OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

705(82) ADDENDUM

1/21

PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINII BEGIN	PROJECT TERMINII END	NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
1	HUR	162	0980	9.78	9.84	0.06	GREENFIELD		
2	HUR	162	0990	9.88	9.93	0.05	GREENFIELD		
3	HUR	303	0187	1.85	1.94	0.09	WAKEMAN		
4	HUR	61	0785	7.85	7.91	0.06	GREENFIELD		
5	ERI	13	0367	3.58	3.85	0.27	MILAN		
6	HUR	99	VARIOUS						

HUR-162/303/61-VARIOUS ERI-13-3.58	OHIO FHWA REGION 5 FEDERAL PROJECT

PLAN NO. BR-40-82

The Standard 1981 Specifications of the State of Ohio, Department of Transportation, including changes and Supplemental Specifications listed in the plans and proposal shall govern these improvements.

I hereby approve these plans and declare that the making of these improvements will require the closing of the highways to traffic on Parts No. _____ and that detours will be provided by State forces. The closing to traffic of the highways will not be required on Parts No. 1 2 3 4 & 5 & 6 and provisions for the maintenance and safety of traffic will be as indicated in the proposal.

Approved Date 3-4-82 — District Deputy Director of Transportation

J.D.R. Approved Date 3-25-82 — Engineer of Bridges

Approved Date _____ — Engineer of Maintenance

Approved Date 4-8-82 — Chief Engineer, Operations

Approved Date _____ — Assistant Deputy Director, Program Development

Approved Date _____ — Chief Engineer, Construction

Approved Date _____ — Chief Engineer, Design

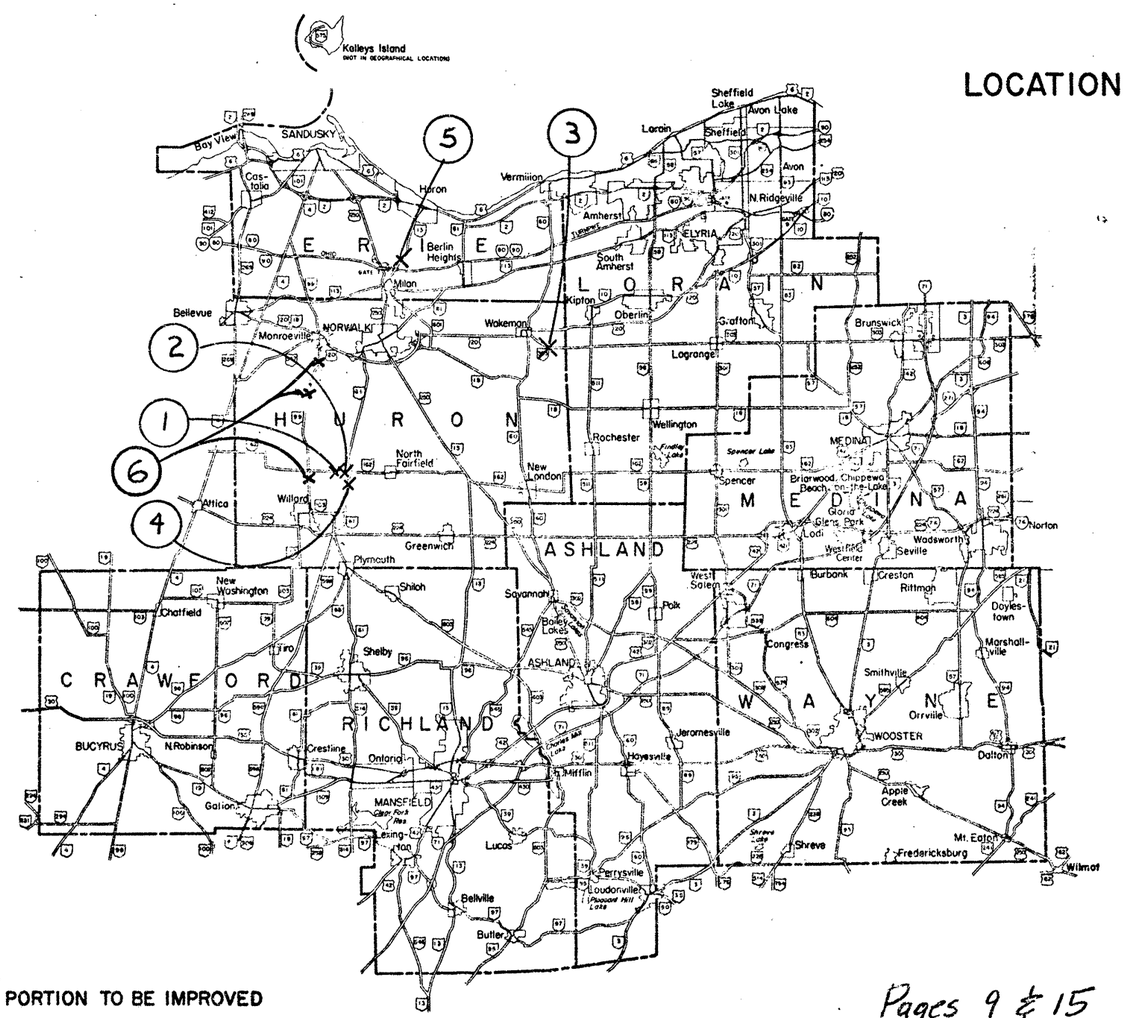
Approved Date _____ — Assistant Director, Department of Transportation

Approved Date 4-9-82 — Director, Department of Transportation

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED:
DIVISION ADMINISTRATOR DATE

LOCATION MAP

N



✕ PORTION TO BE IMPROVED

Pages 9 & 15
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STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
CS-1-54	7-1-54	845	3-2-81
CSB-2-47	9-18-47	849	10-19-81
DBR-2-73	4-10-73	1001	1-3-77
GR-3	2-5-82		
GR-2B	2-5-82		
GR-4	2-5-82		

705

H-1091

7-27-82

22

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 ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGE ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OHIO.

