

DESIGN DESIGNATION

CURRENT ADT (1990)	7,490
DESIGN YEAR ADT (2009)	9,740
DHV	975
D. DIRECTIONAL DISTRIBUTION	50%
T. % B & C TRUCKS	32%
V. DESIGN SPEED	55 MPH
LEGAL SPEED LIMIT	55 MPH
FUNCTIONAL CLASSIFICATION	RURAL EXPRESSWAY

* DESIGN EXCEPTIONS - SEE SHEET 3

CONVENTIONAL SIGNS

County Line	-----	Limited Access (only)	LA
Township Line	-----	Right of Way (only)	RW
Section Line	-----	Limited Access & Right of Way	LA&RW
Corporation Line	-----	Existing Right of Way	-----
Fence Line (existing)	-x-x- (proposed)	Property Line	-P- (in existing fence)
Center Line	-----	Railroad	----- or ++++++
Trees	○, Stumps	Guardrail (existing)	a-a-a-a (proposed)
Utility Poles	Telephone ♂, Power ♂, Light ♂		

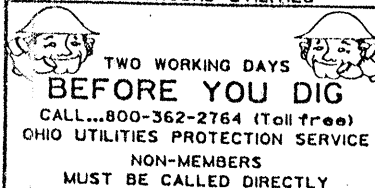
INDEX OF SHEETS

TITLE SHEET	1
SCHEMATIC PLAN	2
TYPICAL SECTION	3
GENERAL NOTES	4-6, 6A
GENERAL SUMMARY	7&8
RESURFACING CALCULATIONS	9
PLAN SHEETS	10-15
CONSTRUCTION DETAILS	16-23, 19A-C
TRAFFIC CONTROL	24&25
MAINTENANCE OF TRAFFIC	26-32, 31A, 32A
STRUCTURE REPAIR & REHABILITATION DETAILS	33-59

LINE DATA

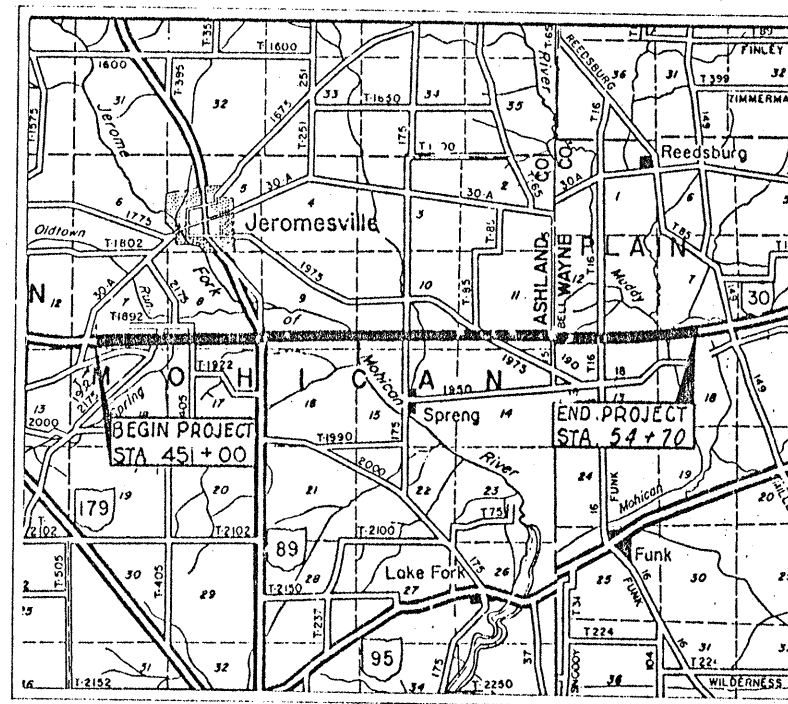
BEGIN PROJECT	STA 451+00	25,055.06 LIN. FT.
STA. EQUATION	STA 701+55.06 BK. = STA 0+00 AH.	
END PROJECT	STA 54+70	5470.00 LIN. FT.
LENGTH OF PROJECT		30,525.06 LIN. FT. Or 5.781 MI.
ADD FOR WORK:		
STA. 450+25 To STA. 451+00		75.00 LIN. FT.
STA. 54+70 To STA. 63+75		905.00 LIN. FT.
STA. 11+80 To STA. 18+50 Co. Rd. 1975		670.00 LIN. FT.
LENGTH OF WORK		32,175.06 LIN. FT. Or 6.094 MI.

UNDERGROUND UTILITIES

Plan Prepared By:
DISTRICT 3
L & D

Project: ASD-30-8.54, WAY-30-0.00

Date of Letting 199, Contract No.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATIONASD-30-8.54
WAY-30-0.00MOHICAN TOWNSHIP, ASHLAND COUNTY
PLAIN TOWNSHIP, WAYNE COUNTY

LOCATION MAP

SCALE IN MILES

Portion to be Improved
State & Federal Routes
Other Roads

SCALES

Plan
Profile: Horizontal N/A, Vertical N/A
Cross Section: Horizontal N/A, Vertical N/A

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

BP-5 10-1-87	MC-9A 1-11-85	TC-35.10 8-29-84	TC-65.10 2-26-82	AS-1-81 11-27-81
BP-3 12-6-76		TC-41.10 8-29-84	TC-65.11 4-5-82	DBR-2-73 4-10-73
BP-4 10-1-87	MC-4 7-26-76	TC-41.20 3-26-79	TC-71.10 4-9-79	RB-1-65 2-2-69
BP-13 1-23-90	MC-11 8-1-78			
GR-1 1-11-85		TC-42.10 8-19-77		
GR-2B 2-5-82		TC-42.20 3-26-79	MT-95.30 10-10-88	SD-1-69 6-12-69
				EXJ-4-87 1-5-89
GR-4 2-5-82		TC-51.10 1-20-84	MT-99.10 11-14-86	
GR-4A 1-30-84		TC-51.11 1-20-84	MT-99.20 4-29-88	
		TC-52.20 4-3-79		
BP-10 1-30-84				

ASD-30-8.54
WAY-30-0.00
F-49(59)OHIO
FHWA
REGION 5
FEDERAL
PROJECT1
59EXTRA
a.a. 5-12-92
F-49(59)
LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR OF TRANSPORTATION IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.

1989 SPECIFICATIONS

The standard specifications of the State of Ohio, Department of Transportation, including changes and supplemental specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for maintenance and safety of traffic will be as set forth on the plans and estimates.

"UNDER AUTHORITY OF SECTION 4511.21, DIVISION (I) OF THE REVISED CODE OF OHIO, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED."

Approved: Harry W. Pemo
Date: 5/24/90 District Deputy Director,
Department of TransportationApproved: B.D. Hurlburt
Date: 2-12-90 Engineer, Bureau of Bridges and
Structural DesignApproved: Charles J. Still
Date: 2/4/90 Deputy Director, Planning and DesignApproved: Samuel B. Hurst
Date: 2/4/90 Director,
Department of TransportationDEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

REVISED 10-18-90

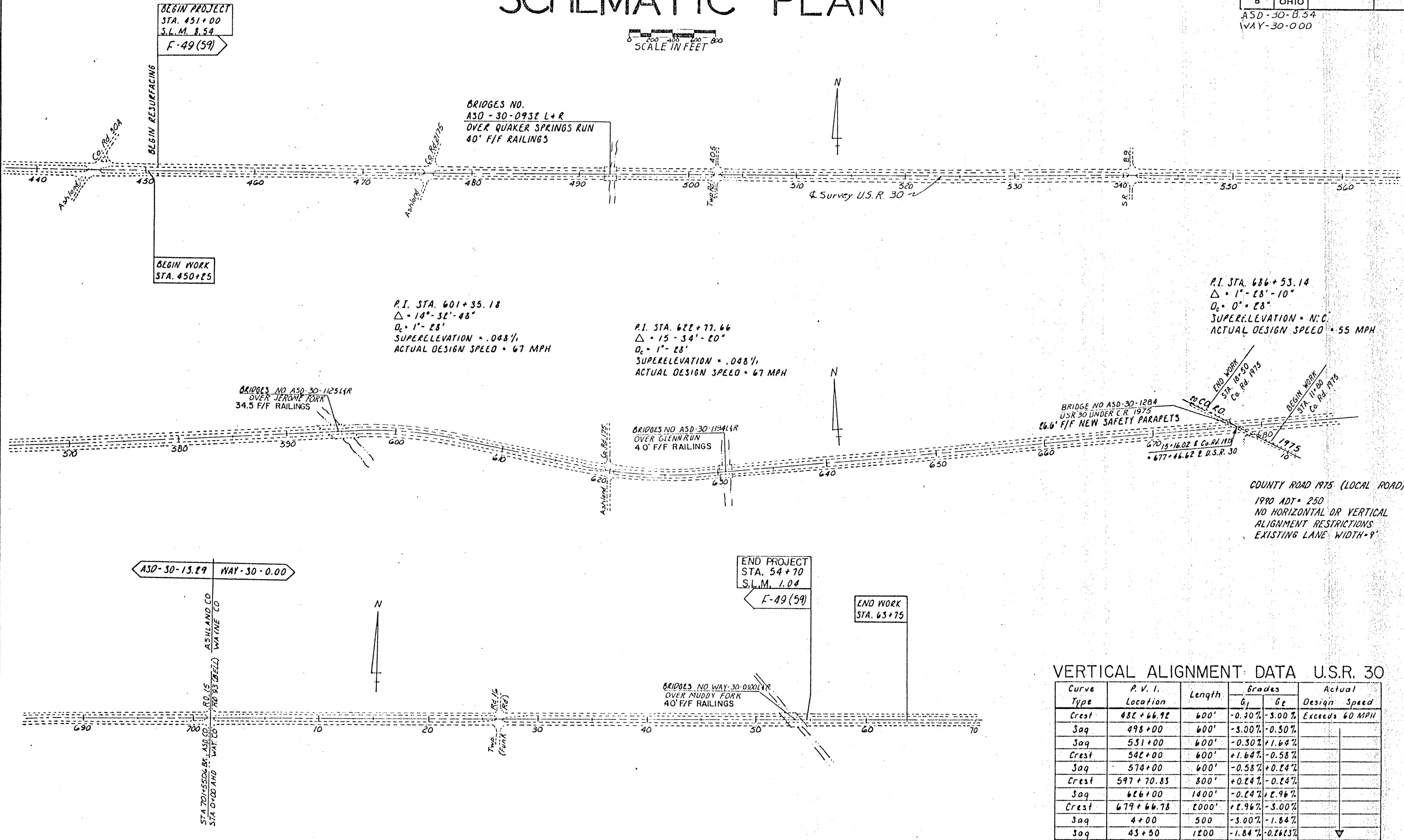
SCHEMATIC PLAN

FHWA REGION	STATE	PROJECT
5	OHIO	

ASD-30-B.54
WAY-30-000

2
59

SCALE IN FEET
0 200 400 600 800



GENERAL NOTES

FHWA REGION	STATE	PROJECT	
5	OHIO		

33
59

ASD-30-8.54
WAY-30-0.00

REFERENCE SHALL BE MADE TO STANDARD DRAWINGS:

SD - 1 - 69 DATED 6/12/69
EXJ - 4 - 87 DATED 1/05/89
RB - 1 - 55 DATED 2/22/59
DBR - 2 - 73 DATED 4/10/73
GR - 3 DATED 2/22/90

AND SUPPLEMENTAL SPECIFICATIONS:

852 DATED 6/10/87
952 DATED 12/14/88

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURES HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURES AND 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. THE ORIGINAL CONSTRUCTION PLANS OF THE EXISTING BRIDGES ARE AVAILABLE UPON REQUEST AT THE DISTRICT 3 OFFICE OF THE OHIO DEPARTMENT OF TRANSPORTATION, ASHLAND, OHIO.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE BID EXAMINATION OF THE EXISTING STRUCTURES BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.

DESIGN SPECIFICATIONS:

THESE STRUCTURES CONFORM TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 1989 INCLUDING THE OHIO "SUPPLEMENT" TO THESE SPECIFICATIONS.

DESIGN DATA:

DESIGN STRESSES:

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 PSI
REINFORCING STEEL - ASTM A615, A616, A617 - GRADE 60
MINIMUM YIELD STRENGTH 60,000 PSI
STRUCTURAL STEEL - ASTM A36 - YIELD STRENGTH 36,000 PSI

WORK LIMITATIONS:

NO CONCRETE DECK OVERLAYS SHALL BE PLACED BEFORE APRIL 15. THE CONTRACTOR SHALL SCHEDULE THE WORK SO THAT ALL DECK OVERLAYS ARE PLACED BEFORE OCTOBER 15. IF FOR SOME UNFORESEEN CIRCUMSTANCES THE DECK OVERLAYS OR PORTIONS OF THE DECK OVERLAY ARE NOT PLACED BY OCTOBER 15, REGARDLESS OF THE WORK REMAINING, THE FULL DEPTH REPAIRS SHALL BE COMPLETED AS PER 511 AND THE UNFINISHED DECK SHALL BE RESURFACED WITH ITEM 404 - ASPHALT CONCRETE AND OPENED TO TRAFFIC. THE CONTRACTOR SHALL PLACE AND MAINTAIN AT HIS EXPENSE THE ASPHALT WEARING SURFACE UNTIL IT IS REMOVED AT HIS EXPENSE THE FOLLOWING SPRING WHEN THE DECK OVERLAY CAN BE PLACED AFTER APRIL 15.

ITEM 202 - PORTIONS OF STRUCTURES REMOVED,
BACKWALLS, AS PER PLAN:
ITEM 202 - PORTIONS OF STRUCTURES REMOVED,
DECK EDGES, AS PER PLAN:
ITEM 202 - PORTIONS OF STRUCTURES REMOVED,
PARAPETS, AS PER PLAN:

THESE ITEMS OF WORK SHALL BE USED TO REMOVE EXISTING BACKWALLS, AS PER DETAIL ON SHEET NO. 43 AND 44. DECK EDGES AS PER PLAN ON SHEET NO. 46 AND PORTIONS OF EXISTING PARAPET INCLUDING ALUMINUM RAILING, CURBS AND BULB ANGLE FROM BRIDGE DECK AND THE ABUTMENT AND ANY OTHER ITEMS AS NEEDED AS PER DETAILS ON SHEET NOS. 49, 50, AND 51.

CONCRETE SHALL BE REMOVED BY A HYDRAULIC SPLITTING METHOD. A LINE OF HOLES SHALL BE DRILLED ALONG THE REMOVAL LINE AND A HYDRAULIC SPLITTER USED AS PER THE MANUFACTURER'S RECOMMENDATIONS. THIRTY-FIVE (35) AND FIFTEEN (15) POUND JACK HAMMERS SHALL BE USED FOR THE FINAL FINISH WORK. A HOE RAM, CONCRETE CRUSHER, OR OTHER SIMILAR IMPACT DEVICES WILL NOT BE PERMITTED TO DO ANY OF THE WORK. CONCRETE SHALL BE REMOVED IN A MANNER THAT PREVENTS CUTTING, ELONGATING, OR DAMAGING OF THE EXISTING REINFORCING STEEL WHICH IS TO SALVAGED. IF THE EXISTING REINFORCING STEEL DESIGNATED FOR PRESERVATION IS DAMAGED DURING REMOVAL OPERATIONS, DOWELED REINFORCING STEEL SHALL BE ADDED AT THE CONTRACTOR'S EXPENSE. CARE SHALL BE TAKEN NOT TO CRACK THE DECK IF THE DECK IS CRACKED, IT SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CU.YD. FOR THE ABOVE ITEMS, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - WEARING COURSE REMOVED (1 1/4" THICKNESS), AS PER PLAN:
ITEM 202 - WEARING COURSE REMOVED (1 3/4" THICKNESS), AS PER PLAN:

WORK SHALL CONSIST OF REMOVING EXISTING LATEX MODIFIED CONCRETE OVERLAY BY GRINDING.

PAYMENT FOR ALL OF THIS ABOVE SHALL BE AT UNIT PRICE BID PER SQ.YD. FOR THE ABOVE ITEMS, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - SCUPPER REMOVAL:

WORK SHALL INCLUDE REMOVING EXISTING PLATES, BARS, CUTTING OFF EXISTING SCUPPER DRAIN PIPE 3" BELOW DECK, CUTTING OFF SCUPPER DRAIN BAR AND GRINDING AREA FLUSH WITH WEB, AND ANY OTHER ITEM AS NEEDED AS PER DETAILS ON SHEET NO. 54.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID PER EACH FOR ITEM 202, SCUPPER REMOVAL WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 202 - REMOVAL OF BEARING DEVICES:

THIS ITEM SHALL BE USED TO JACK BRIDGE NOS. ASD-30-0932, ASD-30-1125, ASD-30-1194 AND WAY-30-0100 TO REMOVE THE EXISTING SLIDING ABUTMENT BEARINGS AND THE EXISTING ROCKER BEARINGS. THE EXISTING ANCHOR BARS SHALL BE CUT OFF FLUSH WITH THE ABUTMENT SEAT.

ALL WELDS SHALL BE GROUND SMOOTH, THE AREA AROUND THE BEARINGS SHALL BE SANDBLASTED PRIOR TO SEATING THE NEW BEARINGS. ALL EXISTING BEARINGS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

THE SUPERSTRUCTURE SHALL BE JACKED ABOVE THE EXISTING ABUTMENT SEAT, A UNIFORM AMOUNT NOT TO EXCEED ONE (1) INCH. DETAIL PLANS AND PROCEDURES OF THE JACKING OF THE SUPERSTRUCTURE SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER AND SHALL BEAR HIS SIGNATURE AND NUMBER OR PROFESSIONAL ENGINEERING SEAL. APPROVAL OF THE ABOVE PLANS AND PROCEDURES SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR THE BEHAVIOR OF THE PROPOSED JACKING PROCEDURES.

THE CONTRACTOR SHALL SUBMIT THREE (3) COPIES OF THE PLANS AND PROCEDURES AND TWO (2) COPIES OF THE CALCULATIONS TO THE DIRECTOR, THIRTY (30) DAYS PRIOR TO THE JACKING OPERATION AND RECEIVE APPROVAL BEFORE BEGINNING THE JACKING OPERATIONS.

THE FOLLOWING JACKING REQUIREMENTS AND PROCEDURES SHALL APPLY:

- 1) ATTACHMENTS MADE BY WELDING TO ANY MAIN STRUCTURAL MEMBER SHALL BE APPROVED BY THE DIRECTOR BEFORE SUCH ATTACHMENTS ARE MADE. DETAILS OF THE ATTACHMENTS SHALL BE SUBMITTED FOR APPROVAL AS PART OF THE JACKING PLANS AND PROCEDURES OR INDEPENDENTLY BY A SIMILAR SUBMISSION.
- 2) THE SUPPORT AND JACKING SYSTEM SHALL BE CAPABLE OF SUPPORTING THE STRUCTURE WITH TRAFFIC LOADS HAVING THE FOLLOWING MAXIMUM ABUTMENT REACTIONS INCLUDING DEAD LOAD, LIVE LOAD AND IMPACT.

BRIDGE NO.	TOTAL REACTION PER BEARING
ASD-30-0932 L/R	37K
ASD-30-1125 L/R	57K
ASD-30-1194 L/R	37K
WAY-30-0100 L/R	43K

- 3) JACK ALL BEAMS SIMULTANEOUSLY AT A UNIFORM RATE. VERTICAL DIFFERENTIAL MOVEMENT SHALL NOT BE PERMITTED BETWEEN ANY BEAMS. THE CONTRACTOR SHALL REPLACE AT HIS EXPENSE, ANY PART OF THE STRUCTURE MADE UNSATISFACTORY BY MOVEMENT, AS DETERMINED AND DIRECTED BY THE DIRECTOR.
- 4) PROPERLY ARRANGE ALL TEMPORARY SUPPORTS SO AS NOT TO DAMAGE OR INDUCE EXCESS STRESS IN ANY MEMBER, INCLUDING CROSSFRAMES.
- 5) CONSTRUCTION "BUMP" SIGNS (OW-62-36) SHALL BE ERECTED AND MAINTAINED DURING THE PERIOD THAT THE SUPERSTRUCTURE IS JACKED. THE SUPERSTRUCTURE SHALL NOT BE KEPT JACKED OVERNIGHT.

THE DETAIL PLANS AND PROCEDURES SHALL INCLUDE THE FOLLOWING:

- 1) METHOD OF KEEPING BEAMS SOCKETED IN THE DECK AND VERIFICATION OF SUCH
- 2) METHOD OF VERIFYING THAT ALL NEW BEARINGS ARE SEATED IN THE FINAL LOCATION
- 3) METHOD OF VERIFYING THAT THE ACTUAL HIGH AND LOW BEARING REACTIONS AT EACH ABUTMENT BEARING HAVE ONLY A MAXIMUM DIFFERENCE OF 20% BASED UPON THE HIGH REACTION

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 202, REMOVAL OF BEARING DEVICES WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PERFORM THE ABOVE WORK.

GENERAL NOTES

ASD-30-8.54
WAY-30-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

34
59

ITEM 510 - DOWEL HOLES, AS PER PLAN:

ALL DOWEL HOLES SHALL BE GROUTED AS PER SUPPLEMENTAL SPECIFICATIONS 852 AND 952.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH FOR ITEM 510, DOWEL HOLES, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 511 - CLASS S CONCRETE, PARAPETS, AS PER PLAN:

THIS ITEM SHALL BE USED TO FACE THE EXISTING PARAPETS AS PER DETAILS ON SHEET NOS. 49, 50, AND 51 AND AS INDICATED ON ANY OTHER SHEET IN THE PLAN.

NOT MORE THAN 48 HRS. PRIOR TO PLACING THE CONCRETE, ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND, INCLUDING EXPOSED REINFORCING AND STRUCTURAL STEEL SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, AND ALL OTHER CONTAMINATES DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

IN LIEU OF THE PROPORTIONING SPECIFIED IN 499.03 AND 511.02, THE FOLLOWING TABLE SHALL BE USED TO ESTABLISH THE QUANTITIES PER CUBIC YARD FOR CONCRETE, THE COARSE AGGREGATE SHALL BE LIMESTONE.

QUANTITIES PER CUBIC YARD
(USING NO. 8 LIMESTONE)

AGGREGATE			CEMENT CONTENT	WATER/CEMENT RATIO
FINE (LB)	COARSE (LB)	TOTAL (LB)		
1555	1100	2655	715	0.44

AIR CONTENT - 8% PLUS OR MINUS 2%

TYPE A CHEMICAL ADMIXTURE SHALL BE USED

ALL OTHER PROVISIONS OF ITEM 511 SHALL REMAIN IN EFFECT

IF DURING PLACEMENT OF THE PARAPET; THE LATEX MODIFIED CONCRETE OVERLAY IS DAMAGED, IT SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER.

CURING SHALL BE IN ACCORDANCE WITH 511.14 TYPE A OR B.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT UNIT PRICE BID PER CUBIC YARD FOR ITEM 511 CLASS S CONCRETE, PARAPETS, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - STRUCTURAL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS, AS PER PLAN:

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO REMOVE EXISTING ANGLES, RETAINERS, DECK CONCRETE, TRIMMING ENDS OF BEAMS FOR EXPANSION AND OTHER ITEMS AS NEEDED TO INSTALL THE NEW JOINTS, AS PER DETAILS IN THE PLANS AND ON STANDARD DRAWING EXJ - 4 - 87.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT UNIT PRICE BID PER LINEAR FOOT FOR THE ITEM 516 - STRUCTURAL STEEL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - STRUCTURAL EXPANSION JOINT EXTENSIONS INCLUDING ELASTOMERIC STRIP SEALS, AS PER PLAN:

THIS ITEM SHALL INCLUDE REMOVING EXISTING STRIP SEAL GLANDS, RETAINERS IN CURBS, SANDBLASTING INSIDE EXISTING PRESERVED RETAINERS, REMOVING CONCRETE, EXTENDING BARS AND ANGLES, INSTALLING NEW NEOPRENE STRIP SEAL GLANDS, EXPANDED POLYSTYRENE AND OTHER ITEMS NEEDED TO EXTEND THE EXISTING JOINTS AS PER DETAILS IN THE PLANS.

IT IS BELIEVED THAT THE EXISTING RETAINER IS A TYPE E AS FORMERLY MANUFACTURED BY WATSON BOWMAN-ACME CORP. CONTRACTOR SHALL VERIFY EXISTING RETAINER TYPE AND MAKE USE OF THE SAME. NEW NEOPRENE STRIP SEAL GLAND SHALL BE COMPATIBLE WITH RETAINERS. RETAINERS REMOVED FROM CURBS SHALL NOT BE RE-USED.

THE STEEL RETAINER EXTENSIONS SHALL BE WELDED TO THE EXISTING RETAINERS TO FORM A WATERTIGHT JOINT. THE NEW NEOPRENE STRIP SEAL GLAND SHALL BE ONE CONTINUOUS PIECE ACROSS THE ENTIRE DECK. THE NEOPRENE STRIP SEAL GLAND SHALL NOT BE INSTALLED UNTIL ALL OTHER WORK IS COMPLETE ON THE STRUCTURE. A LUBRICANT-ADHESIVE SHALL BE USED TO FACILITATE PLACEMENT OF THE NEOPRENE STRIP SEAL GLAND.

PHYSICAL PROPERTIES:

- THE STEEL RETAINER SHALL MATCH THE EXISTING PRESERVED RETAINER
- ADHESIVE SHALL BE A ONE - PART MOISTURE CURING POLYURETHANE AND HYDROCARBON SOLVENT MIXTURE AS SPECIFIED BY THE SEAL MANUFACTURER UNLESS OTHERWISE APPROVED BY THE DIRECTOR. IT SHALL HAVE A SUITABLE CONSISTENCY AT THE TEMPERATURE AT WHICH THE SEALS ARE INSTALLED AND SHALL BE COMPATIBLE WITH THE SEALS AND THE STEEL RETAINERS.
- THE NEOPRENE STRIP SEAL GLAND SHALL CONFORM TO THE PHYSICAL PROPERTIES SPECIFIED FOR AASHTO M220 EXCEPT FOR THE RECOVERY TEST. IT SHALL BE ONE CONTINUOUS PIECE FOR EACH JOINT.
- SET SCREWS FOR FASTENING OF OPTIONAL SPLIT RETAINER SHALL BE STAINLESS STEEL.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER LINEAR FOOT FOR ITEM 516, STRUCTURAL EXPANSION JOINT EXTENSIONS INCLUDING ELASTOMERIC STRIP SEALS, AS PER PLAN WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 516 - BEARING DEVICES:

ON BRIDGE NO. ASD-30-1125 L/R NEW R-100 ROCKERS SHALL BE INSTALLED ON ALL ABUTMENTS, SEE STANDARD DRAWING RB-1-55 FOR DETAILS.

