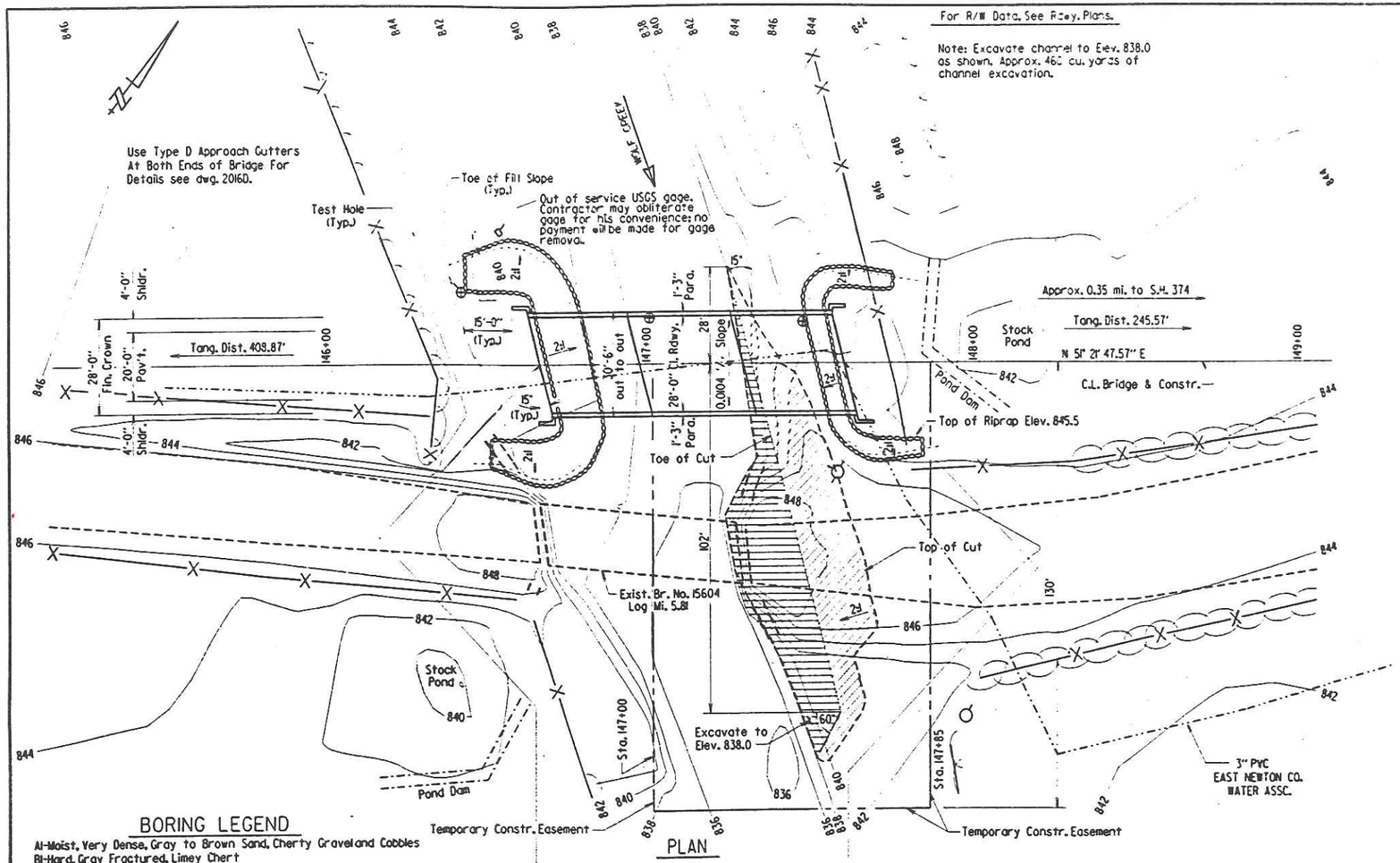
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BR5101		
				04819		- LAYOUT -		37952

For R/W Data, See Rdwy. Plans.

