

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BELMONT COUNTY

FHWA REGION	STATE	FEDERAL PROJECT	
5	OHIO		

BEL-7A- (0.31)

[illegible]

This map shows the Ohio River region, including parts of Ohio, West Virginia, and Pennsylvania. The Ohio River is shown flowing from the northwest to the southeast, with numerous tributaries. Major cities and towns are labeled, including Cincinnati, Columbus, Dayton, and Pittsburgh. The map also shows the locations of several bridges and ferries. A scale bar and a north arrow are included in the bottom right corner.

Counties shown in Ohio: Cuyahoga, Lorain, Franklin, Hamilton, Warren, Stark, Tuscarawas, Guernsey, Belmont, and Noble. Counties shown in West Virginia: Mason, Boone, Lincoln, Wayne, and Hancock. Counties shown in Pennsylvania: Allegheny, Lawrence, and Erie.

Major cities and towns labeled include: Cincinnati, Columbus, Dayton, Cleveland, Pittsburgh, Erie, and many others. The map also shows the locations of several bridges and ferries.

A scale bar and a north arrow are included in the bottom right corner.

Project Length: 0.00 Lin.Ft. or 0.000 Mile
Work Length: **1093.35** Lin.Ft. or **0.207** Mile

STANDARD DRAWINGS		SUPPLEMENTAL SPECIFICATIONS	
✓ VPF-1-90	9-26-90	✓ 852	6-10-87
✓ MT-97.10	4-29-88		
✓ MT-95.30	10-10-88	✓ 952	12-14-88

Plans Prepared
by District 11

BRIDGE NOTES

EXISTING STRUCTURE VERIFICATION

Details and dimensions on these plans pertaining to the existing structure have been obtained from plans of the existing structure and/or from field observations and measurements. Consequently, they are indicative of the existing structure and the proposed work but they shall be considered tentative and approximate. The Contractor is referred to CMS sections 102.05, 105.02 and 513.02. Contract bid prices shall be based upon a prebid examination of the existing structure 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.

MAINTAINING TRAFFIC

The Contractor shall maintain traffic at all times in accordance with Spec 614. He shall conduct his operations so as to erect the fence on the bridge with minimum hazard, delay and inconvenience to motorists using the bridge or passing under it. At least one lane of traffic shall be maintained in each direction on I-70 at all times and all lanes of I-70 shall be open to traffic when no work is being performed directly above the traveled lanes. When work is to be performed directly over a lane, that lane shall be closed to traffic as per MT-95.30 and the Contractor shall install and maintain protective shields between his operations and motorists using the open lanes of I-70. One lane of West Street (BEL-70-2618) may be closed to traffic during working hours. Alternating one-way traffic shall be maintained by means of flaggers during the closure period as per MT-97.10. All lane closures shall be subject to the approval of the Engineer and no lane closures will be permitted during non-working hours. Two-way traffic shall be maintained on Marion Street (BEL-7A-0031) at all times. Payment for all of the above shall be included in the unit price bid for Item 614, Maintaining traffic.

PREVIOUS CONSTRUCTION PLANS

The following original construction plans are available for reference in the District II Office in New Philadelphia, Ohio:
BEL-40-26.43 & BEL-7A-0.00
BEL-40-23.89

BASE PLATE THREADED ANCHORS

Base plate threaded anchors for fences are designed for a minimum strength concrete of f'c=4000 p.s.i. Special designs are required for concrete strengths less than this amount.

FENCE POST SPACING

The Contractor shall space posts @ 7'-0" c/c except at locations where this spacing will interfere with railing posts or deflection joints, in which case the Contractor can adjust the spacing down to a distance not less than 6'-0" c/c of posts. Post spacing shall not exceed 7'-0" c/c of posts. At all end panels post spacing shall be 7'-0" c/c of post. Post spacing that is less than 6'-0" c/c of posts shall only be permitted at specific locations as marked on the plans or at locations where it is deemed necessary by the Engineer.

UTILITIES

The following utilities and owners are located within the work limits of this project:

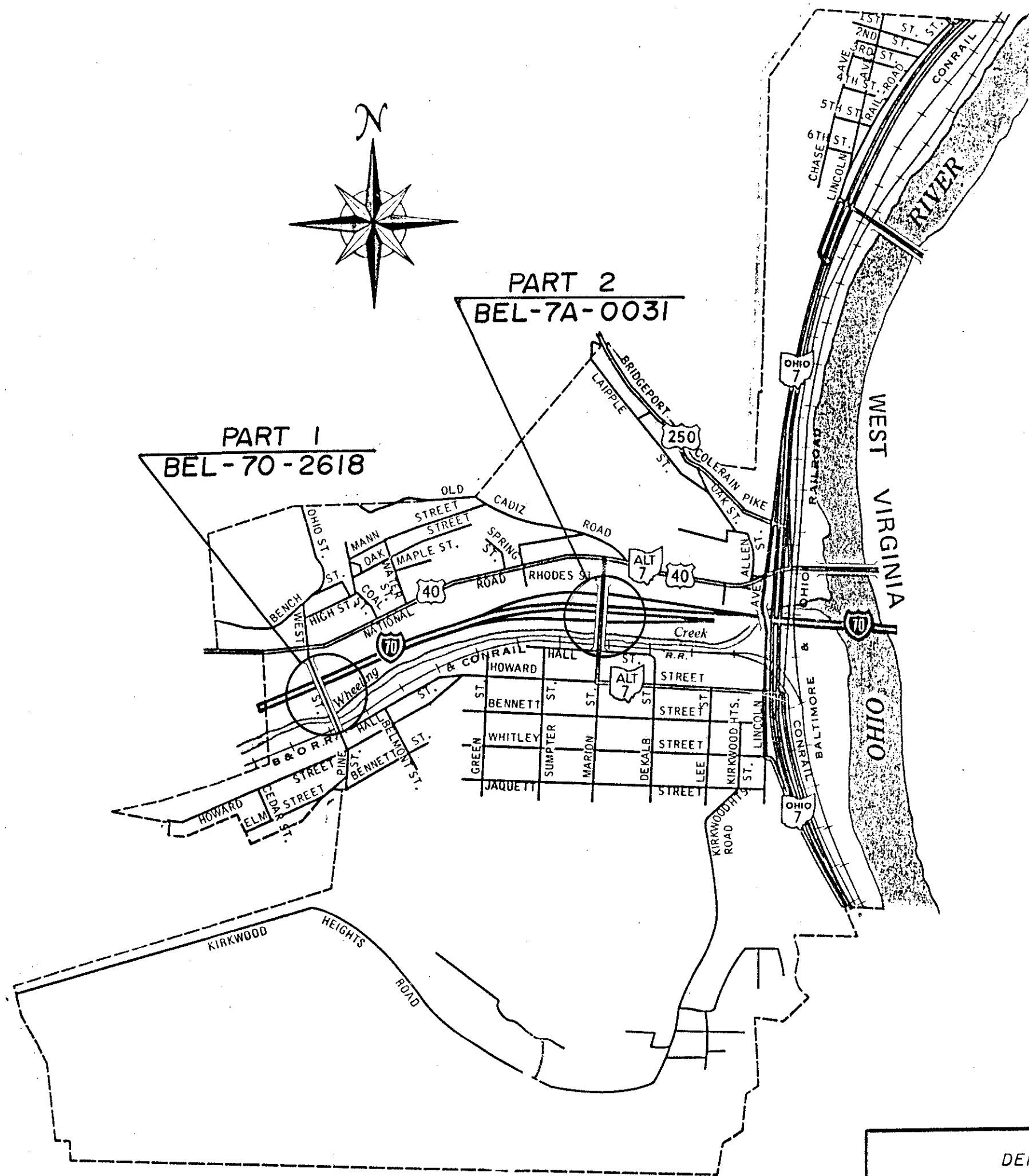
Village of Bridgeport
Municipal Building
303 Main Street
Bridgeport, Ohio 43912
Phone: (614) 635-2424

Ohio Department of Transportation
District No. II
1072 West High Street
New Philadelphia, Ohio 44663
Phone (216) 339-6633

FHWA REGION	STATE	PROJECT	
5	OHIO		

BEL-70-(26.18)
BEL-7A-(0.31)

BRIDGE SUMMARY						
BEL-70-2618	BEL-7A-0.31	ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION
1166.16	781.42	Special	60739930	1947.58	Lin.Ft.	Vandal fence protection, 12 ft. curved, coated-fabric
Lump	Lump	614	11000	Lump		Maintaining traffic
Lump	Lump	624	10000	Lump		Mobilization



STATE OF OHIO DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS BUREAU OF MAINTENANCE						
BRIDGE NOTES, SUMMARY & SCHEMATIC LAYOUT						
BRIDGE NO.'s BEL-70-2618 AND BEL-7A-0031						
DESIGNED	CADD	CHECKED	REVIEWED	DATE	REVIS.	FR.
WRG	WRG	JLO				