ON BRIDGE NOS. ASD-30-0932 L/R, ASD-30-1194 L/R, AND WAY-30-0100 L/R NEW LAMINATED ELASTOMERIC BEARINGS SHALL BE INSTALLED ON ALL ABUTMENTS, SEE DETAILS ON SHEET NO. 45.

ITEM 518 - POROUS BACKFILL, AS PER PLAN:

POROUS BACKFILL SHALL BE INSTALLED AS PER THE DETAILS IN THE PLANS. THE AGGREGATE SHALL BE NO. 57 CRUSHED GRAVEL. THE GEOTEXTILE FABRIC SHALL BE TYPE A AS PER 712.09. DURING ALL PERIODS OF SHIPMENT AND STORAGE THE FABRIC SHALL BE WRAPPED IN A HEAVY DUTY PROTECTIVE COVERING TO PROTECT IT FROM DIRECT SUNLIGHT, MUD, DIRT, DUST AND OTHER DEBRIS. THE GEOTEXTILE FABRIC SHALL BE CONTINUOUS EXCEPT AT THE CENTER JOINT. ALL JOINTS SHALL BE LAPPED A MINIMUM OF TWO (2) FEET.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR ITEM 518, POROUS BACKFILL, AS PER PLAN, WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN:

THIS ITEM SHALL BE USED TO REPAIR THE ABUTMENT. WITHIN TWENTY FOUR (24) HOURS BEFORE PLACING CONCRETE. THE EXISTING SURFACE AGAINST WHICH THE CONCRETE SHALL BE PLACED, AND EXISTING REINFORCING STEEL SHALL BE THOROUGHLY CLEANED BY SANDBLASTING. SANDBLASTING SHALL BE AT LEAST EQUAL TO SA 2 "THOROUGH 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.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT 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 SPECIAL - SCUPPER EXTENSION:

WORK SHALL INCLUDE EXTENDING SCUPPERS 8" BELOW THE BEAMS, REMOVING EXISTING CONCRETE FROM SCUPPERS, REMOVING EXISTING BARS ON SCUPPERS, TRIMMING PLATES, PLACING NEW BARS ON SCUPPERS AND OTHER ITEMS NEEDED TO LENGTHEN SCUPPERS AS PER DETAILS ON SHEET NO. 54.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH FOR ITEM SPECIAL, SCUPPER EXTENSION WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL - MICRO-SILICA MODIFIED CONCRETE OVERLAY (1 3/4" THICK):

COARSE AGGREGATE SHALL BE LIMESTONE OR SLAG.

PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER SQUARE YARD FOR SPECIAL MICRO - SILICA MODIFIED CONCRETE OVERLAY, (1-3/4" INCHES THICK), WHICH SHALL INCLUDE ALL LABOR, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM SPECIAL - SEALING OF CONCRETE SURFACES:

THE PROPOSED CONCRETE PARAPET SURFACES AND THE PROPOSED DECK EDGES SHALL BE SEALED USING AN EPOXY SEALER. SEE THE DETAILS ON SHEET NO. 53. FOR AREAS TO BE SEALED. SEE THE PROPOSAL FOR SURFACE PREPARATION REQUIREMENTS, APPLICATION RATES, MATERIAL REQUIREMENTS AND APPLICATION PROCEDURES.

ITEM SPECIAL - ADJUSTING BEAM SEAT ELEVATIONS:

WORK SHALL INCLUDE REMOVING EXISTING CONCRETE AND PLACING NON SHRINK GROUT TO REQUIRED HEIGHT AS PER MANUFACTURERS RECOMMENDATIONS, AND DETAILS ON SHEET NO. 45.

EPOXY GROUT USED FOR ADJUSTING THE BEAMS SEAT ELEVATIONS SHALL BE FURNISHED BY ONE OF THE FOLLOWING OR AN APPROVED EQUAL:

MANUFACTURER	GROUT DESIGNATION
CELTITE, INC. 150 CARLEY COURT GEORGETOWN, KENTUCKY 403-4 TELEPHONE (800) 626-2948	CELTITE 42 - 76 HI - FILL
DURAL INTERNATIONAL CORP. 95 BROOK AVENUE DEER PARK, NEW YORK 11729 TELEPHONE (516) 586-1655	DURALITH
U.S. GROUT CORPORATION 401 STILLSON ROAD FAIRFIELD, CONNECTICUT 06430 TELEPHONE (203) 336-7900	FIVE STAR RAPID EPOXY GROUT

PAYMENT FOR ADJUSTING THE BEAM SEAT ELEVATIONS SHALL BE MADE AT THE SQUARE YARD PRICE BID FOR THIS ITEM WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

GENERAL NOTES

FHWA REGION	STATE	PROJECT
5	OHIO	

35
59

CLASS S CONCRETE, AS PER PLAN:

THIS ITEM SHALL BE USED TO RECAST THE DECK EDGES AS PER DETAILS ON SHEET NO. 46, RECAST BACKWALLS AS PER DETAILS ON SHEET NOS. 43 AND 44, FACE ABUTMENTS AS PER DETAILS ON SHEET NO. 48 AND ENCASE PILING AS PER DETAILS ON SHEET NO. 47.

NOT MORE THAN 24 HRS. PRIOR TO PLACING THE CONCRETE, ALL EXISTING SURFACES TO WHICH THE CONCRETE IS TO BOND, INCLUDING EXPOSED REINFORCING AND STRUCTURAL STEEL SHALL BE CLEANED BY ABRASIVE BLASTING. THESE SURFACES SHALL BE MADE FREE OF SPALLS, LAITANCE, AND ALL CONTAMINANTS DETRIMENTAL TO ACHIEVING AN ADEQUATE BOND.

IMMEDIATELY BEFORE THE THE DECK EDGE CONCRETE IS PLACED ALL ADJACENT CONCRETE SURFACES SHALL BE COVERED WITH A THIN LAYER OF BONDING GROUT. THE BONDING GROUT SHALL CONSIST OF EQUAL PARTS BY VOLUME OF PORTLAND CEMENT AND SAND, MIXED WITH ENOUGH WATER TO FORM A SLURRY OF PAINT LIKE CONSISTANCY WHICH SHALL BE SUCH AS TO ALLOW IT TO BE APPLIED WITH A STIFF BRUSH OR BROOM TO EXISTING CONCRETE SURFACES IN A THIN EVEN COATING THAT WILL NOT RUN OR PUDDLE. THE GROUT SHALL BE APPLIED FOR A SHORT DISTANCE IN ADVANCE OF THE PLACEMENT OF THE CONCRETE AND SHALL NOT BE DRY.

IN LIEU OF THE PROPORTIONING SPECIFIED IN 499.03 AND 511.02, THE FOLLOWING TABLE SHALL BE USED TO ESTABLISH THE QUANTITIES PER CUBIC YARD FOR CONCRETE, THE COARSE AGGREGATE SHALL BE LIMESTONE.

QUANTITIES PER CUBIC YARD (USING NO. 8 LIMESTONE)				
FINE (LB)	AGGREGATE COARSE (LB)	TOTAL (LB)	CEMENT CONTENT (LB)	WATER/CEMENT RATIO
1591	1127	2718	715	0.40

AIR CONTENT - 8% PLUS OR MINUS 2%

A HIGH RANGE WATER REDUCER (SUPERPLASTICIZER) MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE DOSAGE RATE SHALL BE DETERMINED BY THE CONTRACTOR BASED ON THE MANUFACTURER'S RECOMMENDATIONS TO ACHIEVE THE DESIRED WORKABILITY LEVEL.

THE HIGH RANGE WATER REDUCER SHALL CONFORM TO 705.12, ASTM-C494 TYPE F AND SHALL NOT CONTAIN CALCIUM CHLORIDE.

TYPE A OR D CHEMICAL ADMIXTURE CONFORMING TO 705.12, ASTM-C494 AND NOT CONTAINING CHLORIDE SHALL BE ADDED TO THE CONCRETE AT THE PLANT.

ALL ADDITIVES, INCLUDING AIR ENTRAINMENT, SHALL BE MANUFACTURED BY THE SAME COMPANY AND CERTIFIED AS COMPATIBLE BY THE MANUFACTURING CO.

THE CEMENT CONTENT SHALL BE MAINTAINED AND A MAXIMUM WATER-CEMENT RATIO OF 0.40 SHALL NOT BE EXCEEDED. THE SLUMP OF THE SUPERPLASTICIZED CONCRETE DELIVERED TO THE JOB SITE SHALL BE 1 1/2" PLUS OR MINUS 1/2". THE SUPERPLASTICIZED ADMIXTURE SHALL BE ADDED AT THE JOB SITE AND MIXED FOR A MINIMUM OF FIVE (5) MINUTES. AFTER THE SUPERPLASTICIZER HAS BEEN ADDED, THE SLUMP SHALL BE 6 1/2" PLUS OR MINUS 1/2". THE CONTRACTOR SHALL FURNISH A VOLUMERIC DISPENSER FOR THE SUPERPLASTICIZER.

CONCRETE MIXTURES CONTAINING A HIGH RANGE WATER REDUCER SHALL MEET THE SAME REQUIREMENTS FOR ENTRAINED AIR CONTENT, MAXIMUM STRENGTH, AND MAXIMUM WATER-CEMENT RATIO AS REQUIRED FOR THE RESPECTIVE GRADE OF CONCRETE WITHOUT A HIGH RANGE WATER REDUCER.

SAMPLING AND TESTING FOR ENTRAINED AIR CONTENT AND MINIMUM STRENGTH SHALL BE TAKEN FROM THE CONCRETE THAT HAS BEEN TREATED WITH A HIGH RANGE WATER REDUCER.

DECK EDGES SHALL BE IN CURED IN ACCORDANCE WITH 511.14 TYPE A WATER CURING ALL OTHERS SHALL BE CURED IN ACCORDANCE WITH 511.14 TYPE A OR B.

PAYMENT SHALL BE AT THE UNIT PRICE BID PER CUBIC YARD FOR THE FOLLOWING ITEMS WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM	UNIT	DESCRIPTION
511	CU.YD.	CLASS S CONCRETE, ABUTMENTS, AS PER PLAN
511	CU.YD.	CLASS S CONCRETE, BACKWALLS, AS PER PLAN
511	CU.YD.	CLASS S CONCRETE, DECK EDGES, AS PER PLAN
511	CU.YD.	CLASS S CONCRETE, PILING ENCASEMENT, AS PER PLAN
511	CU.YD.	CLASS S CONCRETE, PARAPETS, AS PER PLAN

ASD-30-8.54
WAY-30-0.00

BRIDGE ESTIMATED QUANTITIES

[illegible]

* 50 % FEDERAL PARTICIPATION

BRIDGE QUANTITIES

		STRUCTURE FILE NUMBER	BRIDGE NUMBER	SKEW	DECK LENGTH	EXISTING WIDTH	PROPOSED WIDTH	AREA	NUMBER OF SCUPPERS TO BE REMOVED	NUMBER OF SCUPPERS TO BE EXTENDED	PAVEMENT WIDTH		TYPE OF PROPOSED WEARING SURFACE	202 PORTIONS OF STRUCTURES REMOVED, BACKWALLS AS PER PLAN	202 PORTIONS OF STRUCTURES REMOVED, DECK EDGES, AS PER PLAN	202 PORTIONS OF STRUCTURES REMOVED, PARAPETS, AS PER PLAN	202 BRIDGE RAILING REMOVED	202 WEARING COURSE REMOVED (1 1/4" THICK) AS PER PLAN
				DEGREES	FEET	FEET	FEET	SQ.YD.	EACH	EACH	FEET			CU,YD.	CU.YD.	CU.YD.	LIN.FT.	SQ.YD.
		0300578	ASD-30-0932 L OVER QUAKER SPRINGS RUN	0°-0'	111.7	40.0'	40.0'	497			24		MSMC	23	25		237.50	497
		0300608	ASD-30-0932 R OVER QUAKER SPRINGS RUN	0°-0'	111.7	40.0'	40.0'	497			24		MSMC	23	25		237.50	497
		0300632	ASD-30-1125 L OVER JEROME FORK	51°-15' R.F.	222.86	30.0'	34.5'	855	32		24		MSMC	41	63		462.50	
		0300667	ASD-30-1125 R OVER JEROME FORK	51°-15' R.F.	222.86	30.0'	34.5'	855	32		24		MSMC	41	63		462.50	
		0300691	ASD-30-1194 L OVER GLENN RUN	0°-0'	111.7	40.0'	40.0'	497			24		MSMC	23	25		237.50	497
		0300721	ASD-30-1194 R OVER GLENN RUN	0°-0'	111.7	40.0'	40.0'	497			24		MSMC	23	25		237.50	497
		0300756	ASD-30-1284 UNDER ASD CO.RD, 1975	56°-59'-13"L.F.	304.14	24.0'	26.6'	917		10	18					59		
		8501440	WAY-30-0100 L OVER MUDDY FORK	37°-30' R.F.	144.4	40.0'	40.0'	642			24		MSMC	32	32		312.50	642
		8501475	WAY-30-0100 R OVER MUDDY FORK	37°-30' R.F.	144.4	40.0'	40.0'	642			24		MSMC	32	32		312.50	642
		TOTALS												238	290	59	2500	3272

MSMC = MICRO - SILICA MODIFIED CONCRETE

ASD-30-8.54
WAY-30-0.00

38
59

BRIDGE QUANTITIES

BRIDGE NUMBER	202	202	202		509	510		511	511	511	
	WEARING COURSE REMOVED (1 3/4" THICK), AS PER PLAN	SCUPPER REMOVAL	REMOVAL OF EXISTING BEARING DEVICES		EPOXY COATED REINFORCING STEEL	DOWEL HOLES AS PER PLAN		CLASS S CONCRETE, ABUTMENTS, AS PER PLAN	CLASS S CONCRETE, BACKWALLS, AS PER PLAN	CLASS S CONCRETE, DECK EDGES, AS PER PLAN	
	SQ.YD.	EACH	EACH		POUND	EACH		CU.YD.	CU.YD.	CU.YD.	
ASD-30-0932 L OVER QUAKER SPRINGS RUN			10		5177	92			23		28
ASD-30-0932 R OVER QUAKER SPRINGS RUN			10		5177	92			23		28
ASD-30-1125 L OVER JEROME FORK	743	32	10		9017	126			41		55
ASD-30-1125 R OVER JEROME FORK	743	32	10		9017	126			41		55
ASD-30-1194 L OVER GLENN RUN			10		5177	92			23		28
ASD-30-1194 R OVER GLENN RUN			10		5177	92			23		28
ASD-30-1284 UNDER ASD CO. RD. 1975					9394	1296		43			
WAY-30-0100 L OVER MUDDY FORK			10		6397	114			32		36
WAY-30-0100 R OVER MUDDY FORK			10		6397	114			32		36
TOTALS	1486	64	80		60,930	2144		43	238		294

BRIDGE QUANTITIES

BRIDGE NUMBER	511	511	513		516	516	516	516	516		
	CLASS S CONCRETE, PARAPETS, AS PER PLAN	CLASS S CONCRETE, PILING ENCASEMENT AS PER PLAN	STRUCTURAL STEEL (AISC CERTIFICATION NOT REQUIRED)		LAMINATED ELASTOMERIC BEARINGS (5" X 11" X 1 1/8" LAMINATED ELASTOMERIC PAD WITH 6" X 12" X 1 1/2" STEEL LOAD PLATE)	LAMINATED ELASTOMERIC BEARINGS (7" X 11" X 1 5/8" LAMINATED ELASTOMERIC PAD WITH 8" X 13" X 1 1/2" STEEL LOAD PLATE)	STRUCTURAL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS, AS PER PLAN	STRUCTURAL EXPANSION JOINT EXTS. INCL. ELASTOMERIC STRIP SEALS, AS PER PLAN	BEARING DEVICES		
	CU.YD.	CU.YD.	POUND		EACH	EACH	LIN.FT.	LIN.FT.	EACH		
ASD-30-0932 L OVER QUAKER SPRINGS RUN		15			10		80				
ASD-30-0932 R OVER QUAKER SPRINGS RUN		15			10		80				
ASD-30-1125 L OVER JEROME FORK							112		10		
ASD-30-1125 R OVER JEROME FORK							112		10		
ASD-30-1194 L OVER GLENN RUN					10		80				
ASD-30-1194 R OVER GLENN RUN					10		80				
ASD-30-1284 UNDER ASD CO. RD. 1975	60							17			
WAY-30-0100 L OVER MUDDY FORK			125			10	102				
WAY-30-0100 R OVER MUDDY FORK			92			10	102				
TOTALS	60	30	217		40	20	748	17	20		

BRIDGE QUANTITIES

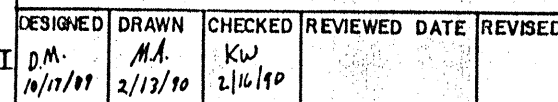
BRIDGE NUMBER	517		518		519		601			SPECIAL		
	RAILING (DEEP BEAM RAIL WITH STEEL TUBULAR BACKUP AND TYPE 2 STEEL POSTS AND BOLTS		POROUS BACKFILL, AS PER PLAN		PATCHING CONCRETE STRUCTURES, AS PER PLAN		ROCK CHANNEL PROTECTION, TYPE B, WITHOUT FILTER [†]			SCUPPER EXTENSION	TEST SLAB	
	LIN.FT.		CU.YD.		SQ.FT.		CU.YD.			EACH	LUMP SUM	
ASD-30-0932 L OVER QUAKER SPRINGS RUN	237.50		31				198				LUMP	
ASD-30-0932 R OVER QUAKER SPRINGS RUN	237.50		31				198					
ASD-30-1125 L OVER JEROME FORK	462.50		52									
ASD-30-1125 R OVER JEROME FORK	462.50		52									
ASD-30-1194 L OVER GLENN RUN	237.50		31									
ASD-30-1194 R OVER GLENN RUN	237.50		31									
ASD-30-1284 UNDER ASD CO. RD. 1975									10			
WAY-30-0100 L OVER MUDDY FORK	312.50		33		197		378					
WAY-30-0100 R OVER MUDDY FORK	312.50		33		148		336					
TOTALS	2500		294		345		1110		10		LUMP	

[†] QUANTITY CARRIED TO ROADWAY GENERAL SUMMARY.

BRIDGE QUANTITIES

BRIDGE NUMBER	SPECIAL MICRO-SILICA MODIFIED CONCRETE OVERLAY (1 3/4" THICK)	SPECIAL MICRO-SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS)	SPECIAL CONTAIN, COLLECT, STORE AND EVALUATE ABRASIVES AND PAINT CHIPS	SPECIAL SHIPMENT AND DISPOSAL OF NON-HAZARDOUS WASTE	SPECIAL SHIPMENT AND DISPOSAL OF HAZARDOUS WASTE	SPECIAL FIELD PAINTING OF EXISTING STEEL, SURFACE PREPARATION, SYSTEM OZEU	SPECIAL FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU	SPECIAL FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU	SPECIAL FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU	SPECIAL SEALING OF CONCRETE SURFACES (EPOXY)	SPECIAL ADJUSTING BEAM SEAT ELEVATIONS
	SQ.YD.	CU.YD.	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	SQ.YD.	SQ.YD.
ASD-30-0932 L OVER QUAKER SPRINGS RUN	497	15	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	60	10
ASD-30-0932 R OVER QUAKER SPRINGS RUN	497	32	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	60	10
ASD-30-1125 L OVER JEROME FORK	854	28	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	119	
ASD-30-1125 R OVER JEROME FORK	854	21	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	119	
ASD-30-1194 L OVER GLENN RUN	497	19	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	60	10
ASD-30-1194 R OVER GLENN RUN	497	16	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	60	10
ASD-30-1284 UNDER ASD CO. RD. 1975			LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	402	
WAY-30-0100 L OVER MUDDY FORK	642	16	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	77	10
WAY-30-0100 R OVER MUDDY FORK	642	19	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	77	10
TOTALS	4980	166	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	LUMP	1034	60

* THE COLOR OF PAINT SHALL BE BLUE



ASD-30-8.54
WAY-30-0.00

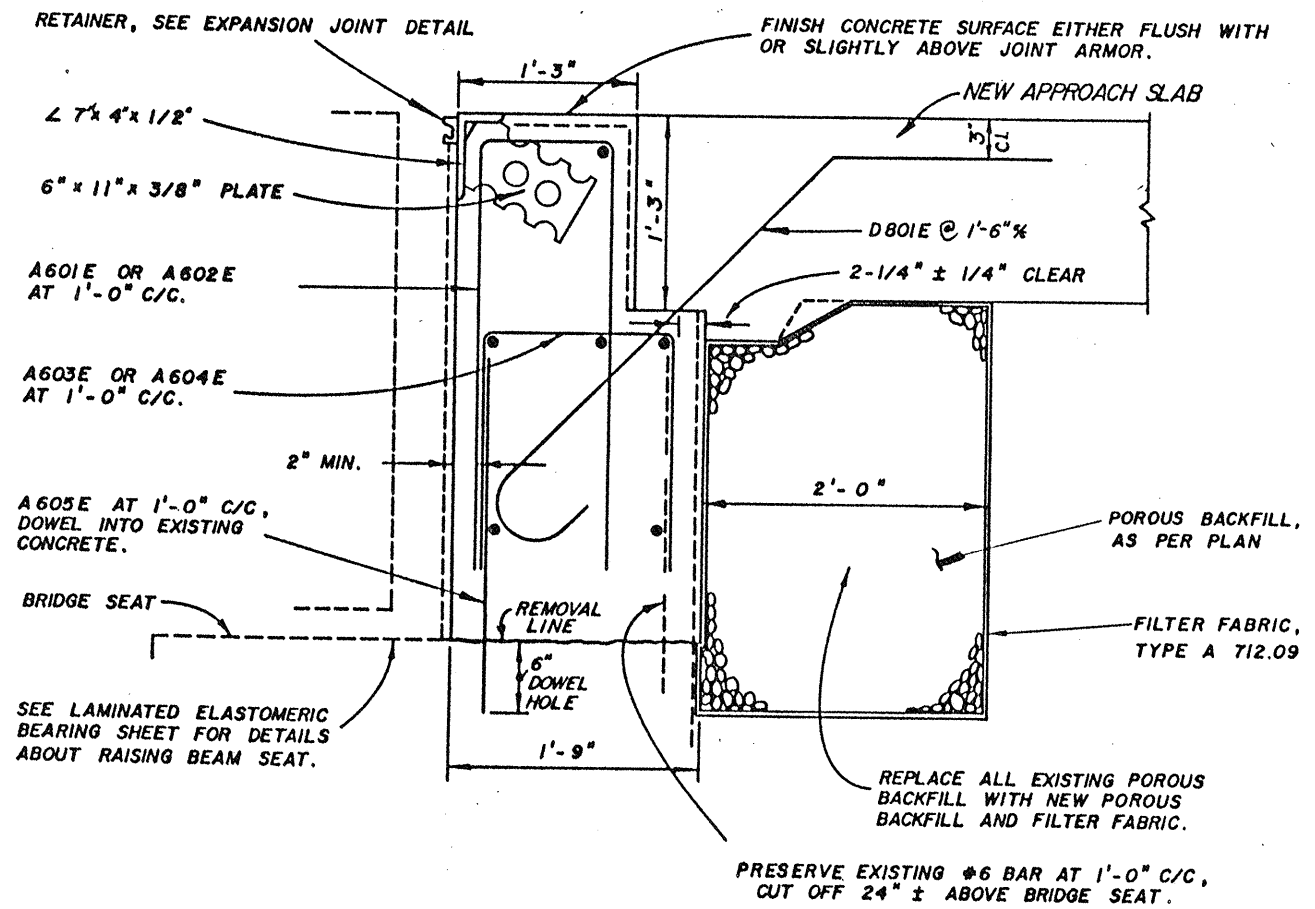
ITEM 509 – EPOXY COATED REINFORCING STEEL (BACKWALL REPLACEMENT)												
BAR DATA			QUANTITIES									
			ASD						WAY			
MARK	LENGTH	SHAPE	30-0932 L	30-0932 R	30-1125 L	30-1125 R	30-1194 L	30-1194 R	30-0100 L	30-0100 R	TOTAL NO.	WEIGHT
A501E	17'-8"	S	12	12			12	12			48	884
A502E	21'-8"	S	12	12			12	12			48	1085
A503E	27'-3"	S			32	32					64	1819
A504 E	22'-4"	S							12	12	24	559
A505 E	27'-5"	S							12	12	24	686
A506 E	2'-6"	S	12	12	16	16	12	12	12	12	104	271
A601E	8'-7"	B			110	110					220	2836
A602E	6'-7"	B	80	80			80	80	102	102	524	5181
A603E	6'-0"	B			110	110					220	1983
A604 E	4'-0"	B	80	80			80	80	102	102	524	3148
A605 E	2'-6"	S	80	80	110	110	80	80	102	102	744	2794
D801 E	5'-8"	B	54	54	48	48	54	54	54	54	420	6355

ITEM	QUANTITY	UNIT	DESCRIPTION
202	238 *	CU. YD.	PORTIONS OF STRUCTURES REMOVED , BACKWALLS,AS PER PLAN
509	27,601 *	POUND	EPOXY COATED REINFORCING STEEL
510	848 * ⁷	EACH	DOWEL HOLES, AS PER PLAN
511	238 * ⁷	CU. YD.	CLASS S CONCRETE, BACKWALLS,AS PER PLAN
518	294 * ⁹⁰	CU. YD.	POROUS BACKFILL , AS PER PLAN

* QUANTITIES CARRIED TO BRIDGE QUANTITY SHEETS

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE				
BACKWALL REPLACEMENT				
BRIDGE NOS: ASD 30 - 0932 L & R ASD 30 - 1125 L & R ASD 30 - 1194 L & R WAY 30 - 0100 L & R				
DESIGNED DM 9/29/89	DRAWN TD 11/89	CHECKED KW 2/16/90	REVIEWED DATE	REVISED