CONTRACT BID PRICES SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

ESTIMATED QUANTITIES:

SPECIFIC LOCATIONS AND USAGE OF ESTIMATED QUANTITIES SET UP ON THIS PLAN TO BE USED"AS DIRECTED BY THE ENGINEER" SHALL BE MADE A MATTER OF RECORD BY INCORPORATION INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT. ESTIMATED QUANTITIES OF MATERIALS SHALL NOT BE ORDERED FOR DELIVERY TO THE PROJECT UNLESS AUTHORIZED BY THE ENGINEER.

LOCATIONS OF GUARDRAIL:

THE GUARDRAIL PROTECTION PROVIDED IN THIS PLAN SHALL BE LOCATED IN THE FIELD TO ASSURE THAT THE INSTALLATIONS WILL AFFORD THE MAXIMUM PROTECTION FOR TRAFFIC.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS ITEM WILL BE USED TO REMOVE THE EDGES OF THE DECK ON STRUCTURES: HUR-162-0980 AND HUR-303-0187, AS PER DETAILS ON SHEET NO. 12, 13. A HOE RAM WILL NOT BE PERMITTED TO DO THIS WORK. (CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NORMAL 35 - POUND CLASS AND SHALL BE OPERATED AT AN ANGLE OF LESS THAN 45 DEGREES WITH RESPECT TO THE SURFACE OF THE DECK). CONCRETE SHALL BE REMOVED IN A MANNER THAT PREVENTS CUTTING, ELONGATING OR DAMAGING REINFORCING STEEL TO BE SALVAGED. IF EXISTING REINFORCING STEEL DESIGNATED FOR SALVAGE IS DAMAGED DURING THIS REMOVAL, DOWELS MUST BE ADDED AT THE CONTRACTOR'S EXPENSE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 202 PORTION OF STRUCTURE REMOVED, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202, BRIDGE RAILING REMOVED, AS PER PLAN:

THIS ITEM SHALL INCLUDE THE REMOVAL OF THE EXISTING RAIL ELEMENTS AND POSTS. ALL MATERIALS REMOVED SHALL BE DISPOSED OF BY THE CONTRACTOR.

WHEN THE EXISTING BRIDGE POSTS ARE TO BE REUSED, THE EXISTING RAIL ELEMENTS SHALL BE CAREFULLY REMOVED SO AS NOT TO DAMAGE THE POSTS. ANY POSTS DAMAGED DURING THE REMOVAL OPERATION SHALL BE REPLACED AT NO EXPENSE TO THE STATE.

WHERE THE EXISTING BRIDGE POSTS ARE MOUNTED ON ANCHOR BOLTS WHICH ARE TO BE REUSED, THE POSTS SHALL BE CAREFULLY REMOVED SO AS NOT TO DAMAGE THE NUTS AND BOLTS. ANY NUTS AND/OR BOLTS DAMAGED DURING THE REMOVAL OPERATIONS SHALL BE REPLACED AT NO EXPENSE TO THE STATE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 202 BRIDGE RAILING REMOVED, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202, GUARDRAIL REMOVED, AS PER PLAN:

ALL GUARDRAIL DESIGNATED FOR REMOVAL ON THIS PROJECT SHALL BE DISPOSED OF BY THE CONTRACTOR. ALL OTHER PROVISIONS OF ITEM 202 SHALL REMAIN IN EFFECT.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 202 GUARDRAIL REMOVED, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 517 RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP, TYPE 2 POST), AS PER PLAN:

THE SINGLE DEEP BEAM RAIL WITH TUBULAR BACKUP AS PER STANDARD DRAWING DBR-2-73 SHALL BE MOUNTED ON NEW TYPE 2 POSTS UTILIZING THE EXISTING GUARDRAIL ANCHOR BOLTS IN THE DECK FACIA. POSTS SHALL BE OF SUFFICIENT LENGTH TO OBTAIN A MINIMUM OF 27 INCH GUARDRAIL HEIGHT ABOVE THE BRIDGE DECK. THE PAY LENGTH FOR THIS ITEM SHALL BE THE EXISTING BRIDGE LIMIT LENGTH, BUT SHALL INCLUDE THE ADDITIONAL TUBULAR BACKUP TO END AT THE FIRST POST OFF EACH END OF THE BRIDGE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 517 RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP, TYPE 2 POST), AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 517 RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP, TYPE 1 POST WITH TOP HANDRAIL), AS PER PLAN:

THE SINGLE DEEP BEAM RAIL WITH TUBULAR BACKUP SHALL BE MOUNTED ON NEW TYPE 1 POSTS UTILIZING THE EXISTING GUARDRAIL ANCHOR BOLTS IN THE DECK FACIA. THE RAILING WILL BE CONSTRUCTED AS PER STANDARD DRAWING DBR-2-73 AND DETAILS ON SHEET NO. 19 . THE PAY LENGTH FOR THIS ITEM SHALL BE THE EXISTING BRIDGE LIMIT LENGTH, BUT SHALL INCLUDE THE ADDITIONAL TUBULAR BACKUP TO END AT THE FIRST POST OFF EACH END OF THE BRIDGE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 517 RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP, TYPE 1 POST WITH TOP HANDRAIL), AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 517 RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP), AS PER PLAN:

THE SINGLE DEEP BEAM RAIL WITH TUBULAR BACKUP SHALL BE MOUNTED ON THE EXISTING POSTS. THE RAILING WILL BE CONSTRUCTED AS PER STANDARD DRAWING DBR-2-73. THE PAY LENGTH FOR THIS ITEM SHALL BE THE EXISTING BRIDGE LIMIT LENGTH, BUT SHALL INCLUDE THE ADDITIONAL TUBULAR BACKUP TO END AT THE FIRST POST OFF EACH END OF THE BRIDGE.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE PID PER LINEAR FOOT FOR ITEM 517 RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP), AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 606 BRIDGE TERMINAL ASSEMBLY, TYPE "D" MODIFIED, AS PER PLAN:

THE BRIDGE TERMINAL ASSEMBLY, TYPE "D", SHALL BE BUILT ACCORDING TO STANDARD DRAWING GR-3A AND MODIFIED AS PER DETAIL ON SHEET NO. 16 .

