

Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION

March 21, 2012

Connecticut Department of Transportation
2800 Berlin Turnpike
Newington, CT 06131-7546

Attn: Thomas J. Maziarz, Bureau Chief, Policy & Planning

Re: FM-201200688C
Department of Transportation
Statewide Flood Management General for Minor Activities

Dear Mr. Maziarz,

The Inland Water Resources Division of the Department of Energy & Environmental Protection has reviewed the Flood Management Certification signed by Thomas J. Maziarz, of the Connecticut Department of Transportation, Bureau of Policy & Planning. The certification document, dated February 3, 2012 and submitted February 14, 2012, states that the proposed activities have been designed in compliance with the requirements of Section 25-68d(b) of the Connecticut General Statutes (CGS) and Section 25-68h-1 through 25-68h-3, inclusive, of the Regulations of Connecticut State Agencies (RCSA).

There are twelve (12) categories of minor activities that are subject to occur on an as needed basis throughout the state, including: 1) Minor Safety Improvements, Streetscape, and Transportation Facility and Enhancement Projects; 2) Roadway Repair, Repaving, Maintenance & Underground Utilities; 3) Minor Stormwater Drainage Improvements; 4) Removal of Sediment or Debris from a Floodplain; 5) Wetland Restoration, Creation, or Enhancement; 6) Scour Repairs at Structures; 7) Guide Rail Installation; 8) Deck and Superstructure Replacement; 9) Minor Culvert and Bridge Repairs including proper containment; 10) Fisheries Enhancements; 11) Surveying and Testing; 12) Bicycle / Pedestrian, Multi-Use Trails and Enhancement Projects. A description of activities allowed under each category is included along with detail sheets of typical structures and treatments that might be installed for the various activities.

The above referenced certification is hereby approved subject to the following conditions:

- Erosion and sedimentation controls shall be designed, installed and maintained in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*, and Best Management Practices as outlined in Section 1.10 of the *State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816*, as revised.
- Any temporary facilities or equipment requiring work or placement in a floodplain must be able to be removed in a timely manner from the site in case of a flood warning, except for temporary

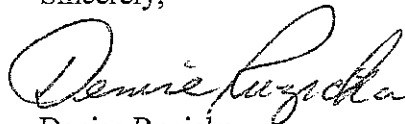
structures that have been designed in accordance with the guidelines outlined in the *CTDOT Drainage Manual* for Temporary Hydraulic Structures.

- Temporary facilities will allow for the passage of fish with minimal disturbance to the streambed.
- Unconfined in-stream work will be limited to the period indicated by a sign-off from the DEEP Fisheries Division.
- Any activities which may alter storm drainage facilities shall be required to provide stormwater treatment consistent with the *2004 Connecticut Stormwater Quality Manual*.
- A copy of any certification form that is required to be submitted to CTDOT in order to satisfy authorization under any of the activity categories shall be submitted to DEEP prior to commencement of respective work activity.
- Any activities that might trigger the need for a FEMA map change of any kind is not authorized under this general Flood Management Certification.

The certification approval was requested for ten (10) years and therefore will expire on April 1st, 2022.

No revisions or alterations to the approved activities are allowed without first obtaining written approval from this Division of such alterations. If there are any questions, contact Colin Clark of the Inland Water Resources Division at 860-424-3214.

Sincerely,



Denise Ruzicka
Director, Inland Water Resources Division

Connecticut Department of Transportation

Flood Management General Certification

Attachment A – Executive Summary

The Department of Transportation (CTDOT) is seeking approval for minor activities within regulated floodplain areas across the state for a ten-year period. The requested activities are described in detail below:

Under this updated Flood Management General Certification application, the Department is requesting that the activities listed below also be recognized as being allowed in any *Coastal Flood Hazard Area*, with the understanding that all other necessary coastal permits will be obtained through DEEP OLISP.

The Department further clarifies that activities should be defined as eligible by the actions listed in the description under each category, and that the nature of work itself does not necessarily have to match with the Category heading.