ALL BARS NORMAL TO THIS SECTION ARE
A501E , A502E , A503E , A504E , A505E

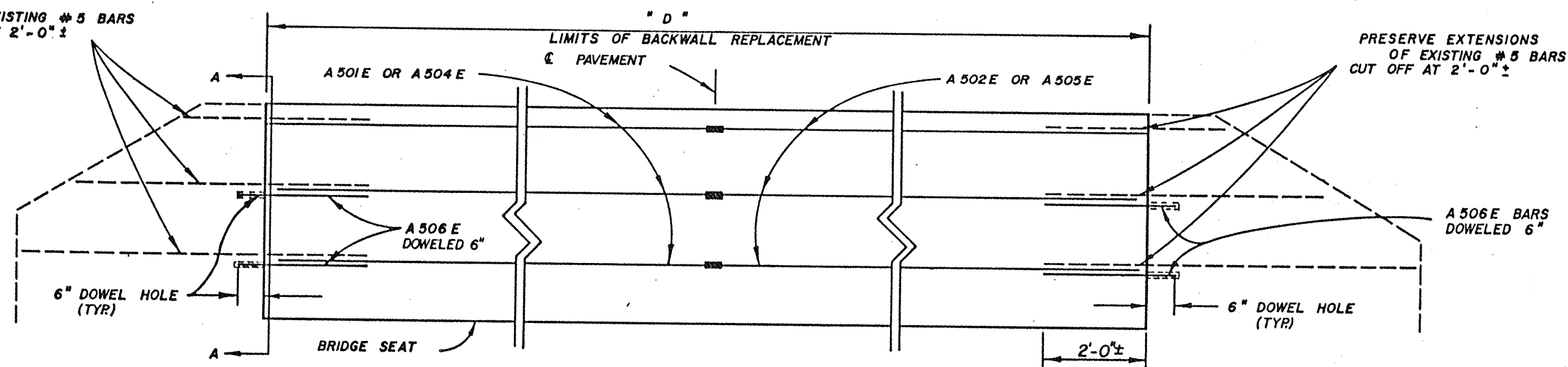


TYPICAL BACKWALL REPLACEMENT

BRIDGE NOS:
ASD-30-0932 L&R ASD-30-1194 L&R
ASD-30-1125 L&R WAY-30-0100 L&R

ASD-30-8.54
WAY-30-0.00

PRESERVE EXISTING #5 BARS
CUT OFF AT 2'-0"±

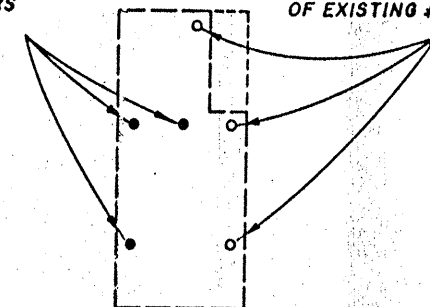


TYPICAL EXISTING ELEVATION

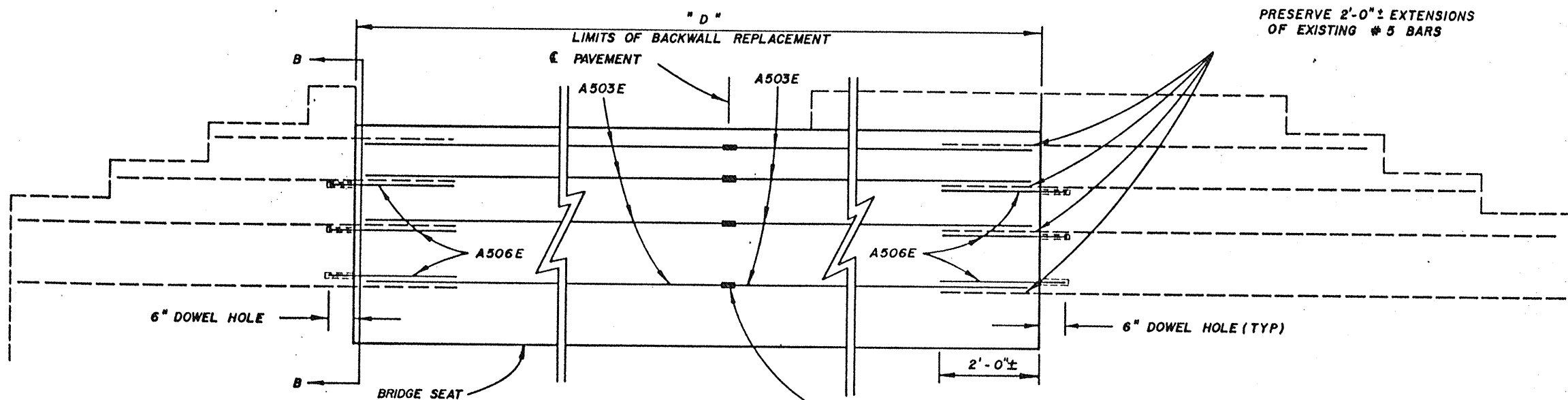
BRIDGE NOS. ASD-30-0932 L&R
ASD-30-1194 L&R
WAY-30-0100 L&R

A 506E BARS
DOWELED 6"

PRESERVE EXTENSIONS
OF EXISTING #5 BARS



SECTION A-A



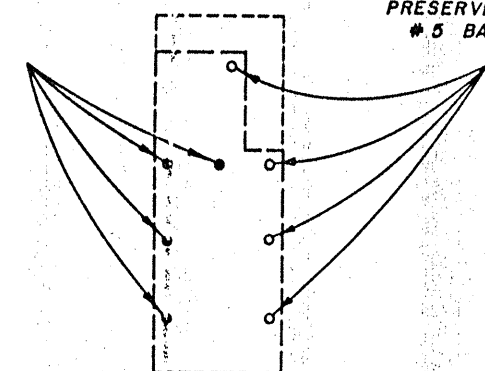
TYPICAL EXISTING ELEVATION

BRIDGE NO. ASD-30-1125 L&R

PRESERVE 2'-0"± EXTENSIONS
OF EXISTING #5 BARS

A 506E BARS
DOWELED 6"

PRESERVE EXISTING
#5 BARS

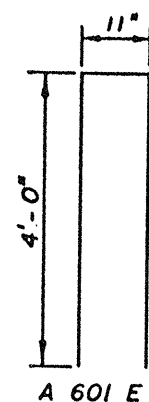


SECTION B-B

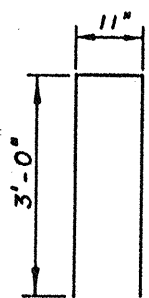
MECHANICAL CONNECTORS SHALL BE USED TO
CONNECT REBAR NEAR PAVEMENT CENTERLINE.
CONNECTORS SHALL MEET SECTION 509.06
AND BE APPROVED BY THE ENGINEER.
INCLUDE COST IN ITEM 509.

#5 AND #6 BARS SHALL LAP EXISTING
BARS 1'-8" MIN.

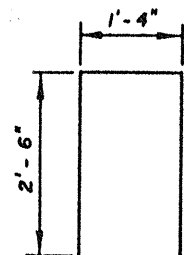
MECHANICAL CONNECTORS (TYP.)



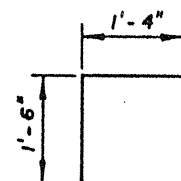
A 601 E



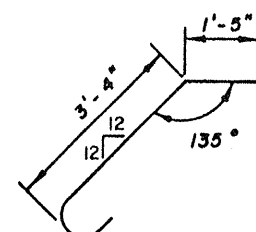
A 602 E



A 603 E



A 604 E



D 801 E

BENDING DIAGRAMS

BACKWALL REPLACEMENT LENGTH "D"

BRIDGE NO.	"D"
ASD-30-0932 L&R	40'-0"
ASD-30-1125 L&R	55'-1"
ASD-30-1194 L&R	40'-0"
WAY-30-0100 L&R	50'-5"

NOTE: BACKWALL REPLACEMENT LOCATION SHALL CORRESPOND
WITH NEW APPROACH SLAB LOCATION.

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

BACKWALL REPLACEMENT
BRIDGE NOS:
ASD-30-0932 L&R
ASD-30-1125 L&R
ASD-30-1194 L&R
WAY-30-0100 L&R

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
D.M. 8/15/89	T.D. 9/89	KW 2/10/90			

NOTES

ASD-30-8.54
WAY-30-0.00

TOLERANCES:
 INDIVIDUAL ELASTOMER LAYER THICKNESS $\pm 20\%$ OF DESIGN VALUE (NOT TO EXCEED $\pm 1/8"$)

PLAN DIMENSIONS
 DESIGN THICKNESS $\leq 1-1/4"$ -0. + 1/4"
 DESIGN THICKNESS $> 1-1/4"$ -0. + 1/8"
 EDGE COVER OF EMBEDDED LAMINATES -0. + 1/8"

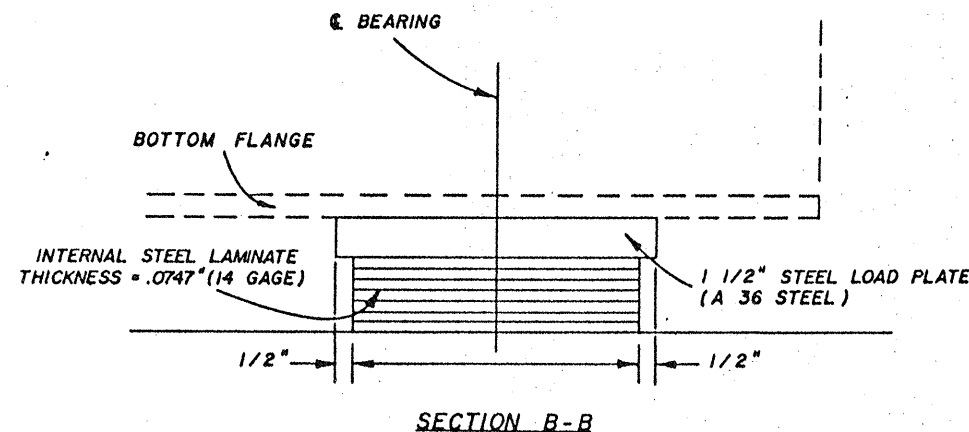
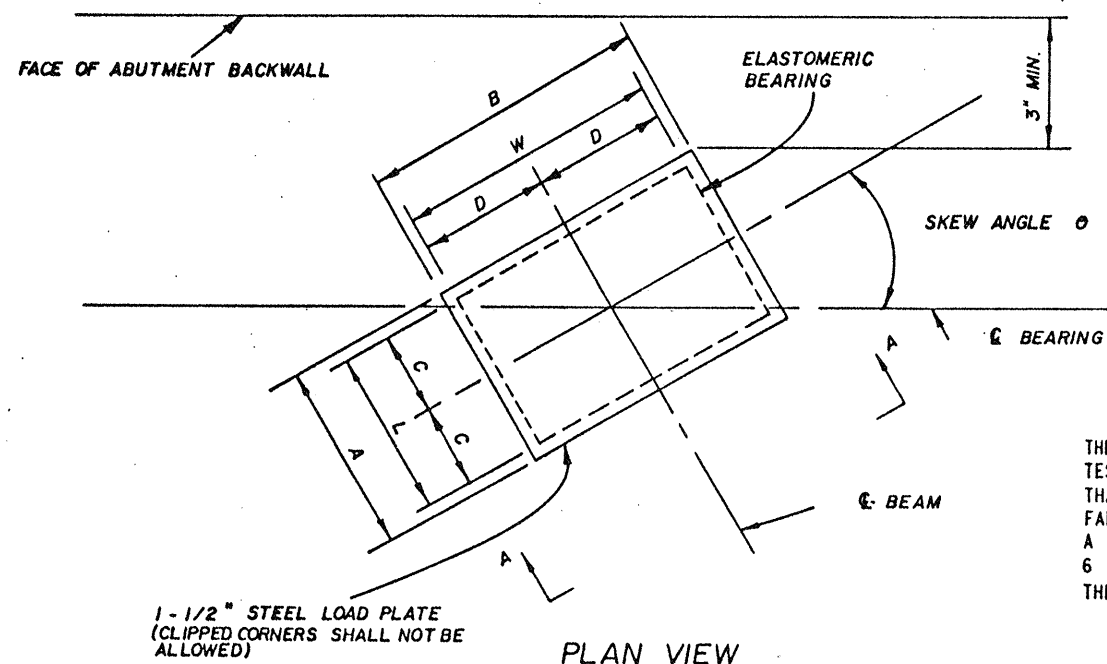
LOAD PLATE. THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.

WELDING OF THE LOAD PLATE TO THE SUPERSTRUCTURE SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE SHALL NOT EXCEED 400 °F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

BEARINGS SHALL BE SET AT AN AMBIENT TEMPERATURE OF 60 °F $\pm$ 10 °F

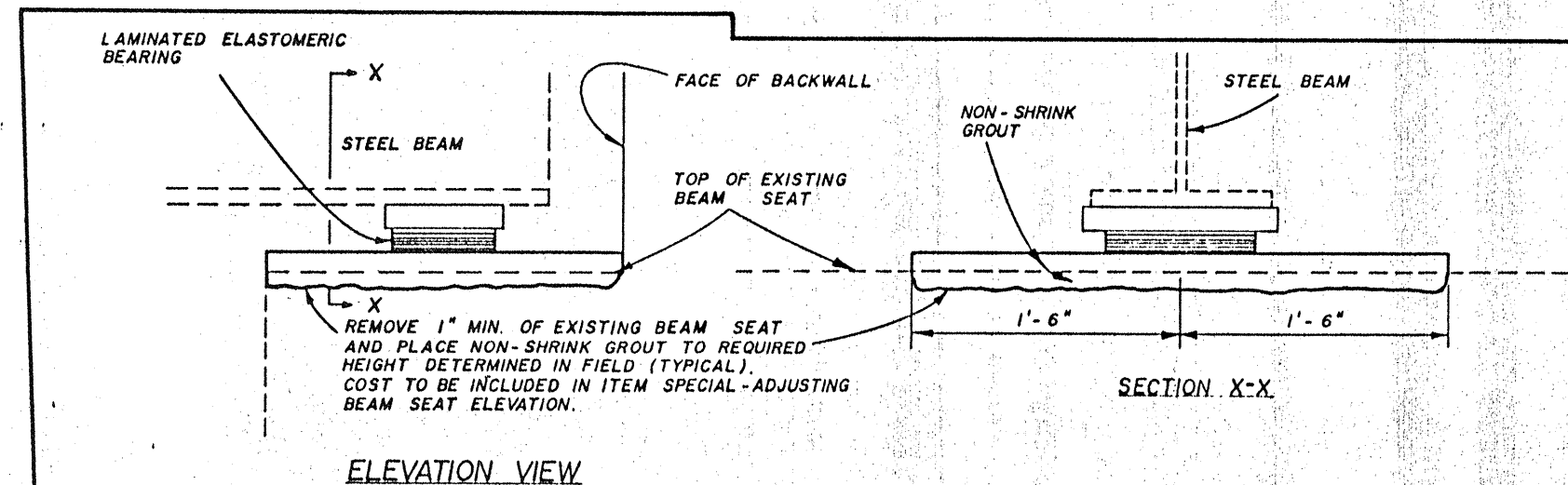
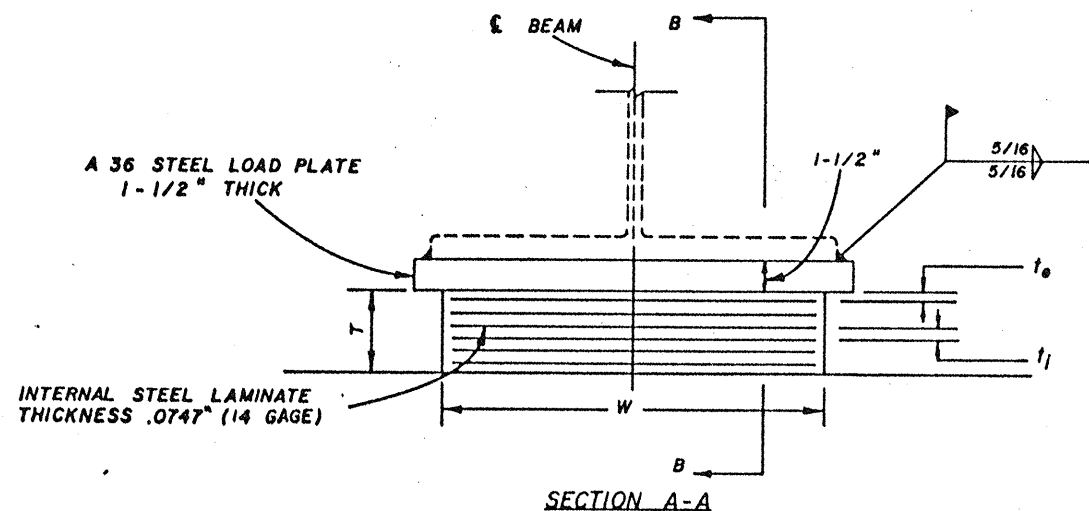
BASIS OF PAYMENT:

THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL EXPANSION LAMINATED ELASTOMERIC BEARINGS. PAYMENT WILL BE MADE AT THE CONTRACT BID PRICE FOR ITEM 516, EACH, LAMINATED ELASTOMERIC BEARINGS (5" X 11" X 1-1/8" LAMINATED ELASTOMERIC PAD WITH 6" X 12" X 1-1/2" STEEL LOAD PLATE) OR LAMINATED ELASTOMERIC BEARINGS (7" X 11" X 1-5/8" LAMINATED ELASTOMERIC PAD WITH 8" X 13" X 1-1/2" STEEL LOAD PLATE).



ELASTOMERIC TEST PAD

THE ELASTOMERIC BEARING MANUFACTURER SHALL SUPPLY A PLAIN ELASTOMERIC PAD FOR TESTING PURPOSES. THE PAD SHALL BE FURNISHED FROM THE SAME BATCH OF NEOPRENE THAT IS USED IN THE FABRICATION OF THE LAMINATED ELASTOMERIC BEARING AND THE FABRICATOR SHALL CERTIFY THE IDENTITY OF THE ELASTOMER. THE PAD SHALL HAVE A 1/2 INCH THICKNESS, AND SHALL HAVE MINIMUM LENGTH AND WIDTH DIMENSIONS OF 6 INCHES. ONLY ONE BEARING OF EACH SIZE NEEDS TO BE PROOF LOADED. PAYMENT FOR THE TEST PAD WILL BE INCLUDED IN THE PRICE BID FOR THE BEARINGS.

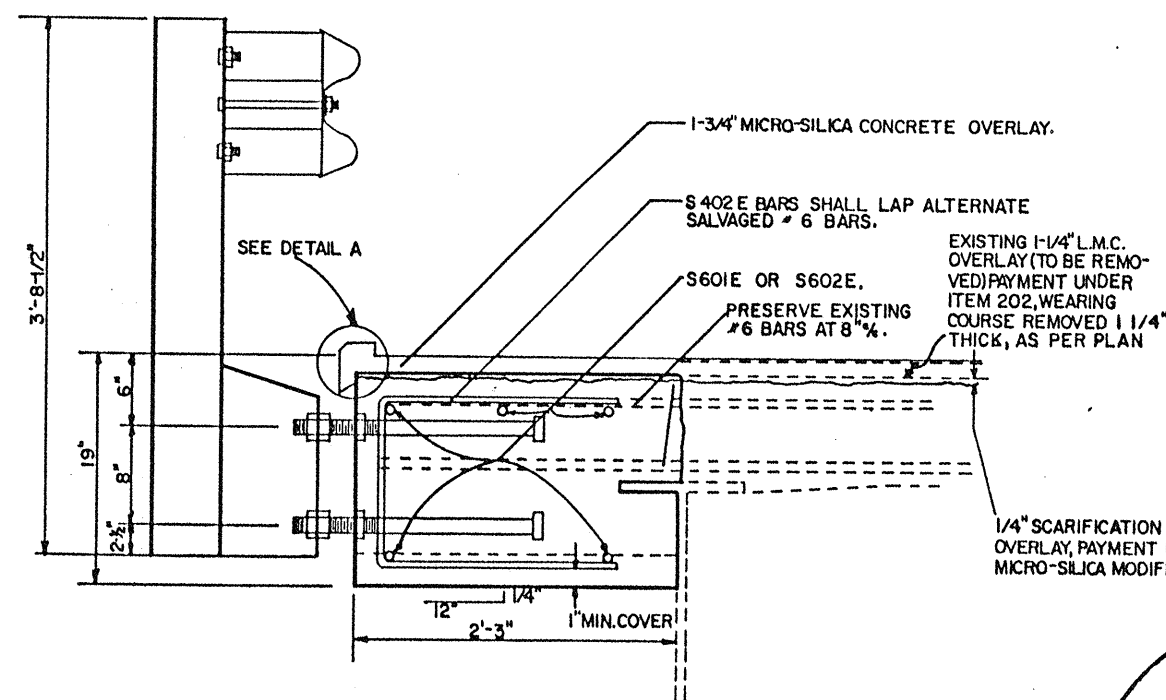


ADJUSTING BEAM SEAT ELEVATIONS

BEARING PAD DATA (50 DUROMETER HARDNESS)															
BRIDGE NUMBER	LOCATION	A	B	C	D	L	T	W	t _o LAYERS	t _i LAYERS	NO. STEEL LAMINATES .0747" THICK	SKEW ANGLE Θ	DEAD LOAD (KIPS)	LIVE LOAD (KIPS)	TOTAL LOAD (KIPS)
ASD-30-0932 L&R	REAR ABUTS	6"	12"	2-1/2"	5-1/2"	5"	1-1/8"	11"	2 AT .130"	3 AT .182"	4	0° 00'	20.8	15.2	36.0
	FORWARD ABUTS	6"	12"	2-1/2"	5-1/2"	5"	1-1/8"	11"	2 AT .130"	3 AT .182"	4	0° 00'	20.8	15.2	36.0
ASD-30-1194 L&R	REAR ABUTS	6"	12"	2-1/2"	5-1/2"	5"	1-1/8"	11"	2 AT .130"	3 AT .182"	4	0° 00'	20.8	15.2	36.0
	FORWARD ABUTS	6"	12"	2-1/2"	5-1/2"	5"	1-1/8"	11"	2 AT .130"	3 AT .182"	4	0° 00'	20.8	15.2	36.0
WAY-30-0100 L&R	REAR ABUTS	8"	13"	3-1/2"	5-1/2"	7"	1-5/8"	11"	2 AT .130"	5 AT .182"	6	37° 30'	27.8	16.3	44.1
	FORWARD ABUTS	8"	13"	3-1/2"	5-1/2"	7"	1-5/8"	11"	2 AT .130"	5 AT .182"	6	37° 30'	27.8	16.3	44.1

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE				
LAMINATED ELASTOMERIC BEARINGS				
BRIDGE NOS:		ASD-30-0932 L&R ASD-30-1194 L&R WAY-30-0100 L&R		
DESIGNED D.M.	DRAWN D.L.	CHECKED K.W.	REVIEWED DATE	REVISED
10/11/89	4/12/90	2/16/90		

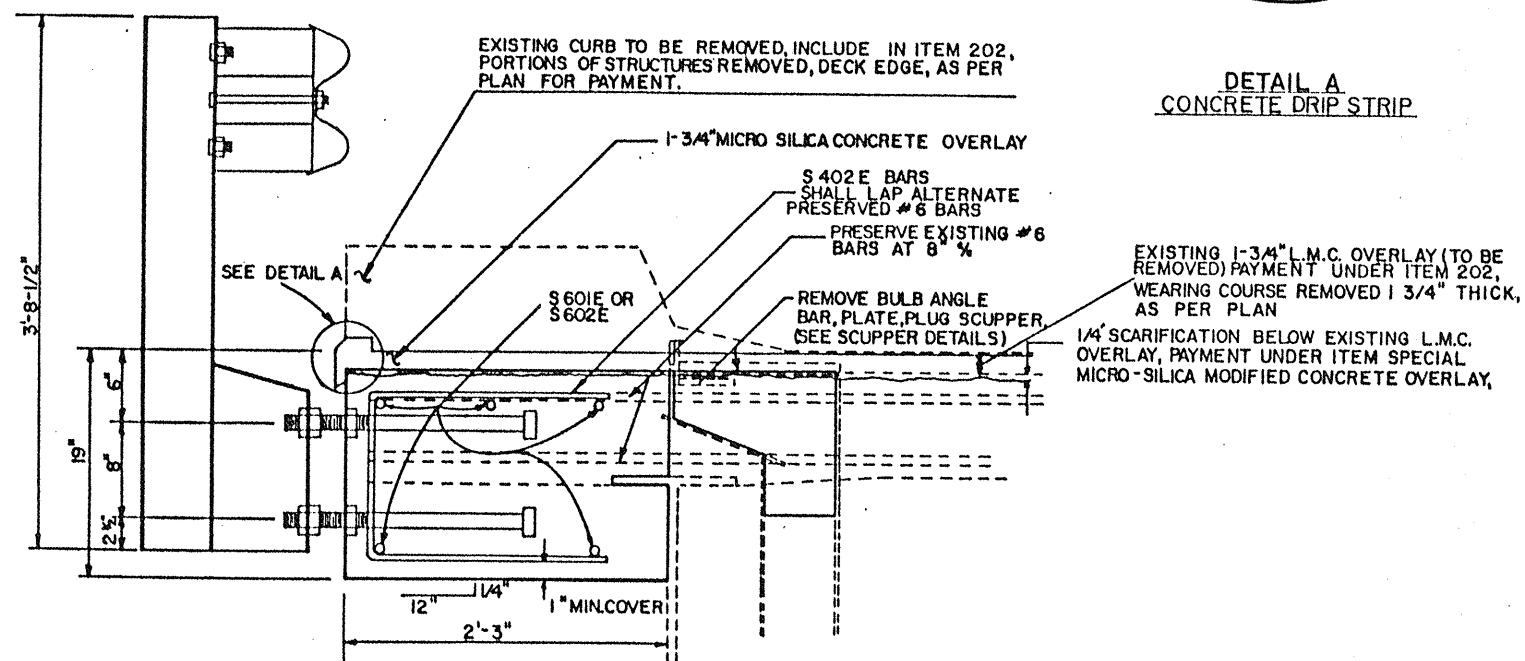
ASD-30-8.54
WAY-30-0.00



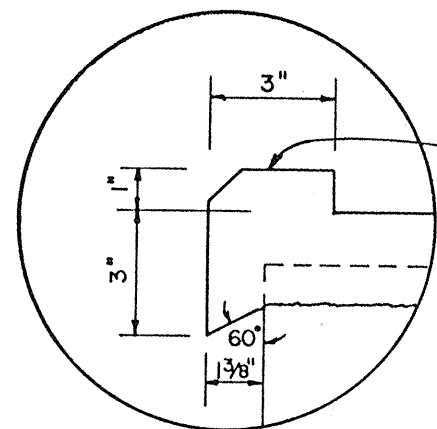
TYPICAL DECK EDGE

BRIDGE NOS: ASD 30-0932 L&R
ASD 30-1194 L&R
WAY 30-0100 L&R

NOTE: ALL S601E AND S602E BARS SHALL BE LAPPED 1'-8" MINIMUM



TYPICAL DECK EDGE
BRIDGE NO. ASD 30-1125 L&R

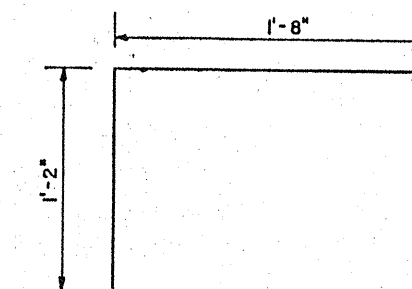


DETAIL A
CONCRETE DRIP STRIP

CONCRETE DRIP STRIP EXTENDS THE LENGTH
OF THE BRIDGE ON BOTH SIDES.