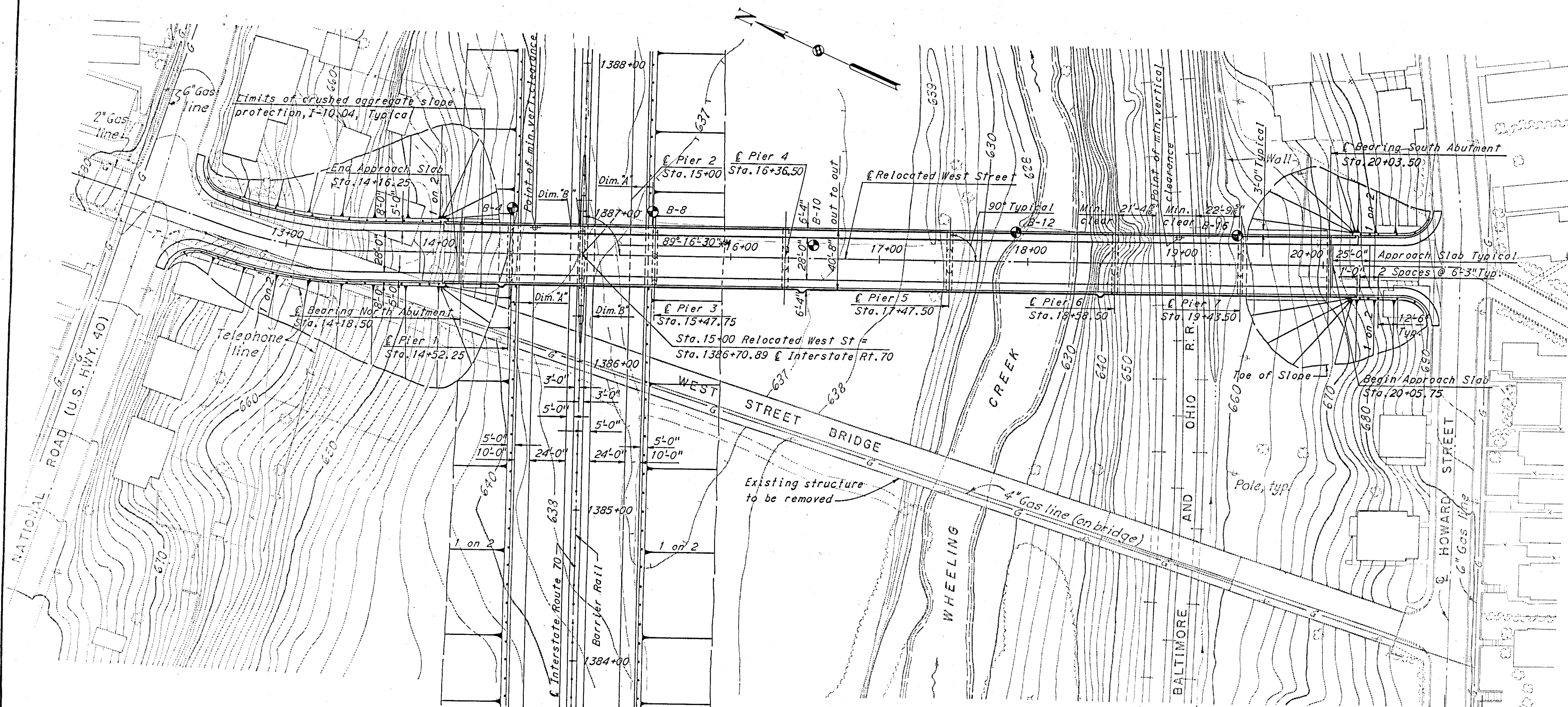
BEL-70-(26.18)
BEL-7A-(0.31)

EXISTING STRUCTURE

Type 3 span rolled beam unit and 5 span welded girder unit both continuous with reinforced concrete deck and substructure.

Spans Beam unit-33'-9" 47'-9" 39'-9" = 121'-0"
Girder unit-8'-0" cantilever, 89'-9" 111'-0" 111'-0" 85'-0" 60'-0" = 464'-0"
Ctr. to ctr. end bearings = 585'-0"