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 606 BRIDGE TERMINAL ASSEMBLY, TYPE "D", MODIFIED, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516, VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK REQUIRED TO REMOVE PORTIONS OF STRUCTURES IN CURBS, REMOVE EXTENTION BARS, TRIM EXISTING ANGLES, PROVIDE ALL ANCHORS, STUDS, STEEL EXTRUSION 1 1/2" X 4" BAR, NEOPRENE EXTRUSION, PREFORMED EXPANSION JOINT FILLER AND REPLACEMENT CONCRETE IN ACCORDANCE WITH DETAILS ON SHEET NO. 15 .

THE STEEL EXTRUSION SHALL BE PROVIDED IN MAXIMUM LENGTH POSSIBLE TO ALLOW FOR TRAFFIC MAINTENANCE AND SHALL BE WELDED TOGETHER TO FORM A WATERTIGHT JOINT. THE NEOPRENE EXTRUSION SHALL BE ONE CONTINUOUS PIECE. THE NEOPRENE SHALL NOT BE INSTALLED UNTIL ALL OTHER WORK IS COMPLETE UPON THE STRUCTURE. AN ADHESIVE SHALL BE USED TO FACILITATE PLACEMENT OF THE NEOPRENE EXTRUSION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.

THE STEEL EXTRUSION SHALL BE TYPE E WITH SE300 NEOPRENE EXTRUSION AS MANUFACTURED BY WATSON BOWMAN ASSOCIATES, INC., 1280 NIAGRA STREET, BUFFALO, NEW YORK, 14213.

PHYSICAL PROPERTIES -

A. THE STEEL EXTRUSION SHALL CONFORM TO ASTM A 242.

B. ADHESIVES SHALL BE ONE-PART MOISTURE CURING POLYURETHANE AND HYDROCARBON MIXTURES AS DISTRIBUTED UNDER THE TRADE NAME BONLASTIC BY WATSON BOWMAN, INC., OF BUFFALO, NEW YORK, PRIMA LUBE BY ACME HIGHWAY PRODUCTS CORPORATION OF BUFFALO NEW YORK, OR AN APPROVED EQUIVALENT.

C. THE NEOPRENE EXTRUSION SHALL CONFORM TO THE PHYSICAL PROPERTIES SPECIFIED FOR AASHO M220 EXCEPT FOR THE RECOVERY TEST. 94 LIN. FT. OF ITEM 516 HAVE BEEN PROVIDED TO DO THIS WORK.

ALTERNATE DESIGN - THESE DETAILS AND PROVISIONS ARE BASED ON WABO STRIP SEAL BY WATSON BOWMAN ASSOCIATES, INC., OF BUFFALO, NEW YORK.

D. SET SCREWS FOR FASTENING OF SPLIT EXTRUSION SHALL BE STAINLESS STEEL. ACME TYPE E EXTRUSION WITH AS3LP SEAL BY ACME HIGHWAY PRODUCTS, INC., 33 CHANDLER STREET, BUFFALO, NEW YORK WILL BE ACCEPTED AS AN ALTERNATE. THE CONTRACTOR SHALL FURNISH MATERIAL SPECIFICATIONS, CERTIFIED MATERIAL TEST RESULT, CERTIFICATION THAT THE PRODUCT MEETS SPECIFICATIONS, APPROPRIATE INSTALLATION PROCEDURES NECESSARY TO ACCMMODATE THE ALTERNATE DESIGN.

THE APPROVAL OF AN ALTERNATE JOINT SEAL DESIGN AND THE ISSUANCE OF REVISED PROJECT PLANS SHALL BE BASED ON THE UNDERSTANDING THAT SUCH PROJECT MODIFICATIONS WILL BE DONE WITHOUT COST TO THE STATE.

PAYMENT SHALL BE AT THE UNIT PRICE BID PER LINEAL FOOT FOR ITEM 516 - VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINT, [illegible], AS PER PLAN, AND SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO COMPLETE THE ABOVE.

ITEM 601 ROCK CHANNEL PROTECTION, TYPE "C", WITHOUT BEDDING, AS PER PLAN:

THIS ITEM SHALL BE PLACED AS PER DETAILS ON SHEET NO. 15 AND AS DIRECTED BY THE PROJECT ENGINEER. MINIMUM DEPTH SHALL BE 1.5 FEET. THE GROUND SHALL FIRST BE GRADED SMOOTH SO THAT THE FILTER FABRIC WILL NOT BE TORN WHEN LAID ON THE GROUND. THE FILTER FABRIC SHALL BE POLY-FILTER X AS MANUFACTURED BY CARTHAGE MILL INC., EROSION CONTROL DIVISION, 124 WEST 16th STREET, CINCINNATI, OHIO 54216, OR APPROVED EQUAL.

