

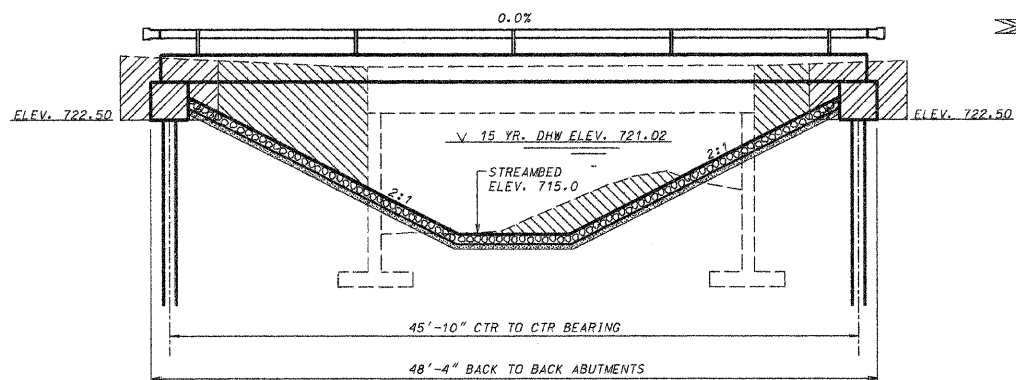
DESIGN STRESSES

$f'_c = 5,000$ P.S.I. (PRESTRESSED BEAMS)
 $f'_c = 4,000$ P.S.I. (PRESTRESSED BEAMS)
 $f'_c = 3,500$ P.S.I. (CONCRETE STRUCTURES)
 $f'_s = 270,000$ P.S.I. (PRESTRESSED STRANDS)
 $f'_s = 189,000$ P.S.I. (PRESTRESSED STRANDS)
 $f'_y = 60,000$ P.S.I. (REINFORCEMENT BARS)

LOADING HS 20-44 DESIGN SPECS. 1996 AASHTO

EXISTING STRUCTURE: 24' CLEAR SPAN CONCRETE THRU GIRDER ON CLOSED ABUTMENTS, SKEWED 0s.

EXISTING CLOSED ABUTMENT FOOTING MAY INTERFERE WITH PILING LOCATION. THE CONTRACTOR SHALL REMOVE ENTIRE STRUCTURE INCLUDING FOOTINGS.



ELEVATION

INDICATES CHANNEL EXCAVATION SEE ROADWAY PLANS FOR QUANTITIES
 INDICATES STRUCTURE EXCAVATION SEE ROADWAY PLANS FOR QUANTITIES

OUTLINE OF EXISTING FOOTING IS ESTIMATED. NO EXISTING PLANS AVAILABLE

SCALE 1"=6' CONTRACT NO. 95644

WATERWAY INFORMATION

DRAINAGE AREA = 0.82 SQ. MI. LDW GRADE ELEV. 727.0 AT STATION 7+00

FLOOD	FREQ. YR.	0	OPENING SQ. FT.		NAT.	HEAD - FOOT		HEADWATER EL.	
			C.F.S. EXISTING	PROP.		EXIST.	PROP.	EXIST.	PROP.
DESIGN	15	433	100	117	721.02	0.28	0.02	721.30	721.04
BASE	100	714	124	150	722.03	0.51	0.10	722.54	722.13

