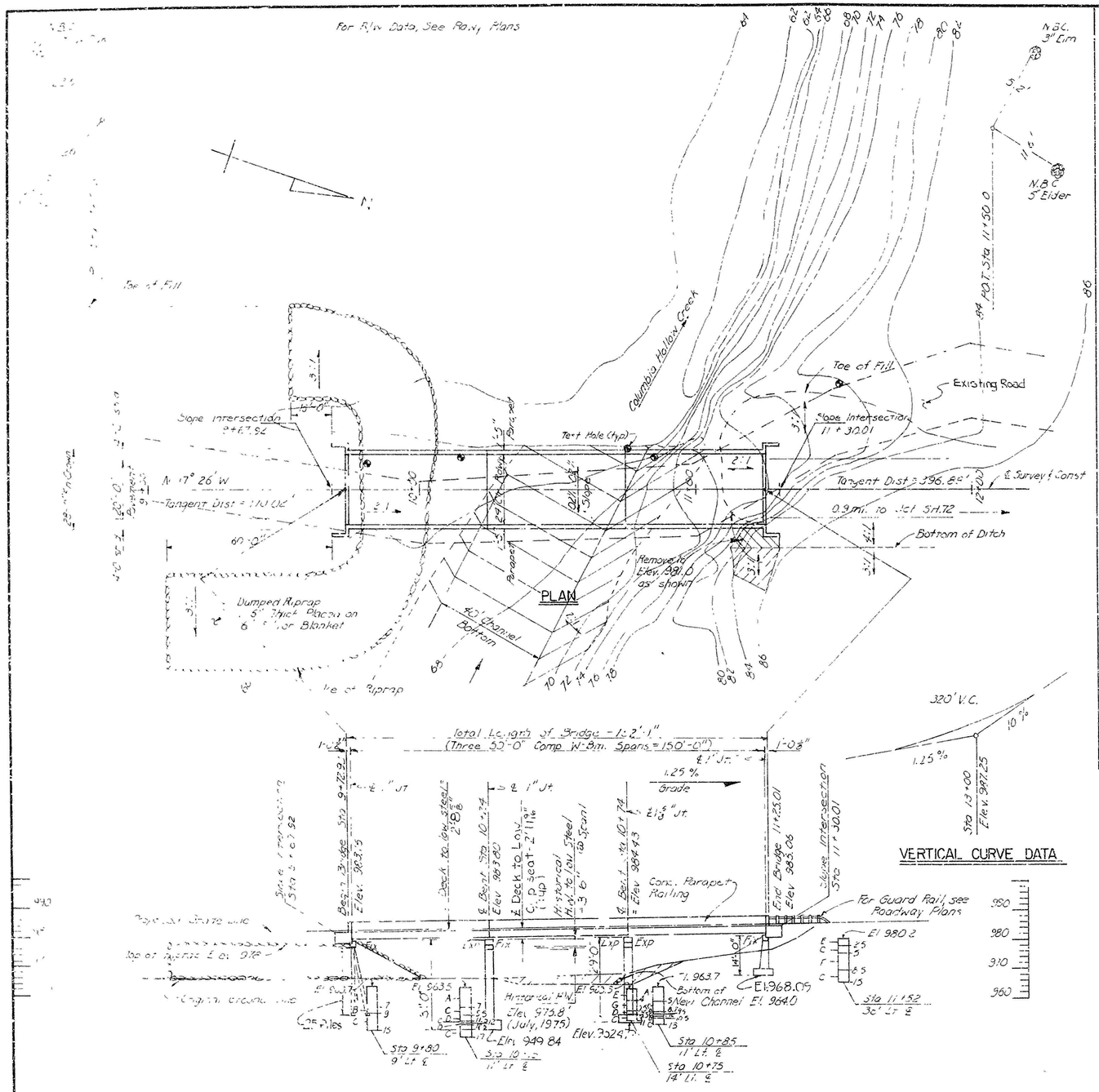
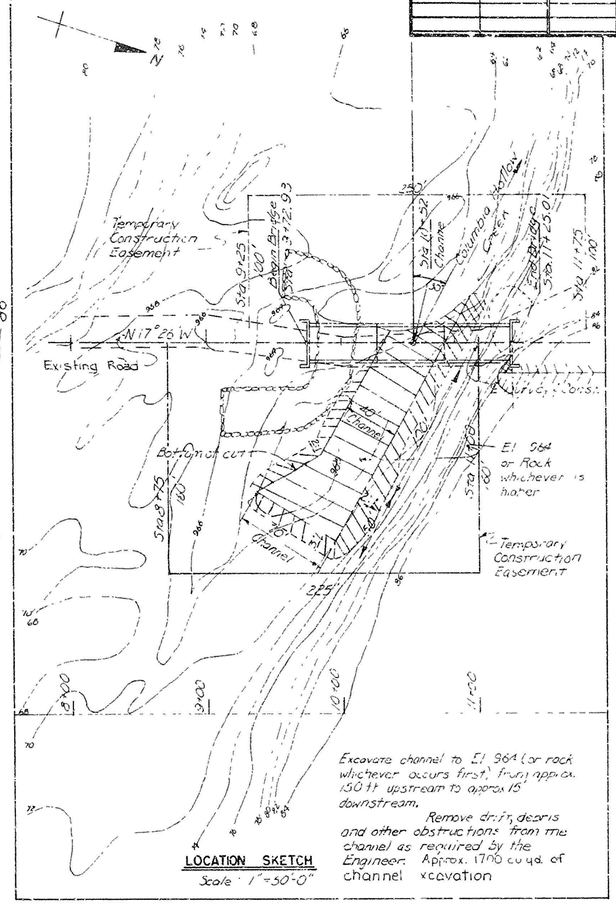
DATE REVISED	DATE PLANED	DATE REVISED	DATE PLANED	FED. ROAD NO	STATE	FED. AID PROJ NO	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO	NS-4-2		7	31

