Contract Publication Series 13-251

HISTORIC DOCUMENTATION OF THE GEORGE ROGERS CLARK MEMORIAL BRIDGE IN JEFFERSONVILLE, CLARK COUNTY, INDIANA

by
Holly B. Higgins, M.S.

Prepared for

Office of Environmental Services INDOT

Kentucky Transportation Cabinet

Prepared by

cra cultural resource analysts, inc

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Prepared for

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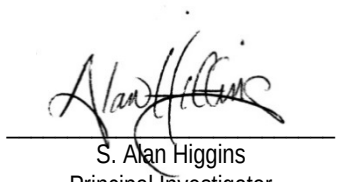

S. Alan Higgins
Principal Investigator

March 6, 2013

Lead Agencies:
Kentucky Department of Transportation /
Indiana Department of Transportation

Historic Documentation
George Rogers Clark Memorial Bridge In Jeffersonville, Clark County, Indiana

Location:	U.S. 31, Jeffersonville and Clarksville, Clark County, Indiana
Indiana Historic Sites and Structures Inventory Number:	019-446-58215
Kentucky Heritage Council Survey Number:	JFCD-217
National Register of Historic Places File Number:	NR-0681
Date of Construction:	1928–1929
Engineers:	Modjeski and Masters
Builders:	American Bridge Company, Vang Construction Company, and Henry Bickel Company
Architect:	Paul Phillipe Cret
Present Use:	Automobile Bridge
Project Abstract:	Walsh Construction Group intends to undertake work on the approach to the George Rogers Clark Memorial Bridge, also known as the Louisville Municipal Bridge, in association with work on the Downtown Crossing as part of the Louisville-Southern Indiana Ohio River Bridges project. The bridge is listed in the National Register of Historic Places (NRHP) and per Stipulation III.D.2 of the First Amended Memorandum of Agreement (MOA) governing actions that must be carried out prior to the initiation of construction activities, Walsh Construction is required to prepare a Treatment Plan for the George Rogers Clark Memorial Bridge and associated components in the event that displacement of character-defining features cannot be avoided. This Treatment Plan includes state-level documentation of the Indiana approach portion of the George Rogers Clark Memorial Bridge and associated components in accordance with the Division of Historic Preservation and Archaeology (DHPA; State Historic Preservation Office (SHPO)) Minimum Architectural Documentation Standards. Cultural Resource Analysts, Inc., has completed this historic documentation report in partial fulfillment of the stipulations of mitigation. This report was prepared in July and August 2013 by Holly B. Higgins of Cultural Resource Analysts, Inc. Photographs were taken by S. Alan Higgins and Holly Higgins on July 29 and August 7, 2013.

TABLE OF CONTENTS

LIST OF FIGURES

I. INTRODUCTION

Walsh Construction Group intends to undertake work on the northern (Indiana) approach to the George Rogers Clark Memorial Bridge in association with work on the Downtown Crossing as part of the Louisville-Southern Indiana Ohio River Bridges project. The bridge is listed in the National Register of Historic Places (NRHP) and per the First Amended Memorandum of Agreement (MOA) governing actions that must be carried out prior to the initiation of construction activities, in fulfillment of Stipulation III.D.2, Walsh Construction is required to prepare a Treatment Plan for the George Rogers Clark Memorial Bridge northern approach and associated components in the event that displacement of character-defining features cannot be avoided. This Treatment Plan includes state-level documentation of the Indiana approach portion of the George Rogers Clark Memorial Bridge and associated components in accordance with the Division of Historic Preservation and Archaeology (DHPA; State Historic Preservation Office [SHPO]) Minimum Architectural Documentation Standards.

The following Treatment Plan and state-level documentation were prepared in August 2013 by Walsh Construction Group with the assistance of Cultural Resource Analysts, Inc.

II. STATE LEVEL DOCUMENTATION

Introduction

Walsh Construction intends to undertake work on the approach to the George Rogers Clark Memorial Bridge, also known as the Louisville Municipal Bridge, in association with the Downtown Crossing as part of the Louisville-Southern Indiana Ohio Rivers Bridges project. The bridge is listed in the National Register of Historic Places (NRHP) and per the First Amended Memorandum of Agreement (MOA) governing actions that must be carried out prior to the initiation of construction activities, Walsh Construction is required to prepare a Treatment Plan for the George Rogers Clark Memorial Bridge and associated components in the event that displacement of character-defining features cannot be avoided. This Treatment Plan includes state-level documentation of the Indiana approach portion of the George Rogers Clark Memorial Bridge and associated components in accordance with the Division of Historic Preservation and Archaeology (DHPA; State Historic Preservation Office [SHPO]) Minimum Architectural Documentation Standards.

Cultural Resource Analysts, Inc. (CRA) has completed this historic documentation report of the approach in fulfillment of Stipulation III.D.2 of the First Amended MOA. The documentation includes a historic context and site-specific archival research, a narrative architectural description, color archival photographs, and an enclosed compact disc containing digital photographs of the site.

Archival research undertaken in association with this documentation report included the following: a records review at the Indiana Division of Historic Preservation and Archaeology; research in the newspaper collections, clippings files, historic maps, and other collections at local and regional libraries and historical societies, such as the Charlestown-Clark County Public Library, the Jeffersonville Township Public Library, the Louisville Free Public Library and the Filson Historical Society.

This report was prepared in July and August of 2013 by Holly B. Higgins of Cultural Resource Analysts, Inc. Photographs were taken by S. Alan Higgins and Holly Higgins of Cultural Resource Analysts, Inc., on July 29 and August 7, 2013.

Historic Context

The George Rogers Clark Memorial Bridge, originally known as the Louisville Municipal Bridge, was constructed by the American Bridge Company of Pittsburgh, beginning in June 1928 and was dedicated on October 31, 1929, at a cost of $4.7 million (Kramer 2007). The cantilevered Warren through truss bridge was the first highway bridge to cross the Ohio River at Louisville. While rail bridges had connected Louisville with southern Indiana since the 1880s, the Clark Memorial Bridge was the first bridge specifically dedicated to automobile traffic. Prior to its construction the main route for automobiles to cross the Ohio River was via ferry, which took much longer than by bridge. The availability of a dedicated automobile route greatly expanded economic opportunities on both sides of the river.

The Louisville Bridge Commission, appointed by the Louisville Board of Trade in 1924, signed a contract with the engineering firm of Modjeski and Masters, who had constructed the Huey P. Long Bridge outside New Orleans and was also responsible for the San Francisco-Oakland Bay Bridge. Vang Construction Company of Pittsburgh was contracted to build the substructure while the American Bridge Company was contracted to build the superstructure. The bridge approaches, toll houses and administration building were constructed by Henry Bickel Co. and the lighting system was awarded to F.A. Clagg, Co., both of Louisville (Allgeier 1983: 4-5; Thatcher 1949: 113). The pylons and Administration Building were designed by Paul Phillipe Cret, an internationally-significant architect whose commissions included the Indianapolis Public Library, the Benjamin Franklin Bridge in Philadelphia and the Folger Shakespeare Library in Washington, D.C., among others (Long 1999).

Construction of the cantilevered structure began in the middle of the river due to the time taken to purchase and demolish the buildings located in the approach paths in Louisville and Jeffersonville. This led the American Bridge Company to develop a new bridge construction method for erecting the structure, known as the "guy derrick system of erection." The system utilized four guy derricks for the erection of each half of the bridge. Two derricks travelled away from the main tower piers, one that erected the anchor arms while the other erected the cantilever arms and suspended span. This made it unnecessary for the structural sections to also provide for the erection stresses. The power plant for each group of derricks was located beneath the bridge near the piers, further lessening the load (Allgeier 1983:5).

The bridge was financed by a bond paid off by tolls collected on the bridge. This financing plan garnered national attention because it was the first of its type and was known as the Louisville Plan. The bond was finally paid in 1946, when tolls were discontinued. The City of Louisville transferred ownership of the bridge to the Commonwealth of Kentucky and the name was changed to the George Rogers Clark Memorial Bridge in 1949. The Administration Building was used by the Kentucky Highway Department and then the Kentuckiana Regional Planning and Development Agency before being sold into private ownership in 1979. The toll booths were removed in the late 1960s (Allgeier 1983:5-6; Kramer 2007; Thatcher 1949:111).

The pylons are constructed of smooth limestone in the Art Deco style, topped with sculpted eagles. The Indiana pylons bear the Indiana state symbols and "Indiana" is engraved on both faces. The pylons on the Kentucky side bear its state symbols (Allgeier 1983:2). The Art Deco architectural style is characterized by a linear, hard edge or angular composition usually with a vertical emphasis. Ornamentation is usually arranged in a series of setbacks to emphasize the geometric form and utilizes the same material as the structure or is constructed of metal, glazed bricks, or mosaic tiles. Chevrons and reeded and fluted columns are common, as are Egyptian motifs. Verticals are emphasized with decorated spandrels. This architectural style was largely popular during the late 1920s and 1930s (McAlester and McAlester 2000: 465; Blumenson 1981: 77). It first gained public attention in 1922 with Elliel Saarinen's Art Deco design that was submitted in a contest for the Chicago Tribune Headquarters. While the design did not win, it was widely praised as a new architectural style and a departure from the Classicism of the past. The Exposition des Arts Decoratifs in Paris in 1925 further popularized the style (Pennsylvania Historical and Museum Commission [PHMC]:2013).

Description

IHSSI No.: 019-446-58215

Zone: 16

Quad: New Albany, IN-KY 1992 and Jeffersonville, IN-KY 1993

UTMs: E: 609215 N: 4235856

Photographs: Figures 1–22

The George Rogers Clark Memorial Bridge is situated along the boundary between the cities of Jeffersonville and Clarksville and allows U.S. 31 to pass over the Ohio River. Opening in 1929, the bridge, the first for automobile traffic crossing from southern Indiana into downtown Louisville, originally operated as a toll bridge, although the only evidence of this former function is the Administration Building, now privately owned and located approximately 131 ft northeast of the northern approach (Figures 1–2). The four-lane, cantilevered Warren through-truss bridge is a single deck and features six spans, with eight piers of ashlar stone. The length of the bridge measures approximately 3,740 ft in length and the Jeffersonville approach measures approximately 800 ft in length. The roadway is approximately 40 ft in width.

Setting and Approach Features

The overall setting of the northern approach is commercial, with the site of the former Ohio Falls Car and Locomotive Company, now an office park, located immediately west of the approach. The physical terminus of the northern approach is situated in a park-like setting, surrounded by a grassy area and trees to the south, which extend into a large lawn area that flanks the length of the approach structure to the south. On the northern side of the approach terminus, a large, sculpted limestone marker, in the shape of a tablet, commemorating the bridge is located approximately 45 ft north of the former Municipal Bridge Administration Building, which was, with the pylons, designed by Paul Phillipe Cret. The Administration Building is a two-story, limestone-block structure, featuring steel casement windows and a terra cotta crest that caps the building.

Sidewalks run along either side of the road leading up to the bridge. The sidewalks are bordered by limestone block edging walls on either side, which are formed to follow the gentle curve of the sidewalks leading to the bridge, terminating at the intersection of U.S. 31 and Court Street. These walls frame the lawn to the south and the administration complex and tablet marker to the north before blending into larger limestone block walls to the east as the sidewalks lead to the approach structure. Along the western wall, the division between the walls is punctuated by a shallow flight of stairs, approximately 220 ft north of the western pylon.

The larger limestone walls flank the sidewalks as the terrain ascends toward the bridge, forming an aesthetic parapet to the sidewalks and landscape. The walls are comprised of blocks forming a series of panels and pilasters, which mimic the arrangement of the approach structural walls. Former locations of embedded lamp posts are noted by corroded anchors secured within the limestone cap of each wall. Both walls exhibit minor damage, typically in the form of split corners or spalled edges, associated with nearly 90 years of existence, but portions of the western wall are more noticeably damaged, and a few of the limestone blocks forming the panel components appear to have become partially dislodged. A section of the western wall just north of the pylon has been in-filled with poured concrete. According to historic photos, this is where the toll booth was originally located (Figures 3–6).

Concrete stairs punctuate either wall at the pylons. Each is located approximately 20 ft north of the pylon. Each set of steps, flanked by side walls, merges into a landing immediately adjacent to the pylons before the sidewalks extend into the bridge structure. These landings are framed by a continuation of the limestone block parapet walls that curve into the pylons, forming a radial arrangement (Figures 7–11).

Pylons

The bridge approach is accentuated by decorative pylons that form a celebratory gateway to the bridge. These rectangular pylons are integrated into the curvilinear limestone block walls to the north, and to the south, a metal railing adjoins the pylons. Each pylon is 11 ft long by 5 ft wide and 24 ft 9 inches tall (Allgeier 1983: 20). Comprised of smooth-finished limestone blocks, set in a stepped vertical arrangement, in the Art Deco style, the pylons each feature an engaged, fluted column, capped by sculpted limestone eagles. A sculpted medallion located at the center of each column bears a depiction of a lumberjack, and is bordered on either side by a fleur-de-lis. The word “Indiana” is carved into the east and west face of each pylon, with “Louisville Municipal Bridge” and the names of the commissioners below. Each pylon is capped by a metal lantern, with frosted glass inserts. Several of the glass inserts are cracked and others exhibit small circular holes, characteristic of small bullets (Figures 12–16). The pylon structures themselves retain high integrity and characteristically exhibit only minimal damage associated with weathering, such as isolated patches of surface loss. Other minimal damage includes surface cracks, primarily along corners and at grade. The

western pylon also exhibits graffiti near the base, along the western face.

Approach Structure

The 800 ft northern approach is primarily supported by mortared limestone block walls measuring 50.5 inches wide by 29.5 inches tall, with the southernmost portion of the approach supported by riveted steel stringers and girders. The blocks are arranged in a series of panels, flanked by twelve pilasters that are evenly spaced along each structural wall. Rectangular copper vents punctuate the central limestone block on every other panel, just beneath the road deck. The approach walls terminate at the southern end in a large opening, fronted by riveted steel doors set beneath the bridge's substructure. The approach structural walls are capped by a metal railing, heavily corroded, that runs the length of the deck along the sidewalk. Both the eastern and western approach walls display varying degrees of damage, including missing and/or repointed mortar (some with concrete patches), spalling and associated weathering, cracked faces, and graffiti, with damage more evident on the eastern wall. Missing and repointed mortar, as well as cracks, are most noticeable near the southernmost pilaster on both walls, where the structural load terminates and is transmitted to the steel girder arrangement to the south; the connections at the parapets also form a general location for deterioration and surface wear. Rail connections are a prominent source of deterioration, with much spalling and general breaking away of the limestone block surface present along the rail connections at the deck. The limestone block in these areas has also been stained with rust leaching from the railing. Pockets of graffiti are also found along the grade (Figures 17–22).

Figure 1. Overview of George Rogers Clark Memorial Bridge.

Figure 2. Administration Building.

Figure 3. Overview of walls north of pylons.

Figure 4. Northern end of eastern edging wall and dedication tablet.

Figure 5. Western wall south of northernmost steps.

Figure 6. Damage to western edging wall north of pylons.

Figure 7. Southernmost steps along western half wall.

Figure 8. Northernmost steps along western wall.

Figure 9. Steps along eastern wall.

Figure 10. Eastern curved half wall.

Figure 11. Western curved half wall.

Figure 12. Overview of front of pylons.

Figure 13. Overview of rear of pylons.

Figure 14. Detail of sculpted emblem on western pylon.

Figure 15. Detail of sculpted eagle and lantern on western pylon.

Figure 16. Detail of east side of western pylon.

Figure 17. Overview of eastern mortared limestone block wall.

Figure 18. Overview of western mortared limestone block wall.

Figure 19. Detail of copper vent.

Figure 20. Damage to western limestone block wall.

Figure 21. Detail of western railing.

Figure 22. Riveted metal doors beneath southern end of approach.

Significance Statement

The George Rogers Clark Memorial Bridge was listed in the National Register of Historic Places in 1984 under Criterion C in the area of Architecture as an excellent example of an Art Deco bridge and as an important example of the work of Paul Phillipe Cret; in the area of Engineering as an important work of Modjeski and Masters and the American Bridge Company and as the first bridge constructed using the guy derrick system; and in the area of Transportation as an important example of the early state highway systems of Indiana and Kentucky (Allgeier 1983: 6). The bridge was the first bridge specifically for automobile traffic across the Ohio River at Louisville and as such, served as a gateway for economic growth between Indiana and Kentucky. This gateway was prominently proclaimed by the construction of the pylons and limestone walls which create a visual entre, welcoming traffic across the river as Indiana and Kentucky were joined in a new era of growth. The Art Deco styling of the pylons and associated features further reflect their significance, as the then-new and popular style reflected a tendency toward the lavish and epitomized progress and the future, and was typically reserved for important public, civic, and commercial buildings and structures of the period. The choice of Paul Phillipe Cret, an internationally-recognized and significant architect, further signified the importance of the bridge – and particularly the gateways – not only to Louisville and Southern Indiana, but to Indiana and Kentucky as a whole. In his design, Cret utilized symbols of both states, acknowledging history but also recognizing the economic opportunity ahead.

Although the bridge and its approach has been minimally diminished by some isolated damage and deterioration over its existence, it

still fully conveys its significance as an important transportation element to Louisville and surrounding communities, which continues to be reflected in the design and prominence of the gateway elements at the northern approach. Integrity of design, workmanship, and materials are still present, as original materials and design elements have been retained throughout, with the exception of minor elements such as the original lighting. Furthermore, location, setting, feeling, and association are all likewise intact, with the bridge retaining its function as an automobile crossing – one of three from Louisville to southern Indiana – and continuing to provide a valuable economic link between each, with the gateway continuing to serve as a visual clue to the bridge's importance and role in connecting these two important centers.

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1939 New Albany, Indiana-Kentucky, 7.5-minute series topographic quadrangle. United States Geological Survey, Washington, D. C.

1992 New Albany, Indiana-Kentucky 7.5-minute series topographic quadrangle. United States Geological Survey, Washington D.C.

1993 Jeffersonville, Indiana-Kentucky 7.5-minute series topographic quadrangle. United States Geological Survey, Washington, D.C.

Appendix A. USGS Topographic Map

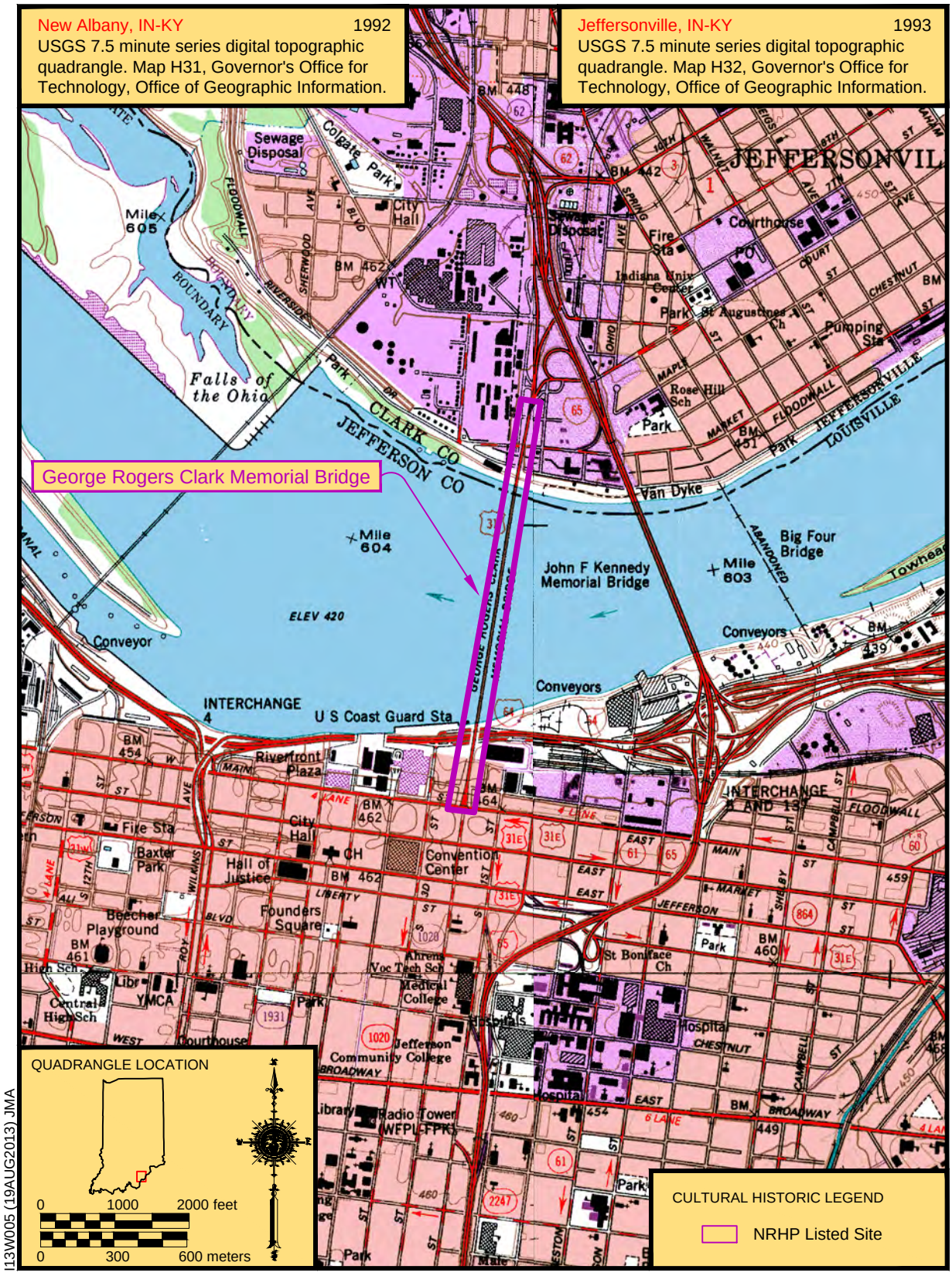

Figure A-1. A portion of the 1992 New Albany, IN-KY and 1993 Jeffersonville, IN-KY 7.5-minute topographic quadrangles depicting the location of the George Rogers Clark Memorial Bridge

Appendix B. Aerial Map

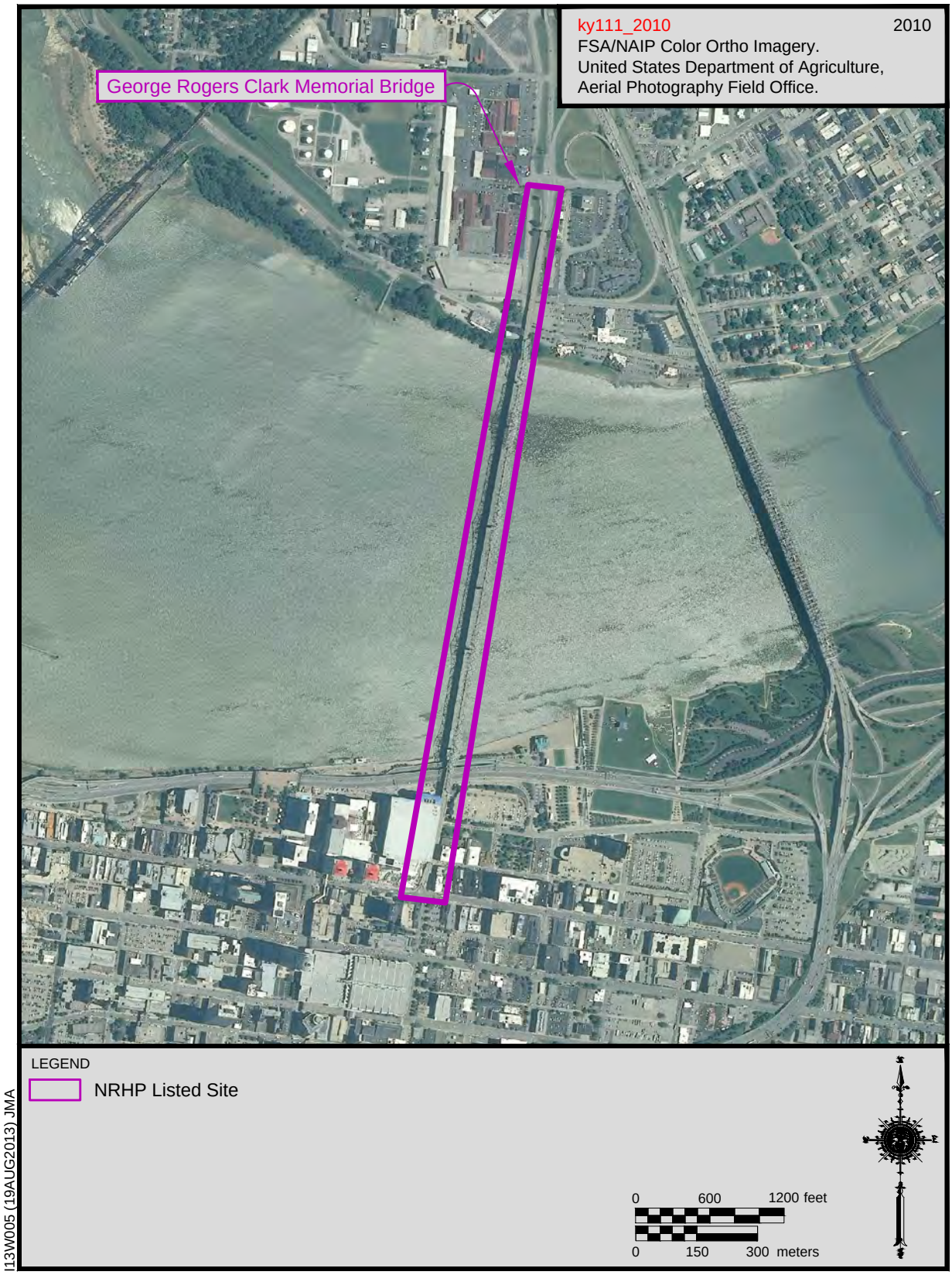

Figure B-1. A portion of an aerial depicting the location of the George Rogers Clark Memorial Bridge.

Appendix C. Historic Photographs and Maps

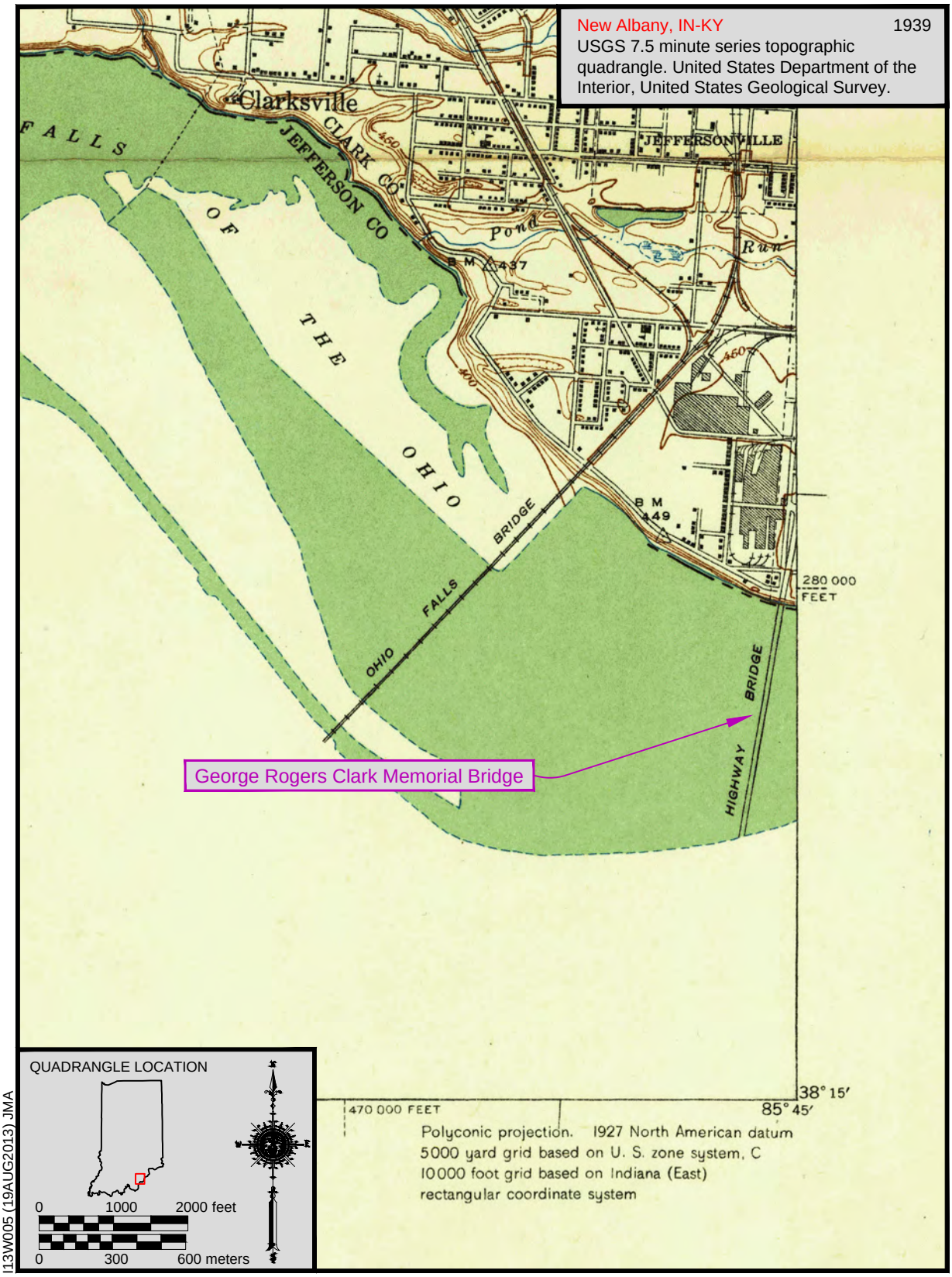

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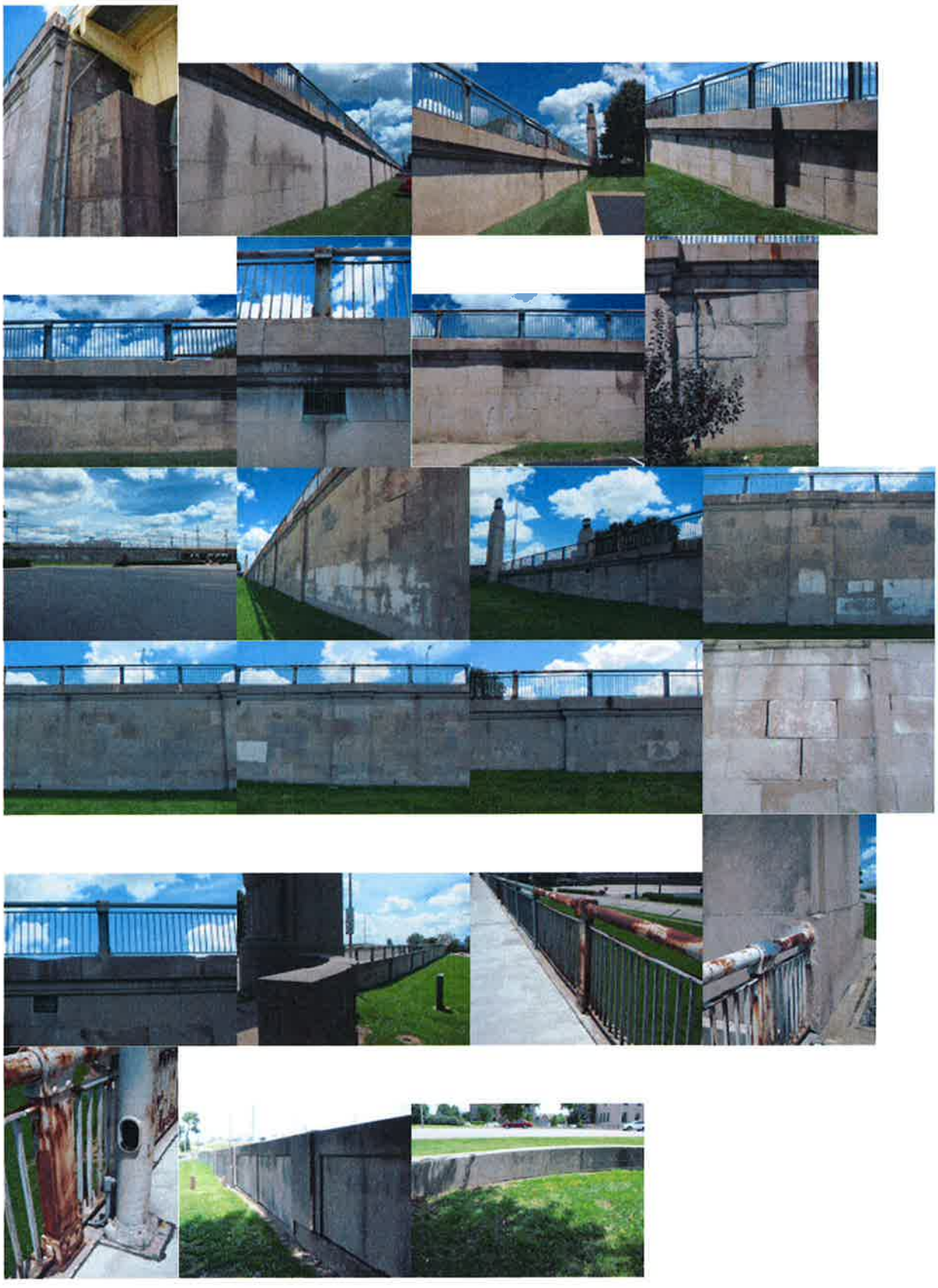
Figure C-1. A portion of the 1939 New Albany, IN-KY 7.5-minute topographic quadrangle depicting the George Rogers Clark Memorial Bridge.

Figure C-2. October 31, 1929, photograph of opening day of the Louisville Municipal Bridge (Nokes 2002)

Figure C-3. Circa 1929 photograph of the Indiana approach (Nokes 2002).

Figure C-4. Circa 1950 photograph of the Indiana toll booths (Howerton Coady 1978).

Appendix D. Photographs



Photograph and Digital Image Index

The following photographic descriptions correspond to the digital images printed and enclosed on a CD. The photograph information is printed on the reverse of each printed 5" x 7" view included in the documentation packet.

Name of Property:	George Rogers Clark Memorial Bridge
City or Vicinity:	Clarksville
County:	Clark
State:	Indiana
Name of Photographers:	S. Alan Higgins
Location of Original Digital Files:	CRA, 201 NW 4th St., Suite 204, Evansville, IN 47708
Number of Photographs:	73

Photo 1: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_1
Overview of bridge, facing south.

Photo 2: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_2
Overview of pylons, facing southeast.

Photo 3: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_3
Overview of pylons, facing northeast.

Photo 4: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_4
Eastern pylon, facing south.

Photo 5: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_5
Detail of eastern pylon lantern and sculpted eagle facing southwest.

Photo 6: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_6
Eastern pylon, facing northeast.

Photo 7: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_7
Eastern pylon, facing southeast.

Photo 8: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_8
Base of eastern pylon and wall, facing south.

Photo 9: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_9
Base of eastern pylon, wall and steps, facing north.

Photo 10: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_10
Eastern wall and steps, facing north.

Photo 11: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_11
Eastern steps, facing west.

Photo 12: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_12
Western pylon, facing south.

Photo 13: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_13
Western pylon, detail of carved medallion, facing south.

Photo 14: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_14
Western pylon lantern and sculpted eagle, facing southeast.

Photo 15: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_15
Western pylon, facing east.

Photo 16: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_16
Western pylon lantern, facing east.

Photo 17: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_17
Western pylon, facing northwest.

Photo 18: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_18
Western pylon, facing west.

Photo 19: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_19
Western pylon lantern, facing west.

Photo 20: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_20
Base of western pylon and wall, facing south.

Photo 21: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_21
Base of western pylon and wall, facing east.

Photo 22: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_22
Western pylon wall, facing northeast.

Photo 23: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_23
Graffiti on base of western pylon, facing east.

Photo 24: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_24
Steps near western pylon, facing north.

Photo 25: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_25
Steps near western pylon, facing east.

Photo 26: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_26
Eastern wall north of pylon, facing southwest.

Photo 27: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_27
Eastern wall north of pylon, facing northwest.

Photo 28: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_28
Lamp post hole in eastern wall north of pylon, facing northeast.

Photo 29: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_29
Eastern wall north of pylon, facing northwest.

Photo 30: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_30
Eastern wall north of pylon, facing southwest.

Photo 31: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_31
Eastern wall north of pylons, facing south.

Photo 32: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_32
Eastern wall north of the Administration Building, facing northeast.

Photo 33: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_33
Eastern wall north of the Administration Building, facing southwest.

Photo 34: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_34
Western wall north of pylon, facing northwest.

Photo 35: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_35
Western wall north of pylon, facing northwest.

Photo 36: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_36
Western wall north of pylon, facing southwest.

Photo 37: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_37
Spalling along western wall north of pylon, facing west.

Photo 38: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_38
Western wall north of pylon, facing northwest.

Photo 39: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_39
Western wall north of pylon, facing northwest.

Photo 40: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_40
Western wall north of pylon, facing north.

Photo 41: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_41
Electricity connection along western wall north of pylon, facing southeast.

Photo 42: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_42
Spalling on western wall north of pylon, facing east.

Photo 43: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_43
Western wall north of pylons, facing southeast.

Photo 44: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_44
Steps near the northern end of western wall north of pylon, facing east.

Photo 45: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_45
Overview of eastern and western walls north of pylons, facing southeast.

Photo 46: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_46
Damage along western wall north of pylon, facing northwest.

Photo 47: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_47
Graffiti on western wall north of pylon, facing south.

Photo 48: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_48
Damage along western wall north of pylon, facing north.

Photo 49: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_49
Western wall north of pylon, facing northeast.

Photo 50: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_50
Administration Building, facing northeast.

Photo 51: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_51
Dedication tablet, facing west.

Photo 52: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_52
Door beneath southern end of approach, facing north.

Photo 53: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_53
Connection with bridge substructure, facing southeast.

Photo 54: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_54
Eastern limestone block wall, facing northwest.

Photo 55: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_55
Eastern limestone block wall between pilasters 9 and 10, facing northwest.

Photo 56: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_56
Pilaster 11, eastern limestone block wall, facing southwest.

Photo 57: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_57
Eastern limestone block wall and railing damage between pilasters 9 and 10, facing west.

Photo 58: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_58
Copper vent along eastern limestone block wall between pilasters 6 and 7, facing west.

Photo 59: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_59
Graffiti on eastern limestone block wall between pilasters 4 and 5, facing west.

Photo 60: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_60
Damage to eastern limestone block wall near pilaster 1, facing west.

Photo 61: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_61
Overview of western limestone block wall, facing east.

Photo 62: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_62
Western limestone block wall, facing northeast.

Photo 63: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_63
Western limestone block wall and pylons, facing northeast.

Photo 64: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_64
Pilaster 2, western limestone block wall, facing east.

Photo 65: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_65
Western limestone block wall between pilasters 3 and 4, facing east.

Photo 66: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_66
Pilaster 4, western limestone block wall, facing east.

Photo 67: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_67
Pilaster 10, western limestone block wall, facing east.

Photo 68: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_68
Pilaster 1 damage, western limestone block wall, facing east.

Photo 69: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_69
Damage to western limestone block wall between pilasters 8 and 9, facing east.

Photo 70: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_70
Western limestone block wall, facing southeast.

Photo 71: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_71
Railing along western side of northern approach, facing southwest.

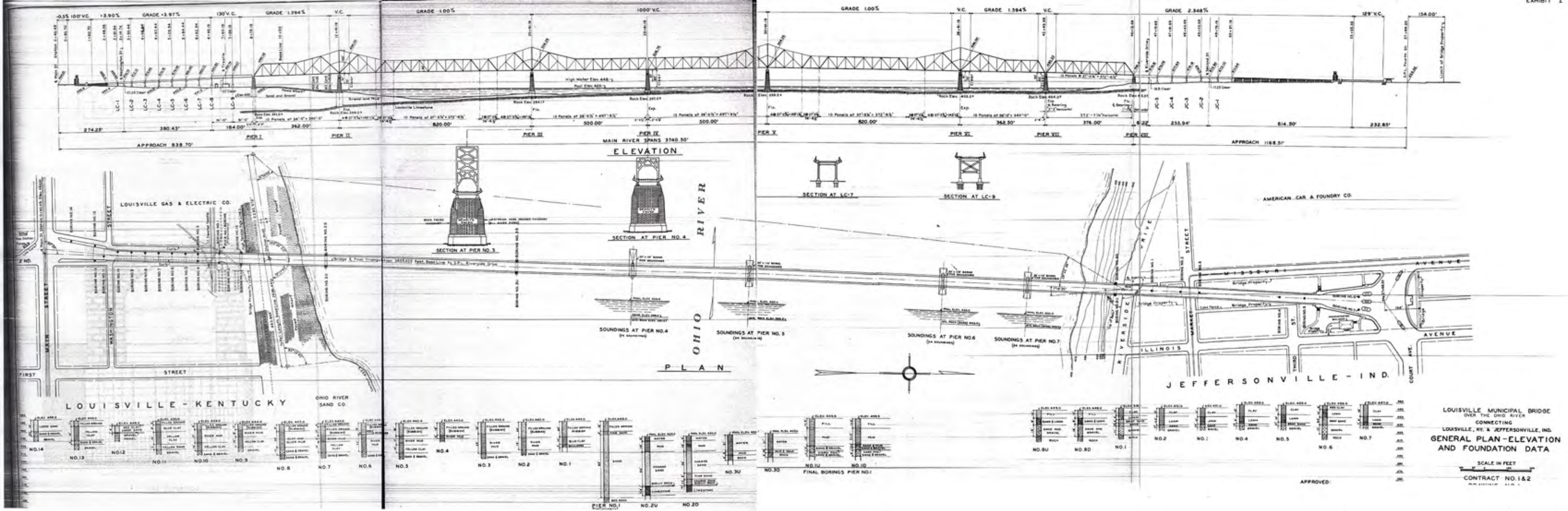
Photo 72: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_72
Connection between railing and western pylon, facing northwest.

Photo 73: IN_ClarkCounty_GeorgeRogersClarkMemorialBridgeIndianaApproach_73
Railing and lamp post base, facing north.

Appendix E. Measured Drawings

Included in this section are select sheets from the original construction drawings included in the 1930 report, *The Louisville Municipal Bridge Over the Ohio River between Louisville, Kentucky and Jeffersonville, Indiana* (Modjeski and Masters), available at the Filson Historical Society, Louisville, Kentucky, and the Main Library of the Louisville Free Public Library, Louisville, Kentucky.

