OFFICE OF BRIDGE PROGRAMS, U.S. COAST GUARD

Bridge Permit Application Guide

U.S. Department of Homeland Security

United States Coast Guard

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U.S. Department of Homeland Security

United States Coast Guard

Commandant
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1. PURPOSE. This Manual has been prepared to assist Federal, State and local agencies, as well as members of the general public, when applying for a Coast Guard permit to construct a new bridge or causeway or reconstruct or modify an existing bridge or causeway across the navigable waters of the United States.

2. ACTION. All Coast Guard unit commanders, commanding officers, officers-in-charge, deputy/assistant commandants, and chiefs of headquarters staff elements shall comply with the provisions of this Manual. Internet release is authorized.

3. DIRECTIVES AFFECTED. This Publication supersedes the previous Bridge Permit Application Guide, COMDTPUB P16591.3C.

4. DISCUSSION. Federal law prohibits the construction of any bridge across the navigable waters of the United States unless first authorized by the Coast Guard. This Manual shall be provided to State or local agencies who routinely apply for bridge permits and to other prospective applicants when requested. If the procedures described in this Manual are followed, it will expedite the permitting process. Questions regarding a specific project should be directed to the Bridge Program staff of the Coast Guard district where the project is located.

5. MAJOR CHANGES.

   a. The document attached herein provides all the necessary information for an applicant to apply for a Coast Guard bridge permit. There have been several minor editorial changes incorporated into this edition of the Bridge Permit Application Guide. The guide originally had two sections, the Introduction and the Permit Application. This version adds a new section, the Bridge Project Initiation Request. This section requires

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applicants with covered projects under Title 41 of the Fixing America's Surface Transportation Act (FAST-41) to submit a Project Initiation Request providing clear indication the applicant/project sponsor is prepared to proceed with fulfilling the requirements of the National Environmental Policy Act in a timely manner. The Coast Guard encourages all other applicants to submit a Bridge Project Initiation Request. This is expected to reduce the amount of time the Coast Guard spends working on projects that are not yet ripe for permit consideration.

b. The Permit Application section is still broken down into three subsections but the order of presentation has changed to reflect the way the Coast Guard documents this information in its internal case record of file. The Environmental Documentation section has been modified to simplify the documentation requirements necessary for inclusion by the applicant. This streamlined approach was developed in conjunction with the Coast Guard Offices of Environmental Management and Environmental Law.

c. Appendix A is new to this document but not new to the program. It provides the tools necessary for an applicant to conduct a navigation impact report as part of the application process to accurately determine the current and prospective navigation on the waterway. The appendix requires applicants with Department of Transportation funded projects to prepare the report and encourages all other applicants to prepare the report to facilitate the permit application process. This requirement is in accordance with the 2014 Memorandum of Understanding between the Coast Guard, Federal Highway Administration, Federal Transit Administration, and the Federal Railroad Administration.

6. IMPACT ASSESSMENT. This Publication does not require any new action by the district bridge offices that is not already part of the permit application process. It is an information collection tool for bridge permit applicants. There are no new personnel resources required, no new training and no funding considerations. All actions conducted by district bridge personnel to process a Coast Guard bridge permit will be captured by a new Bridge Permit TTP.

7. ENVIRONMENTAL ASPECTS AND IMPACT CONSIDERATION.

a. The development of this Directive and the general policies contained within have been thoroughly reviewed by the originating office and are categorically excluded (CE) under current USCG CE #33 from further environmental analysis, in accordance with Section 2.B.2. and Figure 2-1 of the National Environmental Policy Act Implementing Procedures and Policy for Considering Environmental Impacts, COMDTINST M16475.1 (series).

b. This Directive will not have any of the following: significant cumulative impacts on the human environment; substantial controversy or substantial change to existing environmental conditions; or inconsistencies with any Federal, State, or local laws or administrative determinations relating to the environment. All future specific actions resulting from the general policies in this Manual must be individually evaluated for compliance with the National Environmental Policy Act (NEPA), Council on Environmental Policy NEPA regulations at 40 CFR Parts 1500-1508, DHS and Coast Guard NEPA policy, and compliance with all other environmental mandates.

8. DISTRIBUTION. No paper distribution is available for this Manual. An electronic version is located on the following Commandant (CG-612) web sites. Internet: http://www.uscg.mil/Directives/, and CGPortal: https://cgportal2.uscg.mil/library/Directives/SitePages/Home.aspx.

9. RECORDS MANAGEMENT CONSIDERATIONS. This Manual has been thoroughly reviewed during the Directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with the Federal Records Act, 44 U.S.C. 3101 et seq., NARA requirements, and Information and Life Cycle Management Manual, COMDTINST M5212.12 (series). This policy does not have any significant or substantial change to existing records management requirements.

10. FORMS/REPORTS. None.

11. REQUEST FOR CHANGES. Send changes/recommendations to: HQS-DG-lst-CG-BRG@uscg.mil.

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Captain, U.S. Coast Guard
Acting Director, Marine Transportation Systems

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SECTION 1 INTRODUCTION TO THE PERMITTING PROCESS

The Coast Guard permits the location and plans of bridges and causeways and imposes any necessary conditions relating to the construction, maintenance, and operation of these bridges in the interest of public navigation. A bridge permit is the written approval of the location and plans of the bridge or causeway to be constructed or modified across a navigable waterway of the United States.

Additional information regarding Coast Guard permitting can be found online at http://www.uscg.mil/hq/cg5/cg551/default.asp. Federal law prohibits the construction of bridges and causeways across navigable waterways unless the Coast Guard first authorizes them. By following the procedures in this Publication the Coast Guard can efficiently process a bridge permit application.

This guidance does not substitute applicable legal requirements, nor does it create a rule. It is neither intended to, nor does it impose legally-binding requirements on any party. It represents the Coast Guard's current thinking on this topic and may assist industry, mariners, the general public, and the Coast Guard, as well as other federal and state regulators, in applying statutory and regulatory requirements. In compliance with the Paperwork Reduction Act of 1995, the collection of this information for a bridge permit application is covered by Office of Management and Budget Control Number: 1625-0015.

THE PERMITTING PROCESS

A. Project Initiation

1. The applicant contacts the Coast Guard District Bridge Office to discuss the proposed bridge project and requirements listed in this Guide.

2. The Coast Guard District Bridge Office determines if the waterway is navigable (if not previously done) and if the project is exempt from a Coast Guard bridge permit.

3. The applicant submits a project initiation request to the Coast Guard District Bridge Office. Information on the project initiation request can be found later in this Guide.

4. The Coast Guard District Bridge Office provides navigational points of contact to assist with navigation data collection for the navigation impact report. See Appendix A for navigation impact report requirements.

5. The Coast Guard District Bridge Office reviews the proposed project purpose and need statement.

6. The Coast Guard District Bridge Office reviews the project initiation request submission and determines project viability and priority level.

B. Coordination Meetings

1. The applicant develops a coordinated project plan with the Coast Guard and other Federal, State, and local agencies (responsibilities, issues/concerns, need for public

meetings, application requirements, and project schedule/milestones). During the development of this plan, the following actions occur:

a. The lead Federal agency and cooperating agency are identified.

b. A designation in writing is made to document which agency is to act on behalf of other agencies for the Endangered Species Act, National Historic Preservation Act, etc.

c. The Coast Guard District Bridge Office provides written acceptance of cooperating/participating agency status to the lead Federal agency.

d. Applicant provides information on level of NEPA document, if known.

C. <u>Preliminary Navigational Clearance Determination</u>

1. Applicant submits navigational impact report (when applicable).

2. The Coast Guard District Bridge Office provides a preliminary navigation determination to the applicant in writing. The determination will state how long it is valid if navigation does not change on the waterway.

D. <u>NEPA Scoping, Drafting and Evaluation Phase</u>

1. The Coast Guard District Bridge Office attends scoping meetings and reiterates Coast Guard environmental requirements for the NEPA document.

2. The lead federal agency drafts the NEPA document.

3. The Coast Guard District Bridge Office compares the NEPA draft to requirements outlined in the Bridge Permit Application Guide.

4. The Coast Guard District Bridge Office evaluates design alternatives in the NEPA document against the preliminary navigation determination.

5. The Coast Guard District Bridge Office provides environmental comments to the lead federal agency and sponsor/applicant. Comments on navigation within the NEPA document should be addressed separately.

E. <u>NEPA Decision Phase</u>

1. The lead federal agency adjudicates NEPA comments.

2. The Coast Guard District Bridge Office prepares the Coast Guard NEPA decision document for approval in conjunction with the lead Federal agency (the USCG NEPA document is typically signed when the lead Federal agency signs their NEPA document).

F. <u>Permit Application Review and Public Notice</u>

1. Application materials might be submitted to the USCG during the NEPA evaluation phase.

a. Once all permit application materials are submitted, the Coast Guard District Bridge Office reviews the application and determines whether it is complete. The Coast Guard District Bridge Office will then notify the applicant in writing (via letter or e-mail) of application deficiencies and when the application is complete. A projected permit date will be included in the letter to the applicant once the application is deemed complete.

b. The application is complete when all final required documents and certifications are received and are sufficient to make a permit decision.

2. The Coast Guard District Bridge Office will issue the public notice (PN) when sufficient information is received. The application needs not be complete in order to issue a PN.

3. The Coast Guard District Bridge Office will then respond to navigation-related public comments and send non-navigation related comments to the lead federal agency and sponsor/applicant.

4. Ensure consultations under all applicable environmental laws are completed before permit decision.

G. Permit Decision & Case File Submission

1. The Coast Guard District Bridge Office makes a permit recommendation and if appropriate, issues the bridge permit.

2. If the project is a headquarters action, the case file is sent to Coast Guard headquarters for permit decision. When a Coast Guard Headquarters final agency action is required, the staff of the Permits Division, Bridge Program Office, U. S. Coast Guard Headquarters in Washington, DC, reviews and evaluates the case file submitted by the District Commander.

3. Based on this evaluation, the District Commander's recommendation may be accepted or rejected, and a bridge permit may be issued or denied.

SECTION 2 BRIDGE PROJECT INITIATION REQUEST

The Coast Guard District Bridge Office should be consulted early and often throughout the entire bridge permitting process. The permitting improvement provisions found in Title 41 of the Fixing America's Surface Transportation Act (FAST Act Title 41, or "FAST-41") created a new requirement for covered projects to include a notice of initiation. Applicants with projects covered under FAST-41 must now submit a written Project Initiation Request providing clear indication they are prepared to proceed with fulfilling the requirements for NEPA in a timely manner. Submission of this document is highly encouraged for all other applicants to avoid delays and head off potential conflicts in the permit application process.

A. BRIDGE PROJECT INITIATION REQUEST FOR PERMIT - The initiation request consists of the following information:

1. A brief description of the proposed project, including information about constraints or flexibility with respect to the project;

2. A brief description of the purpose and need of the bridge project;

3. Proposed schedule (if known), including timeframe for filing necessary Federal and State applications, construction start date, and planned in-service date, if approved;

4. A list of potentially affected Federal and non-Federal entities; and,

5. Based on existing, relevant and reasonably available information, a description of the known existing major project site conditions, potential changes to the waterway and/or any other areas of concern.

B. BRIDGE PROJECT INITIATION REQUEST SUBMISSION AND EVALUATION

1. Projects which require preparation of an Environmental Impact Statement (EIS) require the initiation request be submitted no later than just prior to, or at the same time as, the submittal of the draft NEPA Notice of Intent (NOI). Contact the Coast Guard District Bridge Office responsible for the area in which the project is to be located to coordinate the timing of the submission. For non-EIS level projects the initiation request should be submitted when:

    a. The proposed bridge project is sufficiently defined to provide the above required information; and

    b. The project sponsor is ready to begin the NEPA phase of project development by devoting appropriate staff, consultant services, financial resources and leadership attention to the project. Consultation among the project sponsor/applicant, lead agencies, and other appropriate agencies prior to this notification is a good practice.

<u>NOTE</u>: The project sponsor/applicant typically may begin to submit application materials at this stage. Once the Coast Guard has received an Initiation Request, the Coast Guard will begin reviewing application materials as they become available. The Coast Guard requires submission of all the items within Section 3 before the application can be considered complete.

SECTION 3 PERMIT APPLICATION

The Coast Guard bridge permitting process is directed by laws, policies, professional standards and other requirements. This chapter is a guide to help the applicant through the bridge permit application process. Additional information may be found in 33 CFR, Parts 114 and 115. The OMB Information Collection Number is 1625-0015.

A. <u>THE APPLICATION PACKAGE</u> - The application package consists of the following information. Submit information in the format outlined below. If any section is not applicable to the project, state why it is not applicable.

1. Per 33 CFR § 115.50(j), when applying for a bridge permit, submit an application package to the Coast Guard District Bridge Office that has jurisdiction over the area of the proposed bridge site.

   Salutation (i.e. Dear Sir/Ma'am):

   Application is hereby made for a Coast Guard bridge permit.

   Application Date:

   a. Applicant information:

      1) Name;

      2) Address;

      3) Telephone number; and

      4) Email address;.

   b. Consultant/Agent information (if employed):

      1) Name (company or individual);

      2) Address;

      3) Telephone number;

      4) Email address; and

      5) Letter authorizing the consultant/agent to obtain permits on behalf of the applicant.

   c. Proposed Bridge(s):

      1) Name of the waterway that the bridge(s) would cross;

      2) Number of miles above the mouth of the waterway where the bridge(s) would be located and provide latitude and longitude coordinates (degree/minute/second) at

centerline of navigation channel (contact the local Coast Guard Bridge Office for guidance);

3) City or town, county/parish, and state where the bridge(s) would be located at, near, or between;

4) Brief description of project to include type of bridge(s) proposed [fixed or movable (drawbridge, bascule, vertical lift, swing span, pontoon), highway, railway, pedestrian, pipeline] and existing bridge(s) at project site, if applicable;

5) Drawbridge Regulations (if applicable): if the proposed bridge(s) is a new movable span, identify if it will operate under 33 CFR § 117.5 (which requires all movable span bridges to open upon vessel request) or if it is anticipated a special operating regulation will be requested in accordance with 33 CFR Part 117 Subpart B. If a special operating regulation is anticipated, explain why special operating regulations are being requested and contact the Coast Guard District Bridge Office to discuss further. If there is an existing drawbridge at the site, identify the drawbridge regulation the bridge operates under and indicate if the regulation must be adopted by the new bridge or whether there is an expectation that a modification may be required.;

6) Date of plans and number of plan sheets;

7) Estimated cost of bridge(s) and approaches;

   a) Provide the estimated cost of the bridge(s) as proposed, with vertical and horizontal navigational clearances.

   b) Provide the estimated cost of a low-level bridge(s) on the same alignment with only sufficient clearance to pass high water while meeting the intended purpose and need.

