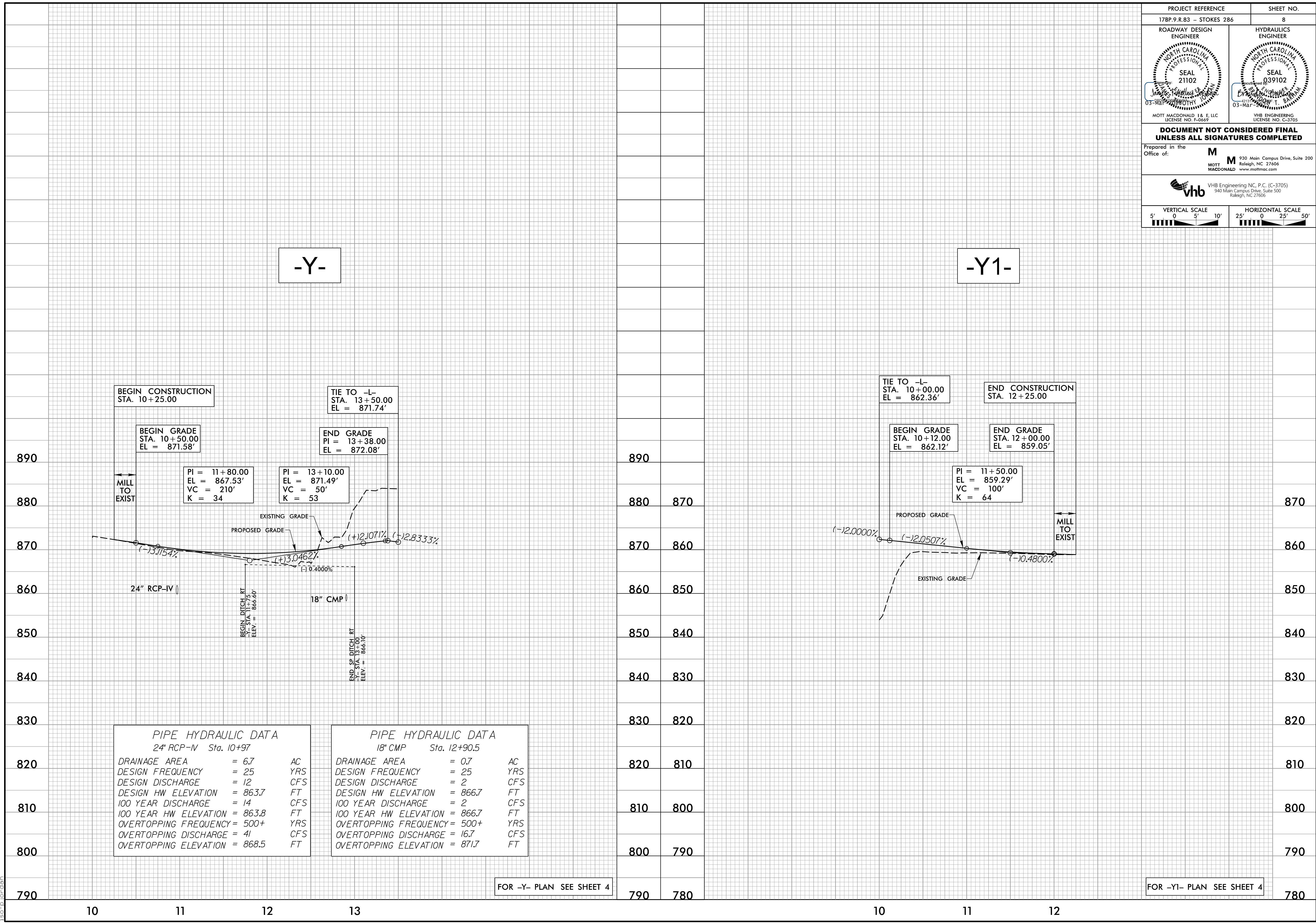


PROJECT REFERENCE		SHEET NO.	
17BP.9.R.83 - STOKES 286		8	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
MOTT MACDONALD I & E, LLC LICENSE NO. F-0669		VHB ENGINEERING LICENSE NO. C-3705	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			
Prepared in the Office of:		M MOTT MACDONALD 930 Main Campus Drive, Suite 200 Raleigh, NC 27606 www.mottmac.com	
		VHB Engineering NC, P.C. (C-3705) 940 Main Campus Drive, Suite 500 Raleigh, NC 27606	
VERTICAL SCALE 5' 0 5' 10'		HORIZONTAL SCALE 25' 0 25' 50'	

-Y-

-Y1-



BEGIN CONSTRUCTION STA. 10+25.00

TIE TO -L- STA. 13+50.00 EL = 871.74'

BEGIN GRADE STA. 10+50.00 EL = 871.58'

END GRADE PI = 13+38.00 EL = 872.08'

PI = 11+80.00
EL = 867.53'
VC = 210'
K = 34

PI = 13+10.00
EL = 871.49'
VC = 50'
K = 53

PROPOSED GRADE: (-)3.1154%, (+)3.0462%, (+)2.1071%, (-)2.8333%, (-)0.4000%

24" RCP-IV

BEGIN DITCH RT STA. 11+75 ELEV. = 866.60'

18" CMP

END OF DITCH RT STA. 12+10 ELEV. = 866.10'

PIPE HYDRAULIC DATA		
24" RCP-IV Sta. 10+97		
DRAINAGE AREA	= 6.7	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 12	CFS
DESIGN HW ELEVATION	= 863.7	FT
100 YEAR DISCHARGE	= 14	CFS
100 YEAR HW ELEVATION	= 863.8	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 41	CFS
OVERTOPPING ELEVATION	= 868.5	FT

PIPE HYDRAULIC DATA		
18" CMP Sta. 12+90.5		
DRAINAGE AREA	= 0.7	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 2	CFS
DESIGN HW ELEVATION	= 866.7	FT
100 YEAR DISCHARGE	= 2	CFS
100 YEAR HW ELEVATION	= 866.7	FT
OVERTOPPING FREQUENCY	= 500+	YRS
OVERTOPPING DISCHARGE	= 16.7	CFS
OVERTOPPING ELEVATION	= 871.7	FT

FOR -Y- PLAN SEE SHEET 4

TIE TO -L- STA. 10+00.00 EL = 862.36'

END CONSTRUCTION STA. 12+25.00

BEGIN GRADE STA. 10+12.00 EL = 862.12'

END GRADE STA. 12+00.00 EL = 859.05'

PI = 11+50.00
EL = 859.29'
VC = 100'
K = 64

PROPOSED GRADE: (-)12.0000%, (-)12.0507%, (-)10.4800%

EXISTING GRADE

MILL TO EXIST

FOR -Y1- PLAN SEE SHEET 4

1/22/2025 9:49:03 AM
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