



PUBLIC NOTICE

**US Army Corps
of Engineers**®
Rock Island District

Applicant: Iowa Department of Transportation Date: December 10, 2021
Illinois Department of Transportation Date: January 08, 2022
CEMVR-RD-2021-1590 Section 10/404

Joint Public Notice
US Army Corps of Engineers
Iowa Department of Natural Resources
Illinois Environmental Protection Agency
Illinois Department of Natural Resources/Office of Water Resources

1. **Applicants:** Iowa Department of Transportation, 800 Lincoln Way, Ames, Iowa 50010 and the Illinois Department of Transportation, 819 Depot Avenue, Dixon, Illinois 61021.
2. **Project Location:** The project is located on Interstate 74 over the Mississippi River, mile 485, in multiple areas. Sections 32 and 33, Township 78 North, R 4 East, Scott County, Iowa, Sections 29 and 32, Township 18 North, R 1 West, Rock Island County, Illinois. UTM NAD-83 Zone 15, Northing 4599180, Easting 707520. Lat. 41.517379, Long. -90.513053.

3. **Project Description:**

A. The Iowa Department of Transportation is requesting authorization to demolish the existing eastbound and westbound I-74 bridges that span the Mississippi River between Moline, Illinois and Bettendorf, Iowa. The new dual I-74 bridges, which are being constructed on a new alignment that is shifted to the east (upstream) of the existing I-74 alignment, are nearing completion, and once they are open to traffic the existing bridges will be taken out of service. The proposed project will involve the removal of all elements of the existing suspension bridges, approach spans, substructures, and all but one set of piers. The demolition of the old bridges will be let as two separate projects, IM-074-1(210)5--13-82 and IM-074-1(214)5--13-82. Project (210) will provide for the removal of the existing bridges between the Bettendorf anchorage structures located on the Iowa shoreline and the Moline anchorage structure located in the middle of the river. Under Project (210), removal will include the bridge superstructures (north of the Moline anchorage), the Bettendorf anchorages, the Moline anchorage, and Piers A, B, C, and D. Project (214) will provide for the removal of the bridges from Piers E, which are located just south of the Moline anchorage structure, to Piers L, which are located along the Illinois shoreline. Under Project (214), removal will include the remaining bridge superstructures (south of the Moline anchorage) and Piers E, F, G, H, J, and L. Piers A, B, C, D and the Moline anchorages will be removed down to bedrock, whereas Piers E, F, G, H, J, and L will be removed to at least one foot below the existing mud line. The Pier K structures will remain in place in order to avoid disturbance to sensitive mussel habitat. Following demolition of the bridges, the Pier K structures will be equipped with navigational lighting.

B. Project (210) will include the following allowances and/or requirements: the contractor will be allowed to utilize explosives to demolish sections of the bridges; the contractor will be allowed to drop bridge spans into the Mississippi River; the contractor will be required, after each main navigation channel span is detonated and dropped into the river, to promptly clear the channel and to conduct a sweep for smaller debris within 24 hours; the contractor will be required, after the other non-navigation channel spans are detonated and dropped into the river, to clear the channel and to conduct a sweep for

smaller debris within 48 hours; the contractor will be required to mark any objects that are placed or accidentally dropped into the river, and which may cause an obstruction to navigation, with lighted buoys or orange flags until the objects are removed; for pier/anchorage structure removal, the contractor will use conventional removal techniques on Piers A, B, C, D, and the Moline anchorage structure on the top portion of the structures and then will use drilled explosives to blast the base of the structures down to the specified elevations; and the contractor will be required to use conventional removal techniques only on the Bettendorf anchorage structures due to their proximity to the existing levee.

C. Project (214) will include the following allowances and/or requirements: the contractor will be prohibited from utilizing explosives to demolish the bridges (the use of expansive demolition agents will be allowed and required for this project); the contractor will not be allowed to drop the six bridge spans between Piers E and L into the river; and for pier removal the contractor will use conventional removal techniques on Piers E, F, G, J, and L down to the normal pool level, and will be required to use expansive demolition agents to remove the piers down to the specified elevation; Pier H, which is located on land, will be removed entirely by conventional removal techniques.

D. The navigation channel of the Mississippi River will be maintained and remain open to river traffic during most demolition activities. Access to Sylvan Slough may also be restricted during demolition. The contractor will coordinate any temporary interruptions of river traffic with the U.S. Coast Guard.

E. Temporary access in the Mississippi River may include an appropriate combination of barges, temporary slips, temporary supports (falsework), and temporary cofferdams. Elevated earthen/sand/rock work platforms (causeways or equipment pads) within the river shall not be used during removal of the existing bridges (i.e. fills in the river for temporary crossings, causeways, or equipment pad structures will not be permitted). Dredging may be necessary to facilitate barge access to the project area. Dredging shall be limited to the minimum quantity required for barge access. Dredged material will be disposed of by the contractor at an approved off-site location; no dredged material will be placed back into the river.

F. This project will temporarily impact 0.92 acre of wetland and 7.17 acres (180 linear feet) of the Mississippi River. No mitigation is being proposed for this project.

4. Agency Review:

A. Department of the Army, Corps of Engineers. The Department of the Army application is being processed under the provisions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

B. State of Iowa. The project plans have been submitted to the Iowa Department of Natural Resources for state certification of the proposed work in accordance with Section 401 of the Clean Water Act. The certification, if issued, will express the Department's opinion that the proposed activity will comply with Iowa's water quality standards (Chapter 61 IAC). The applicant has also applied for authorization of work in the floodplain pursuant to Chapter 455B of the Iowa Code and other applicable state permits. Written comments concerning possible impacts to waters of Iowa should be addressed to: Iowa Department of Natural Resources, 502 East 9th Street, Des Moines, Iowa 50319. A copy of the comments should be provided to the Corps of Engineers office (see paragraph 11, of this public notice for address).

C. State of Illinois

- (1) The project plans have been submitted to the Illinois Environmental Protection Agency (IEPA) for review.
- (2) The Illinois Department of Natural Resources, Office of Water Resources (IDNR/OWR) is a participant in the joint application process and requires that IDNR/OWR permits be obtained for construction within floodways; construction and other activities within public bodies of water; and construction, operation and maintenance of dams pursuant to the State of Illinois Rivers, Lakes, and Streams Act (615 ILCS 5).
- (3) Inquiries concerning IDNR/OWR jurisdiction and/or review of the activity should be directed to the Office of Water Resources at dnr.dworm@illinois.gov or 217/782-3863. Information on the IDNR/OWR regulatory and other programs can be found at <http://dnr.state.il.us/owr>.

5. **Historical/Archaeological:** Coordination with the SHPO for both Iowa and Illinois has occurred. The results of the historic and archaeological surveys were coordinated with the SHPO for each state to obtain concurrence for the properties under their jurisdiction. These concurrence findings reported on the types and locations of NRHP-eligible properties. Illinois SHPO concurred with Iowa DOT's findings of adverse effect on historic properties impacted by the proposed project on January 10, 2006. FHWA and the Illinois SHPO signed a Memorandum of Agreement (MOA) on May 21, 2008, regarding impacts to historic properties in Illinois and the appropriate mitigation measures to be taken. On May 6, 2008, FHWA and the Iowa SHPO signed a MOA that identifies historic properties impacted in Iowa and the appropriate measures to be taken to mitigate the impacts. FHWA notified the Advisory Council on Historic Preservation (ACHP) of the Finding of Adverse Effect on the four historic properties. ACHP responded with a determination that the agency's participation in the process for resolving adverse effects was unnecessary and that filing the MOAs and any related documentation with the ACHP will satisfy the requirements of Section 106 of the National Historic Preservation Act.

6. **Endangered Species:** In compliance with Section 7 of the Endangered Species Act of 1973 this project has been evaluated to determine the likelihood of impacting threatened and/or endangered species or critical habitat. Upon review of the Iowa Department of Natural Resources Iowa Natural Areas Inventory database and in coordination with the United States Fish and Wildlife Service (USFWS) it was determined there are several federally endangered mussel species present in or near the project. The following species were identified: Higgins eye pearlymussel (*Lampsilis higginsii*), sheepsnose (*Plethobasus cyphus*), spectaclecase (*Cumberlandia monodonta*). Formal consultation with the USFWS was initiated on May 5, 2016, by submittal of a Biological Assessment. On July 18, 2016, the USFWS issued a transmission letter and final Biological Opinion (BO), including an incidental take statement for the replacement of the I-74 Bridge, thereby concluding formal consultation. USFWS subsequently amended the BO on September 7, 2021 to include updated information on demolition of the existing bridges, additional conservation measures, and updated incidental take totals for the three Federally-listed mussel species. The project will not result in the destruction or adverse modification of federally designated critical habitat but will have an impact on federally designated essential habitat.

7. **Dredge/Fill Material Guidelines:** The evaluation of the impact of the proposed activity on the public interest will also include application of the guidelines promulgated by the Administrator of the United States Environmental Protection Agency under authority of Section 404(b) of the Clean Water Act (40 CFR Part 230).

8. **Public Interest Review:** The decision whether to issue the Corps permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

9. **Who Should Reply:** The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity. These statements should be submitted on or before the expiration date specified at the top of page 1. These statements should bear upon the adequacy of plans and suitability of locations and should, if appropriate, suggest any changes considered desirable.

10. **Public Hearing Requests:** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided.

11. **Reply to the Corps.** Comments concerning the Corps permit should be addressed to the District Engineer, US Army Corps of Engineers, Rock Island District, ATTN: OD-P (FROHLICH), Clock Tower Building - Post Office Box 2004, Rock Island, Illinois 61204-2004. For additional information contact **Al Frohlich, (309/794-5859)** or email: Albert.J.Frohlich@usace.army.mil



Attach
Plan

Mr. Albert J. Frohlich
Project Manager, Western Branch
Regulatory Division

REQUEST TO POSTMASTERS: Please post this notice conspicuously and continuously until the expiration date specified at the top of page 1.