METHOD OF MEASUREMENT SHALL BE THE VOLUME OF ROCK CHANNEL PROTECTION, TYPE "C", WITHOUT BEDDING, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 845 - LATEX MODIFIED CONCRETE OVERLAY:

PLACEMENT OF THE OVERLAY SHALL BE COMPLETED DURING THE NIGHT BETWEEN OFFICIAL SUNSET AND SUNRISE. THE CONTRACTOR SHALL SUBMIT A PLAN FOR PROVIDING ADEQUATE LIGHTING FOR THE WORK AREA AT LEAST 15 CALENDAR DAYS IN ADVANCE, AND RECEIVE WRITTEN APPROVAL FROM THE DIRECTOR, BEFORE PLACING THE CONCRETE. THE LIGHTS SHALL BE SO DIRECTED THAT THEY DO NOT AFFECT OR DISTRACT APPROACHING TRAFFIC. IN EARLY SPRING OR LATE FALL THE OVERLAYS MAY BE PLACED DURING DAYLIGHT HOURS BY PERMISSION OF THE ENGINEER, IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

WIND SPEED.....10 MPH OR LESS

RELATIVE HUMIDITY.....40% OR GREATER

CONCRETE TEMPERATURE.....70° OR LESS

AIR TEMPERATURE.....70° OR LESS

ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY FOR THE LIGHTING SHALL BE INCLUDED IN ITEM 845 - LATEX MODIFIED CONCRETE OVERLAY ($1\frac{1}{4}$" THICK).

INSTEAD OF COVERING THE SINGLE LAYER OF BURLAP WITH A LAYER OF FOUR (4) MIL POLYETHYLENE OR A WET BURLAP-POLYETHYLENE SHEET, THE BURLAP SHALL BE KEPT CONTINUOUSLY WET BY MEANS OF AN AUTOMATIC WETTING SYSTEM FOR THE FIRST TWENTY-FOUR (24) HOUR PERIOD.

ANY CONSTRUCTION EQUIPMENT ON THE DECK SURFACE AFTER THE DECK SURFACE HAS BEEN SAND BLASTED SHALL BE DRIVEN ON A FOUR (4) MIL POLYETHYLENE SHEET TO PREVENT CONTAMINATION OF THE CLEAN SURFACE.

A CONTINGENT QUANTITY OF 2 CUBIC YARDS FULL DEPTH REPAIR IS PROVIDED FOR EACH STRUCTURE. IF THIS ITEM IS NOT REQUIRED IT SHALL BE NONPERFORMED.

FULL DEPTH REPAIR WILL BE USED TO REPAIR THE DETERIORATED EDGES ON STRUCTURES: HUR-162-0980 AND HUR-303-0187.

SPALLED TOPS OF BACKWALLS SHALL BE REPAIRED WITH ITEM 845, LATEX MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS)

LONGITUDINAL JOINTS ARE PERMITTED BUT ONLY TO THE EXTENT NECESSARY TO ACCOMODATE THE WIDTH OF THE FINISHING MACHINE, TO FACILITATE CHANGES IN ROADWAY CROWN, AND TO PERMIT MAINTENANCE OR VEHICULAR TRAFFIC, EXCEPT AS APPROVED BY THE DIRECTOR. JOINTS SHALL NOT BE USED ADJACENT TO RAISED CURBS, BARRIERS, OR EDGES OF DECKS.

WATER BLAST CLEANING SHALL NOT BE USED.

ALL REQUIRED CHARACTERISTICS (AIR, SLUMP, ETC.) OF THE MIX SHALL BE ADJUSTED BEFORE PLACEMENT ON THE DECK STARTS.

PRIOR TO THE SCARIFICATION OF THE DECK SURFACE THE CONTRACTOR SHALL ESTABLISH PERIODIC BENCH MARKS FOR THE EXISTING SURFACE ON THE CURBS, PARAPETS OR RAILINGS. SUPPORT RAILS FOR THE FINISHING SHALL BE SET WITH REFERENCE TO THESE BENCH MARKS SO THAT THE LATEX CONCRETE SURFACE WILL BE 1" (A TOLERANCE OF -0" TO +1/8") ABOVE THE ORIGINAL DECK. SURFACE EXCEPT WHERE LOW SPOTS OCCUR AND THE LATEX CONCRETE SURFACE WILL BE NOT LESS THAN $1\frac{1}{4}$" (A TOLERANCE OF -0" TO +1/8") THICK.

AFTER THE SCREED RAILS HAVE BEEN SET TO PROPER PROFILE AND PRIOR TO PLACING THE OVERLAY, THE FINISHING MACHINE WITH 1-1/8" THICK FILLER BLOCKS ATTACHED TO THE BOTTOM OF THE SCREED SHALL BE PASSED OVER THE ENTIRE AREA OF THE DECK TO BE OVERLAID, EXCEPT WHERE SURFACE PROFILE ADJUSTMENTS HAVE BEEN MADE.

ITEM 845 - LATEX MODIFIED CONCRETE OVERLAY (CONT'D):

THE FILLER BLOCKS SHOULD GENERALLY CLEAR THE SCARIFIED DECK SURFACE BY NOT MORE THAN 1/8". CONCRETE WHICH DOES NOT CLEAR THE FILLER BLOCKS SHALL BE REMOVED.

NO CONCRETE DECK PREPARATIONS SHALL BE STARTED AFTER OCTOBER 15. ANY CONCRETE DECK OVERLAYS STARTED BEFORE OCTOBER 15 SHALL BE COMPLETED BEFORE OCTOBER 20. NO CONCRETE DECK OVERLAYS SHALL BE PLACED BEFORE APRIL 15.

THE EXISTING ASPHALT WEARING SURFACE ON THE STRUCTURE SHALL BE REMOVED AS PART OF THE INITIAL REMOVAL FOR SURFACE PREPARATION.

