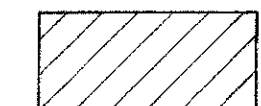
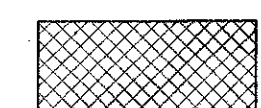



ESTIMATED QUANTITIES				
ITEM	DESCRIPTION	QUANTITY		
		MEASURED		ESTIMATED
843	PATCHING CONCRETE STRUCTURE WITH TROWELABLE MORTAR	14	SF	42 SF
519	PATCHING CONCRETE STRUCTURE AS PER PLAN	25	SF	75 SF

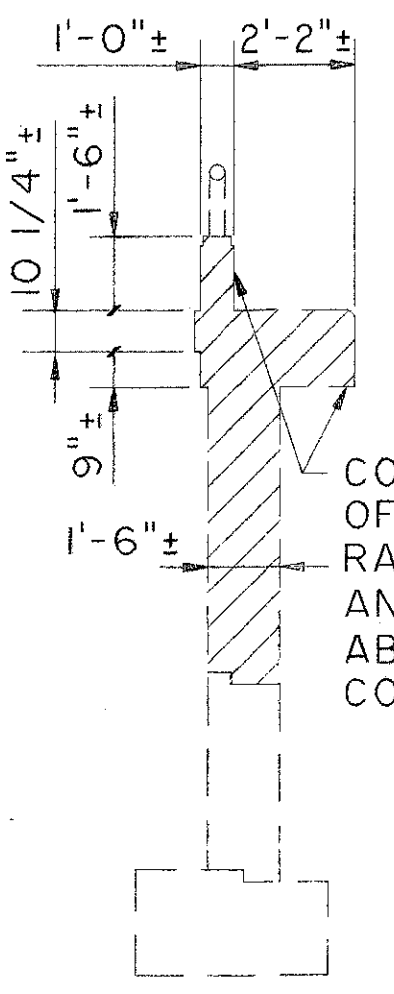
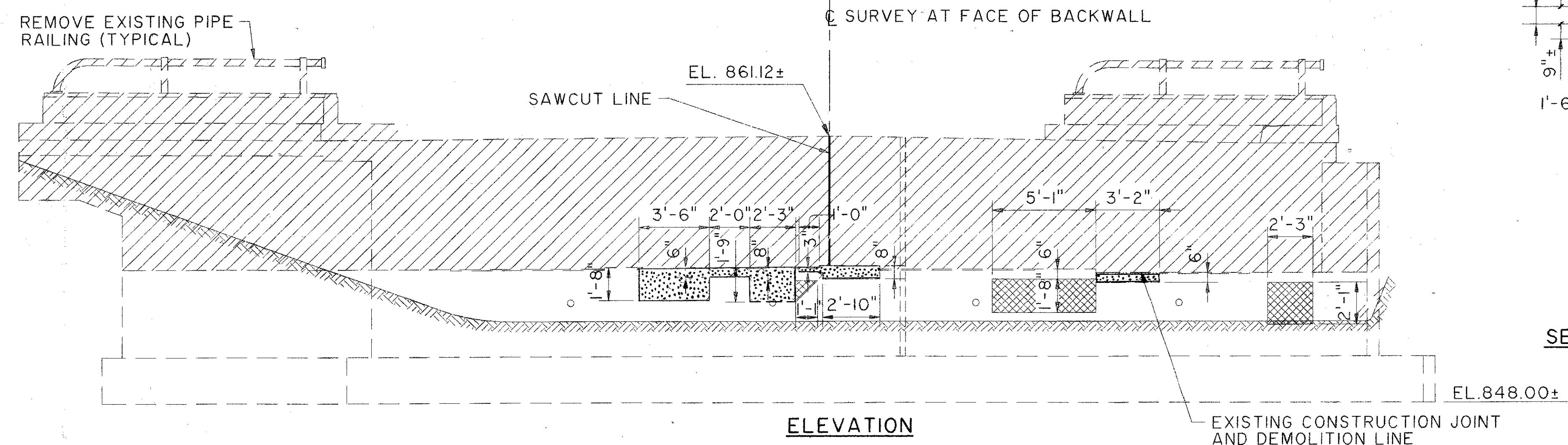
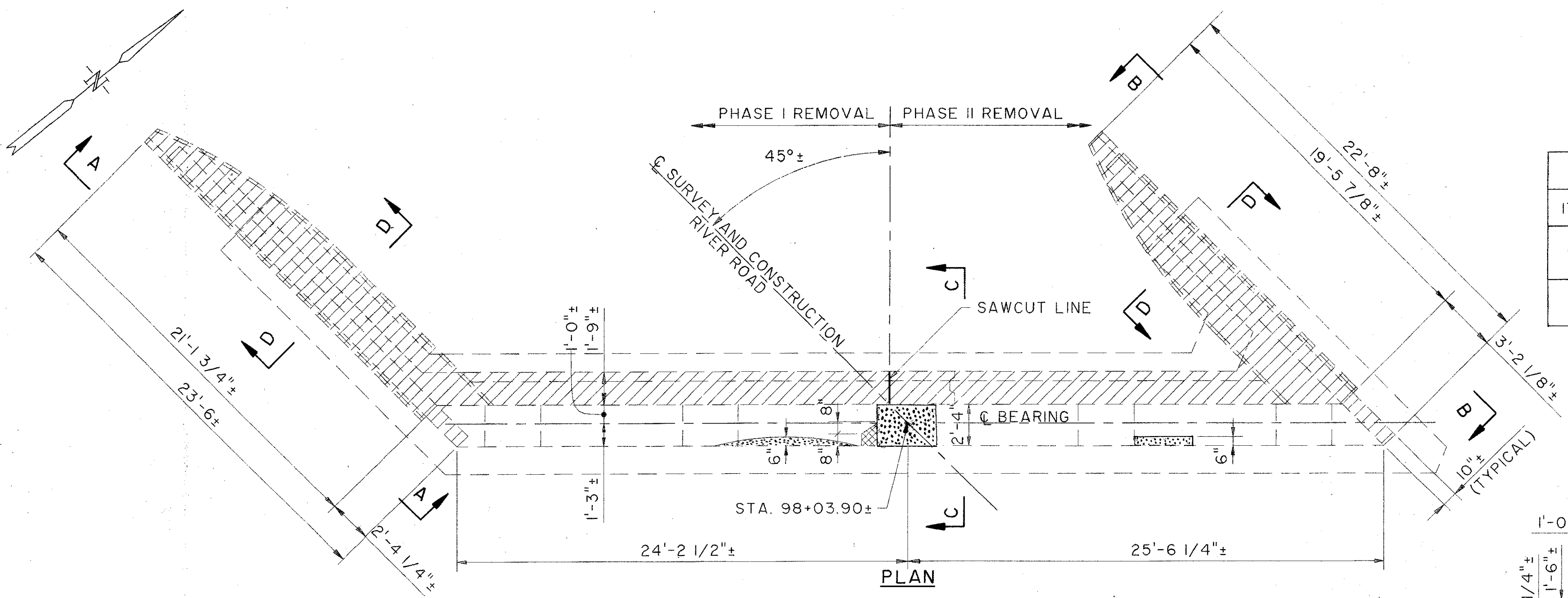
LEGEND