1. **Minor Safety Improvements, Streetscape, and Transportation Facility and Enhancement Projects**

Description: Projects which include minor grading and minor safety improvements including traffic signals, signs, sidewalks, rail platform extensions, elevated walkways, boardwalks, landscaping and light poles as well as other activities similar in scope and scale. This category also includes ancillary work to make rail stations and other CTDOT facilities compliant with ADA standards, as well as allowing for stormwater improvements at such facilities which do not result in any adverse effect to the floodplain and are compliant with the restrictions set forth in Item #3 – Minor Stormwater Drainage Improvements. This item does not include sound barriers.

Landscape plantings will be in accordance with the most current version of the State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, as revised by the latest supplementals and also in accordance with the State of Connecticut Department of Energy & Environmental Protection's Non-Native Invasive plant Species Policy. Obstructions such as poles, signs, rail platforms, elevated walkways, boardwalks and plantings will be placed in the floodplain, but not in the floodway. Any grade changes in the floodplain will be limited to 2.0 feet maximum over the existing ground elevation in the floodway fringe only, not in the floodway, where a floodway has been established and shown on the relevant FEMA Flood Insurance Study mapping. Grade changes shall not decrease the flood storage capacity of the floodplain and any fill must be compensated for by

an equal cut so that there will be no net fill below the base flood elevation within the floodplain. Compensation for the proposed fill shall occur within the same hydraulic cross section or the same reach of stream such that the loss is properly compensated for.

2. Roadway Repair, Repaving, Maintenance & Underground Utilities

Description: Milling, repaving and associated regrading to roadsides. Also included are roadway patching and repairs to existing grade and work to the subgrade of the roadway such as utility work, underdrain and stormdrain installation, exclusive of storm drainage outfalls.

Construction under this category will allow up to a 4- inch increase in pavement height in a floodway fringe but no increase in pavement height in a floodway. This item will allow for the roadside to be graded meeting the new pavement grade. Also included are roadway patching and repairs to existing grade, and work to the subgrade of the roadway, such as utility work, underdrain and stormdrain installation when such work does not affect the elevation of the roadway within the regulated area.

3. Minor Stormwater Drainage Improvements

Description: Placement of new drainage outfalls in order to reconfigure existing drainage systems, where the proposed pipe size is 36" or less provided that a pre and post stormwater assessment / analysis indicates that such placement would not cause an increase in peak discharge of the receiving floodplain source and therefore no increase in the regulatory flood elevation. Appropriate stormwater treatment and sedimentation and erosion controls must be included in the design and approved by the Office of Environmental Planning (OEP). This category also allows for upgrade of an existing pipe not exceeding and including the requirements above, as well as replacement with equivalent diameter pipe of drainage outfalls, replacement or placement of riprap aprons or preformed scour holes set no higher than existing grade at existing outfalls. All work under this category shall be consistent with the DEP 2004 Stormwater Quality Manual.

Placement of a flared end as a replacement for an endwall is acceptable provided the fill matches adjacent slope limits. The design of rip rap aprons and preformed scour holes shall conform to the guidelines in the CTDOT Drainage Manual.

4. **Removal of Sediment or Debris from a Floodplain**

Description: Removal of sediment or debris from a floodplain including pond and ditch cleaning, and wetland restoration efforts.

Removal of fill also includes the cleaning of ponds when all other necessary Inland or Coastal wetland permits are approved. Sediment shall be disposed of in accordance with Best Management Practices as outlined in Section 1.10 of The State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816, as revised by the latest supplementals.

5. **Wetland Restoration, Creation or Enhancement**

Description: Removal of material and placement of organic soils and wetland plantings. This category may include treatments and excavation to eradicate invasive species.

This item shall include actions necessary for creating wetland mitigation sites, such as placement of organic soils and wetland plantings. Any placement of material for soil amendment shall be an amount less than or equal to the material which was removed from the floodplain. Placement of plantings alone can also be performed under this category to stabilize streambanks or other areas as well as provide plantings to replace non-native vegetation, or for wildlife habitat enhancement as long as the activity does not adversely change the character of the bank or the hydraulic capacity of the waterway.

