

B.M. - CHISELED "L" S.E. WINGWALL OF EXISTING BRIDGE AT STATION 691+08.7, ELEV. 531.96

EXISTING STRUCTURE TO BE REMOVED - STRUCTURE NO. 034-0048 SINGLE SPAN REINFORCED CONCRETE SLAB BRIDGE ON CLOSED ABUTMENTS. OVERALL LENGTH IS 22 FEET BACK TO BACK OF ABUTMENTS. 20 FEET CLEAR SPAN AND 29.1 FEET ROADWAY WIDTH.

STAGE 1 - REMOVE EXISTING STRUCTURE DOWNSTREAM OF A LINE 1'-6" LEFT (UPSTREAM) OF THE CENTERLINE. PROVIDE 10 FOOT MINIMUM TRAFFIC LANE OVER REMAINING PORTION. CONSTRUCT NEW BOX CULVERT DOWNSTREAM OF CENTERLINE ROADWAY, FILL OVER BOX CULVERT TO PROVIDE 10 FOOT MINIMUM TRAFFIC LANE FOR STAGE 2.

STAGE 2 - REMOVE REMAINING EXISTING STRUCTURE, CONSTRUCT REST OF NEW BOX CULVERT, ROADWAY FILL, BASE, AND SURFACING.

REV. NO.	DESCRIPTION	DATE	BY	CHECKED
1	AS SHOWN			
2	REVISION			
3	REVISION			

SHEET 1 OF 3 SHEETS

FOR INFORMATION ONLY

GENERAL NOTES

See Proposal for Boring Data.
 Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 Grade 60.
 Exposed edges shall be beveled 3/4".
 Class X Concrete shall be used throughout.
 For backfilling and embankment see Standard Specifications.
 It shall be the responsibility of the contractor to divert the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be incidental to "Class X Concrete Box Culvert."

TOTAL BILL OF MATERIAL

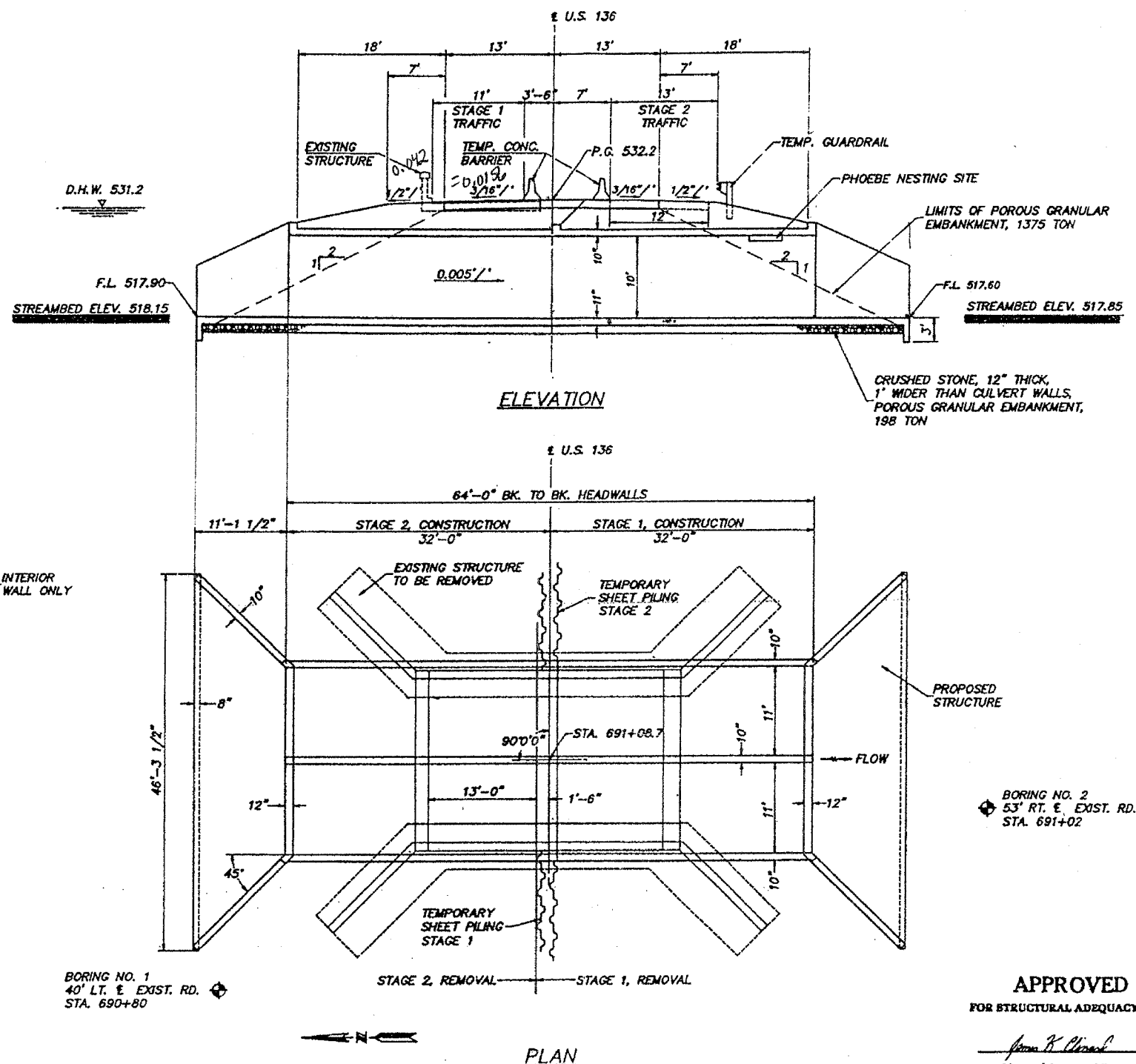
ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Class X Concrete Box Culverts	Cu. Yd.	212.3
Reinforcement Bars	Lbs.	36,510
Reinforcement Bars, Epoxy Coated	Lbs.	1680
Porous Granular Embankment	Ton	1573
Name Plates	Each	1

