

OHIO DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

468-93

PLAN NO. BR-83-92



PART	COUNTY	ROUTE	SECTIONS	PROJECT TERMINI		NET LENGTH MILES	TOWNSHIP	CITY	VILLAGE
				BEGIN	END				
1	ERIE	2	1911 L+R						

CONCRETE DIAPHRAGM RETROFIT

THE STANDARD 1993 SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND THE PROPOSAL SHALL GOVERN THESE IMPROVEMENTS.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THESE IMPROVEMENTS WILL REQUIRE THE CLOSING OF THE HIGHWAY 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 AND PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS INDICATED IN THE PROPOSAL.

APPROVED DATE 12-8-92

Phillip A. Harwood
DISTRICT DEPUTY DIRECTOR OF TRANSPORTATION

APPROVED DATE 2-24-93

B.D. Hanhiammi DFT
ENGINEER OF BRIDGES

APPROVED DATE 3-1-93

Keith C. Szwarczyk
ENGINEER OF MAINTENANCE

APPROVED DATE 3-4-93

Alyander H. Hynds
DEPUTY DIRECTOR, OPERATIONS

APPROVED DATE _____

ASSISTANT DEPUTY DIRECTOR, PROGRAM DEVELOPMENT

APPROVED DATE _____

CHIEF ENGINEER, CONSTRUCTION

APPROVED DATE _____

CHIEF ENGINEER, DESIGN

APPROVED DATE _____

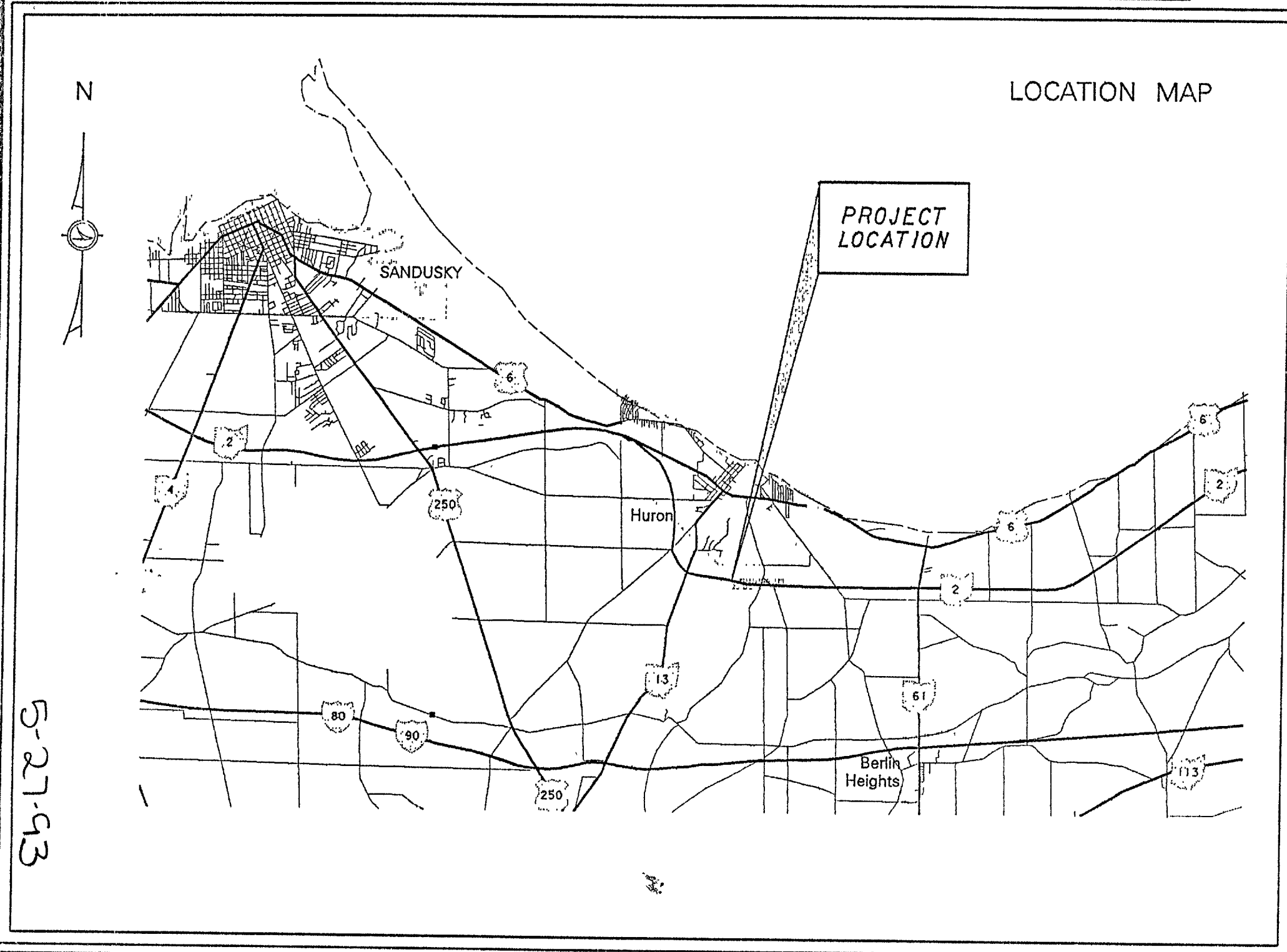
ASSISTANT DIRECTOR, DEPARTMENT OF TRANSPORTATION

APPROVED DATE 3-4-93

Jerry Wray
DIRECTOR, DEPARTMENT OF TRANSPORTATION



LOCATION MAP



4108

9

5-27-93

STANDARD DRAWINGS	SUPPLEMENTAL SPECIFICATIONS	
TC-35.10	8/29/84	
MT-95.30	10/10/88	

GENERAL NOTES

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 OBSERVATION 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.