EXHIBIT 1



LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

GENERAL PLAN - ELEVATION AND FOUNDATION DATA

SCALE IN FEET

CONTRACT NO. 1 & 2

APPROVED:

EXHIBIT II

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER

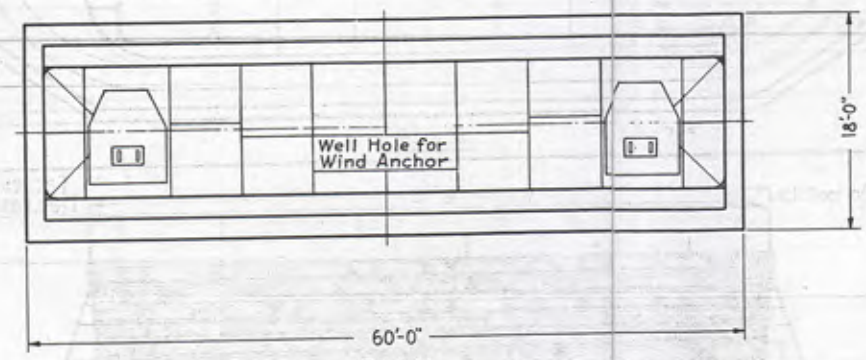
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

PIER I

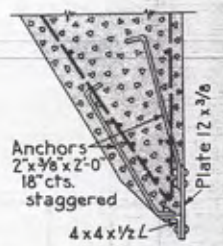
MODJESKI & MASTERS
ENGINEERS

SCALE IN FEET
10 0 10 20 30

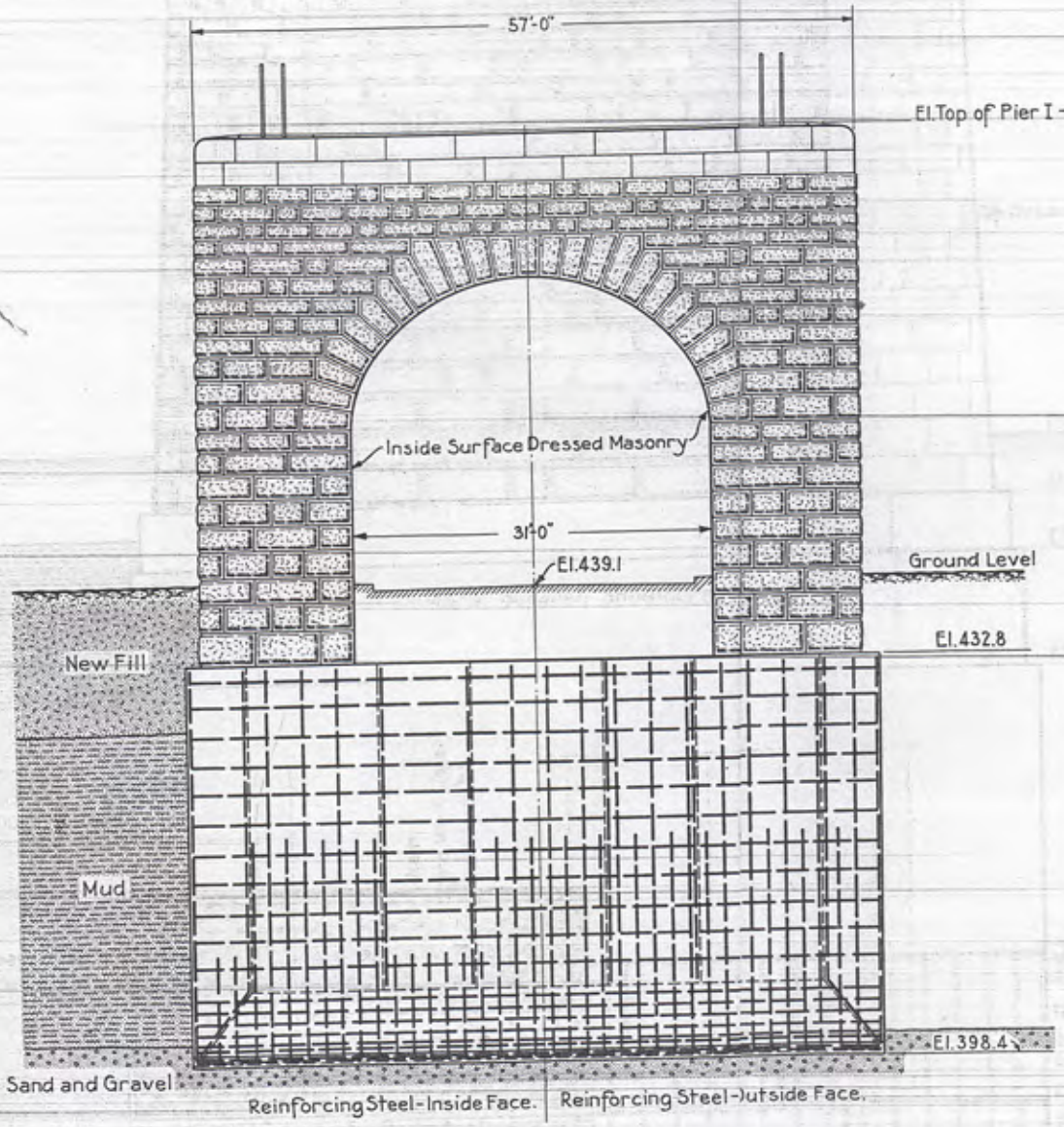
APPROVED:
Ralph Modjeski
F. M. Masters
ENGINEERS



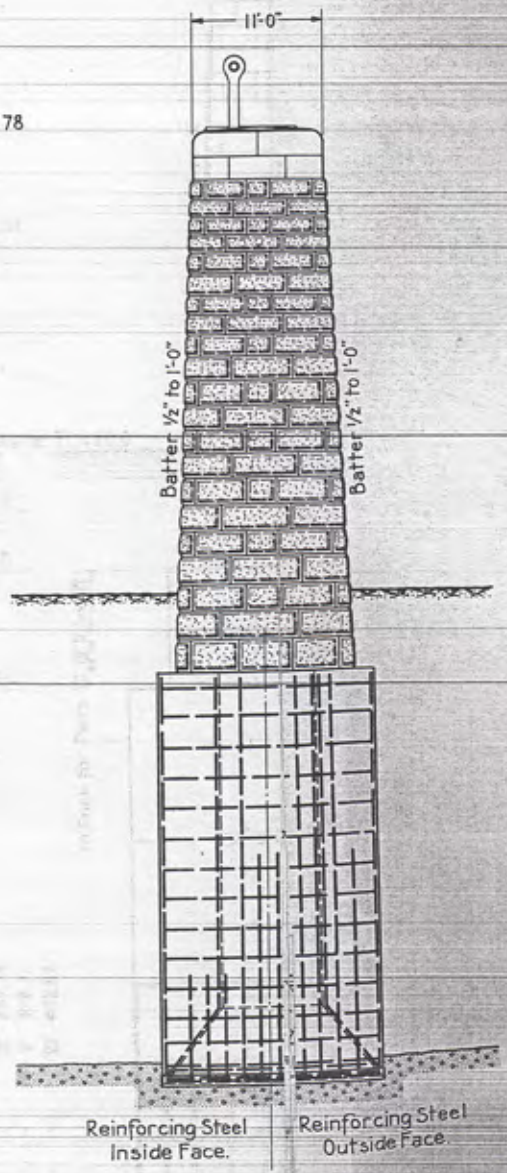
PLAN



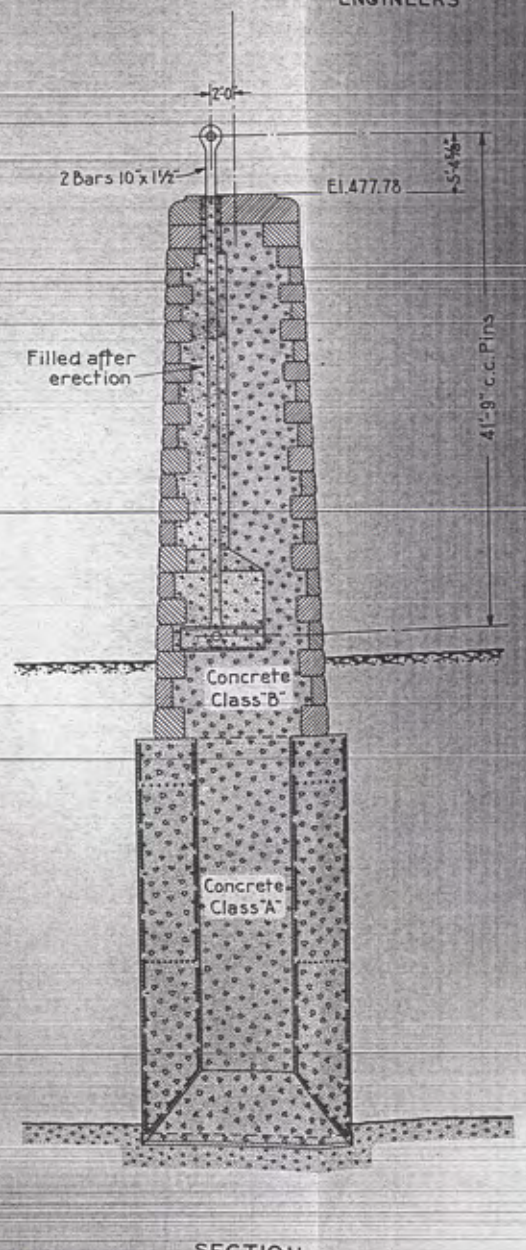
DETAIL OF CUTTING EDGE



SIDE ELEVATION



END ELEVATION



SECTION
THRU ANCHOR WELL

EXHIBIT III

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER

CONNECTING

LOUISVILLE, KY. & JEFFERSONVILLE, IND.

PIERS II, III, IV, V, VI

MODJESKI & MASTERS
ENGINEERS

APPROVED:

Ralph Modjeski

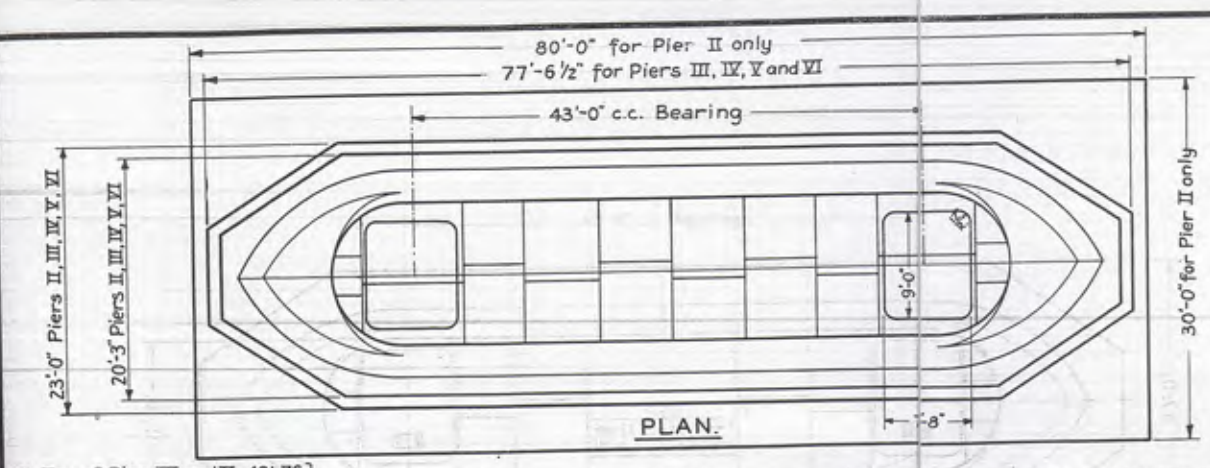
F. N. Masters

ENGINEERS

SCALE IN FEET

10 0 10 20 30

Note: Details shown are for Pier II.
Piers III, IV, V and VI upper portions the same as Pier II except for elevation of tops. Caisson Portions similar to Pier VII except elevation of rock. See Exhibit IV.



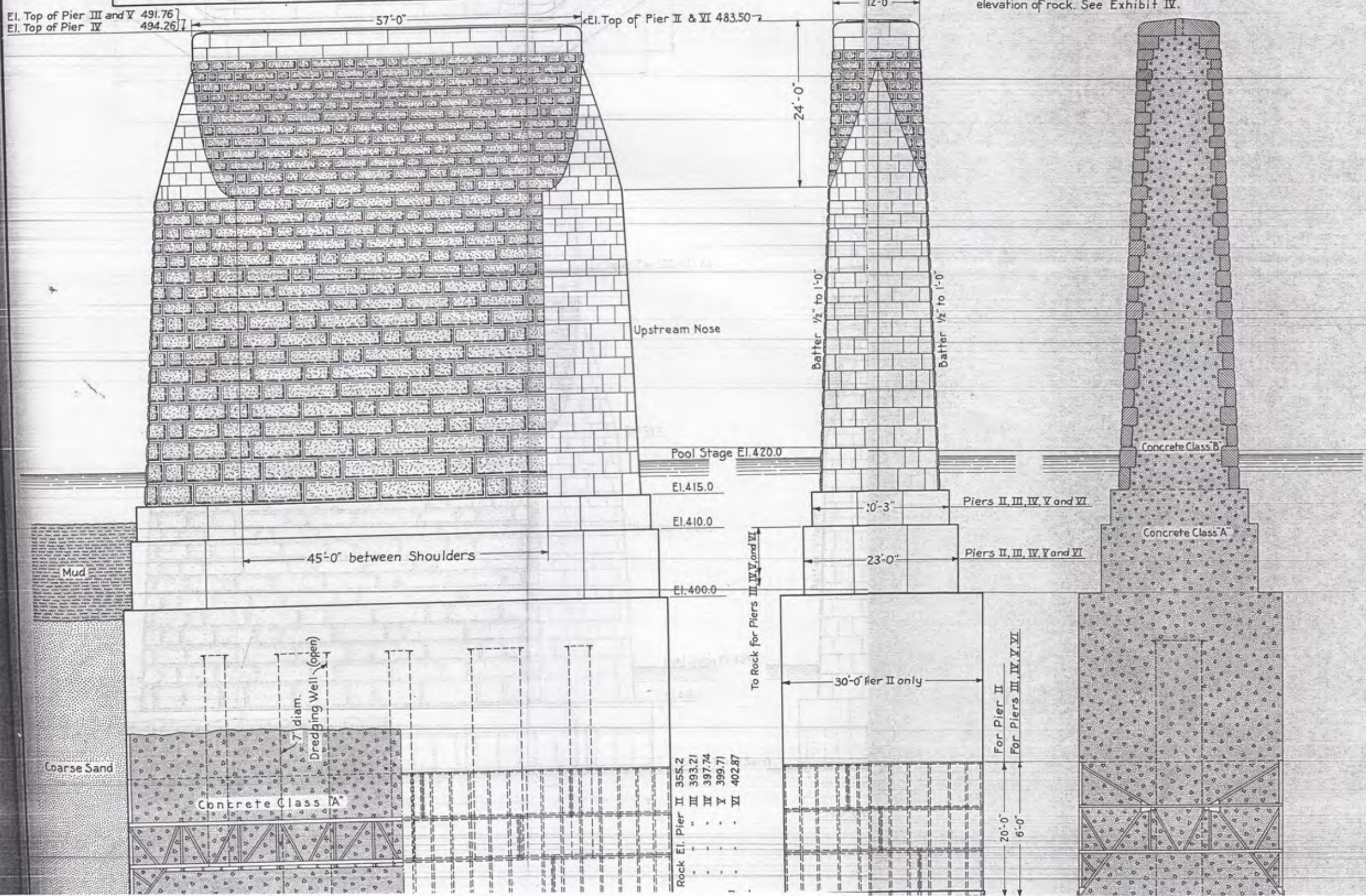


EXHIBIT IV.

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER

CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

PIER VII

MODJESKI & MASTERS
ENGINEERS

SCALE IN FEET

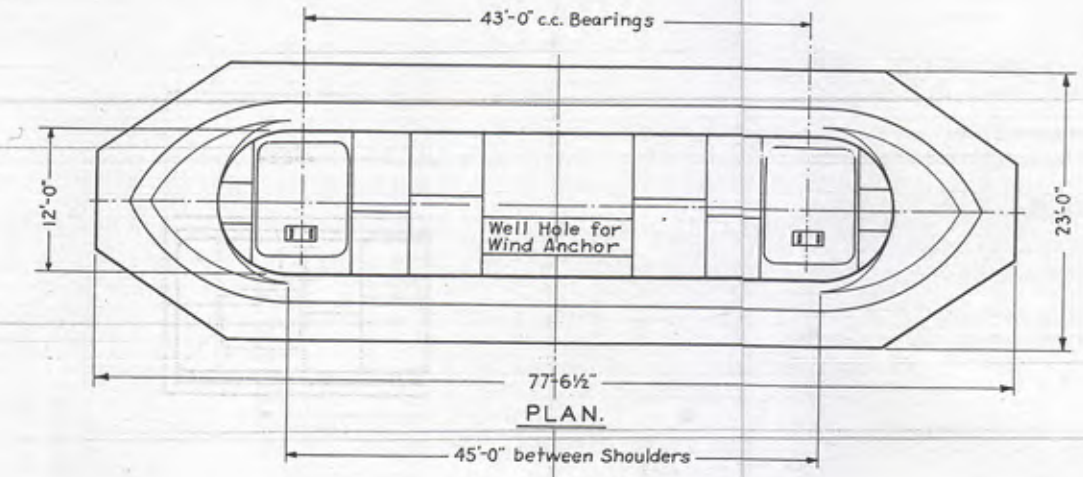
10 0 10 20 30

APPROVED:

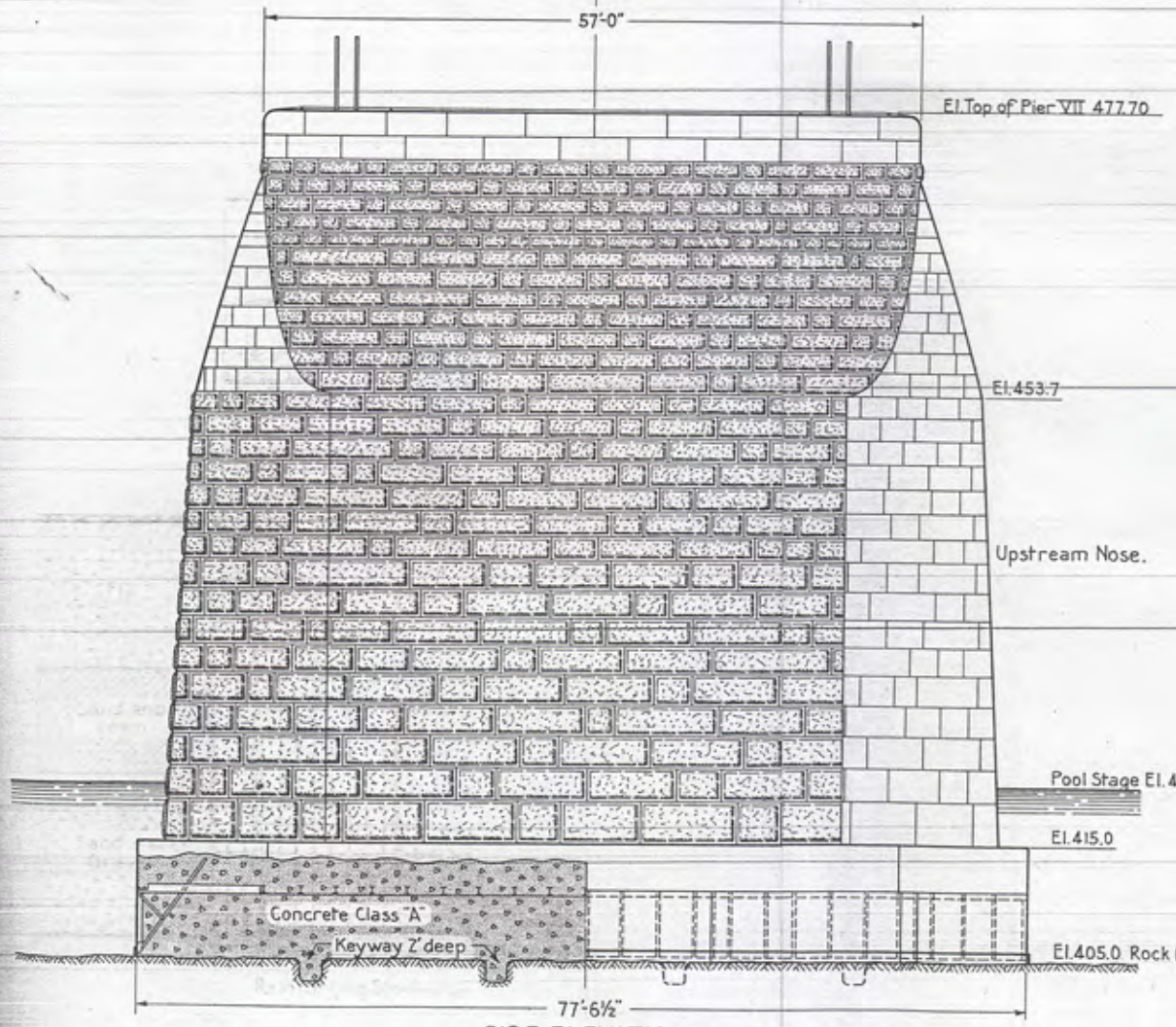
Modjeski & Masters

F. M. Masters

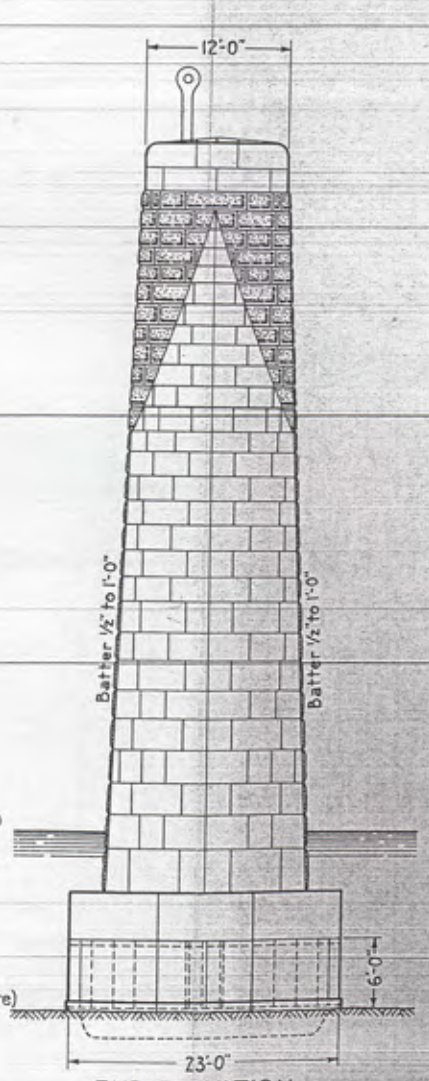
ENGINEERS



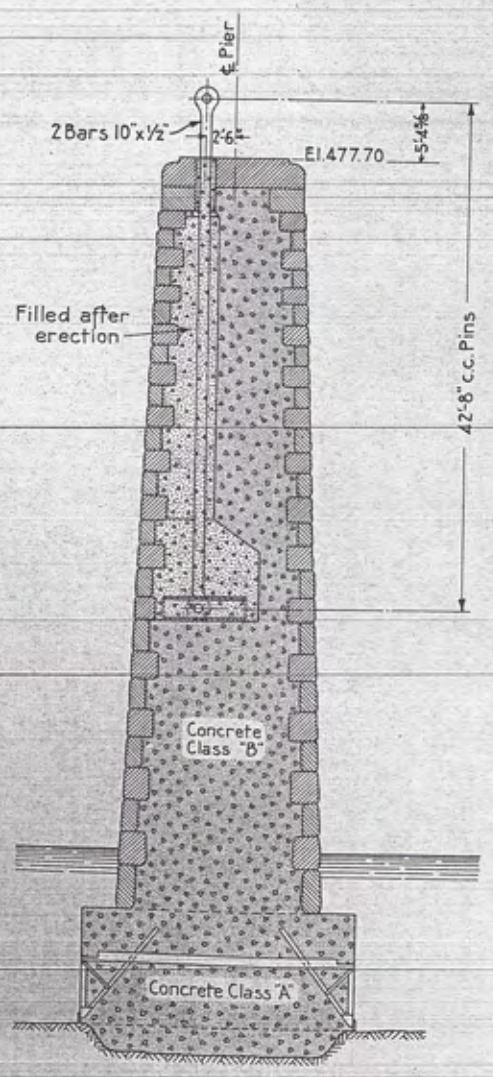
PLAN.



SIDE ELEVATION.



END ELEVATION.



SECTION
THRU ANCHOR WELL.

EXHIBIT V

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER

CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

PIER VIII

MODJESKI & MASTERS
ENGINEERS

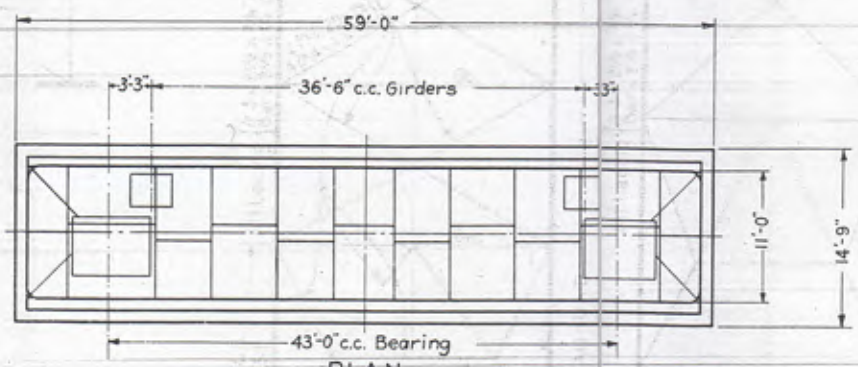
SCALE IN FEET

10 0 10 20 30

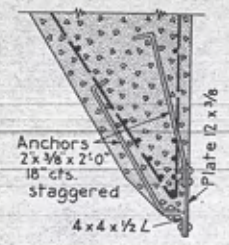
APPROVED:

Ralph Modjeski

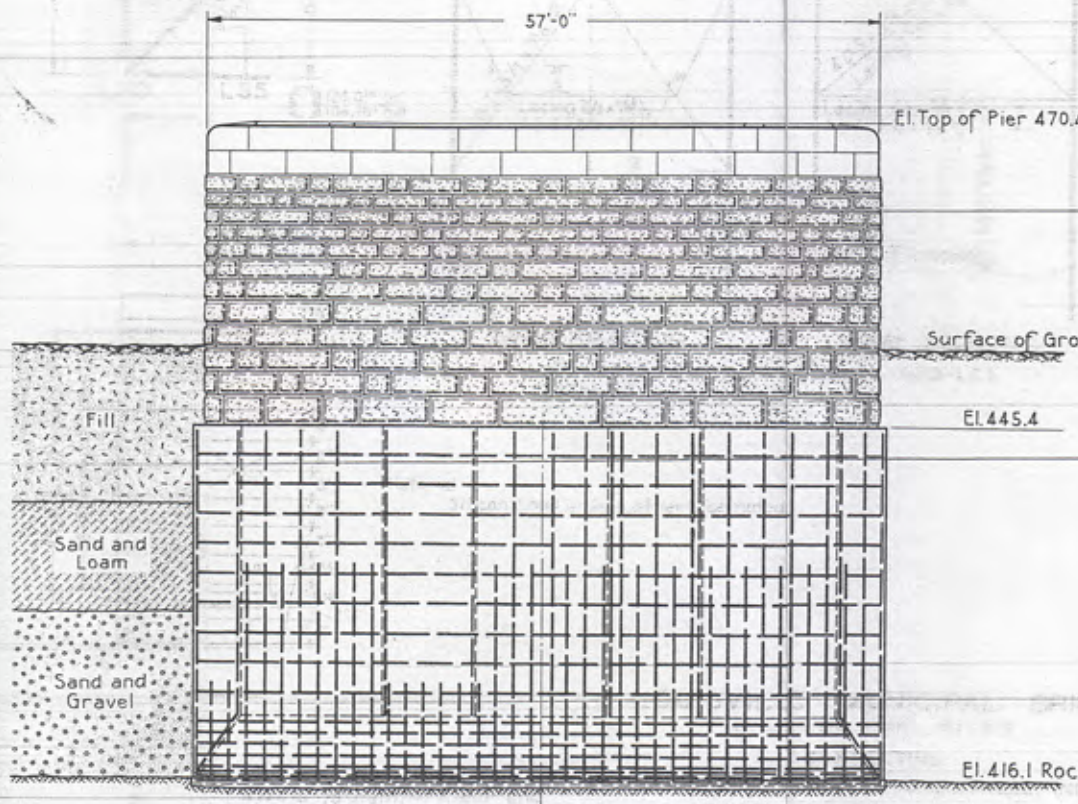
F. M. Masters
ENGINEERS



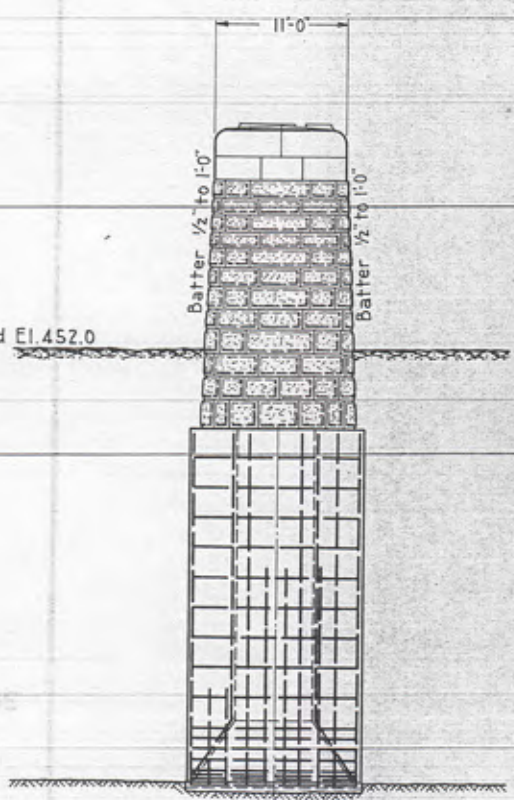
PLAN.



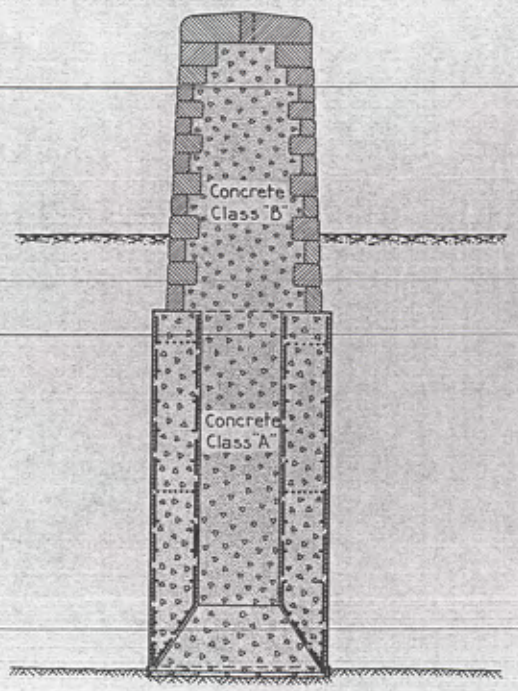
DETAIL OF CUTTING EDGE.



SIDE ELEVATION.



END ELEVATION.



SECTION

EXHIBIT XL

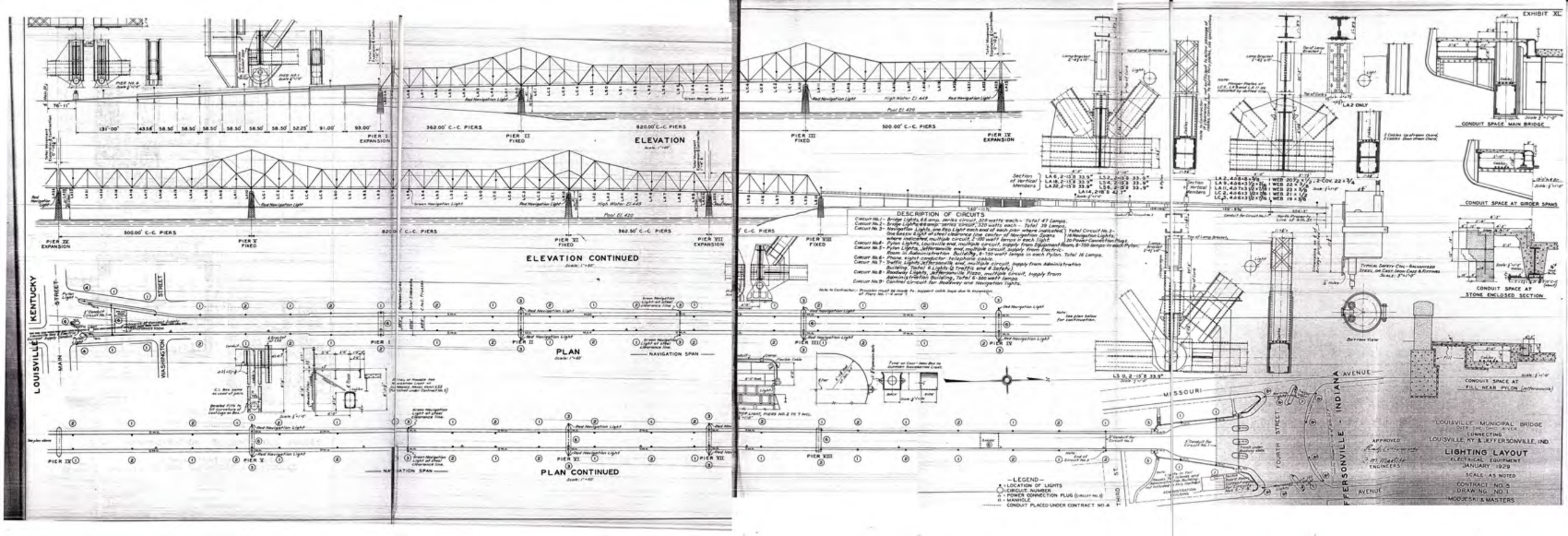
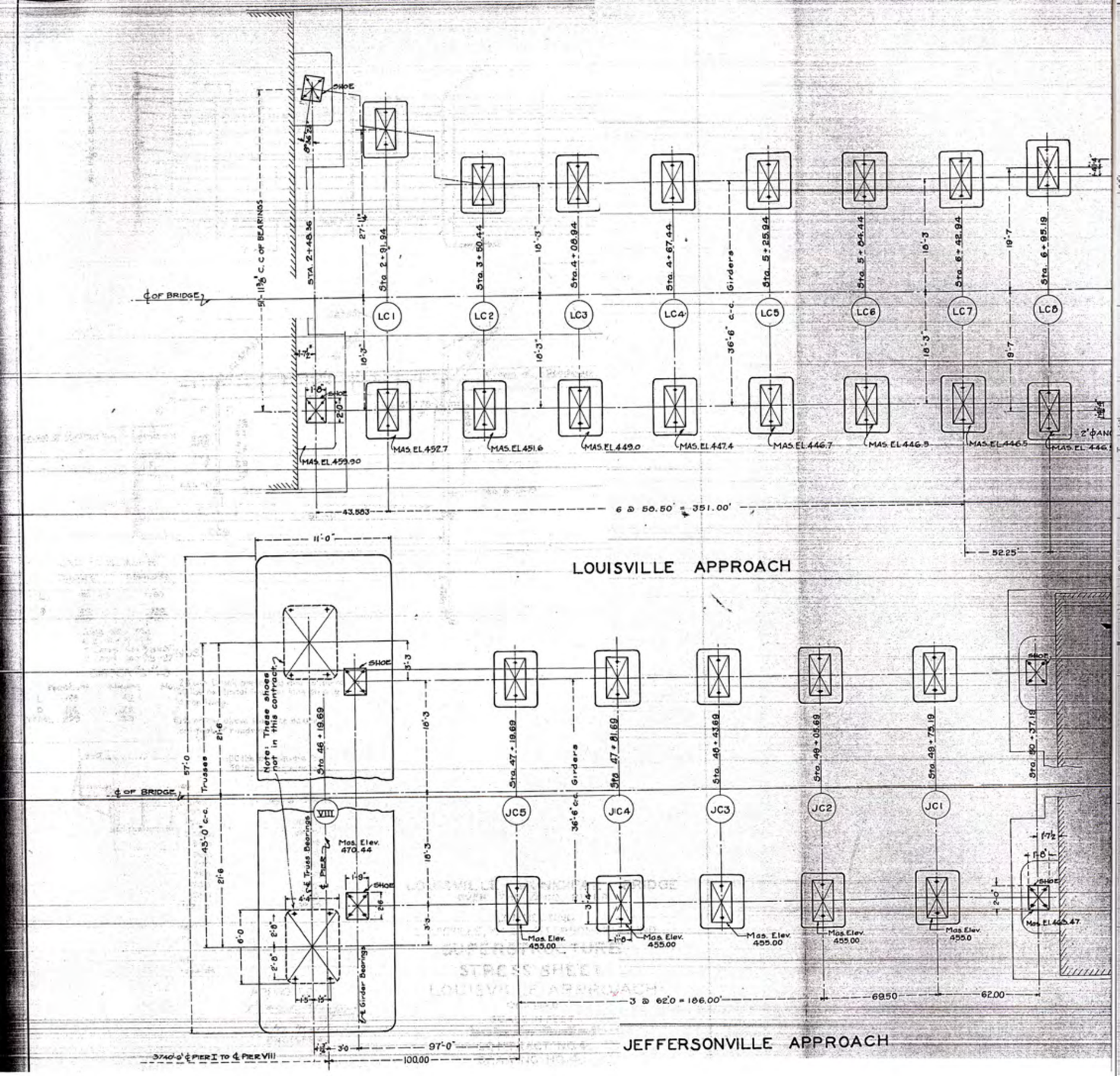
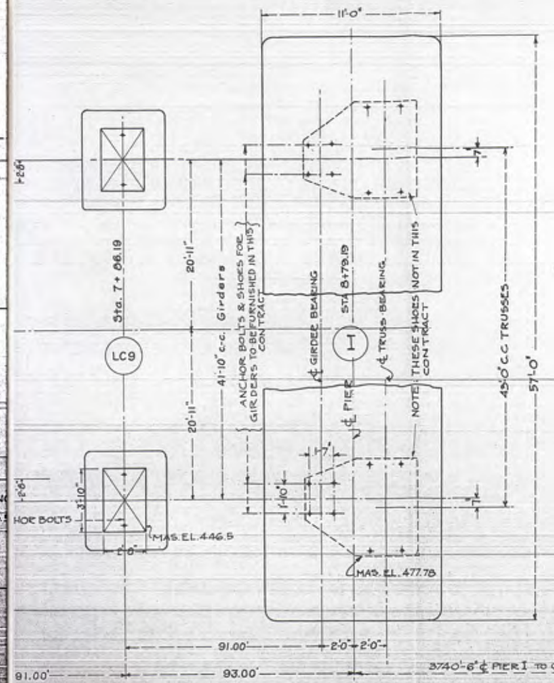

ELEVATION
Scale: 1"=40'
PIER I EXPANSION
PIER II FIXED
PIER III FIXED
PIER IV EXPANSION
PIER V FIXED
PIER VI FIXED
PIER VII EXPANSION
362.00' C.-C. PIERS
500.00' C.-C. PIERS
820.00' C.-C. PIERS
Red Navigation Light
Green Navigation Light
High Water El. 449
Pool El. 420
ELEVATION CONTINUED
Scale: 1"=40'
PLAN
Scale: 1"=40'
NAVIGATION SPAN
PLAN CONTINUED
Scale: 1"=40'
KENTUCKY
LOUISVILLE
MAIN STREET
WASHINGTON STREET
DESCRIPTION OF CIRCUITS
Circuit No.1 - Bridge Lights, 66 amp. series circuit, 308 watts each - Total 47 Lamps.
Circuit No.2 - Bridge Lights, 66 amp. series circuit, 320 watts each - Total 39 Lamps.
Circuit No.3 - Navigation Lights, one Pilot Light each end of each pier, where indicated. One Beacon Light at steel clearance line center of Navigation Spans where indicated, multiple circuit, 2-100 watt lamps in each light. Total Circuit No.3 - 16 Navigation Lights, 20 Power Connection Plugs.
Circuit No.4 - Pylon Lights, Louisville end, multiple circuit, supply from Equipment Room, 8-750 lamps in each Pylon.
Circuit No.5 - Pylon Lights, Jeffersonville end, multiple circuit, supply from Electric-Room in Administration Building, 8-750 watt lamps in each Pylon. Total 16 Lamps.
Circuit No.6 - Phone, eight conductor telephone cable.
Circuit No.7 - Traffic Lights Jeffersonville end, multiple circuit, supply from Administration Building. Total 6 Lights (2 Traffic and 4 Safety)
Circuit No.8 - Roadway Lights, Jeffersonville Plaza, multiple circuit, supply from Administration Building, Total 6-300 watt lamps.
Circuit No.9 - Control circuit for Roadway and Navigation Lights.
Note to Contractor:- Provision must be made for support cable loops due to expansion.
Section of Vertical Members
LA 6, 2-15 @ 33.9°
LA 1B, 2-15 @ 33.9°
LA 2B, 2-15 @ 33.9°
LS 2, 2-15 @ 33.9°
LS 4, 2-15 @ 33.9°
LS 6, 2-15 @ 33.9°
LA 1A, 2-15 @ 42.7°
LA 2A, 2-15 @ 33.9°
LA 2 ONLY
LA 2, 4.0 6 x 5/16 WEB 20 1/2" x 5/16 2-COV. 22 x 3/4
LA 9, 4.0 6 x 33/64 WEB 23 x 5/16
LA 11, 4.0 7 x 33/64 WEB 23 x 5/16
LC 2, 4.0 6 x 13/64 WEB 21 x 1/2
LC 3, 4.0 6 x 13/64 WEB 19 x 5/16
CONDUIT SPACE MAIN BRIDGE
CONDUIT SPACE AT GIRDER SPANS
CONDUIT SPACE AT STONE ENCLOSED SECTION
CONDUIT SPACE AT FILL NEAR PYLON (alternate)
Typical Safety Cage - Galvanized Steel, on East Main Cage & Ladders
Borrow View
LEGEND
X - LOCATION OF LIGHTS
◯ - CIRCUIT NUMBER
△ - POWER CONNECTION PLUG (CIRCUIT NO.3)
□ - MANHOLE
CONDUIT PLACED UNDER CONTRACT NO.4
MISSOURI AVENUE
INDIANA AVENUE
JEFFERSONVILLE
FOURTH STREET
THIRD ST.
LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.
LIGHTING LAYOUT
ELECTRICAL EQUIPMENT
JANUARY 1929
SCALE AS NOTED
CONTRACT NO. 5
DRAWING NO. 1
MODJESKI & MASTERS
APPROVED
Ralph Modjeski
F. H. Masters
ENGINEERS

EXHIBIT XXIV





NOTE:
ALL ANCHOR BOLTS TO BE 1½"Φ (EXCEPT AS NOTED) AND TO BE OF THE WEDGE TYPE, EXTENDING 5'-0" INTO MASONRY.

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER

CONNECTING

LOUISVILLE, KY. & JEFFERSONVILLE, IND.

APPROACHES

LOCATION PLAN-STEEL SUPPORTS

NOV. 1928

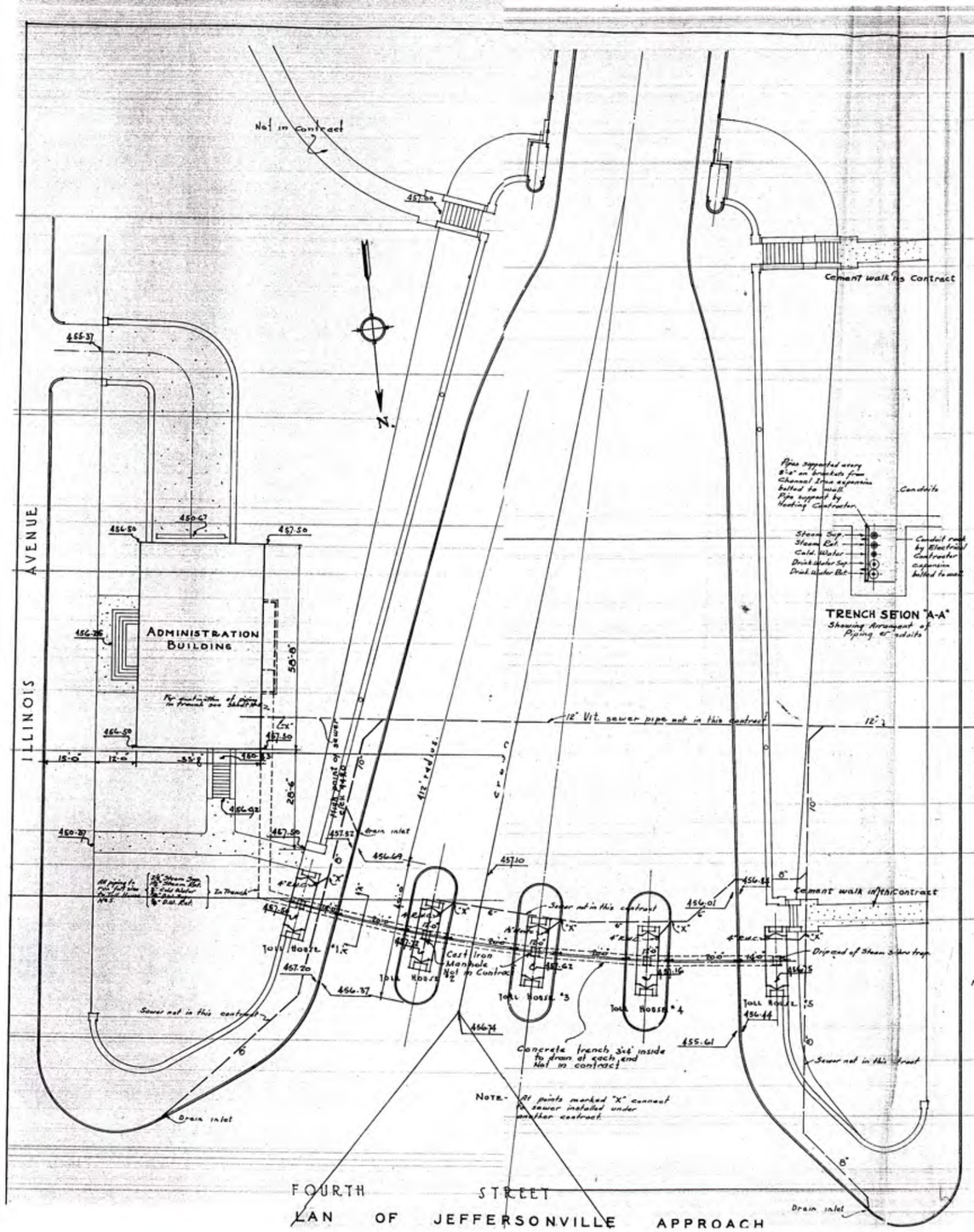
SCALE IN FEET
0 1 2 3 4 5 6 7 8 9 10

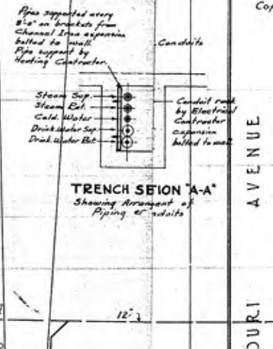
CONTRACT NO. 4.
DRAWING NO. 3.

