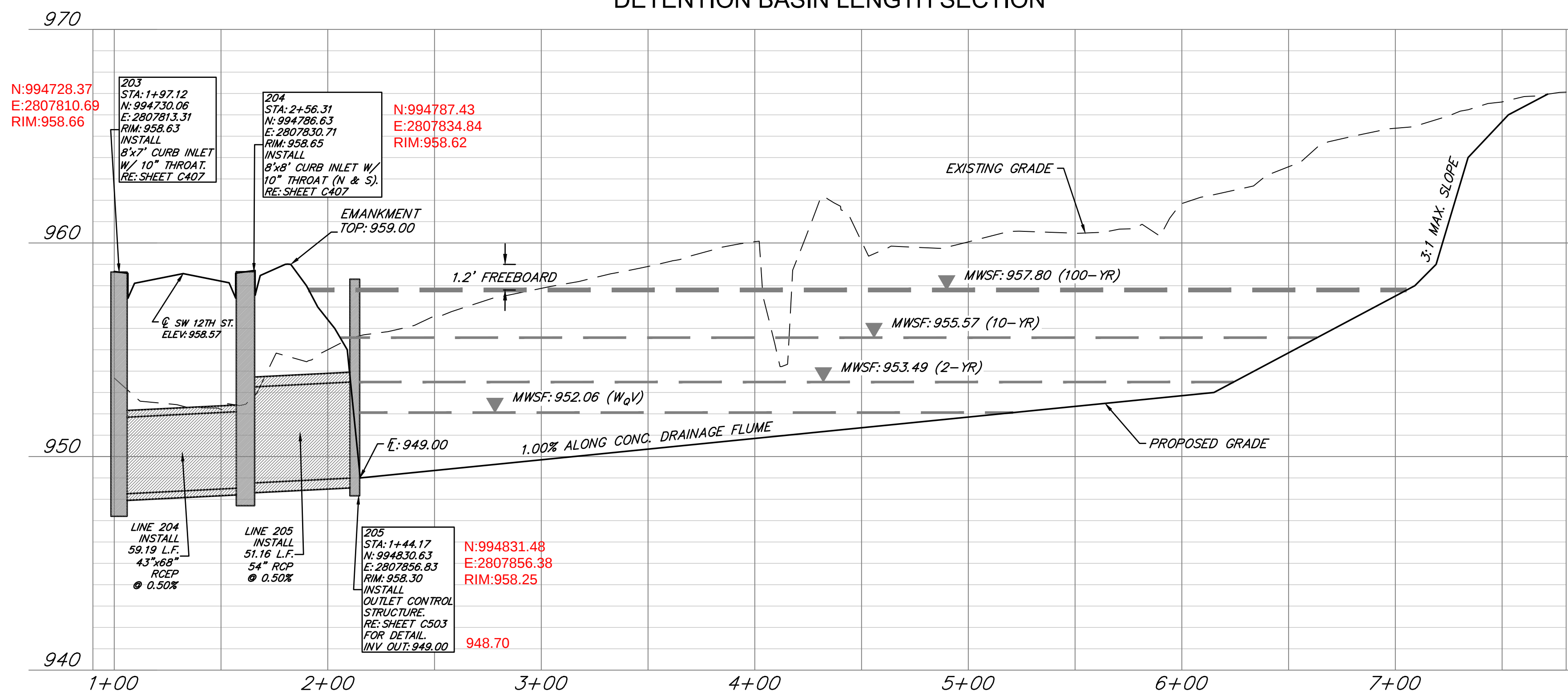