WORK LIMITATIONS:

THE CONTRACTOR SHALL NOT PERFORM ANY WORK ON SUNDAYS OR LEGAL HOLIDAYS WITHOUT THE APPROVAL OF THE DIRECTOR.

NO LANE CLOSURES WILL BE PERMITTED ON SATURDAYS OR SUNDAYS.

NO WEST BOUND LANE CLOSURES WILL BE PERMITTED BETWEEN THE HOURS OF 9:00 A.M. AND 1:00 P.M. FROM THE FRIDAY PRECEDING MEMORIAL DAY TO THE TUESDAY FOLLOWING LABOR DAY.

ALL WORK SHALL BE SUSPENDED AT 3:00 P.M. THE DAY PRECEDING ALL LEGAL HOLIDAYS AND SHALL NOT RESUME UNTIL 7:00 A.M. THE DAY FOLLOWING THE HOLIDAY.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE RESPECTIVE BID ITEMS.

UNDERGROUND UTILITIES:

EXTREME CAUTION SHOULD BE EXERCISED IN AREAS WITH UNDERGROUND WATERLINES, DRAINS, CABLES, SEWERS, OR OTHER UTILITIES.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ALL DAMAGE INFLICTED ON UNDERGROUND UTILITIES.

UTILITY OWNERSHIP :

RAILROAD

WHEELING & LAKE ERIE RAILWAY
PHILLIP C. LARSON, V.P. OPS.
P.O. BOX 96, 100 E. FIRST ST.
BREWSTER, OHIO 44613

SEQUENCE OF WORK:

THE CONCRETE DIAPHRAGM RETROFITS SHALL BE ALL COMPLETED AT ONE PIER BEFORE GOING TO ANOTHER PIER. THE FOLLOWING IS THE SEQUENCE IN WHICH THE PIERS SHALL BE WORKED AT.

~~A.~~ PIER # 1
~~B.~~ PIER # 6
~~C.~~ PIER # 2
~~D.~~ PIER # 5
~~E.~~ PIER # 3

~~F.~~ PIER # 8
~~G.~~ PIER # 13
~~H.~~ PIER # 9
~~I.~~ PIER # 12
~~J.~~ PIER # 10

~~K.~~ PIER # 15
~~L.~~ PIER # 21
~~M.~~ PIER # 16
~~N.~~ PIER # 20
~~O.~~ PIER # 17
~~P.~~ PIER # 19



JULIE EPIER

GENERAL NOTES

468

3
11

ITEM SPECIAL - CONCRETE DIAPHRAGM RETROFIT

THIS WORK SHALL CONSIST OF THE FOLLOWING SEQUENCE OF OPERATIONS PERFORMED ON ONE SIDE OF THE CONCRETE BEAM AT EACH LOCATION SHOWN ON THE PLAN.

1. SAW CUT WITH A CONCRETE CHAIN SAW 6 INCHES DEEP INTO THE CONCRETE DIAPHRAGM AS SHOWN ON THE DETAILS IN THE PLAN.

DURING THE SAWING OPERATION THE BEARINGS SHALL BE CONTINUOUSLY CLEANED WITH CLEAN RUNNING WATER. AFTER THE SAWING OPERATION ALL CONCRETE SAW WATER SHALL BE COMPLETELY REMOVED FROM THE BEARINGS BEFORE ANY SAW WATER CAN DRY.

2. REMOVE THE TRIANGULAR PIECE OF THE CONCRETE DIAPHRAGM BY USING A CHISEL AND HAMMER.

CARE SHALL BE TAKEN NOT TO REMOVE OR DAMAGE ANY SURROUNDING CONCRETE.

3. MEASURE THE AREA BEHIND THE SIDE RETAINERS TO MAKE SURE THAT THERE IS 2 INCHES OF CLEARANCE BEHIND THE SIDE RETAINERS. IF THERE IS NOT 2 INCHES OF CLEARANCE THEN SOME ADDITIONAL CONCRETE SHALL BE REMOVED BY HAND CHIPPING UNTIL THE 2 INCHES OF CLEARANCE IS OBTAINED.

4. REMOVE THE FIBER BOARD FROM THE TOP OF THE SIDE RETAINER AND CLEAN THE BEARING AREA WITH WATER TO MAKE SURE THAT ALL DEBRIS IS REMOVED FROM THE BEARING AREA.

THE ACCEPTED NUMBER OF RETROFITS AS DETAILED ABOVE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LOCATION, (ONE SIDE OF THE CONCRETE BEAM) FOR ITEM SPECIAL - CONCRETE DIAPHRAGM RETROFIT WHICH PRICE AND PAYMENT SHALL BE FULL COMPENSATION FOR FURNISHING ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO SAW, WASH, CHISEL, REMOVE CONCRETE, REMOVE FIBER BOARD AND CLEAN.

ITEM SPECIAL - PIER NUMBERING

THIS ITEM OF WORK SHALL BE USED TO PAINT THE PIER NUMBERS ON THE ENDS OF THE PIER CAP AT LOCATIONS SHOWN IN THE PLANS.

THE NUMBERS SHALL BE STENCILED ON THE ENDS OF THE PIER CAPS WITH 12" NUMBERS WITH A BLACK URETHANE PAINT.


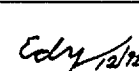
PAYMENT FOR ALL OF THE ABOVE SHALL BE AT THE UNIT PRICE BID PER EACH LOCATION FOR ITEM SPECIAL - PIER NUMBERING, WHICH SHALL INCLUDE ALL MATERIAL, LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO PAINT THE PIER NUMBERS.