1 4373 - LAYOUT - 22047

For R/W Data, See R.O.W. Plans





GENERAL NOTES

BENCH MARK: N.I.S. 8" ELDER 65 FT. STA. 10+57, ELEV. 969.50

ALL CONCRETE SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4 INCH.

PILING SHALL BE HP10X42 AND SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 55 TONS PER PILE AND INTO THE MATERIAL DESIGNATED HARD GRAY LIMESTONE ON THE BORING LOGS. LENGTHS OF PILING SHOWN ARE FOR ESTIMATING QUANTITIES ONLY. ORDER LENGTHS SHOWN. CUT-OFF OR BUILD UP, IF NECESSARY, TO BE PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

FOOTINGS SHALL BE SET A MINIMUM OF 1'-0" INTO HARD GRAY LIMESTONE. FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SECTION 801.04 OF THE STANDARD SPECIFICATIONS. TOP OF FOOTINGS FOR BENTS 2 & 3 SHALL BE A MINIMUM OF 1'-6" BELOW THE CHANNEL BOTTOM.

FOR DETAILS OF END BENT NO. 1, SEE DWG. NO. 22048
FOR DETAILS OF END BENT NO. 4, SEE DWG. NO. 22050
FOR DETAILS OF COMPOSITE W-BEAM SPANS SEE DRAWING NO. 22051 & 14990F
FOR DETAILS OF INT. BENTS, SEE DWG. NO. 22049

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 EDITION AND 1978 INTERIM.

LIVE LOADING: HS15

METHOD OF DESIGN: LOAD FACTOR

BORING LEGEND

A — Moist, Medium Dense Reddish Brown & Grey Cherty Gravel & Cobbles with Clay

B — Hard, Gray, Fractured Cherty Limestone

C — Hard, Gray Cherty Limestone

D — Void

E — Moist, Dense, Gray Gravel, Cobbles & Boulders with Clay

F — Loose Gray Gravel

G — Alternating Layers of Gravel & Limestone

VERTICAL CURVE DATA

E 25
S 5
F 15
C 65
C 15

BASIC FLOOD

Q100 = 8700 cfs
Normal W.S. = 975.3
W.S. with Backwater = N.A.