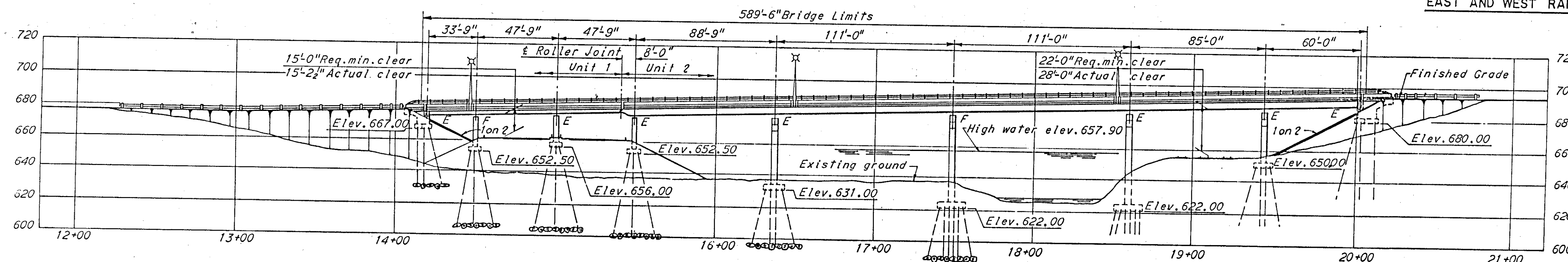
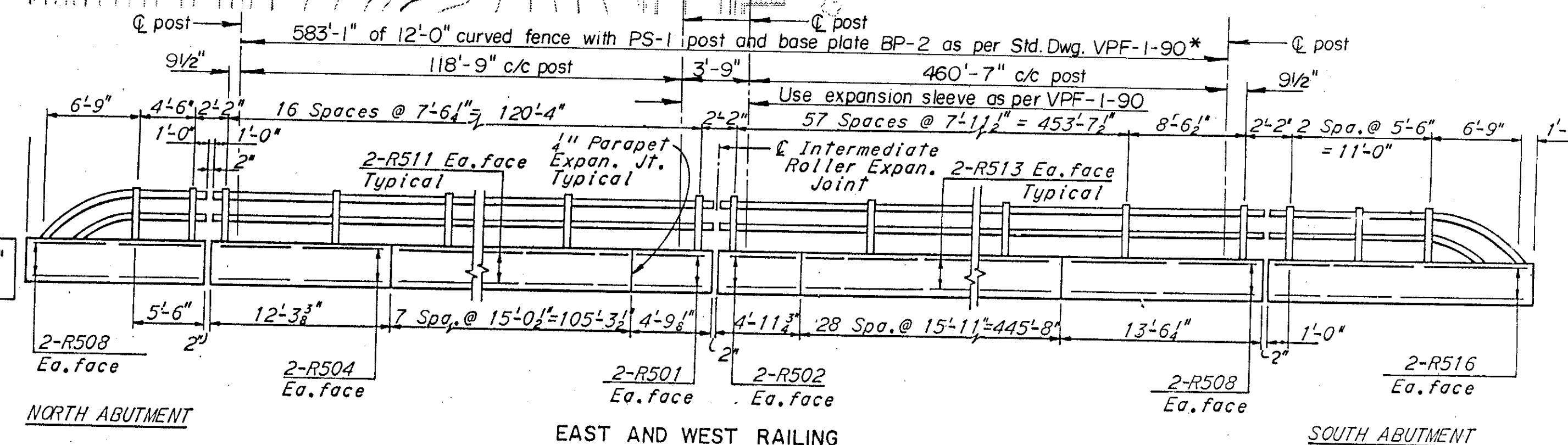
Roadway 28'-0" f/f of two 5'-2" sidewalks.
Loading CF 400
Skew 0°
Alignment Tangent
Surface Course 1" Monolithic concrete.
Approach Slabs AS-1-54 (25'-0" long).



** Between centerline of West Street and centerline of I-70.

PLAN

* See note "FENCE POST SPACING" on sheet 2.



