

GENERAL NOTES

HAS-151-(8.07)

FHWA REGION	STATE	PROJECT	
5	OHIO		

2
6

PROPOSED WORK

REBUILD EACH WINGWALL FOR BOTH ABUTMENTS, AS PER PLAN.
ESTABLISH DETOUR AND CLOSE ROAD TO TRAFFIC.
REMOVE EXISTING DECK AND GUARDRAIL, AS PER PLAN.
SET TIMBER CAP AND ERECT TIMBER DECK.
PERFORM PAVING, EARTHWORK AND GUARDRAIL ITEMS.
SEED AND CLEAN UP.

DESIGN DATA

DESIGN LOADING- HS20-44 AND THE ALTERNATE MILITARY LOADING
CONCRETE CLASS C- UNIT STRESS 1333 P.S.I. FOR SUBSTRUCTURE
REINFORCING STEEL- ASTM A615,A616,A617-GRADE 60 UNIT STRESS=24000 P.S.I.

ITEM 202 - PORTIONS OF STRUCTURE REMOVED

THIS ITEM SHALL INCLUDE REMOVING THE EXISTING DECK, PORTIONS OF THE ABUTMENTS AND EXISTING BITUMINOUS WEARING SURFACE ON THE STRUCTURE. ALSO INCLUDED UNDER THIS ITEM IS SAWING & REMOVING THE PAVEMENT BEHIND THE ABUTMENTS AS DETAILED.

ITEM 202 - GUARDRAIL REMOVED FOR RE-USE

INCLUDED IN THE LINEAR FOOT QUANTITY FOR THIS ITEM IS THE GUARDRAIL THAT EXTENDS ACROSS THE EXISTING BRIDGE. IT IS INTENDED TO RE-USE THIS GUARDRAIL AS PER 606.06 AND 517.04 BETWEEN THE REMAINING GUARDRAIL LEFT IN PLACE. THE LOCATIONS AS SHOWN ON THE PLAN ARE SUBJECT TO ADJUSTMENT BY THE ENGINEER TO ASSURE THAT THE INSTALLATION WILL AFFORD MAXIMUM PROTECTION FOR TRAFFIC. ANY ADJUSTMENT NECESSARY FOR RE-USE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE RESPECTIVE ITEMS.

ITEM SPECIAL-REBUILDING FARM FENCE

THIS ITEM SHALL INCLUDE THE INSTALLATION OF A FENCE EQUAL OR BETTER THAN EXISTING, TEMPORARILY ALONG LIMITS OF THE WORK AGREEMENT AND SUBSEQUENTLY TO THE ORIGINAL LOCATION AS DIRECTED BY THE ENGINEER. POSTS SHALL BE NEW, BUT MAY BE SAME TYPE AS EXISTING; OTHER MATERIALS SHALL BE AS PER 607.02. ALL LABOR AND MATERIALS REQUIRED TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID PER LIN.FT.

BRIDGE IDENTIFICATION SIGNS

THE EXISTING BRIDGE IDENTIFICATION SIGNS SHALL BE REMOVED FOR REUSE BY THE CONTRACTOR. IF EXISTING SIGNS ARE DETERMINED TO BE UNSUITABLE FOR REUSE BY THE ENGINEER, NEW SIGNS WILL BE PROVIDED BY THE STATE. AFTER THE NEW RAIL HAS BEEN ERECTED, THE CONTRACTOR SHALL DRILL HOLES AND INSTALL THE SIGN(S) AS DIRECTED BY THE ENGINEER. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 606-GUARDRAIL, TYPE 5, AS PER PLAN.

FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 150 SQ. FT. OF FLOOR SPACE. PAYMENT SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 619, FIELD OFFICE.

RIGHT-OF-WAY

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY AND AREAS INDICATED ON THE SITE PLAN TO BE COVERED BY A MAINTENANCE WORK AGREEMENT SIGNED WITH THE RESPECTIVE OWNERS. AREAS COVERED BY THE WORK AGREEMENT(S) SHALL BE GRADED TO MEET THE LINE OF THE CHANNEL CROSS SECTIONS, OR SHALL BE RESTORED TO ORIGINAL CONDITION UNDER ITEM 203, EXCAVATION FOR PAYMENT, AFTER OTHER WORK HAS BEEN COMPLETED.

EXISTING STRUCTURE VERIFICATION

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND/OR FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C.M.S. SECTIONS 102-05,105.02, AND 513.02.

ROUNDING OF CORNERS

THE ROUNDED CORNERS, AS SHOWN ON THE TYPICAL SECTION, APPLY TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN ON THE PLANS.