FINAL SOUNDING OF THE DECK SHALL NOT BE PERFORMED UNTIL 24 HOURS AFTER A RAIN, WHICH SHALL INCLUDE EIGHT (8) HOURS OF GOOD DRYING WEATHER. IN NO CASE SHALL THE FINAL SOUNDING BE MADE WHEN THE DECK IS DAMP. FINAL SOUNDING MAY INCLUDE ONE (1) OR MORE ATTEMPTS TO ASSURE ALL DETERIORATED CONCRETE HAS BEEN REMOVED.

ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO COMPLETE THE ABOVE WORK SHALL BE INCLUDED IN ITEM 845 - LATEX MODIFIED CONCRETE OVERLAY ($1\frac{1}{4}$" THICK).

ALL PROVISIONS OF ITEM 511 OF 1981 CONSTRUCTION AND MATERIALS SPECIFICATIONS SHALL APPLY EXCEPT WHEN IN CONFLICT WITH THESE NOTES.

ITEM 519 PATCHING CONCRETE STRUCTURES, AS PER PLAN

THIS ITEM SHALL BE USED TO REPAIR A DETERIORATED BACKWALL ON STRUCTURE HUR-162-0980 AND DETERIORATED EDGES ON STRUCTURE HUR-61-0785. 410 SQ. FT. OF ITEM 519 HAVE BEEN PROVIDED TO DO THIS WORK.

WITHIN 24 HOURS BEFORE PLACING CONCRETE, THE EXISTING SURFACE AGAINST WHICH THE CONCRETE SHALL BE PLACED SHALL BE THOROUGHLY CLEANED BY SANDBLASTING. EXISTING REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY SANDBLASTING AT LEAST EQUAL TO SA2 "THROUGH BLAST CLEANING" AS OUTLINED IN ASTM D-2200 OR SSPC-SP6. ALL LOOSE AND DETERIORATED CONCRETE AND CALCIUM CARBONATE DEPOSITS SHALL BE REMOVED WITH HAND TOOLS BEFORE SANDBLASTING. CONCRETE QUANTITIES SHALL BE ADJUSTED TO INCLUDE ADDITIONAL VOLUMES REQUIRED. BONDING GROUT SHALL BE PLACED AS PER 519.04.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE FOOT FOR ITEM 519 "PATCHING CONCRETE STRUCTURES AS PER PLAN" WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 849 ELASTOMERIC COMPRESSION SEALS FOR STRUCTURAL STEEL JOINT, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NEEDED TO WELD SHUT THE JOINT AS PER DETAIL ON SHEET NO. 14. THE NEW DECK EDGES WILL HAVE AN ELASTOMERIC COMPRESSION SEAL FORMED IN CONCRETE AS PER DETAIL ON SHEET NO. 14.

THE ELASTOMERIC COMPRESSION SEAL SHALL BE TYPE D-300 AS MANUFACTURED BY WATSON BOWMAN ASSOCIATES, INC., 1280 NIAGARA STREET, BUFFALO, NEW YORK 14213, OR APPROVED EQUAL. PAYMENT SHALL BE AT THE UNIT PRICE BID PER LINEAL FOOT FOR ITEM 849, ELASTOMERIC COMPRESSION SEAL FOR STRUCTURAL STEEL JOINT, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

GENERAL SUMMARY

HUR-162/303/61-VARIOUS
ERI-13-3.58
PLAN NO. BR-40-82

ITEM	SHEET NUMBER 2	3	6	8	11	12	13			16	18			QUANT.	UNIT	DESCRIPTION
																STRUCTURE
202						21	28							49	CU.YDS.	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
202										1138	621			1759	LIN. FT.	BRIDGE RAILING REMOVED, AS PER PLAN
509						3952	5406							9358	LBS.	REINFORCING STEEL
516			94											94	LIN.FT.	VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINT, AS PER PLAN
849				12 ~~76~~									12	~~76~~	LIN. FT.	ELASTOMERIC COMPRESSION SEALS FOR STRUCTURAL STEEL JOINT, AS PER PLAN
519				410										410	SQ. FT.	PATCHING CONCRETE STRUCTURES, AS PER PLAN
845					3764									3764	SQ.YDS.	LATEX MODIFIED CONCRETE OVERLAY (1¼ IN. THICK)
845					109									109	CU.YDS.	LATEX MODIFIED CONCRETE OVERLAY, (VARIABLE THICKNESS)
845					64									64	CU.YDS.	FULL DEPTH REPAIR, AS PER PLAN.
SPECIAL					3642									3642	SQ. YDS.	PAVEMENT PLANING BITUMINOUS WITHOUT HEAT
																ROADWAY
203	20	12												32	STATION	LINEAR GRADING
404	358	180			204									742	CU.YDS.	ASPHALT CONCRETE AC-20
202										2956	1555			4511	LIN. FT.	GUARDRAIL REMOVED, AS PER PLAN
517										729				729	LIN. FT.	RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP), TYPE 2 POSTS AND BOLTS
517										409				409	LIN.FT.	RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP), TYPE 2 POSTS AS PER PLAN

Rev. 9-2-82 RLE

GENERAL SUMMARY

HUR-162/303/61-VARIOUS
ERI-13-3.58
PLAN NO. BR-40-82
10/21

ITEM	SHEET NUMBER					15	16	18		21			QUANT	UNIT	DESCRIPTION
															ROADWAY (CONTINUED)
517								120					120	LIN. FT.	RAILING, (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP, TYPE I POSTS WITH TOP HANDRAIL) AS PER PLAN
517								501					501	LIN. FT.	RAILING (SINGLE DEEP BEAM WITH STEEL TUBULAR BACKUP), AS PER PLAN
606							16	12					28	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE B
606							3377	1679					5056	LIN. FT.	GUARDRAIL, TYPE 5
606							2						2	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE J
606							16	10					26	EACH	ANCHOR ASSEMBLY, TYPE A
606							2						2	EACH	ANCHOR ASSEMBLY, TYPE T
606							2						2	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE D, MODIFIED, AS PER PLAN
															EROSION
601						639							639	CU.YDS.	DUMPED ROCK FILL, TYPE C, WITHOUT BEDDING, AS PER PLAN
															MISCELLANEOUS
614										LUMP			LUMP	LUMP	MAINTAINING TRAFFIC
624													LUMP	LUMP	MOBILIZATION

