



**Connecticut Department of
Energy & Environmental Protection**
Bureau of Water Protection & Land Reuse
Land & Water Resources Division

Project Plan Checklist

The following is a checklist of requirements that need to be completed and submitted as part of the project plans.

- Title Sheet.** Include location map, list of drawings, standard general notes, and original and revised plan dates. Please note that any final license will refer to this title page for the approved plan set. Any revisions made during the application review process must be noted on a revised title sheet. If more than one company prepares plans for the application, use additional sheets.
- Plan Preparation.** All proposed plans must be signed by a P.E. which depict the following: dredging, marinas, flood and erosion control structures, public infrastructure including bridges, tunnels, and boat launch facilities, fill projects including roadways, parking lots, and yard improvements, flood hazard mitigation projects including flood-proofing of residences, any public access project including public access docks. Any other proposed plan may be signed and sealed by a licensed professional qualified by statute to do so. At least one copy of each sheet of all proposed plans must bear a live seal and signature. Please contact LWRD for guidance as to whether plans signed by a P.E. are required for your project.
- Vicinity Map.** Provide either a vicinity map or section of a USGS topographic quadrangle map, at a scale of 1:24,000, indicating the exact location of the project site.
- Tax Assessor's Map.** Show the Map, Block and Lot #, subject property and immediately adjacent properties.
- Plan Views.** Existing and proposed plan views (on separate sheets), based on a site survey prepared by a licensed land surveyor ("surveyor"). Include topography and bathymetry. On at least one plan view, note the name of adjacent property owners.
 - For new structures proposed in tidal/coastal wetlands and waters, at least one plan view must depict the entire property shoreline with all resources and existing structures noted.
- Elevation or cross-section views.** Existing and proposed cross-section views (on separate sheets), based on a site survey prepared by a licensed surveyor. Include topography and bathymetry.
- Site Survey.** Must be at minimum, a T-2 or V-3 standard and signed and sealed by a surveyor licensed in the State of Connecticut. The site survey must be no older than 5 years. In specific areas where the T-2 or V-3 standard is not possible to achieve, the reason why such standard cannot be met, the location of the areas and the methods used to provide survey information in the areas must be noted on the survey. At least one copy of each sheet must bear a live seal and signature. If more than one sheet is used, each sheet must contain a match line. For projects in tidal waters, this standard applies landward of mean high water. Also, surveys for tidal water dredge projects may be prepared by a Certified Hydrographer and certified to the United States Army Corps of Engineers (USACE) standards. For more information, refer to [Reference/FAQs for Survey Requirements](#).
- A-2 Boundary Survey.** If the survey is older than five years, provide a certification that no changes have been made to the boundaries since the time of the survey.
 - The survey must include any easements, right-of-ways, and utility crossings in the project area.
- Plan Standards.** Plans must include north arrow, scale (numeric and graphic), legend/key and title block.
- Activity Specific Details.** Detailed plan views and cross-sections must be prepared for each separate proposed activity.

Plan Checklist (continued)

- Resource Boundaries.** Show wetland and waterbody limits on all plan views. (The points on the wetland line symbol point into the wetland.) Include wetland and waterbody names.
 - For non-tidal/inland wetlands, include delineations for both state wetlands (by soil type) and federal wetlands (by hydrology, soils and vegetation).
 - The tidal wetland boundary is determined by type of vegetation, refer to Connecticut General Statutes Section 22a-29(2). Identify vegetation type on the plan. Include one foot above local extreme high water, if applicable (see [Reference Guide for Regulatory Jurisdiction in Tidal Waters and Wetlands](#)).
 - Location and species of submerged aquatic vegetation must be identified on the plans.
 - Show the location of any known eagle or osprey nests within 600' of the proposed work area.
- Permanent and temporary wetland impacts.** Impact areas need to be graphically shown with temporary and permanent impacts clearly differentiated. A table should be included to quantify these impacts. Impacts to wetlands and watercourses should be quantified by area. Layout an area that the Contractor will be restricted to, all areas located within wetlands or watercourses will be counted as an impact area. Sufficient room should be provided to perform the work, but disturbance to wetland resources need to be minimized to the extent feasible.
- Ordinary High Water (OHW) Line.** Show location of OHW on all plans for activities in watercourses.
- Extent of Inundation.** For those activities which will affect the hydrologic or hydraulic characteristics of a non-tidal watercourse or inland wetland, show the pre- and post- construction aerial extent of inundation for the 2-year, 10-year, 25-year, and 100-year storm frequency events.
- Flow Arrows.** Show for both existing and proposed watercourses and drainage systems, including swales within the project limits.
- Invert Elevations.** Show for bridges and culverts. Invert elevations for drainage outlets are not required for inland sites but the proposed volumetric flow rate (Q_{max}) and velocity (V_{max}) the end of drainage runs needs to be included. Invert elevations must be shown for all drainage outfalls within the Coastal Jurisdiction Line (CJL).
- FEMA Floodplain Lines.** 100-year flood limit, floodway (if present), and other pertinent flood lines included on the plan and in the pertinent cross section and elevation views. Include the base flood elevation.
- Permanent and Temporary Floodplain Impacts.** Impact areas need to be graphically shown with temporary and permanent impacts clearly differentiated. Impacts to floodplains should be quantified by volume. A table should be included to quantify these impacts.
- Worksite Access and Staging.** Show the proposed construction access. Staging plans should include the temporary locations of: access roads, moorings, barges, work floats, and stockpiles.
 - Provide schematic staging plan(s) and suggested sequence of construction related to work in regulated areas.
 - Depict how access roads will be treated after construction.
 - For long access roads, it may provide insight to a regulatory reviewer to show a small scale view of the entire length of the access road in relation to regulated areas, and only focus detail on the actual impact locations.
- Stormwater Design.** Should be in conformance with the 2004 Connecticut Stormwater Quality Manual to the extent possible. For DOT projects, the design shall be in accordance with the DOT Drainage Manual (unless otherwise determined by DOT Hydraulics and Drainage).
- Water Handling.** Specify an elevation for top of temporary water handling structures. A hydraulic table should be included detailing the pertinent hydraulic data and elevations based on the derived temporary design storm.
 - Specify size of temporary gravity bypass pipe, if used, or minimum channel width to maintain flow conveyance through the site between cofferdams.
 - For handling of the stream itself under a pumping scenario, the pump, pipe/hose, and outlet approximate locations need to be shown. Ensure proper outlet control as may be necessary for pump discharges.

