

INDEX OF SHEETS
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3. BRIDGE TYPICAL SECTION

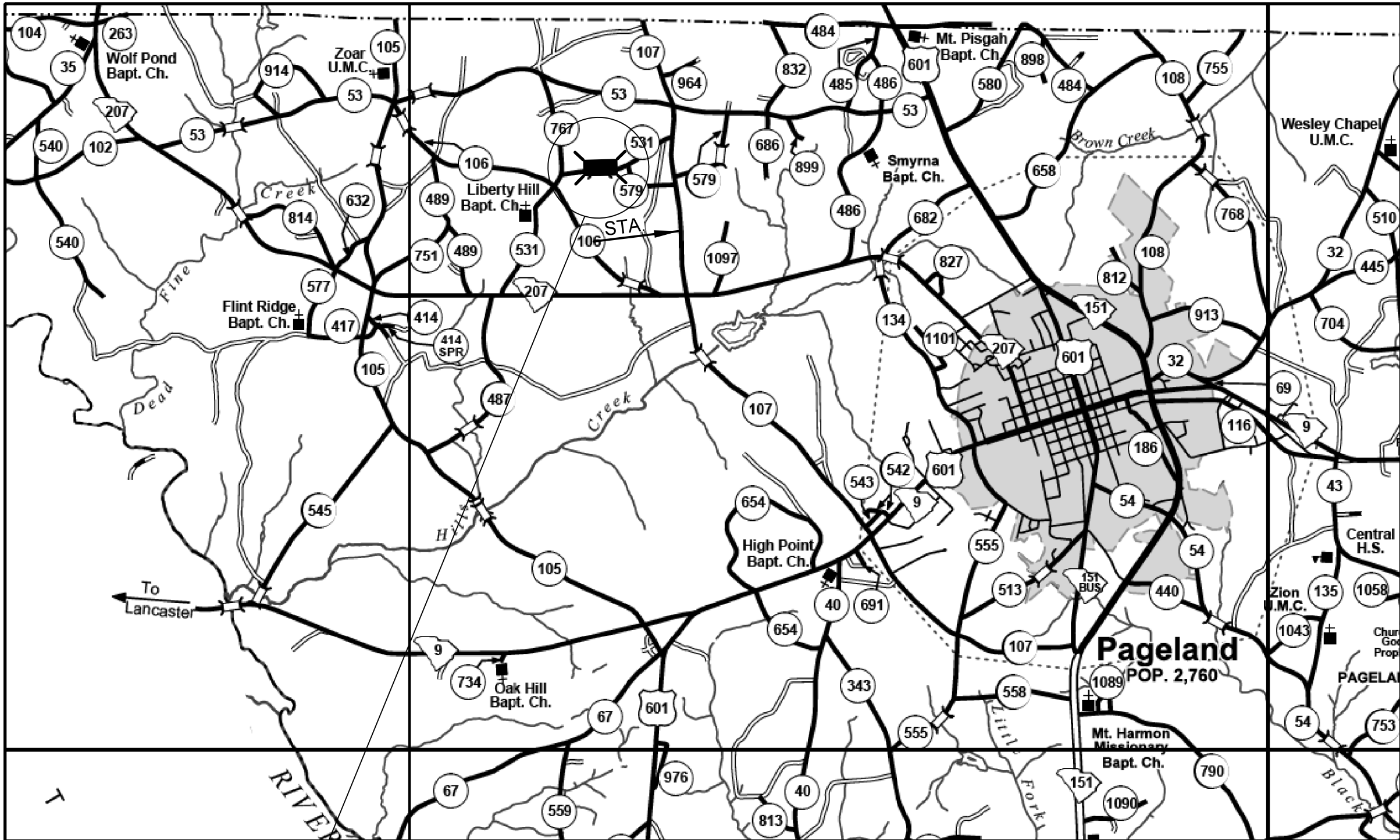


PROPOSED PLANS
FOR
CHESTERFIELD COUNTY
PROJECT ID P041959
STATE ROUTE S-13-531 (HENRY FUNDERBURK RD)
REPLACE BRIDGE OVER MANGUM BRANCH

Design Reference for these plans is the:

LVB

Supplemental Design Criteria For
Low Volume Bridge Replacement Projects



Approximate Location of Bridge is
Latitude 34°-47'-57" N
Longitude 80°-27'-28" W

SITE LOCATION

LAYOUT

NET LENGTH OF ROADWAY	0.000	MILES
NET LENGTH OF BRIDGES	0.011	MILES
NET LENGTH OF PROJECT	0.011	MILES
LENGTH OF EXCEPTIONS	0.000	MILES
GROSS LENGTH OF PROJECT	0.011	MILES

NOTE: EXCEPT AS MAY OTHERWISE BE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL CONFORM TO THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION) AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.