UNDERGROUND UTILITIES

THE LOCATIONS OF UNDERGROUND UTILITIES ON THE PLAN ARE AS OBTAINED FROM OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C. NO UNDERGROUND UTILITIES ARE KNOWN TO BE WITHIN THE WORK AREA.

UTILITY NOTIFICATION

IN ADDITION TO THE REQUIREMENTS OF SPECIFICATION 105.06, THE CONTRACTOR SHALL NOTIFY, AT LEAST TWO WORKING DAYS BEFORE BREAKING GROUND, ALL PUBLIC SERVICE CORPORATIONS HAVING WIRES, POLES, CONDUIT OR OTHER STRUCTURES, WHICH MAY BE AFFECTED BY THE OPERATION. HE SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER TO AVOID DAMAGES TO ANY AND ALL UTILITIES. ANY AND ALL WORK REQUIRED FOR PUBLIC OR PRIVATE UTILITIES WILL BE DONE BY AND AT THE EXPENSE OF THEIR RESPECTIVE OWNERS, UNLESS OTHERWISE NOTED ON THESE PLANS.

FOLLOWING ARE OWNERS KNOWN TO BE WITHIN THE AREA OF THE PROJECT:

GENERAL TELEPHONE CO. OF OHIO
715 COMMERCIAL PARKWAY
P.O. BOX 399
DOVER, OHIO 44622
PHONE 216/364-0363

ITEM 517- RE-ERECT RAILING, DEEP BEAM WITH TUBULAR BACKUP, AS PER PLAN

THE DETAILS OF STD. DWG. DBR-2-73 SHALL BE FOLLOWED EXCEPT THE TUBULAR BACKUP SHALL BE THE SIZE OF EXISTING RAILING TO BE RE-USED. ALL GUARDRAIL ELEMENT SHALL BE BOLTED TO THE TUBULAR BACKUP AT A MAXIMUM OF 6.25 FEET AS PER STD. DWG. DBR-2-73. METHOD OF MEASUREMENT FOR PAYMENT SHALL BE THE LENGTH OF RAILING COMPLETED IN PLACE BETWEEN THE FIRST POST OFF EACH END OF THE BRIDGE.

606-BRIDGE TERMINAL ASSEMBLY, TYPE B, AS PER PLAN

THIS ITEM OF WORK SHALL CONFORM TO THE PROVISIONS OF STD. DWG. GR-3, EXCEPT THAT THE POSTS SHALL BE W10X26, 9 FEET LONG AND THE MINIMUM CONCRETE ENCASEMENT SHALL BE 6 INCHES.

ITEM SPECIAL - TIMBER LONGITUDINAL DECK PANELS

ALL PANELS SHALL MEET AASHTO HS 20-44 LOADING AND AITC REQUIREMENTS. ALL MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF 521.02. PANELS ARE TO BE IN SECTIONS BETWEEN 3'-0" AND 4'-0" WIDE, MANUFACTURED FROM WEST COAST DOUGLAS FIR, SELECT STRUCTURAL F-1550 OR SOUTHERN YELLOW PINE, #2 DENSE F-1550, S4S, DET, CREOSOTE, CCA OR PENTA TREATED. SIZE AND GRADE SHALL CONFORM TO AMERICAN LUMBER STANDARDS. NO SUBSTITUTION OF LENGTHS PERMISSIBLE. LUMBER/TIMBER FURNISHED SHALL BE GRADED IN ACCORDANCE WITH THE "GRADING OF LUMBER AND TIMBER" IN LIEU OF THE REQUIREMENT FOR ASSOCIATION-GRADE MARK.

- INDIVIDUAL BOARD SIZES SHALL BE 4X10 (NOMINAL) MINIMUM.
- NO-END SPLICES WILL BE PERMITTED UNLESS PANELS ARE GLUED-LAMINATED.
- INDIVIDUAL BOARDS SHALL BE FLUSH ON BOTTOM OF PANELS FOR PROPER BEARING.
- S4S NOT REQUIRED UNLESS GLUED-LAMINATED
- INDIVIDUAL BOARDS SHALL BE LAMINATED TOGETHER BY 10"X3/8" SPIKES, DOWELS, SPLIT-RING CONNECTORS, OR 3/4" THREADED RODS (WITH RECESSED NUTS), ALL AT 2'-0" C/C MAX., OR GLUED.
- ALL TIMBER SHALL BE PRECUT AND PREBORED BEFORE TREATING.