APPROVED
Lloyd Morgan
F. M. Masters
ENGINEERS

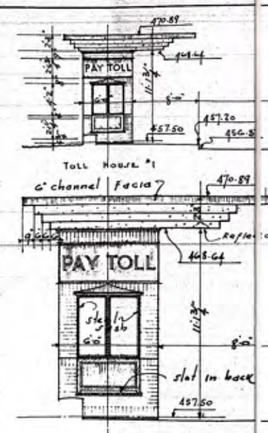
MODJESKI AND MASTERS
ENGINEERS

EXHIBIT XLIII

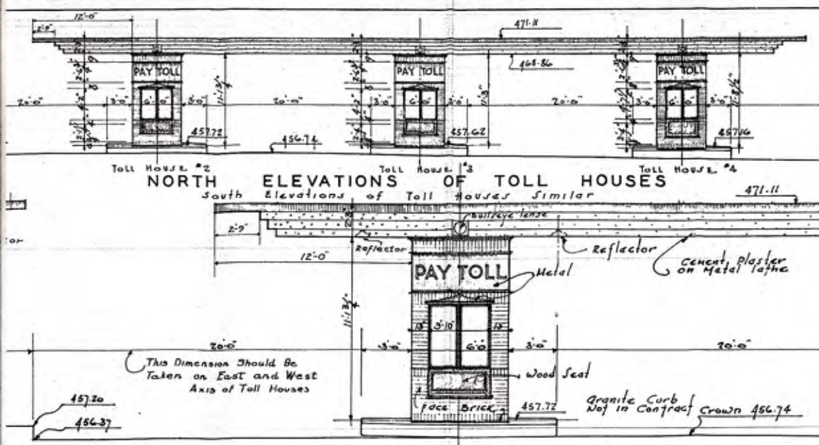




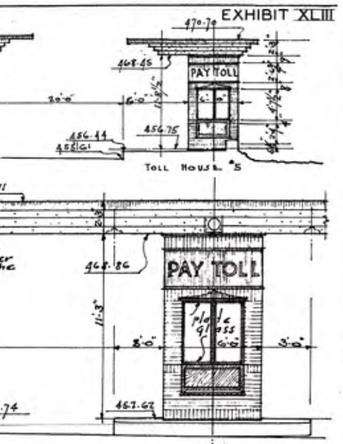
TRENCH SECTION "A-A"
Showing Arrangement of Piping & Conduits



TOLL HOUSE #1
South Elevation Similar

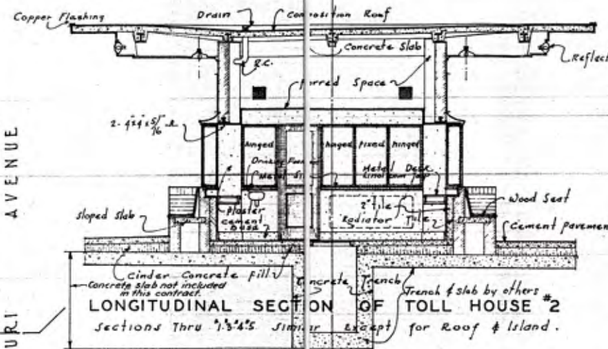


NORTH ELEVATIONS OF TOLL HOUSES
South Elevations of Toll Houses Similar

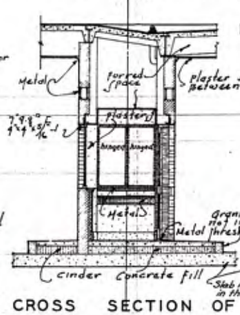


TOLL HOUSE #3
South Elevation Similar

TOLL HOUSE #2
South Elevation Similar

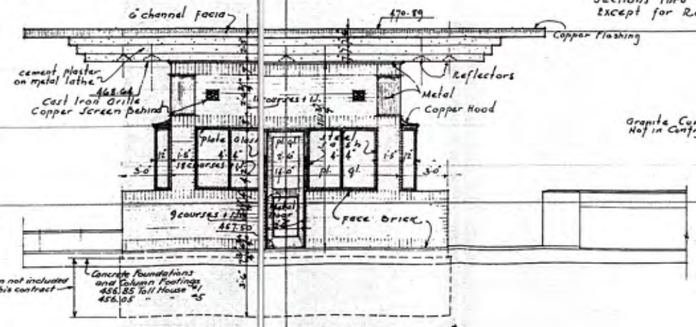


LONGITUDINAL SECTION OF TOLL HOUSE #2
Sections Thru 1-3-4-5 Similar Except for Roof & Island.

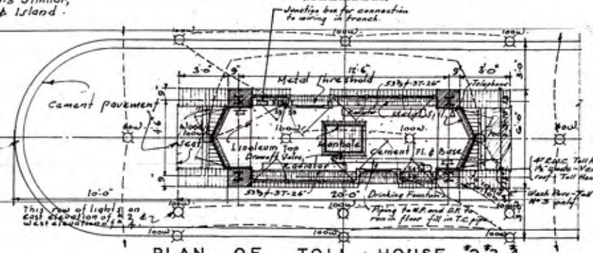


CROSS SECTION OF EAST ELEVATION OF TOLL HOUSE #2
TOLL HOUSE #2
Sections Thru 1-3-4-5 Similar, Except for Roof & Island.

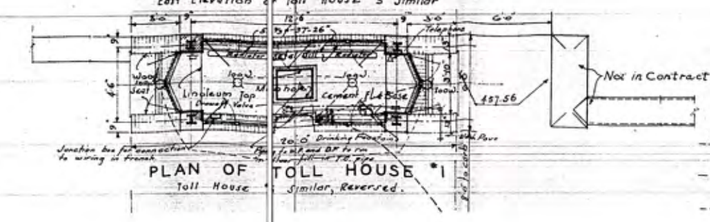
All East & West Elevations of Toll Houses #3 & #2 Similar
West Elevation of Toll House #2 Similar



WEST ELEVATION OF TOLL HOUSE #1
East Elevation of Toll House #5 Similar



PLAN OF TOLL HOUSE #2-3-4



PLAN OF TOLL HOUSE #1
Toll House #4 Similar, Reversed.

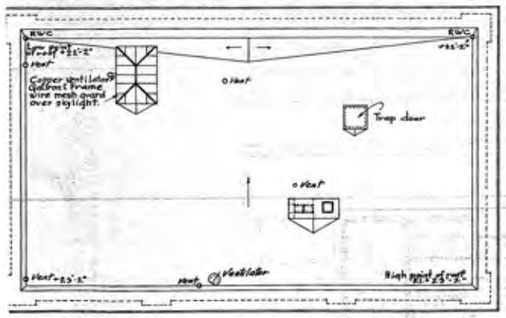
LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

ADMINISTRATION BUILDING, TOLL HOUSES AND INTERIOR OF APPROACHES
TOLL HOUSES AND PLOT PLAN

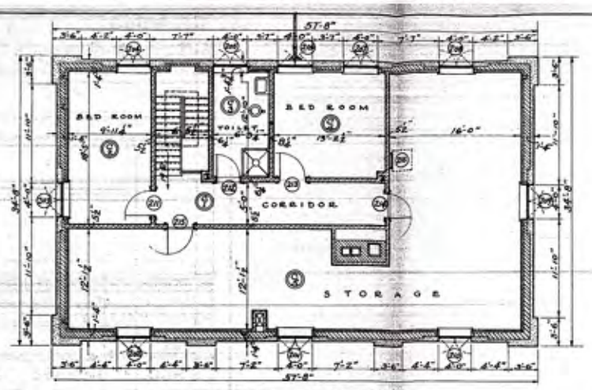
APPROVED
Ralph Modjeski
F. M. Masters
ENGINEERS
Sam S. Hart

DATE MARCH 1, 1929
SCALE 1/16 - 1/8 - 1/4 = 1-0
CONTRACT NO. 6
DRAWING NO. 3
MODJESKI & MASTERS
ENGINEERS

EXHIBIT XLI

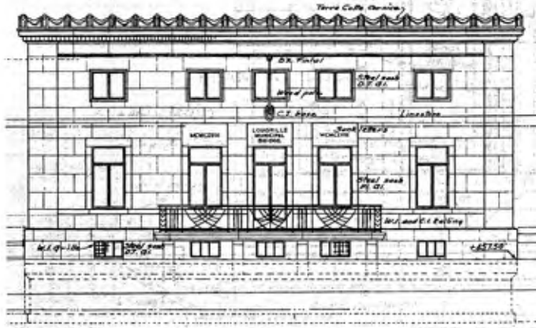


ROOF PLAN

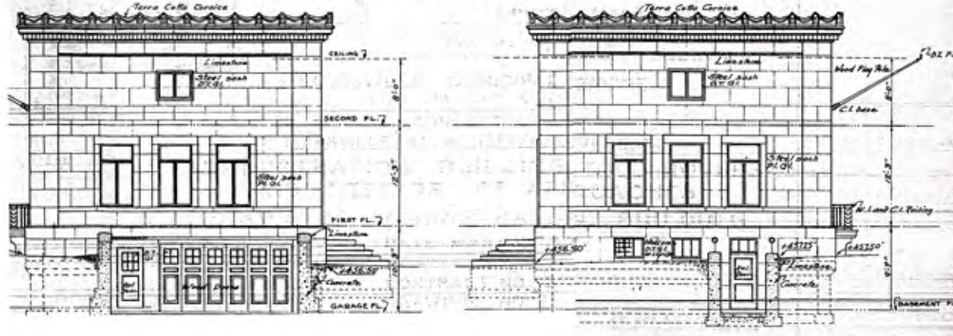


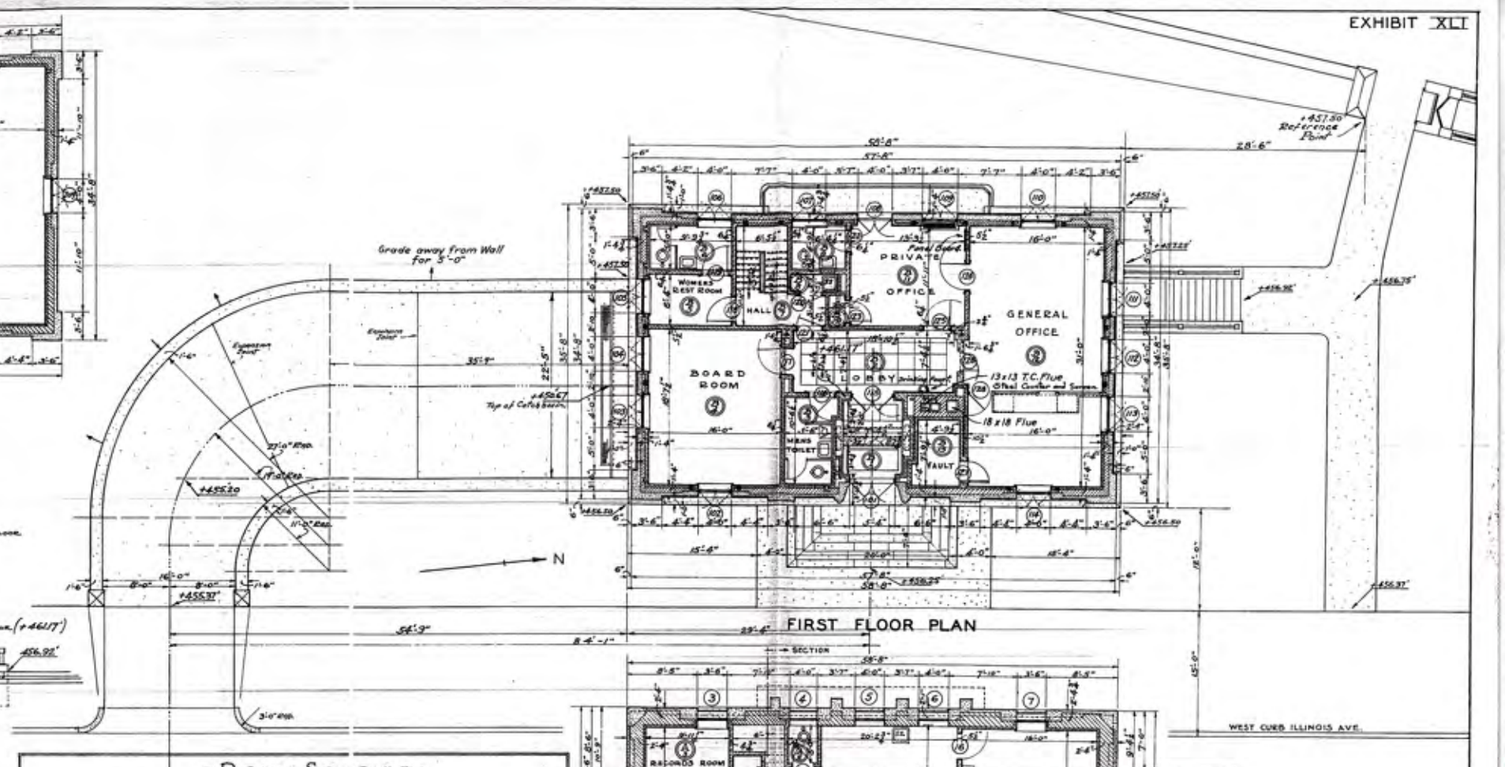
SECOND FLOOR PLAN

EAST ELEVATION

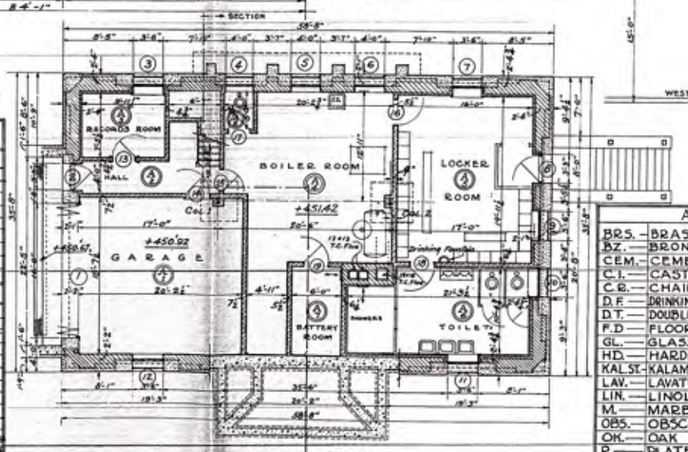


WEST ELEVATION





FIRST FLOOR PLAN



BASEMENT FLOOR PLAN

ROOM SCHEDULE

BASEMENT

ROOM	No.	FLOOR	BASE	WALLS	CEILING	STAIRS	PLUMBING	MISCELLANEOUS
GARAGE	A1	CEM.(SL)	CEM.	CEM.PL.	CEM.PL.	D.T. GL.	F.D.	
HALL	A2	" "	"	PL.	PL.			
WOMEN'S REST ROOM	A3	" "	"	"	"	D.T. GL.		
BOILER ROOM & COAL BUNKER	A4	" "	"	"	"	" "	F.D.	
LOCKER ROOM	A5	" "	"	"	"	OBS.GL.	LEAD D.	LOCKERS, BENCHES & PARTITIONS
TOILET	A6	TZ.	TZ.COVE.	CEM.PL.	CEM.PL.	" "		
BATTERY ROOM	A7	CEM.(SL)	CEM.	PL.	PL.			
TOILET	A8	" "	"	CEM.PL.	CEM.PL.	OBS.GL.	I.W.C.	

FIRST FLOOR

VESTIBULE	B1	TZ. SEE FINISH		PL. M.WA.	PL. PL.CEMENT	M.TILE & BASE		FD. STD.	SD.WX.
LOBBY	B2	"		"	"		D.F. & W.C.	" "	" "
MEN'S TOILET	B3	TZ.	TZ.COVE	"	PL.			PD.	" "
BOARD RM	B4	LIN.	OK.	PL.	PL.	P. GL.		FD. STD.	"
PRIVATE OFFICE	B5	LIN.	OK.	"	"	P. GL.		PD. STD.	"
GEN. OFFICE	B6	TZ.	TZ. COVE	M.WA.	"	OBS. GL.		PD.	"
HALL	B7	TZ.	TZ. COVE BASE 12"	PL.	"		LAV. 1 W.C.	PD. STD.	"
TOILET	B8	CEM.(SL)	CEM.	PL.	"	ST. W. FL. TREAD	I.S.S.	FD	SD. VD.
TOILET	B9	TZ.	TZ.COVE.	M.WA.	"	P. GL.	LAV. 1 W.C.	FD.	SD. WX.
CLOSET	B10	LIN.	OK	PL.	"			PD.	" "
PRIV. OFFICE	B11	"	"	"	"	P. GL.		PD. STD.	" "
GEN. OFFICE	B12	"	"	"	"	"			
VAULT	B13	"	"	"	"			PD.	" "

SECOND FLOOR

CORRIDOR	C1	LIN.	OK	PL.	PL.	ST. W. FL. TREAD		FD. STD.	SD. WX.
BED RM.	C2	"	"	"	"	D.T. GL.		" "	" "
TOILET	C3	TZ.	TZ.COVE.	M.WA.	"	"	LAV. 1 W.C.	FD. STD.	"
BED RM.	C4	LIN.	OK.	PL.	"	"		PD. STD.	" "
STORAGE	C5	CEM.	"	"	"	"		FD.	SD. V.P.

TOLL HOUSES

TOLL ROOMS	F.2	CEM.(SL)	CEM.	CEM.PL.	CEM.PL.	P. GL.	D.F.	PD.

INTERIORS OF APPROACHES

LOUISVILLE APPROACH

POLICE RM.			CEM.	CEM.PL.	CEM.PL.			PD.	SD.V.D.
TOILET				CEM.PL. to 3'-6" M.WA.			LAV. 1 W.C.	PD.	"
EQUIP. RM.				CEM.PL. to TILE WALL					

JEFFERSONVILLE APPROACH

GARAGE			CEM.	CEM.PL. or TILE	WALL.				SD.VD.

DOOR SCHEDULE

NO.	SIZE	THICK	MAT'L	GLASS	TRIM	THRESH.	FINISH	PANELS	MISC.
1	Misc	2¼	WF	DT.GL.			VIS.	3	BUILDING
2	3'-0"	1¾	WF	DT.GL.	OK.	C.I.	FD.	2	TOLL RM. 2 SIDES
8	2'-6"0"	"	"	"	"	"	"	1	TOLL RM. 2 SIDES
13	3'-0"	"	"	"	"	"	"	1	OBS.GL.
14	"	"	"	½ GL.	"	"	"		
15	"	"	"	"	"	"	"		
16	"	"	"	"	"	"	"	2	
17	2'-6"0"	"	OK	OK.			SD.VD.	1	
18	2'-6"0"	"	"	OBS.GL.	WF M.	"	"	1	
19	3'-0"	"	"	OK.	"	"	"	1	WALL ST. FRAMING

NO.	SIZE	THICK	MAT'L	GLASS	TRIM	THRESH.	FINISH	PANELS	MISC.
101	2'-8"	2"	BE.	P.GL.			BE. WAXED	1	ST. TREAD
115	2'-6"	1¾"	OK	P.GL.	OK		SD. VD.	1	TERRAZZO
116	2'-6"0"	"	"	"					
117	3'-0"0"	"	"	"					OBS.GL.
118	2'-6"0"	"	"	"					
119	2'-6"0"	"	"	"					
120	2'-6"0"	"	"	"					
121	3'-0"0"	"	"	"					OBS.GL.
122	2'-6"0"	"	"	"					
123	2'-6"0"	"	"	"					

NO.	SIZE	THICK	MAT'L	GLASS	TRIM	THRESH.	FINISH	PANELS	MISC.
124	2'-6"0"	"	"	"					
125	2'-6"0"	"	"	"					
126			BE.					1	ST. TREAD
127									TERRAZZO
128									
211	3'-0"0"	1¾	OK		OK.		SD.WX.	1	
212	2'-6"0"	"	"		OK.				
213	3'-0"0"	"	"		OK.				
214	"	"	"		OK.				
215	"	"	"		OK.				
216	Trap	door	see	detail					

All panels in doors to be wood unless otherwise noted.

TOLL HOUSE DOORS

NO.	SIZE	THICK	MAT'L	GLASS	TRIM	THRESH.	FINISH	PANELS	MISC.
TOLL ROOMS	2'-6"0"	1¾	ST	P.GL.		C.I.	FD.	2	STEEL FRAMES
" "	"	"	"	"		"	"	"	"
" "	"	"	"	"		"	"	"	"
" "	"	"	"	"		"	"	"	"

INTERIOR OF APPROACH

BOILER ROOM	3'-0"0"	1¾	OK		OK		SD.WX.	
GARAGE	3'-0"0"	1¾	KAL.		OK	C.I.	FD.	1

ABBREVIATIONS

BRS.	BRASS	PM.	PICTURE MOLD
BZ.	BRONZE	R.	RISERS
CEM.	CEMENT	RAD.	RADIATOR
C.I.	CAST IRON	SD.	STAINED
C.R.	CHAIR RAIL	SH.	SHOWER
D.F.	DRINKING FOUNTAIN	SL.	SLATE
D.T.	DOUBLE THICK	SS.	SLOP SINK
F.D.	FLOOR DRAIN	ST.	STEEL
GL.	GLASS	STD.	STIPPLED
HD.	HARDENED	TR.	TRANSOM
KAL.ST.	KALAMEIN STEEL	TREDS.	TREADS
LAV.	LAVATORY	TZ.	TERRAZZO
LIN.	LINOLEUM	U.	URINAL
M.	MARBLE	VD.	VARNISHED
OBS.	OBSCURE	WA.	WAINSCOT
OK.	OAK	W.C.	WATER CLOSET
P.	PLATE	W.P.	WHITE PINE
PART.	PARTITION	WX.	WAXED
PD.	PAINTED	WI.	WROUGHT IRON
PL.	PLASTER	SH.	SHOWER
PLER.	PINK LEPANTO		

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY., & JEFFERSONVILLE, IND.

ADMINISTRATION BUILDING, TOLL HOUSES, AND INTERIOR OF APPROACHES.

ADMINISTRATION BUILDING, PLANS, ELEVATIONS, & SCHEDULES.

DATE MARCH 1, 1929.
SCALE 1/8 - 1'-0"
CONTRACT NO. 6.
DRAWING NO. 1.

MODJESKI & MASTERS
ENGINEERS.

APPROVED
Ralph Modjeski
F. M. Masters
ENGINEERS
Gene L. Leech
ARCHITECT

EXHIBIT XXI

MISSOURI

AVENUE

30" Brick Sewer 9½' Deep

10' Sidewalk Cinders

10' Brick Sidewalk

Brick Retaining Wall

Railing

Sta. 50+37.19

Expansion Joint

18" Tree

24" Tree

6" Poplar

8" W. Cherry

6" Catalpa

BRIDGE PROPERTY

12' ALLEY

Cable

PRIVATE PROPERTY
OCCUPIED BY DWELLINGS

Concrete Sidewalk

Curb

AVENUE

Match Line

Railing

Triangulation Point

PIER NO. VIII

38'-10"

8'-8"

49'-4"

0+00

Boring No. 1

Boring No. 2

12'-0"

10'-0"

122.9'-0"

64°23'

Tree

Concrete

67.3'

Cinders

No Curb

Dirt

Property Line

BRIDGE PROPERTY

PRIVATE PROPERTY
OCCUPIED BY DWELLINGS

12" Catalpa

6" Maple

12" Maple

12' ALLEY

STREET

RAILWAY

ELECTRIC

MARKET

4" Gas Main 4' Deep

Macadam

8" Water Main 4' Deep

Curb

11' Sidewalk

60'

RIVERSIDE DRIVE

WEST

OHIO RIVER

CLAY

LOAM

GRAY SAND

SAND

GRAVEL

ROCK

#1

#2

1" Water Line

1½" Gas Line

ILLINOIS

2.348%

Sta. 46+19.69

Elev. 481.44

Elev. 470.44

Elev. 455.00

97'-6"

62'-0"

69'-6"

Sta. 46+19.69

Sta. 47+81.69

Sta. 48+43.69

Sta. 49+05.69

APPROVED

F. M. Masters

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

APPROACHES
JEFFERSONVILLE SURVEY PLAN

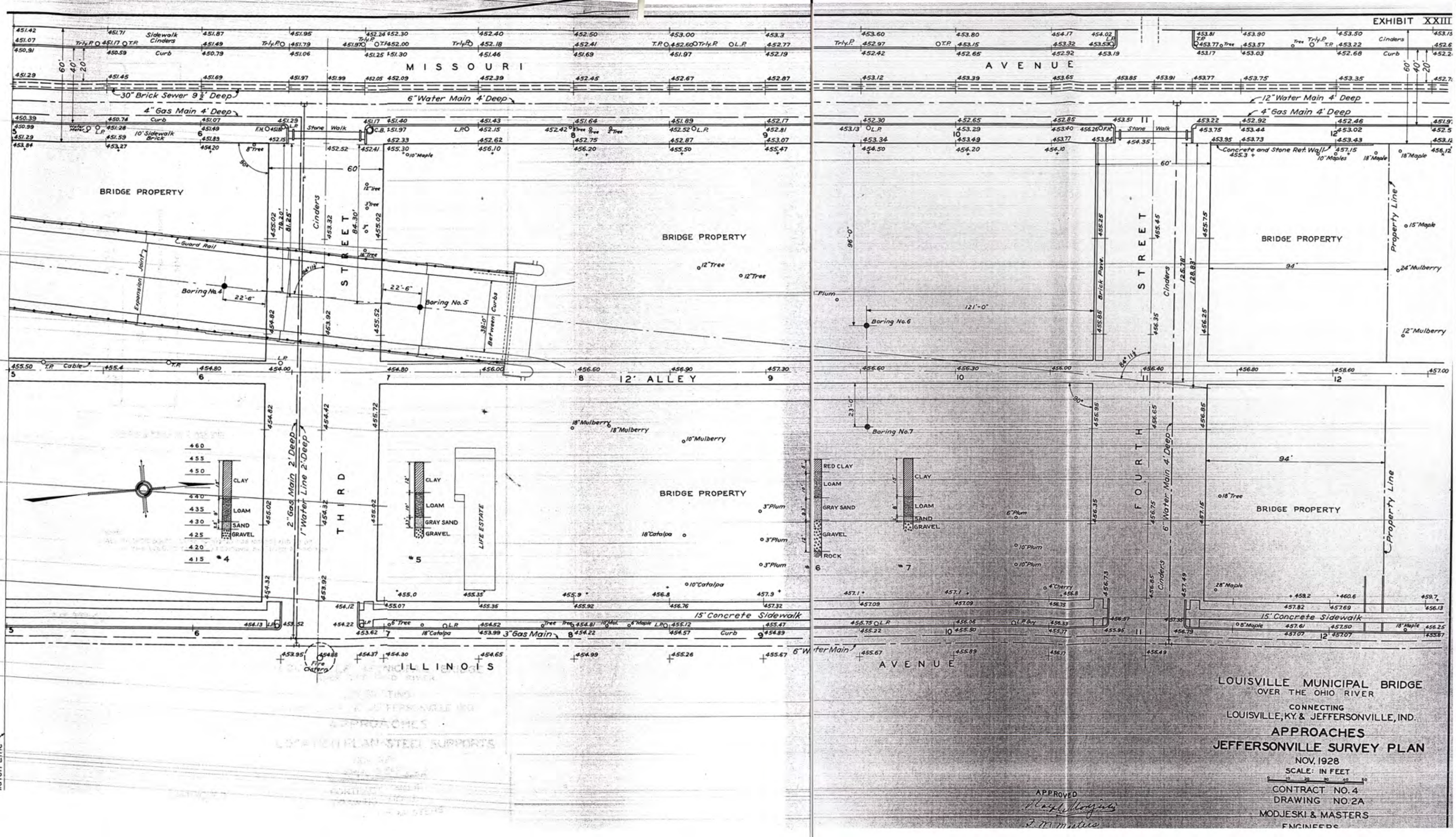
NOV. 1928

SCALE: IN FEET

CONTRACT NO. 4
DRAWING NO. 2

MODJESKI & MASTERS

EXHIBIT XXIII



LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER

CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

APPROACHES
JEFFERSONVILLE SURVEY PLAN

NOV. 1928
SCALE: IN FEET
0 10 20 30 40 50

CONTRACT NO. 4
DRAWING NO. 2A
MODJESKI & MASTERS
ENGINEERS

APPROVED
Mayor Hodgins
Chairman

utting Line
Match Line

EXHIBIT XXX

MISSOURI AVENUE

MARKET STREET

THIRD STREET

FOURTH STREET

ILLINOIS AVENUE

RADER PARK

LIMIT OF CONTRACT

PROPERTY LINE

Top Soil

Drain Inlet

Granite curb & cement sidewalk

Top soil to continue under bridge structure

C.I. Post in railing for future lamp post

Lamp Standards not in this contract

Path not in this contract

Areas marked "Top Soil" to be graded to an even slope to meet the grades as indicated and covered with top soil as specified

Note
See ¼" scale plan of approach for electrical conduit, drainage etc.

N

PLOT PLAN
Scale ½" = 1'-0"

CONTINUATION OF PLOT PLAN
Scale ½" = 1'-0"

ELEVATION
Scale ¼" = 1'-0"

Lantern not in this contract

Lamp Standards not in this contract

cast iron post to receive future lamp standard

Bronze ventilating grilles above upper bay

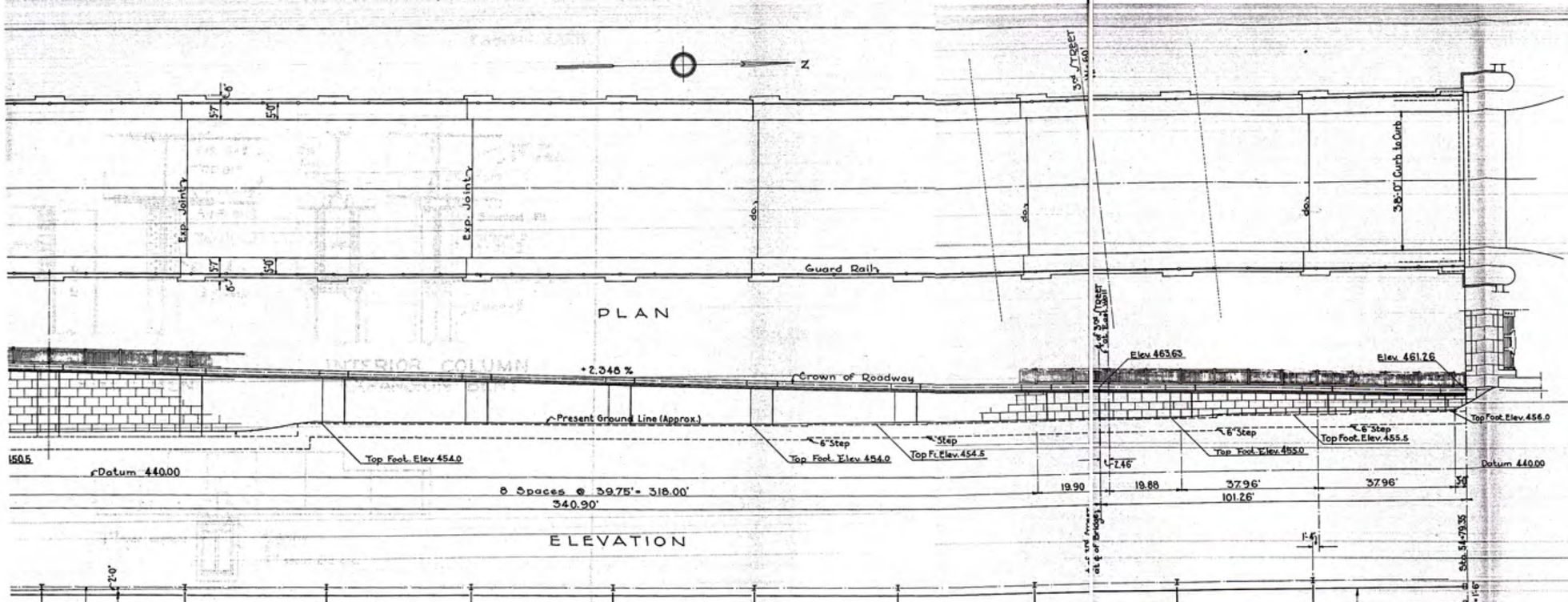
For Details of Footings see Sheet 12

Bottom of Footer 3 feet below ground line

APPROVED
Ralph Modjeski
F. M. Masters
ENGINEERS

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.
APPROACHES
JEFFERSONVILLE GENERAL PLAN
NOV. 1928
SCALE: AS NOTED
CONTRACT NO. 4
DRAWING NO. 15
MODJESKI & MASTERS
ENGINEERS

EXHIBIT XXXIII

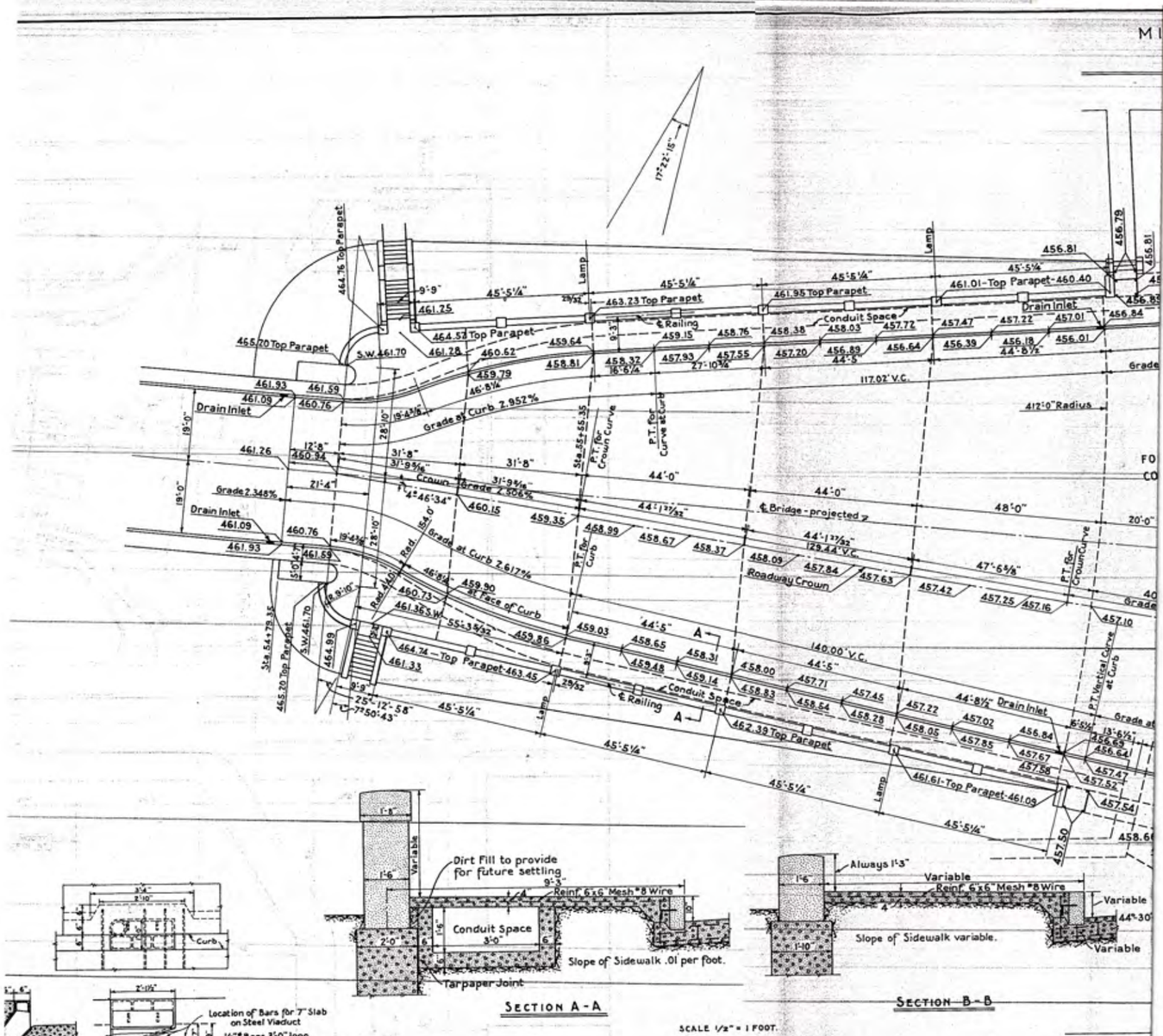


APPROVED
Clay Modjeski
J. M. Masters
ENGINEERS

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

JEFFERSONVILLE PLAZA
GENERAL PLAN & SECTIONS

NOV. 1928.
SCALE IN FEET. 1/16" = 1'-0"
CONTRACT NO. 4
DRAWING NO. 12.
MODJESKI & MASTERS,

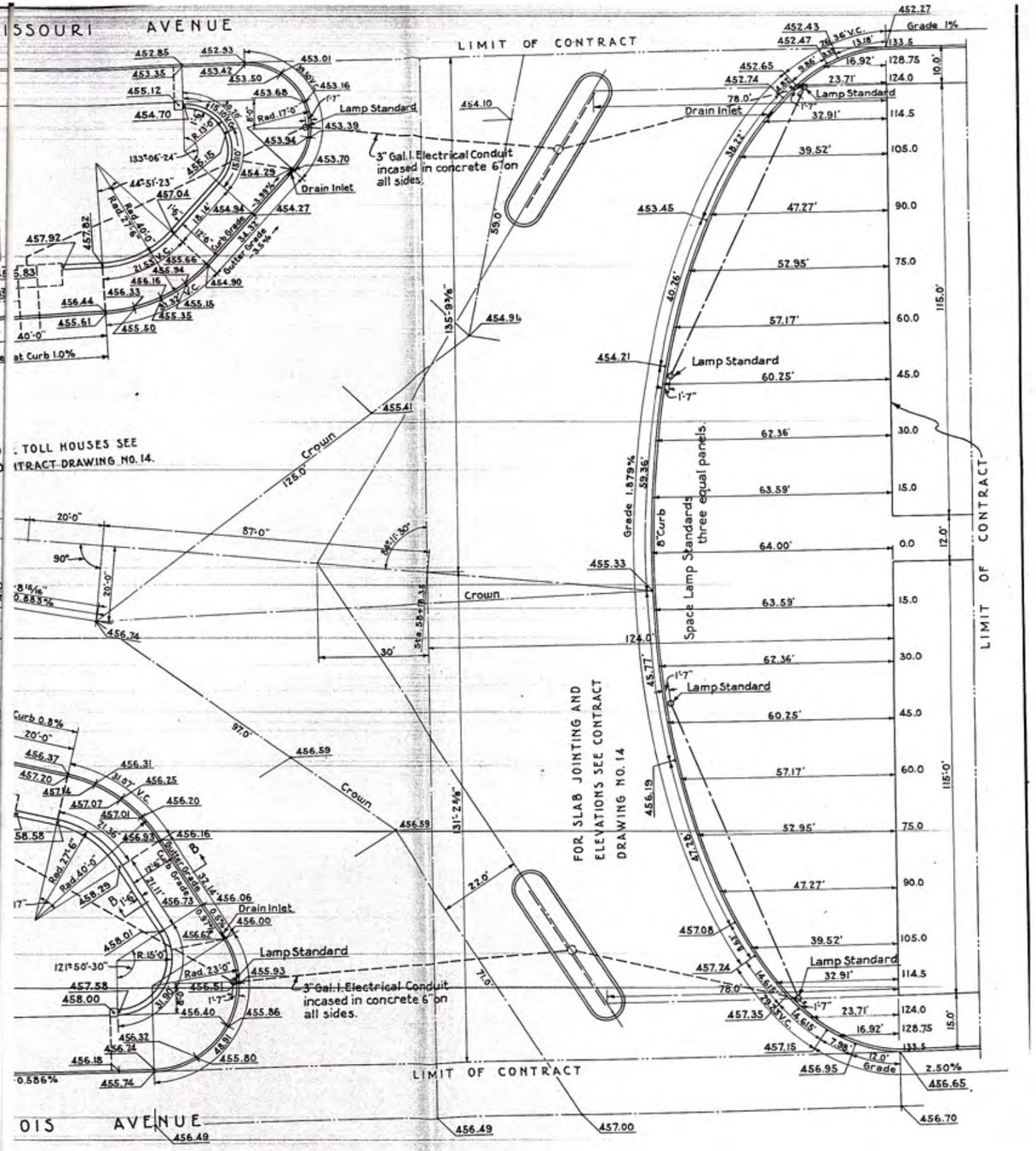


SECTION A-A

SECTION B-B

DETAIL OF CONCRETE ABOUT DRAIN INLETS.

SCALE 1/2" = 1 FOOT.



FOR TOLL HOUSES SEE CONTRACT DRAWING NO. 14.

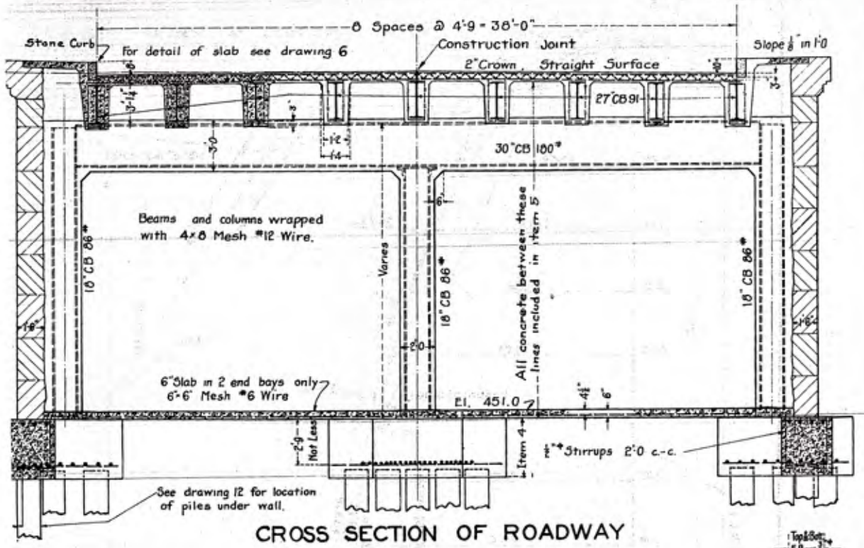
FOR SLAB JOINTING AND ELEVATIONS SEE CONTRACT DRAWING NO. 14

Note: All Foundations are as shown on Drawing No. J52.