NOTICE TO EDITORS: This notice is provided as background information for your use in formatting news stories. This notice is not a contract for classified display advertising

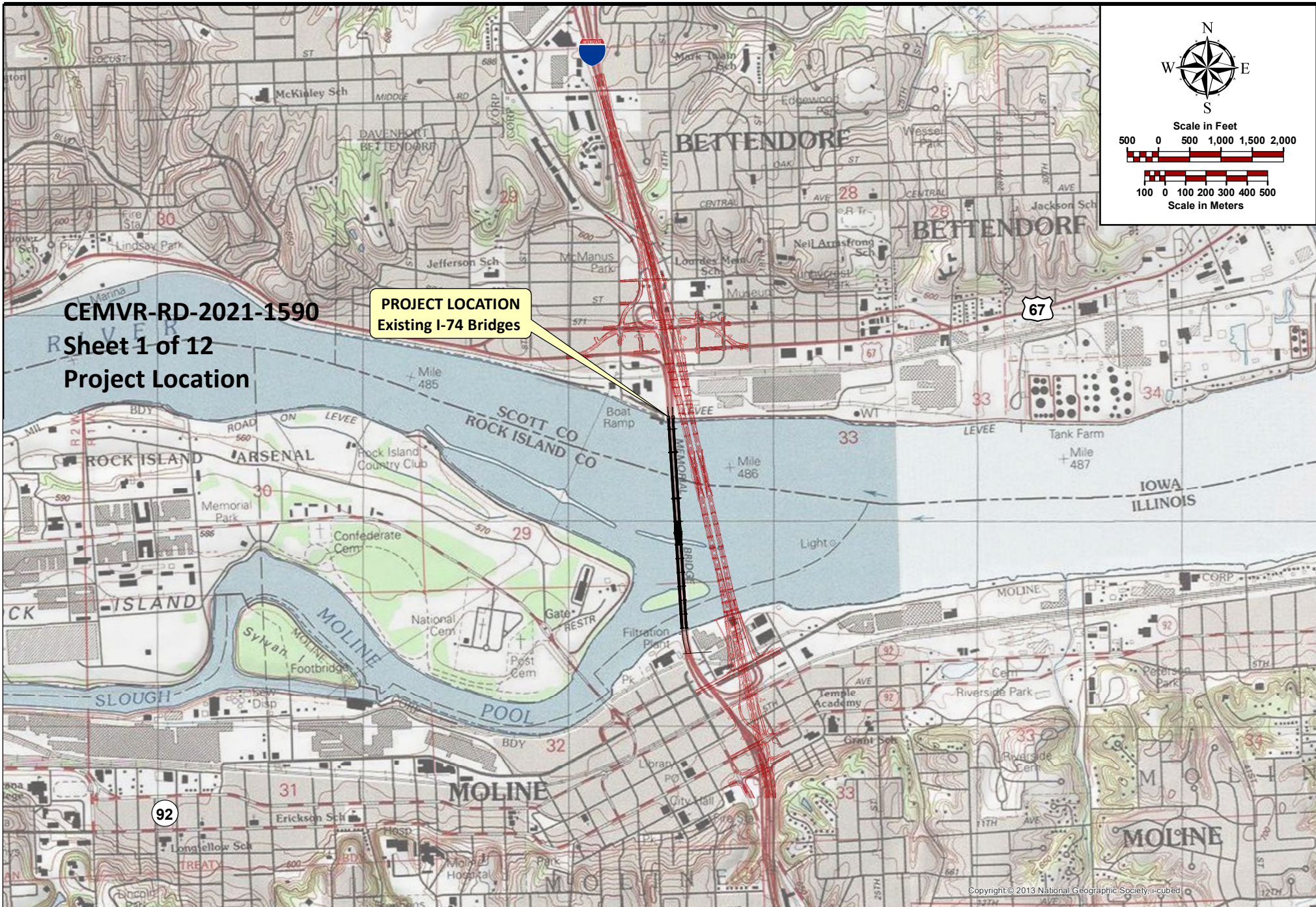


Figure 2. USGS Quadrangle map showing project location, existing Interstate 74 over the Mississippi River, Scott County, Iowa and Rock Island County, Illinois.

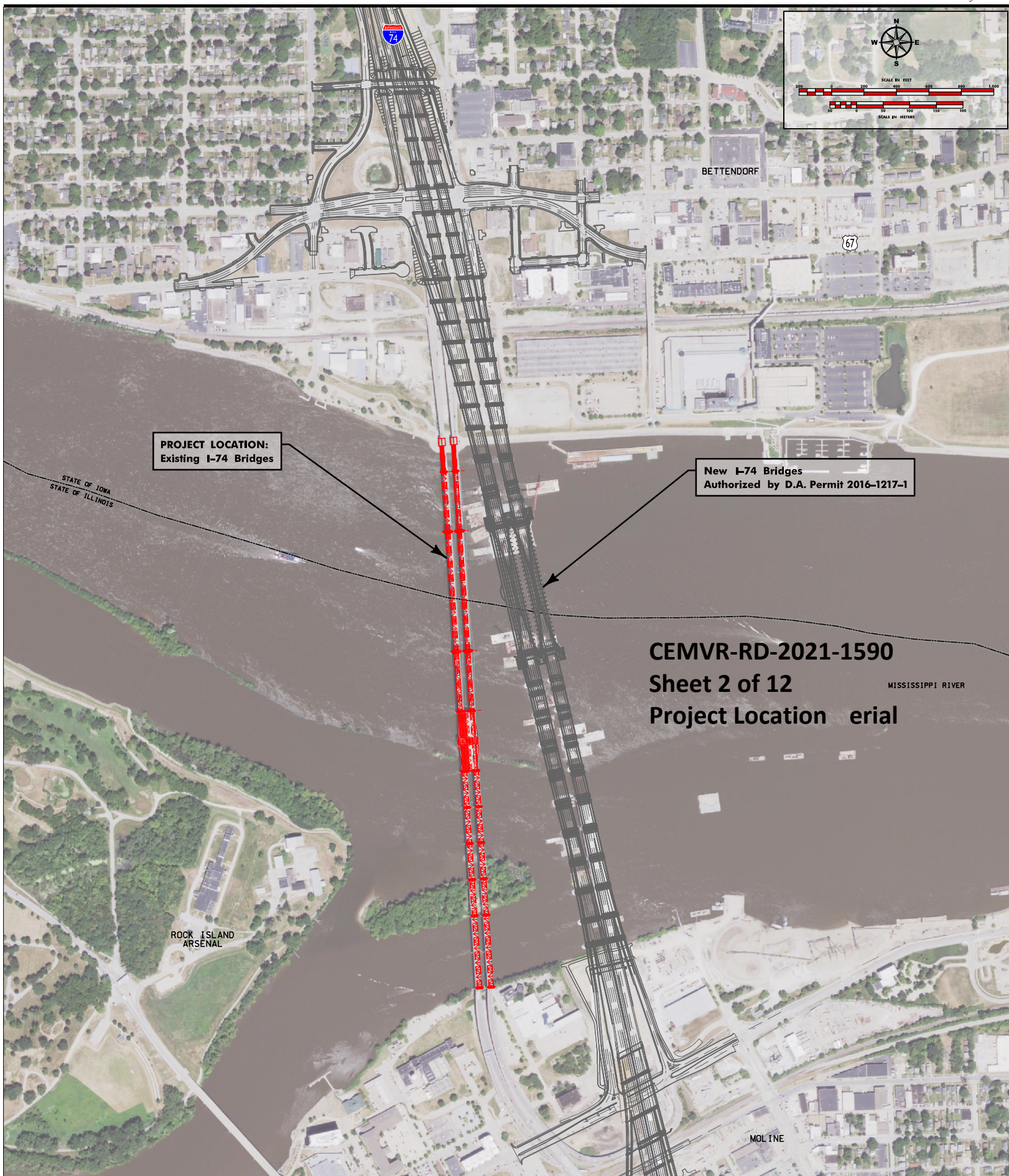
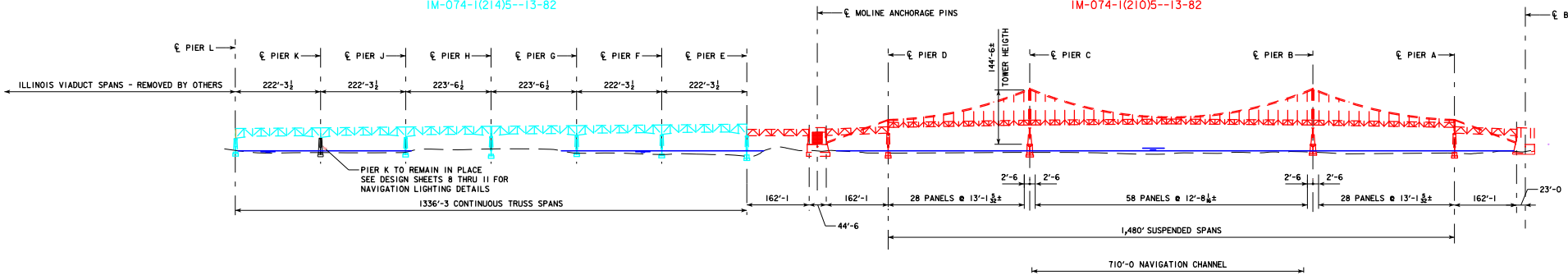


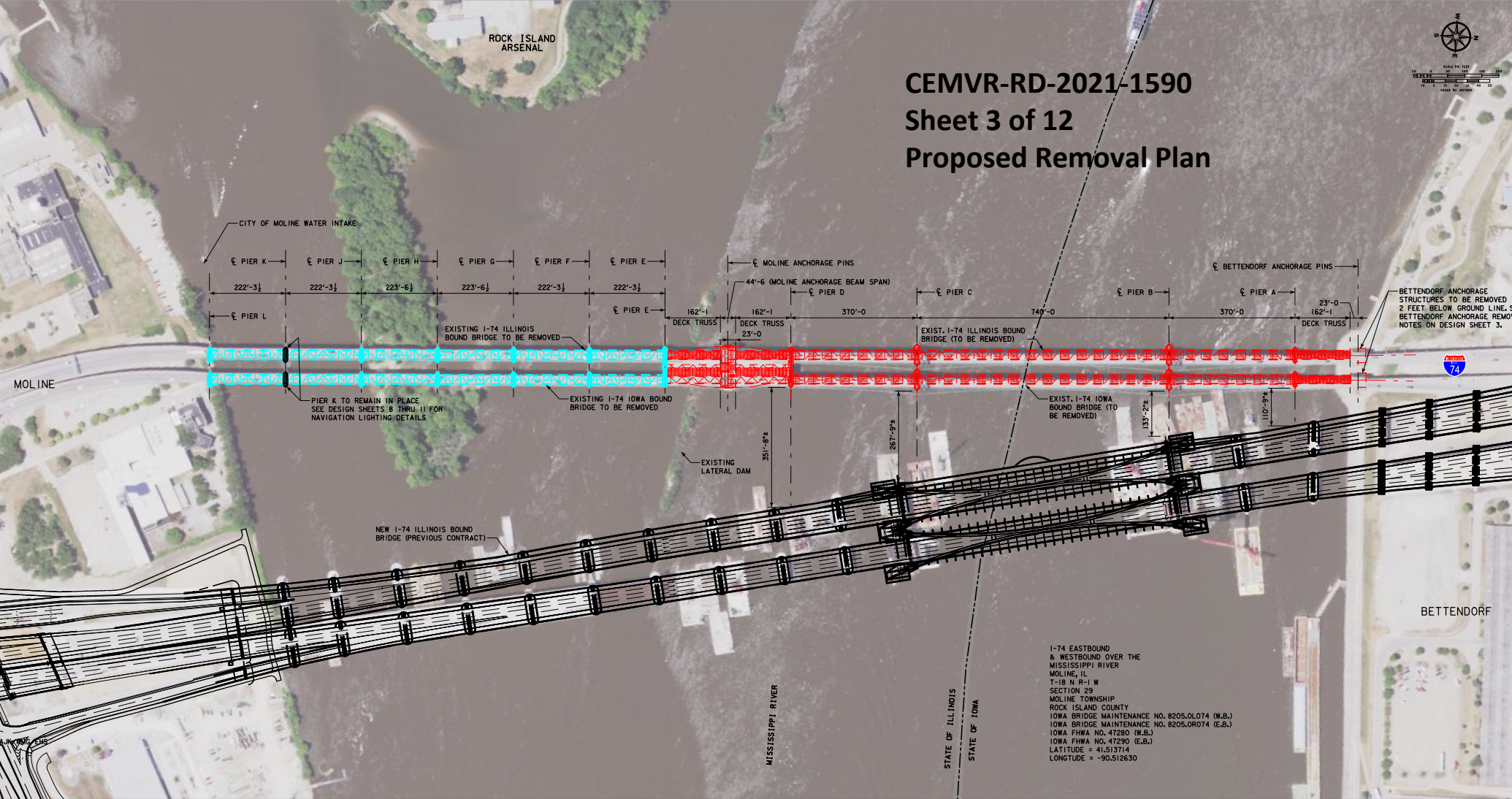
Figure 3. Project location map, showing the alignment of the existing Interstate 74 Mississippi River bridges in relation to the new Interstate 74 bridges, in Bettendorf, Iowa (Scott County) and Moline, Illinois (Rock Island County).

