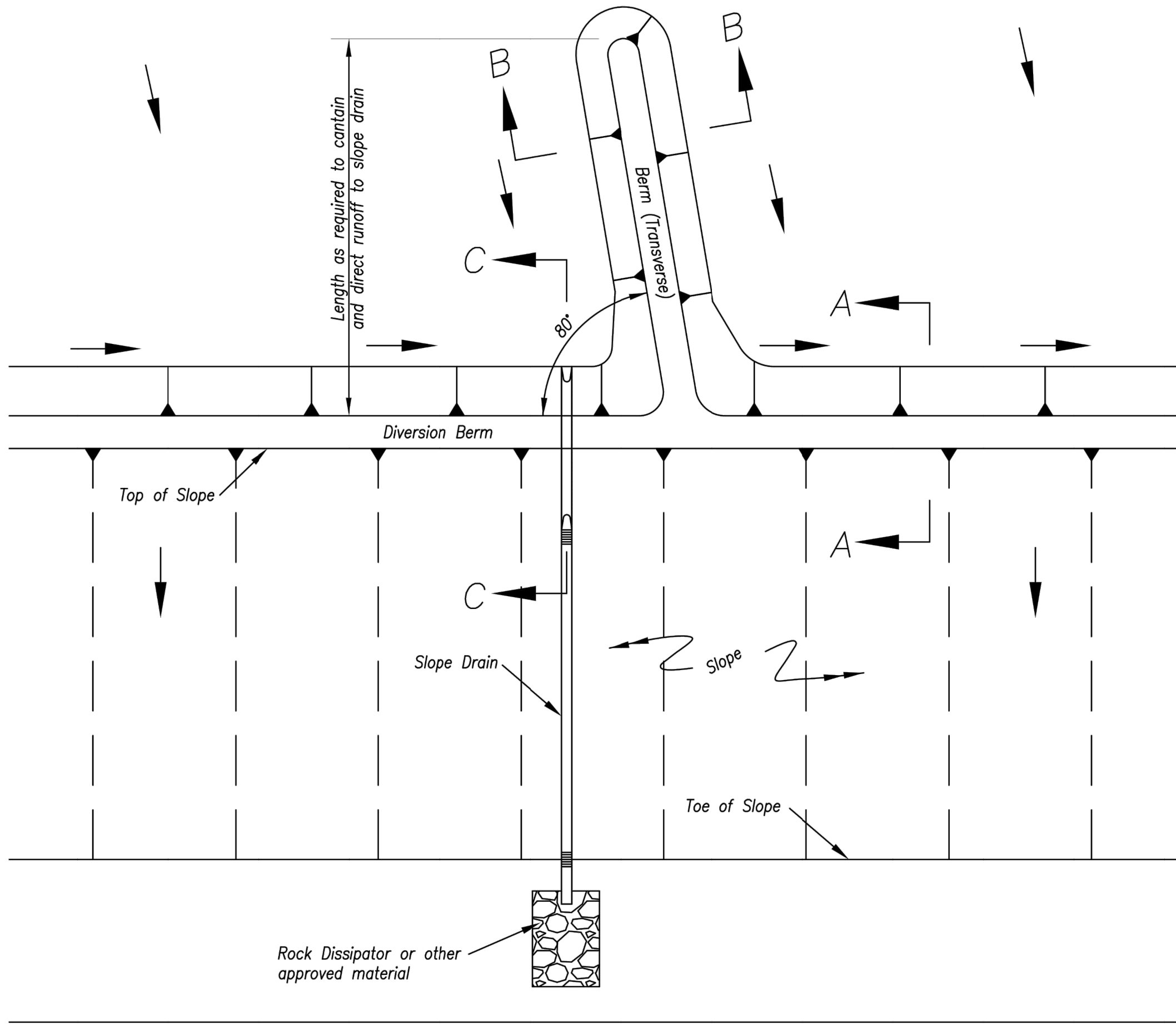
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PROFESSIONAL ENGINEER

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39 OF 41

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TYPICAL PLAN VIEW OF DIVERSION BERM AND SLOPE DRAIN

Notes for Diversion Berm:

1. Slope drains are optional, but may be required by the engineer if the berm is at the top of a steep slope.
2. Diversion berms must be installed as a first step in the land-disturbing activity and must be functional prior to upslope land disturbance.
3. The berm should be adequately compacted to prevent failure.
4. Temporary or permanent seeding and mulch shall be applied to the berm immediately following its construction.
5. Place the berm so to minimize damages by construction operations and traffic.
6. The berm must discharge to a temporary sediment trap or stabilized area.
7. All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of diversion.
8. The diversion shall be excavated or shaped to line, grade and cross-section as required to meet the criteria specified herein, free of irregularities which will impede flow.
9. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the completed diversion. Fill shall be composed of soil which is free from excessive organic debris, rocks or other objectionable materials.