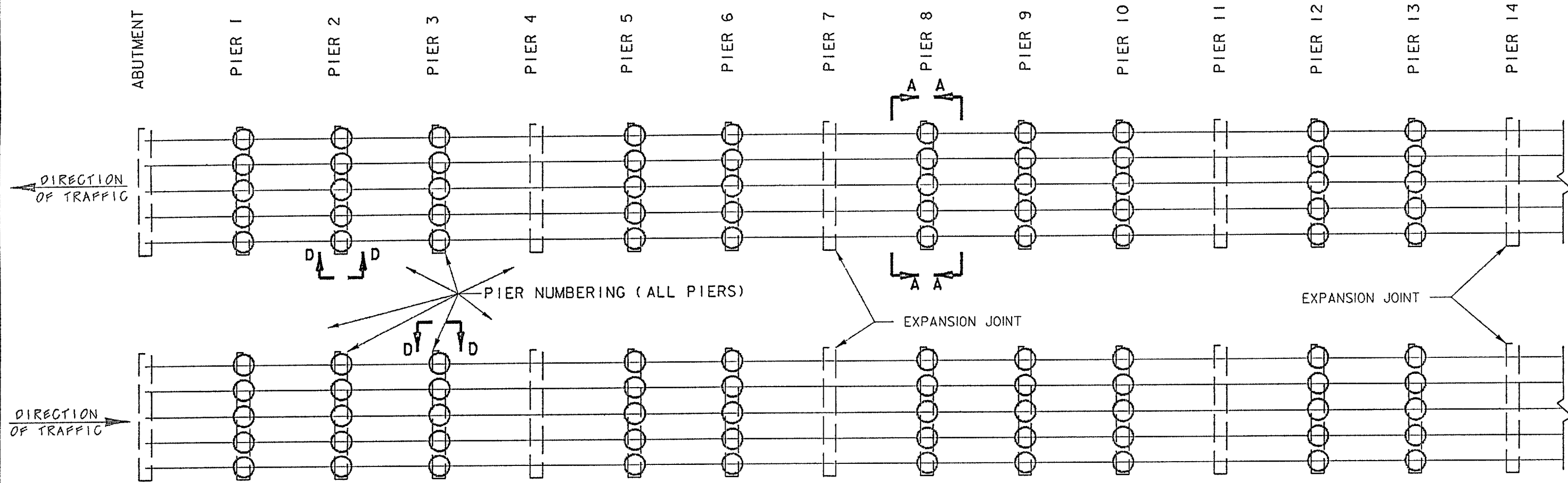
ITEM 614 - MAINTAINING TRAFFIC

TRAFFIC SHALL BE MAINTAINED AS INDICATED IN THE MAINTENANCE OF TRAFFIC STANDARD DRAWINGS AND AS OUTLINED IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" CURRENT EDITION WITH LATEST REVISIONS AT THE TIME THE CONTRACT IS AWARDED. THE PLANS SHALL CONSTITUTE THE MINIMUM PROVISIONS FOR TRAFFIC CONTROL. THE PROJECT ENGINEER MAY DIRECT A CHANGE IN THE LOCATION OF THE PLAN TRAFFIC CONTROL DEVICES TO MEET THE FIELD CONDITIONS. THE CONTRACTOR SHALL ALSO PROVIDE ADDITIONAL TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AREA AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

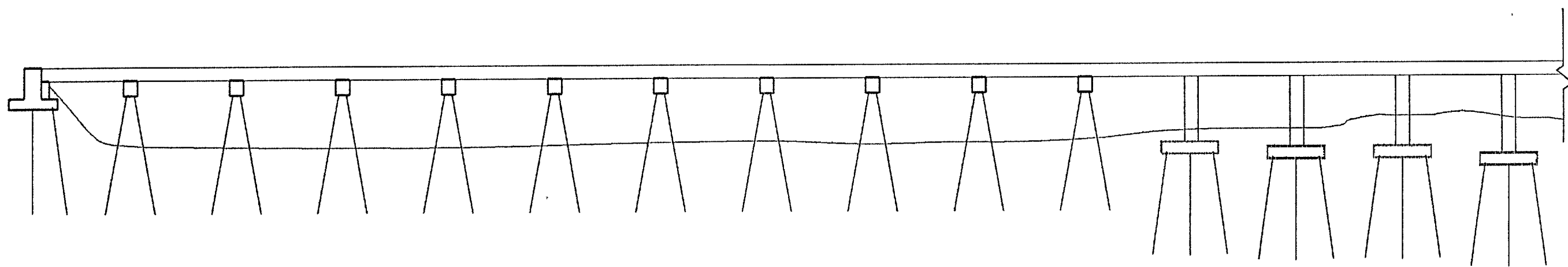
GENERAL SUMMARY

ITEM	ITEM EXTENSION	TOTAL QUANTITY	UNIT	DESCRIPTION
SPECIAL		512	EACH	CONCRETE DIAPHRAGM RETROFIT
SPECIAL		52	EACH	PIER NUMBERING
614	11000	LUMP	LUMP	MAINTAINING TRAFFIC
614	10000	LUMP	LUMP	MOBILIZATION
SPECIAL		LUMP	LUMP	PREMIUM ON RAILROAD'S PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE LIABILITY INSURANCE

GENERAL SUMMARY				
O. D. O. T. DISTRICT THREE BRIDGE DEPARTMENT				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D.M. 7-92			AEC	12-92