ELEVATION

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

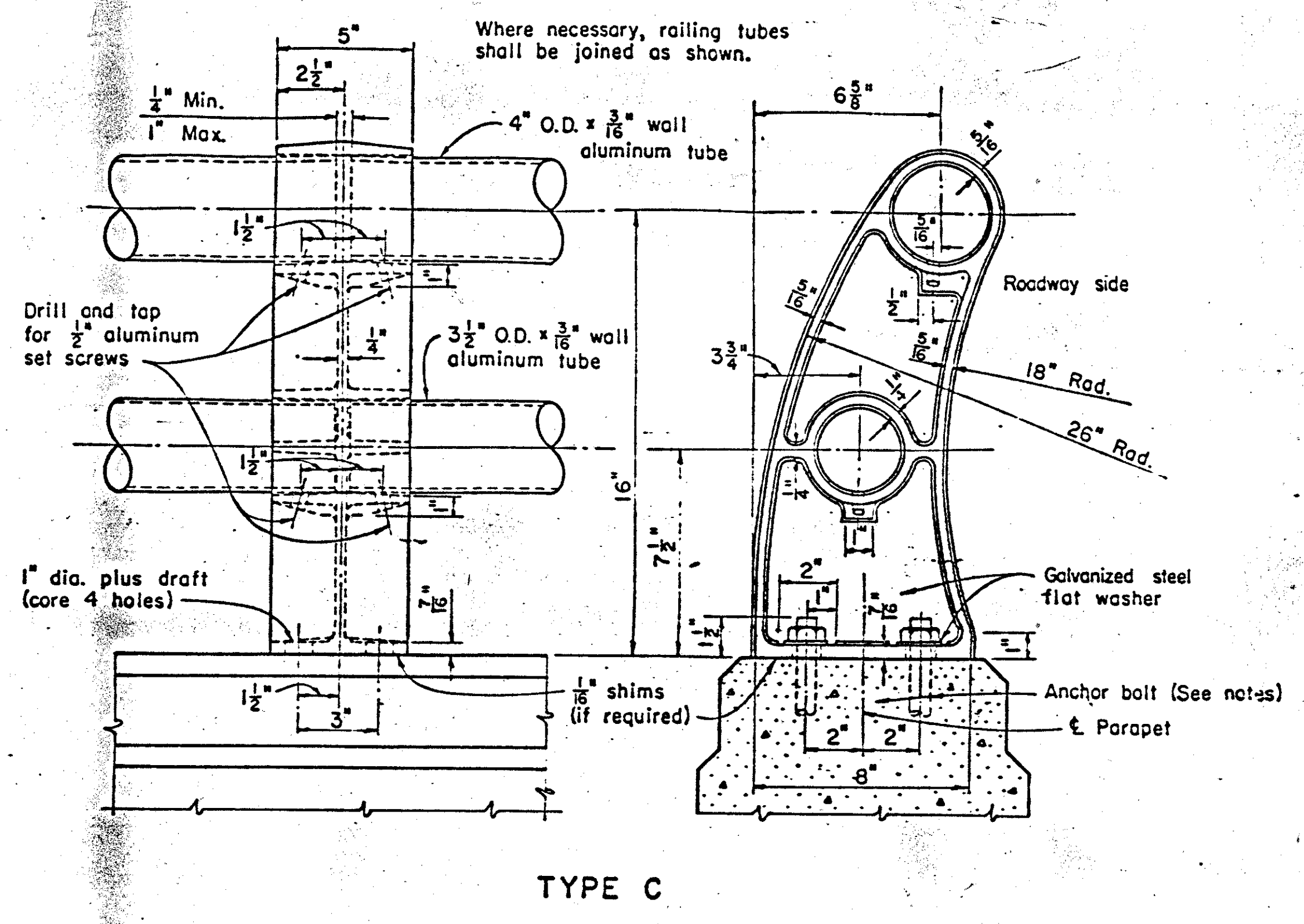
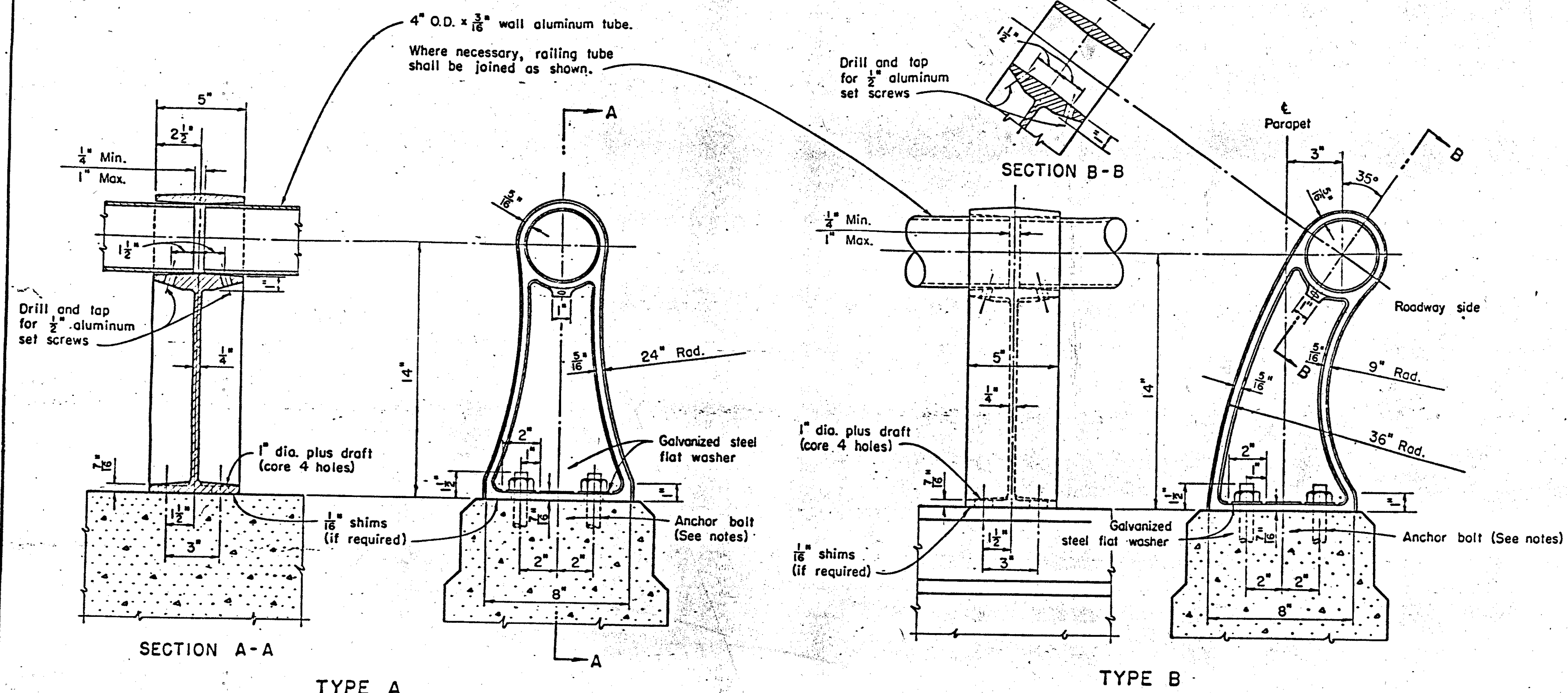
SITE PLAN

