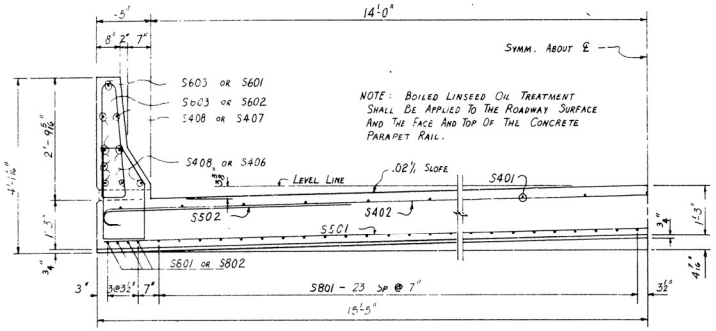
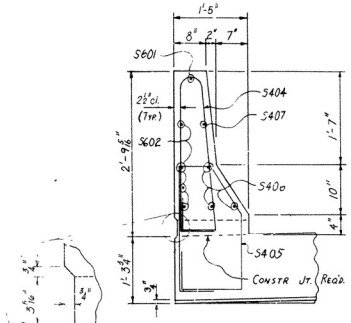
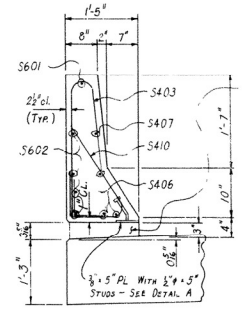
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIV.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		60229	13	34
				1	5P.6	SLAB SPAN 23524		



HALF-SECTION THRU ROADWAY
3/4" = 1'-0"

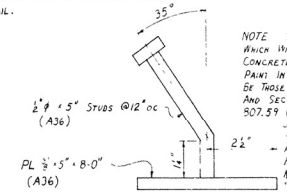


SECTION B-B
1" = 1'-0"



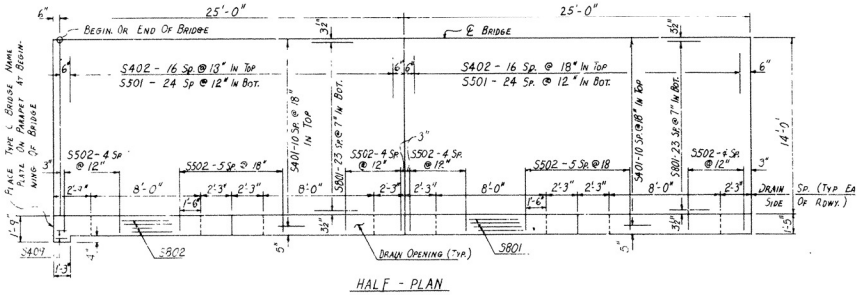
NOTE: Drain Shall Taper From 3" x 8'-0" At Curb To 3/16" x 8'-0" At Back Face Of Concrete Parapet Rail.

SECTION C-C
1" = 1'-0"

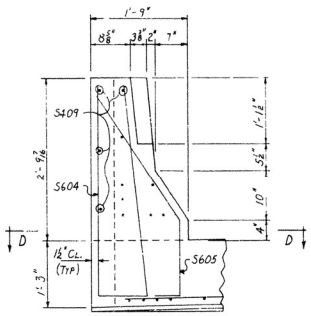


NOTE The Surfaces Of The 3/8" Plates Which Will Not Be In Contact With Concrete Shall Receive Two Coats Of Paint In The Shop. These Coats Shall Be Those Specified As First Shop Coat And Second Field Coat In Subsection 807.59 (a) And 807.59 (c).
Studs Shall Be 5" Long Granular Flux Filled Solid Fused Or Equal And Automatically Welded To Plate. Studs & Plate To Be Measured And Paid For As Class "S" Concrete.
Structural Steel Shall Meet The Requirements Of Section 807 Except As Noted

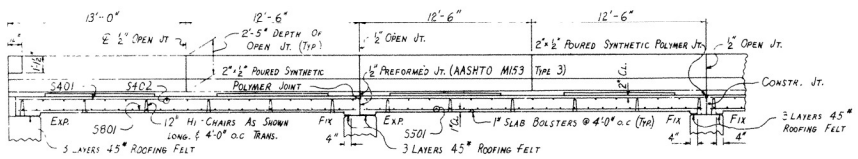
DETAIL A
1/2" = 1"