IM-074-1(214)5--13-82

IM-074-1(210)5--13-82

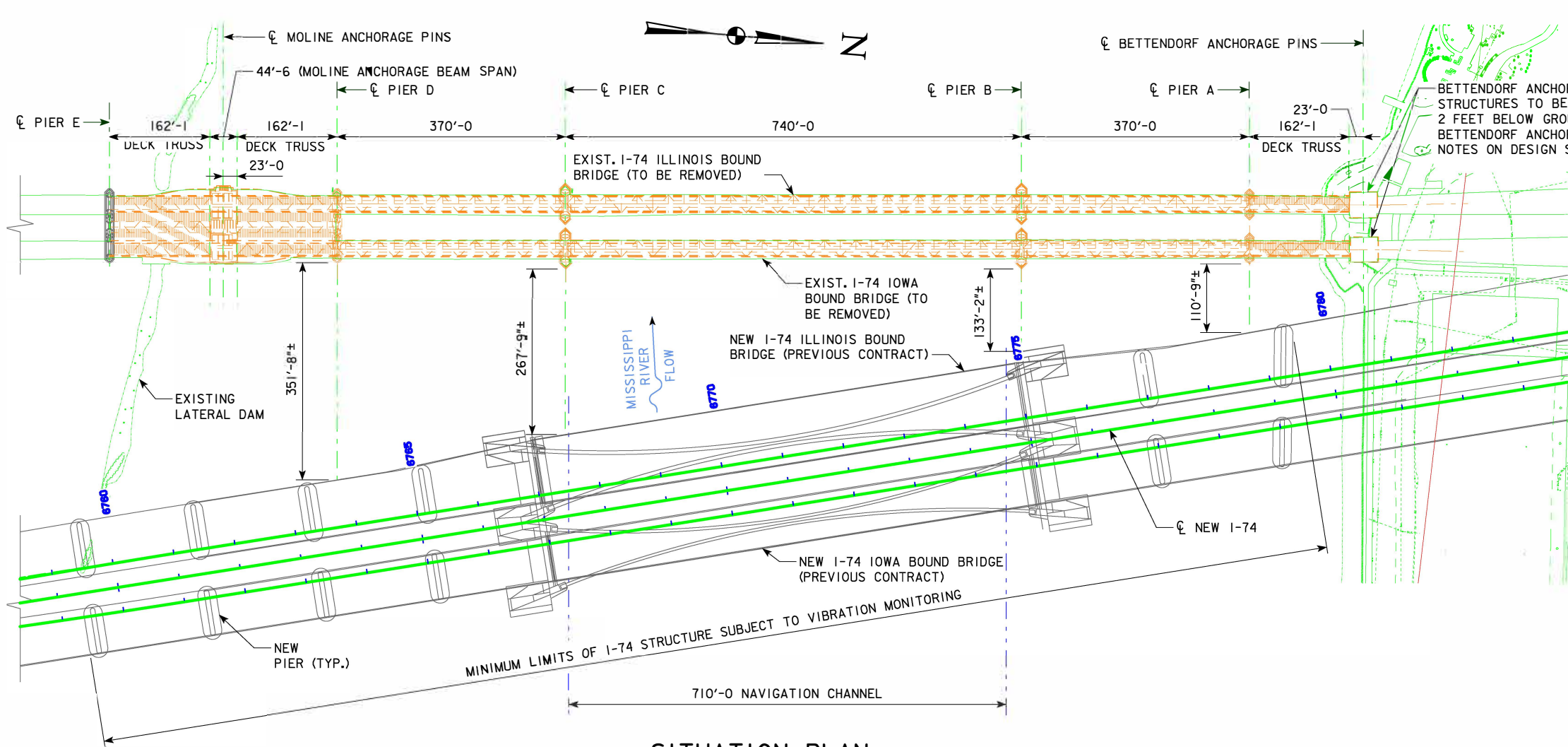


CEMVR-RD-2021-1590
Sheet 3 of 12
Proposed Removal Plan

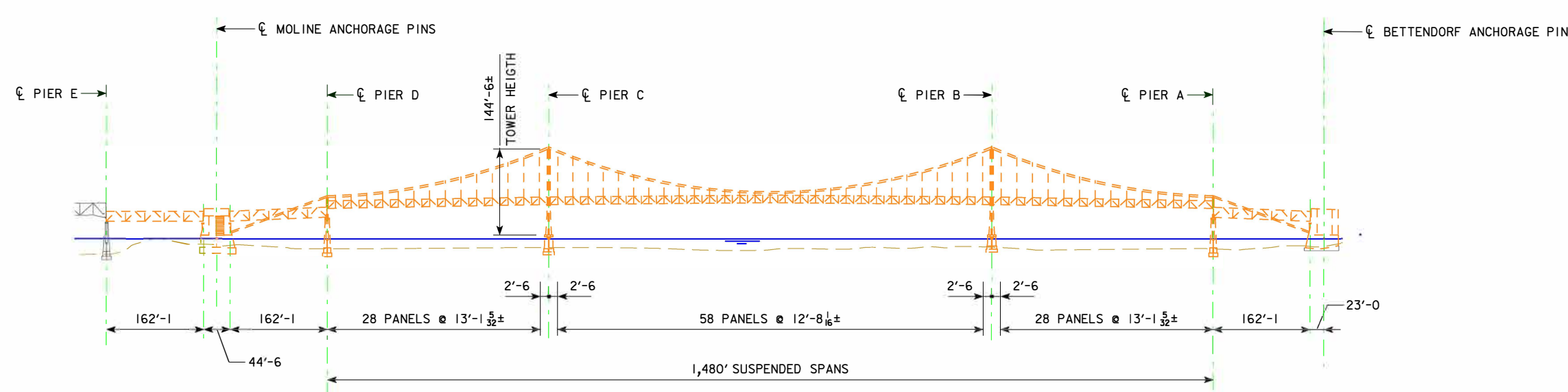


I-74 EASTBOUND & WESTBOUND OVER THE MISSISSIPPI RIVER
 MOLINE, IL
 T-18 N R-1 W
 SECTION 29
 MOLINE TOWNSHIP
 ROCK ISLAND COUNTY
 IOWA BRIDGE MAINTENANCE NO. 8205.0L074 (W.B.)
 IOWA BRIDGE MAINTENANCE NO. 8205.0R074 (E.B.)
 IOWA FHWA NO. 47280 (W.B.)
 IOWA FHWA NO. 47290 (E.B.)
 LATITUDE = 41.513714
 LONGITUDE = -90.512630

Figure 4. Proposed removal of the existing Interstate 74 bridges over the Mississippi River, in Bettendorf, Iowa (Scott County) and Moline, Illinois (Rock Island County).



SITUATION PLAN



ELEVATION

EXISTING STRUCTURES

TYPE: SUSPENSION WITH STEEL TRUSS APPROACHES
 SPANS: 2 DECK TRUSS SPANS @ 162'-1±
 1 MOLINE ANCHORAGE BEAM SPAN @ 44'-6
 3 SUSPENSION @ 370'-0±, 740'-0±, AND 370'-0±
 1 DECK TRUSS SPAN @ 162'-1±
 (SPANS LISTED ABOVE ARE FOR ONE BRIDGE)
 ROADWAY: ILLINOIS BOUND: 24'-0±
 IOWA BOUND: 23'-3±
 FACE TO FACE SAFETY CURB
 SKEW: 0°00'00"
 TYPE OF DECK: CAST-IN-PLACE CONCRETE
 APPROACH SLABS: NONE
 ALIGNMENT: TANGENT

BENCHMARK DATA (NAVD 1988 DATUM)

BENCHMARK NO.: 500 STA. 6781+18.95 LT. 161.23'
 ELEV. 575.797, CHISELED "X" IN BOLT E. SIDE
 CONCRETE STRUCTURE

ELEVATIONS BASED ON NGVD 1912 DATUM.

THE FOLLOWING CONVERSION APPLIES TO
 THE PROJECT LOCATION:
 NAVD 88 = NGVD 1912 - 0.727 FT.

CEMVR-RD-2021-1590
Sheet 4 of 12
Project 210 Situation Plan

LOCATION

| | |
|--|--|
| I-74 OVER THE MISSISSIPPI RIVER MOLINE, IL T-18 N R-1 W SECTION 29 MOLINE TOWNSHIP ROCK ISLAND COUNTY LATITUDE = 41.519667 LONGITUDE = -90.513139 | I-74 OVER THE MISSISSIPPI RIVER BETTENDORF, IA T-78 N R-4 E SECTION 33 DAVENPORT TOWNSHIP SCOTT COUNTY BRIDGE MAINT. NO. 8205.0L074 (WB), 8205.0R074 (EB) FHWA NO. 47280 (WB), 47290 (EB) LATITUDE = 41.519667 LONGITUDE = -90.513139 |
|--|--|

DESIGN FOR REMOVALS TO THE 0° SKEW
I-74 BRIDGES OVER THE MISSISSIPPI RIVER (ILLINOIS & IOWA BOUND)

SITUATION PLAN
 STA. 6771+73.17 - 406.38' LT - I-74
SCOTT & ROCK ISLAND COUNTIES
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 4 OF 9 FILE NO. 30253 DESIGN NO. 4108