RELOCATED WEST STREET OVER I-70,
WHEELING CREEK AND B. & O. RAILROAD

BR. NO. BEL-70-2618 STA. 14+16.25
SCALE: 1" = 40' STA. 20+05.75
BELMONT CO. OHIO

DRAWN	TRACED	CHECKED	REVIEWED	REVISED
DATE 3/8/91	DATE 3/8/91	DATE 3/8/91	DATE 3/8/91	DATE 3/8/91

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NOTES

GENERAL: This drawing provides design and construction details. The project plans for each structure will indicate the type of aluminum post (A, B or C), height of parapet, panel lengths, details at ends of railing, reinforcing steel details, reinforcing steel list, estimated quantities, and other necessary information including special notes and details.

In the determination of the type of railing posts to be specified, as well as the other details of the railing to be shown on the project plans, the following criteria generally will govern:

Either Type A or Type B railing posts will be used for bridges with curbs less than 3'-3" in width. Type C posts will be used for bridges with safety curbs 3'-3" in width, with a parapet height of 1'-6", and may be used for sidewalk railing, with a parapet height of 1'-8". The cast aluminum posts shall conform to alloy SG 70 B and to the other requirements for cast posts and post bases for full-height railings as specified in Sec. M-7.19 Aluminum for Railings.

The railing tubes shall terminate with a cap (as detailed) at the ends unless they are curved downward to the concrete parapet as shown.

Rails will not be bent downward where either Type B or C posts are used.

Railing shall be in lengths of not less than two panels on abutments and at ends of superstructures and of not less than three panels elsewhere. On abutments, a 1/2" wall aluminum pipe may be substituted for the 3/16" wall aluminum tube, at the same price.