MAINTAINING TRAFFIC

PLAN NO. BR-72-85

THE CONTRACTOR SHALL MAINTAIN TWO LANES OF TRAFFIC AT ALL TIMES DURING THE REBUILDING OF THE ABUTMENTS. THE CONTRACTOR SHALL THEN BE PERMITTED TO CLOSE THE ROAD TO TRAFFIC FOR 7 CALENDAR DAYS, IN ACCORDANCE WITH THE REQUIREMENTS OF 614 AND THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", TO REMOVE THE EXISTING DECK AND TO PLACE THE NEW TIMBER DECK AND ASPHALT WEARING SURFACE AND TO ALSO REBUILD THE GUARDRAIL. PAYMENT FOR THE ABOVE SHALL BE INCLUDED UNDER THE UNIT PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

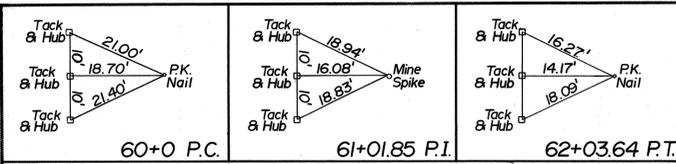
ITEM 305- CONCRETE BASE

THIS ITEM SHALL BE PLACED FROM THE ENDS OF THE TIMBER SLAB, AFTER IT IS SET, TO THE EXISTING SAWN PAVEMENT. NO JOINTS OF ANY KIND ARE REQUIRED. SPECIMEN BEAMS WILL BE USED IN ORDER TO MEET ROAD CLOSURE LIMITATIONS.

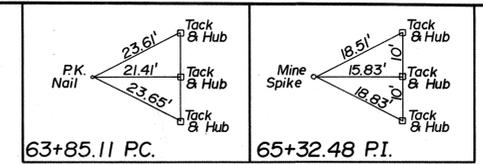
MICROFIL
SEP 17 1986

GENERAL SUMMARY

ITEM	TOTAL	UNIT	DESCRIPTION
202	200	LIN.FT.	GUARDRAIL REMOVED FOR REUSE
202	LUMP	SUM	PORTIONS OF STRUCTURE REMOVED
203	89	CU.YD.	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
203	91	CU.YD.	EMBANKMENT
305	24	SQ.YD.	PORTLAND CEMENT CONCRETE BASE
403	5	CU.YD.	ASPHALT CONCRETE, AC-20
404	3	CU.YD.	ASPHALT CONCRETE, AC-20
407	4	GAL.	TACK COAT
503	LUMP	SUM	UNCLASSIFIED EXCAVATION
509	550	LBS.	REINFORCING STEEL
510	24	EACH	DOWEL HOLES
511	12	CU.YD.	CLASS C CONCRETE, ABUTMENTS
517	50	LIN.FT.	RE-ERECT RAILING (D.B.R. W/TUBULAR BACKUP),AS PER PLAN
518	9	CU.YD.	POROUS BACKFILL
521	0.65	MFBM	BRIDGE TIMBERS
516	9	SQ.FT.	1" PREFORMED EXPANSION JOINT FILLER
601	8	CU.YD.	DUMPED ROCK FILL, TYPE B
606	150	LIN.FT.	GUARDRAIL REBUILT, TYPE 5
606	4	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE B, AS PER PLAN
659	353	SQ.YD.	SEEDING AND MULCHING
659	0.16	TON	AGRICULTURAL LIMING
659	0.03	TON	COMMERCIAL FERTILIZER
SPECIAL	150	LIN.FT.	REBUILDING FARM FENCE, AS PER PLAN
SPECIAL	441	SQ.FT.	27'-0" X 16'-4" X 10" LONGITUDINAL DECK PANELS
614	LUMP	SUM	MAINTAINING TRAFFIC
619	LUMP	SUM	FIELD OFFICE
623	LUMP	SUM	CONSTRUCTION LAYOUT STAKES



B.M. ELEV. 947.07 TOP BOLT CONCRETE SIGN
 BASE STA. 64+56.6 45.8' RIGHT.
 B.M. ELEV. 950.01 MINE SPIKE IN ϕ
 STA. 60+93 40' LEFT