PLAN

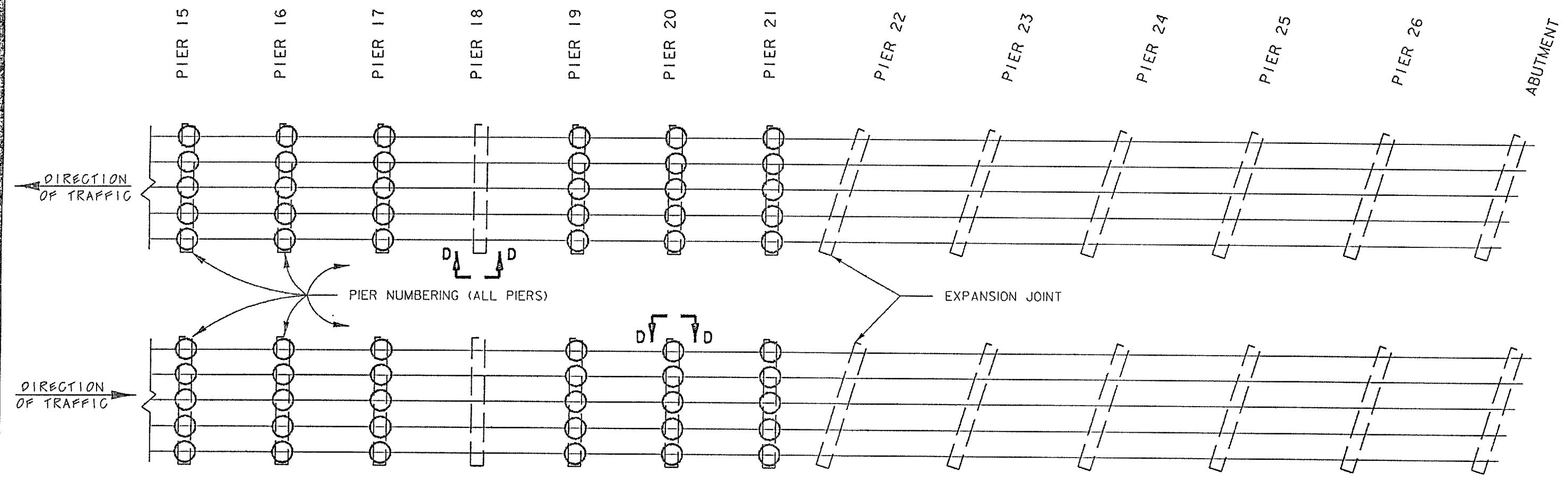


PROFILE

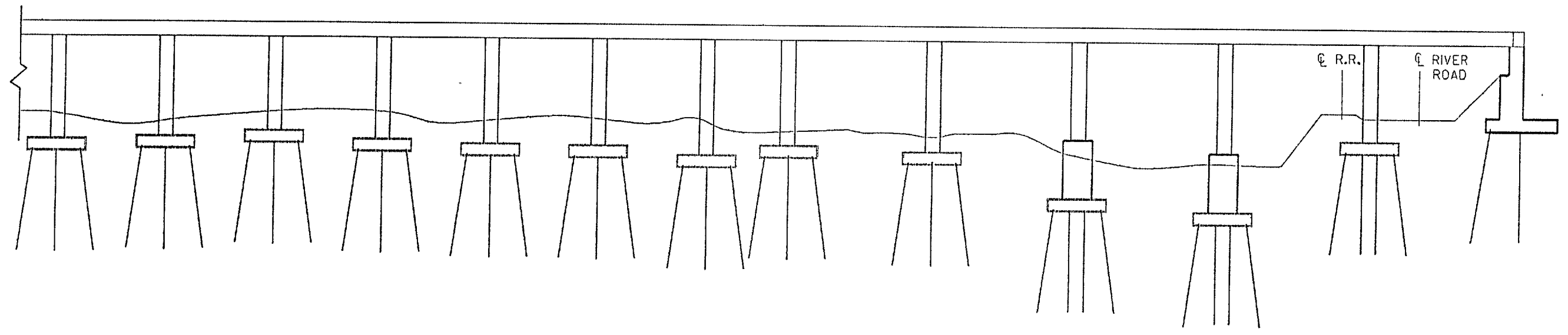
○ RETROFIT LOCATION

RETROFIT LOCATIONS				
ERI-2-1911 L+R				
O. D. O. T. DISTRICT THREE BRIDGE DEPARTMENT				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D.M. 6-92	RPT	Edy/12/92	AEC	12-92

