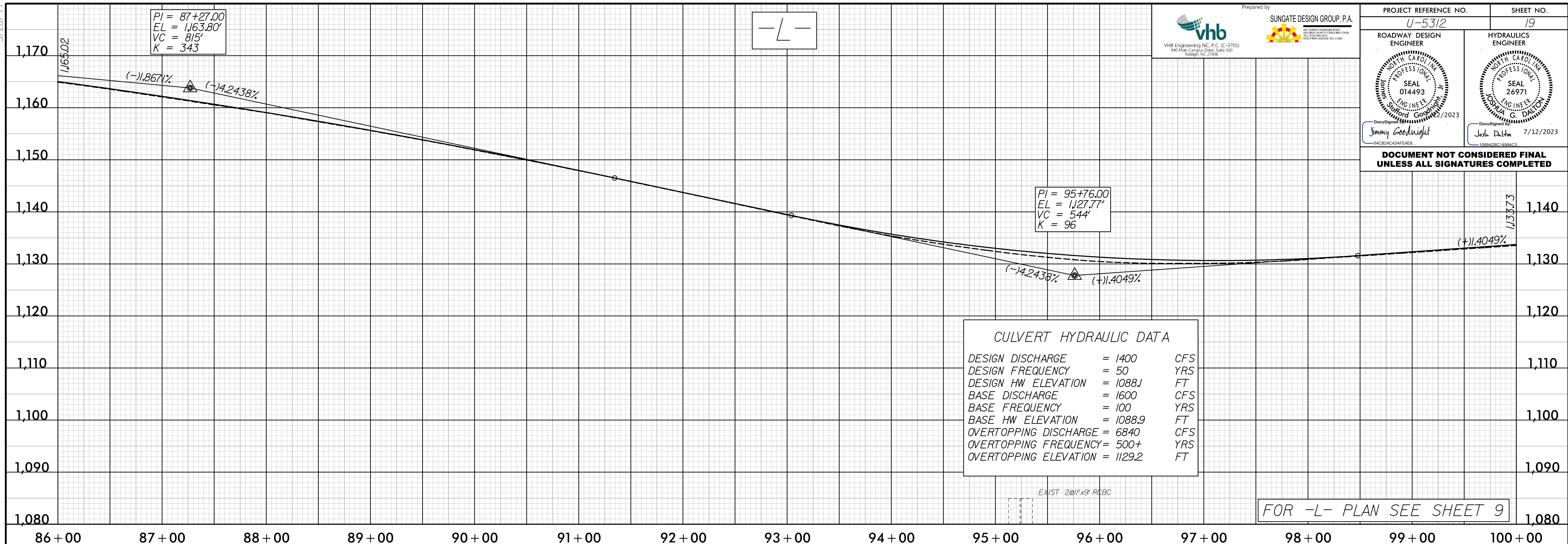


5/28/23



Prepared by

vhb
VHB Engineering NC, P.C. (C-2705)
940 Main Campus Drive, Suite 300
Raleigh, NC 27606

SUNGATE DESIGN GROUP, P.A.

PROJECT REFERENCE NO. **U-5312** SHEET NO. **19**

ROADWAY DESIGN ENGINEER
SEAL 014493
Jeffrey Goodright 7/2023

HYDRAULICS ENGINEER
SEAL 26971
Justin DeHaven 7/12/2023

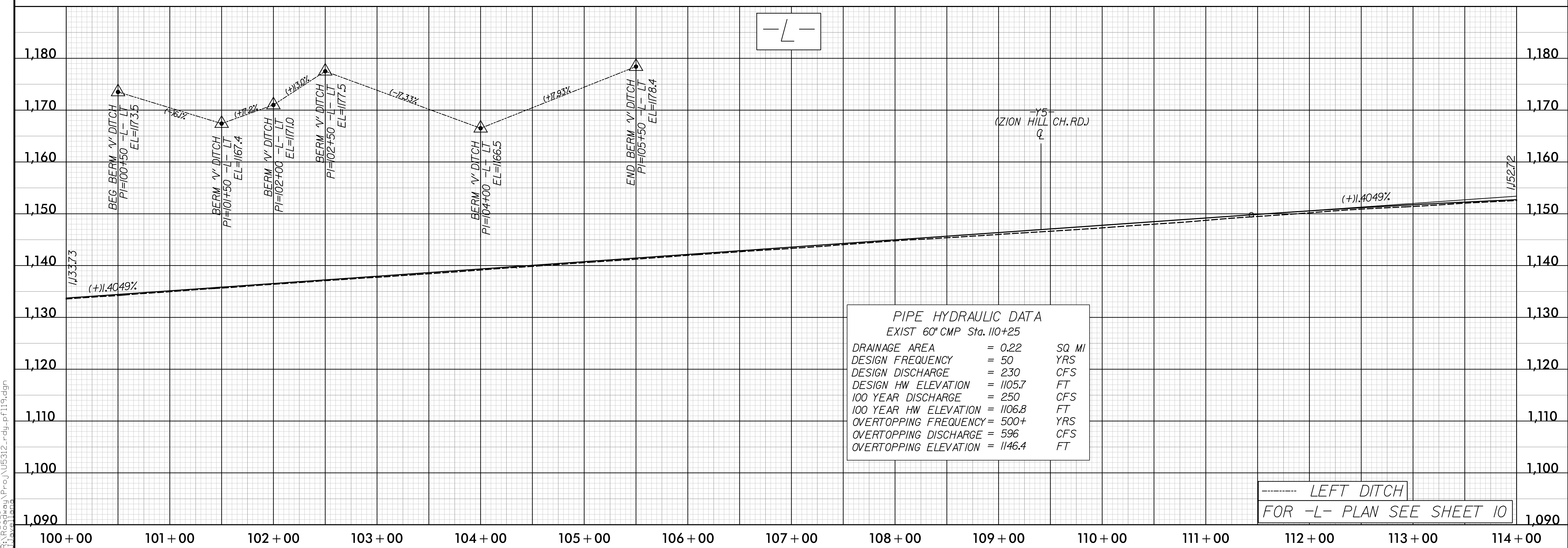
1009ADBC149843

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 1400	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 1088.1	FT
BASE DISCHARGE	= 1600	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 1088.9	FT
OVERTOPPING DISCHARGE	= 6840	CFS
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING ELEVATION	= 1129.2	FT

FOR -L- PLAN SEE SHEET 9



PIPE HYDRAULIC DATA
EXIST 60" CMP Sta. 110+25

DRAINAGE AREA	= 0.22	SQ MI
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 230	CFS
DESIGN HW ELEVATION	= 1105.7	FT
100 YEAR DISCHARGE	= 250	CFS
100 YEAR HW ELEVATION	= 1106.8	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 596	CFS
OVERTOPPING ELEVATION	= 1146.4	FT

----- LEFT DITCH

FOR -L- PLAN SEE SHEET 10

7/12/2023
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