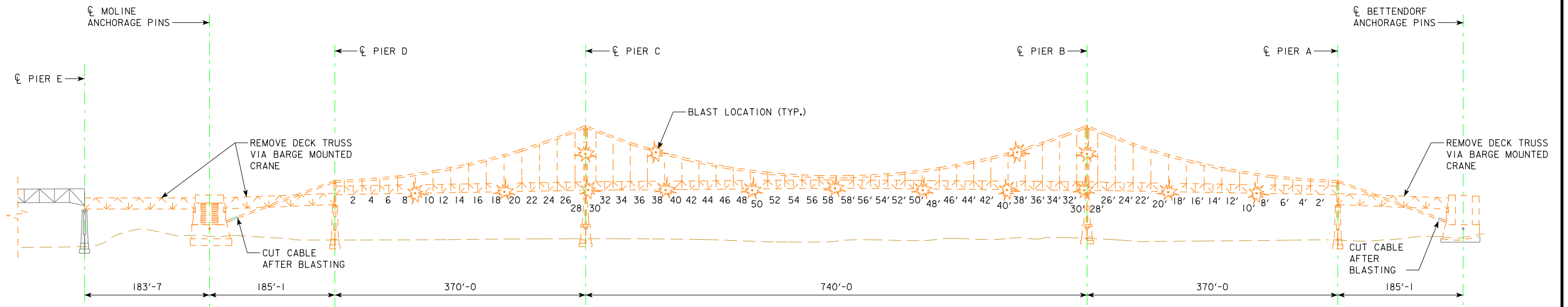
benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

DESIGN TEAM: AJK/RMG/EHS

SCOTT & ROCK ISLAND COUNTIES

PROJECT NUMBER IM-074-I(210)5--13-82

SHEET NUMBER 5



ELEVATION - SUPERSTRUCTURE DEMOLITION

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Sheet 5 of 12
Project 210 Proposed Demolition Plan

SUPERSTRUCTURE DEMOLITION NOTES

- 1) ILLINOIS BOUND (EASTBOUND) STRUCTURE TO BE REMOVED FIRST.
- 2) PYLONS SHALL FALL OUTWARD, AWAY FROM THE NAVIGATION CHANNEL.
- 3) TRUSS SEGMENTS WERE CHOSEN TO BE APPROXIMATELY 200,000 POUNDS.
- 4) DO NOT REMOVE CABLE BANDS AND WRAPPING WIRE.

SUGGESTED SUPERSTRUCTURE DEMOLITION PROCEDURE

- STEP 1 ONCE ENTIRE DECK HAS BEEN REMOVED, TRUSSES AND CABLES SHALL BE PRE-CUT TO PREPARE FOR BLASTING.
 - A) PRIOR TO BLASTING, FLOATS SHALL BE ATTACHED TO RIGGING ON TRUSS SEGMENTS, SUSPENSION CABLES, AND PYLONS TO AID IN REMOVAL FROM RIVER.
 - B) PRE-CUT TRUSS AT BLAST LOCATIONS.
 - C) HANGERS CAN BE SELECTIVELY CUT PRIOR TO BLASTING. IT IS RECOMMENDED THAT EVERY OTHER HANGER BE CUT. REMAINING HANGERS SHALL BE BLASTED.
 - D) PIERS B AND C SHALL BE PRE-CUT IN 2 OR 3 LOCATIONS.
- STEP 2 CHARGES ARE TO BE PLACED ON MAIN CABLES, TOWERS, REMAINING HANGERS AND AT REQUIRED STIFFENING TRUSS BREAK POINTS.
- STEP 3 AFTER STRUCTURE BLASTING HAS BEEN COMPLETED, SEGMENTS SHALL BE REMOVED FROM RIVER VIA BARGE-MOUNTED CRANE.
 - A) ALL RESTRICTIONS ON BLOCKING THE NAVIGABLE CHANNEL SHALL BE ADHERED TO.
 - B) MAIN SPAN SEGMENTS SHALL BE REMOVED FROM RIVER PRIOR TO SIDE SPAN SEGMENTS.
- STEP 4 THE DECK TRUSS APPROACH SPANS SHALL BE REMOVED VIA BARGE MOUNTED CRANE.

DESIGN FOR REMOVALS TO THE 0° SKEW
I-74 BRIDGES OVER THE MISSISSIPPI RIVER (ILLINOIS & IOWA BOUND)
SUPERSTRUCTURE DEMOLITION
 STA. 6771+73.17 - 406.38' LT - I-74
 DECEMBER 2014
SCOTT & ROCK ISLAND COUNTIES
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 7 OF 9 FILE NO. 30253 DESIGN NO. 4108

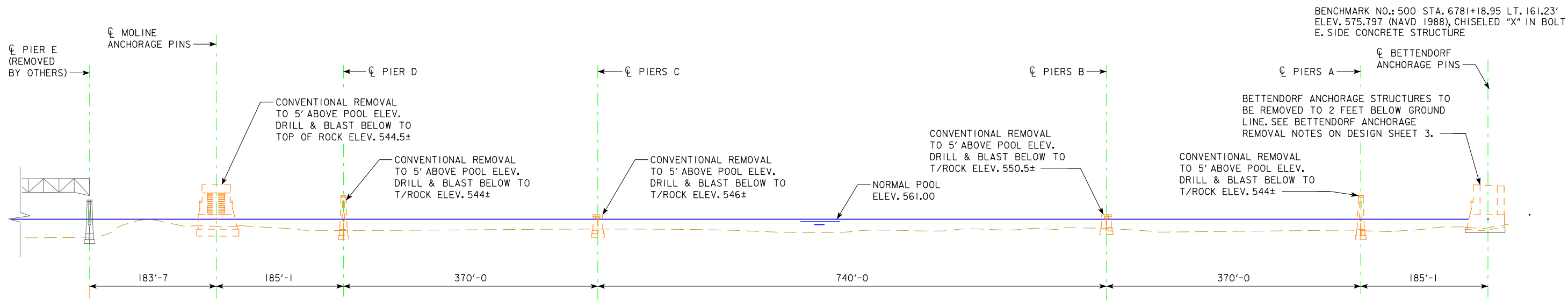
benesch
 Alfred Benesch & Company
 205 North Michigan Avenue, Suite 2400
 Chicago, Illinois 60601
 312-565-0450 Job No. 10061