ITEM	QUANTITY	UNIT	DESCRIPTION
202	290 *	CU YD.	PORTIONS OF STRUCTURES REMOVED, DECK EDGES, AS PER PLAN
509	23,935 *	POUND	EPOXY COATED REINFORCING STEEL
511	294 *	CU YD.	CLASS S CONCRETE, DECK EDGE, AS PER PLAN

* QUANTITIES CARRIED TO BRIDGE QUANTITY SHEETS



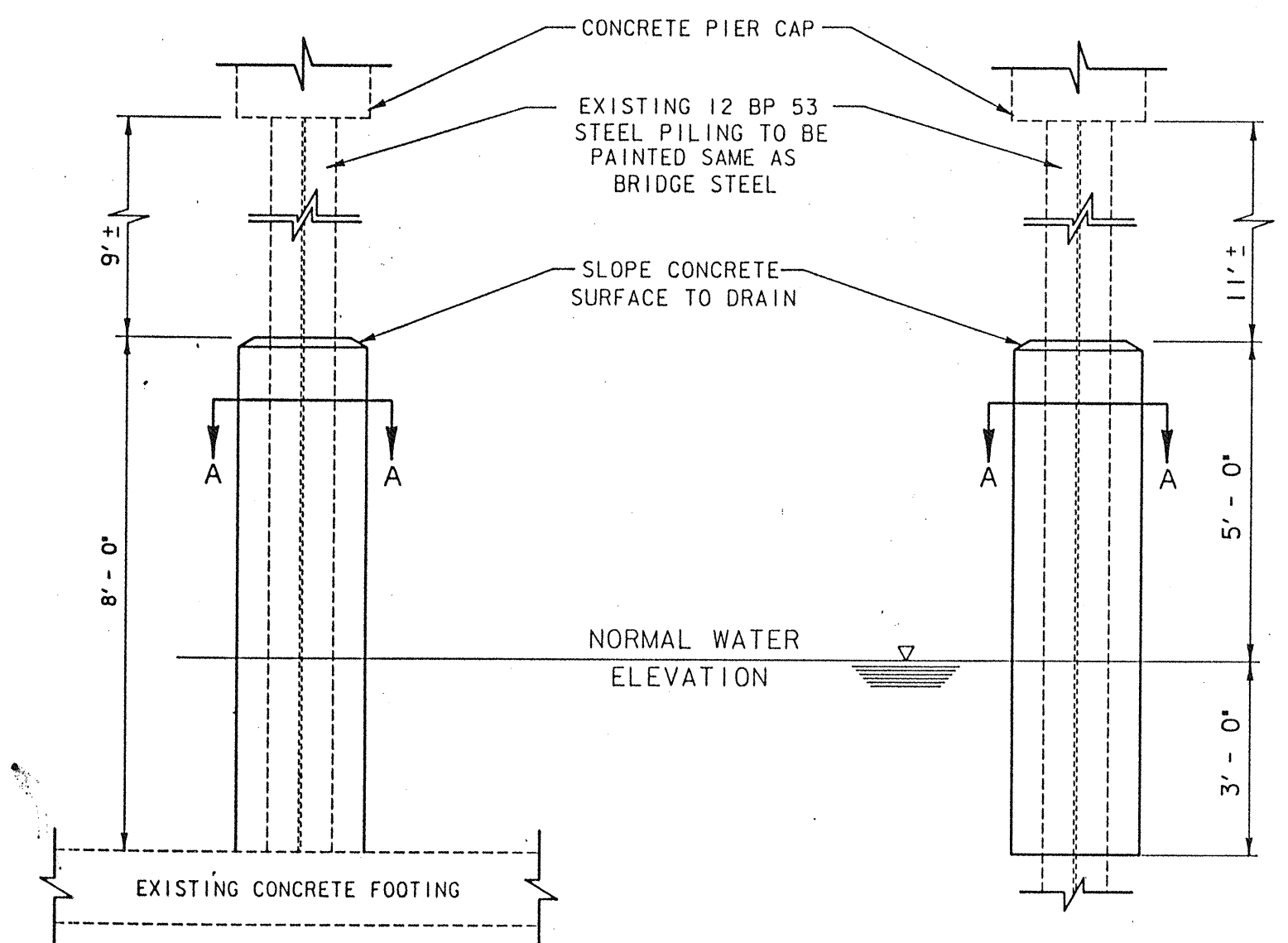
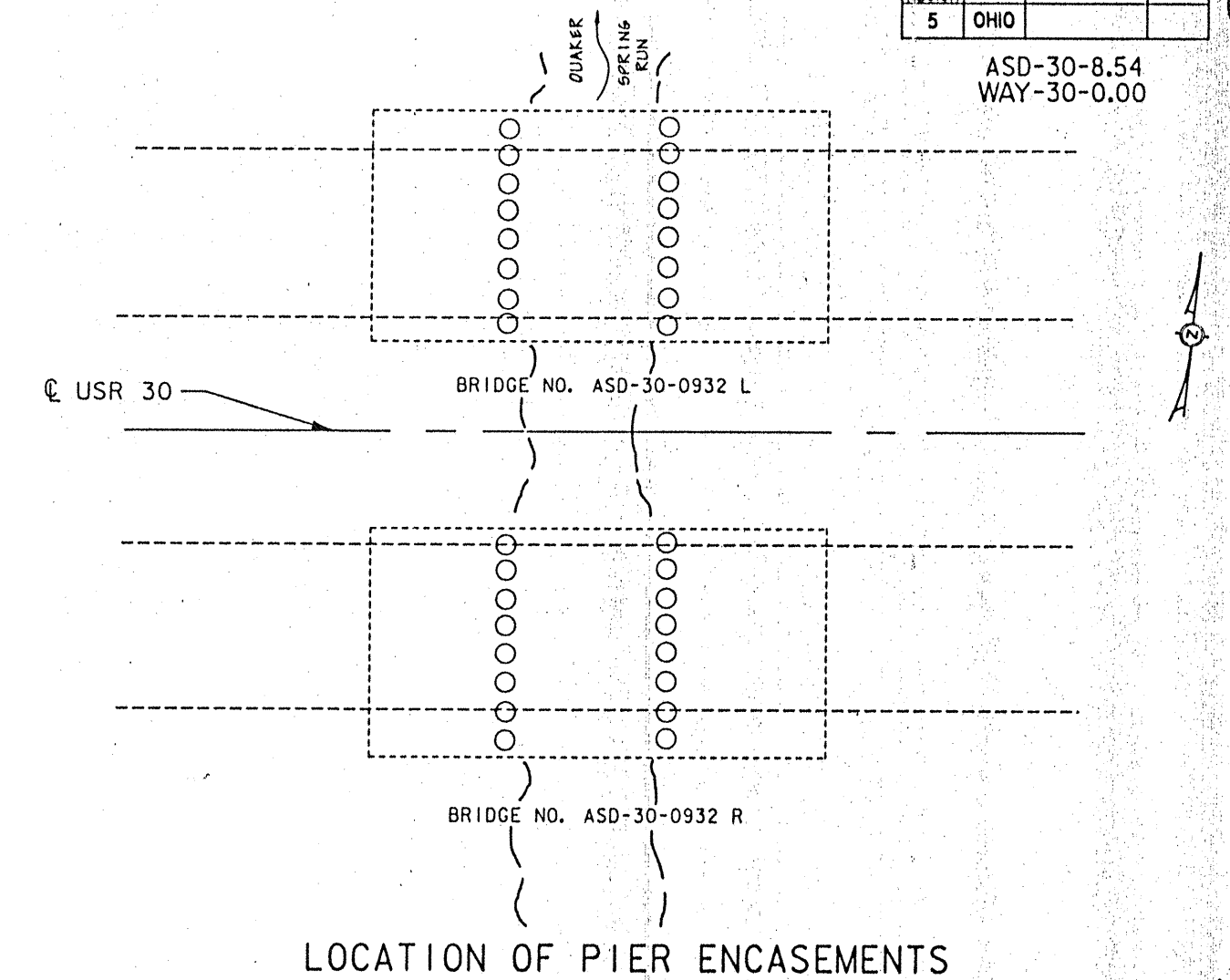
S402 E BENDING DIAGRAM

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

DECK EDGE REPLACEMENT
BRIDGE NOS: ASD-30-0932 L&R
ASD-30-1125 L&R
ASD-30-1194 L&R
WAY-30-0100 L&R

DESIGNED D.M. 8/2/89	DRAWN 2/2/90 3/14/90	CHECKED KW 2/16/90	REVIEWED DATE	REVISED
----------------------------	----------------------------	--------------------------	---------------	---------

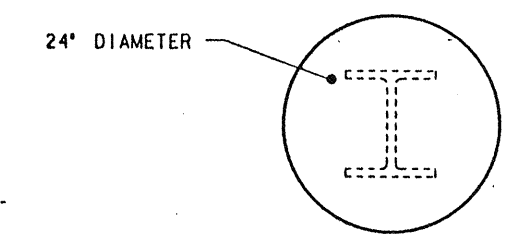
ASD-30-8.54
WAY-30-0.00



TYPICAL PILING PIER ON FOOTING
BRIDGE NO. ASD-30-0932 R

TYPICAL PILING PIER
BRIDGE NO. ASD-30-0932 L

NOTE: EXISTING STEEL PILING SHALL BE SANDBLASTED AND
PAINTED BETWEEN CONCRETE PIER CAP AND PILING ENCASEMENT



SECTION A-A

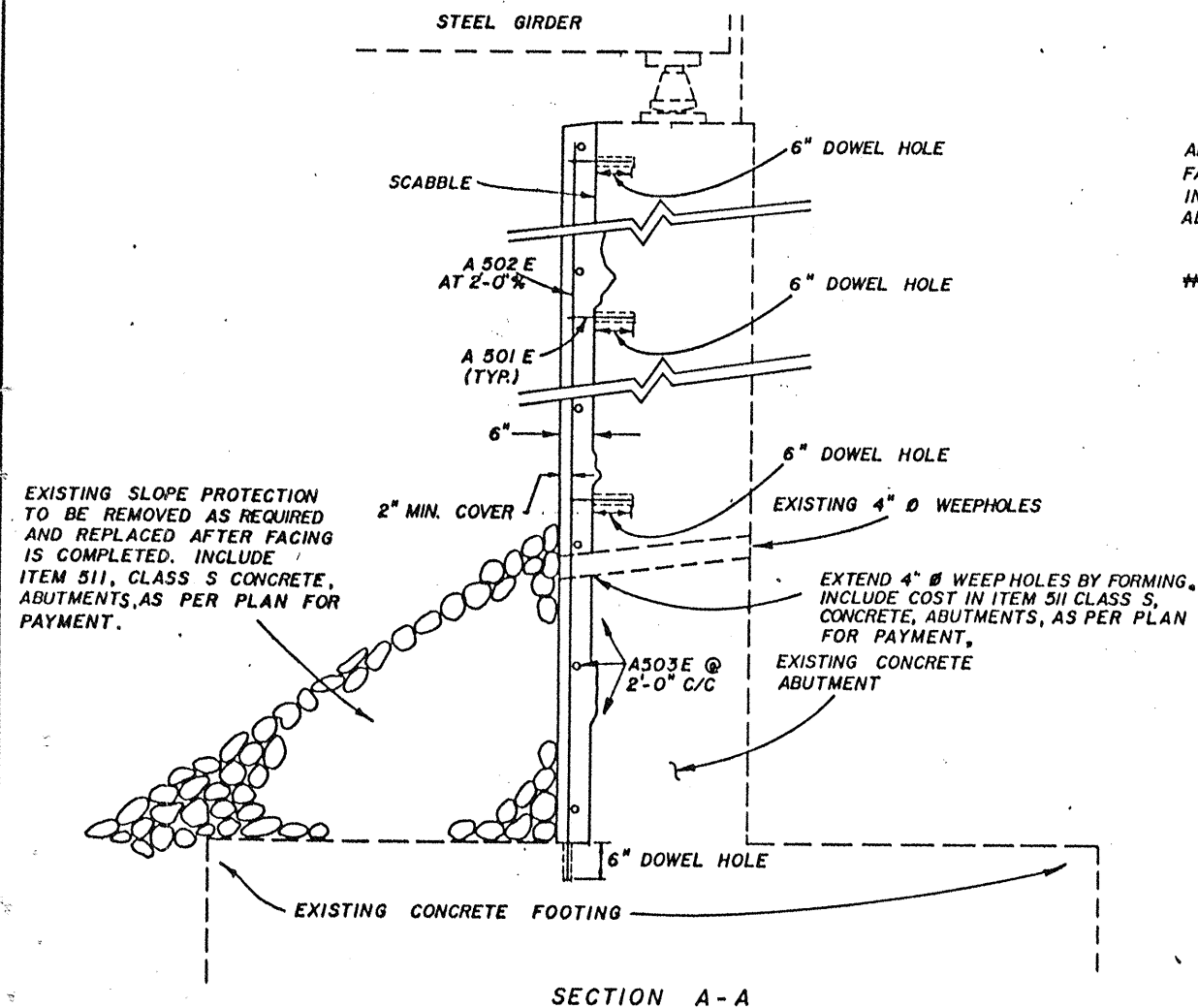
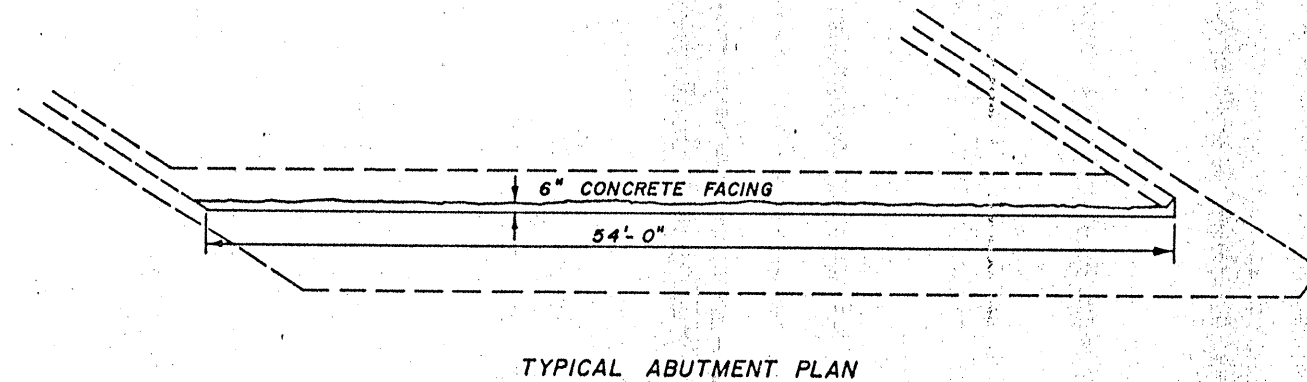
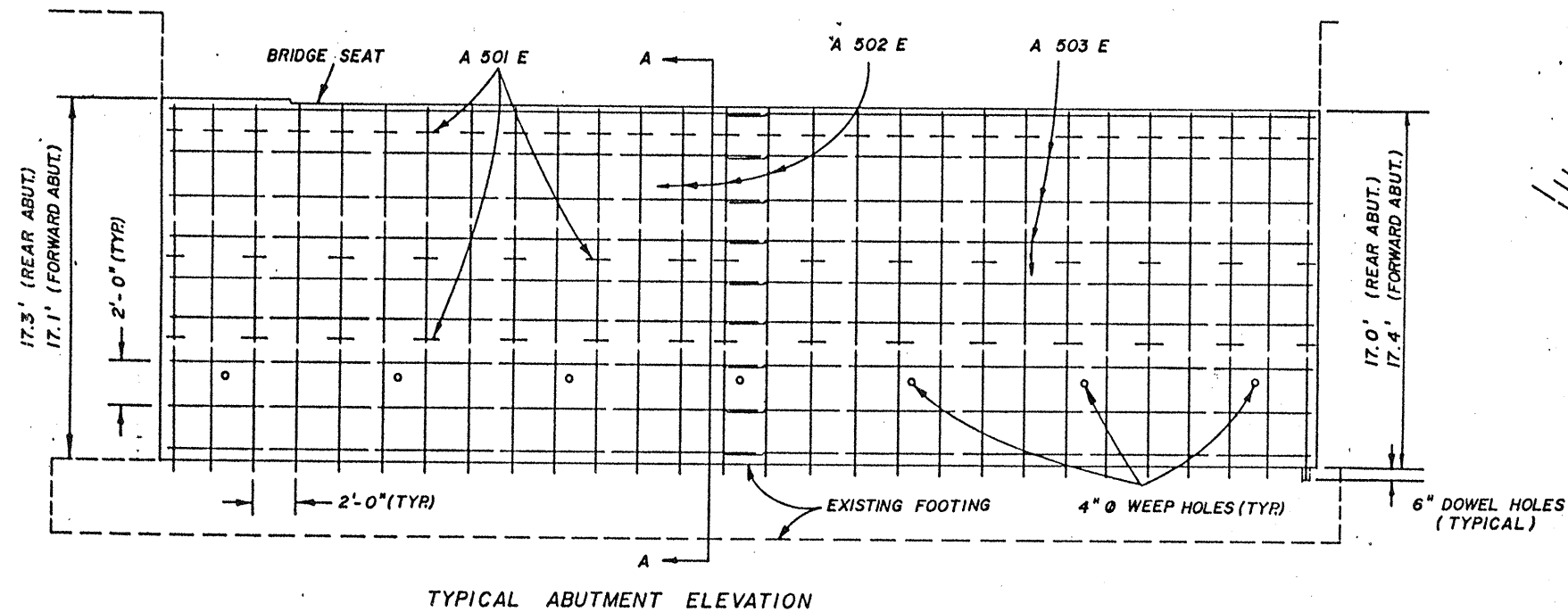
PIER ENCASEMENT QUANTITIES

BRIDGE NO.	PIER COLUMNS TO BE ENCASD	NUMBER OF PIER COLUMNS	PIER COLUMNS ENCASEMENT LENGTH	511		
				CLASS 5 CONCRETE, PILING ENCASEMENT, AS PER PLAN	CU. YD.	
ASD-30-0932 L	ALL	16	8' - 0"	15.0		
ASD-30-0932 R	ALL	16	8' - 0"	15.0		
TOTAL				30		

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE					
PILING ENCASEMENT DETAILS					
BRIDGE NO. ASD-30-0932 L/R					
DESIGNED D.M. 7/17/87	DRAWN T.R.O.	CHECKED K.W. 2/16/90	REVIEWED	DATE	REVISED

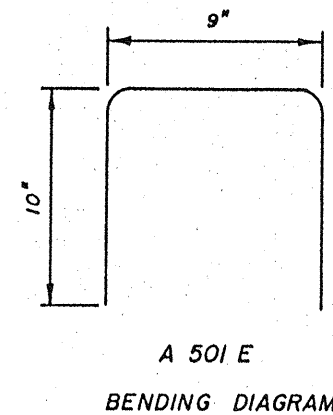
DESIGN FILE: Z:\1970.7\730\PIER.DGN:1
PRF NAME: PILING.CAS
DATE: 23-MAY-1990

ASD-30-8.54
WAY-30-0.00



ALL LOOSE AND UNSOUND CONCRETE ALONG
FACE OF ABUTMENTS SHALL BE REMOVED.
INCLUDE IN ITEM 511, CLASS S CONCRETE,
ABUTMENTS, AS PER PLAN FOR PAYMENT.

** 5 BARS LAPPED AT 1'-5" MIN.



ITEM 509 - EPOXY COATED REINFORCING STEEL (ABUTMENT)				
REBAR DATA			QUANTITIES	
MARK	LENGTH	SHAPE	NUMBER	WEIGHT (LBS)
A 501 E	2'- 2"	B	116	262
A 502 E	17'- 4"	S	56	1012
A 503 E	27'- 7"	S	36	1036
			TOTAL	2310

ITEM	QUANTITY	UNIT	DESCRIPTION
509	* 2310	POUND	EPOXY COATED REINFORCING STEEL
510	* 288	EACH	DOWEL HOLES, AS PER PLAN
511	* 43	CU. YD.	CLASS S CONCRETE, ABUTMENTS, AS PER PLAN

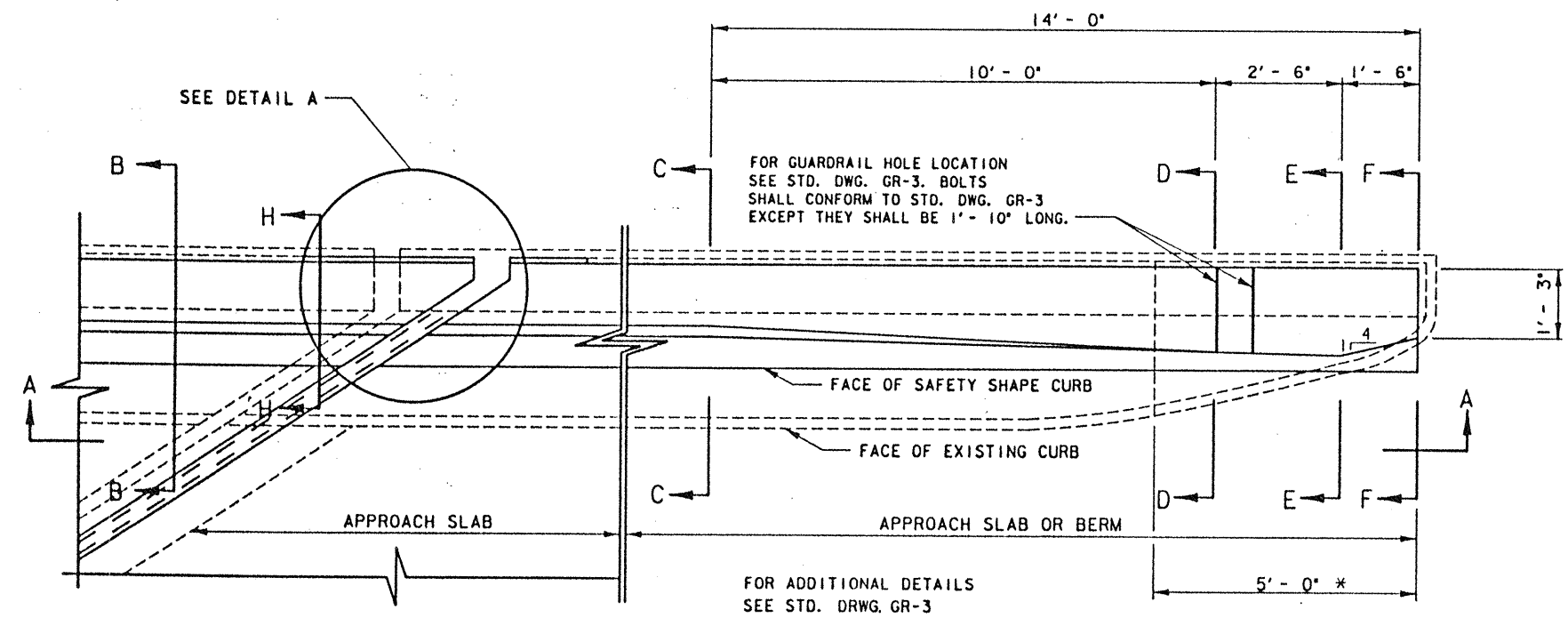
*QUANTITIES CARRIED TO BRIDGE QUANTITY SHEETS