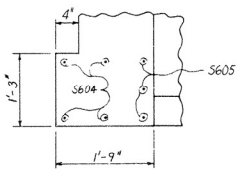
HALF - PLAN
N.T.S



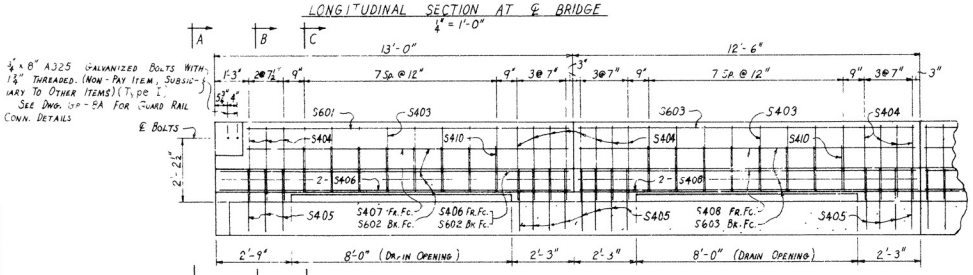
SECTION A-A
1" = 1'-0"



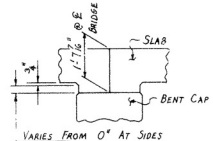
LONGITUDINAL SECTION AT ℄ BRIDGE
1/4" = 1'-0"



SECTION D-D
1" = 1'-0"



LONGITUDINAL SECTION AT CURB
1/2" = 1'-0"

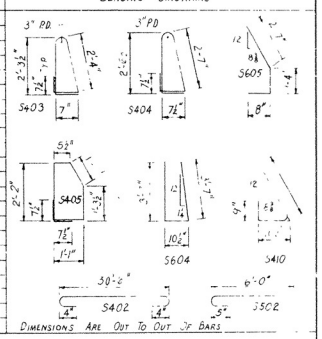


RISER DETAIL
1/2" = 1'-0"

BAR LIST (EACH SPAN)

MK	No Req'd End	No Req'd Int.	Length	Pin Dia.
S401	21	21	24'-8"	Str.
S402	17	17	31'-6"	3"
S403	32	32	6'-4"	2"
S404	30	32	6'-10"	2"
S405	30	32	6'-11"	2"
S406	6	–	12'-8"	Str.
S407	2	–	11'-8"	Str.
S408	8	16	12'-1"	Str.
S409	8	–	11"	Str.
S410	32	32	3'-2"	2"
S501	25	25	30'-4"	Str.
S502	32	32	6'-7"	3 3/4"
S601	2	–	11'-8"	Str.
S602	8	–	12'-8"	Str.
S603	10	20	12'-1"	Str.
S604	4	–	7'-9"	3 3/4"
S605	6	–	4'-5"	3 3/4"
S801	48	50	24'-8"	Str.
S802	2	–	25'-2"	Str.

Bending Diagrams



GENERAL NOTES

ALL CONCRETE TO BE CLASS S. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

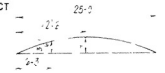
REINFORCING STEEL TO BE ASTM A615 OR A617, GRADE 60. BAR SUPPORTS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "REINFORCING STEEL".

ROOFING FELT, BITUMINOUS FELT, PREFORMED JOINT, AND SYNTHETIC POLYMER JOINTS SHALL BE MEASURED AND PAID FOR AS CLASS S CONCRETE.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION EDITION OF 1977, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO 1978 AND INTERIM.
DESIGN LIVE LOADING: H20
LOAD DISTRIBUTION TO SLAB: DEAD LOAD (SLAB & FUTURE SURF.) = 208 PSF
RAIL DEAD LOAD = 303 LB/FT LINE LOAD AT CENTER OF SPAN
LIVE LOAD = 0.184 WHEELS/FT + 30% IMPACT

METHOD OF DESIGN: LOAD FACTOR
MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE, f'c = 3500 PSI
YIELD STRENGTH OF REINFORCING STEEL, fy = 60,000 PSI



D.L. CAMBER DIAGRAM

Quantity	End Span	Int. Span
Concrete	41.05 Cu.Yd	40.91 Cu.Yd
Reinforcing Steel	6487 #	6396 #
Structural Steel*	215 Lbs.	215 Lbs.

*Not Paid For Directly, Subsidiary To The Item "Class S Concrete."