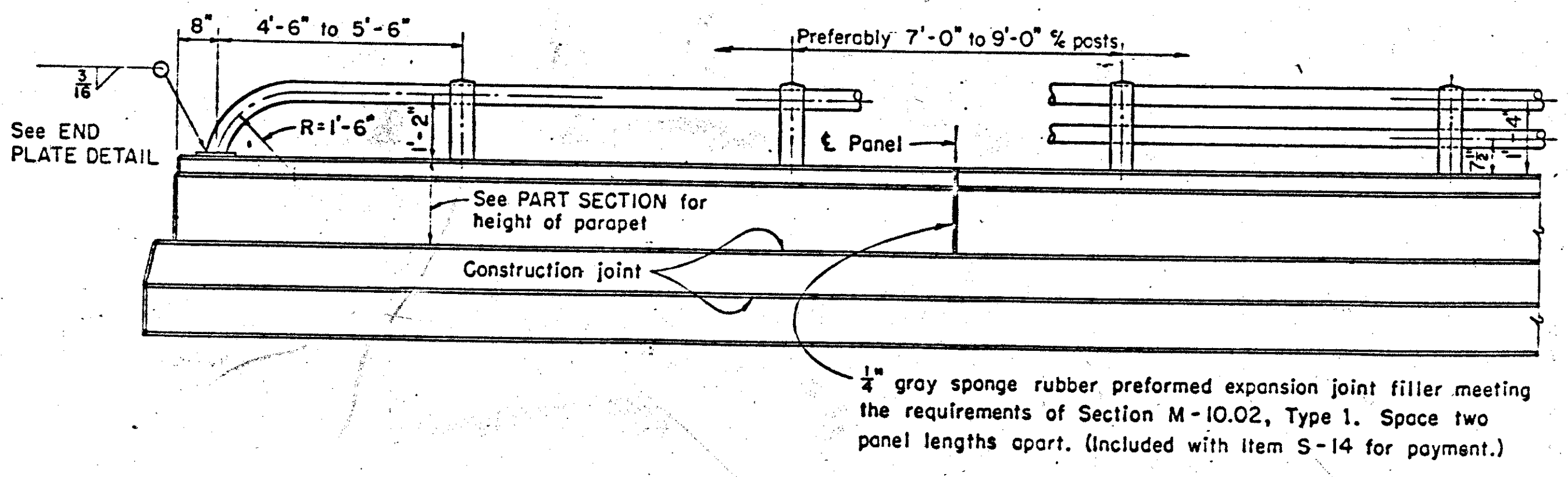
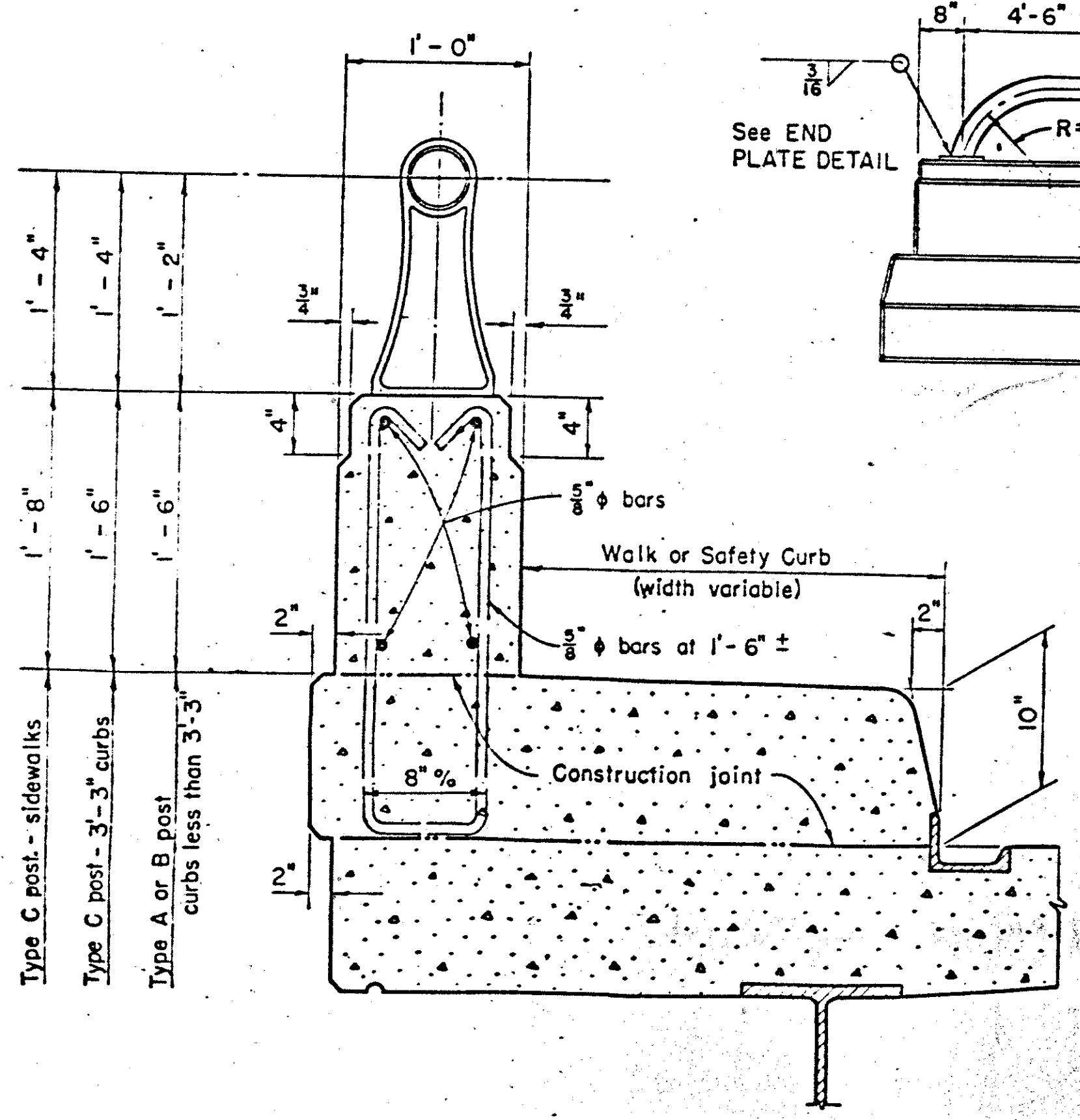
FINISH: The extreme outer surfaces of cast railing posts shall be given a 60 grit finish.