Maintenance:

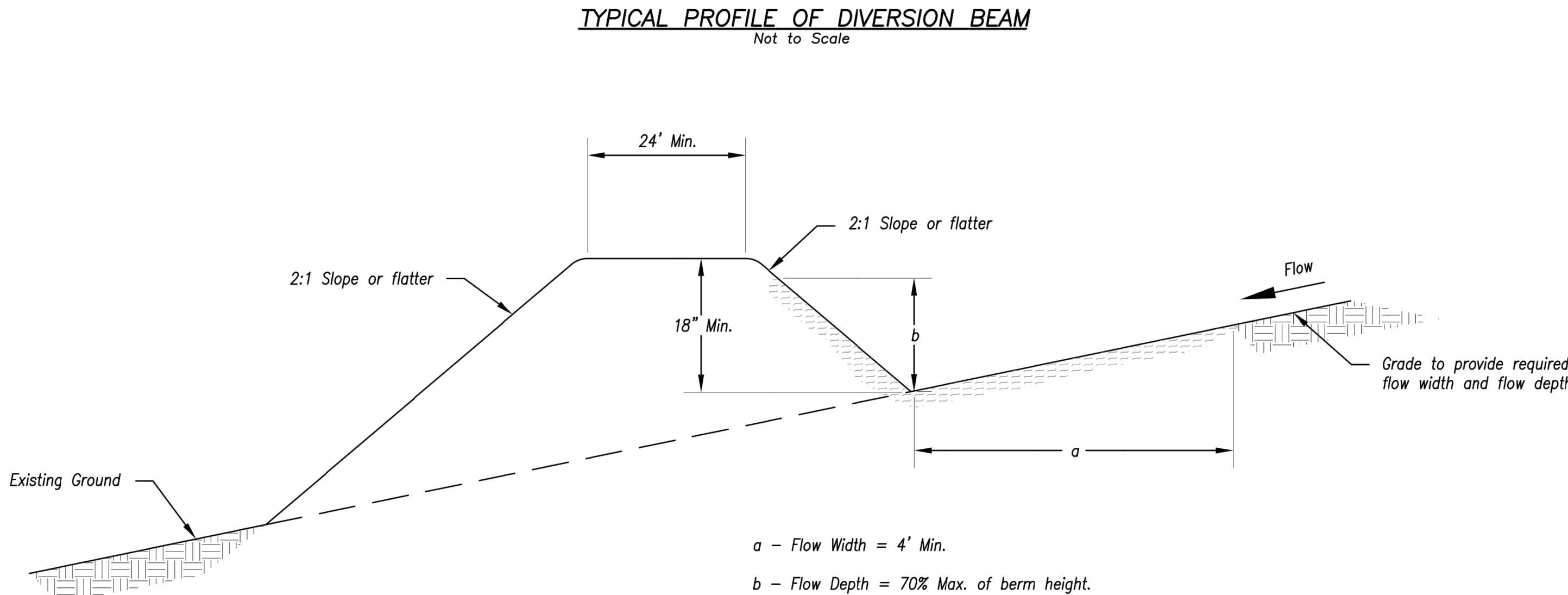
1. Berm shall be reshaped, compacted, and stabilized as necessary to maintain its function.
2. Breaches in the berm shall be repaired immediately.