DESIGN FILE: E21911



PLAN

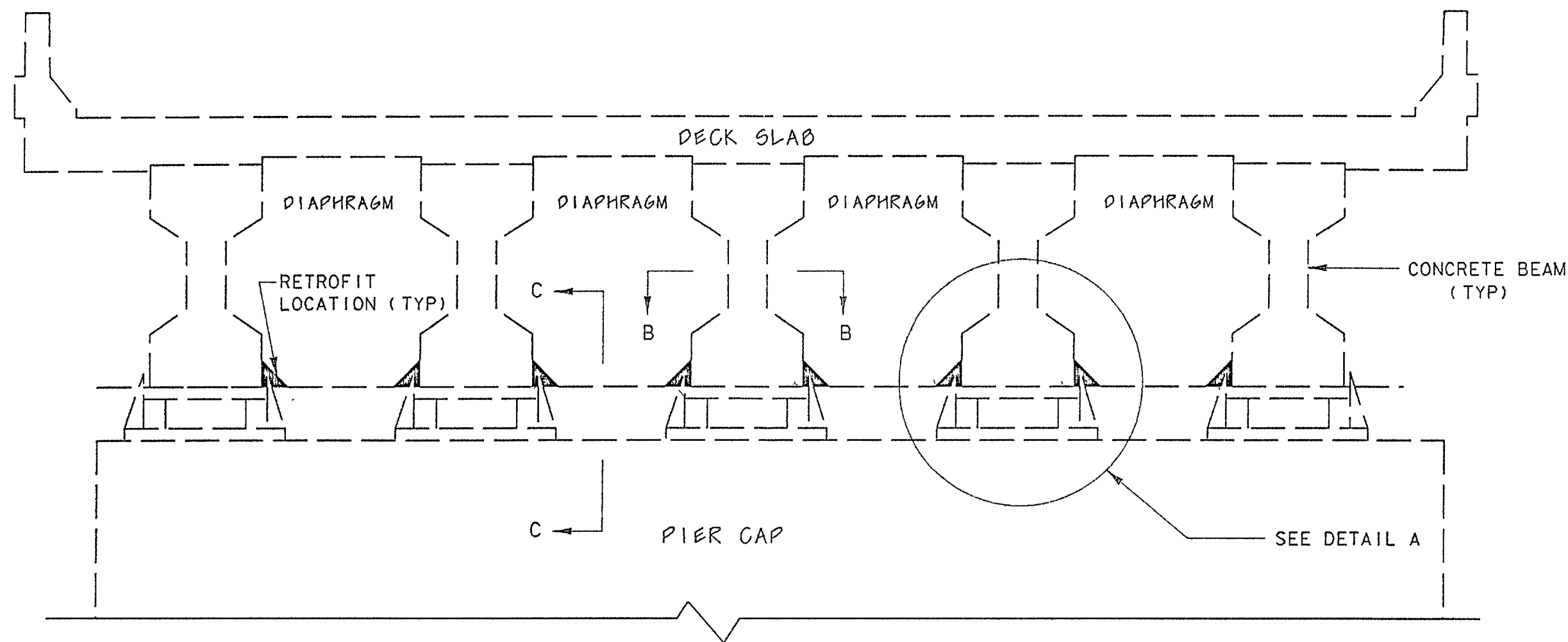


PROFILE

○ RETROFIT LOCATION

RETROFIT LOCATIONS				
ERI-2-1911 L+R				
O. D. O. T. DISTRICT THREE BRIDGE DEPARTMENT				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D. M. 6-92	FT	Edy 12/92	FEC	12-92