CONSULTING ENGINEERING FIRM

HNTB
HNTB CORPORATION
SC License No. 265
343 E. Six Forks Rd., Suite 200, Raleigh, N.C. 27609

ENGINEER OF RECORD

**CONCEPTUAL
PLANS
NOT FOR
CONSTRUCTION**

FOR CONSTRUCTION : _____
DATE _____

3 DAYS BEFORE DIGGING IN
SOUTH CAROLINA
CALL 811
SOUTH CAROLINA 811 (SC811)
WWW.SC811.COM
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

ASSET ID NOT ASSIGNED

TRAFFIC DATA

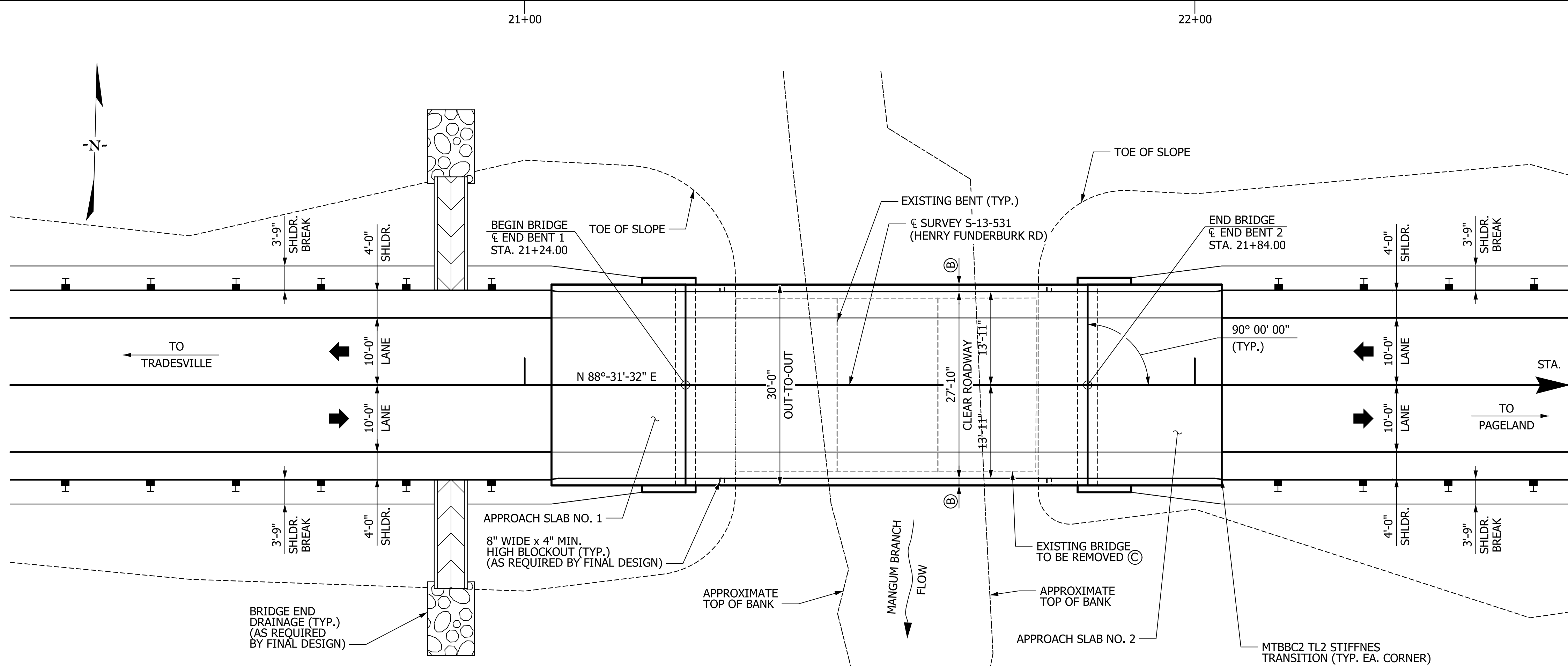
2025 ADT 110 V.P.D.
2045* ADT 150* V.P.D.
TRUCKS 5 %
*DESIGN TRAFFIC DATA