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

ABUTMENT FACING
BRIDGE NO.
ASD - 30 - 1284

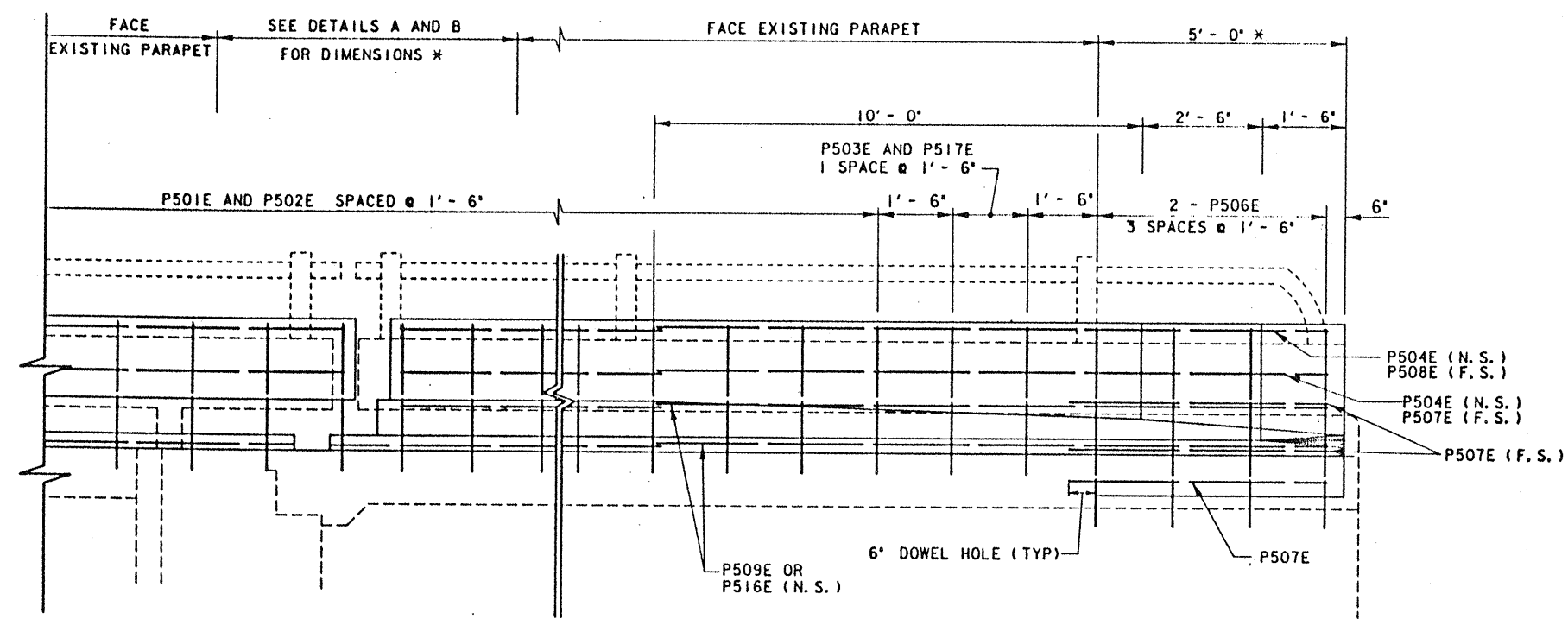
DESIGNED	DRAWN	CHECKED	REVIEWED DATE	REVISED
D.M. 9/25/99	T.D. 11/01	K.W. 2/16/99		

ASD-30-8.54
WAY-30-0.00



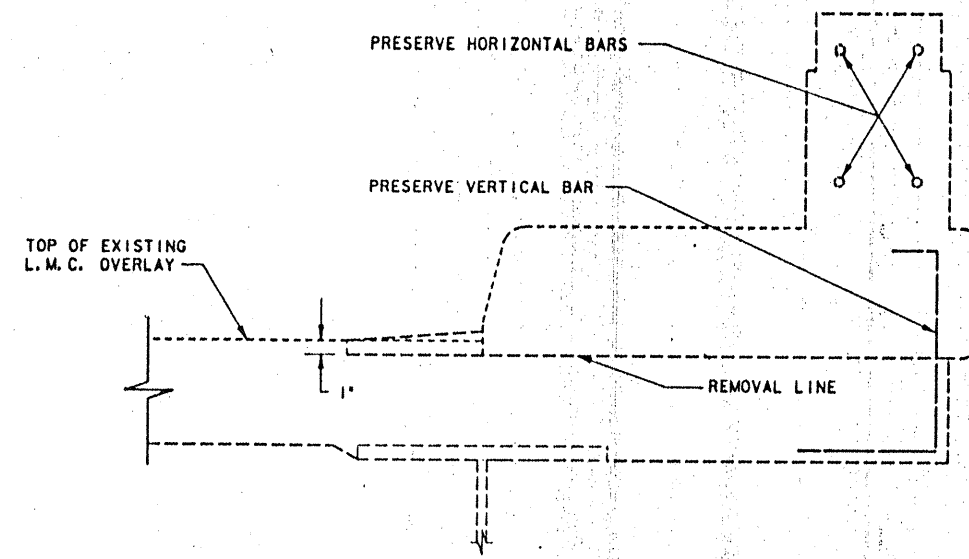
PART PLAN AT ABUTMENT

* EXISTING PARAPET TO BE COMPLETELY
REMOVED AND NEW PARAPET TO BE
FORMED. INCLUDE REMOVAL WITH ITEM
202 - PORTIONS OF STRUCTURES
REMOVED, PARAPETS, AS PER PLAN.



SECTION A - A

FOR REINFORCING BARS NOT SHOWN, SEE SECTION H-H ON THIS SHEET



SECTION H - H REMOVAL

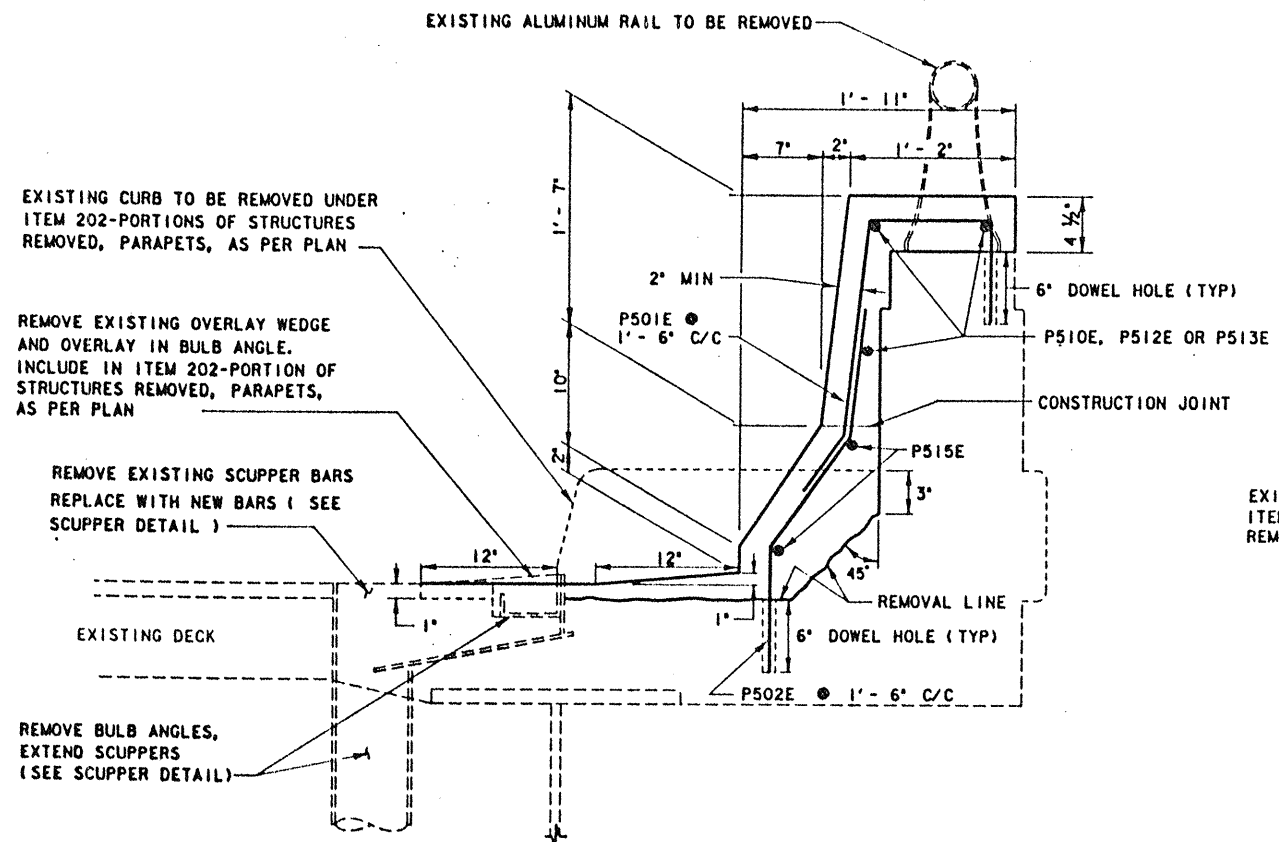
STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE					
PARAPET DETAILS					
BRIDGE NO. ASD-30-1284					
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
DM	T.R.O.	KW			
9/10/97		2/10/98			

DATE: 1-JUN-1990

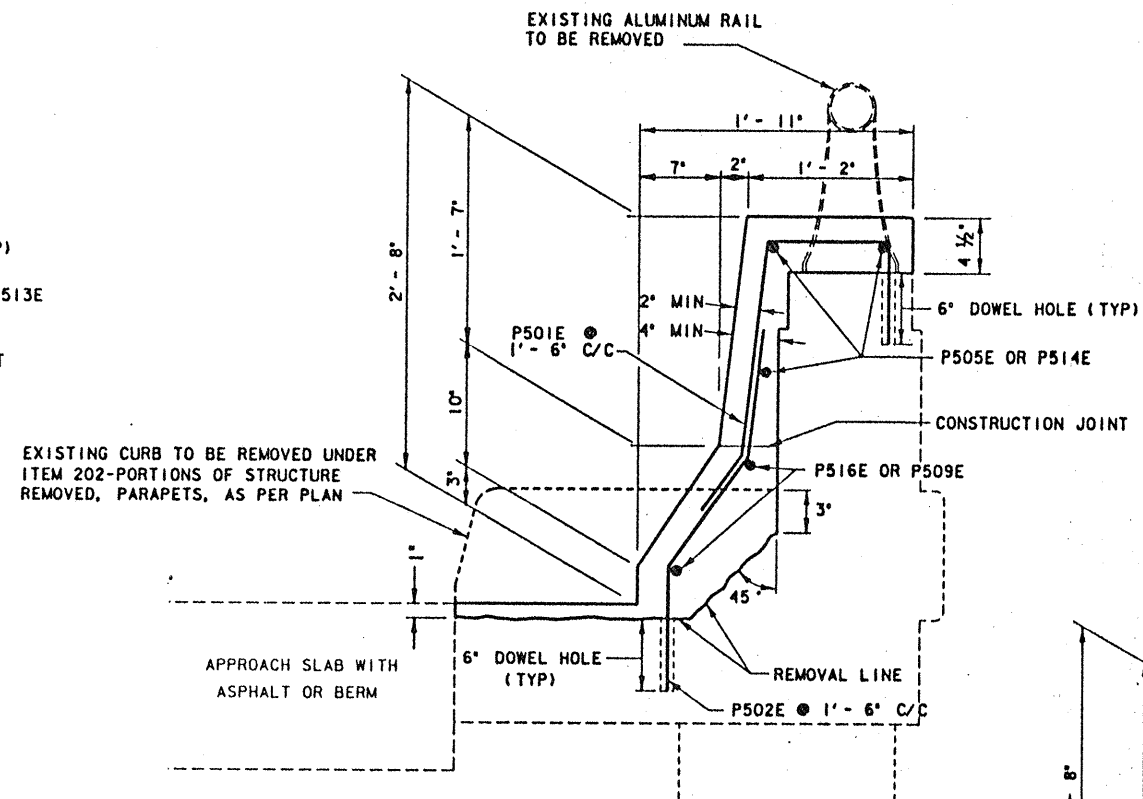
PRE NAME: A30PAR2

DESIGN FILE: ZF100707.PARA.DET.DGN

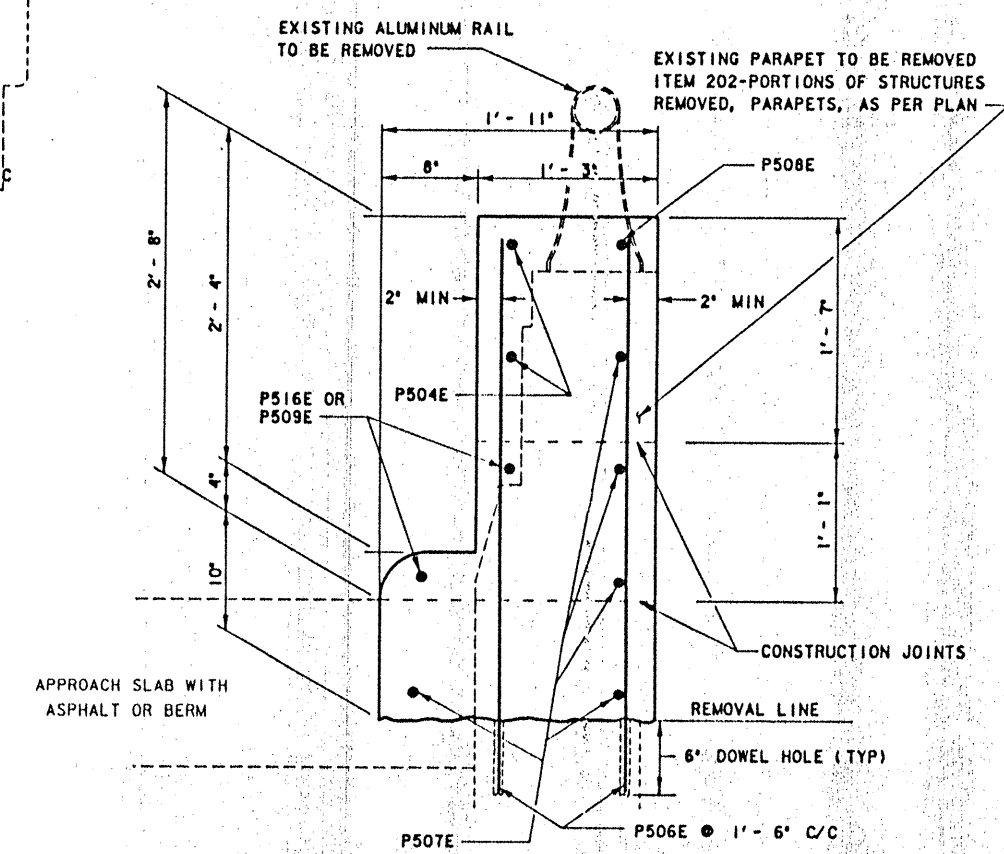
ASD-30-8.54
WAY-30-0.00



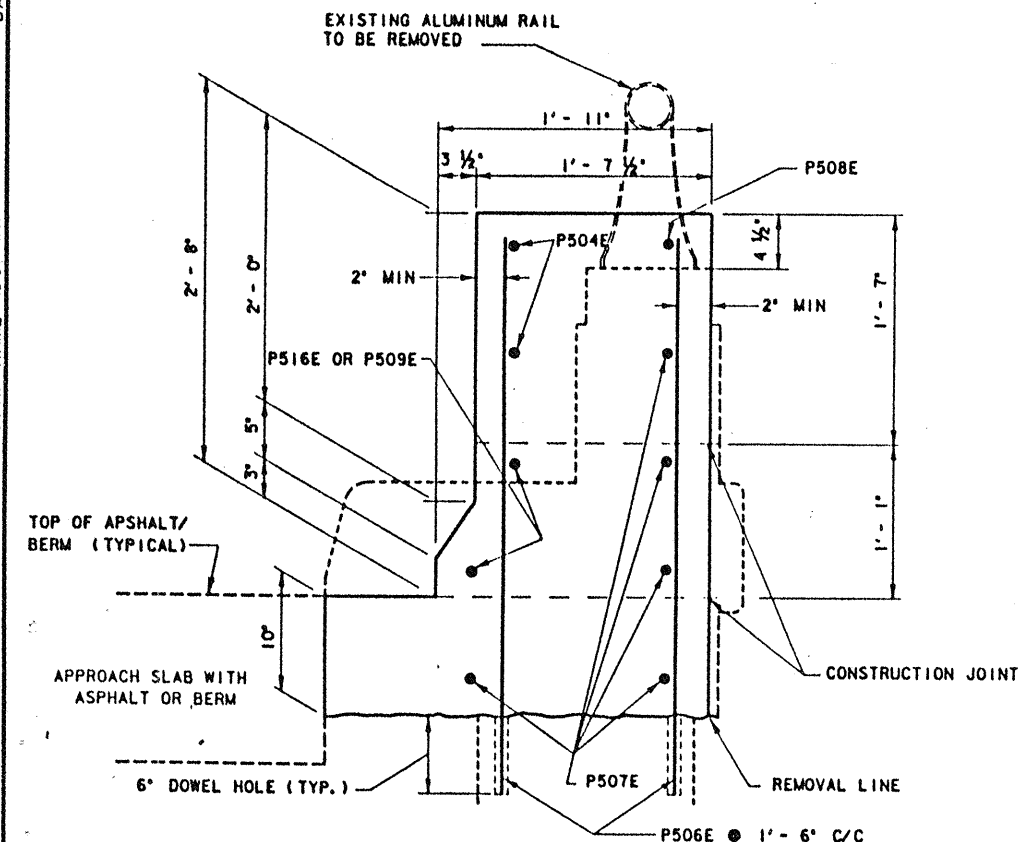
SECTION B - B



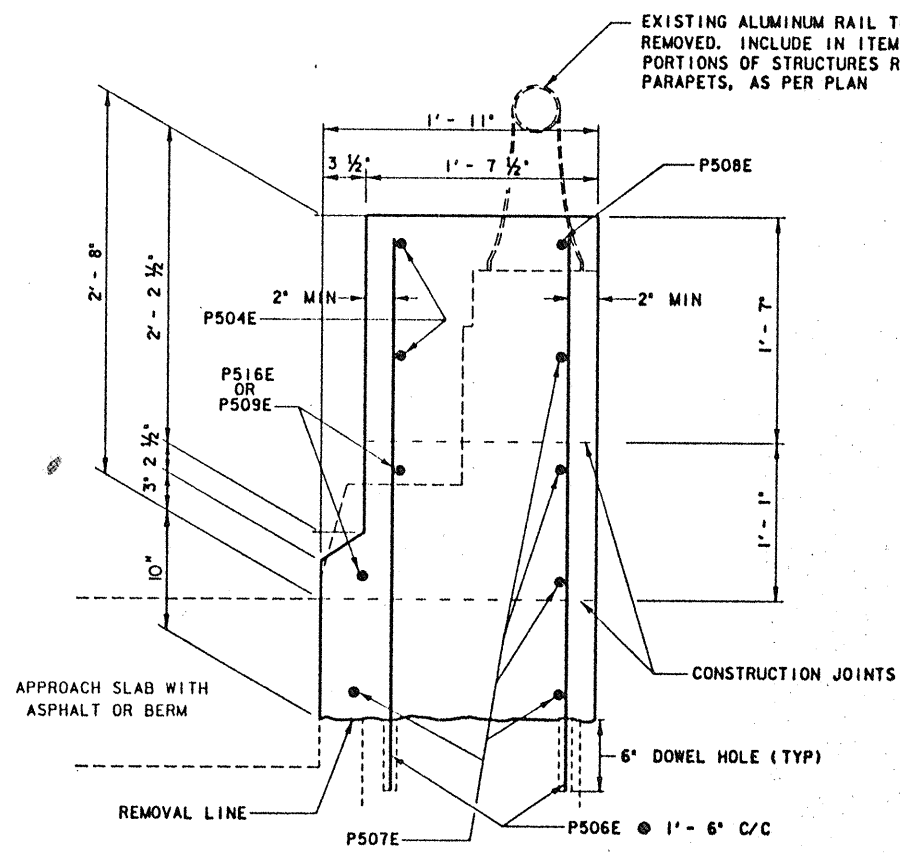
SECTION C - C



SECTION F - F



SECTION D - D

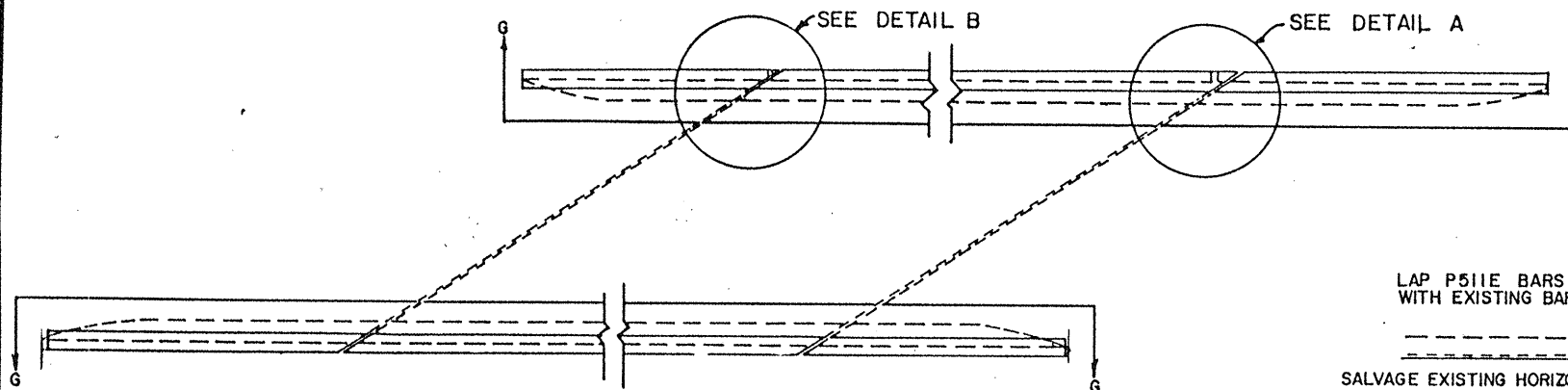


SECTION E - E

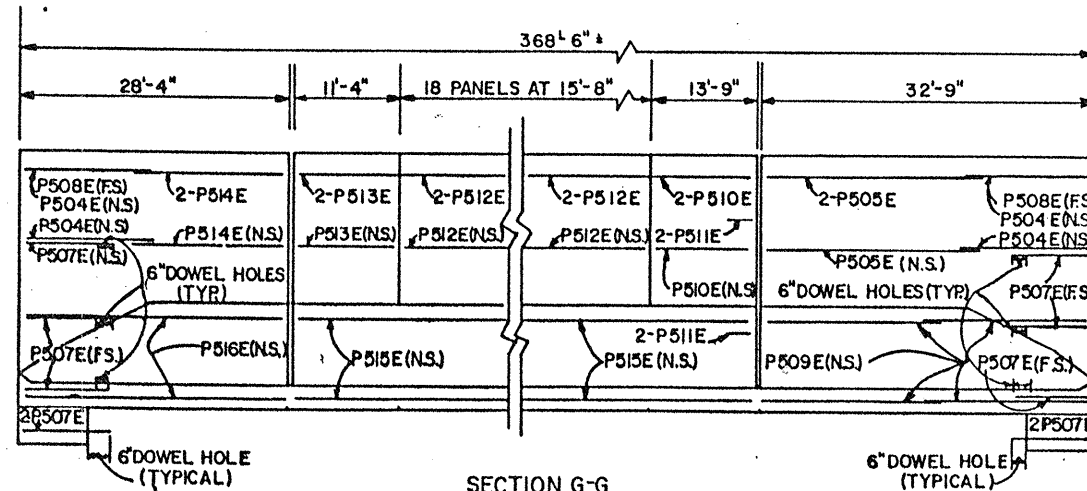
ALL LOOSE AND UNSOUND CONCRETE IN THE AREA OF THE PARAPET TO BE FACED, SHALL BE REMOVED. ALL REMAINING SOUND CONCRETE SHALL THEN BE SCABBLED 1/4" DEEP.

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE				
PARAPET DETAILS				
BRIDGE NO. ASD-30-1284				
DESIGNED DM 9/18/11	DRAWN T.R.B.	CHECKED KW 2/16/10	REVIEWED	DATE REVISD

DESIGN FILE: ZFH170.713PARA-DET.DGN: .PRF NAME: A30PAR1 DATE: 23-MAY-1990



PLAN VIEW



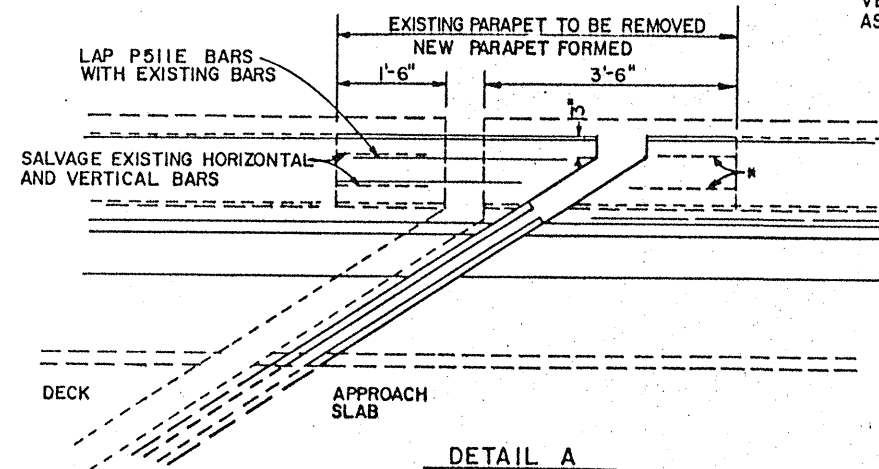
SECTION G-G

FOR REINFORCING BARS NOT SHOWN, SEE SECTION A-A ON SHEET NO. 49
REINFORCING BARS NEAR DEFLECTION JOINTS MAY NEED
TO BE MOVED TO PROVIDE 2" CLEARANCE ON EITHER SIDE
OF DEFLECTION JOINTS.