8) Type and source of project funding (federal, state, private, etc.);

9) Proposed project timeline;

10) Other Federal actions (e.g., permits, approvals, funding, etc.) associated with the proposal.

d. Legal authority for proposed action:

1) If the applicant does not own the existing bridge(s) that is being replaced or modified, include a signed statement from the bridge owner authorizing the removal or modification work.

2) State whether the applicant has the right to build in accordance with 33 CFR § 115.05. If the applicant does not own the property needed to build the bridge(s) as proposed, include a signed statement (e.g., deed or easement) from the property owner or owners authorizing the proposed construction or modification work.

e. International bridges (if applicable):

1) The International Bridge Act of 1972, or a copy of the Special Act of Congress if constructed prior to 1972, should be cited as the legislative authority for international bridge construction; and

2) The Coast Guard requires Presidential approval, via the State Department, before issuing a bridge permit under the International Bridge Act of 1972.

<u>NOTE</u>: Please include a copy of State Department approval for international bridges in the application package for a Coast Guard bridge permit.

f. Dimensions of the proposed bridge(s): (All navigational clearances should be stated in U.S. linear feet in decimal form vs. feet and inches. For international bridges, provide clearances in both linear feet and meters). Cite number of plan sheets and date(s) of plan sheets to be approved.

1) Vertical clearance as indicated on plan sheets: This is the minimum vertical distance between the lowest part (e.g., member, chord, or steel) of the superstructure spanning the navigation channel and the recognized datum (e.g., MHW, 2% flow line, etc.) at the bridge site. Cite clearances above the appropriate high water elevation and low water elevation. In the case of movable bridges, cite clearances in the open and closed positions. In some situations, vertical clearances should be cited at the margins of the navigation channel, and for a bascule bridge clearances at the tip of the leaves, if not fully open.

2) Horizontal clearance as indicated on plan sheets: This is the horizontal distance, measured normal to the axis (centerline) of the channel, through which the stated vertical clearance is available. Clearance may be between piers (full width of the span), between the bridge protective system, within the margins of the navigational channel, or bank-to-bank in the case of a bridge having no piers or bridge pier protective fender system within the waterway.

3) Length of bridge(s) project: This is the length of the bridge(s) project from abutment-to-abutment or approach-to-approach.

   If no prior permit exists, and this is a modification or replacement project, is the length the same as the old bridge. If not, what is the difference?

4) Width of bridge(s) project: This is the width of the bridge(s) at its widest point (out-to-out).

   If no prior permit exists, and this is a modification or replacement project, is the width the same as the old bridge. If not, what is the difference?

5) Depth of the waterway: At project site at MHW if tidal or OHW if non-tidal, using the appropriate elevation and datum (e.g., NGVD 1929, NAVD 1988, etc.).

6) Width of waterway: At project site at MHW if tidal or OHW if non-tidal.

7) Significant effect on flood heights and associated drift, if any, that could cause a navigation hazard.

g. Temporary Bridge(s) dimensions (vertical clearance, horizontal clearance, length and width), if applicable:

h. Waterway Data Requirements: Contact the Coast Guard District Bridge Office to determine what data in the navigation impact report (see Appendix A) is required for the proposed project. The information will assist the Coast Guard in making a preliminary navigation determination, which will inform alternatives that will be analyzed in the environmental documentation.

i. Existing bridge(s) if applicable:

1) Name of bridge(s): e.g., US 40 Highway Bridge; or Coleman Memorial Bridge; or State Route 7 Bridge also known as Preston Falls Bridge and waterway mile point;

2) Type of bridge(s) and number of lanes: e.g., fixed or moveable (drawbridge, bascule, vertical lift, swing span, pontoon, etc.); highway, railway, pedestrian, pipeline;

3) Drawbridge Regulations (if applicable): If the existing bridge(s) has a movable span identify whether its operating schedule is regulated by 33 CFR § 117.5 or if it operates under a special operating regulation found in 33 CFR Part 117 Subpart B (if so cite the regulation).

Modification of an existing drawbridge may require revision or removal of the existing regulation (e.g. if the bridge project involves replacing the existing drawbridge with a fixed bridge). Contact the local Coast Guard office if it is anticipated the existing operating schedule will change for the proposed bridge;

4) Latitude and longitude coordinates (degree/minute/second) at centerline of the bridge(s);

5) Dimensions of the existing bridge(s): (All navigational clearances should be stated in U.S. linear feet. In addition, provide clearances in meters if international bridge(s)).

a) Vertical clearance: This is the minimum vertical distance between the lowest part (e.g., member, chord, or steel) of the superstructure spanning the navigation channel and the recognized datum (e.g., MHW, 2% flow line, etc.) at the bridge site. Cite clearances above the appropriate high water elevation and low water elevation. In the case of movable bridges, cite clearances in the open and closed positions. In some situations, vertical clearances should be cited at the margins of the navigation channel, and for a bascule bridge clearances at the tip of the leaves, if not fully open.

For modification and replacement projects, the applicant must cite the vertical clearance of the existing bridge and the proposed bridge from the same datum.

If the vertical datum for the existing bridge differs from the proposed vertical datum (tidal referenced to geodetic), show all necessary converted vertical clearance values and note the original values in the notes section on the plan sheets to demonstrate any change in approved clearances. If conversions (i.e. MLT to MLW) cannot be made, it is necessary for the applicant to survey the existing bridge to provide as-built clearances using the same verifiable vertical datum (tidal and geodetic) as the proposed project.

b) Horizontal clearance: This is the horizontal distance, measured normal to the axis (centerline) of the channel, through which the stated vertical clearance is available. Clearance may be between piers (full width of the span), between the bridge protective system, within the margins of the navigation channel or bank-to-bank in the case of a bridge having no piers in the waterway.

c) Length of existing bridge(s): This is the horizontal distance from abutment-to-abutment or approach-to-approach.

d) Width of existing bridge(s): This is the width of the bridge(s) at its widest point (out-to-out).

6) Owner of the existing bridge(s).

j. Discuss construction methodology, if known, and removal of existing bridge(s), as applicable:

1) Discuss proposed construction methodology and restrictions;

2) Discuss maintenance of land traffic during construction activities;

3) Discuss extent of removal of existing bridge(s) (e.g. in its entirety, two feet below the mud line, down to or below the natural bottom of the waterway or to a specific elevation), time needed for removal, etc.; and

4) Discuss demolition methodology.

<u>NOTE</u>: In the interest of navigational safety, the Coast Guard must make the final decision concerning the extent of bridge(s) removal.

k. Other agencies with jurisdiction over the proposed project:

1) Agency; and

2) Permits or type of approvals required for the project.

B. ENVIRONMENTAL DOCUMENTATION:

NOTE: See Appendix B for a table of the Environmental Control Laws, Executive Orders, and Regulations Requiring Compliance, as applicable, with Bridge Program Actions.

NOTE: For all of the below environmental control laws, the Coast Guard requests specific decision documents as part of the application. If the Coast Guard is the lead federal agency for the National Environmental Policy Act and other environmental control laws, coordinate with the local Coast Guard District Bridge Office for a list of documents to include.

1. **National Environmental Policy Act -** The National Environmental Policy Act (NEPA) (42 USC 4321, et seq.) requires Federal agencies to evaluate the potential environmental impacts of their actions. Coast Guard bridge permits are federal actions that require the preparation of an environmental evaluation document describing the potential environmental effects under NEPA.

   Lead Federal Agency:

   List Cooperating Agencies for project:

   a. Type of environmental document.

      ☐ Environmental Impact Statement/Record of Decision (EIS/ROD)

      Cite location(s) in the application package:

      ☐ Environmental Assessment/Finding of No Significant Impact (EA/FONSI)

      Cite location(s) in the application package:

      ☐ Categorical Exclusion (CE)

      Cite location(s) in the application package:

   b. Has the environmental document been modified, reevaluated, supplemented or rescinded for the proposed action?

      ☐ Yes ☐ No

      If yes, cite location(s) in the application package:

2. **Environmental Effects Abroad -** Executive Order 12114 requires federal agencies taking actions that significantly affect the environment of other nations or the global commons to take environmental considerations into account for that action.

   a. Does the proposed project involve a bridge connection to Canada or Mexico?

      ☐ Yes ☐ No

If yes, cite location(s) in NEPA document where environmental effects abroad are described:

3. **Clean Water Act** - Section 401 of the Clean Water Act of 1977(CWA) (33 U.S.C. 1251), as amended, prohibits Federal permitting or licensing agencies from issuing authorizations for construction activities having discharges into navigable waters, until the appropriate water quality certifying agency has issued a water quality certification or waiver procedures have been satisfied.

   a. Has a Water Quality Certification (WQC), waiver or statement that the WQC is not required been obtained from the appropriate federal, interstate, or state agency?

      ☐ Yes ☐ No

      If yes, cite location(s) in the application package:

   NOTE: The USCG will not accept an application package as complete if a WQC, waiver, or statement from the appropriate regulatory body has not been obtained.

   b. Name of the Federal, State or Tribal certifying agency and point of contact with phone and email address, if available:

   c. If the WQC is granted under a Programmatic Agreement (e.g., U.S. Army Corps of Engineers (USACE) Nationwide Permit (NWP) include the date of the NWP, the type of NWP (14, 15, etc.) and the NWP number and title:

   d. For permit amendment actions, include a new WQC or a written confirmation from the certifying agency that the existing WQC has been reissued/renewed or is still valid for the proposed action.

      ☐ New WQC Attached

      ☐ Written Confirmation of WQC validity attached

4. **Wetlands** - Executive Order 11990 - Protection of Wetlands, states that no federally approved project will occur in wetlands unless there is no practical alternative to constructing in the wetlands. As a result, the Coast Guard must analyze alternative locations which avoid taking wetlands. If no alternative locations or designs are practicable, then the Coast Guard must ensure that the project design includes all practicable measures to minimize wetland impacts.

   a. Is the proposed project located in or adjacent to a wetland?

      ☐ Yes ☐ No

   b. If yes, what is the acreage of wetlands that will be permanently and temporarily impacted by the proposed project?

      Include USACE permit (nationwide authorization or individual), if required, and cite where wetland mitigation measures are described in the application package:

5. **Coastal Zone Management Act** - The Coastal Zone Management Act **(**CZMA**)** of 1972 (16 U.S.C. § 1451), as amended, and its implementing regulations (15 CFR Part 930), requires all projects located within the designated coastal zone of a state to be consistent with the State's federally approved CZM plan (CZMP).

   a. Is the project located in a state that has an approved CZMP?

   ☐ Yes ☐ No

   b. If yes, is the project within an area included in the federally approved CZMP?

   ☐ Yes ☐ No

   c. If yes, has the State specifically excluded this activity from its federally approved CZMP?

   ☐ Yes ☐ No

   Include State CZM concurrence/with consistency certification and cite location(s) in the application package:

6. **Floodplains** - Executive Order 11988, Floodplain Management and Protection, requires Federal agencies to avoid authorizing projects in the base floodplain unless there is no practical alternative. By their very nature, most bridges are located within the base floodplain. Therefore, the Coast Guard must ensure that the project design includes all measures practicable to minimize floodplain impacts and to protect the natural and beneficial values of the floodplain.

   a. Is the proposed project located in the base floodplain? An encroachment into the base floodplain does not exist when only the piers, pilings, or pile bents are located in the floodplain.

   ☐ Yes ☐ No

   b. Is there a significant encroachment (constituting a considerable probability of loss of human life; likely future damage associated with the encroachment that could be substantial in cost or extent; or a notable adverse impact on natural and beneficial floodplain values) into the floodplain?

   ☐ Yes ☐ No

   c. If yes, provide documentation and cite location(s) in the application package:

7. **Wild and Scenic Rivers** - Section 7 of the Wild and Scenic Rivers Act of 1968 (16 U.S.C. § 1271), as amended, prohibits the issuance of any federal permit for construction of projects having adverse impacts on a river, or a proposed river, with values qualifying it for protection under this act.

a. Is the river involved in the proposed bridge project a designated Wild and Scenic River?

☐ Yes ☐ No

b. If yes, attach correspondence with the river-administering agency and cite location(s) in the application package:

8. **Coastal Barrier Resources Act -** The Coastal Barrier Resources Act (CBRA) established the Coastal Barrier Resources System and restricted federal expenditures that encourage development in such areas unless the project falls under an exception to the CBRA.

a. Does the proposed project connect to a unit of the Coastal Barrier Resources System?

☐ Yes ☐ No

b. If yes, and the project is federally funded, cite location of Section 6 exception in the application package and any correspondence with the FWS:

9. **Land and Water Conservation Fund Act -** Section 6(f) of the Land and Water Conservation Fund Act (LWCFA) assures that once an area has been funded with LWCFA assistance, it is continually maintained in public recreation use unless NPS approves substitution property of reasonably equivalent usefulness and location and of at least equal fair market value. The Secretary must approve all conversions of property acquired or developed with LWCFA assistance under this section to other than public outdoor recreation uses.

a. Does the proposed project involve a conversion of land or facilities funded under Section 6(f) of the LWCFA?

☐ Yes ☐ No

b. If yes, include correspondence with the NPS and authorization from the Secretary of the Interior for that conversion and cite location(s) in the application package:

10. **National Marine Sanctuaries Act -** Section 304(d) of the National Marine Sanctuaries Act (16 U.S.C. § 1434(d)) requires interagency consultation between NOAA and federal agencies taking actions, including authorization of private activities, "likely to destroy, cause the loss of, or injure a sanctuary resource."

a. Is the proposed project in or adjacent to a National Marine Sanctuary?

☐ Yes ☐ No

b. Is the proposed bridge(s) likely to destroy, cause loss of, or injure a resource of a National Marine Sanctuary? (If no, provide evidence)

☐ Yes ☐ No

c. If yes, include evidence of consultation with Office of National Marine Sanctuaries

and the agency's findings/conditions and cite location(s) in the application package:

11. **Marine Protected Areas** - Executive Order 13158 requires each Federal agency whose actions affect the natural or cultural resources that are protected by a Marine Protected Area (MPA) to identify such actions and, to the extent permitted by law and to the maximum extent practicable, avoid harm to the natural and cultural resources that are protected by an MPA.

    a. Is the proposed project in or adjacent to a MPA as defined in section 4(d) of Executive Order 13158?

    ☐ Yes ☐ No

    b. If yes, will the proposed project affect the natural or cultural resources that are protected by the MPA? (If no, provide evidence)

    ☐ Yes ☐ No

    c. If yes, include evidence of correspondence with MPA Center, if applicable, and cite location(s) in the application package:

12. **Endangered Species Act** - Section 7 of the Endangered Species Act of 1973 (ESA) (16 U.S.C. § 1531), as amended, requires each Federal agency to insure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat.

    a. Are there federally designated threatened or endangered species and/or critical habitat in the area that the proposed project is located? (If no, provide evidence)

    ☐ Yes ☐ No

    b. May the proposed project affect federally designated threatened or endangered species and/or critical habitat? (If no, provide evidence)

    ☐ Yes ☐ No

    c. If yes, was there formal or informal consultation with the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS)?