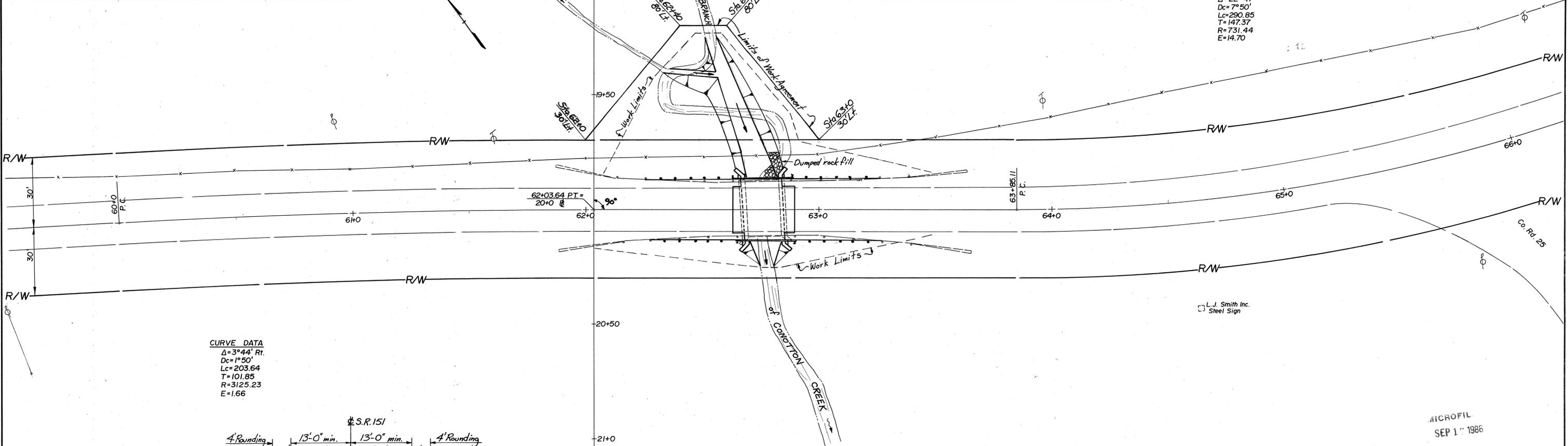


FHWA REGION	STATE	PROJECT	
5	OHIO		

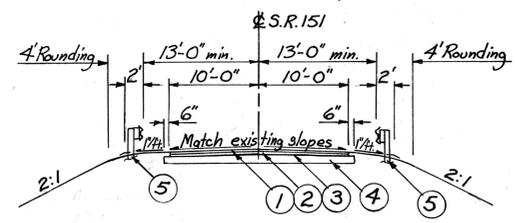
HAS-151-(8.07)

PLAN NO. BR-72-85

CURVE DATA
 $\Delta = 22^\circ 47'$
 $D_c = 7^\circ 50'$
 $L_c = 290.85$
 $T = 147.37$
 $R = 731.44$
 $E = 14.70$



CURVE DATA
 $\Delta = 3^\circ 44'$ Rt.
 $D_c = 1^\circ 50'$
 $L_c = 203.64$
 $T = 101.85$
 $R = 3125.23$
 $E = 1.66$



- ① Item 404, Asphalt concrete AC-20 (1 1/4" thickness)
- ② Item 403, Asphalt concrete AC-20 (2" avg. thickness)
- ③ Item 407, Tack coat (applied @ 0.05 gals./sq. yd.)
- ④ Item 305, Concrete base, (9" min. thickness)
- ⑤ Item 606, Guardrail, Rebuilt, Type 5

TYPICAL SECTION

		GUARDRAIL			
		202	517	606	606
STATION	ITEM	Guardrail removed	Re-erect railing, for reuse as per plan	Guardrail, Rebuilt, Type 5	Bridge terminal assembly, Type B, as per plan
From 62+28 To 63+28	Rt.	100	25	75	2
From 62+26 To 63+26	Lt.	100	25	75	2
TOTALS		200	50	150	4

EXISTING STRUCTURE
 TYPE: Steel beam simple on concrete abutments
 SPAN LENGTH: 14'-0" ±
 ROADWAY WIDTH: 24'-4" t/f Rail
 LOADING: H-15
 ALIGNMENT: Tan. SKEW: 3° ±
 WEARING SURFACE: Bituminous