Notes for Slope Drain:

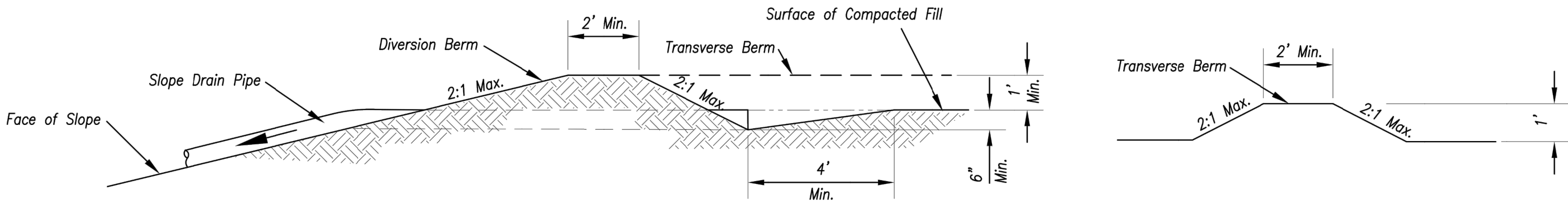
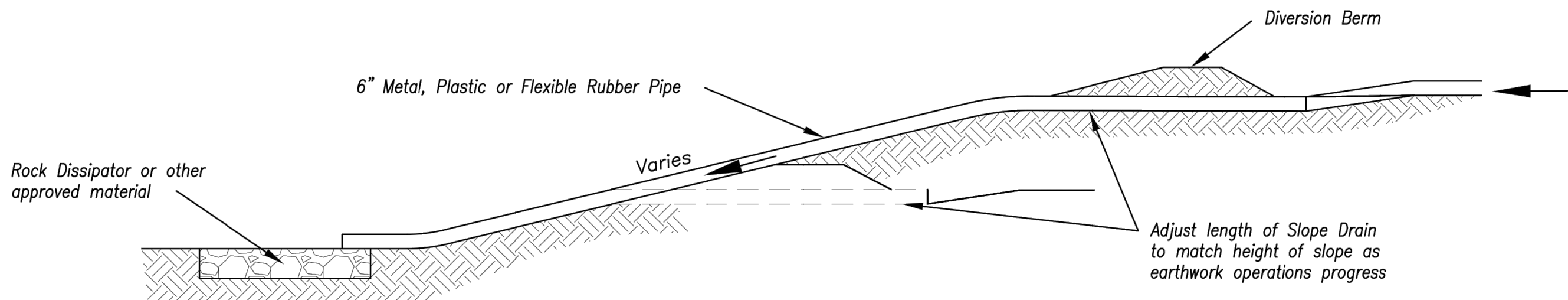
1. Slope Drain and Diversion Berm may be used on either project foreslopes or project backslopes.
2. Discharge of Slope Drains shall be into stabilized ditch or area, or into Sediment Basin.
3. Pipe shall be secured in place as approved by Engineer.

Maintenance:

1. Accumulation of any visible sediment at the inlet and outlet shall be removed promptly.
2. Outlet conditions shall be repaired if scour is observed. Leaking or damaged section of pipe shall be repaired immediately.
3. Barriers directing water to the inlet shall be monitored for continuity and effectiveness.



TYPICAL PROFILE OF DIVERSION BERM



Section C-C

Section B-B

TYPICAL PROFILE OF DIVERSION BERM WITH SLOPE DRAIN

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
DIVERSION BERMS AND SLOPE DRAINS	STANDARD DRAWING NUMBER ESC-05 ADOPTED: 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