    ☐ Formal consultation

    ☐ Informal consultation

    d. If formal, provide date(s) and attach biological assessment, biological opinion, and any other relevant correspondence and cite location(s) in application package:

    e. If informal, provide dates and include correspondence or documented phone conversations with and from USFWS/NMFS and cite location(s) in the application package:

f. Include Biological Assessment/Biological Evaluation, as appropriate.

13. **Fish and Wildlife Coordination Act -** The Fish and Wildlife Coordination Act (FWCA) (16 USC § 742, et seq.) provides the basic authority for the USFWS' involvement in evaluating impacts to fish and wildlife from proposed water resource development projects. It requires that fish and wildlife resources receive equal consideration to other project features. It also requires Federal agencies that construct, license or permit water resource development projects to first consult with the Service (and NMFS in some instances) and the State fish and wildlife agency regarding the impacts on fish and wildlife resources and measures to mitigate these impacts.

    a. Include any correspondence with USFWS and the relevant state wildlife agency regarding FWCA coordination and cite location(s) in the application package:

14. **Magnuson-Stevens Fishery Conservation and Management Act -** The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) (16 U.S.C. § 1855), as amended, requires Federal agencies which fund, permit, or carry out activities that may adversely impact Essential Fish Habitats (EFH) to consult with the National Marine Fisheries Service (NMFS) regarding potential adverse effects of actions on EFH. Will the proposed project likely adversely affect designated EFH as defined in the Magnuson-Stevens Act? (If no, provide evidence)

    ☐ Yes ☐ No

    b. Identify location of EFH assessment and relevant correspondence with NMFS in the application package.

15. **Marine Mammal Protection Act -** The Marine Mammal Protection Act (MMPA) (16 USC § 1361, et seq.) prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S. If a take may occur, an Incidental Take Authorization may be necessary.

    a. Does the proposed project involve a "take" of marine mammals as defined in the MMPA?

    ☐ Yes ☐ No

    b. If yes, include the incidental harassment authorization or letter of authorization from NMFS and any relevant correspondence and cite location(s) in the application package:

16. **Migratory Bird Treaty Act -** Migratory Bird Treaty Act (MBTA) (16 U.S.C. § 703-712) made it illegal to take any migratory bird, nest, egg, or part or any bird protected under the Act except under the terms of a valid permit issued by the USFWS.

    a. Does the proposed project involve a potential take of migratory birds as defined in the MBTA? (If no, provide evidence)

    ☐ Yes ☐ No

b. If yes, is a permit required?

☐ Yes ☐ No

c. If a permit is required, include it and any correspondence with USFWS and cite location(s) in the application package:

17. **Bald and Golden Eagle Protection Act** - The two species of eagles that are native to the United States have additional protection under the Bald and Golden Eagle Protection Act (BGEPA)(16 USC § 668-668c). USFWS issues permits to take, possess, and transport bald and golden eagles.

a. May the proposed project take or disturb bald or golden eagles (including nests) as defined in the BGEPA? (If no, provide evidence)

☐ Yes ☐ No

b. If yes, is a permit required?

☐ Yes ☐ No

c. If a permit is required, include it and any correspondence with USFWS and cite location(s) in the application package.

18. **Invasive Species** - Executive Order 13112 – Invasive Species required each Federal agency whose actions may affect the status of invasive species to prevent the introduction of invasive species and not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species.

a. Does the proposed project have potential to introduce or foster the spread of invasive species?

☐ Yes ☐ No

b. If yes, cite the document that describes measures that will be taken to minimize this risk and location(s) in the application package:

19. **Section 106** - Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108 et seq.), as amended, requires that federal agencies take into account the effects of their undertaking on sites, structures, etc. listed in the National Register of Historic Places.

a. Does the proposed project have potential to impact properties (including submerged abandoned shipwrecks) listed in or eligible for inclusion in the National Register of Historic Places?

☐ Yes ☐ No

b. If yes, provide evidence of consultation with the State Historic Preservation Officer (and the Advisory Council on Historic Preservation, if applicable) and cite location (s) in the application package. Include:

☐ Copies of the correspondence

☐ Memorandum of Agreement

☐ No effect determination

c. For projects involving Federal lands only provide:

☐ Archeological clearances

☐ Archeological reports

20. **Clean Air Act** - Section 176(c) of the Clean Air Act (CAA)(42 U.S.C. § 7401,as amended), prevents the Coast Guard from approving any project or from issuing any permit for actions not conforming to the provisions of an approved Federal Implementation Plan (FIP) or to a State Implementation Plan (SIP).

a. Does the proposed project occur in an area of nonattainment or maintenance for any criteria pollutant?

☐ Yes ☐ No

b. If project occurs in a nonattainment or maintenance area, do the transportation or general conformity regulations, or both, apply?

☐ General ☐ Transportation

c. Is the project exempt from a transportation conformity analysis for any of the reasons listed in 40 CFR § 93.126? Which reason?

☐ Yes ☐ No Reason:

d. Is the project exempt from a general conformity analysis for any of the reasons listed in 40 CFR § 93.153(c)?

☐ Yes ☐ No

e. If general conformity applies, is the project listed in a conforming SIP?

☐ Yes ☐ No

f. If a general conformity determination was prepared, include the draft and final determinations and any relevant correspondence and cite their location(s) in the application package:

g. If transportation conformity applies, is the project listed in a conforming SIP, TIP, RTP, or FIP?

☐ Yes ☐ No

h. If yes, cite location of information regarding listing in the application package:

i. If transportation conformity applies, does the project contribute to any new localized CO, PM_{10}, or $PM_{2.5}$ violations or increase the frequency or severity or any existing violations of the same?

☐ Yes ☐ No

j. If yes, cite location of information in the application package:

21. **Actions to Address Environmental Justice in Minority or Low-Income Populations** - Executive Order 12898 requires all Federal agencies to ensure that environmental justice consideration is part of their missions by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations in the United States and its territories and possessions.

a. Does the proposed project involve disproportionate adverse impacts to minority and/or low-income populations as defined in Executive Order 12898?

☐ Yes ☐ No

b. If yes, include the analysis describing the impacts and cite location(s) in the application package:

c. If yes, cite the location in the application package that describes measures to be taken to reduce those impacts:

22. **Hazardous Materials, Substances or Wastes**

a. Does the proposed project involve or is it located near a Superfund site or any site regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA) or State law regulating hazardous materials, substances or wastes?

☐ Yes ☐ No

b. If yes, cite the location(s) in the NEPA document where hazardous materials, substances or wastes are discussed:

C. <u>PLAN SHEETS</u> - Plans submitted with the bridge permit application become an official, and permanent, part of the issued permit or permit amendment. <u>To minimize delays, provide the following information:</u>

1. Plan Sheet Checklist - Use the following checklist for specifics to include with bridge plans:

a. **<u>General</u>**

____ Provide all plans in standard 8 ½ X 11" size, providing the fewest sheets possible that still show significant project structural details. Plan sheets may be submitted electronically.

<u>NOTE</u>: Do not show bridge navigational lighting plans on bridge plan and elevation views.

____ Show all dimensions and distances in U.S. linear feet in decimal form (versus feet and inches). For international bridges also show all dimensions in both linear feet and meters.

____ Include the datum used in the plan and elevation view. Use the same datum for all submitted drawings (e.g. NAVD, NGVD). For replacement and modification projects, the datum used may differ between the new plans and the previously approved plans for the existing structure. If this situation occurs, please be sure to show all necessary conversions to demonstrate any change in approved clearances.

____ All plan sheets must bear the date, signature and stamp of a professional engineer.

<u>NOTE</u>: the engineer stamp date must either match or be dated later than the title block date before the permit and plans can be approved by the Coast Guard.

If desired, it is acceptable for the engineer to add the following statement to the plans, "Conceptual plans utilized to obtain Coast Guard bridge permit".

____ The total number of plan sheets identified in the title block must match the number of plan sheets submitted for approval.

b. **<u>Title Blocks</u>** - Include the following items in the title blocks (lower right-hand corner on all of the plan sheets):

____ Applicant/Owner;

____ Consultant/Agent;

____ Name of Bridge(s);

____ Name of Waterway;

____ Mile point of bridge(s) location (from confluence of mouth of waterway) in

statute miles;

____ City, county/parish, and state (state whether the bridge(s) is at, near, or between – as appropriate);

____ Date of plans (i.e., mm/dd/yyyy, must either match or be dated prior to the engineer's date stamp); and

____ Sheet number and total number of sheets in set to be approved (i.e., Sheet 1 of 5).

c. **Location/Vicinity Map**

____ Show graphic scale and north arrow;

____ Show location of bridge(s) on waterway;

____ Identify the name of the waterway;

____ Show course of waterway (i.e. ebb/flood, or direction of flow for non-tidal waters);

____ Show structures immediately adjacent to the proposed bridge(s) and their relation to the proposed bridge(s);

____ Identify wildlife and waterfowl refuges and any historical and archaeological sites; and

____ Insert a small map of the state in which the project is located with an arrow showing the location of the proposed project.

d. **Plan View**

____ Show graphic bar scale and north arrow;

____ Identify the adjacent property owners at the four corners of the proposed structure(s);

____ Show existing shorelines (may be defined or established by local or state regulation);

____ Show ebb and flood in tidal waters and direction of flow in non-tidal waterway;

____ Show mean high and low waterlines in tidal areas. Show ordinary high water and ordinary low water elevations if proposed activity is in a non-tidal waterway;

____ Show all portions of existing bridge(s) that will remain in place;

____ Show all portions of existing bridge(s) that will be removed by using dashed lines;

____ Show principal dimensions of structure(s) from grade-to-grade. Show length,

width, etc.;

____ Show location of dredging, excavation, fill or rip-rap, to include approximate number of cubic yards. Note: The Coast Guard does not approve these activities or items. Contact the U.S. Army Corps of Engineers for approval;

____ Show location of the bridge protective system, piles, cables, etc. existing or to be constructed in the waterway. Identify type of material to be used;

____ Show limits of navigational channel;

____ Show axis (centerline) of channel;

____ Show horizontal clearances, normal to the axis (centerline) of the channel between the bridge protective system, pilings, or abutments;

____ Show water depth at mean low (or ordinary low if non-tidal) at various locations in the channel, under, upstream and downstream of the bridge(s); and

____ Show the bridge protective system.

e. **Elevation View**

____ Show graphic bar scale and north arrow;

____ Show mean high and mean low water elevations in tidal areas. Show ordinary high and low water elevations in non-tidal areas;

____ Show amount of fill material in cubic yards below mean high water;

____ Show horizontal clearance normal to the axis (centerline) of the channel between the bridge protective fender system, pilings, or abutments, as appropriate for navigational channel;

____ Show vertical clearances referenced to the appropriate high water stage either Mean High Water (MHW) or Ordinary High Water (OHW). Show vertical clearances at the center, as well as at the horizontal limits of the navigational channel (the most restrictive vertical clearance in the navigational channel);

____ If the bridge(s) will have a draw, show the draw in the open and closed positions. Vertical clearances in the open position might not be unlimited, especially for vertical lift bridges and bascule bridges. For bascule bridges, specify which part of the navigation channel has an unlimited clearance in the open position i.e. the center 50 feet of the channel, etc;

____ Show proposed navigational envelope (opening);

____ Show proposed and existing contour of waterway bottom;

____ Show 100-year flood elevation;

____ Show the location and elevation of the low steel member of the navigation span; and

____ If the bridge(s) will have a permanent traveler system installed for inspection/maintenance, show the reduction in vertical clearance (traveler height below low steel) and the location of traveler storage when not in use.

f. **Typical Section View**

____ Show graphic bar scale;

____ Show out-to-out width of the structure(s). (This is the width of the bridge(s) at its widest point.); and

____ Include location and dimensions of travel lanes, shoulders, sidewalks, fishing/pedestrian platforms, railings, pipelines, etc.

g. **Details of the Bridge Protective System** (if details are known and ready for CG approval as part of the permit decision)

____ Show bridge pier protective system in plan and elevation views including detail of attachment to pier, countersunk bolts, and relationship to mean high and low waterlines (on elevation view).

h. **Temporary Structures/Falsework** (if details are developed and ready for CG approval as part of the permit decision)

____ Show temporary structures/falsework;

____ Show existing bridge(s) to be removed using dashed lines; and

____ Show minimum horizontal and vertical clearances during construction.

WHEN APPLICABLE, PLEASE SUBMIT THE FOLLOWING PERMIT PLAN SHEETS SEPARATELY (do not include the sheets below in the same sequentially numbered package of sheets provided for bridge approval):

i. **Details of the Bridge Protective System** (if details and materials are not known at time of CG permit decision)

____ Show bridge protective system in plan and elevation views including detail of attachment to pier, countersunk bolts, and relationship to mean high and low waterlines (on elevation view).

j. **Temporary Structures/Falsework** (if details and materials are not known at time of CG permit decision)