ELEVATION

Drainage Area = 11.239 Mi.

DESIGN FLOOD

Q25 = 5900 cfs
Normal W.S. = 973.2
W.S. with Backwater = 975.7

LAYOUT OF
BRIDGE OVER COLUMBIA HOLLOW CREEK
COLUMBIA HOLLOW CREEK BR & APPRS.
BENTON COUNTY
ROUTE 20 SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

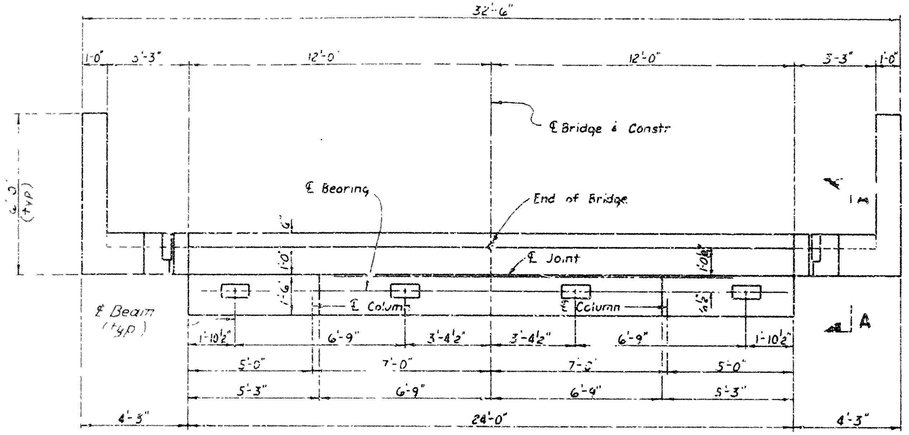
DRAWN BY: NAB DATE: 6-6-78
CHECKED BY: WA DATE: 11-6-78
DESIGNED BY: JB DATE: —
SCALE: 1" = 10'-0" (HOR.) 1" = 5'-0" (VERT.)

BRIDGE ENGINEER

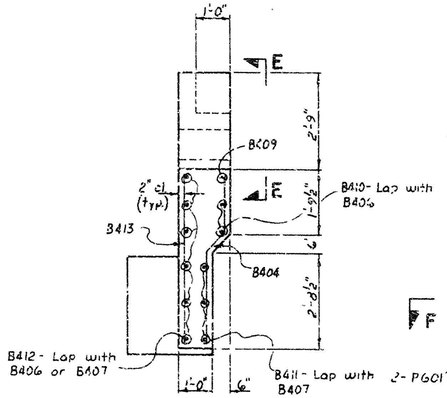
BRIDGE NO. 4373 DRAWING NO. 22047

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		NS-4-2	12	31

4373-END BENT-22050

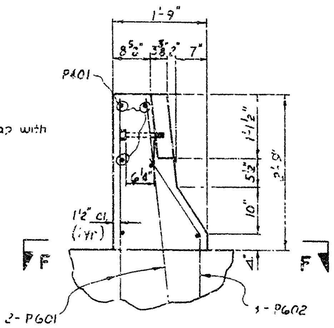


PLAN



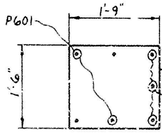
SECTION A-A

Scale: ½" = 1'-0"



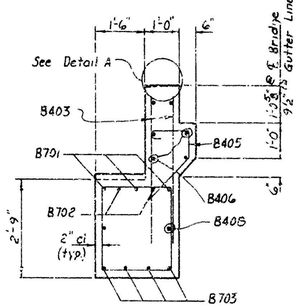
VIEW E-E

Scale: ¾" = 1'-0"



SECTION F-F

Scale: ¾" -0"