STATION 691+08.7
 BUILT 1990 BY
 STATE OF ILLINOIS
 F.A. RT.53 SEC. 24 B-1
 LOADING HS 20
 STR. NO. 034-2007

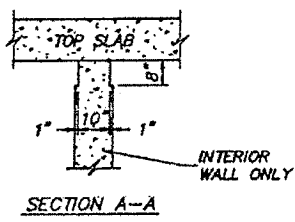
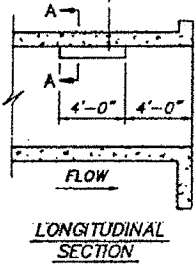
NAME PLATE
 See Std. 2113

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
 [Signature]
 Licensed Structural Engineer

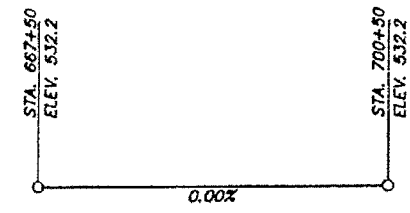
[Signature]
 WILLIAM L. WELLS
 LICENSED STRUCTURAL ENGINEER
 STATE OF ILLINOIS NO. 081-004362
 LICENSE EXPIRES NOVEMBER 30, 1990



NOTCH FORMED BY ROUGH FINISHED BOARD ATTACHED TO AND REMOVED WITH FORMWORK, EACH INTERIOR WALL (DO NOT CHAMFER).



PHOEBE NESTING SITE DETAILS
 (DOWNSTREAM END ONLY)



BORING NO. 1
 40' LT. E EXIST. RD.
 STA. 690+80

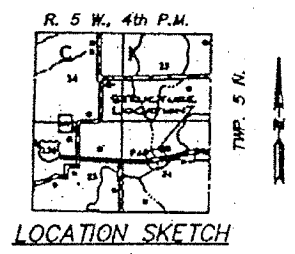
BORING NO. 2
 53' RT. E EXIST. RD.
 STA. 691+02

WATERWAY INFORMATION

DRAINAGE AREA 1.79 SQ. MI.		LOW GRADE ELEV. 532.2		@ STA. 691.08.7	
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.	NAT. H.W.E.	HEAD-FT. HEADWATER EL.
			EXIST. PROP.	EXIST. PROP.	EXIST. PROP.
DESIGN	50	1280	250 220	531.2 .6 .8	531.8 532.0
BASE	100	1485	250 220	531.2 .9 1.0	532.1 532.2
OVERTOPPING	80	1400	220	531.2 .9	532.1
MAX. CALC.	500				

* 10 YEAR FLOOD ON LAMONE RIVER ASSUMED TO OCCUR CONCURRENTLY WITH TRIBUTARY FLOODING.
 ** HIGHEST WATER OCCURS AT SITE DURING MAJOR LAMONE RIVER FLOODS -
 HW₅₀ = 532.6 ±
 HW₁₀₀ = 533.2 ±

DESIGN SPECIFICATION
 1989 AASHTO
LOADING HS 20-44
 ALLOW 25#/SQ. FT. FOR FUTURE WEARING SURFACE
DESIGN STRESSES
 f_c = 3,500 PSI
 f_y = 60,000 PSI (REINF.)



REV. NO.	DATE	DESCRIPTION
1	2/90	F.A. RTE. 53 SECTION 24 B-1 HANCOCK/McDONOUGH COUNTIES GENERAL PLAN AND ELEVATION STRUCTURE NUMBER 034-2007 STA. 691+08.7

KLINGNER & ASSOCIATES P.C.
 Consulting Engineers
 813 Broadway • Quincy, Illinois 62301
 (217) 223-3670 • FAX: 223-3603