____ Show temporary structures/falsework;

____ Show existing bridge(s) to be removed using dashed lines; and

____ Show minimum horizontal and vertical clearances during construction.

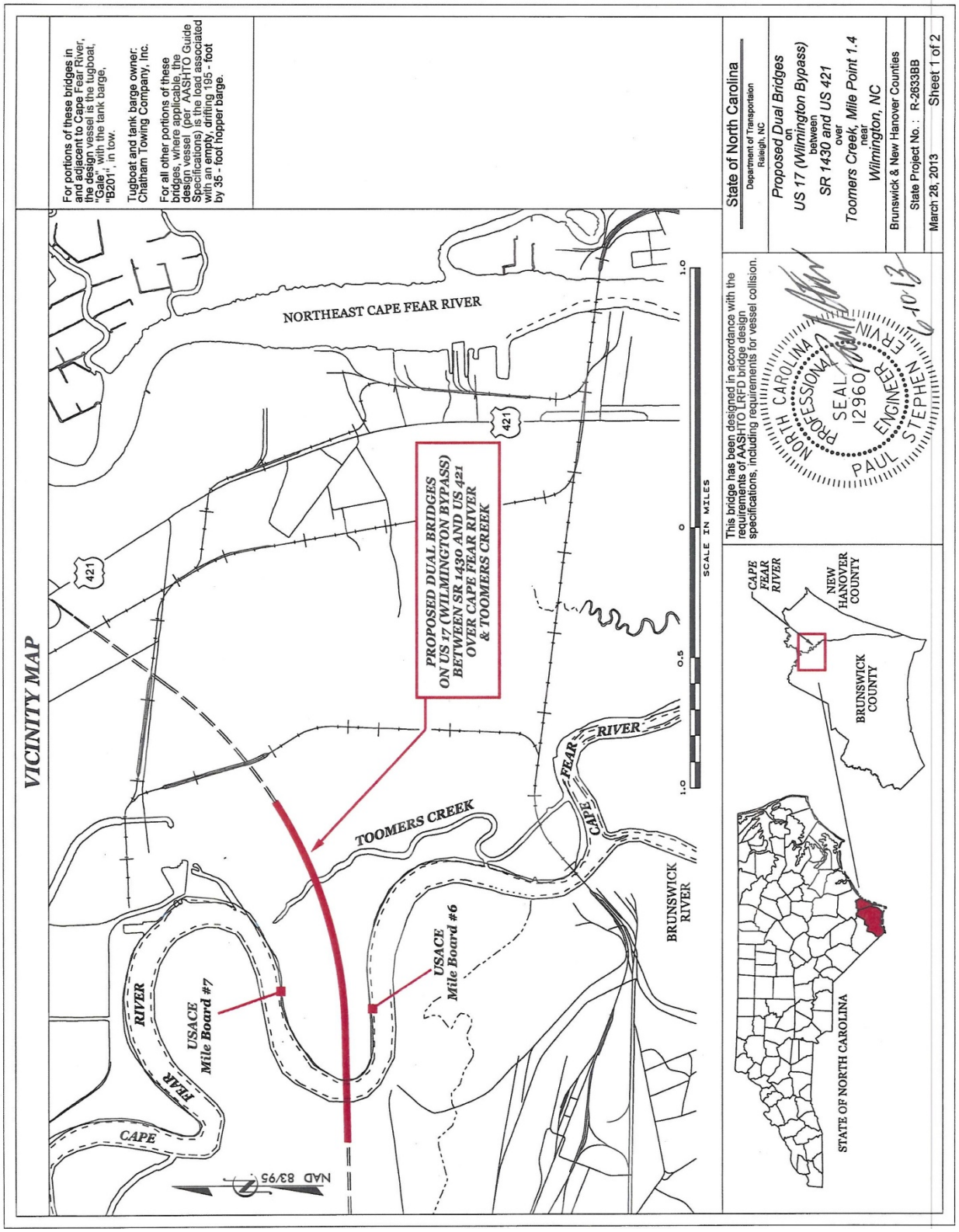
k. **Bridge Lighting Plan**

____ Submit lighting plan application in accordance with 33 CFR Part 118 and bridge lighting guide (see USCG Bridge Program website: http://www.uscg.mil/hq/cg5/cg551/default.asp). This is a separate application from the bridge permit application. The submission time can vary by District Bridge Office. Applicants should contact their local District Bridge Office to determine at what point is appropriate to submit a bridge lighting plan.