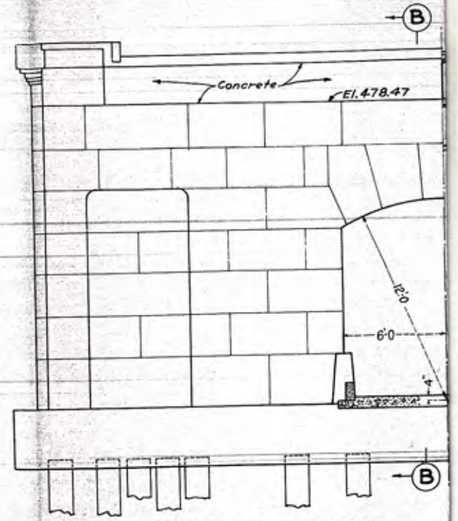
LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.
APPROACHES
JEFFERSONVILLE PLAZA
MAY 1929
SCALE: 1/16"=1'-0"
CONTRACT NO. 4.
SUPPLEMENTARY DWG. NO. 14
MODJESKI & MASTERS
ENGINEERS

APPROVED:
Ralph Modjeski
F. M. Masters
ENGINEERS

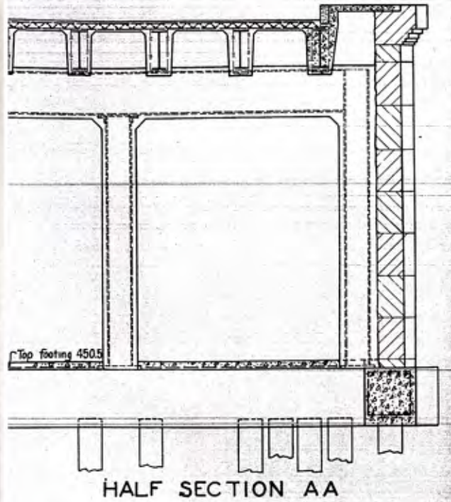
EXHIBIT XXXIV



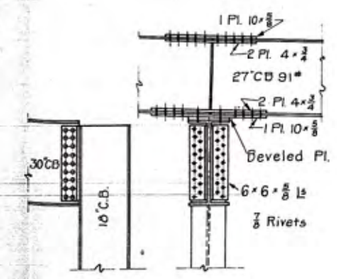
CROSS SECTION OF ROADWAY



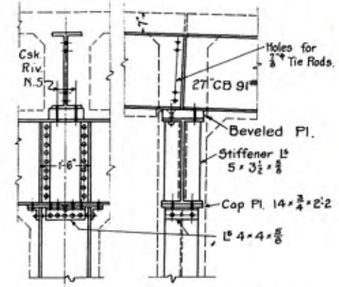
HALF END ELEVATION



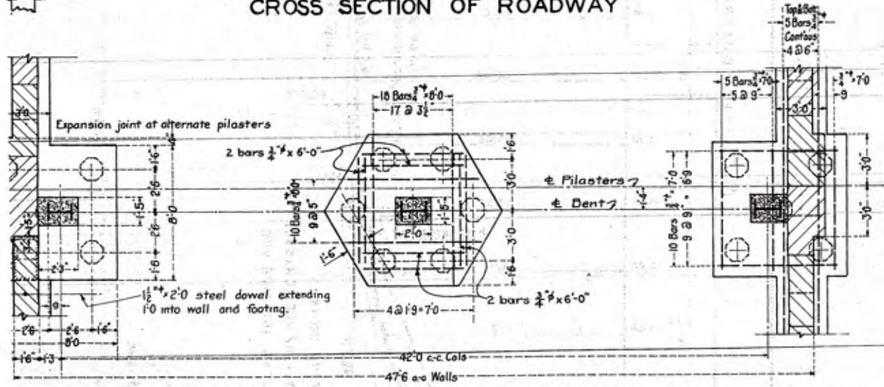
HALF SECTION AA



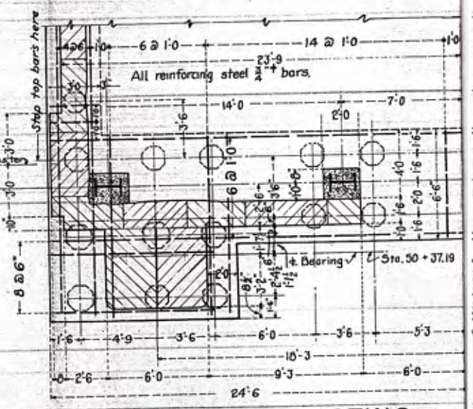
SIDE COLUMN
FIXED BENT



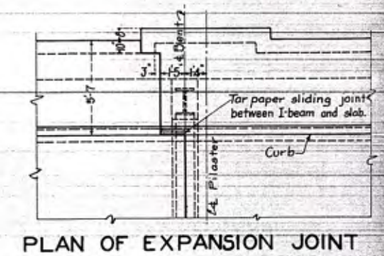
INTERIOR COLUMN
EXPANSION BENT



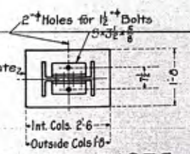
PLANS OF TYPICAL FOOTINGS



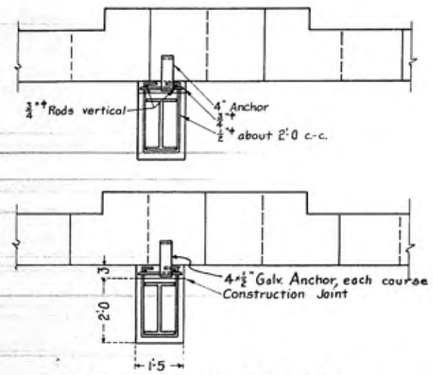
PLAN OF END FOOTING



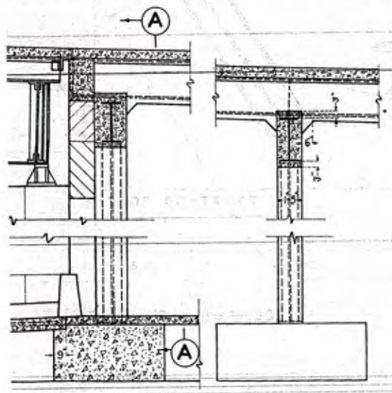
PLAN OF EXPANSION JOINT



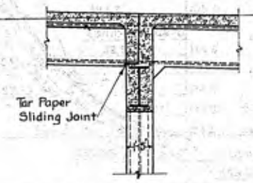
COLUMN BASES



WALL ANCHOR DETAILS

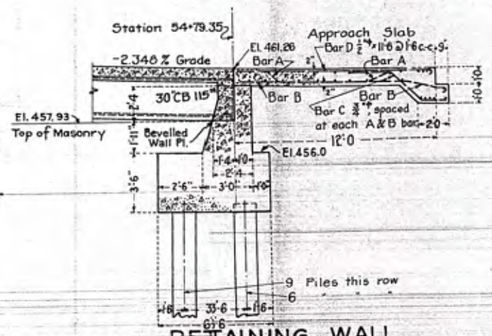


ND WALL
SECTION BB

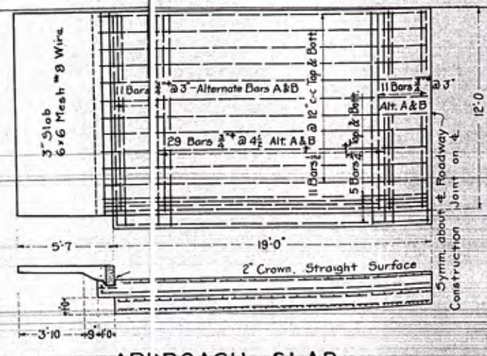


ROADWAY DETAIL
EXPANSION BENT

INTERIOR COLUMN
FIXED BENT



RETAINING WALL
AT END OF APPROACH



APPROACH SLAB

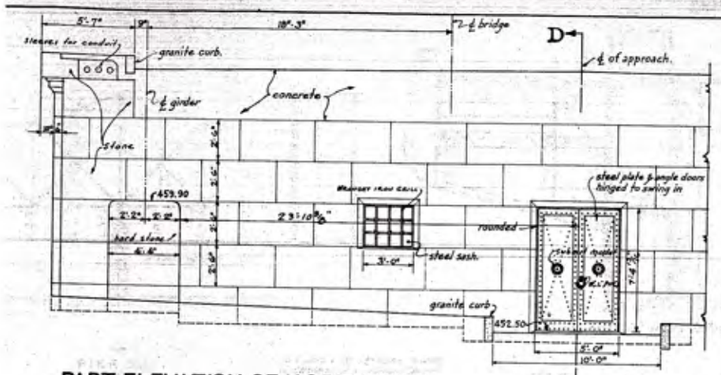
APPROVED
Ray Lloyd
F. M. Masters
ENGINEERS

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE IND

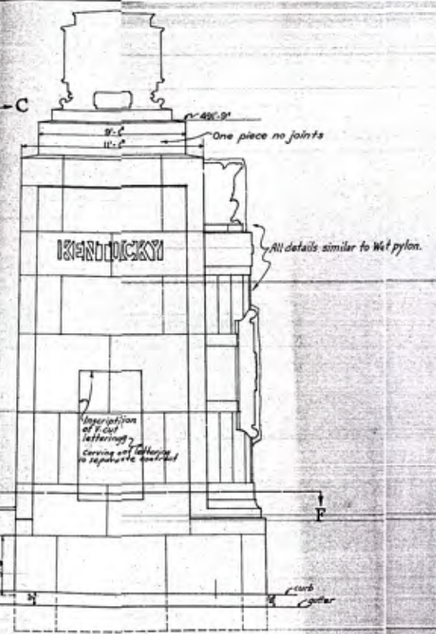
JEFFERSONVILLE PLAZA
DETAILS

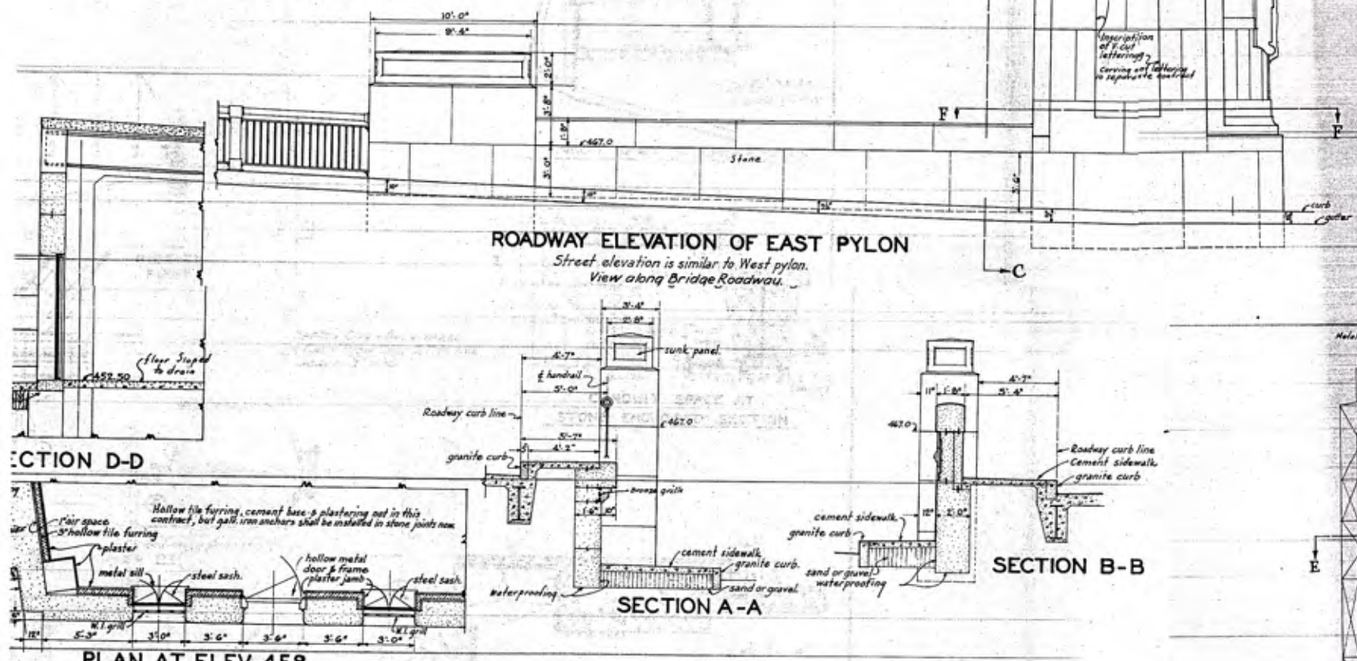
NOV. 1928.
SCALE IN FEET
0 1 2 3 4 5 10
CONTRACT NO. 4
DRAWING NO. 13.
MODJESKI & MASTERS
ENGINEERS

EXHIBIT XXXIX



PART ELEVATION OF NORTH WALL





ROADWAY ELEVATION OF EAST PYLON

Street elevation is similar to West pylon. View along Bridge Roadway.

SECTION D-D

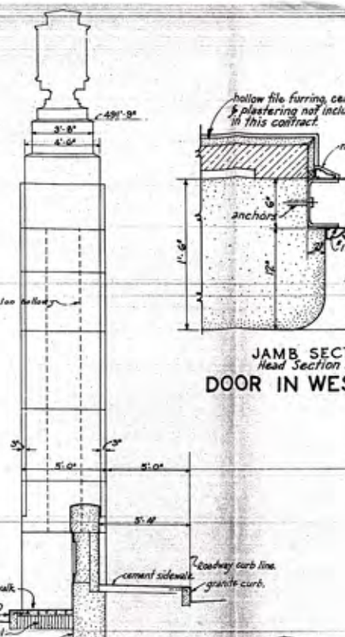
SECTION A-A

SECTION B-B

PLAN AT ELEV. 458

STREET ELEVATION OF WEST PYLON

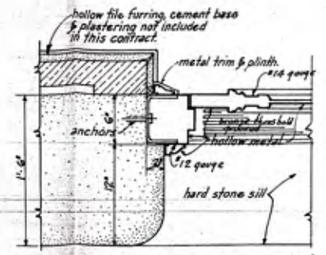
Roadway elevation is similar to East pylon.



SECTION C-C

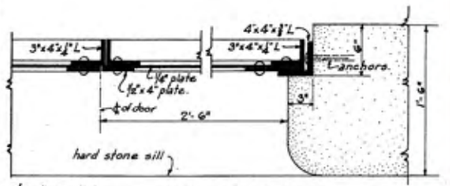
END ELEVATION

Both pylons are similar



JAMB SECTION
Head Section similar.

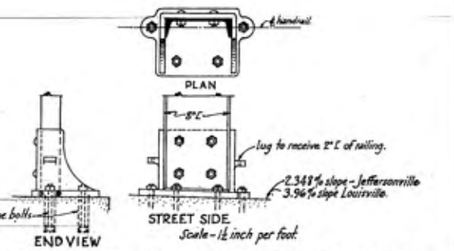
DOOR IN WEST WALL



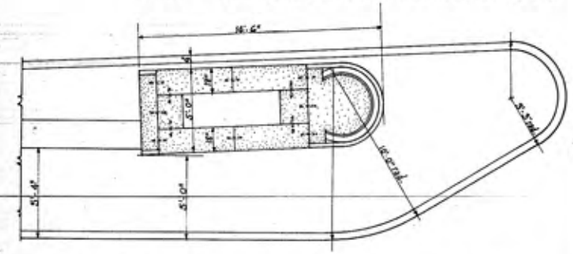
Scale - ½ inch per foot.

JAMB SECTION

DOOR IN NORTH WALL



CAST IRON BASE FOR RAILING POSTS



DETAIL PLAN OF EAST PYLON AT LINE F-F

Note. Wherever Stone comes in contact with fill or concrete it shall receive two coats of waterproofing

For Footings under stone work see Drawings 10 & 11.

APPROVED:

Russell Modjeski

J. M. Masters

ENGINEERS

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

APPROACHES
DETAILS

NOV. 1928

SCALE: 1/4" = 1'-0"

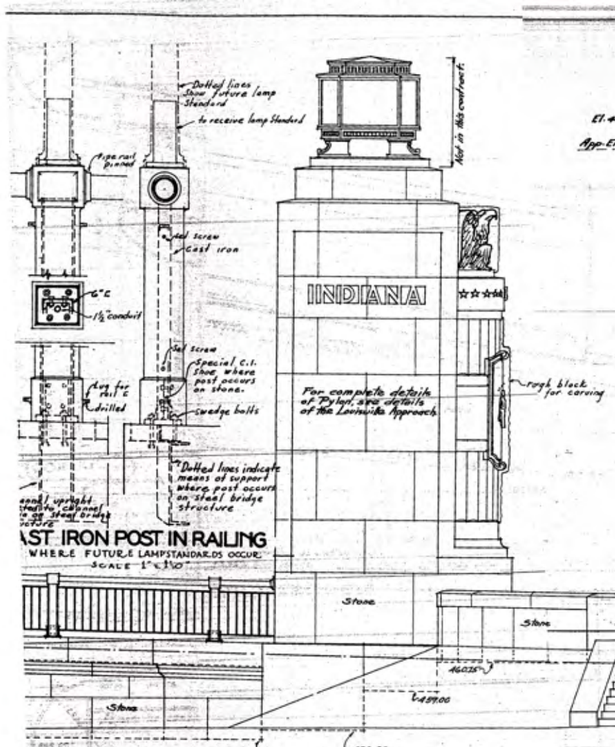
CONTRACT NO. 4.
DRAWING NO. 18.

MODJESKI & MASTERS
ENGINEERS

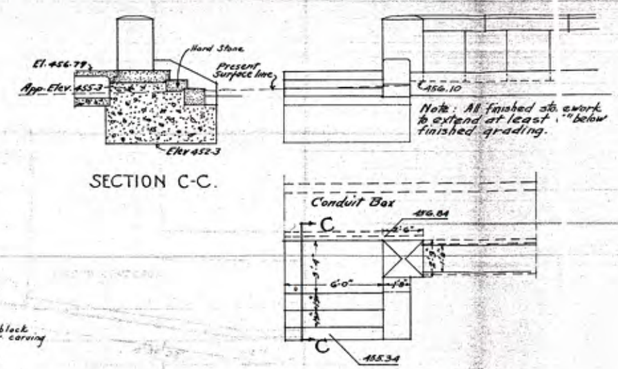
Revised 12.11.1928.

PAUL P. CRET CONSULTING ARCHITECT

EXHIBIT XXXVII

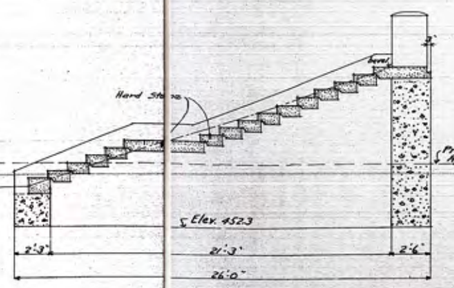


CAST IRON POST IN RAILING
WHERE FUTURE LAMPSTANDARDS OCCUR.
SCALE 1" = 1'0"

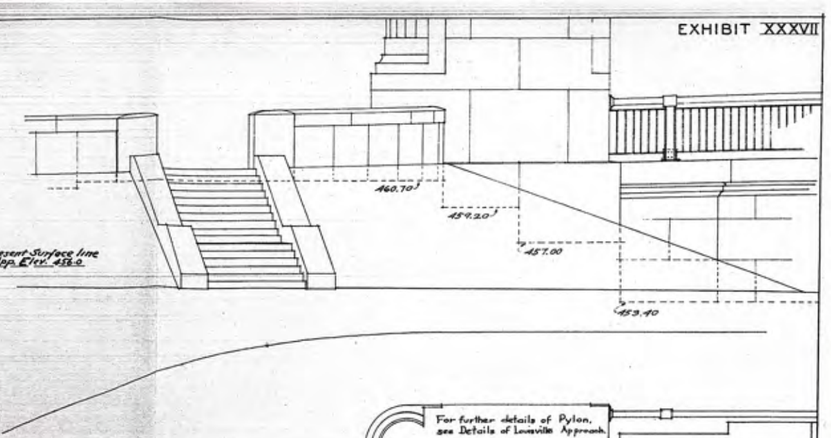


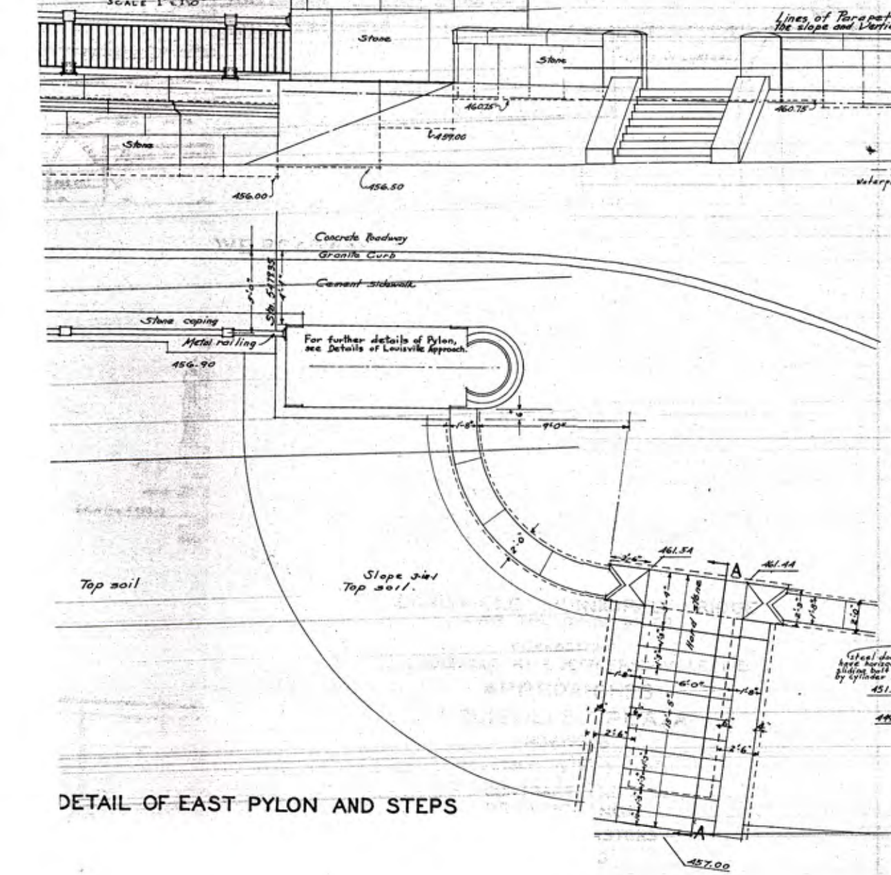
SECTION C-C.

DETAIL OF NORTHWEST STEPS
Scale ½" = 1'0"

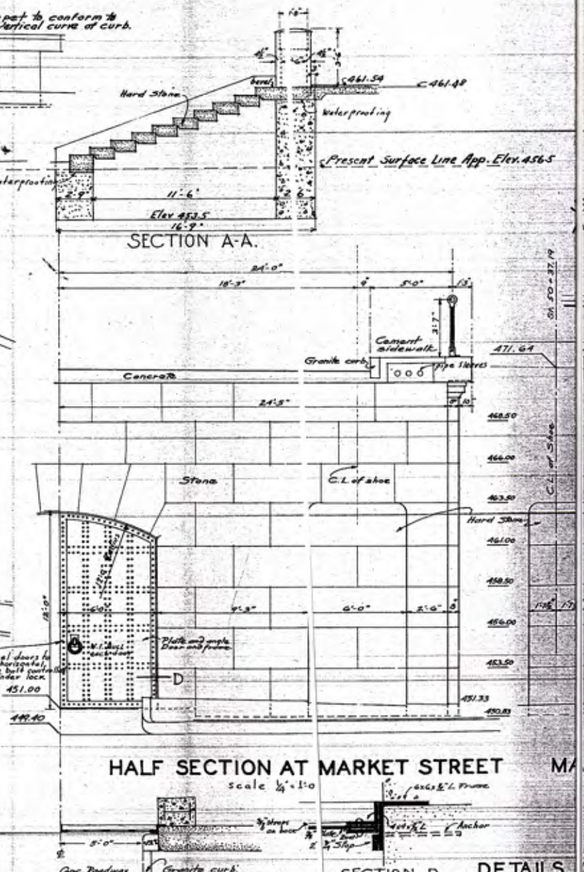


SECTION B-B



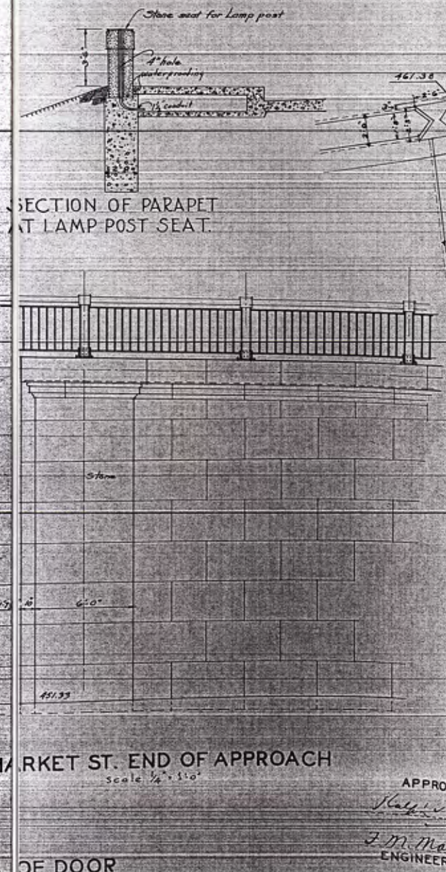


DETAIL OF EAST PYLON AND STEPS

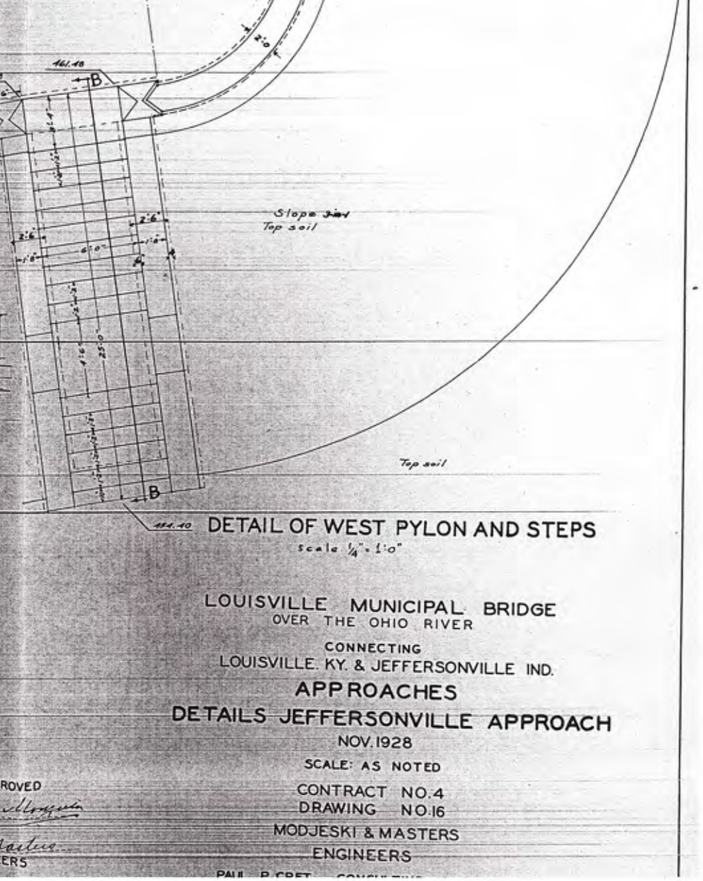


HALF SECTION AT MARKET STREET
Scale ½" = 1'0"

DETAILS OF DOOR



SECTION OF PARAPET
AT LAMP POST SEAT.



DETAIL OF WEST PYLON AND STEPS
Scale ½" = 1'0"

MARKET ST. END OF APPROACH
Scale ½" = 1'0"

APPROVED
Ralph Modjeski
F. M. Masters
ENGINEERS

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE IND.
APPROACHES
DETAILS JEFFERSONVILLE APPROACH
NOV. 1928
SCALE: AS NOTED
CONTRACT NO. 4
DRAWING NO. 16
MODJESKI & MASTERS
ENGINEERS
PAUL P. CRET CONSULTING

Appendix F. IHSSI Form

Both the 1982 IHSSI form and the 2011 update for the resource from the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) are included in this section.

1. Rating: ☑ Outstanding ☐ Significant / Notable ☐ Contributing

2. County: CLARK

3. Survey No.: 019-446-55023

4. Historic Name: LOUISVILLE & NASHVILLE BRIDGE

5. Township: HOPE

Preliminary No.: 019-446-55021

6. Address: US 31 & OHIO RIVER

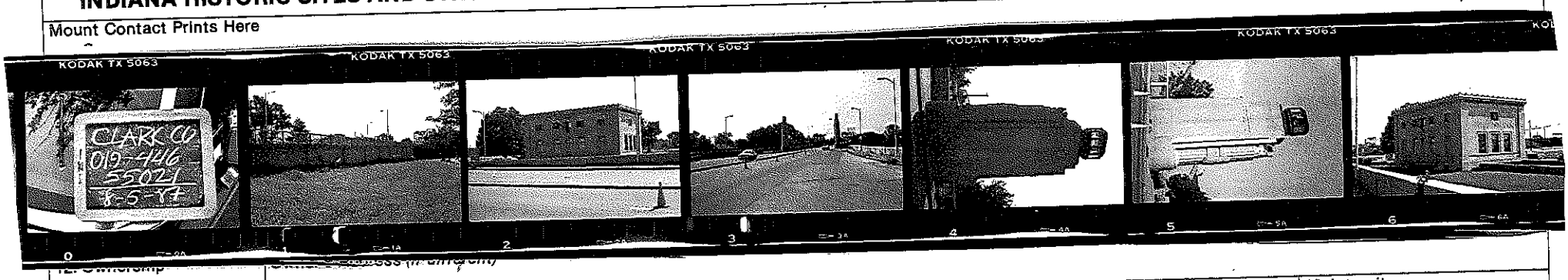
7. City:

8. Quad Name: NEW ALBANY

INDIANA HISTORIC SITES AND STRUCTURES INVENTORY

State of Indiana Department of Natural Resources — State Form 16822 / Revised 1987

Mount Contact Prints Here



☐ Public ☐ Private

13. Use	Present	Past
Residence	☐	☐
Commercial	☐	☐
BRIDGE	☑	☑
_____	☐	☐

14. Category: ☑ Building(s) ☐ District ☐ Site ☑ Structure ☑ Object

15. Surveys / Legal Protections: Nat'l Register 1984

16. Location Notes / Legal Description: US #31 @ OHIO RIVER

17. Condition: ☐ Excellent ☑ Good ☐ Fair ☐ Deteriorated ☐ Ruins

18. Integrity: ☐ Unaltered ☐ Altered ☐ Moved

Date moved:

19. Time Period(s): 1928-29

20. Style(s): ART DECO

21. Architect / Builder: PAUL PHILIPPE CRET

22. SPECIFY ALTERATIONS

Removals	Replacement	Additions	Other

23. DESCRIPTION

Stories: 11

Plan: INSELMOTOR OF PIERS

Foundation: LOUISVILLE & NASHVILLE BRIDGE

Walls: REINFORCED CONCRETE

Roof: MASONRY PIERS

Porches: THE VAN CONSTRUCTION CO

Openings: STEEL WORK

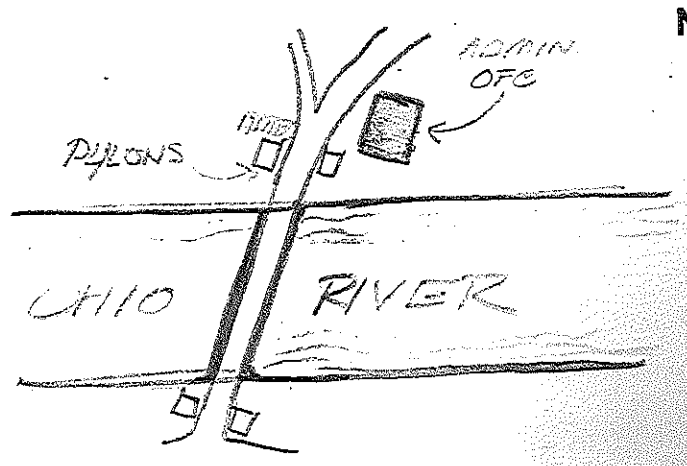
Interior: AMERICAN BRIDGE

Grounds / Outbuildings: ARCHITECTURAL

ENGINEERS: HENRY PRENTISS CO.

ROMAN VODJESKI, FRANK MASTERS

24. SITE PLAN



25. No. of Contributing Resources

26. No. of Non-contributing Resources

27. Environment

28. Areas of Significance:
- ☐ Agriculture
- ☑ Architecture
- ☐ Art
- ☐ Commerce
- ☐ Communications
- ☐ Community Planning
- ☐ Conservation
- ☐ Economics
- ☐ Education
- ☑ Engineering
- ☐ Entertainment / recreation
- ☐ Ethnic heritage
- ☐ Exploration / settlement
- ☐ Health / medicine
- ☐ Indian
- ☐ Industry
- ☐ Invention
- ☐ Landscape architecture
- ☐ Law
- ☐ Literature
- ☐ Military
- ☐ Performing arts
- ☐ Philosophy
- ☐ Politics / government
- ☐ Religion
- ☐ Science
- ☐ Social history
- ☑ Transportation
- ☐ Vernacular / Construction
- ☐ Other _____

29. Historic Context(s) / Statement of Significance / Additional Description:

"CONSULTING ARCHITECT"

"PAUL PHILIPPE CRET"

ATTACH NEG

ENVELOPE

☐ SEE CONTINUATION SHEET

30. FOR STATE OFFICE USE ONLY

NR

SR

E

NE

31. UTM 16

32. Information Sources

33. Surveyor: JAMIE O'DAY — Affiliation: HPR — Date: 8-9-88

34. Revised by — Affiliation — Date

IHSSI (County Survey)

Survey Number:	019-446-58215
Rating:	Outstanding
Historic Name:	Louisville Municiple Bridge, Clark Memorial Bridge
Year Dataset Compiled:	2011
National Register File Number:	NR-0681

Survey County

County	Legal Township(s)	Quad Name(s)
Clark	Jeffersonville	New Albany

Address:	U.S. 31
City:	-
Location Notes:	The bridge is over the Ohio River and connects Highway 31 to Second Street in Louisville.

Coordinates

Easting	Northing
609355	4236624
609282	4236281

Common Name: Second Street Bridge

Category: Structure

Visible?: ☑

Historic District?: ☐

Historic District Name: -

Ownership: public-state

Use: Present

Residence: ☐ Commericial: ☐ Vacant: ☐

Other: ☑ Describe: bridge

Other: ☐

Use: Past

Residence: ☐ Commericial: ☐ Vacant: ☐

Other: ☑ Describe: toll bridge

Other: ☐

Surveys/ Legal Protections

National Register: ☑ State Register: ☑ Hoosier Homestead: ☐

National Historic Landmark: ☐ Local Designation: ☐ Protective Covenants: ☐

Other: ☐

Areas of Significance: ENGINEERING, TRANSPORTATION

Other Significance: -

Endangered: No

Explanation: -

Number of Contributing Resources: 1

Number of Non-contributing Resources: 0

Environment: -

Bibliography: Miller, Carol. A Young Person''s Guide to Clark County History. 1990. Jeffersonville Township Library. Kramer, Carl E. The Place We Call Home A history of Clark County, Indiana. Indiana University. 2007. Jeffersonville Township Library.

Structure Type

Bridge: ☑ Historic Bridge Number: -

Cemetery: ☐

Other: ☐

Architect/ Builder	Architectural Firm	Affiliation
Paul Phillipe Cret	-	Architect

Time Period(s): 1928-9

Condition: Good

Integrity: Slightly Altered

Date Moved: -

Alterations: -

Truss or Arch Type	Connection Type	Number of Panels	Number of Spans	Span Length
Warren truss	Riveted	-	0	-

Total Number of Spans: 0

Skew Angle: 0

Structure Material: METAL: Steel

Deck Material: CONCRETE

Abutments & Wingwalls: STONE: Limestone

Builder Plaque: On North gateway

Decorative Features: North gateway

Statement of Significance: -

Architectural Description: The bridge appears to be unaltered. The toll buildings were removed 1946. The toll house is now privately owned and was surveyed seperately. The bridge was completed in October 1929 at a cost of 4.7 million dollars. The bridge was dedicated on October 31, 1929. The bridge was a toll bridge until 1946. The bridge is now named the Clark Memorial Bridge but is commonly called the Second Street Bridge.

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Appendix G. National Register of Historic Places Nomination

NPS Form 10-900
(7-81)

OMB NO. 1024-0018
EXP. 12/31/84

United States Department of the Interior
National Park Service

National Register of Historic Places Inventory—Nomination Form

For NPS use only
received FEB 6 1984
date entered

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic Louisville Municipal Bridge, Plyons and Administration Building

and/or common George Rogers Clark Memorial Bridge, Pylons and Administration Building

2. Location

street & number Between Louisville, ~~Kentucky~~ and Jeffersonville, Indiana over the Ohio River ___ not for publication

city, town Administration Building, 315 N. Illinois Ave. Jeffersonville, Indiana na vicinity of ~~congressional district~~

state Kentucky code 021 Indiana code 018 **county** Jefferson code 111 Clark code 019

3. Classification

Category	Ownership	Status	Present Use	
na district	na public	X occupied	na agriculture	na museum
x building(s)	na private	X unoccupied	X commercial	na park
x structure	X both	na work in progress	na educational	na private residence
na site	**Public Acquisition**	**Accessible**	na entertainment	na religious
na object	na in process	X yes: restricted	na government	na scientific
	na being considered	X yes: unrestricted	na industrial	X transportation
		na no	na military	na other:

4. Owner of Property

name See Continuation Sheet

street & number NA

city, town NA NA vicinity of **state** NA

5. Location of Legal Description

(see also cont. sheet)

courthouse, registry of deeds, etc. Commonwealth of Kentucky, Department of Highways

street & number State Office Building

city, town Frankfort **state** Kentucky

6. Representation in Existing Surveys

title Kentucky Department of Transportation Survery of Bridges Bureau of Highways, Division of Environmental Analysis **has this property been determined eligible?** NA yes X no

date 1982 NA federal X state NA county NA local

depository for survey records Kentucky Department of Transportation

city, town Frankfort **state** Kentucky

7. Description

Condition		Check one	Check one
na excellent	na deteriorated	X unaltered	X original site
x good	na ruins	X altered	na moved date NA
na fair	na unexposed		

Describe the present and original (if known) physical appearance

The Louisville Municipal Bridge spans the Ohio River between Louisville, Kentucky and Jeffersonville, Indiana. It is one of six bridges which crosses the Ohio at Louisville; three highway bridges, two railroad bridges and one abandoned bridge.

Constructed in 1928-29, the Louisville Municipal Bridge is a single deck, six span cantilever truss bridge, with Warren through trusses. The eight piers are of ashlar stone, one anchored on each bank of the river. The bridge design is as follows: "an archor arm from Pier I to Pier II, 362' long; a cantilever structure from Pier II to Pier III, 820' long; and anchor arm from Pier III to Pier IV, 500' long; followed by a duplicate structure consisting of an anchor arm from Pier IV to Pier V, 500' long; a cantilever structure from Pier V to Pier VI, 820' long; an anchor arm from Pier VI to Pier VII, 362'6" long and a single span from Pier VII to Pier VIII, 376' long." [1]

The length of the bridge proper is 3740', with a 1200 foot Jeffersonville approach and 800 foot Louisville approach. The four lane roadway is approximately 40' wide with five-foot walkways on either side.

The bridge approaches on both sides of the river are flanked by smooth limestone pylons. The pylons are Art Deco in style, with engaged, fluted columns topped by sculptured eagles. The Kentucky pylons bear Kentucky state symbols and the incised words "Kentucky" on both sides. The Indiana state symbols, the name "Indiana" are similarly treated on the Indiana pylons. An Art Deco lantern tops each pylon. The pylons are approximately 14' long, 5' wide and 30' tall. (see photos 12, 14, 15 - Figure 1)

The Municipal Bridge Administration Building, located on the Jeffersonville side of the river, is a two-story limestone structure on a raised basement. The main entrance of the building is on the east side. Five steps rise centrally to a pair of bronze doors with a transom which originally held a cast iron grill shaped as a crest with the initials "MB" in the center. This grill is no longer in place. The push bars for the doors, however, are cast bronze in stylized dolphin motifs. A limestone panel is located above the entrance with the name "Louisville Municipal Bridge" incised. Stone pilasters divide the three facade bays. Steel casement windows with single transoms are used in all first floor openings and smaller, nearly square steel casement windows for the third floor. The basement windows are steel casement types with wrought iron grills. (See photos 5, 7- Figures 3, 4)

The west elevation, which originally faced the toll booths, does not have the stone pilasters of the east facade and has considerably more fenestration. The first floor, central bay contains a central door flanked by windows, all three of identical design; casement, steel with single transoms. Each is crowned by a stone panel with the name of the bridge incised over the door and "MCMXXVIII" over each window. A delicate, shallow, Art Deco balconette projects from the facade and encases this bay. Windows flank the central bay and there are five second floor and basement windows. (See photo 6 - Figure 3)

[1] Ralph Modjeski and Frank M. Masters, The Louisville Municipal Bridge; Final Report. ND

8. Significance

Period	Areas of Significance—Check and justify below				
NA prehistoric	NA archeology-prehistoric	NA community planning	NA landscape architecture	NA religion	
NA 1400–1499	NA archeology-historic	NA conservation	NA law	NA science	
NA 1500–1599	NA agriculture	NA economics	NA literature	NA sculpture	
NA 1600–1699	X architecture	NA education	NA military	NA social/ humanitarian	
NA 1700–1799	NA art	X engineering	NA music	NA theater	
NA 1800–1899	NA commerce	NA exploration/settlement	NA philosophy	X transportation	
X 1900–	NA communications	NA industry	NA politics/government	NA other (specify)	
		NA invention			

Specific dates 1928-1929 **Builder/Architect** Madjeski & Masters, Engineers
Paul Cret, Architect
American Bridge Co., Contractors
Vang Construction Co., Contractors
Henry Bickel Co., Contractors

Statement of Significance (in one paragraph)

The Louisville Municipal Bridge is significant as the first highway bridge across the Ohio at Louisville, and as an engineering milestone in bridge construction. Architecturally, the paired pylons on each side of the bridge and the Administration Building are excellent and rare local examples of the Art Deco style. They also represent the work of internationally famed architect Paul Phillippe Cret.

By 1928, when construction began on the Municipal Bridge, three railroad bridges spanned the Ohio. The Kentucky & Indiana Terminal Railroad Bridge, in ca. 1915, added wagon paths to either side of its bridge which linked Louisville to New Albany, Indiana. But the K&I structure was not easily accessible to downtown Louisville, nor was it sufficient to accomodate large numbers of vehicles. Until the completion of the Louisville Municipal Bridge, ferry service across the river was the predominant means of crossing.

The need for such a bridge was long in evidence, but the rapid increase in automobile ownership in the late teens and early twenties forced the city of Louisville to take the issue in hand and move forward.

After a decade of discussion, debate, referendums and negotiations, the Louisville Bridge Commission, appointed by the Louisville Board of Trade, signed a contract with the prestigious engineering firm, Modjeski and Masters. Its senior partner was Ralph Modjeski. Modjeski graduated in 1885 from Government College, Paris, France, "Ecole des Ponts es Chaussees," with the degree of civil engineer and ranked at the head of his class. Other distinguised works include the Huey P. Long Bridge (1933-36) and the San Francisco-Oakland Bay Bridge (1933-37). His excellence as an engineer was recognized by his receipt of the coveted John Fitz gold metal for scientific and industrial achievements in 1929, the same year that the Municipal Bridge was completed. He was, in fact, unable to attend opening ceremonies in Louisville due to a trip to Japan as the engineering emissary of President Herbert Hoover.

Modjeski and Masters began subcontracting in spring of 1928. The contract for the substructure went to Vang Construction Co. of Pittsburgh. Work on the piers began in June of 1928. In July, the American Bridge Co. of New York was awarded the contract for the superstructure. Because of the delay of the purchase and demolition of the properties in the path of the approaches in Louisville and Jeffersonville, and because of time constraints, it was necessary that the erection of the cantilever structure begin in the middle of the river. The American Bridge Co., in order to accomodate this situation, developed a new method of construction which proved to be cost and time efficient. The method is best described in the Madjeski & Masters final report to the Bridge Commission.

9. Major Bibliographical References

See continuation sheet.

10. Geographical Data

Acreage of nominated property approx. 5 acres

Quadrangle name (Bridge, pylons) New Albany (A,B,C) (Admin. bldg.) Jeffersonville (D) **Quadrangle scale** 1:24,000

UMT References

	Zone	Easting	Northing
A	16	609090	4234790
B	16	609210	4235665
C	16	609340	4236580
D	16	609390	4237450
E			
F			
G			
H			

Verbal boundary description and justification

See continuation sheet.

List all states and counties for properties overlapping state or county boundaries

state	Kentucky	**code** 021	**county** Jefferson	**code** 111
state	Indiana	**code** 018	**county** Clark	**code** 019

11. Form Prepared By

name/title M. A. Allgeier, Director of Research

organization Louisville Landmarks Commission **date** October 13, 1983

street & number 727 W. Main St. **telephone** 502-587-3501

city or town Louisville **state** Kentucky

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

___ national X state ___ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

State Historic Preservation Officer signature Mary Conan Oppel

title State Historic Preservation Officer **date** January 31, 1984

For NPS use only

I hereby certify that this property is included in the National Register

Entered in the National Register **date** 3/8/84

Keeper of the National Register

Attest: **date**

Chief of Registration

OWNERS OF PROPERTY

Bridge - The Commonwealth of Kentucky, Department of Highways
State Office Building
Frankfort, Kentucky 40601

Admin. Bldg. - Kenneth J. & Doris J. Baumgartle
228 E. Court Ave.
Jeffersonville, Ind. 47130

Reed K. & Charlotte A. Baumgartle
1504 Cameron Dr.
Jeffersonville, Ind. 47130

LOCATION OF LEGAL DESCRIPTION

The description of the Administration Building, although found with the Kentucky Department of Highways, may also be found in the Clark County Courthouse, Jeffersonville, Indiana.

For NPS use only
received
date entered

DESCRIPTION CONT.

The north and south facades each contain three first-floor windows and one second-floor window. The garage entrance to the basement story is on the south and the single door, used by the toll takers, is located on the north.

A delicate, limestone-colored, terra cotta cheneau crowns the building. The clearly Art Deco flavor of the design is reminiscent of classical swag and anthemion motifs.

The interior of the building is in remarkably good condition with few alterations. Pink Lepanto marble wainscoting is used in the foyer and lobby. Decorative cast iron grills cover the radiators throughout the building. Lighting fixtures are brass in an Art Deco styling. All woodwork, including chair rails and picture molding in some rooms, is oak. All restrooms contain marble wainscoting and stall dividers. Floors are slate or terrazzo in some areas. (See photos 8-11, Figure 2)

The bridge, pylons and administration building compliment one another and represent architectural, engineering and transportation history in both Louisville and Jeffersonville.

"The American Bridge Company developed a new method of erecting this cantilever structure known as their 'guy derrick system of erection.' This system involved the use of four ordinary guy derricks for the erection of each half of the bridge; two derricks travelling away from each of the main tower piers, one erecting the anchor arms while the other derrick at the same time erected the cantilever arms and suspended span. This system of erection had the advantage of light weight in the erection equipment, thus making it unnecessary to increase the structural sections to provide for the erection stresses. The power plant for the operation of the derricks was located in a barge floating in the river at the foot of each pier, thus eliminating the weight of all power plant on the cantilever structure. The derriks were supported by means of top guys clamped to the tops of the mast and fastened to the tops of the piers. The mast was secured sideways by means of guys fastened to the floorbeams of the bridge, as well as to a special guy beam slung under each floorbeam. The derrick itself was mounted on a small four wheel railway truck carriage travelling on the stringers."

The other contracts let by Modjeski and Masters were for construction of the bridge approaches, toll houses and administration building, all of which were awarded to Henry Bickel Co. of Louisville. The lighting system contract went to F. A. Clagg Co., also of Louisville.

The outstanding Roman-influenced Art Deco styling of the Pylons and Administration Building were from designs of Paul Phillippe Cret (1876-1945). An internationally famed architect and educator, other examples of Cret's work include the Integrity Trust Building (1929), Rodin Museum (1932), the Folger Shakespeare Memorial Library (1932). Cret, a French-born architect trained at the Ecole des Beaux Arts in Paris, was a teacher in the school of architecture at the University of Pennsylvania. Louis I. Kahn (1901-74) was Cret's most famous student.

The Administration Building is an outstanding example of Cret's expertise. The classical proportions and subtly classical architectural elements are complimented by the Art Deco motifs throughout the design. The materials used in this small, utilitarian structure are of the quality expected in any fine public building. Stone, brass, marble, terra cotta, stone, cast and wrought iron all merge in this design to provide efficient, functional and aesthetically pleasant space.

The pylons, for which Cret is also responsible are pillars of pride and patriotism. Every detail was carefully designed, including the lanterns and sculpted eagles.

The opening of the Louisville Municipal Bridge was one of the most heralded events in the early twentieth century for Louisville. The method of financing the bridge, a $5 million revenue-bond issue floated at 4½% interest to be paid off from tolls on the city-owned bridge, gained national attention and became known as "the Louisville plan." Its opening meant an increase in commerce for both sides of the river and was regarded in such glowing terms as "dream of a century," "a strip of steel suspended in mid air, seemingly held in place by a force like that of Atlas...", and

"a bridge of friendship linking Kentucky and Indiana and truly making Louisville the Gateway to the South."[2]

The tolls were discontinued in 1946 when the bonds were retired. At that time, the city transfered ownership of the bridge and the Administration Building to the State of Kentucky, and the name was changed to the George Rogers Clark Memorial Bridge. The Administration Building was then used by the Kentucky Highway Department, and later by Kentuckiana Regional Planning and Development Agency. The toll booths were removed sometime in the late 1960s and the Administration Building was sold to a private individual ca. 1979. The building is currently used for storage and is in excellent condition.

The Louisville Municipal Bridge, its pylons and Administration Building, are significant remnants of the early state highway systems of both Kentucky and Indiana. The engineering of the bridge structure is an important work of the prestigious firm Modjeski and Masters, and the American Bridge Company introduced to the industry the "guy derrick system" of construction. The pylons and Administration Building represent important examples of the work of famed architect Paul Phillippe Cret, and are excellent examples of the Art Deco style. The Louisville Municipal Bridge remains today as a great source of pride to both the Louisville and Jeffersonville communities.