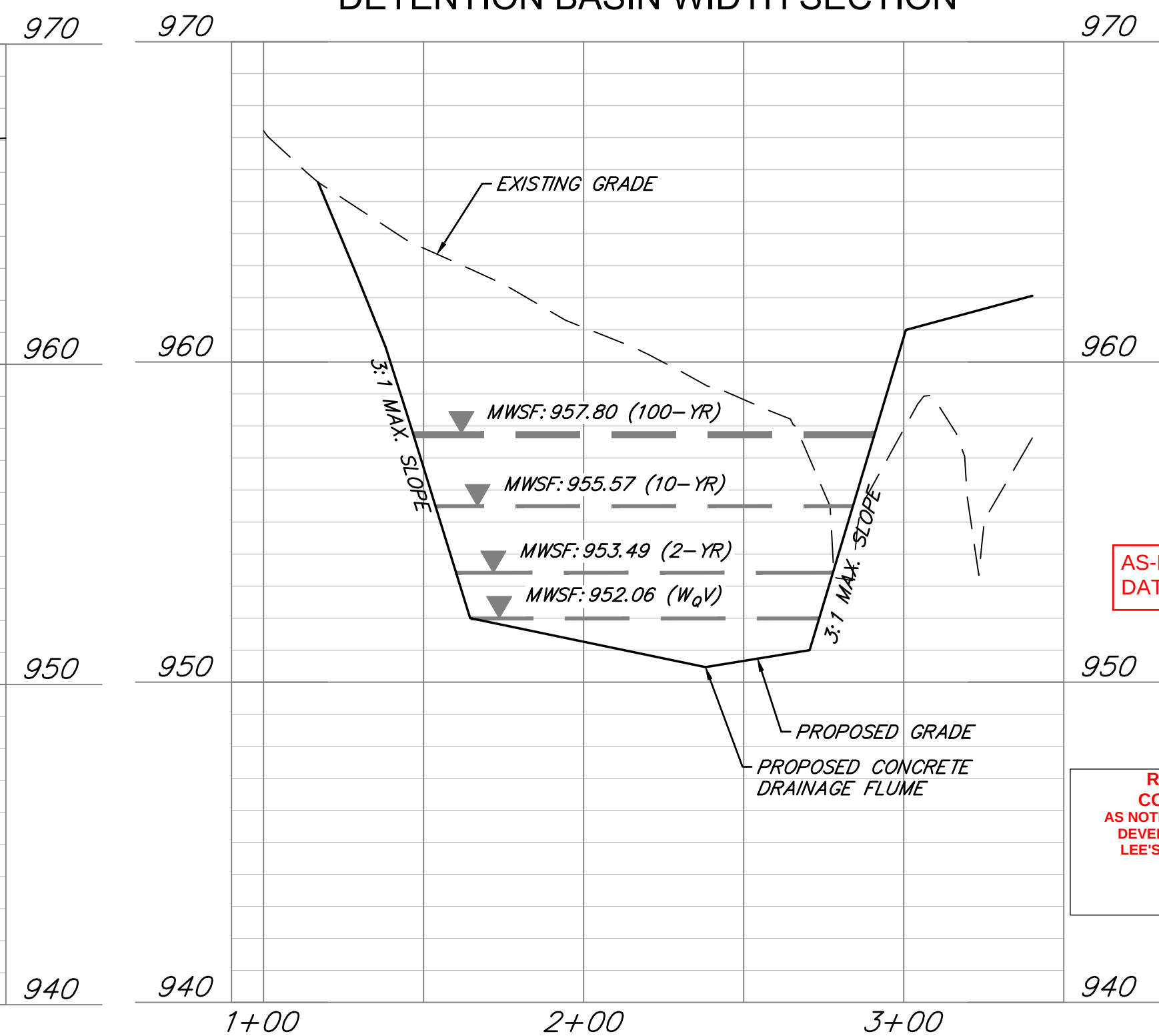