DESIGN TEAM: AJK/RMG/EHS

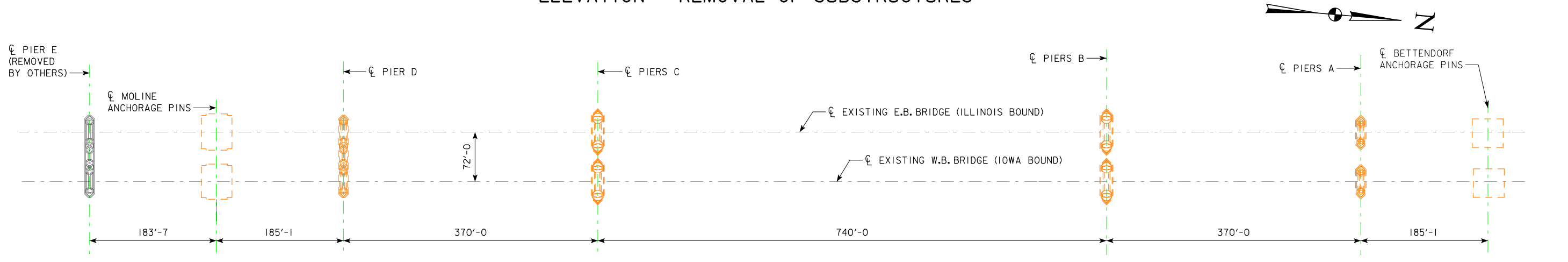
SCOTT & ROCK ISLAND COUNTIES

PROJECT NUMBER IM-074-I(210)5--13-82

SHEET NUMBER 8

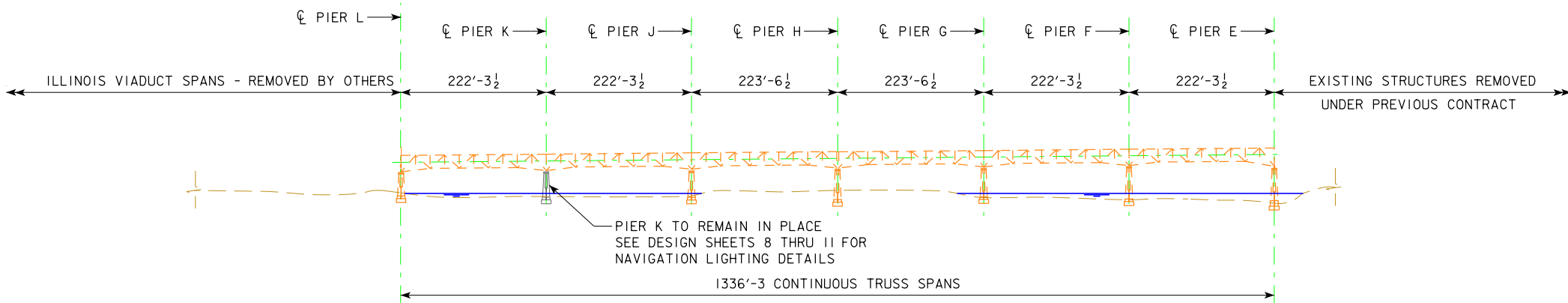


ELEVATION - REMOVAL OF SUBSTRUCTURES



PLAN - REMOVAL OF SUBSTRUCTURES

CEMVR-RD-2021-1590
Sheet 6 of 12
Project 210 Proposed Substructure Demolition

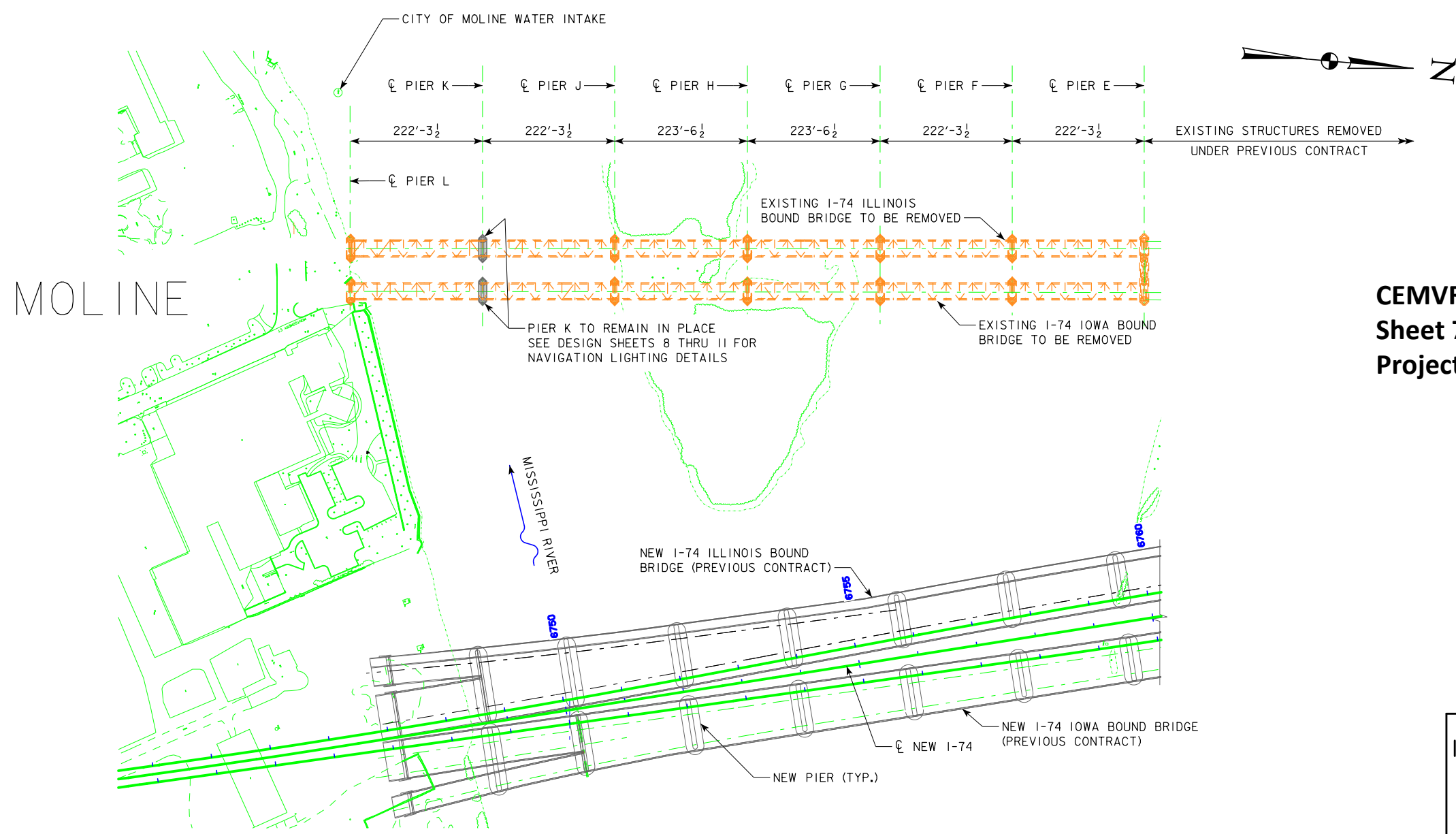


ELEVATION

| EXISTING STRUCTURES | |
|---------------------|--|
| TYPE: | CONTINUOUS STEEL TRUSS |
| SPANS: | 4 @ 222'-3 1/2', 2 @ 223'-6 1/2' (SPANS LISTED ABOVE ARE FOR 1 BRIDGE) |
| ROADWAY: | 24'-0"± FACE TO FACE SAFETY CURB ILLINOIS BOUND BRIDGE 23'-3"± FACE TO FACE SAFETY CURB IOWA BOUND BRIDGE |
| SKEW: | 0°00'00" |
| TYPE OF DECK: | CAST-IN-PLACE CONCRETE |
| APPROACH SLABS: | NONE |
| ALIGNMENT: | TANGENT |

| BENCHMARK DATA (NAVD 1988) | |
|----------------------------|--|
| BENCHMARK NO.: | 500 STA. 6781+18.95 LT. 161.23' |
| ELEV.: | 575.797, CHISELED "X" IN BOLT E. SIDE CONCRETE STRUCTURE |

ALL ELEVATIONS BASED ON NGVD 1912 DATUM.
THE FOLLOWING CONVERSION APPLIES TO THE PROJECT LOCATION:
NAVD 88 = NGVD 1912 - 0.727 FT.

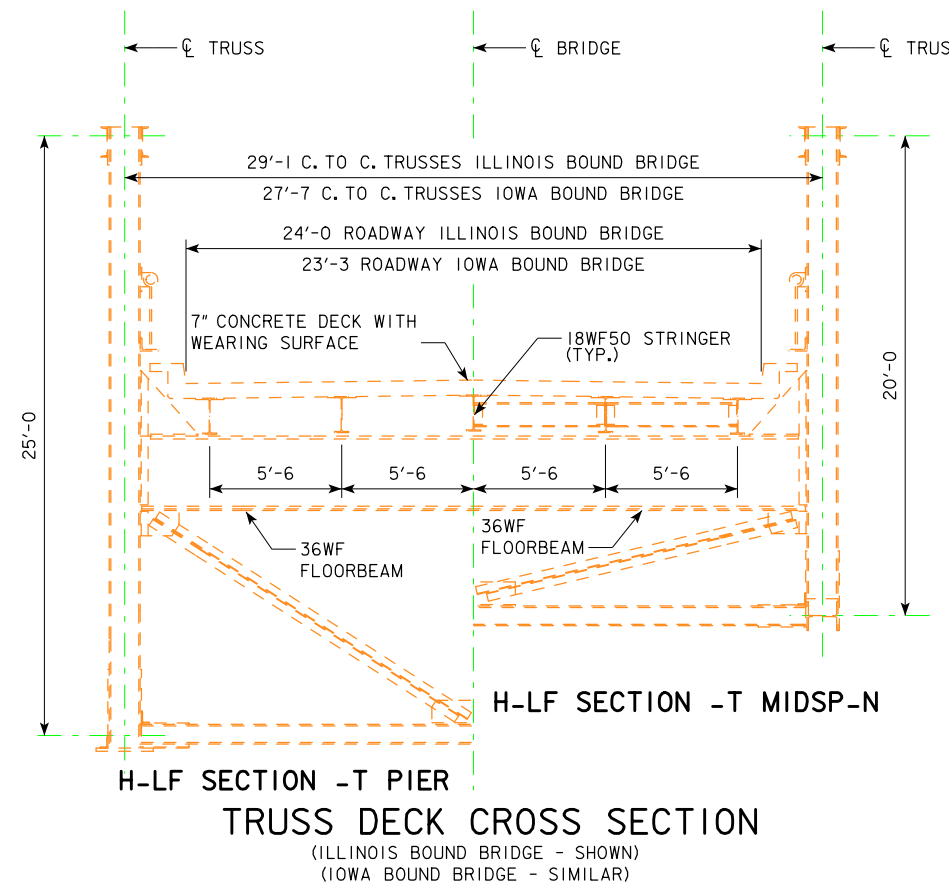
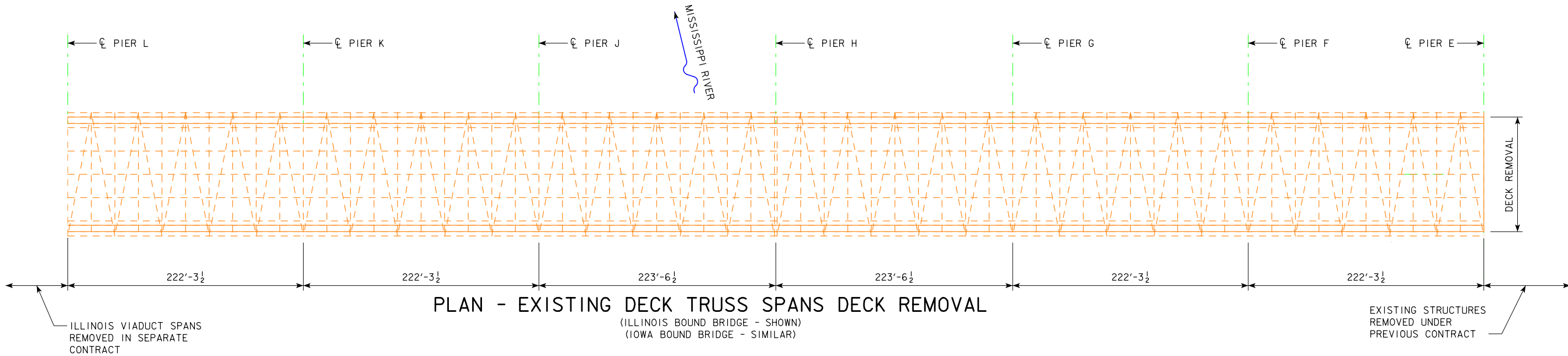
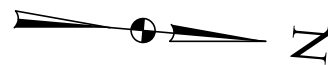


SITUATION PLAN

CEMVR-RD-2021-1590
Sheet 7 or 12
Project 214 Situation Plan

I-74 EASTBOUND & WESTBOUND OVER THE MISSISSIPPI RIVER
MOLINE, IL
T-18 N R-1 W
SECTION 29
MOLINE TOWNSHIP
ROCK ISLAND COUNTY
IOWA BRIDGE MAINTENANCE NO. 8205.0L074 (W.B.)
IOWA BRIDGE MAINTENANCE NO. 8205.0R074 (E.B.)
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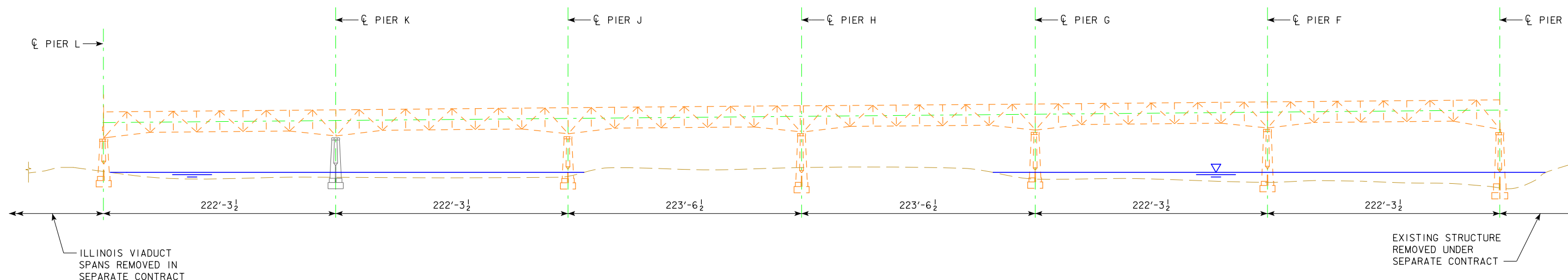
DESIGN FOR 0° SKEW
I-74 BRIDGES OVER THE MISSISSIPPI RIVER (ILLINOIS & IOWA BOUND)
4 @ 222'-3 1/2', 2 @ 223'-6 1/2' TRUSS SPANS
SITUATION PLAN
STA. 6754+17.58 - 684.84' LT - I-74
DECEMBER 2014
ROCK ISLAND COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
DESIGN SHEET NO. 3 OF 11 FILE NO. 30253 DESIGN NO. 4208