REVIEWED	DR.	NEW	BY	CHK	DATE
					6/23

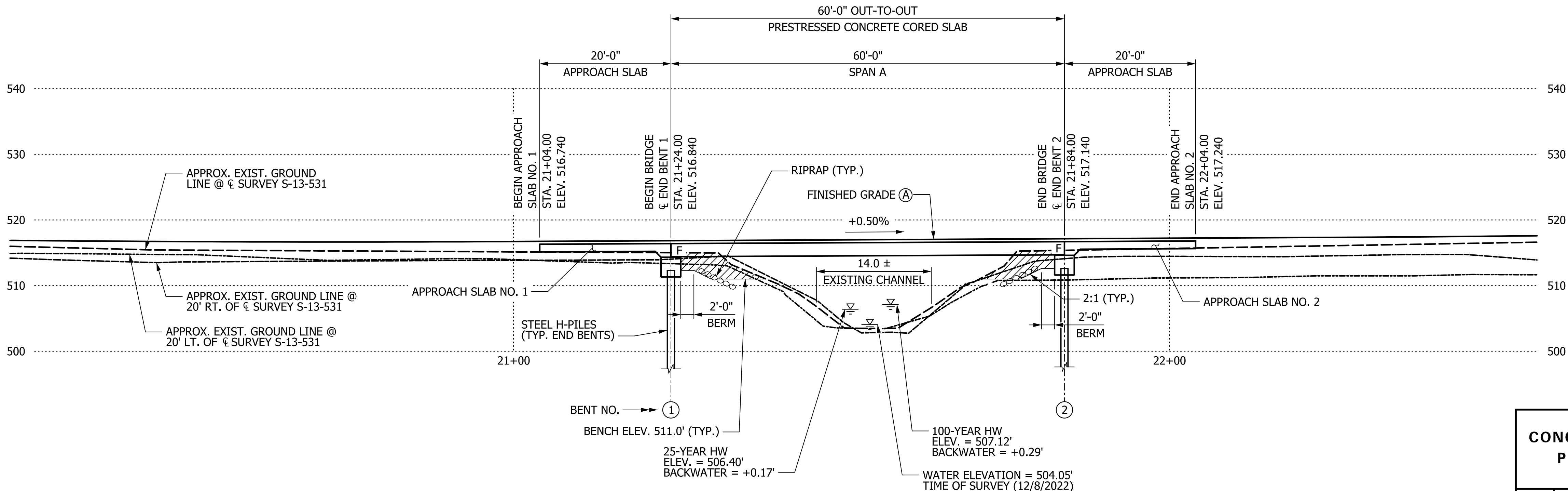
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PLOTTED DATE: 7/5/2023
FILE NAME: ...Prp_001_S_13_531_P041959_1.scdgn

CADD FILE INFORMATION 3:59:07 PM
PLOTTED DATE: 7/5/2023
FILE NAME: ...\\Prep_002.S.13.531_P041959.bp.dgn

BRIDGE PLANS ID	SHEET NO.
P041959	2



PLAN



SECTION ALONG SURVEY   S-13-531

NOTES:

- (A) PROPOSED PROFILE SET SO THAT THE LOW CHORD SATISFIES THE HYDRAULIC REQUIREMENTS, SET FORTH BY THE RFP.
- (B) INCLUDES 1'-0" MASH BARRIER PARAPET AND 1" SLAB EXTENSION.
- (C) REMOVE AND DISPOSE OF EXISTING 27'-6" x 45'-0" 3-SPAN SIMPLE CONCRETE SLAB BRIDGE AND APPURTENANCES IN ACCORDANCE WITH SECTION 202.4.2 OF THE STANDARD SPECIFICATIONS.