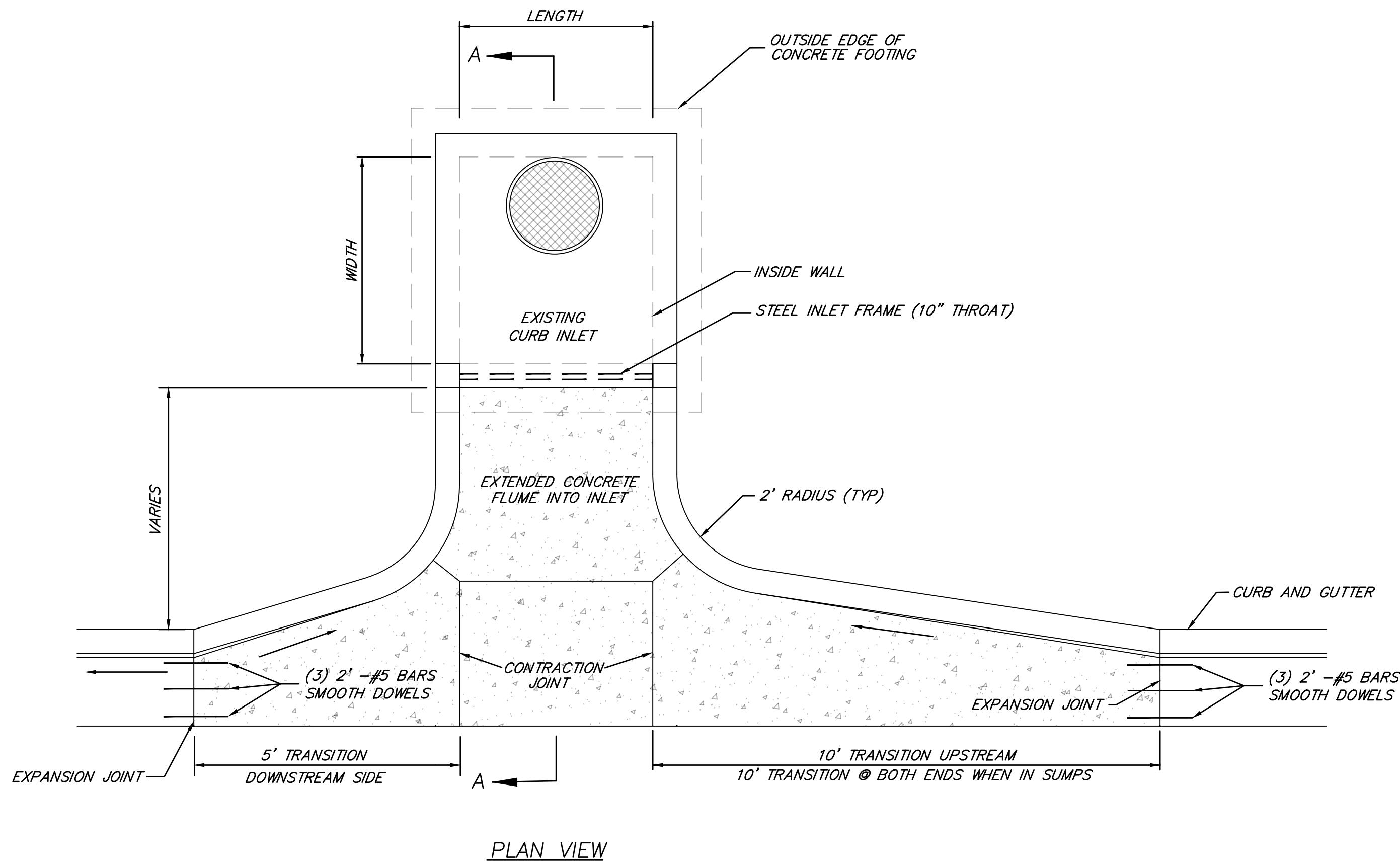
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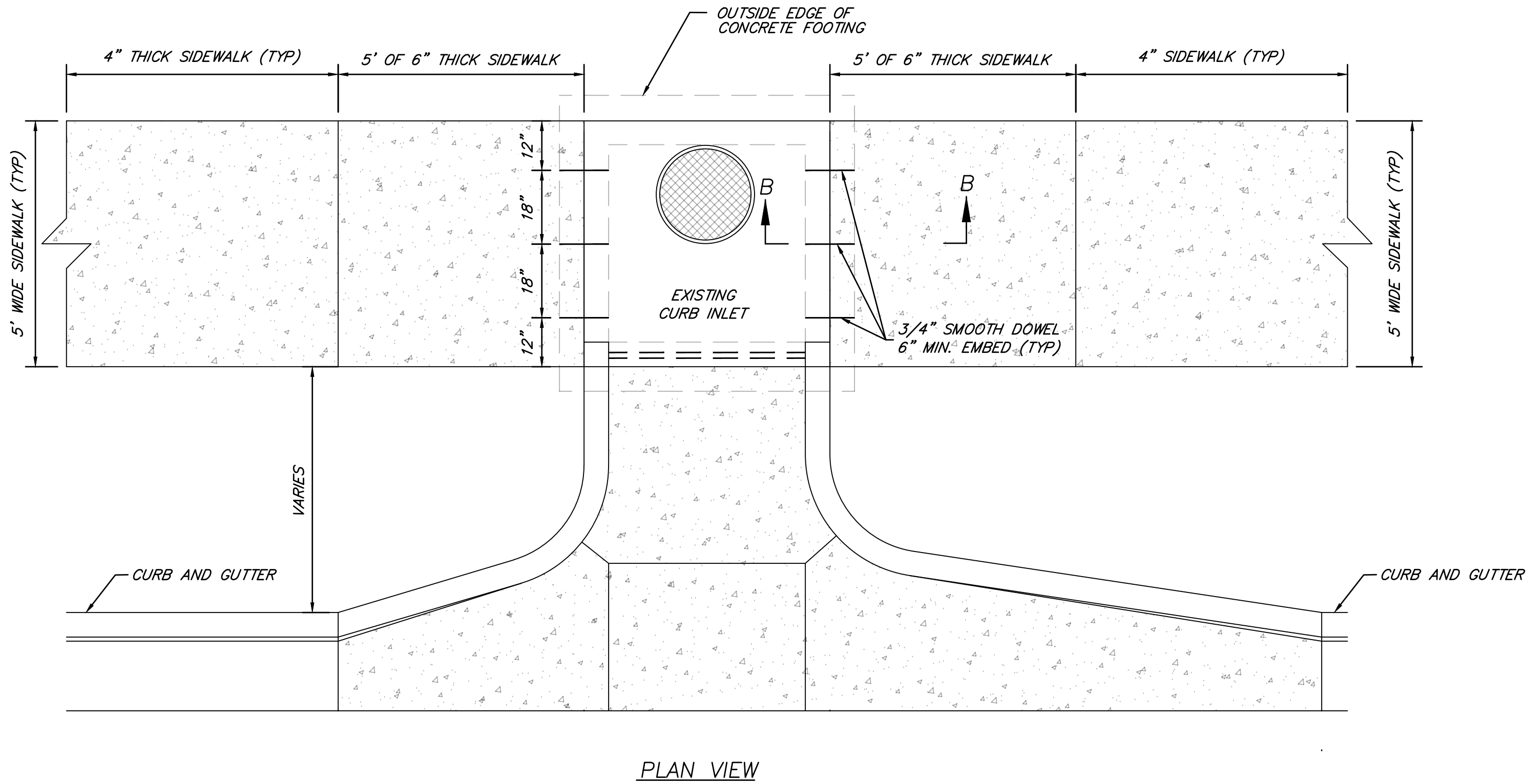