2. SAMPLE PLANS FROM VARIOUS PROJECTS SUBMITTED FOR APPROVAL

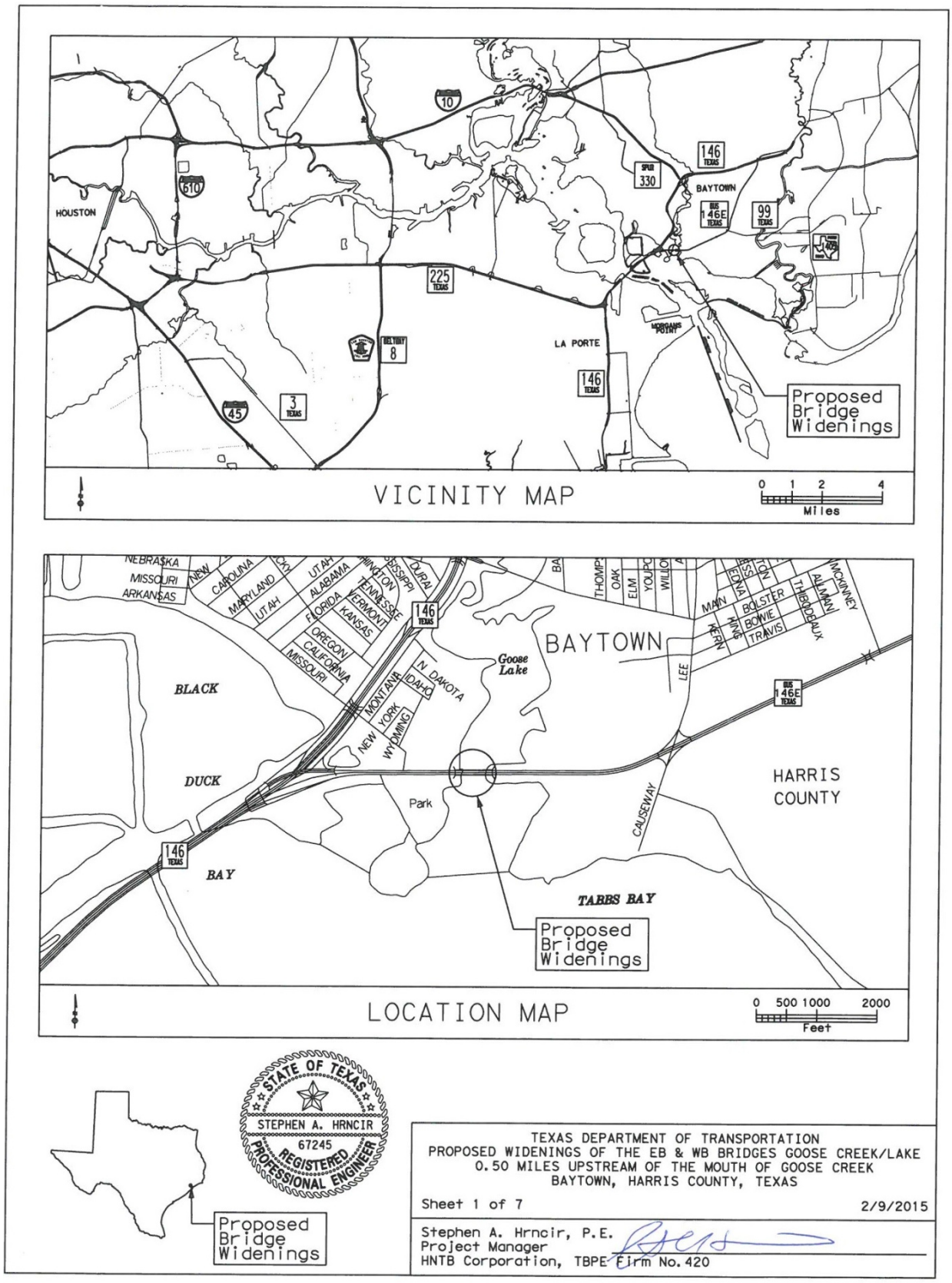
Example 2.1

Location and Vicinity Maps



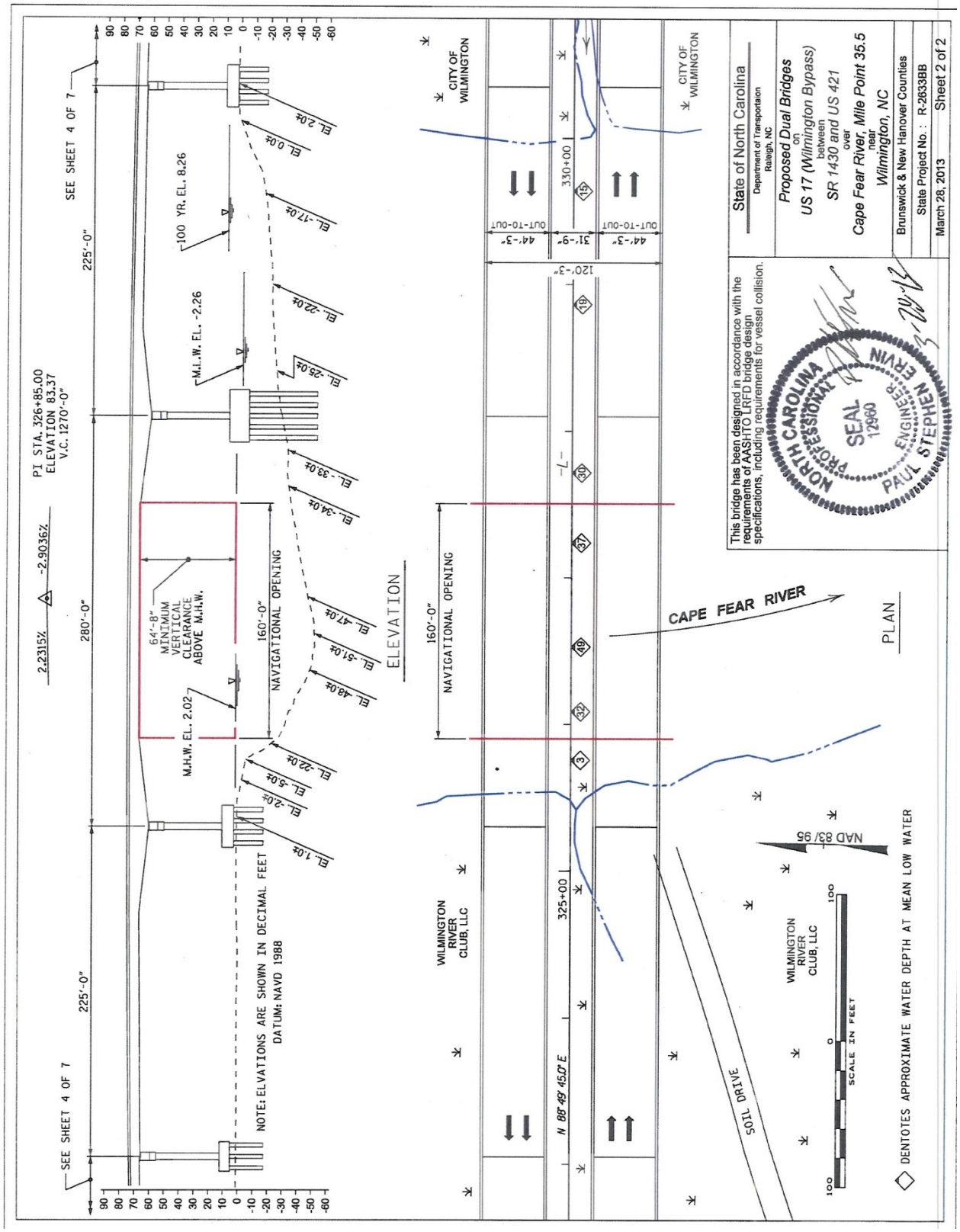
Example 2.2

Combined Vicinity and Location Map



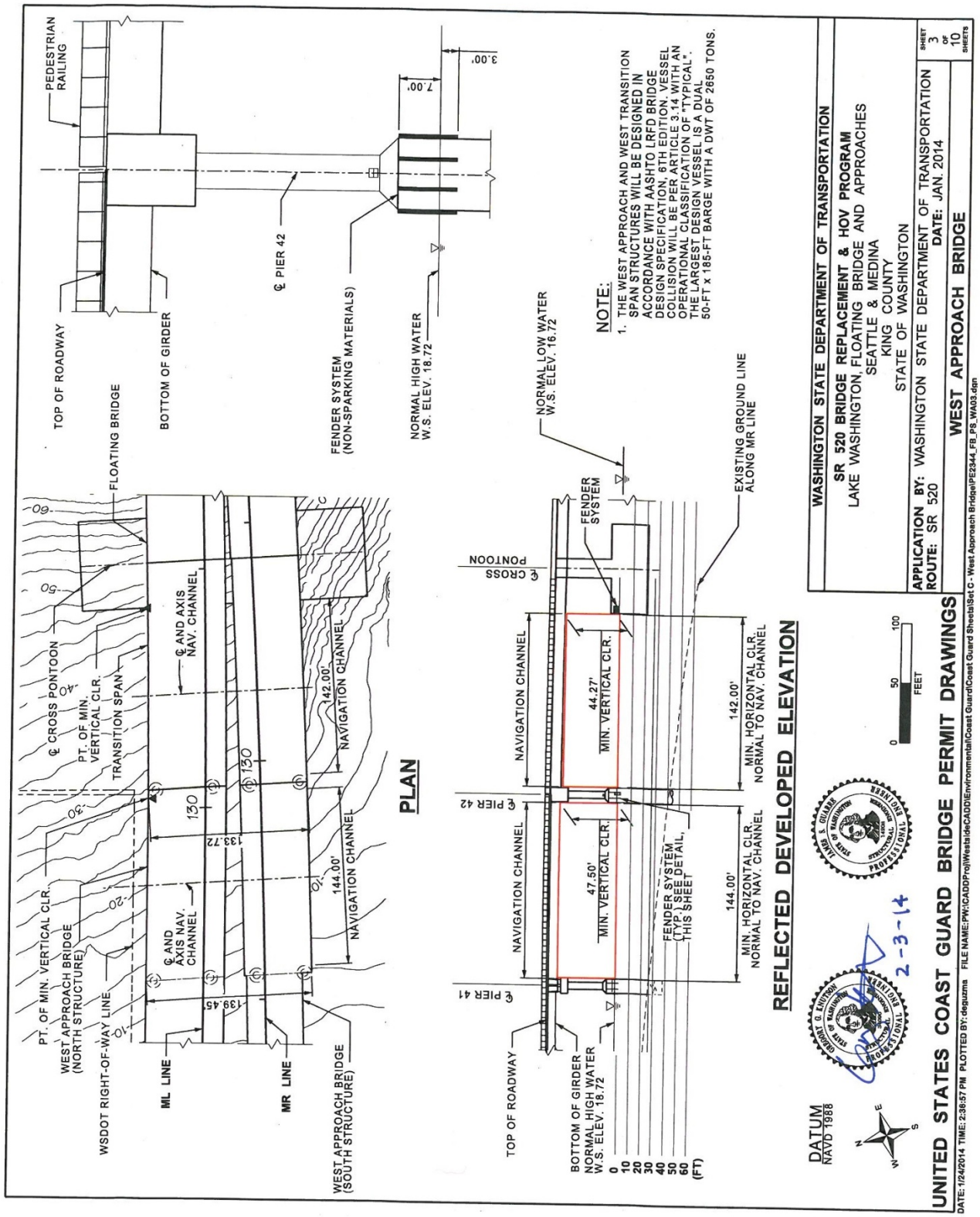
Example 2.3

Combined Plan and Elevation Views



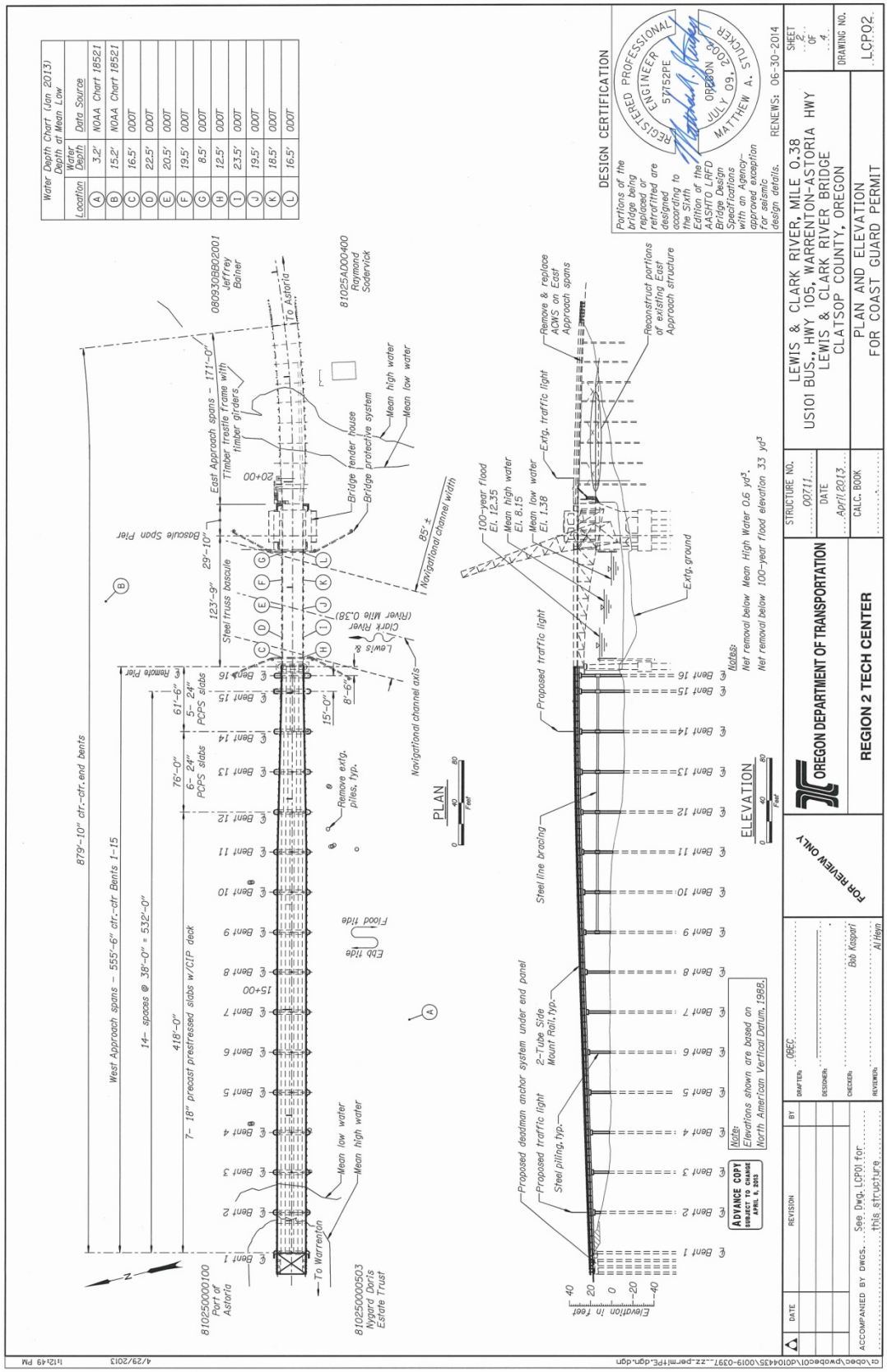
Example 2.4

Combined Plan and Elevation Views



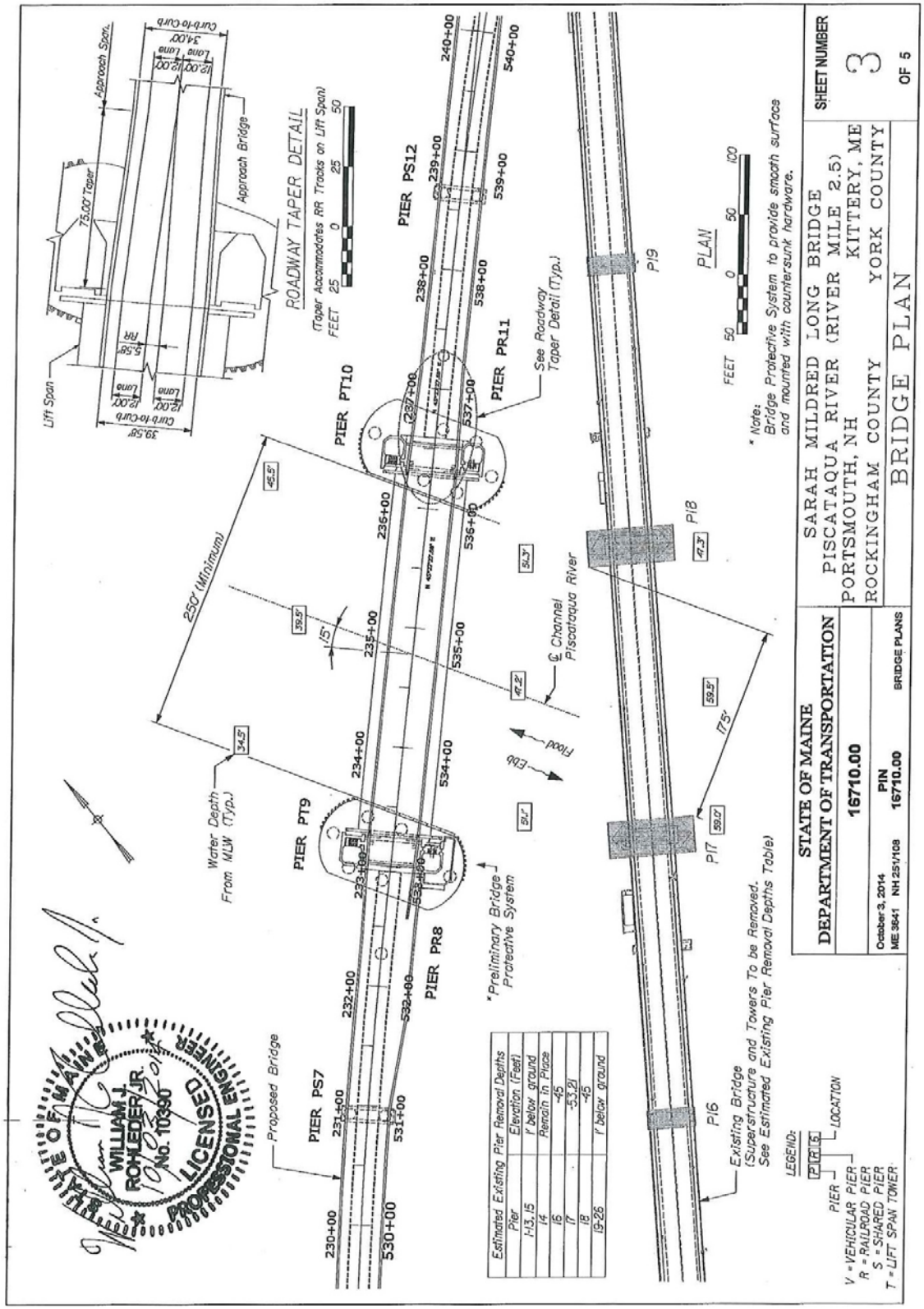
Example 2.5

Combined Plan and Elevation Views



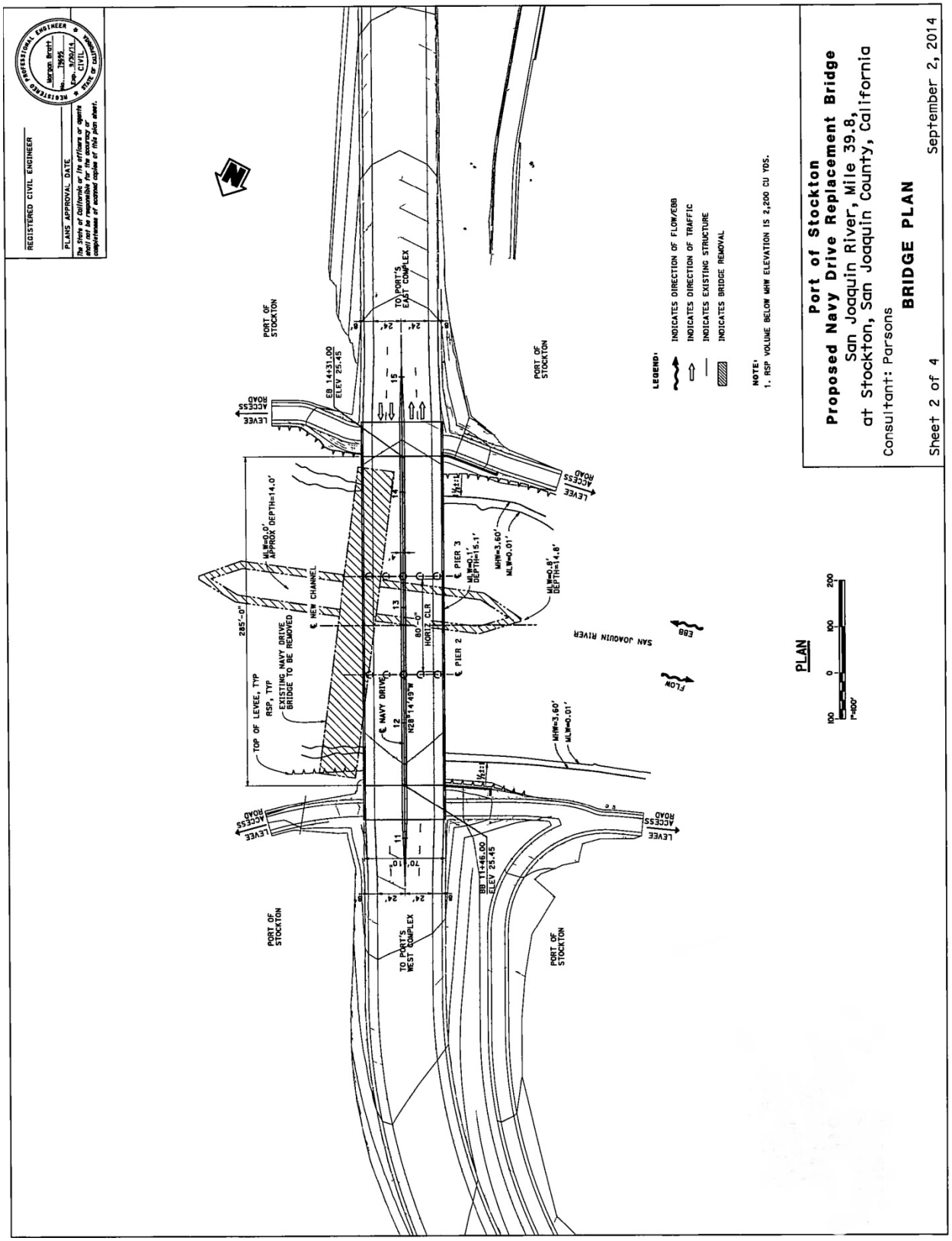
Example 2.6

Plan View



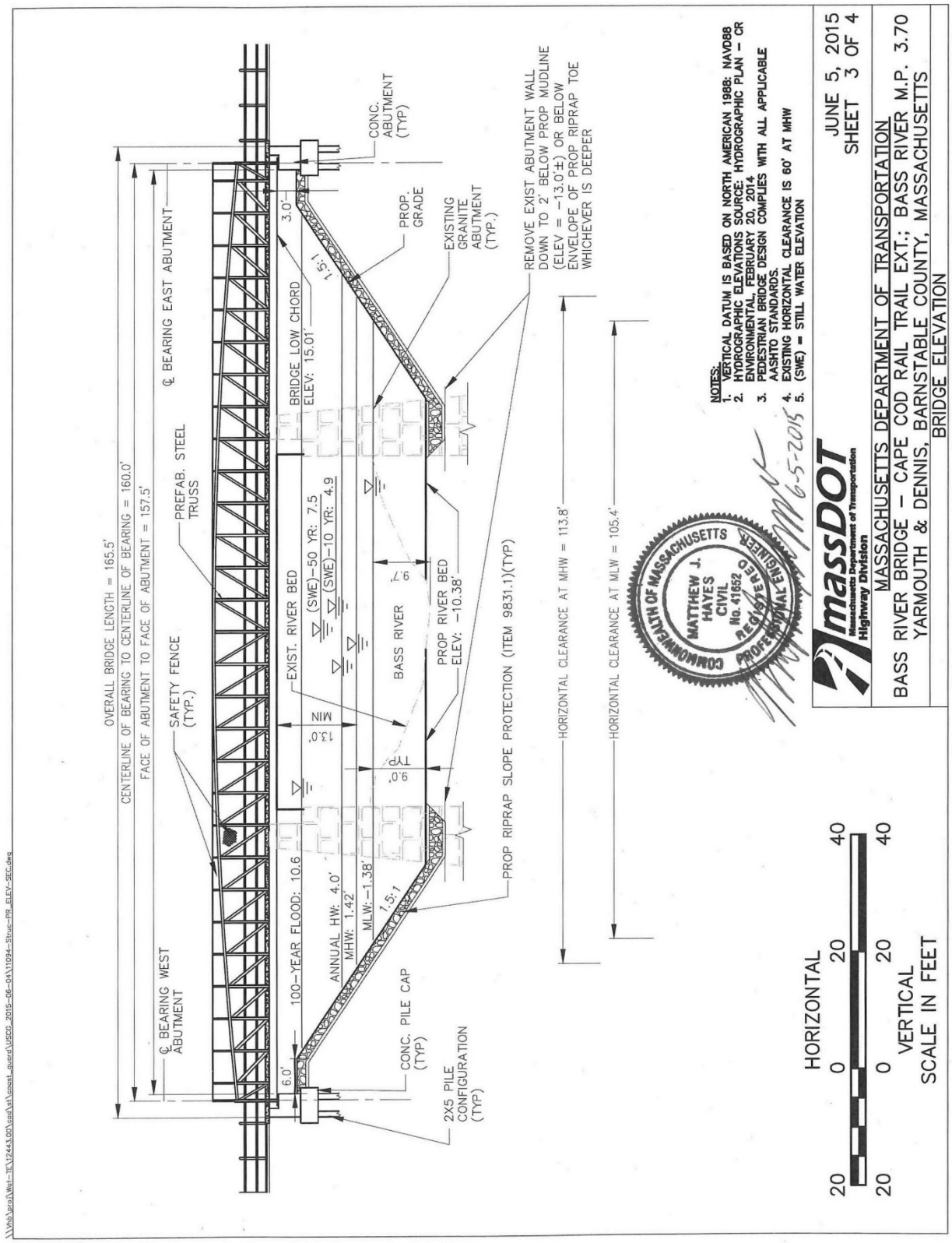
Example 2.7