DETENTION BASIN LENGTH SECTION



DETENTION BASIN WIDTH SECTION



WATER SURFACE ELEVATIONS:

W_QV	-	952.06
2-YR	-	953.49
10-YR	-	955.57
100-YR	-	957.80

OUTLET DISCHARGE RATES:

$W_Q V$	- 0.08 CFS
2-YR	- 23.41 CFS
10-YR	- 94.04 CFS
100-YR	- 194.07 CFS

LEGEND

The diagram illustrates various road construction symbols and their corresponding descriptions. It is organized into two columns. The left column contains symbols, and the right column contains their descriptions.

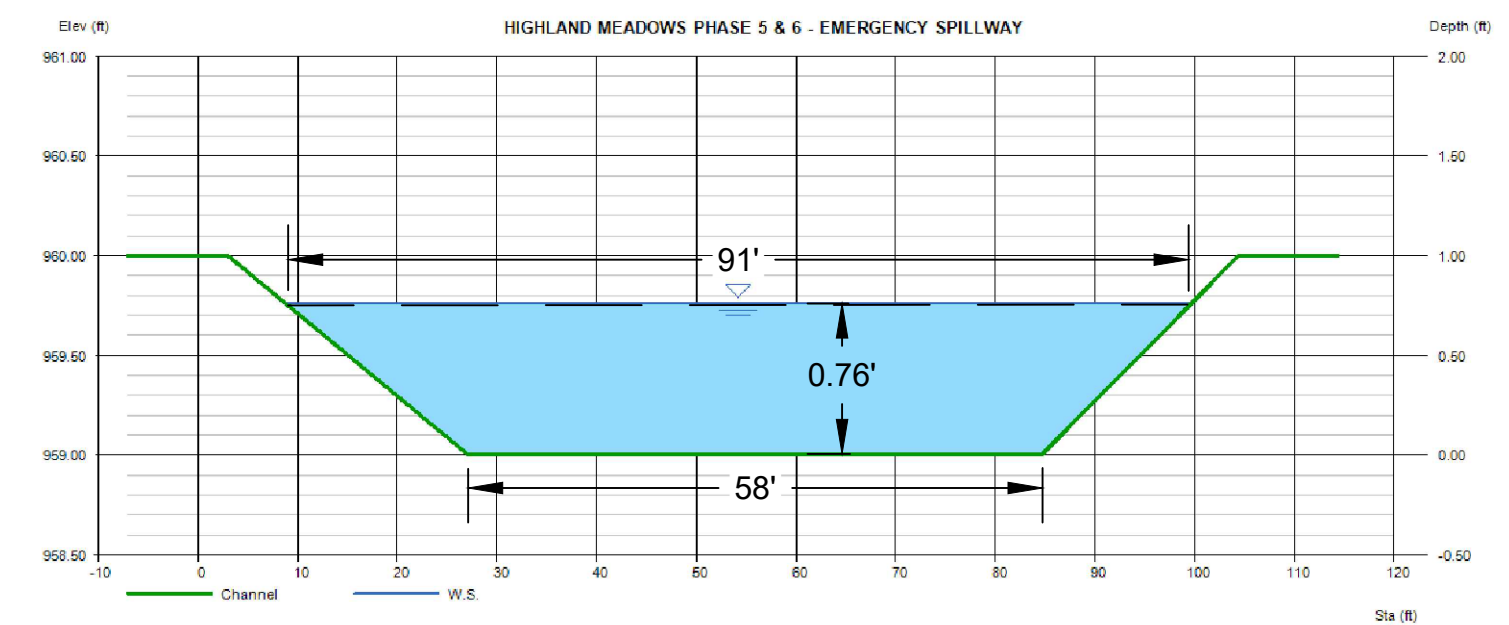
- Proposed Major Contour:** A solid black line with the number 900 written above it.
- Proposed Minor Contour:** A solid black line with the number 901 written above it.
- Existing Major Contour:** A dashed black line with the number 900 written above it.
- Existing Minor Contour:** A dashed black line with the number 901 written above it.
- Typical 28' Roadway Pavement Section:** A cross-section diagram showing a multi-layered road surface.
- 5' Concrete Sidewalk:** A cross-section diagram showing a single layer of concrete.
- Riprap Stabilization:** A cross-section diagram showing a layer of stones or riprap.
- Right-of-Way:** A solid black line.
- Road Centerline:** A dashed black line.

DETENTION BASIN GENERAL NOTES:

1. 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.
2. AN AS-GRADED AND AS-BUILT DRAWING SHALL BE SUBMITTED TO AND REVIEWED BY THE CITY FOR 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 BASIN, OUTLET STRUCTURE INCLUDING ALL WEIR ELEVATIONS AND STORM SYSTEM INCLUDING ALL THE INVERTS, STAMPED BY A MISSOURI LICENSED ENGINEER.
3. ALL SIDEWALK ADJACENT TO TRACTS SHALL BE CONSTRUCTED WITH PUBLIC IMPROVEMENTS, ALONG WITH ALL ADA ACCESSIBLE SIDEWALK RAMPS.
4. DETENTION BASIN SHALL FUNCTION AS A SEDIMENT BASIN UNTIL ALL DISTURBED AREAS ARE ADEQUATELY STABILIZED AND DISPLACED SEDIMENTS ARE NO LONGER BEING COLLECTED IN THE BASIN. REFER TO EROSION CONTROL PLANS AND DETAILS WITHIN THIS PLAN SET, AS WELL AS, SWPPP DOCUMENTS AND MDNR LAND DISTURBANCE PERMIT FOR STATE REQUIREMENTS.

EMERGENCY SPILLWAY CALCULATIONS:

DEPTH - 0.76 FT
Q_{SPILL} - 203.4 CFS
Q₁₀₀ - 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



REVISIONS				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-2012009232
2.	REVISED PER CITY COMMENTS	GC	3/10/21	DATE:	12/2/2020
				ISSUED FOR:	FOR REVIEW
				JOB NUMBER:	20KC10057
				MO COA NO.	000062

SUMMIT HOMES KC
HIGHLAND MEADOWS - 5TH PLAT

DETENTION BASIN PLAN & PROFILE

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



SHEET NUMBER
C205
13 OF 40