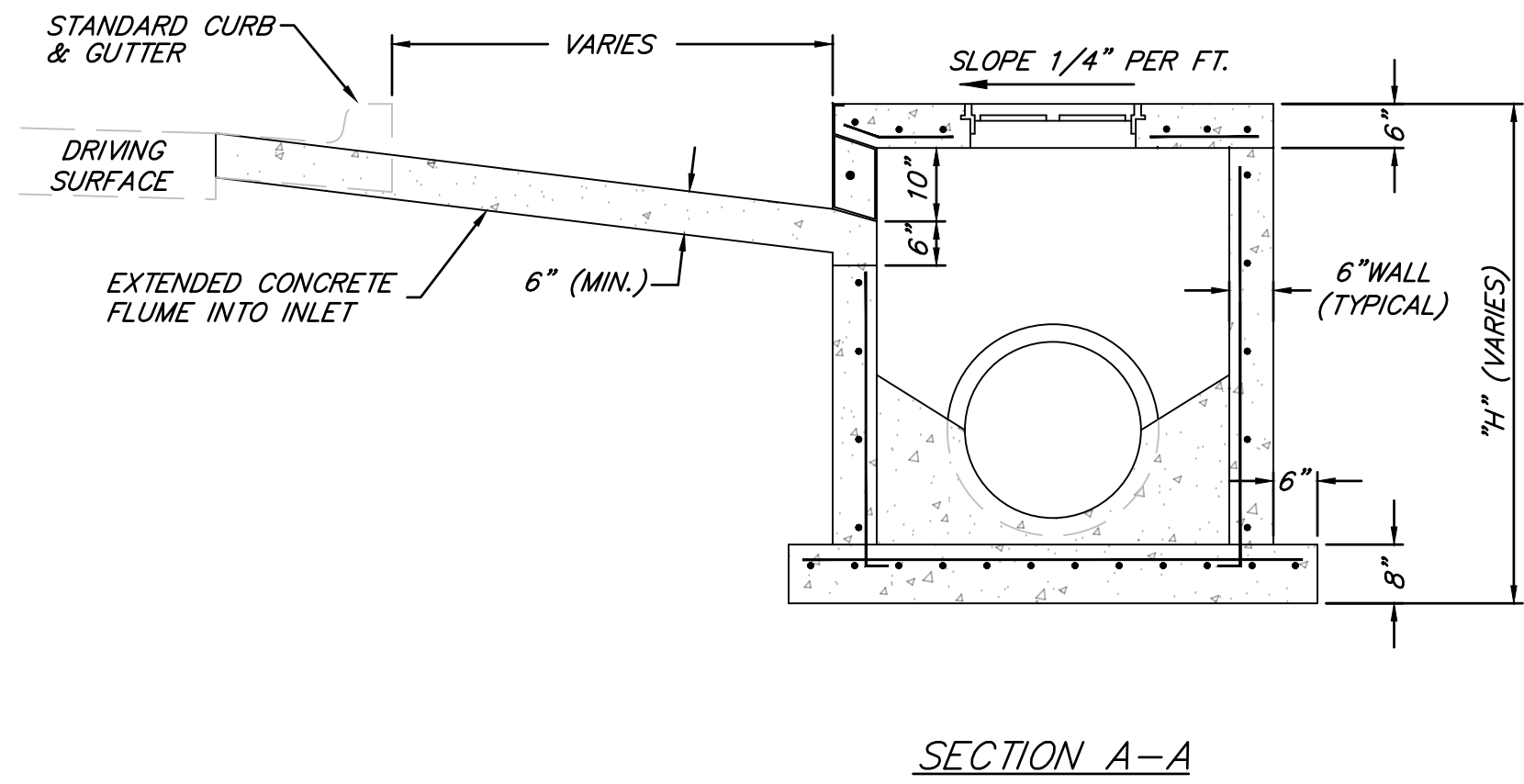
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TEMPORARY DIVERSION BERM
S10, T47N, R32W LEE'S SUMMIT, JACKSON COUNTY, MISSOURI