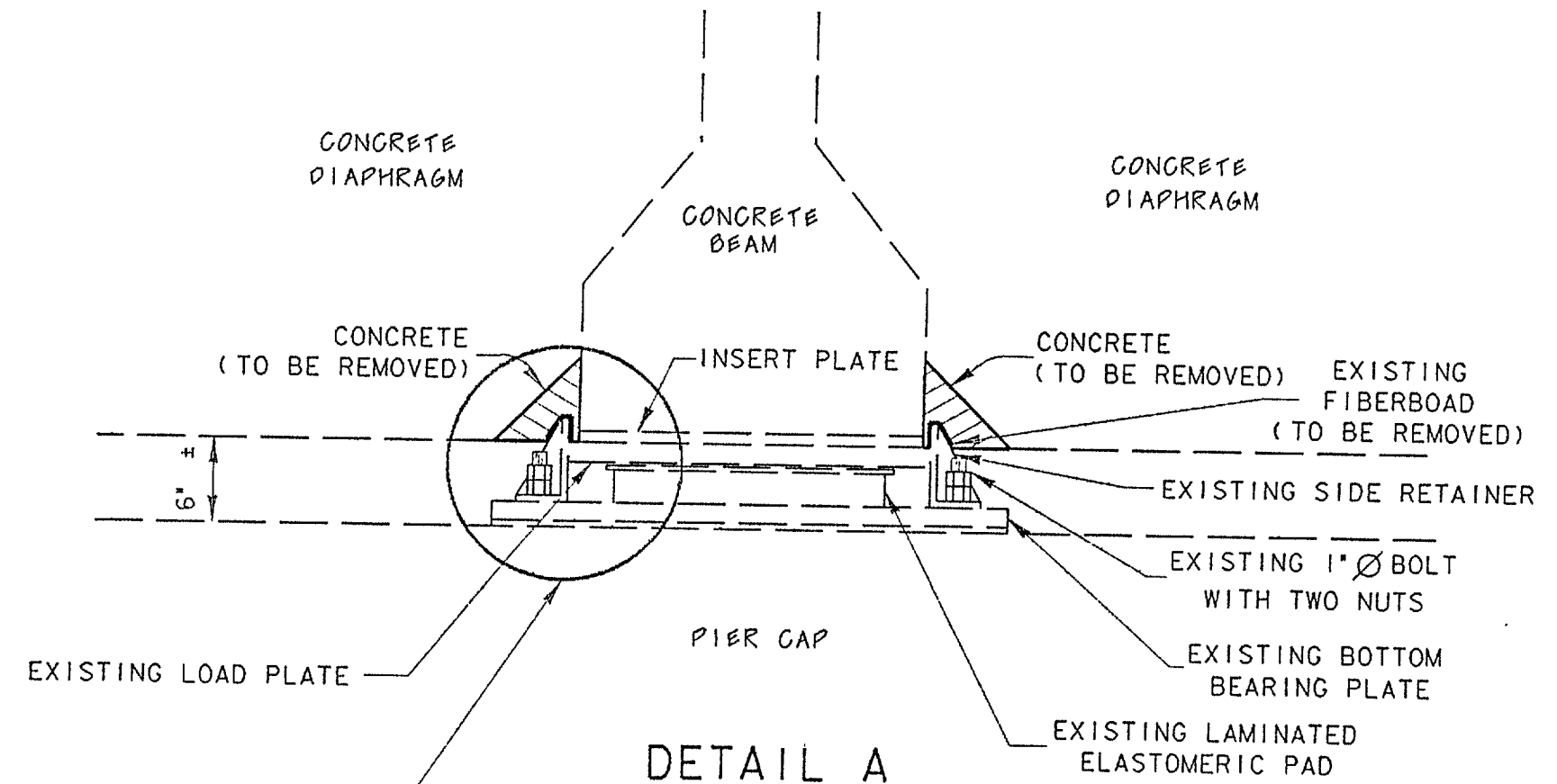
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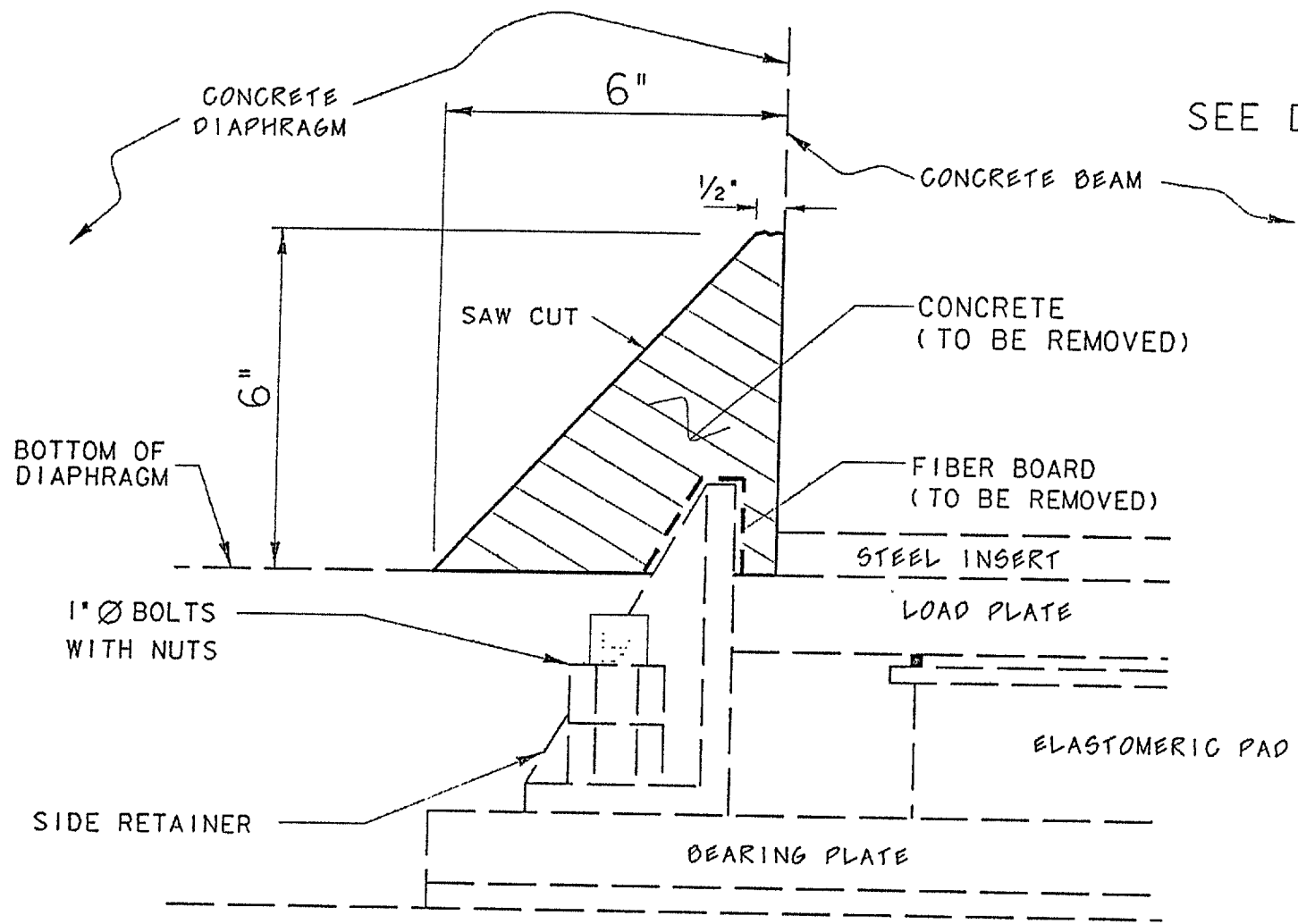
SECTION A-A
TRANVERSE SECTION
(TYPICAL)

RETROFIT LOCATION

SECTION A-A				
ERI-2-1911 L+R				
D. D. O. T. DISTRICT THREE BRIDGE DEPARTMENT				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D.M. 6-92		Edy 12/92	RLC	12-92




DETAIL A
TYPICAL ON INTERIOR BEAMS
(ONE SIDE ONLY ON EXTERIOR BEAMS)
(2 RETROFIT LOCATIONS SHOWN)