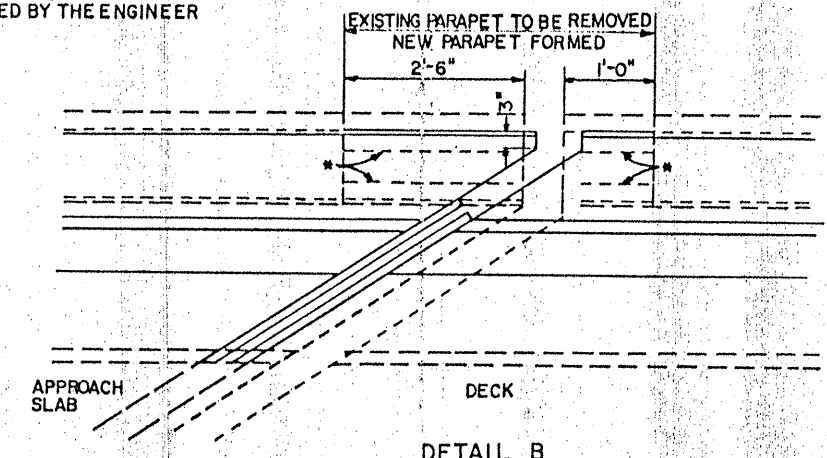
ALL #5 BARS LAPPED 1'-5" MIN.
(N.S.) = NEAR SIDE
(F.S.) = FAR SIDE

ITEM	QUANTITY	UNIT	DESCRIPTION
202	59 *	CUYD	PORTIONS OF STRUCTURES REMOVED, PARAPET, AS PER PLAN
509	7084 *	POUNDS	EPOXY COATED REINFORCING STEEL
510	1008 *	EACH	DOWEL HOLES, AS PER PLAN
511	160 *	CUYD	CLASS S CONCRETE, PARAPETS, AS PER PLAN

* QUANTITIES CARRIED TO BRIDGE QUANTITY SHEETS

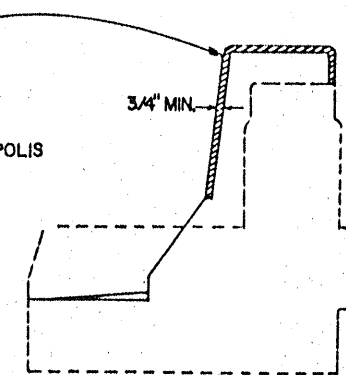


DETAIL A

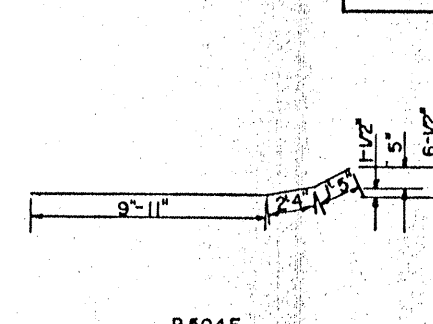
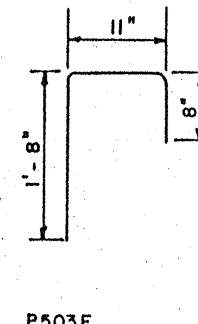
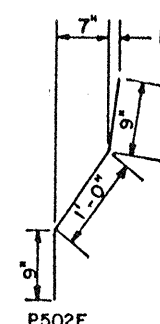
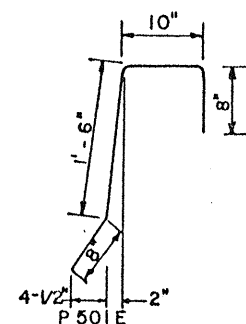


DETAIL B

EXISTING DEFLECTION JOINTS SHALL BE EXTENDED COMPLETELY
THROUGH THE PROPOSED FACING AND SHALL BE MADE BY FORMING.
THE 1/4\"/>



SECTION THROUGH DEFLECTION
JOINT



BENDING DIAGRAMS

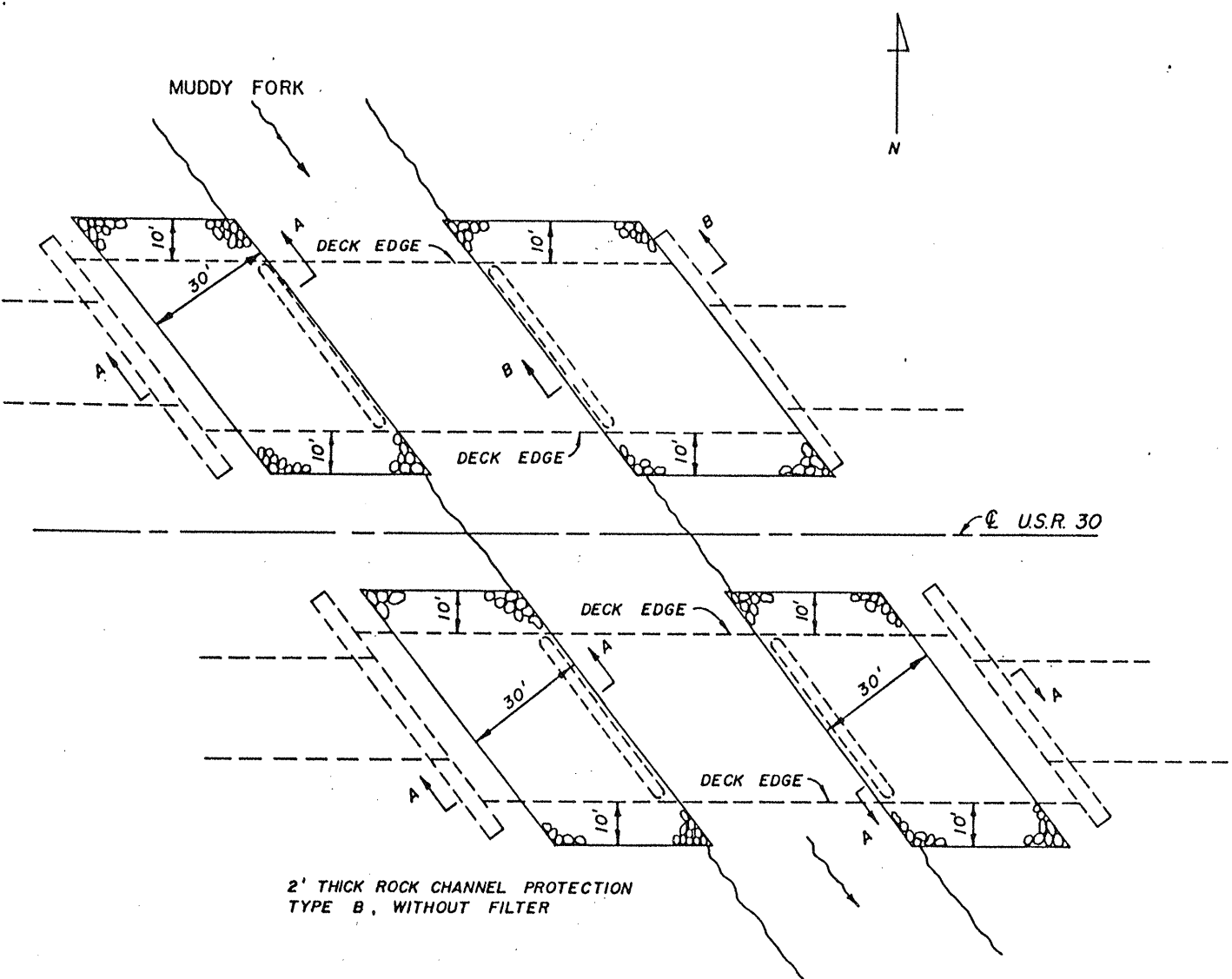
ITEM 509, EPOXY COATED REINFORCING STEEL (PARAPET)				
REBAR DATA			QUANTITIES	
MARK	LENGTH	SHAPE	TOTAL	WEIGHT
P 501E	3'-5"	B	470	1675
P 502E	2'-6"	B	470	1226
P 503E	3'-0"	B	8	25
P 504E	13'-8"	B	8	114
P 505E	20'-2"	S	6	126
P 506E	3'-10"	S	32	128
P 507E	5'-4"	S	20	111
P 508E	13'-8"	S	4	57
P 509E	16'-11"	S	8	141
P 510E	13'-5"	S	6	84
P 511E	2'-6"	S	8	21
P 512E	15'-4"	S	108	1727
P 513E	11'-0"	S	6	69
P 514E	15'-9"	S	6	99
P 515E	29'-2"	S	44	1339
P 516E	28'-0"	S	4	117
P 517E	3'-0"	S	8	25
TOTAL				7084

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

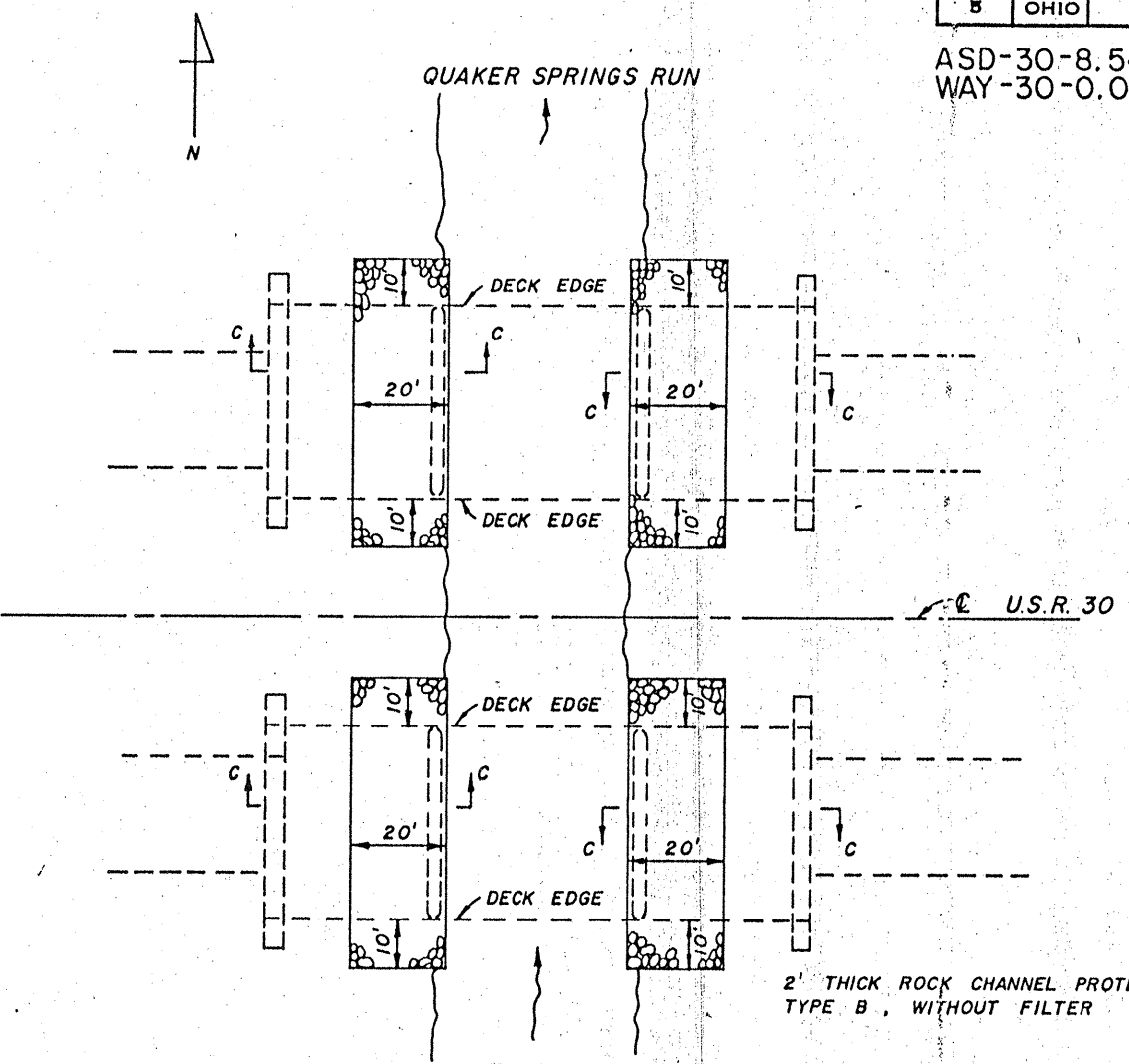
PARAPET DETAIL
BRIDGE NO. ASD-30-1284

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVIS
D.M.	K.W.	K.W.			
9/11/81	2/13/82	2/16/82			

ASD-30-8.54
WAY-30-0.00



PLAN VIEW OF WAY 30-0100 L&R FOR PLACEMENT OF ROCK CHANNEL PROTECTION

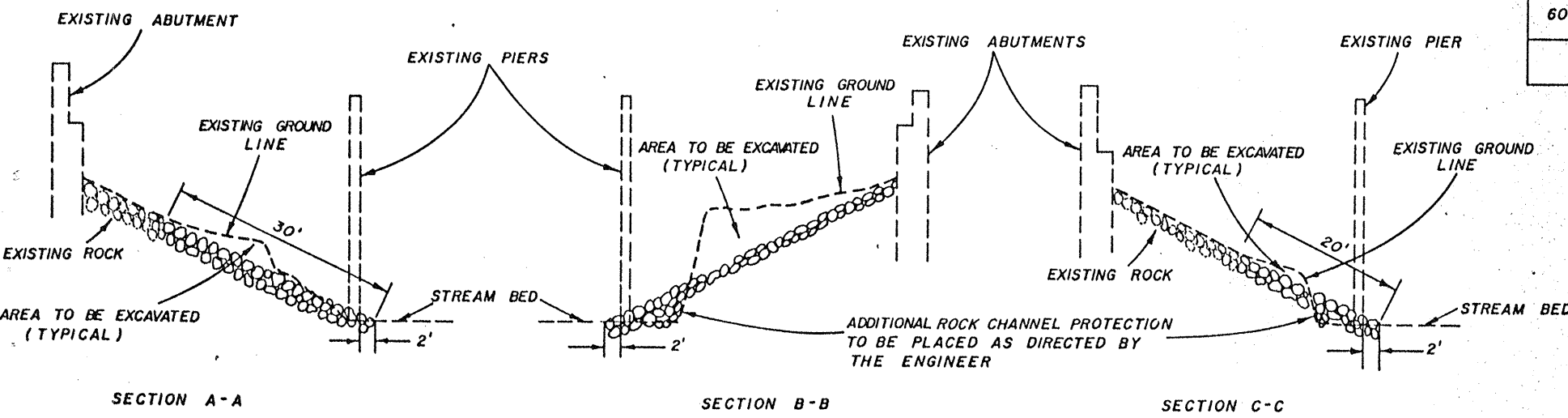


PLAN VIEW OF ASD 30-0932 L&R FOR PLACEMENT OF ROCK CHANNEL PROTECTION

ITEM	QUANTITIES				UNIT	TOTAL	DESCRIPTION
	WAY 30-0100L	30-0100R	ASD 30-0932L	30-0932R			
601	*378	*336	*198	*198	CU.YD.	1110	ROCK CHANNEL PROTECTION, TYPE B WITHOUT FILTER

* QUANTITIES CARRIED TO BRIDGE QUANTITY SHEETS

ALL NEEDED EXCAVATION TO BE INCLUDED
IN ITEM 601 FOR PAYMENT.

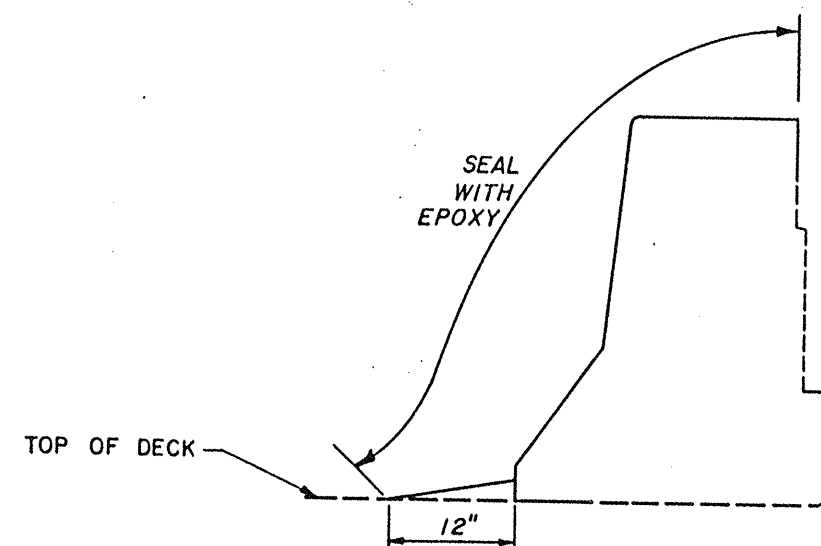


STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE				
ROCK CHANNEL PROTECTION BRIDGE NOS. ASD-30-0932 L&R WAY-30-0100 L&R				
DESIGNED D.M. 9/20/89	DRAWN T.D. 10/89	CHECKED K.W. 1/16/90	REVIEWED DATE	REVISED

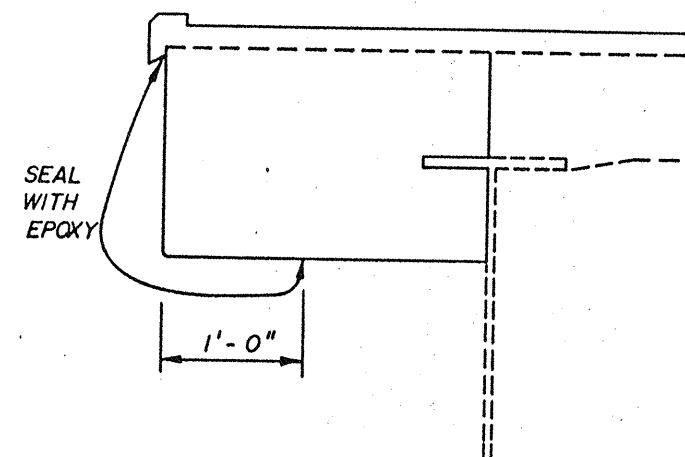
FHWA REGION	STATE	PROJECT	
5	OHIO		

53
59

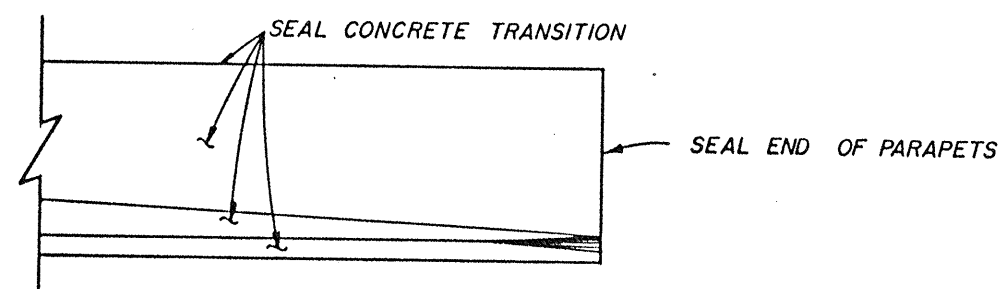
ASD-30-8.54
WAY-30-0.00



SECTION THROUGH PARAPET
BRIDGE NO. ASD-30-1284



DECK EDGE
BRIDGE NOS. ASD-30-0932 L&R
ASD-30-1125 L&R
ASD-30-1194 L&R
WAY-30-0100 L&R

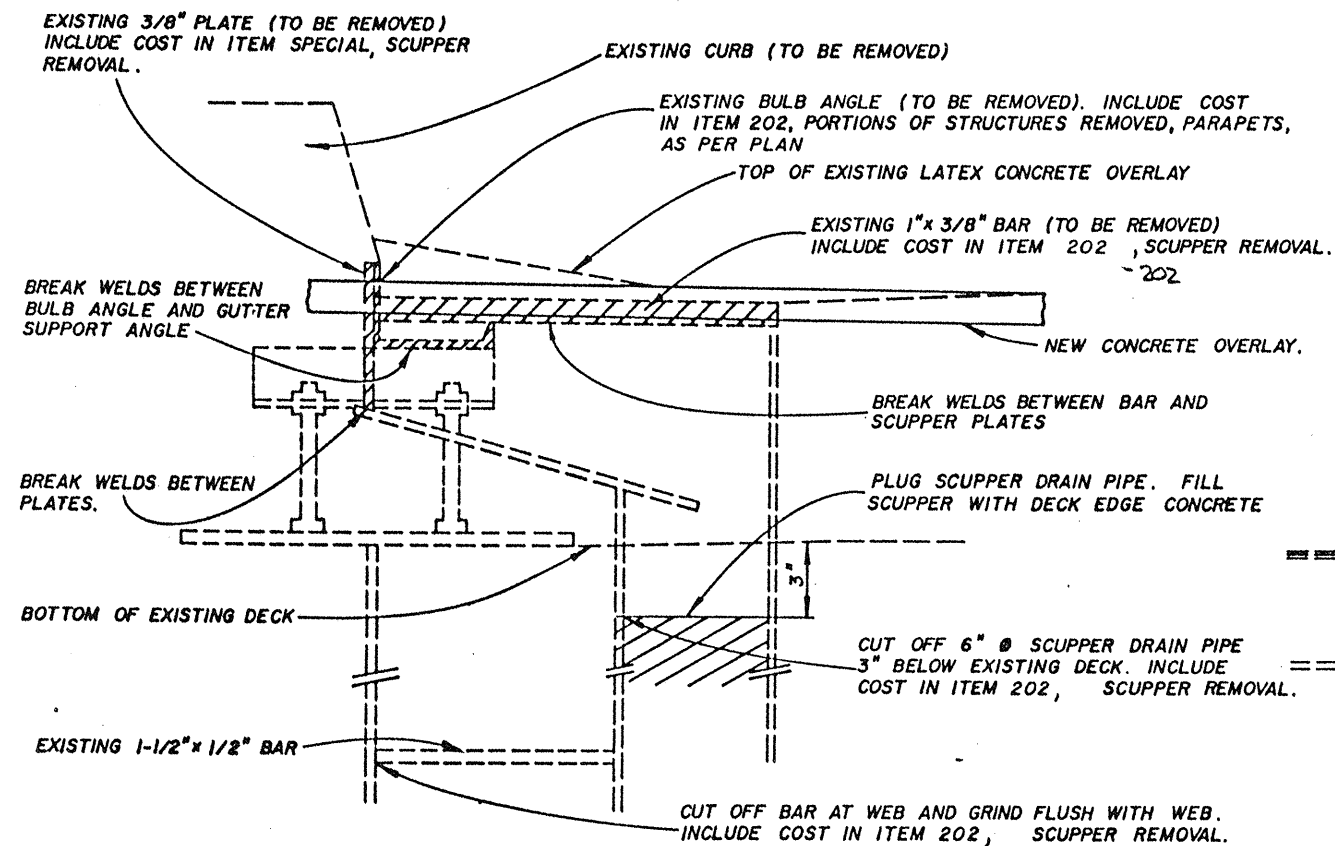


PARAPET
TRANSITION SIDE VIEW
BRIDGE NO. ASD-30-1284

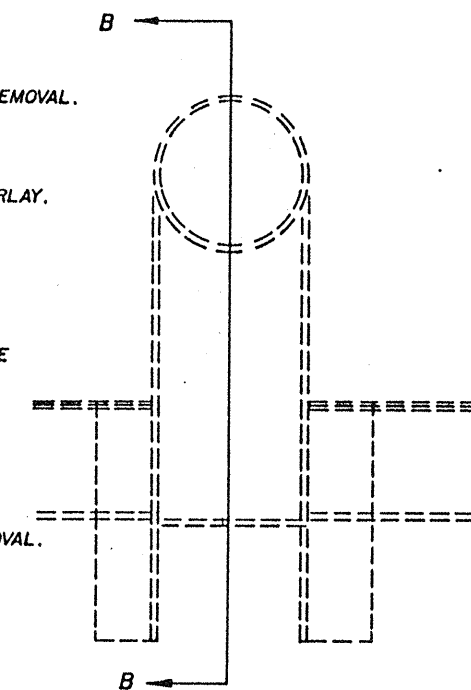
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

SEALING OF CONCRETE SURFACE
DETAILS
BRIDGE NOS.
ASD-30-0932L&R ASD-30-1125L&R ASD-30-1194L&R
ASD-30-1284L&R WAY-30-0100L&R

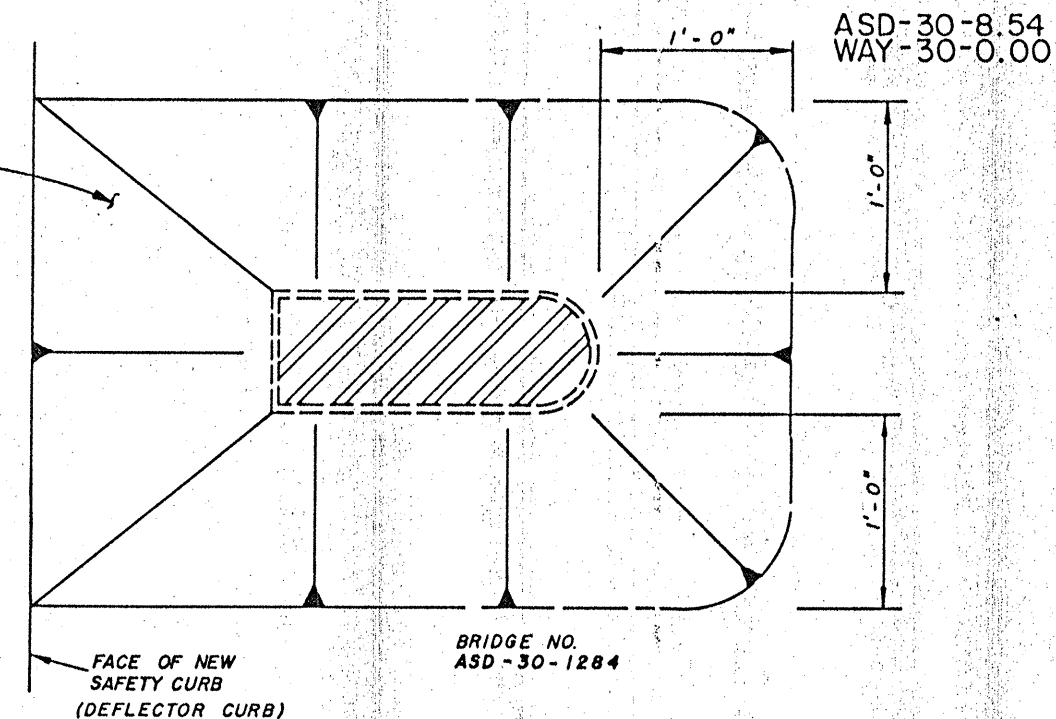
DESIGNED	DRAWN	CHECKED	REVIEWED DATE	REVISED
DM 11/20/89	KW T.D. 12/89	KW T.D. 2/16/90		