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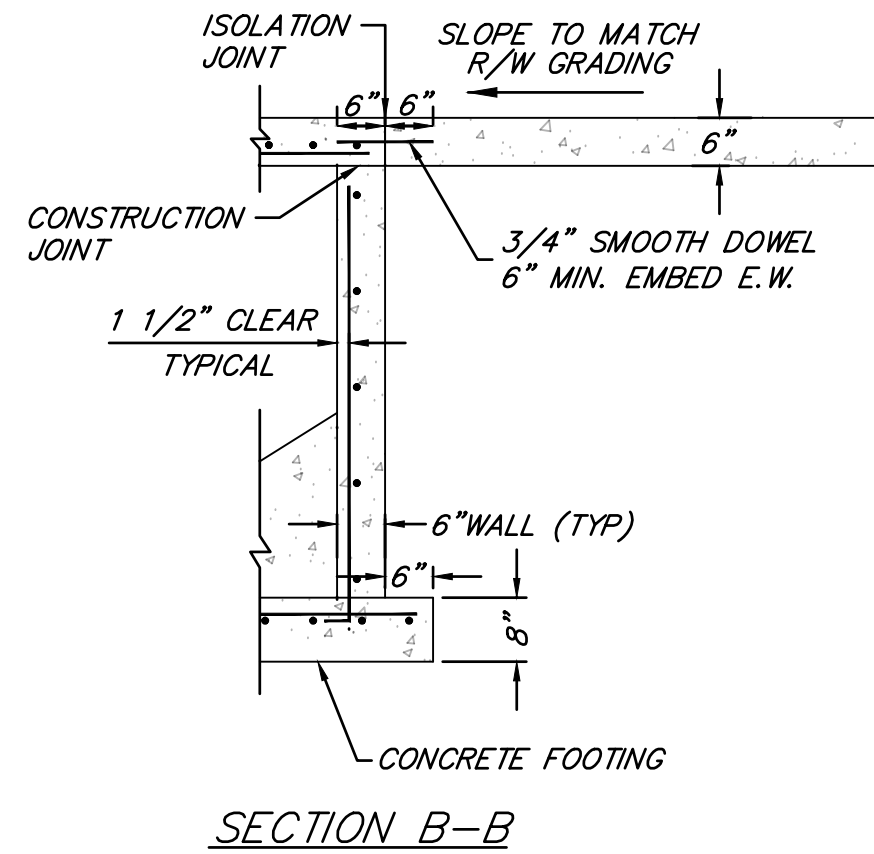
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SETBACK INLET CONCRETE FLUME DETAIL
NOT TO SCALE



CURB INLET ADJOINING SIDEWALK DETAIL
NOT TO SCALE



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SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

SETBACK CURB
MODIFICATION INLET
DETAILS

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