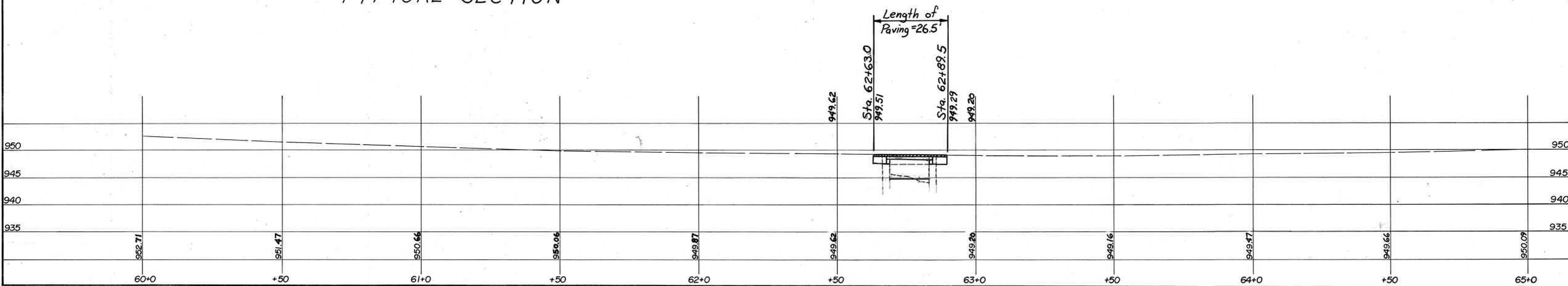
PROPOSED STRUCTURE
 TYPE: Timber slab on existing abutments (extended)
 SPAN: Same as existing
 ROADWAY WIDTH: 26'-0" f/p Rail
 LOADING: HS20-44
 ALIGNMENT: Tan. SKEW: Same as existing
 WEARING SURFACE: Asphalt Concrete

DRAINAGE AREA = 1.28 sq. mi.
 $Q_{25} = 411.87$ c.f.s.
 $Q_{100} = 600.88$ c.f.s.

STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 BUREAU OF MAINTENANCE

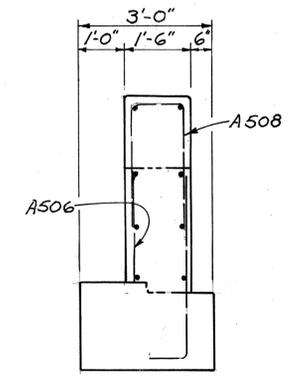
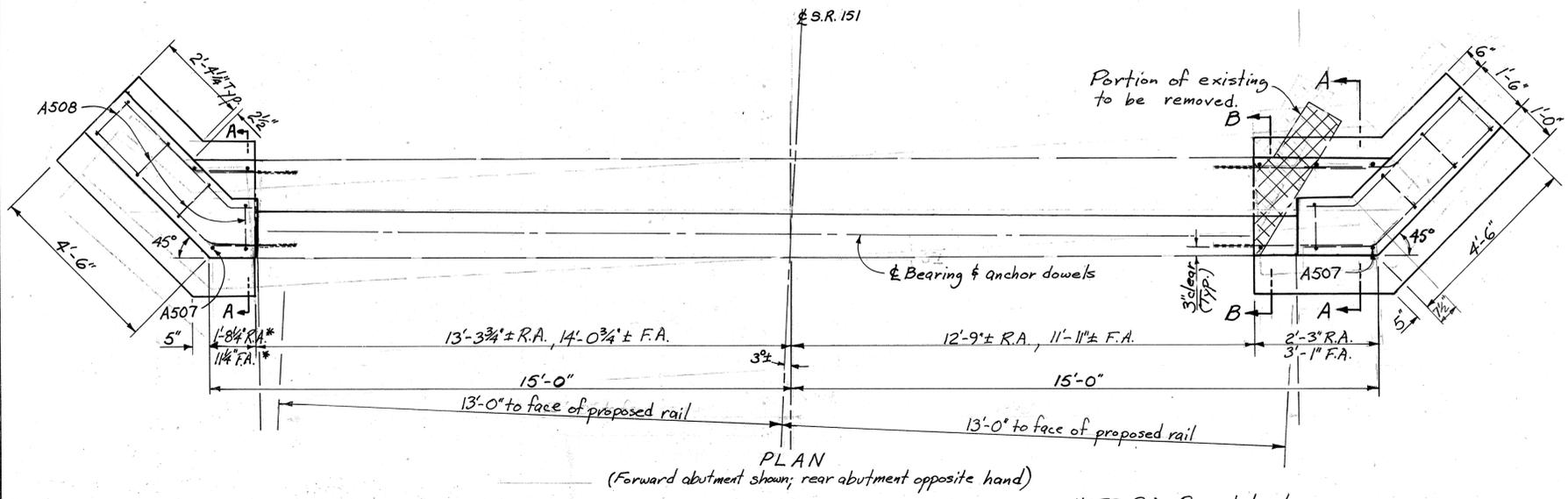
SITE PLAN

BRIDGE No HAS-151-0807
 OVER BR. CONOTTON CREEK



PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
DIST. II	DIST. II	WRG	JLO	JLO	JLO