M&R 679 9-1-77

BRIDGE DECK TREATMENT

HUR-162/303/61-VARIOUS
ERI-13-3.58

PLAN NO. BR-40-82

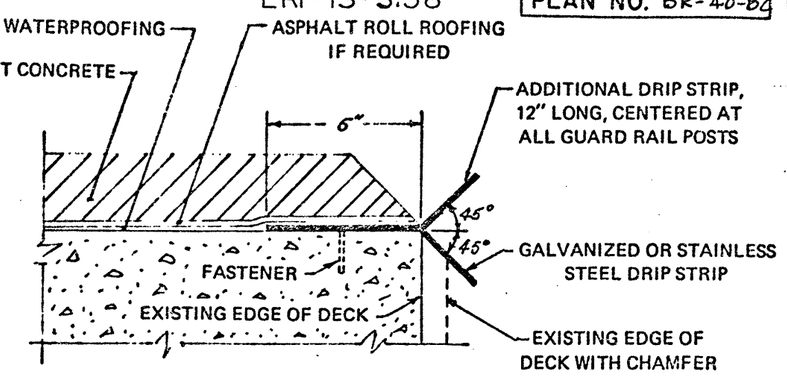
11/21

PROTECTIVE COURSE FOR MEMBRANE WATERPROOFING

MEMBRANE WATERPROOFING, Sheet Type 1: A minimum of 1-1/2 inches of 404 Asphalt Concrete shall be placed over the membrane.

MEMBRANE WATERPROOFING: A minimum of 2-1/2 inches of 404 Asphalt Concrete shall be placed over the membrane.

DRIP STRIP: Prior to applying deck membrane waterproofing, a bent drip strip shall be installed along the edges of the deck as shown. The strips shall be fastened at 3'-0" c/c maximum with power driven pins or no. 10 galvanized screws and expansion anchors, subject to the approval of the Engineer. The strips shall be placed the full length of the deck, ending at the face of the abutment wingwall or steel end dam angle. Where splices are required a 3" (Min.) lap shall be used with a fastener through the lap. Steel for galvanized strips shall be 8" X 0.105" and shall meet the requirements of ASTM A568. Galvanizing shall be in accordance with 711.02. Stainless steel shall be 18 gauge ASTM A304, mill finish. Payment shall be at the contract price bid for item Special Sq. Ft. Steel Drip Strip, which shall include all materials, labor, tools and incidentals necessary to complete item.



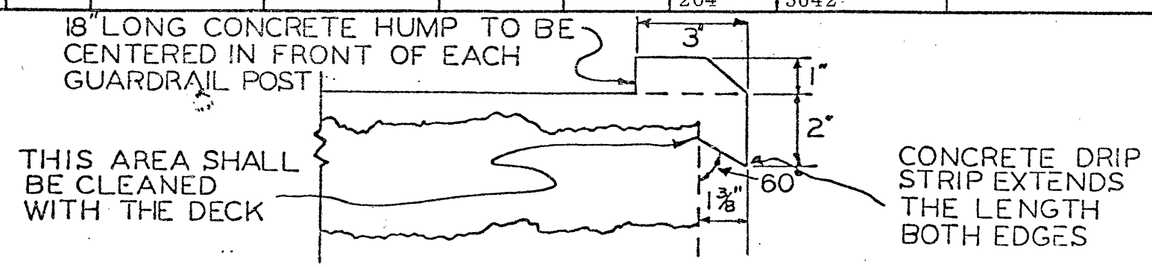
TYP. SEC. DRIP STRIP

BRIDGE DECK DATA

PART	COUNTY, ROUTE, BRIDGE NO.	LENGTH (BRIDGE LIMITS)	WIDTH	BRIDGE DECK AREA	202 WEARING COURSE REMOVED DEPTH ___"	BRIDGE DECK REPAIR ☒ SS-845 LATEX MODIFIED CONCRETE ☐ SS-850 DENSE CONCRETE: 1¼" THICK OVERLAY	VARIABLE THICKNESS OVERLAY	FULL-DEPTH REPAIR		519	SPECIAL: STEEL DRIP STRIP	DECK WATERPROOFING: MEMBRANE WATERPROOFING SHEET TYPE 1	MEMBRANE WATERPROOFING	516 VERT. EXT. OF STR. EXP. JOINTS	ASPHALT CONCRETE: THICK INS.	404	SPECIAL PAVEMENT PLANNING BITUMINOUS W/O HEAT S. Y.	PAVEMENT WIDTH FT.
		L.F.	L.F.	S.Y.	S.Y.	S.Y.	C.Y.	C.Y.	TYPE	S.F.	S.F.	S.Y.	S.Y.	L.F.		C.Y.		
	HUR-162-0980	104	32	370		370	10	14		85						22	400	18
	HUR-162-0990	58.5	32	208		208	6	2								22	400	18
	HUR-303-0187	208	27	624		624	22	38								25	444	20
	HUR-61-0785	143	36	572		572	16	2		325						25	444	20
	ERI-13-0367	130	40	578		578	16	2								25	444	20
	HUR-99-0372	60	36	240		240	7	2								25	444	20
	HUR-99-1028	125	40	556		556	15	2								30	533	24
	HUR-99-1314	126	44	616		616	17	2								30	533	24
					TOTAL	3764	109	64								204	3642	