TOTAL BILL OF MATERIAL

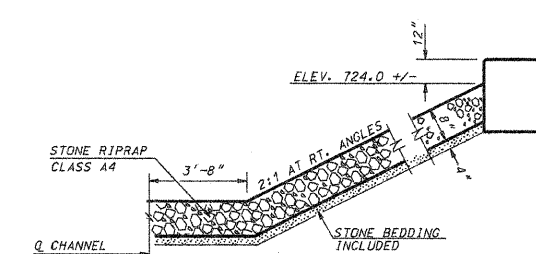
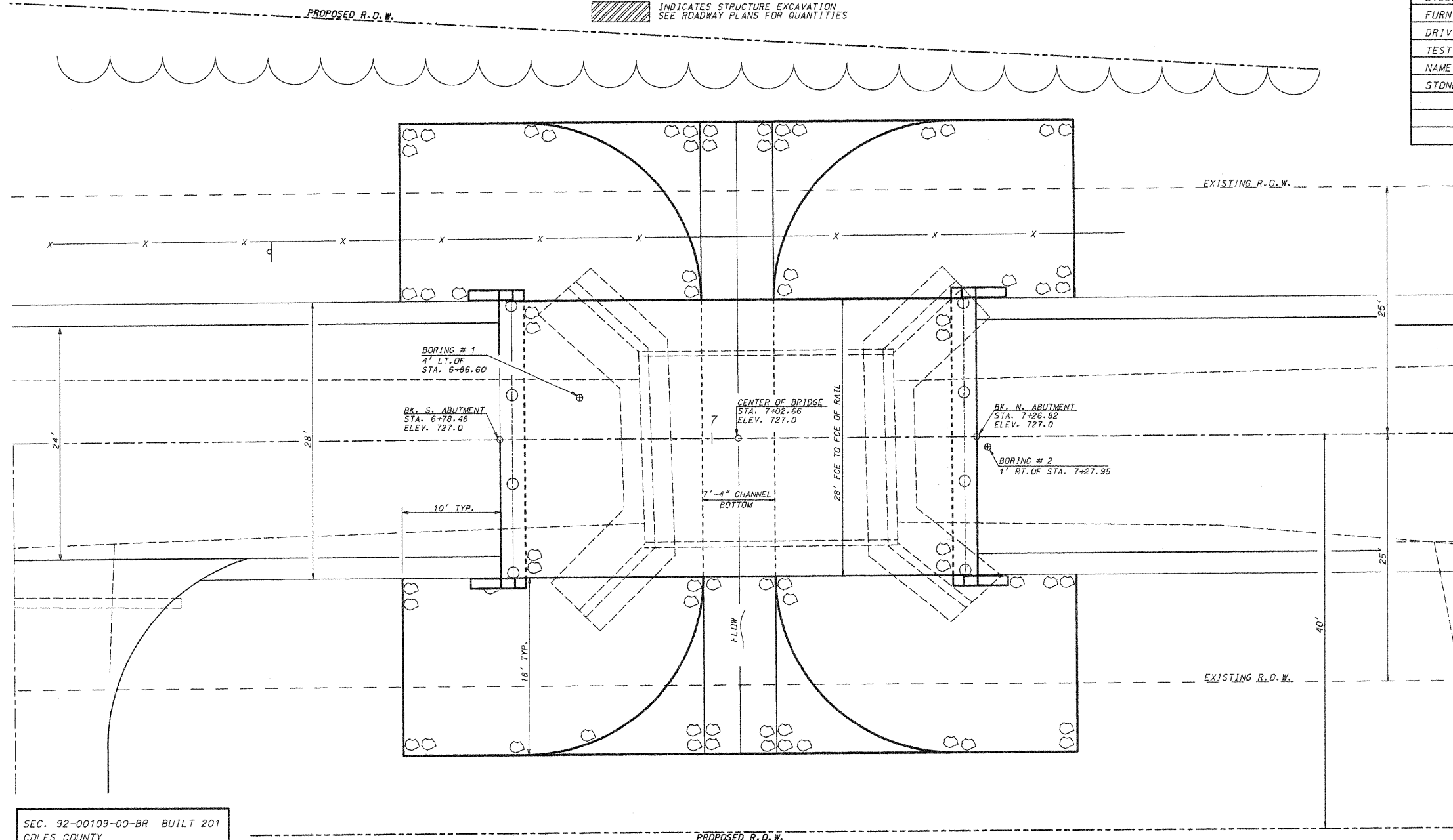
ITEM	UNIT	SUPER	SUB	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH			1
STRUCTURE EXCAVATION	CU. YD.		33	33
CONCRETE STRUCTURES	CU. YD.		18.6	18.6
PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ. FT.	1316		1316
REINFORCEMENT BARS	POUND		1920	1920
STEEL RAILING, TYPE S1	FOOT	94		94
FURNISHING METAL SHELL PILES 14" x 0.250"	FOOT		183	183
DRIVING PILES	FOOT		183	183
TEST PILE METAL SHELL	EACH		1	1
NAME PLATES	EACH		1	1
STONE RIPRAP, CLASS A-4	SQ. YD.		319	319

LAYOUT OF SLOPE PROTECTION SYSTEM MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.

BORING DATA IS SHOWN ONLY AS A GUIDE TO BIDDERS IN ESTIMATING SOIL CONDITIONS WHICH MAY BE ENCOUNTERED DURING CONSTRUCTION

THE CONTRACTOR SHALL DRIVE ONE TEST PILE IN A PERMANENT LOCATION AT THE NORTH ABUTMENT AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M31, M42 OR M53 GRADE 60



DETAIL "A"



I certify that to the best of my knowledge, information, and belief, this bridge design is structurally adequate for the design loading shown on the plan. The design is an economical one for the style of structure and complies with requirements of the current "A.A.S.H.T.O. Standard Specifications for Highway Bridges."
 Robert L. McClintock Date: 01/26/11
 Robert L. McClintock IL, S.E. #3137 LICENSED EXPIRES 11-30-12

SEC. 92-00109-00-BR BUILT 201
 COLES COUNTY
 LOADING HS 20
 STR. NO. 015-3376
 HUTTON ROAD DISTRICT

NAME PLATE DETAIL
 (SEE STANDARD 515001)

PLAN

B.M. - RAILROAD SPIKE IN POWERPOLE, 52' LT. OF STA. 4+20, ELEVATION 740.21

GENERAL PLAN AND ELEVATION

SECTION 92-00109-00-BR
 HUTTON ROAD DISTRICT
 COLES COUNTY

McCLINTOCK
 CIVIL ENGINEERING SERVICE
 404 SHAW AVE. PARIS, IL 61944
 PHONE (217) 466-6110

DRN TDL DATE 8/1/98 SHEET 4 OF 12
 REV. SDE DATE 1/21/11
 APPR. JOB NO. 3137-362-96