[2]Jean Howerton Coady, "Clark Bridge; A Glamor Boy of Another Day," Courier-Journal and Louisville Times, Louisville, KY. ND

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Kramer, Carl E. "Bridging the Ohio," Louisville Magazine (Louisville), August, 1979.

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Morgan, William. "Old Bridge Building Awaits Inspiration," Courier-Journal and Louisville Times (Louisville), July 3, 1977.

"Ralph Modjeski Famed As Builder of Bridges," Louisville Times (Louisville), October 29, 1929.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED
DATE ENTERED

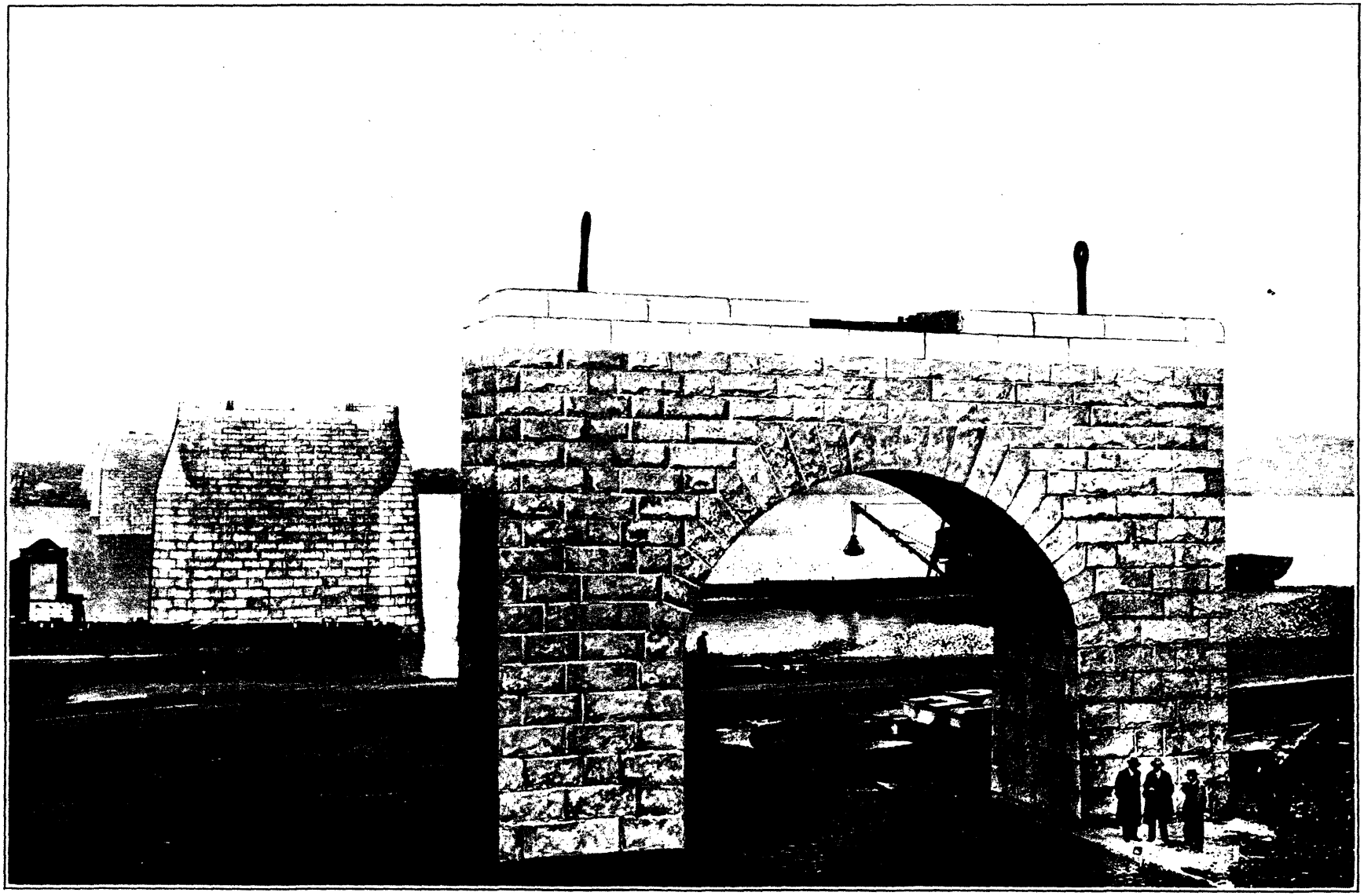
Louisville Municipal Bridge
bet. Lou., KY & Jeff., IN

VERBRAL BOUNDARY DESCRIPTION AND JUSTIFICATION

Beginning at a point in the northwest corner of the intersection of the north line of West Main Street in Louisville and the west line of that portion of North Second Street which runs along the east side of the Clark Memorial Bridge apporach, running thence north to a point in Jeffersonville, Indiana, just north of the Indiana Bridge, pylons, and including the full width, height and breadth of the Clark Memorial Bridge, piers and structure (approx. 3740'), and approaches (Kentucky approach approx. 800', Indiana approach approx. 1200).

Also included is part of Jeffersonville City Block 17, Lots 10 & 11, upon which sets the Muncipal Bridge Administration Building. The boundaries extend ten feet from the foundation walls of said building.

The nomination is structured to include all adjacent structures and buildings related to the Louisville Municipal Bridge.

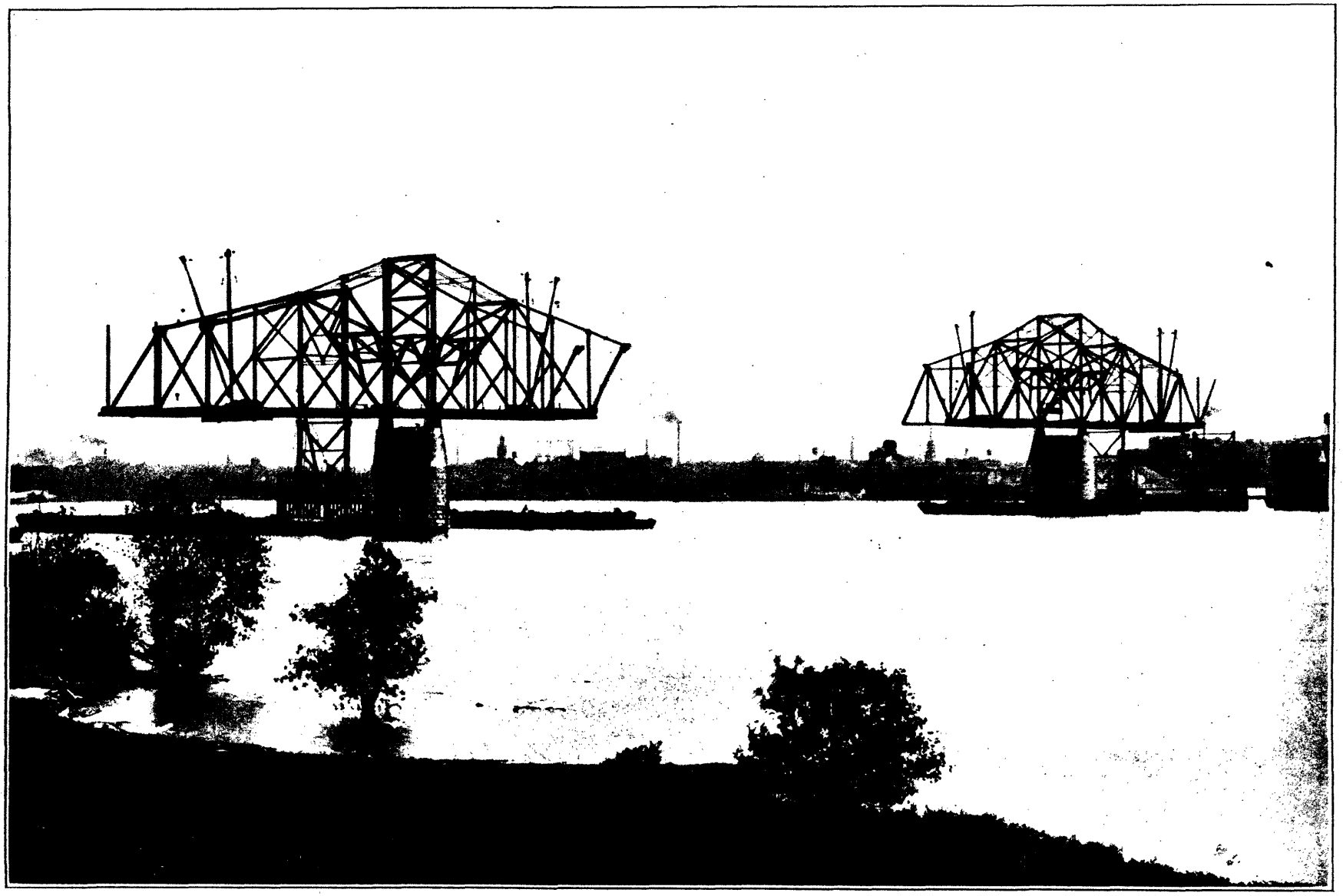


COMPLETED PIERS—PIER 1 IN FOREGROUND

Louisville Municipal Bridge
Between Louisville, Ky and
Jeffersonville, Indiana

Photo 1 - from Modjeski & M
Masters Final Report to
Bridge Commission (ND)

Louisville Landmarks Commissio
727 W. Main St
Louisville, KY

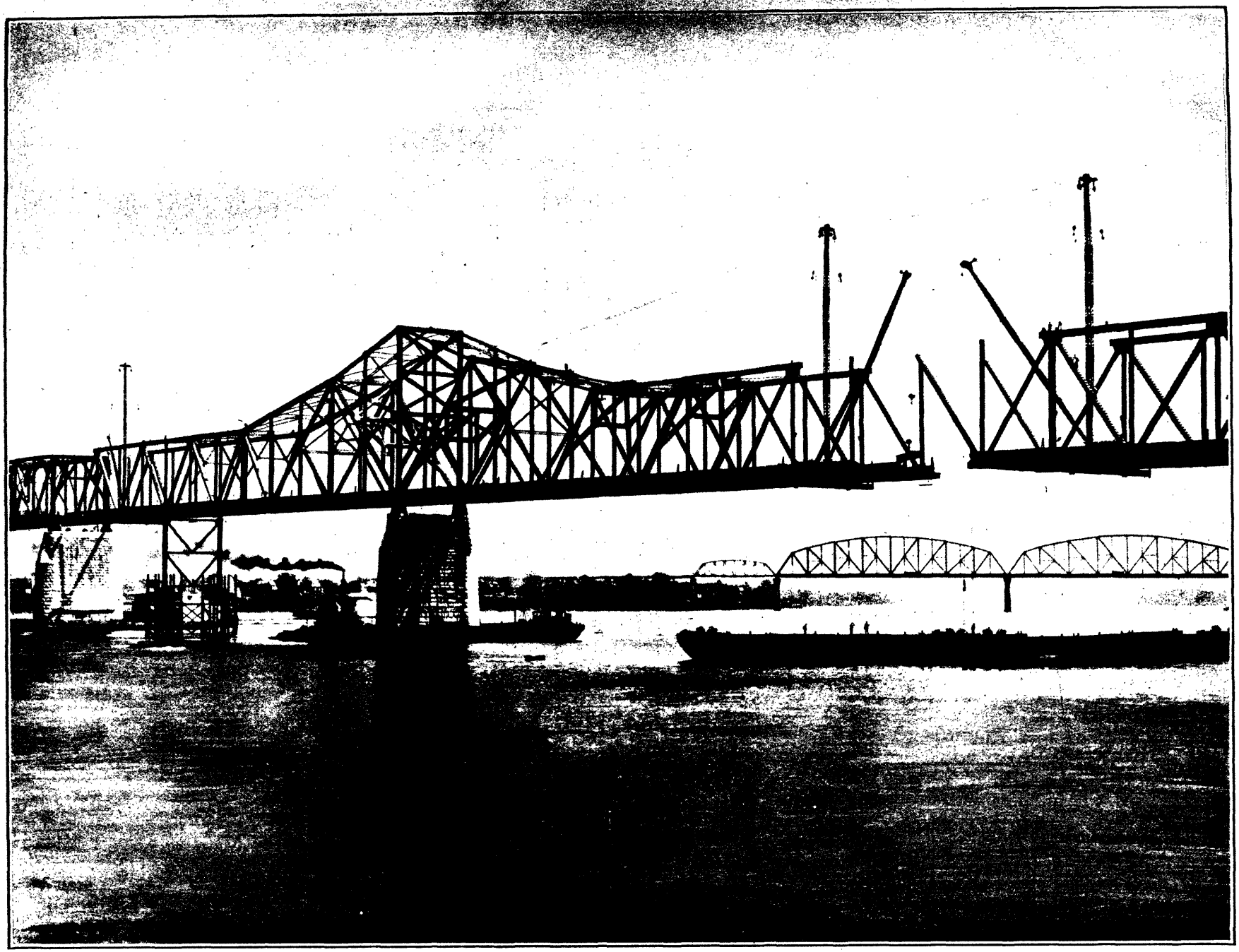


CANTILEVER ERECTION OVER PIERS V AND VI

Louisville Municipal Bridge
Between Louisville, KY and
Jeffersonville, Indiana

Photo 2 - from Modjeski &
Masters, Final Report to
Bridge Commission (ND)

Louisville Landmarks Commissio
727 W Main St
Louisville, KY

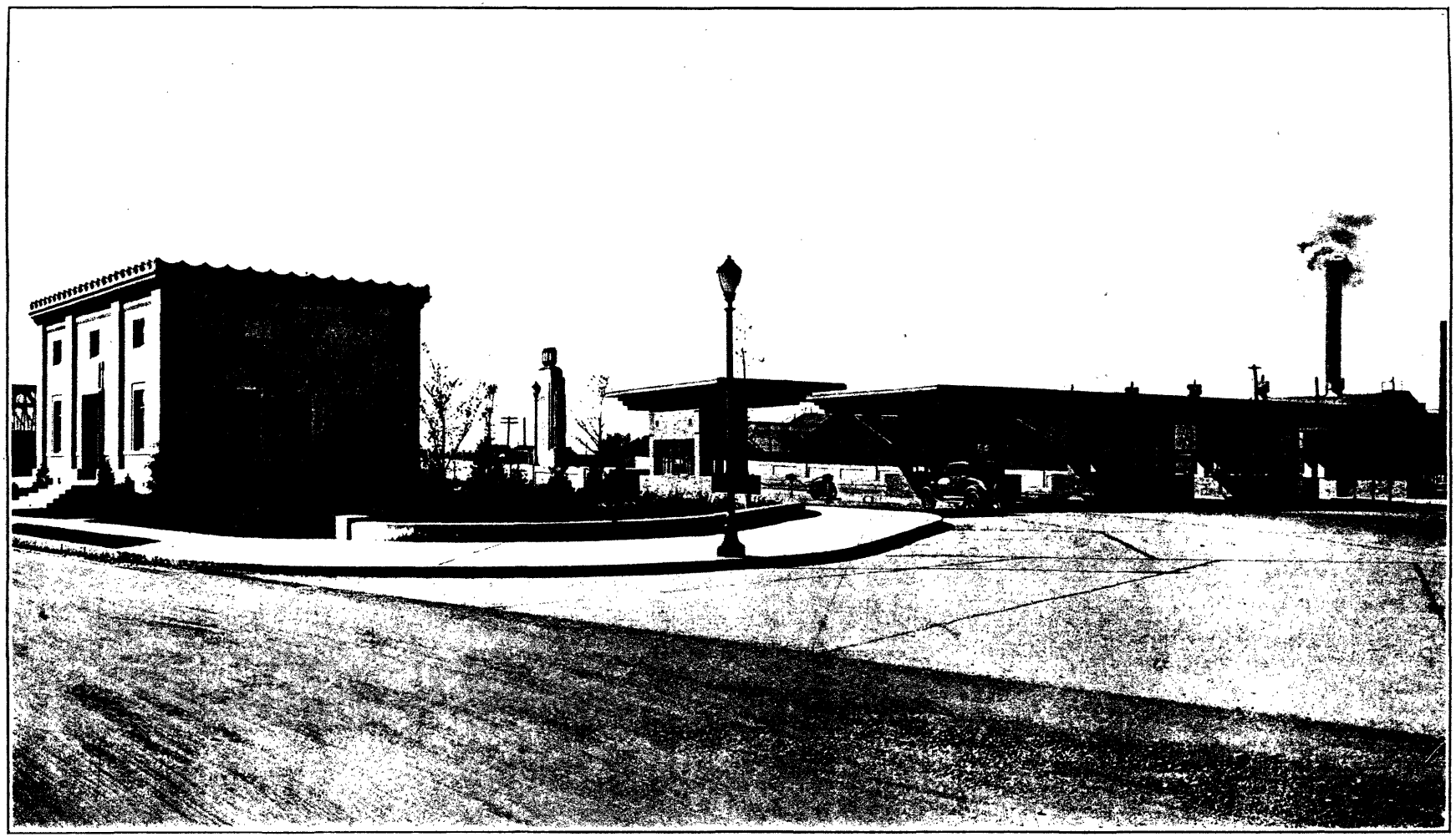


CANTILEVER ERECTION—MAIN BRIDGE

Louisville Municipal Bridge
Between Louisville, KY and
Jeffersonville, Indiana

Photo 3 - from Modjeski &
Masters Final Report to
Bridge Commission (ND)

Louisville Landmarks Commission
727 W Main
Louisville, KY



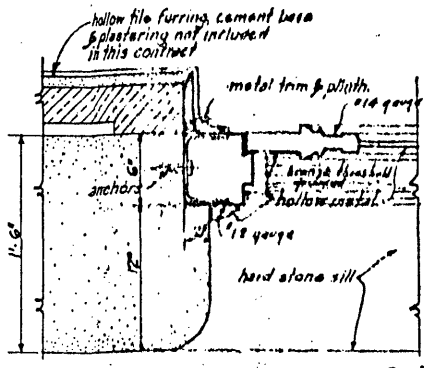
ADMINISTRATION BUILDING AND TOLL HOUSES

Louisville Municipal Bridge
Between Louisville, KY and
Jeffersonville, Indiana

Photo 4 - from Modjeski &
Masters, Final Report to
Bridge Commission (ND)

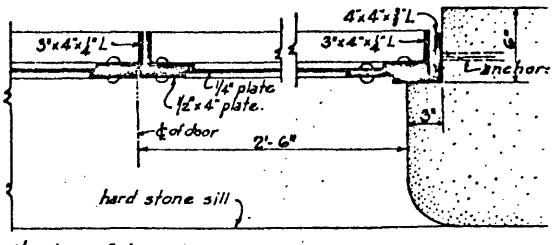
Louisville Landmarks Comm.
727 W Main St
Louisville, KY

ilar to West pylon.



JAMB SECTION
Head Section similar.

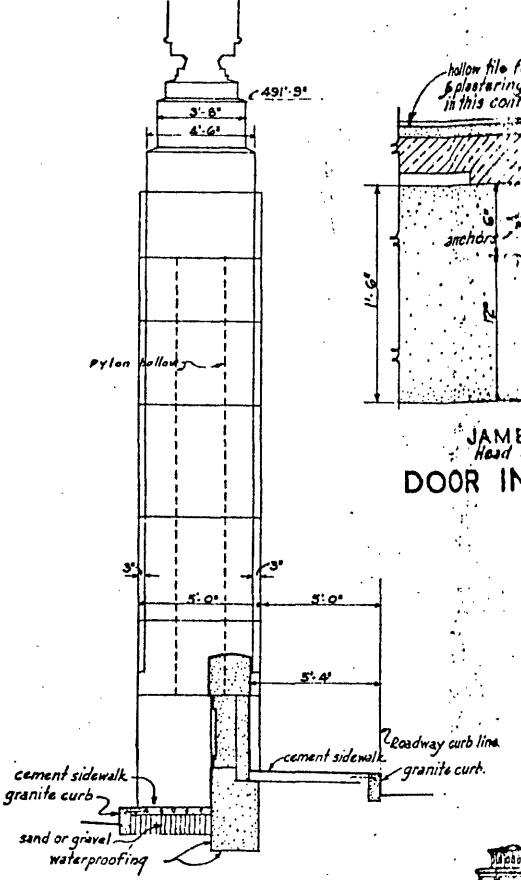
DOOR IN WEST WALL



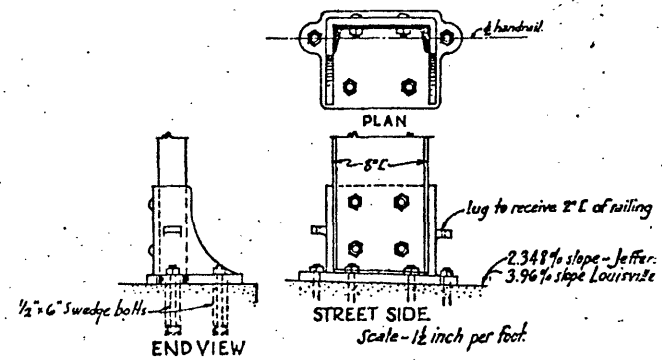
Scale - 1½ inch per foot.

JAMB SECTION

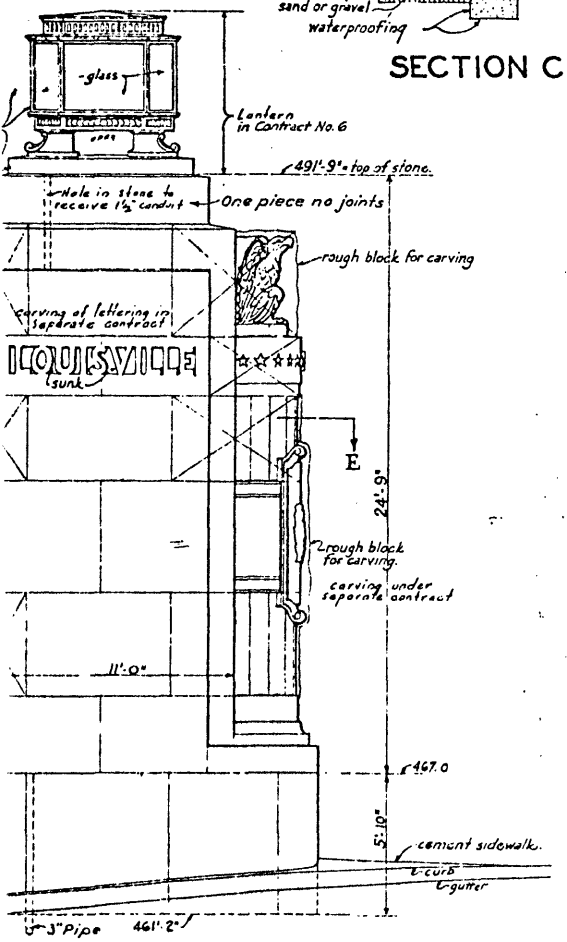
DOOR IN NORTH WALL

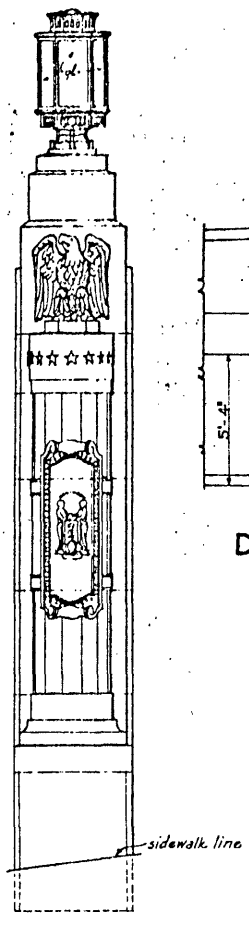


SECTION C-C



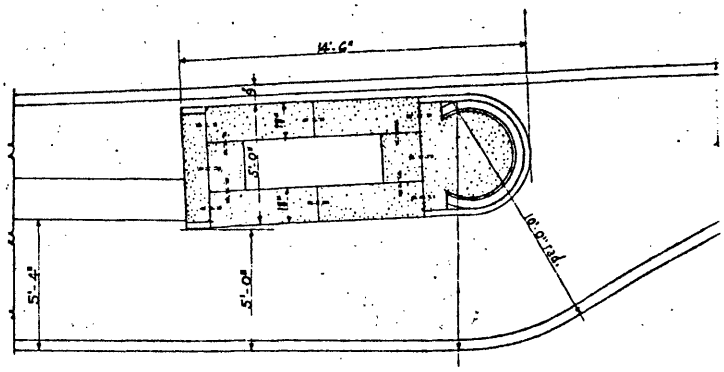
CAST IRON BASE FOR RAILING PO





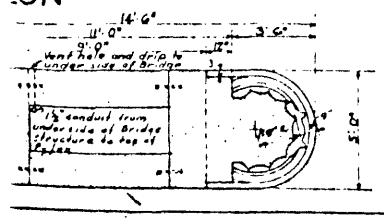
END ELEVATION

Both pylons are similar



DETAIL PLAN OF EAST PYLON AT LINE F-F

.ON



Note
Wherever Stone comes in contact with fill or concrete it shall receive two coats of waterproofing

APPROVED:

Ralph Modjeski

F. M. Masters

ENGINEERS

For Footings under stone work see Drawings 10 & 11.

Revised 12.11.1928.

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

APPROACHES
DETAILS

NOV. 1928

SCALE: 1/4" = 1'-0"

CONTRACT NO. 4.
DRAWING NO. 18.

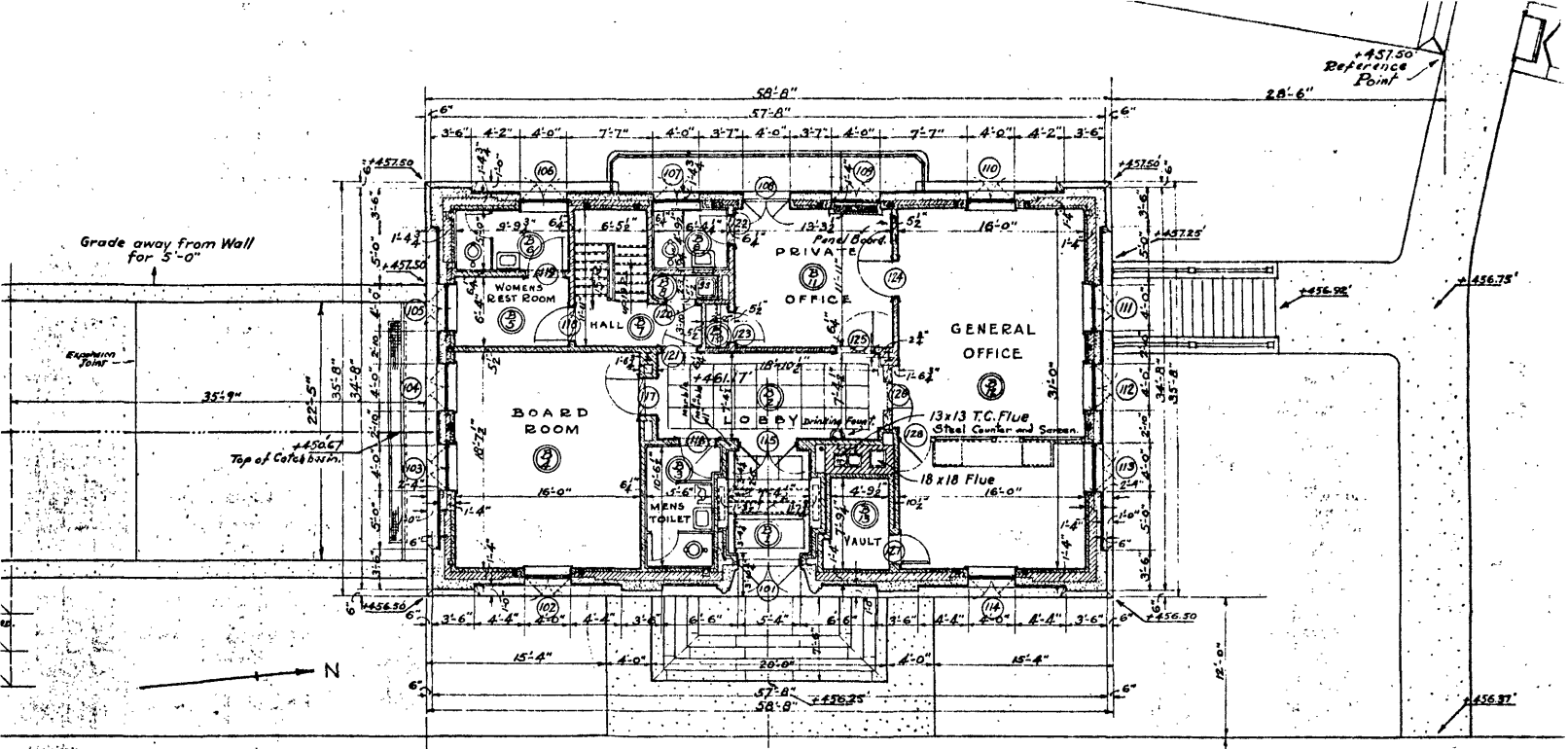
MODJESKI & MASTERS
ENGINEERS

PAUL P. CRET CONSULTING ARCHITECT

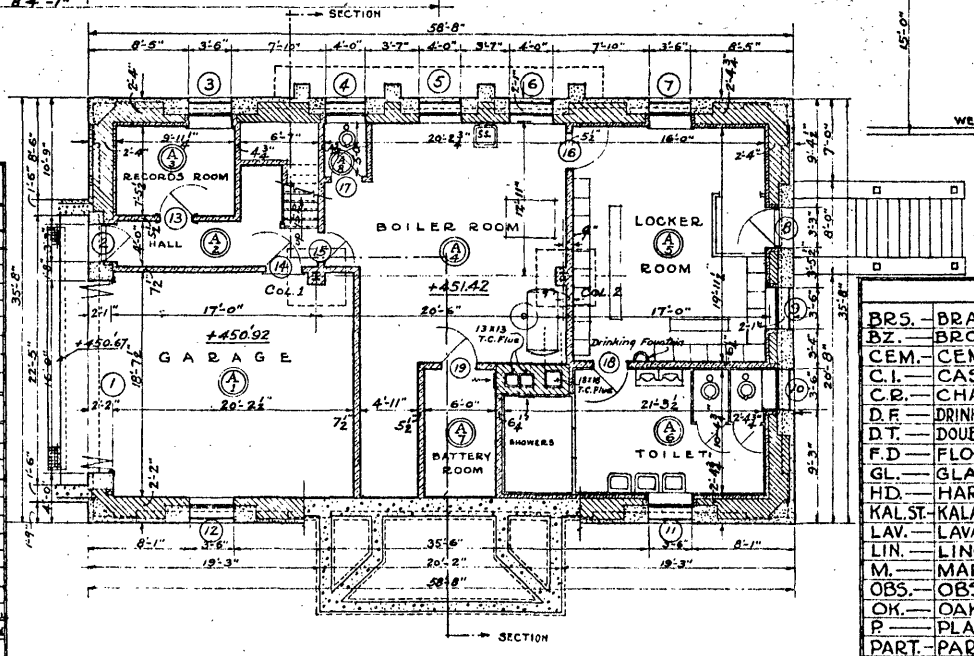
Louisville Municipal Bridge
Between Louisville, KY and
Jeffersonville, Indiana

Louisville Landmarks Commissio
727 W Main St
Louisville, KY

Figure 1 - detail of plans for
Louisville Municipal Bridge,
Modjeski & Masters, Final Report



FIRST FLOOR PLAN



BASEMENT FLOOR PLAN

TOLL HOUSE DOORS

NO.	SIZE	THICK	MAT'L	GLASS	TRIM	THRESH	FINISH	PANELS	MISC.
TOLL HOUSE 1 & 2	2'-8½" x 7'-0"	1¾	ST.	P.GL.		C.I.	P.D.	2	STEEL FRAMES
TOLL HOUSE 3	2'-4½" x 7'-0"	"	"	"		"	"	"	"
TOLL HOUSE 4 & 5	2'-4½" x 7'-0"	"	"	"		"	"	"	"
INTERIOR OF APPROACH									
MEN'S REST Room	2'-8½" x 7'-0"	1¾	OK		OK		SD.WD.		
WOMEN'S REST Room	2'-8½" x 7'-0"	1¾	KAL.		OK	C.I.	P.D.	1	KAL. ST. FRAME

ABBREVIATIONS

BRS. —	BRASS	PM. —	PICTURE MO
BZ. —	BRONZE	R. —	RISERS
CEM. —	CEMENT	RAD. —	RADIATOR
C.I. —	CAST IRON	SD. —	STAINED
C.R. —	CHAIR RAIL	SH. —	SHOWER
D.F. —	DRINKING FOUNTAIN	SL. —	SLATE
D.T. —	DOUBLE THICK	SS. —	SLOP SIN
F.D. —	FLOOR DRAIN	ST. —	STEEL
GL. —	GLASS	STD —	STIPPLED
HD. —	HARDENED	TR. —	TRANSOM
KAL.ST. —	KALAMEIN STEEL	TRDS. —	TREADS
LAV. —	LAVATORY	TZ. —	TERRAZZ
LIN. —	LINOLEUM	U. —	URINAL
M. —	MARBLE	VD. —	VARNISHI
OBS. —	OBSCURE	WA. —	WAINSCOT
OK. —	OAK	W.C. —	WATER CLOS
P. —	PLATE	W.P. —	WHITE PIN
PART. —	PARTITION	WX. —	WAXED
PD. —	PAINTED	WI.	WROUGHT IRON
PL. —	PLASTER	SH.	SHOWER
P. LEP.	PINK LEPANTO		

ALL PANELS IN DOORS TO BE WOOD UNLESS OTHERWISE NOTED.

SCHEDULE

GLASS	TRIM	THRESH	FINISH	PANELS	MISC.	NO.	SIZE	THICK	MAT'L	GLASS	TRIM	THRESH	FINISH	PANELS	MISC.
P.GL.		DZ.		1		126	OPENING WITH M			RAIL &	Gate	(DZ)			
P.GL.	ON		SD.WX.	1	TRANS.	127	VAULT DOOR (SEE SPECIFICATIONS)								
	OK.&M.	M.		1	SLAT ING DUT TOM	128	METAL DOOR SEE DETAIL								
OBS.GL.	OK.	M.	"	1	TRANS. OBS.GL.	211	3'-0"x7'	1¾"	OK		OK.		SD.WX.	1	
"	"	M	"	1	"	212	2'-8"x7'	"	"		OK	M.	"	1	
		M.	"	1		213	3'-6"x7'	"	"		OH		"	1	
		M	"	1	"	214	"	"	"				"	1	
OBS.GL.			"	1	TRANS. OBS.GL.	215	"	"	"				"	1	
	"	M.	"	1		216	Trap door see detail							1	
OBS.GL.	"	M	"	1	TRANS. OBS.GL.										

APPROVED

J. M. Masters
ENGINEERS

Paul P. Cret
ARCHITECT

Revised April 15, 1929 as per letter of April 5, 1929

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY., & JEFFERSONVILLE, IND.

ADMINISTRATION BUILDING, TOLL HOUSES, AND INTERIOR OF APPROACHES.

ADMINISTRATION BUILDING, PLANS, ELEVATIONS, & SCHEDULES.

DATE MARCH 1, 1929.
SCALE 1/8 - 1'-0"
CONTRACT NO. 6.
DRAWING NO. 1.

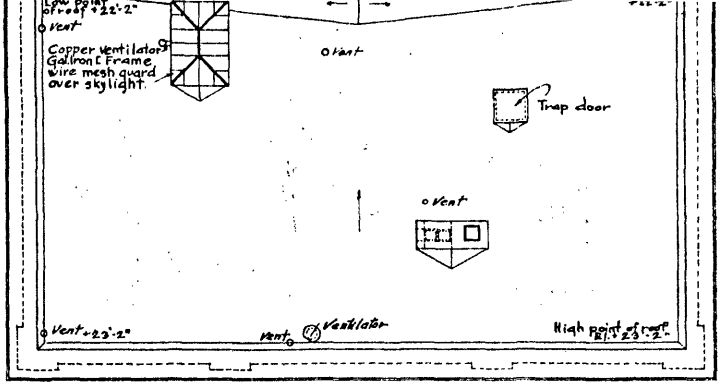
MODJESKI & MASTERS
ENGINEERS.

PAUL P. CRET - CONSULTING ARCHITECT.

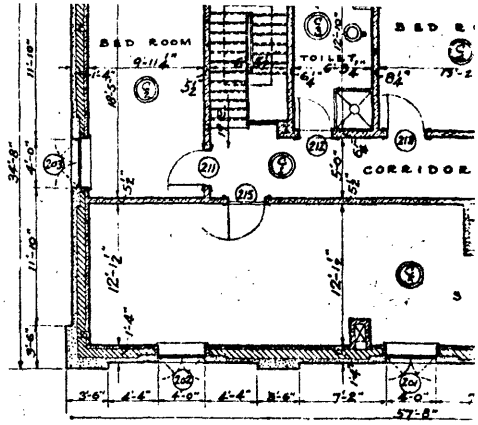
Louisville Municipal Bridge
Between Louisville, KY and
Jefferson, Indiana

Louisville Landmarks Commissior
727 W Main
Louisville, KY

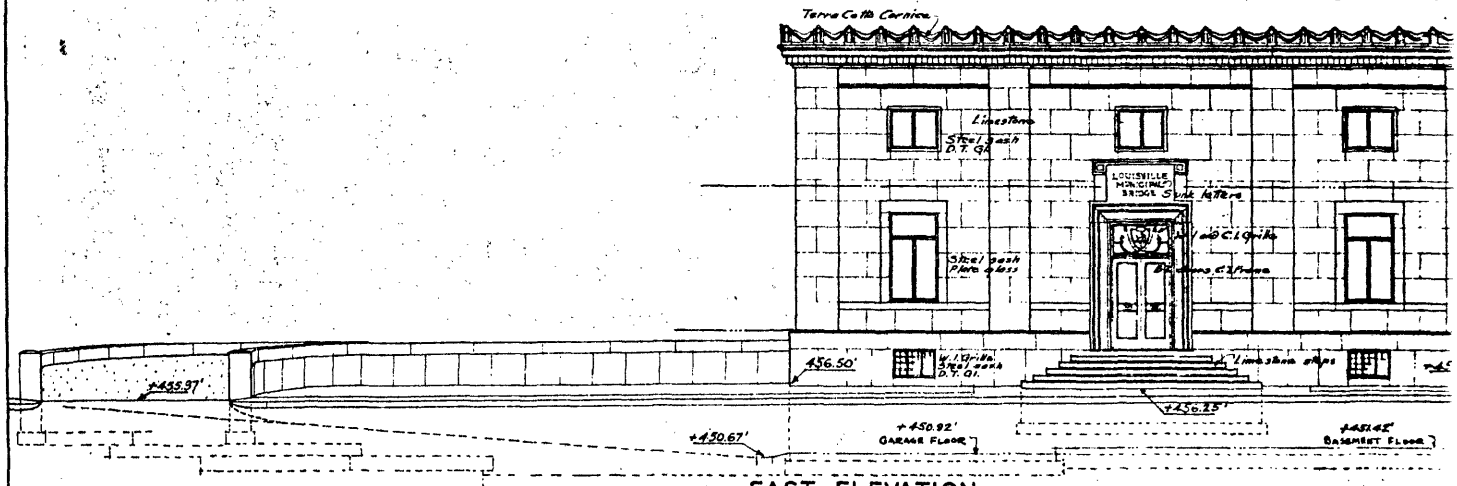
Figure 2 - detail of plans for
Louisville Municipal Bridge
Modjeski & Masters, Final Report



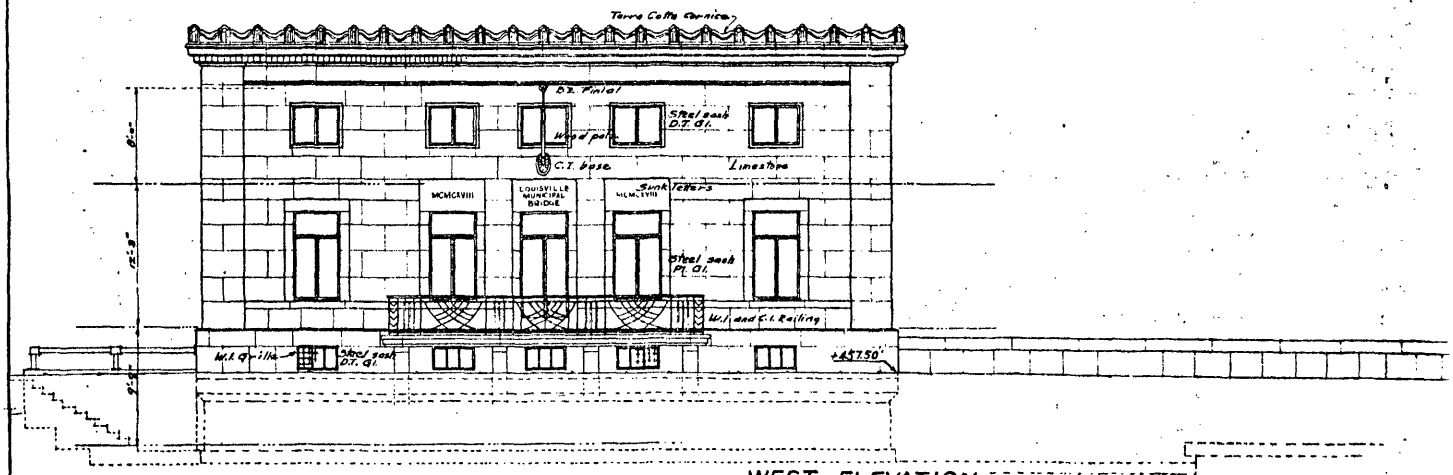
ROOF PLAN



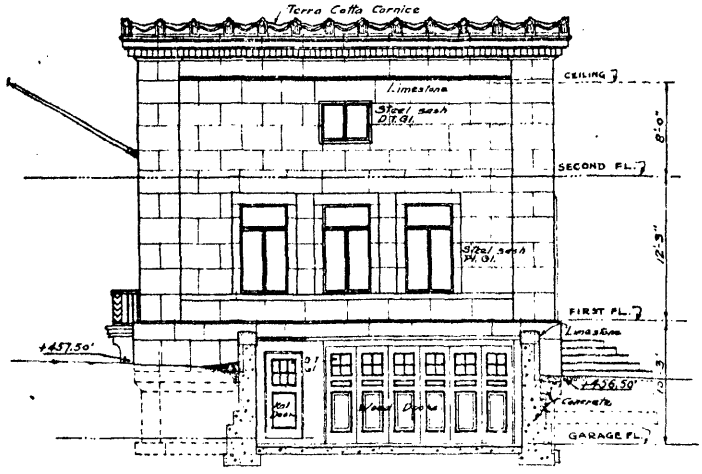
SECOND FLOOR



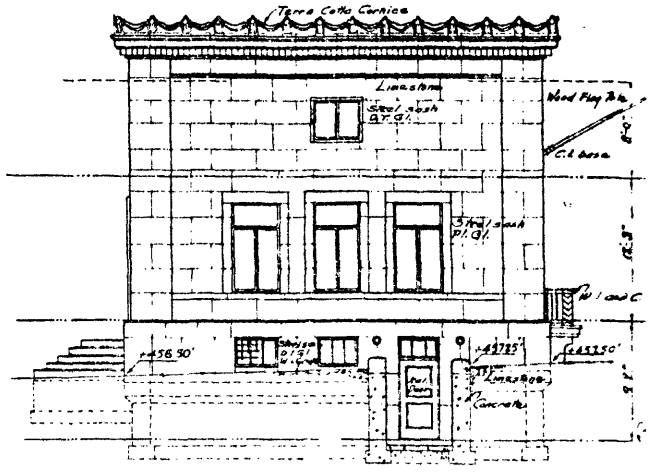
EAST ELEVATION



WEST ELEVATION



SOUTH ELEVATION

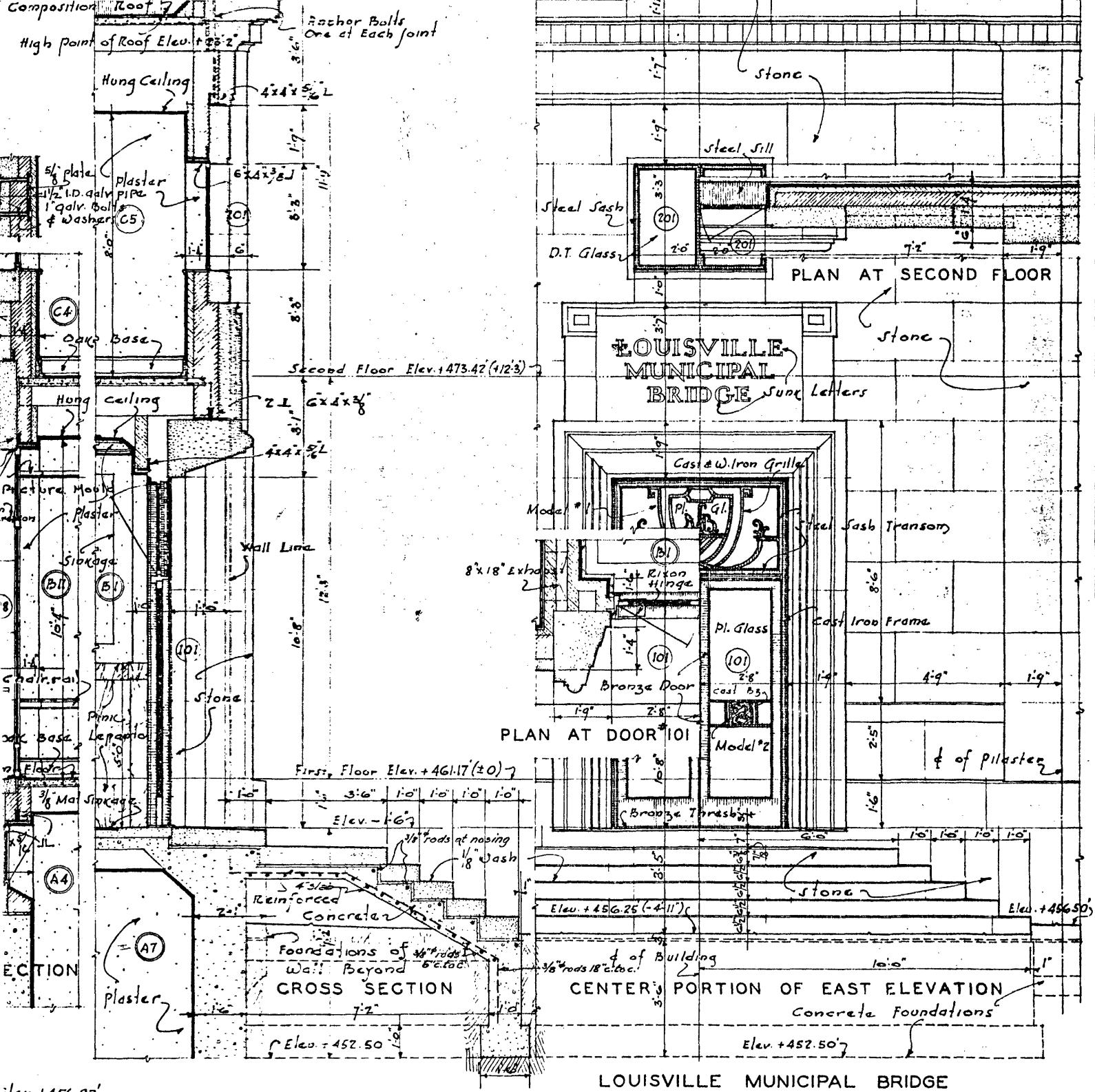


NORTH ELEVATION

Louisville Municipal Bridge
Between Louisville, KY and
Jeffersonville, Indiana

Louisville Landmarks Comm.
727 W Main St
Louisville, KY

Figure 3 - detail of plans for
Louisville Municipal Bridge
Modjeski & Masters, Final Report



INDEX OF MATERIALS

- STONE
- CONCRETE
- MARBLE
- BRICK
- CINDER CONCRETE
- HOLLOW TILE
- CINDERS
- WOOD

All Models except "C" Model are Provided for in Allowance

APPROVED
Clay Williams
J. M. Masters
ENGINEERS
ARCHITECT

Reinforcing of Stairway Slabs, Revised 3-14-1929

LOUISVILLE MUNICIPAL BRIDGE
OVER THE OHIO RIVER
CONNECTING
LOUISVILLE, KY. & JEFFERSONVILLE, IND.