Plan View



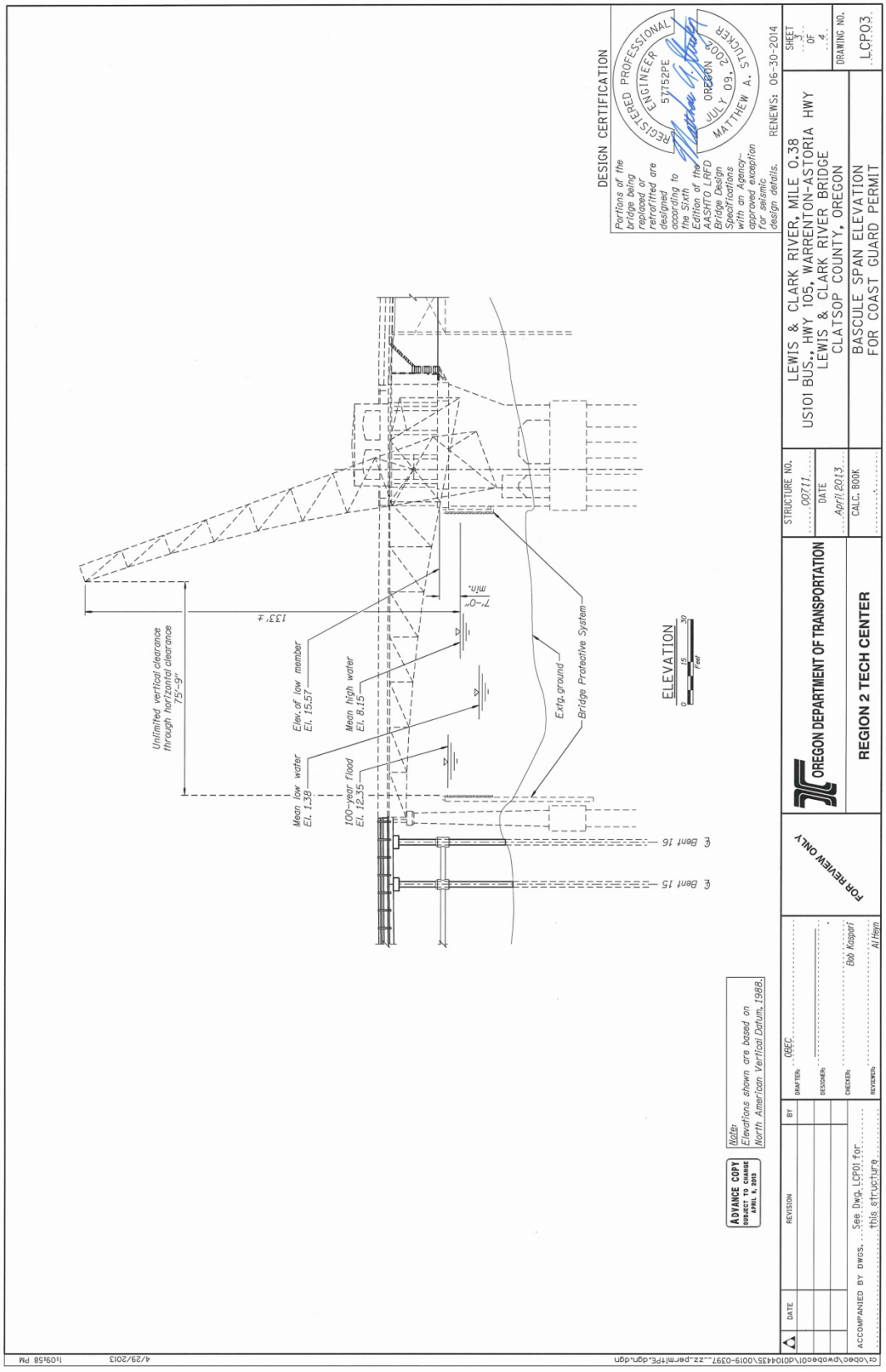
Example 2.8

Elevation View



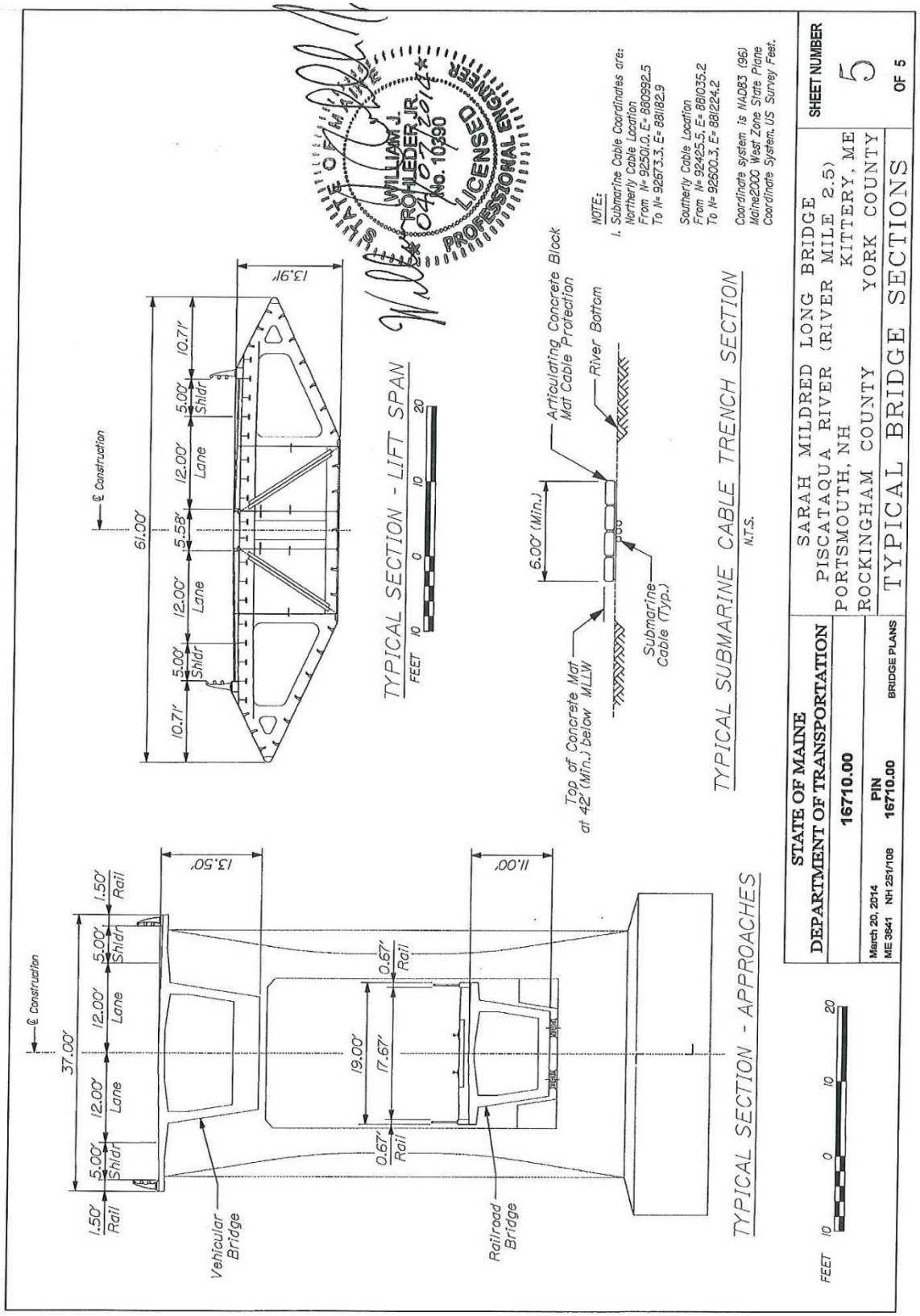
Example 2.9

Elevation View



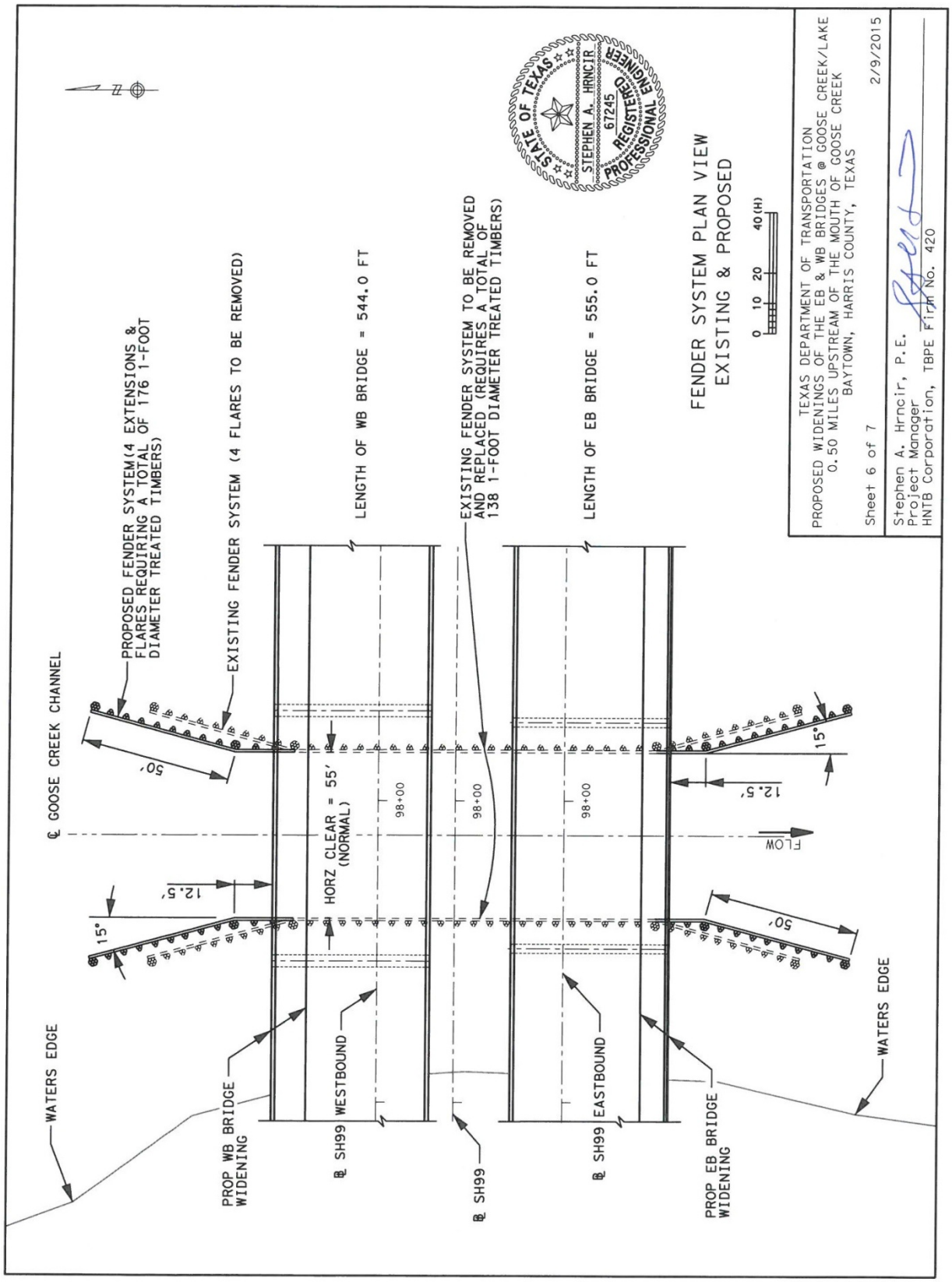
Example 2.10

Typical Cross Section



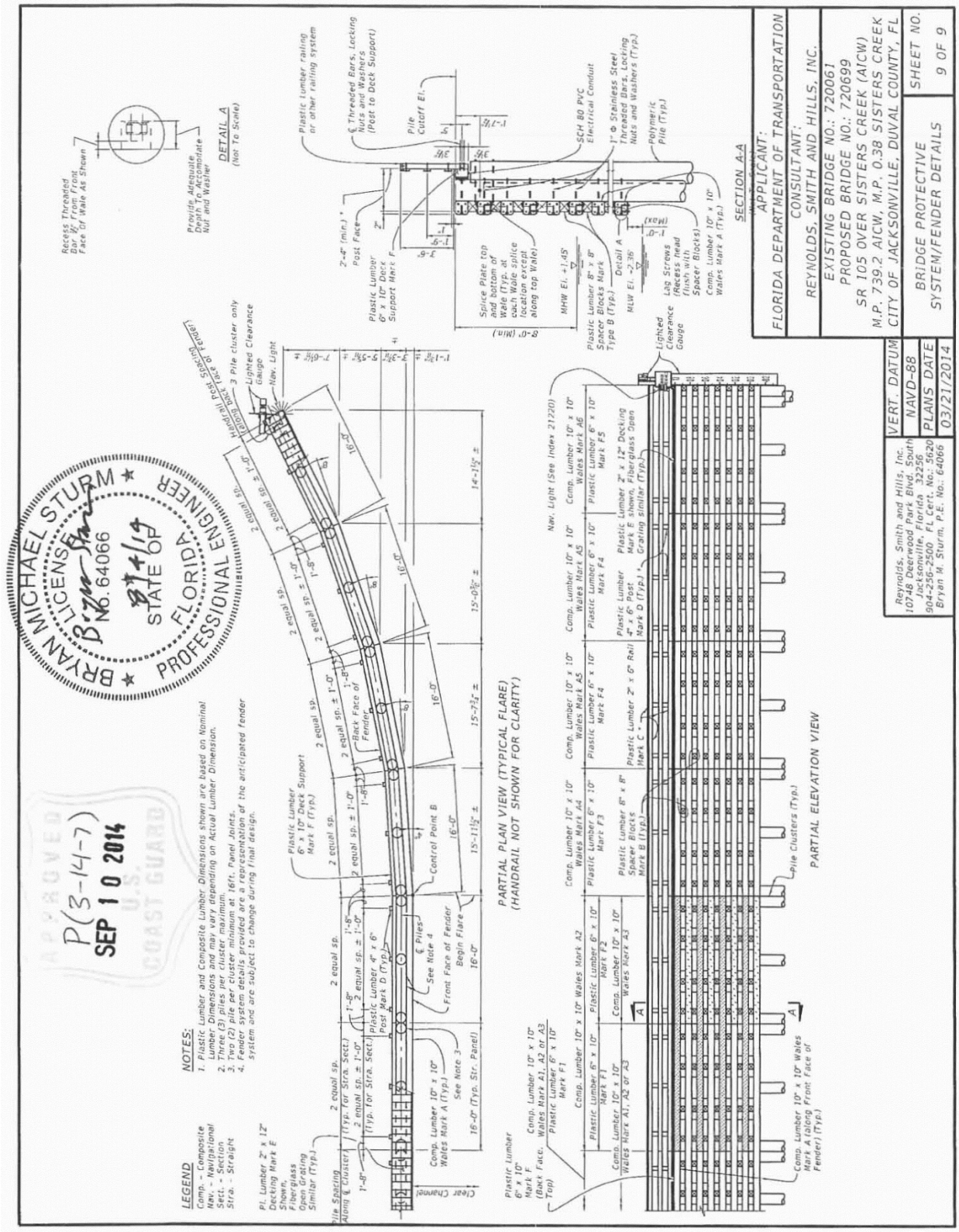
Example 2.11

Bridge Pier Protection System



Example 2.12

Bridge Pier Protection System



APPENDIX A: WATERWAY DATA REQUIREMENTS

This appendix identifies the detailed elements, to include guide clearances on waterways, which are considered on a case-by-case basis when making a determination based on the reasonable needs of navigation.