Note: Excavate channel to Elev. 838.0 as shown. Approx. 460 cu. yards of channel excavation.



BORING LEGEND

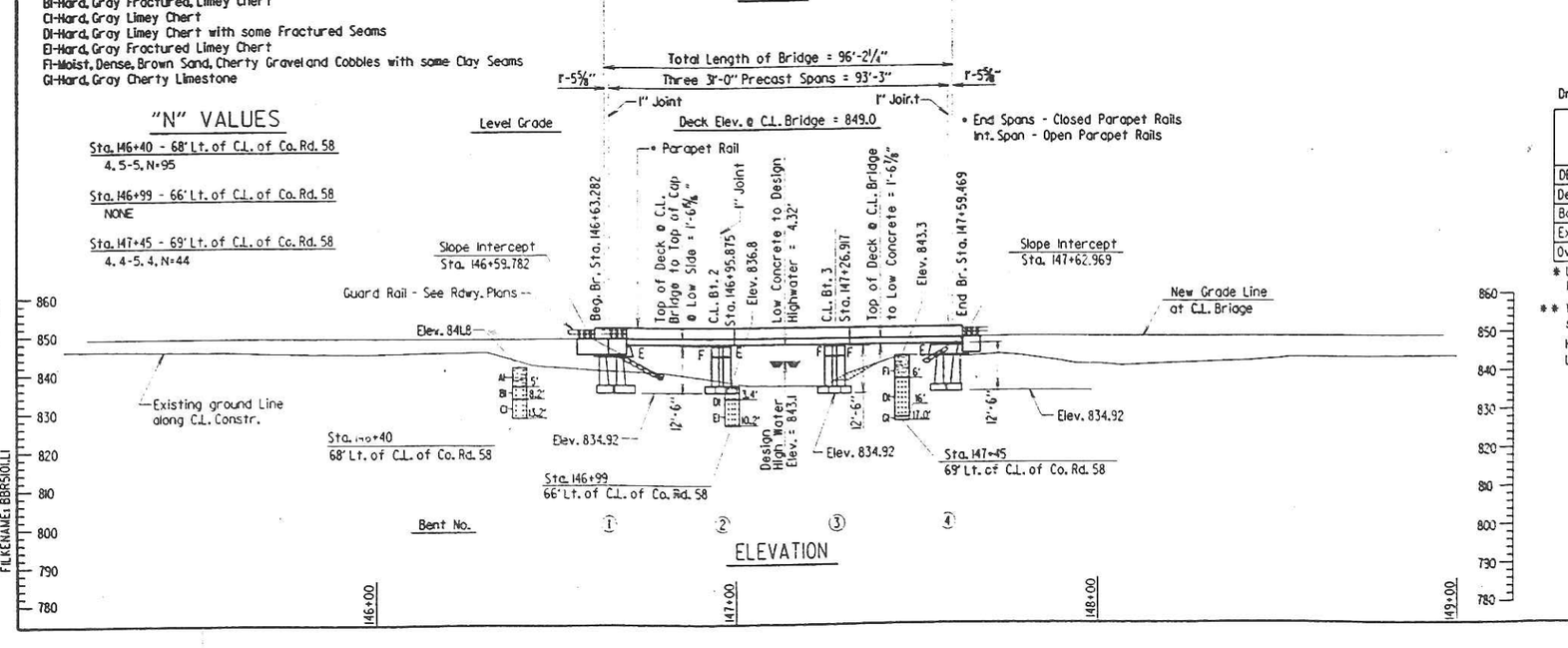
A1-Moist, Very Dense, Gray to Brown Sand, Cherty Gravel and Cobbles
B1-Hard, Gray Fractured, Limey Chert
C1-Hard, Gray Limey Chert
D1-Hard, Gray Limey Chert with some Fractured Seams
E1-Hard, Gray Fractured Limey Chert
F1-Moist, Dense, Brown Sand, Cherty Gravel and Cobbles with some Clay Seams
G1-Hard, Gray Cherty Limestone