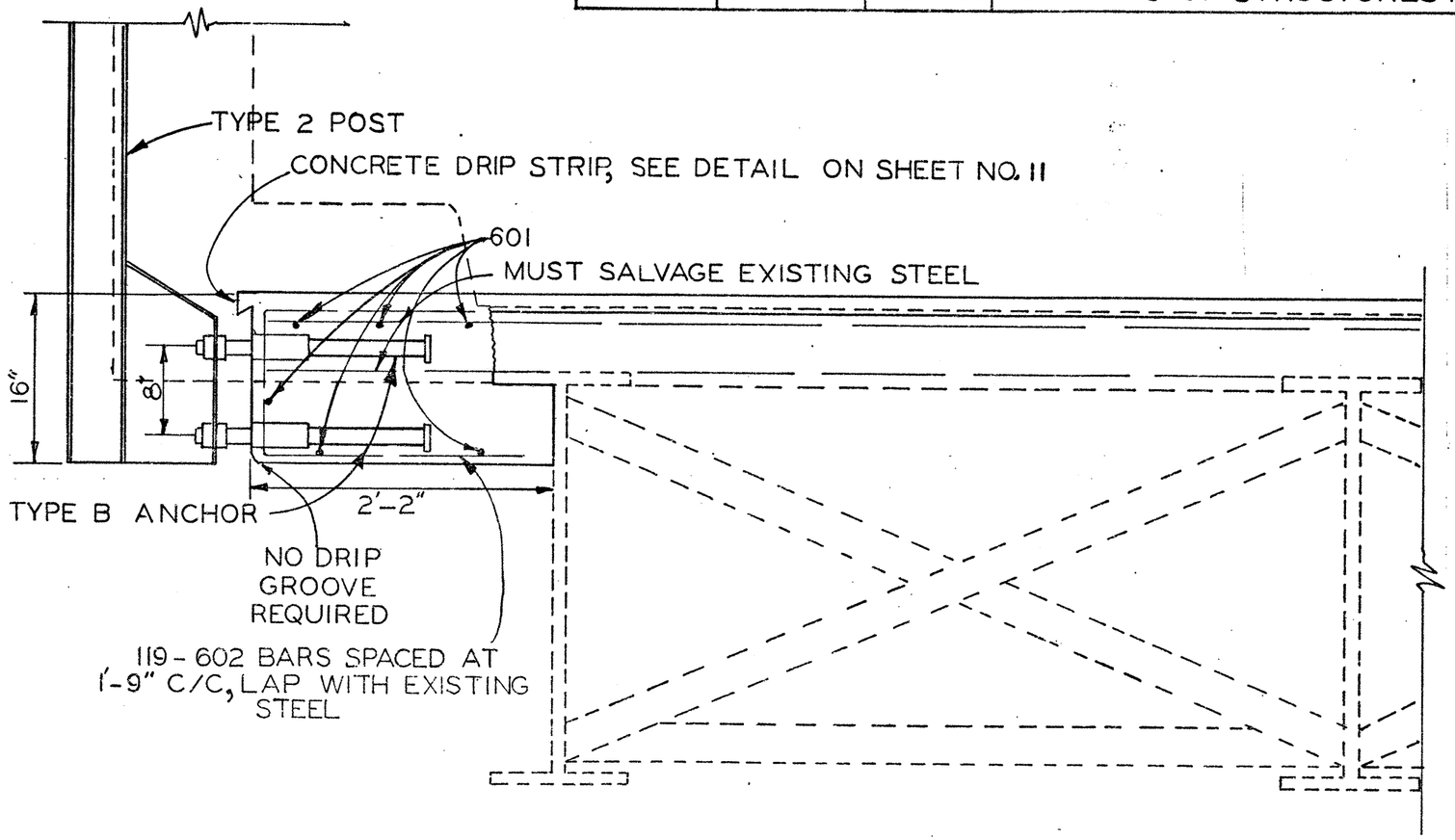
PLANE 100 FT. ON EACH APPROACH AND REPLACE WITH ITEM 404, ASPHALT CONCRETE TO MEET PROPOSED BRIDGE ELEVATION.

ITEM 404, ASPHALT CONCRETE HAS BEEN PROVIDED FOR BERM WIDENING FOR MAINTAINING TRAFFIC. SEE SHEET NO. 2.

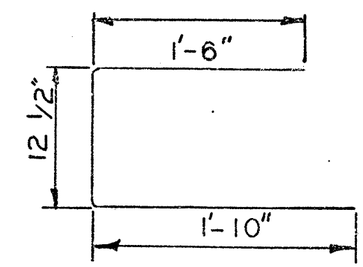


PLAN NO. BR-40-82

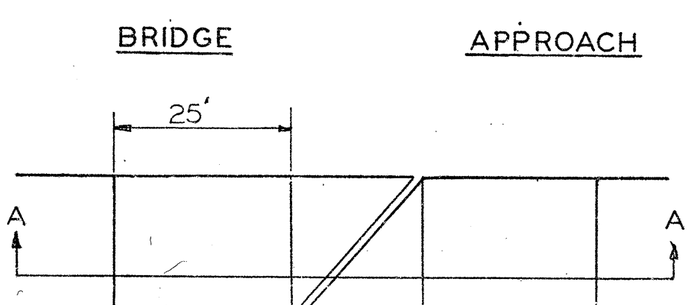
ITEM	QUANT.	UNIT	DESCRIPTION
202	28	CU.YD.	PORTIONS OF STRUCTURES REMOVED, AS PER PLAN