SHIMS shall be provided under the railing posts, where necessary, to assist in vertical aligning. They shall be of aluminum alloy, 2 3/8" x 1/16" x 8", and shall be slotted for anchor bolts to permit insertion after the posts are in place.

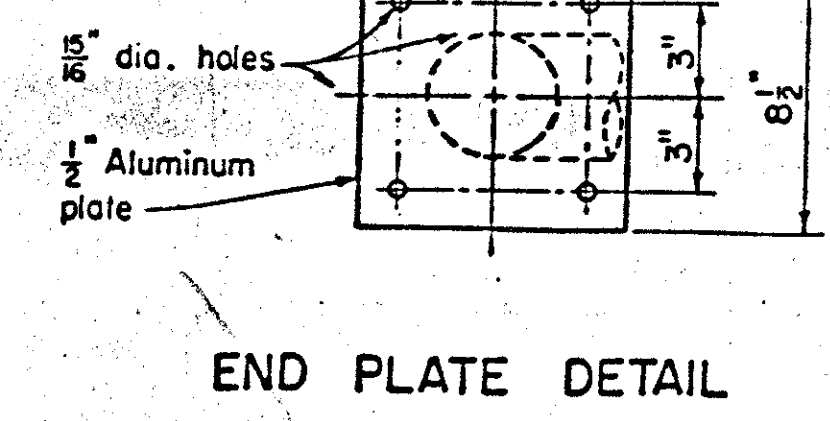
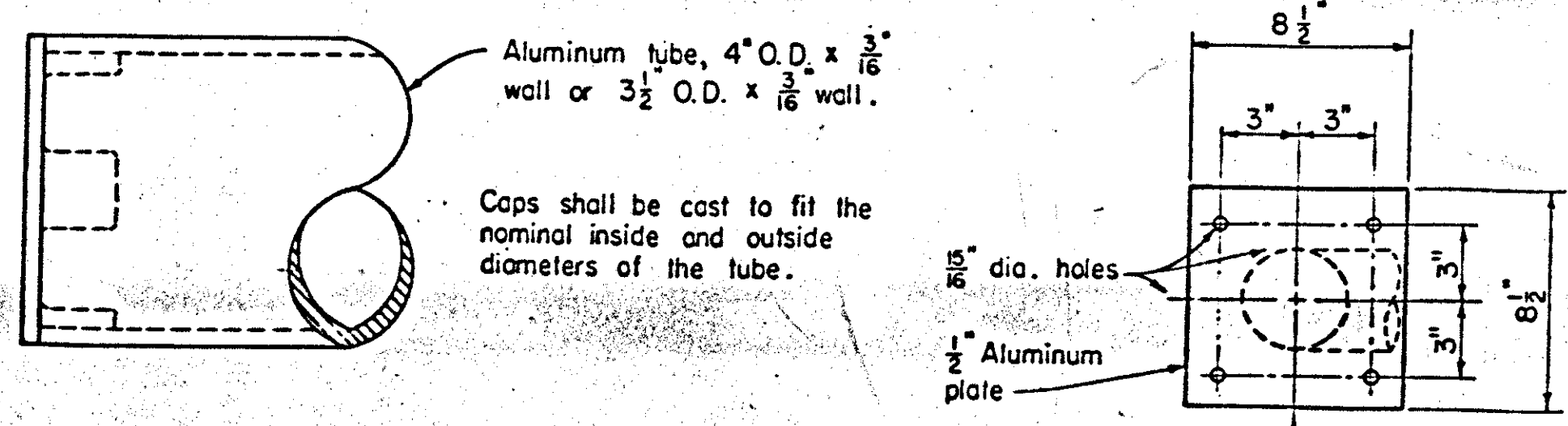
SET SCREWS shall be furnished with each casting and shall be included in the unit price bid per linear foot of railing.

ANCHOR BOLTS shall be galvanized steel, 1'-0" long plus a 2 1/2" 90° bend or a head at the bottom end, and shall have a minimum diameter of 0.62" at the root of the thread.

CONCRETE PARAPETS shall be placed in alternate sections by use of bulkheads. Closing sections shall be placed after removal of bulkheads and after placement of sponge rubber. Rubber shall be flush with surface of concrete and exposed edges shall be free of mortar.



TREATMENT OF PARAPET AND FASCIA



REVISIONS 3 - 1 - 58 2 - 2 - 59 12 - 12 - 60 4 - 2 - 62	STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES			
	STANDARD ALUMINUM RAILING WITH CONCRETE PARAPET			
	APPROVED: <i>[Signature]</i> DATE: 4-9-57 ENGINEER OF BRIDGES			
	PREPARED DHO KEY JVP	TRACED JVP JCN	CHECKED CSD DWT	REVIEWED BFG AJF WHR DHO
				DRAWING NUMBER AR-1-57