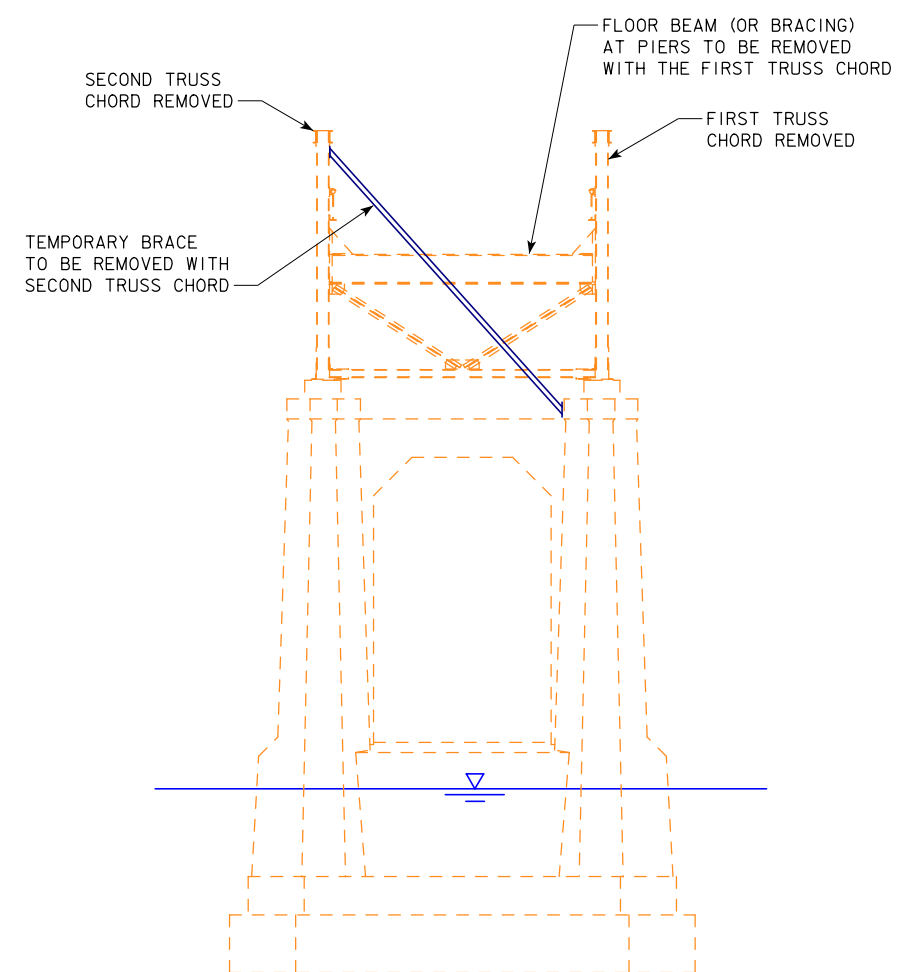
CEMVR-RD-2021-1590
Sheet 8 of 12
Project 214 Bridge Deck Removal Plan

DESIGN FOR 0° SKEW
I-74 BRIDGES OVER THE MISSISSIPPI RIVER (ILLINOIS & IOWA BOUND)
 4 @ 222'-3 1/2', 2 @ 223'-6 1/2' TRUSS SPANS
BRIDGE DECK REMOVAL
 STA. 6754+17.58 - 684.84' LT - I-74 DECEMBER 2014
ROCK ISLAND COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 4 OF 11 FILE NO. 30253 DESIGN NO. 4208

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 Chicago, Illinois 60601
 312-565-0450 Job No. 10061



ELEVATION - SUPERSTRUCTURE DEMOLITION



SECTION AT PIER

SUGGESTED SUPERSTRUCTURE DEMOLITION PROCEDURE

- STEP 1 REMOVE CONCRETE DECK AND ALL ATTACHED APPURTENANCES ON TRUSS SPANS.
- STEP 2 CONSTRUCT TEMPORARY BRACE AT EACH PIER TO STABILIZE THE TRUSS CHORD THAT WILL BE THE SECOND TRUSS TO BE REMOVED FOR EACH SPAN.
- STEP 3 REMOVE FLOOR BEAMS, BRACING AND STRINGERS. LEAVE SELECT MEMBERS AS REQUIRED TO BRACE THE TWO TRUSSES AGAINST EACH OTHER.
- STEP 4 REMOVE FIRST TRUSS CHORD WITH REMAINING SELECT MEMBERS AS MENTIONED ABOVE. TRUSS CHORDS CAN BE CUT AND REMOVED ONE SPAN AT A TIME.
- STEP 5 REMOVE SECOND TRUSS CHORD (WITH TEMPORARY BRACE) AND REPEAT FOR EACH SPAN.

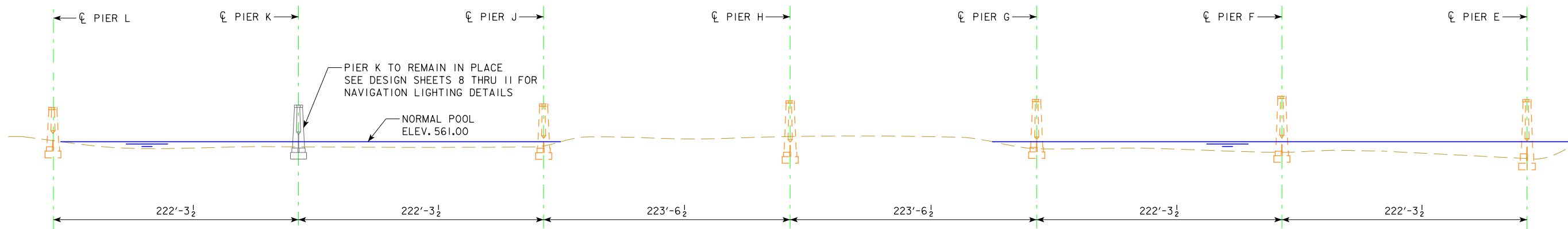
CEMVR-RD-2021-1590
Sheet 9 of 12
Project 214 Proposed Superstructure Demolition Plan

ESTIMATED STEEL WEIGHTS

| | | |
|-------|-------|---|
| 960 | LB/FT | TRUSSES |
| 60 | LB/FT | RAILINGS |
| 275 | LB/FT | STRINGERS |
| 260 | LB/FT | FLOORBEAMS |
| 210 | LB/FT | BRACING |
| <hr/> | | |
| 1,765 | LB/FT | TOTAL STEEL WEIGHT PER FOOT OF BRIDGE (TRUSS SPANS) |

TRUSS WEIGHTS TAKEN FROM ORIGINAL PLANS

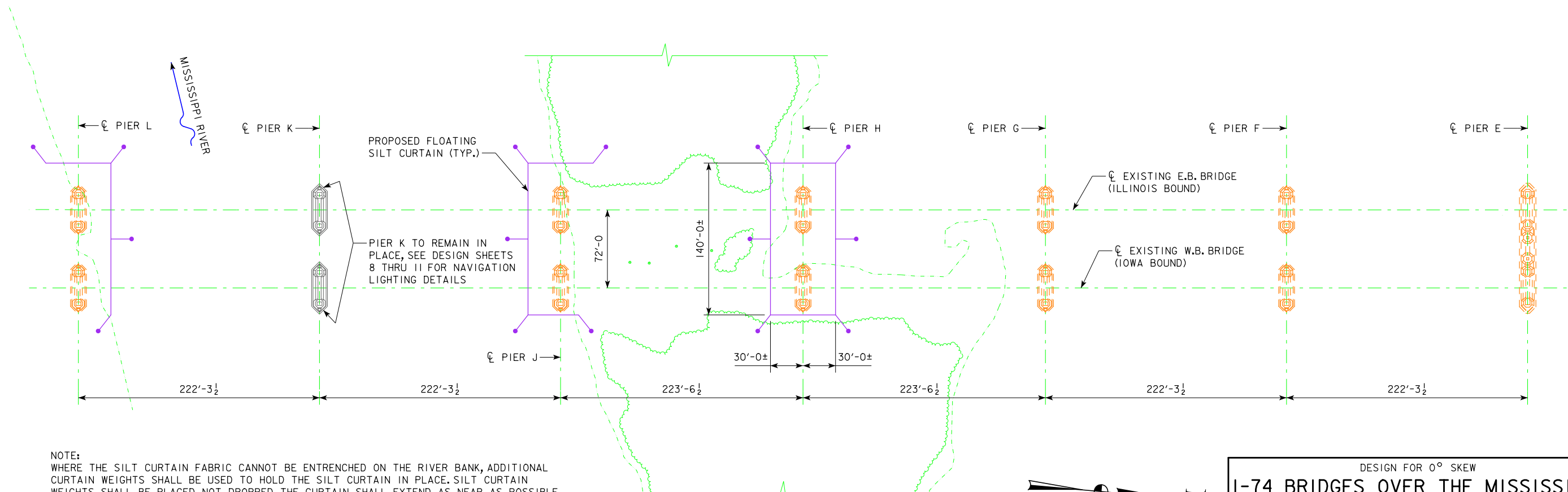
DESIGN FOR 0° SKEW
I-74 BRIDGES OVER THE MISSISSIPPI RIVER (ILLINOIS & IOWA BOUND)
 4 @ 222'-3 1/2', 2 @ 223'-6 1/2' TRUSS SPANS
SUPERSTRUCTURE DEMOLITION
 STA. 6754+17.58 - 684.84' LT - I-74
ROCK ISLAND COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 5 OF 11 FILE NO. 30253 DESIGN NO. 4208
 DECEMBER 2014



ELEVATION - REMOVAL OF SUBSTRUCTURE

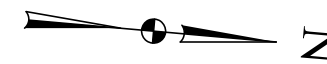
CEMVR-RD-2021-1590
Sheet 10 of 12
Project 214 Proposed Substructure Demolition Plan

EXISTING CITY OF MOLINE WATER INTAKE



NOTE:
 WHERE THE SILT CURTAIN FABRIC CANNOT BE ENTRENCHED ON THE RIVER BANK, ADDITIONAL CURTAIN WEIGHTS SHALL BE USED TO HOLD THE SILT CURTAIN IN PLACE. SILT CURTAIN WEIGHTS SHALL BE PLACED, NOT DROPPED. THE CURTAIN SHALL EXTEND AS NEAR AS POSSIBLE TO THE PIER THAT IS TO BE REMOVED, AND SHALL BE ANCHORED AT THAT LOCATION. THE SILT CURTAIN SHALL BE REMOVED IN A MANNER TO ENSURE THAT THE SILT IS CONTAINED AND NOT RELEASED INTO THE RIVER.