MICROFIL
 SEP 1 1986



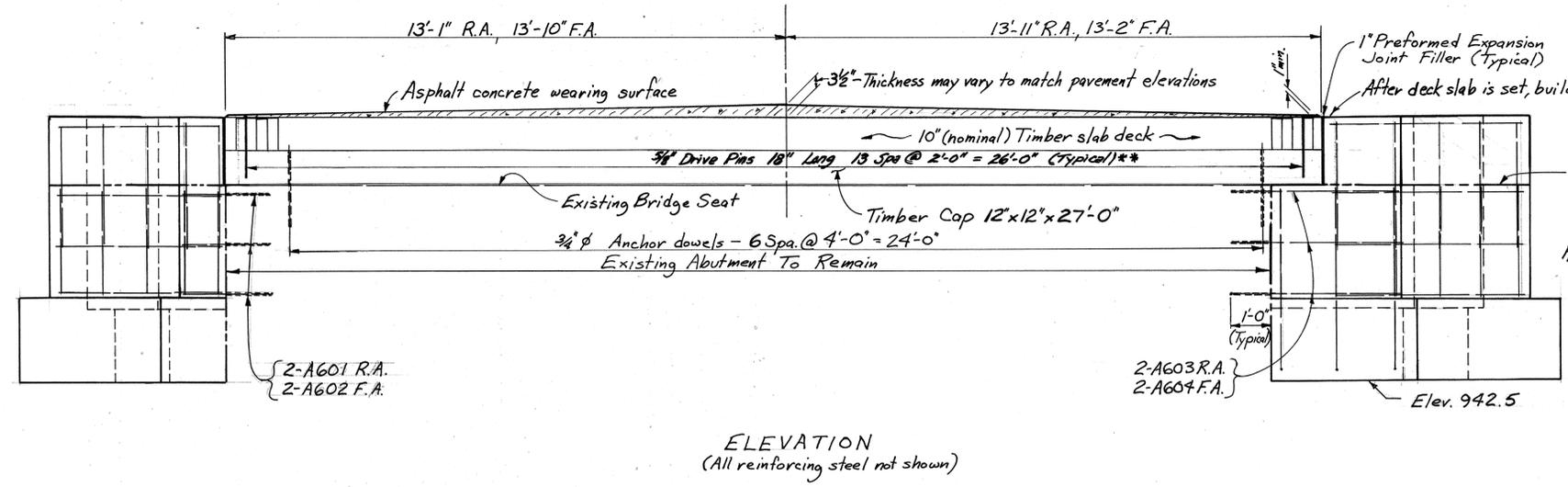
END VIEW OF 45° WING

NOTE: R.A. = Rear abutment
 F.A. = Forward abutment
 N.S. = North Side
 S.S. = South Side

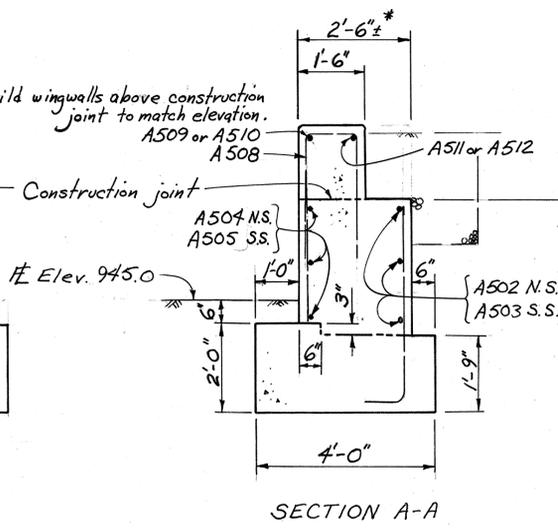
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*-Match existing abutment dimension

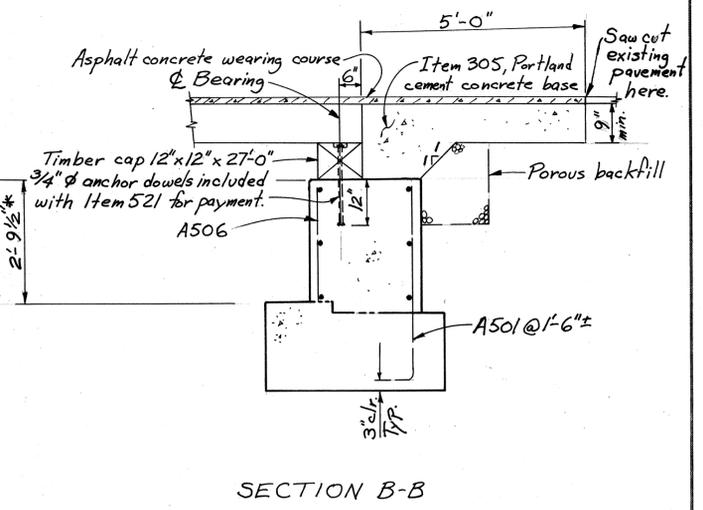
POROUS BACKFILL, 1.5 ft. thick, shall extend up to the plane of the subgrade and laterally to the surface of the embankment slopes.