The Coast Guard Bridge Program ensures Marine Safety, Security, and Stewardship and contributes to the freedom of navigation and the nations Marine Transportation System through its authority to approve the location and plans of all new bridges, modifications of existing bridges, international bridges, and causeways in or over navigable waterways of the United States.

In accordance with 33 CFR § 116.01, "[a]ll bridges are obstructions to navigation and are tolerated only as long as they serve the needs of land transportation while allowing for the reasonable needs of navigation." Authority for the permitting process is found in 33 U.S.C. § § 401, 491, 525-533, the International Bridge Act of 1972 and various acts of Congress. Pursuant to the Rivers and Harbors Act, 33 U.S.C. § 401 "No bridge shall at any time unreasonably obstruct the free navigation of any navigable waterway of the Unites States." In addition, per 33 U.S.C. § 494 "No bridge erected or maintained under the provisions of sections 491 to 498 of this title, shall at any time unreasonably obstruct the free navigation of the waterway over which it is constructed."

It is important to note that initial determinations of reasonable needs are based on facts and circumstances at the time of the proposal and may later be unreasonable if facts and circumstances surrounding the proposal change over time or are discovered during the permit application and public notice process.

Navigation Impact Report

The permitting improvement provisions found in the 2014 Memorandum of Understanding between the U.S. Coast Guard, the Federal Highway Administration, the Federal Transit Administration, and the Federal Railroad Administration requires applicants with Department of Transportation funded projects prepare a navigation impact report in order to analyze the navigational impacts of the bridge design alternatives. Submission of this report is highly encouraged for all other applicants to avoid delays and head off potential conflicts in the permit application process.

Navigation impact reports provide the most accurate picture of current and prospective navigation on a waterway. The project sponsor or potential permit applicant prepares the report early in project planning, and updates periodically during project development because waterways and waterway usage are dynamic and may change over time.

Before preparing a navigation impact report, contact the Coast Guard District Bridge Office to determine what data is required for the application.

A. Means of Data Collection

1. The Coast Guard and applicants can use a variety of tools to gather information to assist

in the determination of appropriate bridge navigational clearances, to include, but not limited to:

a. Conducting site visits and ride-alongs with qualified vessel operators on the waterway, obtaining firsthand knowledge of navigational needs through the proposed bridge site;

b. The Coast Guard issues a public notice to solicit comments for navigational concerns;

c. The Coast Guard advertises the bridge project in the Local Notice to Mariners;

d. Conduct waterway user surveys;

e. Conduct a waterways study (typically applicant-prepared);

f. The Coast Guard reviews navigational information in the environmental documentation prepared by the applicant;

g. The Coast Guard reviews bridge tender logs;

h. Conduct public meetings;

i. Consult with and conducting interagency meetings;

j. Consult guide clearances for the waterway;

k. Contact regional planning interests for current and future plans that will impact the waterway;

l. Consult USACE methodology in USACE Engineer Manuals EM-1110-2-1611 and EM-1110-2-1613 for determining horizontal and vertical clearance requirements (see Enclosure (2) for sample methodology);

m. Consult with local Coast Guard Sectors, Captains of the Port, Coast Guard Stations and Coast Guard Cutters prior to making navigation determinations since they offer a wealth of professional experience in navigational issues; and

n. When available, waterborne commerce statistics (collected by the U.S. Department of Commerce) should be reviewed and incorporated into the waterway evaluation as they provide cargo volumes and vessel trips for commercial shipments by waterway reach.

2. The Coast Guard will make every effort to involve members of the navigation community and other interested or affected parties early in the Coast Guard Bridge Program consideration of navigational needs. It is also imperative that dialogue be maintained with the navigational community all throughout project development and approval processes so that changes in waterway usage, particularly during lengthy project developments, are documented and included in design decision making.

Navigation impact reports should identify and/or consider:

B. <u>Present governing bridge(s) or aerial structure(s) on the waterway:</u>

1. Identify all bridges upstream and downstream of the proposed bridge site and their existing horizontal and vertical clearances to determine the existing minimum horizontal and vertical clearances (including overhead transmission line clearances). Provide in table format.

   (If all bridges downstream have the same minimum clearance, state instead of the above requested information.)

2. Does the proposed bridge(s) match (or is greater than) the navigational clearance of existing structures on the waterway?

3. What is the most restrictive horizontal clearance on the waterway? (This may be a fixed bridge downstream/upstream of the proposed structure, a low hanging power line downstream/upstream of the bridge(s), or it may be some other structure that limits horizontal clearance. Sometimes the existing to-be-replaced bridge(s) is the most restrictive structure.)

   a. Milepoint:

   b. Horizontal clearance:

4. What is the most restrictive vertical clearance on the waterway? (This may be a fixed bridge downstream/upstream of the proposed structure, a low hanging power line downstream/upstream of the bridge(s), or it may be some other structure which limits vertical clearance. Sometimes the existing to-be-replaced bridge(s) is the most restrictive structure.)

   a. Milepoint:

   b. Vertical clearance:

5. Will the proposed bridge(s) become the most restrictive/obstructive structure across the waterway?

C. <u>Waterway characteristics:</u> (All domestic bridge navigational clearances should be stated in linear feet in decimal form vs. feet and inches. All international bridge navigational clearances should be stated in linear unit of measure as well as the metric equivalent.)

1. Various waterway stages: (Datum that is used).

2. Natural flow of the waterway including currents, waterway velocity, water direction, and velocity fluctuations (seasonal, daily, hourly, etc.), that might affect navigation.

3. Width of the waterway at bridge site:

4. Depth of the waterway and elevation fluctuations at bridge site: [List the depth at each waterway bridge stage (ex. Range of tides, average high water elevation, etc.)].

5. Waterway layout and geometry: (For example, is there a dam or lock; does the elevation

of the approach impact the required bridge(s) clearance?)

6. Channel and waterway alignment: Location of the channel(s)

7. Other limiting factors: (For example, bends in the waterway within one-half mile of project site, hindrances to free navigation, fog, hydraulics, etc.)

D. <u>Do vessels that engage in emergency operations (i.e., law enforcement, fire, rescue, emergency dam repair, etc.), national defense activities (i.e. cruisers, fuel barges, munitions ships, etc.) or channel maintenance (i.e., dredges, dam and levee repair, etc.) operate on the waterway? If yes, describe the vessels and provide the following information:</u>

1. Does levee maintenance, bridge work (other bridges), channel maintenance and emergency operations upstream of bridge require certain vessels to transit the waterway?

2. Does the proposed bridge(s) impact USCG and/or other government vessels' ability to transit the bridge(s) to conduct mission essential functions (icebreakers, patrols, etc.)?

3. Vessels using the waterway during the proposed bridge(s) lifespan (should include):

   a. Vessel name;

   b. Registration/documentation numbers;

   c. Vessel type;

   d. Vessel owner contact information (company/individual name, address, contact info.);

   e. Primary vessel mooring location (include waterway milepoint, if known);

   f. Vessel overall length;

   g. Vessel beam;

   h. Vessel draft (depth of hull below waterline at full load);

   i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

   j. Specialized vessels that use the waterway (e.g. vessels which have limited maneuverability due to inherent design or mode of operation);

   k. Safety margin required by vessel to navigate through the bridge(s);

   l. Vessel transit frequencies under proposed bridge(s), transit speeds, and load configurations; and

   m. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).

4. Will the proposed bridge(s) provide the horizontal and vertical clearances for the safe, efficient passage of the largest of these vessels? Why?

5. If no, estimate the number of vessels in each of the above categories unable to pass through the proposed bridge(s). Give the name, length overall (LOA), beam, draft and height of highest fixed point above the waterline for vessels affected by the bridge(s).

6. Can these vessels be modified (i.e., folding mast, relocation or equipment, etc.) without decreasing their respective response times? If so, name the vessels.

7. If modifications are feasible, state the name of the vessel(s), their trip frequency, the necessary modifications, the cost of the modification(s) and who will pay for them (i.e., vessel owner, applicant, other).

8. Provide any additional information concerning the potentially impacted or burdened users of the waterway as well as the future use of the waterway.

E. <u>Has the United States Corps of Engineers (USACE) completed or does it plan to complete a federal navigation project on the waterway? If yes, provide the following information:</u>

1. Project name, downstream/upstream milepoints, depth, type of project, scope, status of project and other limiting factors.

2. Whether there is/was a "design vessel" used in planning the channel? What is/was the design vessel? Was the design vessel reviewed by the Coast Guard?

3. The following specifications of the vessel for which the navigation project is or will be designed: LOA, beam, draft and height of highest fixed point above the waterline.

4. Will the proposed bridge(s) provide the horizontal and vertical clearances necessary for the safe, efficient passage of the vessel for which the navigation project was designed?

5. If so, can the vessel be modified to clear the proposed bridge(s) without substantially increasing operating costs?

6. If modifications are feasible, state the necessary modifications, costs of any modification(s), and who will pay for the modifications.

7. Are there projected changes in waterway usage based upon anticipated waterway improvement projects?

8. Does the proposed bridge(s) impact USACE ability to transit the bridge(s) in a Federal project channel?

F. <u>Describe the present and prospective recreational navigation:</u> Will the proposed bridge(s) affect the safe, efficient movement of any segment of the present or prospective recreational fleet operation on the waterway? If yes, provide the following information:

1. Vessels utilizing the waterway during the proposed bridge(s) lifespan. (Information in

this bullet should include:)

a. Vessel name;

b. Registration/documentation numbers;

c. Vessel type;

d. Vessel owner contact information (company/individual name, address, contact info.);

e. Primary vessel mooring location (include waterway milepoint, if known);

f. Vessel overall length;

g. Vessel beam;

h. Vessel draft (depth of hull below waterline at full load);

i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

j. Specialized vessels that use the waterway (e.g., vessels which have limited maneuverability due to inherent design or mode of operation);

k. Safety margin required by vessel to navigate through the bridge(s);

l. Vessel transit frequencies under proposed bridge(s), transit speeds, and load configurations; and

m. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).

2. What is the estimated percentage of the recreational fleet, which may be affected by the proposed bridge(s)?

3. Will the proposed bridge(s) eliminate the access of these vessels to existing or planned commercial, water-oriented facilities (i.e., restaurants, shops, recreational areas, marinas, etc.) in the vicinity of the proposed bridge(s)? If yes, describe these facilities.

4. Is it feasible to modify the affected segments of the fleet to clear the proposed bridge(s) without substantially increasing operating costs? If yes, name the vessel(s), state the necessary modifications, cost of modifying each vessel and person or entity responsible for financing the modifications.

5. Provide any additional information concerning the potentially impacted or burdened users of the waterway as well as the future use of the waterway.

<u>NOTE</u>: Check with local USACE District Office, Chamber of Commerce or other organizations for proposed marinas, recreational areas, shops, etc.

G. <u>Describe the present and waterway and prospective commercial navigation and the cargoes moved on the waterway:</u> Will the proposed bridge(s) affect the safe, efficient movement of any segment of the present or prospective commercial fleet operating on the waterway? If yes, provide the following information:

1. Vessel name;
2. Registration/documentation numbers;
3. Vessel type;
4. Vessel owner contact information (company/individual name, address, contact info.);
5. Primary vessel mooring location (include waterway milepoint, if known); vessel overall length;
6. Vessel beam;
7. Vessel draft (depth of hull below waterline at full load);
8. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);
9. Specialized vessels that use the waterway (e.g. vessels which have limited maneuverability due to inherent design or mode of operation);
10. Safety margin required by vessel to navigate through the bridge(s);
11. Vessel transit frequencies under proposed bridge(s), transit speeds, and load configurations; and
12. Vessel traffic characteristics (to include if tug assist is required for transit through the bridge(s) due to limited horizontal clearance).
13. Does the proposed bridge(s) impact existing and future cruise ship ports-of-call/terminals?
14. Does the proposed bridge(s) impact ports supporting post-Panamax vessels?
15. Does the proposed bridge(s) impact vessels that produce unique products for the region?
16. Does the proposed bridge(s) impact vessels that require helper boats/tugs? (Note the combined clearance requirement of the vessel and the helper boat/tug.)
17. Document annual cargo movements (cargo types and quantities);
18. State the estimated percentage of the commercial fleet, which may be affected by the proposed bridge(s).
19. Will the proposed bridge(s) clearance impact present and/or prospective upstream commercial activity, e.g., jobs and economic growth and development?

20. If yes, address any existing or planned commercial/industrial developments negatively affected by the proposed clearances and discuss the economic impacts the proposed clearances will have on these businesses:

21. Document the foreseeable needs to future navigation;

22. Provide existing and historical navigational use and waterway conditions;

23. Provide input from waterway dependant facilities concerning future use;

24. Describe land use zoning along the waterway (particularly within the riparian zone);

25. Describe future vessel size and traffic trends;

26. Include input from states based on state development plans;

27. Include input from facilities based on business plans;

28. Document local commercial shipping and other businesses affected by this restriction.

Note: the next opportunity to adjust clearances for navigation is usually between 50-100 years unless interim waterway improvement projects include the cost of bridge alterations.

29. Is it feasible to modify the restricted vessels to clear the proposed bridge(s) without substantially increasing operating costs? If yes, name the vessel(s), state the necessary modifications, cost of modifying each vessel and company or entity responsible

30. Provide any additional information concerning the potentially impacted or burdened users of the waterway as well as the future use of the waterway.

H. <u>Identify the name and contact information for marine facilities located within a 3-mile radius of the proposed project (public boat ramps, marinas or major docking facilities, boat repair facilities, etc.:</u>

I. <u>Will the proposed bridge(s) block access of any vessel presently using local service facilities (i.e., repair shops, parts distributors, fuel stations)? If yes, provide the following information:</u>

1. Describe the facilities impacted and estimate the number of vessels currently using these facilities.

    a. Vessel information should include the following for each blocked vessel:

        1) Vessel name;

        2) Registration/ documentation numbers;

        3) Vessel type;

        4) Vessel owner contact information (company/individual name, address, contact info);

5) Primary vessel mooring location (include waterway milepoint, if known); vessel overall length;

6) Vessel beam;

7) Vessel draft (depth of hull below waterline at full load); and

8) Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty);

2. Could any of these facilities be considered critical infrastructure, key resources, or important/unique U.S. industrial capability (i.e., are these facilities unique or one of only a few of the type in the area?) Address whether the proposed clearances negatively affect those facilities and their customers.