6. **Scour Repairs at Structures**

Description: Scour repairs which bring the streambed back to original grade, as either depicted on original as-built plans or as determined in the field by the Engineer. This category may also be utilized to install designed counter measures that do not change the hydraulic capacity of the structure and that are acceptable to CTDEEP Fisheries Division.

Note: Municipal projects which require no other State permit approvals will only qualify for the General Certification under this item when accompanied by a completed CTDEEP Fisheries Division sign-off form.

Fill will be placed to an appropriate level which is at an elevation no higher than the original grade at either bridge face or points beyond the influence of local or contraction scour. The placement of riprap or alternate counter-measures must be limited to local scour holes adjacent to the

bridge substructure units, retaining walls, wingwalls or culvert termini unless the proposed plans have been reviewed by the CTDEEP Fisheries Division and their concurrence is documented by the completed sign-off form.

7. **Guide Rail Installation**

Description: Installation, replacement or repair of guide rails including minor clearing and grubbing which may be necessary to place a new system and allow for its deflection and the use of appropriate materials under guiderail to prevent erosion. This category also allows for upgrade of existing system to bring them into conformance with current safety standards, including upgrades to termini and connections to bridge parapets and the replacement of existing concrete Jersey Barriers already in place with Merritt Parkway Concrete Barriers and replacement of existing metal beam rail already in place with timber Merritt Parkway Guide Rail. Jersey type solid safety barriers at a new location may not be placed under this item.

8. **Bridge Deck and Superstructure Replacements**

Description: Replacement of the superstructure or deck of a structure where both the existing and proposed low chord elevation is above the floodway elevation. Temporary impacts for construction may include; scaffolding, ladders, work platforms, sandbags, cofferdams and sedimentation control devices as well as other activities similar in scope and scale necessary to perform the work. This item includes necessary modifications to the substructure to accommodate the new superstructure if the modifications do not result in a change to the hydraulic opening.

No decrease in hydraulic capacity may occur as a result of any work under this item. Any temporary impact items will be able to be removed in a timely manner from the site in case of a flood warning, except for items designed under the CTDOT Drainage Manual as temporary structures, which will allow for the passage of fish, with minimal disturbance to the streambed.

9. **Minor Culvert and Bridge Repairs including proper containment.**

Description: Repairs to bridges, culverts or pipes including such actions as repairs to spalling concrete, repointing, joint repairs, bridge seat and bearing repairs, upgrade of parapets or railing, (open design only allowed)

painting, replacement of wood on wooden bridges, cleaning, repair and painting or replacement of steel bridge elements with proper containment to prevent debris from falling to any regulated areas below, in-kind culvert replacements, wingwalls, endwalls, cut-off walls as well as other activities similar in scope and scale which would not diminish the hydraulic capacity of the structure. Temporary impacts for construction may include but are not limited to: scaffolding, ladders, cofferdams, sandbags and sedimentation control devices necessary to perform the work and / or access the work site. Containment systems and work platforms hung from the bridge may also be utilized such that the temporary system does not extend below the temporary design flood elevation unless the system can be readily removed prior to the anticipated flood event. The design frequency of the temporary design flood shall be determined by the procedures outlined in the Drainage Manual.

10. Fisheries Enhancements

Description: Work in waterways to create or enhance fisheries habitat. Such work may include placement of boulders, riparian plantings, vortex rock weirs, rock vanes, log structures, wing deflectors, channel blocks, cover logs and rootwads, bank cribbing and other enhancements such as scour pool excavation and stream bank stabilization. This item includes any temporary impacts necessary for construction. This item may not be used for construction of fishways or fishladders.

All enhancements must be approved by the CTDOT Hydraulics and Drainage Section. Boulders or groupings of boulders placed will be no wider than 20% of the stream width and there will be no more than one boulder or boulder grouping per 300 square feet of channel. Boulders will be placed only downstream of any bridge structure. Riparian plantings will be conducted in accordance with the State of Connecticut Department of Energy and Environmental Protection's Non-Native Plant Species Policy. Temporary floodplain impacts for construction necessary to perform the work shall be allowed given provisions for stabilizing and restoring the access way are provided.