PLAN - REMOVAL OF SUBSTRUCTURE



DESIGN FOR 0° SKEW
I-74 BRIDGES OVER THE MISSISSIPPI RIVER (ILLINOIS & IOWA BOUND)
 4 @ 222'-3 1/2', 2 @ 223'-6 1/2' TRUSS SPANS
SUBSTRUCTURE DEMOLITION
 STA. 6754+17.58 - 684.84' LT - I-74
ROCK ISLAND COUNTY
 IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
 DESIGN SHEET NO. 6 OF 11 FILE NO. 30253 DESIGN NO. 4208
 DECEMBER 2014

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 312-565-0450 Job No. 10061

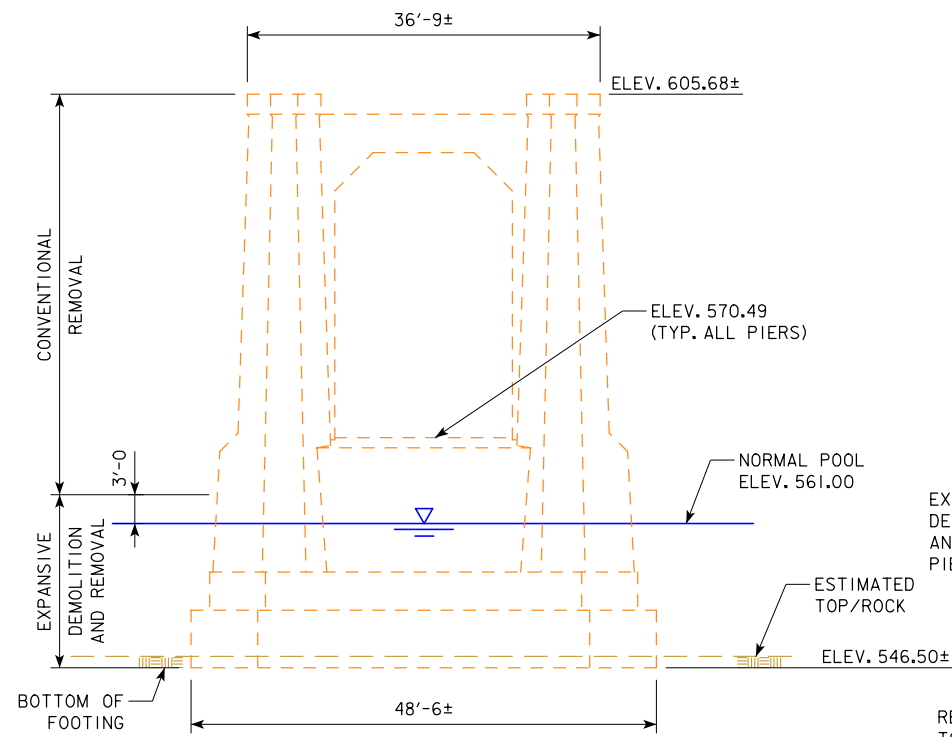
DESIGN TEAM: AJK/RMG/EHS

ROCK ISLAND COUNTY

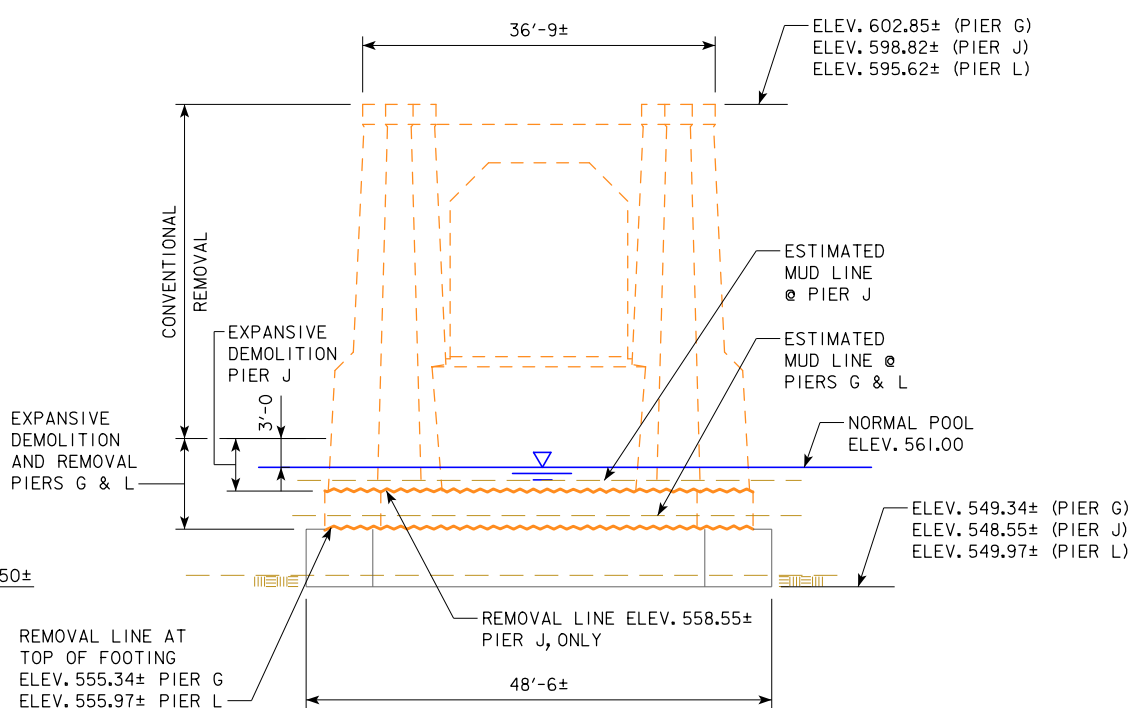
PROJECT NUMBER IM-074-I(214)5--13-82

SHEET NUMBER 7

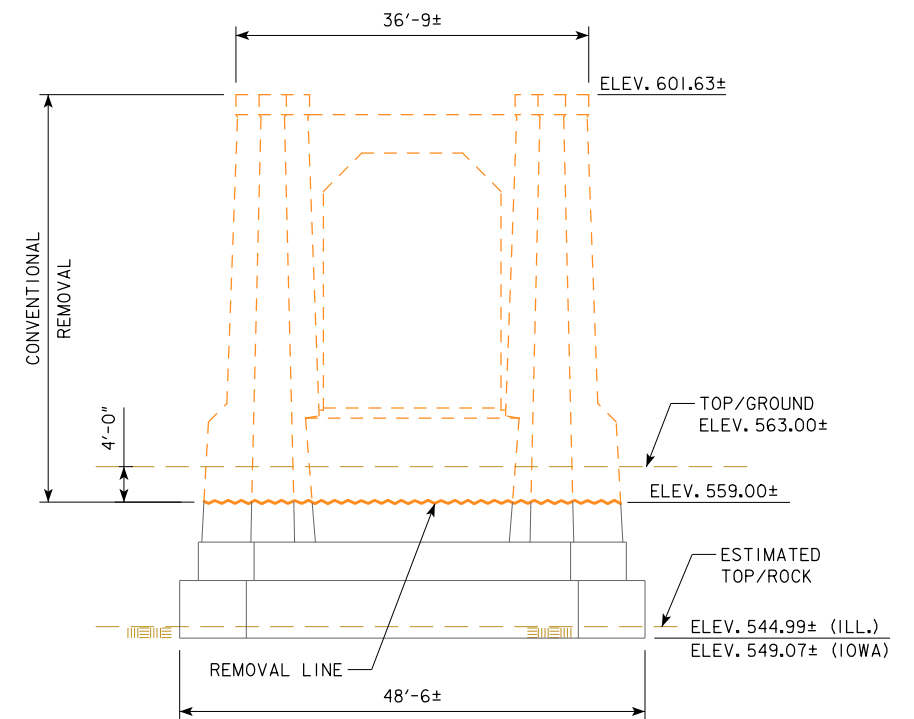
BENCHMARK NO.: 500 STA. 6781+18.95 LT. 161.23'
 ELEV. 575.797 (NAVD 1988), CHISELED "X" IN BOLT
 E. SIDE CONCRETE STRUCTURE



ELEVATION - PIER F
 (ILLINOIS BOUND PIER ELEVATIONS - SHOWN)
 (IOWA BOUND PIER - SIMILAR)
 (LOOKING NORTH)



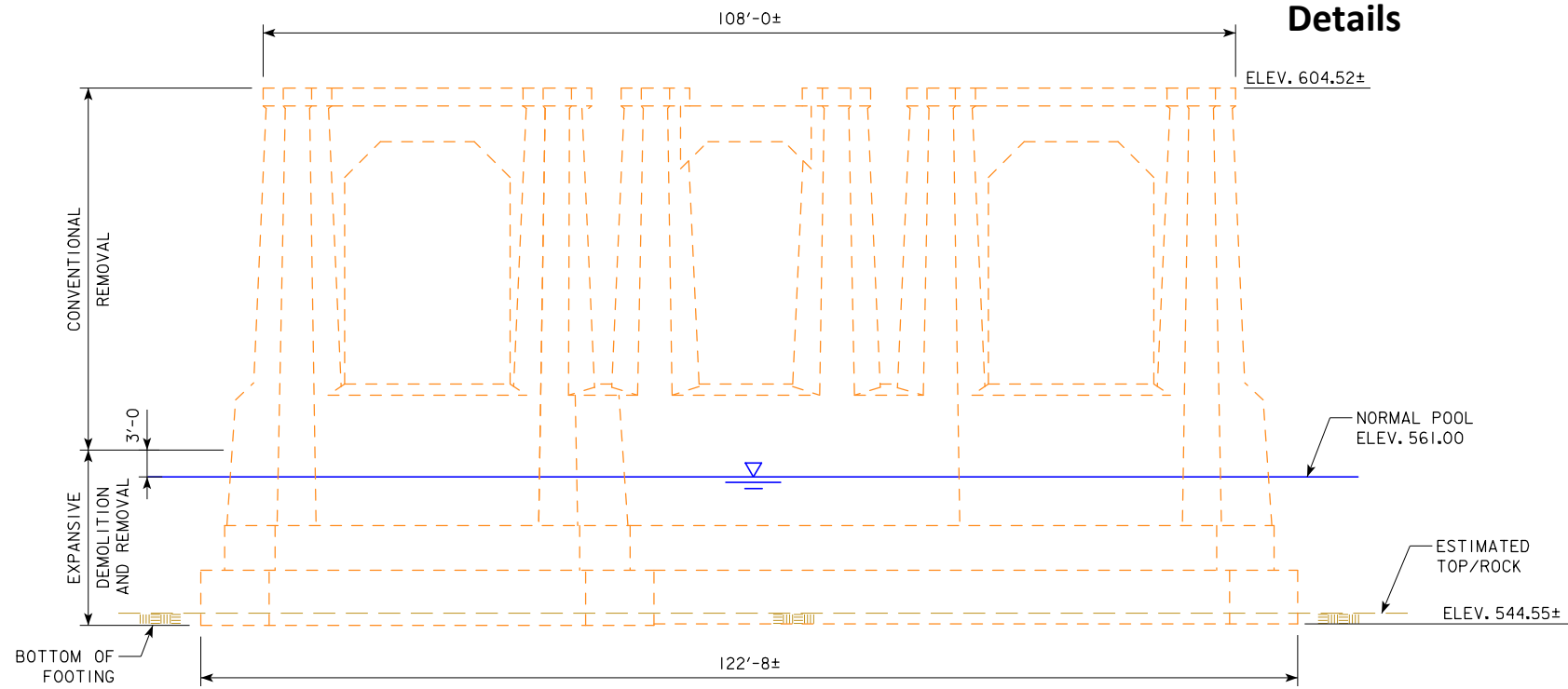
ELEVATION - PIERS G, J & L
 (ILLINOIS BOUND PIER ELEVATIONS - SHOWN)
 (IOWA BOUND PIER - SIMILAR)
 (LOOKING NORTH)



ELEVATION - PIER H
 (ILLINOIS BOUND PIER ELEVATIONS - SHOWN)
 (IOWA BOUND PIER - SIMILAR)
 (LOOKING NORTH)

CEMVR-RD-2021-1590
Sheet 11 of 12
Project 214 Proposed
Substructure Demolition Plan
Details

ALL ELEVATIONS BASED ON NGVD 1912 DATUM.
 THE FOLLOWING CONVERSION APPLIES TO
 THE PROJECT LOCATION:
 NAVD 88 = NGVD 1912 - 0.727 FT.