ADMINISTRATION BUILDING, TOLL HOUSES AND INTERIOR OF APPROACHES

DETAILS OF ADMINISTRATION BUILDING

DATE MARCH 1, 1929
SCALE - ¼ & ½ = 1-0
CONTRACT NO. 6.
DRAWING NO. 2
MODJESKI & MASTERS
ENGINEERS

Revised April 15, 1929 as per letter of April 5, 1929 to Henry Bickel Co.

PAUL P. CRET CONSULTING ARCHITECT

Louisville Municipal Bridge
Between Louisville, KY and
Jeffersonville, Indiana

Louisville Landmarks Commission
727 W Main Street
Louisville, KY

Figure 4 - detail of plans for
Louisville Municipal Bridge
Modjeski & Masters, Final Report

III. TREATMENT PLAN

TREATMENT PLAN FOR THE GEORGE ROGERS CLARK MEMORIAL BRIDGE NORTHERN APPROACH, CLARK COUNTY, INDIANA

The subject of this Treatment Plan is the George Rogers Clark Memorial Bridge (Bridge), also known as the Louisville Municipal Bridge, a historically significant engineering structure that is listed in the National Register of Historic Places (NRHP). Due to the bridge's significance and in consideration of the proposed construction activities associated with redesign of the Bridge as part of the Louisville Southern Indiana Ohio River Bridges (LSIORB) project , the First Amendment Memorandum of Agreement (MOA) was developed, stipulating actions that must be carried out prior to the initiation of construction activities. The development of this Treatment Plan, which outlines processes and procedures to be adhered to for each character-defining feature of the northern approach in preparation for and during construction activities, satisfies, in part, Stipulation III.D. Such a Treatment Plan is important in ensuring the historic integrity of materials and components during project activities. All construction activities will be completed by the Walsh Design Build Team (Walsh) and their subcontractors.

Walsh recognizes that the first step in protecting the historic integrity of individual materials and components of the Bridge is thorough documentation. To that end, and in accordance with the First Amended MOA, a state-level documentation packet depicting current conditions of the Bridge and associated approach elements has been prepared. To supplement this data, prior to any construction activities on the Bridge, Walsh will document any component being removed, relocated, and used elsewhere on site to ensure that no damage is done during this process, as well as to ensure historical accuracy upon relocation.

The information included in this Treatment Plan is supplemented by construction plan sheets, depicting construction specifications and details of the stairs, pylon foundations, and other such features. These plans are included as Attachment A.

I. HISTORIC METAL HANDRAIL

The existing metal handrail on the Bridge approach will be removed prior to construction activities and reinstalled on the new approach to be constructed as part of the LSIORB project. If certain sections of railing are found to be too deteriorated during removal to allow for sufficient functioning on the new approach, new sections will be fabricated to match the existing railing in-kind in terms of design and materials, in order to retain continuity and overall historic integrity of the component. The fabricator of the new sections is available to fabricate pieces as necessary for successful rehabilitation of the handrail. The following processes will be adhered to during removal and reinstallation of the handrail. Documentation related to the historic metal railing is included as Attachment B. The lower (northernmost) handrail of the new approach will be paneled concrete or limestone.

Removal of Existing Metal Handrail

- Walsh will document and label each section of handrail prior to the initiation of any construction activity, in order to facilitate reinstallation in a historically appropriate manner. While the sections are being documented, each one will be assessed to determine if it is suitable for reinstallation on the new Bridge approach or if it is functionally deficient and thus requires replacement.

- Following documentation, Walsh will unbolt and dismantle each section of handrail, ensuring that no damage is introduced to the handrail components or other character-defining features of the bridge during removal. Sections of the handrail deemed appropriate for reuse after inspection will be carefully loaded onto a semi-trailer.

- The handrail sections determined appropriate for reinstallation on the new approach will be transported to a secure facility, where they will be carefully unloaded and stored until Walsh is ready to install them on the new Bridge approach. Sections of the handrail that require cleaning and priming will be done so in a controlled environment at this time. Cleaning will be completed by sandblasting (per NPSPB No.27) the handrail by an experienced contractor. Walsh will ensure that no damage is done to the handrail during this process. If damage occurs, the piece will be replaced. After all pieces are cleaned they will then be primed and prepared for painting. All notes and documentation completed during removal of and transport of the handrail components will be maintained for the duration to ensure appropriate reinstallation at a later date.

Reinstallation of Existing/New Metal Handrail

- Following new construction of the Bridge approach, Walsh will transport the historic handrail components, as well as any newly-fabricated in-kind pieces, from secured storage.

- Each section will be carefully lifted from the transport vehicle using nylon slings and measures will be taken to control and stabilize the handrail sections while they are being placed in the new locations to avoid unnecessary damage.

- Each section will be installed (bolted) on the edge of the concrete coping, in a manner consistent with their historic treatment, returning the bridge to its historic function. Once erection of the handrail is complete, it will be painted.

Handrail on the Reconstructed Stairs of the Bridge (see below)

- New handrail will be installed on the reconstructed stairs on the east and west sides of the Bridge approach near the pylons to comply with current codes and accessibility guidelines. The handrail will be fabricated to complement the historic handrail on the bridge. The handrail will also be painted to match the handrail on the existing Clark Memorial Bridge. Shop drawings for the handrail will be submitted for review to the Indiana Department of Transportation (INDOT), Kentucky Transportation Cabinet (KYTC), and the Bi-State Historic Consultation Team (BSHCT).

II. LIMESTONE FACADE / BLOCK RELOCATION

Each elevation of the existing Bridge approach is faced with limestone block. As part of the current project, the original limestone blocks will be removed and stored so that they can be reinstalled as a façade material at the east elevation of the new Bridge approach, which will be constructed with a plain faced, mechanically stabilized earth (MSE) wall. After construction is complete, the limestone blocks will be returned to the site and reinstalled as the façade. A record of the decision of the Bi-State Historic Consultation Team (BSHCT) and the Indiana Historic Preservation Advisory Team (IHPAT) to relocate the limestone block walls to the east wall is included as Attachment B.

The Bi-State Management Team has instructed Walsh not to erect a limestone block façade on the west side of the Bridge approach. Instead, a MSE wall will be erected and the concrete wall panels used on the MSE wall will be cast using a concrete formliner that will closely replicate the appearance of the stacked limestone blocks. The formliner for the west elevation will be cast in a natural color to replicate the historic limestone blocks presently found on the Bridge approach. Detailed drawings of the formliner are included in Attachment A construction plan pages.

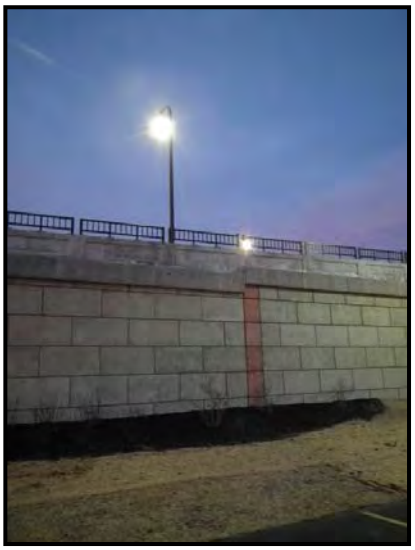


Figure 1: Picture from another job of the MSE wall panels that are going to be used on the west side of the approach.

Removal of Limestone Blocks

- To allow access to safely remove the limestone blocks on the Bridge approach, Walsh will first remove the sidewalk carefully so as not to damage the limestone blocks below.

- Walsh will remove each limestone block using a hydraulic excavator and specially-designed clamp, designed so as to ensure that blocks are not damaged during removal. Each block will be lifted individually by the clamp and then placed on a flatbed trailer for transportation to a secure storage facility. Upon placement of the blocks on the trailer, each will be stabilized and supported so as to prevent movement or damage during transport.

- At the storage facility, each block will once again be individually lifted and removed from the trailer with specialized equipment. As the blocks are unloaded in the storage facility, each will be stabilized, supported, and monitored so as to ensure there is not inadvertent damage while in storage.

Relocation of Limestone Blocks

- Per guidance from the KYTC, the original limestone blocks of the historic approach will be reinstalled in the construction of the East side of the new Bridge approach. As such, following completion of construction on the new Bridge approach, the historic limestone blocks will be reinstalled to the façade on the east elevation, limestone blocks will not be cleaned.

- To facilitate reinstallation, at the storage facility, each historic limestone block will be individually assessed as to its condition to determine appropriateness for reinstallation on the east elevation of the new Bridge approach. Preference will be given to those blocks that are structurally and aesthetically sound, promoting both structural and historical integrity.

- Following selection of the limestone blocks to be reinstalled and following completion of the new Bridge approach, each limestone block will be loaded onto flatbed trailers for return to the approach site. The limestone blocks will once again be stabilized and supported to prevent movement or damage during transport to the site.

- During construction of the façade wall, each block will be individually lifted from the transport trailer for reinstallation by the hydraulic excavator and specialized clamp. The operator and crew completing the construction work will take precautionary measures to ensure that the businesses and visitors' center in the area of the new wall are not impacted by the construction.

- Once the façade is complete, the remaining blocks will become the property of the contractor and will be their responsibility to remove from the site.

III. LIMESTONE STAIRS

The existing limestone stairs on the east and west sides of the Bridge approach will be carefully removed and securely stored until the components can be integrated into a new stair design as part of the Bridge approach redesign. The existing limestone stair treads and outer coping will be incorporated into the new stairway construction, which will be required to comply with all current code regulations, including the addition of a handrail on top of the original coping. The new handrail will designed to complement the existing handrail, so as not to be an intrusive modern element that detracts from the historic character of the approach elements. Special care will be taken when fastening it to the existing limestone coping to prevent any direct damage and to prevent any future indirect damage at the connection.

Removal of Existing Stairs

- The coping on the existing stairs will be removed using a hydraulic excavator with nylon straps as not to damage the coping or the treads during removal.

- The stair treads will be removed using padded forks on a loader or skid steer, depending on the weight of the treads.

- The curb and treads will be loaded onto a flatbed trailer for transportation to a secure storage facility. Each component will be appropriately braced and supported to prevent movement and inadvertent damage during transport.

- At the storage facility, the coping, curb, and treads will be unloaded from the flatbed trailer in the same manner as they were loaded, with nylon straps or padded forks, as appropriate, to prevent any damage during the unloading process.

Installation of Existing Stair Components on New Foundations

- The new stair foundations will be cast-in-place solid concrete with steps formed to allow the historic limestone treads from the original stairs to be placed seamlessly on top of the concrete base, limestone treads will not be cleaned. The limestone treads will be secured to the concrete stair foundations with grout.

- The limestone curbs presently along the stairs will be incorporated into the new stair foundations. Here, concrete ramps will be poured on either side of the stair foundations to provide a solid base for reinstallation of the curbs. The curbs will be secured to the concrete ramps with grout, limestone curbs will not be cleaned.

- In accordance with code regulations, a handrail must be installed on the new stairs. For this, a handrail will be designed to be compatible with the rail currently along the deck of the Bridge approach so as not to unduly detract from the historic character of the Bridge approach. The handrail will be secured to the coping with mounts specifically designed to prevent damage during its fastening.

- Once the stairs are complete, the remaining curb and treads will become the property of the contractor and will be their responsibility to remove from the site.

IV. HISTORIC LIMESTONE PYLONS

Two plans have been developed to address relocating the original pylons. The first plan involves removing the pylons by carefully dismantling them to minimize the potential for damage during relocation, while the second plan involves excavating the footer of the pylons and using hydraulic movers to relocate the pylons as a single structure. Both plans will continue to be assessed to determine the best course of action, with emphasis placed on choosing the approach that best minimizes the potential for damage to the pylons and their individual components during removal and relocation. Documentation related to relocation of the pylons is included as Attachment B.

Plan 1. Dismantling of Limestone Pylons for Relocation

Should this plan be chosen and prior to the process being undertaken, a professional limestone contractor who specializes in the relocation of historic monuments will provide an in-depth relocation plan, including details on how the process will be photographed and documented and how the pylons will be excavated, braced, removed, relocated, and rest in their final locations as part of the redesign. This contractor will be verified through the provision of references of similar types of work.

Dismantling Pylons for Relocation

- The original pylons and all associated features will be photographed, inspected, and documented prior to dismantling.

- The lighting fixture topping each pylon will be removed by a licensed electrical contractor. The fixture will be secured and padded during removal and transport so that the glass and metal components are not damaged.

- A mason crew experienced in relocating historic structures will be used to remove the limestone blocks. As they remove the blocks, they will be labeled to ensure that the pylons will be reassembled just as they were dismantled.

- The crew will assess the limestone blocks to determine if the original lifting components are still secured in the blocks. If the original components are located, they will be assessed to determine if they are still capable of being used to lift the blocks. If they are, the crew will utilize the components to lift the blocks for disassembly. Each block will be properly stabilized during dismantling to prevent damage to any of the limestone components.

- Upon verifying a secure lifting method, the crew will carefully remove the mortar from the joints to work the blocks loose from the inside. This will prevent damage to the exterior face of the limestone blocks. All mortar removal will be monitored to ensure that inadvertent damage to the limestone block does not occur.

- Special lifting plans will be developed for removal of the carved limestone eagle feature to ensure proper lifting and prevent damage from occurring during removal. The entire feature, as well as individually fragile portions, will be properly stabilized and padded during removal and transport to protect the intricate details of the carving.

- At the base, the crew will excavate around the remaining blocks and footer to provide access to the base components. Mechanized excavation will not be used in close proximity to the base. Rather, manual shoveling will be used near the base of the pylon to ensure that no damage is done to the limestone.

- The relocation crew will remove limestone blocks individually, as they are moved to the relocation site and staged for resetting.

- Delicate or intricate pieces, such as the carving of the eagle, will be stabilized, padded, and placed in a secured enclosure to prevent inadvertent damage prior to relocation.

Resetting Pylons at New Location

- Once the pylons have been dismantled, they will be reset on a new footer at the relocation site. Each piece will be reinstalled in the reverse order from which it was dismantled, and in reference to the documentation process completed during dismantling, to ensure that all components are historically accurate in placement and alignment. Joints will be reset with limestone mortar tooled to match the original joints before dismantling.

- The pylons will be photographed, inspected and documented post relocation to verify that no damage inadvertently occurred during relocation.

Plan 2. Relocation of Limestone Pylons by Moving as a Single Structure

Should this plan be chosen and prior to the process being undertaken, a professional limestone contractor who specializes in the relocation of historic monuments will provide an in-depth relocation plan, including details on how the process will be photographed and documented and how the pylons will be excavated, braced, removed, relocated, and reset in their final locations as part of the redesign. This contractor will be verified through the provision of references of similar types of work.

- Relocation of Limestone Pylons as a Single Structure

    - The original pylons and all associated features will be photographed, inspected, and documented prior to relocation. The pylons will not be cleaned.

    - The lighting fixture topping each pylon will be removed by a licensed electrical contractor. The fixture will be secured and padded during removal and transport so that the glass and metal components are not damaged.

    - To facilitate relocation of the pylons, each as a single unit, the crew will excavate around the base of the pylons. Away from the base, excavation will be mechanical; as the crew gets close to the base of the pylons, manual shoveling will be used to excavate around the base, minimizing the potential for damage to the limestone.

    - Following excavation, the footer of each pylon will be prepared for installation of steel beams beneath the footer to transfer the load of the pylon structure from the footer to the beams.

- The pylon structure will then be hydraulically lifted to install self-propelled hydraulic dollies, which will be used to transport the pylon structures to their new footers. The pylon structures will be stabilized and supported at key load points during transport to ensure that the pylons do not move during relocation.

- The pylons will be photographed, inspected and documented post relocation to verify that no damage inadvertently occurred during relocation.

V. LIMESTONE SIDEWALK EDGING BLOCKS

The small limestone blocks currently lining the edge of the sidewalks extending along the roadway as traffic exits the Bridge coming into Indiana will be removed and relocated during construction to prevent damage. They will be reinstalled along newly constructed sidewalk sections following construction.

Removal of Limestone Blocks

- Walsh will remove each limestone block using a hydraulic excavator and specially-designed clamp, designed so as to ensure that blocks are not damaged during removal. Each block will be lifted individually by the clamp and then placed on a flatbed trailer for transportation to a secure storage facility. Upon placement of the blocks on the trailer, each will be stabilized and supported so as to prevent movement or damage during transport.

- At the storage facility, each block will once again be individually lifted and removed from the trailer with specialized equipment. As the blocks are unloaded in the storage facility, each will be stabilized, supported, and monitored so as to ensure there is not inadvertent damage while in storage.

Relocation of Limestone Blocks

- To facilitate reinstallation, at the storage facility, each historic limestone block will be individually assessed as to its condition to determine appropriateness for reinstallation along newly constructed sidewalks. Preference will be given to those blocks that are aesthetically sound, promoting historical integrity. Limestone blocks will not be cleaned.

- Following selection of the limestone blocks to be reinstalled and following completion of the new sidewalks, each limestone block will be individually loaded onto a flatbed trailer for return to the site. The limestone blocks will once again be stabilized and supported to prevent movement or damage during transport to the site.

- During reinstallation, each block will be individually lifted from the transport trailer for reinstallation by the hydraulic excavator and specialized clamp. The operator and crew completing the construction work will take precautionary measures to ensure that the businesses and visitors' center in the area of the new sidewalks are not impacted by the construction.

- Once the sidewalk edging blocks are complete, the remaining blocks will become the property of the contractor and will be their responsibility to remove from the site.

VI. HISTORICALLY APPROPRIATE LIGHTING

Walsh is aware that the aesthetics committee for the Louisville-Southern Indiana Ohio River Bridges project, along with the participant historical organizations and entities, requires historically-appropriate lighting, with a preference for the reuse of the existing light poles presently along the Bridge approach. As character-defining features, these poles are historically significant to the Bridge and are to be preserved as part of the project. In addition to recognizing the historical significance of the extant lighting, the aesthetics committee also wants to retain the same amount of lamp lumens/light shed (light shone on the Bridge approach) that presently characterizes the area. Therefore, Walsh has included the existing lighting – in a configuration retaining the appropriate light shed – into the project design. Lighting design plan sheets are included in Attachment A.

Removal and Reinstallation of Historic Light Fixtures

- Walsh, and electrical subcontractor, James H. Drew, will carefully uninstall each light fixture, ensuring that no damage is introduced to the light fixtures, limestone blocks, or other character-defining features of the bridge during removal.

- Each light pole will be lifted using a crane with nylon slings to stabilize and support the fixture during removal.

- Upon removal, the light poles will be transported to a secure facility, where they will be carefully unloaded and stored until Walsh is ready to reinstall them on new foundations designed as part of the new bridge approach. Light poles will not be cleaned.

- Following new construction of the bridge approach and setting of the light foundations, the light poles will be transported back to the site for reinstallation. Each light pole will be reinstalled by James H. Drew and will be lifted and supported by a crane with nylon slings during the installation process.

VII. IMPACT TO HISTORIC ADMINISTRATION BUILDING

Walsh does not foresee any impacts to the historic Administration Building located adjacent to the Bridge approach. The building is outside the right-of-way and is not anticipated to be affected by the project. Crews will be attentive to the building during construction activities to ensure that the use of hydraulic excavators and other equipment in the vicinity of the Bridge approach will not impact the site. In addition, preventative measures for vibration and noise are highlighted in the Design Built Team's Vibration and Noise abatement submittal, which is included on a CD with this submission.

ATTACHMENT A: CONSTRUCTION PLAN PAGES

New Stair Location

New location of sidewalk blocks

New Pylon Location

Existing Pylon Location

Existing Pylon Location

New location of sidewalk blocks

New Pylon Location

Limestone Block Facade

New Stair Location

NOTE: CURB RADII MEASURED TO FACE OF CURB

(K1) QC/QA HMA (SEE TYP. SECTIONS)	(F) SIDEWALK, CONC., 4 IN.	(2) CONC. MEDIAN BARRIER (45°)
(K2) QC/QA HMA (SEE TYP. SECTIONS)	(FT) SIDEWALK TRANSITION	(2A) CONC. MEDIAN BARRIER, MOD. 1
(K3) QC/QA HMA (SEE TYP. SECTIONS)	(G) W-BEAM GUARDRAIL	(2B) CONC. MEDIAN BARRIER, MOD. 2
(K4) QC/QA HMA (SEE TYP. SECTIONS)	(M1) REINF. CONC. MOMENT SLAB, 12 IN.	(2C) CONC. MEDIAN BARRIER, MOD. 3
(K5) QC/QA HMA (SEE TYP. SECTIONS)	(M2) REINF. CONC. MOMENT SLAB, 10 IN.	(2D) CONC. MEDIAN BARRIER (33")
(K6) QC/QA HMA (SEE TYP. SECTIONS)	(W) RETAINING WALL	(3) BRIDGE RAILING, FT
(K7) QC/QA HMA (SEE TYP. SECTIONS)	(A) CURB RAMP TYPE A	(4) BRIDGE RAILING, FC
(K8) QC/QA HMA (SEE TYP. SECTIONS)	(C) CURB RAMP TYPE C	(13) INTEGRAL CONC. CURB
(A) QC/QA-PCCP (SEE TYP. SECTIONS)	(G) CURB RAMP TYPE G	(15) CURB AND GUTTER
(P) PCCP PATCHING, FULL DEPTH	(H) CURB RAMP TYPE H	(18) CURB AND GUTTER, TYPE B

(19) CURB AND GUTTER, TYPE B, MODIFIED, T" (SEE GENERAL DETAILS)

(20) CURB AND GUTTER, MODIFIED, T" (SEE GENERAL DETAILS)

(26) NURSERY SODDING

(R) MILL & RESURFACE (SEE TYP. SECTIONS)

(2E) CONC. MEDIAN BARRIER (33"), MOD. 1

→ DIRECTION OF TRAVEL

REMOVAL NOTES

1. REMOVE OR ABANDON STRUCTURE AND PIPES AFTER NO LONGER NECESSARY FOR TEMPORARY DRAINAGE
2. REMOVE OR ABANDON
3. PIPE TO REMAIN

REV. NO.	SUBMITTAL NAME	DATE
REV. B	INTERIM SUBMITTAL	08/08/2013
REV. A	CONCEPTUAL SUBMITTAL	04/16/2013

PREPARED BY: THE OHIO RIVER BRIDGES; WALSH Milestone JACOBS

PRELIMINARY

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SSL DRAWN: TPH

CHECKED: RJP CHECKED: MEN

INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN
CONSTRUCTION DETAILS - LINES "US-31", "FR-M", "RAMP 10" & "RAMP 11"

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE
VERTICAL SCALE	DESIGNATION 0300798
SURVEY BOOK	PROJECT 0300798
CONTRACT	SHEET NO. 3R2783 of
	DRAWING NO.

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DATE PLOTTED: 8/8/2013
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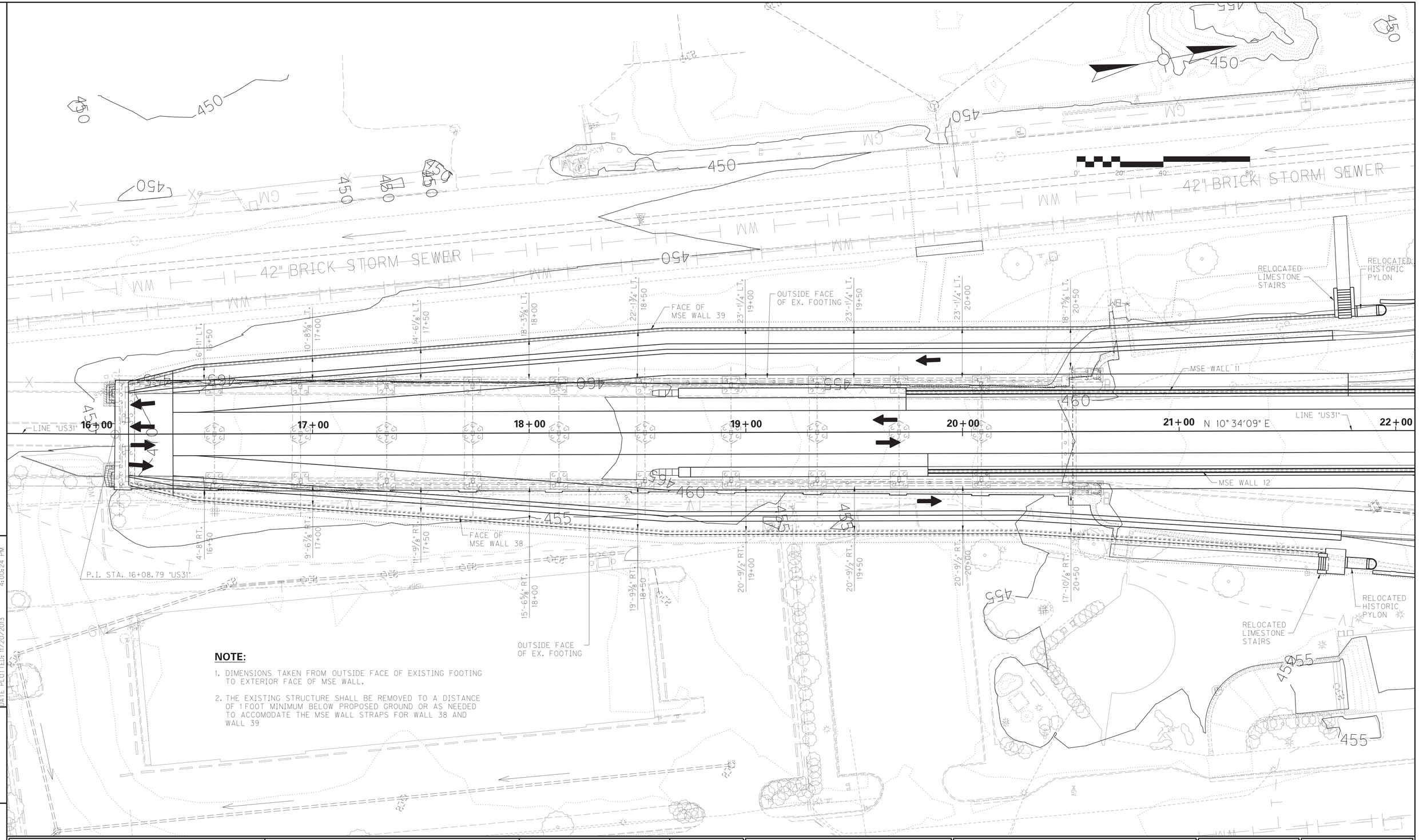

NOTE:

1. DIMENSIONS TAKEN FROM OUTSIDE FACE OF EXISTING FOOTING TO EXTERIOR FACE OF MSE WALL.
2. THE EXISTING STRUCTURE SHALL BE REMOVED TO A DISTANCE OF 1 FOOT MINIMUM BELOW PROPOSED GROUND OR AS NEEDED TO ACCOMODATE THE MSE WALL STRAPS FOR WALL 38 AND WALL 39

MicroStation v8.11.9.357 | MODEL NAME: BU2AB-1 | USER: mappel | DATE PLOTTED: 11/20/2013 4:00:24 PM | FILE NAME: ...\dms02675\S3_SDS_EF-01.dgn

REV. NO.	BU 2AB-1 RFC	11/19/2013
REVISION NO.	SUBMITTAL NAME	DATE

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

KEVIN MICHAEL GORAK REGISTERED No. 10100852 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Kevin M. Gorak 11/19/2013
DESIGN ENGINEER DATE

DESIGNED: KMG DRAWN: PCR
CHECKED: MEA CHECKED: MEA

INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN

FOUNDATION PLAN

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE	DESIGNATION 0300798
SURVEY BOOK	PROJECT 0300798
CONTRACT	SHEET NO. 3S5300 of
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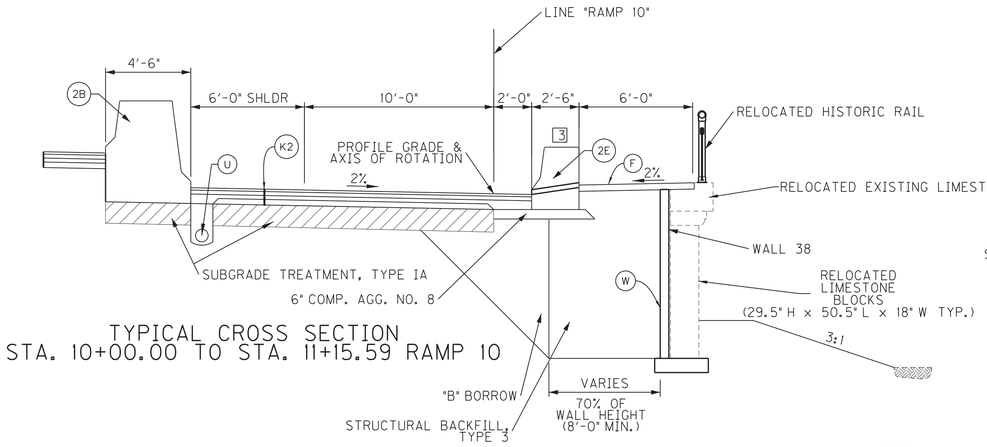
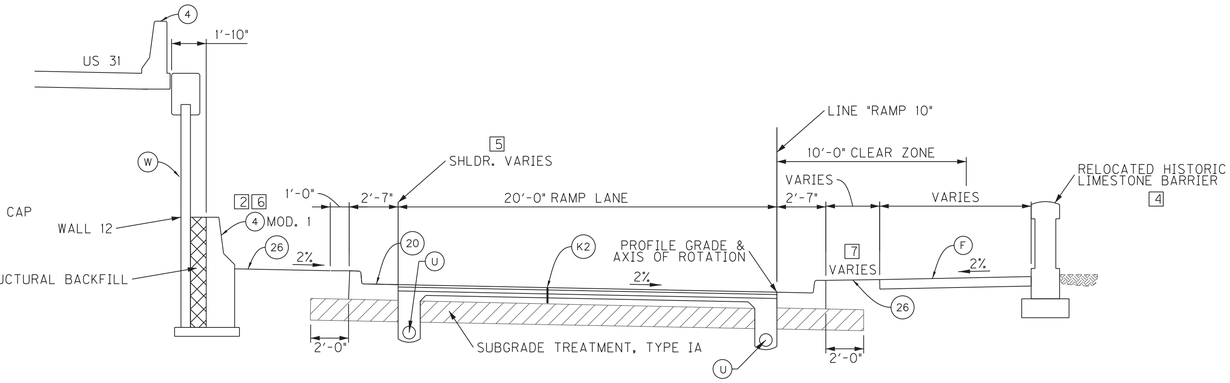


TYPICAL CROSS SECTION
STA. 10+00.00 TO STA. 11+15.59 RAMP 10



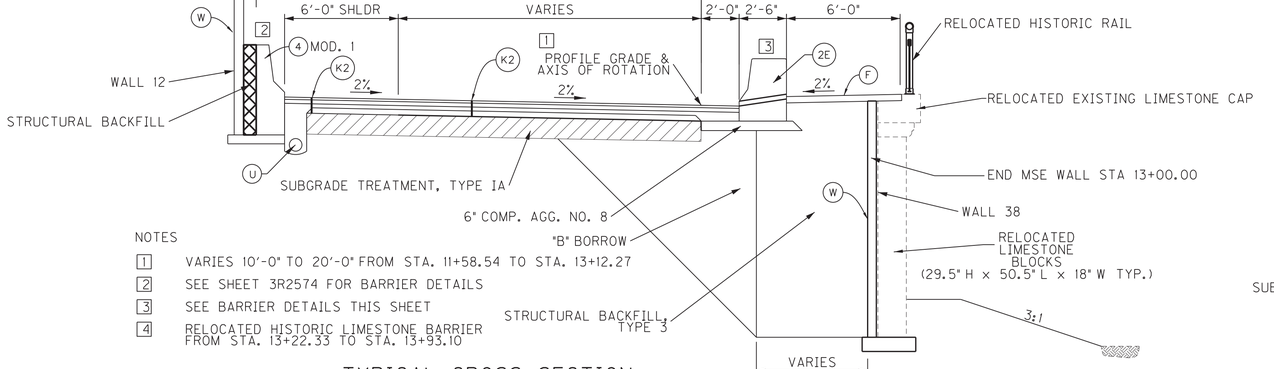
TYPICAL CROSS SECTION
STA. 13+06.73 TO STA. 13+93.10 RAMP 10

NOTES

5 VARIES 6'-0" TO 7'-8" FROM STA. 13+12.23 TO STA. 13+37.55
VARIES 7'-8" TO 0'-0" FROM STA. 13+37.55 TO STA. 13+76.15

6 BARRIER ENDS AT STA. 13+45.16

7 VARIES 0'-0" TO 7'-0" FROM STA. 13+06.73 TO STA. 13+93.10



NOTES

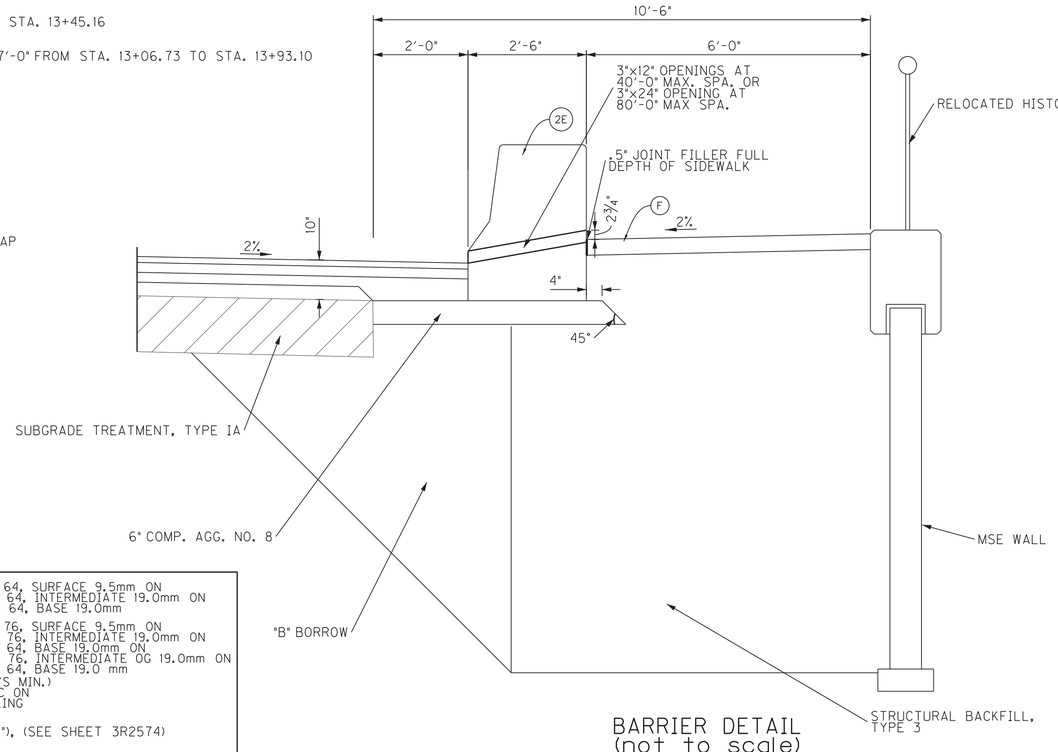
1 VARIES 10'-0" TO 20'-0" FROM STA. 11+58.54 TO STA. 13+12.27

2 SEE SHEET 3R2574 FOR BARRIER DETAILS

3 SEE BARRIER DETAILS THIS SHEET

4 RELOCATED HISTORIC LIMESTONE BARRIER FROM STA. 13+22.33 TO STA. 13+93.10

TYPICAL CROSS SECTION
STA. 11+15.59 TO STA. 13+06.73 RAMP 10



BARRIER DETAIL
(not to scale)

(K1) 165 LBS/SYS QC/QA-HMA, 5, 76, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE 19.0mm ON
440 LBS/SYS QC/QA-HMA, 5, 64, BASE 25.0mm ON
300 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
440 LBS/SYS QC/QA-HMA, 5, 64, BASE 25.0 mm

(K2) 165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0mm ON
250 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
385 LBS/SYS QC/QA-HMA, 2, 64, BASE 19.0mm

(K3) 165 LBS/SYS QC/QA-HMA, 3, 70, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 3, 70, INTERMEDIATE 19.0mm ON
250 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
385 LBS/SYS QC/QA-HMA, 3, 64, BASE 19.0mm

(K4) 165 LBS/SYS QC/QA-HMA, 4, 76, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 4, 76, INTERMEDIATE 19.0mm ON
330 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0mm ON
250 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
330 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0 mm

(K5) 165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0mm ON
300 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
330 LBS/SYS QC/QA-HMA, 2, 64, BASE 19.0mm

(K6) 165 LBS/SYS QC/QA-HMA, 4, 76, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 4, 76, INTERMEDIATE 19.0mm ON
300 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
385 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0mm

(K7) 165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0mm ON
660 LBS/SYS QC/QA-HMA, 2, 64, BASE 19.0mm

(K8) 165 LBS/SYS QC/QA-HMA, 4, 76, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 4, 76, INTERMEDIATE 19.0mm ON
385 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0mm ON
250 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
385 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0 mm

(R) VARIABLE DEPTH (165 LBS/SYS MIN.)
QC/QA HMA SURFACE, TYPE C ON
SCARIFICATION/PROFILE MILLING

(2E) CONC. MEDIAN BARRIER (33"), (SEE SHEET 3R2574)

(A) 12.5" QC/QA PCCP WITH 1.5" DIA. DOWEL BARS AND D-1 JOINTS AT 15' SPACING
(B) SUBBASE FOR PCCP.
(F) SIDEWALK, CONC., 4 IN.
(FT) SIDEWALK TRANSITION
(G) W-BEAM GUARDRAIL
(MI) REINF. CONC. MOMENT SLAB, 12 IN.
(M2) REINF. CONC. MOMENT SLAB, 10 IN.
(O) COMPACTED AGG. NO. 53
(P) PCCP PATCHING, FULL DEPTH, 11 IN
(U) UNDERDRAIN
(W) RETAINING WALL
(2) CONC. MEDIAN BARRIER (45°)
(2A) CONC. MEDIAN BARRIER, MOD. 1
(2B) CONC. MEDIAN BARRIER, MOD. 2
(2C) CONC. MEDIAN BARRIER, MOD. 3
(2D) CONC. MEDIAN BARRIER (33°)
(3) BRIDGE RAILING, FT
(4) BRIDGE RAILING, FC
(13) INTEGRAL CONC. CURB
(14) CURB AND GUTTER, MOD. 1
(15) CURB AND GUTTER
(18) CURB AND GUTTER, TYPE B
(19) CURB AND GUTTER, TYPE B, MODIFIED, T" (SEE GENERAL DETAILS)
(20) CURB AND GUTTER, MODIFIED, T" (SEE GENERAL DETAILS)
(26) SODDING, NURSERY
(27) SEED MIXTURE, U

REV. 00	BU 2AB-1 RFC	11/19/2013
REVISION NO.	SUBMITTAL NAME	DATE

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

SCOTT S. LECHER REGISTERED No. 10707518 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 11/19/2013 DATE

DESIGNED: ELM	DRAWN: TPH
CHECKED: SSL	CHECKED: SSL

INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN
TYPICAL SECTION
LINE "RAMP 10"

HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	
VERTICAL SCALE	DESIGNATION
1" = 10'	0300798
SURVEY BOOK	PROJECT
	0300798
CONTRACT	SHEET NO. 3R2546 of
	DRAWING NO.

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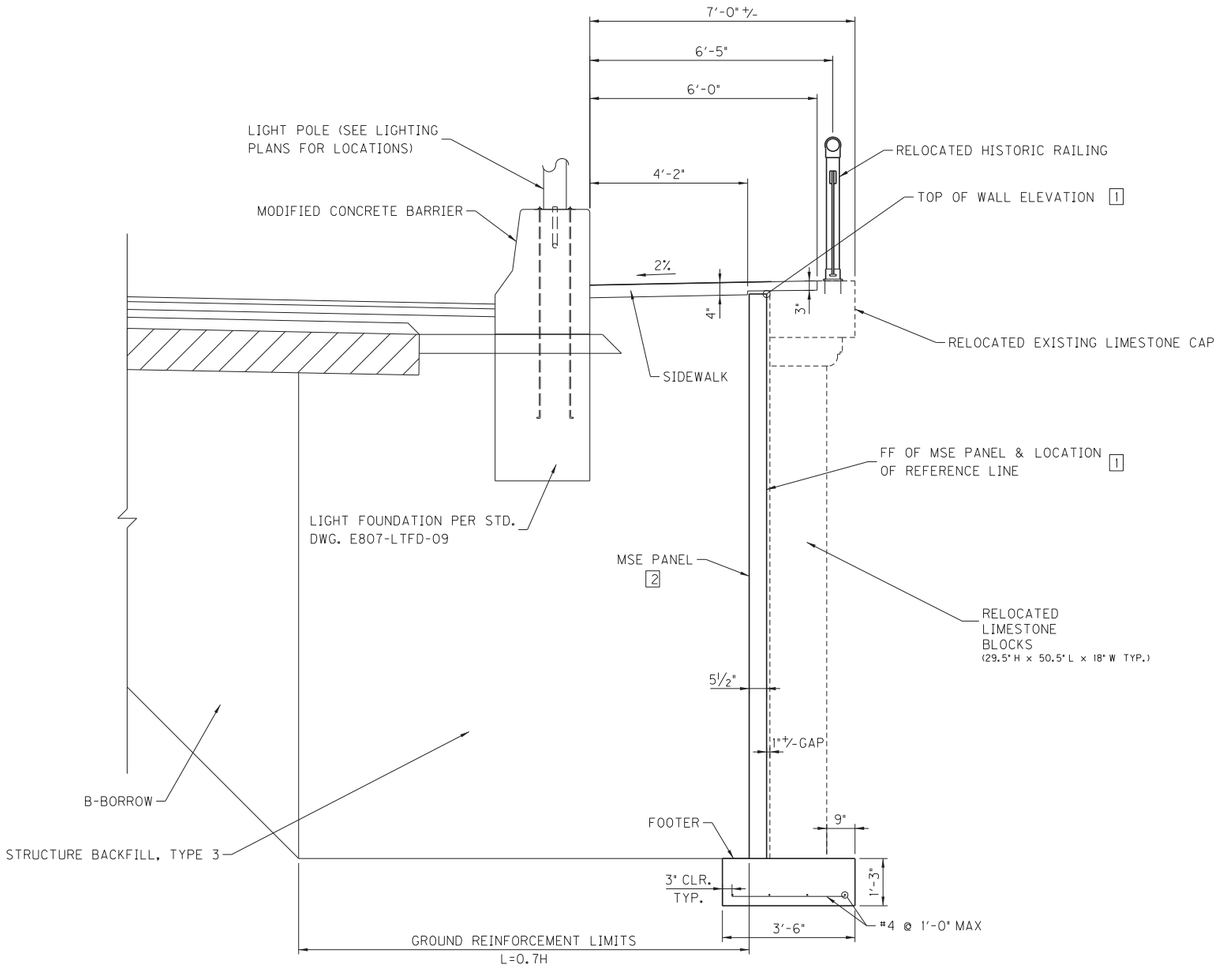
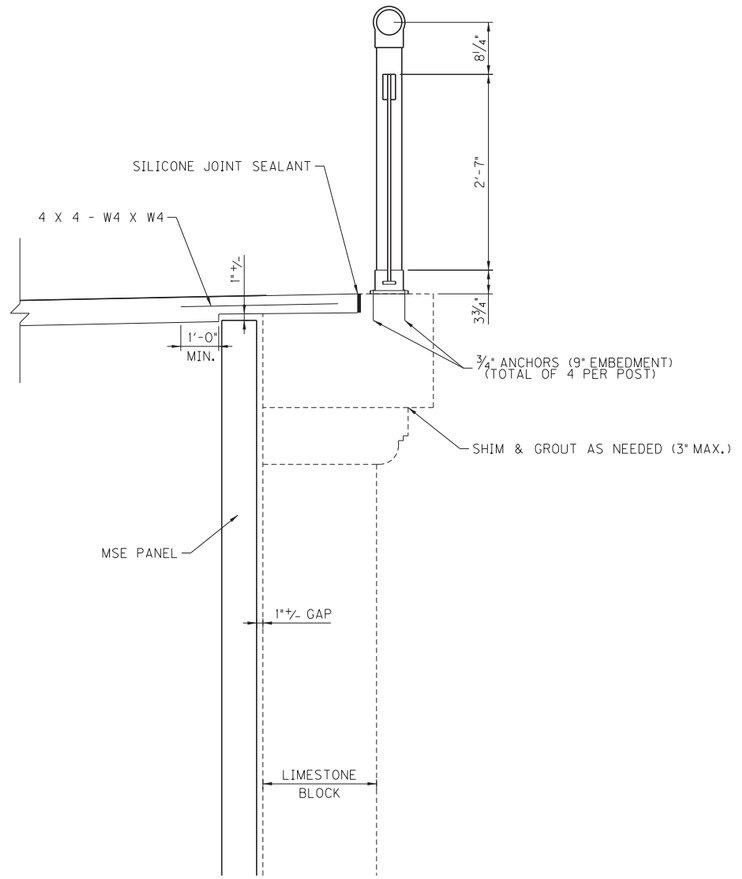


TYPICAL SECTION WALL 38

STA. 16+15.62 TO STA. 18+63.24 LINE "US 31"
STA. 9+95.24 TO STA. 13+00.00 LINE "RAMP 10"



WALL 38 DETAIL

NOTES:

1. FOR GEOMETRIC LAYOUT OF WALL 38, SEE SHEET 3R2858.
2. MSE PANELS WILL CONTAIN DOVETAIL VERTICAL SLIP JOINTS. LIMESTONE BLOCKS WILL BEAR ON METAL CLIPS THAT CONNECT TO MSE JOINTS. SEE MSE SHOP DRAWINGS FOR ADDITIONAL DETAILS.