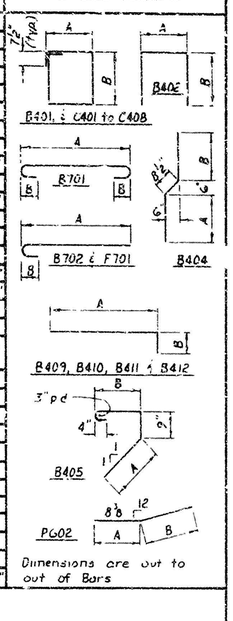
SECTION B-B

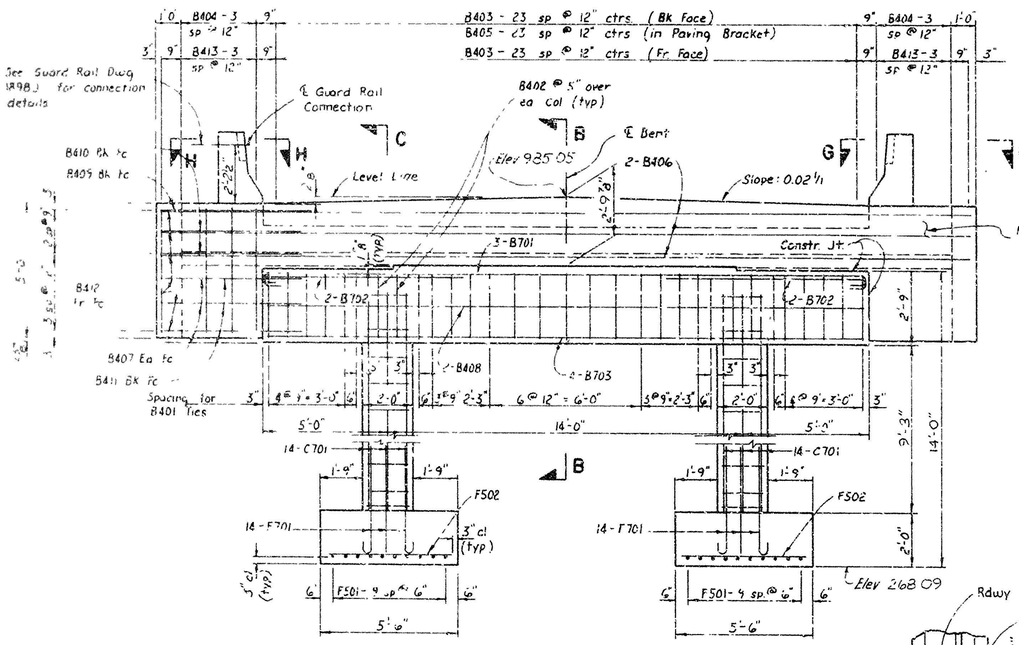
Scale: ½" = 1'-0"

BAR LIST

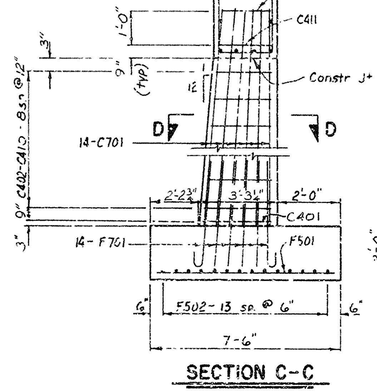
MARK	NO. REQ'D	LENGTH	A	B	PIN DIA	BENDING DIAGRAMS
B401	27	10'-0"	2'-2"	2'-5"	2"	
B402	4	6'-10"	2'-2"	2'-5"	2"	
B403	48	4'-3"	–	–	Str	
B404	8	4'-11"	2'-7"	1'-8"	2"	
B405	24	4'-0"	1'-8"	1'-2"	2"	
B406	6	32'-2"	–	–	Str	
B407	12	12'-0"	–	–	Str	
B408	2	23'-8"	–	–	Str	
B409	2	7'-9"	4'-7"	3'-3"	2"	
B410	6	6'-2"	4'-7"	1'-8"	2"	
B411	6	6'-5"	5'-1"	1'-8"	2"	
B412	13	7'-2"	5'-7"	1'-8"	2"	
B413	32	4'-8"	–	–	Str	
B701	3	25'-4"	23'-8"	7"	5¼"	
B702	4	8'-10"	8'-0"	7"	5¼"	
B703	4	23'-8"	–	–	Str	
CA01	2	3'-8"	1'-7"	2'-10"	2"	
C402-C410	2 ea	9'-8½" to 8'-2½"	1'-7"	2'-9⅛ +0/-1¼"	2"	
C411	2	6'-0"	1'-7"	2'-0½"	2"	
C412	2	7'-10½"	1'-7"	1'-11⅛"	2"	
C701	28	11'-6"	–	–	Str	
F501	20	7'-0	–	–	Str	
F502	28	5'-0"	–	–	Str	
F701	28	5'-6"	4'-8"	7"	5¼"	
P401	12	1'-2"	–	–	Str	
PG01	8	5'-1"	–	–	Str	
PG02	6	4'-8"	2'-10"	1'-10"	3¾"	