ELEVATION - PIER E
 (LOOKING SOUTH)

NOTES:

- FOR PIERS J AND L, DEMOLITION BELOW ELEVATION 564.00 MUST BE DONE WITH EXPANSIVE DEMOLITION AGENTS TO MINIMIZE THE AMOUNT OF DUST AND DEBRIS INTRODUCED INTO THE WATERWAY.
- THE ELEVATIONS OF THE REMOVAL LIMITS SHOWN AT PIERS J AND L ARE ESTIMATED. THE REMOVAL LIMIT AT PIERS J AND L SHALL BE 1'-0" BELOW THE MUD LINE AND THE RIVERBED SLOPE SHALL BE RE-MADE TO MEET THE EXISTING RIVERBED.
- ALL EXCAVATION REQUIRED AT PIER H TO FACILITATE REMOVAL SHALL BE INCIDENTAL TO THE COST OF THE REMOVAL OF THE EXISTING BRIDGE.

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SUPPORT PLATFORM NOTES:

DESIGN LIVE LOAD IS 100 PSF UNIFORM LOAD OR A SINGLE 500 LB CONCENTRATED LOAD, EQUIVALENT TO TWO WORKERS WEIGHING 250 POUNDS EACH, INCLUDING THEIR EQUIPMENT.

ALL STRUCTURAL STEEL OTHER THAN THE GRATING SHALL BE ASTM A709 GRADE 50.

ALL BOLTS SHALL BE HIGH STRENGTH. BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, ARTICLE 4153.06.

GRATING SHALL BE WELDED TYPE WITH $\frac{3}{16}$ " BEARING BARS AT $1\frac{3}{16}$ " CENTERS AND $\frac{1}{4}$ " ϕ CROSS RODS AT 4" MAXIMUM CENTERS. DEPTH OF BEARING BARS SHALL BE 1", AS SHOWN IN GRATING DETAIL. THE GRATING MATERIAL FOR BEARING BARS AND BANDING SHALL BE OF RECTANGULAR SECTION AND SHALL COMPLY WITH THE REQUIREMENTS OF ASTM A1011 TYPE 2. CROSS RODS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM A510. THE MANUFACTURER SHALL CERTIFY THAT THE GRATING CAPACITY MEETS OR EXCEEDS THE DESIGN LIVE LOAD PLUS DEAD LOAD OF THE GRATING.

ALL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AFTER FABRICATION. GRATINGS SHALL BE GALVANIZED AFTER WELDING TO THE CHANNELS.

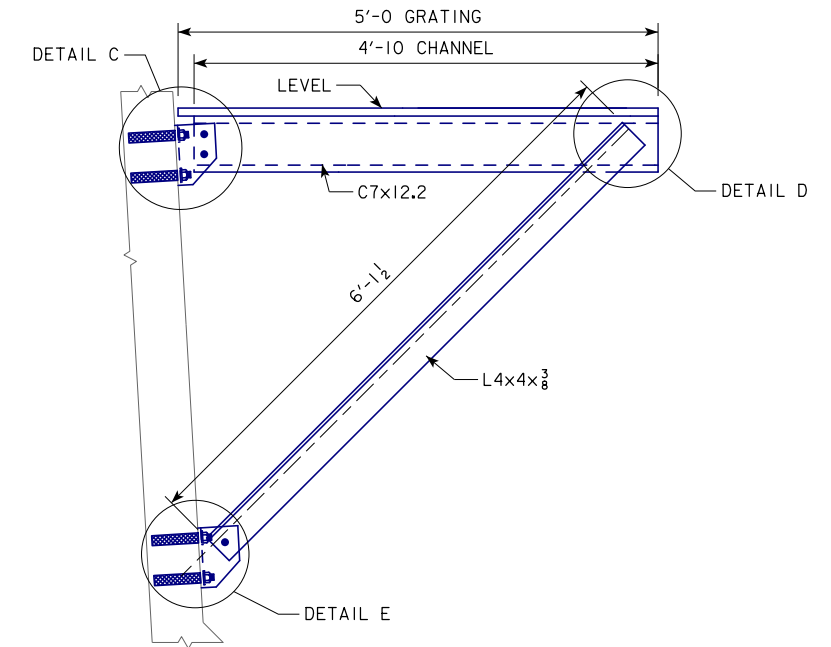
ALL BOLTS SHALL BE $\frac{5}{8}$ " DIAMETER UNLESS OTHERWISE NOTED. HOLES FOR $\frac{5}{8}$ " BOLTS SHALL BE $\frac{11}{16}$ " DIAMETER. FOR BOLT SPACINGS AND EDGE CLEARANCES NOT SHOWN, AASHTO CRITERIA SHALL BE USED.

BOLTED STEEL CONNECTIONS MAY BE FABRICATED IN THE SHOP OR INSTALLED IN THE FIELD AT THE CONTRACTOR'S OPTION. USE OF FIELD-DRILLED BOLT HOLES IS PERMITTED FOR FIELD INSTALLATION.

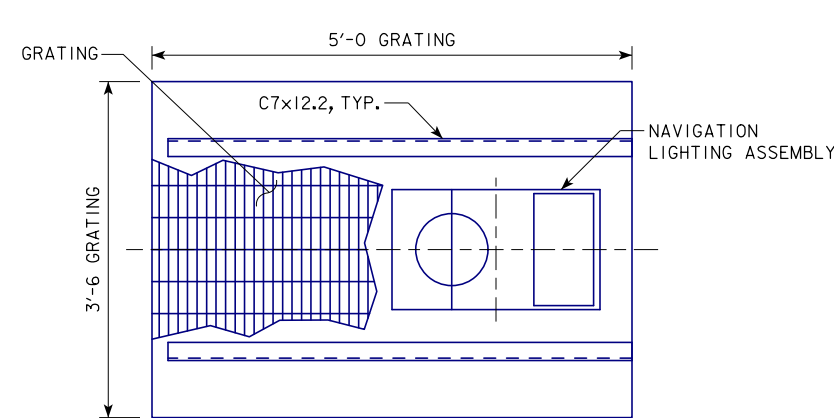
NO FIELD WELDING WILL BE PERMITTED.

CONTRACTOR SHALL FIELD VERIFY EXISTING PIER END DIMENSIONS PRIOR TO FABRICATION TO INSURE PROPER STEEL FIT UP AND A MINIMUM EDGE DISTANCE OF 8 INCHES FOR THE CONCRETE ANCHORS.

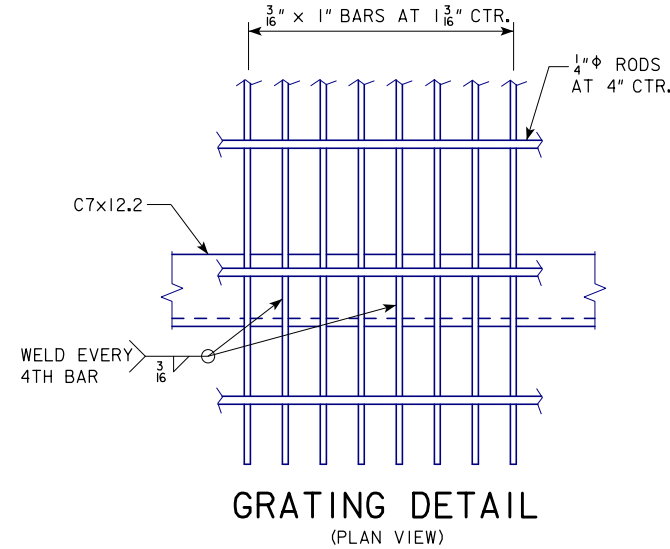
CEMVR-RD-2021-1590 Sheet 12 of 12 Pier K Navigational Lighting



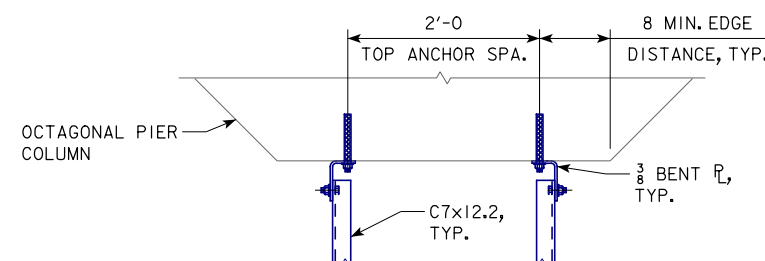
SUPPORT PLATFORM ELEVATION
(NAVIGATION LIGHTING ASSEMBLY NOT SHOWN FOR CLARITY)



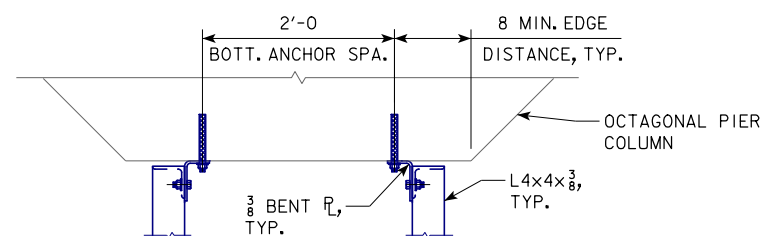
SUPPORT PLATFORM TOP PLAN



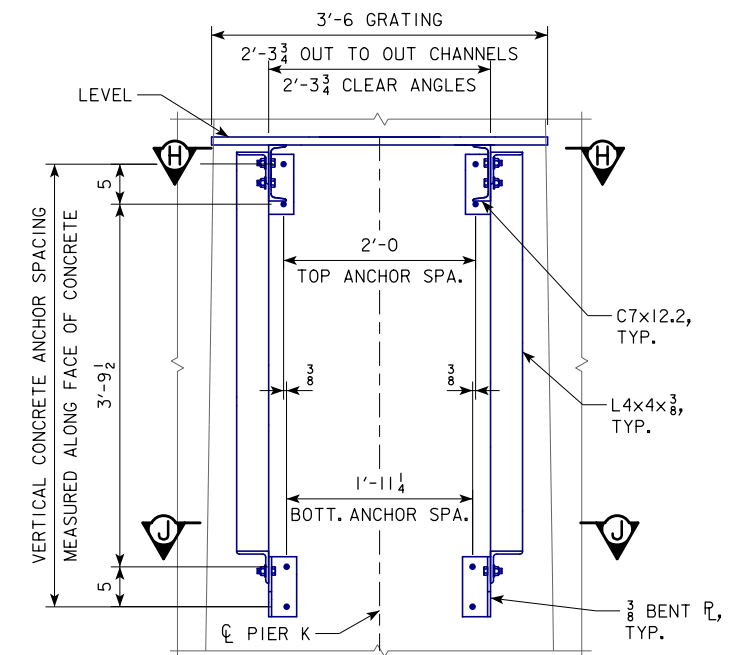
GRATING DETAIL
(PLAN VIEW)



SECTION H-H



SECTION J-J



SUPPORT PLATFORM END VIEW
(NAVIGATION LIGHTING ASSEMBLY NOT SHOWN FOR CLARITY)

NOTES:

FOR DETAILS C, D, & E, SEE DESIGN SHEET 10.

FOR CONCRETE ANCHOR NOTES, SEE DESIGN SHEET 10.

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