REV. NO.	SUBMITTAL NAME	DATE
00	BU 2AB-1 RFC	11/19/2013

PREPARED BY: THE OHIO RIVER BRIDGES; WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

SCOTT S. LECHER REGISTERED No. 10707518 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 11/19/2013 DATE

DESIGNED: SSL | DRAWN: MPF | CHECKED: PWM | CHECKED: TDK

INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN
WALL 38 DETAILS

HORIZONTAL SCALE	½" = 1'-0
VERTICAL SCALE	
SURVEY BOOK	
CONTRACT	
BRIDGE FILE	0300798
DESIGNATION	0300798
PROJECT	0300798
SHEET NO.	3R2584 of
DRAWING NO.	

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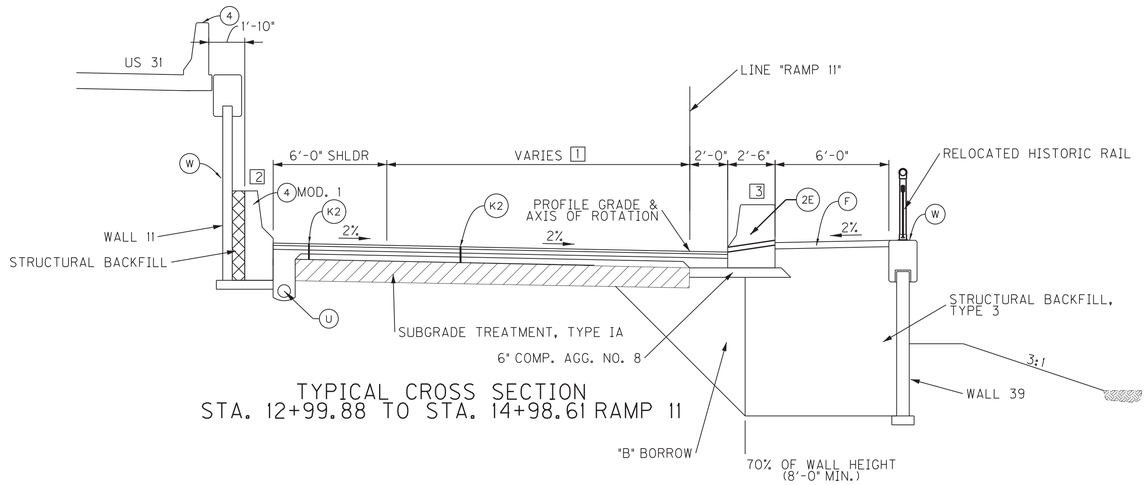
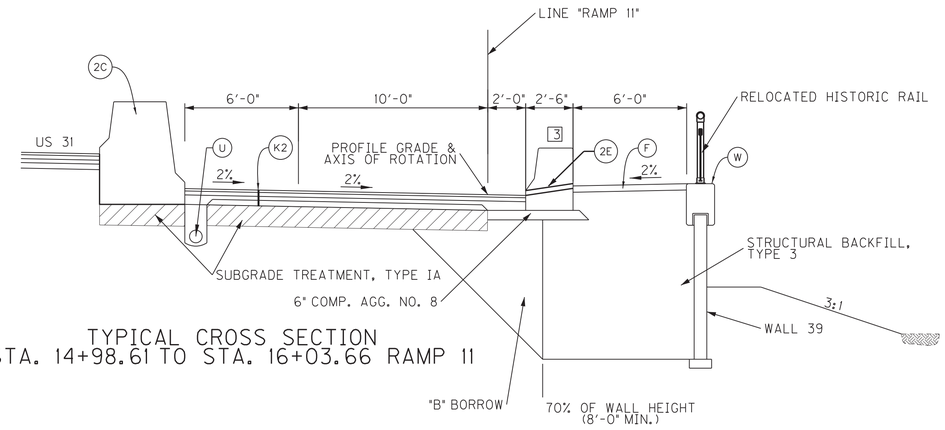


TYPICAL CROSS SECTION
STA. 12+99.88 TO STA. 14+98.61 RAMP 11



TYPICAL CROSS SECTION
STA. 14+98.61 TO STA. 16+03.66 RAMP 11

NOTES

[1] VARIES 16'-0" TO 10'-0" FROM STA. 12+80.91 TO STA. 14+14.44
[2] SEE SHEET 3R2574 FOR BARRIER DETAILS
[3] SEE BARRIER DETAILS ON SHEET 3R2546

(K1) 165 LBS/SYS QC/QA-HMA, 5, 76, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE 19.0mm ON
440 LBS/SYS QC/QA-HMA, 5, 64, BASE 25.0mm ON
300 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
440 LBS/SYS QC/QA-HMA, 5, 64, BASE 25.0 mm

(K2) 165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0mm ON
250 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
385 LBS/SYS QC/QA-HMA, 2, 64, BASE 19.0mm

(K3) 165 LBS/SYS QC/QA-HMA, 3, 70, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 3, 70, INTERMEDIATE 19.0mm ON
250 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
385 LBS/SYS QC/QA-HMA, 3, 64, BASE 19.0mm

(K4) 165 LBS/SYS QC/QA-HMA, 4, 76, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 4, 76, INTERMEDIATE 19.0mm ON
330 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0mm ON
250 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
330 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0 mm

(K5) 165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0mm ON
300 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
330 LBS/SYS QC/QA-HMA, 2, 64, BASE 19.0mm

(K6) 165 LBS/SYS QC/QA-HMA, 4, 76, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 4, 76, INTERMEDIATE 19.0mm ON
300 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
385 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0mm

(K7) 165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0mm ON
660 LBS/SYS QC/QA-HMA, 2, 64, BASE 19.0mm

(K8) 165 LBS/SYS QC/QA-HMA, 4, 76, SURFACE 9.5mm ON
275 LBS/SYS QC/QA-HMA, 4, 76, INTERMEDIATE 19.0mm ON
385 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0mm ON
250 LBS/SYS QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0mm ON
385 LBS/SYS QC/QA-HMA, 4, 64, BASE 19.0 mm

(R) VARIABLE DEPTH (165 LBS/SYS MIN.) QC/QA HMA SURFACE TYPE C ON SCARIFICATION/PROFILE MILLING

(2E) CONC. MEDIAN BARRIER (33"), (SEE SHEET 3R2574)

(A) 12.5" QC/QA PCCP WITH 1.5" DIA. DOWEL BARS AND D-1 JOINTS AT 15' SPACING
(B) SUBBASE FOR PCCP.
(F) SIDEWALK, CONC., 4 IN.
(FT) SIDEWALK TRANSITION
(G) W-BEAM GUARDRAIL
(M1) REINF. CONC. MOMENT SLAB, 12 IN.
(M2) REINF. CONC. MOMENT SLAB, 10 IN.
(O) COMPACTED AGG. NO. 53, 6 IN
(P) PCCP PATCHING, FULL DEPTH, 11 IN
(U) UNDERDRAIN
(W) RETAINING WALL
(2) CONC. MEDIAN BARRIER (45°)
(2A) CONC. MEDIAN BARRIER, MOD. 1
(2B) CONC. MEDIAN BARRIER, MOD. 2
(2C) CONC. MEDIAN BARRIER, MOD. 3
(2D) CONC. MEDIAN BARRIER (33°)
(3) BRIDGE RAILING, FT
(4) BRIDGE RAILING, FC
(13) INTEGRAL CONC. CURB
(14) CURB AND GUTTER, MOD. 1
(15) CURB AND GUTTER
(18) CURB AND GUTTER, TYPE B
(19) CURB AND GUTTER, TYPE B, MODIFIED, T" (SEE GENERAL DETAILS)
(20) CURB AND GUTTER, MODIFIED, T" (SEE GENERAL DETAILS)
(26) SODDING, NURSERY
(27) SEED MIXTURE, U

REV. NO.	BU 2AB-1 RFC	10/29/2013
REVISION NO.	SUBMITTAL NAME	DATE

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

SCOTT S. LECHER REGISTERED No. 10707518 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Scott S. Lecher 10/29/2013
DESIGN ENGINEER DATE

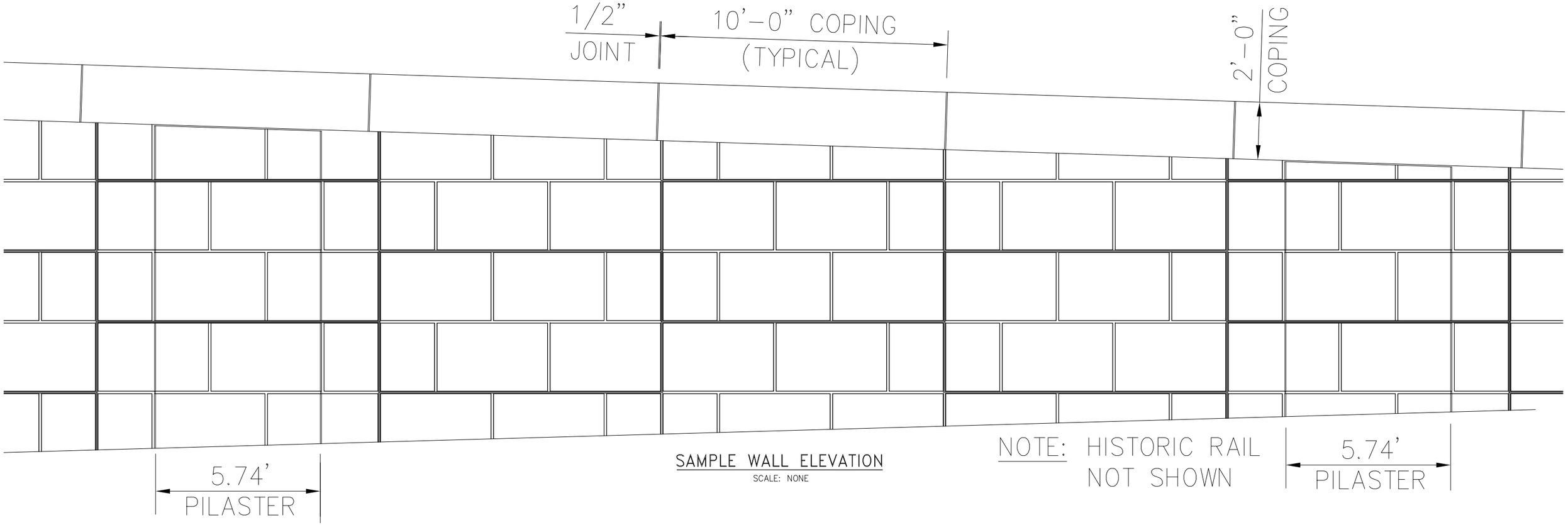
DESIGNED: ELM DRAWN: TPH
CHECKED: SSL CHECKED: SSL

INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN
TYPICAL SECTION
LINE "RAMP 11"

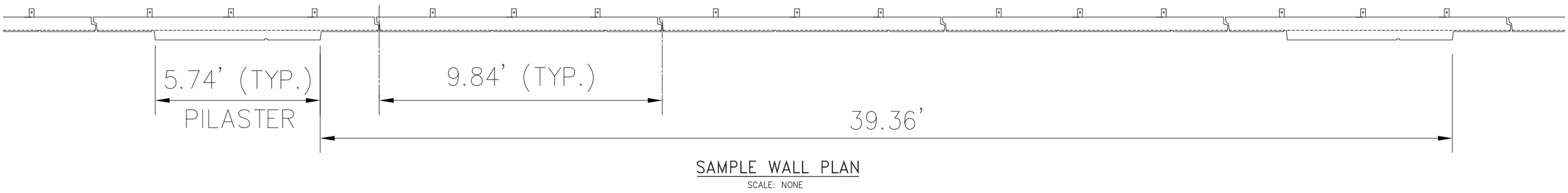
HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	
VERTICAL SCALE	DESIGNATION
1" = 10'	0300798
SURVEY BOOK	PROJECT
	0300798
CONTRACT	SHEET NO. 3R2549 of
	DRAWING NO.

MicroStation v8.11.9.357 MODEL NAME: BU2AB-1 USER: thansen DATE PLOTTED: 10/25/2013 10:15:42 AM FILE NAME: ...\dms02675\S3_RTS-12.dgn



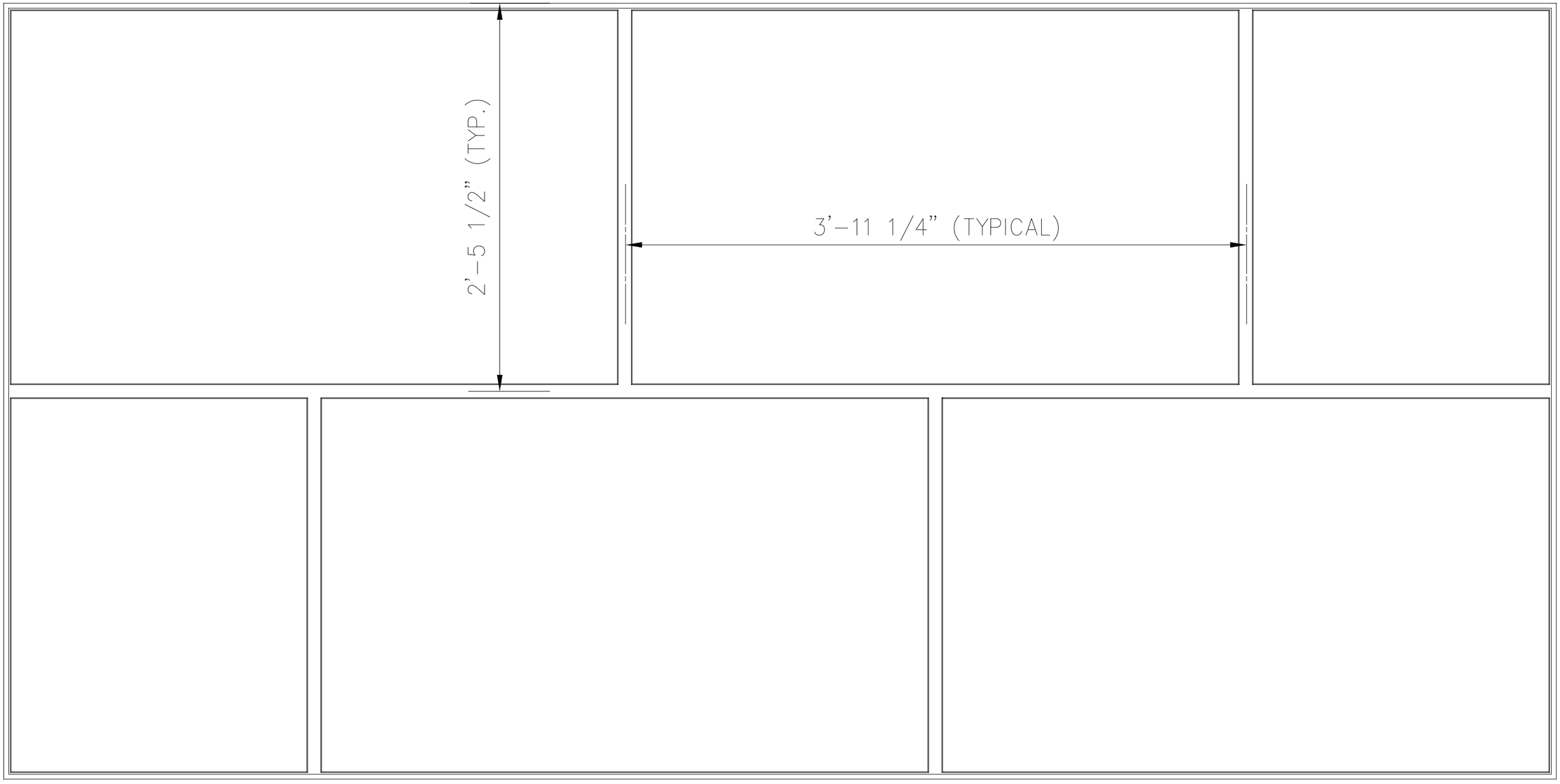
SAMPLE WALL ELEVATION

SCALE: NONE



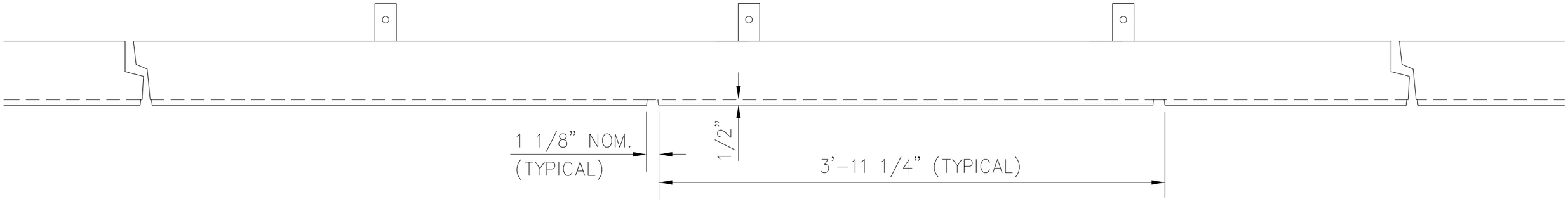
SAMPLE WALL PLAN

SCALE: NONE



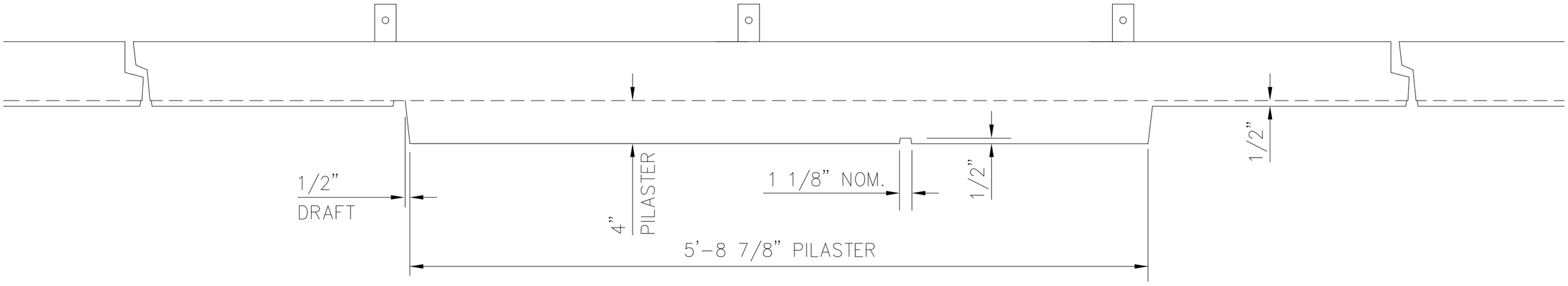
LARGE STACKED RUNNING BOND BLOCKS

SCALE: NONE



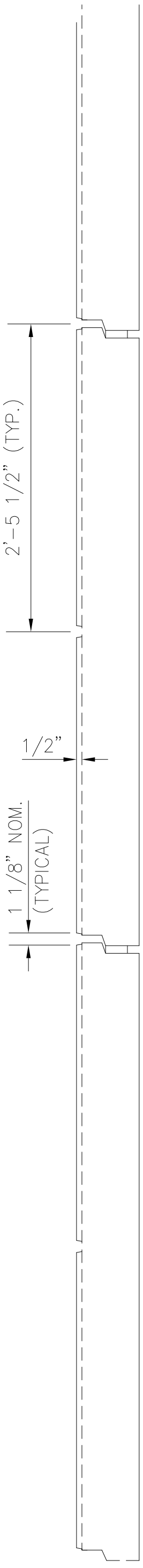
ARCHITECTURAL TREATMENT

SCALE: NONE



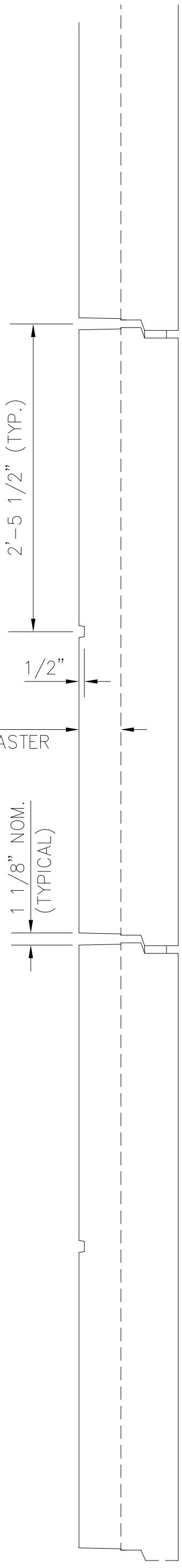
PILASTER DETAIL

SCALE: NONE



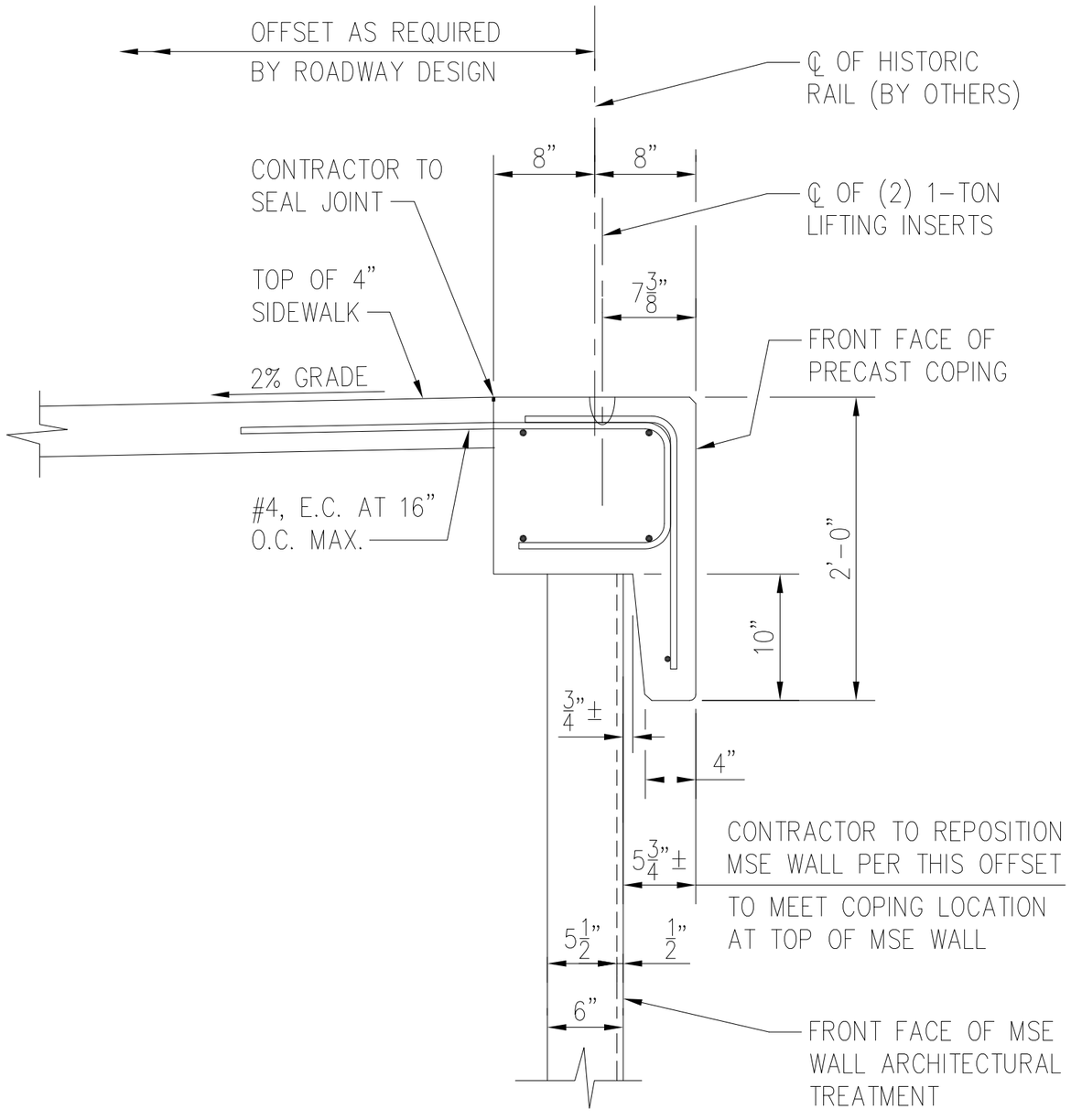
VERTICAL SECTION

SCALE: NONE



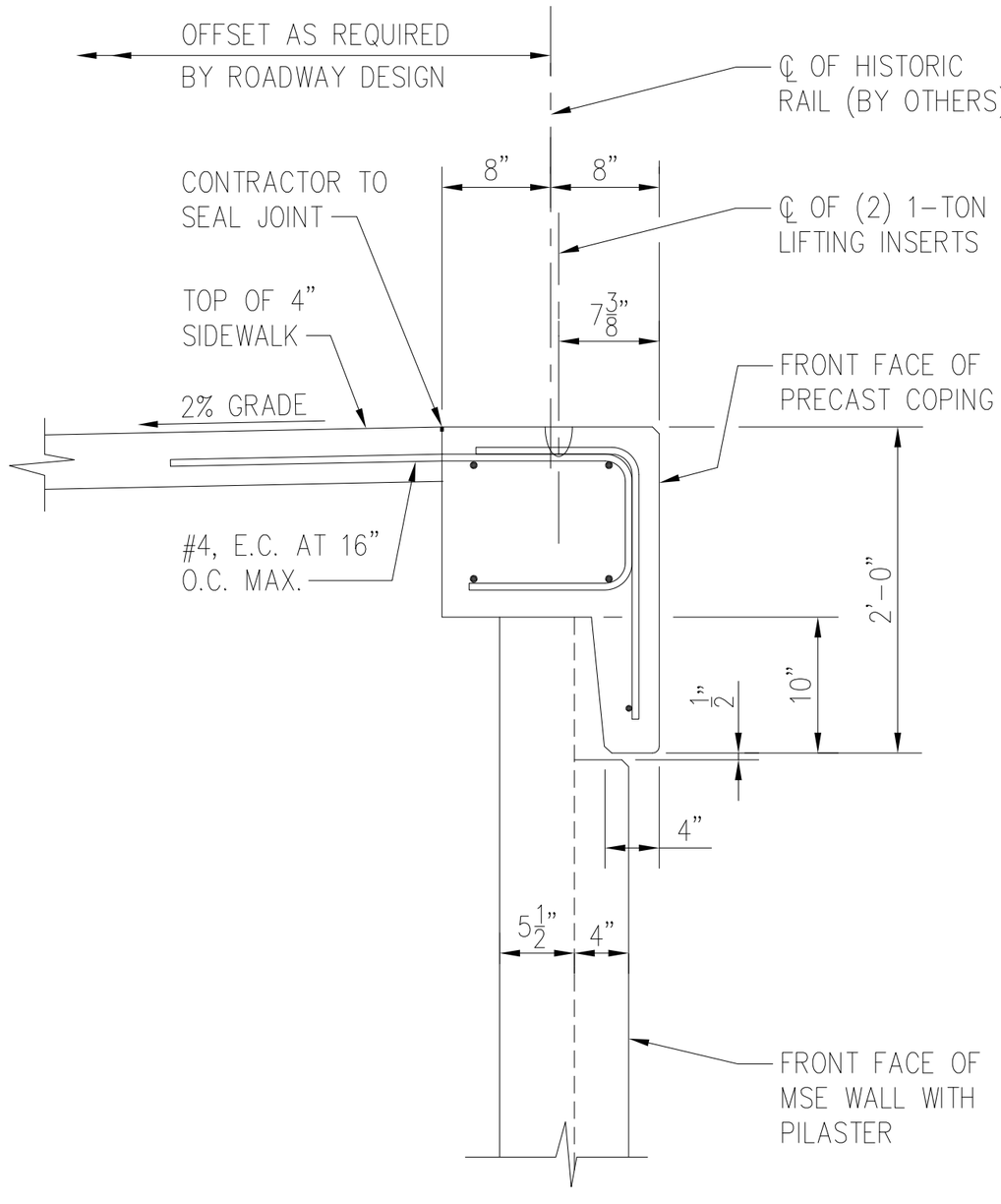
PILASTER SECTION

SCALE: NONE



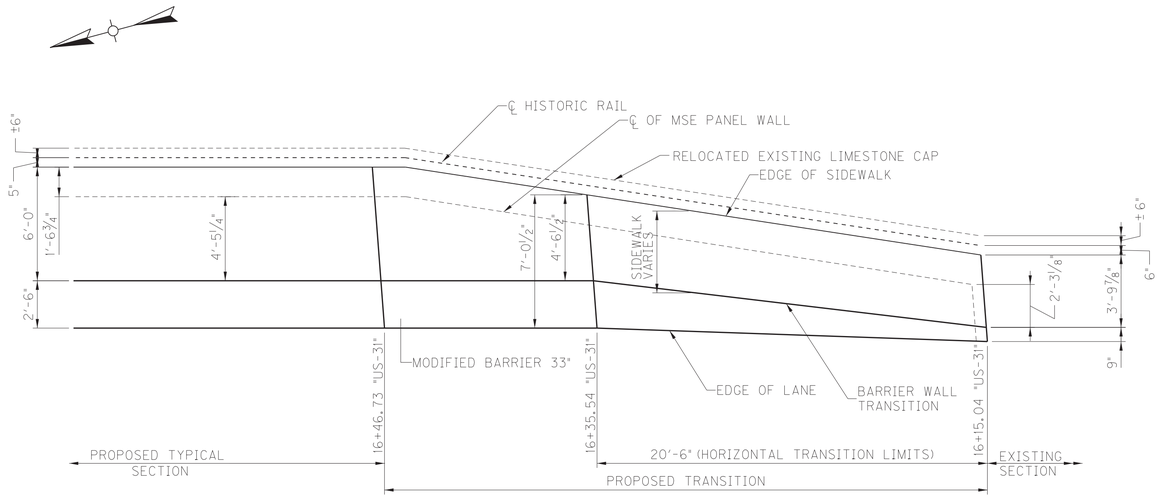
PRECAST COPING

SCALE: 1" = 1'–0"



PRECAST COPING AT PILASTER

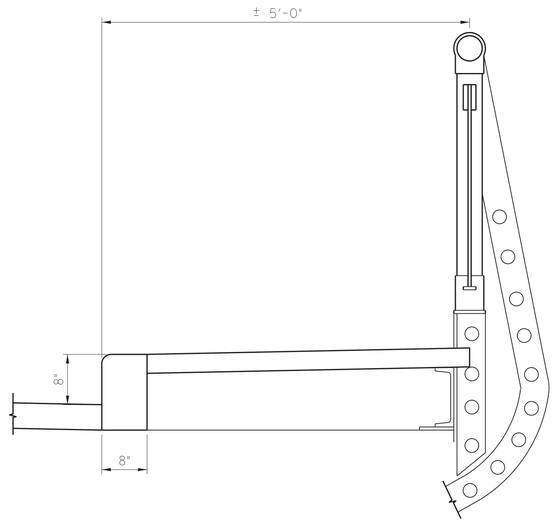
SCALE: 1" = 1'–0"



RIGHT BARRIER TRANSITION DETAIL

PLAN

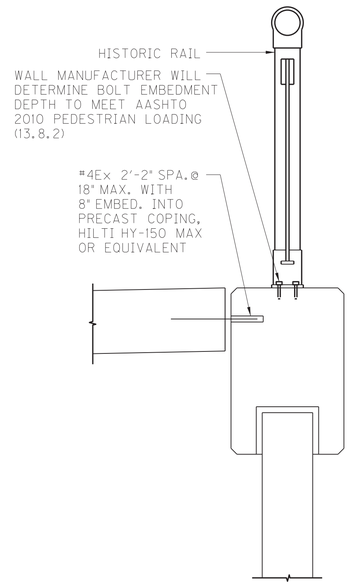
SCALE: 1/4" = 1'-0"



EXISTING SIDEWALK SECTION

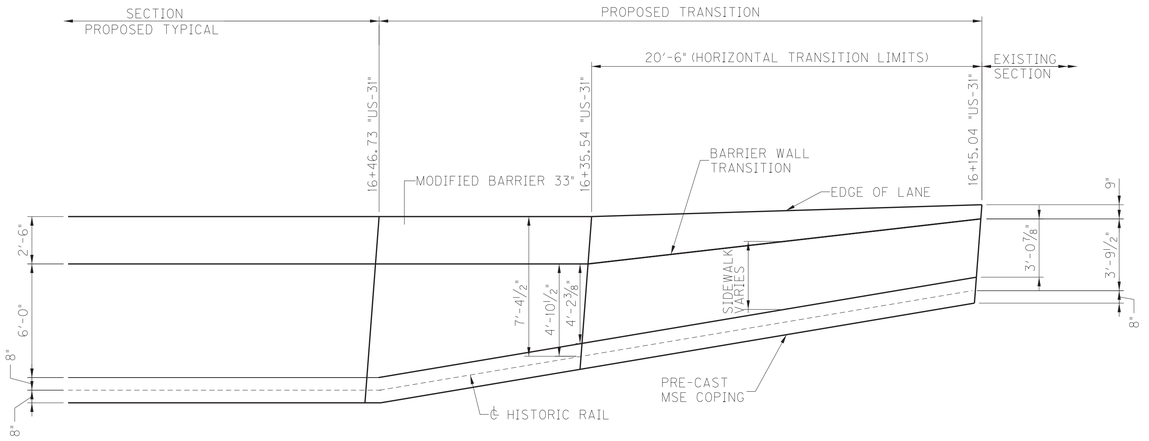
(AT BEGIN INCIDENTAL CONSTRUCTION)

SCALE: 1" = 1'-0"



MSE COPING SIDEWALK CONNECTION DETAIL

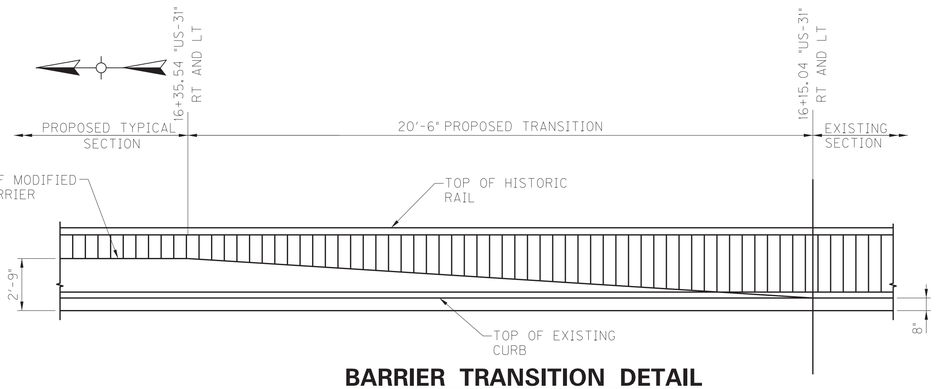
SCALE: 1" = 1'-0"



LEFT BARRIER TRANSITION DETAIL

PLAN

SCALE: 1/4" = 1'-0"



BARRIER TRANSITION DETAIL

ELEVATION

SCALE: 1/4" = 1'-0"

REV. 00	BU 2AB-1 RFC	11/19/2013
REVISION NO.	SUBMITTAL NAME	DATE

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

SCOTT S. LECHER REGISTERED No. 10707518 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 11/19/2013 DATE

DESIGNED: SSL DRAWN: MPF

CHECKED: PWM CHECKED: TDK

INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN

GENERAL ROADWAY DETAILS
HISTORICAL BARRIER WALLS

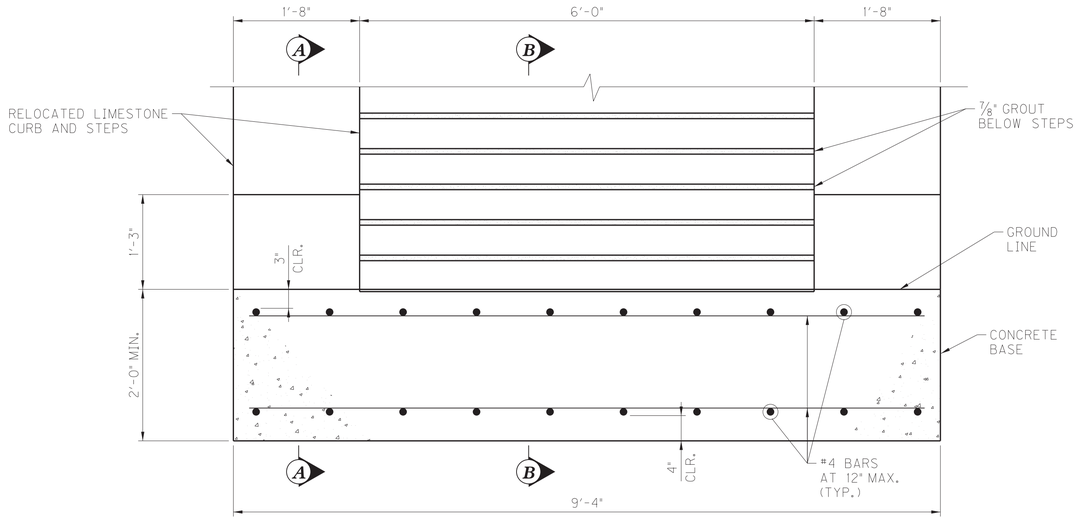
HORIZONTAL SCALE AS NOTED
VERTICAL SCALE

SURVEY BOOK
CONTRACT

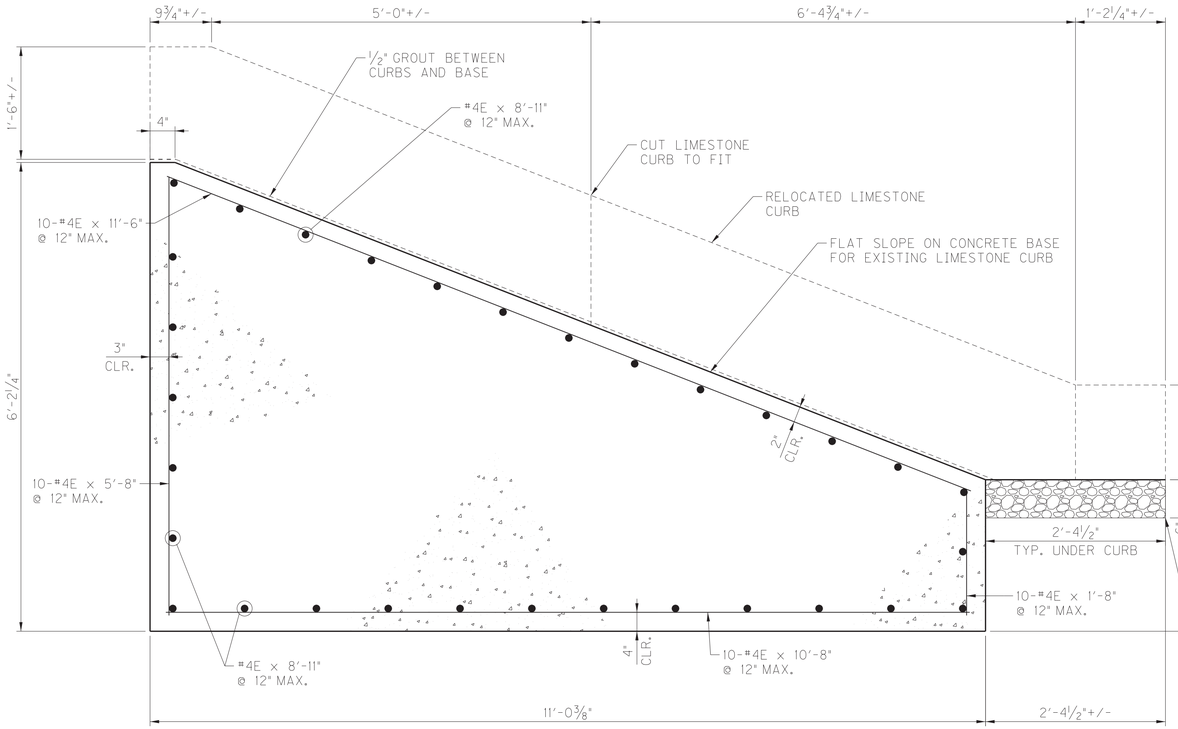
BRIDGE FILE
DESIGNATION 0300798

PROJECT 0300798
SHEET NO. 3R2581 of
DRAWING NO.