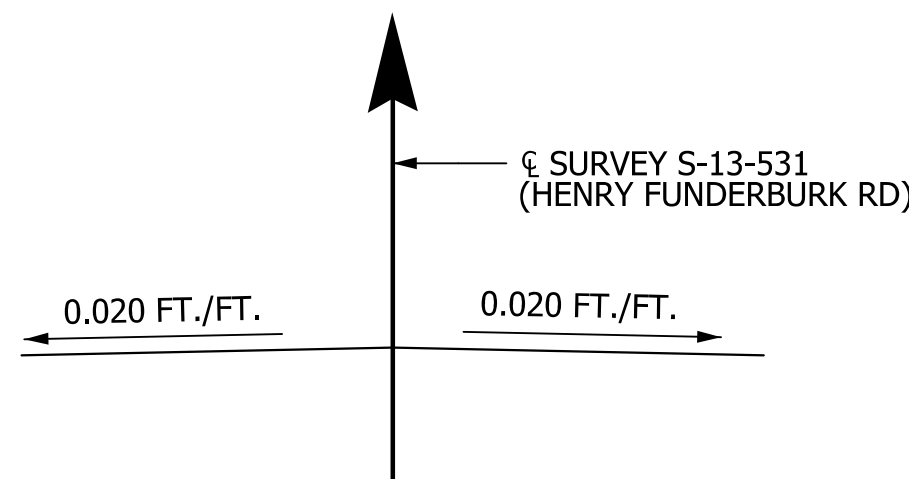
F - DENOTES FIXED BEARING

/// = EXCAVATE HATCHED AREA

CONTROL POINTS

PSC2
ELEVATION = 530.91'
N 1079569.98 E 2162247.53

CP 3
ELEVATION = 534.76'
N 1079629.13 E 2163371.46



TYPICAL THROUGHOUT BRIDGE
SUPERELEVATION SKETCH

VERTICAL CURVE DATA

PV1 = 20+00.00 ELEV. 516.22 V.C. = 200'
PVI = 23+00.00 ELEV. 517.72 V.C. = 150'
-3.27% +0.50% +3.50%

HYDROLOGY DATA

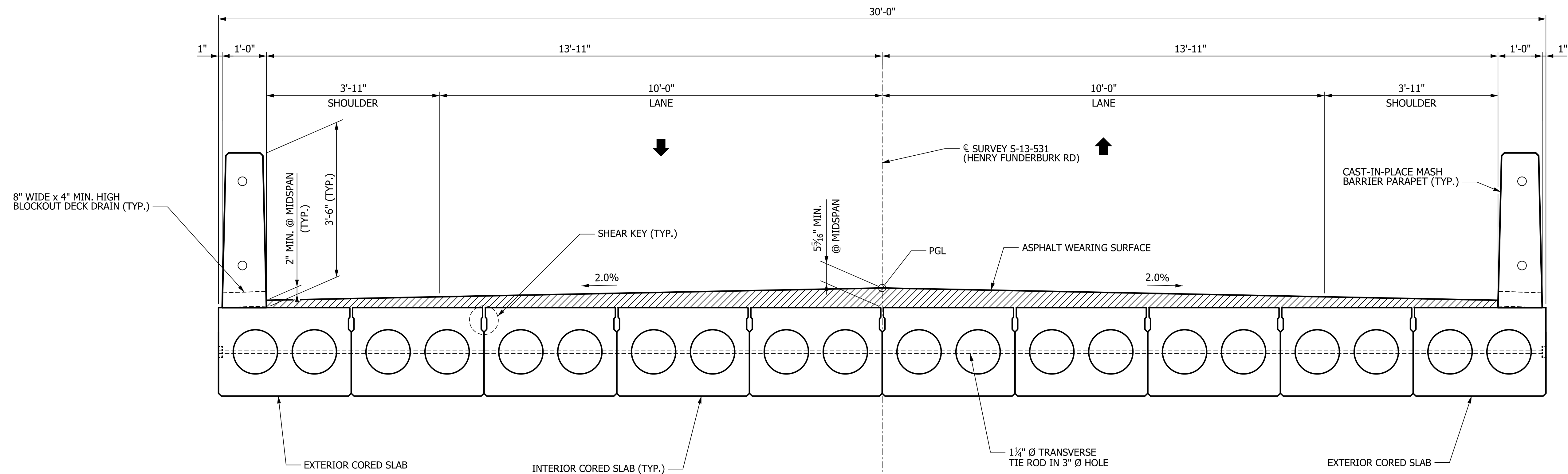
D.A. = 0.37 SQ. MILES
Q₂₅ = 242 CFS
VELOCITY₂₅ = 5.9 FPS
AREA FURNISHED UNDER₂₅ = 40.8 SQ. FT.
Q₁₀₀ = 340 CFS
VELOCITY₁₀₀ = 6.2 FPS
AREA FURNISHED UNDER₁₀₀ = 55.4 SQ. FT.

