

ATTACHMENT C
Bridge Permit Plan Sheet Job Aid

Bridge Permit Application Plan Sheet Job Aid



Project Name:

Mid-Currituck Bridge Project (R-2576) – Currituck Sound Bridge

Plans submitted with the bridge permit application become an official, and permanent, part of the issued permit or permit amendment. To minimize application processing delays, applicants should avoid placing extraneous information on the plan sheets not requested by the Coast Guard. Including extraneous information creates unnecessary issues when the bridge owner wants to deviate from the approved plan sheets. Please ensure this checklist is completed for all application submissions.

1. **General**

- 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.

NOTE: 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 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.

- Prior to permit issuance and plan sheet approval, all plan sheets must bear the date, signature and stamp of a professional engineer.

NOTE: 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. For projects involving FHWA Office of Federal Lands, please contact CG-BRG for further direction.

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”.

- Plan sheets properly depict the proposed project in a manner that allows the general public to thoroughly understand the project and permit action.

- Plan sheets properly depict the proposed permit action, specifically taking into consideration any existing plan sheets. Consider whether existing plan sheets will be supplemented or superseded for permit amendment actions.

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

- Applicant/Owner;

- Consultant/Agent;

N/A

- Name of Bridge(s);

- Name of Waterway;

- Mile point of bridge(s) location (from confluence of mouth of waterway) in statute miles; - [Currituck Sound does not have a navigational channel – the bridge is located roughly 19.1 statute miles north of the confluence of Currituck Sound with Albermarle Sound.](#)

- 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

- The total number of plan sheets identified in the title block must match the number of plan sheets submitted for approval. Each sheet should be identified by the sheet number and total number of sheets in set to be approved (i.e., Sheet 1 of 5).

3. **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);
 - N/A
- Insert a small map of the state in which the project is located with an arrow showing the location of the proposed project.

4. Plan View

- Show graphic bar scale and north arrow;
- 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 or ordinary high water and ordinary low water elevations if proposed activity is in a non-tidal waterway. Only one waterline is required in instances where the difference in mean high and low water elevation is minimal relative to the slope of the waterway banks. Waterlines are not required when bulkheads or other artificial banks are present.
 - Not Required
- Identify all portions of existing bridge(s) that will remain in place;
 - N/A

- Identify all portions of existing bridge(s) that will be removed by using a discernable method (e.g. grayscale, dashed lines, etc.);
 - N/A
- Show principal dimensions of structure(s) from grade-to-grade. Show length, width, etc.;
- Show location of dredging, excavation, fill or rip-rap, when it presents potential impact to mariners. **Note: The Coast Guard does not approve these activities or items. Contact the U.S. Army Corps of Engineers for approval;**
 - N/A
- Show location of the bridge protective system, piles, cables, etc. existing or to be constructed in the waterway. When available, identify type of material to be used;
 - N/A
- 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; and
- On waterways where water depths may restrict vessel movements, 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).
 - N/A

5. **Elevation View**

- Show graphic bar scale;

- Show mean high and mean low water elevations in tidal areas or ordinary high and low water elevations in non-tidal areas;
- Show amount of fill material in cubic yards below mean high water;
- Show proposed navigational opening (i.e., the box that depicts the minimum horizontal and vertical clearances through which vessels will transit);
- Show horizontal clearance normal to the axis (centerline) of the navigational channel between the bridge protective fender system, pilings, or abutments, as appropriate;
- Show vertical clearance between the low steel member of the navigation span and the appropriate high water stage (Mean High Water (MHW), Ordinary High Water (OHW), etc.). Include the low steel elevation;
- If a Federally maintained navigational channel is present and the most restrictive vertical clearance is not over the channel, show vertical clearance at the center of the channel, as well as at the horizontal limits of the navigational channel referenced to the appropriate high water stage (Mean High Water (MHW), Ordinary High Water (OHW), etc.);
 - N/A
- 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.;
 - N/A
- Show proposed and existing contour of waterway bottom; **The proposed and existing waterway bottom are the same – no changes proposed.**
- Show 100-year flood elevation; 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.

N/A

6. 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.

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

N/A

- Show bridge pier protective system in plan and elevation views with appropriate dimensions (length, diameter of pier protection cells, etc.). Include detail of attachment to pier, countersunk bolts, and relationship to mean high and low waterlines (on elevation view) when available.

8. Temporary Structures/Falsework (If it impacts navigation, details must be provided at time of public notice. Submit plan sheets separately, not as part of the plan sheets for permit approval).

N/A

- Show location of temporary structures/falsework;
- Show minimum horizontal and vertical clearances if impacting the navigation span.

N/A

Show dimensions of proposed temporary structure(s).

9. Temporary Bridge(s) (Required for public notice and permit approval. Must be part of plan sheet set for permit approval)

N/A

Show location of temporary bridge(s);

Show minimum horizontal and vertical clearances of proposed temporary bridge(s).

Show length of proposed temporary bridge(s).

Show width of proposed temporary bridge(s).

WHEN NOT AVAILABLE AT TIME OF PERMIT APPROVAL, THE BELOW MUST BE SUBMITTED TO THE DISTRICT BRIDGE OFFICE WHEN SO REQUIRED:

- a. **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).

- b. **Temporary Structures/Falsework** (if no impact to navigation and 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.

- c. **Bridge Lighting Plan**

Submit lighting plan in accordance with 33 CFR Part 118 and bridge lighting guide (see USCG Bridge Program website: [Office of Bridge Programs \(uscg.mil\)](http://uscg.mil)). 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.