"N" VALUES

Sta. 146+40 - 68' Lt. of C.L. of Co. Rd. 58
4.5-5, N=95

Sta. 146+99 - 66' Lt. of C.L. of Co. Rd. 58
NONE

Sta. 147+45 - 69' Lt. of C.L. of Co. Rd. 58
4.4-5.4, N=44



HYDRAULIC DATA

Drainage area = 6.3 square miles.

FLOOD	FREQUENCY	DISCHARGE	* NATURAL WATER SURFACE ELEVATION	** WATER SURFACE ELEV. WITH BACKWATER
DESCRIPTION	YEARS	CFS	FEET	FEET
Design	25	2870	843.1	845.6
Base	100	3960	843.8	847.9
Extreme	500	5300	844.4	849.2
Overtopping	400	4900	844.2	849.1

* Unconstricted water surface at proposed bridge location without structure and roadway approaches.

** Water surface elevation with backwater at upstream side of roadway approaches.

Historical H.W. Elev. = 845.8 ft.
Low Bridge Member Elev. = 847.42 ft.

GENERAL NOTES

BENCH MARK: #903 CH. "SQ." SE COR BR., 59 feet right of C.L. Construction Sta. 146+69.90. Elev. 849.4207.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 edition) with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges, (1996 edition) with current interim specifications.

LIVE LOADING: HS20 METHOD OF DESIGN: Load Factor

SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f'_c = 4,000 psi
Class S Concrete (substructure)	f'_c = 3,500 psi
Reinforcing Steel (AASHTO M31 or M53, GR. 60)	f_y = 60,000 psi

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

FOOTINGS: Footings shall be set a minimum of 1.5' into material designated as hard, fractured gray limey chert on the boring legend. The top of the intermediate bent footings shall be set a minimum of 0.5' below the channel bottom. Foundations for footings shall be prepared in accordance with section 801.04 of the Standard Specifications. Rock excavations shall be made to neat lines of the concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting. Concrete in footings shall be poured directly against excavated surfaces of rock.

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

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

DETAIL DRAWINGS:	DRAWING NO.
End Bents	37953
Intermediate Bents	37954
31'-0" Precast Concrete Spans	15240 & 15230
Type C Bridge Name Plate	2389A
Embankment Construction	1888A
Dumped Riprap and Filter Blanket	1891F
Type D Approach Gutters	20160

EXISTING BRIDGE: The existing bridge No. 15604 (log mile 5.81) is 18' wide and 63' long and consists of concrete deck supported by steel beams and a masonry substructure. The existing bridge is located approximately 50' downstream from the proposed bridge.

REMOVAL AND SALVAGE: After the new bridge is open to traffic the existing bridge (15604) shall be removed in accordance with section 205 the Standard Specifications. All salvageable steel material shall be stacked and set aside to remain the property of the County. The contractor shall coordinate with the county. All remaining material shall become the property of the contractor.

STATE OF ARKANSAS
Edward T. Ean
REGISTERED PROFESSIONAL ENGINEER
No. 7915
12-17-98
EDWARD T. EAN
BRIDGE ENGINEER

LAYOUT OF BRIDGE OVER WOLF CREEK

WOLF CREEK STR. & APPRS. (S)
NEWTON COUNTY
CO. ROAD NO. 58
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: LDF DATE: 6-18-98
CHECKED BY: DJ Mm DATE: 12-17-98
DESIGNED BY: LHS DATE: 07-98
SCALE: 1" = 20'-0"

BRIDGE NO. 04819 DRAWING NO. 37952

MICROFILMED JAN 20 1999

FILENAME: BBR5101LI

LDFE546