Plan Checklist (continued)

- Dewatering Basins.** Show approximate size and location. Basins shall always be located outside of wetlands and placed outside of floodplain/floodway areas to the extent possible.
 - Address the handling and disposal plan for wet dredged/excavated sediment.
 - Dewatering/water handling is not required for the installation of fisheries enhancements (rock vanes, weir's, vortex, rootwads, etc). These items are to be installed under flowing conditions, and at the direction of DEEP Fisheries Division staff.
 - "Clean" stormwater runoff within, or passing through, the project limits should be temporarily handled (via, berms, swales, pipes, etc.) as necessary to divert flows around the work area.
- Erosion and Sediment Controls.** Must be shown on plans and comply with standards in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control Manual (as amended).
- Slope Protection and Permanent Stabilization Details.** Include plantings, turf, erosion control matting (biodegradable whenever possible), riprap, etc. where they will be used. Show location and call out type.
- Fisheries/Wildlife Habitat Notes.** Show details as required in accordance with consultations (Common Form Attachments 2B and 2C). Any work prohibition areas must be delineated on plans.
 - When incorporating a wildlife shelf to meet USACE crossing criteria, clearly call out wildlife shelf and specify material to be utilized. Show elevation and dimension(s) on section/elevation plans.
- Streambed Channel Material.** Depict where natural streambed material/supplemental material is being placed to topdress riprap or disturbed areas. On elevation plans, specify depth and call out top elevation on banks where proposed (typically the 2-year storm elevation).
- Mitigation, Landscaping.** Provide planting plan & tables for impacted/disturbed wetland/buffer areas, especially along watercourses. Seed mixes, where used, should be called out on the plans.
 - Invasive species control plans must be prepared for all USACE Pre-Construction Notification applications.
 - Wood chip mulch should not be used within the limits of inland wetlands or below the CJL.
 - Do not place plantings under overhead utilities, and place them outside the clear zone.

Additional Requirements Specific to Coastal/Tidal Projects

- Flow Arrows.** Identify direction of the ebb and flood tides.
- Elevations.** On all plans, in NAVD88, depict the Coastal Jurisdiction Line (CJL), Mean High Water (MHW), Mean Low Water (MLW) and the High Tide Line (HTL). (HTL is required for USACE.) For dock applications, show the water depth around the proposed dock location. Note distance structures extends past MHW (required for USACE).
- Navigation channels.** Identify on plans and note distance to nearest channel (federal or local) with authorized depth. If near a federal channel, note the state plane coordinates of the proposed structure's waterward end. For bridges, show existing/temporary/proposed vertical clearances.
- Adjacent structures.** Identify on plans and note distance to nearest structures including docks, bulkheads, moorings and opposite shoreline.
- Adjacent property owners.** Note the name and mailing addresses of the immediately adjacent property owners on at least one plan view.
- Berthing areas.** Identify the proposed vessel berthing location with the boat and any tie-off pilings included.
- Temporary and Permanent Utility Crossings.** Show the location over navigable waterways, note the length of time and clearance above channel. For federal clearance requirements, see [33 CFR 322.5\(i\)](#).
- Tidal Wetland Mitigation.** Coordinate plan details with LWRD staff prior to application submission.

Additional Requirements Specific to Coastal/Tidal Projects (continued)

- Marinas and Yacht Clubs.** Plans must show the locations of existing and proposed utilities including marine sanitation systems, electric and water hook-ups and gas docks. Show the existing and proposed boat slip and mooring count (# the slips and moorings); and, winter float storage locations.
- Facility Expansion.** The plans for new or expanding marinas and yacht clubs need to identify, on the upland: car parking to vessel berthing ratio consistent with local zoning; and, support facilities including office and restrooms.
- Shellfish Resources.** The location of any shellfish beds and natural or recreational shellfishing areas in the immediate vicinity of the project must be noted on the plan view.
- Dredging Projects.** Plans for dredging shall include:
 - proposed sideslopes, showing top of slope and bottom of slope (in cross-sections and plan view);
 - footprint of historical, authorized dredge projects (plan view);
 - the elevation of the lowest predicted tide and a minimum 10' buffer from the top of slope (plan view);
 - a minimum 15' buffer from the top of slope and existing tidal wetland vegetation (plan view); and,
 - dewatering basin location for upland disposal (refer to 'Dewatering Basins', above).