ELEVATION
 (All reinforcing steel not shown)



SECTION A-A



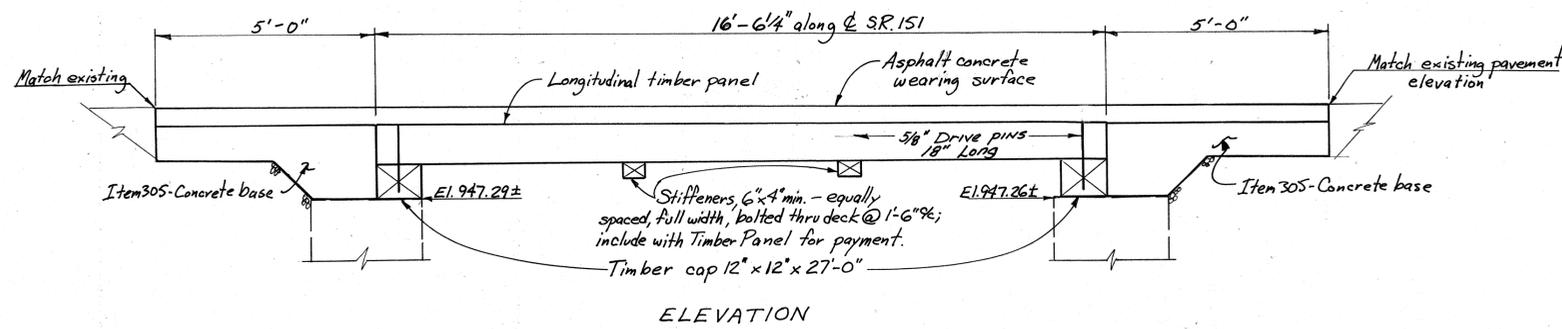
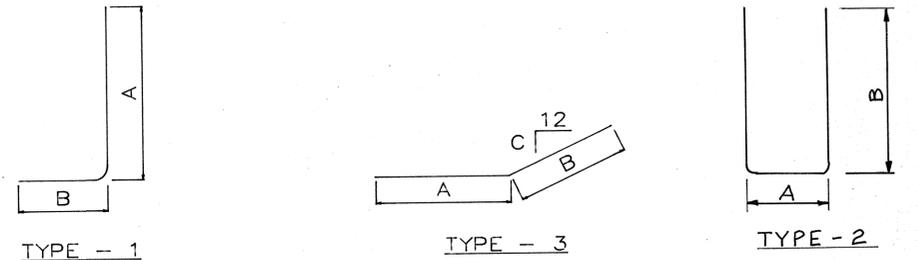
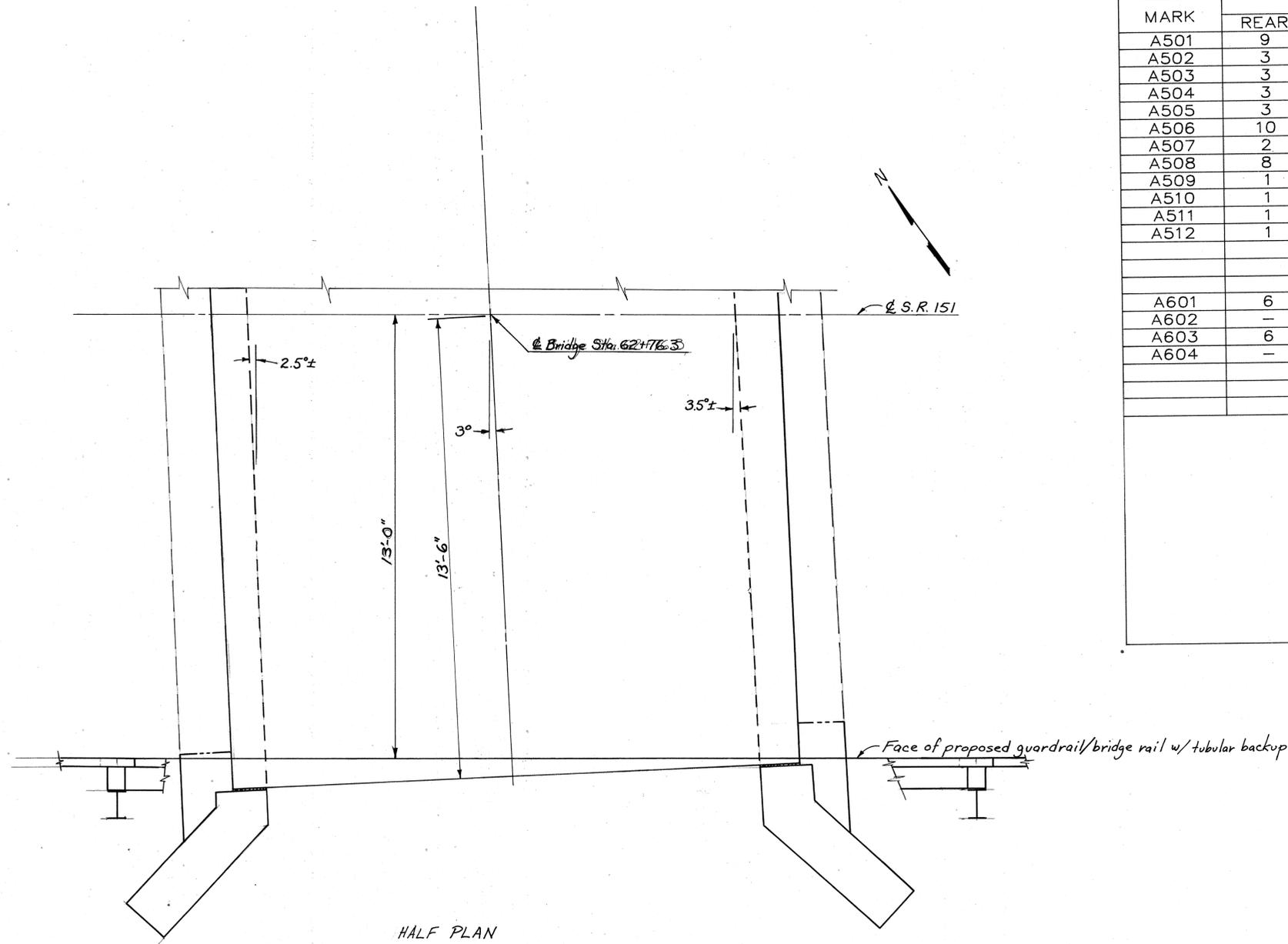
SECTION B-B

