

MASSDOT HIGHWAY DIVISION CONSTRUCTION PLAN SHEETS
REQUIREMENTS FOR USCG PERMIT APPLICATION

Plan sheets containing the following information should be submitted to MassDOT Highway Division as soon as the information is available (upon approval of the Bridge Type Study) since it can take **up to one year** to secure a Coast Guard Bridge Permit.

GENERAL

- Submit one original set of plans on mylar or linen size 8½ X 11 inches. Submit fewest number of sheets possible, showing significant structural details. Plans must be of good reproducible quality.
- Each drawing must have simple title, date and number (e.g., sheet 1 of 2, sheet 2 of 2) in lower right hand corner.
- Show graphic scale and north arrow on each individual plan sheet.
- All dimensions and distances must be shown on both English and metric measurement systems.
- State government datum used in plan and elevation views and location of datum. Datum utilized should be the same for all drawings submitted. Provide survey notes and report showing calculations used to derive elevations and identify referenced tidal bench mark.

Title Blocks – Show the following items in the title blocks located in the lower corner of your drawings:

- Applicant/Agent and Owner
- North Arrow
- Waterway name
- Mile point of bridge location, **in miles and metric equivalent**
- City, County and State
- Date of plans
- Sheet number of total number of sheets in set

VICINITY MAP

- Clearly identify entire work site.
- Show course of river.
- Identify structures crossing waterways within ½ mile of proposed structure.
- Show location of any public park, recreation area, wildlife or waterfowl refuge or any historic site in the vicinity.

PLAN VIEW

- Show existing shorelines.
- Show ebb and flood in tidal waters and direction of flow in non-tidal rivers. Show unusual current patterns if applicable.
- Show mean high and low waterlines if the proposed activity is in tidal areas. Show ordinary high water line and ordinary low water line if proposed activity is in a lake, river or stream.
- Show an existing bridge, if any is to be replaced, and whether or not it is to be removed.
- If the bridge will have a draw, show the draw in the open and closed positions.
- Show principal dimensions of structure from grade to grade. Show length, width, etc. Show location and dimensions of sidewalks, railings, pipelines, etc.
- Show location of dredging, excavation, fill or rip-rap. Give approximate number of cubic yards and type of material.
- Identify and show location of any fenders, dolphins, piles, cables, etc. existing or to be constructed in the waterway. Identify type of material to be utilized.
- Show limits of maintained navigational channel, if applicable.
- Show axis of channel.
- Show horizontal clearances, normal to the axis of the channel.
- Show water depth at mean low or ordinary low water at various locations in the channel, under, upstream and downstream of the bridge.

ELEVATION VIEW

- Show mean high and mean low water elevations in tidal areas. Show ordinary high and low water in non-tidal areas.
- Show horizontal clearances normal to the axis of the channel(s).
- Show vertical clearances above mean high or ordinary high water. Vertical clearances should be shown at waterward face of each pier and at center of navigational channel.
- Show proposed and existing contour of waterway bottom.
- Show 100 year flood height and flood of record.

SECTION VIEW

- Include location of sidewalks, fishing platforms, railings pipelines, fenders, rip-rap, etc.

FENDERS (if applicable)

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