3. What economic impact will loss of access have on these facilities? Include estimated dollar amount to support Commandant and DHS goals.

4. What is the distance to alternate service facilities capable of servicing the affected vessels? Describe the facilities.

5. Will use of these alternate facilities substantially increase vessel operation affected vessels? Describe the facilities.

6. Is it feasible to modify the affected vessels to clear the proposed bridge(s)?

7. If yes, state the name, necessary modifications, cost of modifying each vessel and who will pay for the modifications.

J. <u>Are alternate routes bypassing the proposed bridge(s) available for use by vessels unable to pass the proposed bridge(s)? If yes, provide the following information:</u>

1. State the number of vessels that will be forced to use alternate routes.

2. For each vessel identified in section H1.a. above, include the following information:

   a. Vessel name;

   b. Registration/documentation numbers;

   c. Vessel type;

   d. Vessel owner contact information (company/individual name, address, contact info.);

   e. Primary vessel mooring location (include waterway milepoint, if known);

   f. Vessel overall length;

   g. Vessel beam;

   h. Vessel draft (depth of hull below waterline at full load);

i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty); and

j. Specialized vessels that use the waterway (e.g., vessels which have limited maneuverability due to inherent design or mode of operation);

3. Identify any alternate routes and provide the respective distances between the proposed bridge(s) and these routes.

4. Will use of these routes substantially increase the transit time and/or operating costs of the affected vessels? This relates to the mobility goals of the Commandant and DHS.

5. If yes, describe the impacts of increased transit time and/or operating costs.

6. Is it feasible to modify these vessels to clear the proposed bridge(s)?

7. If yes, state the name, necessary modifications, cost of modifying each vessel and who will pay for these modifications.

K. <u>Will the bridge(s) prohibit the entry of any vessels to the local harbor of refuge? If yes, describe the harbor and provide the following information:</u>

1. What percentage of vessels currently using the harbor refuge will not be able to pass the proposed bridge(s) to gain access to that refuge? Describe the vessels.

2. Provide vessel information for those vessels identified in J.1.:

a. Vessel name;

b. Registration/documentation numbers;

c. Vessel type;

d. Vessel owner contact information (company/individual name, address, contact info.);

e. Primary vessel mooring location (include waterway milepoint, if known);

f. Vessel overall length;

g. Vessel beam;

h. Vessel draft (depth of hull below waterline at full load);

i. Vessel air draft (height of the highest fixed point of the vessel above the waterline, when empty); and

j. Specialized vessels that use the waterway (e.g. vessels which have limited maneuverability due to inherent design or mode of operation);

3. Is it feasible to modify these vessels to clear the proposed bridge(s)?

4. If yes, state the name, necessary modification, cost of modifying each vessel and who will pay for the modifications.

5. If alternate refuges are available, describe them and state the distance of each from the present harbor of refuge.

NOTE: A harbor of refuge is defined as a naturally or artificially protected water area that provides a place of relative safety or refuge for commercial and recreational vessels traveling along the coast or operating in a region.

L. Will the proposed bridge(s) be located within one-half mile of a bend in a waterway? If yes, describe the bend and provide the following information:

1. Is there sufficient distance between the bridge(s) and the bend to allow proper vessel alignment for the safe, efficient passage of vessels through the proposed bridge(s)?

2. If no, what factors make construction of the bridge(s) at an alternate location impractical?

M. Are there other factors (i.e., dockages, lightering areas, existing bridges, etc.) located within one-half mile of the proposed bridge(s), which would create hazardous passage through the proposed structure? If yes, provide the following information:

1. Describe the factors. (For example, construction impacts to navigation and waterway users, etc.)

2. What mitigative measures are being recommended? (For example, navigation safety during construction, etc.) Why?

N. Do local hydraulic conditions (i.e., wave chop, cross currents, tides, shoals, etc.) increase the hazard of passage through the proposed bridge(s)? If yes, provide the following information:

1. Describe the conditions:

2. What mitigative measures are being recommended? Why?

O. Do local atmospheric conditions (i.e., strong, prevailing winds, fog, rapidly developing storms, etc.) increase the hazard of passage through the proposed bridge(s)? If yes, provide the following information:

1. Describe the conditions:

2. What mitigative measures are being recommended? Why?

P. Have guide clearances been established for the waterway? If yes, provide the following information:

1. Horizontal guide clearance;

2. Vertical guide clearance;

3. Do the proposed bridge(s) clearances differ from these guide clearances?

4. If yes, what factors justify deviating from these guide clearances?

Q. <u>Are there other natural or man-made conditions that affect navigation (atmospherics, exclusion zones, etc.)?</u>

1. Describe the conditions:

2. What mitigative measures are being recommended? Why?

R. <u>State any other factors considered necessary for the safe, efficient passage of vessels through the proposed bridge(s)? Are clearance gauges needed? Why?</u>

S. <u>Include a description of the impacts to navigation caused or which could be reasonably caused by the proposed bridge(s) including but not limited to: proposed construction methodology, proposed or prospective changes to the existing bridge(s) operating schedule (for movable bridges), and any proposed mitigation to all unavoidable impacts to navigation.</u>

1. Conduct a navigational impact report, and include a review of all bridges upstream and downstream of the proposed site to determine the minimum vertical and horizontal clearances available on the waterway.

2. If the proposed bridge(s) is fixed, and is replacing an existing drawbridge with unlimited vertical clearance, the applicant must determine whether the proposed bridge(s) will accommodate existing and perspective navigation.

T. <u>Is there any proposed or completed mitigation for impacted waterway users? Are there any impacts that cannot be mitigated?</u>

1. Can vessels and cargoes be partially disassembled/dismantled in order to transit the proposed bridge(s), and if so, is it economically reasonable? The Coast Guard must take into consideration a vessel's ability to adjust its operations without economic loss. Adjustment or mitigations techniques may include using other routes, lowering electronics (GPS, radar, communication antennae, etc.), lowering crane booms, etc.

2. Are alternative routes available for vessel passage?

3. Can vessels transit at typical lower water stages (mean low water, mean pool level, etc.)?

APPENDIX B: Environmental Control Laws, Executive Orders, and Regulations Requiring Compliance, as applicable, with Bridge Program Actions

UNITED STATES CODE REFERENCES	IMPLEMENTING REGULATIONS
BRIDGE LAWS: *33 U.S.C. § § 401; 491 – 508; and 511 to 535(i)*	33 CFR PARTS 114 – 118
NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 *42 U.S.C. § 4321*	40 CFR PARTS 1500 – 1508
CLEAN WATER ACT OF 1977 *33 U.S.C. § § 1251; 1352; and 1330* **COASTAL ZONE MANAGEMENT ACT OF 1972** *16 U.S.C. § § 1451; and 3501 - 3503* **COASTAL BARRIER RESOURCES ACT OF 1982** *16 USC § 3501*	40 CFR PART 121 Water Quality Certification 40 CFR PARTS 401-503 and 136 15 CFR PART 930 E.O. 11990, Protection of Wetlands E.O. 11988, Floodplain Management and Protection DOT Order 5620.2 Floodplain Management
NATIONAL HISTORIC PRESERVATION ACT OF 1966, SECTION 106 *16 U.S.C. § 470*	36 CFR PARTS 60, 63, and 800
FISH AND WILDLIFE COORDINATION ACT *16 U.S.C. § 661 - 666* **ENDANGERED SPECIES ACT OF 1973** *16 U.S.C. § 1531* **MARINE MAMMAL PROTECTION ACT OF 1972**	50 CFR PART 17 50 CFR PART 402 50 CFR PART 216
LAND AND WATER CONSERVATION FUND ACT OF 1965: *16 U.S.C. § 4601-4604 et seq.*	36 CFR PART 59

Environmental Control Laws, Executive Orders, and Regulations Requiring Compliance, as applicable, with Bridge Program Actions	
NATIONAL MARINE SANCTURIES ACT *16 U.S.C. § 1431*	15 CFR PART 922
MAGNUSON – STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT *(Essential Fish Habitat)* *16 U.S.C. § 1855*	50 CFR PARTS Parts 600.805 - .930 E.O. 13112, Invasive Species
MIGRATORY BIRD TREATY ACT OF 1918 *16 U.S.C. § 703 – 712*	50 CFR PART 10 and 21
BALD AND GOLDEN EAGLE PROTECTION ACT	E.O. 13186, Responsibilities of Federal Agencies to Protect Migratory Birds
CLEAN AIR ACT *42 U.S.C. § § 7401, 7410 and 7506(c)*	40 CFR PARTS 6, 51 and 93
WILD AND SCENIC RIVERS ACT OF1968 *16 U.S.C. § 1271 – 1287*	36 CFR PART 297
E.O. 12898 ENVIRONMENTAL JUSTICE	
RESOURCE CONSERVATION AND RECOVERY ACT *42 U.S.C. § 9601*	40 CFR PARTS 239-282
E.O. 12144, ENVIRONMENTAL EFFECTS ABROAD OF MAJOR FEDERAL ACTIONS	
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980 *42 U.S.C. § 103*	40 CFR PARTS 300 – 374

APPENDIX C: Coast Guard District Bridge Program Office Contacts

Commander (dpb) **First Coast Guard District** Battery Park Building New York, NY 10004-5073 **Tel: 212-514-4338**	Commander (dpb) **Ninth Coast Guard District** 1240 East 9th Street Cleveland, OH 44199-2060 **Tel: 216-902-6087**
Commander (dpb) **Fifth Coast Guard District** LANTAREA Federal Building 431 Crawford Street Portsmouth, VA 23704-5004 **Tel: 757-398-6222**	Commander (dpw) **Eleventh Coast Guard District** Building 50 - 6 Alameda, CA 94501-5100 **Tel: 510-437-3516**
Commander (dpb) **Seventh Coast Guard District** 909 SE First Avenue (Ste 432) Miami, FL 33130-3050 **Tel: 305-415-6743**	Commander (dpw) **Thirteenth Coast Guard District** Jackson Federal Building 915 Second Avenue Seattle, WA 98174-1067 **Tel: 206-220-7282**
Commander (dpb) **Eighth Coast Guard District** Hale Boggs Federal Building 501 Magazine Street New Orleans, LA 70130-3396 **Tel: 504-671-2127**	Commander (dpw) **Fourteenth Coast Guard District** Prince Kalanianaole Federal Bldg 300 Ala Moana Blvd., Rm. 9139 Honolulu, HI 96850-4982 **Tel: 808-535-3412**
Commander (dwb) **Eighth Coast Guard District** 1222 Spruce Street St. Louis, MO 63103-2398 **Tel: 314-269-2378**	Commander (dpw) **Seventeenth Coast Guard District** P. O. Box 25517 Juneau, AK 99802-5517 **Tel: 907-463-2268**

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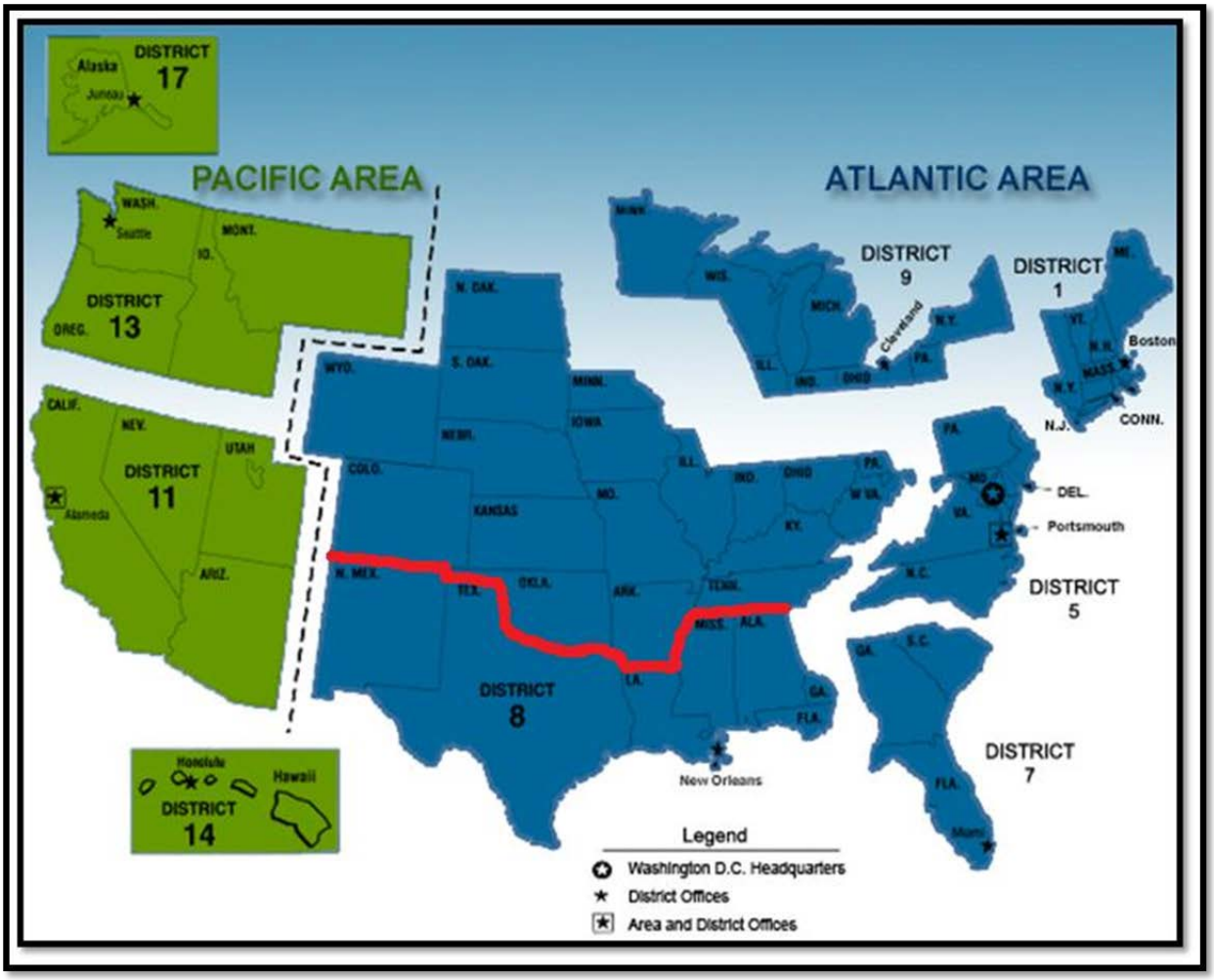
APPENDIX D: Coast Guard District Map



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