-  ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN
-  ITEM 843, PATCHING CONCRETE STRUCTURE, WITH TROWELABLE MORTAR
-  ITEM 519, PATCHING CONCRETE STRUCTURES, AS PER PLAN

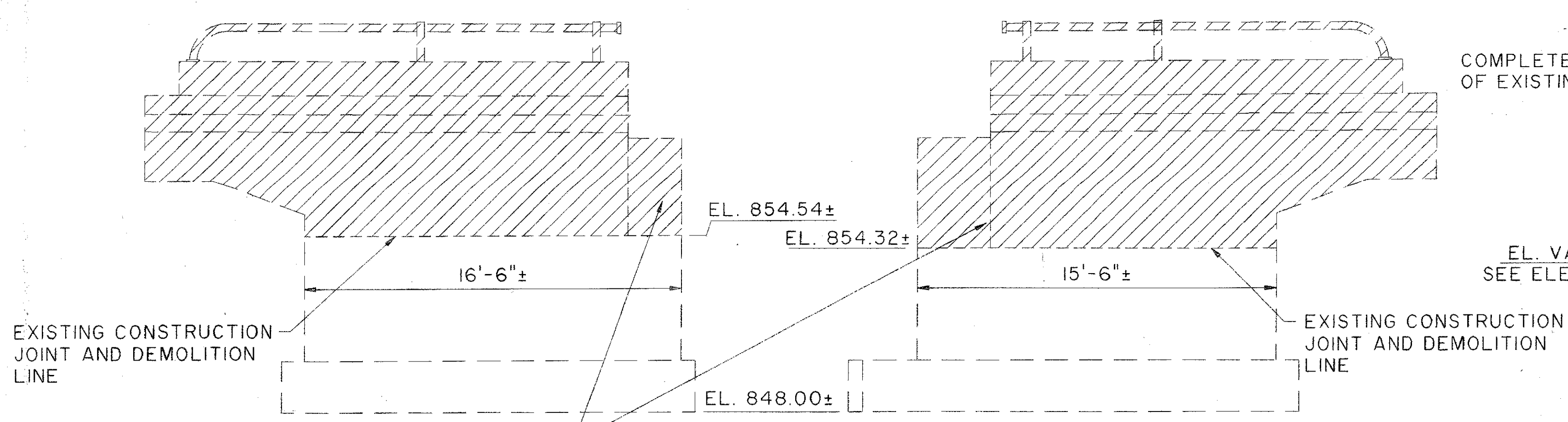
NOTES:

1. CONSTRUCTION JOINT PREPARATION: REMOVE CONCRETE TO A ROUGH SURFACE.

PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACE TO REMOVE LOOSE DISINTEGRATED CONCRETE THEN, THE JOINT SURFACE AND EXPOSED REINFORCEMENT SHALL BE THOROUGHLY CLEANED OF ALL DIRT, DUST, OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. CONCRETE BONDING SURFACES SHALL BE WET WITHOUT FREE WATER AS CONCRETE IS PLACED.
2. SUBSTRUCTURE CONCRETE REMOVAL SHALL BE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT A HAMMER HEAVIER THAN 35 POUNDS, BUT NOT TO EXCEED 90 POUNDS, MAY BE USED AT THE APPROVAL OF THE ENGINEER. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.
3. FOR NEW BACKWALL AND CONCRETE PARAPET REPLACEMENT DETAILS, SEE SHEETS [26/52] AND [27/52].
4. ALL ELEVATIONS SHOWN WITH REFERENCE TO THE EXISTING ABUTMENTS ARE APPROXIMATE.



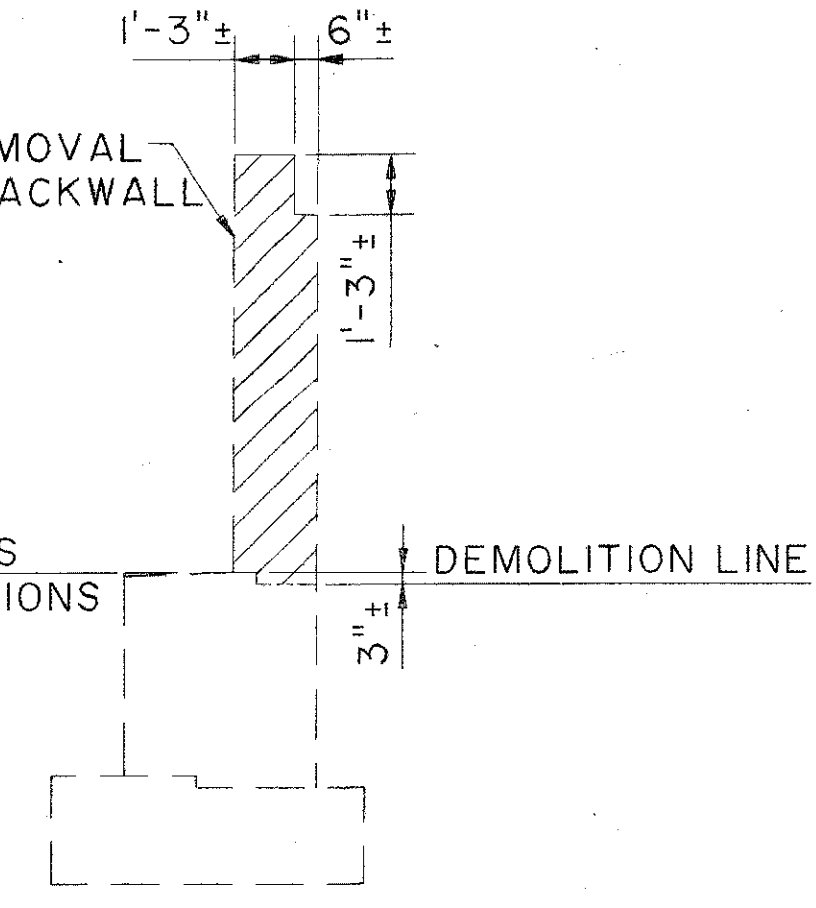
SECTION D-D



ELEVATION A-A

ELEVATION B-B

COMPLETE REMOVAL OF EXISTING WINGWALL AND BACKWALL ABOVE CONSTRUCTION JOINT



SECTION C-C

THE OSBORN ENGINEERING COMPANY 24/52
CONSULTING ENGINEERS
CLEVELAND, OHIO 44114

REAR ABUTMENT DEMOLITION AND REPAIRS
BRIDGE NO. LAK-90-2515
RIVER ROAD OVER I-90

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	OHIO
LYH	BFG		JRS	GA	2/94	O.D.O.T. 6/17/94 5/24/99