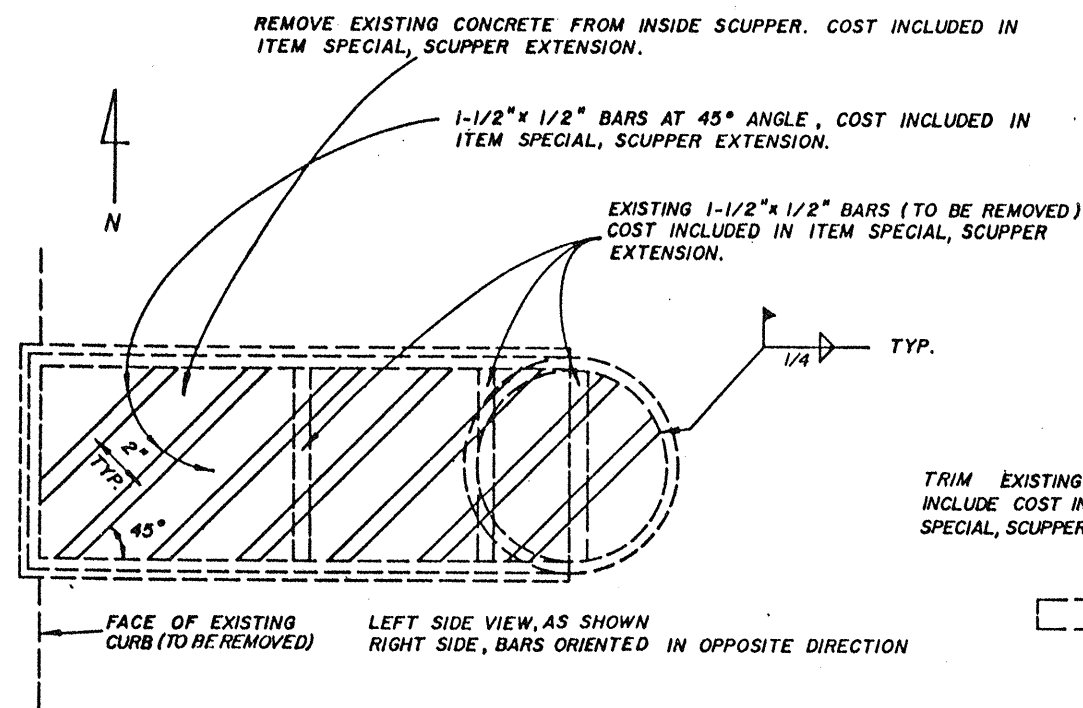
SECTION B-B
BULB ANGLE, PLATE, BAR REMOVAL
BRIDGE NO. ASD-30-1125 L&R



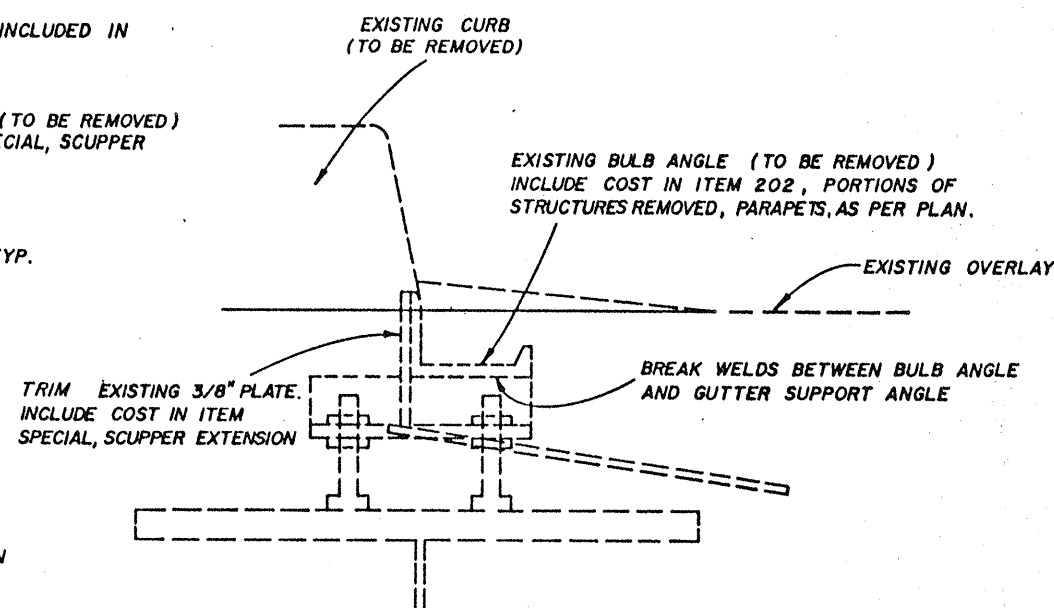
PLAN VIEW OF SCUPPER & BULB ANGLE
BRIDGE NO. ASD-30-1125 L&R



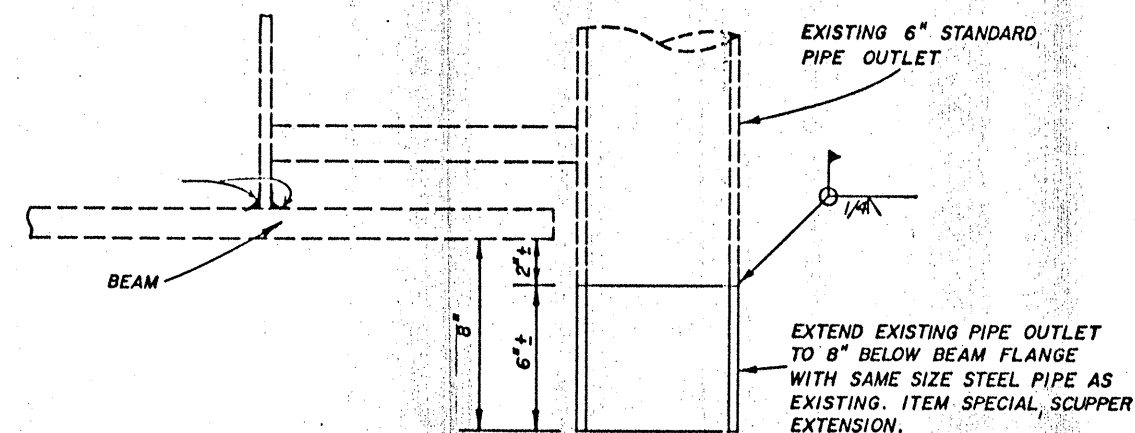
SCUPPER LENGTHENING
BRIDGE NO. ASD-30-1284



SCUPPER BAR REPLACEMENT
BRIDGE NO. ASD-30-1284



BULB ANGLE REMOVAL
BRIDGE NO. ASD-30-1284

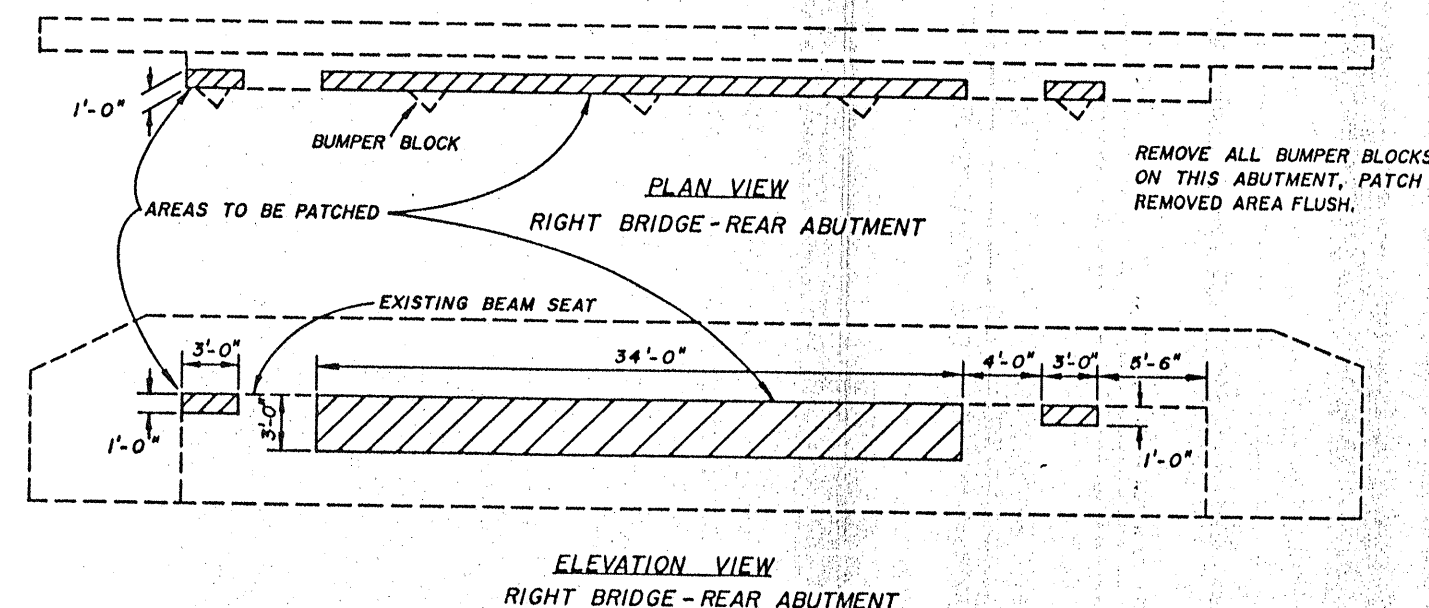
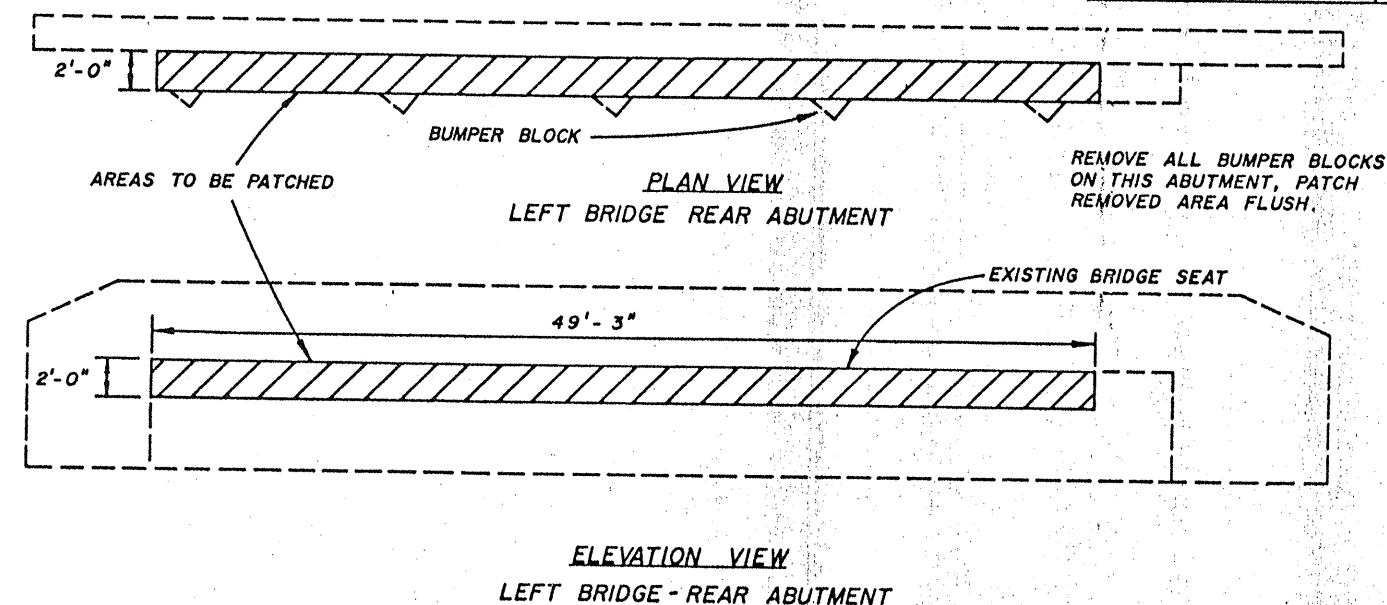
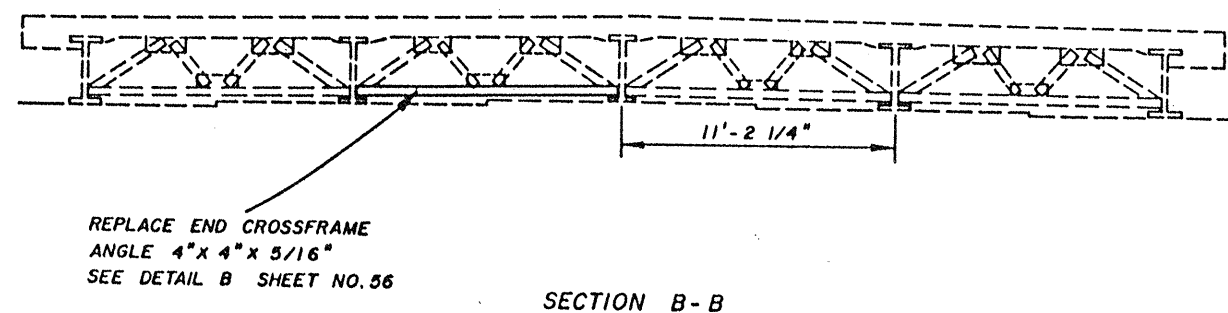
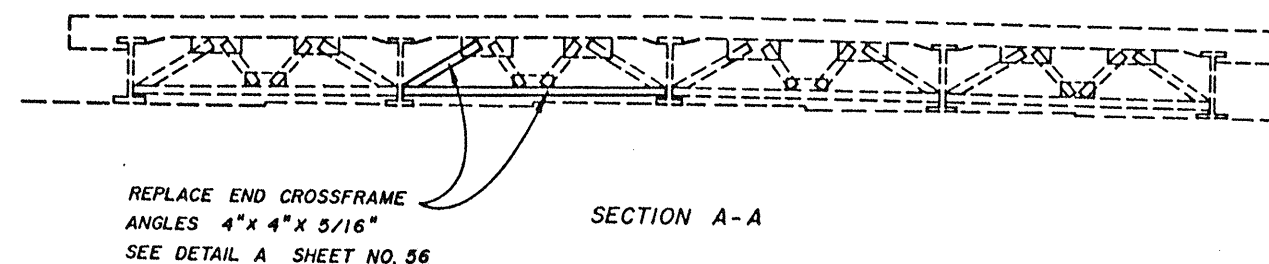
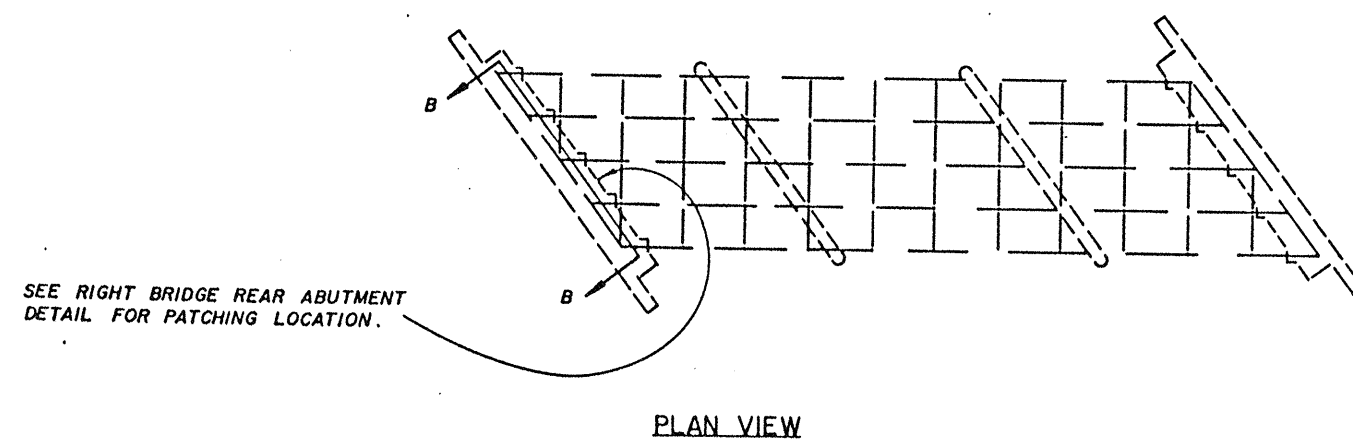
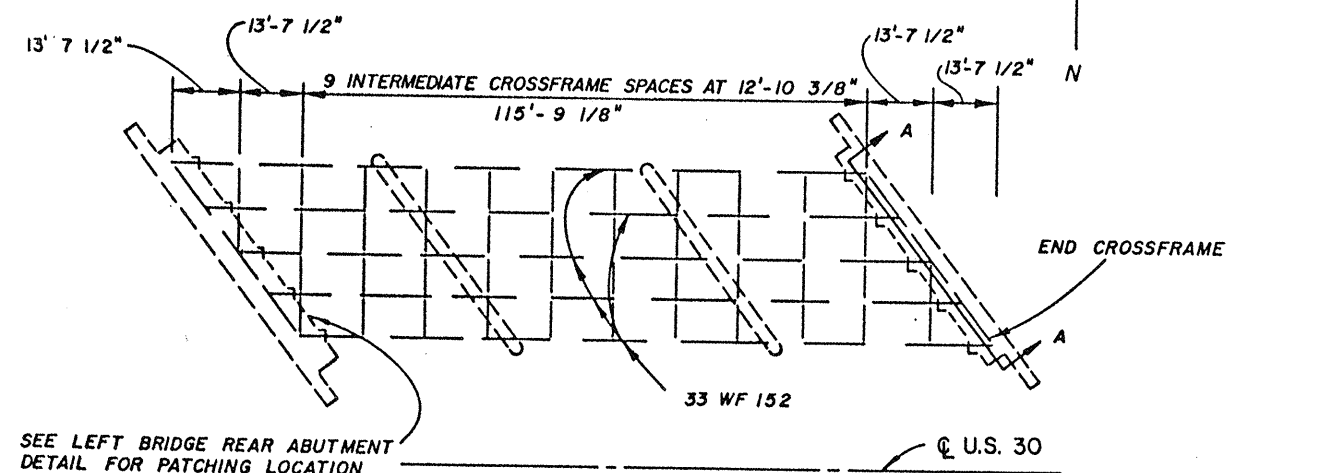


STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE				
SCUPPER DETAILS				
BRIDGE NOS: ASD-30-1125 L&R ASD-30-1284				
DESIGNED DM 8/3/89	DRAWN TD 10/89	CHECKED KW 2/16/90	REVIEWED DATE	REVISED

ASD-30-8.54
WAY-30-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

55
59



ITEM	QUANTITY	UNIT	DESCRIPTION
513	217 *	POUND	STRUCTURAL STEEL (AISC CERTIFICATION NOT REQUIRED)
519	345 *	SQ. FT.	PATCHING CONCRETE STRUCTURES, AS PER PLAN
			AS PER PLAN

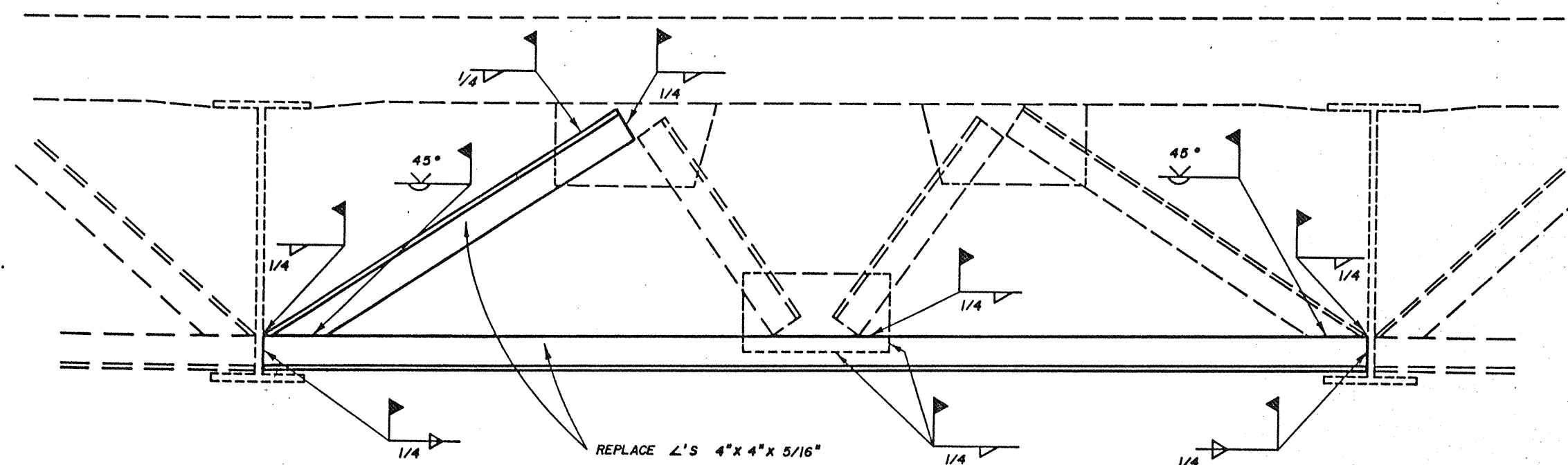
* QUANTITIES CARRIED TO BRIDGE QUANTITY SHEETS

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE				
STRUCTURE REPAIR & ABUTMENT CONCRETE PATCHING				
BRIDGE NO. WAY-30-0100 L&R				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D.M.	T.D.	K.W.		
9/26/89	11/11	2/14/90		

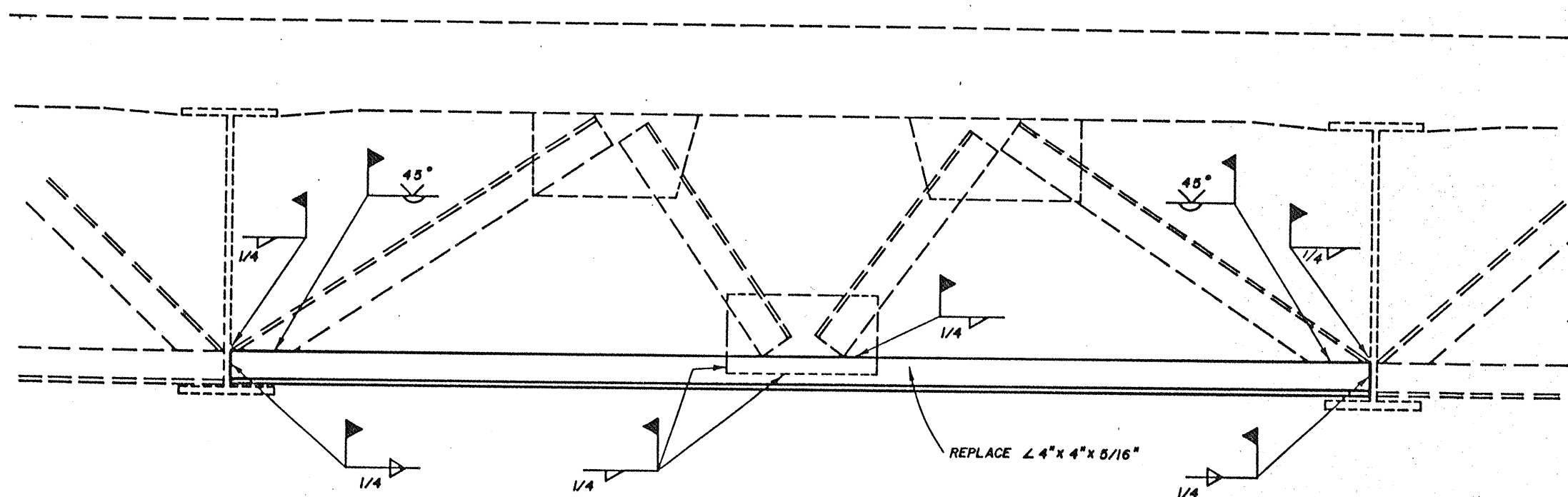
ASD-30-8.54
WAY-30-0.00

ANGLES TO BE REPLACED SHALL CAREFULLY BE
CUT LOOSE FROM BEAMS AND OR GUSSETS.
ALL AREAS AT THOSE LOCATIONS SHALL
BE GROUND SMOOTH.

SEE SHEET NO. 55 FOR LOCATIONS OF END
CROSSFRAME MEMBERS TO BE REPLACED.