** Cost of the 5/8" Drive Pins shall be included with Item 521 for payment.

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS BUREAU OF MAINTENANCE						2/3
ABUTMENT DETAILS						
BRIDGE NO. HAS-151-0807 OVER BR. CANTON CREEK						
DESIGNED Dist. II JLO	DRAWN	TRACED	CHECKED WRG	REVIEWED	DATE	REVISED

REINFORCING STEEL LIST

MARK	NUMBER			LENGTH	WEIGHT	TYPE	DIMENSIONS			
	REAR	FWD.	TOTAL				A	B	C	D
A501	9	9	18	5'-4"	100	1	4'-7"	10.5"		
A502	3	3	6	3'-9"	23	3	2'-5"	1'-4"	12	
A503	3	3	6	4'-0"	25	3	2'-5"	1'-7"	12	
A504	3	3	6	5'-1"	32	3	4'-3"	10"	12	
A505	3	3	6	5'-10"	37	3	4'-3"	1'-7"	12	
A506	10	10	20	2'-8"	56	ST.				
A507	2	2	4	4'-3"	18	ST.				
A508	8	8	16	6'-5"	107	2	1'-2"	2'-9"		
A509	1	1	2	5'-2"	11	3	4'-3"	11"	12	
A510	1	1	2	6'-11"	14	3	4'-3"	1'-8"	12	
A511	1	1	2	4'-2"	9	3	3'-9"	5"	12	
A512	1	1	2	4'-11"	10	3	3'-9"	1'-2"	12	
A601	6	-	6	2'-9"	25	ST.				
A602	-	6	6	2'-0"	18	ST.				
A603	6	-	6	3'-3"	29	ST.				
A604	-	6	6	4'-0"	36	ST.				



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STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BUREAU OF MAINTENANCE

3/3

**SUPERSTRUCTURE
AND REINFORCING STEEL LIST**

BRIDGE NO. HAS-151-0807
OVER BR. CONOTTON CREEK

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
JLO			WRG			