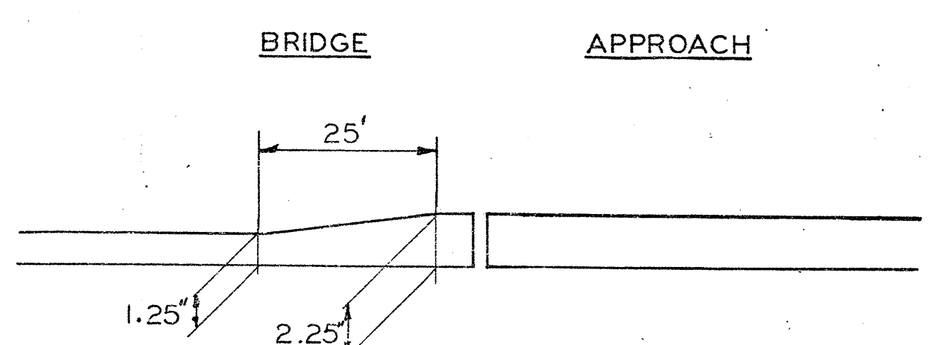
MARK	NO.	LENGTH	SHAPE	WEIGHT
601	72	36'-6"	S	3947
602	238	4'-1"	B	1459
		TOTAL		5406



602



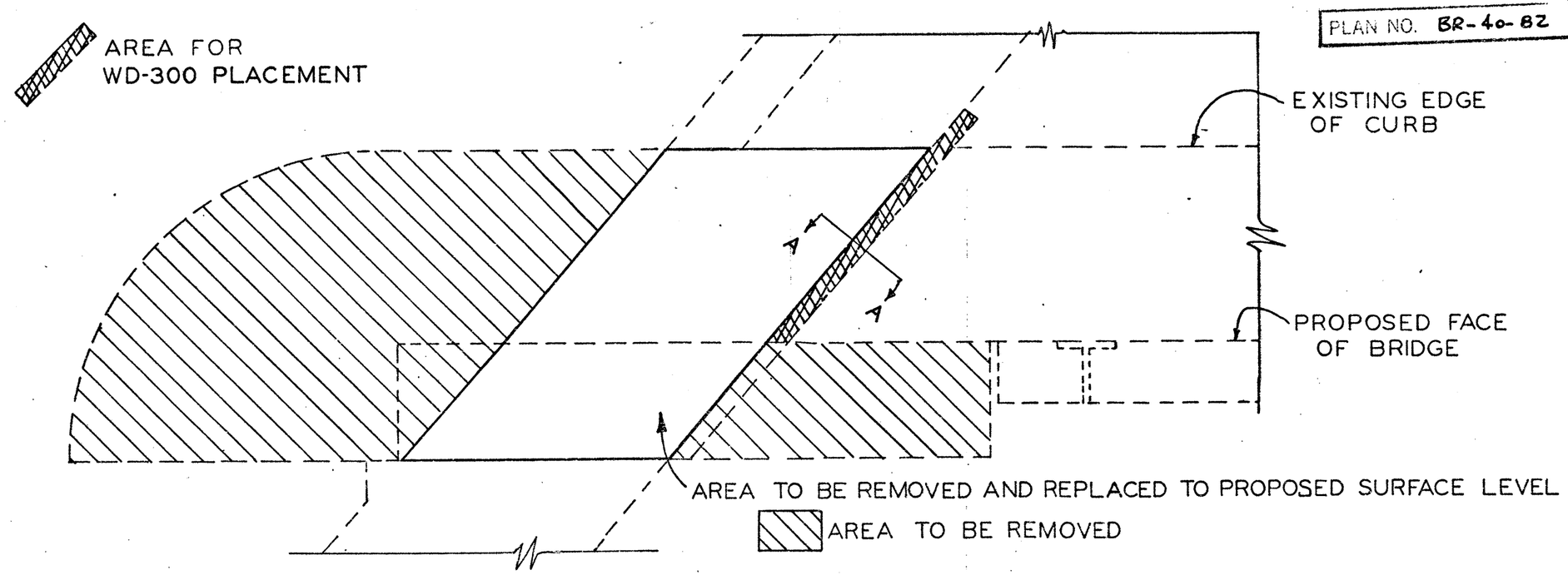
PARTIAL DECK PLAN
SHOWING LMC THICKNESS

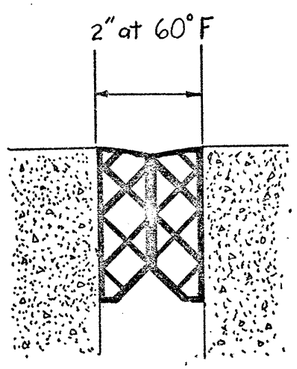


SECTION A-A

HUR-303-0187

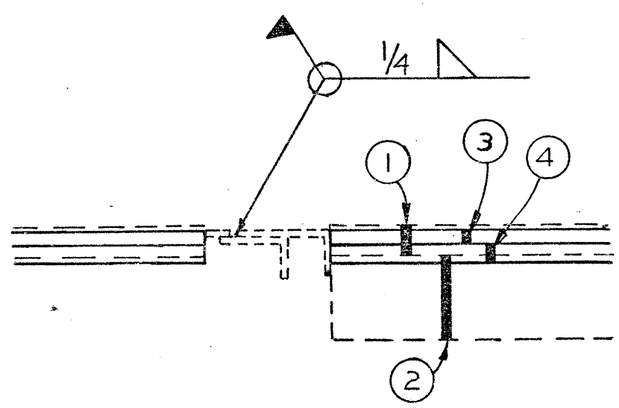
SUPERSTRUCTURE DETAILS





WD - 300 OR
APPROVED EQUAL

SECTION A-A



1. EXISTING ASPHALT
2. EXISTING CONCRETE
3. LATEX MODIFIED CONCRETE OVERLAY 1¼" THICK
4. LATEX MODIFIED CONCRETE VARIABLE THICKNESS

HUR-303-0187

ABUTMENT AND SUPERSTRUCTURE DETAILS