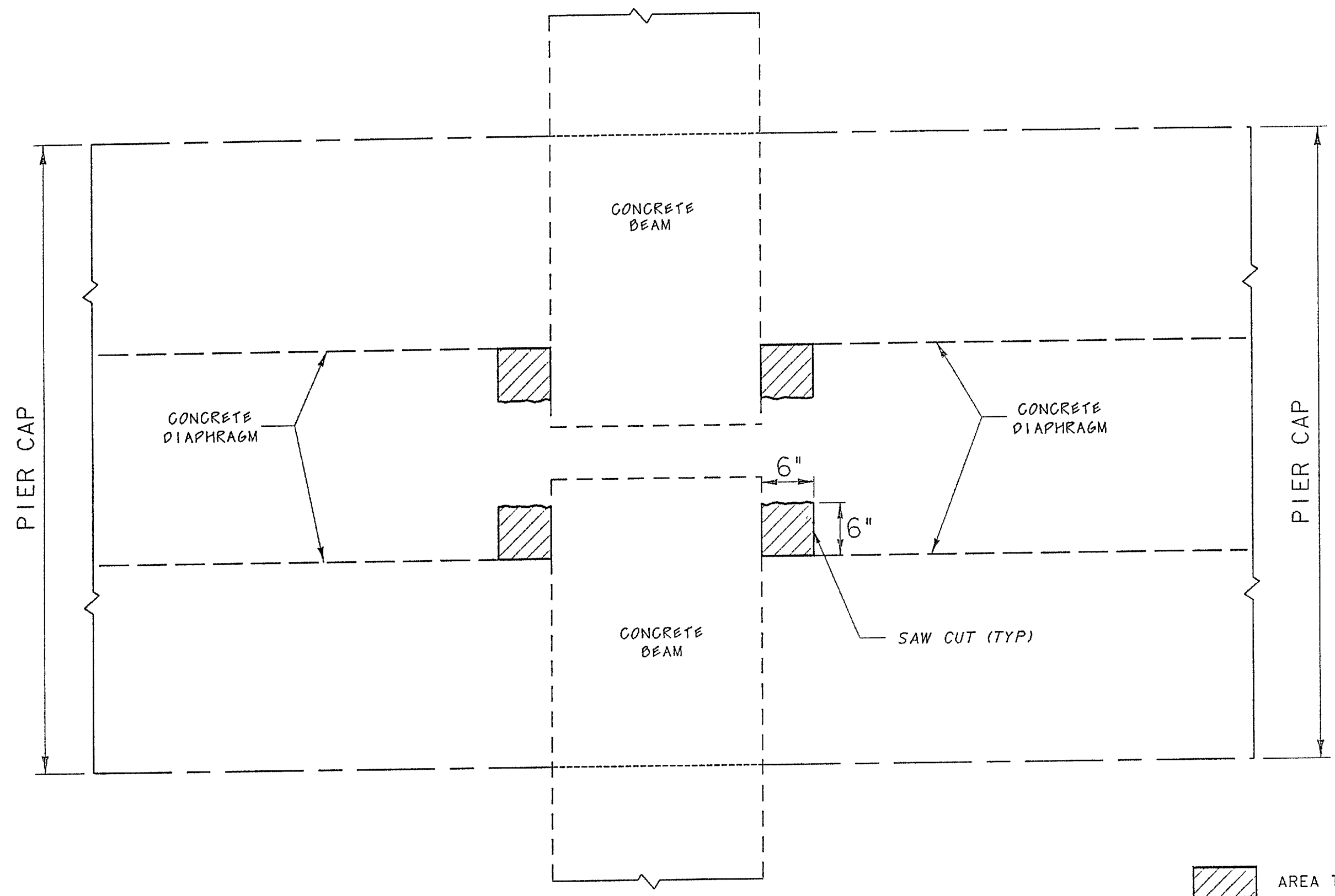


DETAIL B
1 RETROFIT SHOWN

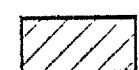
 AREA TO BE REMOVED

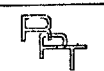
DETAIL A				
ERI-2-1911 L+R				
O. D. O. T. DISTRICT THREE BRIDGE DEPARTMENT				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D.M. 6-92		Edy 12/92	FEC	02-92

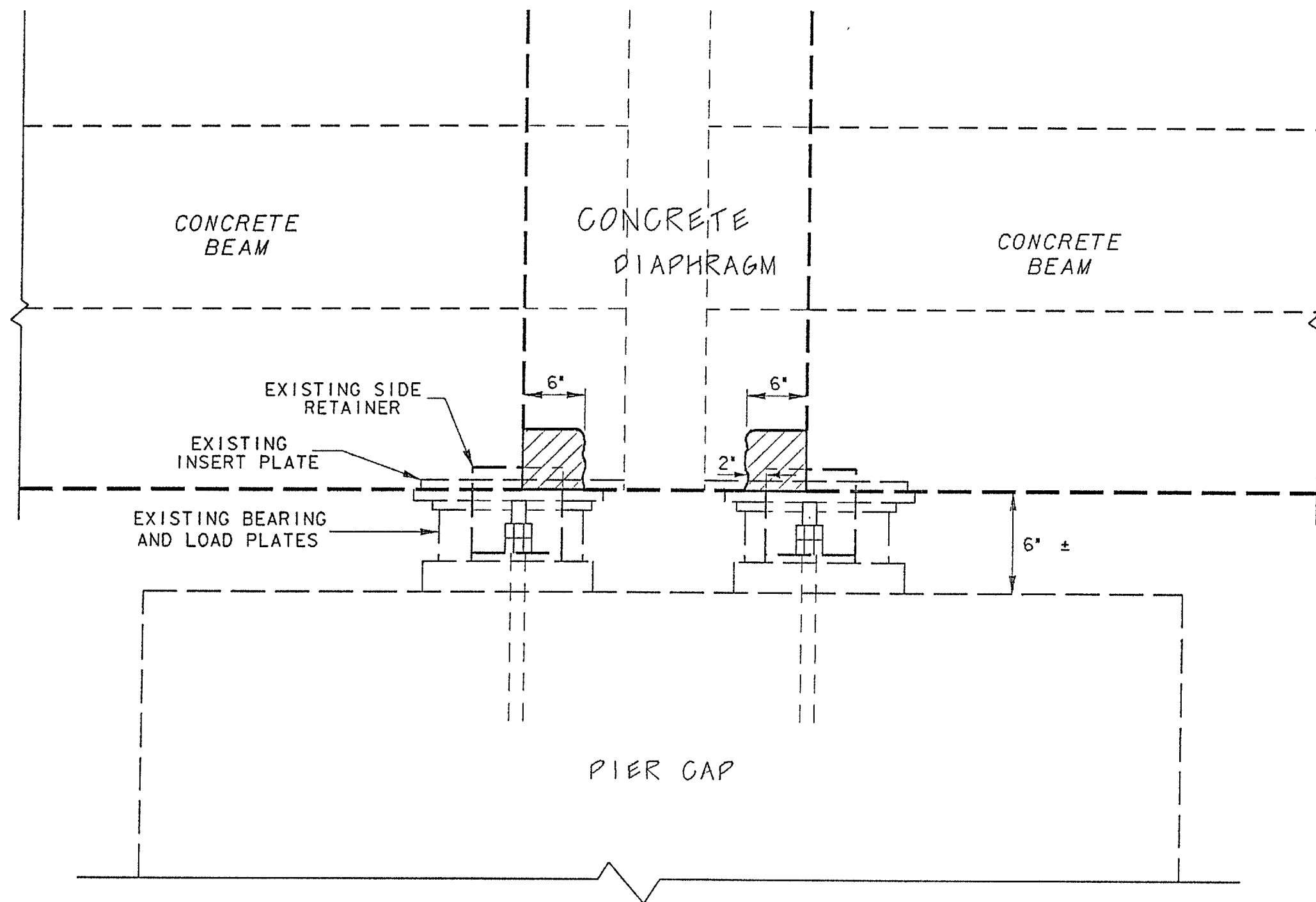
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SECTION B-B
4 RETROFIT AREAS SHOWN