END CROSSFRAME DETAIL A



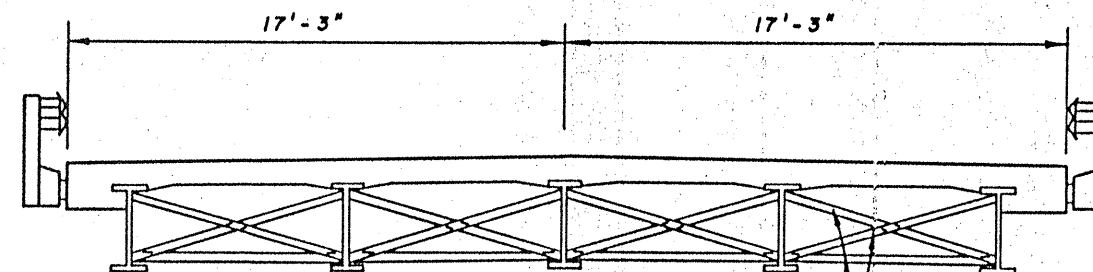
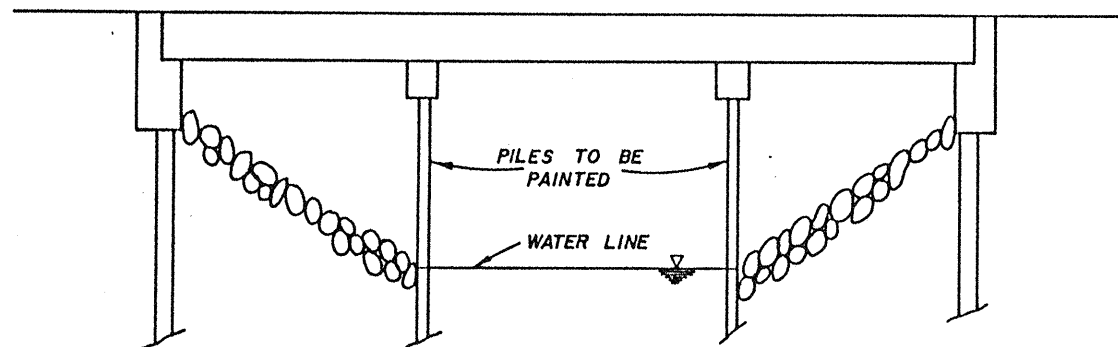
END CROSSFRAME DETAIL B

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

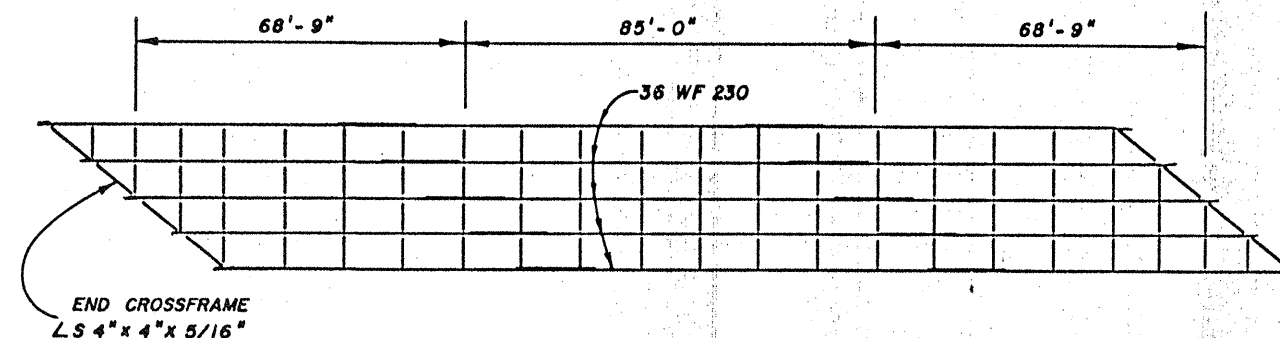
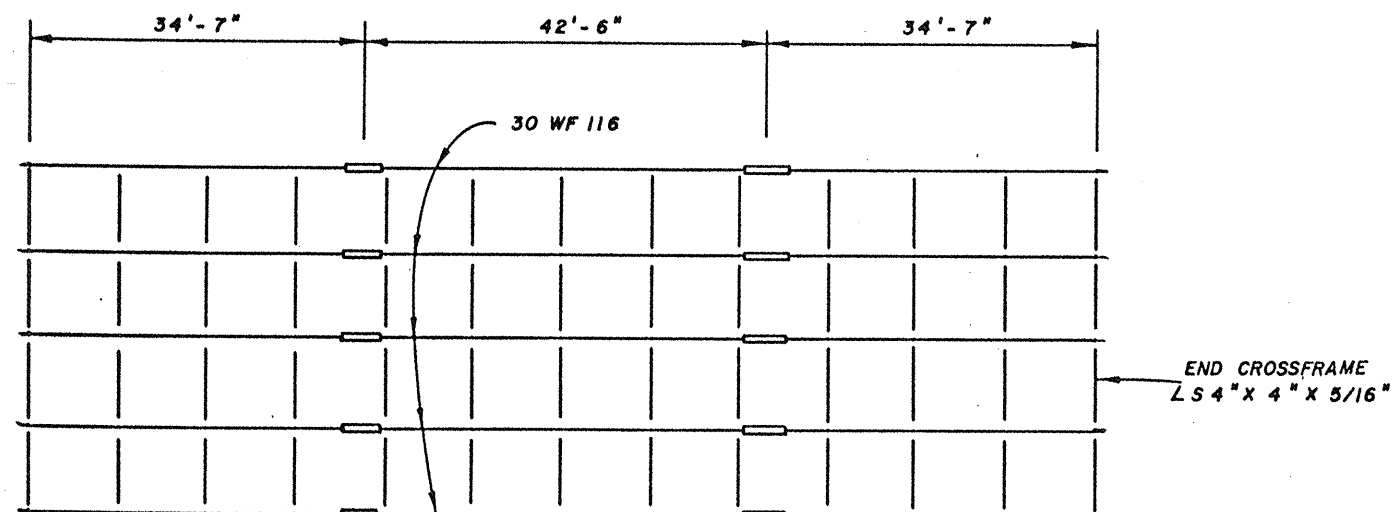
STRUCTURE REPAIR
DETAILS
BRIDGE NO. WAY-30 - 0100 L&R

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
DM	KW				
9/27/09	70	2/10/10			
	12/09				

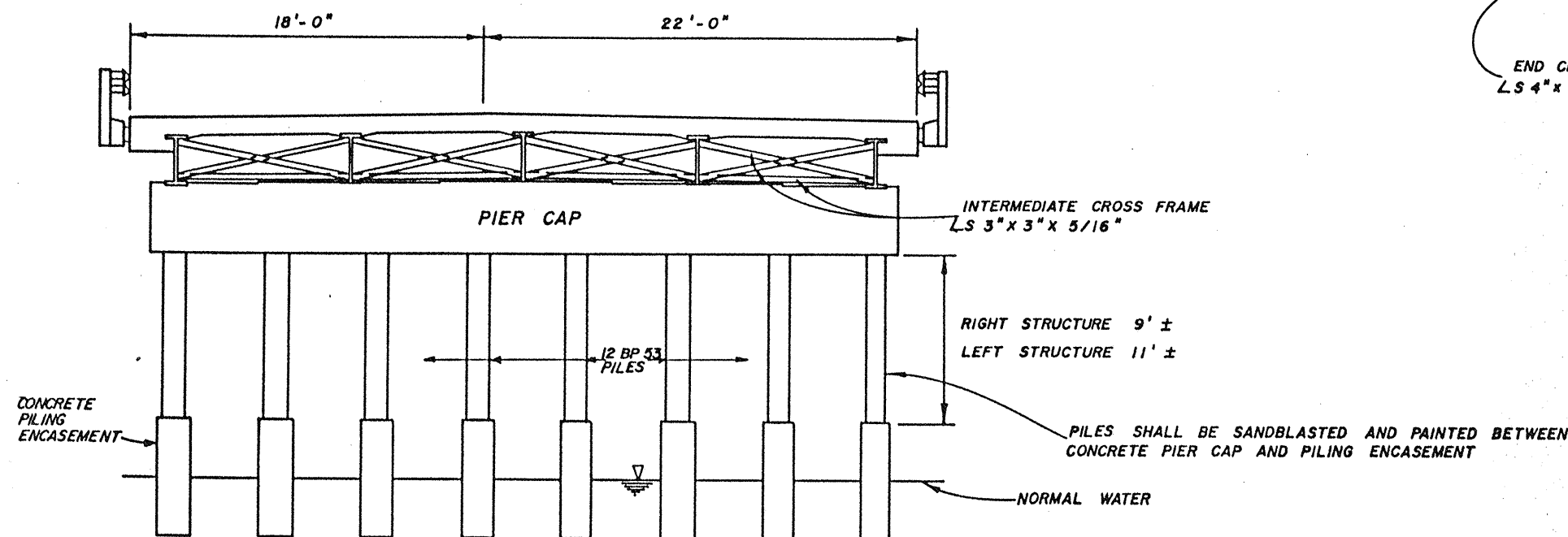
ASD-30-8.54
WAY-30-0.00



INTERMEDIATE CROSSFRAME
LS 3"x 3"x 5/16"



BRIDGE NO. ASD-30-1125 L&R



32 PILES TO BE PAINTED;
INCLUDE COST WITH BRIDGE PAINTING.

BRIDGE NO. ASD-30-0932 L&R

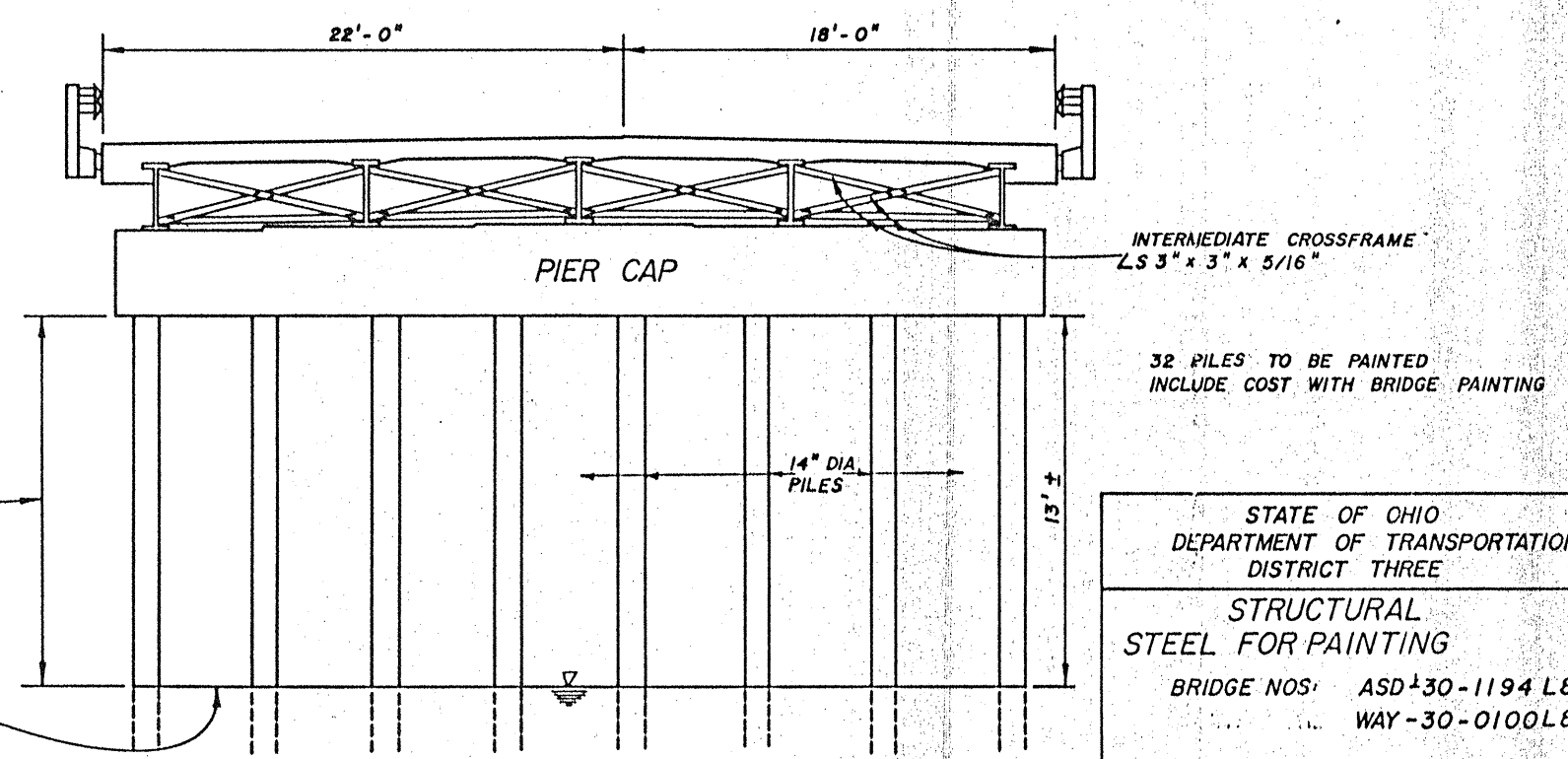
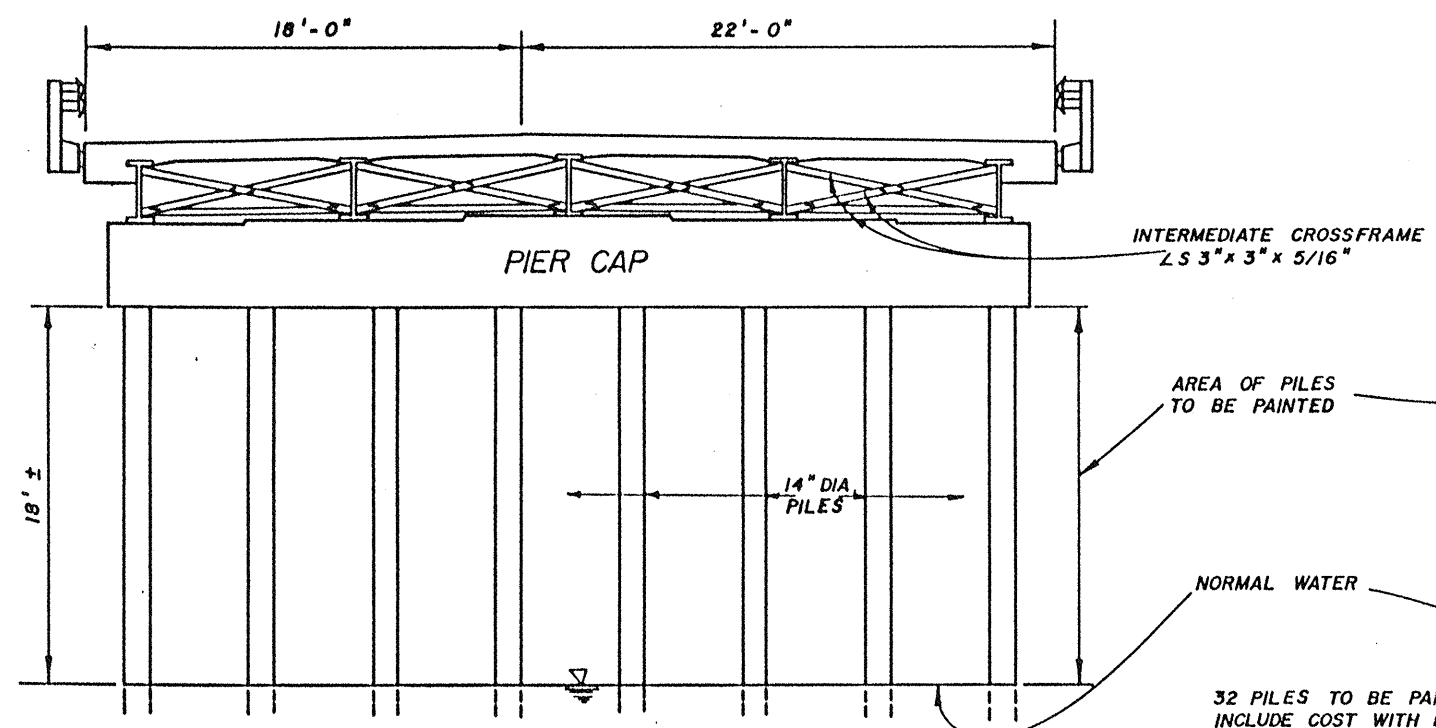
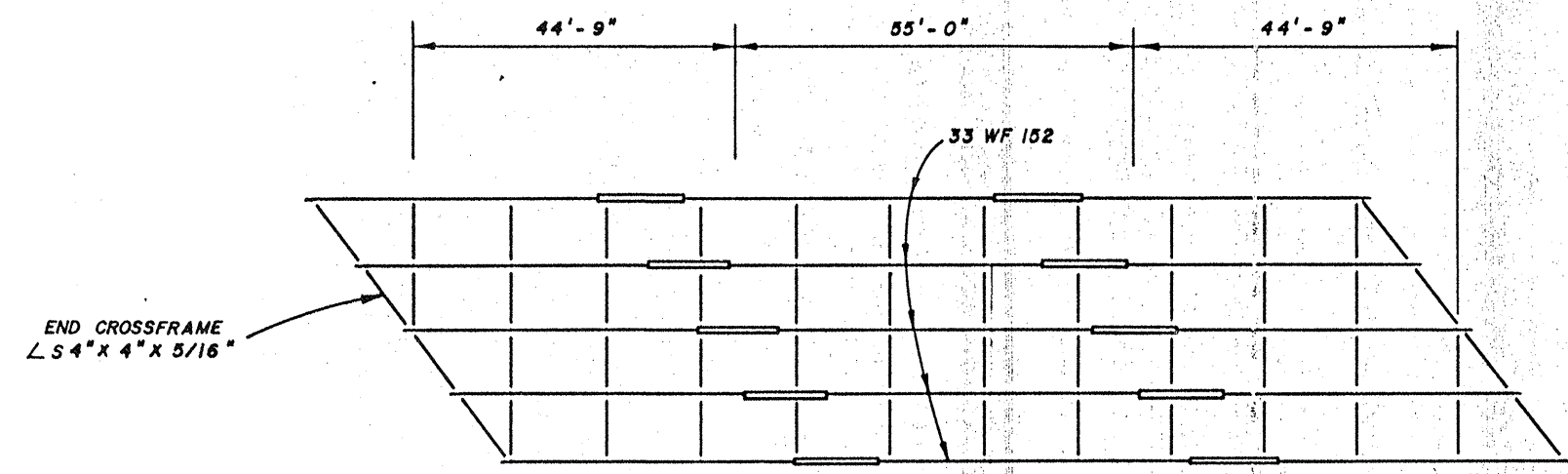
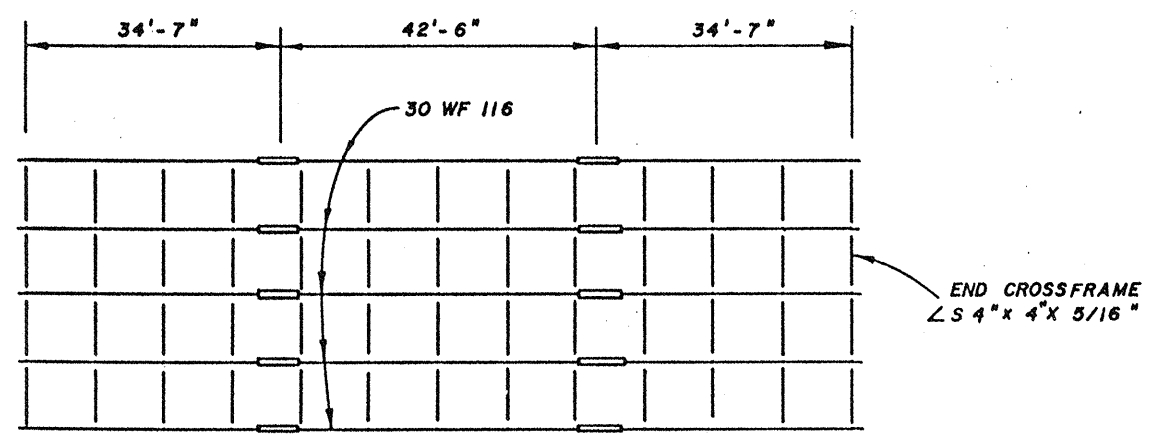
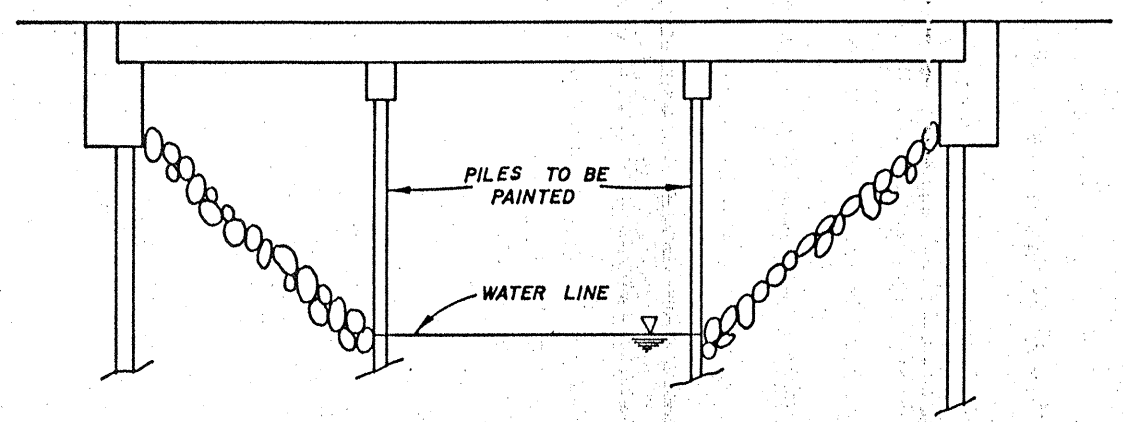
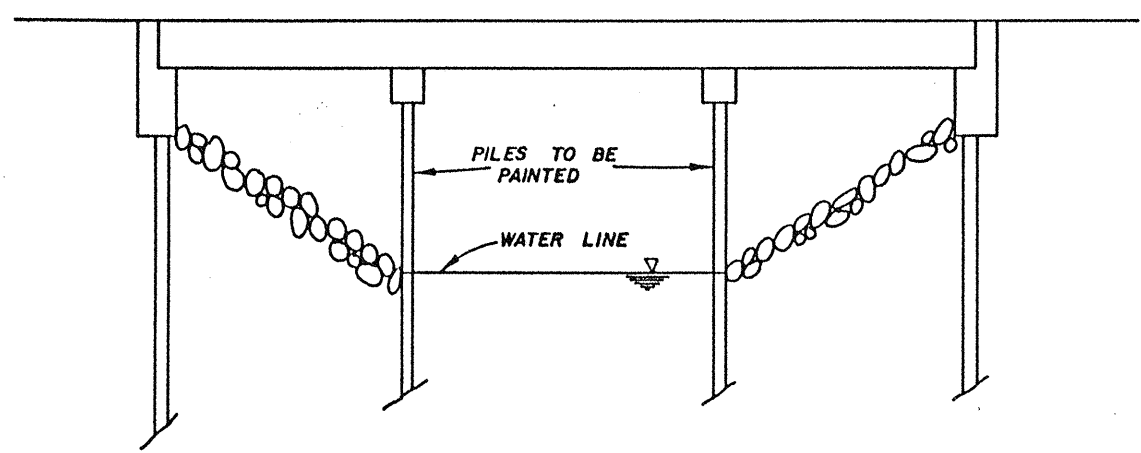
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

STRUCTURAL STEEL
FOR PAINTING

BRIDGE NOS. ASD-30-0932 L&R
ASD-30-1125 L&R

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
DM	TD	KW			
11/20/81	11/81	2/16/90			

ASD-30-8.54
WAY-30-0.00



BRIDGE NO. ASD-30-1194 L&R

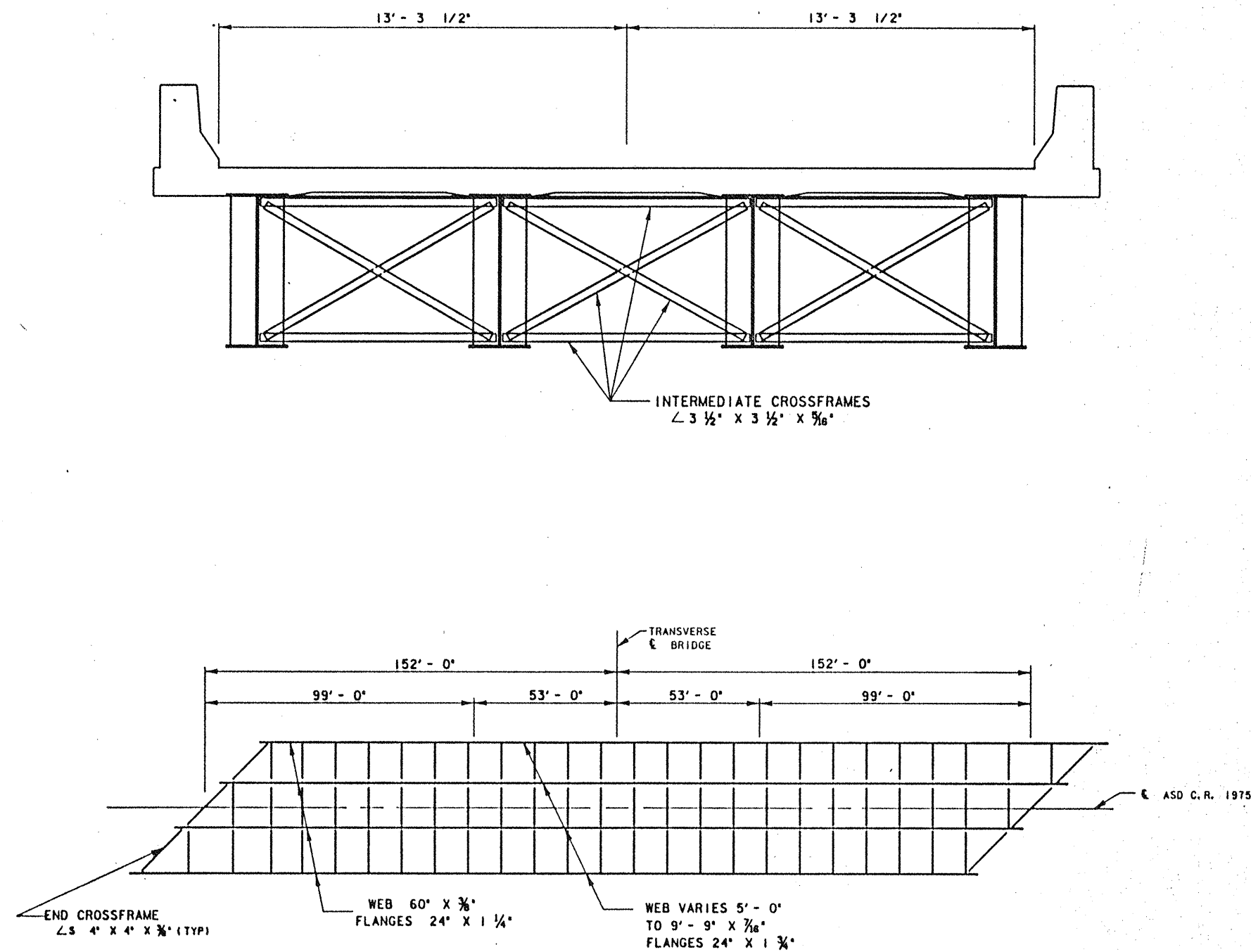
BRIDGE NO. WAY-30-0100 L&R

STATE OF OHIO DEPARTMENT OF TRANSPORTATION DISTRICT THREE				
STRUCTURAL STEEL FOR PAINTING				
BRIDGE NOS: ASD-30-1194 L&R WAY-30-0100 L&R				
DESIGNED DM 11/20/81	DRAWN TD 12/81	CHECKED KW 2/16/82	REVIEWED	DATE REVIS

FHWA REGION	STATE	PROJECT	
5	OHIO		

59
59

ASD-30-8.54
WAY-30-0.00



BRIDGE NO. ASD - 30 - 1284

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

STRUCTURAL STEEL
FOR PAINTING

BRIDGE NO. ASD - 30 - 1284

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	REVISED
D.M. 11/20/81	T.R.O.	K.W. 3/1/90			

DATE 23-MAY-1990

PRF NAME: A30

DESIGN FILE: ZF107030A30-PAINT.DGN