BENDING DIAGRAMS

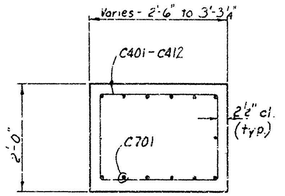




ELEVATION

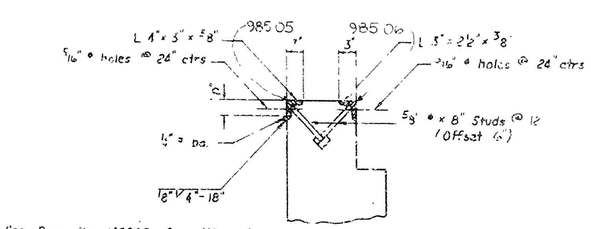


SECTION C-C



SECTION D-D

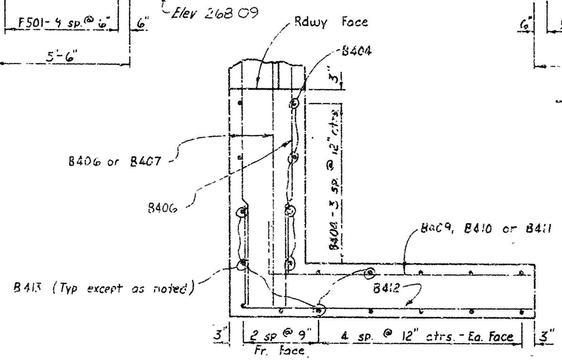
Scale: ¾" = 1'-0"



Note: See Dwg No 14990F for Alternate Anchor & Dimension "D"

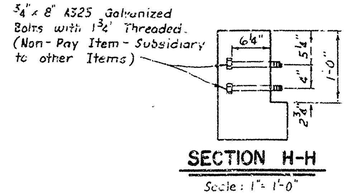
DETAIL

Scale: 1½" = 1'-0"



VIEW G-G

Scale: ¾" = 1'-0"



SECTION H-H

Scale: 1" = 1'-0"

NOTES:

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 WITH 1978 INTERIM SPECIFICATIONS.

LIVE LOAD- H15

METHOD OF DESIGN- LOAD FACTOR

ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH f'c = 3500 PSI. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60 (YIELD STRENGTH = 60,000 PSI). SHOP LISTS AND BENDING DIAGRAMS MAY BE SUBMITTED FOR APPROVAL BEFORE FABRICATION IS BEGUN.

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36, AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND BID FOR "STRUCTURAL STEEL IN BEAM SPANS (A36)"

BACKWALL SHALL NOT BE POURED UNTIL BEAMS HAVE BEEN PLACED ON BENT

Note: For Anchor Bolt Layout See Dwg No 22048

DETAILS OF END BENT NO. 4
BRIDGE OVER COLUMBIA HOLLOW CREEK
COLUMBIA HOLLOW CREEK BR. & APPRS.
BENTON COUNTY

ROUTE 20 SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: K.D.H. DATE: 8-28-78
CHECKED BY: _____ DATE: _____
DESIGNED BY: J&K DATE: May 77
SCALE: ⅜"=1'-0" or as noted

Elmer Pinkerton
BRIDGE ENGINEER

BRIDGE NO. 4373 DRAWING NO. 22050