OVERTOPPING FLOOD

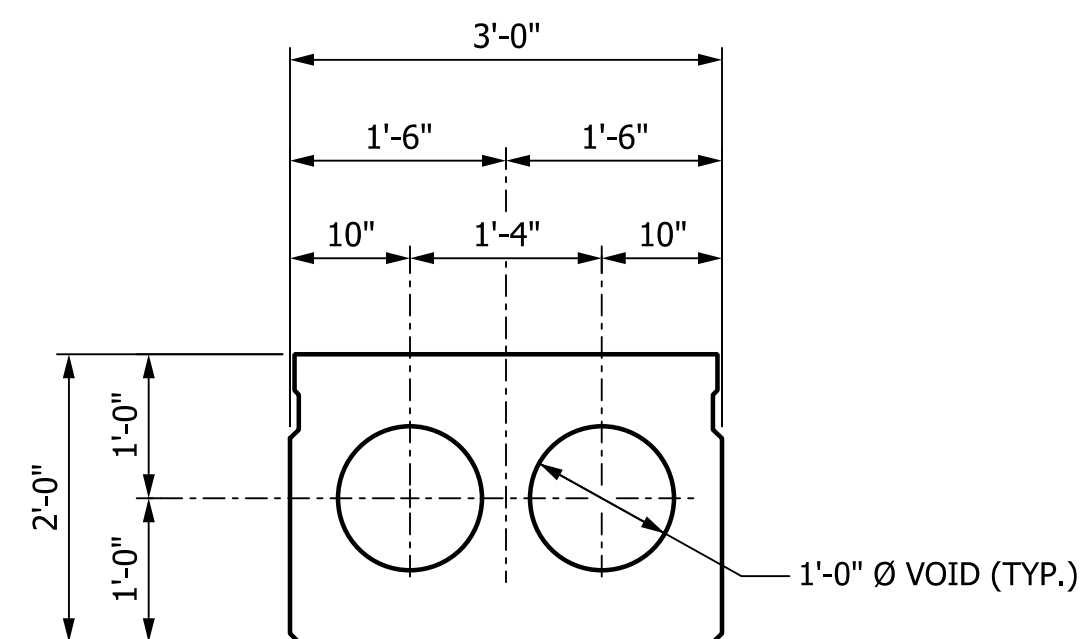
Q = 3,960 CFS
PROBABILITY < 0.2%

CONCEPTUAL PLANS				HNTB HNTB CORPORATION SC License No. 265 343 E. Six Forks Rd., Suite 200, Raleigh, N.C. 27609	
REV.				SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION	
REV.					
REV.					
REVIEWED				BRIDGE PLAN AND PROFILE S-13-531 (HENRY FUNDERBURK ROAD) BRIDGE REPLACEMENT OVER MANGUM BRANCH	
QUAN.					
DR.	MEW	BJA	6-23		
DES.					
BY	CHK.	DATE		COUNTY CHESTERFIELD	ROUTE S-13-531

NOT FOR
CONSTRUCTION



TYPICAL SECTION
(LOOKING IN DIRECTION OF STATIONING)



INTERIOR SLAB SECTION

CADD FILE INFORMATION 3:59:08 PM
PLOTTED DATE: 7/5/2023
FILE NAME: ...\\Prep-003_S-13_531_P041959_+s.dgn

<div style="text-align: center; padding: 20px;"> NOT FOR CONSTRUCTION </div>	<div style="text-align: center; padding: 10px;"> CONCEPTUAL PLANS </div>				<div style="text-align: center; padding: 10px;"> <div style="margin-top: 5px;"> HNTB CORPORATION SC License No. 265 343 E. Six Forks Rd., Suite 200, Raleigh, N.C. 27609 </div> </div>			
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	REV.							
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	REVIEWED							
	QUAN.				<div style="text-align: center; padding: 10px;"> BRIDGE TYPICAL SECTION S-13-531 (HENRY FUNDERBURK ROAD) BRIDGE REPLACEMENT OVER MANGUM BRANCH </div>			
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