DETAILS OF STANDARD
25'-0" R.C. SLAB SPANS
CONC. PARAPET RAIL - 28'-0" CL. RDWY.

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

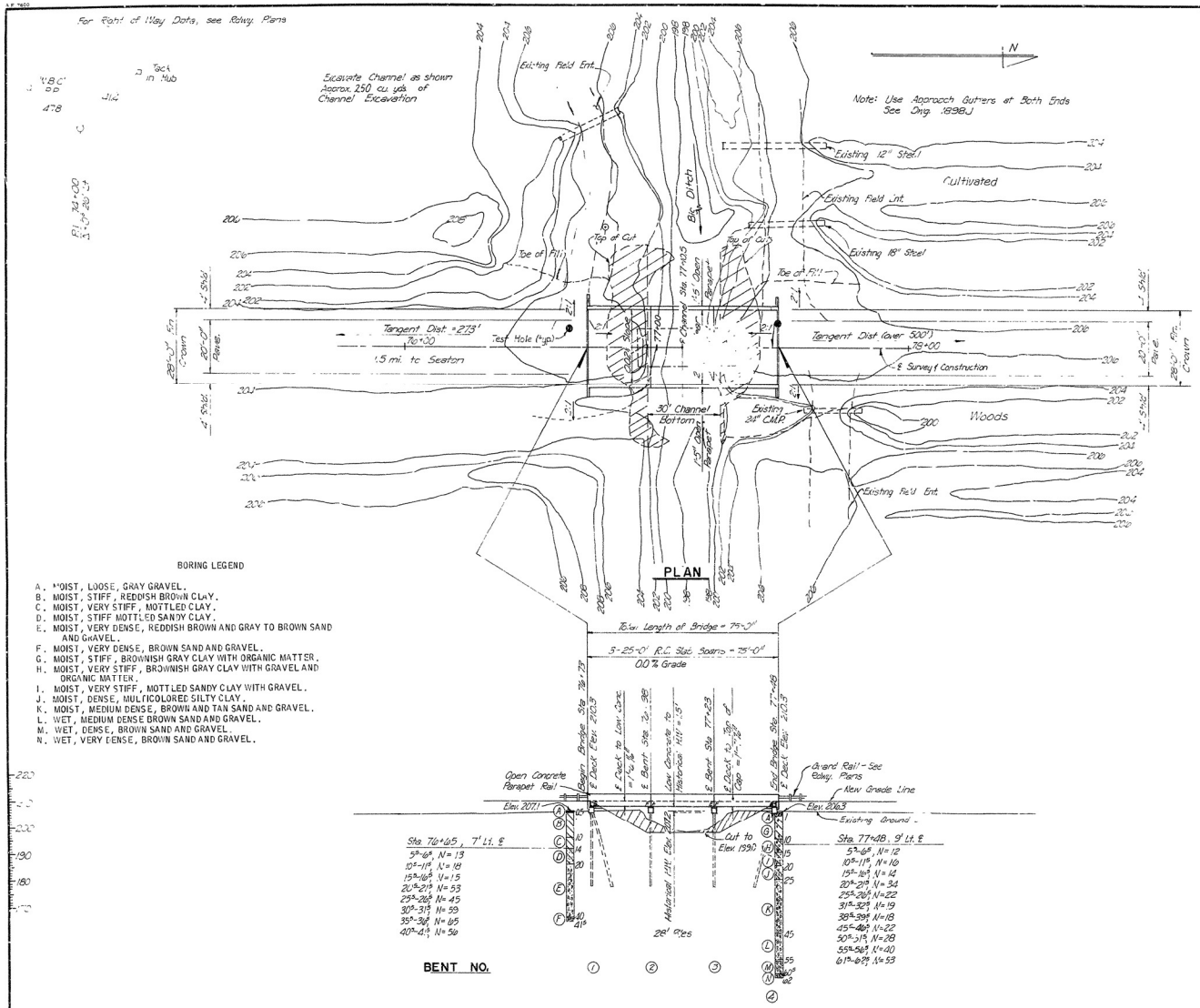
ALTERED BY: LM DATE: 1-31-80
CHECKED BY: GVA DATE: 2-6-80
DESIGNED BY: MRC DATE: 31 JULY 75
SCALE: As Noted

Bruce Pickerstor
BRIDGE ENGINEER

BRIDGE NO. 5868 DRAWING NO. 23524

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO		60229	11	34
				5868	LAYOUT	23522		