 AREA TO BE REMOVED


SECTION B-B				
ERI-2-1911 L+R				
O. D. O. T. DISTRICT THREE BRIDGE DEPARTMENT				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D.M. 6-92		Edy 12/92	7EC	12-92

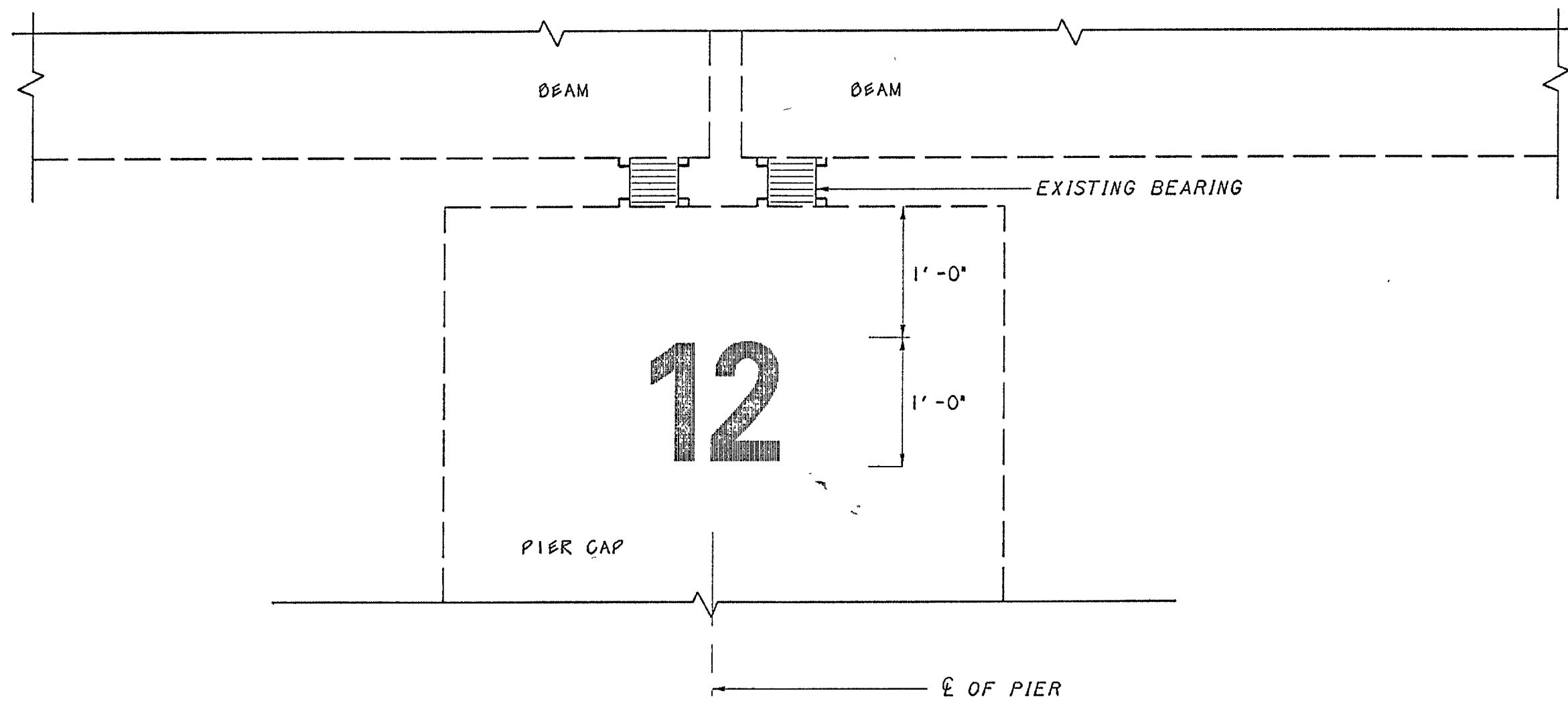


SECTION C-C

 AREA TO BE REMOVED

DESIGN FILE: E21911

SECTION C-C				
ERI-2-1911 L+R				
O.D.O.T. DISTRICT THREE BRIDGE DEPARTMENT				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D.M. 6-92		Edy 12/92	FLC	12-92



SECTION D-D
TYPICAL PIER

SEE PAGE 5,6 FOR LOCATIONS

PIER NUMBERING SECTION D-D ERI-2-1911 L + R				
O. D. O. T. DISTRICT THREE BRIDGE DEPARTMENT				
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
D.M. 7-92		Edy/12/92	JEC	12-92

DESIGN FILE: E21911