MicroStation v8.11.9.357
MODEL NAME: BU2AB-1
USER: thansen
DATE PLOTTED: 11/21/2013 1:08:58 PM
FILE NAME: ...\dms02675\S3_RDS_DS-06.dgn

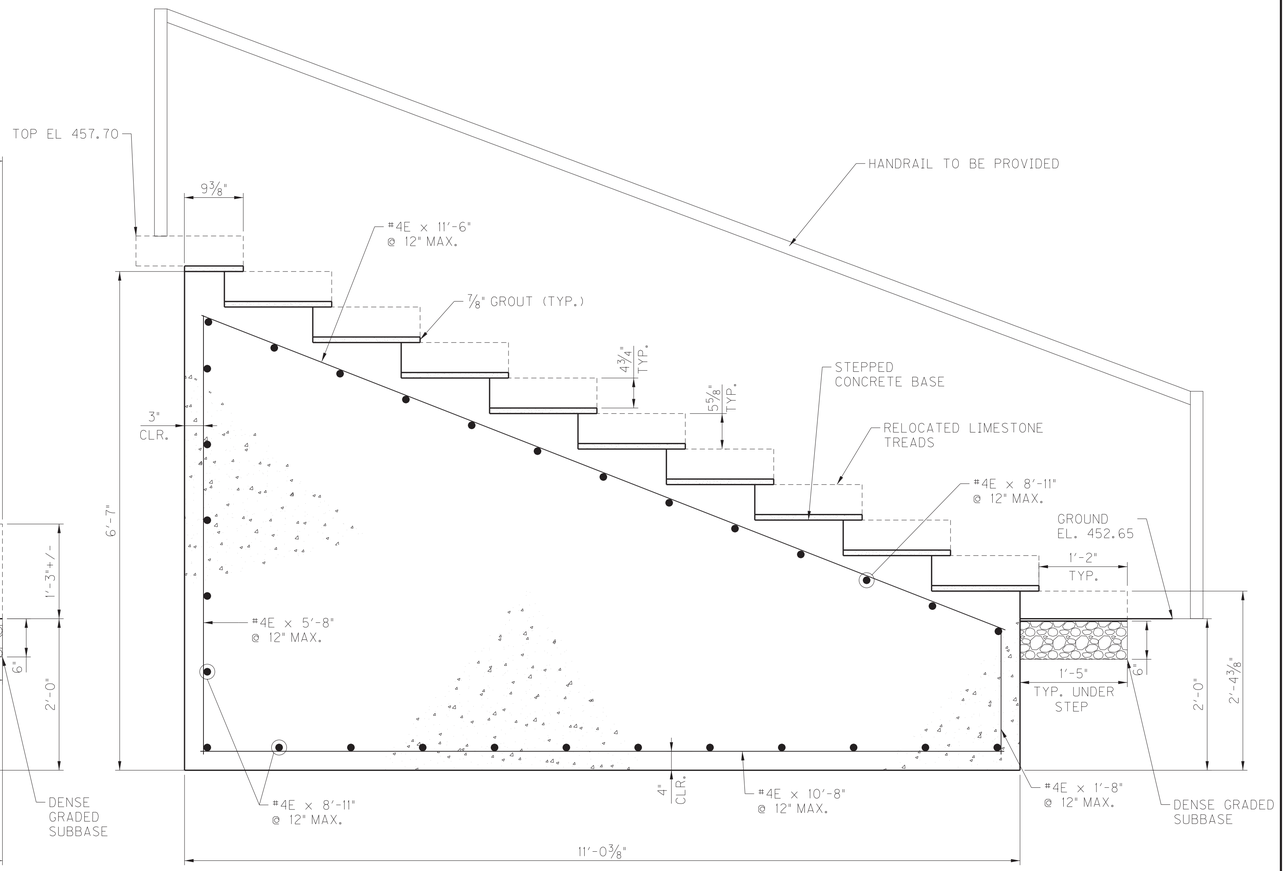


TYPICAL SECTION – WEST STAIRS



SECTION A–A – WEST STAIRS

(REUSING SEGMENTS OF LIMESTONE CURBS AND STEPS FROM EXISTING WEST STAIRCASE)



SECTION B–B – WEST STAIRS

(REUSING SEGMENTS OF LIMESTONE CURBS AND STEPS FROM EXISTING WEST STAIRCASE)

MicroStation v8.11.9.357
MODEL NAME: Repair Layout
USER: MNoe
DATE PLOTTED: 11/20/2013 4:45:21 PM
FILE NAME: ...\dms02675\S3_SDS_SD-01.dgn

REV. 00	BU 2AB-1 RFC	11/19/2013
REVISION NO.	SUBMITTAL NAME	DATE

PREPARED BY: THE OHIO RIVER BRIDGES; WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

KEVIN MICHAEL GORAK REGISTERED No. 10100852 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Kevin M. Gorak — DESIGN ENGINEER — 11/19/2013 DATE

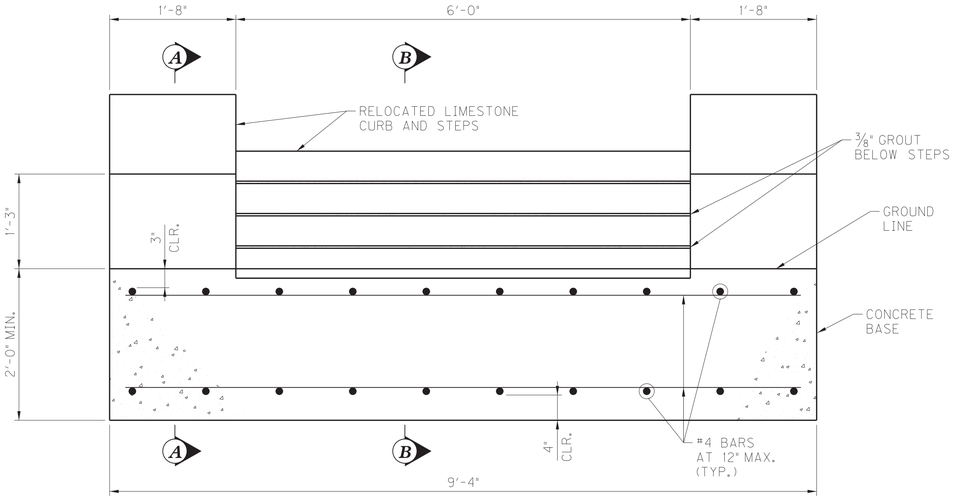
DESIGNED: MEA | DRAWN: PCR | CHECKED: KMG | CHECKED: MEA

INDIANA DEPARTMENT OF TRANSPORTATION

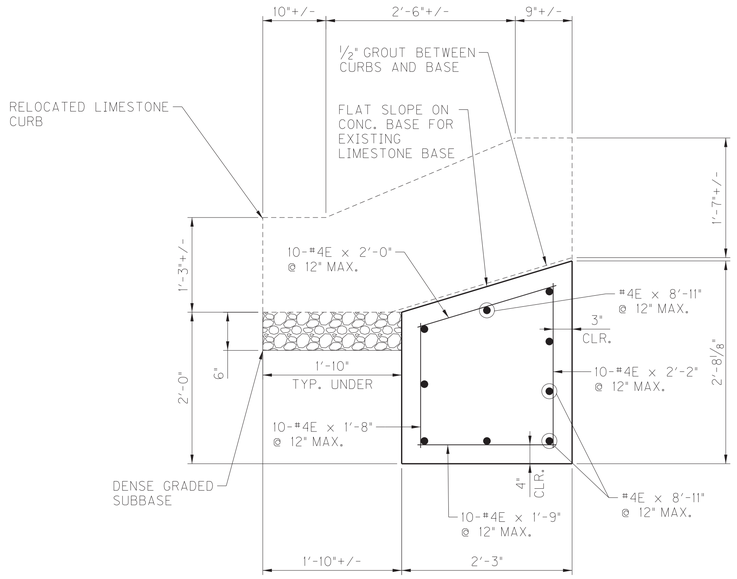
SECTION 3 - ORB DOWNTOWN
WEST STAIR DETAILS

HORIZONTAL SCALE 1" = 1'-0"
VERTICAL SCALE
SURVEY BOOK
CONTRACT

BRIDGE FILE
DESIGNATION 0300798
PROJECT 0300798
SHEET NO. 3S5306 OF
DRAWING NO.

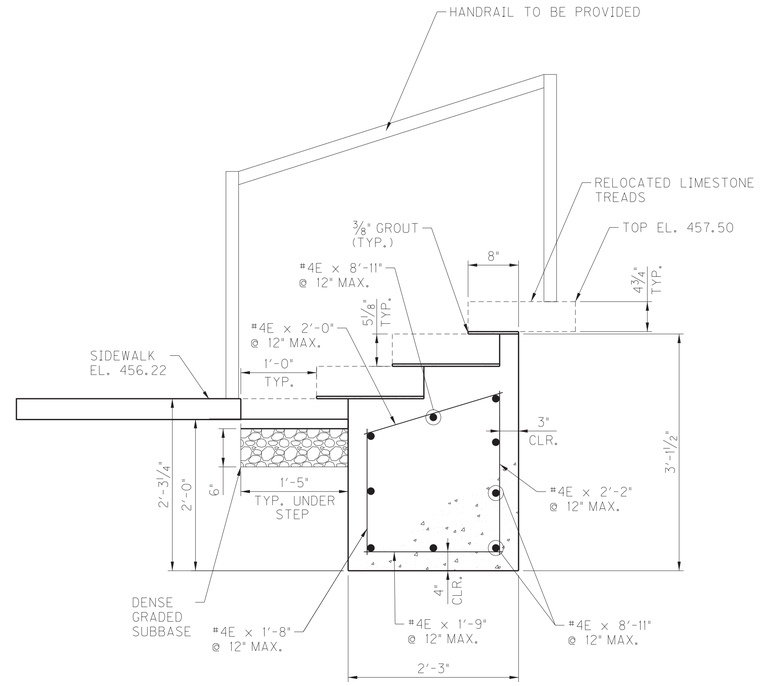


TYPICAL SECTION – EAST STAIRS



SECTION A–A – EAST STAIRS

(REUSING LIMESTONE CURBS FROM EXISTING NORTH STAIRCASE AND STEPS FROM EXISTING NORTH AND EAST STAIRCASES)



SECTION B–B – EAST STAIRS

(REUSING LIMESTONE CURBS FROM EXISTING NORTH STAIRCASE AND STEPS FROM EXISTING NORTH AND EAST STAIRCASES)

MicroStation v8.11.9.357
MODEL NAME: Stair Layout
USER: MNoe
DATE PLOTTED: 11/20/2013 4:45:34 PM
FILE NAME: ...\dms02675\S3-SDS-SD-02.dgn

REV. NO.	SUBMITTAL NAME	DATE
00	BU 2AB-1 RFC	11/19/2013

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH JACOBS Milestone

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

KEVIN MICHAEL GORAK REGISTERED No. 10100852 STATE OF INDIANA PROFESSIONAL ENGINEER

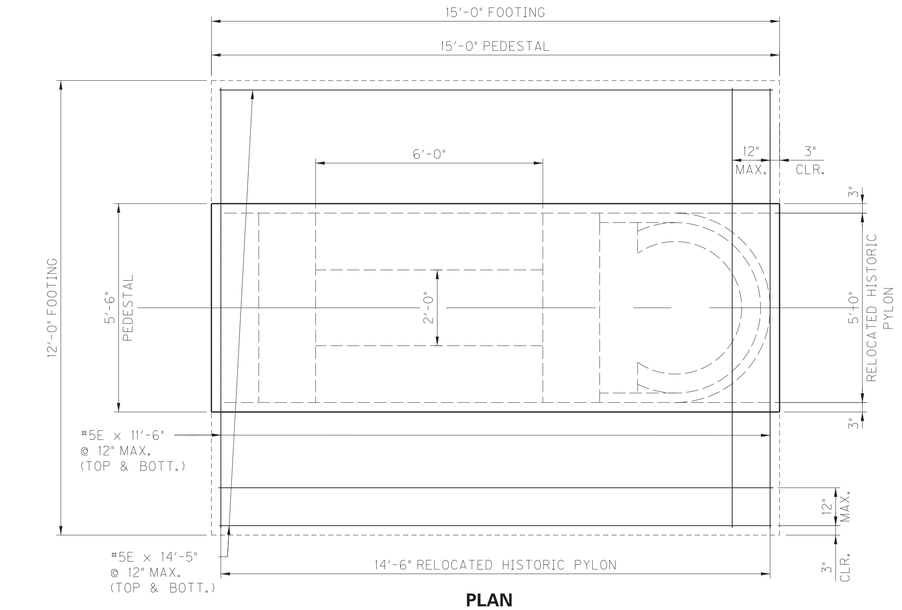
RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 11/19/2013

DESIGNED: MEA | DRAWN: PCR | CHECKED: KMG | CHECKED: MEA

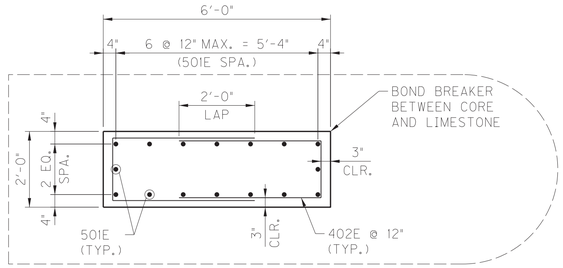
INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN
EAST STAIR DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 1'-0"	
VERTICAL SCALE	DESIGNATION
	0300798
SURVEY BOOK	PROJECT
	0300798
CONTRACT	SHEET NO. 3S5307 of
	DRAWING NO.

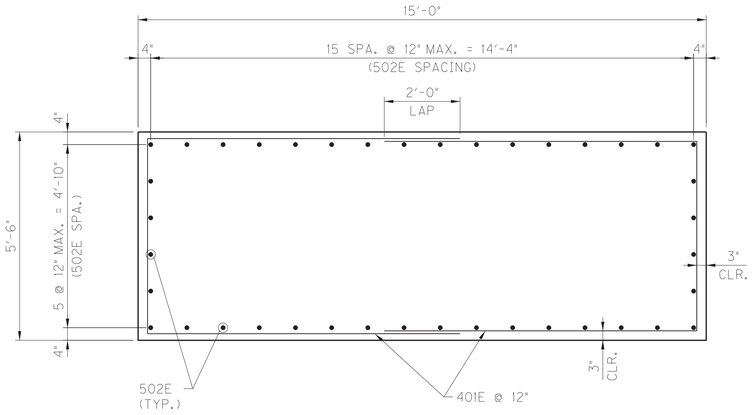


PLAN

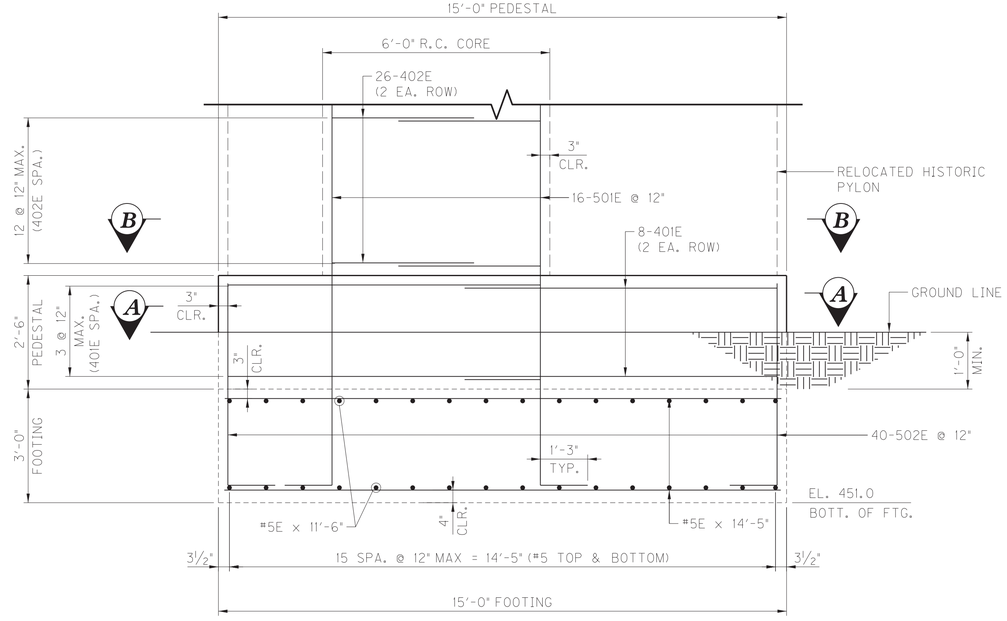


SECTION B–B
(REINFORCED CONCRETE CORE)

(POUR EXTENDS 12 FT INTO RELOCATED HISTORIC PYLON)



SECTION A–A
(PEDESTAL)

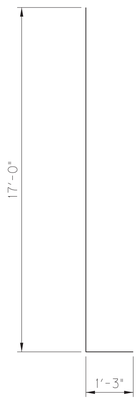


ELEVATION

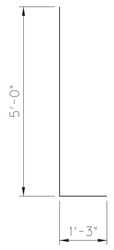
MONUMENT FOUNDATION
CLARK MEMORIAL BRIDGE

SCALE ½" = 1'-0"

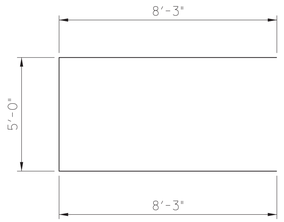
NOTE:
USE ½" PEFJ BETWEEN MONUMENT FOUNDATION AND WEST STAIR FOUNDATION.



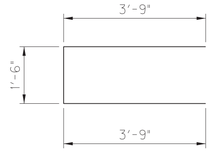
501E x 18'–3"



502E x 6'–3"



401E x 21'–6"



402E x 9'–0"

BILL OF MATERIALS
PYLON FOUNDATION

EPOXY REINFORCING BARS

SIZE & MARK	NO. OF BARS	LENGTH	WEIGHT (LBS.)
501E	16	18'-3"	
502E	40	6'-3"	
#5	26	14'-5"	
#5	32	11'-6"	
TOTAL #5			1340
401E	8	21'-6"	
402E	26	9'-0"	
TOTAL #4			271
TOTAL REINFORCING BARS			1611

CONCRETE		
CONCRETE, B, FOOTING		20.0 CYS
CONCRETE, A, SUBSTRUCTURE		
PEDESTAL	7.6 CYS	
REINF. CONC. CORE	5.3 CYS	
TOTAL CONC. A, SUBSTRUCTURE		12.9 CYS

REV. 00	BU 2AB-1 RFC	10/29/2013
REVISION NO.	SUBMITTAL NAME	DATE

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

KEVIN MICHAEL GORAK REGISTERED No. 10100852 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 10/29/2013

DESIGNED: KMG | DRAWN: PCR | CHECKED: MEA | CHECKED: MEA

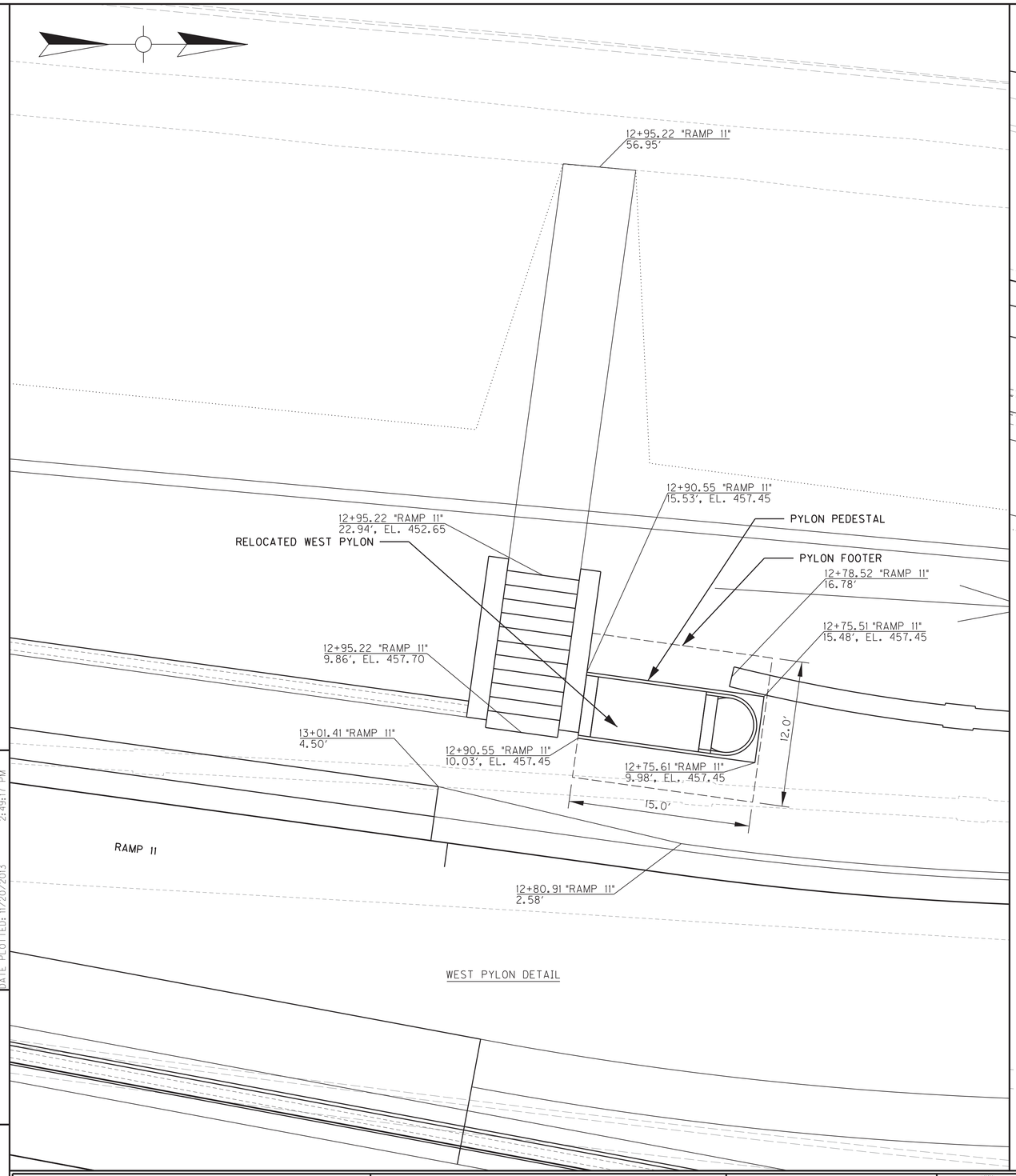
INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN
HISTORIC PYLON FOUNDATION DETAILS

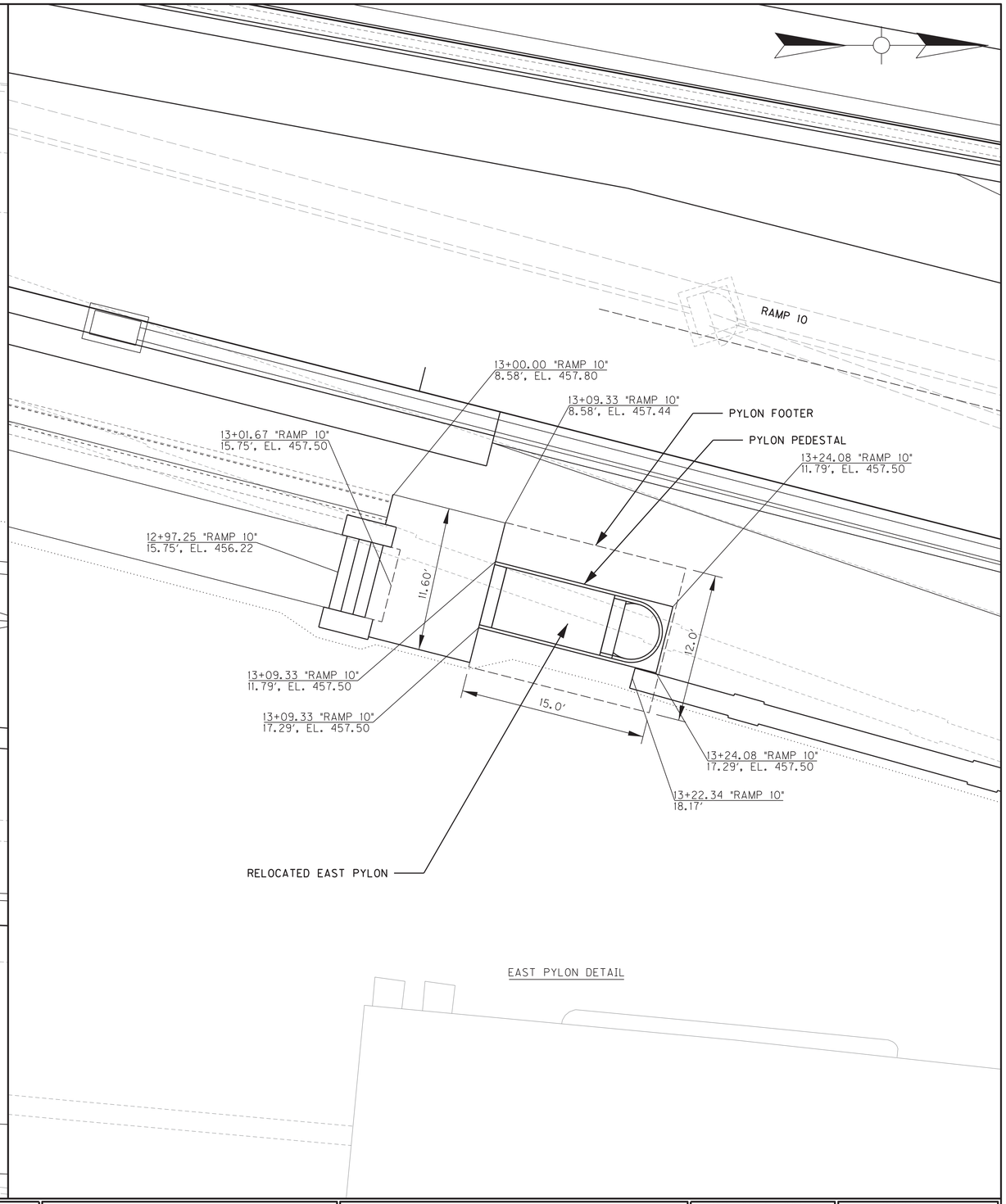
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	
VERTICAL SCALE	DESIGNATION
	0300798
SURVEY BOOK	PROJECT
	0300798
CONTRACT	SHEET NO. 3S5308 of
	DRAWING NO.

MicroStation v8.11.9.357
FILE NAME: ...\dms02675\S3-SDS-PD-01.dgn
USER: mappel
DATE PLOTTED: 10/25/2013 1:49:10 PM
MODEL NAME: BU2AB-1

FILE NAME: ...\dms02675\S3-SDS-PY-03.dgn
USER: MNoe
DATE PLOTTED: 11/20/2013 2:49:17 PM
MODEL NAME: BU2AB-1
MicroStation v8.11.9.357



WEST PYLON DETAIL



EAST PYLON DETAIL

REV. NO.	SUBMITTAL NAME	DATE
00	BU 2AB-1 RFC	11/19/2013

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

SCOTT S. LECHER REGISTERED No. 10707518 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 11/19/2013 DATE

DESIGNED: KMG	DRAWN: PCR
CHECKED: MEA	CHECKED: MEA

INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN

HISTORIC PYLON FOUNDATION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
	0300798
SURVEY BOOK	PROJECT
	0300798
CONTRACT	SHEET NO. 3S5309 of
	DRAWING NO.

EXISTING UTILITY LEGEND

GM	GAS MAIN
WM	WATER MAIN
	SANITARY SEWER
	MANHOLE
	FIRE HYDRANT
	POWER POLE
	ELECTRIC
TV	CABLE TV

GENERAL LEGEND

"NO WORK ZONE" AREA

ATMS EQUIPMENT LEGEND

PROPOSED CONDUIT (TYPE AS SPECIFIED)	EXISTING CONDUIT (TYPE AS SPECIFIED)
PROPOSED CCTV CAMERA	EXISTING CCTV CAMERA
PROPOSED HANDHOLE	EXISTING HANDHOLE
PROPOSED SERVICE POINT 120/240V, 100A	EXISTING SERVICE POINT
PROPOSED LIGHT POLE	EXISTING LIGHT POLE
PROPOSED MICROWAVE DETECTOR	EXISTING MONOPOLE
PROPOSED CCTV TOWER WITH 2 TOWER MOUNTED CABINETS	TYPE F WIRELESS SENSOR
PROPOSED CABLE DUCT MARKER	EXISTING ATMS VAULT
PROPOSED ATMS VAULT	EXISTING ATMS CONTROLLER CABINET
PROPOSED ATMS CONTROLLER CABINET	EXISTING CCTV TOWER WITH CABINET
PROPOSED LIGHT POLE W/ WIRELESS REPEATER	
PROPOSED MICROLOOP CONDUIT	

SIGNAGE LEGEND

	GROUND MOUNTED SHEET SIGN
	GROUND MOUNTED PANEL SIGN
	OVERHEAD CANTILEVER SIGN STRUCTURE
	OVERHEAD BOX TRUSS SIGN STRUCTURE
(1)	NO CHANGE REQUIRED TO EXISTING SIGN AND SUPPORTS
(4)	REMOVE EXISTING PANEL SIGN FROM OVERHEAD STRUCTURE
(7)	REMOVE EXISTING SHEET SIGN AND SUPPORTS
(8)	REMOVE EXISTING GROUND MOUNTED PANEL SIGN, SUPPORTS AND FOUNDATIONS
(9)	REMOVE EXISTING OVERHEAD SIGN, SUPPORTS AND FOUNDATIONS
(10)	MODIFY EXISTING GROUND MOUNTED PANEL SIGN
(A)	COMMUNITY WAY FINDING SIGN TO BE REMOVED, STORED AND REINSTALLED ON EXISTING ORNAMENTAL POSTS
(B)	REMOVE AND RESET SHEET SIGN
(C)	RELOCATE EXISTING HAR-SIGN, FLASHERS, BATTERY BOX AND SOLAR PANEL ON NEW KYTC POSTS
(D)	SALVAGE EXISTING SIGN TO CITY OF JEFFERSONVILLE
RMA	ROUTE MARKER ASSEMBLY
RR	RAMP REFERENCE SIGN
BRM	BRIDGE REFERENCE MARKER

SIGNALIZATION LEGEND

PROPOSED SYSTEM LOCAL CONTROLLER AND CABINET, MENU DRIVEN, 8 PHASE ON "P-1" FOUNDATION	EXISTING SYSTEM LOCAL CONTROLLER AND CABINET, MENU DRIVEN, 8 PHASE ON "P-1" FOUNDATION
PROPOSED TRAFFIC SIGNAL HEAD, 3 FACE, 12 ": RED, YELLOW, GREEN	EXISTING TRAFFIC SIGNAL HEAD, 3 FACE, 12 ": RED, YELLOW, GREEN
PROPOSED TRAFFIC SIGNAL HEAD, 3 FACE, 12": LT. RED ARROW, LT. YELLOW ARROW, LT. GREEN ARROW	EXISTING TRAFFIC SIGNAL HEAD, 3 FACE, 12": LT. RED ARROW, LT. YELLOW ARROW, LT. GREEN ARROW
PROPOSED TRAFFIC SIGNAL HEAD, 5 FACE, 12": RED, YELLOW, GREEN, LT. YELLOW ARROW, LT. GREEN ARROW	EXISTING TRAFFIC SIGNAL HEAD, 5 FACE, 12": RED, YELLOW, GREEN, LT. YELLOW ARROW, LT. GREEN ARROW
PROPOSED SIGNAL DETECTOR HOUSING	EXISTING SIGNAL DETECTOR HOUSING
PROPOSED SIGNAL CANTILEVER STRUCTURE & FOUNDATION	EXISTING SIGNAL CANTILEVER STRUCTURE & FOUNDATION
PROPOSED DISCONNECT HANGER	EXISTING DISCONNECT HANGER
PROPOSED SIGNAL PEDESTAL ON "A" FOUNDATION	EXISTING SIGNAL PEDESTAL ON "A" FOUNDATION
PROPOSED PEDESTRIAN SIGNAL HEAD, COUNTDOWN, 18" W/ PUSH BUTTON & R10-3e SIGN	EXISTING PEDESTRIAN SIGNAL HEAD, W/ PUSH BUTTON & R10-3e SIGN
PROPOSED SIGNAL HANDHOLE	EXISTING SIGNAL HANDHOLE
PROPOSED 2 IN. GALVANIZED STEEL CONDUIT	EXISTING 2 IN. GALVANIZED STEEL CONDUIT
PROPOSED STEEL STRAIN POLE & FOUNDATION	EXISTING STEEL STRAIN POLE & FOUNDATION
C PROPOSED COUNTING LOOP	C EXISTING COUNTING LOOP
PROPOSED SAW-CUT LOOP (CIRCULAR OR OCTAGONAL ACCEPTABLE)	A OUTDOOR ETHERNET CAT-5e CABLE

03

LIGHTING LEGEND

6	PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE M-C-III, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-177302 OR EQUAL, ALL LUMINAIRES ORIENTED IN SAME COMPASS DIRECTION (ASYMMETRIC)
6	PROPOSED HIGH MAST LIGHTING TOWER WITH 6-1000 WATT HPS LUMINAIRES OF IES DISTRIBUTION TYPE S-C-V, HAVING OUTPUT CHARACTERISTICS EQUIVALENT TO GE PHOTOMETRIC CURVE 35-176318 OR EQUAL, ALL LUMINAIRES EQUALLY SPACED AT 60 DEGREES (SYMMETRIC)
	PROPOSED TWIN 400 WATT HPS ROADWAY LUMINAIRE ON ANCHOR BASE (SEE LUMINAIRE TABLE FOR DETAILS)
	PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON BREAKAWAY TRANSFORMER BASE (SEE LUMINAIRE TABLE FOR DETAILS)
	PROPOSED 400 WATT HPS ROADWAY LUMINAIRE ON ANCHOR BASE (SEE LUMINAIRE TABLE FOR DETAILS)
EX	PROPOSED 250 WATT HPS ROADWAY LUMINAIRE AND RELOCATED EXISTING POLE ON ANCHOR BASE (SEE LUMINAIRE TABLE FOR DETAILS)
PR	PROPOSED 250 WATT HPS ROADWAY LUMINAIRE AND PROPOSED NEW POLE ON ANCHOR BASE (SEE LUMINAIRE TABLE FOR DETAILS)
	PROPOSED WALL MOUNTED UNDERPASS LUMINAIRE, 150 WATT HPS
	PROPOSED CABLE DUCT MARKER (EXACT LOCATION AND ARROW DIRECTIONS TO BE FIELD DETERMINED)
	PROPOSED SERVICE POINT 240/480 VOLT (TYPE AS INDICATED)
M	PROPOSED MONUMENT SERVICE POINT, 120/240 VOLT (TYPE I)
	PROPOSED LIGHTING HANDHOLE (TYPE AS SHOWN)
M	PROPOSED MONUMENT LIGHTING HANDHOLE (TYPE AS SHOWN)
	PROPOSED 4-1/C NO. 4 WIRES IN PLASTIC DUCT IN 2 INCH GALVANIZED STEEL CONDUIT
	PROPOSED 4-1/C NO. 4 WIRES IN PLASTIC DUCT IN TRENCH

(2C)	2 INCH GALVANIZED STEEL CONDUIT (IN BARRIER WALL)
(2S)	2 INCH GALVANIZED STEEL CONDUIT (BENEATH SIDEWALK)
(2M)	2 INCH GALVANIZED STEEL CONDUIT (BETWEEN POINTS IDENTIFIED FOR MONUMENT LIGHTING)
(XX)	SIGN, UNDERPASS AND ROADWAY LIGHTING IDENTIFICATION NUMBER (SEE NOTES ON LIGHTING PLANS)
"A-1"	LIGHTING CIRCUIT IDENTIFICATION
	EXISTING HIGH MAST LIGHTING TOWER
	EXISTING CONVENTIONAL LIGHTING POLE AND LUMINAIRE
	EXISTING SERVICE POINT, 240/480 VOLT (TYPE AS INDICATED)
	EXISTING 4-1/C NO. 4 WIRES IN PLASTIC DUCT IN 2 INCH GALVANIZED STEEL CONDUIT
	EXISTING 4-1/C NO. 4 WIRES IN PLASTIC DUCT IN TRENCH
	EXISTING LIGHTING HANDHOLE
ET01	EXISTING HIGHMAST TOWER IDENTIFICATION NUMBER
RMN	EXISTING POLE AND LUMINAIRE TO REMAIN FOR TEMPORARY LIGHTING
RMV	EXISTING POLE AND LUMINAIRE TO BE REMOVED IN THIS MOT STAGE
TMP	TEMPORARY POLE AND LUMINAIRE NEEDED FOR THIS MOT STAGE
	TEMPORARY 400W HPS ROADWAY LUMINAIRE ON WOOD POLE
45T	LUMINAIRE TO BE AT 45 DEGREE TILT
	BREAKER BOX FOR UNDERPASS LIGHTING
	PROPOSED MONUMENT WITH SCONCE LIGHTING

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REV. 03	BU2AB-1 RFC	10/29/2013
REVISION NO.	SUBMITTAL NAME	DATE

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

DAVID A. HENKEL REGISTERED No. 60910340 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL David A. Henkel 10/29/2013
DESIGN ENGINEER DATE

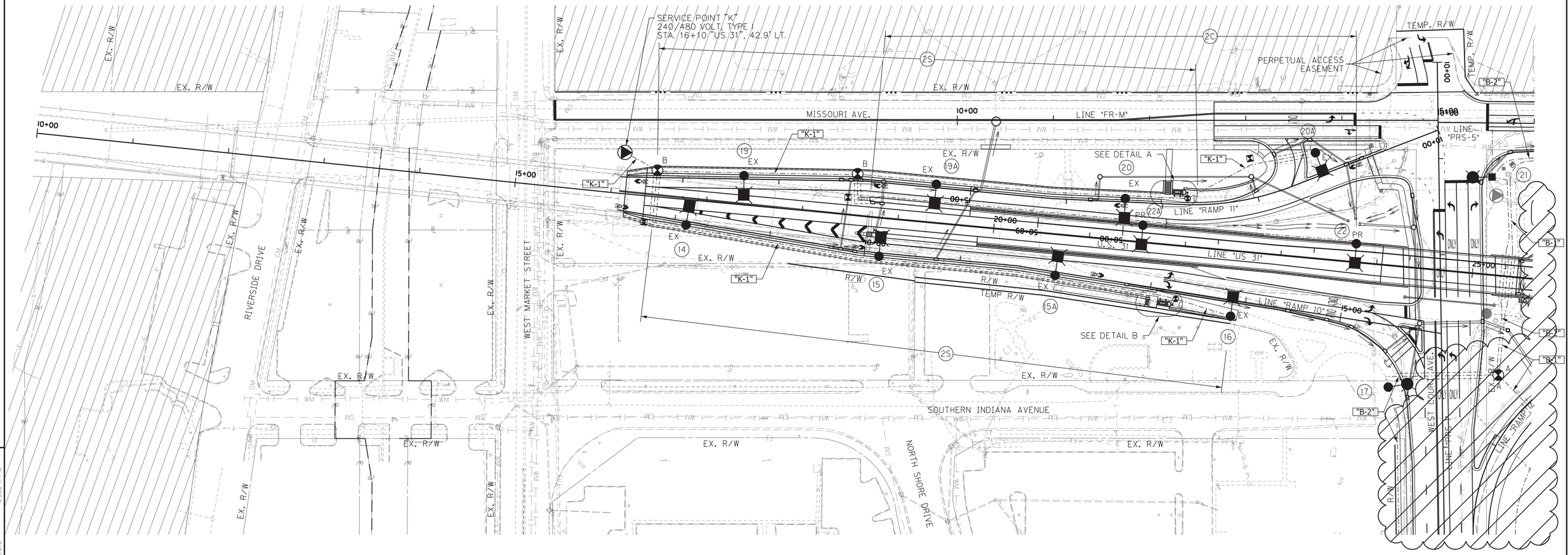
DESIGNED: RLH DRAWN: CER
CHECKED: DAH CHECKED: DAH

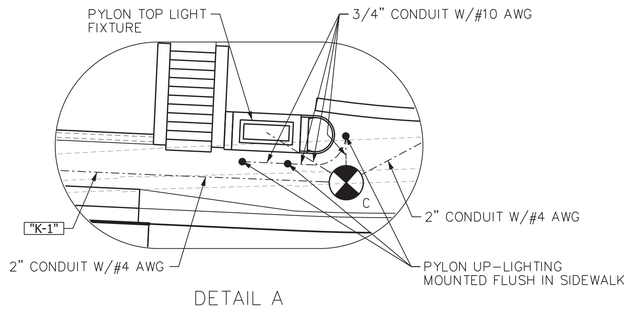
INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN

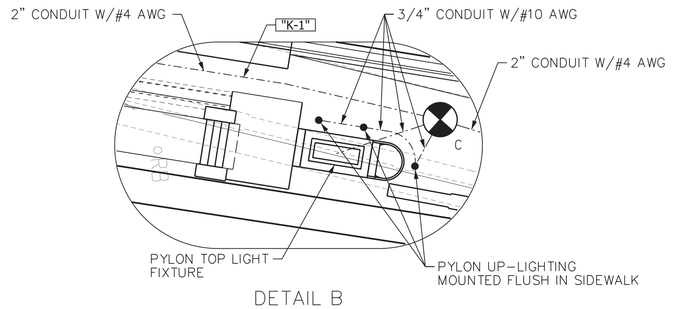
TRAFFIC PLANS LEGEND

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0300798
SURVEY BOOK	PROJECT
	0300798
CONTRACT	SHEET NO. 3T8004 of
	DRAWING NO.





DETAIL A
NTS



DETAIL B
NTS

LIGHT POLES

ID NUMBER	STATION	LINE	OFFSET
14	8+12	"RAMP 10"	3.54' RT
15	10+15	"RAMP 10"	3.54' RT
15A	12+00	"RAMP 10"	3.54' RT
16	13+87	"RAMP 10"	16.7' RT
17	13+37	"PRS-1"	59.5' RT
19	17+36	"RAMP 11"	3.5' RT
19A	15+36	"RAMP 11"	3.5' RT
20	13+39	"RAMP 11"	3.5' RT
20A	11+28	"RAMP 11"	24.0' RT
21	10+57	"PRS-5"	56.2' RT
22	23+77	"US 31"	19.3' LT
22A	21+54	"US 31"	17.7' LT

NOTE(S):
1. PYLON UP-LIGHTING TO BE FIELD LOCATED AND INSTALLED PER VENDOR RECOMMENDATION.
2. EXISTING PYLON TOP LIGHT FIXTURES SHALL BE INVESTIGATED AND DOCUMENTED PRIOR TO REMOVAL BY CONTRACTOR. FIXTURES SHALL BE STORED IN A SAFE LOCATION UNTIL THEY ARE TO BE REINSTALLED ON RELOCATED PYLONS BY CONTRACTOR. SPECIFIC DETAILS RELATED TO THE FIXTURES, COMPONENT PARTS TO BE REUSED AND/OR DISCARDED, AND NEW COMPONENT PARTS WILL BE DETERMINED FOLLOWING FIELD INVESTIGATIONS.

REV. 00	BU2AB-1 RFC	11/20/2013
REVISION NO.	SUBMITTAL NAME	DATE

PREPARED BY

THE OHIO RIVER BRIDGES

WALSH Milestone JACOBS

WALSH
NOVEMBER 27, 2013
RELEASED FOR CONSTRUCTION

RICHARD E. HENSLEY REGISTERED No. 900347 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 11/20/2013 DATE

DESIGNED: REH | DRAWN: JRC
CHECKED: DAH | CHECKED: REH

INDIANA DEPARTMENT OF TRANSPORTATION

SECTION 3 - ORB DOWNTOWN

PROPOSED LIGHTING PLANS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
	0300798
SURVEY BOOK	PROJECT
	0300798
CONTRACT	SHEET NO. 3T8419 of
	DRAWING NO.

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ATTACHMENT B: RECORD OF DISCUSSION REGARDING THE LOCATION OF THE PYLONS AND RAILING AND REUSE OF LIMESTONE BLOCKS

THE OHIO RIVER BRIDGES
Phone: 502-442-0925
Project Office: 9300 Shelbyville Road, Suite 300, Louisville, KY 40222

May 23, 2013

CTS-GEC-HPP-LTR0385
Reply Requested: YES
Date Requested: May 23, 2013

Mr. Andy Barber, Project Manager
Kentucky Transportation Cabinet, District #5
8310 Westport Road
Louisville, KY 40242

Mr. Ronald Heustis, Project Manager
Indiana Department of Transportation
100 North Senate Avenue, Room N642
Indianapolis, IN 46204-2249

Mr. Jeff Schmidt, Federal Project Manager
Federal Highway Administration – Kentucky Division
9300 Shelbyville Road, Suite 300
Louisville, Kentucky 40222

Reference: Louisville Southern Indiana Ohio River Bridges Project (Project)

Subject: Recommendation for George Rogers Clark Memorial Bridge Pylons and Railing

Dear Mr. Barber /Mr. Heustis /Mr. Schmidt:

The relocation of the pylons and placement of a barrier railing at the George Rogers Clark Memorial Bridge has been accomplished in a way that will ensure the protection of the National Register of Historic Places (NRHP) designation for the bridge. This was completed in accordance with Stipulation III.D. of the First Amended Memorandum of Agreement (MOA). It was presented to the BiState Historic Consultation Team (BSHCT) on May 21, 2013 and recommended to advance to the BiState Management Team (BSMT). Therefore, CTS-GEC requests concurrence in the recommendation for placement of the pylons and railing for the Downtown Procurement by the BSMT.

Sincerely,

James Hilton
Deputy Project Manager, CTS-GEC

5/23/13

Signature Approved
Mr. Andy Barber, Project Manager, KYTC

5-23-13

Signature Concurred
Mr. Ronald Heustis, Project Manager, INDOT

5/23/13

Signature Reviewed
Mr. Jeff Schmidt, FHWA Project Manager

cc: Mr. John Sacksteder, CTS-GEC
Mr. Jeff Vlach, CTS-GEC
Project Controls

August 7, 2013

Arik Quam
Design Build Team Project Manager
Walsh Construction Design Build Team

SUBJECT: LSIORB – Downtown Crossing
GRC Stone Wall Recommendation

Dear Sir:

At the Bi-State Historic Consultation Team (BSHCT) meeting of May 21, 2013, two options were discussed for the construction of the stonewall (retaining wall) adjacent to US 31 for the referenced bridge. Option 1 proposed the surface installation of existing limestone blocks on one side of US 31 with the opposite side to be formliner. Option 2 would split the limestone blocks equally between the two sides with the remaining portion of each wall to be formliner. Option 1 was recommended with the limestone blocks to be placed on the west side of US 31.

At the Indiana Historic Preservation Advisory Team (IHPAT) meeting of June 5, 2013, the two options for the construction of the stonewall were presented. After discussion, the IHPAT passed a resolution to select Option 1, but with the limestone blocks to be placed on the east side of US 31. The IHPAT members recommended that it would be more historically significant to place the limestone wall adjacent to the Visitor Center and the Administration Building on the east side.

On July 19, 2013, the Bi-State Management Team (BSMT) requested that the BSHCT Co-chairs (Mary Kennedy of the Indiana Department of Transportation and John Carr of the Indiana State Historic Preservation Office) review the selections of the BSHCT and IHPAT members and provide a recommendation. On July 29, 2013, both Co-chairs concurred with the IHPAT recommendation of Option 1 with placement of the existing limestone blocks on the east side of US 31.

With the placement of the existing limestone blocks on the retaining wall, there was a concern expressed about extra blocks not used in the construction. The BSMT concluded that there was no recommendation in the Revised Record of Decision (RROD) for any salvaged materials from the referenced bridge. The Request for Proposal (RFP) indicated that any remaining materials from demolition or reconstruction, which can include materials from the referenced bridge, would become the property of Walsh to dispose of as appropriate. Careful consideration of the use of the limestone blocks for the reconstruction of the approach should occur before discard or sale of these materials.

Lastly, the BSMT requested that the limestone blocks should also be used to create the steps at the referenced bridge. The steps are to meet regulation even if they need to be resized to provide the appropriate heights and widths. A historically appropriate rail should be added, recognizing that some boring into the blocks would be required to anchor the rail system.

If you have any questions, do not hesitate to contact this office. Your cooperation in expediting the development of this Project is appreciated.

Sincerely

Robert G. Harris, Jr., P.E.
KYTC Construction Manager
LSIORB – Downtown Crossing

CC: Mr. Andy Barber, KYTC
Mr. Ken Sperry, KYTC
Mr. John Sacksteder, CTS-GEC
Mr. Jim Hilton, CTS-GEC
Mr. Jeff Vlach, CTS-GEC
Project Controls