13



BORING LEGEND

A. MOIST, LOOSE, GRAY GRAVEL.
B. MOIST, STIFF, REDDISH BROWN CLAY.
C. MOIST, VERY STIFF, MOTTLED CLAY.
D. MOIST, STIFF MOTTLED SANDY CLAY.
E. MOIST, VERY DENSE, REDDISH BROWN AND GRAY TO BROWN SAND AND GRAVEL.
F. MOIST, VERY DENSE, BROWN SAND AND GRAVEL.
G. MOIST, STIFF, BROWNISH GRAY CLAY WITH ORGANIC MATTER.
H. MOIST, VERY STIFF, BROWNISH GRAY CLAY WITH GRAVEL AND ORGANIC MATTER.
I. MOIST, VERY STIFF, MOTTLED SANDY CLAY WITH GRAVEL.
J. MOIST, DENSE, MULTICOLORED SILTY CLAY.
K. MOIST, MEDIUM DENSE, BROWN AND TAN SAND AND GRAVEL.
L. WET, MEDIUM DENSE BROWN SAND AND GRAVEL.
M. WET, DENSE, BROWN SAND AND GRAVEL.
N. WET, VERY DENSE, BROWN SAND AND GRAVEL.

GENERAL NOTES

BENCH MARK: SPIKE IN SIDE OF P.P. 50' LT. OF CENTERLINE AT STA. 63+50, ELEV. 207.39.

ALL CONCRETE SHALL BE POURED IN THE DRY.

ALL PILING SHALL BE 16" OCTAGONAL OR 16" SQUARE PRECAST CONCRETE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A BEARING CAPACITY OF 44 TONS AND TO A MINIMUM PENETRATION OF 20' BELOW NATURAL GROUND. PILE SHAPES SHALL NOT BE MIXED ON ANY BRIDGE.

LENGTHS OF PILING SHOWN ARE ASSUMED FOR ESTIMATING QUANTITIES ONLY. ACTUAL LENGTHS TO BE DETERMINED IN THE FIELD. DRIVE ONE 30' TEST PILE IN BENT 2. PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.

FOR DETAILS OF END BENTS, SEE DWG. NO. 23523
FOR DETAILS OF INTERMEDIATE BENTS, SEE DWG. NO. 23523
FOR DETAILS OF PRECAST CONCRETE PILING, SEE DWG. NO. 23383
FOR DETAILS OF R.C. SLAB SPANS, SEE DWG. NO. 23521

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 INTERIM SPECIFICATIONS.

LIVE LOADING: H20

METHOD OF DESIGN: LOAD FACTOR

REMOVE THE EXISTING 39 FT. BRIDGE AT STA. 76+92. THE BRIDGE CONSISTS OF A TIMBER DECK ON TIMBER STRINGERS SUPPORTED BY TIMBER CAPS AND PILING. SEE SECTION 205 OF THE STANDARD SPECIFICATIONS. ALL MATERIAL FROM THE EXISTING BRIDGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ~~CONSTRUCT A 40 FT. TEMPORARY BRIDGE APPROXIMATELY 41 FT. LT. OF STA. 76+92 WITH A MINIMUM DECK ELEVATION OF 205.4'. THE TEMPORARY BRIDGE SHALL HAVE A MINIMUM ROADWAY OF 20 FT. AND A MINIMUM LIVE LOAD DESIGN CAPACITY OF HS LOADING. SEE SECTION 605 OF THE STANDARD SPECIFICATIONS.~~

DESIGN FLOOD
Qso: 1800 cfs
Normal W.S. Elev. = N.A.
W.S. with Backwater Elev = N.A.

ELEVATION
D.A. = 16.8 sq mi.

BASIC FLOOD
Q100 = 2100 cfs
Normal W.S. Elev = N.A.
W.S. with Backwater Elev = N.A.

LAYOUT OF
BRIDGE OVER BIG DITCH
SEATON-CULLER
LONOKE COUNTY

ROUTE 381 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: E.R.W. DATE: 11-29-79
CHECKED BY: CVA DATE: 12-3-79
DESIGNED BY: DFS DATE: 11-29-79
SCALE: 1" = 20'-0"

Brad Pinkerton
BRIDGE ENGINEER

BRIDGE NO. 5868 **DRAWING NO. 23522**