11. Surveying and Testing

Description: This item includes activities such as field survey, excavation of utility test pits, physical testing or the installation of monitoring devices to determine surface or subsurface engineering site data.

Conventional land survey activities will be accomplished in accordance with standard Department of Transportation practice. Minor manual clearing of brush or undergrowth will be allowed to establish lines of sight

necessary for geodetic survey. Soil borings using mechanical drill rigs will be allowed provided that no fill is placed for access to the drilling site. The installation or use of temporary or permanent monitoring devices to record or provide real time data relative to bridges, culverts, streams or subsurface characteristics will be allowed providing that there is no resultant permanent reduction in hydraulic capacity at a waterway crossing site. Any devices shall be approved by the Hydraulics and Drainage Unit of CTDOT. The excavation of utility test pits using mechanical excavators is acceptable providing that there is no change in the final ground elevation at the test pit site.

12. Bicycle / Pedestrian, Multi Use Trails and Enhancement Projects

Description: Construction of Bicycle / Pedestrian pathways, multi-modal trails, Rails to Trails and enhancement projects in a regulated floodplain. These projects may include any of the activities listed below, or a combination of these activities on the same project. The Project Engineer must indicate in their submission under this category, where each proposed approved activity will take place, along with a corresponding site number.

Overall, projects in this category must comply with all applicable requirements described in Category 1, "Minor Safety Improvements, Streetscape, and Transportation Facility Projects". Independent functionality must be evident in project termini, and / or the project must provide links between or to other existing trails. Proper containment and water handling must be included in the plans for activities involving work in water.

- A. Rehabilitation or removal of existing structures in a floodplain or floodway such as piers, abutments, crib walls and retaining walls. No new structures are allowed in a floodway under this category.
- B. Placement of retaining walls, crib walls or similar structure in the floodplain with the purpose of decreasing the overall fill in the floodplain. Elevated walkways, boardwalks and like structures will also be included under this category. This activity must not have an adverse effect on flood flow conveyance.
- C. Construction of portions of the trail itself may be within a regulated floodway provided that the path or trail itself is constructed at grade. In these areas, only split rail fencing will be allowed.
- D. Rehabilitation or re-use of an existing culvert or bridge structure to carry the trail where there is no decrease in the hydraulic opening. Work under this category may include a new deck, various concrete repairs, and placement of parapets and railing as long as they are an open type design.

- E. Minor modifications to structures at the same location with minor re-alignments to better accommodate stream flows. This category allows for replacement or extension of abutments, wingwalls, endwalls, cutoff where there is no adverse effect to the floodway and floodplain
- F. Placement of new culvert on new location in the floodplain in order to capture drainage or convey a small watercourse which is in conformance with the restrictions set forth in Item #3 – Minor Stormwater Drainage Improvements Culverts deemed to be carrying a watercourse must be buried one foot and meet the ACOE openness ratio and are limited to an effective opening of 36”

The following practices shall be followed for **ALL** activities covered under this General Certification:

- ***Proper erosion and sedimentation controls will be utilized in conjunction with Best Management Practices as outlined in Section 1.10 of The State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816, as revised by the latest supplementals.***
- ***Any temporary facilities or equipment requiring work in, or placement in floodplain, must be able to be removed in a timely manner from the site in case of a flood warning, except for items designed as temporary structures, in accordance with the guidelines outlined in the CTDOT Drainage Manual for Temporary Hydraulic Structures.***
- ***Temporary facilities will allow for the passage of fish with minimal disturbance to the streambed.***
- ***Unconfined in-stream work will be limited to the period indicated by a sign-off from DEEP Fisheries Division. This time frame will typically be June 1 to September 30th***

Projects will be screened through the Department's Hydraulics and Drainage Unit, using the memo attached. The Office of Environmental Planning and DEEP will be provided with a copy of this memo for each project approved.