

BENCH MARK: T.B.M. #901 "RR Spike in 8" Twin Oak" 238.95' Rt. of Sta. 155+72.2652; Elev. 162.62
T.B.M. #905 "C.P.S. in 10" Hackberry" 103.03' Lt. of Sta. 222+92.7953; Elev. 166.63

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (2002 edition) with current interim specifications.

LIVE LOADING: HS20
Seismic Performance Category: B

METHOD OF DESIGN: Load Factor

Class S Concrete (substructure)	$f'_c = 3,500$ psi
Class S(AE) Concrete (superstructure)	$f'_c = 4,000$ psi
Class S Concrete (Prestressed Girders)	$f'_c = 5,000$ psi
Reinforcing Steel (M31 or M53, Gr. 60)	$f_y = 60,000$ psi
Structural Steel (M270, Gr. 50W)	$F_y = 50,000$ psi
Structural Steel (M270, Gr. 36)	$F_y = 36,000$ psi


BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division upon request.

DETAIL DRAWINGS:

DRAWING NO.

End Bents	41875-41876
Intermediate Bents	41877
308'-0" Prestressed Concrete Girder Units	41878-41884
Expansion Joints	41885
Details of Elastomeric Bearing Pads w/ Shear Blocks	41886
Details of Concrete Piles	41874
Type Special Approach Slabs and Gutters	41904-41905

CONCRETE PILING: Piling for Roc Roe Bridge Bents 1-33 shall be 18" square precast prestressed concrete piles and shall be driven with an approved air, steam, or diesel hammer to a minimum ultimate bearing capacity of 150 tons per pile. The driving system approval and the ultimate bearing capacity shall be based on the requirements of section 805.09(c) (Method C "Dynamic Load Test").

 A test pile shall be driven in Bents 1, 3, 6, 8, 11, 13, 15, 18, 20, 23, 26, 28, 31, and 33. The test piles in Bents 1, 6, 13, 18, 28, and 33 require dynamic testing. The dynamic test at Bent 18 shall be used to approve the proposed driving system before the remaining test piles and production piles are driven. See the bridge layout for test pile length.

Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Piles shall be driven a minimum of 20 feet below the bottom of footing. Piling in End Bents shall be driven after embankment to bottom of cap is in place. Piling in End Bents shall have a minimum penetration of 20' below natural ground. Payment for cut-off or build-up of the piling shall be based upon the Standard Specifications.

PILE DESIGN CAPACITY: 60 ton

FOOTINGS: The top of footings for bents shall be a minimum of 5 feet below the natural ground except at bents 20 through 32, which shall be as shown.

At bents with significant ground slope, the top of footings shall be a minimum of 2 feet below the natural ground.

Backfilling after construction of bents shall be to the natural ground profile.

except at bents 20 through 32, which shall be to the elevation of fill as shown.

Foundation for the footing shall be set in accordance with Section 801.04 of the Standard Specifications.

BRIDGE DECK: The concrete deck shall be given a fine finish as specified for finishing in subsection 802.19 for Class 5 Bridge Roadway Surface Finish.

CLASS I PROTECTIVE SURFACE TREATMENT. Treatment shall be applied to the roadway surface and to the roadway face and the top of the concrete parapet rail.

	DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	4/16/10	6-23-10				ARK.			
					JOB NO.	110503	67	233	
					06829	GENERAL NOTES		41871	

EXISTING BRIDGE: The existing bridge No. A1253 (log mile 5.36) is 24' wide and 1430' long and consists of steel beam spans supported by a concrete substructure with retaining wall abutments.

REMOVAL AND SALVAGE: After the new bridge is opened to traffic, the existing bridge no. A1253 shall be removed in accordance with section 205 of the Standard Specifications and Special Provision "Nesting Sites of Migratory Birds." All material from the existing bridge shall become the property of the contractor except the bridge name plate which shall remain the property of the state and except as noted otherwise in the contract.

Plans for the existing bridges will be made available to the Contractor upon request to Programs and Contracts Division.
Existing Dwg. Nos. 4904, 4914, 4915, 4916.

MAINTENANCE OF TRAFFIC: See Roadway Plans.

1 Revised Pile Notes 4/16/10



ALTERNATE NO. 1

GENERAL NOTES

ROC ROE BRIDGE
ROC ROE & WHITE RIVER RELIEF
STRS. & APPRS. (CLARENDON) (F)
MONROE COUNTY

ROUTE 79 SEC. 13

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Engstrom/Modjeski and Masters, Inc.

DRAWN BY: FS DATE: Sept. 07 FILENAME: b11050311_14
 CHECKED BY: YO DATE: Feb. 06 SCALE: N.T.S.
 DESIGNED BY: FS DATE: Feb. 06
 BRIDGE NO. 06829 DRAWING NO. 41871